Submittals

Concrete (Coating, Resurfacer, Joint Sealants)

lot 4 architecture

819 SOUTH BLACK AVE. BOZEMAN, MT 59715 C: 406.451.3613 E: msteiner@lot4.net

TO:

Langlas & Associates, Inc.
1019 E. Main Street, Suite 101
Bozeman, MT 59715
406.599.3566

WE ARE SENDING YOU ATTACHED:

SHOP DRAWINGS	
COPY OF LETTER	

PRINTS
CHANGE ORDER

PLANS 🗆 SAMPLES 🗖 SPECIFICATIONS

COPIES	DATE	NO.	DESCRIPTION
Electronic	05.19.2022	031000-101-0	New Concrete Joint Sealant

APPROVED AS SUBMITTED

APPROVED AS NOTED

RETURNED FOR CORRECTIONS

RESUBMIT

REMARKS:

LETTER OF TRANSMITTAL

DATE: 05.25.2022 JOB # 2208

ATTENTION: Jesse Gonzalez

RE: Reviewed Submittal

MELISSA STEINER, ARCHITECT



Not Approved

Revise and

05/19/2022

Jesse Gonzalez

Resubmit

BUILDING TRUST

Reviewed

Reviewed

031000-101-0

Langlas

with Comments

SUBMITTAL NUMBER DATE This submittal has been reviewed for compliance with the contract documents. Approval does not relieve this Subcontractor or Supplier of the responsibility for conformance to the quality standards set forth in the contract documents nor does it relieve his responsibility for field verification of all conditions relating to this contract

PRODUCT DATA SHEET

Sikaflex[®]-1A

Elastomeric joint sealant / adhesive

PRODUCT DESCRIPTION

Sikaflex[®]-1A is a premium-grade, high-performance, moisture-cured, 1-component, polyurethane-based, non-sag elastomeric sealant. Sikaflex-1a can be used in green and damp concrete applications. Meets Federal Specification TT-S-00230C, Type II, Class A. Meets ASTM C-920, Type S, Grade NS, Class 35, use T, NT, O, M, G, I, A. Canadian standard CAN/CGSB 19.13-M87.

USES

- Designed for all types of joints where maximum depth of sealant will not exceed 1/2 in.
- Excellent for small joints and fillets, windows, door frames, reglets, flashing, common roofing detail applictions, and many construction adhesive applications.
- Suitable for vertical and horizontal joints; readily placeable at 40°F
- Has many applications as an elastic adhesive between materials with dissimilar coefficients of expansion.
- Submerged conditions, such as canal and reservoir joints.

CHARACTERISTICS / ADVANTAGES

- Eliminates time, effort, and equipment for mixing, filling cartridges, pre-heating or thawing, and cleaning of equipment.
- Fast tack-free and final cure times.
- High elasticity cures to a tough, durable, flexible consistency with exceptional cut and tear -resistance.
- Stress relaxation.
- Excellent adhesion bonds to most construction materials without a primer.
- Excellent resistance to aging, weathering.

Product Data Sheet Sikaflex®-1A August 2019, Version 01.01 02051101000000008

- Proven in tough climates around the world.
- Can be applied to green concrete 24 hours after pour
- Can be applied to damp concrete 1 hour after getting wet
- Odorless, non-staining.
- Jet fuel resistant.

SHOP DRAWING / SUBMITTAL REVIEW

s are reviewed tor contormance with de real compliance with the Contract Docun Do Not Authorize Changes to Contract S comments, and/or corrections do not r from compliance with the Contract D tractor is responsible for confirming, cor

REJECTED/RE

tion of th

ner and for full compliance with t

4 hours Seine

Melissa Steine

OVED E & RESUBMIT

other trades and subc

ntract Documents

05.24.22 Date:

- Certified to the NSF/ANSI Standard 61 for potable water.
- Urethane-based; suggested by EPA for radon reduction.
- Paintable with water-, oil- and rubber-based paints.
- Capable of ±35% joint movement.

APPROVALS / STANDARDS

- ASTM C 920, Type S, Grade NS, Class 35, use NT, A, M
- Federal specification TT-S-00230 C Type II, Class A
- Canadian Standard CANICGSB 19.13-M87
- Certified to NSF/ANSI standard 61 for portable water

PRODUCT INFORMATION

10.1 fl. oz. (300 mL) Cartridge, 20 fl. oz. uni-pac Sausages, 4.5 gal (17 L) in a 5 gal pail, 52 gal (197 L) in a 55 gal drum				
	White, colonial white, aluminum gray, limestone, black, dark bronze, capitol tan, stone and medium bronze. Special architectural colors on request.			
Cartridge and Sausage : 12 months in original, unopened packaging. Pail and Drum : 6 months in original, unopened packaging.				
Store at 40°-95	5°F (4°-35°C).			
(21 day) 45±5			(ASTM C 661)	
550 %			(ASTM D-412)	
Substrate	Peel Stren	gth Adhesio		
Concrete	20 lbs	0 %	(TT-S-00230C)	
Aluminium	20 lbs	0 %		
Glass	20 lbs	0 %		
55 lb./in.			(ASTM D-624)	
±35 %			(ASTM C-719)	
Good resistance to water, diluted acids, and diluted alkalines. Consult Technical Service for specific data.				
Excellent				
–40 °F to +170	°F			
	gal pail, 52 gal White, colonia tan, stone and Cartridge and S Pail and Drum: Store at 40°-95 (21 day) 45±5 21 day Tensile Stress @ 100% 550 % Substrate Concrete Aluminium Glass 55 lb./in. ±35 % Good resistanc Technical Servi Excellent	gal pail, 52 gal (197 L) in a 55 g White, colonial white, aluminu tan, stone and medium bronze Cartridge and Sausage: 12 mor Pail and Drum: 6 months in ori Store at 40°-95°F (4°-35°C). (21 day) 45±5 21 day Tensile Stress 1 Stress @ 100% 2 550 % Substrate Peel Streng Concrete 20 lbs Aluminium 20 lbs Glass 20 lbs 55 lb./in. ±35 % Good resistance to water, dilut Technical Service for specific d	gal pail, 52 gal (197 L) in a 55 gal drum White, colonial white, aluminum gray, limestone tan, stone and medium bronze. Special architect Cartridge and Sausage: 12 months in original, unpened p Store at 40°-95°F (4°-35°C). (21 day) 45±5 21 day Tensile Stress 175 psi (1.21 MPa) Stress @ 100% 85 psi (0,59 N/mm 550 % Substrate Peel Strength Adhesion Concrete 20 lbs 0 % Aluminium 20 lbs 0 % 551 lb./in. ±35 % 0 % Good resistance to water, diluted acids, and dilu Technical Service for specific data. Excellent Excellent 0 %	

APPLICATION INFORMATION

Coverage

Width/Depth	1/4"	3/8"	1/2"
1/4"	24.3		
3/8"	16.2	10.8	
1/2"	12.1	8.1	6.1
3/4"	8.1	5.4	4.0
1"			3.0
1.25"			2.4
1.5"			2.0

BUILDING TRUST

20 oz Sausage: Yield in Linear Feet





Width/Depth	1/4"	3/8"	1/2"
1/4"	48.1		
3/8"	32.1	21.4	
1/2"	24.1	16.0	12.0
3/4"	16.0	10.7	8.0
1"			6.0
1.25"			4.8
1.5"			4.0

1 gallon: Yield in Linear Feet

Width/Depth	1/4"	3/8"	1/2"
1/4"	307.9		
3/8"	205.3	136.8	
1/2"	153.9	102.6	77.0
3/4"	102.6	68.4	51.3
1"			38.5
1.25"			30.8
1.5"			25.7

Cure Time

Final cure: 4 to 7 days

Curing Rate

Tack-free time 3 to 6 hours

Tack-free to touch 3 hours

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

Product Conditioning: Condition material to 65°-75°F before using.

Clean all surfaces. Joint walls must be sound, clean, frost-free, and free of oil and grease. Curing compound residues and any other foreign matter must be thoroughly removed. A roughened surface will also enhance bond. Install bond breaker tape or backer rod to prevent bond at base of joint. Priming is not usually necessary. Most substrates only require priming if testing indicates a need or where sealant will be subjected to water immersion after cure.

For green concrete applications control joints must be cut 8 hours prior to sealant installation and in expansion joint forms must be removed 4 hours prior to sealant installation. For wet concrete applications all excess or standing water must be displaced and concrete must then dry for a minimum of 60 min prior to sealant installation. Consult Sikaflex Primer Technical Data Sheet or Technical Service for additional information on priming.

APPLICATION METHOD / TOOLS

Recommended application temperatures: 40°-100°F. For cold weather application, condition units at approximately 70°F; remove prior to using. For best performance, Sikaflex-1a should be gunned into joint when joint slot is at mid-point of its designed expansion and contraction. Place nozzle of gun into bottom of the joint and fill entire joint. Keep the nozzle in the sealant, continue on with a steady flow of sealant preceding the nozzle to avoid air entrapment. Avoid overlapping of sealant to eliminate entrapment of air.

Sikaflex-1a can be applied on green concrete after the concrete has cured for a minimum of 24 hours at 75°F.Control joints must be cut and open for min of 8 hours prior to application. Expansion joints must have forms removed a minimum of 4 hours prior to application. For damp concrete applications Sikaflex-1a can be applied 60 minutes after any and all water has been displaced.

Tooling & Finishing

Tool sealant to ensure full contact with joint walls and remove air entrapment. Joint dimension should allow for 1/4 inch minimum and 1/2 inch maximum thickness for sealant. Proper design is 2:1 width to depth ratio, For use in horizontal joints in traffic areas, the absolute minimum depth of the sealant is 1/2 in. and closed cell backer rod is recommended.

Removal

Use personal protective equipment (chemical resistant gloves/goggles/clothing). Without direct contact, remove spilled or excess product and placed in suitable sealed container. Dispose of excess product and container in accordance with applicable environmental regulations.

Over Painting

Product Data Sheet Sikaflex®-1A August 2019, Version 01.01 02051101000000008



BUILDING TRUST

Allow 1-week cure at standard conditions when using Sikaflex-1a in total water immersion situations and prior to painting.

CLEANING OF TOOLS

Clean all tools and application equipment with Sika[®] Remover-208 immediately after use. Hardened material can only be removed mechanically. For cleaning skin use Sika[®] Cleaning Wipes-100.

AVAILABILITY/WARRANTY

- Pre-treatment Sealing and Bonding Chart
- Method Statement: Joint Sealing
- Method Statement: Joint Maintenance, Cleaning and Renovation
- Technical Manual: Facade Sealing

LIMITATIONS

- Allow 1 week cure at standard conditions when using Sikaflex-1a in total water immersion situations.
- When overcoating with water, oil and rubber based paints, compatibility and adhesion testing is essential.
- Sealant should be allowed to cure for 7 days prior to overcoating
- Avoid exposure to high levels of chlorine. (Maximum continuous level is 5 ppm of chlorine.)
- Maximum depth of sealant must not exceed 1/2 in.; minimum depth is 1/4 in.
- Maximum expansion and contraction should not exceed 35% of average joint width.
- Do not cure in the presence of curing silicone sealants.
- Avoid contact with alcohol and other solvent cleaners
- during cure.
 Do not apply when moisture-vapor-transmission condition exists from the substrate as this can cause bubbling within the sealant.
- Use opened cartridges and uni-pac sausages the same day.
- When applying sealant, avoid air-entrapment.
- Since system is moisture-cured, permit sufficient exposure to air.
- White color tends to yellow slightly when exposed to ultraviolet rays.
- Light colors can yellow if exposed to direct gas fired heating element.
- The ultimate performance of Sikaflex-1a depends on good joint design and proper application with joint surfaces properly prepared.
- The depth of sealant in horizontal joints subject to

traffic is 1/2 in.

- Do not tool with detergent or soap solutions.
- Do not use in contact with bituminous/asphaltic materials.
- In green concrete applications sealing joints in poor or low strength concrete 24 hours after pour may impact ability of sealant to gain proper adhesion.
- In damp concrete applications all standing water and excess water must be eliminated prior to the 60 minute waiting time.

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

OTHER RESTRICTIONS

See Legal Disclaimer.

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the

BUILDING TRUST



current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.

Sale of SIKA products are subject to the Terms and Conditions of Sale which are available at https://usa.sika.com/en/group/SikaCorp/termsandconditions.html or by calling 1-800-933-7452.

Sika Corporation

201 Polito Avenue Lyndhurst, NJ 07071 Phone: +1-800-933-7452 Fax: +1-201-933-6225 usa.sika.com



 Sikaflex®-1A

 August 2019, Version 01.01

 02051101000000008

Sika Mexicana S.A. de C.V.

Carretera Libre Celaya Km. 8.5 Fracc. Industrial Balvanera Corregidora, Queretaro C.P. 76920 Phone: 52 442 2385800 Fax: 52 442 2250537

Sikaflex-1A-en-US-(08-2019)-1-1.pdf

BUILDING TRUST



lot 4 architecture

819 SOUTH BLACK AVE. BOZEMAN, MT 59715 C: 406.451.3613 E: msteiner@lot4.net

TO:

Langlas & Associates, Inc.
1019 E. Main Street, Suite 101
Bozeman, MT 59715
406.599.3566

WE ARE SENDING YOU ATTACHED:

SHOP DRAWINGS	
COPY OF LETTER	

PRINTS
CHANGE ORDER

PLANS 🗆 SAMPLES 🗖

SPECIFICATIONS

COPIES	DATE	NO.	DESCRIPTION
Electronic	04.13.2022	033500-101-0	New Concrete Resurfacer

APPROVED AS SUBMITTED

APPROVED AS NOTED

RETURNED FOR CORRECTIONS RE

RESUBMIT 🗖

REMARKS: Please note 'broom finish'

MELISSA STEINER, ARCHITECT

LETTER OF TRANSMITTAL

DATE: 04.13.2022 JOB # 2208

ATTENTION: Jesse Gonzalez

RE: Reviewed Submittal

CONCRETE RESURFACER



Resurface Worn, Old, Spalled Concrete



PRODUCT DATASHEET

DESCRIPTION: Rapid Set® CONCRETE RESURFACER (CR) is an advanced hydraulic cement-based polymer-modified mortar that can be used both indoors and outdoors to resurface worn, old or spalled concrete, giving a new concrete look. CR has been specially formulated to match the color of typical portland cement concrete. Cutting-edge self-curing technology (SCT) means wet curing is not required in most applications. CR has a working time of up to 30 minutes and can receive foot traffic in as little as 2 to 3 hours.

USES: Use CR when a new wear surface is desired to repair old, damaged or discolored concrete.

ENVIRONMENTAL ADVANTAGES: Use CR to reduce your carbon footprint and lower your environmental impact. Production of Rapid Set cement emits far less CO₂ than portland cement. Contact your CTS representative for LEED values and environmental information.

APPLICATION: Typical application thicknesses range from 1/16" to 1/4" (0.16 to 0.64 cm). In smaller areas, CR may be applied up to 1/2" (1.2 cm) thick.

SURFACE PREPARATION: Surface must be clean, sound, and free of oil, curing compound, dust, mastic and other bond breakers. Surface must be prepared to a minimum profile of ICRI CSP 2. Mechanical methods of surface preparation such as shotblasting are preferred. Acid etching is not recommended. Surface must be dry and have a minimum temperature of 50°F (10°C).

PRIMING: Priming is not required. For porous substrates, use Rapid Set® Acrylic Primer to minimize the formation of pinholes on the surface. Follow all product application instructions.

MIXING: The use of a power-driven mechanical mixer, such as a mortar mixer or a drillmounted mixer, is recommended. Organize work so that personnel and equipment are in place before mixing. Use clean potable water. CR may be mixed using 2.5 to 3 quarts (2.3 L to 2.8 L) of water per 25-lb (11.3-kg) bag. Use less water to achieve higher strengths. Do not exceed 3 quarts (2.8 L) of water per bag. Place the desired quantity of mix water into the mixing container. While the mixer is running, add material. Mix for the minimum amount of time required to achieve a lump-free, uniform consistency (usually 2 to 3 minutes). Do not retemper. Avoid mixers that entrap large amounts of air. Mixed CR should be used within 30 minutes at 70°F (21°C).

PLACEMENT: CR may be placed using traditional methods. Surface and ambient temperatures must be between 50°F to 90°F (10°C to 32°C). Do not install on frozen surfaces. Place quickly to allow for maximum finishing time. Once applied, typical finishing time is 5 to 10 minutes at 70°F (21°C). Thinner applications will set faster. Do not wait for bleed water; apply final finish as soon as possible. CR may be troweled, floated or broom finished with a concrete broom.

COLD WEATHER: Environmental and material temperatures below 70°F (21°C) may delay setting time and reduce the rate of strength gain. Lower temperatures will have a more pronounced effect. Thinner sections will be more significantly affected. To compensate for cold temperatures, keep material warm, use heated mix water, and follow ACI 306 Procedures for Cold Weather Concreting. 293

OVERVIEW

Highlights: Rapid strength gain

Polymer modified

Self-curing technology (SCT)

Concrete gray color

Foot traffic in 2 to 3 hours

30 minute working time

Interior/exterior

Conforms to:

ASTM C109

MasterFormat® 2016

03 01 30	Maintenance of Cast-In-Place Concrete
03 01 40	Maintenance of Precast Concrete
03 01 50	Maintenance of Cast Decks and Underlayments
03 01 70	Maintenance of Mass Concrete
03 53 19	Concrete Overlayment
03 54 16	Hydraulic Cement Underlayment

Manufacturer:

CTS Cement Manufacturing Corp. 12442 Knott St. Garden Grove, CA 92841 Tel: 800-929-3030 | Fax: 714-379-8270 Web: www.CTScement.com E-mail: info@CTScement.com



CONCRETE RESURFACER Resurface Worn, Old, Spalled Concrete

WARM WEATHER: Environmental and material temperatures above 70°F (21°C) may shorten setting time and increase the rate of strength gain. Higher temperatures will have a more pronounced effect. To compensate for warm temperatures, keep material cool, use chilled mix water and follow ACI 305 Procedures for Hot Weather Concreting. The use of Rapid Set[®] SET Control[®] set retarding admixture from the Rapid Set[®] Concrete Pharmacy[®] will help offset the effects of high temperatures.

CURING: Rapid Set[®] CONCRETE RESURFACER (CR) does not require water curing or curing compound under moderate conditions at 70°F (21°C). In dry, windy or hot conditions, mist with water to maintain a continuously wet surface until the product has achieved sufficient strength. CR cures to a gray color. Walk on time is approximately 2 to 3 hours.

YIELD & PACKAGING: One 25-lb (11.3 kg) bag of CR will yield approximately 0.24 ft^3 (6800 cm³). The coverage is approximately 75 ft^2 (7.0 m²) at 1/16" (0.16 cm) depth. Coverage may vary due to jobsite conditions.

SHELF LIFE: CR has a shelf life of 12 months when stored properly in a dry location, protected from moisture, out of direct sunlight, and in an undamaged package.

USER RESPONSIBILITY: Before using CTS products, read current technical data sheets, bulletins, product labels and safety data sheets at www.CTScement.com. It is the user's responsibility to review instructions and warnings for any CTS products prior to use.

WARNING: DO NOT BREATHE DUST. AVOID CONTACT WITH SKIN AND EYES. Use material in well-ventilated areas only. Exposure to cement dust may irritate eyes, nose, throat, and the upper respiratory system/lungs. Silica exposure by inhalation may result in the development of lung injuries and pulmonary diseases, including silicosis and lung cancer. Seek medical treatment if you experience difficulty breathing while using this product. The use of a NIOSH/MSHA-approved respirator (P-, N- or R-95) is recommended to minimize inhalation of cement dust. Eat and drink only in dust-free areas to avoid ingesting cement dust. Skin contact with dry material or wet mixtures may result in bodily injury ranging from moderate irritation and thickening/cracking of skin to severe skin damage from chemical burns. If irritation or burning occurs, seek medical treatment. Protect eyes with goggles or safety glasses with side shields. Cover skin with protective clothing. Use chemical resistant gloves and waterproof boots. In case of skin contact with cement dust, immediately wash off dust with soap and water to avoid skin damage. In case of skin contact with wet cement, wash exposed skin areas with cold running water as soon as possible. In case of eye contact with cement dust, flush immediately and repeatedly with clean water, and consult a physician. If wet cement splashes into eyes, rinse eyes with clean water for at least 15 minutes and go to the hospital for further treatment.

Please refer to the SDS and www.CTScement.com for additional safety information regarding this material.

LIMITED WARRANTY: CTS CEMENT MANUFACTURING CORP. (CTS) warrants its materials to be of good quality and, at its option, will replace or refund the purchase price of any material proven to be defective within one (1) year from date of purchase. The above remedies shall be the limit of CTS's responsibility. Except for the foregoing, all warranties expressed or implied, including merchantability and fitness for a particular purpose, are excluded. CTS shall not be liable for any consequential, incidental, or special damages arising directly or indirectly from the use of the materials.

▲ WARNING

CANCER and REPRODUCTIVE HARM - www.P65Warnings.ca.gov

TYPICAL PHYSICAL DATA

Compressive Strength, ASTM C109 Mod.** 24 hours 2500 psi (17.2 MPa)

•

28 days 4500 psi (31.0 MPa)

**Data obtained at 3 quarts of water. All data produced at 70°F (21°C).



lot 4 architecture

819 SOUTH BLACK AVE. BOZEMAN, MT 59715 C: 406.451.3613 E: msteiner@lot4.net

TO:

Langlas & Associates, Inc.	
1019 E. Main Street, Suite 101	
Bozeman, MT 59715	
406.599.3566	

WE ARE SENDING YOU ATTACHED:

SHOP DRAWINGS	
COPY OF LETTER	

PRINTS
CHANGE ORDER

PLANS 🗆 SAMPLES 🗖

SPECIFICATIONS

COPIES	DATE	NO.	DESCRIPTION
Electronic	04.18.2022	033500-102-0	New Concrete Coating Product

APPROVED AS SUBMITTED

APPROVED AS NOTED

RETURNED FOR CORRECTIONS

RESUBMIT 🗖

REMARKS:

LETTER OF TRANSMITTAL

ATTENTION: Jesse Gonzalez

RE: Reviewed Submittal

MELISSA STEINER, ARCHITECT



recommended for application to a porous substrate for the primary purpose of preventing the penetration of water.

SuperSeal[™] 2000

TECHNICAL INFORMATION SHEET

USES

Not Approved

04/18/2022

Jesse Gonzalez

SuperSeal[™] 2000 can be used on interior or exterior masonry, and concrete-type surfaces. SuperSeal[™] 2000 can be used as a base-coat for interior applications where a compatible, commercial floor waxes is planned as part of a maintenance program. Use on colored or uncolored, stamped or exposed aggregate concrete, porous brick, natural and manufactured stone, stucco, slate, unglazed tile and flagstone.

GLOSS "WET-LOOK" SEALER – 600 VOC

SuperSeal[™] 2000 is an acrylic-based, crystal-clear sealer. Formulated and recommended for application to a porous substrate for the primary purpose of preventing the penetration of water.

Reatures A NonYellowing, Crystal Clear – Dries to a Gloss "Wet Look" Finish - Interior/Exterior Use -Kubandes Kolor

Matte finish proposed.

DESCRIPTION

SuperSeal[™] 2000 is a premium-quality, non-yellowing, UVresistant, super-tough acrylic film that is easy to clean and maintain. SuperSeal™ 2000 is formulated and

TECHNICAL DATA

MOISTURE RETENTION, TEST ASTM C309	SHOP DRAWING / SUBMITTAL REVIEW APPROVED AS NOTED REVIEW R & RESUMIT	
Super Seal 2000 (at 200 ft ² per gallon), kg/m ²	NOT REVIEWED FOR YOUR INFORMATION	0.21
Test requirement, not to exceed, kg/m ²	Submittais are reviewed for conformance with design intent and general compliance with the Contract Documents only. Notations Do Not Authorize Changes to Contract Sum.	0.55
MOISTURE RETENTION, TEST ASTM C309	Approval, comments, and/or corrections do not relieve the Contractor from compliance with the Contract Documents. The Contractor is responsible for confirming, correlating all quantifies, dimensions, tolerances, clearances, fabrication processes, techniques, and sequences of construction, com-	
SuperSeal™ 2000 (at 300 ft² per gallon), kg/m²	patibility of materials and methods, coordination of their work with other trades and subcontractors, performance of work in	0.32
Test requirement, not to exceed, kg/m ²	a safe and satisfactory manner and for full compliance with the Contract Documents.	> 0.4
Gasoline Resistance	04.18.22 4 Reviewed by Date: Reviewed by LOT4 architecture Melissa Steiner	
15-minute exposure (ponding)		Slight dulling
Τσ°C		50
Tukon Hardness		
30 minutes at 180°F		9.3
30 minutes at 300°F		13.7
Pencil Hardness		
30 minutes at 180°F		F
30 minutes at 300°F		Н
FLEXIBILITY, 1/8, 1/4, 1/2 INCH MANDRELS*		6,5,4
Spray conditions		
Viscosity, No. 2 Zhan cup, sec.		19

ABRASION RESISTANCE

(mg lost, CS-17 wheel, 1000 g load, 1000 cycles) 160

*The degree of cracking at the bend over each mandrel is rated on a 0 (no failure) to 10 (complete flaking) scale.

PACKAGING

SuperSeal™ 2000 is available in one-gallon (3.8 L) and five-gallon (18.925 L) containers and fifty-five gallon (208.175 L) drums.

296





COVERAGE

SuperSeal™ 2000 will cover approximately 150 to 200 square feet per gallon depending upon porosity of the surface.

STORAGE

Store in a safe place. Keep containers tightly sealed. DO NOT allow product to freeze. Material that is frozen CANNOT be used when thawed. Shelf life is approximately 12 months.

CAUTIONS

Contains aromatic hydrocarbons. KEEP OUT OF REACH OF CHILDREN. Before using or handling, read the Material Safety Data Sheet and Warranty. DO NOT TAKE INTERNALLY. Do not breathe vapors or mist. Use only with adequate ventilation and use a respirator when levels are above applicable limits. Avoid contact with skin and eyes. Close container after each use. Use good hygiene when handling this product and wash and bathe after each use. Be sure to wash clothing after each use.

WARNING

IT IS ILLEGAL TO USE THIS PRODUCT IN THE STATE OF CALIFORNIA. OTHER STATES MAY ALSO HAVE SIMILAR RESTRICTIONS. CHECK WITH YOUR LOCAL REGULATORY AGENCY. NOT RECOMMENDED for dense surfaces. Apply in thin coats, only on surfaces textured for slip resistance. If applied too heavily or applied to dense surfaces, the sealer may become slippery, especially in areas where water accumulates. If in doubt, test the surface by sprinkling with water. If water beads up on the surface, additional cleaning and testing must be done. Do not use where hydrostatic pressure is possible.

PREPARTION OF CONCRETE

Concrete Coatings, Inc. strongly recommends representative jobsite samples. Individuals who will be performing the work should test different sections of the concrete to determine suitability, coverage, and final appearance. New concrete should be cured at least 28 days, prior to application. The application area must be completely clean and dry to the touch. Pressure washing and power scrubbing may be necessary. Remove all efflorescence, oil, dirt, wax, old paints, sealer, and curing compounds. RINSE THOROUGHLY. Allow the surface to dry at least 24 hours. Soaps and detergents should never be used for cleaning. Dried residue on the surface will prevent the sealer from bonding. Acid washing is NOT recommended. If acid is used, a representative area must be tested. Soak the entire surface with water before applying the acid mixture. When the fizzing stops, rinse with clean water. After 10 or 15 minutes, the surface must then be flushed with clean water and neutralized with a pH neutralizer such as ammonia, baking soda, or T.S.P. Repeat rinsing and neutralizing. Acid residue will prevent the sealer from penetrating. Allow the surface to dry for at least 24 hours prior to application. NOT RECOMMENDED for pre-sealed or dense surfaces, such as glazed tile, marble or granite, dense brick, dense slate, or terrazzo. If in doubt, test the surface by sprinkling with water. If water beads up on the surface, additional cleaning and testing must be done. Do not use where hydrostatic pressure is possible.

APPLICATION

Always test a small area of surface to verify protection and appearance. Use SuperSeal[™] 2000 full strength. Thinning is not required. Apply 1-2 light, even coats (depending on porosity of surface) with a short-napped roller or a sprayer with neoprene seals and hose. Allow 1-3 hours between coats or until the surface is dry to the touch. Apply in temperatures between 12.8°C to 26.7°C (55°F and 80°F). Avoid using in direct sunlight, especially on hot, windy days. Apply during the cooler part of the day when the surface is shaded. Do not apply on rainy or foggy days. Excess moisture will not allow the sealer to dry properly. Use only in well ventilated areas. It is recommended that foot traffic remain off the finished sealed surface for 24 hours. For heavy traffic, allow 72 hours for curing. HELPFUL HINT: Use xylene for easy cleanup immediately after use.

MAINTENANCE

The sealed surface should be inspected periodically for areas of thin or traffic-worn sealer and reapplied as needed. If traces of efflorescence are present, it should first be eliminated with a gentle cleaner. For maximum life expectancy, routinely sweep and wash floors with appropriate cleaners and detergents. All chemicals or abrasive grit should be removed as soon as possible

Can last up to 4-5 years, but recommended recoating of horizontal surfaces every 2 years.



WARRANTY

This product is not intended for public use and is intended for use by licensed contractors and installers, experienced and trained in the use of these products. It is warranted to be of uniform quality, within manufacturing tolerances. The manufacturer has no control over the use of this product, therefore, no warranty, expressed or implied, is or can be made either as to the effects or results of such use. In any case, the manufacturer's obligations shall be limited to refunding the purchase price or replacing material proven defective. The end user shall be responsible for determining product's suitability and assumes all risks and liability.

PLAN SPECIFICATION

SuperSeal™ 2000 Suggested Short Form Specification:

All concrete flatwork designated as being sealed in the plans and specifications shall be sealed with 1-2 light even coats of SuperSealTM 2000, at the rate of approximately 250 to 300 square feet per gallon ($6.13 - 7.36 \text{ m}^2/\text{L}$), manufactured by CCI 800-443-2871, Layton, UT. SuperSealTM 2000 shall be applied in accordance with the SuperSealTM 2000 Technical Information Sheet.

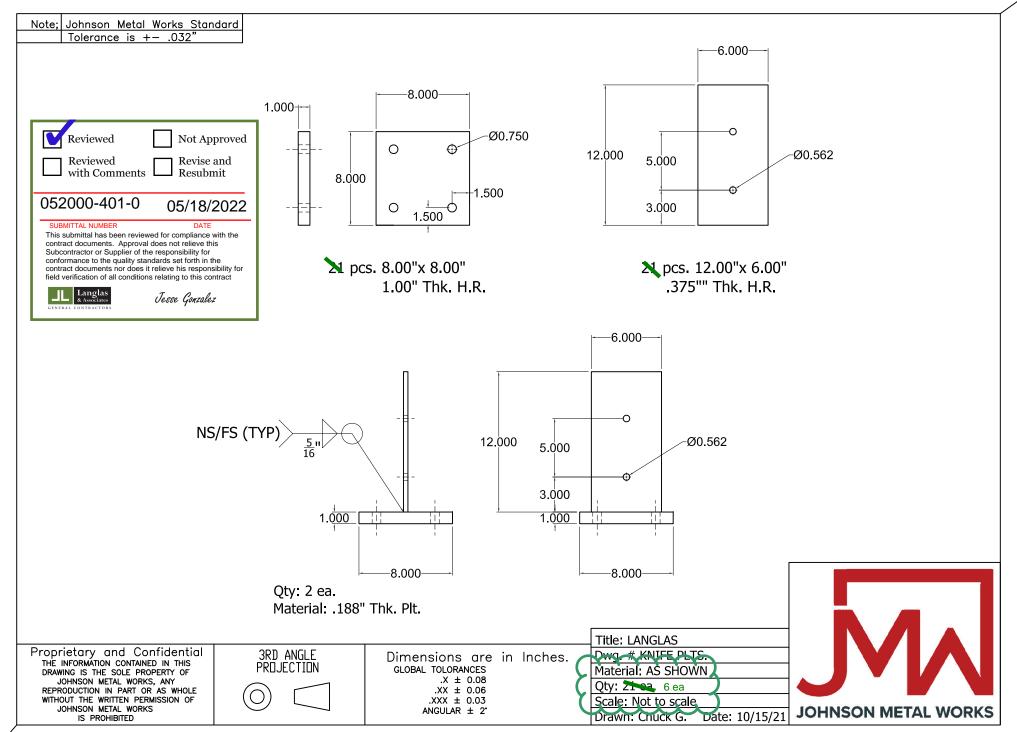
ORDER SPECIFICATION

Product: SuperSeal™ 2000		
Shipping Weight: 8 lbs (3.63 kg)	Container Size: 1-Gallon (3.79 L)	Item No: S-2000-1
Shipping Weight: 40 lbs (18 kg)	Container Size: 5-Gallon (18.925 L)	Item No: S-2000-5
Shipping Weight: 450 lbs (202.5 kg)	Container Size: 55-Gallon (208.175 L)	Item No: S-2000-55

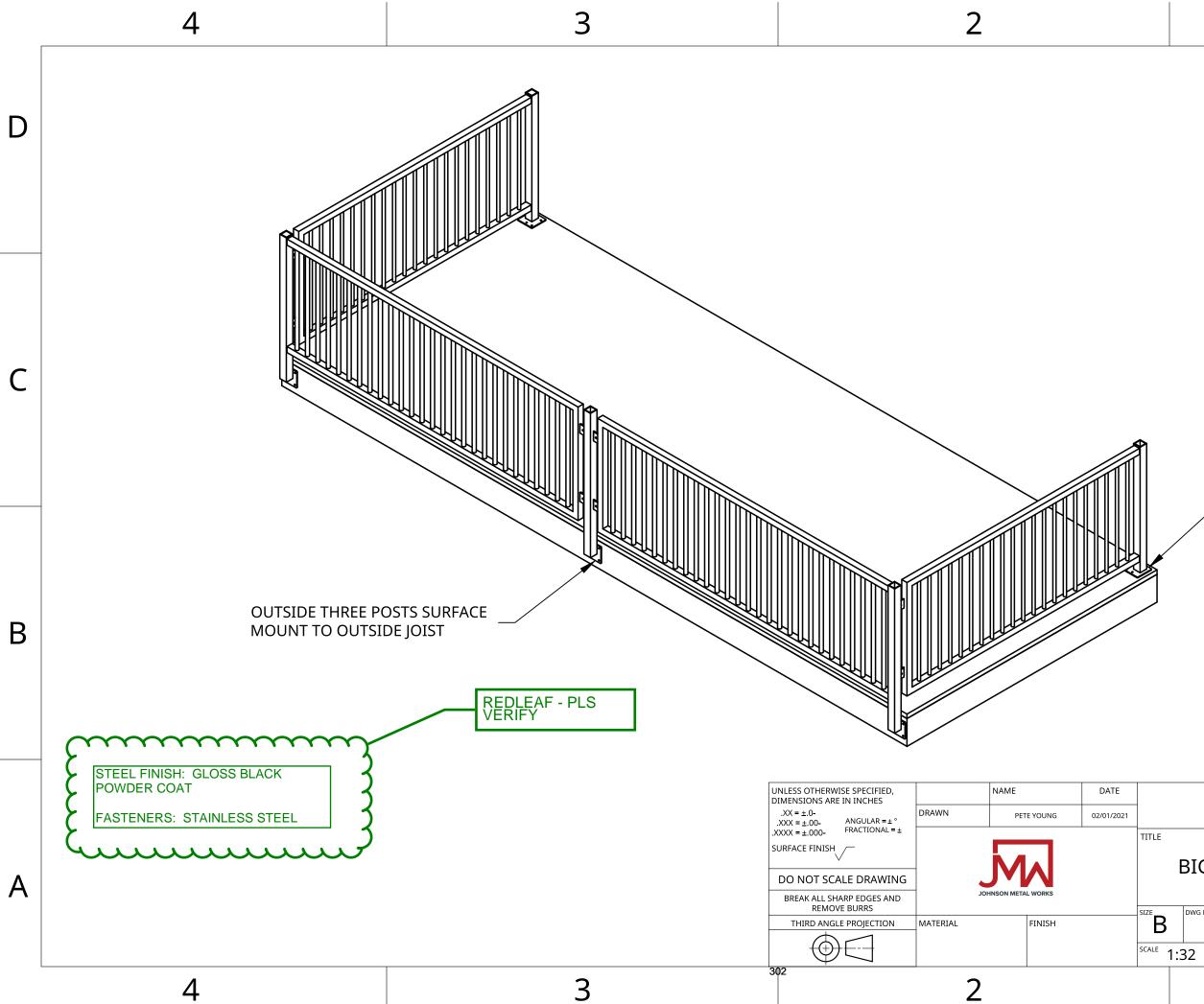
"Concrete Coatings Inc. warrants its products to be free of manufacturing defects and that they will meet Concrete Coatings Inc. current published physical properties when applied in accordance with Concrete Coatings Inc. written directions and tested in accordance with ACI, ASTM and Concrete Coatings Inc. Standards. There are no other warranties by Concrete Coatings Inc. of any nature whatsoever, expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Concrete Coatings Inc. shall not be liable for damages of any sort, including remote or consequential damages, resulting from any claimed breach of any warranty, whether expressed or implied, from any other cause whatsoever. Concrete Coatings Inc. will not be responsible for use of this product in a manner to infringe on any patent held by others. User assumes all liability and risk associated with use, selection, application and warranty of product. Concrete Coatings Inc. makes no representation as to the suitability of product for any application and/or damages of any kind directly or indirectly associated with its selection or application."

FOR THE LOCATION OF YOUR NEAREST CONCRETE COATINGS INC. REPRESENTATIVE CALL NATIONWIDE TOLL-FREE 1-800-443-2871

Knife Plate



Balcony Railing Shop Drawings

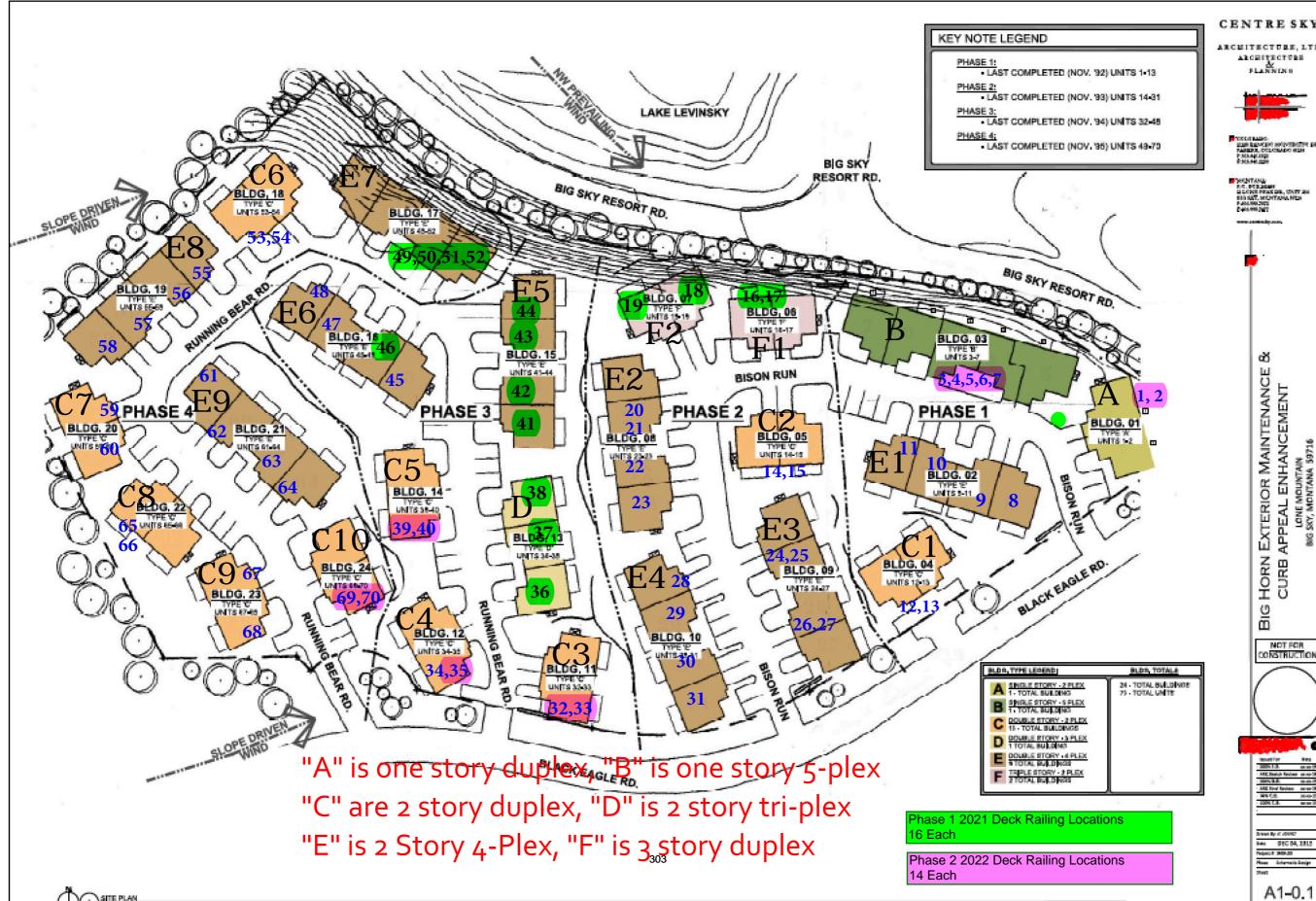


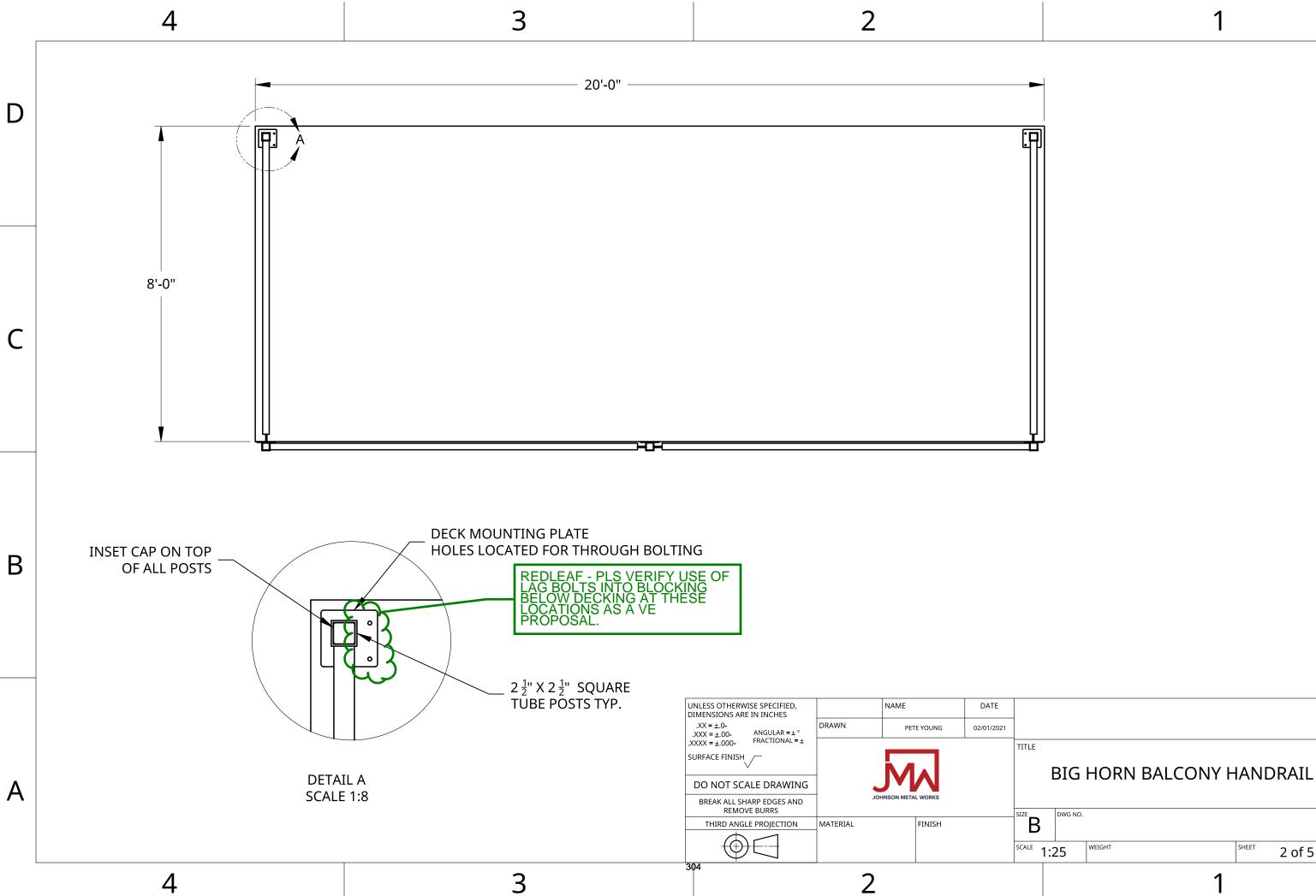
	D
BUILDING SIDE TWO POSTS DECK MOUNT	С
GENERAL CONTRACTORS GENERAL CONTRACTORS This submittal has been reviewed for compliance with the contract documents. Approval does not relieve this Subcontractor or Supplier of the responsibility for conformance to the quality standards set forth in the contract documents nor does it relieve his responsibility for field verification of all conditions relating to this contract REVIEWED BY:	В
SUBMITTAL #: 05300-401-0 ITLE BIG HORN BALCONY HANDRAIL REV. CALE 1:22	A

1

1

1 of 5





B	DWG NO	D.				REV.
CALE 🧳	1:25	WEIGHT		SHEET	2 of 5	
		·	4			

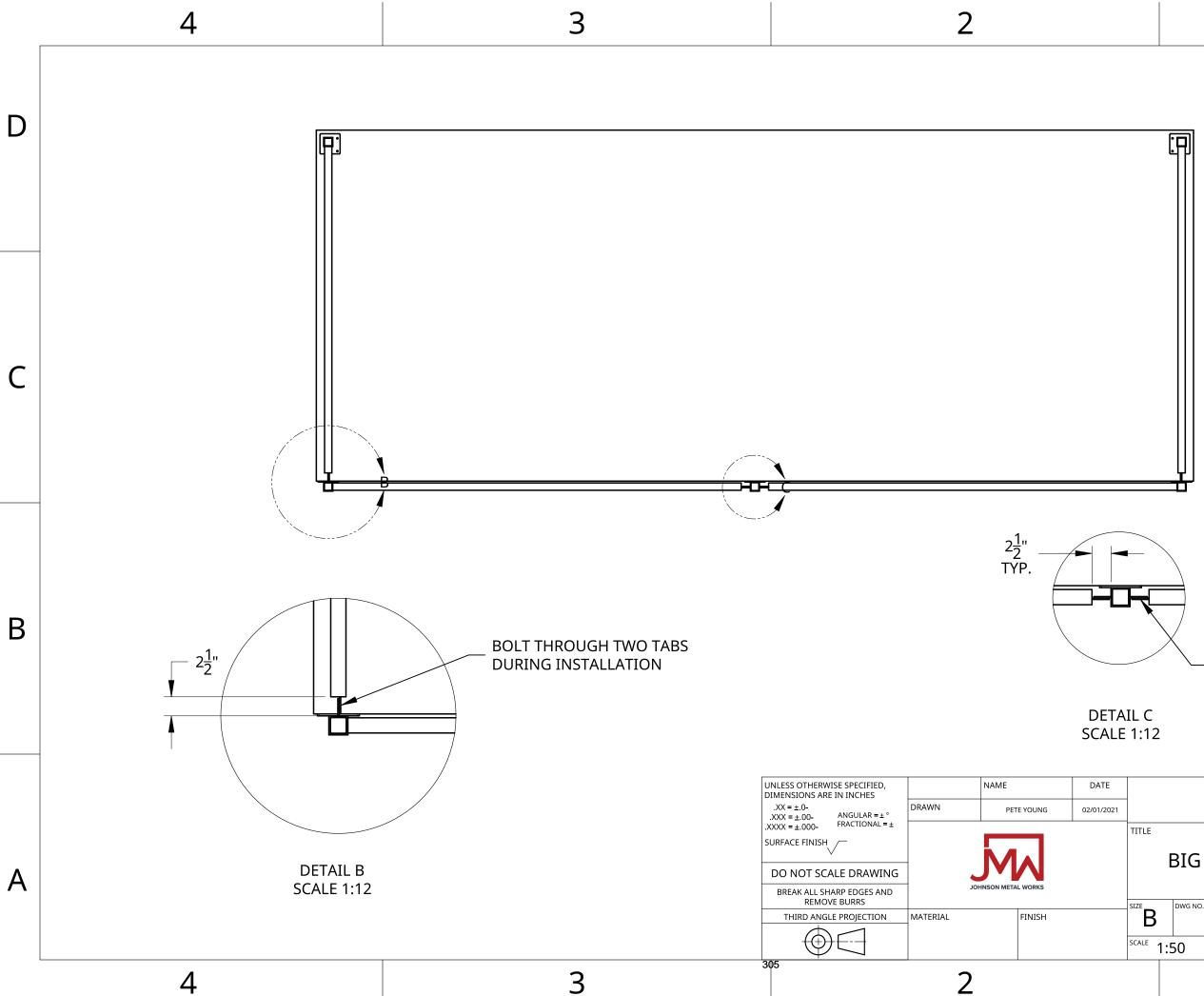
1

D

С

В

Α



	DIG		DALCOT	••••				Α
B	DWG NO.						REV.	
SCALE	1:50	WEIGHT			SHEET	3 of 5		
				1				



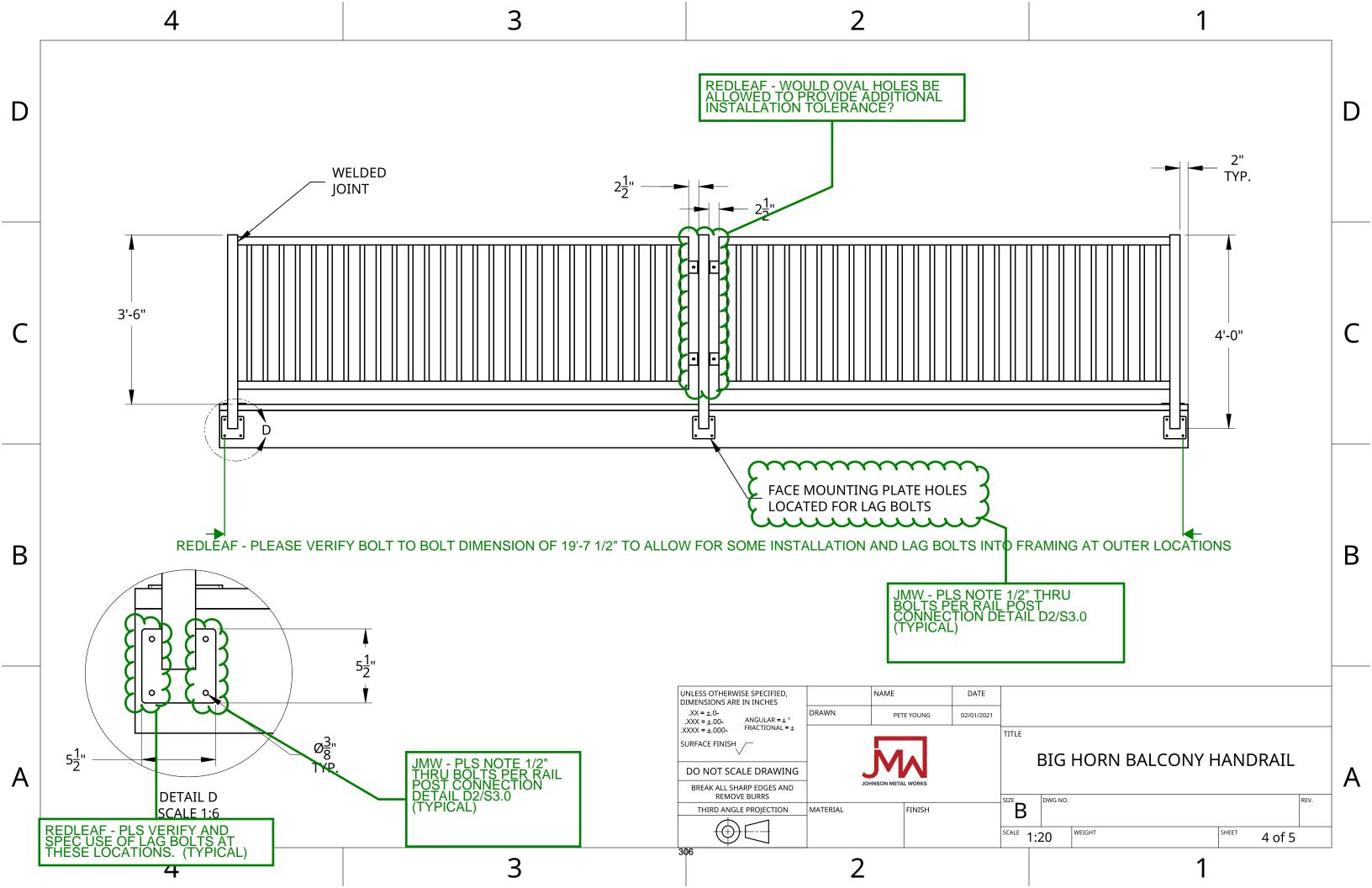
BOLT THROUGH TWO TABS

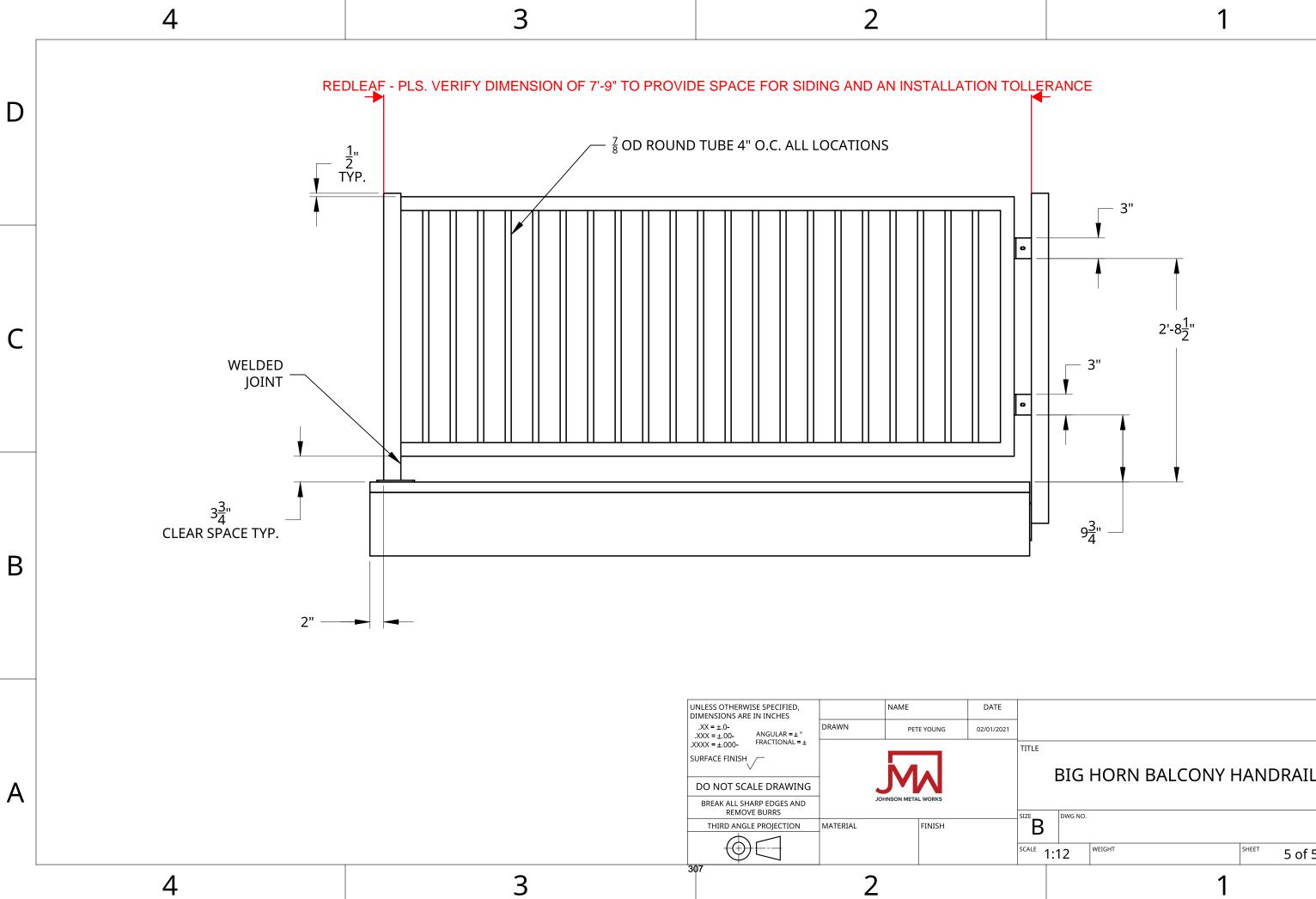
DURING INSTALLATION

D

С

В





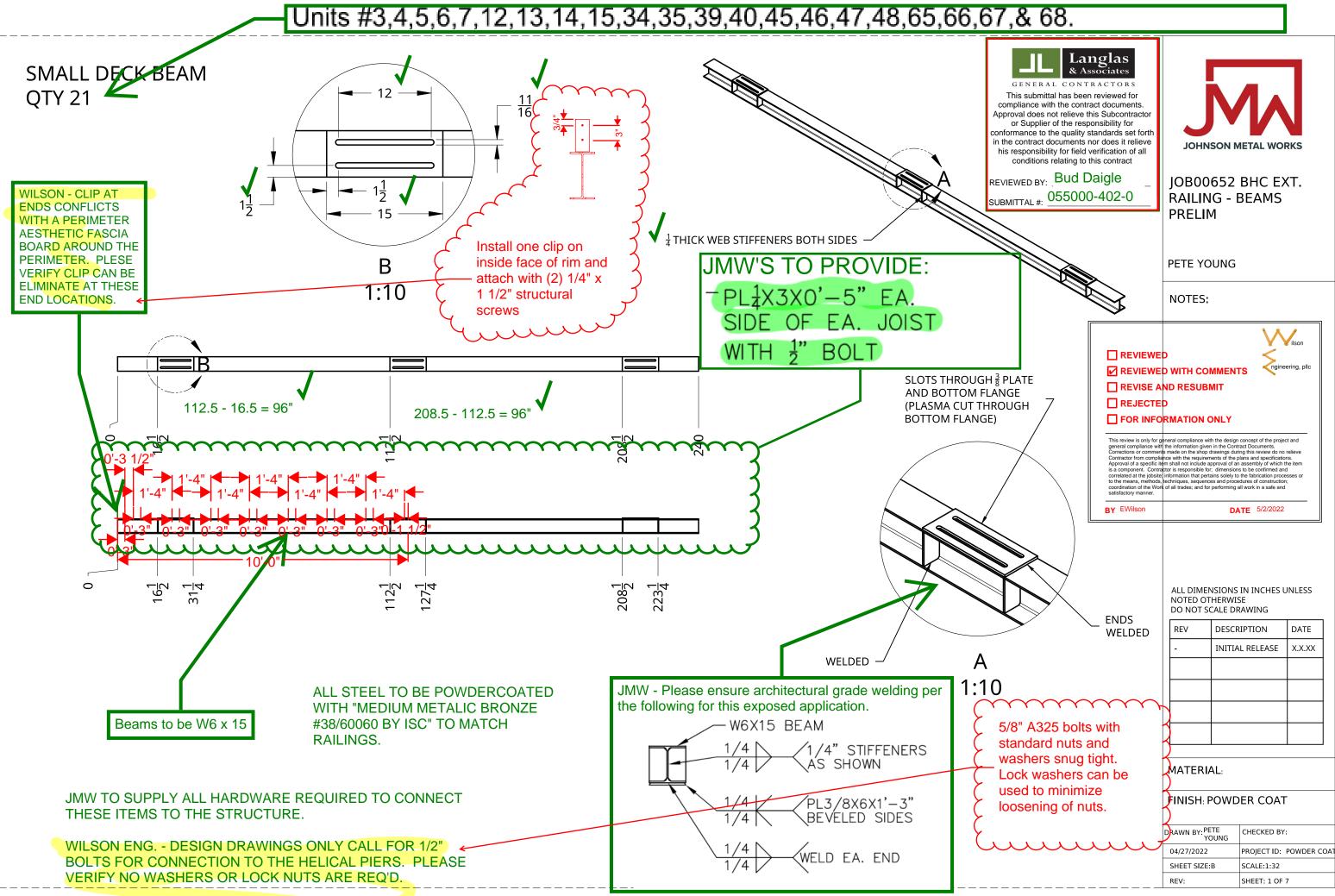
	DIG					Α
B	DWG NO.				REV.	
^{scale} 1	:12	WEIGHT	SHEET	5 of 5		
		1				

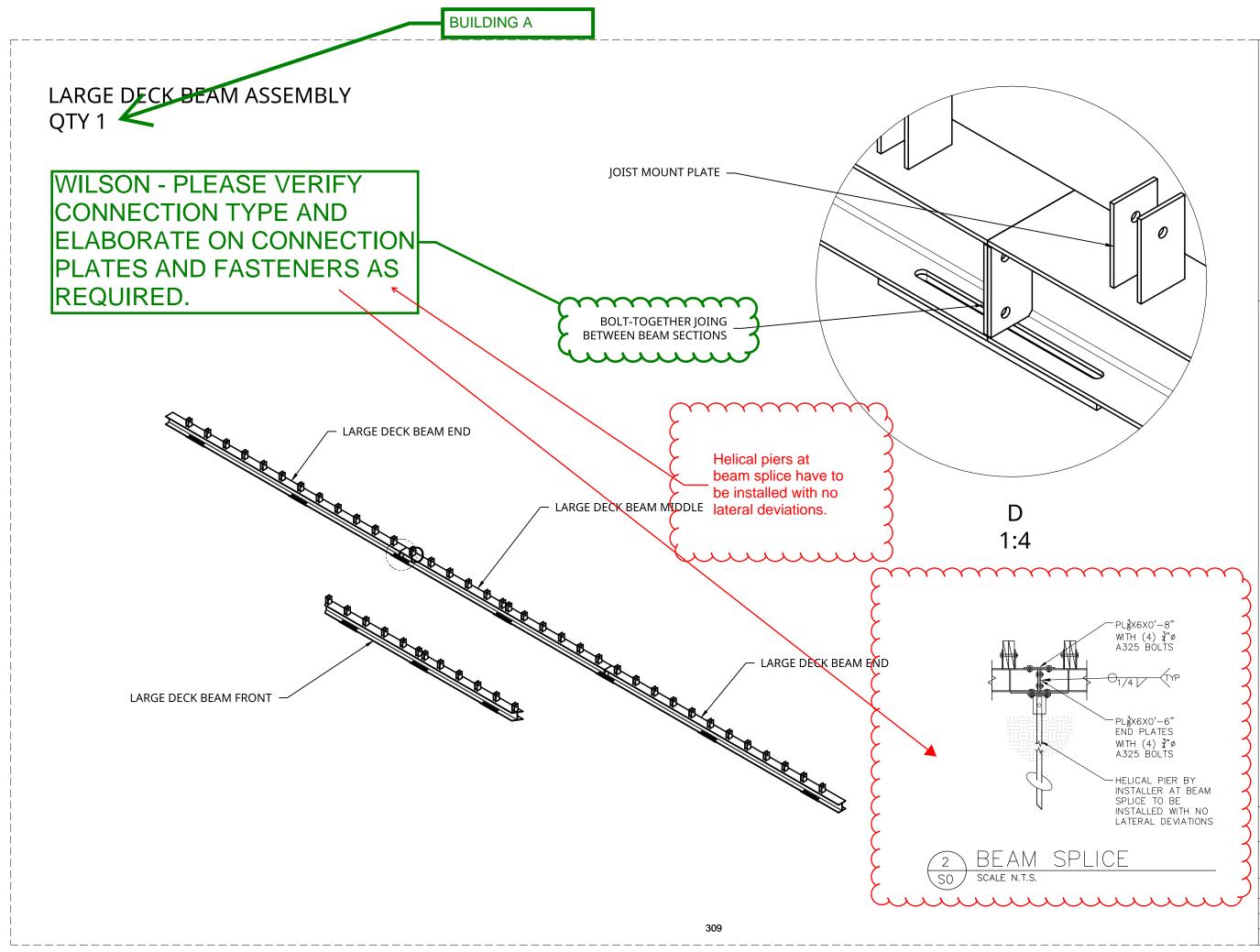
1

D

С

В







JOB00652 BHC EXT. RAILING - BEAMS PRELIM

PETE YOUNG

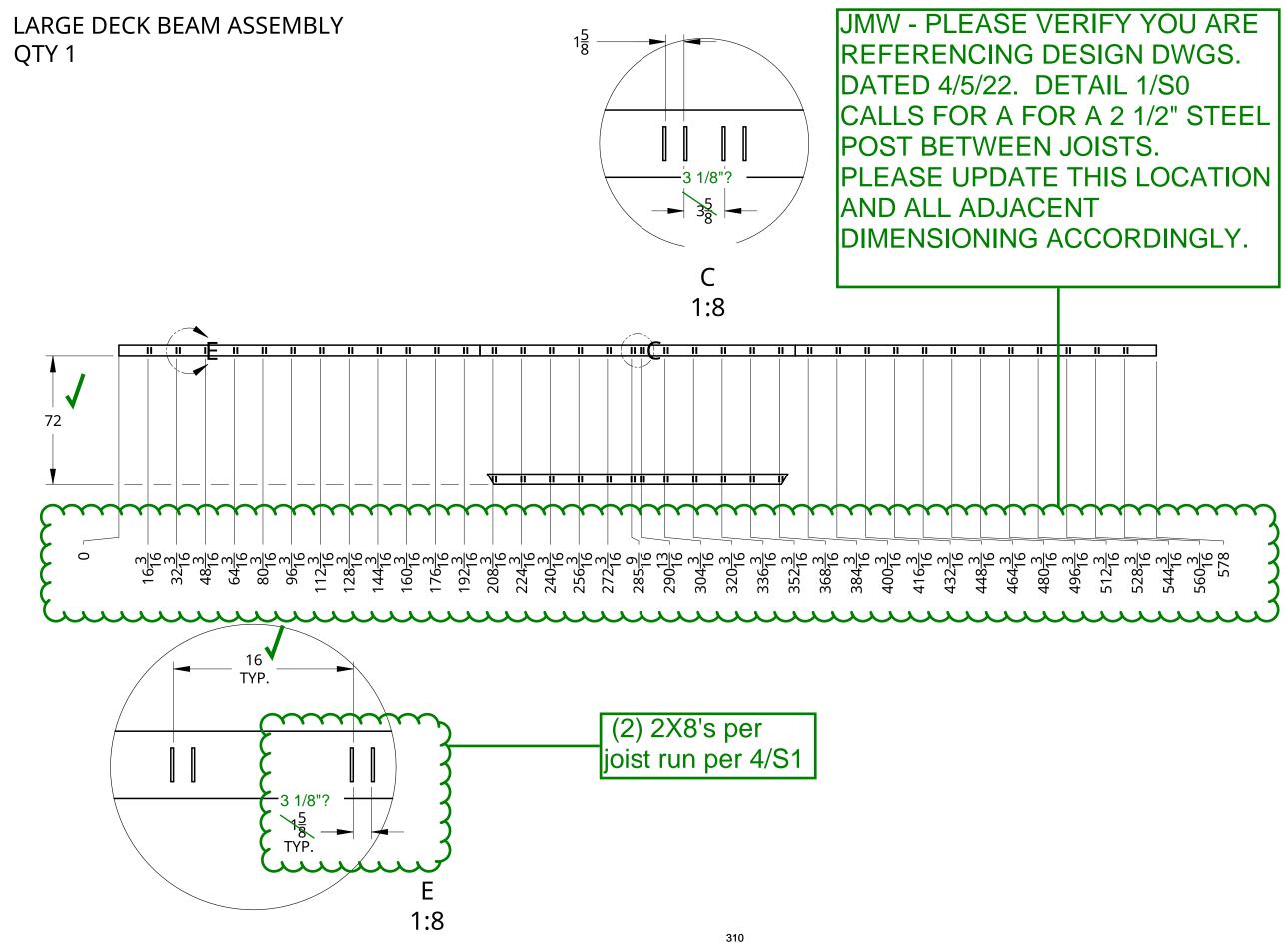
NOTES:

ALL DIMENSIONS IN INCHES UNLESS NOTED OTHERWISE DO NOT SCALE DRAWING

DESCRIPTION	DATE
INITIAL RELEASE	X.X.XX

MATERIAL:

DRAWN BY: PETE YOUNG	CHECKED BY:
04/27/2022	PROJECT ID: POWDER COAT
SHEET SIZE:B	SCALE:1:50
REV:	SHEET: 2 OF 7





JOB00652 BHC EXT. **RAILING - BEAMS** PRELIM

PETE YOUNG

NOTES:

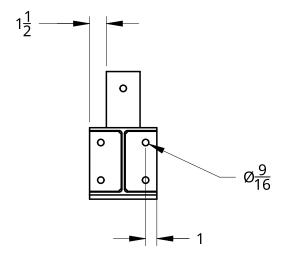
ALL DIMENSIONS IN INCHES UNLESS NOTED OTHERWISE DO NOT SCALE DRAWING

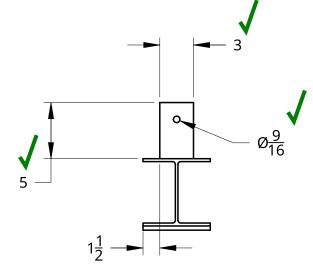
REV	DESCRIPTION	DATE
-	INITIAL RELEASE	X.X.XX

MATERIAL:

DRAWN BY: PETE YOUNG	CHECKED BY:
04/27/2022	PROJECT ID: POWDER COAT
SHEET SIZE:B	SCALE:1:50
REV:	SHEET: 3 OF 7

LARGE DECK BEAM ASSEMBLY QTY 1





1:8



JOB00652 BHC EXT. RAILING - BEAMS PRELIM

PETE YOUNG

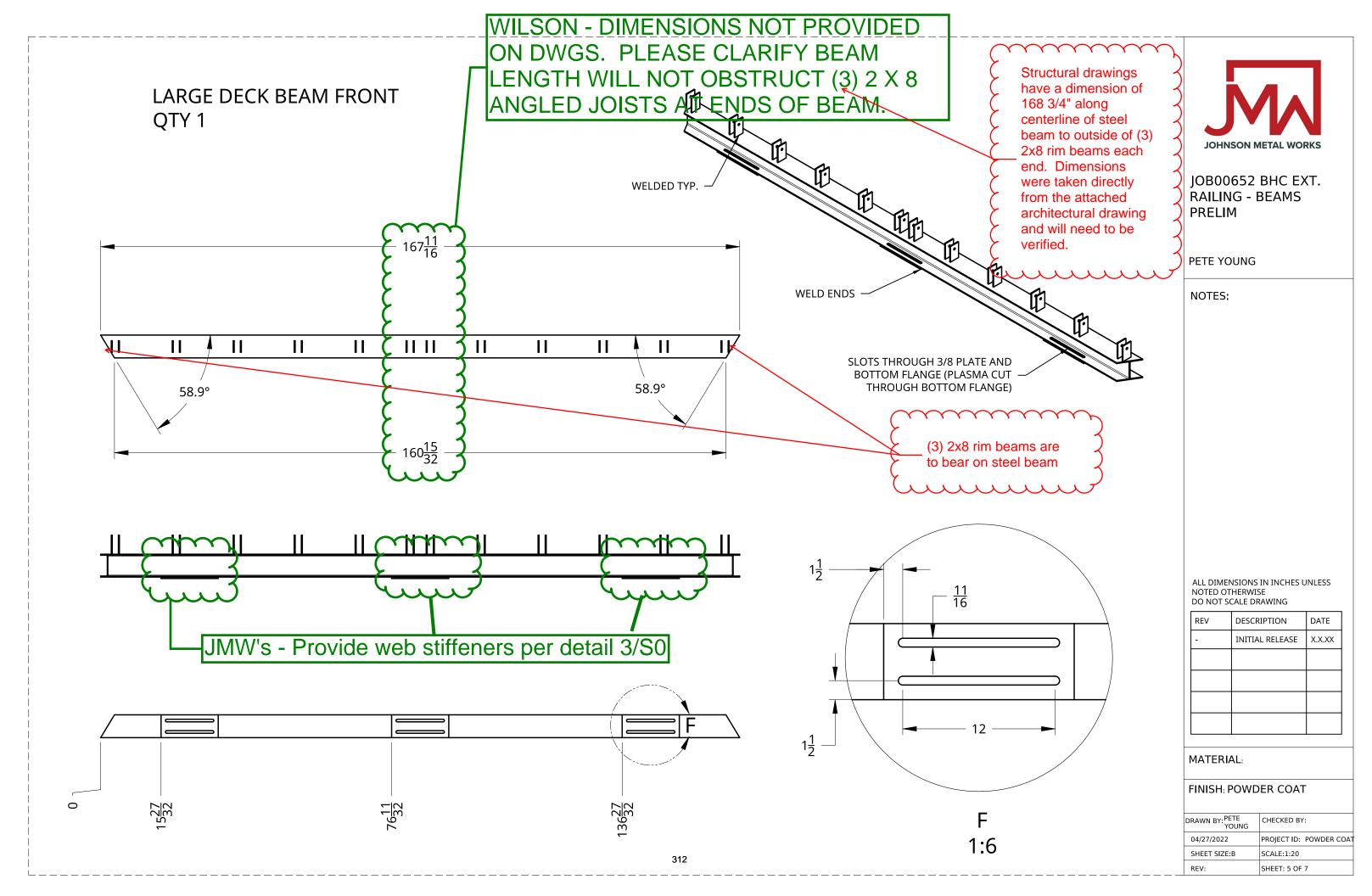
NOTES:

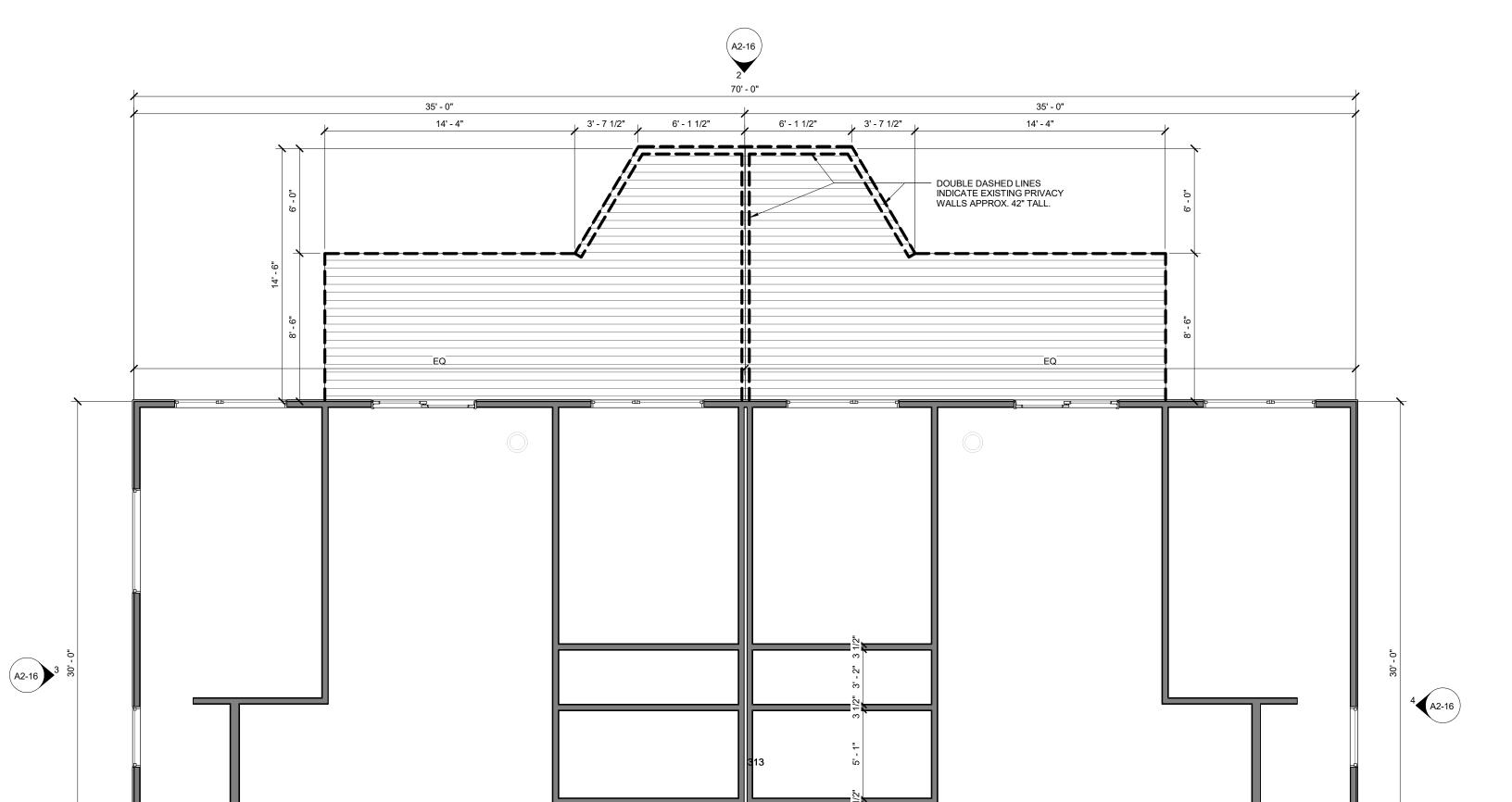
ALL DIMENSIONS IN INCHES UNLESS NOTED OTHERWISE DO NOT SCALE DRAWING

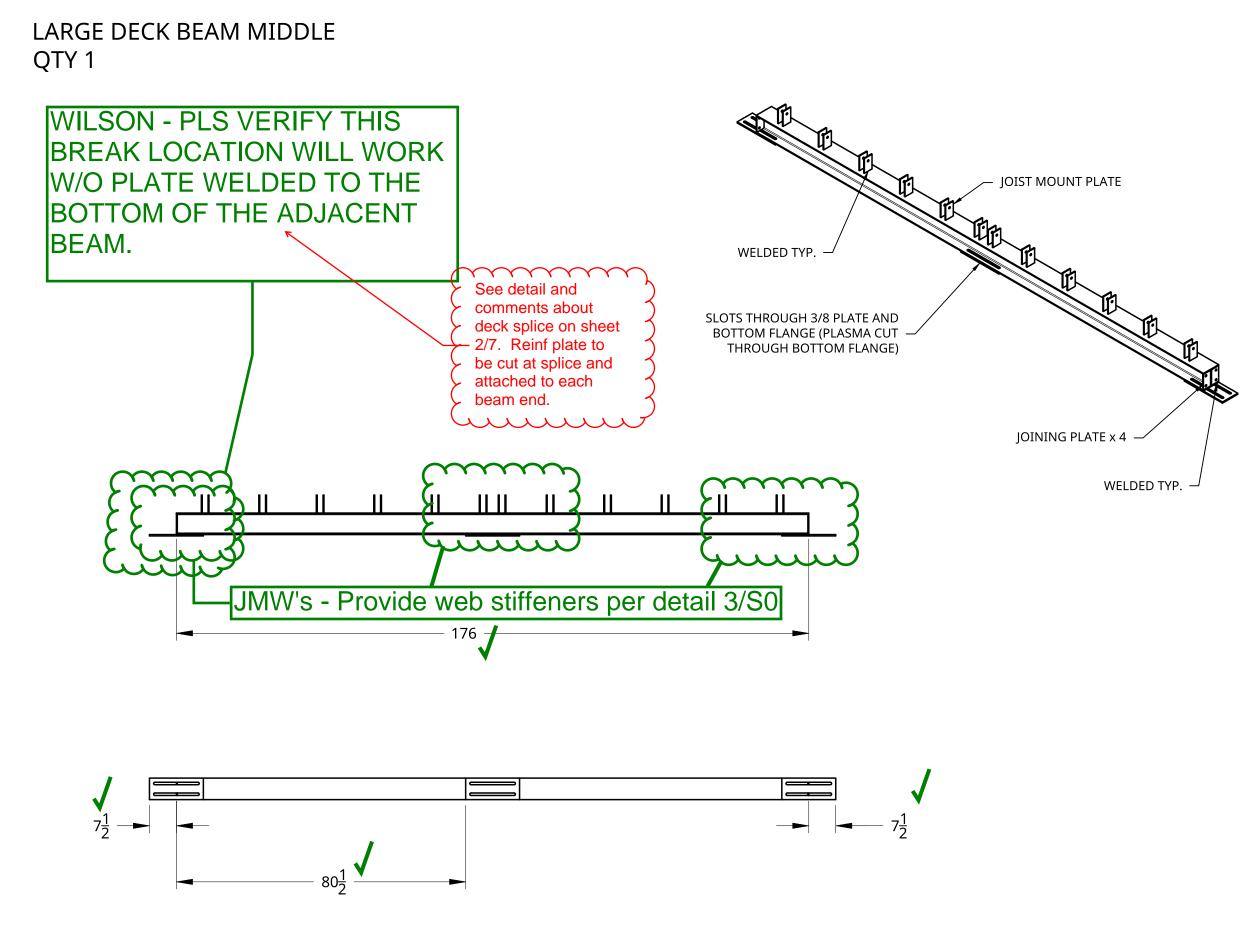
REV	DESCRIPTION	DATE
-	INITIAL RELEASE	X.X.XX

MATERIAL:

DRAWN BY:PETE YOUNG	CHECKED BY:
04/27/2022	PROJECT ID: POWDER COAT
SHEET SIZE:B	SCALE:1:50
REV:	SHEET: 4 OF 7







314



JOB00652 BHC EXT. RAILING - BEAMS PRELIM

PETE YOUNG

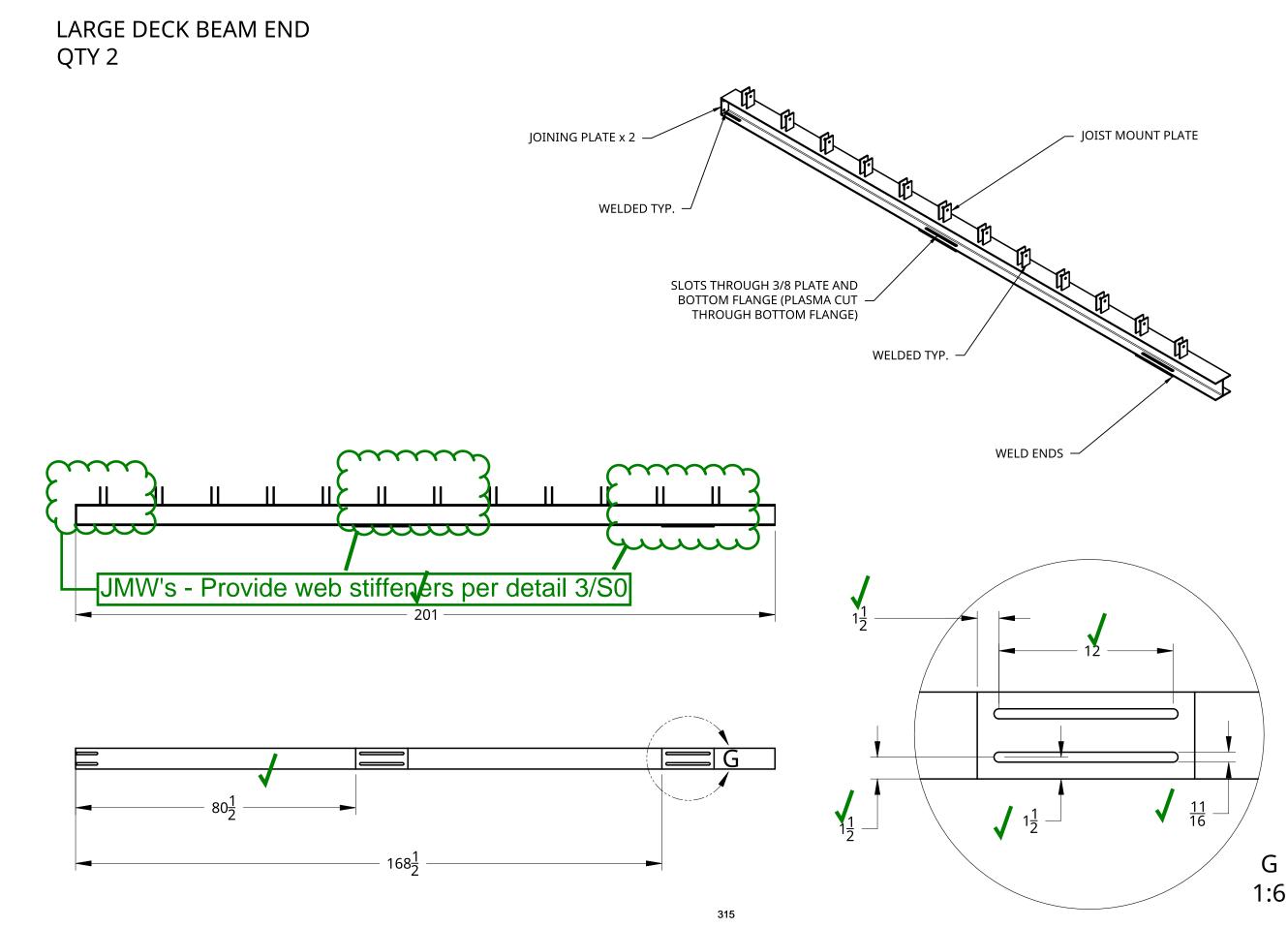
NOTES:

ALL DIMENSIONS IN INCHES UNLESS NOTED OTHERWISE DO NOT SCALE DRAWING

REV	DESCRIPTION	DATE
-	INITIAL RELEASE	X.X.XX

MATERIAL:

DRAWN BY:PETE YOUNG	CHECKED BY:
04/27/2022	PROJECT ID: POWDER COAT
SHEET SIZE:B	SCALE:1:25
REV:	SHEET: 6 OF 7





JOB00652 BHC EXT. RAILING - BEAMS PRELIM

PETE YOUNG

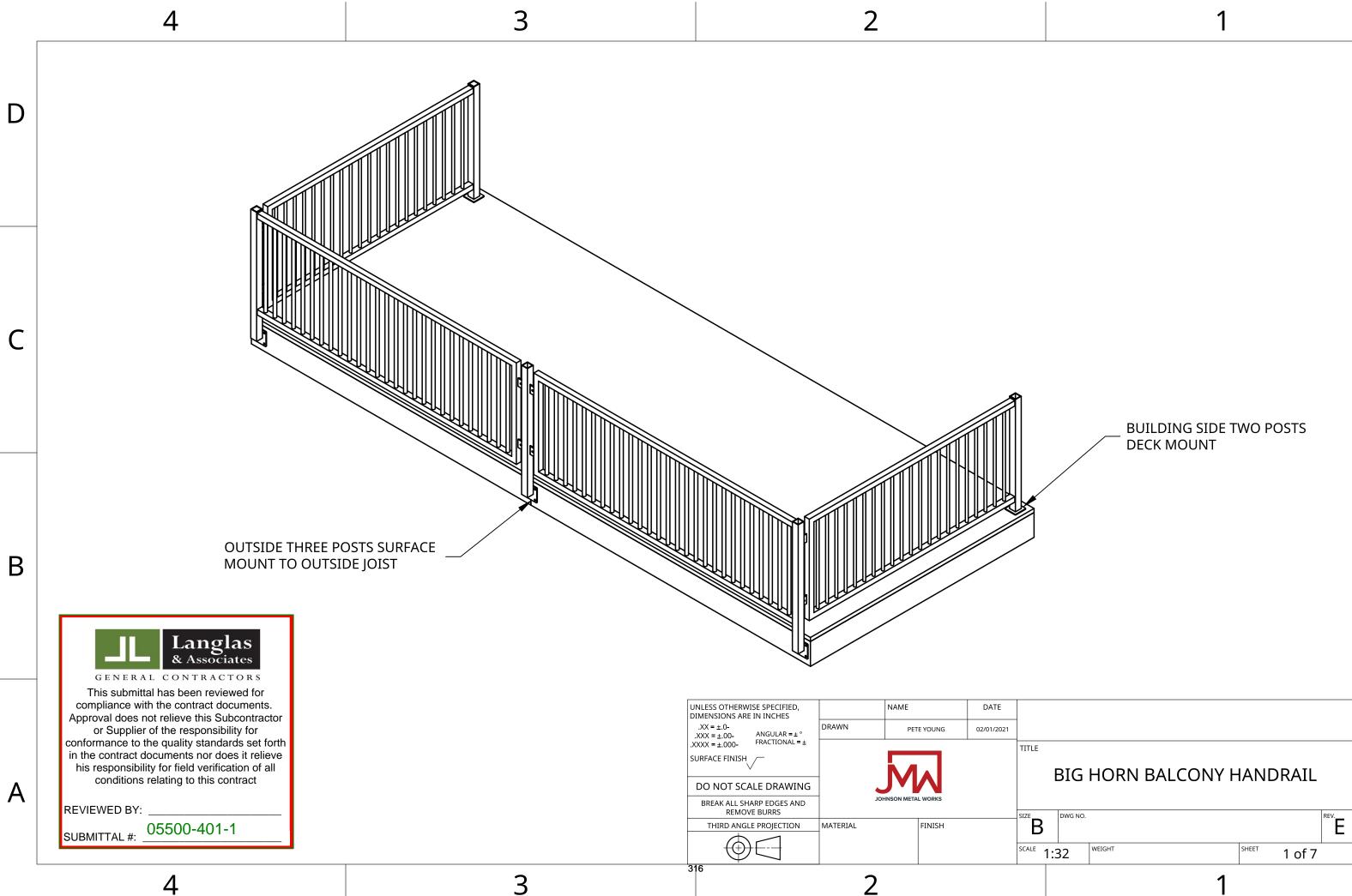
NOTES:

ALL DIMENSIONS IN INCHES UNLESS NOTED OTHERWISE DO NOT SCALE DRAWING

REV	DESCRIPTION	DATE
-	INITIAL RELEASE	X.X.XX

MATERIAL:

DRAWN BY: PETE YOUNG	CHECKED BY:
04/27/2022	PROJECT ID: POWDER COAT
SHEET SIZE:B	SCALE:1:25
REV:	SHEET: 7 OF 7

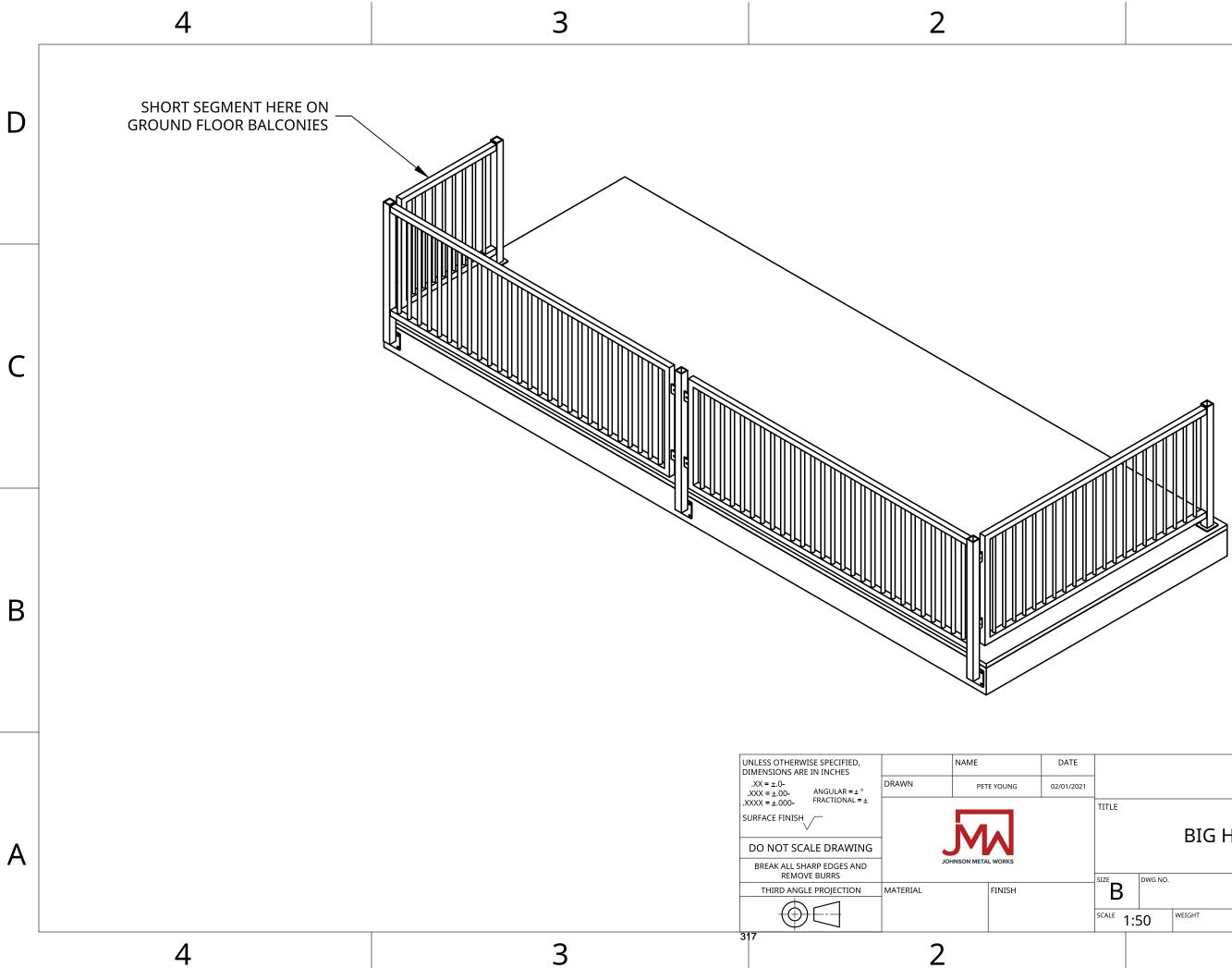


	_						A
B	DV	WG NO.				^{REV.}	
CALE	1:32	2	WEIGHT	SHEET	1 of 7		
			4				

D

С

В



B	DWG NC).					E REV.	
CALE ,	1:50	WEIGHT			SHEET	2 of 7		
				1				

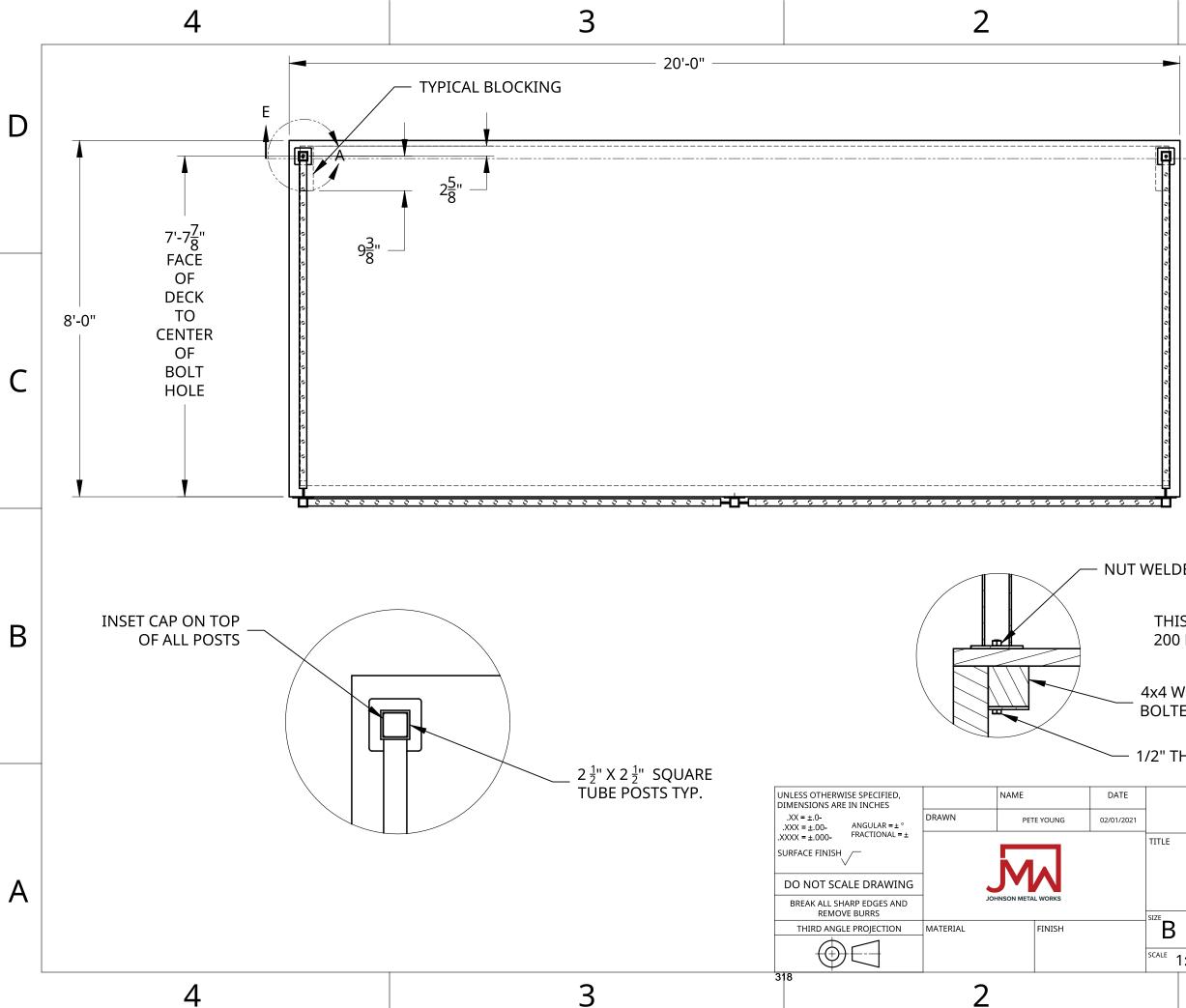
BIG HORN BALCONY

1

D

С

В



	510						Α
B	DWG NO.					E E	
^{CALE} 1	:25	WEIGHT		SHEET	3 of 7		
			1				

BIG HORN BALCONY HANDRAIL

- 1/2" THROUGH BOLT

Ε

D

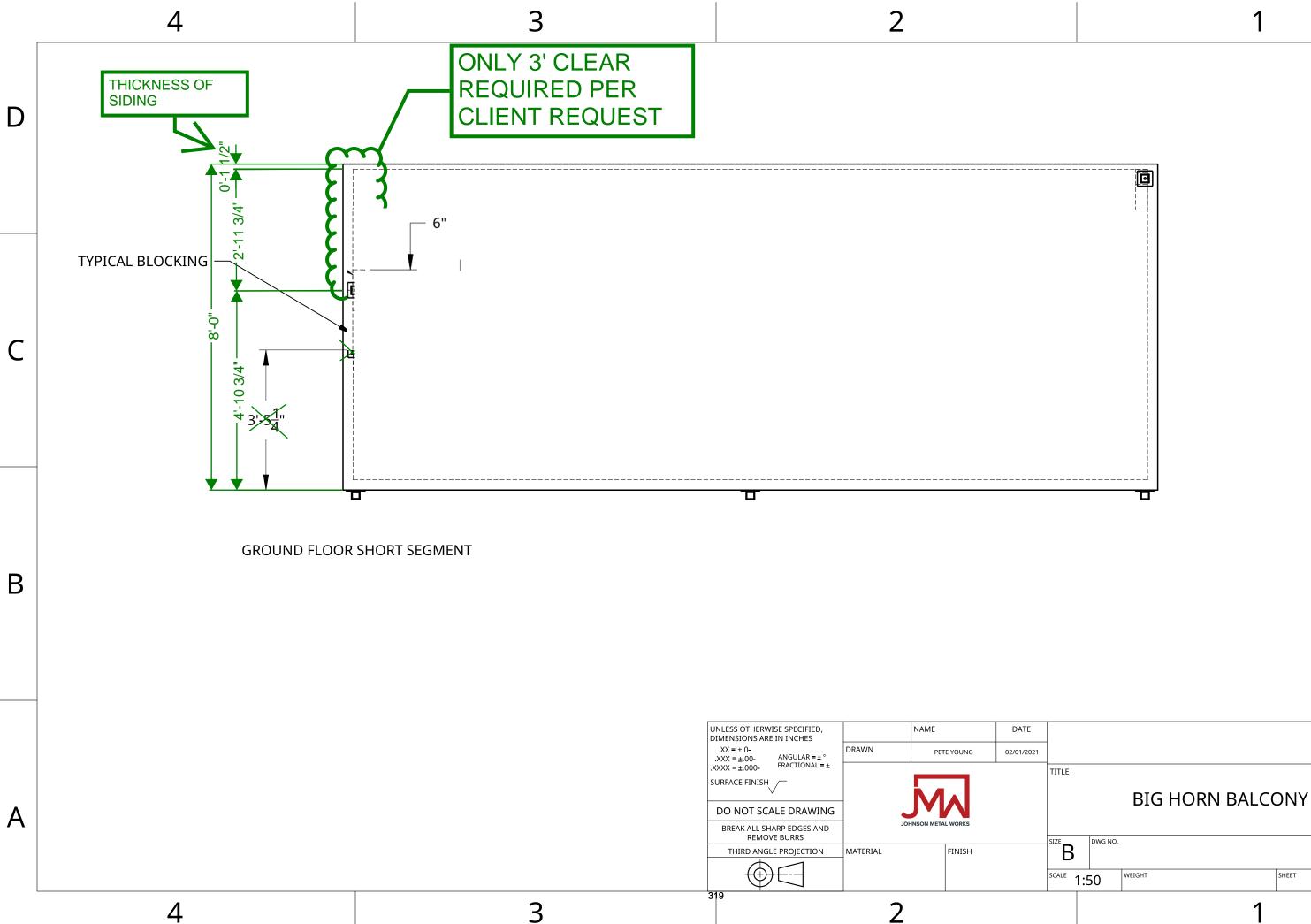
С

В

4x4 WOOD BLOCKING LAG BOLTED TO FLOOR JOIST

THIS CONNECTION TO WITHSTAND 200 LBS FORCE IN EITHER DIRECTION

NUT WELDED TO PLATE INSIDE POST

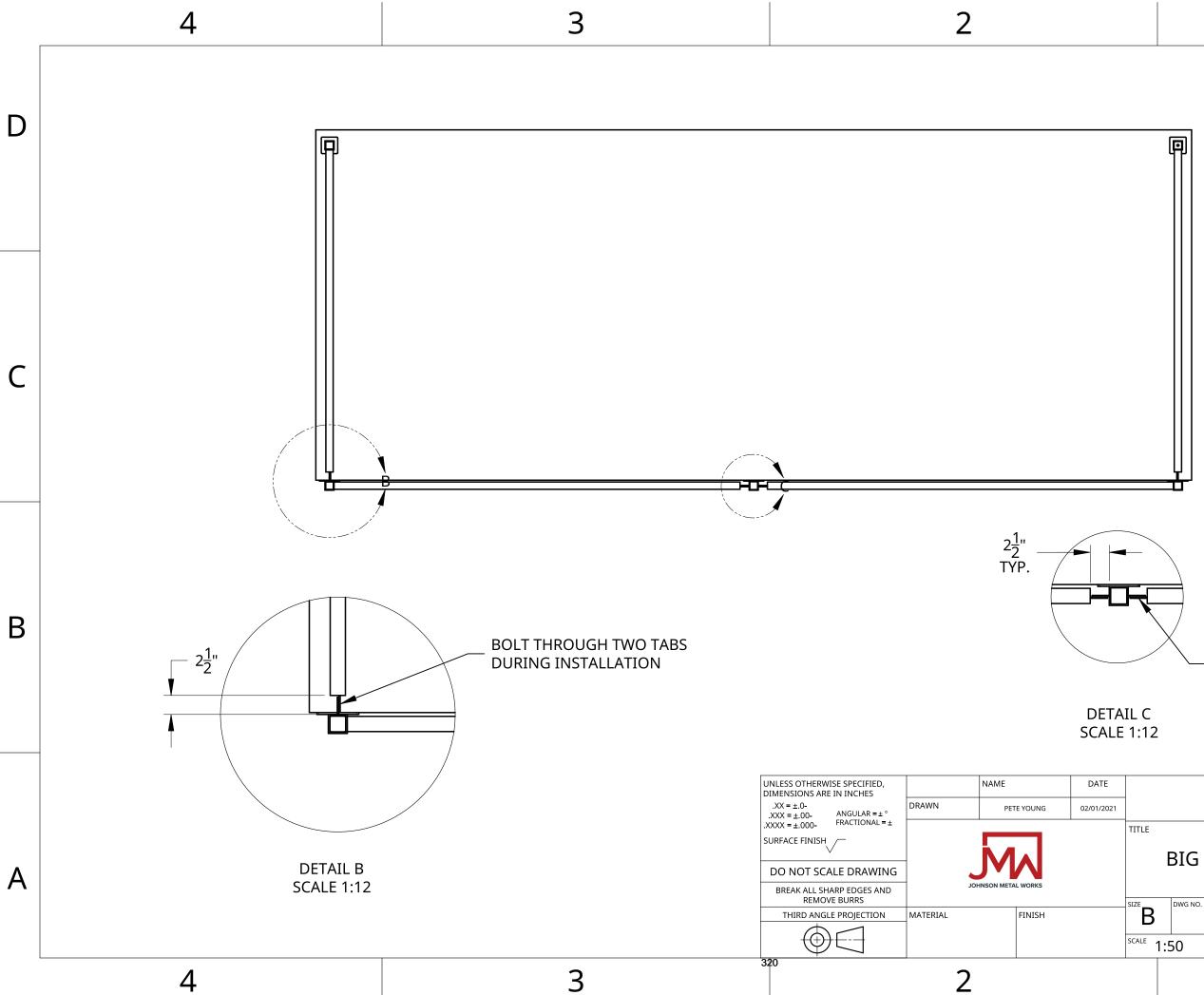


B	DWG NO.						E E		
CALE	1:50	WEIGHT			SHEET	4 of 7			
				1					

D

С

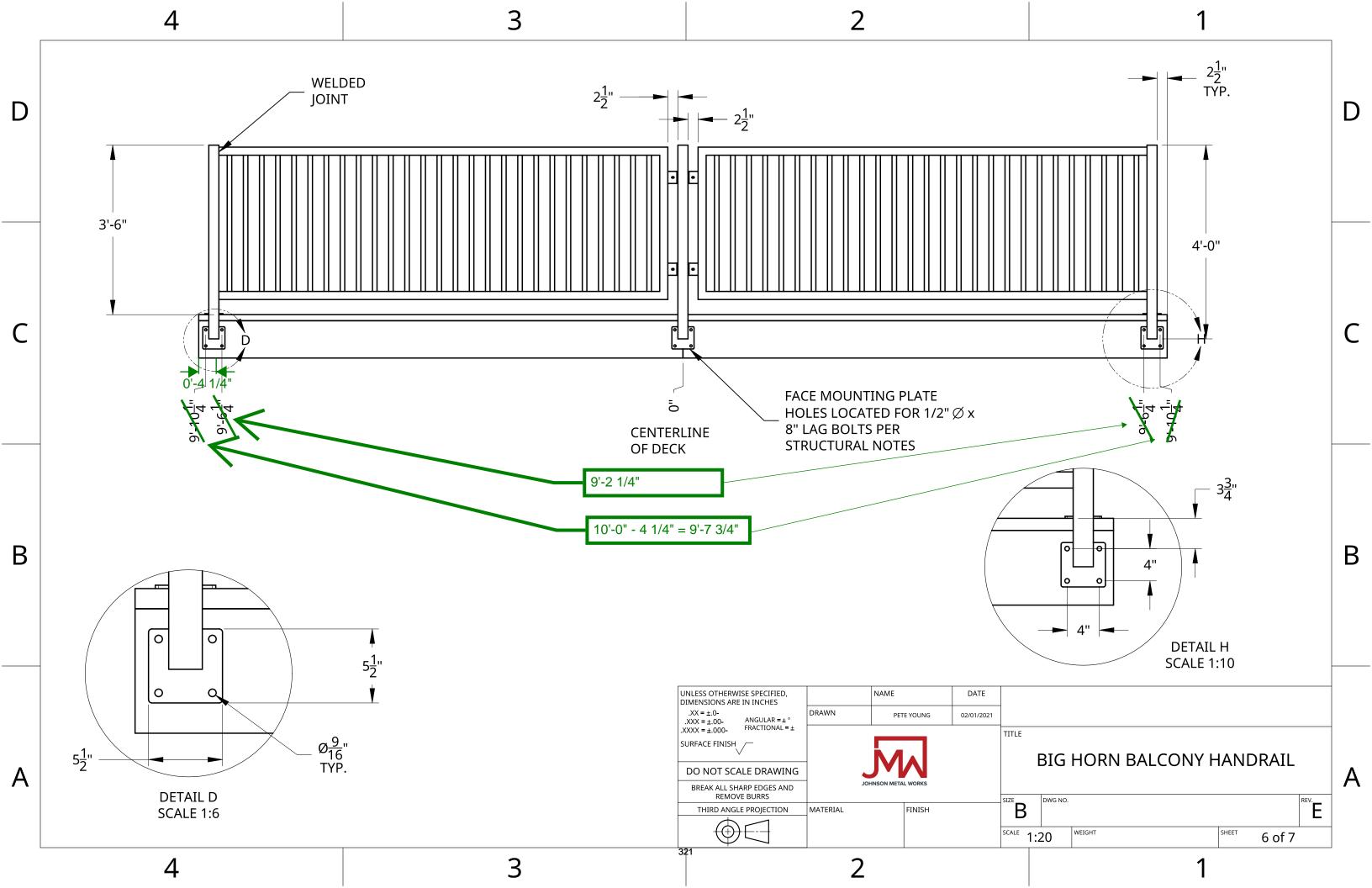
В

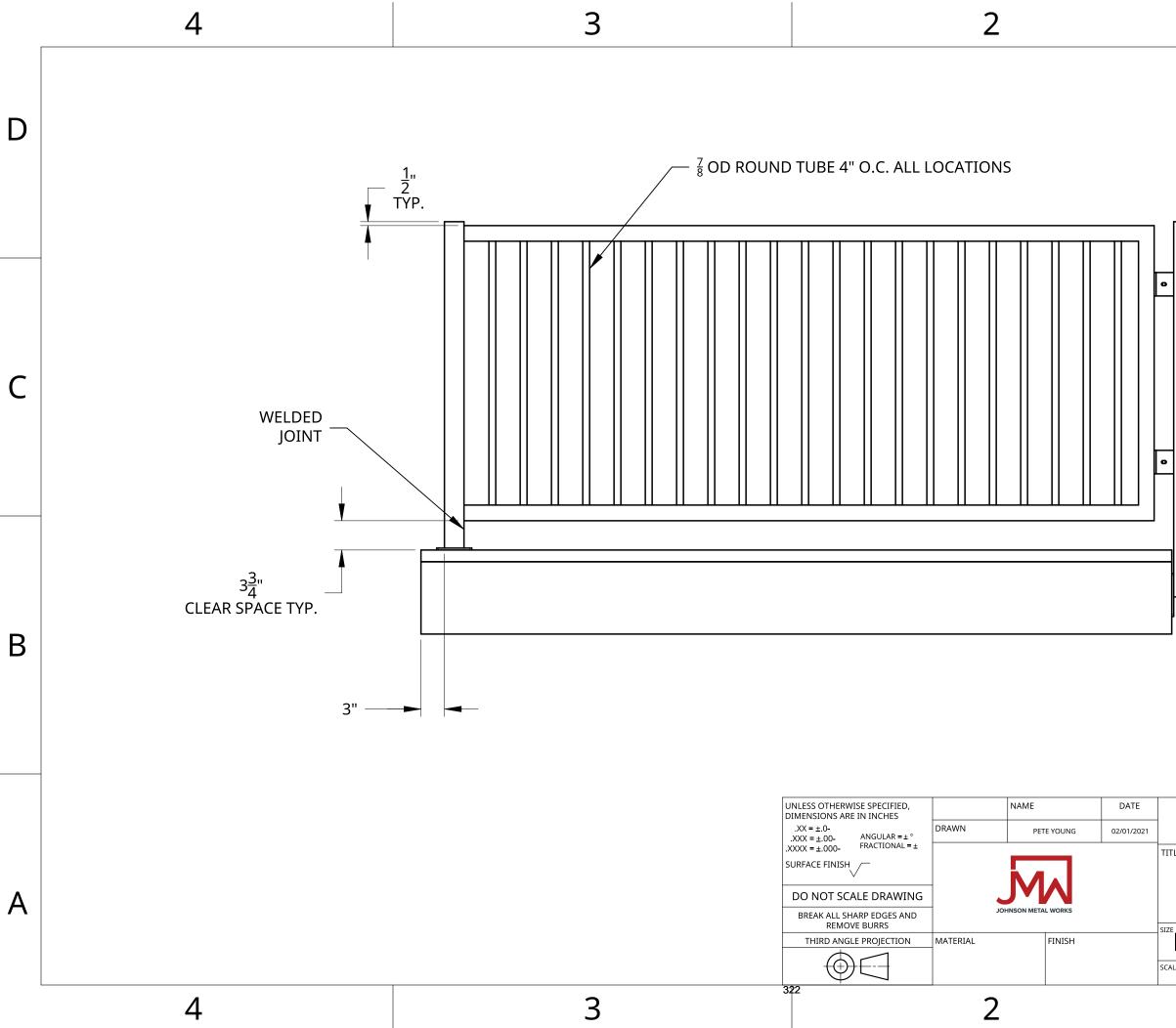


		DURING						
L C 1:12	2							
TITLE	BIG	HORN	BALC	ONY H	IANE	DRAIL		A
B	DWG NO.						E E	
CALE .	1:50	WEIGHT			SHEET	5 of 7		
				1				

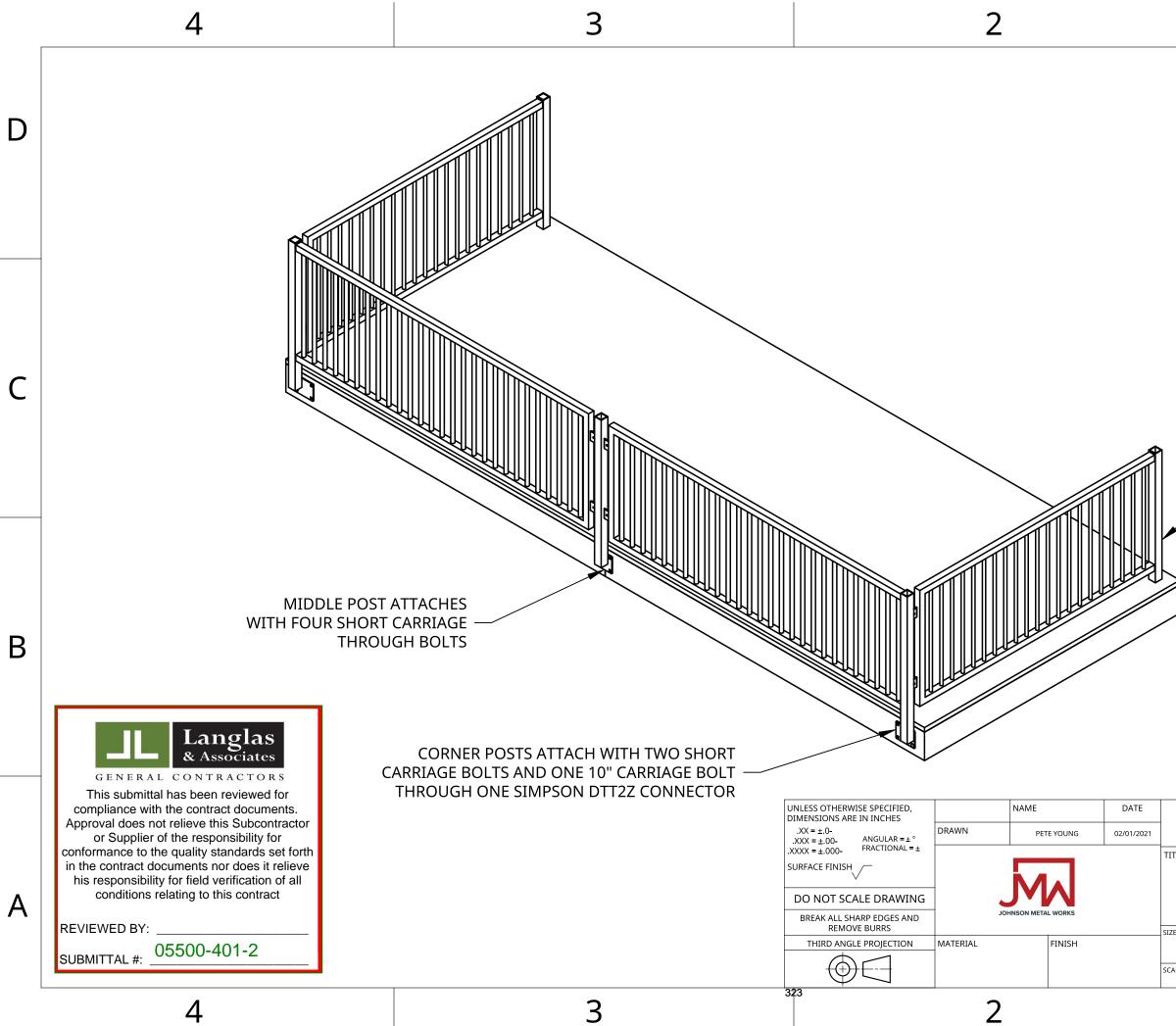
D

С





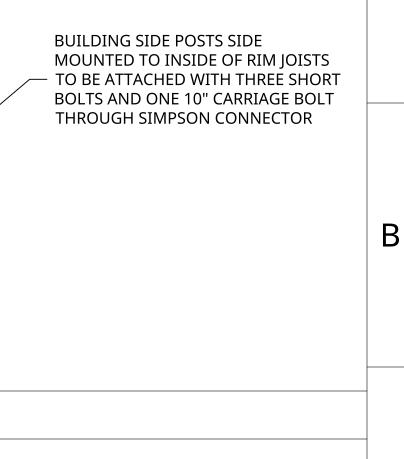
	D
	C
	В
ITLE BIG HORN BALCONY HANDRAIL ZEB DWG NO. E E CALE 1:12 VEIGHT T Of 7 1	A



B	DW	G NO.				REV.
CALE ,	1:32		WEIGHT	SHEET	1 of 8	

TITLE

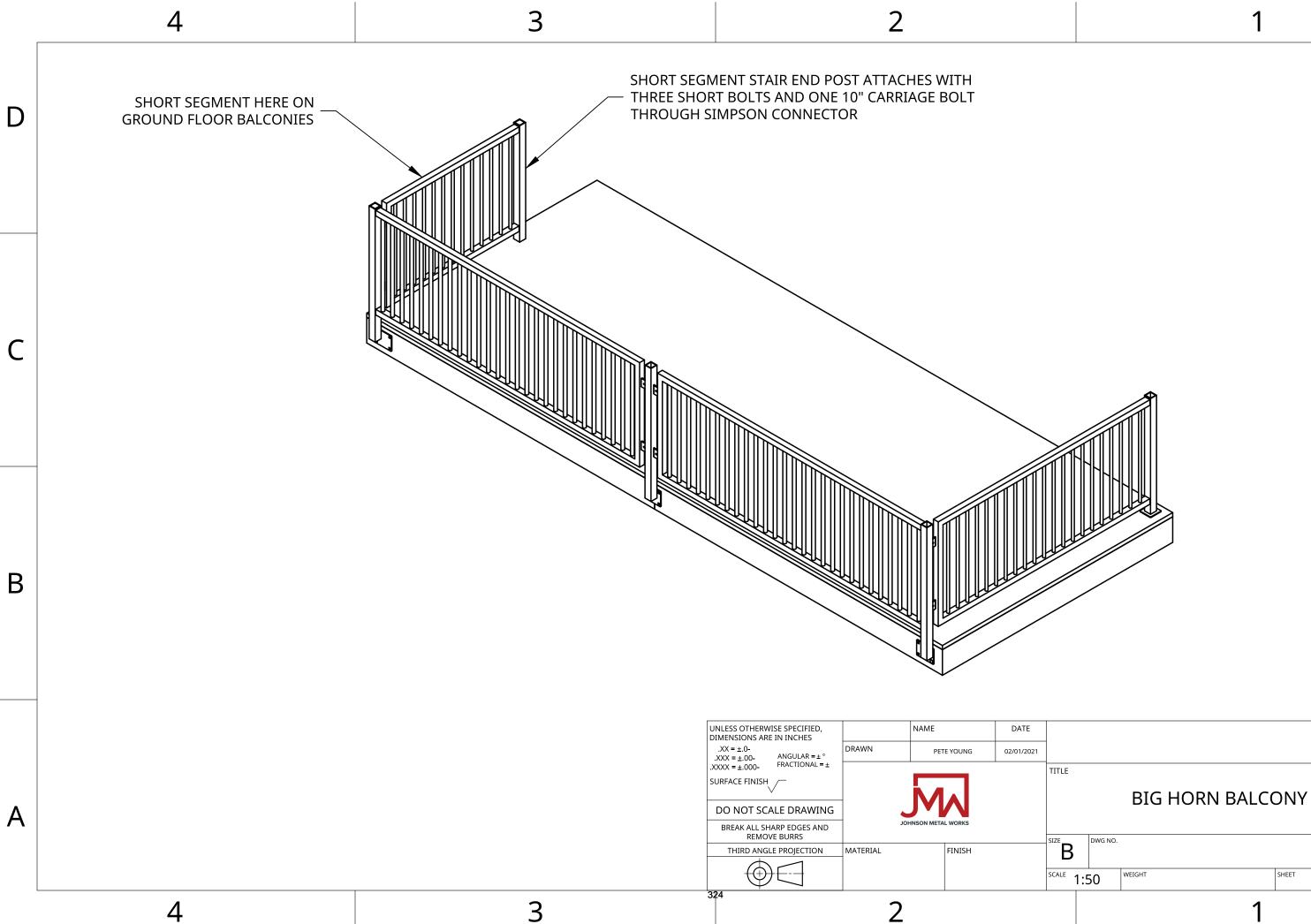
BIG HORN BALCONY HANDRAIL



D

С

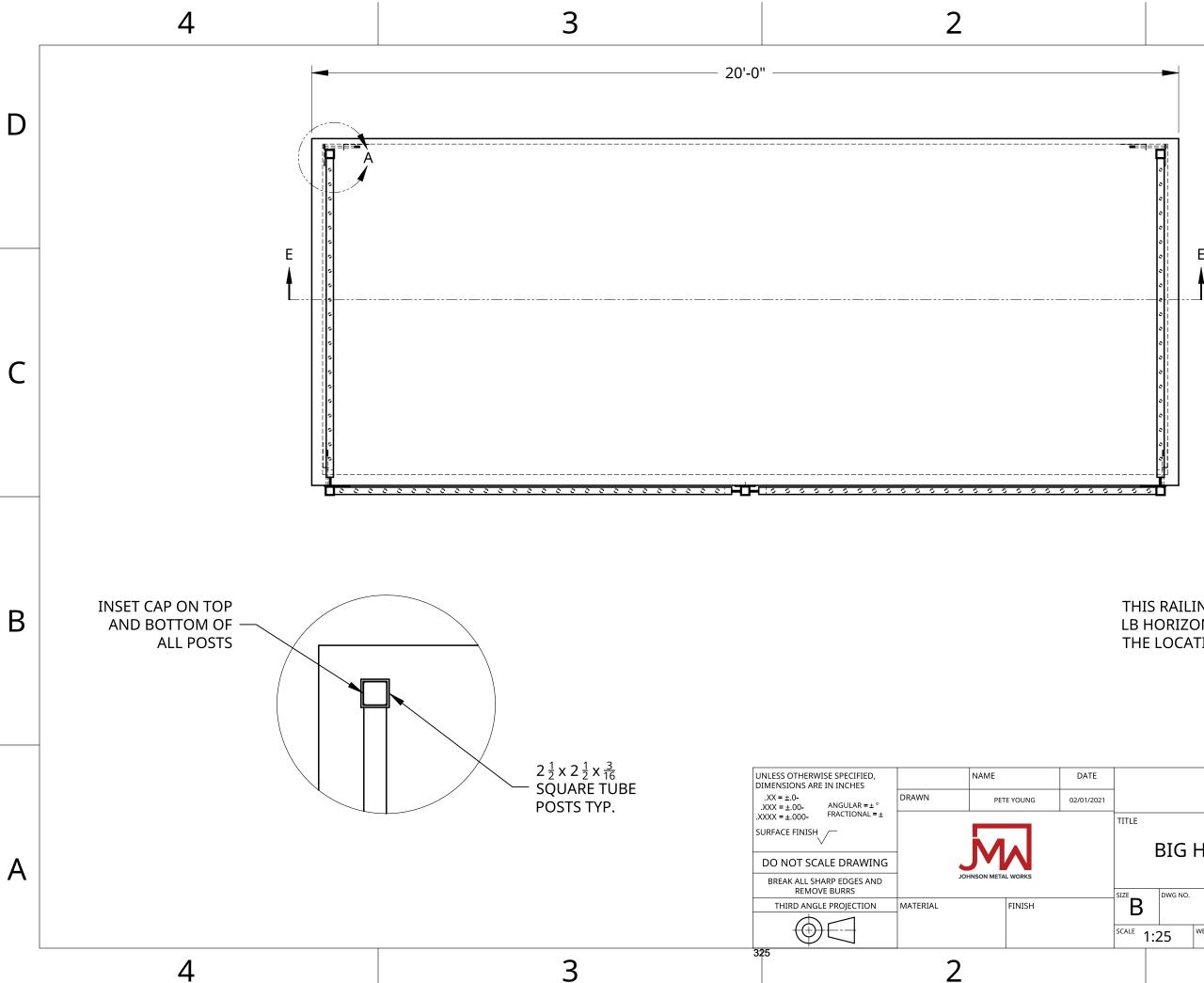
Α



				 				Α
B	DV	WG NO.					REV.	
CALE	1:50)	WEIGHT		SHEET	2 of 8		
				1				

D

С

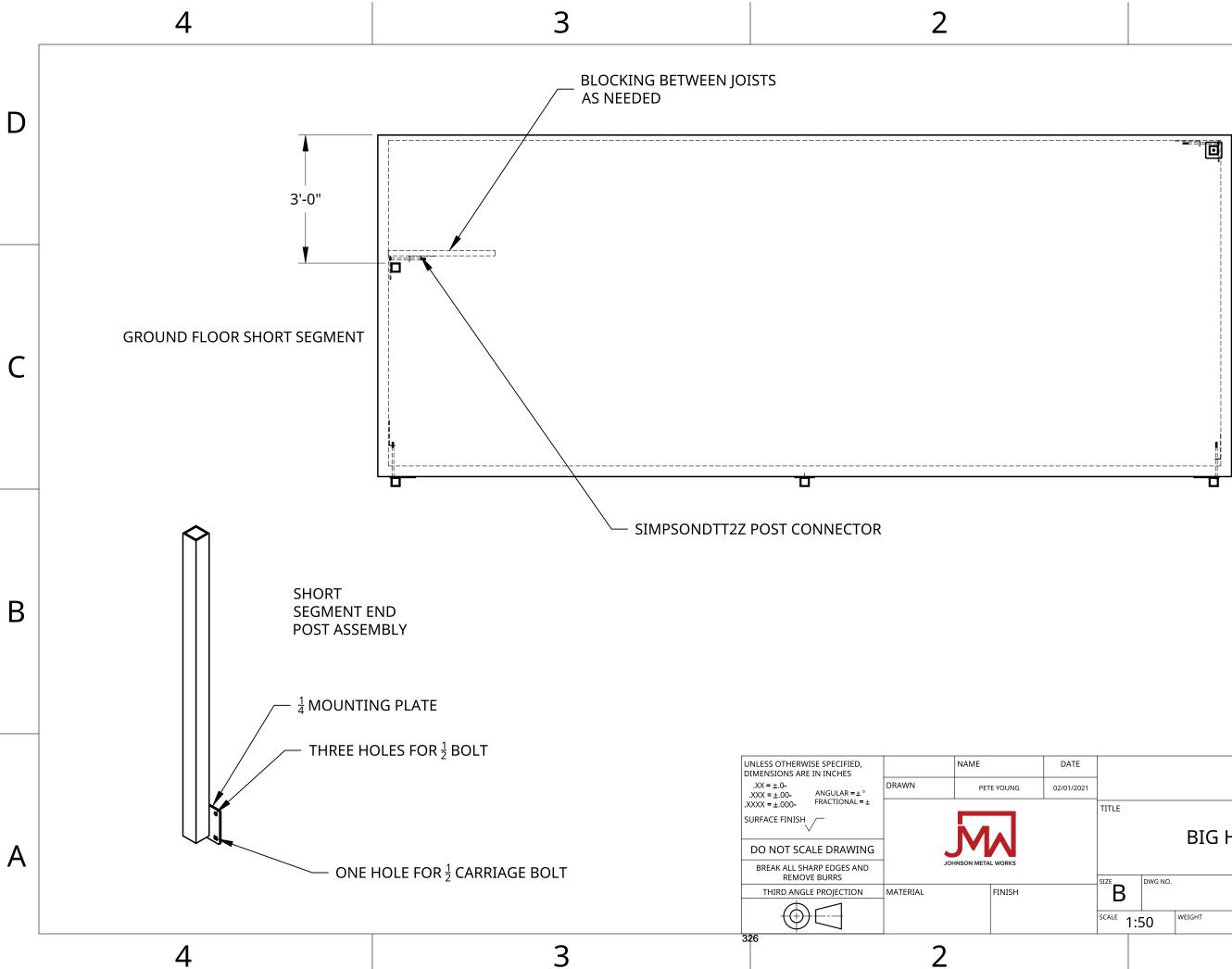


	BIG	HORN	I BALC	CONY	HANI	ORAIL	ŀ
B	DWG NO						
CALE ,	1:25	WEIGHT			SHEET	3 of 8	
				1			

THIS RAILING WILL WITHSTAND A 200 LB HORIZONTAL FORCE APPLIED IN THE LOCATION SHOWN

D

С



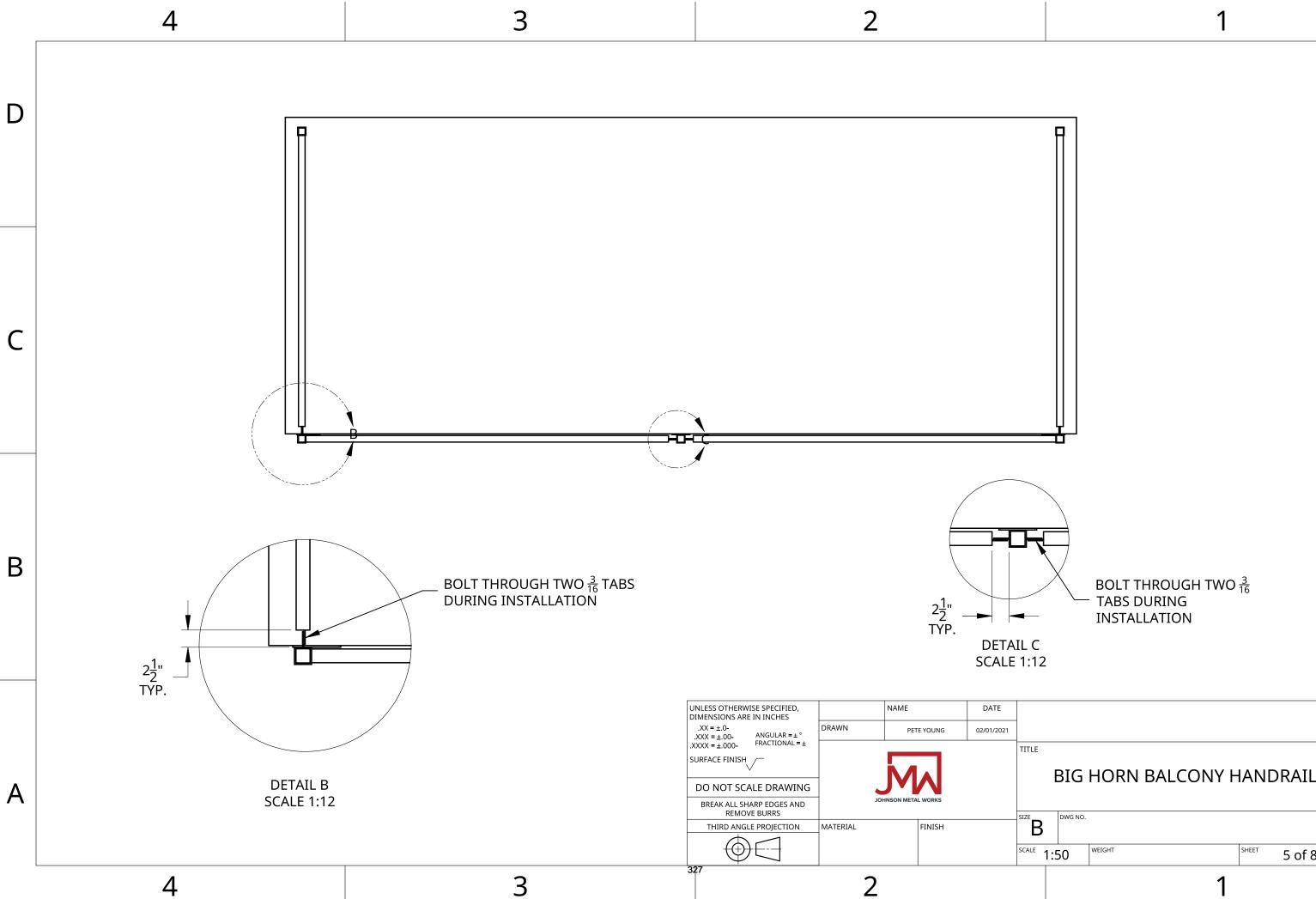
			Dien					Α
B	DWG	NO.					REV.	
CALE 🦨	1:50	٧	VEIGHT		SHEET	4 of 8		
				1				



1

D

С

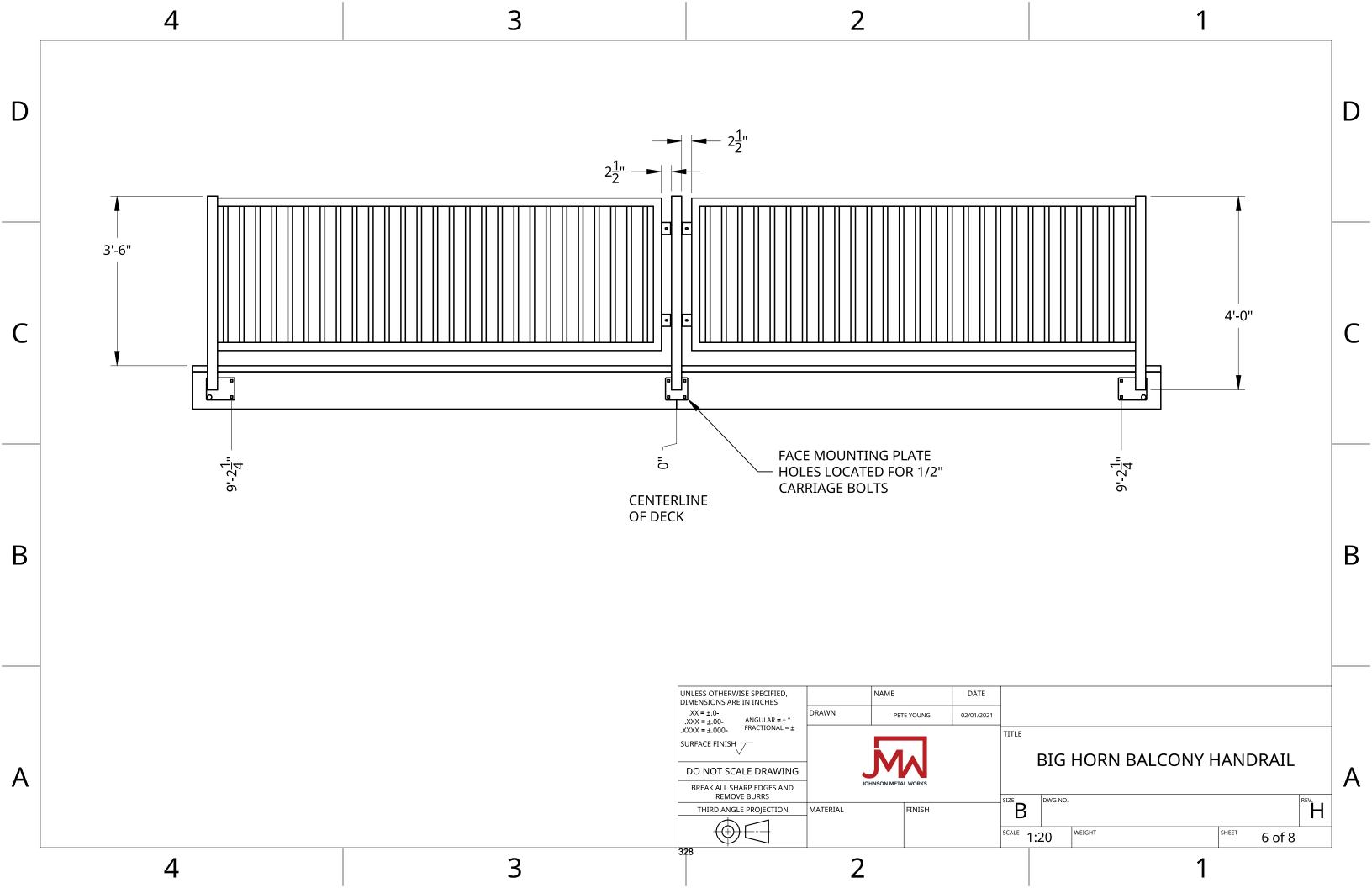


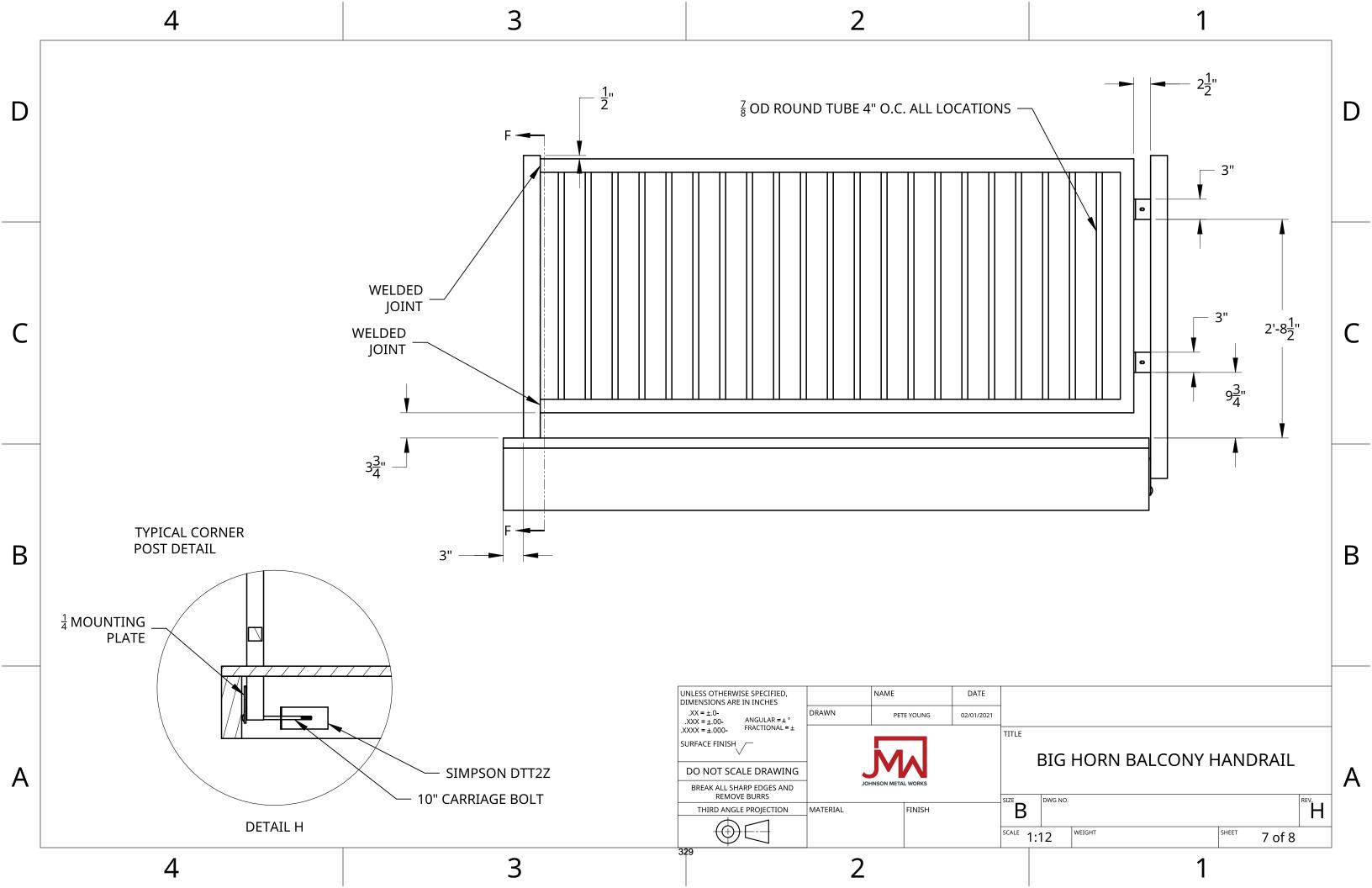
	BIC	וכ	HORN BALCONY H	IAND	RAIL		Α
B	DWG I	NO.				REV.	
SCALE	1:50		WEIGHT	SHEET	5 of 8		
			1				

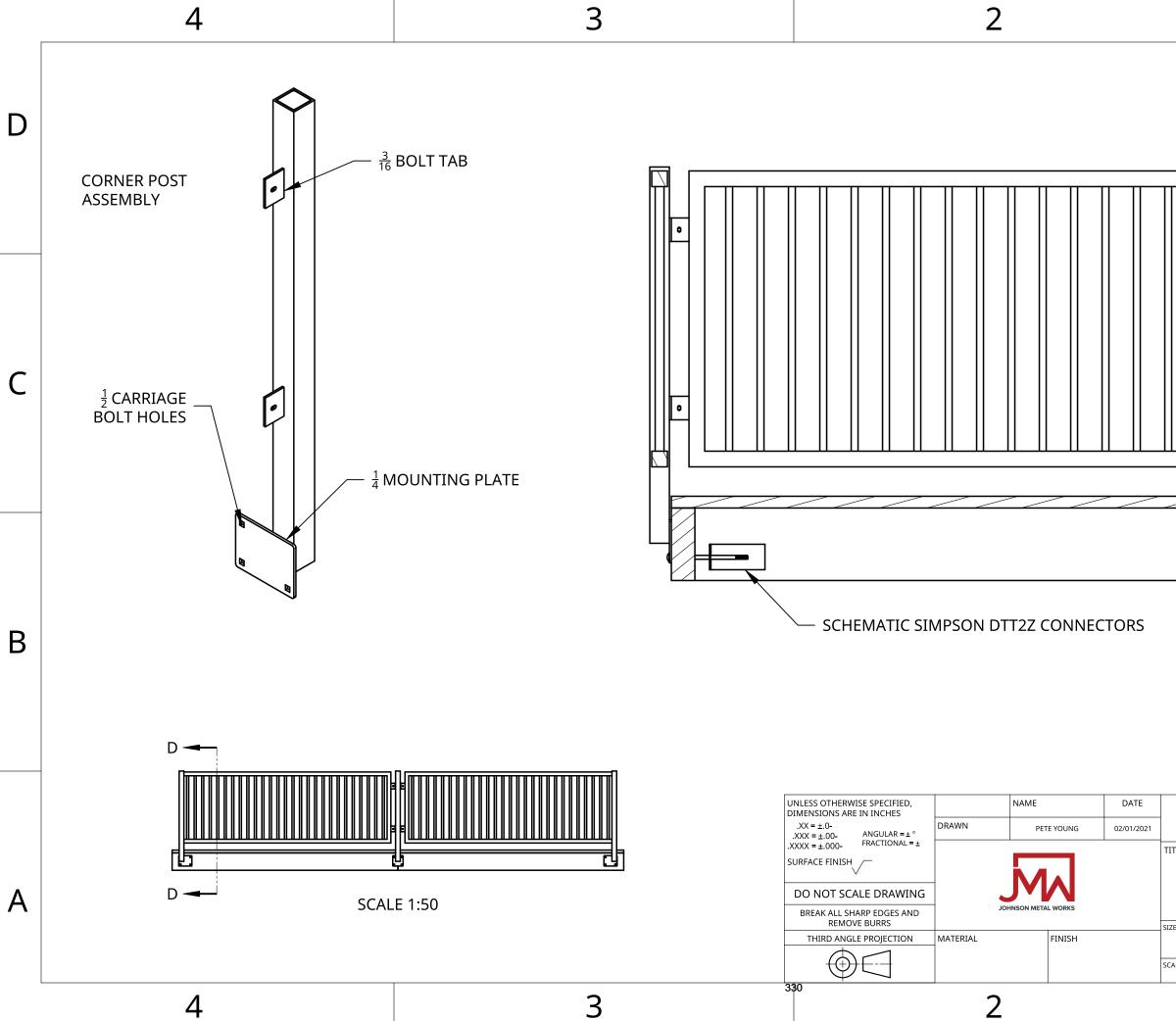


D

С

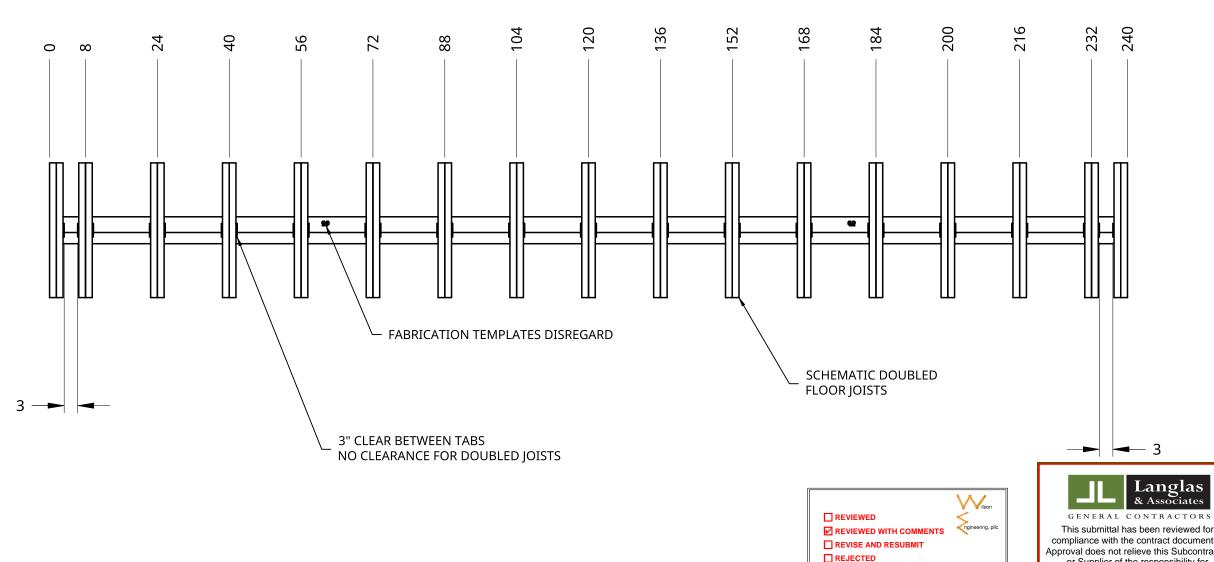






	D
	С
	В
TITLE BIG HORN BALCONY HANDRAIL SIZE B DWG NO. SCALE 1:12 WEIGHT SHEET 8 of 8 1	A

SMALL DECK BEAM UNITS #3, 4, 5, 6, 7, 12, 13, 14, 15, 34, 35, 39, 40, 45, 46, 47, 48, 65, 66, 67, & 68 ALL STEEL POWDER COATED MEDIUM METALIC BRONZE #38 / 60060 BY ISC



DATE 5/19/2022

FOR INFORMATION ONLY



JOB00652 BHC EXT. RAILING - BEAMS PRELIM

PETE YOUNG

NOTES:

ALL DIMENSIONS IN INCHES UNLESS NOTED OTHERWISE DO NOT SCALE DRAWING

REV	DESCRIPTION	DATE
-	INITIAL RELEASE	X.X.XX
A	REVISION	5.3.22
В	SPLICE CHANGE	5.3.22
с	TAB CHANGES	5.10.22
D		5.11.22

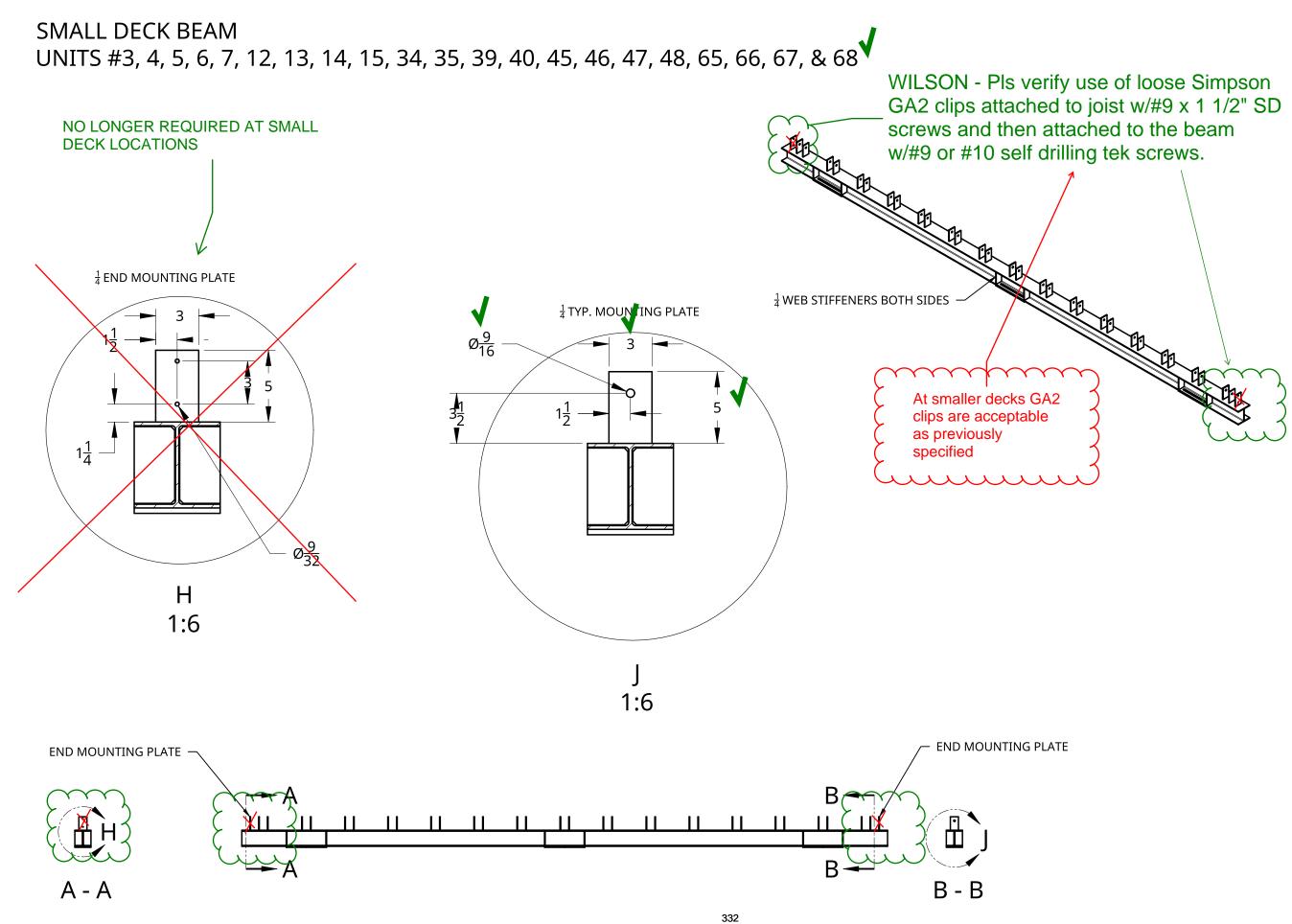
MATERIAL:

FINISH: POWDER COAT

DRAWN BY:PETE YOUNG	CHECKED BY:
04/27/2022	PROJECT ID: POWDER COAT
SHEET SIZE:B	SCALE:1:32
REV:D	SHEET: 1 OF 11

compliance with the contract documents. Approval does not relieve this Subcontractor or Supplier of the responsibility for conformance to the quality standards set forth in the contract documents nor does it relieve his responsibility for field verification of all conditions relating to this contract

REVIEWED BY: Bud Daigle SUBMITTAL #: 055000-402-1





JOB00652 BHC EXT. **RAILING - BEAMS** PRELIM

PETE YOUNG

NOTES:

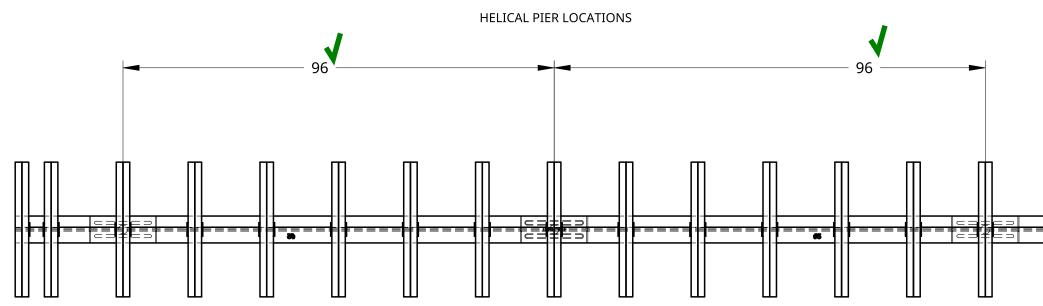
ALL DIMENSIONS IN INCHES UNLESS NOTED OTHERWISE DO NOT SCALE DRAWING

REV	DESCRIPTION	DATE
-	INITIAL RELEASE	X.X.XX
A	REVISION	5.3.22

MATERIAL:

DRAWN BY:PETE YOUNG	CHECKED BY:			
04/27/2022	PROJECT ID: POWDER COAT			
SHEET SIZE:B	SCALE:1:32			
REV:D	SHEET: 2 OF 11			

SMALL DECK BEAM UNITS #3, 4, 5, 6, 7, 12, 13, 14, 15, 34, 35, 39, 40, 45, 46, 47, 48, 65, 66, 67, & 68





JOB00652 BHC EXT. RAILING - BEAMS PRELIM

PETE YOUNG

NOTES:

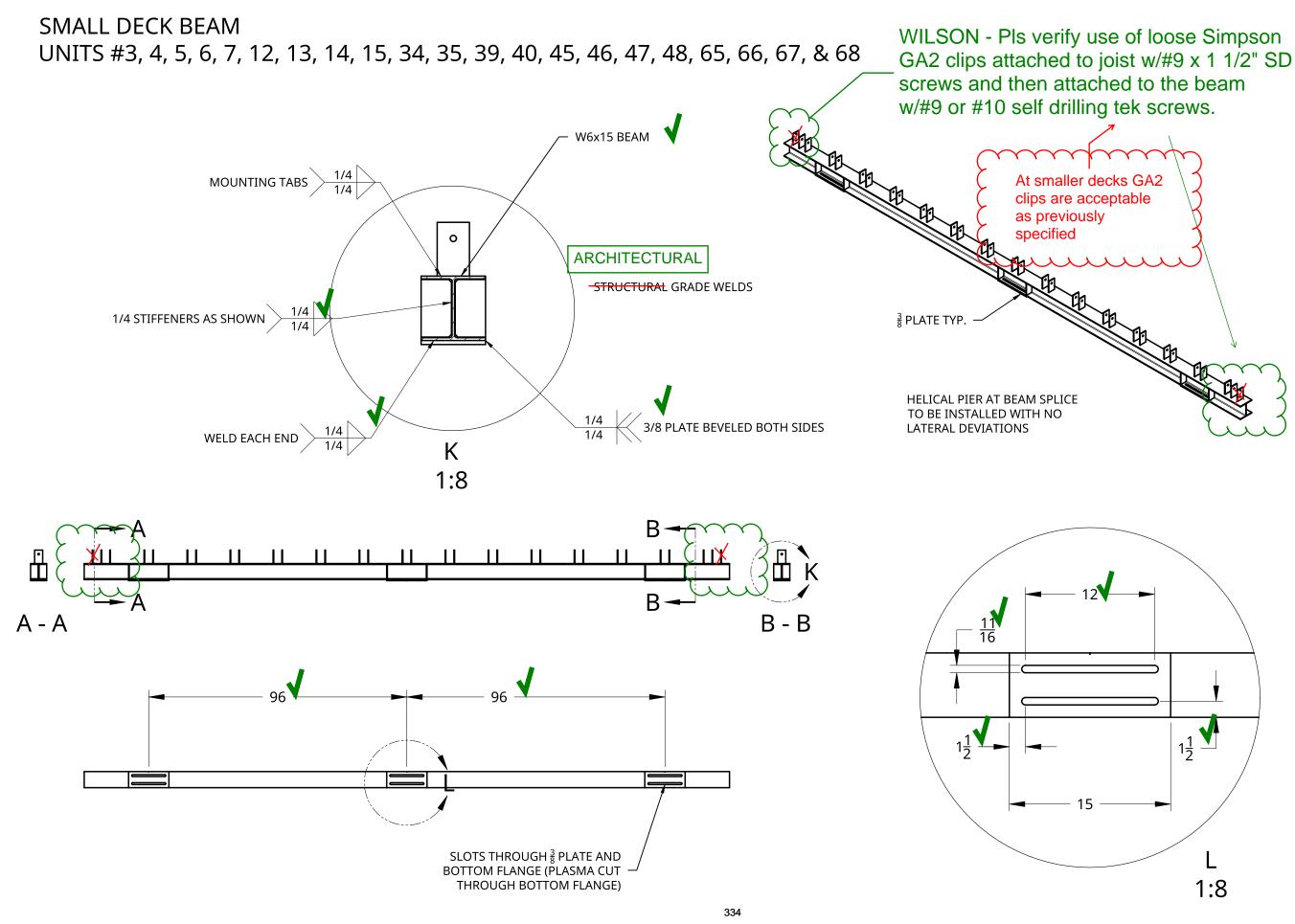


ALL DIMENSIONS IN INCHES UNLESS NOTED OTHERWISE DO NOT SCALE DRAWING

REV	DESCRIPTION	DATE
-	INITIAL RELEASE	X.X.XX
A	REVISION	5.3.22

MATERIAL:

DRAWN BY:PETE YOUNG	CHECKED BY:
04/27/2022	PROJECT ID: POWDER COAT
SHEET SIZE:B	SCALE:1:32
REV:D	SHEET: 3 OF 11





JOB00652 BHC EXT. **RAILING - BEAMS** PRELIM

PETE YOUNG

NOTES:

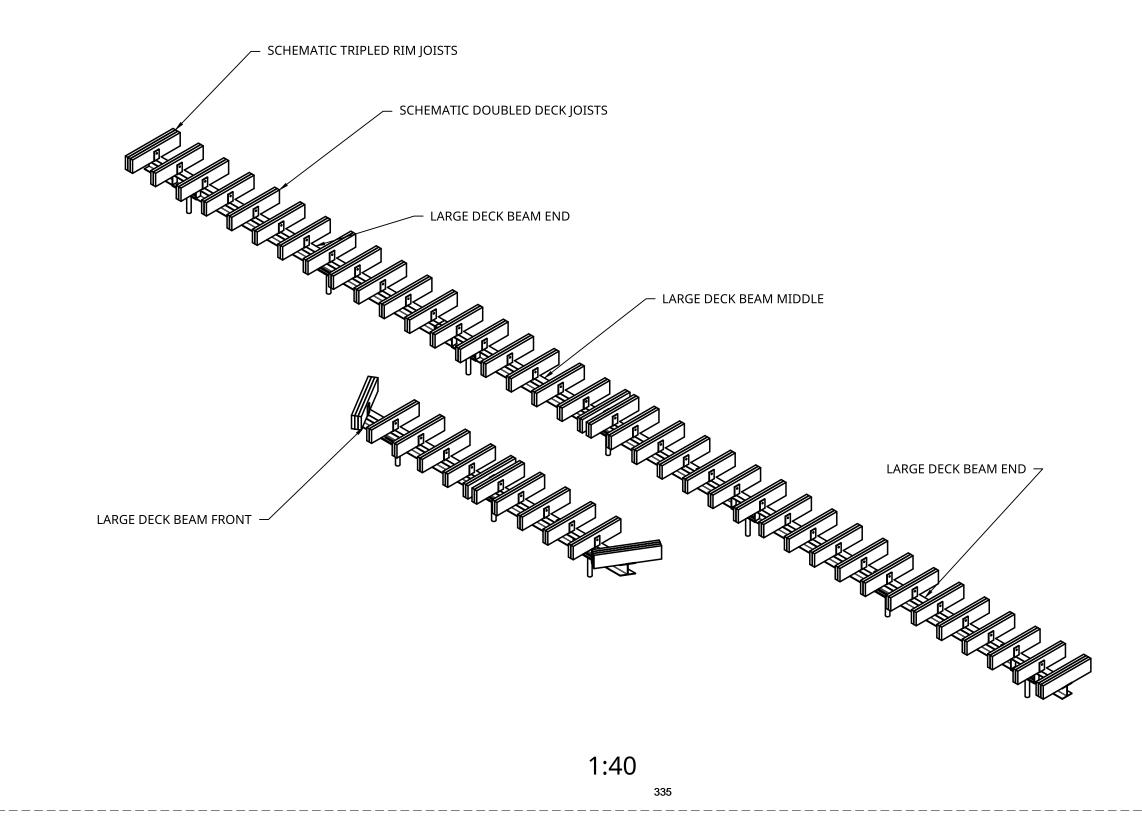
ALL DIMENSIONS IN INCHES UNLESS NOTED OTHERWISE DO NOT SCALE DRAWING

REV	DESCRIPTION	DATE
-	INITIAL RELEASE	X.X.XX

MATERIAL:

DRAWN BY:PETE YOUNG	CHECKED BY:
04/27/2022	PROJECT ID: POWDER COAT
SHEET SIZE:B	SCALE:1:32
REV:D	SHEET: 4 OF 11

LARGE DECK BEAM ASSEMBLY BUILDING A ALL STEEL POWDER COATED MEDIUM METALIC BRONZE #38 / 60060 BY ISC





JOB00652 BHC EXT. RAILING - BEAMS PRELIM

PETE YOUNG

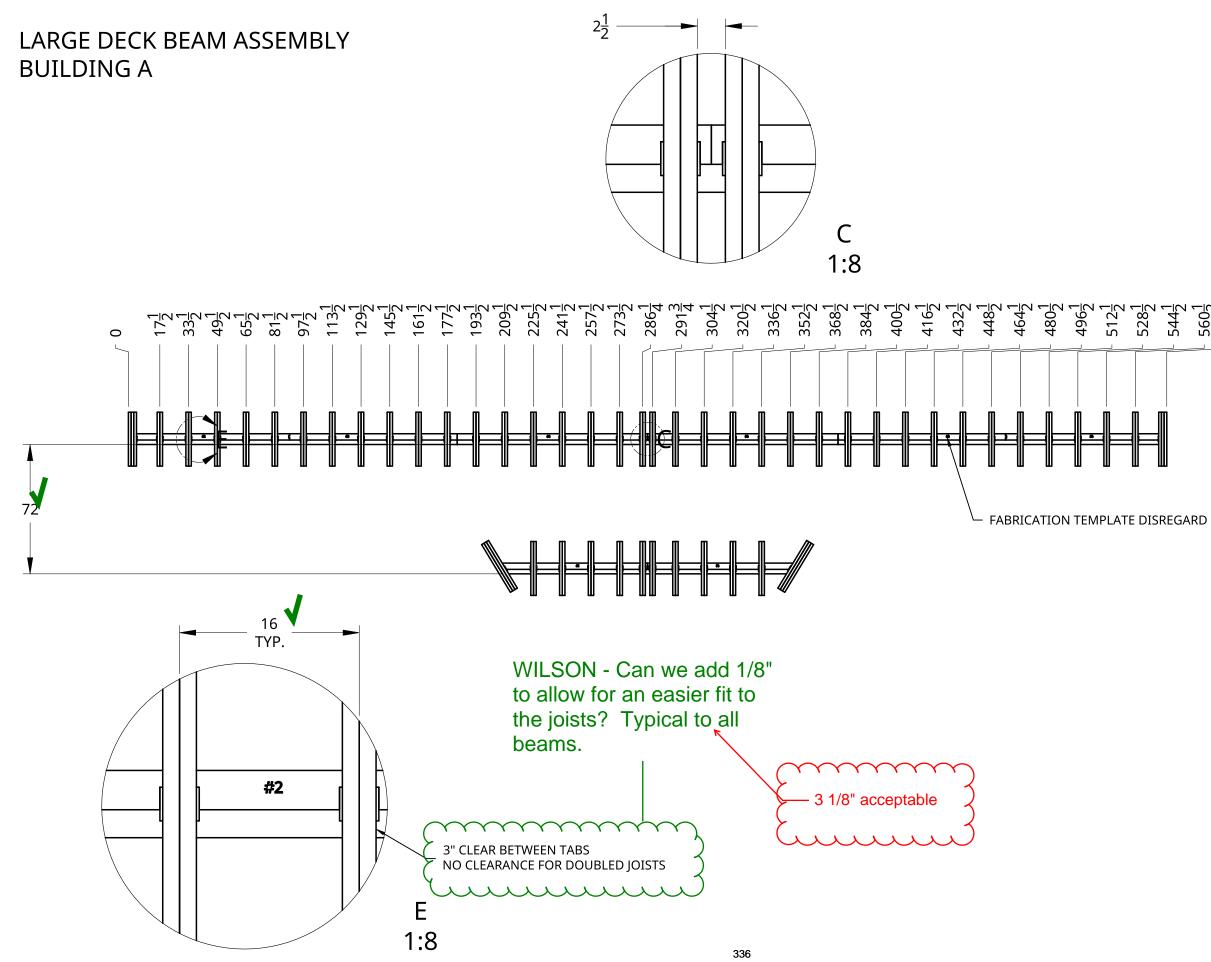
NOTES:

ALL DIMENSIONS IN INCHES UNLESS NOTED OTHERWISE DO NOT SCALE DRAWING

REV	DESCRIPTION	DATE
-	INITIAL RELEASE	X.X.XX

MATERIAL:

DRAWN BY: PETE YOUNG	CHECKED BY:
04/27/2022	PROJECT ID: POWDER COAT
SHEET SIZE:B	SCALE:1:50
REV:D	SHEET: 5 OF 11

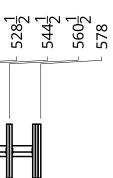




JOB00652 BHC EXT. RAILING - BEAMS PRELIM

PETE YOUNG

NOTES:



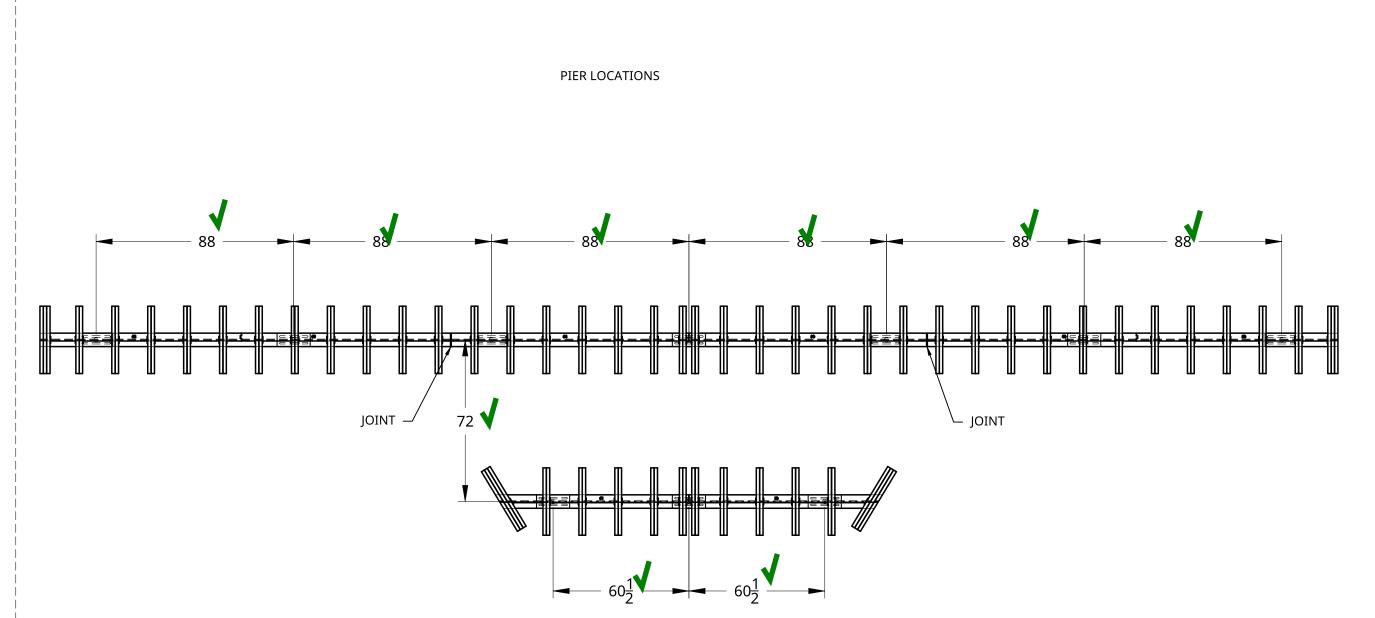
ALL DIMENSIONS IN INCHES UNLESS NOTED OTHERWISE DO NOT SCALE DRAWING

REV	DESCRIPTION	DATE
-	INITIAL RELEASE	X.X.XX

MATERIAL:

DRAWN BY:PETE YOUNG	CHECKED BY:
04/27/2022	PROJECT ID: POWDER COAT
SHEET SIZE:B	SCALE:1:50
REV:D	SHEET: 6 OF 11

LARGE DECK BEAM ASSEMBLY BUILDING A





JOB00652 BHC EXT. RAILING - BEAMS PRELIM

PETE YOUNG

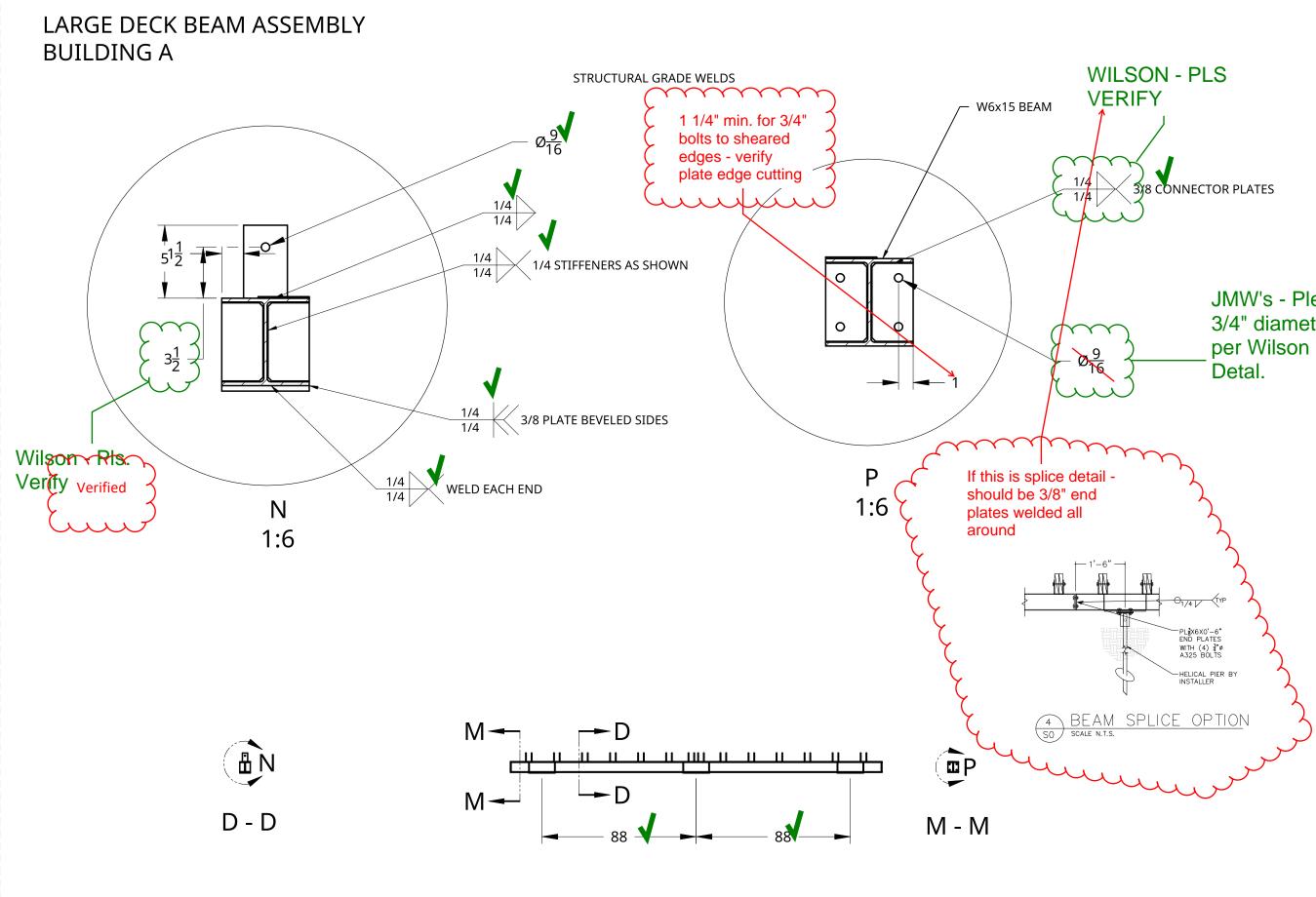
NOTES:

ALL DIMENSIONS IN INCHES UNLESS NOTED OTHERWISE DO NOT SCALE DRAWING

REV	DESCRIPTION	DATE
-	INITIAL RELEASE	X.X.XX

MATERIAL:

DRAWN BY:PETE YOUNG	CHECKED BY:
04/27/2022	PROJECT ID: POWDER COAT
SHEET SIZE:B	SCALE:1:40
REV:D	SHEET: 7 OF 11





JOB00652 BHC EXT. RAILING - BEAMS PRELIM

PETE YOUNG

NOTES:

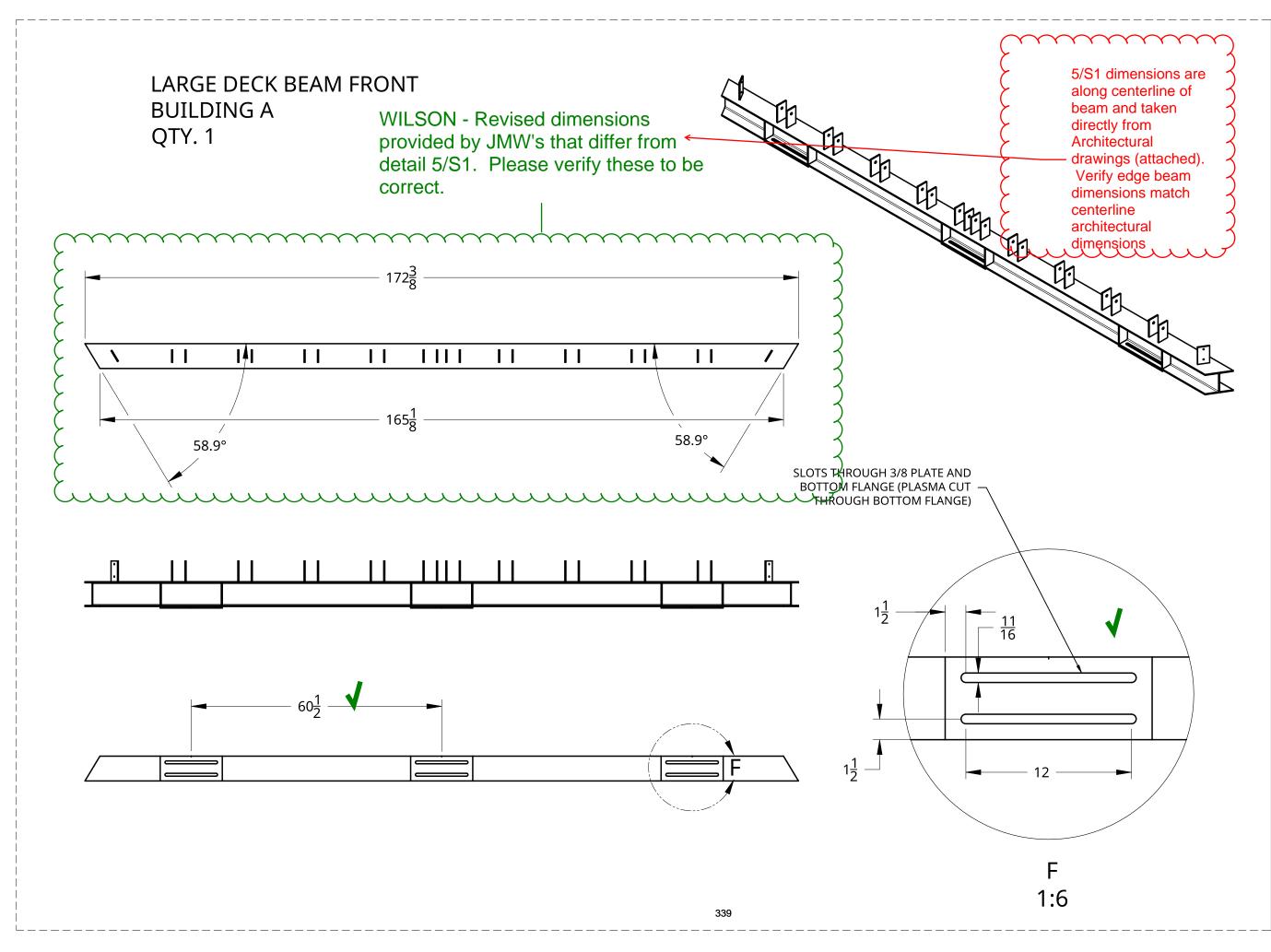
JMW's - Please provide (4) 3/4" diameter A325 bolts per Wilson Beam Splice Detal.

ALL DIMENSIONS IN INCHES UNLESS NOTED OTHERWISE DO NOT SCALE DRAWING

REV	DESCRIPTION	DATE
-	INITIAL RELEASE	X.X.XX

MATERIAL:

DRAWN BY:PETE YOUNG	CHECKED BY:
04/27/2022	PROJECT ID: POWDER COAT
SHEET SIZE:B	SCALE:1:50
REV:D	SHEET: 8 OF 11





JOB00652 BHC EXT. RAILING - BEAMS PRELIM

PETE YOUNG

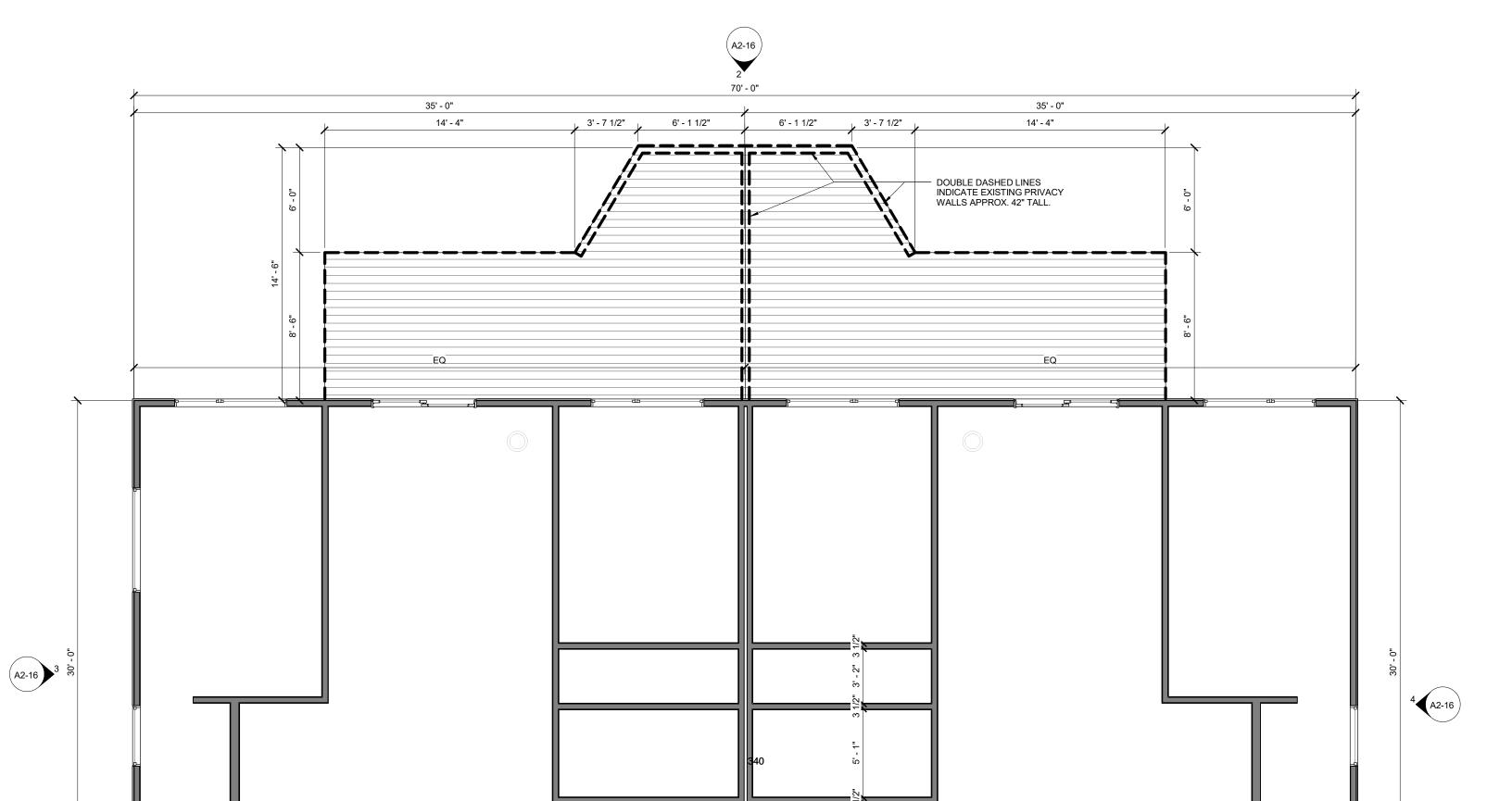
NOTES:

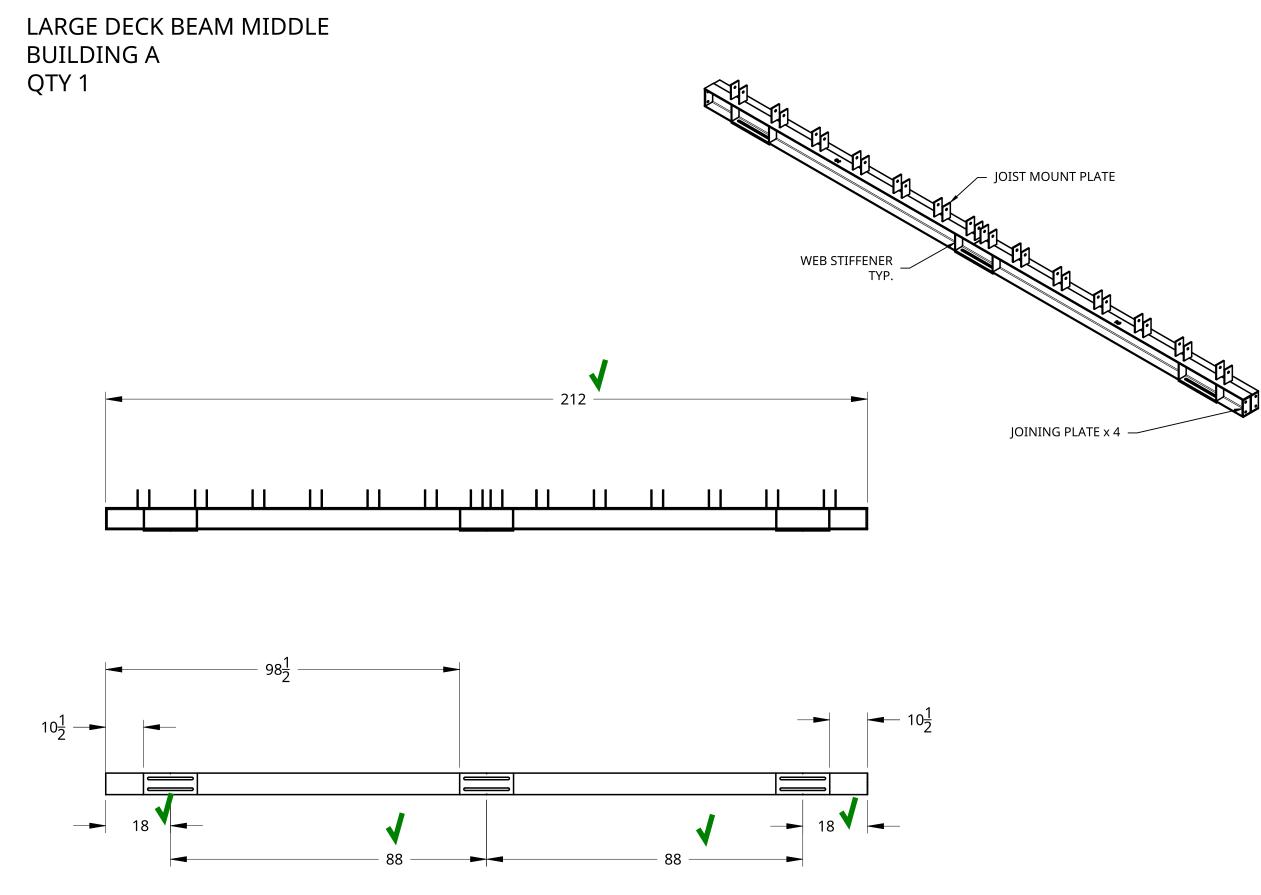
ALL DIMENSIONS IN INCHES UNLESS NOTED OTHERWISE DO NOT SCALE DRAWING

REV	DESCRIPTION	DATE
-	INITIAL RELEASE	X.X.XX

MATERIAL:

DRAWN BY: PETE YOUNG	CHECKED BY:
04/27/2022	PROJECT ID: POWDER COAT
SHEET SIZE:B	SCALE:1:20
REV:D	SHEET: 9 OF 11





341



JOB00652 BHC EXT. RAILING - BEAMS PRELIM

PETE YOUNG

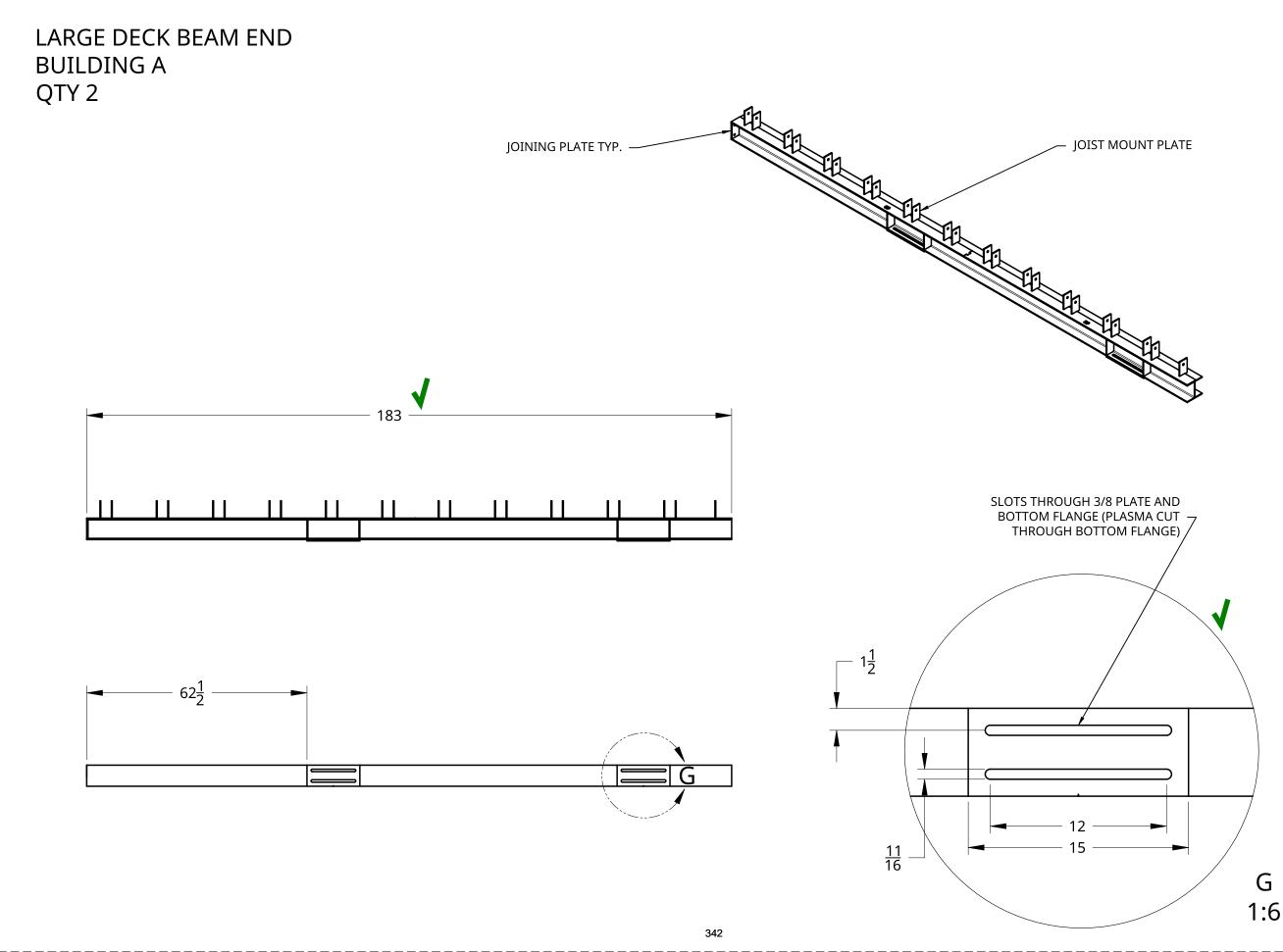
NOTES:

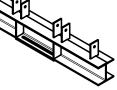
ALL DIMENSIONS IN INCHES UNLESS NOTED OTHERWISE DO NOT SCALE DRAWING

REV	DESCRIPTION	DATE
-	INITIAL RELEASE	X.X.XX

MATERIAL:

DRAWN BY: PETE YOUNG	CHECKED BY:
04/27/2022	PROJECT ID: POWDER COAT
SHEET SIZE:B	SCALE:1:25
REV:D	SHEET: 10 OF 11







JOB00652 BHC EXT. RAILING - BEAMS PRELIM

PETE YOUNG

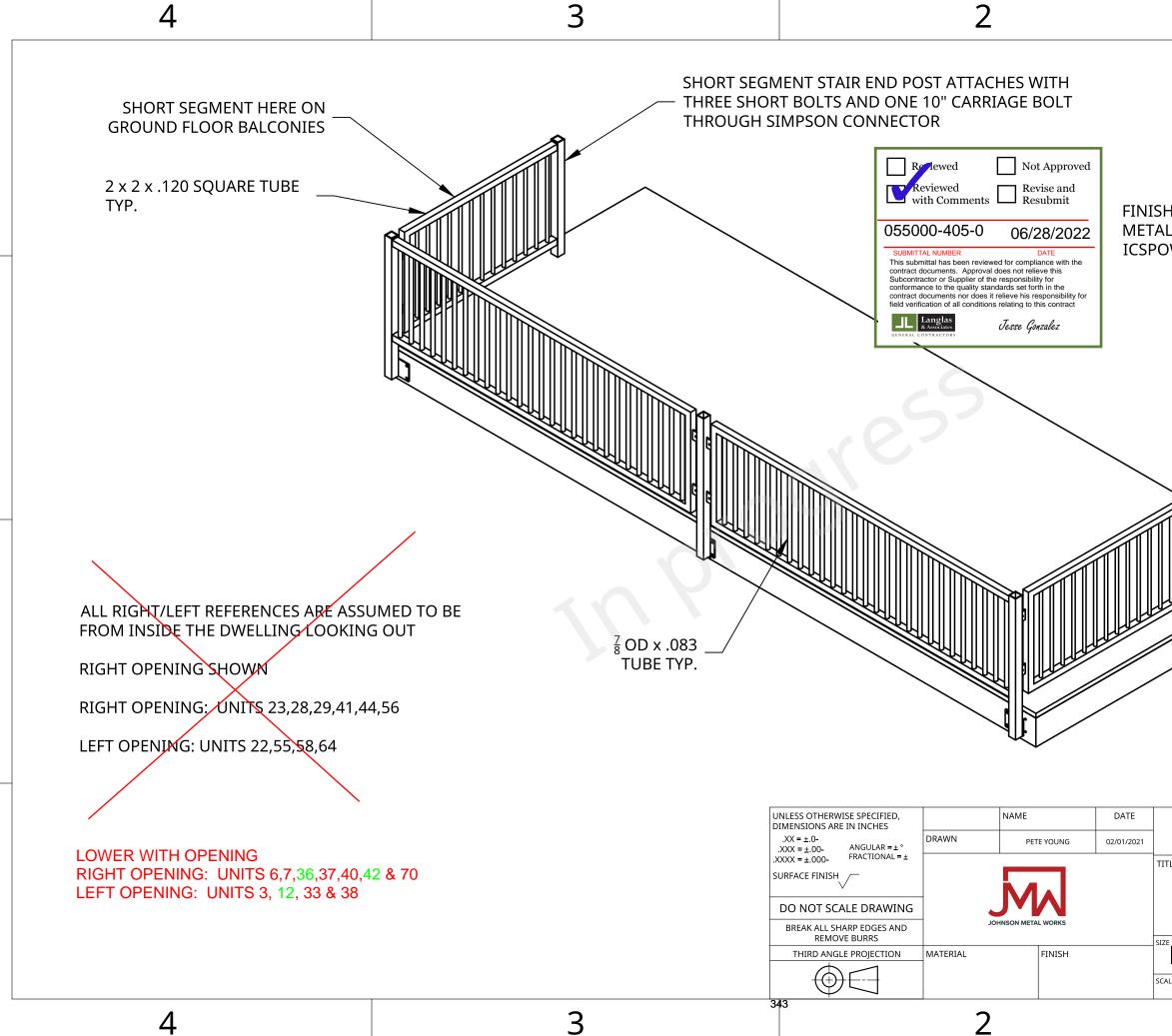
NOTES:

ALL DIMENSIONS IN INCHES UNLESS NOTED OTHERWISE DO NOT SCALE DRAWING

REV	DESCRIPTION	DATE
-	INITIAL RELEASE	X.X.XX

MATERIAL:

DRAWN BY: PETE YOUNG	CHECKED BY:
04/27/2022	PROJECT ID: POWDER COAT
SHEET SIZE:B	SCALE:1:25
REV:D	SHEET: 11 OF 11

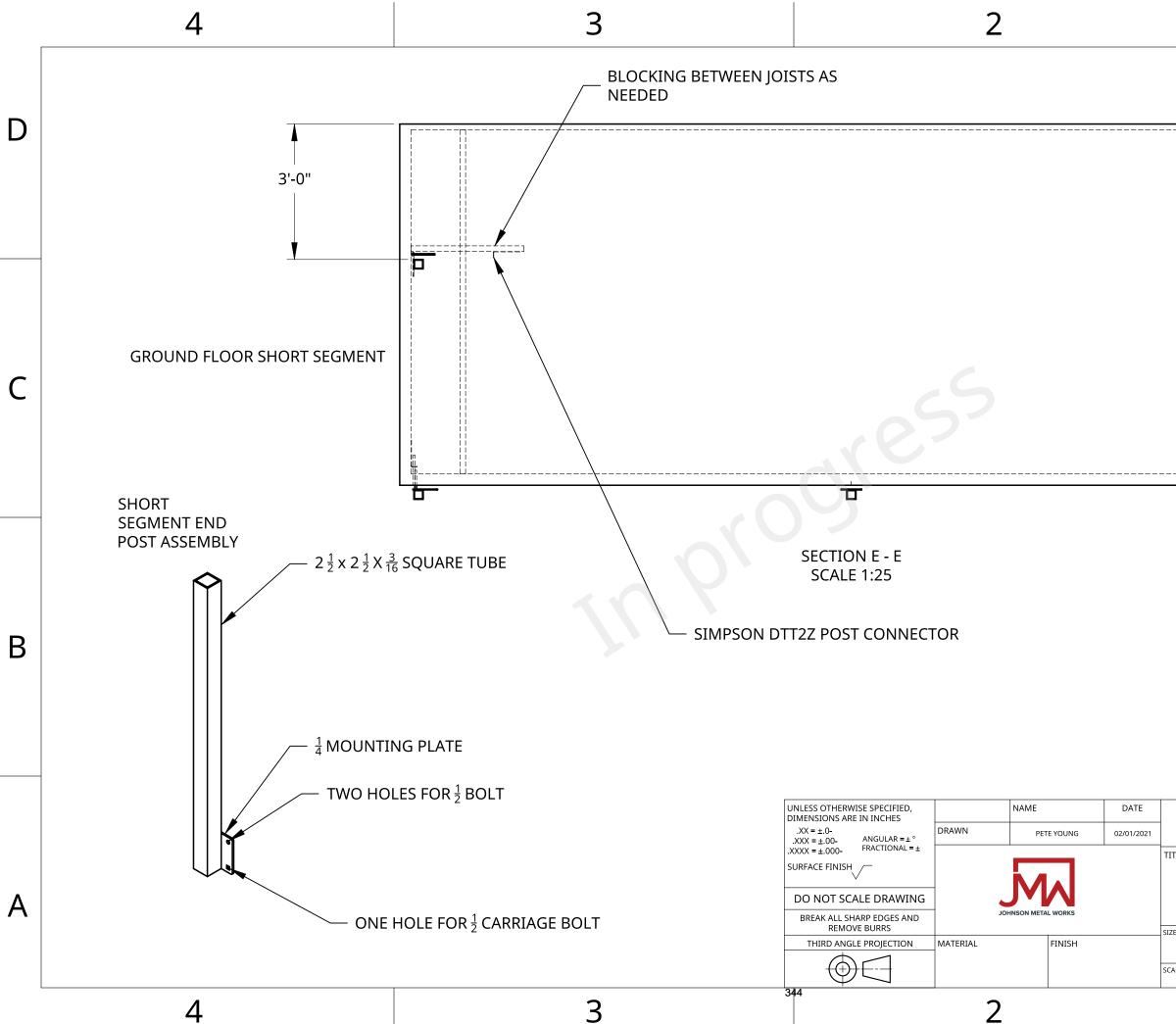


D

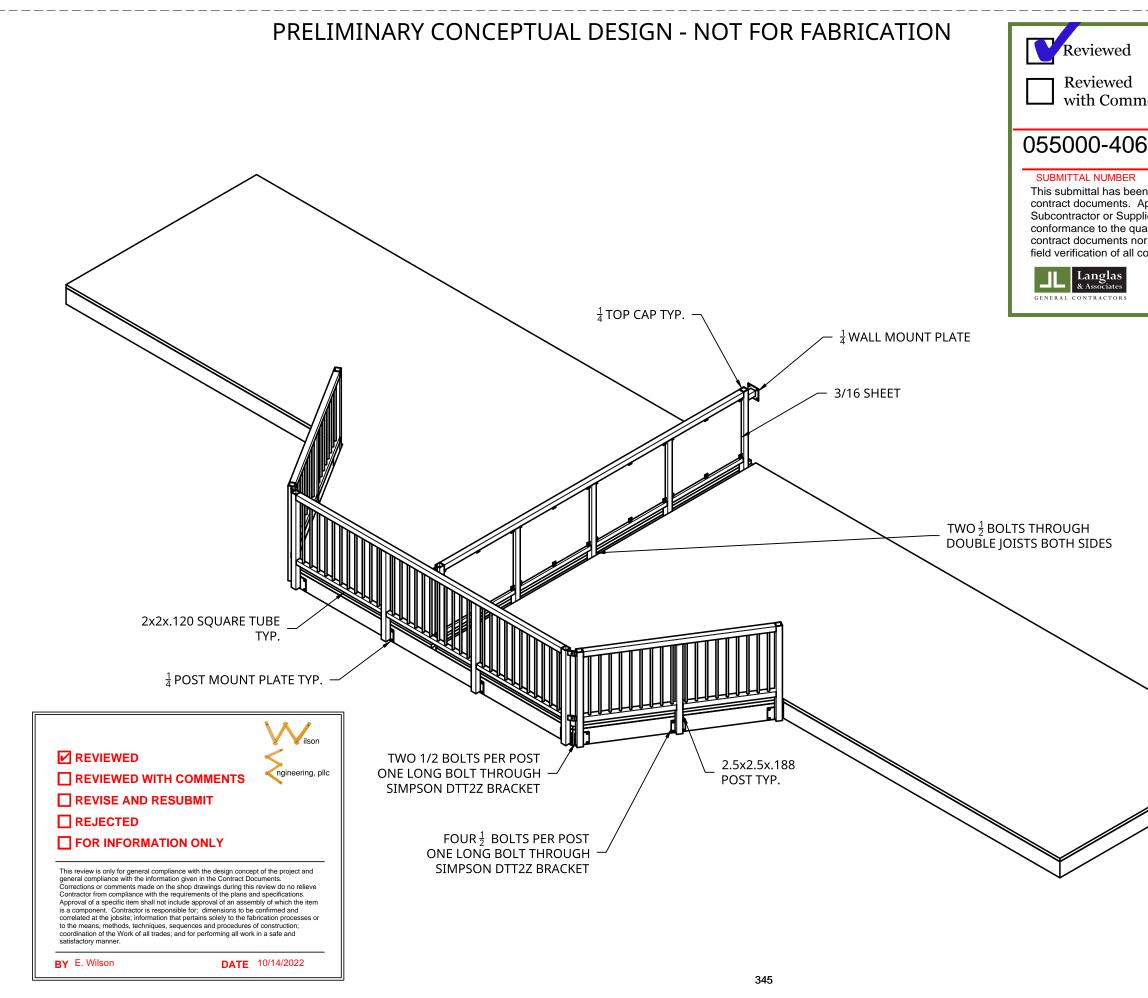
В

Α

	D
H: POWDER COAT MEDIUM ALLIC BRONZE #38 / 60060 FROM OWDERCOAT.COM SAMPLES	
$2\frac{1}{2} \times 2\frac{1}{2} \times \frac{3}{16}$ SQUARE TUBE ALL CORNER POSTS TYP.	С
	В
ITLE BIG HORN BALCONY	А 0



	D
	С
	В
TITLE BIG HORN BALCONY IZEB DWG NO. IZALE 1:50 WEIGHT SHEET 1	A 0



Not Approved Revise and Resubmit		
6-3 10/05/2022		
DATE n reviewed for compliance with the pproval does not relieve this ier of the responsibility for ality standards set forth in the r does it relieve his responsibility for		
onditions relating to this contract <i>Jesse Gonzalez</i>	-	F
		[



EXT DECK RAILING UNIT 1&2 PRELIM

PETE YOUNG

NOTES: Powdercoat: Medium Metalic Bronze #38/ 60060" by ICS Powdercoat

ALL DIMENSIONS IN INCHES UNLESS NOTED OTHERWISE DO NOT SCALE DRAWING

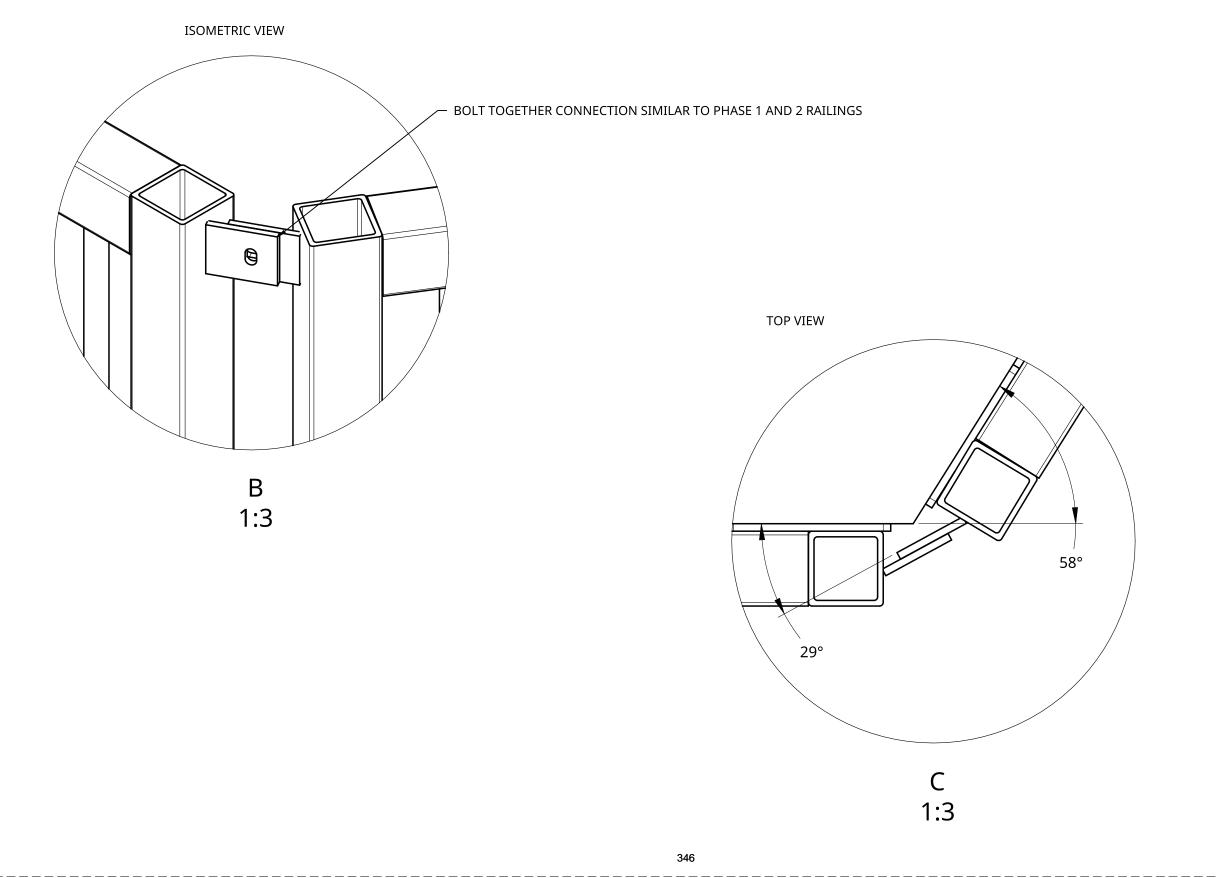
REV	DESCRIPTION	DATE
-	SUBMITTAL	X.X.XX

MATERIAL:

FINISH: PowderCoat

DRAWN BY:PETE YOUNG	CHECKED BY:
07/19/2022	PROJECT ID:
SHEET SIZE:B	SCALE:1:34
REV:E	SHEET: 1 OF 11

CORNER ATTACHMENT DETAILS





EXT DECK RAILING UNIT 1&2 PRELIM

PETE YOUNG

NOTES: Powdercoat: Medium Metalic Bronze #38/ 60060" by ICS Powdercoat

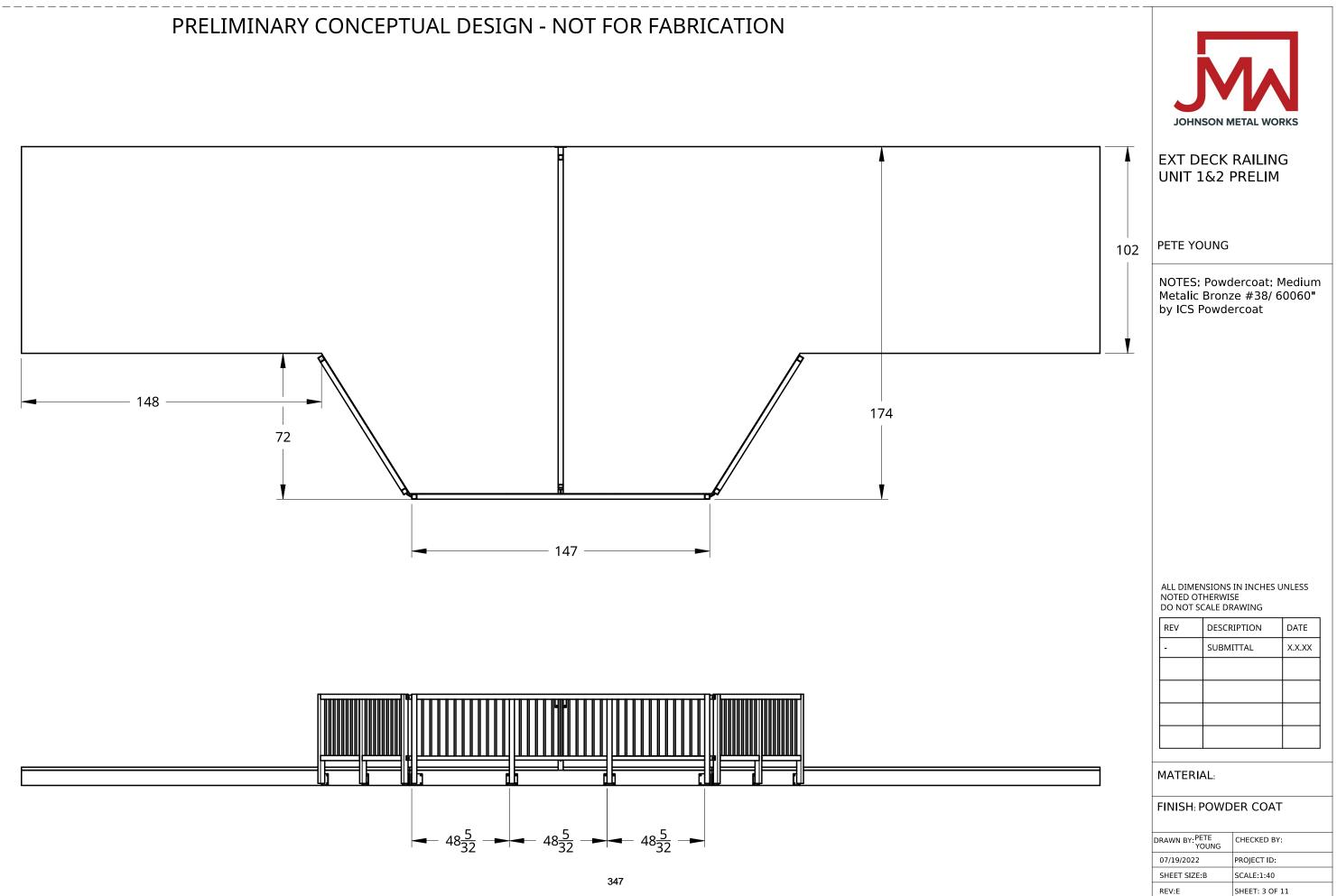
ALL DIMENSIONS IN INCHES UNLESS NOTED OTHERWISE DO NOT SCALE DRAWING

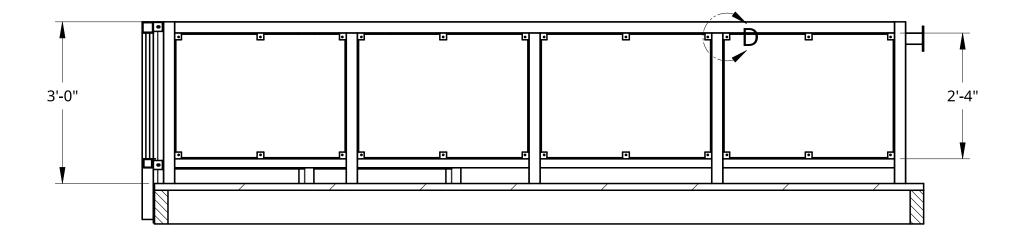
REV	DESCRIPTION	DATE
-	SUBMITTAL	X.X.XX

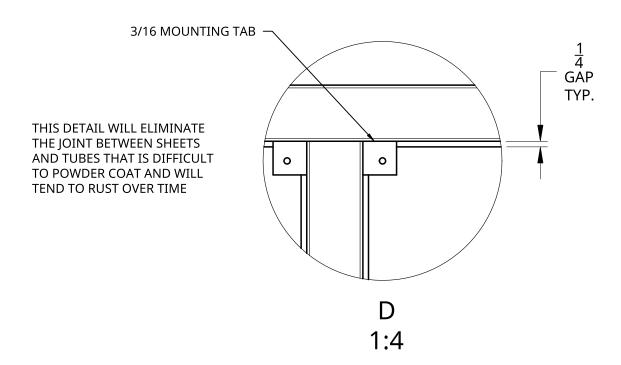
MATERIAL:

FINISH: PowderCoat

DRAWN BY:PETE YOUNG	CHECKED BY:
07/19/2022	PROJECT ID:
SHEET SIZE:B	SCALE:1:34
REV:E	SHEET: 2 OF 11









EXT DECK RAILING UNIT 1&2 PRELIM

PETE YOUNG

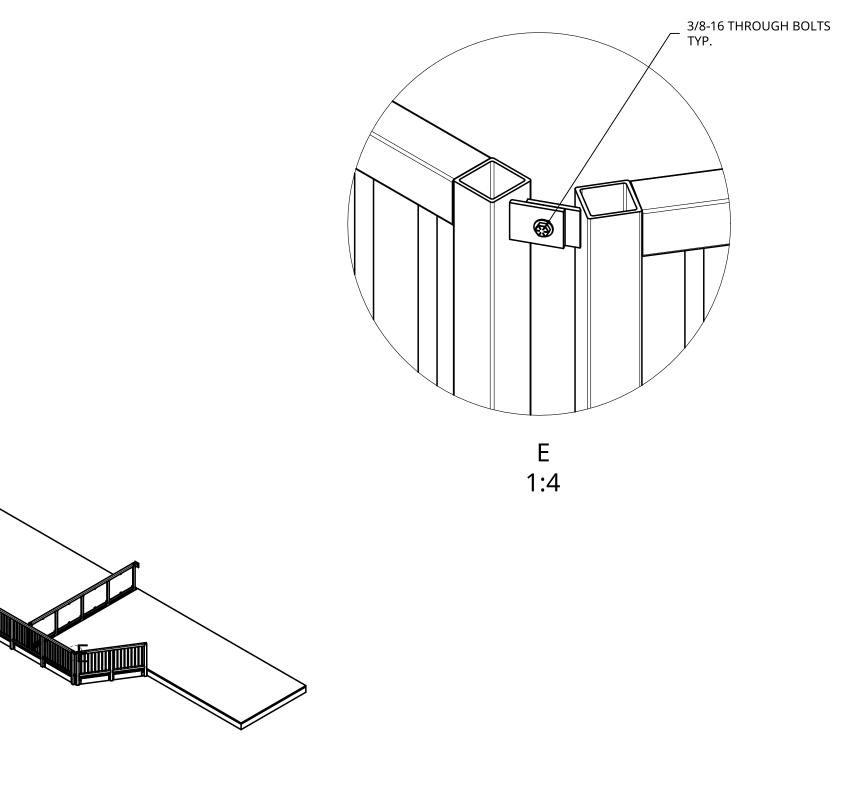
NOTES: Powdercoat: Medium Metalic Bronze #38/ 60060" by ICS Powdercoat

ALL DIMENSIONS IN INCHES UNLESS NOTED OTHERWISE DO NOT SCALE DRAWING

REV	DESCRIPTION	DATE
-	SUBMITTAL	X.X.XX

MATERIAL:

DRAWN BY:PETE YOUNG	CHECKED BY:
07/19/2022	PROJECT ID:
SHEET SIZE:B	SCALE:1:40
REV:E	SHEET: 4 OF 11



349



JOB00769 EXT DECK RAILING UNIT 1&2 PRELIM

PETE YOUNG

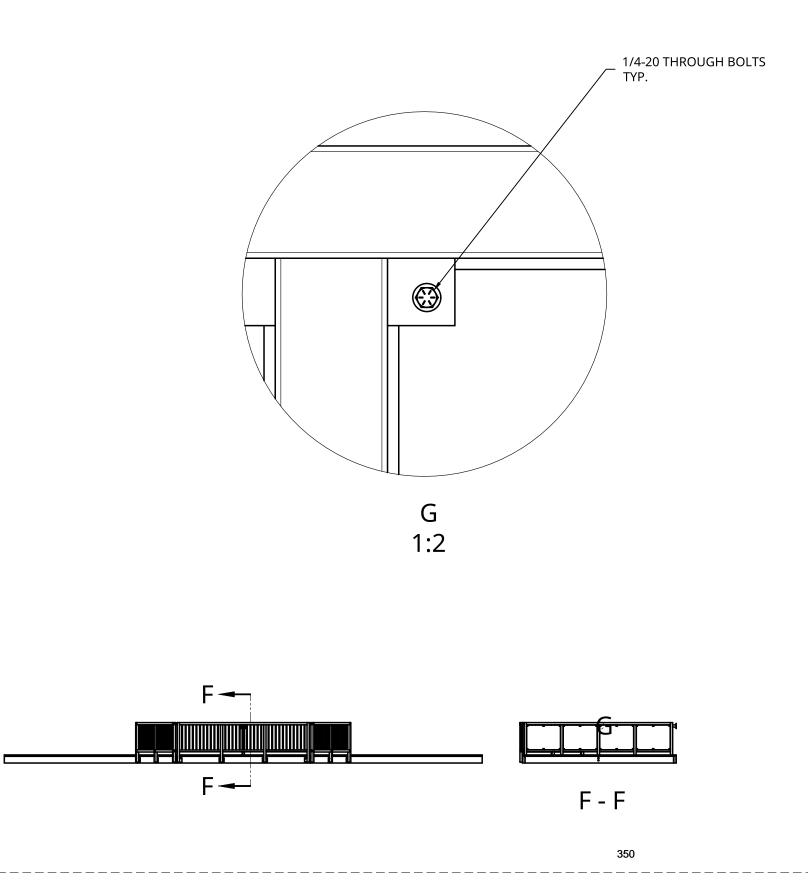
NOTES:

ALL DIMENSIONS IN INCHES UNLESS NOTED OTHERWISE DO NOT SCALE DRAWING

REV	DESCRIPTION	DATE
-	SUBMITTAL	X.X.XX

MATERIAL:

DRAWN BY:PETE YOUNG	CHECKED BY:
07/19/2022	PROJECT ID:
SHEET SIZE:B	SCALE:1:100
REV:E	SHEET: 5 OF 11





JOB00769 EXT DECK RAILING UNIT 1&2 PRELIM

PETE YOUNG

NOTES:

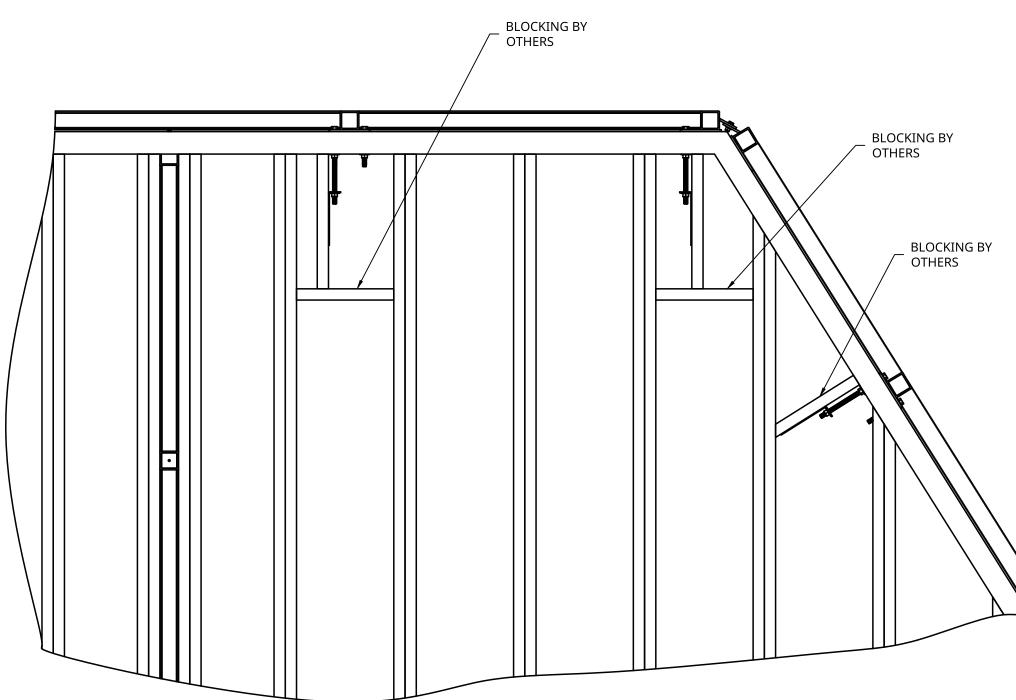
ALL DIMENSIONS IN INCHES UNLESS NOTED OTHERWISE DO NOT SCALE DRAWING

REV	DESCRIPTION	DATE
-	SUBMITTAL	X.X.XX

MATERIAL:

DRAWN BY:PETE YOUNG	CHECKED BY:
07/19/2022	PROJECT ID:
SHEET SIZE:B	SCALE:1:100
REV:E	SHEET: 6 OF 11

CROPPED BOTTOM VIEW





JOB00769 EXT DECK RAILING UNIT 1&2 PRELIM

PETE YOUNG

NOTES:

ALL DIMENSIONS IN INCHES UNLESS NOTED OTHERWISE DO NOT SCALE DRAWING

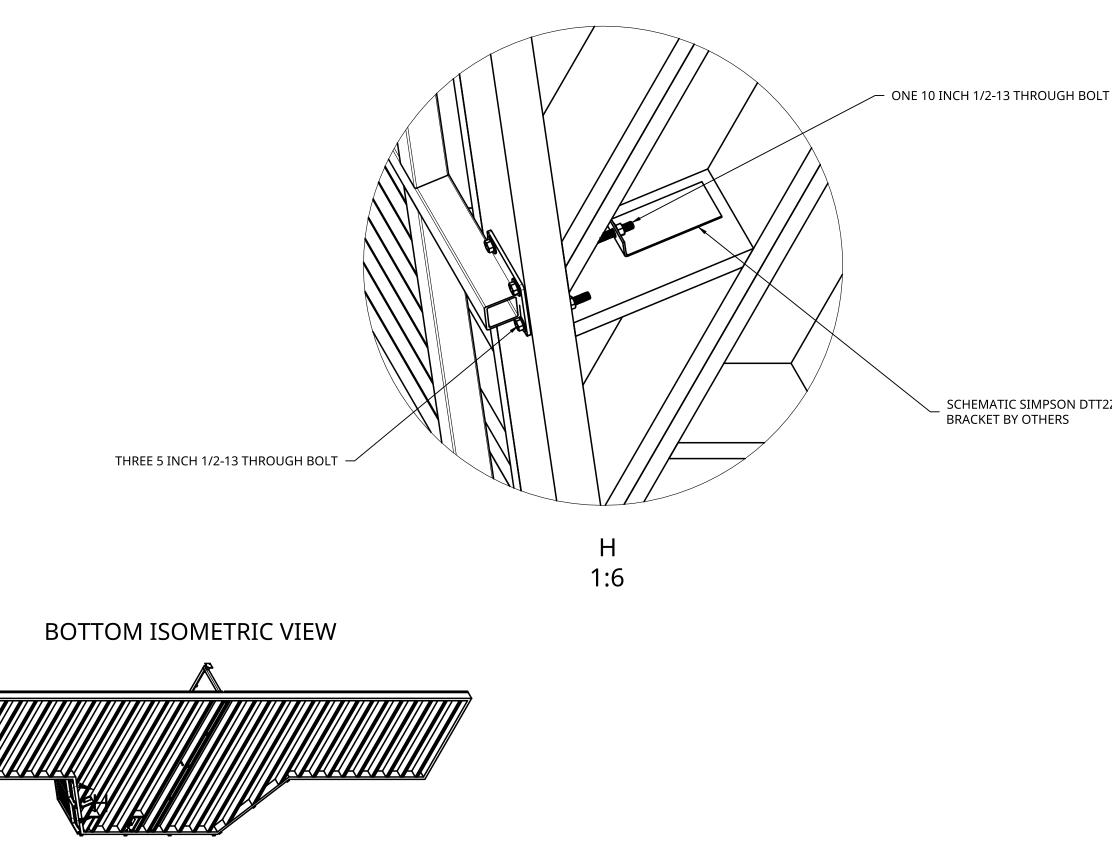
REV	DESCRIPTION	DATE
-	SUBMITTAL	X.X.XX

MATERIAL:

FINISH:

DRAWN BY:PETE YOUNG	CHECKED BY:
07/19/2022	PROJECT ID:
SHEET SIZE:B	SCALE:1:100
REV:E	SHEET: 7 OF 11





SCHEMATIC SIMPSON DTT2Z



JOB00769 EXT DECK RAILING UNIT 1&2 PRELIM

PETE YOUNG

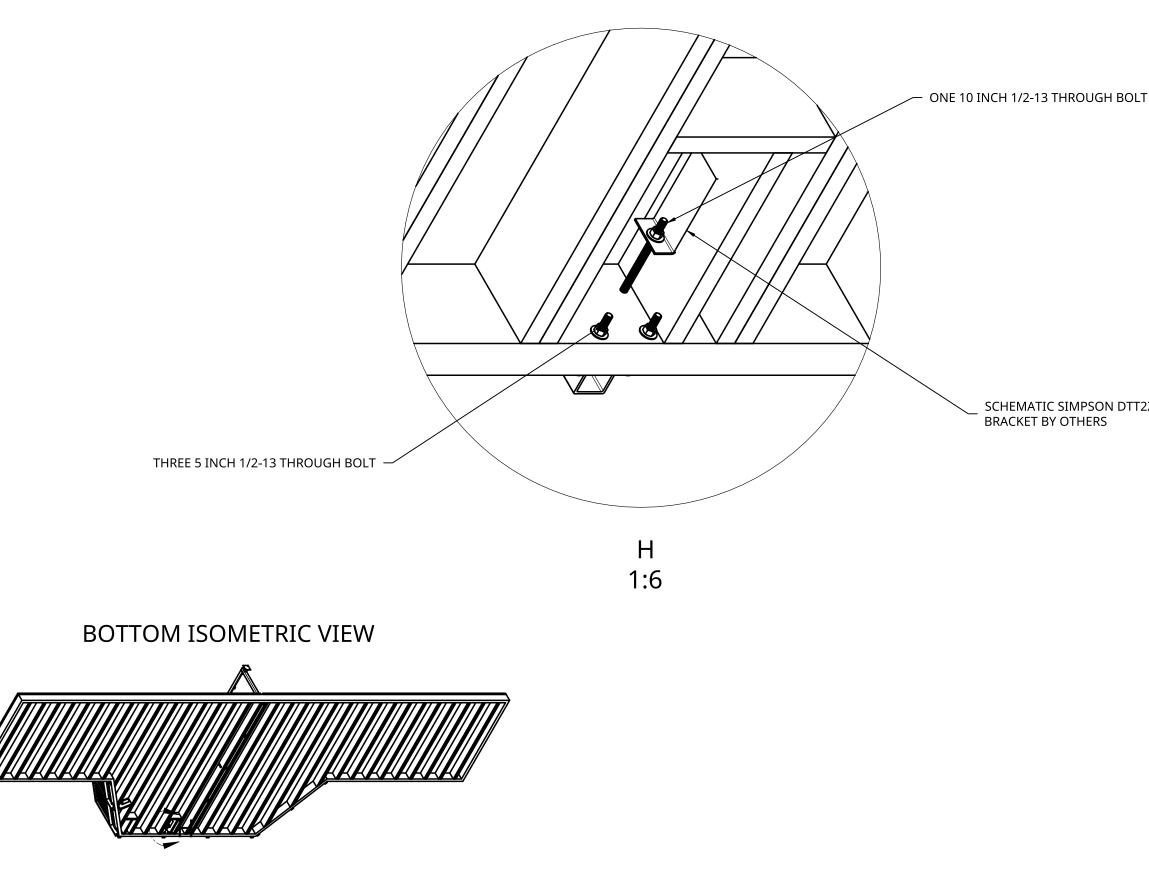
NOTES:

ALL DIMENSIONS IN INCHES UNLESS NOTED OTHERWISE DO NOT SCALE DRAWING

REV	DESCRIPTION	DATE
-	SUBMITTAL	X.X.XX

MATERIAL:

DRAWN BY:PETE YOUNG	CHECKED BY:
07/19/2022	PROJECT ID:
SHEET SIZE:B	SCALE:1:100
REV:E	SHEET: 8 OF 11



SCHEMATIC SIMPSON DTT2Z



JOB00769 EXT DECK RAILING UNIT 1&2 PRELIM

PETE YOUNG

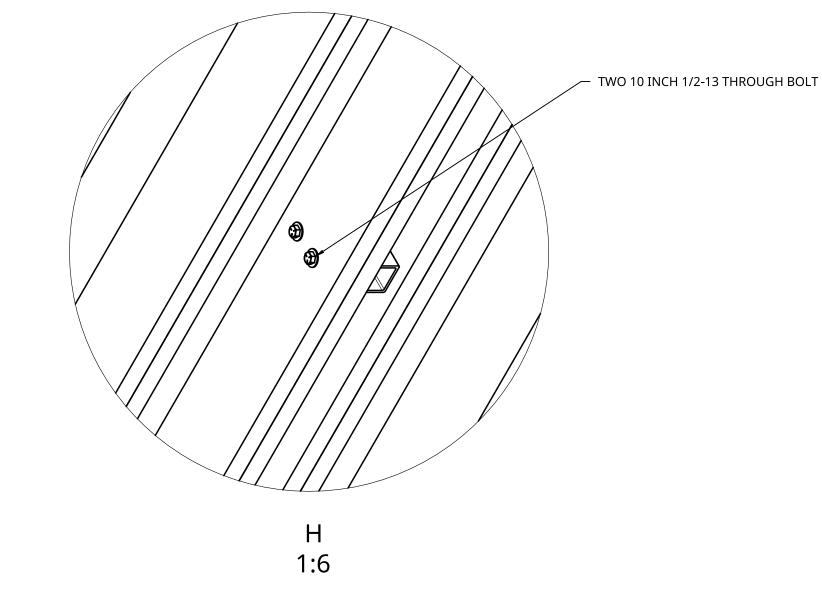
NOTES:

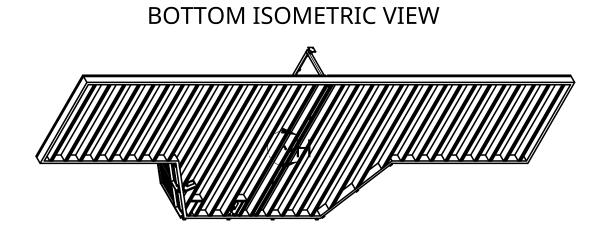
ALL DIMENSIONS IN INCHES UNLESS NOTED OTHERWISE DO NOT SCALE DRAWING

REV	DESCRIPTION	DATE
-	SUBMITTAL	X.X.XX

MATERIAL:

DRAWN BY:PETE YOUNG	CHECKED BY:
07/19/2022	PROJECT ID:
SHEET SIZE:B	SCALE:1:100
REV:E	SHEET: 9 OF 11







JOB00769 EXT DECK RAILING UNIT 1&2 PRELIM

PETE YOUNG

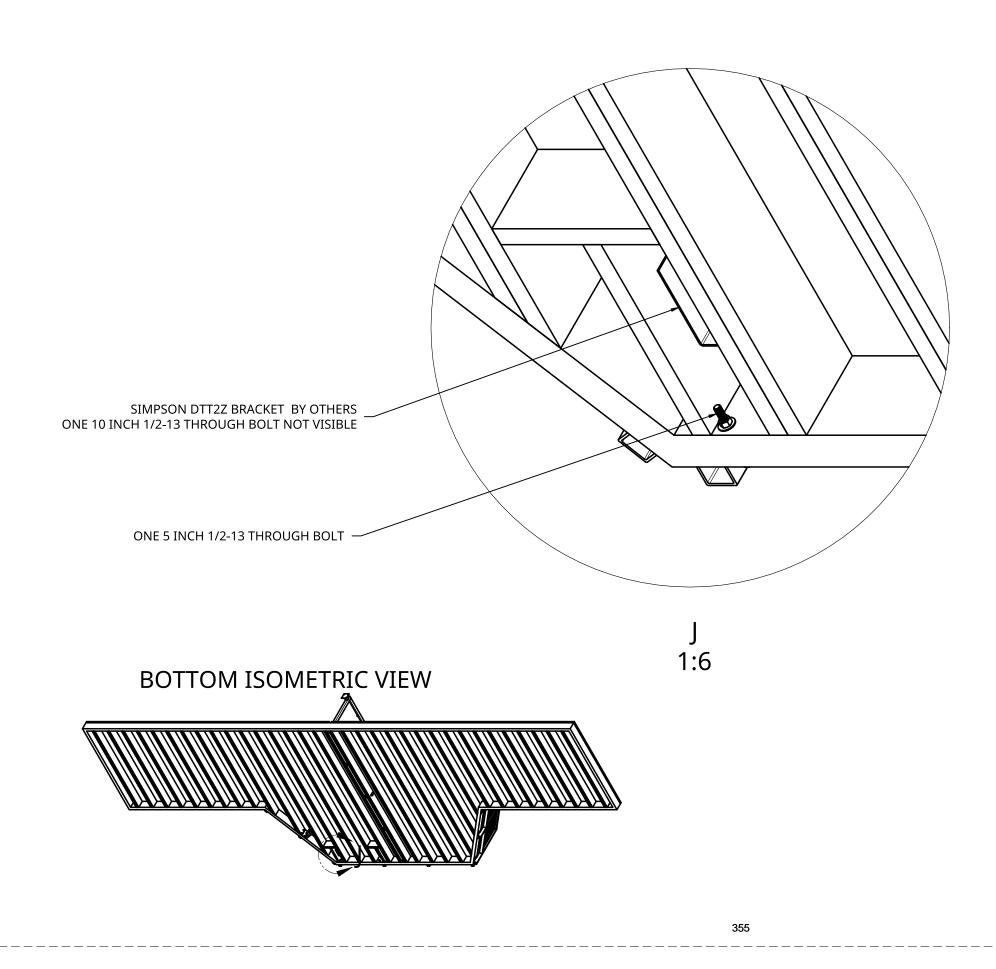
NOTES:

ALL DIMENSIONS IN INCHES UNLESS NOTED OTHERWISE DO NOT SCALE DRAWING

REV	DESCRIPTION	DATE
-	SUBMITTAL	X.X.XX

MATERIAL:

DRAWN BY:PETE YOUNG	CHECKED BY:
07/19/2022	PROJECT ID:
SHEET SIZE:B	SCALE:1:100
REV:E	SHEET: 10 OF 11





JOB00769 EXT DECK RAILING UNIT 1&2 PRELIM

PETE YOUNG

NOTES:

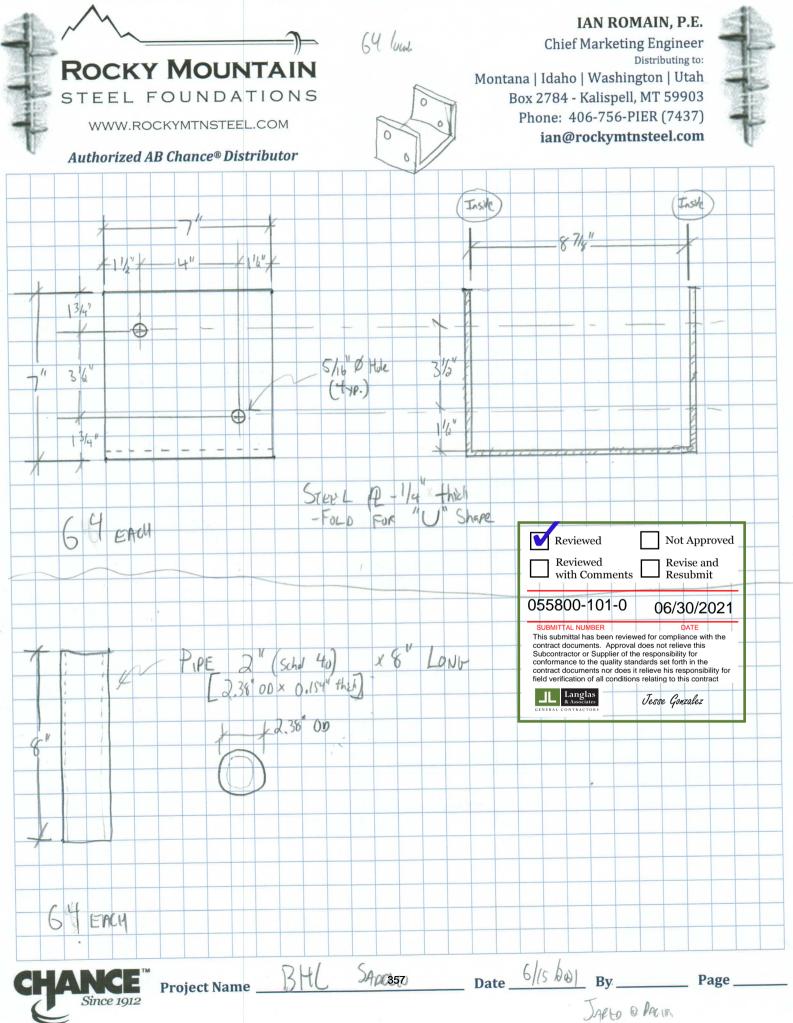
ALL DIMENSIONS IN INCHES UNLESS NOTED OTHERWISE DO NOT SCALE DRAWING

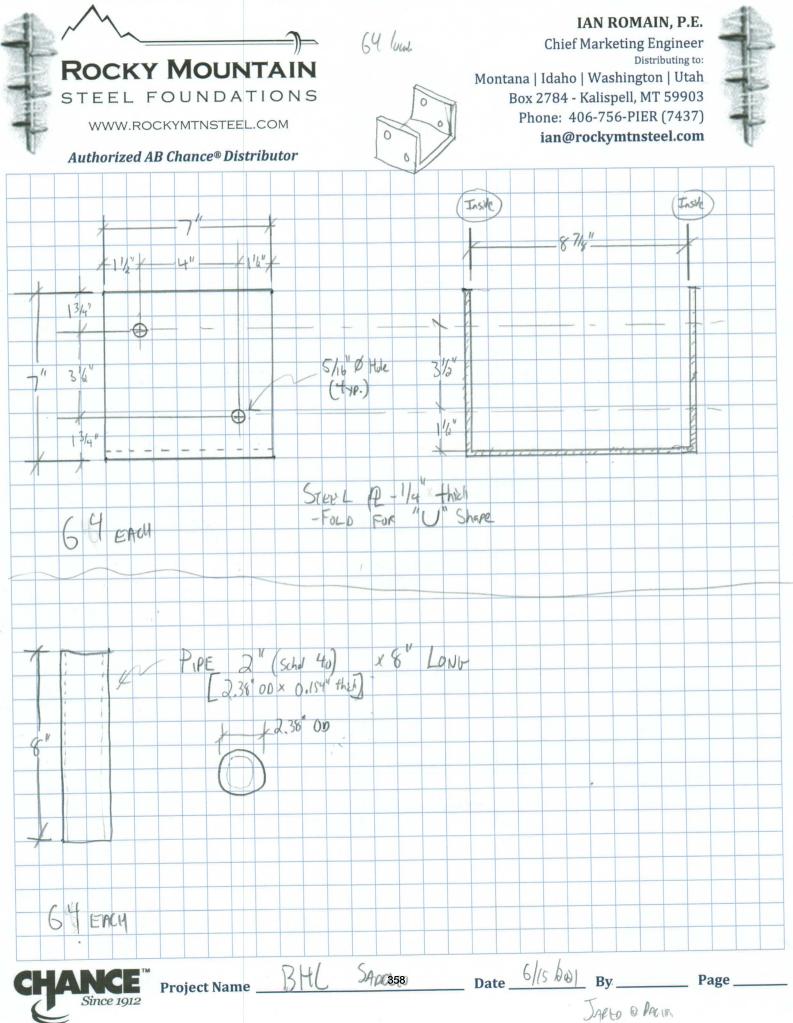
REV	DESCRIPTION	DATE
-	SUBMITTAL	X.X.XX

MATERIAL:

DRAWN BY:PETE YOUNG	CHECKED BY:
07/19/2022	PROJECT ID:
SHEET SIZE:B	SCALE:1:100
REV:E	SHEET: 11 OF 11

Deck Saddle





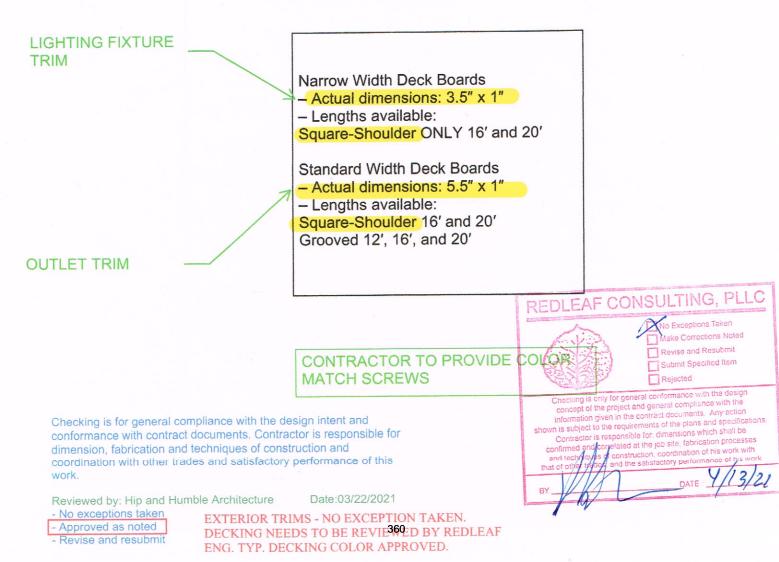
Decking

TRIM FOR EXTERIOR LIGHTING FIXTURES AND OUTLETS



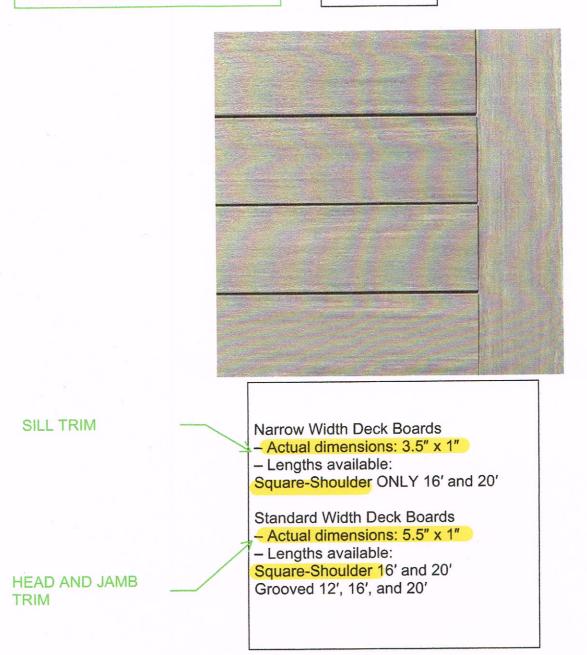
REVISED TO COASTLINE PER ADDENDUM #2.

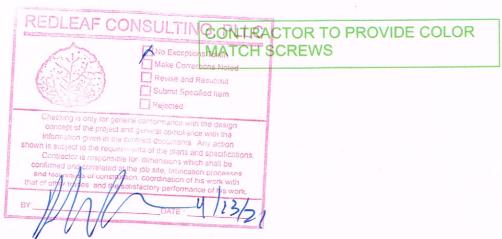




EXTERIOR TRIM FOR WINDOWS, DOORS, AND LOUVERS

COASTLINE







AZEK[®] DECK WARRANTY

Lifetime Limited Warranty

Statement of Warranty: This warranty is given to either (1) the original purchaser or (2) the owner(s) of the property at the time of installation, if different from the original purchaser (collectively hereinafter "Purchaser"), of AZEK® alternative decking materials including the Harvest, Arbor and Vintage Collections® (hereinafter "Products") manufactured by The AZEK Company LLC (hereinafter "Manufacturer"). For purposes of this warranty, a "Residential Purchaser" shall refer to a single-family residential homeowner and a "Commercial Purchaser" shall refer to any Purchaser other than a single-family residential homeowner.

Except as set forth in the exclusions, limitations and restrictions set forth below, Manufacturer warrants to a Residential Purchaser that for the lifetime of the product (20 years for a Commercial Purchaser), the Products will, from the date of the original purchase, be free from material defects in workmanship and materials that (1) occur as a direct result of the manufacturing process, (2) occur under normal use and service, (3) occur during the warranty period and (4) result in splitting, cupping, splintering, blistering, peeling, flaking, cracking, rotting or structural damage from termites or fungal decay.

Exclusions from Warranty Coverage: Manufacturer does not warrant against, is not responsible for, and no implied warranty shall be deemed to cover, any product failure, product malfunction, or damages attributable to: (1) improper installation of the Products and/ or failure to abide by the Manufacturer's installation guidelines, including but not limited to improper gapping; (2) use of the Products beyond normal use, or in an application not recommended by the Manufacturer's installation guidelines and/or local building codes; (3) movement, distortion, collapse or settling of the ground or the supporting structure on which the Products are installed; (4) any act of God (such as flooding, hurricane, earthquake, lightning, etc.), environmental condition (such as air pollution, mold, mildew, etc.); (5) variations or changes in color of Products; (6) normal weathering of surfaces; (7) improper handling, storage, abuse or neglect of the Products by Purchaser or third parties; (8) exposure to, or direct or indirect contact with extreme heat sources including reflected sunlight from low-emissivity (Low-E) glass which may damage the surface of the product and/or cause the Product to fade; (9) fabrication or remanufacturing by third parties; (10) any fasteners not supplied by Manufacturer; or (11) improper application of paint or other surface chemicals not recommended by the Manufacturer in writing.

Purchaser is solely responsible for determining the effectiveness, fitness, suitability and safety of the Products in connection with their use in any particular application.

Obtaining Warranty Performance: If Purchaser discovers a defect in any of the Products covered under this Limited Warranty during the applicable warranty period, Purchaser must, within thirty (30) days from the discovery of the alleged defect, but no later than the end of the applicable warranty period, notify Manufacturer using AZEK's online warranty claim form process available at http://www.TimberTech.com/warranty/warranty-claims-center. Alternatively, Purchaser may submit a claim by contacting the Manufacturer in writing, at the following address:

TimberTech 894 Prairie Avenue Wilmington, Ohio 45177 Attn: Claims Department



Purchaser must include in this notification proof of purchase and a statement explaining the defect. Manufacturer may request additional information. It is a further condition of this Warranty that the Manufacturer will, within a reasonable period of its receipt of such notice, be permitted to inspect the claimed defect. After reviewing at information. Manufacturer will, affits option, either regarding the validity of such claim. If Manufacturer determines Purchaser's claim is valid. Manufacturer will, affits option, either replace the defective Products or refund the portion of the purchase price of a price

The Manufacturer will not be liable for labor and/or removal costs connected with the claim. Replacement may rough will be provided that is as close as possible in color, design and quality as the replaced material, but Manufacturer does not guarantee an exact match as colors and design may change. In the event of repair or replacement, the original warranty shall apply to the repaired or replaced portion of the AZEK Products and will extend for the balance of the warranty period in effect at the time the material proved defective.

Transfer of Warranty: This warranty may be transferred one (1) time, within the five (5) year period beginning from the date of original purchase by Purchaser, to a subsequent buyer of the property upon which the Products were originally installed.



AZEK[®] DECK WARRANTY

OTHER CONDITIONS: The Manufacturer does not recommend the AZEK Products for all end use applications. The AZEK Products are intended for decks, boardwalks and piers. Local Code Authority should be consulted before installation of structures with specific load-bearing capacities and for other zoning code requirements. This Lifetime Limited Warranty is valid for single-family, residential applications only. For all other applications, including commercial use, this warranty shall be limited to a period of twenty (20) years.

THE WARRANTY STATEMENTS CONTAINED IN THIS LIFETIME LIMITED WARRANTY SET FORTH THE ONLY WARRANTIES EXTENDED BY AZEK AND ARE IN LIEU OF ALL OTHER CONDITIONS AND WARRANTIES, EITHER EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE PROVISIONS OF THIS WARRANTY SHALL CONSTITUTE THE ENTIRE LIABILITY OF AZEK AND THE PURCHASER/PROPERTY OWNERS EXCLUSIVE REMEDY FOR BREACH OF THIS WARRANTY. IN PARTICULAR, IN NO EVENT SHALL AZEK BE LIABLE TO THE PURCHASER/PROPERTY OWNER FOR SPECIAL, INCIDENTAL, INDIRECT, CONSEQUENTIAL, OR PUNITIVE DAMAGES ARISING FROM THE USE OF THE AZEK PRODUCTS OR THE BREACH OF ANY EXPRESS OR IMPLIED WARRANTY.

The laws of some states and provinces do not allow the exclusion, limitation or variation of certain conditions or warranties implied by legislation so the above limitations or exclusions may not apply to you. This Lifetime Limited Warranty gives you specific legal rights and you may also have other rights that vary from state to state and province to province.

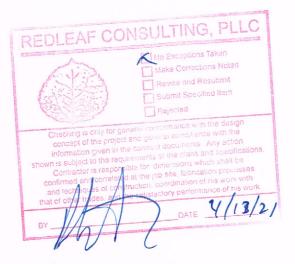
REGISTER BY MAIL: Please complete and mail to:

TimberTech 894 Prairie Avenue Wilmington, Ohio 45177 Attn: Claims Department

REGISTER ONLINE: Visit TimberTech.com.

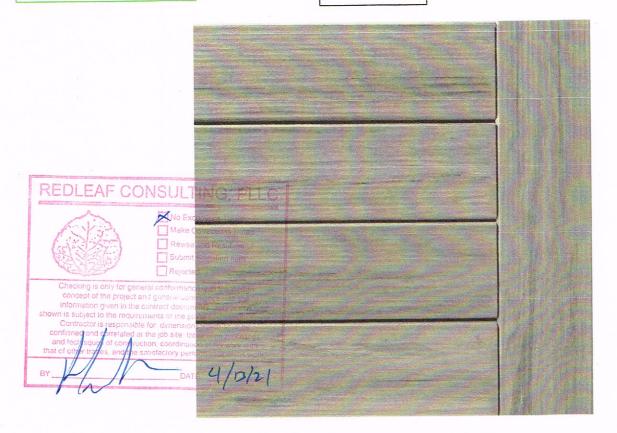
This warranty is effective for purchases made on or after January 1, 2019.

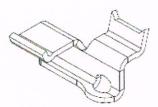
Copyright © 2019 The AZEK Company LLC



EXTERIOR DECKING

ASHWOOD





CONCEALoc™ Hidden Fastener

Deck Boards – Actual dimensions: 5.36" x 0.94" – Lengths available: Square-Shoulder 16' and 20' Grooved 12', 16', and 20'

Fascia Boards

Actual dimensions: 0.58" x 11.95"
 Lengths available: 12'

Riser Boards

- Actual dimensions: 0.58" x 7.25"
- Lengths available: 12'



CONTRACTOR TO PROVIDE COLOR MATCH SCREWS FOR FASCIA

PLS VERIFY CONCEALED FASTNER

DECKING NEEDS TO BE REVIEWED BY REDLEAF ENG. TYPICAL. DECKING COLOR AND CONCEALoc HIDDEN FASTENER 364STEM APPROVED.

limber

TIMBERTECH[®] PRO[™] DECKING WARRANTY

30-Year Limited Residential Warranty 10-Year Limited Commercial Warranty

Statement of Warranty: This warranty is given to either (1) the original purchaser or (2) the owner(s) of the property at the time of installation, if different from the original purchaser (collectively hereinafter "Purchaser"), of PRO[®] alternative decking materials (including the Legacy, Reserve, Tropical, and Terrain Collections) manufactured by The AZEK Company LLC (hereinafter "Manufacturer").

For purposes of this warranty, a "Residential Purchaser" shall refer to a single-family residential homeowner and a "Commercial Purchaser" shall refer to any Purchaser other than a single-family residential homeowner.

Except as set forth in the exclusions, limitations and restrictions set forth below, Manufacturer warrants to a Residential Purchaser that for a period of thirty (30) years (10 years for a Commercial Purchaser), the Products will, from the date of the original purchase, be free from material defects in workmanship and materials that (1) occur as a direct result of the manufacturing process, (2) occur under normal use and service, (3) occur during the warranty period and (4) result in splitting, splintering, rotting or purchase from termites or fungal decay.

Exclusions from Warranty Coverage: Manufacturer does not warrant against and is not responsible for and no implied warranty shall be deemed to cover, any product failure, product malfunction, or damages attributable to: [1] improper installation of the Products and/ or failure to abide by the Manufacturer's installation guidelines, including but not limited to improper gapping. [2] use of the Products beyond normal use, or in an application not recommended by the Manufacturer's installation guidelines and/or local building codes;[3] movement, distortion, collapse or settling of the ground or the supporting structure on which the Products are installed; [4] any act of God (such as flooding, hurricane, earthquake, lightning, etc.], environmental condition (such as air, pollution, mode, mildew, etc.], or staining from foreign substances (such as dirt, oil, etc.]; [5] variations or changes in color of Products, [6] normal weathering of surfaces; [7] improper handling, storage, abuse or neglect of the Products by Purchasen the transferee or third parties; [8] exposure to, or direct or indirect contact with extreme heat sources including reflected sunlight from low remissivity from by buildings which may damage the surface of the product and/or cause the Product to fade; [9] fabrication for admanufacturer application of part of physical surface. [10] minor dripping from DrySpace; [11] any fasteners not supplied by Manufacturer; product application of part of physical surface parts.

Purchaser is solely responsible for determining the effectiveness, fitness, supporting and safety of the Products in connection with their use in any particular application.

Obtaining Warranty Performance: If Purchaser discovers a defect in any of the Products covered under this Limited Warranty during the applicable warranty period, Purchaser must, within thirty (30) days from the discovery of the alleged defect, but no later than the end of the applicable warranty period, notify Manufacturer. Purchaser may notify Manufacturer of a warranty claim using TimberTech's online warranty claim form process available at **http://TimberTech.com/warranty/warranty/warranty-claims-center**. Alternatively, Purchaser may submit a warranty claim by contacting the Manufacturer in writing at the following address:

TimberTech 894 Prairie Avenue Wilmington, Ohio 45177 Attn: Claims Department

Purchaser must include in this notification proof of purchase and a statement explaining the defect. Manufacturer may request additional information. After reviewing all information, Manufacturer will make a determination regarding the validity of such claim. If Manufacturer determines Purchaser's claim is valid, Manufacturer will, at its option, either replace the defective Products or refund the portion of the purchase price paid by Purchaser for such defective Products (not including the cost of its initial installation). Replacement material will be provided that is as close as possible in color, design and quality as the replaced material, but Manufacturer does not guarantee an exact match as colors and design may change. In the event of repair or replacement, the original warranty shall apply to the repaired or replaced portion of the Products and will extend for the balance of the warranty period in effect at the time the material proved defective.

If a Residential Purchaser makes a valid warranty claim during years eleven (11) through thirty (30) after the original purchase date, then the Residential Purchaser's recovery will be prorated as indicated below. If Manufacturer is providing replacement materials, it may elect to replace the percentage listed below of Products; if Manufacturer is refunding the purchase price, it may elect to refund the percentage listed below of the purchase price of the Products.



TIMBERTECH[®] PRO[™] DECKING WARRANTY

Year of Claim	Recovery
11-13	80%
14-16	60%
17-19	40%
20-22	20%
23-30	10%

REDLEAF CONSULTING, PLLC



This warranty shall not cover, and Manufacturer shall not be responsible for costs and expenses incurred with respect to the removal of the defective Products or the installation of replacement materials, including but not initiated to 'tabor' and 'freight. The foregoing remedies are the Purchaser's SOLE AND EXCLUSIVE REMEDY FOR BREACHOF ANY WARRANTY mensions which shall be

Transfer of Warranty: This warranty may be transferred one (1) time, within the fixed by the base of by the base of the work with the date of original purchase by Purchaser, to a subsequent buyer of the property upon which the propuets were originally installed

Limitations: DISCLAIMER OF WARRANTIES: EXCEPT FOR [1] THE EXPRESS WAILTEN WARRANTY CONTAINED HEREIN, MANUFACTURER MAKES NO OTHER WARRANTIES, GUARANTEES OR INTERMITES, WHETHER EXPRESS OR IMPLIED, ARISING BY LAW, COURSE OF DEALING, USAGE OF TRADE, CUSTOM OR OTHERWISE, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTY OF MERCHANTABILITY AND IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ALL SUCH OTHER WARRANTIES, GUARANTEES AND INDEMNITIES ARE HEREBY DISCLAIMED, OVERRIDDEN AND EXCLUDED FROM THIS TRANSACTION FOR THE WARRANTY TERM AND BEYOND THE WARRANTY TERM.

LIMITATION OF REMEDIES AND EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES: MANUFACTURER'S LIABILITIES ARE LIMITED SOLELY AND EXCLUSIVELY TO THE OBLIGATIONS SPECIFICALLY UNDERTAKEN HEREIN, AND UNDER NO CIRCUMSTANCES WILL MANUFACTURER BE LIABLE OR OBLIGATED FOR ANY INCIDENTAL, CONSEQUENTIAL, INDIRECT, SPECIAL, PUNITIVE OR ANY OTHER DAMAGES OF ANY KIND WHATSOEVER (INCLUDING, BUT NOT LIMITED TO, LOST PROFITS, LOST SALES, LOSS OF GOODWILL, USE OF MONEY, USE OF GOODS, STOPPAGE OF WORK, OR IMPAIRMENT OF ASSETS), WHETHER FORESEEABLE OR UNFORESEEABLE, ARISING OUT OF BREACH OR FAILURE OF EXPRESS OR IMPLIED WARRANTY, BREACH OF CONTRACT, FRAUD, MISREPRESENTATION, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE, EXCEPT AND ONLY TO THE EXTENT THIS LIMITATION IS SPECIFICALLY PRECLUDED BY APPLICABLE LAW OF MANDATORY APPLICATION. MANUFACTURER'S LIABILITY WITH RESPECT TO DEFECTIVE PRODUCTS SHALL IN NO EVENT EXCEED THE REPLACEMENT OF SUCH PRODUCTS OR REFUND OF THE PURCHASE PRICE, AS DESCRIBED ABOVE.

Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages and/or limitations on how long an implied warranty lasts so the above exclusions and/or limitations may not apply to you. This Warranty gives you specific legal rights, and you may also have other rights that vary from state to state or province to province.

Miscellaneous: This writing is understood and intended to be the final expression of the parties' agreement and is a complete and exclusive statement of the terms and conditions with respect thereto, superseding all prior agreements or representations, oral or written, and all other communication between the parties relating to the subject matter of this warranty. This warranty may not be altered or amended except in a written instrument signed by Manufacturer and Purchaser or permitted transferee. No agent, employee or any other party is authorized to make any warranty in addition to that made herein and Manufacturer shall not be bound by any such statements other than those contained in this warranty. Manufacturer reserves the right to discontinue or modify the Products covered under this warranty at any time without notice. In the event that repair or replacement of the Products pursuant to this warranty is not possible, Manufacturer may fulfill any repair or replacement obligation under this warranty with a product of equal value.

This warranty is effective for purchases of Products on or after January 1, 2019.

© 2019 The AZEK Company LLC

Insulation & Weather Barrier

PLEASE VERIFY IF ACCEPTABLE ALTERNATE TO JOHNS MANVILLE





Hunter Panels Xci Foil

Reflective Foil Faced Polyisocyanurate Foam Sheathing for Residential and Light Commercial Application

HUNTER PANELS Xci FOIL

WOOD FRAMING

NON COMBUSTIBLE INSULATION

DESCRIPTION

Xci Foil is a high thermal performance rigid insulation panel composed of a polyisocyanurate foam core bonded with reflective tri-laminate foil facers on both sides. It is designed for use in wall applications to meet the requirements for continuous insulation (ci) within the building envelope.

FEATURES AND BENEFITS

- Polyiso offers increased R-Value per inch vs mineral fiber, XPS or EPS options
- Designed for use in continuous insulation to assist in meeting the most current ASHRAE 90.1, IECC, IBC and IRC standards
- Manufactured with NexGen Chemistry: Contains no CFCs, HCFCs, is Zero ODP, and has virtually no GWP
- Lightweight yet durable, easy to handle. Cuts with a knife or saw.

APPLICATIONS

- Provides continuous insulation (ci) for standard wood frame, FRT wood frame, steel stud, CMU and concrete exterior wall constructions
- Exterior retrofit applications of existing walls
- Interior retrofit of existing walls or ceilings in concealed applications when protected by code-approved 15-minute thermal barrier
- Xci Foil is compatible with wood, vinyl, fiber cement, aluminum, or hardboard sidings in wood frame construction

Note: Xci Foil is not suitable for exposed interior applications.

PANEL CHARACTERISTICS

- ASTM C 1289 Type 1, Class 1. Grade 1, 2 or 3 available.
- Available 4' x 8' (1220mm x 2440mm) panels in thicknesses of 0.5" (12.7mm) 4.0" (102mm)
- Other sizes are available upon special request—(for example: 16" or 24" width)

CODES AND COMPLIANCES

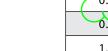
- ASTM C 1289
- International Residential Code (IRC) R316 and International Building Code (IBC) Chapter 26
- NFPA 285 passed, contact Hunter Panels for more information
- ICC-ESR-3174
- DRJ Technical Evaluation Report 1402-02
- Miami Dade County Product Control Approved

WRB

The incorporation of Weather Resistant Barriers (air, vapor and moisture) is a critical element of a wall assembly. A design professional familiar with local code requirements should specify the selection and placement of any WRB. Furthermore, it is recommended that a hygrothermal analysis of the proposed assembly be conducted to determine the type and locations of a proposed WRB.

Note: Xci Foil with taped or foamed seams can be considered a WRB.





the architect. Xci Foil Thermal Values

Thickness (inches)	Thickness (mm)	R Value*
0.5	12.7	3.3
0.75	19	5.0
1.0	25	6.5
1.5	38	10.0
2.0	51	13.3
2.5	64	17.0
3.0	76	20.3
3.5	89	24.0
4.0	102	27.0

*Thermal values as per ASTM C 518 in accordance with ASTM C 1289

WRB*

FIBER CEMENT

The location and number of WRB's in

the wall assembly are determined by

Hunter Panels • 15 Franklin St, Portland, Møine 04101 • 888.746.1114 • Fax 877.775.1769 www.hunterpanels.com

Checking is for general compliance with the design intent and conformance with contract documents. Contractor is responsible for dimension, fabrication and techniques of construction and coordination with other trades and satisfactory performance of this work.

Reviewed by: Hip and Humble Architecture

No exceptions taken

Approved as noted

Hunter Panels Xci Foil

Revise and resubmit

WARNINGS AND LIMITATIONS

Insulation must be protected from open flame. Hunter Panels will not be responsible for specific building design by others, for deficiencies in construction or workmanship, for dangerous conditions on the job site or for improper storage and handling. Technical specifications shown in this literature are intended to be used as general guidelines only and are subject to change without notice. Call Hunter Panels for more specific details.

Date:03/22/2021

INSTALLATION

- Xci Foil is not a structural sheathing, code approved shear or corner bracing is required
- Exterior cladding must be attached through the insulation to the framing
- For wood framing, secure boards with 3/8" head diameter galvanized roofing nails which must penetrate the stud at least 34" or use 1" crown 16 gauge staples which penetrate framing 1/2"
- Fasten insulation to framing every 12" around the perimeter and every 16" in the field
- Refer to local codes and practices for placement of the WRB in the wall assembly
- Exterior siding can be installed over Xci Foil. Refer to the siding manufacturer's installation instructions.

POST-INSTALLATION EXPOSURE

During the time frame between installation of Xci Foil and the application of the finished exterior cladding, it is recommended that a building wrap be applied to the Xci Foil. If a building wrap has not been specified, ALL UNFACED FOAM EXPOSED TO DIRECT DAYLIGHT (i.e. corners, window and door openings) should be taped with a compatible waterproof tape. Xci Foil is not intended to be left exposed for extended periods of time (i.e. in excess of 60 days) without adequate protection. Please contact Hunter Panels for details.

JOB-SITE STORAGE

Good construction practice dictates that all insulations should be protected from moisture and direct sunlight during job-site storage. Pallets of Hunter Panels Xci Foil are double packaged in a UV resistant polyethylene bag. This moisture resistant package is designed for protection from the elements during flat bed shipment from our factories to the job-site. Outdoor storage for extended periods of time requires waterproof tarpaulins and elevated storage above ground level a minimum of 2". Additionally, we recommend slitting the bundle packaging vertically down the center of the two short sides to prevent moisture accumulation within the package.



888.746.1114 www.hunterpanels.com



Reflective Foil Faced Polyisocyanurate Foam Sheathing for **Residential and Light Commercial Application**

Typical Physical Property Data Chart

Property	Test Method	Value
Compressive Strength	I I ASIMID 1671	
Dimensional Stability	ASTM D 2126	2% linear change (7 days)
Moisture Vapor Permeance	ASTM E 96	<0.05 perm (2.875ng/(Pa•s•m²))
Water Absorption	ASTM C 209	< 0.05% volume
Service Temperature		-100° to 250° F (-73°C to 122°C)
Recycled Content		9% pre-consumer

*Also available in Grade 3 (25 psi)

LEED POTENTIAL CREDITS FOR POLYISO USE **Energy and Atmosphere** Optimize Energy Performance Materials & Resources • Building Life-Cycle Impact Reduction

- Environment Product Declaration
- Material Reuse
- 9% Pre-consumer Recycled Content
- Construction and Demolition Waste Management

Indoor Environmental Quality Thermal Comfort

PENNSYLVANIA

UTAH

WASHINGTON

08-18

FLORIDA

TEXAS

lot 4 architecture

819 SOUTH BLACK AVE. BOZEMAN, MT 59715 C: 406.451.3613 E: msteiner@lot4.net

TO:

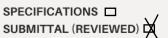
Langlas & Associates, Inc.					
1019 E. Main Street, Suite 101					
Bozeman, MT 59715					
406.599.3566					

WE ARE SENDING YOU ATTACHED:

SHOP DRAWINGS	
COPY OF LETTER	

PRINTS
CHANGE ORDER

PLANS 🗆 SAMPLES 🗖



COPIES	DATE	NO.	DESCRIPTION
Electronic	04.05.2022	072100	Rigid Insulation Submittal

APPROVED AS SUBMITTED

APPROVED AS NOTED

RETURNED FOR CORRECTIONS R

RESUBMIT

REMARKS:

MELISSA STEINER, ARCHITECT

LETTER OF TRANSMITTAL

DATE: 04.06.2022 JOB # 2208

ATTENTION: Jesse Gonzalez

RE: Reviewed Submittal



OX Engineered Products 22260 Haggerty Road Suite 365 Northville, MI 48167 p. 1.800.345.8881 f. 248.289.9955 oxep.com







Take your energy efficiency to the max.

IsoRed Max is our line of rigid polyiso insulation with multiple facer options that adds thermal insulation to commercial curtain walls or other E84 Class A polyiso applications.

APPROVED REVISE & RESUBMIT NOT REVIEWED	APPROVED AS NOTED REJECTED/RESUBMIT FOR YOUR INFORMATION
and general compliance v Notations Do Not Authorize Approval, comments, and Contractor from complian	for conformance with design inten with the Contract Documents only e Changes to Contract Sum. I/or corrections do not relieve the use with the Contract Documents sible for confirming, correlating al
quantities, dimensions, to processes, techniques, an patibility of materials and mit with other trades and subs a safe and satisfactory mar Contract Documents. 04.06.2022	olerances, clearances, fabrication id sequences of construction, commethods, coordination of their work contractors, performance of work in nner and for full compliance with the
quantities, dimensions, to processes, techniques, an patibility of materials and with other trades and subd a safe and satisfactory mai Contract Documents.	olerances, clearances, fabr ad sequences of construction methods, coordination of the contractors, performance of v

Made in USA









Energy Efficiency

Easily add R-value and eliminate insulation gaps.

Multiple Applications

Use it on interior walls, exterior walls, ceilings and sub-terrain applicatior**87**!

Easy to Install

Light panels go up fast, saving time and money.

OX ISO RED MAX Specifications

Physica	al Properties	of ISO RED I	MAX Polyiso She	athings				
ASTM Method	D1621	C209	E96 (1)	D2126	D2126		E8	14 ₍₂₎
	Minimum Comprehensive Strenth, PSI	Water Absorption	Water Vapor Transmission, perms	Dimensional Stability % Change	Nominal Density, pcf	Service Temperature Range, F	Flame Spread	Smoke Developed
ISO RED MAX Type 1, Class 2	25	<0.06	<0.03	<0.2	2.0	-50 to +250	<u>≤</u> 25	≤450

(1) -40 and 200 degrees F, ambient RH, length & width (2) Fire Performance/Surface Burn Characteristics (3) Proprietary polyiso rigid board facers on both sides

Thermal R-Values ⁽¹⁾											
Thickness	0.50	0.75	1.00	1.55	1.75	2.00	2.5	2.75	3.0	3.5	4.0
Thermal R-Value	3.3	5.0	6.5	10.0	11.3	13.0	16.0	17.7	19.0	22.1	25.2
System R-Value ⁽²⁾	6.1	7.8	9.3	13.6	14.3	15.8	18.8	20.5	21.8	25.3	28.0

(1) Thermal values are determined by using ASTM C518 test method at 75 degrees mean temperature. System R-value refers to additional effective R-value possible due to emissivity performance of reflective surface. According to ASHRAE, the reflective foil facing of ISO RED MAX and ISO RED CI qualifies to add R-value to a properly detailed assembly, which includes an adjacent, 3/4" dead air space.

Fastener Meth	ods		
Application	Stud Spacing	Attachment Method	Fastener Spacing (1)
Wood Framing	16" or 24"	Capped nails, staples or roofing nails (~1" framing embedment)	12″ perimeter 12″ field Fastener heads flush with surface
Metal framing	16" or 24"	Corrosion-resistant self-tapping screws with 1" diameter cap or washer. (1/4" framing embedment)	12" perimeter 12" field Fastener heads flush with surface
Interior Masonry or concrete	N/A	Suitable construction adhesive or masonry fasteners with 1" diameter cap or washer or combination of adhesive & mechanical fasteners. (~1" embedment into substrate)	Adhesive beads spaced 16" horizonatlly or full perimeter. Mechanical fasteners 12" perimeter and 12" field spaced 16" horizontally or combination of adhesive and minimum fasteners to hold until adhesive sets
Exterior Masonry or concrete below grade	N/A	Granular water-draining fill	Only as required to ensure intimate contact to masonry surface or water proofed surface
1) Refer to project engine	eer for potential f	astener spacing variation	·

372

Make your next job a commercial success

isoRed Max is our line of rigid polyiso insulation with multiple facer options that adds thermal insulation to commercial curtain walls or other E84 Class A polyiso applications. Use IsoRed Max for exterior walls, interior walls and ceilings to achieve best-in-class R-values and a weather resistant barrier. It's good for building owners. It's good for the planet. And the easy installation is good for you.

Typical Application

OX ISO RED CI / ISO RED MAX -POLYISO INSULATION TAPE JOINTS - MECHANICALLY FASTEN TO METAL DECK OX ISO RED MAX - POLYISO INSULATION OX ISO RED MAX - POLYISO INSULATION - TAPE JOINTS OX ISO RED MAX - POLYISO INSULATION - TAPE JOINTS OX ISO RED CI - POLYISO INSULATION - TAPE JOINTS -FULL HEIGHT OF FOUNDATION WALL OX ISO RED CI - POLYISO INSULATION - TAPE JOINTS

Attributes

- High R-values, as much as R-6.5 per inch. Thicknesses up to 4 inches, and lengths to 30' (dependent on thickness.)
- Vapor barrier performance with closed cell foam structure to stop vapor drive for any climate.
- Fiberglass reinforced foam core for durability on the jobsite and beyond.
- Optional embossed WHITE thermoset finished aluminum front facer for light reflectance, aesthetics, and durability.
- ASTM E84 Class A

Product sizes Standard width 48" Standard lengths 8', 9', 10' Custom lengths available



Poly ISO Grades Grade	& Available Facers Front Facer	Back Facer	Seam Finish Options
ISO RED MAX	0.9 mil foil	0.9 mil foil	Ox Commercial Seam Tape
ISO RED MAX WF	1.25 mil white embossed	0.9 mil silver	ISO RED MAX WF Seam Tape
ISO RED MAX LD	1.25 mil white embossed	1.25 mil silver embossed	ISO RED MAX WF Seam Tape
ISO RED MAX HD	3.4 mil white embossed	1.25 mil silver embossed	ISO RED MAX WF Seam Tape
ISO RED MAX GF	1.25 mil grey embossed	0.9 mil silver	ISO RED MAX GF Seam Tape

Joints/Edges Tape

Ox Commercial Seam Tape or ISO Red Max WF Seam Tape

For water-resistive barrier installations, tape all seams with minimum 27/8" wide sheathing tape (Ox Commercial Seam Tape) or equivalent. 4" wide self-adhered flashing tape (Ox Arctic Flash) meeting AAMA 711 with release liner required for effectively taping of inside and outside corners to comply with manufacturers warranty.

Flash all openings and penetrations with self-adhered flashing tape meeting AAMA 711 (Ox Arctic Flash).

For installation instructions see:

http://www.drjbestpractices.org/installation-guide/2015/jun/installation-instructions-windows-over-fpis

Storage

Normal care should be taken to avoid excessive moisture exposure (soaking) to unpackaged product. Maintain packaging protection until installation. Once removed from the protective bundle covering and installed on the wall frame, ISO RED can remain installed exposed to elements.

OX ISO RED MAX Installation

- 1. Store ISO RED MAX inside or protected from precipitation and standing water.
- 2. Measure and cut boards with knife or saw. Be careful to not mar white surface in cutting step. No allowance for expansion or contraction of the ISO RED MAX is necessary.
- 3. If applicable, install starting PVC trim pieces to walls per manufacturer's instructions.
- 4. Place 3/8" bead of construction adhesive at perimeter of boards and every 5' horizontally. If PVC trim pieces are used, place 3/8" bead of adhesive to inside of PVC trim top flange. Also place a bead of adhesive at top edge of board. (Sikaflex-201, DC 790, Vulkem 116, Liquid Nails Heavy Duty or equivalent).
- 5. Employ mechanical anchorage with washer heads to supplement adhesives.
- Space anchors every 5' horizontally. Tape or finish over exposed anchor heads as desired.
- 6. Finish edges and seams with white tape or PVC trim pieces.
- 7. CLEANING: Can be pressure washed up to 1000 psi from a distance of at least 3 feet with a 15-degree or greater spray tip.

Notice: Customer is responsible for complying with all applicable laws, regulations, and building codes (collectively, "Laws") of the location where any products (individually, "Product" and collectively, "Products") manufactured by Ox Engineered Products, LLC ("Ox") are actually used, specically including, but not limited to, Laws regarding use and disposal of the Products by Customer. Ox expressly disclaims all liability for the Products other than as expressly provided in the applicable warranty for the Product (the "Product Warranty") which is available from Ox at the address below. OX EXPRESSLY DISCLAIMS ANY OTHER WARRANTY EXPRESS OR IMPLIED INCLUDING SPECIFICALLY, BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. None of the information contained in this brochure shall act as a waiver of any patent, trademark, copyright or other intellectual property right of Ox, nor shall any such information expand any rights or remedies set forth in the applicable Product Warranty. Ox shall not be liable for compliance of the Products with any test results obtained by third parties that may be included in this brochure. Actual results may vary. Not all Products are approved for use in all jurisdictions. The Products, Customer irrevocably consents that any dispute arising between Ox and Customer will be determined under Michigan law without consideration of any conicts of law analysis and that any such dispute shall be brought only in the state or federal courts serving the locality in which Ox's headquarters are then located. By purchasing the Products, Customer expressly consents to the exercise by such courts of personal and subject matterjurisdiction and venue for such purposes. OX Engineered Products offices arg**74** ted at 22260 Haggerty Road, Suite 365, Northville, Michigan 48167. Phone (800) 345-8881.

DuPont[™] Tyvek[®] Tape





Waterproof Seam Tape for Maximum Rec

Checking is for general compliance with the design intent and conformance with contract documents. Contractor is responsible for dimension, fabrication and techniques of construction and coordination with other trades and satisfactory performance of this work.



FEATURES/BENEFITS

Description

Using a quality weather barrier on a commercial building is as important as installing it properly. Taping the seams after wrapping – in addition to taping any tears or holes – is the best practice for maximum reduction of air and water intrusion into the building envelope. Finish the building envelope with the superior seam tape – **DuPont**[™] **Tyvek**[®] **Tape**.

Tyvek[®] Tape works when other tapes won't, sealing seams for a continuous protective barrier against air and water infiltration. It features a specially engineered adhesive to create the best adhesion to DuPont[™] Tyvek[®] Weather Barrier Systems in any climate. As part of a complete building envelope system, DuPont[™] Flashing Tape will help reduce the risk of water damage, increase building comfort, and improve energy efficiency.

Air and Water Barrier Performance

Tyvek[®] **Tape** is strong, easy to use, and highly waterproof. It is constructed of an oriented polypropylene film, coated with a specially formulated permanent acrylic adhesive to create the best adhesion between seam tape and DuPont[™] Tyvek[®] weather barriers. Some features and benefits include:

- Durability strong, high tack, easy to use and waterproof
- Heat/cold resistance withstands temperature extremes from -40°F to 220°F
- Pliability no cracking when bent around 5 mm mandrel \oplus -4°
- Quality engineering covered with UV-resistant, biaxiallyoriented polypropylene film coated with a specially formulated permanent acrylic adhesive
- Compliance Tyvek[®] Tape is compliant to the Canadian Construction Materials Centre Technical Guide for Sheathing Tape (CCMC 07281) testing standard

Available Sizes

TABLE 1: Stock Sizes for Tyvek[®] Tape

Product/Size	Packaging	Quantity
1.88" x 54.6 yds.	bulk packed	36 rolls/case
1.88" x 54.6 yds.	individually retail wrapped	36 rolls/case
2.82" x 54.6 yds.	bulk packed	24 rolls/case
2" Tape Dispenser	bulk packed	70 units/case
3" Tape Dispenser	individually boxed	20 units/case

Complete System

For maximum protection against air and water infiltration in homes, use **DuPont[™] Tyvek[®] Tape** with DuPont[™] Tyvek[®] Weatherization Systems, including Tyvek[®] CommercialWrap[®], Tyvek[®] HomeWrap[®], Tyvek[®] StuccoWrap[®], Tyvek[®] DrainWrap[™], DuPont[™] Flashing Systems and Tyvek[®] Wrap Caps.

Sustainable Solutions

From a single family home to an office tower, air and water infiltration can make insulation significantly less effective, heating and air conditioning more costly. Tyvek® Tape contributes to energy efficiency by helping to seal the building envelope, which controls air flow and water intrusion in the wall assembly.

As part of an overall building envelope system with other Tyvek[®] materials, **Tyvek[®] Tape** can:

- Allow systems to meet requirements of ASHRAE 90.1 and IECC Air Leakage Requirements, when tested in accordance with ASTM E2357.
- Allow systems to meet requirements of Wisconsin Energy code (ASTM E1677 and/or ASTM E23571).
- Help contribute towards LEED[®] (Leadership in Energy and Environmental Design) points.

PROPERTIES

Tyvek[®] **Tape** exhibits physical properties as indicated in Table 2 when tested as represented. Review all instructions and (Material) Safety Data Sheet ((M)SDS) before use. Please contact DuPont at 1-800-488-9835 when additional guidance is required for writing specifications that include this product.

TABLE 2: Physical Properties for DuPont[™] Tyvek[®] Tape

Property	Typical Value	Units
Roll length	50 (54.68)	meters (yards)
Tensile strength	27	lbs./in.
Elongation	125	% by length, max.
Caliper (total/adhesive/backing)	3.0/1.6/1.4	mm.
Wet grab adhesion	50	oz./in.
Peel adhesion	40	oz./in.
180 degree peel adhesion (immediate)	24.0	oz.in.
180 degree peel adhesion (after 72 h. dwell)	35.0	oz.in.
Temperature resistance	-40 to 220	°F
Pliability	No cracking when bent around mandrel	5 mm., -4°F
Moisture vapor transmission rate (@ 100°F and 90% relative humidity)	0.3	g/100 in²/24 h.



For more information visit us at tyvek.com or call 1-800-448-9835

NOTICE: No freedom from any patent owned by DuPont or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other government enactments. The product shown in this literature may not be available for sale and/or available in all geographies where DuPont is represented. The claims made may not have been approved for use in all countries or regions. DuPont assumes no obligation or liability for the information in this document. References to "DuPont" or the "Company" mean the DuPont legal entity selling the products to Customer unless otherwise expressly noted. NO EXPRESS WARRANTIES ARE GIVEN EXCEPT FOR ANY APPLICABLE WRITTEN WARRANTIES SPECIFICALLY PROVIDED BY DUPONT. ALL IMPLIED WARRANTIES INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED. The buyer assumes all risks as to the use of the material. Buyer's exclusive remedy or any claim (including without limitations, negligence, strict liability, or tort) shall be limited to the refund of the purchase price of the material. Failure to strictly adhere to any recommended procedures shall release DuPont Specialty Products USA, LLC or its affiliates, of all liability with respect to the materials or the use thereof. The information herein is not intended for use by non-professional designers, applicators or other persons who do not purchase or utilize this product in the normal course of their business.

DuPont", the DuPont Oval Logo, and all trademarks and service marks denoted with [™], [™] or [®] are owned by affiliates of DuPont de Nemours, Inc. unless otherwise noted. © 2019 DuPont.

DuPont Flashing Systems PHYSICAL PROPERTIES DATA SHEET

Product Data

PROPERTIES	DUPONT [™] FLEXWRAP [™]	DUPONT [™] FLEXWRAP [™] NF	DUPONT [™] FLEXWRAP [™] RW
Face Sheet	Elasticized polyethylene laminate (white)	Polyethylene laminate (white)	Elasticized polyethylene laminate (white)
Adhesive*	Butyl rubber (black)	Butyl rubber (black)	Butyl rubber (black)
Thickness	70 mil (1,775 microns)	55 mil (1,397 microns)	70 mil (1,775 microns)
Release Liner	2 piece, heavy-duty siliconized paper	1 piece, heavy-duty siliconized paper for 6-inch width product; 2 piece, heavy-duty siliconized paper for 9-inch width product	Custom-designed, multi-piece, heavy-duty siliconized paper
Dimensions	7- or 9-inch width x 75 feet length	6- or 9-inch width x 75 feet length	9-inch width x 6-inch length custom folded pieces
Applications	Round top or custom shaped windows, 3-D sill protection, wall interruptions: i.e., dryer vents, hose bibs.	Round top or custom shaped windows, 3-D sill protection, wall interruptions: i.e., dryer vents, hose bibs. Suitable for use on substrates where fasteners cannot be applied.	Corner pieces for sill and head of recessed windows.

PROPERTIES	DUPONT [™] STRAIGHTFLASH [™]	DUPONT [™] STRAIGHTFLASH [™] VF
Face Sheet	Spunbonded polyethylene laminate (white)	Spunbonded polyethylene laminate (white)
Adhesive*	Butyl rubber (black)	Dual sided butyl rubber (black)
Thickness	30 mil (760 microns)	30 mil (760 microns)
Release Liner	2 piece, heavy-duty siliconized paper	2 piece, heavy-duty siliconized paper
Dimensions	4-inch width x 150 feet length 9-inch width x 125 feet length	6-inch width x 125 feet length
Applications	Jambs and heads of rectangular windows.	Brick mold, non-integral flanged and non-flanged rectangular windows and doors

* Adhesive system is based on 100% butyl elastomer with no asphalt/modified bitumen components.

Performance Testing

WATER HOLD-OUT PERFORMANCE International Building Code, ICC Evaluation Services, AC-148, Section 4.5.2.1 (Hydrostatic head of 55 cm applied for 5h)	No leakage through flashing membrane.
INSTALLED SYSTEM WATER INTRUSION TESTING (Tested with no exterior cladding)	
ASTM E331	NO leakage at 300 Pa
ASTM E331 after thermal aging (0-160°F)	NO leakage at 300 Pa
WATER VAPOR PERMEABILITY (ASTM E96)	< 1 perm (< 60 ng/Pa.sec.m ²)
APPLICATION TEMPERATURE Best when installe	ed above 25°F (consult DuPont for primer recommendations
UV RESISTANCE	Cover within 120 days
DUPONT [™] FLASHING SYSTEMS PRODUCTS MEET THE	Class A (no primer)
AAMA 711-07 MATERIAL STANDARD AT THE HIGHEST CLASSIFICATION LEVELS:	Level 3 Thermal Exposure (80°C/176°F for 7 days)

For more information about DuPont[™] Weatherization Systems, please call 1-800-44-Tyvek or visit us at www.Construction.Tyvek.com

WARNING: DuPont" Flashing Systems products and their release paper are slippery and should not be walked on. Remove release paper from work area immediately.

DuPont[™] Flashing Systems products are combustible and should be protected from flame and other high heat sources. If the temperature of DuPont[™] Flashing Systems products reach 700°F (307°C) they will burn and the fire may spread and fall away from the point of ignition.



The miracles of science"



Copyright © 2009 E.I. du Pont de Nemours and Company. All rights reserved. The DuPont Oval Logo, DuPont", The miracles of science", FlexWrap", and StraightFlash" are registered trademarks or trademarks of E.I. du Pont de Nemours and Company or its affiliates. K-16326 02/09 377

< DUPONT >

DuPont[™] Flashing Tape

Seals Against Air and Water Intrusion Around Windows and Doors

FEATURES/BENEFITS

Description

DuPont[™] Flashing Tape is a self-adhered flashing tape with improved workability made from polypropylene film with a butyl rubber adhesive backing.Engineered to withstand the rigors of the job site, **DuPont[™] Flashing Tape** helps create a durable seal against water intrusion around heads and jambs of rectangular windows and doors.

In addition to bulk water holdout, **DuPont[™] Flashing Tape** helps control air leakage. Where windows and doors interface with sheathing or the weather barrier, **DuPont[™] Flashing Tape** can help keep heated and cooled air in – and exterior air out – more effectively.

As part of a complete building envelope system, **DuPont**[™] **Flashing Tape** will help reduce the risk of water damage, increase building comfort, and improve energy efficiency.

Ease of Use

- 100% butyl adhesive* with excellent adhesion to most common building materials
- Maintains a forgiving initial tack, allowing for repositioning
- Features multiple size offerings for many applications
- Heavy-duty siliconized paper release liner
- Split release liner on 6", 9", and 12" widths for easier product installation
- DuPont[™] Flashing Tape can be installed at external temperatures as low as 25°F (-4°C)

- Thermally stable polyolefin top-sheet will not deteriorate or stain after extended exposure to temperature up to 180°F (82°C).
- Workable top-sheet enhances ease of product installation
- Aids in the longevity of a home's life
- Backed by a 10-year limited product warranty

Available Sizes

DuPont[™] Flashing Tape comes in 4", 6", 9" and 12" roll widths:

- 4" x 33' For smaller or single use applications such as to flash a standard flanged door or a flanged window.
- 4" x 75' For flashing jambs & heads of standard integral flange residential windows.
- 6" x 75' For applications requiring better coverage on the head of the window (such as flashing onto rough-side OSB), or for flashing complex conditions such as recessed or bump out windows. Split release liner has 2" and 4" sections.
- 9" x 75' For applications requiring better coverage on the head of the window (such as flashing onto rough-side OSB), or for flashing complex conditions such as recessed or bump out windows. Split release liner has 3" and 6" sections.
- 12" x 75' For enhanced protection of deep window sills and inside and outside corner-flashings often used in multi-family construction. Split release liner has 3", 3", and 6" sections.

PROPERTIES

Review all instructions and (Material) Safety Data Sheet ((M)SDS) before use. Please contact DuPont at 1-800-448-9835 when additional guidance is required for writing specifications that include this product.

Test Method	Property	Typical Value
ASTM E-331 ASTM E-331 after thermal aging (0-120°F)	Installed System Water Intrusion Testing (Tested with no exterior cladding)	NO leakage at 300 Pa NO leakage at 300 Pa
ASTM E-96	Water Vapor Permeability	< 1 perm (< 60 ng/Pa.sec.m ²)
-	Application Temperature	Best when installed above 25°F (consult DuPont for primer recommendations)
-	Dupont Flashing Systems Products Meet the AAMA 711-13 Material Standard at the Highest Classification Levels	Class A (no primer) Level 3 Thermal Exposure (80°C/176°F for 7 days)

High Performance Durability

- Meets the AAMA 711-13 material standard: Class A (no primer) and Level 3 Thermal Exposure.
- In installed system water intrusion testing with no exterior cladding, DuPont[™] Flashing Tape performed to ASTM E-331 standards, and shows no leakage at 300 Pa, even after thermal aging to 120°F.
- Withstands up to 120 days UV exposure

Complete System

DuPont[™] Flashing Tape is compatible with all DuPont[™] Tyvek[®] air and water barriers and other building envelope products.



For more information visit us at building.dupont.com or call 1-833-338-7668

NOTICE: No freedom from any patent owned by DuPont or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other customer's use products shown in this literature may not be available for sale and/or available in all geographies where DuPont is represented. The claims made may not have been approved for use in all countries or regions. DuPont assumes no obligation or liability for the information in this document. References to "DuPont" or the "Company" mean the DuPont legal entity selling the products to Customer unless otherwise expressly noted. NO EXPRESS WARRANTIES ARE GIVEN EXCEPT FOR ANY APPLICABLE WRITTEN WARRANTIES SPECIFICALLY PROVIDED BY DUPONT. ALL IMPLIED WARRANTIES INCLUDING THOSE OF MERCHANTABILITY liability, or tort) shall be limited to the refund of the purchase price of the material. Brailure to strictly adhere to any recommended procedures shall release DuPont de Nemours, Inc. or its affiliates of all liability with respect to the material. Business.

DuPont^T, the DuPont Oval Logo, and all trademarks and service marks denoted with M , SM or $^{\otimes}$ are owned by affiliates of DuPont de Nemours, Inc. unless otherwise noted. $^{\odot}$ 2020 DuPont.



DuPont[™] Tyvek[®] DrainWrap[™]

Grooved Air and Water Barrier Engineered to Enhance Drainage



FEATURES/BENEFITS

Description

DuPont[™] Tyvek[®] DrainWrap[™] offers excellent drainage and durability for homes. Vertical grooves on the surface of **Tyvek[®] DrainWrap[™]** make it a superior moisture barrier, engineered to channel bulk water away from wall systems and drain safely to the outside.

Combined with the superior air and water resistance, vapor permeability and strength of the Tyvek[®] brand, **Tyvek[®] DrainWrap[™]** provides enhanced drainage behind claddings such as primed wood (all six sides), fiber cement siding, and foam board applied over flat substrates.

Air and Water Barrier Performance

- **Tyvek**[®] **DrainWrap**[™] helps hold out bulk water, while allowing water vapor to pass through it, promoting drying in the wall system, which can help prevent mold and water damage.
- The unique non-woven fiber structure of Tyvek[®] DrainWrap[™] also helps prevent air movement through the walls, contributing to a more energy efficient home.
- Tyvek[®] DrainWrap[™] is Air Barrier Association of America evaluated to exceed ABAA, ASHRAE 90.1 and IECC air leakage requirements when tested in accordance with ASTM E2357.

- Offers > 98% drainage efficiency when tested in accordance with ASTM E2273.
- Withstands up to four months (120 days) of UV exposure.

Ease of Installation

Tyvek® DrainWrap™ is easy to install. It is pliable, so it wraps around corners with ease. It is also light weight, easier to handle, and faster to install than the average house wrap. In addition, because it's flexible, **Tyvek® DrainWrap™** easily interfaces at joints, and over architectural elements.

Available Sizes

Tyvek[®] **DrainWrap**[™] is available in 9- and 10-foot width rolls for use behind a variety of claddings. This width minimizes seams and offers the potential for reduction in labor costs, compared to narrower rolls.

High Performance Durability

Compared to other textured moisture barriers, **Tyvek® DrainWrap™** provides superior performance in tests where bulk water was applied between a flat acrylic panel and the moisture barrier. When compared to Grade D building paper and #15 felt, **Tyvek® DrainWrap™** provides superior sustained performance.

Sustainable Solutions

DuPont[™] Tyvek[®] DrainWrap[™] may contribute toward LEED[®] points in the areas of Energy and Atmosphere (EA): Optimizing the Building Envelope and Indoor Environmental Air Quality (EQ): Construction IAQ Management Plan and Low Emitting Materials. In addition, the use of a continuous air barrier is a prerequisite for LEED[®] applications requiring compliance with ASHRAE 90.1-2010.

By helping to effectively seal the building envelope, **Tyvek**[®] **DrainWrap**[™] helps to reduce the amount of energy required for heating and cooling.

Complete System

Tyvek[®] **DrainWrap**[™] can be integrated with DuPont self-adhered flashing products and Tyvek[®] Fluid Applied products to offer seamless protection for wall systems that require mechanically fastened and fluid applied air and water barriers.

PROPERTIES

Review all instructions and (Material) Safety Data Sheet ((M)SDS) before use. Please contact your local DuPont[™] Tyvek[®] Specialist before writing specifications around this product. Product properties are as follows:

Test Method	Property	Typical Value	Units
ASTM E2178		.004	cfm/ft²@1.57 psf
Gurley Hill (TAPPI T-460)	Air Penetration Resistance	>300	sec/100cc
ASTM E1677		Type 1	-
ICC-ES AC 24 Section 6.11		Pass	_
ASTM E2273	Drainage	>98	%
ICC-ES AC 235 Section 4.5		Pass	-
		Method A	
ASTM E96-00	Water Vapor Transmission	250	g/m²-24 hrs
		36	perms
		Method B	
ASTM E96-00	Water Vapor Transmission	350	g/m²-24 hrs
		50	perms
ATTCC 127	Water Penetration Resistance	210	cm
TAPPI T-410	Basis Weight	2.1	oz/yd²
ASTM D882	Breaking Strength	30/30	lbs/in
ASTM D1117	Tear Resistance (Trapezoid)	7/9	lbs
ASTM E84 Flame Spread Index	Curfe en Duracia e Characteristica	5	Class A
Smoke Developed Index	Surface Burning Characteristics	25	Class A
	Ultra Violet Light Exposure (UV)	120 (4)	days (months)
	<u> </u>		

Test results shown represent roll averages. Individual results may vary either above or below averages due to normal manufacturing variations, while continuing to meet product specifications.

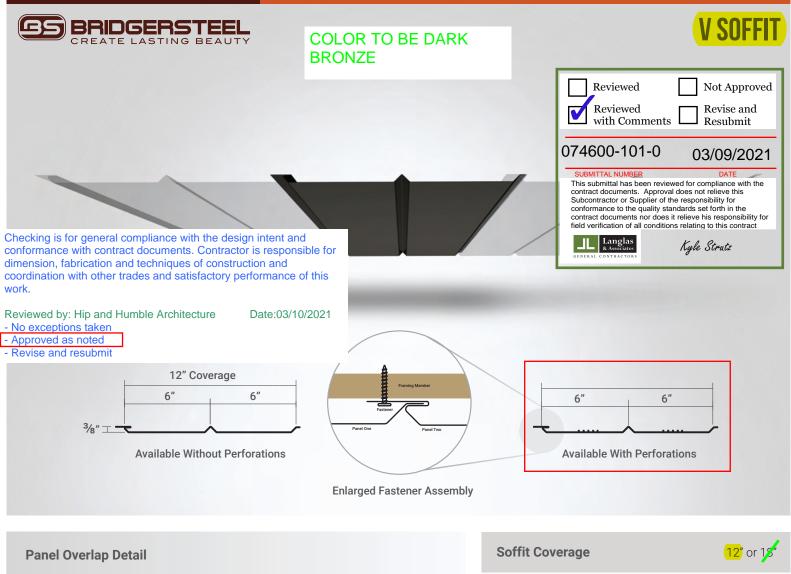


For more information visit us at tyvek.com or call 1-800-448-9835

NOTICE: No freedom from any patent owned by DuPont or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other government enactments. The product shown in this literature may not be available for sale and/or available in all geographies where DuPont is represented. The claims made may not have been approved for use in all countries or regions. DuPont assumes no obligation or liability for the information in this document. References to "DuPont" or the "Company" mean the DuPont legal entity selling the products to Customer unless otherwise expressly noted. NO EXPRESS WARRANTIES ARE GIVEN EXCEPT FOR ANY APPLICABLE WRITTEN WARRANTIES SPECIFICALLY PROVIDED BY DUPONT. ALL IMPLIED WARRANTIES INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED. The buyer assumes all risks as to the use of the material. Buyer's exclusive remedy or any claim (including without limitations, negligence, strict liability, or tort) shall be limited to the refund of the purchase price of the material. Failure to strictly adhere to any recommended procedures shall release DuPont Specialty Products USA, LLC or its affiliates, of all liability with respect to the materials or the use thereof. The information herein is not intended for use by non-professional designers, applicators or other persons who do not purchase or utilize this product in the normal course of their business.

DuPont", the DuPont Oval Logo, and all trademarks and service marks denoted with [™], [™] or [®] are owned by affiliates of DuPont de Nemours, Inc. unless otherwise noted. © 2019 DuPont.

Steel Siding & Soffit

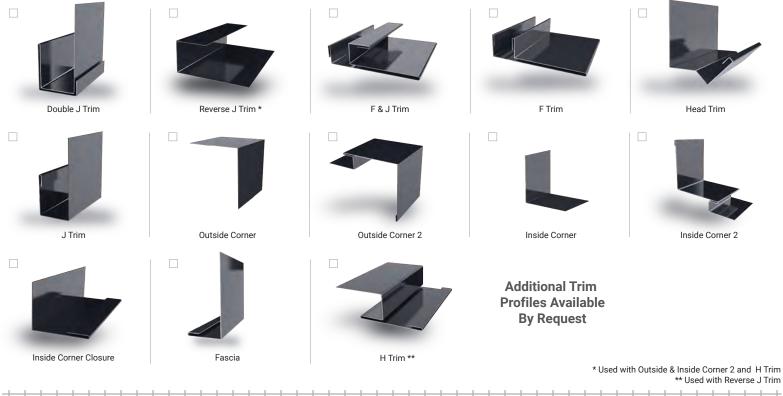


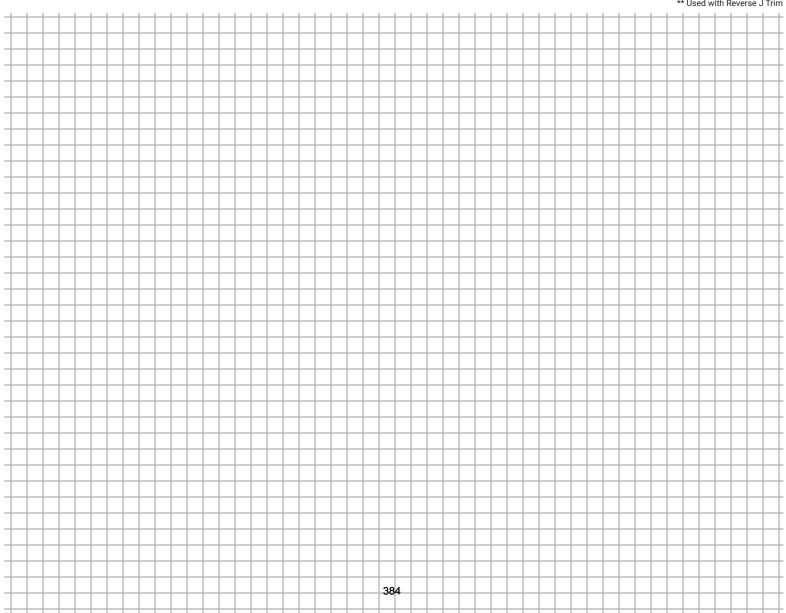
1. Soffit Substrate: Can be installed to wood framing, metal framing or plywood sheathing

2. Perforations: Available in perforated version with air flow data available



Soffit Coverage	12" or 18"
Stiffener Spacing	6"
Panel Gauges	24*, <mark>26,</mark> 29
Fastener Options	Concealed Fastener
Max Panel Length	10' for 12" Coverage
Relief Height	3⁄8″
Air Flow Data	Available Upon Request
Perforations	Available
Warranty	Based on Paint System
For more information	1.833.STEEL.US



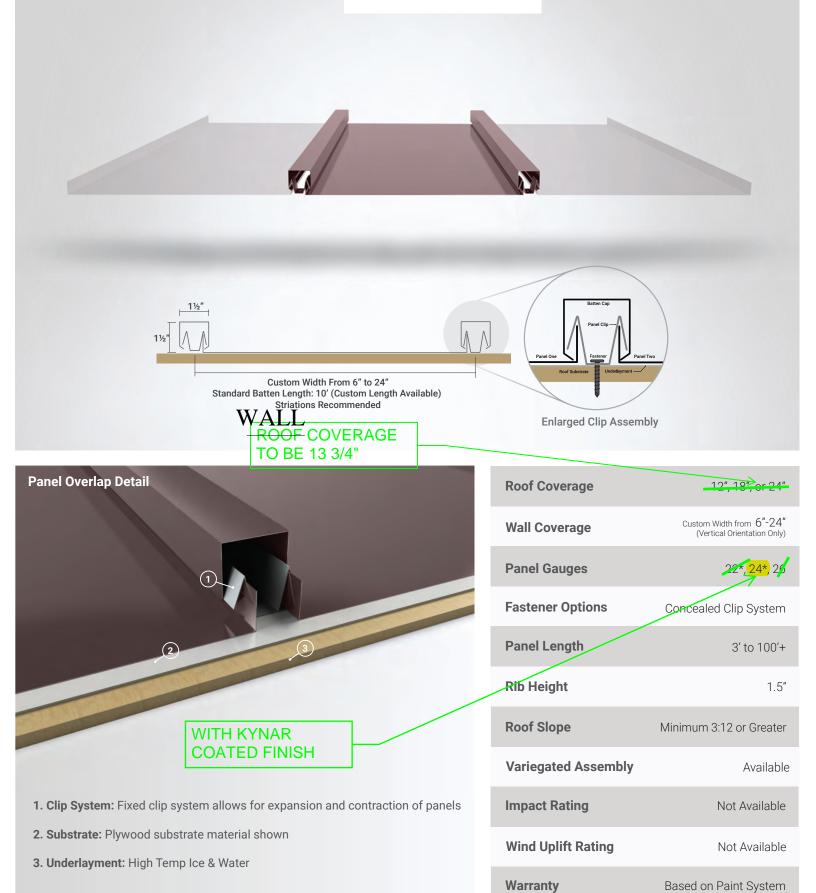




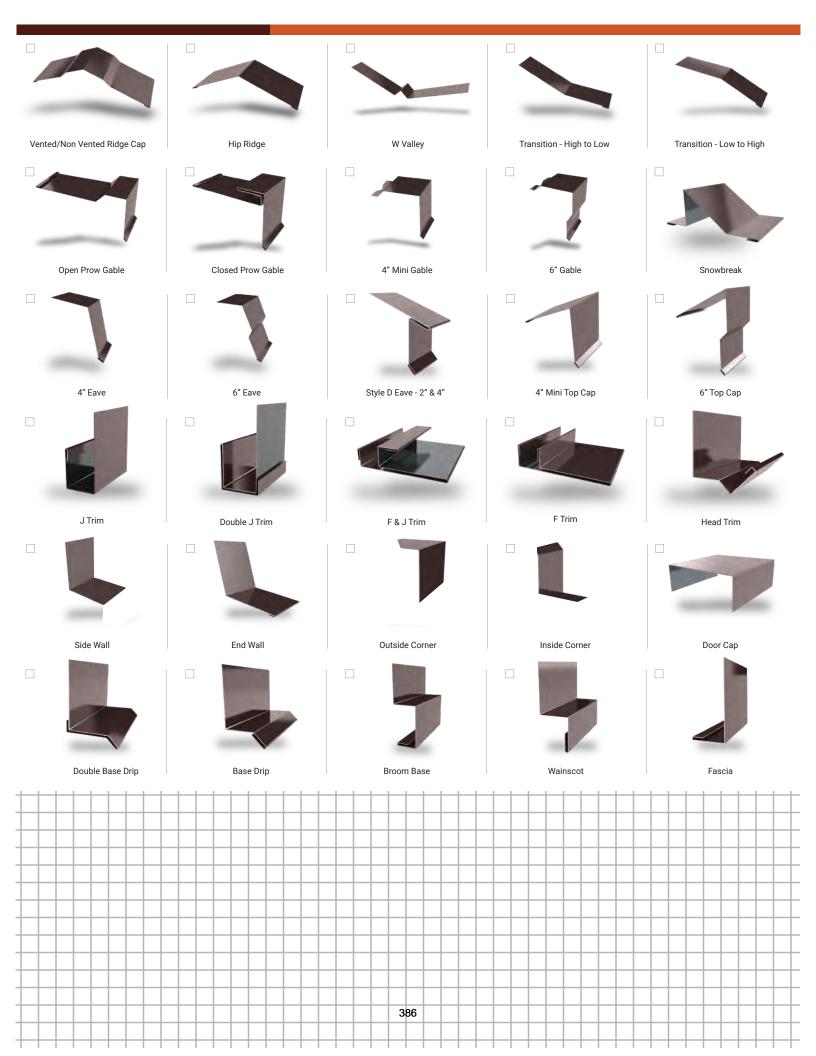
COLOR TO BE WEATHERED WOOD

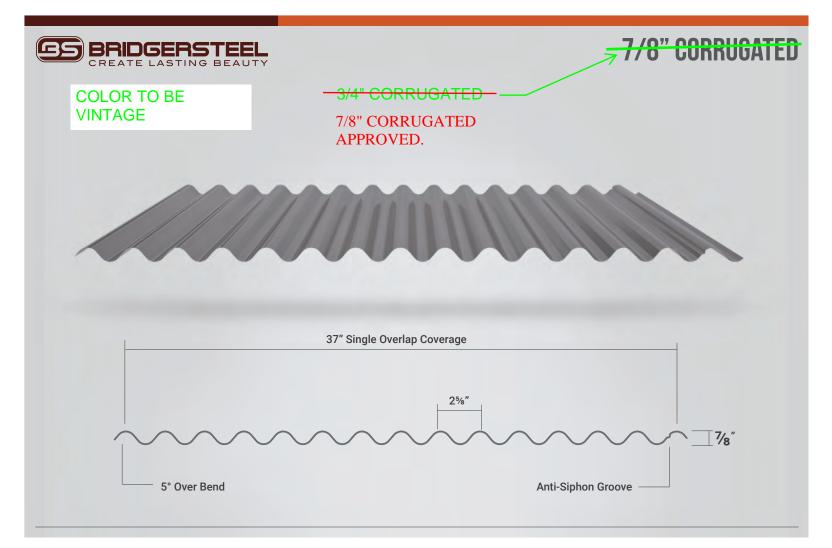
SNAP BATTEN

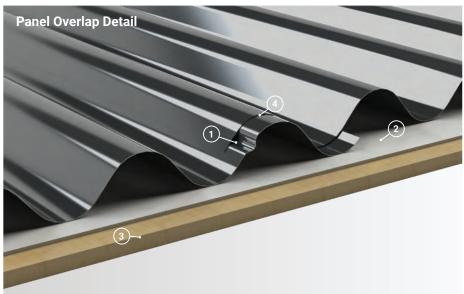
Version 4.2, 7/2020



* Grade 50

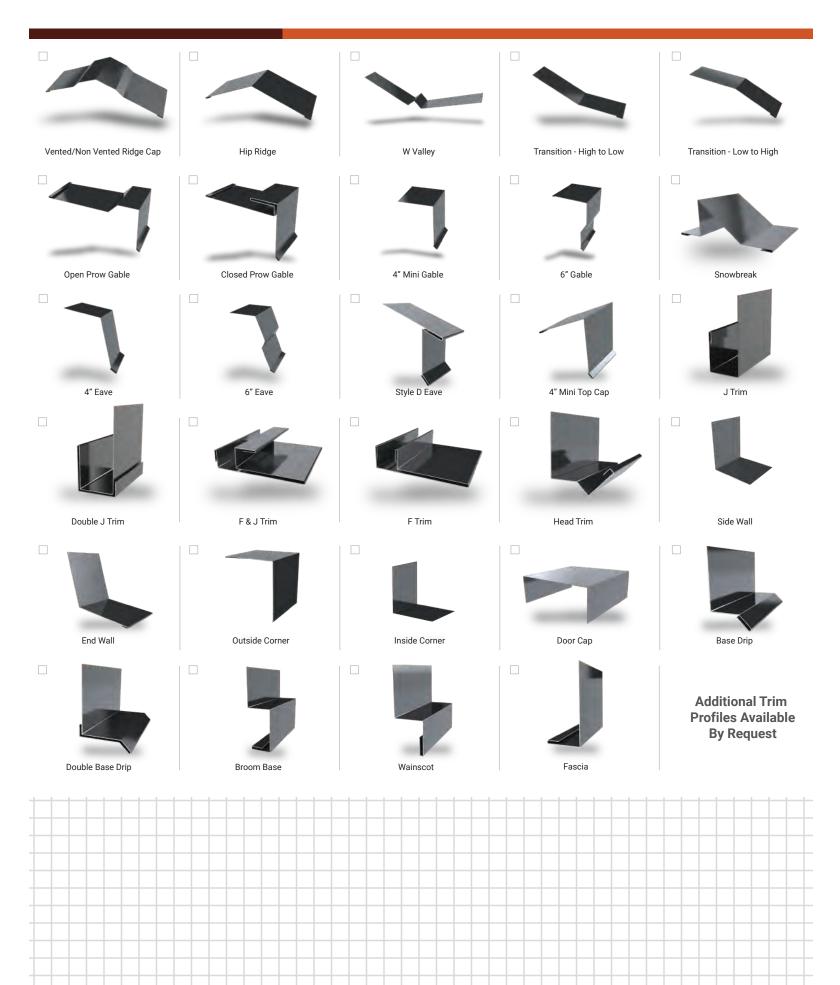






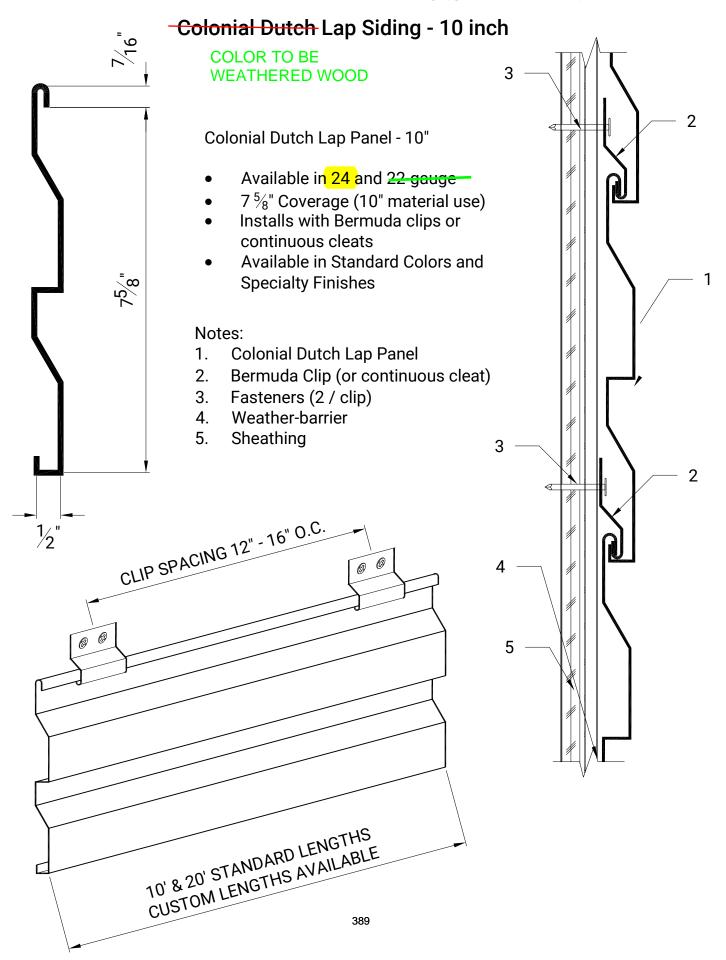
- **1. Anti-Siphon Groove:** In order to help prevent water from penetrating the overlap, the anti-siphon groove creates an internal air gap at the panel overlap.
- 2. Underlayment: High Temp Ice & Water shown. For use at eaves and valleys.
- 3. Substrate: Plywood substrate material shown. Can be used over open framing
- 4. Overlap: Single Overlap with Anti-Siphon Shown.

Roof Coverage	37"
Wall Coverage	37"
Radius Panel	Yes
Panel Gauges	2 <mark>2</mark> *, <mark>24*</mark>
Fastener Optic	Exposed
Panel Length	3' to 50'
Rib Height	%" at 2.67" Centers
Roof Slope	Minimum 1:12 or Greater with Mastic
Impact Rating	UL 2218
Wind Uplift Ra	ting ASTM 1592
Warranty	Based on Paint System
* Grade 50	Version 4.2, 7/2020





WAS CHANGED TO 10" (DOUBLE 5") LAP SIDING. WAS TOLD DUTCH LAP NO LONGER AVAILABLE.





Bridger Steel's Wood Print SMP Paint System Limited 30 Year Limited Warranty

I. Bridger Steel, Inc. ("Bridger Steel") warrants that Bridger Steel's, Wood Print SMP Paint coated metal, herein know as Bridger Steels Painted metal panels & trim, ("Coated metal panels & trim panels & trim") and when purchased by Bridger Steel's customer ("Purchaser"), will retain its film integrity, color and chalk as set forth in the Warranty Table below for SMP (Silicone Modified Polymer) Paint finishes with a G60 Galvanized or an AZ50 Galvalume Substrate, provided the Coated metal panels & trim have been stored, transported, formed and installed in adherence to the exclusions and limitations portion of this limited warranty.

This limited warranty applies to any **Bridger Steel's** coated metal panels & trim panels and trim shipped after June 1, 2016 and no previous warranty shall apply to such product. The limited warranty shall extend from the date of installation of the **Bridger Steel's** coated metal panels & trim or from a date six (6) months after coating of the metal, whichever occurs first.

Definitions.

- 1. Film Integrity shall be defined as the absence of peeling, checking, chipping or cracking, except for such crazing or slight cracking as may occur on tightly roll-formed edges or brake bends at the time of forming Coated metal panels & trim.
- 2. Chalk or Oxidation shall be defined as a numerical rating as warranted when measured in accordance with the standard procedures specified in ASTM D4214.

THIS LIMITED WARRANTY IS SUBJECT TO THE FOLLOWING EXCLUSIONS AND LIMITATIONS. All of the following exclusions and limitations constitute material terms of this limited warranty and failure to satisfy any one or more of the conditions by Purchaser, its agents, or representatives shall release Bridger Steel from its obligations hereunder.

II. Exclusions and Limitations.

- 1. This limited warranty applies only to Coated metal panels & trim installed on buildings within the Continental United States, Alaska, Canada, and Mexico.
- 2. Corrosion or loss of adhesion as a result of embossing or perforating the Coated metal panels & trim is not covered under this limited warranty.
- 3. This limited warranty does not apply to exterior installations that are sheltered from rainfall or that do not provide drainage.
- 4. This limited warranty will be null and void unless the Coated metal panels & trim has been paid for in full.
- 5. This limited warranty does not apply in the event of deterioration to the Coated metal panels & trim caused directly or indirectly by contact with fasteners. Coated metal panels & trim that is improperly installed or maintained is not covered by this limited warranty.
- 6. This product must not be cleaned with abrasive or chemical cleaners.
- 7. This limited warranty does not cover any Coated metal panels & trim located less than one mile from a salt water and/or marine environment.
- 8. Non-uniform changes in appearance that result from unequal exposure to sunlight and/or the elements are not covered by this limited warranty.
- 9. This limited warranty does not cover damages or conditions resulting from circumstances beyond Bridger Steel's control, including, without limitation, the following;
 - a) Acts of God, falling objects, explosions, external forces, or fire;
 - b) Damage caused by improper packaging, handling, shipping, processing, or storage of the Coated metal panels & trim prior to installation contrary to good industry practice (NCCA guidelines described in the series titled "How to Fabricate Pre-paint");

Page 2 of 4

- c) Unusual or aggressive atmospheres such as those were the Coated metal panels & trim is exposed to or contaminated with harmful or corrosive chemicals or salt spray;
- d) Standing or ponding water on the Coated metal panels & trim; Panels must have sufficient slope of 2.5:12 or greater.
- e) Significant differences in insulation below the Coated metal panels & trim panel;
- f) Condensation or other contamination or damage attributable to improper shipping, packaging, handling, processing, or installation;
- g) Failures or damage resulting from edge corrosion;
- h) Scratching or abrading during or after installation;
- i) Prolonged contact with or removal of vegetation, dirt or gravel;
- j) Sustained exposure to animals or animal waste;
- Where the Coated metal panels & trim is in contact with, or subject to runoff from, lead; copper; CCA, ACQ, CA or other treated lumber; green or wet lumber; fire retardant treated shakes or shingles; or wet insulation;
- I) Mishandling of Coated metal panels & trim, including abuse, alteration, modification, improper use or storage;
- m) Damage from snow or ice removal or aggressive pressure washing; or
- n) Damage or conditions at the point(s) where materials or items such as snow guards and solar panels are attached or adhered to the Coated metal panels & trim.

III. Notification of claim; Right of Bridger Steel to Inspect.

Bridger Steel must be notified within 30 days after discovery of an alleged condition giving rise to a claim, and Bridger Steel and its representatives must be allowed an opportunity to inspect and if required, obtain a sample of the Coated metal panels & trim. All decisions regarding the existence of conditions affecting this limited warranty will be made by Bridger Steel and will be final and binding on all parties. The party notifying Bridger Steel of any defect or claim will reimburse all of Bridger Steel's third party expenses incurred in connection with the investigation of a defect or claim if it is later determined that Bridger Steel is not responsible for the problem underlying the defect or claim. In no event will the original warranty period set forth be extended by a warranty claim.

To make a claim or obtain service under this limited warranty, the Purchaser must call Bridger Steel at 406.388.9555 or submit your claim in writing to;

Bridger Steel, Inc. 1558 Amsterdam Rd. Belgrade, MT 59718 Attn: Warranty Claims

IV. Remedy.

Bridger Steel's liability for breach of this limited warranty shall be limited exclusively to the cost of either repairing or replacing non-conforming Coated metal panels & trim for the value of the original purchase price, or at the sole option of Bridger Steel, provide and deliver to the project site in which the warranty was issued, replacement material for any defective Coated metal panels & trim to the Purchaser as listed herein.

Bridger Steel must approve any recoating of the Coated metal panels & trim through submission of three (3) estimates that each includes the name of the coating products to be used, labor and material costs as well as any other costs associated with the work for refinishing or replacing the Coated metal panels & trim. Bridger Steel reserves the right to approve or negotiate the contract for such recoating if the initial estimate is deemed unacceptable. In no event will the original applicable warranty period set forth in the warranty table be extended by a warranty claim.

In the event of any subsequent failure of any recoated or replaced Coated metal panels & trim, Purchaser shall first make any claims against the supplier of those replacement materials.

The warranty period for any refinished or replaced metal substrate shall be only for the remainder of the original Coated metal panels & trim's warranty period.

This limited warranty shall automatically expire upon any change or transfer of ownership of the property on which such Coated metal panels & trim was originally installed.

Page 3 of 4

V. Maintenance.

The Coated metal panels & trim must be washed regularly, either by sweet or tap water or by cleaning with 1/3 cup of Tide[®] detergent or other common detergent containing less than 0.5% phosphate dissolved in one gallon of water. A clear water rinse should follow immediately. The Coated metal panels & trim must not be cleaned with abrasive or chemical cleaners. Cleaning must include the underside of any panel overhang where the underside is exposed to the weather.

VI. General Terms and Conditions.

This limited warranty is extended to Purchaser only and shall not inure to the benefit of any other party. Bridger Steel's name, trademark, or limited warranty shall not to be used in any warranty given by the Purchaser to its customers. This limited warranty is non-transferable and non-assignable by Purchaser, and Purchaser shall not permit its agents, representatives, customers, distributors, applicators, or contractors to claim, represent, or imply that this limited warranty extends to or is available to anyone other than Purchaser.

The applicable warranty period shall be limited to, and shall in no event extend beyond, the warranty period as set forth in the Warranty Table or the warranty period extended by the Purchaser to its customers, whichever is shorter. Bridger Steel reserves the right to terminate this limited warranty at any time upon thirty (30) days advance written notice, except with respect to any Coated metal panels & trim which has already been shipped to Purchaser.

EXCEPT AS SET FORTH HEREIN, BRIDGER STEEL MAKES NO OTHER WARRANTIES WITH RESPECT TO B, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER WARRANTY OF QUALITY. ALL WARRANTIES OTHER THAN THIS LIMITED WARRANTY ARE EXPRESSLY EXCLUDED AND DISCLAIMED. TO THE EXTENT LOCAL LAW PROVIDES THAT IMPLED WARRANTIES MAY NOT BE EXCLUDED OR DISCLAIMED, THOSE WARRANTIES ARE LIMITED IN DURATION OF THE EXPRESS WARRANTY PROVIDED IN THIS LIMITED WARRANTY OR THE SHORTEST DURATION REQUIRED BY LOCAL LAW.

IN NO CASE WILL BRIDGER STEEL BE LIABLE TO ANY PERSON OR ENTITY FOR PROPERTY DAMAGE OR PERSONAL INJURY IN TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY), CONTRACT, WARRANTY, OR OTHERWISE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE, CONSEQUENTIAL OR OTHER DAMAGES OR LOSSES, INCLUDING BUT NOT LIMITED TO DAMAGE FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS TO THE BUILDING OR ITS CONTENTS OR ANY OTHER LOSS, REGARDLESS OF THE CAUSE OF SUCH DAMAGE AND WHETHER OR NOT CAUSED BY OR RESULTING FROM THE NEGLIGENCE OF BRIDGER STEEL, EVEN IF BRIDGER STEEL HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR LOSSES. BRIDGER STEEL'S TOTAL LIABILITY FOR ALL CLAIMS OF ANY KIND WILL NOT EXCEED THE LESSER OF THE PURCHASE PRICE PAID TO BRIDGER STEEL FOR THE PRODUCT IN QUESTION OR ANY REMEDY PROVIDED BY PURCHASER TO ITS CUSTOMER.

Choice of Law. Any disputes arising under or pursuant to the matters contemplated by this limited warranty, at Bridger Steel's election, shall be resolved by arbitration or legal process governed by and interpreted in accordance with the laws of the State of California, and shall have exclusive jurisdiction over any such disputes, especially with respect to matters of validity, execution, interpretation, enforcement or compliance

Page 4 of 4

SMP Paint

Type of Environment of Installation	Film Integrity	Color Fade (Years) Vertical – Visually Discernable* Uniform Fade**	Chalk Rating 8 Rating Vertical 6 Rating Non- Vertical
Residential, Commercial and School – Buildings used for habit- station, Distribution Centers, Hotels, Shopping Malls, Office Buildings, Assembly Factories and Schools located in rural or	40 Years	30 Years	30 years
Industrial – Steel Mills, Power Generating Stations, Oil Fields, Oil Refineries, Ore Mines, Chemical Plants, Paper Mills or other unusual environmental exposure.	Site Review Required	Site Review Required	No Warranty
Severe Marine – Less than 1 mile from coastline.	No Warranty	No Warranty	No Warranty

*Visually Discernable – Print is visually discernable from a distance of eight (8) feet under visual observation in exterior daylight conditions

**Uniform Fade – Will not exhibit excessive color change, except that any such color change shall be visually uniform under conditions of uniform exposure

Notification Prior to Installation:

Purchaser must notify Bridger Steel of installations that are deemed potential Industrial and/or Severe Marine environment prior to design implementation. Bridger Steel can then evaluate the installation site and provide specific warranty coverage

before installation.

Owner:
Address:
Contractor:
Invoice Number & Date:
Date of Substantial Completion://
Date Warranty Begins:
Date Warranty Ends (30 Years):
Job Name:

Effective Date: 3/12021



Bridger Steel's Limited 30 Year Limited Warranty on PVDF Coatings

I. Bridger Steel, Inc. ("Bridger Steel") warrants that Bridger Steel, PVDF Paint coated metal, herein know as Bridger Steels Painted metal panels & trim, ("Coated metal panels & trim panels & trim") and when purchased by Bridger Steel's customer ("Purchaser"), will retain its film integrity, color and chalk as set forth in the Warranty Table below for PVDF Paint (polyvinylidene fluoride) Paint finishes with a G60 Galvanized Substrate or AZ 50, and or AZ 55 Galvalume coated substrate, provided the Coated metal panels & trim have been stored, transported, formed and installed in adherence to the exclusions and limitations portion of this limited warranty.

This limited warranty applies to any **Bridger Steel's** coated metal panels & trim panels and trim shipped after June 1, 2016 and no previous warranty shall apply to such product. The limited warranty shall extend from the date of installation of the **Bridger Steel's** coated metal panels & trim or from a date six (6) months after coating of the metal, whichever occurs first.

Definitions.

1. Film Integrity shall be defined as the absence of peeling, checking, chipping or cracking, except for such crazing or slight cracking as may occur on tightly roll-formed edges or brake bends at the time of forming Coated metal panels & trim.

2. Chalk or Oxidation shall be defined as a numerical rating as warranted when measured in accordance with the standard procedures specified in ASTM D4214.

THIS LIMITED WARRANTY IS SUBJECT TO THE FOLLOWING EXCLUSIONS AND LIMITATIONS. All of the following exclusions and limitations constitute material terms of this limited warranty and failure to satisfy any one or more of the conditions by Purchaser, its agents, or representatives shall release Bridger Steel from its obligations hereunder.

II. Exclusions and Limitations.

- 1. This limited warranty applies only to Coated metal panels & trim installed on buildings within the Continental United States, Alaska, Canada, and Mexico.
- 2. Corrosion or loss of adhesion as a result of embossing or perforating the Coated metal panels & trim is not covered under this limited warranty.
- 3. This limited warranty does not apply to exterior installations that are sheltered from rainfall or that do not provide drainage.
- 4. This limited warranty will be null and void unless the Coated metal panels & trim has been paid for in full.
- 5. This limited warranty does not apply in the event of deterioration to the Coated metal panels & trim caused directly or indirectly by contact with fasteners. Coated metal panels & trim that is improperly installed or maintained is not covered by this limited warranty.
- 6. This product must not be cleaned with abrasive or chemical cleaners.
- 7. This limited warranty does not cover any Coated metal panels & trim located less than one mile from a salt water and/or marine environment.
- 8. Non-uniform changes in appearance that result from unequal exposure to sunlight and/or the elements are not covered by this limited warranty.
- 9. This limited warranty does not cover damages or conditions resulting from circumstances beyond Bridger Steel's control, including, without limitation, the following;
 - a) Acts of God, falling objects, explosions, external forces, or fire;
 - b) Damage caused by improper packaging, handling, shipping, processing, or storage of the Coated metal panels & trim prior to installation contrary to good industry practice (NCCA guidelines described in the series titled "How to Fabricate Pre-paint");

Page 2 of 4

- c) Unusual or aggressive atmospheres such as those were the Coated metal panels & trim is exposed to or contaminated with harmful or corrosive chemicals or salt spray;
- d) Standing or ponding water on the Coated metal panels & trim; Panels must have sufficient slope of 2.5:12 or greater.
- e) Significant differences in insulation below the Coated metal panels & trim panel;
- f) Condensation or other contamination or damage attributable to improper shipping, packaging, handling, processing, or installation;
- g) Failures or damage resulting from edge corrosion;
- h) Scratching or abrading during or after installation;
- i) Prolonged contact with or removal of vegetation, dirt or gravel;
- j) Sustained exposure to animals or animal waste;
- Where the Coated metal panels & trim is in contact with, or subject to runoff from, lead; copper; CCA, ACQ, CA or other treated lumber; green or wet lumber; fire retardant treated shakes or shingles; or wet insulation;
- I) Mishandling of Coated metal panels & trim, including abuse, alteration, modification, improper use or storage;
- m) Damage from snow or ice removal or aggressive pressure washing; or
- Damage or conditions at the point(s) where materials or items such as snow guards and solar panels are attached or adhered to the Coated metal panels & trim.

III. Notification of claim; Right of Bridger Steel to Inspect.

Bridger Steel must be notified within 30 days after discovery of an alleged condition giving rise to a claim, and Bridger Steel and its representatives must be allowed an opportunity to inspect and if required, obtain a sample of the Coated metal panels & trim. All decisions regarding the existence of conditions affecting this limited warranty will be made by Bridger Steel and will be final and binding on all parties. The party notifying Bridger Steel of any defect or claim will reimburse all of Bridger Steel's third party expenses incurred in connection with the investigation of a defect or claim if it is later determined that Bridger Steel is not responsible for the problem underlying the defect or claim. In no event will the original warranty period set forth be extended by a warranty claim.

To make a claim or obtain service under this limited warranty, the Purchaser must call Bridger Steel at 406.388.9555 or submit your claim in writing to;

Bridger Steel, Inc. 1558 Amsterdam Rd. Belgrade, MT 59718 Attn: Warranty Claims

IV. Remedy.

Bridger Steel's liability for breach of this limited warranty shall be limited exclusively to the cost of either repairing or replacing non-conforming Coated metal panels & trim, or at the sole option of Bridger Steel, provide and deliver to the project site in which the warranty was issued, replacement material for any defective Coated metal panels & trim to the Purchaser as listed herein.

Bridger Steel must approve any recoating of the Coated metal panels & trim through submission of three (3) estimates that each includes the name of the coating products to be used, labor and material costs as well as any other costs associated with the work for refinishing or replacing the Coated metal panels & trim. Bridger Steel reserves the right to approve or negotiate the contract for such recoating if the initial estimate is deemed unacceptable. In no event will the original applicable warranty period set forth in the warranty table be extended by a warranty claim.

In the event of any subsequent failure of any recoated or replaced Coated metal panels & trim, Purchaser shall first make any claims against the supplier of those replacement materials.

The warranty period for any refinished or replaced metal substrate shall be only for the remainder of the original Coated metal panels & trim's warranty period.

Page 3 of 4

This limited warranty shall automatically expire upon any change or transfer of ownership of the property on which such Coated metal panels & trim was originally installed.

V. Maintenance.

The Coated metal panels & trim must be washed regularly, either by sweet or tap water or by cleaning with 1/3 cup of Tide[®] detergent or other common detergent containing less than 0.5% phosphate dissolved in one gallon of water. A clear water rinse should follow immediately. The Coated metal panels & trim must not be cleaned with abrasive or chemical cleaners. Cleaning must include the underside of any panel overhang where the underside is exposed to the weather.

VI. General Terms and Conditions.

This limited warranty is extended to Purchaser only and shall not inure to the benefit of any other party. Bridger Steel's name, trademark, or limited warranty shall not to be used in any warranty given by the Purchaser to its customers. This limited warranty is non-transferable and non-assignable by Purchaser, and Purchaser shall not permit its agents, representatives, customers, distributors, applicators, or contractors to claim, represent, or imply that this limited warranty extends to or is available to anyone other than Purchaser.

The applicable warranty period shall be limited to, and shall in no event extend beyond, the warranty period as set forth in the Warranty Table or the warranty period extended by the Purchaser to its customers, whichever is shorter. Bridger Steel reserves the right to terminate this limited warranty at any time upon thirty (30) days advance written notice, except with respect to any Coated metal panels & trim which has already been shipped to Purchaser.

EXCEPT AS SET FORTH HEREIN, BRIDGER STEEL MAKES NO OTHER WARRANTIES WITH RESPECT TO B, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER WARRANTY OF QUALITY. ALL WARRANTIES OTHER THAN THIS LIMITED WARRANTY ARE EXPRESSLY EXCLUDED AND DISCLAIMED. TO THE EXTENT LOCAL LAW PROVIDES THAT IMPLED WARRANTIES MAY NOT BE EXCLUDED OR DISCLAIMED, THOSE WARRANTIES ARE LIMITED IN DURATION OF THE EXPRESS WARRANTY PROVIDED IN THIS LIMITED WARRANTY OR THE SHORTEST DURATION REQUIRED BY LOCAL LAW.

IN NO CASE WILL BRIDGER STEEL BE LIABLE TO ANY PERSON OR ENTITY FOR PROPERTY DAMAGE OR PERSONAL INJURY IN TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY), CONTRACT, WARRANTY, OR OTHERWISE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE, CONSEQUENTIAL OR OTHER DAMAGES OR LOSSES, INCLUDING BUT NOT LIMITED TO DAMAGE FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION,

LOSS TO THE BUILDING OR ITS CONTENTS OR ANY OTHER LOSS, REGARDLESS OF THE CAUSE OF SUCH DAMAGE AND WHETHER OR NOT CAUSED BY OR RESULTING FROM THE NEGLIGENCE OF BRIDGER STEEL, EVEN IF BRIDGER STEEL HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR LOSSES. BRIDGER STEEL'S TOTAL LIABILITY FOR ALL

CLAIMS OF ANY KIND WILL NOT EXCEED THE LESSER OF THE PURCHASE PRICE PAID TO BRIDGER STEEL FOR THE PRODUCT IN QUESTION OR ANY REMEDY PROVIDED BY PURCHASER TO ITS CUSTOMER.

Choice of Law. Any disputes arising under or pursuant to the matters contemplated by this limited warranty, at Bridger Steel's election, shall be resolved by arbitration or legal process governed by and interpreted in accordance with the laws of the State of California, and shall have exclusive jurisdiction over any such disputes, especially with respect to matters of validity, execution, interpretation, enforcement or compliance

Page 4 of 4

PVDF Paint System

Type of Environment of Installation	Color Fade (Years) Hunter Delta-E Units	Chalk Rating (Years) Hunter Delta-E Units
	<5 Years <7 Years	>8, Years 1 through 20 >6, Years 21 through 30
Residential, Commercial and School – Buildings used for habit- station, Distribution Centers, Hotels, Shopping Malls, Office Buildings, Assembly Factories and Schools located in rural or residential areas.	30 years	30 years
Industrial – Steel Mills, Power Generating Stations, Oil Fields, Oil Refineries, Ore Mines, Chemical Plants, Paper Mills or other unusual environmental	Site Review Required	No Warranty
Severe Marine – Less than 1 mile from coastline.	No Warranty	No Warranty

Notification Prior to Installation: Purchaser must notify Bridger Steel of installations that are deemed potential Industrial and/or Severe Marine environment prior to design implementation. Bridger Steel can then evaluate the installation site and provide specific warranty coverage before installation.

Owner:	
Address:	
Contractor:	
Invoice Number & Date:	
Inspected on(Date): / / By:	
Date Warranty Begins:	
Date Warranty Ends (30 Years):	
Job Name:	



Vintage[®] "Pre-Aged" Faceted Metallic Substrate Limited Warranty

<u>Specifically For:</u> Company Attention: Address City,State Zip Code Telephone: (XXX) XXX-XXXX

This Limited Warranty applies to any **Vintage**[®] Coated Metal shipped after October 1, 2009 and no previous warranty shall apply to such product.

Steelscape LLC (hereinafter "Steelscape") warrants that **Vintage** when purchased by a customer (hereinafter the "Purchaser") for roofing, sidewall, and trim panels will retain its Film integrity, Color and Chalk, as defined below after the installation consistent with the Warranty Table included on page 3 of this document.

Definitions:

- 1. Film Integrity shall be defined as the absence of peeling, checking, chipping or cracking, except for such crazing or slight cracking as may occur on tightly roll-formed edges or brake bends at the time of forming prepainted sheet.
- 2. Color Change shall be defined as freedom from fade or change as warranted in ΔE units calculated in accordance with ASTM D2244-02, paragraph 6.2.2 CIEL*a*b*, 10° Observer, specular included. Color Change is measured on an exposed painted surface that has been cleaned of surface soils and chalk and the compared to corresponding values measured on the original or unexposed coated surface.
- 3. Chalk or Oxidation shall be defined as a numerical rating as warranted when measured in accordance with the standard procedures specified in ASTM D4214-98.

THIS LIMITED WARRANTY IS SUBJECT TO THE FOLLOWING CONDITIONS AND LIMITATIONS. All of the following conditions and additional conditions constitute material terms of this limited warranty and failure to satisfy any one or more of the conditions or additional conditions by Purchaser, their agents, or representatives shall release Steelscape from its obligations hereunder.

Conditions:

- 1. **Vintage** must be installed as a surface on which no standing water accumulates and is allowed to remain, or is installed as a vertical trim or sidewall surface of an architectural, commercial, pre-engineered building.
- 2. Vintage must not be cleaned with abrasive or chemical cleaners before, or after, installation.
- 3. Claims under this limited warranty must be sent by Purchaser to Steelscape and must be received by Steelscape within thirty (30) days after discovery of the condition giving rise to the claim.

Steelscape Vintage[®] Limited Warranty

- 4. In the event of a claim under this limited warranty, Purchaser must supply documentation that the product in question was produced by Steelscape. In addition, Purchaser shall demonstrate to the reasonable satisfaction of Steelscape that the failure of the Product was due to a breach of the limited warranty stated herein.
- 5. Purchaser shall reimburse all of Steelscape's expenses incurred in connection with the investigation of a claim if it is later determined that Steelscape is not responsible for the problem underlying the claimed.
- 6. The coated Metal must meet other conditions, installation, and exceptions as outlined in the Warranty specifics on page 3 of this Limited Warranty document.

Limitations:

- The limited warranty shall extend from the date of installation of the Vintage coated Metal or from a date six (6) months after shipment of the Vintage Metal to the Customer, whichever occurs first. Vintage coated Metal that is later embossed is warranted provided the embossing process does not fracture the coating or metal or adversely affect paint adhesion or film integrity. Any corrosion or loss of adhesion as a result of the embossing process is not covered under this warranty.
- 2. This limited warranty only applies to **Vintage** coated Metal sold by Steelscape and applied to Metal that is used and installed in the Continental United States, Alaska, Canada, and Mexico.
- 3. Non-uniform color changes that result from unequal exposure of roofing, sidewall or trim panels to sunlight and/or the elements are not covered by this warranty unless such color change meets the definition of Color Change above.
- 4. This limited warranty does not cover damage or failure of **Vintage** coated Metal in cases where damage or failure is attributable to acts of God, falling objects, external forces, explosions, fire, or other such similar occurrences beyond Steelscape's control.
- 5. This anti-weathering limited warranty does not apply to other causes of degradation on Spectrascape[®] 20 coated metal which has been abraded or scratched or has been damaged by abrasive or chemical cleaners; has been modified, altered, used in a manner not originally intended, or stored improperly or contrary to good industry practice; has been damaged due to moisture entrapment in coils and/or bundles during transit or storage; has been stored or installed in a way which allows standing water on the coating; has been exposed to harmful or corrosive chemicals whether or not they are liquid, solid, or gas; has been stored or installed in such as way that allows for contact with animals and/or animal waste or decomposition products; has been exposed to salt water containing spray and/or salt containing atmosphere; has had prolonged contact with any surface contaminants including, but not limited to, leaves, pine needles, and/or other organic matter; has had internal contamination created by improper ventilation or improper housekeeping; and/or has suffered from improper forming, fabrication or embossing.
- 6. Purchaser's sole and exclusive remedy, and Steelscape's liability under this limited warranty will be limited, at Steelscape's option, to recoating or replacing the Vintage coated Metal claimed to be defective, including re-installation costs. In no event shall Steelscape be liable for any incidental, special, punitive or consequential damages. Steelscape must approve any recoating of the Metal through submission of an estimate that includes the coating products to be used. Furthermore, Steelscape reserves the right to approve or negotiate the contract for such recoating if the initial estimate is deemed unacceptable. In no event will the original applicable warranty period set forth in the warranty table be extended by a warranty claim.
- 7. In the event of any subsequent failure of any recoated or replaced coated Metal, Purchaser shall first make any claims against the supplier of those replacement materials. The warranty for any refinished or replaced metal substrate shall be only for the remainders of the warranty period applicable to the original coated metal substrate.

Steelscape Vintage[®] Limited Warranty

- 8. This limited warranty is extended to Purchaser only and shall not inure to the benefit of any other party. Steelscape's name, trademark, or limited warranty shall not to be used in any warranty given by the Purchaser to their customers. This limited warranty is non-transferable and non-assignable by Purchaser, and Purchaser shall not permit their agents, representatives, customers, distributors, applicators, or contractors to claim, represent, or imply that this limited warranty extends to or is available to anyone other than Purchaser.
- 9. The applicable warranty period shall be limited to, and shall in no event extend beyond, the warranty period as set forth in the Warranty Table or the warranty period extended by the Purchaser to its customers, whichever is shorter.
- 10. Steelscape reserves the right to terminate this limited warranty at any time upon thirty (30) days advance written notice, except with respect to any **Vintage** coated Metal which has already been shipped to Purchaser.
- 11. EXCEPT AS SET FORTH HEREIN, Steelscape MAKES NO OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, WITH RESPECT TO ANY OF THE PRODUCTS.

Miscellaneous:

1. All notices given under or pursuant to this Agreement shall be in writing and either personally delivered or sent by registered or certified mail, postage prepaid, return receipt requested, to the party to whom such notice is to be given as follows:

Steelscape 222 West Kalama River Road Kalama, WA 98625 Telephone: (360) 673-8200 Attention: Quality Department

- 2. No terms or conditions other than those stated herein, and no agreement or understanding, oral or written, in any way purporting to modify this limited warranty shall be binding on Steelscape unless made in writing and signed by its authorized representative.
- 3. Any disputes arising under or pursuant to the matters contemplated by this Agreement, at Steelscape's election, shall be resolved by arbitration or legal process governed by and interpreted in accordance with the laws of the State of California, and shall have exclusive jurisdiction over any such disputes, especially with respect to matters of validity, execution, interpretation, enforcement or compliance.

Vintage[®] "Pre-Aged" Metallic Faceted Substrate Warranty

Type of Environment of Installation	<u>Film</u>	<u>Color</u>	<u>Chalking</u>
	Integrity	ΔE <u><</u> 5.0	<u>≥</u> 8 Rating
	(Years)	(Years)	(Years)
Residential, Commercial and School – Buildings used for habitation, Distribution Centers, Hotels, Shopping Malls, Office Buildings Assembly Factories and Schools located in rural or residential areas.	20	No Warranty	20
Industrial – Steel mills, Power Generating Stations, Oil Fields, Oil Refineries, Ore Mines, Chemical Plants, Paper Mills or other unusual environmental exposure.	No Warranty	No Warranty	No Warranty
Severe Marine – Closer than 1320 feet (1/4 Mile).	No	No	No
	Warranty	Warranty	Warranty

<u>Notification Prior to Installation:</u> In all cases that are uncertain, Purchaser should notify Steelscape of installations that are deemed potential Industrial and/or Marine environment prior to design implementation. Steelscape can then evaluate the installation site and provide specific warranty coverage before installation.

Steelscape holds the right to determine the Environmental Location during a warranty investigation and may deem the specific warranty performance based upon close proximity to one of the severe environmental conditions noted above.

THIS WARRANTY IS FOR PRODUCTS USED IN COIL COATING APPLICATIONS FOR ROOFING, SIDEWALL AND TRIM PANELS ONLY

THIS LIMITED WARRANTY APPLIES ONLY TO PRODUCTS SOLD BY PPG INDUSTRIES AND APPLIED TO METAL THAT IS USED IN THE **CONTINENTAL UNITED STATES**, **ALASKA**, **CANADA**, **AND MEXICO** (HAWAII AND THE CARIBBEAN EXCLUDED) unless Steelscape specifically and in writing notifies Purchaser otherwise prior to sale of the Product. Steelscape retains the right to determine the Environmental Location condition during a warranty investigation and may deem the specific warranty performance based on close proximity to one of the severe environmental conditions noted above. For the purpose of this Limited Warranty, Standard Colors use a group of pigments suitable for the majority of color matches. Some color requests cannot be formulated with durable pigments and will not carry the above mentioned warranty. The customer will be informed as to these exceptions.

FOR ALL INDUSTRIAL APPLICATIONS - Purchaser is required to consult with Steelscape **before** any installation takes place and Steelscape reserves the right to change the terms of this warranty based on the findings of such environmental exposures and/or conditions.

FOR ALL Approved MARINE APPLICATIONS - Homeowner or building owner is required by Steelscape to perform annual maintenance of the building in the form of two (2) sweet water rinses (tap water). Homeowner or building owner is required to keep records of such maintenance for the warranty to be enforceable. **THERE IS NO WARRANTY** if building is located less than one thousand feet (1,320 ft) from seashore or any other body of salt water.

Agreement of Warranty

Purchaser Representative

Steelscape Representative Date

<u>Appendix</u>

Site Installation Survey Form

Customer:	
Address:	
Site/Building Lo	ocation:
If Industrial Loc	cation, What type?:
	Report of Installation
(1) Project	t/Installation Name and Location:
(2) Submi	tted by: (Name, Title, Telephone Number):
	site location such that the installed sheeting may become exposed to salt water spray, and/or salt- ing atmosphere?
(4) Is the	project/installation for an industrial-type or manufacturing-type building?
	what chemical(s) are used in the manufacturing process and what are the percent concentrations chemicals both inside and outside the building?
(6) Which	of the following may become in contact with the painted metal?
a.	Dry solids b. Wet Solids c. Condensation d. Liquids
(7) If the I	ouilding is not for manufacturing purposes, is the site location in an industrial area?
	dentify chemicals, if any, that may contact the painted sheet and percent concentration of these als both inside and outside the building:
(9) Identif into	y and/or describe any potential corrosive materials from neighboring operations that may come contact with the painted sheet:
(10)	What are the temperature and humidity ranges inside and outside the building?
(11)	Does the building have adequate venting in its design?
(12)	Describe the sheeting application – Roofing? Siding? Trim? Other?

Steelscape Vintage[®] Limited Warranty

(13) Provide any other information or description that will assist in the conditions and environment evaluation to which the painted metal sheet will be exposed.

Joint Sealants



Reviewed Not Approved Reviewed Revise and with Comments Revise and			
079200-101-0 04/28/2021			
SUBMITTAL NUMBER DATE This submittal has been reviewed for compliance with the contract documents. Approval does not relieve this Subcontractor or Supplier of the responsibility for conformance to the quality standards set forth in the contract documents nor does it relieve his responsibility for field verification of all conditions relating to this contract			
Langlas Rosciules David Brown			

Checking is for general compliance with the design intent and conformance with contract documents. Contractor is responsible for dimension, fabrication and techniques of construction and coordination with other trades and satisfactory performance of this work.

Reviewed by: Hip and Humble Architecture - No exceptions taken

Approved as noted

Date:04/30/2021

Advanced Silicone 2* Window & Door Sealant

Product Description

Advanced Silicone 2 Window & Door sealant is 100% waterproof and can be exposed to rain or water in as little as 30 minutes. It is ideal for weatherproofing and application on a wide range of projects exposed to harsh weather conditions. This high-performance sealant is permanently flexible, shrink proof, crack-proof, and offers strong adhesion to many common substrates. It has 10-year mold free product protection, is low in odor, and will not blemish most metal finishes. From new construction to renovations, window and door installations to general weather sealing, versatile and proven Advanced Silicone 2 Window & Door sealant offers a durable yet highly flexible seal. Backed by a lifetime guarantee.

Product Attributes

- Meets ASTM C-920 Class 35 specifications
- 40% more flexibility than Class 25 sealants⁽¹⁾
- 5X stronger adhesion⁽²⁾
- 30-minute rain & water ready⁽³⁾
- 100% silicone is 100% waterproof and 100% weatherproof
- Resist mold⁽⁴⁾ with 10-year mold-free product protection
- Will not blemish most high-end metal finishes such as chrome, bronze and nickel
- Will not break down due to extreme weather conditions, freeze & sun-proof
- Shrink & crack-proof
- Excellent adhesion for wet or dry surface applications⁽⁵⁾
- Freeze/thaw stability
- Non-paintable





- (1) Based on comparison of flexibility performance with ASTM C-920 Class 25 consumer sealant
- (2) Based on comparison with our GE Silicone 1* sealant using ASTM C794 Peel Adhesion test
- (3) Exposure to rain or water possible in as little as 30 minutes with bead size max ³/₁₆", temperature min 65°F and humidity min 50%. Otherwise, sealant should not be exposed to water for 8 hours. Do not touch or clean caulk for 24 hours

(5) For wet surface application, wipe off excess water before applying

⁽⁴⁾ Cured sealant is resistant to stain-causing mold & mildew. Regular cleaning of sealant is required, however, as soap and other residue can cause secondary mold and mildew growth

^{*} Silicone 1 and Silicone 2 are trademarks of Momentive Performance Materials inc.



Basic Uses

Advanced Silicone 2* Window & Door sealant is used in a wide variety of applications including, but not limited to windows, doors, siding, trim, vents, asphalt, cement, brick, mortar, and attic/basement applications.

Adheres To

Common building materials including most metals and wood, aluminum, composites, brick, stone, stucco, masonry, cement board, glass, porcelain, ceramic tile, drywall, plaster, vinyl siding, PVC, fiberglass, and painted surfaces, as well as metal finishes such as chrome, bronze & nickel.

Advanced Silicone 2 Window & Door sealant should not be considered:

- For structural repairs
- For use underwater or in other applications where the product will be in continuous contact with water
- For use in food contact applications
- When painting of the cured sealant is desired
- For use on aquariums
- For use on surfaces with special coatings, such as mirrors, without approval of the article's manufacturer
- Under exceedingly hot or cold conditions (see Sealant Application section for additional information)
- On frozen or contaminated surfaces
- On excessively basic or acidic substrates
- For use on surfaces that are above 120°F (49°C)

Packaging

Advanced Silicone 2 Window & Door sealant is currently available in 10.1 fl. oz. (299 mL) plastic caulking cartridges and 2.8 fl. oz. (82.8 mL) plastic squeeze tubes. Plastic cartridges and squeeze tubes are packaged as 12 units in cardboard boxes. Cartridges are dispensed using a single component hand or air-pressured caulking gun.

Advanced Silicone 2 Window & Door Sealant

Stock #	Model #	Color	Product UPC	Size	Carton Size	Coverage (³ /16" bead)
GESIL2WD CLR	GE5000	Clear	077027050004	10.1 fl. oz.	12 each	51 Linear Feet
GESIL2WD WHT	GE5010	White	077027050103	10.1 fl. oz.	12 each	51 Linear Feet
GESIL2WD BLK	GE5030	Black	077027050301	10.1 fl. oz.	12 each	51 Linear Feet
GESIL2WD BRN	GE5080	Brown	077027050806	10.1 fl. oz.	12 each	51 Linear Feet
GESIL2WD LGR	GE50.08	Lt. Gray	077027050097	10.1 fl. oz.	12 each	51 Linear Feet
GESIL2WD ALM	GE5096	Almond	077027050967	10.1 fl. oz.	12 each	51 Linear Feet
SIL2WD CLR	GE500	Clear	077027005004	2.8 fl. oz.	12 each	13 Linear Feet
SIL2WD WHT	M90050	White	77027005007	2.8 fl. oz.	12 each	13 Linear Feet
	Clear	White	Black	Brown	Light Gray	Almond
) R TO BE R	406	* Silicone 2 i	s a trademark of M	omentive Performance Material: Page 2



Typical Properties

Typical physical property values of Advanced Silicone 2* Window & Door sealant as supplied and cured are set forth in the tables below.

Typical Properties - Supplied

Property	Value	Test Method
Consistency	Paste	
VOC (ex. water & exempt)	< 28 g/L	WPSTM C1454
CARB Chem Curing (n.a.) VOC	< 3.0 wt%	
Odor	Light Ammonia	
Work Life (tooling time)	5-10 minutes	
Tack Free Time (@ 72°F (22°C), 50% RH)	30 minutes	ASTM C679
Rain-Ready	30 minutes	
Sag/Slump	< 0.2 inches	ASTM D2202

Typical Properties - Cured

Property	Value	Test Method
Hardness, Durometer (Type A Indenter)	15	ASTM D2240
Tensile Strength	145 psi	ASTM D412
Elongation	347%	ASTM D412
Specific Gravity	1.00	
Joint Movement Capability	±35% Glass +25% Mortar, Aluminum	ASTM C719
Service Temperature Range (after cure)	-60°F to +400°F (-51°C to 204°C)	
Weathering and U.V. Resistance	Excellent	30 year Study
Full Cure Time	24 hours	

Typical properties are average data and are not to be used as or to develop specifications.

Surface Preparation

- Surfaces must be clean, dry and sound prior to application of the sealant. All contaminants, impurities, or other adhesion inhibitors (such as moisture/frost, oils, old sealants, soaps and other surface treatments, etc.) must be removed from the surfaces to which the sealant is intended to adhere.
- For cleaning, a solvent-dampened clean rag usually produces the desired result. Isopropyl Alcohol (IPA) is a commonly used solvent and has proven useful for most non-porous substrates. When handling solvents, refer to manufacturer's SDS for information on handling, safety and personal protective equipment.
- Architectural coatings, paints and plastics should be cleaned with a solvent approved by the manufacturer of the product or which does not harm or alter the finish.
- Since porous materials can absorb and retain moisture, it is important to confirm that substrates are dry prior to application of the sealant.
- Cleaning of surfaces should be done within 1 to 2 hours of when the sealant is to be applied.



Masking

The use of masking tape is recommended where appropriate to ensure a neat job and to protect adjoining surfaces from over-application of sealant. Masking tape should be removed immediately after tooling the sealant and before the sealant begins to skin over (tooling time).

Instructions

1. Remove dirt, grease, moisture, soap residue & old caulk from area to be sealed. Use backer rod for gaps larger than 1/2" x 1/2"

- (12.7mm x 12.7mm)¹⁾.
- 2. Cut nozzle to obtain desired bead size.
- 3. PIERCE INNER FOIL SEAL.
- 4. Using caulk gun, apply sealant into gap. Smooth the sealant into gap.
- 5. Wipe hands & tools thoroughly before washing.
- 6. Allow a mimimum of 30 minutes before exposing sealant to water.

(1) Sealant depth should be controlled with a closed cell, non-gassing type backer rod. Backer rod should be slightly larger in diameter (25 to 50%) than the joint width.

Sealant Application

• Apply sealant in a continuous operation applying a positive pressure adequate to properly fill and seal the seam, cavity or joint.

- Tool or strike the sealant with a concave tool, applying light pressure to spread the material against the joint surfaces to ensure a void-free application.
- When tooling, use care not to spread the sealant over the face of the substrates adjacent to the joint or masking as the silicone can be extremely difficult to remove on rough or porous substrates. Excess sealant should be cleaned from glass, metal and plastic surfaces while still uncured. On porous surfaces the excess sealant should be allowed to progress through the initial cure or set-up. It should then be removed by abrasion or other mechanical means.
- If sealant is applied when the temperature is below 32°F (0°C) or if frost or moisture is present on the surfaces to be sealed, the rate of cure will slow. For standard cure speed, apply in temperatures above 32°F.
- The cure rate of this product is dependent upon temperature and the availability of atmospheric moisture. Under average conditions (relative humidity of 50 ±5% at an air temperature of 73.4 ±2°F [23 ±1°C]) this material can attain a cured thickness of 2-3 mm per 24 hours (assuming ample access to atmospheric moisture). As temperature decreases, the cure rate slows down (and vice versa). Low moisture environments will also reduce the cure rate. Near-confined spaces, which limit the overall access to atmospheric moisture, will generally allow cure only at that surface which has access to the atmosphere.

Note:

- This material requires atmospheric moisture to cure from paste to rubber and may not attain its listed final cured rubber properties when used in designs or applications where the silicone is encapsulated and without access to atmospheric moisture.
- Some materials that bleed plasticizers or oils can cause a discoloration on the surface of sealants. When sealing to or over items such as: rubberized gaskets, bituminous based materials, butyl or oil-based products, oily woods, tapes, etc., compatibility testing prior to use is recommended.
- Silicone materials are hydrophobic in nature and if inadvertently over-applied onto adjacent joint surfaces (even if removed immediately), can create a waterproofing effect of a substrate when the substrate is wet. See section on Masking.



Specifications

Meets ASTM C-920, Type-S, NS, Class 35, Use G Test Requirements. Meets ASTM C-920, Type-S, NS, Class 25, Use NT, M, G, A & O Test Requirements. Federal Specification TT-S-00230C, TT-S-001543A

Suggested References

In addition to the guidelines provided herein, Momentive Performance Materials recommends that designers and users of Advanced Silicone 2* Window & Door sealant familiarize themselves with the latest editions of following industry guidelines and best practices:

1.) ASTM C1193 Standard Guide for Use of Joint Sealants.

Product Safety, Handling and Storage

Customers considering the use of this product should review the latest Safety Data Sheet and label for product safety information, handling instructions, personal protective equipment if necessary, and any special storage conditions required. Safety Data Sheets are available at <u>www.GEsealants.com</u> or, upon request, from any MPM representative. Use of other materials in conjunction with MPM sealants products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

Patent Status

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute the permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

Limitations

Customers must evaluate Momentive Performance Materials products and make their own determination as to fitness of use in their particular application.



Customer Service Centers

Americas	+1 (866) 275-4372
	Email: askgesa@momentive.com
Visit us at <u>www.GEsealants.com</u>	

THE MATERIALS, PRODUCTS AND SERVICES OF MOMENTIVE PERFORMANCE MATERIALS INC. AND ITS SUBSIDIARIES AND AFFILIATES (COLLECTIVELY "SUPPLIER"), ARE SOLD SUBJECT TO SUPPLIER'S STANDARD CONDITIONS OF SALE, WHICH ARE INCLUDED IN THE APPLICABLE DISTRIBUTOR OR OTHER SALES AGREEMENT, PRINTED ON THE BACK OF ORDER ACKNOWLEDGMENTS AND INVOICES, AND AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION, RECOMMENDATIONS, OR ADVICE CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SUPPLIER MAKES NO WARRANTY OR GUARANTE, EXPRESS OR IMPLIED, (i) THATTHE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING ITS PRODUCTS, MATERIALS, SERVICES, RECOMMENDATIONS OR ADVICE. EXCEPT AS PROVIDED IN SUPPLIER'S STANDARD CONDITIONS OF SALE, SUPPLIER AND ITS REPRESENTATIVES SHALL IN NO EVENT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS OR SERVICES DESCRIBE HEREIN. Each user bears full responsibility for making its own determination as to the suitability of Supplier's materials, services, recommendations, or advice for its own particular use. Each user must identify and perform all tests and analyses necessary to assure that its finished parts incorporating Supplier's products, materials, or services will be safe and suitable for use under end-use conditions. Nothing in this or any other document, nor any oral recommendation or advice, shall be deemed to alter, vary, supersede, or waive any provision of Supplier's standard Conditions of Sale or this Disclaimer, unless any such modification is specifically agreed to in a writing signed by Supplier. No statement contained herein nconcerning a possible or suggested use of any material, product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.

GE is a trademark of General Electric company. Used under trademark license. Momentive and the Momentive logo are trademarks of Momentive Performance Materials Inc. *Silicone 1 and Silicone 2 are trademarks of Momentive Performance Materials Inc. Copyright 2020 Momentive Performance Materials Inc. All rights reserved.

GEsealants.com



Don't Just Seal It, ConSeal It!

Rapid Cure Elastomeric

ASTM C920 Sealant

ConSeal[™] CS-1500

Rapid Cure Elastomeric Sealant



This submittal has been reviewed for compliance with the contract documents Approval does not relieve this Subcontractor or Supplier of the responsibility for conformance to the quality standards set forth in the contract documents nor does it relieve his responsibility for field verification of all conditions relating to this contract wite fact bages REVIEWED BY: Bud Daigle

Applications

Designed for use on original construction and repairs that are subject to structural movement: expansion and control joints, perimeter caulk joints, entry way steps, precast concrete panel joints, copings, rises and tilt-wall joints, bunker silos, septic tanks and manure pits.

Performance Properties

Features

- Finish: Gray, Mildew Resistant, Elastomeric Rubber
- Solvent & Isocyanate Free, 100% Solids, Will Not Shrink
- California Proposition 65 compliant
- Meets ASTM C920, Type S, Grade NS, Class 50, Uses NT, M, G, A, and O.
- Tack free skin forms in 40 minutes (77°F at 50% Relative Humidity)
- Full cure takes place in 24 to 48 hours for 1/4" beads and smaller.
- Excellent weatherability when exposed to: Ultraviolet Radiation, Rain, Infrared Radiation, and Atmospheric Hydrocarbons.
- CS-1500 can be painted with emulsion or synthetic enamel paints. Flexible resilient rubber that adheres to most construction materials, including: Concrete, Metal, Fiberglass, Plastic, PVC, Glass, Aluminum

and Wood. **Dhusiant Dranation**

Property Cure System VOC Content Cure Rate (77°F at 50% Relative	CS-1500 Value Hybrid, Moisture Cure 17.4 grams/liter 1/8" every 24 hours	Test Method	Application Ambient Temperature Application Surface Temperature	40°F to 130°F (4°C to 55°C) Ko Exceptions Taken 40°F to 130°F (4°C to 55°C) Nake Corrections Noted Revise and Resubmit Submit Specified Item Rejected
Humidity)				Checking is only for general conformance with the design
Gun Grade	Zero Slump	ASTM C639		concept of the project and general compliance with the information given in the contract documents. Any action
Directions for Use				shown is subject to the requirements of the plans and specifications. Contractor is responsible for: dimensions which shall be

Surface Preparation: The concrete must be clean and free from dust, dirt, grease and debris before application of CS-1500, Uspect surface for soundnessur When surface is clean, sound and dry proceed with using the CS-1500. Note: Make sure the surface is free from frost prior to application.

DO NOT USE petroleum solvents such as Mineral Spirits or Xylene for surface preparation.

Priming: For applications with continuous water immersion ConSeal recommends using a surface primer. ConSeal CS-80 is specifically designed for ConSeal's elastomeric sealants.

Application Instructions: Maintain CS-1500 at room temperature before applying to ensure easy application. CS-1500 may be factory or field applied to seal various construction components. Work CS-1500 into rough surfaces to optimize surface contact. CS-1500 is not to be installed in ratios where joint depth is greater than half of the width. CS-1500 is not designed to bridge gaps larger than 1" or penetrate into joint depth further than 1/2". The use of a backer rod may be necessary in some applications. If using to fill cracks, avoid air entrapment by filling void with continuous bead of CS-1500.

Packaging and Storage: Available in 10.1-fl. oz. cartridges (298 mL), 20.2-fl. oz. sausages (600mL), 28.5-fl. oz. cartridges (842mL) and 5-gallon pails.

12-month shelf life from manufacture date when stored in a cool, dry area. Elevated temperatures >100° F may reduce shelf life.

Coverage and Full Cure Rates: 10.1-ounce cartridges: 1/2" diameter bead covers 7.5 linear feet.

CONCRETE SEALANTS INC. = 9325 State Route 201 = Tipp City, OH 45371, USA = www.ConSeal.com

Full cure for 1/4" bead is 48 hours (77°F at 50% Relative Humidity).

Limited Warranty

This information is presented in good faith, but we cannot anticipate all conditions under which this information and our products, or the products of other manufactures in combination with our products, may be used. We accept no responsibility for results obtained by the application of this information or the safety and suitability of our products, either alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each such product or product combinations for their own purposes. It is the users' responsibility to satisfy himself as to the suitability and completeness of such information for this own particular use. We sell this product without warranty, and buyers and users assume all responsibility and liability for loss or damage arising from the handling and use of this product, whether used alone or in combination with other products.

Toll Free (USA): 800.332.7325 Phone: +1.937.845.8776 Fax: +1.937.845.3587

Version: 18-Jan-21 © 2020 Concrete Sealants, Inc.



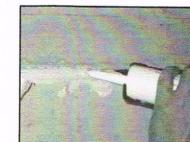
Concrete Sealants, Inc. ISO 9001:2015 Registered

Performance Characteristics

Property	CS-1500 Value	Test Method		
Movement Capability	±25%	ASTM C719		
Tensile Strength	260 psi	ASTM D412		
Shear Strength	215 psi	ASTM D1002		
Elongation	695%	ASTM D412		
Adhesion to Concrete	23 pli, cohesive failure	ASTM D794		
Shore A, Hardness	32	ASTM D661		
UV Stability,	UV-A, No Change	QUV		
Accelerated Weathering	g (2,000 hours)	Weatherometer		
Shrinkage	No measurable shrinkag	No measurable shrinkage after 14 days		
Service Temperature	-40°F to 220°F (-40°C to) 104°C),		
Application Ambient	RECONTINUOUS SERVICE NS	ULTING, PLL		

SUBMITTAL #: 079200-102-0

E



Doors and Hardware

Simkins H	Hallin Lumber (Co		Quote
	26 Nth Broadway 06-586-5495	Reviewed Not Approved Reviewed Revise and with Comments Revise and B81000-101-0 04/28/2021 Substrata Numeer Date This submittab as been reviewed for compliance with the order and releve this order and releve the substrated courners. Approval does not releve this order and releve the order and releve the order of th	SINCE 1946 Quote Number: 352 Sales Person: Taylor Severso	Page 2 of 2 Date: 11/4/2020
	er Information — KCD Enterprises			
Address:	Revi	ewed and approved comments)		82" (c Exte
Phone 1: Phone 2: Fax:	∭-ù Davi	m ନୁସ୍ଟ୍ର d Saenz, MCM		E2" (O.M.) Exterior
Contact:	Craig Roloff			
Job Name:	Big Horn Condos	Building E		
	ications /8" x 82"; R.O. = 38-1	/2" x 82-1/2"	38-1/2" (R.O.) 6- Exterior 37-5/8"(O.M.)	11/16"
Lead Time: Ca	all to Verify		Image is viewed fro	m Exterior!

Comment: 1B & 1D Entry

Item Description	Qty
3' 0" x 6' 8" 206HD-LE Profiles High Definition Steel Door w/Low E Glass - Right Hand Inswing	18
2-3/4" Backset - Double Bore (2-1/8" Dia. Bore w/Standard 5-1/2" Spacing)	18
Set of Ball Bearing - Oil Rubbed Bronze Hinges	18
Primed Wood Frame - 6-11/16" Jamb w/No Exterior Trim	18
Bronze Compression Weatherstrip	18
Composite Adjustable - Bronze w/Light Wood Cap Sill	18
PREFINISH: Paint Door Panel Exterior EVERGREEN, Paint Door Panel Interior STONE WHITE (Match Door Edge to Interior); Paint Frame Exterior EVERGREEN, Paint Frame Interior STONE WHITE	18

Profiles Insulated Steel Door System Specifications

DOOR PANELS	Faces: .021-inch (24 gauge) minimum thickness, tension-leveled cold rolled steel, zinc- coated, conversion-coated to permit paint bond. Door edges: machinable kiln-dried pine or engineered lumber mechanically locked to door faces, four-sided full thermal break provided. Lock area reinforced with solid blocking in full area of passage and deadbolt locksets. May be prepared for cylindrical or full-mortise locksets. Door bottom edge: moisture- and decay-resistant composite. Core: foamed-in-place polyurethane, density 1.9 pcf minimum. Door faces factory primed white.
OPTIONAL FACTORY-GLAZED GLASS OR GLASS INSERTS	Inserts (lites): perimeter frames in raised-molding patterns, molded from composite, wood-grained in natural hardwood patterns, paintable, screw-fastened to doors, screw holes concealed with grained plugs in matching material. Tested to withstand high service temperatures resulting from exposure behind storm doors or dark finishes. Glass minimum 1/8-inch tempered, two panes with sealed airspace between, airspace typically 1/4-inch to 3/4-inch. Options for leaded decorative glass panel or wrought iron grille in air space between tempered glass panes with brass, brushed nickel or black nickel caming finishes. Wrought iron grille available in matte black only. Options for grooved, etched, Low-E, grille between glass (GBG), or mini-blinds. Optional removable wood grilles. Optional permanent external lite dividers.
GASKETING, WEATHERSTRIPPING	Jacketed thermoset open-cell foam, press-fit in kerfs at jamb stops in frames. Extruded thermoplastic elastomer, finned and chambered design, press-fit into bottom kerf of doors. Corner pads at bottom margin corners from jacketed thermoset open-cell foam.
HINGES, STRIKES, MULTI-POINT LOCKING SYSTEM	Steel, with a variety of finishes. Screws plated and finished to match hardware. Standard hinge size $4 \times 4 \times .098$ inches. Strikes are proprietary adjustable type, permitting in-out adjustment of door in frame, up to $3/16$ inch. Multi-point locking system is available in manual shootbolt or tongue versions.
FRAMES	Milled from 5/4 kiln-dried pine, profiled with 1/2-inch stop, standard depth 4-9/16 inches. Other frame depths available to match wall constructions. Exterior casing brickmould in WM180 pattern available. Optional frames in exterior grade red oak with matching brickmould. Optional rot resistant jambs.
SILL, SWING-IN, SWING OUT, SIDELITE OPTIONS	 Wide range of sill options: fixed threshold, adjustable threshold, and public access available in bronze, mill, satin nickel and brass finishes. Double-door models: double door available with both leaves active and locking astragal available. Sidelite options: flush-glazed or lite insert models, with embossed panel & glass moldings, in 10 inch, 12-inch and 14-inch widths. Sidelite systems available with mullions separating doors from sidelites, and continuous sills and frame head, or as separately framed and cased units joined together.
TRANSOM OPTIONS	Transom frames, either rectangular, elliptical or half round, match door frames and have matching exterior brickmould. Transom frames in primed pine or clear northern red oak to match door frame option. Clear, Low-E, or etched insulated glass. Options for leaded decorative glass panel or wrought iron grille in air space between tempered glass panes with brass, brushed nickel or black nickel caming finishes. Wrought iron grille available in matte black only.
4 SPE Door Syst	

Specifications





FULLVIEW RETRACTABLE INSECT SCREEN

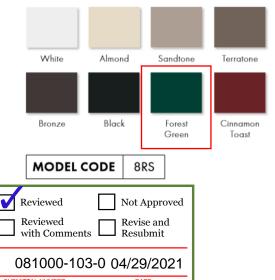
- Thick aluminum frame (1 ½" thick) with reinforced corners and decorative profile
- Premium double-layer weatherstrip for added energy efficiency
- Dual-closers for added durability
- Push-button closer makes it easy to keep the door open while keeping your hands free
- Built-in keyed deadbolt for added security

VENTILATION

- Vents from top with balanced retractable insect screen
- Retractable insect screen conveniently rolls into the frame of the door when not in use
- Easy, one-hand operation and unlimited glass positioning

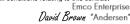


COLOR OPTIONS



This submittal has been reviewed for compliance with the contract documents. Approval does not relieve this Subcontractor or Supplier of the responsibility for conformance to the quality standards set forth in the contract documents nor does it relieve his responsibility for field verification of all conditions relating to this contract

Langlas & Associates



HARDWARE OPTIONS***



INSTALLATION

Install with confidence with our convenient and easy installation systems. Visit andersenwindows.com/stormdoors for more details.





For more information, visit andersenwindows.com/stormdoors

lete door closure when compared to standard pneumatic dual closers. ** Hardware packaged separately. † See andersenwindows.com/stormdoors for nish samples. ††Antique brass, brushed dark nickel, brushed French gold, oil rubbed bronze and Venetian bronze are "living" finishes that can change with time ind use. ‡Nickel, matte black, metallic stone and brass handle sets feature TarnishGuard™, a protective coating that helps maintain their attractive finish for years. Printing limitations prevent exact finish replication. See your Andersen dealer for exact finish samples.

Emco Enterprises LLC is a wholly owned subsidiary of Andersen Corporation that manufactures and supports the limited warranties for Andersen® Storm and Screen Doors. and all other marks where denoted are trademarks of Andersen Corporation and its subsidiary. ©2020 Andersen Corporation. All rights reserved. 01/20

Checking is for general compliance with the design intent and conformance with contract documents. Contractor is responsible for dimension, fabrication and techniques of construction and coordination with other trades and satisfactory performance of this work.

ANDERSEN® STORM DOORS

 Reviewed by: Hip and Humble Architecture
 Date:04/30/2021

 - No exceptions taken
 - Approved as noted

 - Revise and resubmit
 - Approved as noted

PRODUCT LIMITED LIFETIME WARRANTY

DOOR FRAME: Emco Enterprises LLC (Emco), an Andersen company, warrants the door frame, hinges, and painted finish on Andersen® aluminum storm door products to be free from defects in manufacturing, materials, paint adhesion, or workmanship, under normal use, for as long as the original consumer purchaser owns the home in which the door was initially installed.

COMPONENTS: Emco warrants the non-glass and non-insect screen fabric components of Andersen® storm doors (including brass and nickel hardware finish and the mechanical functions of balancers, locksets, closers, windows and insect screens) to be free from defects in manufacturing, materials and workmanship for a period of five (5) years from the date of original retail purchase or for as long as the original consumer purchaser owns the home in which the door was initially installed, whichever is shorter. Insulated glass is also warranted for a period of five (5) years not to develop, under normal conditions, any material obstruction of vision resulting from manufacturing defects or as a result of premature failure of the glass or hermetic seal.

In the event a door frame, hinges, insulated glass or a component fails as a result of a defect in manufacturing, materials or workmanship within the limited warranty period specified above, and upon written proof of purchase, EMCO, at its option, will provide a replacement door frame, hinge, insulated glass unit and/or components without charge – installation is not included. Such replacement or repair is warranted for the remainder of the original limited warranty period. Please locate the door serial number and written proof of purchase and contact Emco Consumer Support at 1-800-933-3626. Warranty claims made one (1) year after purchase are subject to a flat processing fee.

"OOPS-PROOF" INSTALLATION LIMITED WARRANTY

Ernco Enterprises LLC (Ernco), an Andersen company, warrants that any part lost or mis-cut during the original installation of your Andersen storm door will be repaired or replaced at no additional charge within ninety (90) days of the date of original purchase. This limited warranty will not apply if the part has been misused, abused or altered. Cutting parts not specified by the installation guide or mis-drilled parts are not included in this warranty.

In the event a part is lost or mis-cut within the limited warranty period, Emco, at its option, will provide the appropriate replacement part – installation is not included. Please locate the door serial number and written proof of purchase and contact Emco Consumer Support at 1-800-933-3626.

No Other Warranties or Representations

THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ALL WARRANTIES ARE LIMITED TO THE APPLICABLE STATUTE OF LIMITATIONS, BUT IN NO CASE WILL EXTEND BEYOND THE LIMITED WARRANTY PERIODS SPECIFIED ABOVE. EMCO EXCLUDES AND WILL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, WHETHER ARISING OUT OF CONTRACT, TORT OR OTHERWISE. THE REMEDY OF REPAIR OR REPLACEMENT OF THE ACTUAL PURCHASE PRICE OF THE PRODUCT PROVIDED BY THIS LIMITED WARRANTY IS THE EXCLUSIVE REMEDY WITH RESPECT TO AND ANY AND ALL LOSS OR DAMAGE.

This Limited Warranty is only applicable in the U.S.A. (i.e. the fifty states and the District of Columbia). This Limited Warranty gives you specific legal rights, and you may have other rights which vary from state or state or province. Some states do not allow the exclusion of incidental and consequential damages, or limitation of incidental or consequential damages or limitations of the duration of an implied warranty, so

the above limitations or exclusions may not apply to you. If any specific term of this Limited Warranty is prohibited by any applicable law, it shall be null and void, but the remainder of this Limited Warranty shall remain in full force and effect.

What is NOT covered by this limited warranty: damage caused by 1) improper installation, maintenance, or use: 2) chemicals or airborne pollutants, such as salt or acid rain: 3) acts of God, including wind damage: 4) products not manufactured by Emco.

Emco Enterprises LLC is a wholly owned subsidiary of Andersen Corporation. Emco manufactures and supports the limited warranties covering Andersen® Storm and Screen Doors.

"Andersen", "EMCO" and all other marks where denoted are trademarks of Andersen Corporation. @2017 Andersen Corporation. All rights reserved. Heprinted and effective as of February 3, 2017.



COMMERCIAL

Big Horn Condominium - Doors

Big Sky, MT

PATIO DOORS

SUBCONTRACTOR TO VERIFY ALL FIELD DIMENSIONS MATCH NEW DOOR DIMENSIONS

Checking is for general compliance with the design intent and conformance with contract documents. Contractor is responsible for dimension, fabrication and techniques of construction and coordination with other trades and satisfactory performance of this work.

Reviewed by: Hip and Humble Architecture Date:04/07/2021

- No exceptions taken - Approved as noted

- Revise and resubmit

SUBMITTAL WAS NOT REVIEWED FOR ACCURACY OF OWNER SELECTED OPTIONS OR DOOR ORIENTATIONS.

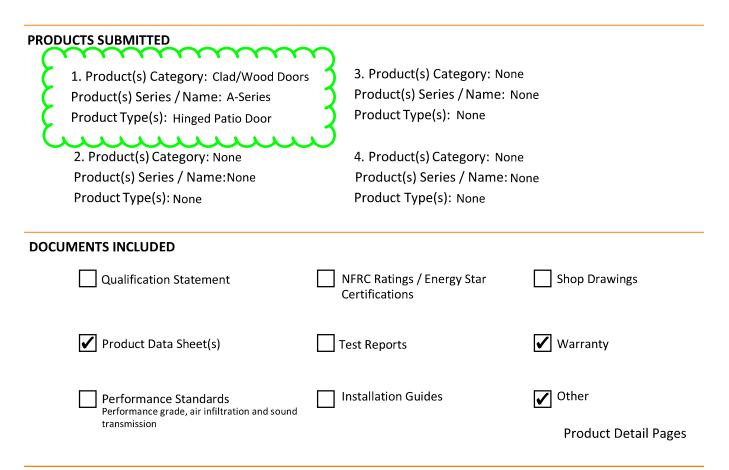
CSI Section: 08 54 13 - Fiberglass Windows (W/ Wood and Composite Frames)



PROJECT DESCRIPTION

Project name: Big Horn Condominium Project city / state: Big Sky, MT

Architect / Engineer: NA General Contractor: Langlas Construction Distributor / Dealer: Simkins-Hallin Lumber

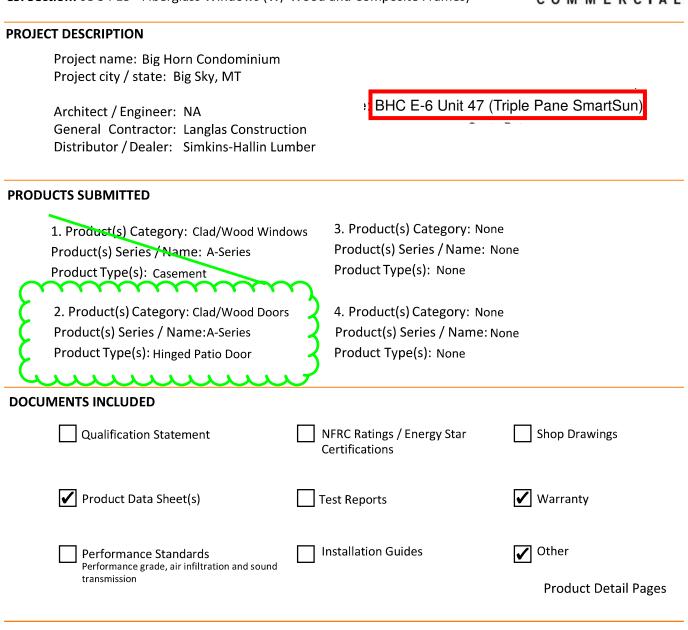


CONTACT INFORMATION

Date Submitted	l: March 24, 2021
Submitted by:	Scott Rumpakis
Company:	Andersen Windows, Inc.
Job title:	Commercial Business Development
Phone:	209-604-1172
Email:	srumpakis@andersencorp.com

CSI Section: 08 54 13 - Fiberglass Windows (W/ Wood and Composite Frames)



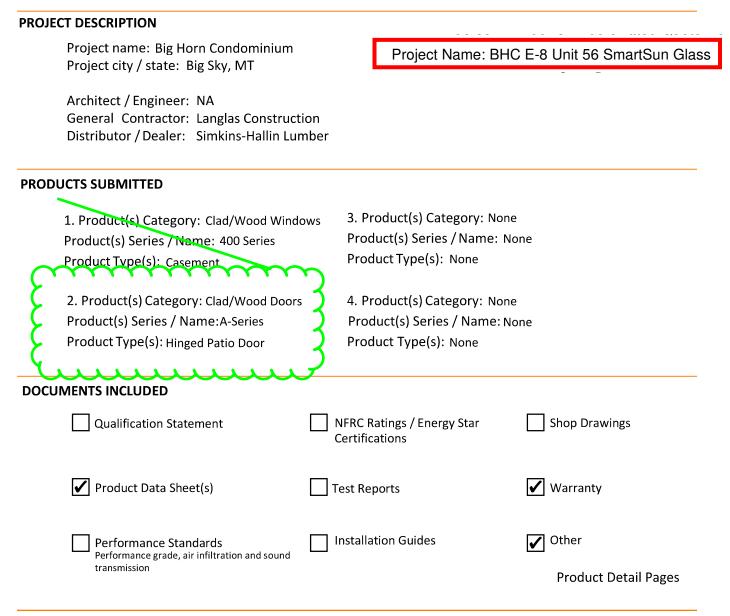


CONTACT INFORMATION

March 24, 2021
Scott Rumpakis
Andersen Windows, Inc.
Commercial Business Development
209-604-1172
srumpakis@andersencorp.com

CSI Section: 08 52 16 - Plastic-Clad Wood Windows





CONTACT INFORMATION

Date Submitted:	March 24, 2021
Submitted by:	Scott Rumpakis
Company:	Andersen Windows, Inc.
Job title:	Commercial Business Development
Phone:	209-604-1172
Email:	srumpakis@andersencorp.com



Product Data Sheet(s)

Andersen.	FIELD I	SUBCONTRACTOR TO VERIFY ALL TIELD DIMENSIONS MATCH NEW DOOR DIMENSIONS]	Andersen Windows - Abbreviated Quote Report		DOUBLE PA PATIO DOOF HEATLOCK		Andersen.			
WINDOWS.DOORS	Quote #	: 457	Prir	nt Date: ()3/24/2		Quote Date:	02/03/	2021	iQ Version:	20.0	WINDOWS+DOORS
Dealer:				<u> </u>			Customer: Billing Address:		& Associates			
Sales Rep:	Taylor S	everson					Phone: Contact:			Fa	ax:	
Created By:	Taylor S	everson					Trade ID:	107718	F	Promotion Code:	T142852	
		ltem	Qty	lte	m Siz	e (Operation)		L	ocation			
		0001 RO Size =	15	FWHID81180 x 8' 0'' H U	•	5L) ze = 8' 10 7/16'' W x 7' 1	1 1/2" H		atio Door LH (E4 Heatlock)	SmartSun		
Viewed from Ex	terior	Factory Ap Top Hur Top Hur	oplied Golo ng Gliding ng Gliding	d Dust Hinge Insect Scree Insect Scree	s n Trac n, ASS	onze Sill, ASSL Handing k, ASSL, Terratone SL, Terratone Tribeca - Stone	, Terratone/Pi	ne, Unfinis	shed, High Peri	formance SmartSur	n Low-E4 Heatl	₋ock Tempered,
		Zone: Northe U-Factor: 0.2	-	:0.16, ENER(GY STA	AR® Certified: Yes						

	0002 13 FWHID81180 (SSAR)	3B Patio Door RH (Sma HeatLock)	rtSun					
	RO Size = 8' 11" W x 8' 0" H Unit Size = 8' 10 7/16" W x 7' 11 1/2" H							
Viewed from Exterior	A Series Unit, Inswing, 6 9/16" Frame Depth, Bronze Sill, SSAR Factory Applied Gold Dust Hinges Top Hung Gliding Insect Screen Track, SSAR, Terrat Top Hung Gliding Insect Screen, SSAR, Terratone Hardware Trim Set, FWH/FWO, RH, Tribeca - Stone	tone	ance SmartSun Low-E4 HeatLock Tempered,					
	Zone: Northern							
	U-Factor: 0.27, SHGC: 0.16, ENERGY STAR® Certified: Yes							
Quote #: 457	Print Date: 03/24/2021	Page 1 Of 4	iQ Version: 20.0					

	Item Qty	Item Size (Operation)	Location					
				TRIPLE PANE W/ HEATLOCK				
	0003 3	FWHID81180 (ASSL)	3A Patio Door LH (HeatLoc Pane)	k Triple				
Viewed from Exterior	A Series Unit, Inswing, 6 9/1 HeatLock, Factory Top Hung Gliding Top Hung Gliding	RO Size = 8' 11" W x 8' 0" H Unit Size = 8' 10 7/16" W x 7' 11 1/2" H A Series Unit, Inswing, 6 9/16" Frame Depth, Bronze Sill, ASSL Handing, Terratone/Pine, Unfinished, Low-E4 SmartSun Enhanced Tempered Triple Pane HeatLock, Factory Applied Gold Dust Hinges Top Hung Gliding Insect Screen Track, ASSL, Terratone Top Hung Gliding Insect Screen, ASSL, Terratone Hardware Trim Set, FWH/FWO, LH, Tribeca - Stone						
	Zone: Northern U-Factor: 0.24, SHG0	: 0.14, ENERGY STAR® Certified: Yes						
	0004 2 RO Size = 8' 11" W	FWHID81180 (SSAR) * x 8' 0" H Unit Size = 8' 10 7/16" W x 7'	3B Patio RH (HeatLock Trip 11 1/2'' H	le				
Viewed from Exterior	HeatLock, Factory Top Hung Gliding Top Hung Gliding	6" Frame Depth, Bronze Sill, SSAR Handir Applied Gold Dust Hinges J Insect Screen Track, SSAR, Terratone J Insect Screen, SSAR, Terratone et, FWH/FWO, RH, Tribeca - Stone	ng, Terratone/Pine, Unfinished, Low-E4 SmartSu	n Enhanced Tempered Triple Pane				
	Zone: Northern U-Factor: 0.24, SHG0	: 0.14, ENERGY STAR® Certified: Yes						

Quote #:	457	Print Date:	03/24/2021	Page	2Of 4	iQ Version:	20.0

	Item Qty Item Size (Operation		ion)	Location		
	0005	1	FWGD 2' 10 5/8" x 7' 11 1/2'	"-FWGD6080 (S-SR)	3B Gliding Patio RH (Sm HeatLock) THIS WILL NE MULLED	
	RO Size :	= 8' 11 3/8'	" W x 8' 0" H	Unit Size = 8' 10 5/8" W	x 7' 11 1/2" H	
Viewed from Exterior	Grille(s), Vertical Top H Top H Hardw Perim FIELD	6 9/16" Pir ung Gliding ung Gliding are Trim S eter Exten MULLING ENT: F	ne, Unfinished Complete Unit, g Insect Screen Track, SR, Te g Insect Screen, SR, Terraton Set, FWGD, Tribeca - Stone	, Job Site, Mulling Locatio erratone le 1/2" Complete Unit, Pine		tSun Low-E4 HeatLock Tempered Glass, No 6 Fiberglass Reinforced Joining, Mull Priority: plied
	Unit U-Fa	ctor SHGC	ENERGY STAR® Certified			
	1 0.26 2 0.26	0.17 0.17	Yes Yes			

Total Load Factor
51.399

Dealer Signature

** All graphics viewed from the exterior

** Rough opening dimensions are minimums and may need to be increased to allow for use of building wraps or flashings or sill panning or brackets or fasteners or other items.

Quole #. 457	Quote	#:	457
--------------	-------	----	-----

Print Date: 03/24/2021

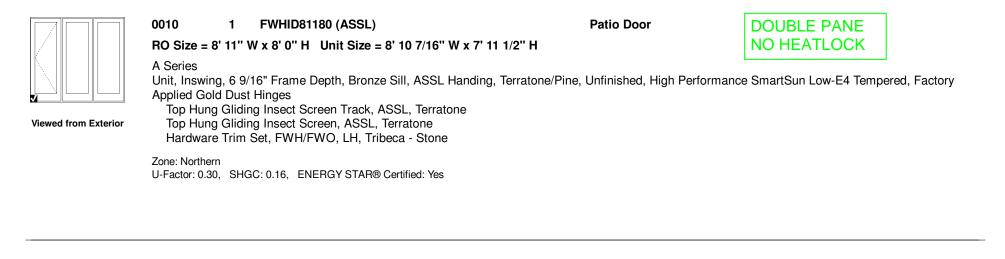
Page

30f 4

iQ Version: 20.0

	Item	Qty	Item Size (Operation)	Location	
	0006	1 FWH	HD81180 (ASSL)	3A & 3D Patio Doors	
	RO Size		0" H Unit Size = 8' 10 7/16" W x	7' 11 1/2" H	
	A Series				
	Unit, Insv	ving, 6 9/16" Fr	ame Depth, Bronze Sill, ASSL Hand	ling, Terratone/Pine, Unfinished, High Performance	e SmartSun Low-E4 HeatLock Tempered,
	Top Hi	Applied Gold Du	ect Screen Track, ASSL, Terratone		
ed from Exterior	Top Hu	ing Gliding Inse	ect Screen Track, ASSL, Terratone ect Screen, ASSL, Terratone		
			WH/FWO, LH, Tribeca - Stone		
	Zone: Nort U-Factor: (6, ENERGY STAR® Certified: Yes		
		,			
				Total Load Factor	
ustomer Signa	ture			3.579	
				_	
	Э				
ealer Signature		ovtorior			
graphics view	wed from the		and many marked as the forecast of the	allow for the of buildly summer and the late	a all an an haardeele ee feele
graphics view	wed from the		s and may need to be increased to	o allow for use of building wraps or flashings o	r sill panning or brackets or fasteners of
graphics vie	wed from the		s and may need to be increased to	allow for use of building wraps or flashings o	r sill panning or brackets or fasteners of
graphics view	wed from the		s and may need to be increased to	o allow for use of building wraps or flashings o	r sill panning or brackets or fasteners of
graphics view	wed from the		s and may need to be increased to	o allow for use of building wraps or flashings o	r sill panning or brackets or fasteners or
graphics view	wed from the		s and may need to be increased to	o allow for use of building wraps or flashings o	r sill panning or brackets or fasteners of
graphics view	wed from the			Page 3Of 4	r sill panning or brackets or fasteners of iQ Version: 20.0

	Item	Q	ty	Item Size (Operation)	Location
					Project Name: BHC E-8 Unit 56 SmartSun Glass
2	0003 RO S			W14-P5040 (L-F) 	Туре В /8'' W x 4' 0'' Н
Viewed from Exterior	Comp Clear In: Ha	Pine Co sect Scre ardware	mplete l een, Stor Pack, PS	Jnit, Factory (Direct) Applied, Mu ne SC, Contemporary Folding - Stone	e SmartSun Low-E4 Glass with Breather Tubes, No Grille, Perimeter Extension Jambs 6 11/16" Hing Location: Factory (Direct), Mull Type: Narrow Mull, Mull Priority: Vertical e actory (Direct) Applied, Complete Unit
		Northern U-Factor	SHGC E	ENERGY STAR® Certified	
			-	No No	



Quote #: 462

Print Date: 03/24/2021

2Of 3

iQ Version: 20.0

Page

Qty

Item Size (Operation)

Location



 \checkmark

Ask to see if all of the products you purchase can be upgraded to be ENERGY STAR® certified.

This image indicates that the product selected is certified in the US ENERGY STAR® climate zone that you have selected.

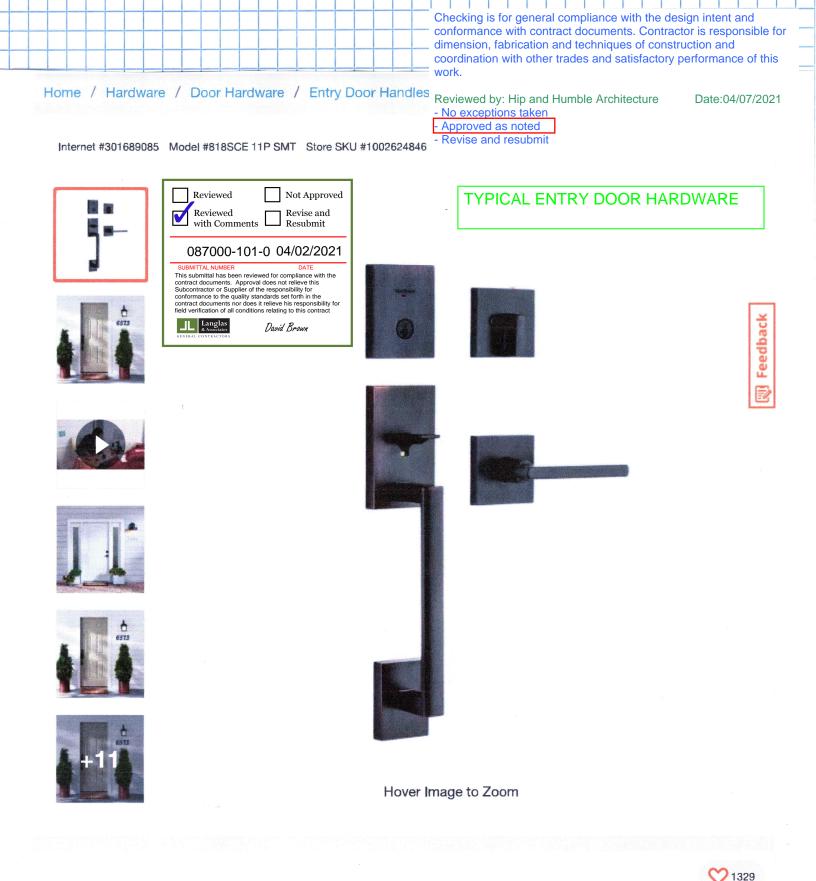
Data is current as of November 2019. This data may change over time due to ongoing product changes or updated test results or requirements. Ratings for all sizes are specified by NFRC for testing and certification. Ratings may vary depending on the use of tempered glass or different grille options or glass for high altitudes etc.

Nexia is a registered trademark of Ingersoll Rand Inc.

Project Comments:

Page

40f 4



San Clemente Low Profile Venetian Bronze Single Cylinder Entry Door Handleset w/ Halifax Door Lever ft SmartKey Security

429

by Kwikset >

																		-												_
Produc	ct Over	view			Sp	ecif	icat	tio	ns			Q	ues	tion	s & /	Ans	wer	s		Activité Maria	Cu	sto	mei	r R	evie	ews				1
Deadbolt Ty													Si	ngle	Cyli	nde	er D	ead	bolt	ţ										
Door Handir	ng												Ur	nive	rsal															
Door Lock S	Style												Ru	ustic	;															
Door Locks	& Knot	os Pr	roduc	ct Ty	'npe								Ke	eyec	Har	ndle	sets	5												
Electronic/N	lechani	ical											Mechanical													×	2			
Features	eatures							-	Easy Installation													UR Feedback	22222							
Finish	Finish								Venetian Bronze															3						
Handleset Product Type							2 Piece Front & Back																							
Hardware Finish Family							Bronze																							
Included			RAC ⁻ PER					LU	DE	Т	WC	2	Hardware, Installation Instructions																	
Interior/Exte													Interior/Exterior																	
Keying Type)											Keyed Different																		
Keyway												KW1																		
Knob/lever s	strike											Round corner																		
Lever style													St	raig	ht															
Lock Type													Ke	eyec	1															
Lock Type													Ke	eyec	l Ent	ry														
Material													M	etal																
Minimum do	or thic	knes	ss (in.	.)									1.1	75																
Product Wei	ght (lb.	.)										6.55																		
Returnable	leturnable						90-Day																							
O 1 /AN	010														^	н. н	/ D .	- 11												
												5										10000								
								_										-												
												43																		



Internet #311228772 Model #91311P HFL11P

UPGRADE OPTION #1















84

Hover Image to Zoom

431

SmartCode 913 Contemporary Venetian Bronze Single Cylinder Electronic Deadbolt with Halifax Hall/Closet Lever

by Kwikset > (Brand Rating: 4.4/5) ()

 \star \star \star \star \star \star (7) \checkmark Write a Review Questions & Answers (9)

Product Overview Specifications	Questions & Answers Customer Reviews											
Froduct Overview Specifications												
Interior/Exterior	Interior/Exterior											
Keyway	KW1											
Lock Type	Keyed,Keypad,Push Button											
Lock Type	Single Cylinder Deadbolt											
Material	Metal											
Number of Batteries Required	4											
Power Source	Self Powered											
Product Weight (lb.)	3.3											
Returnable	90-Day											
Security/ANSI Grade	ANSI Grade 2 (Better)											
Tools/Hardware Collections	Kwikset SmartCode											
Total Number of Keys Included	2											
Wired or Wireless	No electrical connectivity											

Warranty / Certifications

Certifications and Listings

ANSI Certified

Manufacturer Warranty

Lifetime mechanical and finish warranty, 1 year electronics warranty



Internet #305360435 Model #916TRLZW50011PR Store SKU #1002804058

UPGRADE OPTION #2

Feedback

204



















Hover Image to Zoom

433

Z-Wave SmartCode 916 Touchscreen Venetian Bronze Single Cylinder Electronic Deadbolt Featuring SmartKey Security

by Kwikset > Shop the Collection >

Key Features



Specifications

Dimensions

Faceplate depth (in.)	1.19
Faceplate height (in.)	5.63
Faceplate width (in.)	2.81
Projection (in.)	1.19
Required door thickness (in.)	1 3/8 to 2
Strike plate height (in.)	2.75
Strike plate width (in.)	1.125

Details

Battery Size	AA Battery								
Commercial/Residential	Residential								
Deadbolt Type	Single Cylinder Deadbolt								
Door Handing	Universal								
Door Lock Style	Classic								
Door Locks & Knobs Product Type	Deadbolts								
Electronic/Mechanical	Electronic								
Features	Adjustable Backset, Automatic Relocking, Easy Installation, Fail-Safe, Kwikset SmartKey, Rekeyable								
Finish	Venetian Bronze								
Hardware Finish Family	Bronze								
Hardware Included	Lock Only								
Holding force (lb.)	0 O								
	434								

ng SmartThings Hub,Staples eraEdge Hub,VeraSecure k Hub
vare, Installation Instructions
Wave
olt
ote Access
ridge/Gateway
3

Warranty / Certifications

Ce	ər	tifi	ICE	ati	0	ns	s i	ar	nd	L	.is	tir	ng	s													A	١N	ISI	I C)e	rti	fie	d,	U	L	Li	ste	əd													Γ	ack	1	
Ma	ar	าน'	fac	ct	u	re	er '	W	lai	rra	an	ty														121		.ife	eti	m	е	M	ec	ha	an	ic	al	-Fi	ini	sł	١,	1`	Ye	ar	۰E	le	ctı	ror	nic	s			eedb		
	T		T	1	-		T			1		1		1	1	T	1	1	T	T	T	1	Ē	Ĩ		435																										1	Ĩ		
	T																	-	T	T																							Proved a												



Kwikset 916CNTZW500-11P SmartCode 916CNT | Build.com



Q

Call

What are you shopping for?

Shipping to: Bozeman, MT -

COVID-19 Update: Service & Delivery Info



Kwikset

SmartCode 916CNT Touchscreen Electronic Deadbolt with Smartkey and Z-Wave Technology

Model: 916CNTZW500-11P

PROVIDE THIS RECTANGULAR TRIM FOR DEAD BOLT UPGRADE OPTION #2.

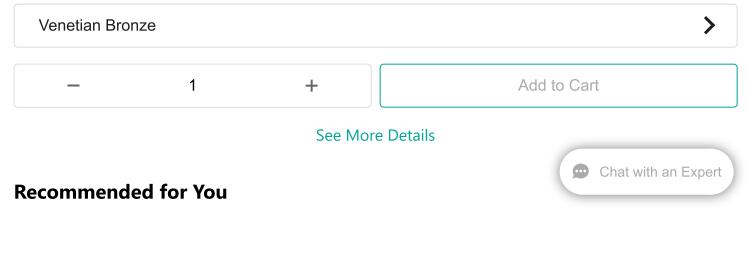
\$226.76

Free Shipping!

Delivered to 59715 by Friday, January 29th - Shipping to 59715

(8)

Finish: Venetian Bronze - 13 In Stock



1/4

Andersen Windows



Exterior Options to Match Any Style.

A-Series products are available in a wide range of exterior colors and exterior trim choices. Even in harsh conditions, they're virtually maintenance-free, hold their original vibrant colors, never need painting and won't flake, rot, blister, peel, pit or corrode.

EXTERIOR TRIM

- Trim is available to complement a wide range of architectural styles
- Trim can be ordered as pre-assembled surrounds, in precut kits or as individual components
- Innovative trim attachment flange on A-Series windows allows pre-assembled exterior trim surrounds to be installed in seconds
- Installed independent of the window or door's water management system

See trim installation video at andersenwindows.com/exteriortrim.

EXTERIOR COLORS



Select any combination of colors shown here for your exterior frame, sash and trim.

^{*} Visit andersenwindows.com/warranty for details.

Printing limitations prevent exact duplication of colors and finishes. See your Andersen supplier for actual color and finish samples.



Interior Options to Match Any Vision.

With six natural wood species, a variety of painted interiors and six, rich factory-finished stain options, the A-Series products provide the flexibility you need to create interiors that please both you and your customers.

MATCH OWNER

INTERIOR WOOD SPECIES OPTIONS



 STAINED INTERIOR OPTIONS

 Shown on pine. Available on pine, maple and oak only.

 Image: Clear Coat
 Image: Clear Coat

 Honey
 Cinnamon

 Image: Clear Coat
 Image: Clear Coat

 Image: Clear Coat<



Additional colors to match all $\ensuremath{\mathsf{II}}$ exterior colors are also available, contact your Andersen supplier.

* Actual wood is Sapele, a non-endangered species of mahogany grown in Africa,

with color and characteristics similar to American mahoganies.

Naturally occurring variations in grain, color and texture of wood make each window one of a kind.

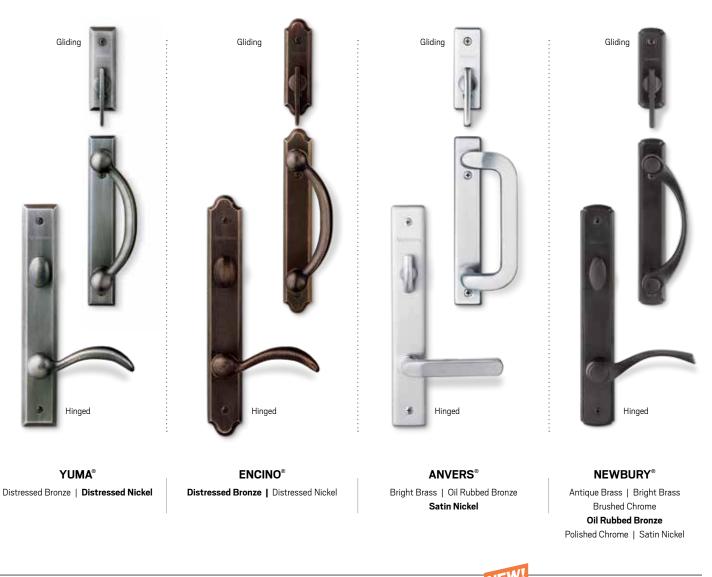
We cannot guarantee consistency in wood grain and/or color within a particular species, product or project.

Printing limitations prevent exact duplication of colors and finishes. See your Andersen supplier for 439 loolor and finish samples.



Bold name denotes finish shown.

Hardware for Every Door. Styles for Every Person.

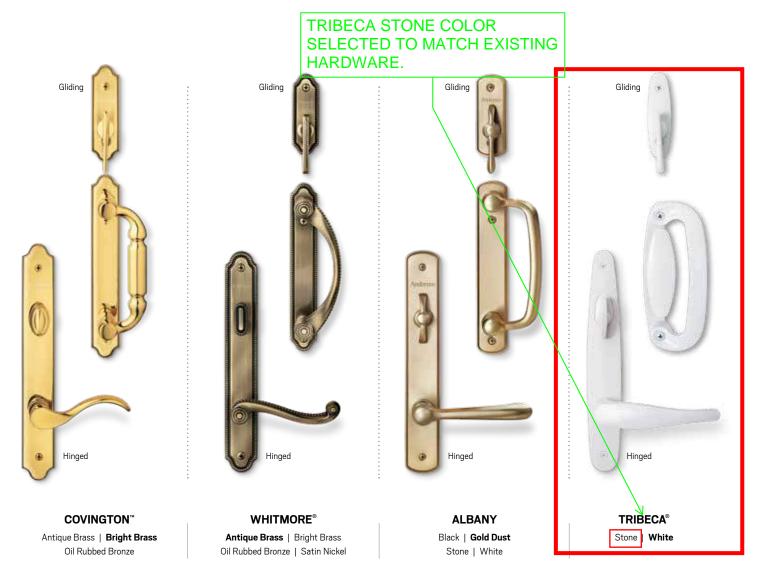




Satin Stainless Steel

Hardware sold separately. "FSB" is a registered trademark of Franz Schneider Brakel GmbH & Co.

A-Series patio door hardware is available in a variety of different designs to match virtually any style. Yuma,[®] Encino,[®] Anvers,[®] Newbury,[®] Covington[™] and Whitmore[®] hardware options each feature solid, drop-forged brass for added strength, while Albany and Tribeca[®] hardware options are made of diecast zinc with durable powder-coated finishes. Additional hardware options such as exterior keyed locks, matching hinge finishes and more are also available. See pages 16-17 for information on the Yale[®] Assure Lock[®] and other Smart Home Solutions.





DOOR HARDWARE FINISH OPTIONS



Matching hinges available in most hardware mounts for most in patio doors. Distressed bronze and oil rubbed bronze are "living" finishes that will change with time and use. Bright brass and satin nickel finishes on patio door hardware feature a 10-year limited warranty. Printing limitations prevent exact finish replication. See your Andersen supplier for actual finish samples.



Best-in-Class Glass.



Choose from a variety of high-performance glass options, including new triple-pane glass and HeatLock[®] technology for even greater energy efficiency.

TRIPLE-PANE GLASS

Three panes of glass combine with either argon gas blend or air and Low-E coatings to provide enhanced energy performance. Adding triple-pane glass to one of our windows or doors results in a lower U-Factor value than using regular dual-pane glass.

HEATLOCK® TECHNOLOGY

Our HeatLock coating can increase the energy efficiency of any A-Series window or door with Low-E4[®] or SmartSun[™] glass. Applied to the room-side glass surface, it reflects heat back into the home for improved performance.

Additional glass options are also available. Visit **andersenwindows.com** or see your Andersen supplier. See your local supplier for actual glass samples.







LOW-E4[®] SMARTSUN[™] GLASS

It helps shield your home from the sun's heat, filtering out 95% of harmful UV rays while letting sunlight shine through, plus it provides all the benefits of Low-E4 glass.

LOW-E4 GLASS

Outstanding thermal performance for climates where both heating and cooling costs are a concern. It comes standard on all A-Series products and is up to 57% more energy efficient than ordinary dual-pane glass.^{*}

LOW-E4 SUN GLASS

Outstanding thermal performance in southern climates where less solar heat gain is desired. It's tinted for maximum protection from the effects of intense sunlight while providing all the benefits of Low-E4 glass.

PERFORMANCE COMPARISON OF ANDERSEN® A-SERIES GLASS OPTIONS

	ENER	RGY	LIC	GHT
GLASS	U-FACTOR How well a product prevents heat from escaping.	SOLAR HEAT GAIN COEFFICIENT How well a product blocks heat caused by sunlight.	VISIBLE LIGHT TRANSMITTANCE How much visible light comes through a product.	UV PROTECTION How well a product blocks ultraviolet rays.
SmartSun			$\bullet \bullet \bullet \circ \circ$	
SmartSun with HeatLock* Coating		• • • •		
Low-E4				
Low-E4 with HeatLock* Coating		$\bullet \bullet \bullet \bigcirc$	$\bullet \bullet \bullet \circ$	$\bullet \bullet \bullet \bigcirc$
Sun		• • • •	• • • •	
PassiveSun®				$\bullet \bullet \bullet \bigcirc$
Triple-Pane with Low-E coatings on two surfaces	•••			• • • •
Clear Dual-Pane		0000		0000

Center of glass performance only. Ratings based on glass options as of January 2018. Visit and ersenwindows.com/energystar for ENERGY STAR® map and NFRC total unit performance data.

TIME-SAVING TRANSLUCENT FILM

We help protect all of our products during delivery and construction with a translucent film on the glass. It also minimizes time spent masking on the job site, then peels away for a virtually spotless window. For details, contact your Andersen supplier.

PATTERNED GLASS

Patterned glass lets in light while obscuring vision and adds a unique decorative touch to your home.



* Summer values are based on comparison of Andersen A-Series double-hung window SHGC to the SHGC for clear dual-pane glass non-metal frame default values from the 2006, 2009, 2012, 2015 and 2018 International Energy Conservation Code "Glazed Fenestration" Default Tables.

[&]quot;ENERGY STAR" is a registered trademark of the U.S. Environmental Protection Agency.



BHC E-6 Unit 47 (Triple Pane SmartSun)



Best-in-Class Glass.

Choose from a variety of high-performance glass options, including new triple-pane glass and HeatLock® technology for even greater energy efficiency.

TRIPLE-PANE GLASS

Three panes of glass combine with either argon gas blend or air and Low-E coatings to provide enhanced energy performance. Adding triple-pane glass to one of our windows or doors results in a lower U-Factor value than using regular dual-pane glass.

HEATLOCK® TECHNOLOGY

Our HeatLock coating can increase the energy efficiency of any A-Series window or door with Low-E4® or SmartSun[™] glass. Applied to the room-side glass surface, it reflects heat back into the home for improved performance.

Additional glass options are also available. Visit andersenwindows.com or see your Andersen supplier. See your local supplier for actual glass samples.







LOW-E4[®] SMARTSUN[™] GLASS

It helps shield your home from the sun's heat, filtering out 95% of harmful UV rays while letting sunlight shine through, plus it provides all the benefits of Low-E4 glass.

LOW-E4 GLASS

Outstanding thermal performance for climates where both heating and cooling costs are a concern. It comes standard on all A-Series products and is up to 57% more energy efficient than ordinary dual-pane glass.*

LOW-E4 SUN GLASS

Outstanding thermal performance in southern climates where less solar heat gain is desired. It's tinted for maximum protection from the effects of intense sunlight while providing all the benefits of Low-E4 glass.

PERFORMANCE COMPARISON OF ANDERSEN® A-SERIES GLASS OPTIONS

	ENEI	RGY	LIC	GHT
GLASS	U-FACTOR How well a product prevents heat from escaping.	SOLAR HEAT GAIN COEFFICIENT How well a product blocks heat caused by sunlight.	VISIBLE LIGHT TRANSMITTANCE How much visible light comes through a product.	UV PROTECTION How well a product blocks ultraviolet rays.
SmartSun		• • • •		
SmartSun with HeatLock* Coating		• • • •		
Low-E4				
Low-E4 with HeatLock* Coating		$\bullet \bullet \bullet \bigcirc$		
Sun		••••		
Paccivo Sun®				
Triple-Pane with Low-E coatings on two surfaces	• • • •			• • • •
Clear Dual-Pane		0000		$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$

Center of glass performance only. Ratings based on glass options as of January 2018. Visit and ersenwindows.com/energystar for ENERGY STAR® map and NFRC total unit performance data.

PATTERNED GLASS

TIME-SAVING TRANSLUCENT FILM

We help protect all of our products during delivery and construction with a translucent film on the glass. It also minimizes time spent masking on the job site, then peels away for a virtually spotless window. For details, contact your Andersen supplier.

Patterned glass lets in light while obscuring vision and adds a unique decorative touch to your home.

Cascade and Reed patterns can be ordered with either a vertical or horizontal orientation. Cascade Fern Obscure Reed

* Summer values are based on comparison of Andersen A-Series double-hung window SHGC to the SHGC for clear dual-pane glass non-metal frame default values from the 2006, 2009, 2012, 2015 and 2018 International Energy Conservation Code "Glazed Fenestration" Default Tables. 443

"ENERGY STAR" is a registered trademark of the U.S. Environmental Protection Agency.

GLASS OPTIONS

Project Name: BHC E-8 Unit 56 SmartSun Glass

Andersen has the glass you need to get the performance you want. From SmartSun[™] glass with HeatLock[®] coating that is ENERGY STAR® certified in all climate zones* to PassiveSun® glass that helps heat homes in northern areas, there's an option for every climate, project and customer. Check with your supplier for the selections that meet ENERGY STAR requirements in your area.

PERFORMANCE COMPARISON OF ANDERSEN® GLASS OPTIONS

	_		E	ENE	RGY			_	_			LI	GHT			
	U	-FAG	сто	R			R HE	AT CIENT			E LIC	GHT ANCE	UVF	PRO	TEC	τιον
GLASS	How we heat	l a pro from						t blocks Inlight.				le light product.				oduct et rays.
SmartSun	•	•		0	•	•		•	•	•	0	0	•	•	•	•
SmartSun with HeatLock Coating			٠	O	•	•	•	•	•	•	0	0	•	•	•	٠
Low-E4 [®]				0	•			0	•			0	•		•	0
Low-E4 with HeatLock Coating	•			O	•			0	•	•	Ø	0	•		•	0
Sun				0	•			•	•	0	0	0	•			0
PassiveSun			0	0	•	0	0	0	•			0	•			0
PassiveSun with HeatLock Coating				0	•	0	0	0	•		0	0	•			0
Clear Dual-Pane		0	0	0	0	0	0	0	•	•	•	•	0	0	0	0



TIME-SAVING FILM

We help protect our products during delivery and construction with a translucent film on the glass. It also minimizes time spent masking on the jobsite, then peels away for a virtually spotless window.



Visit andersenwindows.com/glass for more details on our glass options.

Center of glass performance only. Ratings based on glass options as of January 2019. Visit and ersenwindows.com for ENERGY STAR map and NFRC total unit performance data

ADDITIONAL GLASS OPTIONS

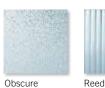
TEMPERED safety glass, standard on patio doors

LAMINATED glass for added strength, enhanced security and sound control

PATTERNED glass lets in light while obscuring vision and adds a unique, decorative touch. Cascade and Reed patterns can be ordered with either a vertical or horizontal orientation.







Obscure

ART GLASS

With art glass from Andersen, you can add interest, create focal points and make your work stand out. These finely crafted inserts are available in two distinctly different series - Classic and Artisan — to complement any home's architecture. Visit andersenwindows.com/artglass for more information.



STORMWATCH® PROTECTION

Most Andersen 400 Series windows are available with impact-resistant glass and structural upgrades to meet the tough building codes of hurricane-prone coastal areas. See your local code official for specific requirements.



Our Insect Screens Come in Different Types. Just Like Insects Do.

Optional insect screens are available for all A-Series products. Patio doors feature Andersen[®] fiberglass insect screens. For windows, choose aluminum insect screens or TruScene[®] insect screens for a more unobstructed view.

TRUSCENE® INSECT SCREENS

Made with a micro-fine stainless steel mesh, exclusive Andersen TruScene insect screens provide 50% greater clarity than our conventional insect screens. They let more fresh air and sunlight in, while doing a better job of keeping out small insects. Exterior TruScene insect screen frames are available in all standard colors. Interior insect screens are available with prefinished wood veneer frames as well as all interior painted options.

TruScene insect screens are not available on patio doors. All comparisons are made to Andersen aluminum-mesh insect screens.

PREFINISHED WOOD FRAME OPTIONS

Casement and awning frames with TruScene insect screens are available in six wood veneers and six stain colors to match the interior finish. Pine frame with clear finish is shown.



FRAME OPTIONS FOR ALUMINUM INSECT SCREENS

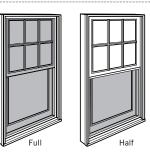
For casement and awning windows, aluminum insect screen frames are available in Stone, White or Gold Dust, shown below from the interior, as well as all interior painted options — Sandtone, Canvas, Dark Bronze and Black. Insect screen frames for all other windows are installed on the exterior of the window and match the unit's exterior color.





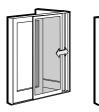
WINDOW CONFIGURATIONS

Full insect screens are available for all operating A-Series windows. Our double-hung windows also have the option of insect screens that cover only the lower sash.

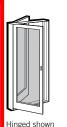


PATIO DOOR INSECT SCREEN CONFIGURATIONS

A-Series patio door insect screens are available in several styles, including a premium top-hung gliding design for gliding and hinged doors.



Premium top-hung gliding design allows for smooth and effortless operation without the interference of dust and debris. Shown on an inswing door and also available for two- and four-panel gliding doors. Conventional gliding shown on gliding door, has bottom rollers with self-contained leveling adjusters. Also available for four-panel gliding and two-panel inswing doors.



on inswing door.

Also available

for two-panel

inswing doors.



Retractable shown on outswing door neatly retracts into small canister. Also available for single-panel door. Retractable also available for gliding doors.

FRENCHWOOD® PATIO DOORS

FEATURES FRENCHWOOD® GLIDING PATIO DOORS

Гате

Frame constructed with a wood core and a fiberglass exterior. This construction produces a rigid frame and a low-maintenance, durable exterior.

 Wood members are treated with a water-repellent preservative for long-lasting* protection and performance.

The interior wood jamb has an extension jamb kerf, making it easy to add interior extension jambs matching wall thicknesses.

● The weather seal is made from a flexible polyethylene leaf with a urethane foam core on the sill and stationary side jambs, and a polypropylene fin weatherstrip on the head and operating side jambs, creating a positive seal between the frame and panels. This system provides a long-lasting," energy-efficient barrier against wind, water and dust.

Sill

• One-piece fiberglass design provides superior water management. The nonconductive fiberglass construction enhances energy performance, and its superior strength eliminates the need for a sill support.

Slip- and wear-resistant poly bead finish available in either neutral gray or dark bronze color.

The roller track has a stainless steel cap that resists denting for smooth, reliable operation.

A factory-applied drop-nose channel attachment is optional for enhanced water performance. See page 133 for details.



Panel

G Panel stiles and rails are constructed of an engineered LVL core. This LVL core provides strength and helps prevent warping for consistent smooth operation.

Interior panel surfaces are constructed from premium wood veneer available in pine, maple, oak, cherry, mahogany^{**} and vertical grain douglas fir. All prefinished interior options use water-based paints and stains.

G The exterior of the wood panel is protected with a Flexacron[®] paint system; this stabilized polyester paint is electrostatically applied to penetrate all exterior surfaces for maximum protection and a lustrous. low-maintenance finish.

Dual corrosion-resistant^{*} ball-bearing rollers on door panels provide smooth gliding operation with self-contained leveling adjusters.

Dual ball-bearing rollers have deep grooves to increase engagement with the roller track and resist lateral movement.

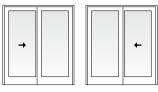
A parting stop bracket adds strength to the door by reinforcing the top of the panels.

Flexible Seal

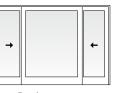


A full-length combination weatherstrip/ interlock system provides a flexible seal at the meeting stile. Shown on a 400 Series Frenchwood gliding patio door.

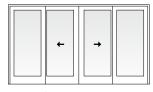
Multiple Panel Configurations



Two-Panel



Three-Panel



Four-Panel

Glass

See page 125 for details.

Hardware Multi-Point Locking System



The multi-point locking system features a unique reachout design that pulls the door panel tightly closed for a weathertight seal and enhanced security.

"Flexacron" is a registered trademark of PPG Industries, Inc.

^{*} Visit andersenwindows.com/warranty for details.

^{**} Actual wood is Sapele, a non-endangered species of mahogany grown in Africa, with color and characteristics similar to American mahoganies.



FEATURES

FRENCHWOOD® HINGED INSWING PATIO DOORS

Frame

Frame constructed with a wood core and a fiberglass exterior. This construction produces a rigid frame and a low-maintenance, durable exterior.

 Wood members are treated with a water-repellent preservative for long-lasting* protection and performance.

The interior wood jamb has an extension jamb kerf, making it easy to add interior extension jambs matching wall thicknesses.

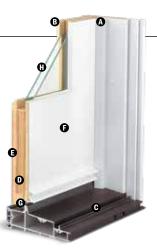
Frenchwood hinged inswing patio doors are available in 4 % (116) and 6 % (167) jamb depths.

Sill

• One-piece fiberglass design provides superior water management. The nonconductive fiberglass construction enhances energy performance, and its superior strength eliminates the need for a sill support.

Slip- and wear-resistant poly bead finish available in either neutral gray or dark bronze color.

A factory-applied drop-nose channel attachment is optional for enhanced water performance. See below for details.



Panel

• Panel stiles and rails are constructed of an engineered LVL core. This LVL core provides strength and helps prevent warping for consistent smooth operation.

G Interior panel surfaces are constructed from premium wood veneer available in pine, maple, oak, cherry, mahogany^{**} and vertical grain douglas fir. All prefinished interior options use water-based paints and stains.

 The exterior of the wood panel is protected with a Flexacron[®] paint system; this stabilized polyester paint is electrostatically applied to penetrate all exterior surfaces for maximum protection and a lustrous, low-maintenance finish. G Factory-applied, one-piece (welded corners), compression-type weatherstrip made from a durable thermoplastic material is attached directly to the panel, not the frame, creating a continuous plane around the panel to provide maximum effectiveness against air and water infiltration. This system provides a long-lasting, energy-efficient barrier against wind, water and dust.

Two-panel doors are available with one or two active panels. For doors with one active panel, hinges can be located along either the jamb or astragal.

Adjustable Hinges

Adjustable hinges have ball-bearing pivots for smooth, frictionless movement and feature easy horizontal and vertical adjustments, plus a quick-release feature for easy panel removal. This release

feature is ideal for transporting large units up stairs or to other hard-to-reach areas. Gold dust finish is

.

standard on wood interior doors. For units with a prefinished White interior, white finish hinges are standard. Also available in finishes that coordinate with most hardware.

Glass

See below for details.

Hardware Multi-Point Locking System



The Frenchwood hinged patio door has a multi-point locking system with a hook bolt above and below the center deadbolt. This system provides added weathertightness and enhanced security.

Optional Corrosion-Resistant Hardware

Optional corrosion-resistant locking mechanism is available and recommended for applications within two miles of the coast and other harsh environments."

COMMON FEATURES

Glass

Panels are silicone bed glazed and finished with an interior wood glass stop.

High-Performance dual-pane glass options include:

- Low-E4[®] tempered glass
- Low-E4 HeatLock[®] tempered glass
- Low-E4 Sun tempered glass
- Low-E4 SmartSun[™] tempered glass
- Low-E4 SmartSun HeatLock
 tempered glass

For even greater energy performance, triple-pane glass is available in these glass options:

- Low-E4 tempered glass
- Low-E4 Enhanced tempered glass
- Low-E4 Enhanced HeatLock tempered glass
- Low-E4 SmartSun tempered glass
- Low-E4 SmartSun Enhanced tempered glass
- Low-E4 SmartSun Enhanced HeatLock tempered glass

Additional glass options are available. Contact your Andersen supplier.

A removable translucent film helps shield the glass from damage during delivery and construction and also simplifies finishing at the jobsite.

Patterned Glass

Patterned glass options are available. See pages 18 for more details.

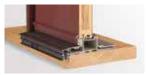
Taller Heights

A-Series Frenchwood patio doors and patio door sidelights are now available in 10' (3028) heights.

Stormwatch

Frenchwood patio doors are available with Stormwatch[®] protection. For a copy of the *Andersen[®] Coastal Product Guide*, go to **andersenwindows.com/coastal** or contact your Andersen supplier.

Performance Grade (PG) Upgrade Optional Drop-Nose Channel



A factory-applied, patented drop-nose channel is available when higher product performance is required. Dropnose channel provides enhanced water performance without increasing interior sill height. Shown on a Frenchwood hinged inswing patio door. Details shown for gliding door on page 133 and hinged inswing door on page 139.

INSTALLATION ACCESSORIES

Listed are optional accessories available for the installation of Andersen® windows and doors. You'll also find key considerations regarding the use and installation of every Andersen product. Keep the instruction guidelines and safety information in mind when considering the installation and use of any Andersen product. Should you have any questions, contact your local Andersen supplier. Thank you for considering and using Andersen products.

COIL STOCK

Andersen aluminum coil stock can be ordered to match any of our 11 trim colors. Made from .018-thick aluminum, coil stock is available in 24" (610) x 50' (15240) rolls. Color-matched 1 1/4" (32) stainless steel trim nails are also available and can be ordered in 1 lb or .454 kg boxes.



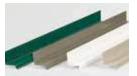
FIBREX [®]	TRIM	BOARD
---------------------	------	-------



Andersen offers a 3 1/2" (89) wide by 3/4" (19) thick cellular Fibrex trim board in 10' (3048) lengths. Available in the same 11 colors as the exterior trim system, this solid trim board can be cut or ripped to size and can be fastened using nails or screws.

	COLOR	LENGTH	DEPTH	WIDTH
Fibrex [®] Trim Board	11 colors	120" (3048)	3/4" (19)	31/2" (89)
Vinul Leminsted Desud	W,S,T	96" (2438)	¹ /2" (13)	24" (610)
Vinyl Laminated Board	W	96" (2438) & 120 (3048)	¹ /2" (13)	48" (1219)
Rigid Vinyl "H" Channel	W	84" (2134) & 150" (3810)	³ /4" (19)	1" (25)
Rigiu Viliyi H Cilailliei	S,T	84" (2134) & 150" (3810)	³ /4" (19)	³ /4" (19)
Rigid Vinyl "h" Channel	W,S,T	150" (3810)	¹ /2" (13)	1" (25)
Rigid Vinyl "J" Channel	W,S,T	150" (3810)	¹ /2" (13)	3⁄4" (19)

CONTINUOUS DRIP CAP



Included on A-Series with vertical (ribbon) joins. Heavy 24-gauge corrosion-resistant aluminum construction. Available in 6' (1829), 10' (3048) and 12'-7 1/2" (3848) lengths and in any of the 11 trim colors.

VINYL CHANNELS AND LAMINATED BOARD



Rigid vinyl "J," "h" and "H" channel and vinyl laminated board.

EXTENSION JAMBS



Available for most Andersen products. See individual sections for details.

COLOR-MATCHED SEALANT

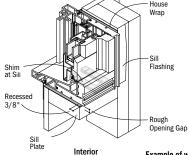
Color-matched sealant is available in Andersen exterior colors. This high-quality sealant can be used during the installation of all Andersen products.

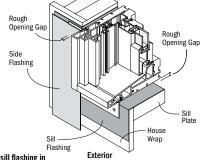
INSTALLATION INFORMATION

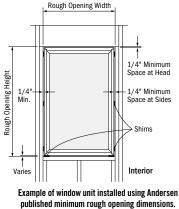
ROUGH OPENINGS

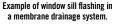
The purpose of a rough opening is to allow for proper spacing between the window or patio door unit and the building structure. The space is required for locating, leveling and squaring the unit during installation and to provide an area for insulation. A rough opening that is incorrectly sized may affect unit operation and may not allow for adequate fastening of the unit to the building structure. Andersen rough opening dimensions are provided as a guideline to help determine the minimum amount of space needed between the window or patio door and the building structure. See appropriate product sections for rough opening guidelines for each product.

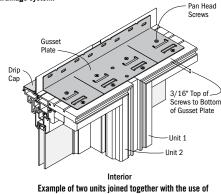
Keep in mind that rough opening dimensions may need to be altered from published guidelines, depending on installation methods, joining methods, replacement methods, etc. For example, flashing systems can reduce the amount of available rough opening space and should be factored in when calculating rough opening dimensions. The use of support or joining materials will encroach on the rough opening and may require additional rough opening space between the unit and the building structure, depending on the thickness of the flashing system and joining materials used. To facilitate drainage, the sill plate should never slope toward the interior. For challenging environments and other information, refer to EEBA's (Energy and Environmental Building Association) Water Management Guide (www.eeba.org).











gusset plates and pan head screws that will require additional rough opening space.

IMPORTANCE OF PROPER INSTALLATION

Proper installation and maintenance of Andersen products is essential to attain optimum performance and operation. Installation instructions that provide guidelines for proper installation are typically provided with Andersen products. They are also available by visiting andersenwindows.com. Remember that every installation is different, and Andersen strongly recommends consultation with the local supplier or an experienced contractor, architect or structural engineer prior to the installation of any Andersen product. The method of attachment for Andersen products, fastener selection and code compliance is the responsibility of the architect, building owner, contractor, installer and/or consumer. For more complete installation details, visit andersenwindows.com or see your Andersen supplier.



Warranty

Andersen M. Limited A-series Warranty Warranty

Para ver la versión, en español, de esta Garantía limitada y Proceso de resolución de controversias, visite andersenwindows.com

LIMITED WARRANTY AND DISPUTE RESOLUTION PROCESS

IMPORTANT: Please carefully read the Dispute Resolution Process that appears in this document after the Limited Warranty. The Dispute Resolution Process includes class action and jury trial waivers that affect your legal rights. To opt out of these waivers, you must visit our website at www.andersenwindows.com/optout and complete the opt-out form within one year from the date of purchase of your Andersen® products from a dealer or retailer. The opt-out only applies to the terms of the Dispute Resolution Process.

A-Series Windows & Doors Limited Warranty

Transferable Limited Warranty on Glass

The glass in Andersen[®] factory glazed A-Series window and door units (including dual-pane glass, High-Performance Low-E4[®] Sun glass, High-Performance Low-E4[®] Sun glass, High-Performance Low-E4[®] PassiveSun glass, Heatlock[™] glass, Low-E glass, patterned glass (including obscure, pebble, fern, reed and cascade designs), FinelightTM grilles, divided light grilles and tempered versions of these glass options) is warranted to be free from defects in manufacturing, materials and workmanship for twenty (20) years from the date of purchase from the retailer/dealer. It is also warranted not to develop, under normal conditions, any material obstruction of vision resulting from manufacturing defects or as a result of premature failure of the glass or organic seal for twenty (20) years from the date of purchase from the retailer/dealer. Patterned glass (including obscure, pebble, fern, reed and cascade designs) is warranted not to develop, under normal conditions, any material change in appearance resulting from manufacturing defects or as a result of seal for twenty (20) years from the date of purchase form the retailer/dealer. This limited warranty on glass does not apply to special order glazings, Andersen[®] art glass, insulated art glass, impactresistant glass or glass that is not factory installed by Andersen.

In the event a glass failure occurs as a result of a defect in manufacturing, materials or workmanship within the limited warranty period, Andersen, at its option, will: (1) provide the appropriate replacement glass product to the Andersen retailer/dealer you specify — labor is not included; or (2) provide a factory-authorized repair to the existing glass at no cost to you; or (3) refund the original purchase price. Such replacement parts or repairs are warranted for the remainder of the original limited warranty period.

Transferable Limited Warranty on Components Other Than Glass

Non-glass portions of Andersen[®] A-Series windows and doors (including non-electric operators, locks, lifts, balance systems, hinges, handles, insect screens, weatherstripping, exterior trim, sash and frame members) are warranted to be free from defects in manufacturing, materials and workmanship for a period of ten (10) years from the date of purchase from the retailer/dealer. This limited warranty does not apply to Andersen electric window operators, retractable insect screens or finishes on bright brass and sain nickel door hardware.

In the event a component other than glass fails as a result of a defect in manufacturing, materials or workmanship within the limited warranty period, Andersen, at its option, will: (1) provide replacement parts to the Andersen retailer/dealer you specify — labor is not included; or (2) provide a factory-authorized repair to the existing component at no cost to you; or (3) refund the original purchase price. Such replacement parts or repairs are warranted for the remainder of the original limited warranty period.

Transferable Limited Warranty on Corrosion-Resistant Hardware and Outswing Patio Door Hinges

Corrosion-resistant hardware (includes casement and awning operator and sash attachment bracket, hinges, lock mechanism for inswing and outswing patio doors and outswing patio door corrosion-resistant hinges) is warranted to be free from mechanical failure due to corrosion caused by an electrolytic chemical reaction involving atmospheric salts, such as what may occur in coastal applications for a period of ten (10) years from the date of purchase from the retailer/ dealer. What is not covered by this corrosion-resistant hardware warranty: any and all aesthetic discoloration or pitting that may occur due to environmental conditions. Minimum maintenance such as cleaning with a mild detergent on a regular basis may be necessary to maintain the original hardware appearance.

The finish on corrosion-resistant outswing patio door hinges is warranted to be free from defects in manufacturing, materials and workmanship and warranted not to tarnish, peel, pit, flake, discolor or corrode for a period of ten (10) years from the date of purchase from the retailer/dealer.

In the event there is a mechanical failure of the corrosion-resistant hardware, lock mechanism for inswing or outswing patio doors or the exterior hinges of an outswing hinged patio door or there is a defect in the finish on corrosion-resistant outswing patio door hinges within the limited warranty period, Andersen, at its option, will: (1) provide replacement parts to the Andersen retailer/dealer you specify – installation labor is not included; or (2) refund the original purchase price. Such replacement parts are warranted for the remainder of the original limited warranty period.

Transferable Limited Warranty on Exterior Coatings

The coatings on exterior components (frame, sash, panel, window sills, patio door sills, grilles and exterior trim) on casement, awning, double-hung, picture, and transom windows, patio doors (inswing outswing, gliding) and sidelights are warranted not to develop corrosion caused by an electrolytic chemical reaction involving atmospheric salts, such as what may occur in coastal applications, for as long as the product is installed in its original structure.

What is not covered by this exterior coatings warranty: A-Series specialty windows and complementary patio doors, accessories and hardware such as insect screens, coil stock, hinges, handle trim sets and lock components.

In the event there is a defect covered by this limited warranty for exterior coatings within the limited warranty period, Andersen, at its option will: 1) refinish the product – labor is included (the finish will be applied with standard commercial refinishing techniques and may not be the same finish as originally applied to the product), 2) repair the product, 3) provide replacement part(s) or product(s) to the Andersen retailer/dealer you specify – labor is not included or 4) refund the original purchase price. Such replacement parts or repairs are warranted for the remainder of the original limited warranty period.

Transferable Limited Warranty on Exterior Color Finish

The color finish on exterior components (frame, sash, panel, window sills and grilles) on Andersen® A-Series casement, awning, double-hung, picture, transom windows, specialty windows, complementary windows, patio doors (inswing, outswing, gliding and sidelights) and complementary patio doors is warranted not to blister, crack, peel or lose adhesion for a period of twenty (20) years from the date of purchase from the retailer/dealer.

The color finish on exterior components (frame, sash, panel, window sills and grilles) on Andersen[®] A-Series casement, awning, double-hung, picture, transom windows, specialty windows, complementary windows, patio doors (inswing, outswing, gliding and sidelights) and complementary patio doors is warranted to be free from manufacturing defects resulting in color fade greater than 5 delta E* (when measured in accordance with ASTM D2244) for a period of ten (10) years from the date of purchase from the retailer/dealer.

What is not covered by this exterior color finish warranty: accessories and hardware, including insect screen frames, patio door sills, hinges, handles, trim sets and lock components, exterior trim profiles, exterior aluminum coil stock and complementary patio door insert panels.

In the event there is a defect covered by this limited warranty for exterior color finish within the limited warranty period, Andersen, at its option, will: 1) refinish the product - labor is included (the finish will be applied with standard commercial refinishing techniques and may not be the same finish as originally applied to the product), 2) repair the product, 3) provide replacement part(s) or product(s) to the Andersen retailer/dealer you specify - labor is not included or 4) refund the original purchase price. Such replacement parts or repairs are warranted for the remainder of the original limited warranty period.

*Technical measurement of color fade

Transferable Limited Warranty for A-Series Products with Stormwatch® Protection (Glazed with Impact-Resistant Glass)

Andersen® A-Series window and door units glazed with impact-resistant glass are warranted to be free from defects in manufacturing, materials and workmanship for ten (10) years from the date of purchase from the retailer/dealer. The glass in A-Series windows and doors with impact-resistant glass is also warranted not to develop, under normal conditions, any material obstruction of vision resulting from manufacturing defects or as a result of premature failure of the glass or organic seal for ten (10) years from the date of purchase from the retailer/dealer. This limited warranty does not apply to special glazings, Andersen art glass, insulated art glass, glass that is not factory installed by Andersen, Andersen electric window operators, retractable insect screens and the finish on bright brass or satin nickel door hardware.

In the event a component fails as a result of a defect in manufacturing, materials or workmanship within the limited warranty period, Andersen, at its option, will: (1) provide replacement parts to the Andersen retailer/dealer you specify — installation labor is not included; or (2) provide a factory authorized repair to the existing component at no cost to you; or (3) refund the original purchase price. Such replacement parts or repairs are warranted for the remainder of the original limited warranty period.

No Other Warranties or Representations

THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, Including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. All warranties are limited to the applicable statute of limitations but in no case will extend beyond the limited warranty periods specified above. Andersen excludes and will not be liable for any incidental or consequential damages, whether arising out of contract, tort or otherwise. The product provided by this limited warranty is the exclusive remedy with respect to

450ANY AND ALL LOSS OR DAMAGE.



Applicable Law

This Limited Warranty is only applicable in the U.S.A. (i.e. the fifty states and the District of Columbia). This Limited Warranty gives you specific legal rights, and you may also have other rights which may vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages or limitation of the duration of an implied warranty, so the above limitations or exclusions may not apply to you. If any specific term of this Limited Warranty is prohibited by any applicable law, it shall be null and void, but the remainder of this Limited Warranty shall remain in full force and effect.

What is NOT covered by this Limited Warranty:

In addition to any other limitations or exclusions in this Limited Warranty, Andersen shall have no obligation for product failure, damage or costs due to or related to the following:

- · Adjustments or corrections due to improper installation.
- Product modifications or glass shading devices (e.g., glass tinting, security systems, improper painting or staining, insulated coverings, etc.).
- · Units improperly assembled or improperly mulled by others.
- Failure due to the application of non-Andersen hardware (e.g., locksets, trim sets, hinges, panic hardware, closers, etc.).
- Failure to properly install Andersen hardware and/or exterior trim.
- Adjustments or corrections due to improper installation.
- Improper installation or use, including use of a non-commercial door as a main entrance or exit door for a building other than a single-family residential unit or re-installing an Andersen window or door after it has been removed from a building and re-sold and/or re-installed in a different building.
- Installing a storm door over or with a patio door.
- Exposure to conditions beyond published performance specifications.
- Water infiltration other than as a result of a defect in manufacturing, materials or workmanship.
 Condensation
- Condensation.
- Improper maintenance, such as use of brick wash, razor blades, sealants, sanding or improper washing.
- Failing to properly seal and maintain the exposed wood portions of a product. This includes, but is not limited to, the exposed wood on all sides of a door panel (e.g., exterior, interior, top, bottom, and both sides), a door frame and wood grilles.
- Chemicals or airborne pollutants, such as salt or acid rain.
- Delivery by others.
- Accidents.
- Acts of God.
- Normal wear and tear.

Additional items excluded from this limited warranty:

- Labor to replace sash or door panels, glass or other components.
- · Labor and other costs related to the removal and disposal of defective product.
- Labor and materials to paint or stain any repaired or replaced product, component, trim or other carpentry work that may be required.
- Products not manufactured by Andersen.
- The performance of the low-maintenance exterior glass coating on products with High-Performance Low-E4[®] glass. Performance will vary depending on environmental conditions.
- Slight glass curvature, minor scratches or other imperfections in the glass that do not impair structural integrity or significantly obscure normal vision.
- Rattling of grille bars within an air space.
- Insects passing through or around the insect screen.
- Tarnish or corrosion to hardware finishes, except components warranted under the Transferable Limited Warranty on Corrosion-Resistant Hardware and Outswing Patio Door Hinges.
- Special glazings. Contact us concerning the limited warranty on special glazings.
- Electric window operators, retractable insect screens and bright brass and satin nickel finishes
 on door hardware. Contact us or refer to the specific limited warranties for these products.
- Andersen[®] 400 Series and 200 Series windows and doors, 100 Series windows and doors, Andersen[®] 400 Series windows with Stormwatch[®] protection and impact-resistant glass, storm doors, Renewal by Andersen[®] windows, E-Series/Eagle[®] windows and doors, Silver Line[®] windows and doors, American Craftsman[®] windows and doors and Weiland[®] windows and doors have their own limited warranties and are not covered by this limited warranty.
- · Service trips to provide instruction on product use.

How to register your Owner-To-Owner® Limited Warranty

Andersen offers quick, easy warranty registration on our website. Just go to www.andersenwindows.com/warranty and submit your warranty information online. All warranty information is treated confidentially and will not be sold or traded to any person or organization outside of Andersen and the Andersen Dealer Network.



Warranty Claim Procedure

To make a claim under this Limited Warranty, contact the Andersen retailer/dealer who sold you your Andersen® product. Or, you may contact us at:

Andersen Windows, Inc./Andersen Service Center

100 Fourth Avenue North Bayport, MN 55003-1096

You may also contact us using the Parts & Service section of our website at www.andersenwindows.com or reach us by phone at 1-888-888-7020.

You can help us serve you faster by providing the following important information:

- Description of the product such as the exterior color, unit type and size and inside visible glass measurements.
- Glass logo information etched in the inside corner of the glass.
- Description of product concerns.
- Documentation of the purchase date, if available.
- Your name, address (with zip code) where the product is installed and telephone numbers.

Non-Warranty Repair

You will be responsible for all costs related to any repair that is not covered by this Limited Warranty or which is outside of the applicable limited warranty periods. When warranty coverage is unclear, Andersen may charge an inspection fee for any on-site product inspection. If the inspector determines the Andersen® product has a defect covered by this Limited Warranty, the inspection fee will be waived.

For specific warranty information outside the United States, please contact your local distributor or write to:

Andersen Windows, Inc./International Division 100 Fourth Avenue North Bayport, MN 55003-1096 USA

DISPUTE RESOLUTION PROCESS

General

If you are dissatisfied with the remedy provided to you under the Limited Warranty set forth above or have any other claim against Andersen related to your Andersen® products, you and Andersen agree to resolve the claim using the following process ("Dispute Resolution Process"). This Dispute Resolution Process will apply to claims of any nature relating to your Andersen product ("Dispute(s)"). Disputes include, but are not limited to, claims for breach of contract or breach of warranty, claims for violation of state or federal laws or regulations, claims based in tort, negligence or product liability, claims based in fraud or fraud in the inducement, marketing or advertising claims and claims related to the enforceability or effect of any term of the Limited Warranty or the Dispute Resolution Process, including, but not limited to, the waivers of class action and jury trials.

Notice Required

To assert a Dispute, you must first provide Andersen with written notice. A Notice of Dispute form is available for your use on Andersen's website at www.andersenwindows.com/noticeofdispute.

Andersen Response

Andersen will have 60 days from receipt of your Notice of Dispute to respond to you in writing. In that response or at any later time, Andersen may make one or more written offers to you to resolve your Dispute.

No Class Action or Jury Trials

YOU AGREE THAT YOU MAY ASSERT DISPUTES AGAINST ANDERSEN ONLY ON AN INDIVIDUAL Basis and not as a plainitff or class member in any class or representative action or proceeding. As part of this dispute resolution process, you and andersen also agree to waive any right to a jury and agree to have all disputes heard and decided solely by the federal or state court judge.

Opt-Out Procedure

You may opt out of this Dispute Resolution Process by completing and submitting a written Opt-Out Notice. The Opt-Out Notice is located on Andersen's website at www.andersenwindows.com/ optout. Whether or not you opt out of the Dispute Resolution Process, all terms of the Limited Warranty set forth above remain in force and effect.

Applicable Law and Severability

This Dispute Resolution Process, including, but not limited to, issues related to its enforceability and effect, will be governed by the laws of the State of Minnesota without regard to conflict of law principles. If any term of this Dispute Resolution Process is found to be invalid or unenforceable in any particular jurisdiction, that term will not apply to that issue in that jurisdiction. Instead, that term will be severed with the remaining terms continuing in full force and effect.

Questions

If you have questions about the Dispute Resolution Process or Opt-Out Procedure, contact us at $844\mathchar`-322\mathchar`-7972.$

Checking is for general compliance with the design intent and conformance with contract documents. Contractor is responsible for dimension, fabrication and techniques of construction and coordination with other trades and satisfactory performance of this work.

Reviewed by: Hip and Humble Architecture

Date:04/07/2021

- No exceptions taken - Approved as noted

- Revise and resubmit

NOT REVIEWED FOR OWNER OPTION SELECTIONS, QUANTITIES OR ORIENTATION. WINDOW MANUFACTURER TO CONFIRM OPERABLE UNITS IN BEDROOMS COMPLY WITH EGRESS REQUIREMENTS.





Big Horn Condominium - Windows

Big Sky, MT

NOTE: NEED TYPE D WINDOW FOR UNIT F2-18. DOUBLE PANE W/ HEATLOCK

SUBCONTRACTOR TO VERIFY ALL NEW WINDOWS MATCH EXISTING FIELD DIMENSIONS

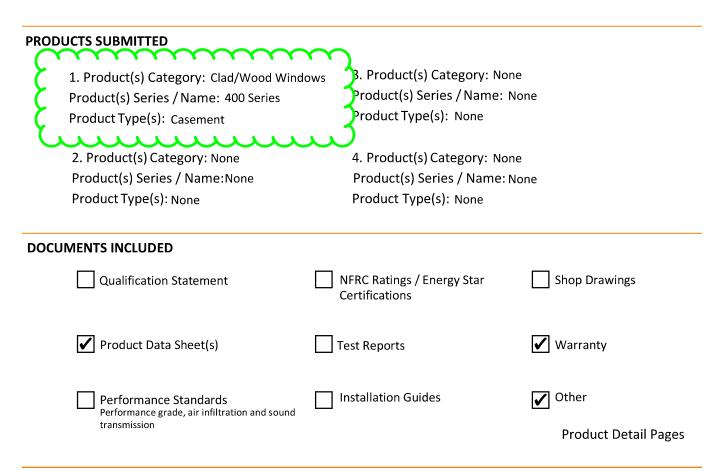
CSI Section: 08 52 16 - Plastic-Clad Wood Windows



PROJECT DESCRIPTION

Project name: Big Horn Condominium Project city / state: Big Sky, MT

Architect / Engineer: NA General Contractor: Langlas Construction Distributor / Dealer: Simkins-Hallin Lumber



Date Submitted:	March 24, 2021
Submitted by:	Scott Rumpakis
Company:	Andersen Windows, Inc.
Job title:	Commercial Business Development
Phone:	209-604-1172
Email:	srumpakis@andersencorp.com

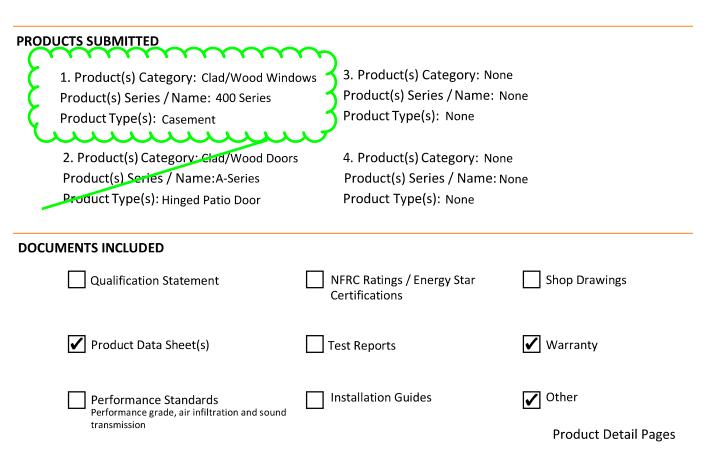
CSI Section: 08 52 16 - Plastic-Clad Wood Windows



PROJECT DESCRIPTION

Project name: Big Horn Condominium Project city / state: Big Sky, MT

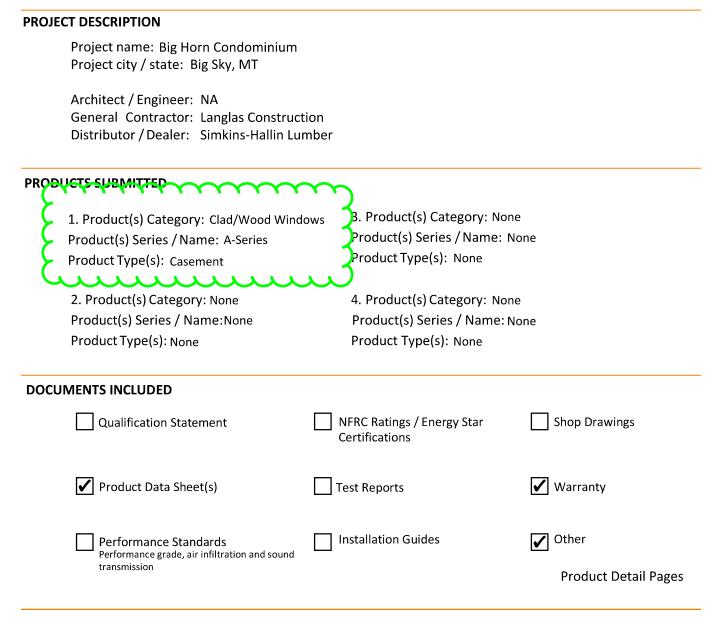
Architect / Engineer: NA General Contractor: Langlas Construction Distributor / Dealer: Simkins-Hallin Lumber



Date Submitted:	March 24, 2021
Submitted by:	Scott Rumpakis
Company:	Andersen Windows, Inc.
Job title:	Commercial Business Development
Phone:	209-604-1172
Email:	srumpakis@andersencorp.com

CSI Section: 08 54 13 - Fiberglass Windows (W/ Wood and Composite Frames)

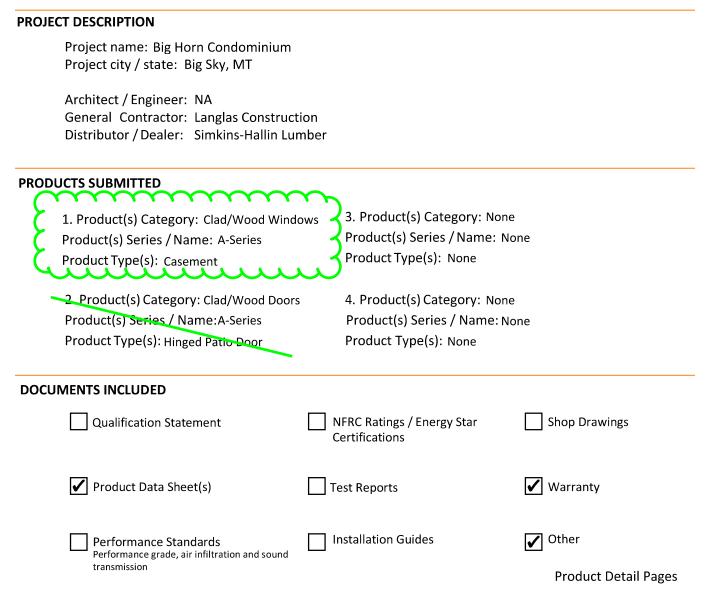




Date Submitted:	March 24, 2021	
Submitted by:	Scott Rumpakis	
Company:	Andersen Windows, Inc.	
Job title:	Commercial Business Development	
Phone:	209-604-1172	
Email:	srumpakis@andersencorp.com	

CSI Section: 08 54 13 - Fiberglass Windows (W/ Wood and Composite Frames)





Date Submitted:	March 24, 2021
Submitted by:	Scott Rumpakis
Company:	Andersen Windows, Inc.
Job title:	Commercial Business Development
Phone:	209-604-1172
Email:	srumpakis@andersencorp.com



Product Data Sheet(s)

Andersen Windows - Abbreviated Quote Report

DOUBLE PANE WITH HEATLOCK



AVV				Project Name: BHC	(SmartSun Low-	E4 HeatLock)	HEATLOC	ĸ	AVV
WINDOWS • DOORS	Quote #:	461	Print Date:	03/24/2021	Quote Date:	02/03/2021	iQ Version:	20.0	WINDOWS+DOORS
Dealer:					Customer:	Langlas & Associat	ies		
					Billing Address:				
					Phone:		F	ax:	
Sales Rep:	Taylor Sev	erson			Contact:				
Created By:	Taylor Sev	rerson			Trade ID:	107718	Promotion Code:	T142852	
	lte	em Qty	1	Item Size (Operation)		Location			
		001 28 2 O Size = 3' 5	•) 1/4" H Unit Size = 3' 4 13/	16" W x 3' 4 3/4" H	Туре А			
	\ U		Unit Extensio	Handing, High Performance n Jambs)	SmartSun Low-E4	HeatLock Glass with	Tubes (Includes 6 11/1	6" Factory Applie	ed Clear Pine

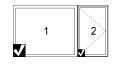
Zone: Northern U-Factor: 0.27, SHGC: 0.21, ENERGY STAR® Certified: Yes

Andersen.

AW

	0002 42 P5040-CW14 (F-R)	Туре В					
1 2 Viewed from Exterior	RO Size = 7' 4 7/8'' W x 4' 0 1/2'' H Unit Size = 7' 4 3/8'' W x 4' 0'' H 400 Series						
	 Composite Unit, Terratone/Clear Pine, High Performance SmartSun Low-E4 HeatLock Glass with Breather Tubes, No Grille, Perimeter Extension Jambs 6 11/16" Clear Pine Complete Unit, Factory (Direct) Applied, Mulling Location: Factory (Direct), Mull Type: Narrow Mull, Mull Priority: Vertical Insect Screen, Stone Hardware Pack, PSC, Contemporary Folding - Stone Perimeter Extension Jambs, Clear Pine, 6 11/16", Factory (Direct) Applied, Complete Unit 						
Zone: Northern Unit U-Factor SHGC ENERGY STAR® Certified							
	1 0.24 0.23 Yes 2 0.26 0.21 Yes						
Quote #: 461	Print Date: 03/24/2021	Page 1 Of 5	iQ Version: 20.0				

	0003 40 41 CW14-P5	040 (L-F)	Туре В	
1 2	RO Size = 7' 4 7/8" W x 4' 0 1	1/2" H Unit Size = 7' 4 3/8" W x	4' 0" H	
	400 Series			
			tSun Low-E4 HeatLock Glass with Breather Tubes, No Grille, Perimeter Extens	ion Jamb
	6 11/16" Clear Pine Complete Insect Screen, Stone	Unit, Factory (Direct) Applied, M	Iulling Location: Factory (Direct), Mull Type: Narrow Mull, Mull Priority: Vertical	
Viewed from Exterior	,	temporary Folding - Stone		
	Dentre et en Entre et en Terrele	a Clear Dina 6 11/16" Eastany (E		
	Perimeter Extension Jamb	S, Clear Fille, 6 11/10, Factory (L	Direct) Applied, Complete Unit	
	Zone: Northern	s, clear fille, o 11/10, factory (L	Jirect) Applied, Complete Unit	
	Zone: Northern Unit U-Factor SHGC ENERGY	STAR® Certified	Jirect) Applied, Complete Unit	
	Zone: Northern	STAR® Certified	Direct) Applied, Complete Unit	
	Zone: Northern Unit U-Factor SHGC ENERGY	STAR® Certified	Direct) Applied, Complete Unit	
	Zone: Northern Unit U-Factor SHGC ENERGY 	STAR® Certified	Direct) Applied, Complete Unit	
	Zone: Northern Unit U-Factor SHGC ENERGY 	STAR® Certified	Direct) Applied, Complete Unit	



0005	1	P5040-CW14 (F-R)
------	----------	------------------

Unit B *Tempered Left*

RO Size = 7' 4 7/8" W x 4' 0 1/2" H Unit Size = 7' 4 3/8" W x 4' 0" H

400 Series

Composite Unit, Terratone/Clear Pine, High Performance SmartSun Low-E4 HeatLock Tempered*High Performance SmartSun Low-E4 HeatLock Glass with Breather Tubes, No Grille, Perimeter Extension Jambs 6 11/16" Clear Pine Complete Unit, Factory (Direct) Applied, Mulling Location: Factory (Direct), Mull Type: Narrow Mull, Mull Priority: Vertical Insect Screen, Stone

Viewed from Exterior

Hardware Pack, PSC, Contemporary Folding - Stone

Perimeter Extension Jambs, Clear Pine, 6 11/16", Factory (Direct) Applied, Complete Unit

Zone: Northern

Unit U-Factor SHGC ENERGY STAR® Certified

```
1 0.24 0.23 Yes
2 0.26 0.21 Yes
```

Quote #: 461

Print Date: 03/24/2021

Page

20f 5

iQ Version: 20.0

	0006 2 CW14-P5040 (L-F)	Unit B *Tempered Right*				
2	RO Size = 7' 4 7/8" W x 4' 0 1/2" H Unit Size = 7' 4 3	3/8" W x 4' 0" H				
	400 Series					
	with Breather Tubes, No Grille, Perimeter Extension Ja	ce SmartSun Low-E4 HeatLock*High Performance SmartSun Low-E4 HeatLock Tempered Glass mbs 6 11/16" Clear Pine Complete Unit, Factory (Direct) Applied, Mulling Location: Factory				
Viewed from Exterior	(Direct), Mull Type: Narrow Mull, Mull Priority: Vertical Insect Screen, Stone					
	Hardware Pack, PSC, Contemporary Folding - Ston	e				
	Perimeter Extension Jambs, Clear Pine, 6 11/16", F	actory (Direct) Applied, Complete Unit				
	Zone: Northern					
	Unit U-Factor SHGC ENERGY STAR® Certified					
	1 0.26 0.21 Yes					
	2 0.24 0.23 Yes					



0007 16 CW14-P 4' 8 1/8" x 4' 0"-CW14 (S-F-S)

Type C

RO Size = 9' 5 5/8" W x 4' 0 1/2" H Unit Size = 9' 5 1/8" W x 4' 0" H

400 Series

Composite Unit, Terratone/Clear Pine, High Performance SmartSun Low-E4 HeatLock Glass with Breather Tubes, No Grille, Perimeter Extension Jambs 6 11/16" Clear Pine Thick Complete Unit, Factory (Direct) Applied, Mulling Location: Factory (Direct), Mull Type: Narrow Mull, Mull Priority: Vertical Perimeter Extension Jambs, Clear Pine, 6 11/16", Factory (Direct) Applied, Thick Complete Unit

Viewed from Exterior

	: Northern U-Factor	SHGC	ENERGY STAR® Certified
1	0.26	0.21	Yes
2	0.24	0.23	Yes
3	0.26	0.21	Yes

Quote #: 461

Print Date: 03/24/2021

Page

3Of 5

iQ Version: 20.0

	Item	Qty	Item Size (Operation)	Location
	0008	16	CW14-P 4' 8 1/8" x 4' 0"-CW14 (L-F-R)	Туре С
	RO Size	e = 9' 5 5/8''	W x 4' 0 1/2" H Unit Size = 9' 5 1/8" W x 4' 0'	'Η
	400 Ser	ies		
				Low-E4 HeatLock Glass with Breather Tubes, No Grille, Perimeter Extension Jambs Mulling Location: Factory (Direct), Mull Type: Narrow Mull, Mull Priority: Vertical
Viewed from Exterior		ct Screen, S		
viewed from Exterior			PSC, Contemporary Folding - Stone sion Jambs, Clear Pine, 6 11/16", Factory (Direc	t) Applied, Thick Complete Unit
	Zone: No	rthern		
			ENERGY STAR® Certified	
	1 0.2		Yes	
	2 0.2 3 0.2		Yes Yes	
	5 0.2	.0 0.21		

	Total Load Factor	
Customer Signature	82.958]

Dealer Signature

** All graphics viewed from the exterior

** Rough opening dimensions are minimums and may need to be increased to allow for use of building wraps or flashings or sill panning or brackets or fasteners or other items.

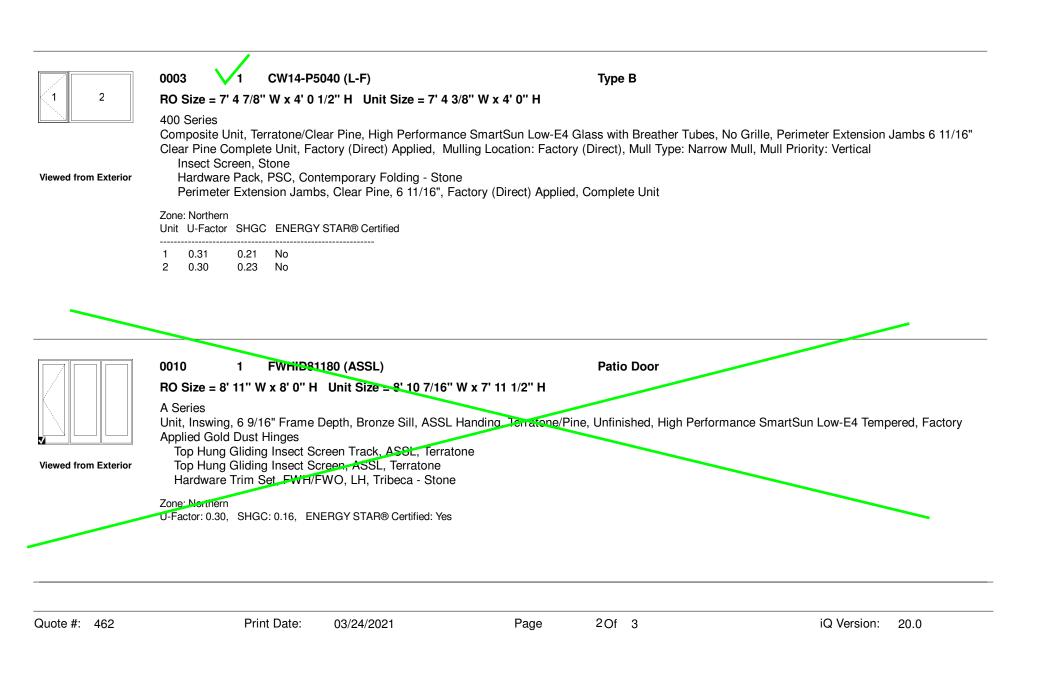
Print Date: 03/24/2021

Page

40f 5

iQ Version: 20.0

001 1 A3535 (V) Type A Viewed from Exterior Wiewed from Exterior 0001 1 A3535 (V) Type A Viewed from Exterior Viewed from Exterior 1 0002 2 P5040-CW14 (F-R) Type B Type B O002 2 P5040-CW14 (F-R) Type B RO Size = 7' 4 7/8'' W x 4' 0 1/2'' H Unit, Terratone/Clear Pine, High Performance SmartSun Low-E4 Glass with Tubes (Includes 6 11/16'' Factory Applied Clear Pine Thick Contemporary Folding - Stone Zone: Northern UFactor: 0.31, SHGC: 0.21, ENERGY STAR® Certified: No Type B O002 2 P5040-CW14 (F-R) Type B RO Size = 7' 4 7/8'' W x 4' 0 1/2'' H Unit Size = 7' 4 3/8'' W x 4' 0'' H 400 Series Composite Unit, Terratone/Clear Pine, High Performance SmartSun Low-E4 Glass with Breather Tubes, No Grille, Perimeter Extension Jambs 6 11/16'' Clear Pine Complete Unit, Factory (Direct) Applied, Mulling Location: Factory (Direct), Mull Type: Narrow Mull, Mull Priority: Vertical Insect Screen, Stone	Dealer:			Windows - Abbrevi HC E-8 Unit 56 Sma Quote Date: Customer: Billing Address: Phone: Contact: Trade ID:		iQ Version: 20.0	Andersen.
1 2 RO Size = 7' 4 7/8" W x 4' 0 1/2" H Unit Size = 7' 4 3/8" W x 4' 0" H 400 Series Composite Unit, Terratone/Clear Pine, High Performance SmartSun Low-E4 Glass with Breather Tubes, No Grille, Perimeter Extension Jambs 6 11/16" Clear Pine Complete Unit, Factory (Direct) Applied, Mulling Location: Factory (Direct), Mull Type: Narrow Mull, Mull Priority: Vertical Insect Screen, Stone Hardware Pack, PSC, Contemporary Folding - Stone Perimeter Extension Jambs, Clear Pine, 6 11/16", Factory (Direct) Applied, Complete Unit Zone: Northern Unit U-Factor 1 0.30 0.23	Viewed from Exterior	RO Size = 3' 5 3/8" W x 3' 5 1 400 Series Unit, Terratone/Clear Pine, V H Complete Unit Extension Jamk Insect Screen, Stone Hardware Pack, PSA, Conte Zone: Northern	landing, High Performa s) mporary Folding - Stor	nce SmartSun Low-E4 (ides 6 11/16" Factory Applied Clea	r Pine Thick
		RO Size = 7' 4 7/8" W x 4' 0 1400 SeriesComposite Unit, Terratone/CleaClear Pine Complete Unit, FacInsect Screen, StoneHardware Pack, PSC, ContPerimeter Extension JambsZone: NorthernUnit U-Factor SHGC ENERGY 310.300.23No	2" H Unit Size = 7' 4 ar Pine, High Performar tory (Direct) Applied, M emporary Folding - Sto , Clear Pine, 6 11/16", I	nce SmartSun Low-E4 G Iulling Location: Factory ne	alass with Breather Tub (Direct), Mull Type: Na		n Jambs 6 11/16"



ľ	tem	Qty	Item Size (Operation)	Location	
Customer Signature	•			Total Load Factor 3.668	

Dealer Signature

** All graphics viewed from the exterior

** Rough opening dimensions are minimums and may need to be increased to allow for use of building wraps or flashings or sill panning or brackets or fasteners or other items.



Ask to see if all of the products you purchase can be upgraded to be ENERGY STAR® certified.



This image indicates that the product selected is certified in the US ENERGY STAR® climate zone that you have selected.

Data is current as of November 2019. This data may change over time due to ongoing product changes or updated test results or requirements. Ratings for all sizes are specified by NFRC for testing and certification. Ratings may vary depending on the use of tempered glass or different grille options or glass for high altitudes etc.

Nexia is a registered trademark of Ingersoll Rand Inc.

Project Comments:

Quote #: 462

Print Date: 03/24/2021

Page

3Of 3

Andersen				Andersen Windows - Abbreviated Quote Report									
AW				Project Name: BHC (Tr	riple Pane Smart	Sun HeatLock)			AW				
WINDOWS-DOORS	uote #: 45	9	Print Date:	03/24/2021	Quote Date:	02/05/2021	iQ Version:	20.0	WINDOWS+DOORS				
Dealer:					Customer:	Langlas & Associates	6						
							F	av.					
Sales Rep: Ta	aylor Severs	on			Contact:		I	a					
Created By: Ta	,					107718	Promotion Code:						
	Item	Qty	1	Item Size (Operation)		Location							
	0001	- <u>-</u> 2	- AAN 3' 4	l 3/4" x 3' 4 3/4" (V)		Туре А							
	ROS	Size = 3' 5 ⁻	1/2" W x 3' 5	1/2" H Unit Size = 3' 4 3/4"	' W x 3' 4 3/4" H								
	A Se	eries											
					ame: BHC (Triple Pane SmartSun HeatLock)								
								ered with Tu	ubes, (Includes				
	Addi	tional Width	hs, 6 11/16",	Factory Applied, Pine, Unfinis				ered with Tu	ubes, (Includes				
Viewed from Exteri	Addi	tional Width sect Screer		Factory Applied, Pine, Unfinis , Stone				ered with Tu	ubes, (Includes				
Viewed from Exteri	Addi In or A	tional Widtl sect Screer AN, Conterr Northern	hs, 6 11/16", n - Aluminum nporary Foldi	Factory Applied, Pine, Unfinis , Stone				ered with Ti	ubes, (Includes				

03/24/2021

1 Of 6

	Item	Qty	Item Size (Operation)	Location	
1 2	0002 RO Size	7 e = 7' 5 1/8''	APW 4' 11 1/4" x 4' 0"-ACW 2' 4 3/8" x 4' ' W x 4' 0 3/4" H Unit Size = 7' 4 3/8" W x		
Viewed from Exterior	Breathe Type: 3/ Inse ACW	site Unit, 4 9 er Tubes, No /4" 4 9/16" F ct Screen - 7 V, Contempo	Grille, Perimeter Extension Jambs 6 11/16 iberglass Reinforced Joining, Mull Priority: Aluminum, Stone orary Folding, Stone		
				t, Pine, Unfinished, 6 11/16", Factory Applied ce rating greater than DP but less than the performance rating of the individual uni	its.
	Zone: No Unit U-F		ENERGY STAR® Certified		
	1 0.2 2 0.2	••••	Yes Yes		



ACW 2' 4 3/8" x 4' 0"-APW 4' 11 1/4" x 4' 0" (L-F) 0003 Type B 8 RO Size = 7' 5 1/8" W x 4' 0 3/4" H Unit Size = 7' 4 3/8" W x 4' 0" H A Series Composite Unit, 4 9/16" Frame Depth, Terratone/Pine, Unfinished, Terratone Sash, Low-E4 SmartSun Enhanced Triple Pane HeatLock Glass with Breather Tubes, No Grille, Perimeter Extension Jambs 6 11/16" Pine, Unfinished Complete Unit, Factory Applied, Mulling Location: Factory (Direct), Mull Type: 3/4" 4 9/16" Fiberglass Reinforced Joining, Mull Priority: Vertical Insect Screen - Aluminum, Stone Viewed from Exterior ACW, Contemporary Folding, Stone

Perimeter Extension Jambs, 7' 4 3/8" x 4' 0" Complete Unit, Pine, Unfinished, 6 11/16", Factory Applied

DP WARNING : This combination has a structural performance rating greater than DP but less than the performance rating of the individual units.

Zone: Northern

Unit U-Factor SHGC ENERGY STAR® Certified

-----Yes

0.22 0.16 1 0.21 0.18 Yes 2

Quote #: 459

Print Date: 03/24/2021 Page

2Of 6

	0004 1 APW 4' 11 1/4" x 4' 0"-ACW 2' 4 3/8" x 4' 0" (F-R) Type B *Tempered Left*							
1 2	RO Size = 7' 5 1/8" W x 4' 0 3/4" H Unit Size = 7' 4 3/8" W x 4' 0" H							
	A Series							
Viewed from Exterior	Composite Unit, 4 9/16" Frame Depth, Terratone/Pine, Unfinished, Terratone Sash, Low-E4 SmartSun Enhanced Tempered Triple Pane HeatLock*Low-E4 SmartSun Enhanced Triple Pane HeatLock Glass with Breather Tubes, No Grille, Perimeter Extension Jambs 6 11/16" Pine, Unfinished Complete Unit, Factory Applied, Mulling Location: Factory (Direct), Mull Type: 3/4" 4 9/16" Fiberglass Reinforced Joining, Mull Priority: Vertical Insect Screen - Aluminum, Stone ACW, Contemporary Folding, Stone Perimeter Extension Jambs, 7' 4 3/8" x 4' 0" Complete Unit, Pine, Unfinished, 6 11/16", Factory Applied							
	DP_WARNING : This combination has a structural performance rating greater than DP but less than the performance rating of the individual units.							
	Zone: Northern Unit U-Factor SHGC ENERGY STAR® Certified							
	1 0.18 0.18 Yes 2 0.22 0.16 Yes							

03/24/2021

3Of 6

	Item	Qty	Item Size (Operation)	Location	
1 2 3	0006	4	ACW 2' 4 3/8" x 4' 0"-APW 4' 6 7/8" x 4' 0" x 4' 0" (S-F-S)	'-ACW 2' 4 3/8" Type C	
	RO Size	= 9' 5 7/8	3" W x 4' 0 3/4" H Unit Size = 9' 5 1/8" W x 4	4' 0" H	
Viewed from Exterior	Breather Type: 3/4 Perim	Tubes, N " 4 9/16" neter Exte	•		
	DP_WAR	NING : 1	This combination has a structural performance	e rating greater than DP but less than the performance ration	ng of the individual units.
		ctor SHG	C ENERGY STAR® Certified		
	1 0.22		Yes		

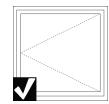
2 0.21 0.18 Yes 3 0.22 0.16 Yes

Page 4Of 6

	Item	Qty	Item Size (Operation)	Location	
	0007	4	ACW 2' 4 3/8" x 4' 0"-APW 4' 6 7/8" x 4' 0" x 4' 0" (L-F-R))"-ACW 2' 4 3/8" Type C	
	RO Size	= 9' 5 7/8	3" W x 4' 0 3/4" H Unit Size = 9' 5 1/8" W x	α 4' 0" H	
Viewed from Exterior	Breather Type: 3/4 Insect ACW	Tubes, N " 4 9/16" Screen - Contem			
	DP_WAF	RNING : T	 This combination has a structural performance	e rating greater than DP but less than the performance rating of	f the individual units.
	Zone: Nort Unit U-Fa	-	C ENERGY STAR® Certified		

0.22 0.16 Yes 1 0.21 0 18 Yes S

2	0.21	0.10	162
3	0.22	0.16	Yes



Viewed from Exterior

ACW 3' 4 3/4" x 3' 4 3/4" (L) 0013 3

Type A *Casement*

RO Size = 3' 5 1/2" W x 3' 5 1/2" H Unit Size = 3' 4 3/4" W x 3' 4 3/4" H

A Series

Unit, 4 9/16" Frame Depth, Terratone/Pine, Unfinished, L Handing, Low-E4 SmartSun Enhanced Tempered Triple Pane HeatLock, (Includes Additional Widths, 6 11/16", Factory Applied, Pine, Unfinished, Complete Unit Extension Jambs), w/ Standard Flange Insect Screen - Aluminum, Stone ACW, Contemporary Folding, Stone

Zone: Northern

U-Factor: 0.20, SHGC: 0.16, ENERGY STAR® Certified: Yes

Quote #: 459

Print Date: 03/24/2021

50f 6

iQ Version: 20.0

Page

Item	Qty	Item Size (Operation)	Location	
Oustan of Circusture			Total Load Factor	
Customer Signature			16.528	

Dealer Signature

** All graphics viewed from the exterior

** Rough opening dimensions are minimums and may need to be increased to allow for use of building wraps or flashings or sill panning or brackets or fasteners or other items.



Ask to see if all of the products you purchase can be upgraded to be ENERGY STAR® certified.



This image indicates that the product selected is certified in the US ENERGY STAR® climate zone that you have selected.

Data is current as of November 2019. This data may change over time due to ongoing product changes or updated test results or requirements. Ratings for all sizes are specified by NFRC for testing and certification. Ratings may vary depending on the use of tempered glass or different grille options or glass for high altitudes etc.

Nexia is a registered trademark of Ingersoll Rand Inc.

Project Comments:

Quote #: 459

Print Date: 03/24/2021

Page

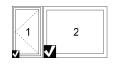
6Of 6

Andersen.			iated Quote Repo	rt TRIPLE PANE NO HEATLOCK	Andersen.		
AW			Project Name BHC E-				
	Quote #: 458	Print Dat	te: 03/24/2021	Quote Date:	02/04/2021	iQ Version: 20.0	WINDOWS+DOORS
Dealer:				Customer: Billing Address:	Langlas & Associate	S	
	-			Phone:		Fax:	
	Taylor Severson				107710	Dremetien Coder	
Created By:	Taylor Severson		Itom Cine (Oneretion)	Trade ID:		Promotion Code:	
	Item	Qty	item Size (Operation)		Location		
The second	0001	1 ACW	3' 4 3/4" x 3' 4 3/4" (R)		Туре А		
and the second s	RO Siz	e = 3' 5 1/2" W x 3	Andersen Windows - Abbreviated Quote Report Project Name BHC E-6 Unit 47 (Triple Pane SmartSun) 03/24/2021 Quote Date: 02/04/2021 iQ Version: 20.0 Customer: Langlas & Associates Billing Address: Phone: Fax: Contact: Trade ID: 107718 Promotion Code: Item Size (Operation) Location 4 3/4" x 3' 4 3/4" (R) Type A 51/2" H Unit Size = 3' 4 3/4" W x 3' 4 3/4" H Ferratone/Pine, Unfinished, R Handing, Low-E4 SmartSun Tempered Triple Pane with Tubes, (Includes Additional Widths, 6 a, Unfinished, Complete Unit Extension Jambs), w/ Standard Flange , Stone ling, Stone				
Viewed from Exte	11/16", Inse	9/16" Frame Dept	Pine, Unfinished, Complete Unit um, Stone	•	•	riple Pane with Tubes, (Includes A	dditional Widths, 6
	Zone: No U-Facto		ENERGY STAR® Certified: Yes				

Page

1 Of 4

	Item	Qty	/ Item S	ize (Operation)		Location		
	0002 RO Siz A Serie			2 4' 0"-ACW 2' 4 3/8" x 4 Unit Size = 7' 4 3/8" W 2		Туре В		
Viewed from Exterior	Compo Perime Fiberg Inse AC	osite Unit eter Exter lass Reir ect Scree W, Conte	nsion Jambs 6 11/16" Iforced Joining, Mull F en - Aluminum, Stone emporary Folding, Sto	Pine, Unfinished Complet riority: Vertical	te Unit, Factory A	oplied, Mulling Location	: Factory (Direct), Mull	Breather Tubes, No Grille, Type: 3/4" 4 9/16"
	Zone: N	ARNING	: This combination ha	as a structural performant	ce rating greater t	han DP but less than the	e performance rating of	the individual units.
	-		0.20 Yes 0.17 Yes					



RO Size = 7' 5 1/8" W x 4' 0 3/4" H Unit Size = 7' 4 3/8" W x 4' 0" H
A Series
Composite Unit, 4 9/16" Frame Depth, Terratone/Pine, Unfinished, Terratone Sash, Low-E4 SmartSun Triple Pane Glass with Breather Tubes, No Grille,
Perimeter Extension Jambs 6 11/16" Pine, Unfinished Complete Unit, Factory Applied, Mulling Location: Factory (Direct), Mull Type: 3/4" 4 9/16"
Elevente a Deinferrend Leinian Mult Drievitur Ventical

Type B

Fiberglass Reinforced Joining, Mull Priority: Vertical Insect Screen - Aluminum, Stone

Viewed from Exterior

ACW, Contemporary Folding, Stone

Perimeter Extension Jambs, 7' 4 3/8" x 4' 0" Complete Unit, Pine, Unfinished, 6 11/16", Factory Applied

ACW 2' 4 3/8" x 4' 0"-APW 4' 11 1/4" x 4' 0" (L-F)

DP_WARNING : This combination has a structural performance rating greater than DP but less than the performance rating of the individual units.

Zone: Northern

0003

Unit U-Factor SHGC ENERGY STAR® Certified

1 0.24 0.17 Yes

1 0.24 0.17 Yes 2 0.23 0.20 Yes

Quote #: 458

Print Date: 03/24/2021

Page 2Of 4

Qty

Item Size (Operation)

Location



 \checkmark

Ask to see if all of the products you purchase can be upgraded to be ENERGY STAR® certified.

This image indicates that the product selected is certified in the US ENERGY STAR® climate zone that you have selected.

Data is current as of November 2019. This data may change over time due to ongoing product changes or updated test results or requirements. Ratings for all sizes are specified by NFRC for testing and certification. Ratings may vary depending on the use of tempered glass or different grille options or glass for high altitudes etc.

Nexia is a registered trademark of Ingersoll Rand Inc.

Project Comments:

4Of 4



EXTERIOR & INTERIOR OPTIONS

EXTERIOR COLORS

Our Perma-Shield[®] exterior cladding system, a time-tested Andersen innovation, offers low maintenance and durability while also providing an attractive appearance.



INTERIOR OPTIONS*

Most 400 Series windows are available in unfinished stain-grade pine or with a long-lasting,^{**} low-maintenance white, dark bronze or black finish. 400 Series Woodwright[®] windows and Frenchwood[®] patio doors can also be ordered with unfinished cak or maple interiors.



* Some products are not available in all colors or wood species. See your Andersen supplier for details.

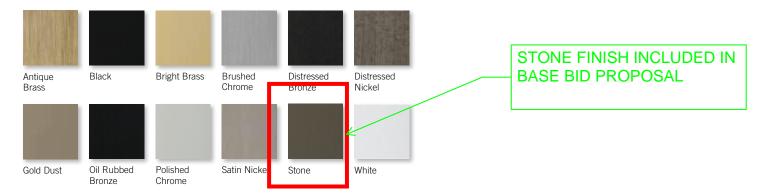
Printing limitations prevent exact replication of color and finishes. See your Andersen supplier for actual color and finish samples. 474

^{**} Visit andersenwindows.com/warranty for details.

WINDOW HARDWARE*

Window hardware enhances the overall design of a window and harmonizes with a home's décor. That's why we offer a broad range of hardware styles and finishes.

HARDWARE FINISHES



* Hardware is sold separately, except standard hardware.

Distressed bronze and oil rubbed bronze are "living" finishes that will change with time and use. Printing limitations prevent exact finish replication. See your Andersen supplier for actual finish samples.



WOODWRIGHT[®] DOUBLE-HUNG

DOUBLE-HUNG SASH LIFTS



STANDARD Lock & Keeper

Antique Brass | Black | Bright Brass Brushed Chrome | Distressed Bronze | Distressed Nickel Gold Dust | Oil Rubbed Bronze | Polished Chrome Satin Nickel | Stone | White





STANDARD Lock & Keeper Standard: Stone | White Optional: Black | Gold Dust



ESTATE" Lock & Keeper Antique Brass | Bright Brass | Brushed Chrome Distressed Bronze | Distressed Nickel | Oil Rubbed Bronze Polished Chrome | Satin Nickel

> Estate lock and keeper is available only for 400 Series tilt-wash double-hung windows.

GLIDING WINDOW



Antique Brass | Black | Bright Brass | Brushed Chrome Distressed Bronze | Distressed Nickel | Oil Rubbed Bronze Polished Chrome | Satin Nickel | Stone | White,

CONTEMPORARY FOLDING HANDLE **INCLUDED IN BASE BID PROPOSAL**







Finger I iff

TRADITIONAL

Antique Brass | Black | Bright Brass | Brushed Chrome Distressed Bronze | Distressed Nickel | Gold Dust | Oil Rubbed Bronze Polished Chrome | Satin Nickel | Stone | White



Bar Lift





Hand Lift

Finger Lift



CLASSIC[™]

Stone | White

Classic double-hung sash lifts are only available for 400 Series Woodwright® double-hung windows







Hand Lift

Finger Lift

ESTATE

Antique Brass | Bright Brass | Brushed Chrome Distressed Bronze | Distressed Nickel Oil Rubbed Bronze | Polished Chrome | Satin Nickel

> Estate double-hung sash lifts are only available for 400 Series Woodwright double-hung windows.

CASEMENT & AWNING



TRADITIONAL FOLDING

Antique Brass | Black | Bright Brass Distressed Bronze | Distressed Nickel Gold Dust | Oil Rubbed Bronze Satin Nickel | Stone | White

Folding handles avoid interference with window treatments.



ESTATE

Antique Brass | Bright Brass | Brushed Chrome Distressed Bronze | Distressed Nickel Oil Rubbed Bronze | Polished Chrome | Satin Nickel

Bold names denote finish shown. Hardware is sold separately, except standard hardware.

Distressed bronze and oil rubbed bronze are 76 ng" finishes that will change with time and use.





Bar Lift

CONTEMPORARY FOLDING

Black | Bright Brass | Gold Dust Oil Rubbed Bronze | Satin Nickel

Stone | White

CLASSIC SERIES

Stone | White

CONTEMPORARY

Antique Brass | Black Bright Brass | Brushed Chrome Distressed Bronze | Distressed Nickel Gold Dust | Oil Rubbed Bronze Polished Chrome | Satin Nickel Stone | White

SmartSun with Heat Lock

GLASS OPTIONS

DOUBLE PANE WITH HEATLOCK

Andersen has the glass you need to get the performance you want. From SmartSun[™] glass with HeatLock[®] coating that is ENERGY STAR[®] certified in all climate zones^{*} to PassiveSun[®] glass that helps heat homes in northern areas, there's an option for every climate, project and customer. Check with your supplier for the selections that meet ENERGY STAR requirements in your area.

PERFORMANCE COMPARISON OF ANDERSEN® GLASS OPTIONS

	ENERGY								LIGHT							
GLASS		U-FACTOR					SOLAR HEAT GAIN COEFFICIENT				E LIO	GHT ANCE	UVF	UV PROTECTION		
		How well a product prevents heat from escaping.				How well a product blocks heat caused by sunlight.						le light product.	How well a product blocks ultraviolet rays.			
SmartSun	•		•	0	•	•	•	•	•	•	O	0	•		•	•
SmartSun with HeatLock Coating	•	•	•	0	•	•	•	•	•	•	0	0	•	•	•	•
Low-E4 [®]	•	٠		0	•		٠	0	•	٠	•	0	•	٠		0
Low-E4 with HeatLock Coating	•			O	•			0	•	•	Ø	0	•			0
Sun	•			0	•			•	•	0	0	0	•			0
PassiveSun	•		0	0	•	0	0	0	•			0	•			0
PassiveSun with HeatLock Coating	•			0	•	0	0	0	•		0	0	•			0
Clear Dual-Pane	•	0	0	0	0	0	0	0	•		•	•	0	0	0	0



TIME-SAVING FILM

We help protect our products during delivery and construction with a translucent film on the glass. It also minimizes time spent masking on the jobsite, then peels away for a virtually spotless window.



Visit **andersenwindows.com/glass** for more details on our glass options.

Center of glass performance only. Ratings based on glass options as of January 2019. Visit and ersenwindows.com for ENERGY STAR map and NFRC total unit performance data.

ADDITIONAL GLASS OPTIONS

TEMPERED safety glass, standard on patio doors

LAMINATED glass for added strength, enhanced security and sound control

PATTERNED glass lets in light while obscuring vision and adds a unique, decorative touch. Cascade and Reed patterns can be ordered with either a vertical or horizontal orientation.









ART GLASS

With art glass from Andersen, you can add interest, create focal points and make your work stand out. These finely crafted inserts are available in two distinctly different series — Classic and Artisan — to complement any home's architecture. Visit **andersenwindows.com/artglass** for more information.



STORMWATCH® PROTECTION

Most Andersen 400 Series windows are available with impact-resistant glass and structural upgrades to meet the tough building codes of hurricane-prone coastal areas. See your local code official for specific requirements.



* Andersen 400 Series products only with SmartSun glass with HeatLock coating (argon gas blend), no grilles, no capillary breather tubes. Excludes patterned/textured glass.

GLASS OPTIONS

Project Name: BHC E-8 Unit 56 SmartSun Glass

Andersen has the glass you need to get the performance you want. From SmartSun[™] glass with HeatLock[®] coating that is ENERGY STAR® certified in all climate zones* to PassiveSun® glass that helps heat homes in northern areas, there's an option for every climate, project and customer. Check with your supplier for the selections that meet ENERGY STAR requirements in your area.

PERFORMANCE COMPARISON OF ANDERSEN® GLASS OPTIONS

			E	NE	RGY			_	_		LIGHT							
	U	R	SC GAIN	AT CIENT			E LIO	ANCE	UV PROTECTION									
GLASS	How we heat	l a pro from						t blocks inlight.				e light product.	How well a product blocks ultraviolet rays.					
SmartSun		•	•	0	•	•	•	•	•	•	0	0	•	•	•	•		
SmartSun with HeatLock Coating			•	●	•			•	•	•	0	0	•			•		
Low-E4®	•	•		0	•			0	•	•	•	0	•		•	0		
Low-E4 with HeatLock Coating	•			O	•			0	•		O	0	•			0		
Sun	•	•		0	•			•	•	0	0	0	•	•	•	0		
PassiveSun			O	0	•	0	0	0	•			0	•			0		
PassiveSun with HeatLock Coating	•			0	•	0	0	0	•		0	0	•			0		
Clear Dual-Pane		0	0	0	0	0	0	0	•	•	•	•	0	0	0	0		



TIME-SAVING FILM

We help protect our products during delivery and construction with a translucent film on the glass. It also minimizes time spent masking on the jobsite, then peels away for a virtually spotless window.



Visit andersenwindows.com/glass for more details on our glass options.

Center of glass performance only. Ratings based on glass options as of January 2019. Visit and ersenwindows.com for ENERGY STAR map and NFRC total unit performance data

ADDITIONAL GLASS OPTIONS

TEMPERED safety glass, standard on patio doors

LAMINATED glass for added strength, enhanced security and sound control

PATTERNED glass lets in light while obscuring vision and adds a unique, decorative touch. Cascade and Reed patterns can be ordered with either a vertical or horizontal orientation.



Cascade





Reed

Fern

Obscure

ART GLASS

With art glass from Andersen, you can add interest, create focal points and make your work stand out. These finely crafted inserts are available in two distinctly different series - Classic and Artisan — to complement any home's architecture. Visit andersenwindows.com/artglass for more information.

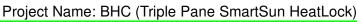


STORMWATCH® PROTECTION

Most Andersen 400 Series windows are available with impact-resistant glass and structural upgrades to meet the tough building codes of hurricane-prone coastal areas. See your local code official for specific requirements.



Breather Tubes Included







Best-in-Class Glass.

Choose from a variety of high-performance glass options, including new triple-pane glass and HeatLock[®] technology for even greater energy efficiency.

TRIPLE-PANE GLASS

Three panes of glass combine with either argon gas blend or air and Low-E coatings to provide enhanced energy performance. Adding triple-pane glass to one of our windows or doors results in a lower U-Factor value than using regular dual-pane glass.

HEATLOCK[®] TECHNOLOGY

Our HeatLock coating can increase the energy efficiency of any A-Series window or door with Low-E4[®] or SmartSun[™] glass. Applied to the room-side glass surface, it reflects heat back into the home for improved performance.

Additional glass options are also available. Visit **andersenwindows.com** or see your Andersen supplier. See your local supplier for actual glass samples.







LOW-E4[®] SMARTSUN[™] GLASS

It helps shield your home from the sun's heat, filtering out 95% of harmful UV rays while letting sunlight shine through, plus it provides all the benefits of Low-E4 glass.

LOW-E4 GLASS

Outstanding thermal performance for climates where both heating and cooling costs are a concern. It comes standard on all A-Series products and is up to 57% more energy efficient than ordinary dual-pane glass^{*}.

LOW-E4 SUN GLASS

Outstanding thermal performance in southern climates where less solar heat gain is desired. It's tinted for maximum protection from the effects of intense sunlight while providing all the benefits of Low-E4 glass.

PERFORMANCE COMPARISON OF ANDERSEN® A-SERIES GLASS OPTIONS

			ENE	RGY	LIGHT											
GLASS	How well a	ACT(a produc rom esc	t prevents	SO GAIN How we heat c	ENT blocks	TR/ Hov		MITT ch visit	IGHT FANCE ble light product.	UV PROTECTION How well a product blocks ultraviolet rays.						
SmartSun	•	• •	0	•	•		•	•		0	0	•				
SmartSun with HeatLock [*] Coating	•	• •	0	•			•	•		0	0					
Low-E4	•	• •	0	•			0	•			0					0
Low-E4 with HeatLock [®] Coating	•		0	•			0	•		•	0	•				0
Sun	•		0	•			•	•	0	0	0	•				0
PassiveSun®	•	• •	0	•	0	0	0	•			0					0
Triple-Pane with Low-E coatings on two surfaces	•		•	•	٠	٠	0		•	O	0	•				•
Clear Dual-Pane		ЭС	\circ	0	0	0	0	•	•			C	0)	0

Center of glass performance only. Ratings based on glass options as of January 2018. Visit and ersenwindows.com/energystar for ENERGY STAR® map and NFRC total unit performance data.

TIME-SAVING TRANSLUCENT FILM

We help protect all of our products during delivery and construction with a translucent film on the glass. It also minimizes time spent masking on the job site, then peels away for a virtually spotless window. For details, contact your Andersen supplier.

PATTERNED GLASS

Patterned glass lets in light while obscuring vision and adds a unique decorative touch to your home.



* Summer values are based on comparison of Andersen A-Series double-hung window SHGC to the SHGC for clear dual-pane glass non-metal frame default values from the 2006, 2009, 2012, 2015 and 2018 International Energy Conservation Code "Glazed Fenestration" Default Tables.

"ENERGY STAR" is a registered trademark of the U.S. Environmental Protection Agency.

GLASS



Best-in-Class Glass.

Choose from a variety of high-performance glass options, including new triple-pane glass and HeatLock® technology for even greater energy efficiency.

TRIPLE-PANE GLASS

Three panes of glass combine with either argon gas blend or air and Low-E coatings to provide enhanced energy performance. Adding triple-pane glass to one of our windows or doors results in a lower U-Factor value than using regular dual-pane glass.

HEATLOCK® TECHNOLOGY

Our HeatLock coating can increase the energy efficiency of any A-Series window or door with Low-E4® or SmartSun[™] glass. Applied to the room-side glass surface, it reflects heat back into the home for improved performance.

Additional glass options are also available. Visit andersenwindows.com or see your Andersen supplier. See your local supplier for actual glass samples.







LOW-E4[®] SMARTSUN[™] GLASS

It helps shield your home from the sun's heat, filtering out 95% of harmful UV rays while letting sunlight shine through, plus it provides all the benefits of Low-E4 glass.

LOW-E4 GLASS

Outstanding thermal performance for climates where both heating and cooling costs are a concern. It comes standard on all A-Series products and is up to 57% more energy efficient than ordinary dual-pane glass.*

LOW-E4 SUN GLASS

Outstanding thermal performance in southern climates where less solar heat gain is desired. It's tinted for maximum protection from the effects of intense sunlight while providing all the benefits of Low-E4 glass.

PERFORMANCE COMPARISON OF ANDERSEN® A-SERIES GLASS OPTIONS

			ENE	R G Y	LIGHT													
GLASS		R prevents ping.	SC GAIN How w heat c	COE ell a p	roduct	ENT blocks	TR/ Hov	VISIBLE LIGHT TRANSMITTANCE How much visible light comes through a product.					UV PROTECTION How well a product blocks ultraviolet rays.					
SmartSun	•	•		0	•			•	•		0	0	•				•	
SmartSun with HeatLock* Coating	•			O	•			•	•		0	0	•					
Low-E4	•			0	•			0	•			0	•				0	
Low-E4 with HeatLock* Coating	•			O	•			0	•		0	0	•				0	
Sun	•			0	•			•		С	0	0	•				0	
DoccivoSun®				0		0	\circ	0									\circ	
Triple-Pane with Low-E coatings on two surfaces	•	•		•	•	•	•	0	•		0	0	•				•	
Clear Dual-Pane	•	0	0	0	0	0	0	0					С) (О	0	

Center of glass performance only. Ratings based on glass options as of January 2018. Visit and ersenwindows.com/energystar for ENERGY STAR® map and NFRC total unit performance data.

PATTERNED GLASS

TIME-SAVING TRANSLUCENT FILM

We help protect all of our products during delivery and construction with a translucent film on the glass. It also minimizes time spent masking on the job site, then peels away for a virtually spotless window. For details, contact your Andersen supplier.

Patterned glass lets in light while obscuring vision and adds a unique decorative touch to your home.

Cascade and Reed patterns Cascade Fern Obscure Reed

can be ordered with either a vertical or horizontal orientation.

^{*} Summer values are based on comparison of Andersen A-Series double-hung window SHGC to the SHGC for clear dual-pane glass non-metal frame default values from the 2006, 2009, 2012, 2015 and 2018 International Energy Conservation Code "Glazed Fenestration" Default Tables.

[&]quot;ENERGY STAR" is a registered trademark of the U.S. Environmental Protection Agency.

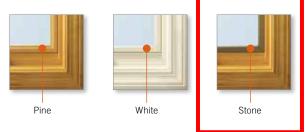
INSECT SCREEN OPTIONS

Exclusive Andersen[®] TruScene[®] insect screens provide more than 50% greater clarity than our conventional insect screens for a beautifully unobstructed view. And they let in more fresh air and sunlight while doing a better job of keeping out small insects.



TRUSCENE INSECT SCREENS

For casement and awning windows, TruScene insect screen frames are available in stone, white, dark bronze, black or natural pine veneer that can be stained to match the window. Insect screen frames for all other windows are installed on the exterior of the window and match the unit sected or color.



Pine | White | Stone | Black | Dark Bronze

CONVENTIONAL INSECT SCREENS

Conventional insect screen frames are available in white, stone, dark bronze and black for casement and awning windows. Insect screen frames for all other windows are installed on the exterior of the window and match the unit's exterior color.

CONFIGURATIONS

DOUBLE-HUNG WINDOWS



FULL OR HALF INSECT SCREEN

14

Full insect screens are available for Andersen venting windows. Andersen also offers the option of half insect screens for the lower sash of our Woodwright[®] and tilt-wash double-hung windows.

GLIDING PATIO DOORS

GLIDING

INSECT SCREEN

for two- and four-

screens are available

Gliding insect

panel doors.



RETRACTABLE INSECT SCREEN

The retractable insect screen is installed on the exterior of the door and opens side to side across the width of the opening. When the insect screen is not in use, it neatly retracts into a small canister. Available for two-panel doors.

HINGED INSWING PATIO DOORS



HINGED INSECT SCREEN

Available for singlepanel doors.



DOUBLE-HINGED INSECT SCREEN

Available for two-panel activepassive doors.



GLIDING INSECT SCREEN

Available for all two- and threepanel doors.



CASEMENT & AWNING WINDOWS

FEATURES

Frame

A seamless one-piece, rigid vinyl frame cover is secured to the exterior of the frame to protect the wood frame from moisture and maintain an attractive appearance while minimizing maintenance.

B The seamless rigid exterior vinyl cover extends 1 3/8" (35) around the perimeter of the unit. This creates a flange to help seal the unit to the structure.

• Wood frame members are treated with a water-repellent preservative for long-lasting* protection and performance.

D Interior stops are unfinished pine. Low-maintenance prefinished white, dark bronze and black interiors are also available.

Sash

G Rigid vinyl encases the entire sash a vinyl weld protects each sash corner for superior weathertightness. It maintains an attractive appearance and minimizes maintenance.

 Wood core members provide excellent structural stability and energy efficiency.

G Flexible bulb weatherstrip or vinyl closed-cell foam weatherstrip is factory installed on the perimeter of the sash.

Glass

A glazing bead and silicone provide superior weathertightness and durability.

• High-Performance glass options include:

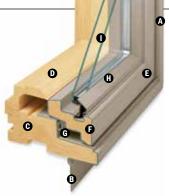
- Low-E4[®] glass
- Low-E4 HeatLock® glass
- Low-E4 Sun glass
- Low-E4 SmartSun[™] glass
- Low-E4 SmartSun HeatLock glass

Tempered glass and other glass options are available. Contact your Andersen supplier.

A removable translucent film helps shield the glass from damage during delivery and construction and simplifies finishing at the jobsite.

Patterned Glass

Patterned glass options are available. See page 12 for more details.



Hardware

Smooth Control Hardware System



The smooth control hardware system employs a worm gear drive for easy operation. Units with a wash mode have hinges that move the sash away

from the frame to provide easier glass cleaning. **CXW**15,

CXW155, CXW16 and CXW25 sizes are not available with wash mode. Hardware option and finish must be specified. Operator handle and cover sold separately.

Single-Actuation Casement Lock



On casement windows, a single-actuation lock easily releases all locking points on casement sash while the reach-out action eliminates binding when closing. The lock handle is offered in finishes that coordinate with your specified hardware option.

Awning Sash Locks



Awning sash locks provide an added measure of security and weathertightness. Hardware style and finish options are compatible with Andersen® casement windows to ensure consistency in appearance when used in combination designs.

Visit andersenwindows.com/warranty for details.

** Dark bronze and black interiors are only available with dark bronze and black exteriors respectively.

Hardware sold separately.

Dimensions in parentheses are in millimeters.

Printing limitations prevent exact replication of colors and finishes. See your Andersen supplier for actual color and finish samples



Casement and awning windows are available with Stormwatch® Protection. Visit andersenwindows.com/coastal for more details.

Performance Grade (PG) Upgrade

Performance upgrades are available for select casement and awning sizes, allowing these



INTERIOR Pine White Dark Black**

units to achieve higher performance

Pressure (DP) Ratings for measuring

Bronze

ratings. Performance Grade (PG) Ratings are more comprehensive than Design

product performance. Contact your Andersen



Naturally occurring variations in grain, color and texture of wood make each window one of a kind. All wood interiors are unfinished unless a prefinished option is specified.

HARDWARE FINISHES



Distressed bronze and oil rubbed bronze are "living" finishes that will change with time and use.

CASEMENT & AWNING HARDWARE OPTIONS¹

CLASSIC SERIES



TRADITIONAL FOLDING



Antique Brass | Black | Bright Brass Distressed Bronze | Distressed Nickel Gold Dust | Oil Rubbed Bronze | Satin Nickel Stone | White

482

ESTATE"



Antique Brass | Bright Brass Brushed Chrome | Distressed Bronze Distressed Nickel | Oil Rubbed Bronze Polished Chrome | Satin Nickel

CONTEMPORARY FOLDING



Black | Bright Brass Gold Dust | Oil Rubbed Bronze Satin Nickel | Stone | White

Folding handle avoids interference with window treatments. Bold name denotes finish shown

Andersen. Factory Applied 6 11/16" Extension Jambs

400 Series Casement & Awning Windows

ACCESSORIES Sold Separately



Extension Jambs





Standard jamb depth is 2 ⁷/₈" (73). Extension jambs are available in unfinished pine or prefinished white. Some sizes may be veneered.

Factory-applied and non-applied interior extension jambs are available in \mathcal{V}_{16} " (1.5) increments between 4 \mathcal{V}_{6} " (116) and 7 \mathcal{V}_{4} " (181). Extension jambs can be factory applied to either three sides (stool and apron application) or four sides (picture frame casing).

Thick Replacement Extension Jambs

To help preserve original alignment of trim and paint lines in replacement situations, special 1 $1/\epsilon^{"}$ (29) thick replacement extension jambs are available. Factoryapplied and non-applied extension jambs are available in $1/\epsilon^{"}$ (1.5) increments between 4 $%/\epsilon^{"}$ (116) and 7 $1/\epsilon^{"}$ (181). Non-applied extension jambs are available in 12' (3658) lineals. Detail on page 34.

Drywall Return Bead



A drywall return bead is available in a narrow or wide dimension with unfinished pine or prefinished white interiors. Can be ordered factory-applied or in non-applied lineals. Detail on page 34.

For more information about glass, patterned glass, art glass, grilles and TruScene insect screens, see pages 12-14.

For more information about combination designs, product performance, installation instructions and accessories, see pages 181-211 or visit andersenwindows.com.

Hardware

Corrosion-Resistant Components



Corrosion-resistant hinge and operator arm hardware is designed for applications in harsh and corrosive environments such as heavy industrial or coastal areas."

Window Opening Control Device Kit



A Window Opening Control Device Kit is available, which limits sash travel to less than 4" (102) when the window is first opened. Available factory applied or field applied in stone, white and black.

Special Use Operator Handles

Available in Classic Series[™] design only.

Compact Operator Handle



where blinds or other window treatments interfere with standard operator handle. Available in white or stone finish.

Easy-Grip Handle

Larger knob makes it easier to grip and operate. Available in white or stone finish. Metal T-Handle



Our smallest operator handle, the metal T-handle, may make it more difficult for young children (5 and under) to open the window. For more information on child safety, write:

Andersen Corporation LookOut for Kids[®] Program 100 Fourth Avenue North Bayport, MN 55003 Call 1-800-313-8889 or email us at lofk@andersencorp.com.

Operator Spline Cover



An operator spline cover is an attractive cap that covers the roto operator stud when the handle has been removed to control access or operation of the window. The operator spline cover should not be used on any window designated or intended for emergency escape or rescue. Please consult your local building code official for local egress code requirements.

Power Operator for Awning Windows



Awning windows can be ordered with an operator enhanced by PowerAssist[™] technology that opens and closes the window with the touch of a button. Easy to install, the 24-volt system features a concealed window power drive, battery backup in case of a power outage and a moisture sensor that automatically closes the window when it rains. A wireless remote control is available (sold separately).

The PowerAssist system is controlled by a wall-mounted console, which includes a power box, battery, touch pad and mounting bracket. Windows can be ordered factoryprepped to save time or they can be ordered as a field kit. Power driver requires field installation. PowerAssist technology eliminates need for sash locks. Available for windows up to five feet wide. Not available for units with Stormwatch® Protection or performance upgrades.

Security Sensors

VeriLock® Sensors

VeriLock sensors are available in five colors. See page 15 for details.

Open/Closed Sensors

Wireless open/closed sensors are available in four colors. See page 15 for details.

Glass

483

Andersen® Art Glass

Andersen art glass panels come in a variety of original patterns. See pages 173-174 for details on Andersen art glass. Visit **andersenwindows.com/artglass** for details and pattern information.

Insect Screens

TruScene® Insect Screen



Exclusive Andersen TruScene insect screens provide over 50% more clarity than our conventional insect screens for a beautiful unobstructed view. They allow more fresh air and sunlight in while doing a better job of keeping out small insects. For casement and awning windows, frames are available in stone, white, dark bronze or black or with pine veneer interiors to blend with the wood interior of the window.

Conventional Insect Screen

Conventional insect screens have charcoal powder-coated aluminum screen mesh. Available with frames in white, stone, dark bronze or black.

Grilles

Grilles are available in a variety of configurations and widths. For casement and awning window grille patterns, see page 34.

Exterior Trim

This product is available with Andersen exterior trim. See pages 175-180 for details.

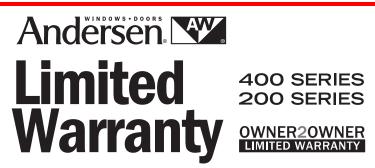
CAUTION:

- Painting and staining may cause damage to rigid vinyl.
- Do not paint 400 Series windows with white, canvas, Sandtone, forest green, dark bronze or black exterior colors.
- Andersen does not warrant the adhesion or performance of homeowner-applied paint over vinyl or other factory-coated surfaces
- 400 Series windows in Terratone color may be painted any color lighter than Terratone color using quality oil-based or latex paint.
- For vinyl painting instructions and preparation, contact your Andersen supplier.
- Do not paint weatherstrip.
- Creosote-based stains should not come in contact with Andersen products.
- Abrasive cleaners or solutions containing corrosive solvents should not be used on Andersen products.

* Visit andersenwindows.com/warranty for details. Dimensions in parentheses are in millimeters.



Warranty



Units Manufactured After November 6, 2015

Para ver la versión, en español, de esta Garantía limitada y Proceso de resolución de controversias, visite andersenwindows.com

LIMITED WARRANTY AND DISPUTE RESOLUTION PROCESS

IMPORTANT: Please carefully read the Dispute Resolution Process that appears in this document after the Limited Warranty. The Dispute Resolution Process includes class action and jury trial waivers that affect your legal rights. To opt out of these waivers, you must visit our website at www.andersenwindows.com/ optout and complete the opt-out form within one year from the date of purchase of your Andersen[®] products from a dealer or retailer. The opt-out only applies to the terms of the Dispute Resolution Process.

400 Series/200 Series Windows & Doors Limited Warranty

Transferable Limited Warranty on Glass

The glass in Andersen® factory glazed windows and doors (including dual-pane glass, High-Performance Low-E4® glass, High-Performance Low-E4® Sun glass, High-Performance Low-E4[®] SmartSun[™] glass, High-Performance Low-E4[®] PassiveSun[®] glass, Heatlock® glass, Low-E glass, patterned glass (including obscure, pebble, fern, reed and cascade designs)), Finelight[™] grilles, divided light grilles and tempered versions of these glass options is warranted to be free from defects in manufacturing, materials and workmanship for twenty (20) years from the date of purchase from the retailer/dealer. It is also warranted not to develop, under normal conditions, any material obstruction of vision resulting from manufacturing defects or as a result of premature failure of the glass or organic seal for twenty (20) years from the date of purchase from the retailer/dealer. Patterned glass (including obscure, pebble, fern, reed and cascade designs) is warranted not to develop, under normal conditions, any material change in appearance resulting from manufacturing defects or as a result of premature failure of the glass or organic seal for twenty (20) years from the date of purchase from the retailer/dealer. This limited warranty on glass does not apply to special order glazings, Andersen® art glass, insulated art glass, impact-resistant glass, insulated glass with shades or blinds between the glass or glass that is not factory installed by Andersen.

In the event a glass failure occurs as a result of a defect in manufacturing, materials or workmanship within the limited warranty period, Andersen, at its option, will: (1) provide the appropriate replacement glass product to the Andersen retailer/dealer you specify — labor is not included; or (2) provide a factory-authorized repair to the existing glass at no cost to you; or (3) refund the original purchase price. Such replacement parts or repair are warranted for the remainder of the original limited warranty period.

Transferable Limited Warranty on Components Other Than Glass

Non-glass portions of Andersen[®] windows and doors (including non-electric operators, locks, lifts, balance systems, hinges, handles, insect screens, weatherstripping, exterior trim, sash and frame members) are warranted to be free from defects in manufacturing, materials and workmanship for a period of ten (10) years from the date of purchase from the retailer/dealer. This limited warranty does not apply to Andersen electric window operators, retractable insect screens or finishes on bright brass and satin nickel door hardware. The non-glass portions of Andersen[®] windows and doors with wood exteriors and commercial doors are subject to a limited warranty with a five (5) year period, but otherwise identical to the ten (10) year limited warranty described above.

In the event a component other than glass fails as a result of a defect in manufacturing, materials or workmanship within the limited warranty period, Andersen, at its option, will: (1) provide replacement parts to the Andersen retailer/dealer you specify — labor is

not included; or (2) provide a factory-authorized repair to the existing component at no cost to you; or (3) refund the original purchase price. Such replacement parts or repairs are warranted for the remainder of the original limited warranty period.

Transferable Limited Warranty on Patio Doors with Shades/Blinds in Insulated Glass

Andersen[®] patio doors with shades/blinds in insulated glass (including insulated glass, shade/blind, insulated glass seal and external control mechanisms attached to the glass, hinges, handles, insect screens, weatherstripping, and frame members) are warranted to be free from defects in manufacturing, materials and workmanship for a period of ten (10) years from the date of purchase from the retailer/dealer.

In the event of a glass failure or failure in the shades or blinds between the glass as a result of a defect in manufacturing, materials or workmanship within the limited warranty period, Andersen, at its option, will: (1) provide the appropriate glass replacement product to the Andersen retailer/dealer you specify — labor is not included; or (2) provide a factory-authorized repair to the existing glass component at no cost to you; or (3) refund the original purchase price. Such replacement parts or repairs are warranted for the remainder of the original limited warranty period.

No Other Warranties or Representations

THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ALL WARRANTIES ARE LIMITED TO THE APPLICABLE STATUTE OF LIMITATIONS, BUT IN NO CASE WILL EXTEND BEYOND THE LIMITED WARRANTY PERIODS SPECIFIED ABOVE. ANDERSEN EXCLUDES AND WILL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, WHETHER ARISING OUT OF CONTRACT, TORT OR OTHERWISE. THE REMEDY OF REPAIR, REPLACEMENT OR REFUND OF THE ACTUAL PURCHASE PRICE OF THE PRODUCT PROVIDED BY THIS LIMITED WARRANTY IS THE EXCLUSIVE REMEDY WITH RESPECT TO ANY AND ALL LOSS OR DAMAGE.

Applicable Law

This Limited Warranty is only applicable in the U.S.A. (i.e., the fifty states and the District of Columbia). This Limited Warranty gives you specific legal rights, and you may also have other rights which may vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages or limitation of the duration of an implied warranty, so the above limitations or exclusions may not apply to you. If any specific term of this Limited Warranty is prohibited by any applicable law, it shall be null and void, but the remainder of this Limited Warranty shall remain in full force and effect.

What Is NOT Covered by this Limited Warranty: Specific Additional Exclusions

In addition to any other limitations or exclusions in this Limited Warranty, Andersen shall have no obligation for product failure, damage or costs due to or related to the following:

- Product modifications or glass shading devices (e.g., glass tinting, security systems, improper painting or staining, insulated coverings, etc.).
- Units improperly assembled or improperly mulled by others.
- Failure due to the application of non-Andersen hardware (e.g., locksets, trim sets, hinges, panic hardware, closers, etc.).
- Failure to properly install Andersen hardware and/or exterior trim.
- · Adjustments or corrections due to improper installation.
- Improper installation or use, including use of a non-commercial door as a main entrance or exit door for a building other than a single-family residential unit or re-installing an Andersen window or door after it has been removed from a building and re-sold and/or re-installed in a different building.
- Exposure to conditions beyond published performance specifications.
- Water infiltration other than as a result of a defect in manufacturing, materials or workmanship.
- Condensation.
- Improper maintenance, such as use of brick wash, razor blades, sealants, sanding or improper washing.
- Failing to properly seal and maintain the exposed wood portions of a product. This
 includes, but is not limited to, the exposed wood on all sides of a door panel (e.g.,
 exterior, interior, top, bottom, and both sides), a door frame and wood grilles.
- Chemicals or airborne pollutants, such as salt or acid rain.
- **485** Delivery by others.

- Accidents.
- Acts of God.
- Normal wear and tear.

Additional items excluded from this limited warranty:

- Labor to replace sash or door panels, glass or other components.
- Labor and other costs related to the removal and disposal of defective product.
- Labor and materials to paint or stain any repaired or replaced product, component, trim or other carpentry work that may be required.

Products not manufactured by Andersen.

- The performance of the low-maintenance exterior glass coating on products with High-Performance Low-E4[®] glass. Performance will vary depending on environmental conditions.
- Minor warping of wood and clad-wood doors. Andersen may defer actions on any claim for warping for a period of up to twelve (12) months from the date of the claim in order to permit conditioning and equalization to humidity and temperature conditions.
- Slight glass curvature, minor scratches or other imperfections in the glass that do not impair structural integrity or significantly obscure normal vision.
- Rattling of grille bars within an air space.
- Insects passing through or around the insect screen.
- Tarnish or corrosion to hardware finishes.
- Special glazings. Contact us concerning the limited warranty on special glazings.
- Andersen[®] art glass and decorative insulated art glass, impact-resistant glass, electric window operators, retractable insect screens and bright brass and satin nickel finishes on door hardware. Contact us or refer to the specific limited warranties for these products.
- Andersen[®] 400 Series windows with Stormwatch[®] protection and with impactresistant glass, A-Series windows and doors, E-Series/Eagle[®] windows and doors, 100 Series windows and doors, storm doors, Renewal by Andersen[®] windows, Silver Line[®] windows and doors, American Craftsman[®] windows and doors and Weiland[®] windows and doors have their own limited warranties and are not covered by this limited warranty.
- Service trips to provide instruction on product use.

How to register your Owner-To-Owner® Limited Warranty

Andersen offers quick, easy warranty registration on our website. Just

go to www.andersenwindows.com/warranty and submit your warranty information online. By registering, you will expedite any warranty service you may have in the future. In addition, you can receive product information updates, safety notices and special offers regarding new



products, as well as information regarding enhancements for the windows and doors you've registered. All warranty information is treated confidentially and will not be sold or traded to any person or organization outside of Andersen and the Andersen Dealer Network.

Warranty Claim Procedure

To make a claim under this Limited Warranty, contact the Andersen retailer/dealer who sold you your Andersen® product. Or, you may contact us at:

Andersen Windows, Inc./Andersen Service Center 100 Fourth Avenue North Bayport, MN 55003-1096

You may also contact us using the Parts & Service section of our website at www. andersenwindows.com or reach us by phone at 1-888-888-7020.

You can help us serve you faster by providing the following important information:

- Description of the product such as the exterior color, unit type and size and inside visible glass measurements.
- Glass logo information etched in the inside corner of the glass.
- Description of product concerns.
- Documentation of the purchase date, if available.
- Your name, address (with zip code) where the product is installed and telephone numbers.

Non-Warranty Repair

You will be responsible for all costs related to any repair that is not covered by this Limited Warranty or which is outside of the limited warranty period. When warranty coverage is unclear, Andersen may charge an inspection fee for any on-site product inspection. If the inspector determines the Andersen[®] product has a defect covered by this Limited Warranty, the inspection fee will be waived.

For specific warranty information outside the United States, please contact your local distributor or write to:

Andersen Windows, Inc. / International Division 100 Fourth Avenue North Bayport, MN 55003-1096

DISPUTE RESOLUTION PROCESS

General

If you are dissatisfied with the remedy provided to you under the Limited Warranty set forth above or have any other claim against Andersen related to your Andersen® products, you and Andersen agree to resolve the claim using the following process ("Dispute Resolution Process"). This Dispute Resolution Process will apply to claims of any nature relating to your Andersen product ("Dispute(s)"). Disputes include, but are not limited to, claims for breach of contract or breach of warranty, claims for violation of state or federal laws or regulations, claims based in tort, negligence or product liability, claims based in fraud or fraud in the inducement, marketing or advertising claims and claims related to the enforceability or effect of any term of the Limited Warranty or the Dispute Resolution Process, including, but not limited to, the waivers of class action and jury trials.

Notice Required

To assert a Dispute, you must first provide Andersen with written notice. A Notice of Dispute form is available for your use on Andersen's website at www.andersenwindows. com/noticeofdispute.

Andersen Response

Andersen will have 60 days from receipt of your Notice of Dispute to respond to you in writing. In that response or at any later time, Andersen may make one or more written offers to you to resolve your Dispute.

No Class Action or Jury Trials

YOU AGREE THAT YOU MAY ASSERT DISPUTES AGAINST ANDERSEN ONLY ON AN INDIVIDUAL BASIS AND NOT AS A PLAINTIFF OR CLASS MEMBER IN ANY CLASS OR REPRESENTATIVE ACTION OR PROCEEDING. AS PART OF THIS DISPUTE RESOLUTION PROCESS, YOU AND ANDERSEN ALSO AGREE TO WAIVE ANY RIGHT TO A JURY AND AGREE TO HAVE ALL DISPUTES HEARD AND DECIDED SOLELY BY THE FEDERAL OR STATE COURT JUDGE.

Opt-Out Procedure

You may opt out of this Dispute Resolution Process by completing and submitting a written Opt-Out Notice. The Opt-Out Notice is located on Andersen's website at www. andersenwindows.com/optout. Whether or not you opt out of the Dispute Resolution Process, all terms of the Limited Warranty set forth above remain in force and effect.

Applicable Law and Severability

This Dispute Resolution Process, including, but not limited to, issues related to its enforceability and effect, will be governed by the laws of the State of Minnesota without regard to conflict of law principles. If any term of this Dispute Resolution Process is found to be invalid or unenforceable in any particular jurisdiction, that term will not apply to that issue in that jurisdiction. Instead, that term will be severed with the remaining terms continuing in full force and effect.

Questions

If you have questions about the Dispute Resolution Process or Opt-Out Procedure, contact us at 844-332-7972.

486

Garage Doors & Openers

Courtyard COLLECTION®



Insulated steel construction, fashioned to resemble the elegant wood designs of traditional carriage house doors.

The Genuine. The Original.



Model 5720, Panel A (165T) Custom finish, Stockton windows



Courtyard Collection[®] doors give you the beauty of wood with the durability of steel. Each model provides varied design options to complement any home.



489 Image above: Model 7560, Panel H (163T) Gray finish, Stocbridge windows, decorative hardware Cover image: Model 7560, Panel H (161A), White finish, Stockton windows, decorative hardware

Courtyard collection®

Built Better from the Inside Out

Door construction

Our Courtyard Collection[®] doors are made with an insulated steel construction and fashioned to resemble the elegant wood designs of traditional carriage house doors.



Foamed-in-place polyurethane insulation with an R-value* of 12.76 and U-factor up to 0.24 helps control costly heat loss and gain. This type of insulation can diminish street noise and provides for quieter door operation.



In-between section thermal seals With an air infiltration rating as low as .08 cfm, these seals help to provide superior resistance to the elements.



Weather resistant – Wood grain textured trim boards are resistant to dents and the elements.

*Overhead Door Corporation uses a calculated door section R-value for our insulated doors.



Quiet operation – Commercial grade track and hardware featuring durable 13 ball bearing rollers is standard for Model 7560 and is an optional upgrade for Model 7520. Residential track and 11 ball bearing rollers is standard for Model 7520.

Wind load-rated door (Optional on Model 7560). Safeguard your home in extreme wind conditions. Wind load rating means your home can be built to withstand a variety of wind conditions and meet your local building codes.

High cycle spring option – Choose a 25,000 cycle spring for almost twice the life of a torsion spring.



Courtyard COLLECTION® Door Designs

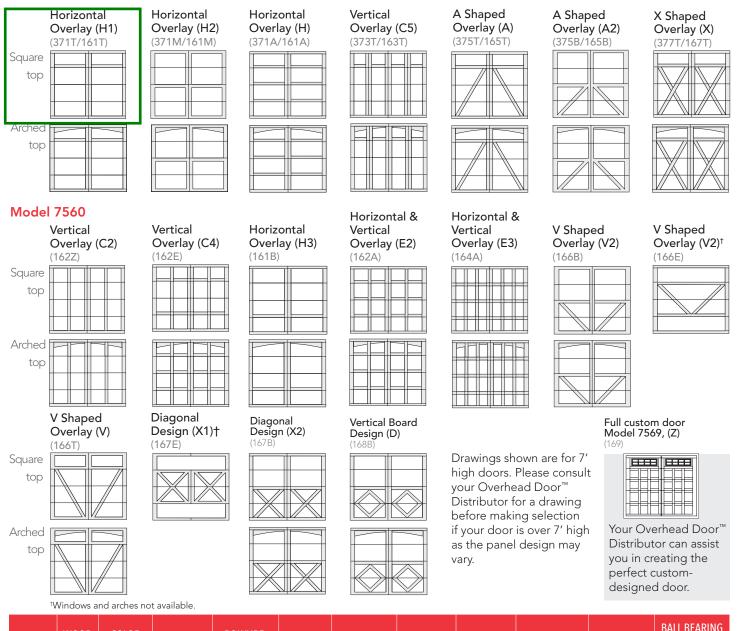
Select your door panel style

Choose a panel style and model

Note: Previous model numbers and panel styles are noted in parentheses in gray.

The Courtyard Collection® includes two models – please see the chart at the bottom of the page for details. Some panel styles are only offered in the Model 7560 as indicated below.

Models 7560/7520



MODELS	WOOD GRAIN TRIM	COLOR MATCHED TRIM	WARRANTY	POLYURE- THANE INSULATION	R-VALUE*	U-FACTOR**	OVERLAY THICKNESS	DOOR THICKNESS	COMMERCIAL TRACK	RESIDENTIAL TRACK	BALL BEARING ROLLERS WITH NYLON WHEELS
7560	•	•	Limited Lifetime	•	12.76	0.24	3⁄4"	1 %"	•		•
7520	•		20-Year Limited	•	9.3	0.24	3/8"	1"	optional	•	•

R-value: The higher the R-value, the greater the insulating properties.

491 ** U-factor: A tested value of actual energy loss of an installed door, wall, or window assembly. † See full text of warranty for details.

Courty ard collection® <u>Door Designs</u>

Select your color and windows



Choose a color

Painted finishes









Almond

Desert Tan









Hunter Green

Gray

(Model7560 only)



Actual colors may vary from brochure due to fluctuations in the printing process. Always request a color sample from your Distributor for accurate color matching before ordering your door.



Choose a window style

Wind load-rated windows are offered only for Models 7560. Windows not available on V1, X1 panels or 12' doors.

Clear Long	
4422	

Somerton

Stockbridge





Stockton



Stockton Arch

Choose a glass type

Models 7520 available with single pane glass only. Models 7560 available with insulated glass.





Arch - Pls verify clear glass type **CONFIRMED - CLEAR GLASS**

Obscure

Actual glass may vary from brochure photos due to fluctuations in the printing process. Check with your Overhead Door™ Distributor to view a glass sample.

Courtyard collection®





Model 7560, Panel H1 (161T), Sandstone/Terra Bronze finish, Clear Long windows



Our Courtyard Collection[®] features insulated steel construction, fashioned to resemble the elegant wood designs of traditional carriage house doors.



Model 7560, Panel H (161A), Desert Tan finish, Somerton windows, decorative hardware

Transform Your Home with the DoorView® Visualization Tool.

Go to **overheaddoor.com** to try our online interactive software tool that lets you visualize what your home would look like with a new Overhead Door[™] garage door. Contact your local Overhead Door[™] Distributor for more information and to receive a quote.





AFTER

Model 7560, Panel C5 (163T), Gray finish, Stockton Arched windows, decorative hardware

The Genuine. The Original.

Since 1921, Overhead Door Corporation has not only raised the standards of excellence for the industry – we've created them. We created the first sectional garage door in 1921 and the first electric garage door opener in 1926.

Today, our network of over 400 Overhead Door[™] Distributors are still leading the way with innovative solutions and unmatched installation, service and support. So look for the Red Ribbon. It's your guarantee that you're getting the genuine, the original Overhead Door[™] products and services.

SOLD AND DISTRIBUTED BY:



The Genuine. The Original.



2501 S. State Hwy. 121 Bus., Suite 200, Lewisville, TX 75067 1-800-929-DOOR • sales@overheaddoor.com

overheaddoor.com

495

©2020 Overhead Door Corporation. Overhead Door is a trademark and Courtyard Collection and the Red Ribbon Logo are registered trademarks of Overhead Door Corporation. All other trademarks are the property of their rightful owners. Consistent with our policy of continuing product improvement, we reserve the right to change product specifications without notice or obligation. R900-688 5M 01/20 JAR

Legacy® 850 GARAGE DOOR OPENERS

Models:

2029

2029B 2129

2129B



Power, reliability and convenience with a choice of belt or chain drive

- **Design flexibility:** Choose to have your opener with or without integrated wi-fi or battery backup; also choose between a belt or chain rail to suit your preference
- **Durable performance:** 24V DC motor operates most residential sectional doors up to 8' high and weighing up to 500 lbs.
- Quiet: DC motor featuring soft start and stop combined with C-channel rail delivers quiet operation
- Lighting: Bulb is positioned toward the inside of the garage for light where you need it most

The Genuine. The Original.



Standard features and benefits

DC power

DC motor operates with variable speeds for soft start and stop; providing smooth, quiet operation and less wear and tear on your garage door.

CodeDodger[®] access security system

Selects a code from billions of combinations each time a remote or wireless keypad are used. Helps prevent piracy of the radio signal for the utmost in security.

Easy programming

Quick, simple limit setting for faster installation.

Auto seek dual frequency range

The opener listens for both the 315 or 390 MHz frequency emitted by the remote or wireless keypad, allowing reliable operation and reducing frequency interference.

Self-diagnostic Safe-T-Beam[®] System

When objects pass through the infrared beam, the door automatically stops closing and then reverses.

C-channel rail

Operator rail designed for strength; conceals rotating belt or chain for better aesthetics.

Lighting system

Optional Overhead Door[™] LED bulb available. 60 Watt max if incandescent bulbs used.

Compatible with both HomeLink® and Car2U® systems

Works with current and all previous versions. No additional external repeater kit or compatibility bridge needed.

Safe-T-Beam®



3-Button Remote



Let your Overhead Door[™] Distributor ensure that your

garage door system operates at peak performance

year-in and out. Ask about routine system tune-ups

and other professional services offered.

Motor*

Belt*

Routine maintenance





Parts and Accessories*

* Limited, non-transferable warranty. See owner's manual for details.

Wall Console

Distributor services

Installation

Selection of an Overhead Door[™] garage door system includes expert installation and service from our professional network of over 400 distributors.





Models 2129/2129B

Smart garage door openers integrated with **OHD** Anywhere®

Remotely monitor and control your sectional garage door from almost anywhere with your smart device.* OHD Anywhere[®] is compatible with most iOS and Android mobile devices Features include:

• Ability to monitor the door position (open or closed) and any change to the position

- Allows multiple user accounts to give others virtual access to your garage door
- Ability to know if an authorized user is operating the door with the OHD Anywhere® app
- Time-based features allow you to schedule door operation
- Maintains access history report for each opener
- The OHD Anywhere® app allows control of multiple OHD Anywhere® Wi-Fi integrated garage door openers

Models 2029B/2129B

Battery Backup included

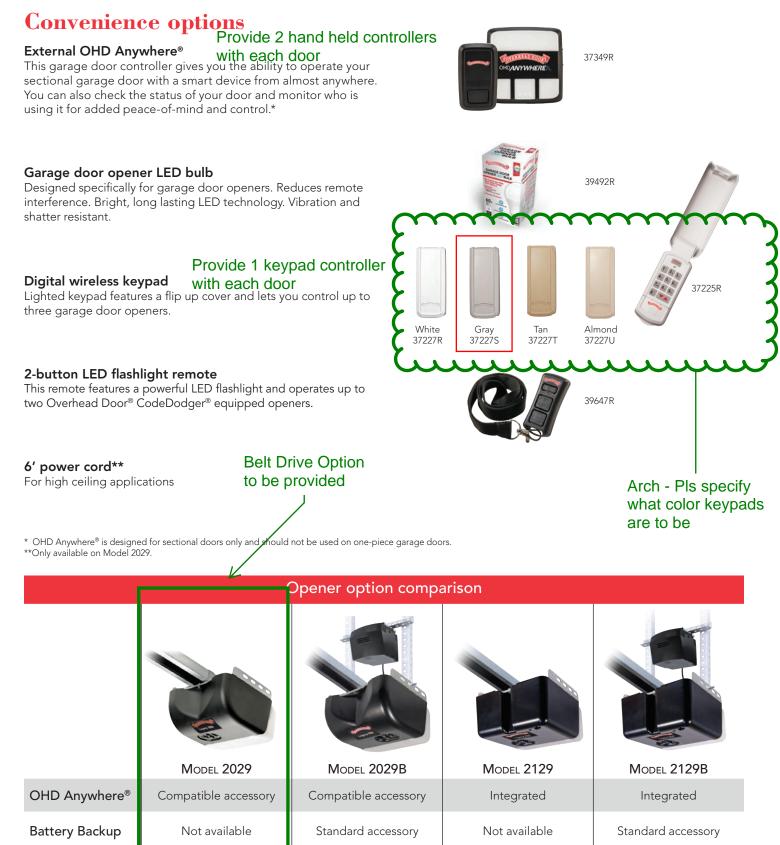
The Overhead Door[™] Battery Backup unit provides peace-ofmind during a power outage. Delivers up to 50 cycles in a 24 hour period after initial power outage.

California Residents:

As required by California State Law SB-969, all newly installed openers must have battery backup as of 07/01/2019.

6' power cord

Optional upgrade



Not available

Not available

Not available



Transform Your Home with the DoorView® visualization tool. Go to **overheaddoor.com to** try our on-line interactive software tool that lets you visualize what your home would look like with a Overhead Door[™] garage door. Contact your local Overhead Door[™] Distributor for more information and to receive a quote.



The Genuine. The Original.

Since 1921, Overhead Door Corporation has not only raised the standards of excellence for the industry – we've created them. We created the first sectional garage door in 1921 and the first electric garage door opener in 1926.

Today, our network of over 400 Overhead Door[™] Distributors are still leading the way with innovative solutions and unmatched installation, service and support. So look for the Red Ribbon. It's your guarantee that you're getting the genuine, the original Overhead Door[™] products and services.

SOLD AND DISTRIBUTED BY:







2501 S. State Hwy. 121 Bus., Suite 200, Lewisville, TX 75067 1-800-929-DOOR • sales@overheaddoor.com

overheaddoor.com

©2020 Overhead Door Corporation. Overhead Door and OHD Anywhere are trademarks and the Red Ribyon Logo, Legacy, CodeDodger and Safe-T-Beam are registered trademarks of Overhead Door Corporation. Consistent with our policy of continuing product improvement, we reserve the right to change product specifications without notice or obligation. HomeLink is a registered trademark of Johnson Controls. Car2U is a registered trademark of Lear Corporation. R900-1167 01/20

Radon Fan

Rn₂ The Standard

Application

The Rn2 is the standard for Radon Mitigation. Ideally tailored performance curve for a vast majority of your mitigations. An excellent choice for systems with elevated radon levels, poor communication, multiple suction points and/or large sub slab footprint. This fan can be mounted both indoor, outdoor and in wet locations.

Design

The fans feature a fully sealed plastic housing. The housing is joined via a vibration welding process. The process uses transverse, reciprocating motion under pressure at the point of contact between the housing's inlet and outlet pieces. The friction produces heat that melts the thermoplastic material at the interface. The melted material quickly re-solidifies, resulting in a fused, single piece housing. The fused seam is inherently air tight, very strong and permanent. An air-tight fan ensures that efficiency is not lost and contaminants are not spilled due to leakage.

A large electrical wiring enclosure is designed into the fan housing, making electrical installation easier. Thermal overload protected with automatic reset is also included.

Certification





Product and Performance Data



Reviewed

Reviewed

312100-101-0

with Comments

SUBMITAL NUMBER DATE This submittal has been reviewed for compliance with the contract documents. Approval does not relieve this Subcontractor or Supplier of the responsibility for conformance to the quality standards set forth in the contract documents nor does it relieve his responsibility for

field verification of all conditions relating to this contract

Not Approved

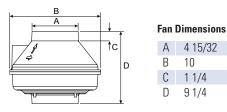
Revise and

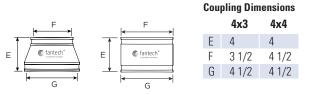
06/16/2022

Jesse Gonzalez

nsibility for

Resubmit





Fan Model	Couplers Sold Separately (Pair)	Fan Style	Pressure Category	Application Pressure Range ¹ (in w.c.)	Max. Pressure ² (in w.c.)	Electrical (V - ~ - Hz)	Rated Power (Watts)	RRNC 2.0 Fan Type
D _m 2	LDVI 4x3	Inline	Med-Low	0.0 - 1.8	1.99	120 - 1 - 60	67	RF1 & RF2
Rn2	LDVI 4x4	IIIIIIe	IVIEU-LOW					

Cross Reference / Replacement Guide^{3, 4}

Fant	tech		
		RadonAway	AMG / Festa
HP 2190	R 150	RP145, RP260	Maverick
HP 190	F 150	XP151, XP201	Hawk
HP 175	R 175	XR261	
FR 150	F 175	GP201	

Contact Us

Learn more and get in touch online at fantech.net

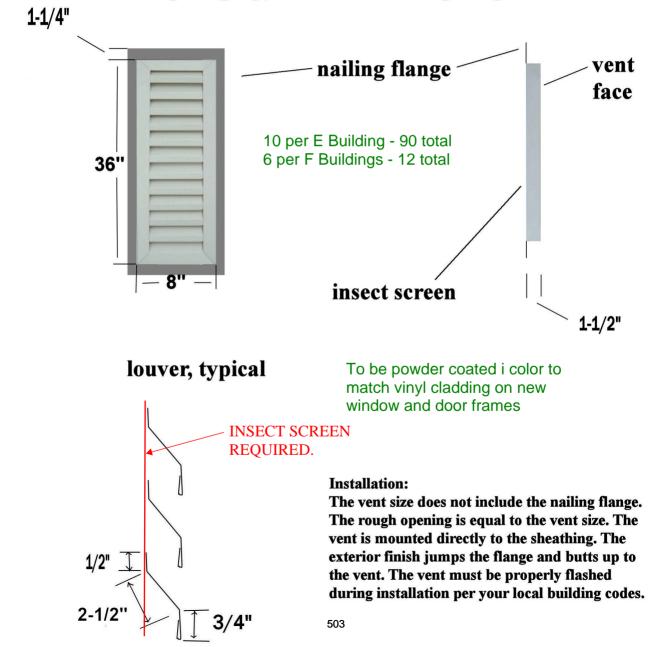


¹ Where the fan moves approximately 20 CFM or more. ² Where the fan operates, but creates no air movement. ³ Fan substitution/replacement based on pressure capability; pipe/connection sizes vary, and may require size transition couplings. Stream ferenced models are indicated for the Fantech model covering the majority of its application range.

Exterior Louvers

American Louver And Vent Company, Inc. specifications:

.019" Baked Enamel finish aluminum frame type - aluminum clad wood (no exposed wood) surface mount, no special framing necessary louver type - fixed, spacing - 2-1/4" typical screen type - aluminum mounting flange type - standard nailing flange



Checking is for general compliance with the design intent and conformance with contract documents. Contractor is responsible for dimension, fabrication and techniques of construction and coordination with other trades and satisfactory performance of this work.

Reviewed by: Hip and Humble Architecture Date:03/10/2021 - No exceptions taken - Approved as noted - Revise and resubmit

ver And Vent Company

Twenty Year Warranty

American Louver And Vent Company warrants line of products including those listed below, as follows:

Gable Vents - Foundation Vents - Crawl Space Vents - Soffit Vents - Address Mounting Blocks

American Louver And Vent Company warrants to the owner of a residence on which any of the above products have been installed that they are free from manufacturing defects which result in cracking, splitting, and excessive fading under normal weather conditions for a period of twenty (20) years from the date of purchase of the component from American Louver And Vent Company.

This warranty is subject to the following limitations:

- 1. The warranted product must have been installed in accordance with the manufacturer's installation instructions. Products not installed in this manner will not be warranted.
- 2. American Louver And Vent Company shall solely determine whether the product was installed according to its installation instructions.
- 3. In the case of a claim of excessive fading, the homeowner is advised that some degree of fading over time is expected. Therefore, American Louver And Vent Company shall solely determine whether the amount of fading in any particular case is excessive. American Louver And Vent Company will not be held responsible for fading, peeling, cracking or any other deterioration of finishes applied by any third parties.
- The homeowner shall have the burden of establishing to American Louver And Vent Company's reasonable satisfaction the date of purchase of the product on which a claim is made.
- 5. In the event of a claim during the warranty period, American Louver And Vent Company at its sole option will either (a) repair or replace the warranted product(s) without charge to the homeowner, or (b) if American Louver And Vent Company is unable to repair the product in a commercially reasonable fashion and if American Louver And Vent Company is unable to replace the product (for example, because it has been discontinued), or notwithstanding that the product may be repaired or replaced, the homeowner nevertheless chooses to accept a refund, American Louver And Vent Company will refund to the homeowner a sum equal to the actual price paid for the product at the time of purchase less reasonable depreciation from the date of purchase, which shall be determined as outlined above, to the date of the claim.
- This warranty excludes reasonable travel expenses and labor charges incurred by American Louver And Vent Company and/or its contractors in removing and/or replacing a warranted product.
- If American Louver And Vent Company attempts a reasonable number of times to repair a defective product under this warranty but those attempts are unsuccessful, American Louver And Vent Company at its option may either replace the product or pay a refund to the homeowner as provided above.
- This warranty will not cover claims for the following (a) damage to or failure of a warranted product resulting from acts of the homeowner or the installer, (b) damage to or failure of the product resulting from unreasonable use or the failure to reasonably maintain the product after the date of purchase.
- THE PROVISIONS OF THIS WARRANTY ARE IN LIEU OF ANY OTHER WARRANTY EXPRESS OR IMPLIED INCLUDING SPECIFICALLY, BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Reviewed Reviewed with Comments	Not Approved Revise and Resubmit
089000-101-0	03/09/2021
SUBMITTAL NUMBER This submittal has been review contract documents. Approval Subcontractor or Supplier of the conformance to the quality stan contract documents nor does it field verification of all conditions	does not relieve this responsibility for dards set forth in the relieve his responsibility for relating to this contract
GENERAL CONTRACTORS	Kyle Strutz

10. THE OBLIGATIONS AND LIABILITIES OF AMERICAN LOUVER AND VENT COMPANY UNDER THIS WARRANTY OR UNDER ANY IMPLIED WARRANTY WHICH IS APPLICABLE DESPITE THE PRECEDING DISCLAIMER ARE IN LIEU OF ALL OTHER OBLIGATIONS OR LIABILITIES INCLUDING, WITHOUT LIMITATION, LIABILITY FOR INCIDENTAL, CONSEQUENTIAL AND/OR ANY OTHER DAMAGES BASED UPON ANY THEORY OF RECOVERY AT LAW OR IN EQUITY INCLUDING SPECIFICALLY ANY THEORY OF NEGLIGENCE, BREACH OF CONTRACT, BREACH OF WARRANTY, OR STRICT LIABILITY.

Some states do not allow limitations on implied warranties or the exclusion or limitation of consequential damages, so the above limitations and exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights, which vary from state to state.

Any claim under this warranty must be made in writing and postmarked within 30 days after discovery of the defect to: American Louver And Vent Company Attn: Warranty Department 708 W 1800 N Suite 9A Logan, UT 84321

American Louver And Vent Company must be allowed a reasonable opportunity to determine and fulfill its obligations under this warranty before the homeowner or others make any repairs. The homeowner's failure to abide by the terms of this provision shall void any responsibility of American Louver And Vent Company to pay for repairs or other work done by third parties.

Exterior Paint & Stain

Reviewed with Comments Revise and 199190-101-0 06/22/2021	-
OLIGNETAL INCOMENT OUTE ONTE ONTEL has been reviewed for complements with the Sont act documents. Approval does not releven this authority actor of Supplier of the responsibility for Sonthract documents nor does it releven this responsibility for iedd varification of all conditions relating to this contract	MINWAX® Technical Data Sheet MINWAX® Water Based Helmsman® 275 VOC Compliant Formula for Closs, Cemi , and Satin
L tenet Gezales	Provide Satin sheen as specified on drawing

DESCRIPTION:

A1-3

Minwax® Water Based Helmsman® Spar Urethane is specially formulated to protect wood against nature's toughest conditions. Water Based Helmsman® forms a protective barrier against rain and moisture and its special oils allow the finish to expand and contract with the wood as seasons, temperatures, and humidity change. The enhanced ultraviolet absorbers found in Water Based Helmsman® reduce the graying and fading effects of the sun and its superior formula allows for a rapid recoat.

RECOMMENDED USE:

Minwax® Ideal For: Doors, Windows, Trim, Bathroom Cabinets, Bar Tops, Kitchen Countertops and Outdoor Furniture.

Note: Water Based Helmsman® is not recommended for use on floors. To protect floors, use Minwax Water Based Oil-Modified Polyurethane or Minwax Water Based Polyurethane for Floors.

SURFACE PREPARATION:

- Surface must be dry and free of paint, wax, grease, polish, old finishes in poor condition or any foreign matter.
- Sand to obtain a smooth, uniform surface. Do not use steel wool. Remove all dust with a damp cloth.
- If desired, apply stain, such as Minwax® Wood Finish®, to unfinished interior wood . surfaces. Follow directions for application instructions and dry times.

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

APPLICATION NOTES:

Product Preparation

Stir well before and occasionally during use. Do not thin.

Application

- Apply a thin coat of Water Based Helmsman® using a high quality bristle brush appropriate for use with water based finishes. On unfinished wood, apply sufficient material to seal open joints, edges and end-grain.
- Let dry at least two hours, then sand entire surface lightly with very fine sandpaper (220 grit) to ensure an even finish and proper adhesion of additional coats.
- Apply second coat. Water Based Helmsman® requires a third coat repeat above step before application. Note: For exterior surfaces or for previously unfinished wood, four coats are recommended.

MINWAX® Technical Data Sheet MINWAX® Water Based Helmsman® 275 VOC Compliant Formula for Closs, Semi, and Satin

DRY TIME:

 After final coat, allow 24 hours before normal use. If applied to countertops, allow 72 hours before normal use.

Note: Dry times are based on good ventilation, temperature of 77 F and 50% relative humidity. Lower temperature, higher humidity, lack of air movement or application of thick coats will extend drying times. Always test surface for tackiness between coats. When used for exterior applications, maintain by lightly sanding and adding an additional coat(s) as conditions require. Water Based Helmsman® is not recommended for large exterior surfaces where maintenance would be difficult, such as decks and siding. Slight ambering may be experienced when Water Based Helmsman® is applied over light-colored stains or wood surfaces.

Always spot test on an inconspicuous area to ensure satisfactory results.

MAINTENANCE:

Damp wiping with Minwax® Wood Cleaner is recommended. Mild detergent and water may also be used. Do not use abrasive pads.

CLEANUP/STORAGE:

Clean application tools with warm water immediately after use.

SAFETY:

CAUTIONS: CONTAINS 1-METHYL-2-PYRROLIDINE.

Contains material that may cause adverse reproductive effects and may adversely affect the developing fetus based on animal data. Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (NIOSH approved) or leave the area. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. FIRST AID: In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.

MINWAX® Technical Data Sheet MINWAX® Water Based Helmsman® 275 VOC Compliant Formula for Closs, Cemi, and Satin

PHYSICAL PROPERTIES:

		Testing Method
Resin type:	Oil-modified urethane	A STATISTICS AND
Solvent:	Water	
Luster:	Gioss, Semi and Satin	ASTM D523
No. of Coats:	3 recommended (Abrade between coats)	
Dry-time:	Recoat: 2 hours	Gardner circular
Sheen:	Gloss 87% minimum	
	Semi: 50 to 64%	
	Satin: 18 to 32%	
Dry film thickness:	2 mil	
Flash point:	Greater than 206 F	ASTM D 3828
Applicator:	synthetic bristle brush	
VOC (grams/liter)	275 Maximum	EPA Method 24
Coverage (sq. ft./qt.):	Approximately 500 sq. ft. per gallon	
% Solids:	28.5 - 31.5	
Pounds/Gallon:	8.59-8.82	ASTM D 2369
Viscosity(Centipoise):	140-230	

DO NOT USE ROLLERS; USE SYNTHETIC BRIGTLE BRUSH

por DRAWING Al-3, PROVIDE I GOAT CLEDE SEDLER, 2 TOP COATS OF POLYUPETHANE

> DEVIEWED DAND SAENZ MCM 6/1/21

MINWAX® Technical Data Sheet MINWAX® Water Based Helmsman® 275 VOC Compliant Formula for Gloss, Semi, and Satin

DESCRIPTION:

Minwax® Water Based Helmsman® Spar Urethane is specially formulated to protect wood against nature's toughest conditions. Water Based Helmsman® forms a protective barrier against rain and moisture and its special oils allow the finish to expand and contract with the wood as seasons, temperatures, and humidity change. The enhanced ultraviolet absorbers found in Water Based Helmsman® reduce the graying and fading effects of the sun and its superior formula allows for a rapid recoat.

RECOMMENDED USE:

Minwax® Ideal For: Doors, Windows, Trim, Bathroom Cabinets, Bar Tops, Kitchen Countertops and Outdoor Furniture.

Note: Water Based Helmsman® is not recommended for use on floors. To protect floors, use Minwax Water Based Oil-Modified Polyurethane or Minwax Water Based Polyurethane for Floors.

SURFACE PREPARATION:

- Surface must be dry and free of paint, wax, grease, polish, old finishes in poor condition or any foreign matter.
- Sand to obtain a smooth, uniform surface. Do not use steel wool. Remove all dust with a damp cloth.
- If desired, apply stain, such as Minwax® Wood Finish®, to unfinished interior wood surfaces. Follow directions for application instructions and dry times.

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

APPLICATION NOTES:

Product Preparation

• Stir well before and occasionally during use. Do not thin.

Application

- Apply a thin coat of Water Based Helmsman[®] using a high quality bristle brush appropriate for use with water based finishes.
- On unfinished wood, apply sufficient material to seal open joints, edges and end-grain.
- Let dry at least two hours, then sand entire surface lightly with very fine sandpaper (220 grit) to ensure an even finish and proper adhesion of additional coats.
- Apply second coat. Water Based Helmsman® requires a third coat repeat above step before application. Note: For exterior surfaces or for previously unfinished wood, four coats are recommended.

MINWAX® Technical Data Sheet MINWAX® Water Based Helmsman® 275 VOC Compliant Formula for Gloss, Semi, and Satin

DRY TIME:

• After final coat, allow 24 hours before normal use. If applied to countertops, allow 72 hours before normal use.

Note: Dry times are based on good ventilation, temperature of 77 F and 50% relative humidity. Lower temperature, higher humidity, lack of air movement or application of thick coats will extend drying times. Always test surface for tackiness between coats. When used for exterior applications, maintain by lightly sanding and adding an additional coat(s) as conditions require. Water Based Helmsman® is not recommended for large exterior surfaces where maintenance would be difficult, such as decks and siding. Slight ambering may be experienced when Water Based Helmsman® is applied over light-colored stains or wood surfaces.

Always spot test on an inconspicuous area to ensure satisfactory results.

MAINTENANCE:

Damp wiping with Minwax® Wood Cleaner is recommended. Mild detergent and water may also be used. Do not use abrasive pads.

CLEANUP/STORAGE:

Clean application tools with warm water immediately after use.

SAFETY:

CAUTIONS: CONTAINS 1-METHYL-2-PYRROLIDINE.

Contains material that may cause adverse reproductive effects and may adversely affect the developing fetus based on animal data. Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (NIOSH approved) or leave the area. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage. FIRST AID: In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.

MINWAX® Technical Data Sheet MINWAX® Water Based Helmsman® 275 VOC Compliant Formula for Gloss, Semi, and Satin

PHYSICAL PROPERTIES:

		Testing Method
Resin type:	Oil-modified urethane	
Solvent:	Water	
Luster:	Gloss, Semi and Satin	ASTM D523
No. of Coats:	3 recommended (Abrade between coats)	
Dry-time:	Recoat: 2 hours	Gardner circular
Sheen:	Gloss 87% minimum	
	Semi: 50 to 64%	
	Satin: 18 to 32%	
Dry film thickness:	2 mil	
Flash point:	Greater than 206 F	ASTM D 3828
Applicator:	synthetic bristle brush	
VOC (grams/liter)	275 Maximum	EPA Method 24
Coverage (sq. ft./qt.):	Approximately 500 sq. ft. per gallon	
% Solids:	28.5 - 31.5	
Pounds/Gallon:	8.59-8.82	ASTM D 2369
Viscosity(Centipoise):	140-230	

From:	Derek Hanson <derekimsky@gmail.com></derekimsky@gmail.com>
Sent:	Friday, July 2, 2021 6:53 AM
То:	Jesse Gonzalez
Cc:	David Saenz; Kyle Strutz; Philip Kedrowski, PE; afleckman@gmail.com
Subject:	Re: BHC - Exterior Paint Submittal

Semi gloss would be great. Thank you.

Kim Northrop

On Wed, Jun 30, 2021 at 1:50 PM Jesse Gonzalez <<u>jesseg@langlas.com</u>> wrote:

Please see attached exterior paint submittal for your review. Let me know if you have any questions.

Thank you.

Jesse Gonzalez

Langlas & Associates, Inc

1019 E. Main St., Suite 101

Bozeman, MT 59715

Phone: 406-585-3420

Cell: 406-599-3566



Design team - pls provide selection

тм



Yes Yes MPI

PRODUCT DESCRIPTION

CARB SCM2007 Canada

WILLIAN	∕IS.		JS	TRL
As of 04	/23/201	9, Complies with:		
OTC	Yes	LEED [®] 09 NC CI	Yes	
OTC Phase II	Yes	LEED® 09 CS	Yes	
SCAQMD	Yes	LEED® v4 Emissions	No	
CARB	Yes	LEED [®] v4 VOC	Yes	
	Vee			

WA	TERBASED ALK
U	RETHANE ENAM
B53-1051	GLOSS
B53-1151	SEMI- GLOSS
B53-1251	LOW SHEEN

113.12

D

EL

RECOMMENDED SYSTEMS

Pro Industrial Waterbased Alkyd Urethane Enamel is a premium quality interior/exterior enamel formulated with a urethane modified alkyd resin system for high performance. It provides beauty and durability when applied to interior/exterior surfaces such as properly prepared drywall, wood, masonry and metal. It brings together the convenience and ease of use of a waterborne coating with the	1ct. Pro Industrial Pro-Cryl Primer 2cts. Pro Industrial Waterbased Alky Urethane Urethane Aluminum: 1ct. Pro Industrial Pro-Cryl Primer 2cts. Pro Industrial Waterbased Alky	2cts.Pro Industrial Waterbased Alkyd UrethaneDrywall:ProMar 200 Zero VOC Primer
 performance and coating characteristics of a traditional oil-based enamel. Excellent washability & flow & leveling 		Woo d , Exte r io r : d 1 ct. Exterior Wood Primer
Excellent touch up	Urethane	2 cts. Pro Industrial Waterbased Alkyd Urethane
Easy application & cleanup		Wood, Interior:
 Resistant to yellowing compared to traditional alkyds 	2cts. Pro Industrial Waterbased Alk	1 ct. Premium Wall & Wood Primer
 Suitable for use in USDA inspected facilities 	Urethane The systems listed above are representative of the produ-	
PRODUCT CHARACTERISTICS		
Not Doct 1 Character Etros the colors Color: most colors Extra White B53W01051 Recommended Spread Rate per coat: Wet mils: 4.0 - 5.0 Dry mils: 1.4 - 1.7 Coverage: 320 - 400 sq ft/gal (7.85-9.81 m²/L) Approximate spreading rates are calculated on volume solids and do not include any application loss. Note: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance. Drying Time @ 4.0 mils wet 50% RH: @ 77°F To touch: 1-2 hrs To recoat: 4 hrs Drying time is temperature, humidity, and film thickness dependent. Finish: 75+@ 60° Gloss 55-70 @ 60° Semi-Gloss 15-25 @ 60° Low Sheen Tinting with CCE: Base oz/gal	5 mils wet Adhesion: Method: ASTM D4541 Result: > 600 psi Pencil Ha rd ness: Method: ASTM D3363 Result: 5H, 7 day dry Flexibility: Method: ASTM D522, 180° bend, 1/8" mandrel	Steel ustrial Waterbased Alkyd Urethane Image: Steel Steel Reviewed Not Approved Reviewed Revise and with Comments Revise and 099100-102-0 06/30/2021 Submittal has been reviewed for compliance with the contract documents. Approval does not relieve this subcontractor or Supplier of the responsibility for comprise to the quality standards set forth in the contract documents nor does it relieve his responsibility for field verification of all conditions relating to this contract Image: State S
Extra White 0 - 6 SherColor	Result: Excellent no cracking	GENERAL CONTRACTORS
Extra White B53W01051 (may vary by color and base) VOC (less exempt solvents): <50 g/L; <0.42 lb/gal As per 40 CFR 59.406 Volume Solids: 34 ± 2% Weight Solids: 47 ± 2%	Dry Heat Resistance: Method: ASTM D2485 Result: 200°F Block Resistance: Lab assessment Excellent	
Weight per Gallon: 10.28 lb, (4.66kg)		
Flash Point: N/A Vehicle Type: Urethane modified alkyd	Resistance to Yellowing: Lab assessment Excellent	





SURFACE PREPARATION	APPLICATION
WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.	Refer to the SDS before using. Temperature: 50°F(10°C) minimum 100°F(37.8°C) maximum (Air, surface, and material) At least 5°F above dew point Relative humi d ity: 85% maximum
Do not use hy dr oca r bon solvents fo r cleaning.	The following is a guide. Changes in pressures and tip sizes may be needed for proper spray
Iron & Steel - Minimum surface preparation is Hand Tool Clean per SSPC-SP2. Remove all oil and grease from surface per SSPC-SP1. For better performance, use Commercial Blast Cleaning per SSPC-SP6. Prime the area the same day as cleaned.	characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compatible with the existing environmental and application conditions.
Aluminum - Remove all oil, grease, dirt, oxide and other foreign material per SSPC-SP1. Prime the area the same day as cleaned.	Reducer: Water
Galvanizing - Allow to weather a minimum of six months prior to coating. Solvent Clean per SSPC-SP1. When weathering is not possible, or the surface has been treated with chromates or silicates, first Solvent Clean per SSPC-SP1 and apply a test patch. Allow paint to dry at least one week before testing adhesion. If adhesion is poor, brush blasting per SSPC-SP16 is necessary to remove these treatments. Rusty galvanizing requires a minimum of Hand Tool Cleaning per SSPC-SP2, prime the area the same day as cleaned.	Airless Spray Pressure
Concrete Block - Surface should be thoroughly clean and dry. Air, material and surface temperatures must be at least 50°F (10°C) before filling. Use Heavy Duty Block Filler or Loxon Block Surfacer. The filler must be thoroughly dry before topcoating.	B r ushNylon / polyester ReductionNot recommended
Masonry - All masonry must be free of dirt, oil, grease, loose paint, mortar, masonry dust, etc. Clean per SSPC-SP13/Nace 6/ ICRI No. 310.2R, CSP 1-3. Poured, troweled, or tilt-up concrete, plaster, mortar, etc. must be thoroughly cured at least 30 days at 75°F(23.9°C). Form release compounds and curing membranes must be removed by brush blasting. Brick must be allowed to weather for one year prior to surface preparation and painting. Prime the area the same day as cleaned. Weathered masonry and soft or porous cement board must be brush blasted or power tool cleaned to remove loosely adhering contamination and to get to a hard, firm surface. Apply one coat Loxon Conditioner, following label recommendations.	Roller
Wood - Surface must be clean, dry and sound. Prime with recommended primer. No painting should be done immediately after a rain or during foggy weather. Knots and pitch streaks must be scraped, sanded and spot primed before full coat of primer is applied. All nail holes or small openings must be properly caulked.	Clean spills, spatters, hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with compliant cleanup solvent to prevent
Previously Painted Surfaces - If in sound condition, clean the surface of all foreign material. Smooth, hard or glossy coatings and surfaces should be dulled by abrading the surface. Apply a test area, allowing paint to dry one week before testing adhesion. If adhesion is poor, additional abrasion of the surface and/or removal of the previous coating may be necessary.	rusting of the equipment. Follow manufacturer's safety recommendations when using solvents.
Retest surface for adhesion. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system.	DANGER: Rags, steel wool, other waste soaked with this product, and sanding residue may spontaneously catch fire if improperly discarded. Immediately place
Apply paint at the recommended film thickness and spreading rate as indicated on front page. Application of coating below minimum recommended spreading rate will adversely affect coating performance.	rags, steel wool, other waste soaked with this product, and sanding residue in a sealed, water-filled, metal container. Dispose of in accordance with local fire
SAFETY PRECAUTIONS Refer to the Safety Data Sheets (SDSs) before use. FOR PROFESSIONAL USE ONLY. Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.	regulations. HOTW 04/23/2019 B53W01051 11 43
PERFORMANCE TIPS No painting should be done immediately after a rain or during foggy weather. When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. Apply coating evenly while maintaining a wet edge to prevent lapping.	
The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by	I

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative or visit www.paintdocs.com to obtain the most current version of the PDS and/or an SDS.



WATERBASED ALKYD URETHANE ENAMEL

113.12

B53-1051 B53-1151 B53-1251 GLOSS SEMI- GLOSS LOW SHEEN

As of 04/23/2019, Complies with:					
OTC	Yes	LEED [®] 09 NC CI	Yes		
OTC Phase II	Yes	LEED [®] 09 CS	Yes		
SCAQMD	Yes	LEED [®] v4 Emissions	No		
CARB	Yes	LEED [®] v4 VOC	Yes		
CARB SCM2007	Yes				
Canada	Yes	MPI			

traditional oil-based enamel.

Excellent touch up

traditional alkyds

•

•

•

•

PRODUCT DESCRIPTION

RECOMMENDED SYSTEMS Pro Industrial Waterbased Alkyd Urethane Steel: Concrete/Masonry: Pro Industrial Pro-Cryl Primer Enamel is a premium quality interior/exterior 1ct Loxon Concrete & Masonry Pri-1ct. enamel formulated with a urethane modified 2cts. Pro Industrial Waterbased Alkyd mer alkyd resin system for high performance. It Urethane 2cts. Pro Industrial Waterbased Alkyd provides beauty and durability when applied to Urethane interior/exterior surfaces such as properly Aluminum: Drywall: prepared drywall, wood, masonry and metal. It 1ct. Pro Industrial Pro-Cryl Primer 1 ct. ProMar 200 Zero VOC Primer brings together the convenience and ease of 2cts. Pro Industrial Waterbased Alkyd 2 cts Pro Industrial Waterbased Alkyd use of a waterborne coating with the Urethane Urethane performance and coating characteristics of a Galvanizing: Wood, Exterior: Pro Industrial Pro-Cryl Primer 1ct. **Exterior Wood Primer** 1 ct. Excellent washability & flow & leveling Pro Industrial Waterbased Alkyd 2cts. 2 cts. Pro Industrial Waterbased Alkyd Urethane Urethane Easy application & cleanup Wood, Interior: Concrete Block: Premium Wall & Wood Primer 1 ct. Resistant to yellowing compared to Heavy Duty Block Filler 1ct. 2 cts Pro Industrial Waterbased Alkvd Pro Industrial Waterbased Alkyd 2cts. Urethane Urethane Suitable for use in USDA inspected The systems listed above are representative of the product's use, other systems may be appropriate. System Tested: (unless otherwise indicated) most colors Substrate: Cold Rolled Steel

facilities PRODUCT CHARACTERISTICS Color: Extra White B53W01051 Finish: 1 ct. Pro Industrial Waterbased Alkyd Urethane Recommended Spread Rate per coat: Wet mils: 4.0 - 5.0 5 mils wet Drv mils: 1.4 - 1.7 Coverage: 320 - 400 sq ft/gal (7.85-9.81 m²/L) Approximate spreading rates are calculated on volume solids and do not include any application loss. Note: Brush or roll application may require multiple coats to achieve maximum Adhesion: Method: **ASTM D4541** film thickness and uniformity of appearance. Drying Time @ 4.0 mils wet 50% RH: Result: > 600 psi @ 77°F To touch: 1-2 hrs Pencil Hardness: To recoat: 4 hrs Method: ASTM D3363 Drying time is temperature, humidity, and film thickness dependent. Result: 5H, 7 day dry Finish: 75+@ 60° Gloss 55-70 @ 60° Semi-Gloss Flexibility: 15-25 @ 60° Low Sheen Method: ASTM D522, 180° bend, Tinting with CCE: 1/8" mandrel Base Strength oz/gal Result: Excellent no cracking Extra White 0 - 6 SherColor Dry Heat Resistance: Extra White B53W01051 (may vary by color and base) Method: ASTM D2485 VOC (less exempt solvents): Result: 200°F <50 g/L; <0.42 lb/gal As per 40 CFR 59.406 Volume Solids: 34 ± 2% Block Resistance: 47 ± 2% Lab assessment Excellent Weight Solids: Weight per Gallon: 10.28 lb, (4.66kg) Flash Point: N/A Resistance to Yellowing: Vehicle Type: Urethane modified alkyd Lab assessment Excellent





SURFACE PREPARATION	APPLICATION
WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.	Refer to the SDS before using. Temperature: 50°F(10°C) minimum 100°F(37.8°C) maximum (Air, surface, and material) At least 5°F above dew point Relative humidity: 85% maximum
Do not use hydrocarbon solvents for cleaning. Iron & Steel - Minimum surface preparation is Hand Tool Clean per SSPC-SP2. Remove all oil and grease from surface per SSPC-SP1. For better performance, use Commercial Blast	The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compatible with the existing environmental and
Cleaning per SSPC-SP6. Prime the area the same day as cleaned. Aluminum - Remove all oil, grease, dirt, oxide and other foreign material per SSPC-SP1. Prime the area the same day as cleaned.	application conditions. Reducer: Water
Galvanizing - Allow to weather a minimum of six months prior to coating. Solvent Clean per SSPC-SP1. When weathering is not possible, or the surface has been treated with chromates or silicates, first Solvent Clean per SSPC-SP1 and apply a test patch. Allow paint to dry at least one week before testing adhesion. If adhesion is poor, brush blasting per SSPC-SP16 is necessary to remove these treatments. Rusty galvanizing requires a minimum of Hand Tool Cleaning per SSPC-SP2, prime the area the same day as cleaned.	Airless Spray Pressure
Concrete Block - Surface should be thoroughly clean and dry. Air, material and surface temperatures must be at least 50°F (10°C) before filling. Use Heavy Duty Block Filler or Loxon Block Surfacer. The filler must be thoroughly dry before topcoating.	B r ushNylon / polyester ReductionNot recommended
M asonry - All masonry must be free of dirt, oil, grease, loose paint, mortar, masonry dust, etc. Clean per SSPC-SP13/Nace 6/ ICRI No. 310.2R, CSP 1-3. Poured, troweled, or tilt-up concrete, plaster, mortar, etc. must be thoroughly cured at least 30 days at 75°F(23.9°C). Form release compounds and curing membranes must be removed by brush blasting. Brick must be allowed to weather for one year prior to surface preparation and painting. Prime the area the same day as cleaned. Weathered masonry and soft or porous cement board must be brush blasted or power tool cleaned to remove loosely adhering contamination and to get to a hard, firm surface. Apply one coat Loxon Conditioner, following label recommendations.	Roller
Wood - Surface must be clean, dry and sound. Prime with recommended primer. No painting should be done immediately after a rain or during foggy weather. Knots and pitch streaks must be scraped, sanded and spot primed before full coat of primer is applied. All nail holes or small openings must be properly caulked.	CLEANUP INFORMATION Clean spills, spatters, hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with compliant cleanup solvent to prevent
Previously Painted Surfaces - If in sound condition, clean the surface of all foreign material. Smooth, hard or glossy coatings and surfaces should be dulled by abrading the surface. Apply a test area, allowing paint to dry one week before testing adhesion. If adhesion is poor, additional abrasion of the surface and/or removal of the previous coating may be necessary. Retest surface for adhesion. If paint is peeling or badly weathered, clean surface to sound	rusting of the equipment. Follow manufacturer's safety recommendations when using solvents. DANGER: Rags, steel wool, other waste soaked with this product, and sanding
substrate and treat as a new surface as above. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system.	residue may spontaneously catch fire if improperly discarded. Immediately place
APPLICATION PROCEDURES Apply paint at the recommended film thickness and spreading rate as indicated on front page. Application of coating below minimum recommended spreading rate will adversely affect coating performance.	rags, steel wool, other waste soaked with this product, and sanding residue in a sealed, water-filled, metal container. Dispose of in accordance with local fire
SAFETY PRECAUTIONS Refer to the Safety Data Sheets (SDSs) before use. FOR PROFESSIONAL USE ONLY. Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.	regulations. HOTW 04/23/2019 B53W01051 11 43
PERFORMANCE TIPS No painting should be done immediately after a rain or during foggy weather. When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. Apply coating evenly while maintaining a wet edge to prevent lapping.	
The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by	or on behalf of The Shenwin-Williams Company, Such

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative or visit www.paintdocs.com to obtain the most current version of the PDS and/or an SDS.



Reviewed Reviewed with Comment	Not Approved Revise and Resubmit				
09100-103-0	09/13/2021				
SUBMITTAL NUMBER	DATE				
This submittal has been reviewed for compliance with the contract documents. Approval does not relieve this Subcontractor or Supplier of the responsibility for conformance to the quality standards set forth in the contract documents nor does it relieve his responsibility for field verification of all conditions relating to this contract					
GENERAL CONTRACTORS	Jesse Gonzalez				

SuperDeck.

FEATURING PREMIUM DUCKBACK TECHNOLOGY

DECK FINISHING SYSTEM



SUPERDECK IS THE MOST COMPLETE DECK CARE SYSTEM AVAILABLE.

The SuperDeck Deck Finishing System is your premium

choice for complete deck care solutions. SuperDeck's

full line of deck care products is perfect for restoring,

waterproofing, stripping, cleaning, staining and sealing.

Ideal for horizontal wood substrates, SuperDeck creates

the impressive results your customers are looking for ...

and the easy application and fast drying time you're



SUPERDECK KEY BENEFITS

- Complete, reliable deck care system with clear, semi-transparent, semi-solid and solid color stains in waterborne and transparent and semi-transparent in oil-based formulations, plus products for surface preparation, stain/ sealer removal, cleaning, restoring and waterproofing.
- Perfect for deck substrates, including new, uncoated, pressure-treated and weathered lumber, cedar and redwood.
- Long-lasting results, durability and adhesion.
- Available in a wide range of colors that complement the popular WoodScapes[®] stains for vertical wood surfaces — allowing a fully coordinated look.

CLEANING & RESTORING THE DECK

looking for.

To select your pre-treatment options, determine if the deck has been previously stained or sealed. If not, determine if the deck is cedar or redwood, pressure-treated wood or composite, and look at the chart to find your ideal pre-treatment solution.



Stain & Sealer Remover	Revive™	Deck Wash
 Great first step for previously coated decks, removing weathered latex stains, oil-based stains, toners, clear finishes 	Restores the natural beauty and color of redwood, cedar and other resinous woods	Best for use on new or uncoated pressure-treated lumber or composite decking
and some solid color stainsProvides a more uniform final finish coat	 Helps remove stains caused by dirt, mildew, algae, weathered wood, tannin extracts, nail bleed and mill glaze 	 Helps remove stains caused by dirt, mildew and algae to clean and renew weathered or pressure-treated wood
Must be followed with an application of Revive	 Use on new or uncoated cedar, redwood or pressure-treated lumber and surfaces treated with Stain & Sealer Remover 	and composite decking

IR REFLECTIVE STAINS KEEP THE SURFACE COOLER

- Available in three package colors in the Waterborne Semi-Solid Color and Solid Color stains.
- IR reflective technology contains pigments that reflect UV rays back into the atmosphere.
- Helps reduce exterior surface temperature of wood decks so they are cooler under foot compared to dark stain colors that are difficult to walk on.



SEALING & STAINING THE DECK

To select your sealing and staining options, determine your desired finished appearance and consult the chart below. Keep in mind that protection and durability increase as opacity increases.



ALSO AVAILABLE WITH IR REFLECTIVE TECHNOLOGY IN 3 COLORS: Helps reduce surface temperature — cooler to walk op.

and a	Ser.						
		SuperDeck	SuperDeck			SuperDeck	SuperDeck
	Product	Waterborne Clear Deck Sealer	Oil-Based Transparent	Oil-Based Semi-Transparent Stain	Waterborne Semi-Transparent Stain	Waterborne Semi-Solid Stain	Waterborne Solid Color Stain
	FEATURES	 Allows wood to gray naturally Repels water on new or weathered wood Soap and water cleanup 	 Provides lightly pigmented, "toned" appearance Provides rich transparent appearance that highlights wood grain Three-oil formula contains deep penetrating tung oil for lasting protection Repels water on new or weathered wood Solvent cleanup One-coat-only coverage on most exterior woods 	 Provides rich pigmented appearance, allows wood grain texture to show through Repels water on new or weathered wood Solvent cleanup One-coat-only coverage on most exterior woods 	 Advanced UV protection Provides rich pigmented appearance, allows wood grain texture to show through Repels water on new or weathered wood Can be applied to damp or dry wood Soap and water cleanup 	 Provides rich pigmented appearance, allows some natural wood grain to show through Repels water on new or weathered wood Can be applied to damp or dry wood Soap and water cleanup 	 Provides durable, opaque protection Protects new, weathered or previously stained wood and composite Can be applied to damp or dry wood Soap and water cleanup ALSO AVAILABLE WITH COOL FEEL[™] TECHNOLOGY* IN 20 COLORS: The color technology behind the Cool Feel[™] palette will help reduce the surface temperature of your deck, making it cooler for family to walk on.
	WATER REPELLENT	****	****	****	****	****	***
	OPACITY	Clear	Transparent	Semi-Transparent	Semi-Transparent	Semi-Solid	Solid
	MILDEW Resistance	**	***	***	****	****	****
	FADE Resistance	*	**	***	****	****	****
	UV PROTECTION	*	**	***	****	****	****
	DURABILITY	*	**	***	****	****	****
	COLOR Options	Clear	5	Tintable	Tintable	Tintable IR colors	Tintable

Final appearance is dependent upon wood type and color selected.

 \star = Poor | \star \star = Good | \star \star \star = Average | \star \star \star = Great | \star \star \star = Excelled

*Cool Feel™ technology helps reduce the surface temperature by up to 20°F when compared to conventional color technology.

■ MAXIMIZED		WOOD GRAIN APPEARANCE		MINIMIZED ►
■ MINIMIZED		PROTECTION		MAXIMIZED ►
Clear	Transparent	Semi Transparent	Semi-Solid	Solid Color

ALL THE DECK PRODUCTS YOU NEED FOR SUPERB RESULTS. SATISFY CUSTOMERS AND EARN MORE REFERRALS.



Achieve the appearance and weathering performance of a satin varnish with the ease of a stain. This formula offers exceptional water beading properties and UV inhibitors for premium results. Its semi-transparent look is ideal for new wood surfaces.



Smooth and fill rough or sound damaged surfaces with a high-build, flexible coating. Deliver maximum hide and resistance to algae and mildew as well as UV protection and lasting color.

ALSO AVAILABLE:



SuperDeck[®] Exotic Hardwood Stain and Log Home Oil Finish

SUPERDECK IS BROUGHT TO YOU BY A NAME YOU KNOW AND TRUST.

For over 150 years, Sherwin-Williams has provided contractors, builders, property managers, architects and designers with the trusted products they need to build their business and satisfy customers. The SuperDeck Deck Finishing System is just one more way we bring you industry-leading paint technology — innovation you can pass on to your customers.

Plus, with more than 4,300 stores and 2,700 sales representatives across North America, personal service and expert advice is always available near jobsites. Find out more about SuperDeck at your nearest Sherwin-Williams store, or to have a sales representative contact you, call **800-524-5979**.





SuperDeck.

FEATURING PREMIUM DUCKBACK TECHNOLOGY

DECK FINISHING SYSTEM



SUPERDECK IS THE MOST COMPLETE DECK CARE SYSTEM AVAILABLE.

The SuperDeck Deck Finishing System is your premium

choice for complete deck care solutions. SuperDeck's

full line of deck care products is perfect for restoring,

waterproofing, stripping, cleaning, staining and sealing.

Ideal for horizontal wood substrates, SuperDeck creates

the impressive results your customers are looking for ...

and the easy application and fast drying time you're



SUPERDECK KEY BENEFITS

- Complete, reliable deck care system with clear, semi-transparent, semi-solid and solid color stains in waterborne and transparent and semi-transparent in oil-based formulations, plus products for surface preparation, stain/ sealer removal, cleaning, restoring and waterproofing.
- Perfect for deck substrates, including new, uncoated, pressure-treated and weathered lumber, cedar and redwood.
- Long-lasting results, durability and adhesion.
- Available in a wide range of colors that complement the popular WoodScapes[®] stains for vertical wood surfaces — allowing a fully coordinated look.

CLEANING & RESTORING THE DECK

looking for.

To select your pre-treatment options, determine if the deck has been previously stained or sealed. If not, determine if the deck is cedar or redwood, pressure-treated wood or composite, and look at the chart to find your ideal pre-treatment solution.



Stain & Sealer Remover	Revive™	Deck Wash
 Great first step for previously	 Restores the natural beauty and	 Best for use on new or uncoated
coated decks, removing	color of redwood, cedar and	pressure-treated lumber or
weathered latex stains, oil-based	other resinous woods	composite decking
stains, toners, clear finishes	 Helps remove stains caused by	 Helps remove stains caused by
and some solid color stains	dirt, mildew, algae, weathered	dirt, mildew and algae to clean
• Provides a more uniform	wood, tannin extracts, nail bleed	and renew weathered
final finish coat	and mill glaze	or pressure-treated wood
Must be followed with an application of Revive	Use on new or uncoated cedar, redwood or pressure-treated lumber and surfaces treated with Stain & Sealer Remover	and composite decking

IR REFLECTIVE STAINS KEEP THE SURFACE COOLER

- Available in three package colors in the Waterborne Semi-Solid Color and Solid Color stains.
- IR reflective technology contains pigments that reflect UV rays back into the atmosphere.
- Helps reduce exterior surface temperature of wood decks so they are cooler under foot compared to dark stain colors that are difficult to walk on.



SEALING & STAINING THE DECK

To select your sealing and staining options, determine your desired finished appearance and consult the chart below. Keep in mind that protection and durability increase as opacity increases.



ALSO AVAILABLE WITH IR REFLECTIVE TECHNOLOGY IN 3 COLORS: Helps reduce surface temperature — cooler to walk on.

	SuperDeck			SuperDeck Hinters and the Hinters and the Hint	SuperDeck Protect allow	SuperDeck entranse
Product	Waterborne Clear Deck Sealer	Oil-Based Transparent	Oil-Based Semi-Transparent Stain	Waterborne Semi-Transparent Stain	Waterborne Semi-Solid Stain	Waterborne Solid Color Stain
FEATURES	 Allows wood to gray naturally Repels water on new or weathered wood Soap and water cleanup 	 Provides lightly pigmented, "toned" appearance Provides rich transparent appearance that highlights wood grain Three-oil formula contains deep penetrating tung oil for lasting protection Repels water on new or weathered wood Solvent cleanup One-coat-only coverage on most exterior woods 	 Provides rich pigmented appearance, allows wood grain texture to show through Repels water on new or weathered wood Solvent cleanup One-coat-only coverage on most exterior woods 	 Advanced UV protection Provides rich pigmented appearance, allows wood grain texture to show through Repels water on new or weathered wood Can be applied to damp or dry wood Soap and water cleanup 	 Provides rich pigmented appearance, allows some natural wood grain to show through Repels water on new or weathered wood Can be applied to damp or dry wood Soap and water cleanup 	 Provides durable, opaque protection Protects new, weathered or previously stained wood and composite Can be applied to damp or dry wood Soap and water cleanup ALSO AVAILABLE WITH COOL FEEL[™] TECHNOLOGY* IN 20 COLORS: The color technology behind the Cool Feel[™] palette will help reduce the surface temperature of your deck, making it cooler for family to walk on.
WATER REPELLENT	****	****	****	****	****	***
OPACITY	Clear	Transparent	Semi-Transparent	Semi-Transparent	Semi-Solid	Solid
MILDEW Resistance	**	***	***	****	****	****
FADE Resistance	*	**	***	****	****	****
UV Protection	*	**	***	****	****	****
DURABILITY	*	**	***	****	****	****
COLOR Options	Clear	5	Tintable	Tintable	Tintable IR colors n	Tintable on-tintable

Final appearance is dependent upon wood type and color selected.

 \star = Poor | \star \star = Good | \star \star \star = Average | \star \star \star \star = Great | \star \star \star \star = Excellent

*Cool Feel™ technology helps reduce the surface temperature by up to 20°F when compared to conventional color technology.

◄ MAXIMIZED		WOOD GRAIN APPEARANCE		MINIMIZED ►
◄ MINIMIZED		PROTECTION		MAXIMIZED ►
Clear	Transparent	Send-Transparent	Semi-Solid	Solid Color

ALL THE DECK PRODUCTS YOU NEED FOR SUPERB RESULTS. SATISFY CUSTOMERS AND EARN MORE REFERRALS.



Achieve the appearance and weathering performance of a satin varnish with the ease of a stain. This formula offers exceptional water beading properties and UV inhibitors for premium results. Its semi-transparent look is ideal for new wood surfaces.



Smooth and fill rough or sound damaged surfaces with a high-build, flexible coating. Deliver maximum hide and resistance to algae and mildew as well as UV protection and lasting color.

ALSO AVAILABLE:



SuperDeck[®] Exotic Hardwood Stain and Log Home Oil Finish

SUPERDECK IS BROUGHT TO YOU BY A NAME YOU KNOW AND TRUST.

For over 150 years, Sherwin-Williams has provided contractors, builders, property managers, architects and designers with the trusted products they need to build their business and satisfy customers. The SuperDeck Deck Finishing System is just one more way we bring you industry-leading paint technology — innovation you can pass on to your customers.

Plus, with more than 4,300 stores and 2,700 sales representatives across North America, personal service and expert advice is always available near jobsites. Find out more about SuperDeck at your nearest Sherwin-Williams store, or to have a sales representative contact you, call **800-524-5979**.







DESCRIPTION: U.V. Plus is an oil based penetrating wood finish suitable for decks, log homes, wood siding, fencing and other exterior wood surfaces. UV Plus protects wood while maintaining a natural appearance.

SPECIFICATIONS

VEHICLE TYPE

Solvent based, blend of linseed oils and alkyds

COLORS

Available in Natural, Natural Pine / Fir, Natural Cedar, Natural Redwood, Natural Sequoia, Navajo Red, Oxford Brown, Dark Walnut, Oak Brown, Driftwood Gray, Cape Cod Gray and Charcoal.

VISCOSITY

15-18 Seconds Zahn #2 at 77F

VOC CONTENT

MC-500 Series < 450 g/L (as supplied) VOC MC-500 Series <250 g/L (as supplied) MS-600 Series < 450 g/L (as supplied) VOC MS-600 Series <250 g/L (as supplied)

SOLIDS BY VOLUME

MC-500 Series 45% VOC MC-500 Series 62% MS-600 Series 45% VOC MS-600 Series 62%

SOLIDS BY WEIGHT

MC-500 Series 50% VOC MC-500 Series 64% MS-600 Series 50% VOC MS-600 Series 64%

WEIGHT PER GALLON

7.3 to 7.9 Pounds

COVERAGE

Rough Wood: 100 to 150 square feet per gallon Smooth Wood: 150 to 250 square feet per gallon

DRY TIME Allow 24 hours in good drying conditions

APPLY WITH Brush, roller, airless spray

PACKAGING

One gallon and five gallon containers. Quarts available in most colors.

SURFACE PREPARATION

Always clean gray or dirty wood before applying UV Plus. Use Messmer's WD Wood and Deck Renewer, available in liquid and powder concentrates. Allow wood to completely dry for at least 24 to 48 hours. Previously stained or treated wood should be sufficiently weathered to allow for complete penetration of U.V. Plus. New redwood should be aged at least 6-8 weeks and cleaned before applying product.

SPECIAL INSTRUCTIONS

Before applying, this product should be mixed thoroughly. Ensure that all settled material on bottom of can is evenly incorporated, and intermix all containers (box them).

Apply UV Plus when surface temperatures are between 45F and 90F. If surface is hot to the touch, it is too hot to apply product. Do not apply product if precipitation is expected within 24-48 hours.

Spray Application: When spraying, back brush or roll to prevent sags and runs. Cover surrounding areas to protect from overspray. For airless spray, use .015" to .019" tip size for best results.

Brush Application: To minimize lapping, maintain a wet edge lengthwise and do not break in the middle of boards.

One coat is sufficient for most applications. Product not absorbed into the wood within 30-60 minutes must be removed to prevent surface sheen.

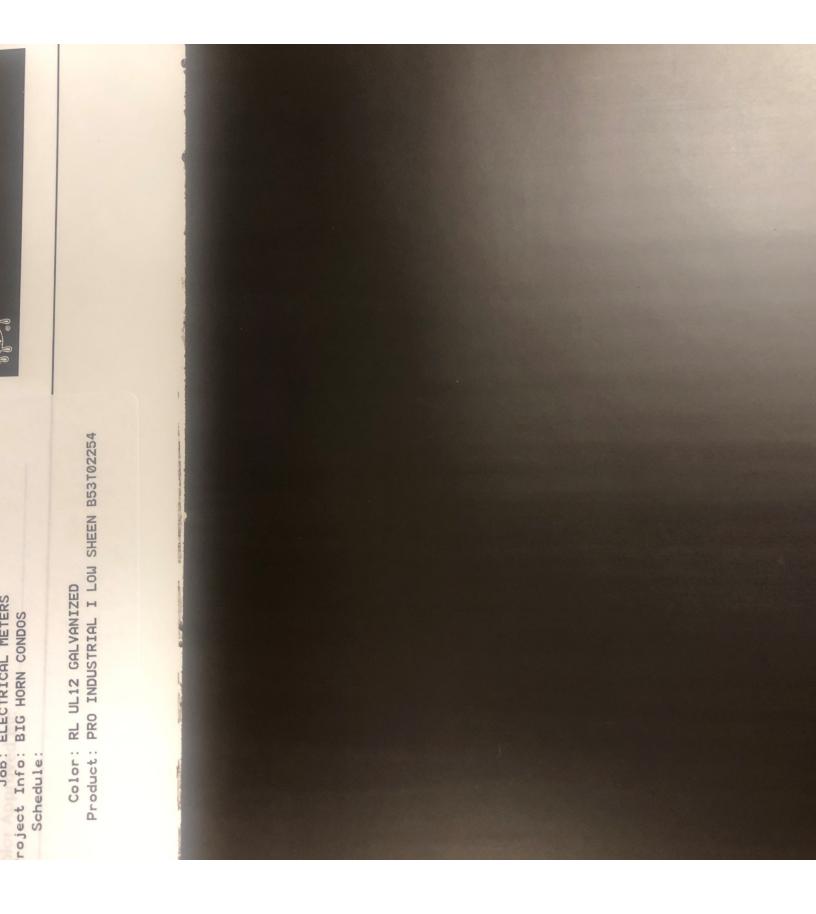
THINNING RECOMMENDATIONS Thinning is not recommended.

CLEANUP

Use paint thinner. Dispose of waste in accordance with local, state and federal regulations. Danger - Rags, steel wool or waste soaked with UV Plus may spontaneously catch fire if improperly discarded. Immediately after each use, place rags, steel wool or waste in a sealed, water filled metal container.

1/05

Schedule:	BIG HORN CONDOS			Reviewed	Not Approved
	RL UL12 GALVANIZED PRO INDUSTRIAL I LOW SH	EEN 853T02254		Reviewed with Comment	
				SUBMITTAL NUMBER This submittal has been revi contract documents. Approv Subcontractor or Supplier of conformance to the quality s contract documents nor doe	DATE ewed for compliance with the
The station			-	tield verification of all conditions of all cond	Jesse Gonzalez
		526			





From:	Derek Hanson <derekimsky@gmail.com></derekimsky@gmail.com>
Sent:	Friday, July 2, 2021 6:59 AM
То:	Jesse Gonzalez
Cc:	David Saenz; Philip Kedrowski, PE; afleckman@gmail.com
Subject:	Re: BHC - Address Number submittals

That all looks good for the numbers. Was there another item on the log which needed to be addressed?

Kim Northrop

On Wed, Jun 30, 2021 at 3:38 PM Jesse Gonzalez <<u>jesseg@langlas.com</u>> wrote:

Please see attached submittal for the Address numbers for your review. I have also included the latest submittal log. Let me know if you have any questions.

Thank you.

Jesse Gonzalez

Langlas & Associates, Inc

1019 E. Main St., Suite 101

Bozeman, MT 59715

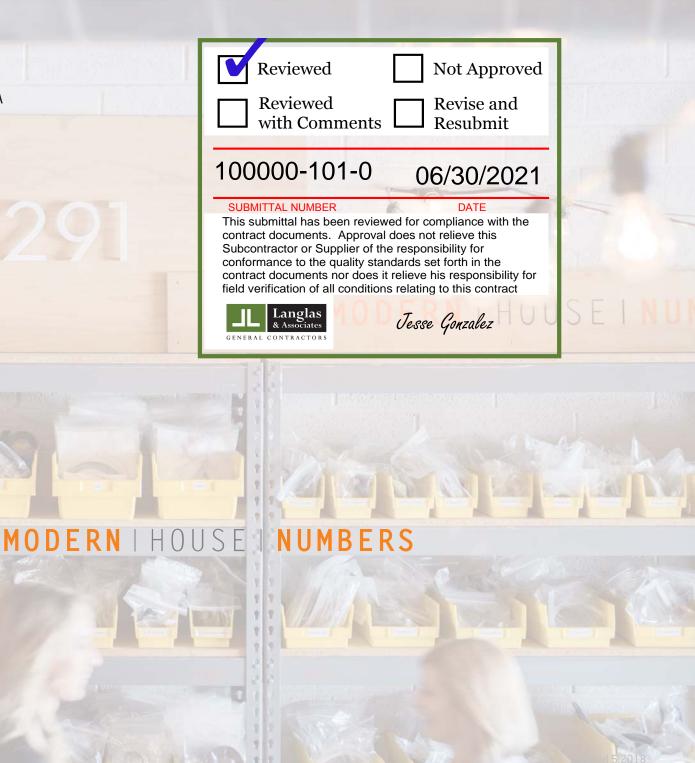
Phone: 406-585-3420

Cell: 406-599-3566



Building Numbers

PRODUCT INFORMATION AND TECHNICAL DATA



MODERN | HOUSE | NUMBERS

GENERAL PRODUCT INFORMATION

CUSTOM MADE ALUMINUM AND POWDER COATED NUMBERS, LETTERS AND SYMBOLS, AND PLAQUES

SIZES: Aluminum or powder coated house numbers and letters available in : 4", 6, 8", 12" and/or 15" high. Additional sizes and custom symbols available upon request. See dimensional charts for specific character heights and widths.

PLAQUE SIZES: Aluminum or powder coated plaques sizes available in the following sizes: 5", 7" and 10" diameter circle, 8"x8" square, 3x8", 4x11, and 5"x16" rectangle. Additional sizes available upon request. Refer to Visibility Chart for plaque viewing distances.

FONTS: Aluminum and powder coated house numbers available in six standard typefaces: Palm Springs, SoCal, Austin, Backbay, Santa Barbara, Soho and South Beach. Additional fonts available with a nominal set up fee.

PLAQUE FONTS: Aluminum and powder coated plaques avilable in two standard typefaces: Palm Springs and SoCal. Text is stencil cut from solid 3/8" thick aluminum. Our other standard fonts available upon request, at no charge. Custom fonts available with additional setup fee.

ALUMINUM FINISH: Aluminum products are finished with two coats of clear, matte sealant to protect them from UV, salt air and other environmental corrosives. Regular cleaning with water and mild soap required to maintain finish.

POWDER COATED FINISHES: Powder coat finishes are more durable that standard paint and are **highly recommended for costal and industrial areas**. Available in the following colors: white, matte black, matte bronze, and dark bronze. Additional colors available for large quantities, upon request at additional fee.

MATERIAL: All aluminum and powder coated house numbers, letters, symbols and plaques are made from solid, 3/8" thick recycled aluminum.

HARDWARE: All aluminum and powder coated house numbers/plaques include 3/16" diameter x 2" long steel studs and 3/16" inside diameter x 1/2" long aluminum spacers. Hardware is concealed with proper installation. If a subtle shadow / floating effect is desired, aluminum standoffs are included to slide over studs. All aluminum and powder coated house numbers/plaques have 3/16" pre-drilled stud holes (not visible from face of number). See attached diagrams for more information.

EXTERIOR GRADE VINYL

SIZES: Available in 1", 2", 3", 4", 6", 8" and 12" high. Additional sizes available at no additional cost. See dimensional charts for heights and widths of specific characters.

COLORS: Available in silver, black, blue, brass, bronze, copper, green, orange and white. Visit moderhousenumbers.com for examples.

MATERIAL: Custom made from high quality exterior grade vinyl with a peel-and-stick adhesive backing. User removes both front and back layers. Note: Smooth, dry mounting surface required.

CURB STENCILS

SIZE: Curb Stencil text is 4" tall. Surrounding vinyl border is 1/2" on all sides. Note: 6" curb height recommended.

COLORS: Spray paint not included. Visit moderhousenumbers.com for list of recommended colors that coordinate with our exterior vinyl colors.

MATERIAL: Made from high quality exterior grade vinyl with a peel-and-stick adhesive backing. User removes both front and back layers. Note: smooth, dry surface required.

SUPPLIES REQUIRED FOR INSTALLATION - NOT INCLUDED

HOUSE NUMBERS AND PLAQUES: Drill, 11/64" drill bit (metal, wood or masonry depending on installation surface), hammer, epoxy (clear, muli-purpose and exterior grade) and masking tape. Also helpful are a rubber mallet, paper towels, ruler and level. Hammer drill for stone and concrete surfaces may be required. See installation tips for more information.

VINYL: Ruler, masking tape and materials to clean mailbox prior to insulation. See attached for additional installation tips. Viny productsl wll not stick if surface is cold/frozen, wet, rough, or dirty.

MODERN | HOUSE | NUMBERS

SANTA BARBARA TYPEFACE

	vinyl only s	izes		number widt	h - aluminun	n and viny	1			quantity of
	*1"	*2"	*3"	4"	6"	8"	12"	15"		4"
0	1	2	2.84	3.79	5.67	7.6	11.4	14.25	0	2
1	0.25	0.75	1.02	1.37	2.05	2.73	4.1	5.12	1	2
2	0.75	1.75	2.5	3.34	5	6.67	10.01	12.51	2	3
3	1	1.75	2.65	3.7	5.31	7.08	10.61	13.27	3	3
4	1	2	2.82	3.76	5.65	7.54	11.31	14.14	4	2
5	1	1.75	2.7	3.6	5.41	6.74	10.82	13.52	5	3
6	1	1.75	2.69	3.58	5.37	7.16	10.74	13.42	6	2
7	1	1.75	2.67	3.56	5.36	7.15	10.73	13.36	7	2
8	1	1.75	2.69	3.58	5.36	7.2	10.72	13.40	8	3
9	1	1.75	2.69	3.58	5.36	7.15	10.73	13.41	9	2
					\bigcirc					

quantity of pre-drilled stud holes								
	4"	6"	8"	12"	15"			
C	2	2	2	4	4			
1	2	2	2	3	3			
2	3	3	3	4	6			
3	3	3	3	4	4			
4	2	2	2	3	5			
5	3	3	3	4	4			
5	2	2	3	4	6			
7	2	3	3	4	5			
8	3	3	3	4	6			
9	2	2	3	4	6			
		\bigcirc						

SOUTH BEACH TYPEFACE

vir	nyl only size	s	n	umber width	- aluminum	and vinyl				qua	ntity of pre-	drilled stud	holes		
	*1"	*2"	*3"	4"	6"	8"	12"	15"			4"	6"	8"	12"	15
0	1	1.75	2.75	3.66	5.49	7.32	10.99	13.73		0	2	2	2	4	
1	0.25	0.25	0.5	0.67	1	1.33	2	2.5	_	1	2	2	2	3	
2	0.75	1.75	2.46	3.28	4.91	6.55	9.83	12.29		2	2	2	2	4	
3	0.75	1.5	2.3	3.08	4.61	6.15	9.23	11.54		3	2	2	2	4	
4	1	1.75	2.79	3.72	5.58	7.44	11.17	13.96		4	3	3	3	3	
5	0.75	1.75	2.51	3.35	5.02	6.69	10.04	12.54		5	2	2	2	4	
6	0.75	1.75	2.55	3.4	5.11	6.81	10.22	12.77		6	2	2	2	4	
7	0.75	1.75	2.54	3.38	5.08	6.77	10.15	12.69		7	2	2	2	4	
8	1	1.75	2.74	3.64	5.48	7.3	10.95	13.69		8	2	2	2	4	
9	0.75	1.75	2.59	3.45	5.17	6.9	10.35	12.93		9	2	2	2	4	-

•2

NUMBERS AND LETTERS : AVERAGE VIEWING DISTANCES

Legibility varies by font, character count, and installation location and surface color. Choose a finish that creates high contrast against the installation surface for maximum legibility.

	size / height in inches	example	avg. viewing distance *varies by finish
small	4"	9870	50' or less
medium	6"	9870	100' or less
medium	De 8"	epiction of size selection - NOT font (see below).	150' or less
large	12"	9870	200" or less
	15"	\bigcup_{534}	300' or less
	2		updated 7/25/19

SANTA BARBARA TYPEFACE

0123456789

ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz

INSTALLATION TIPS: ALUMINUM AND POWDER COATED HOUSE NUMBERS, LETTERS AND SYMBOLS AND PLAQUES

STEP 1

Gather supplies - house numbers, stencil, studs, spacers, (tape, adhesive, hammer, rubber mallet, drill and drill bit - not provided).





STEP 4

Push stud into pre-drilled hole on the back of the number. Light tapping with a hammer may be required. Place on soft surface and take care not to scratch the face of the number.

STEP 2

Tape stencil at desired location, use level to align template. Drill holes according to template - use 11/64" drill bit (3/16" for masonry or rock).





STEP 5 Slide spa

Slide spacer over stud and apply epoxy to the end of the exposed stud.

STEP 3 Apply epoxy to one end of the stud.





STEP 6

Push number into holes, light tapping with a rubber mallet may be required.

LEED ™ FACT SHEET: ALUMINUM



LEED[™] Fact Sheet Aluminum Sheet & Plate for the Building & Construction Market

(LEED[™] is Leadership in Energy & Environmental Design. The LEED Green Building Rating System[™], as promulgated by the U.S. Green Building Council, aims to improve occupant well-being, environmental performance and economic returns of buildings using established and innovative practices, standards and technologies.)

RECYCLED CONTENT

A survey of aluminum producers in mid-2008 indicated that the total recycled content of domestically produced, flat rolled products for the Building and Construction market was approximately 85%. The survey of the producers also indicated that on average ~60% of the total product content is from post-consumer sources. While these numbers represent the industry average, higher post-consumer and total recycled content material may be available from individual producers. For information on the LEED[™] program and to find out how you can earn credit for the recycled content of your aluminum products go to: http://www.usgbc.org/leed/leed main.asp.

RECYCLABILITY

Not only does the aluminum used in the building and construction industry contain a high percentage of both post-consumer and post-industrial recycled content, at the end of its long, useful life in your building application it is 100% recyclable. Aluminum building components can be repeatedly recycled back into similar products with no loss of quality, and aluminum in its various forms provides the most valuable component for most municipal recycling efforts.

To produce aluminum from recycled material requires only \sim 5% of the energy required to produce aluminum from bauxite ore, and every ton of recycled aluminum saves 4 tons of bauxite. Additionally, using recycled aluminum instead of raw materials reduces air pollution generation such as CO2, SOx, and NOx by 95% and water pollution by 97%.

For additional information on aluminum products for the building and construction industry, please contact your local supplier.

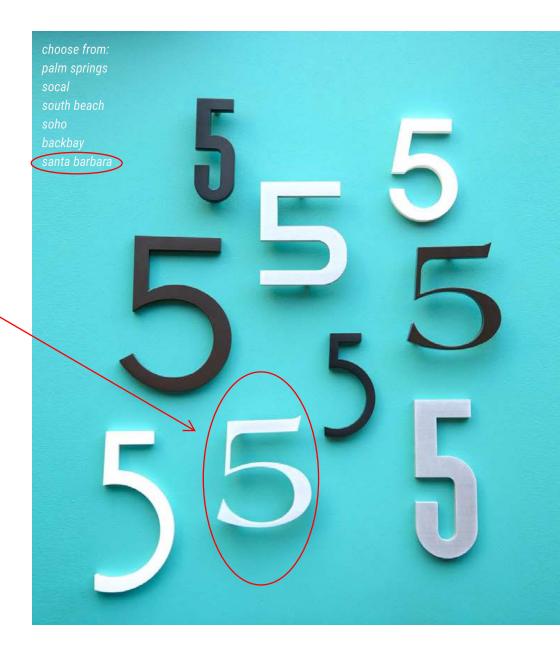
numbers, letters, symbols

Santa Barbara Font —

NUMBERS, LETTERS + SYMBOLS AVAILABLE IN

6 FONTS

From bold to narrow, classic to mod, we've got your number. Choose from one of our six carefully selected iconic typefaces, or request a custom font to create a unique look all your own.



Brushed Aluminum Finish

numbers, letters, symbols

NUMBERS, LETTERS + SYMBOLS AVAILABLE IN

5 FINISHES

Classic and modern finish options to help your project stand the test of time. Choose from UV-resistant brushed aluminum or our durable powder coat finishes.



PRODUCT INFORMATION AND TECHNICAL DATA

I ⊂ MODERN | HOUSE | NUMBERS

540

GENERAL PRODUCT INFORMATION

CUSTOM MADE ALUMINUM AND POWDER COATED NUMBERS, LETTERS AND SYMBOLS, AND PLAQUES

SIZES: Aluminum or powder coated house numbers and letters available in : 4", 6, 8", 12" and/or 15" high. Additional sizes and custom symbols available upon request. See dimensional charts for specific character heights and widths.

PLAQUE SIZES: Aluminum or powder coated plaques sizes available in the following sizes: 5", 7" and 10" diameter circle, 8"x8" square, 3x8", 4x11, and 5"x16" rectangle. Additional sizes available upon request. Refer to Visibility Chart for plaque viewing distances.

FONTS: Aluminum and powder coated house numbers available in six standard typefaces: Palm Springs, SoCal, Austin, Backbay, Santa Barbara, Soho and South Beach. Additional fonts available with a nominal set up fee.

PLAQUE FONTS: Aluminum and powder coated plaques avilable in two standard typefaces: Palm Springs and SoCal. Text is stencil cut from solid 3/8" thick aluminum. Our other standard fonts available upon request, at no charge. Custom fonts available with additional setup fee.

ALUMINUM FINISH: Aluminum products are finished with two coats of clear, matte sealant to protect them from UV, salt air and other environmental corrosives. Regular cleaning with water and mild soap required to maintain finish.

POWDER COATED FINISHES: Powder coat finishes are more durable that standard paint and are **highly recommended for costal and industrial areas**. Available in the following colors: white, matte black, matte bronze, and dark bronze. Additional colors available for large quantities, upon request at additional fee.

MATERIAL: All aluminum and powder coated house numbers, letters, symbols and plaques are made from solid, 3/8" thick recycled aluminum.

HARDWARE: All aluminum and powder coated house numbers/plaques include 3/16" diameter x 2" long steel studs and 3/16" inside diameter x 1/2" long aluminum spacers. Hardware is concealed with proper installation. If a subtle shadow / floating effect is desired, aluminum standoffs are included to slide over studs. All aluminum and powder coated house numbers/plaques have 3/16" pre-drilled stud holes (not visible from face of number). See attached diagrams for more information.

EXTERIOR GRADE VINYL

SIZES: Available in 1", 2", 3", 4", 6", 8" and 12" high. Additional sizes available at no additional cost. See dimensional charts for heights and widths of specific characters.

COLORS: Available in silver, black, blue, brass, bronze, copper, green, orange and white. Visit moderhousenumbers.com for examples.

MATERIAL: Custom made from high quality exterior grade vinyl with a peel-and-stick adhesive backing. User removes both front and back layers. Note: Smooth, dry mounting surface required.

CURB STENCILS

SIZE: Curb Stencil text is 4" tall. Surrounding vinyl border is 1/2" on all sides. Note: 6" curb height recommended.

COLORS: Spray paint not included. Visit moderhousenumbers.com for list of recommended colors that coordinate with our exterior vinyl colors.

MATERIAL: Made from high quality exterior grade vinyl with a peel-and-stick adhesive backing. User removes both front and back layers. Note: smooth, dry surface required.

SUPPLIES REQUIRED FOR INSTALLATION - NOT INCLUDED

HOUSE NUMBERS AND PLAQUES: Drill, 11/64" drill bit (metal, wood or masonry depending on installation surface), hammer, epoxy (clear, muli-purpose and exterior grade) and masking tape. Also helpful are a rubber mallet, paper towels, ruler and level. Hammer drill for stone and concrete surfaces may be required. See installation tips for more information.

VINYL: Ruler, masking tape and materials to clean mailbox prior to insulation. See attached for additional installation tips. Viny productsl wll not stick if surface is cold/frozen, wet, rough, or dirty.

SANTA BARBARA TYPEFACE

	vinyl only s	izes		number widt	h - aluminun	n and viny	1			quantity of
	*1"	*2"	*3"	4"	6"	8"	12"	15"		4"
0	1	2	2.84	3.79	5.67	7.6	11.4	14.25	0	2
1	0.25	0.75	1.02	1.37	2.05	2.73	4.1	5.12	1	2
2	0.75	1.75	2.5	3.34	5	6.67	10.01	12.51	2	3
3	1	1.75	2.65	3.7	5.31	7.08	10.61	13.27	3	3
4	1	2	2.82	3.76	5.65	7.54	11.31	14.14	4	2
5	1	1.75	2.7	3.6	5.41	6.74	10.82	13.52	5	3
6	1	1.75	2.69	3.58	5.37	7.16	10.74	13.42	6	2
7	1	1.75	2.67	3.56	5.36	7.15	10.73	13.36	7	2
8	1	1.75	2.69	3.58	5.36	7.2	10.72	13.40	8	3
9	1	1.75	2.69	3.58	5.36	7.15	10.73	13.41	9	2
					\bigcirc					

qua	ntity of pro	e-drilled stu	d h	oles		
	4"	6"	`	8"	12"	15"
0	2	2		2	4	4
1	2	2	1	2	3	3
2	3	3		3	4	6
3	3	3		3	4	4
4	2	2		2	3	5
5	3	3		3	4	4
6	2	2		3	4	6
7	2	3		3	4	5
8	3	3	1	3	4	6
9	2	2	/	3	4	6
		\bigcirc				

SOUTH BEACH TYPEFACE

vir	nyl only size	s	nı	number width - aluminum and vinyl					quantity of pre-drilled stud holes							
	*1"	*2"	*3"	4"	6"	8"	12"	15"			4"	6"	8"	12"	15	
0	1	1.75	2.75	3.66	5.49	7.32	10.99	13.73	(D	2	2	2	4		
1	0.25	0.25	0.5	0.67	1	1.33	2	2.5			2	2	2	3		
2	0.75	1.75	2.46	3.28	4.91	6.55	9.83	12.29		2	2	2	2	4		
3	0.75	1.5	2.3	3.08	4.61	6.15	9.23	11.54	3	3	2	2	2	4		
4	1	1.75	2.79	3.72	5.58	7.44	11.17	13.96		1	3	3	3	3		
5	0.75	1.75	2.51	3.35	5.82	6.69	10.04	12.54		5	2	2	2	4		
6	0.75	1.75	2.55	3.4	5.11	6.81	10.22	12.77	(5	2	2	2	4		
7	0.75	1.75	2.54	3.38	5.08	6.77	10.15	12.69	-	7	2	2	2	4		
8	1	1.75	2.74	3.64	5.48	7.3	10.95	13.69	8	3	2	2	2	4		
9	0.75	1.75	2.59	3.45	5.17	6.9	10.35	12.93	9	Э	2	2	2	4	-	

•2

NUMBERS AND LETTERS : AVERAGE VIEWING DISTANCES

Legibility varies by font, character count, and installation location and surface color. Choose a finish that creates high contrast against the installation surface for maximum legibility.

	size / height in inches	example	avg. viewing distance *varies by finish
small	4"	9870	50' or less
medium	6"	9870	100' or less
medium	De 8"	epiction of size selection - NOT font (see below).	150' or less
large	12"	9870	200" or less
	15"	\bigcup_{543}	300' or less
			updated 7/25/19

SANTA BARBARA TYPEFACE

0123456789

ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz

INSTALLATION TIPS: ALUMINUM AND POWDER COATED HOUSE NUMBERS, LETTERS AND SYMBOLS AND PLAQUES

STEP 1

Gather supplies - house numbers, stencil, studs, spacers, (tape, adhesive, hammer, rubber mallet, drill and drill bit - not provided).





STEP 4

Push stud into pre-drilled hole on the back of the number. Light tapping with a hammer may be required. Place on soft surface and take care not to scratch the face of the number.

STEP 2

Tape stencil at desired location, use level to align template. Drill holes according to template - use 11/64" drill bit (3/16" for masonry or rock).





STEP 5

Slide spacer over stud and apply epoxy to the end of the exposed stud.

STEP 3 Apply epoxy to one end of the stud.





STEP 6

Push number into holes, light tapping with a rubber mallet may be required.

LEED ™ FACT SHEET: ALUMINUM



LEED[™] Fact Sheet Aluminum Sheet & Plate for the Building & Construction Market

(LEED[™] is Leadership in Energy & Environmental Design. The LEED Green Building Rating System[™], as promulgated by the U.S. Green Building Council, aims to improve occupant well-being, environmental performance and economic returns of buildings using established and innovative practices, standards and technologies.)

RECYCLED CONTENT

A survey of aluminum producers in mid-2008 indicated that the total recycled content of domestically produced, flat rolled products for the Building and Construction market was approximately 85%. The survey of the producers also indicated that on average ~60% of the total product content is from post-consumer sources. While these numbers represent the industry average, higher post-consumer and total recycled content material may be available from individual producers. For information on the LEED[™] program and to find out how you can earn credit for the recycled content of your aluminum products go to: http://www.usgbc.org/leed/leed main.asp.

RECYCLABILITY

Not only does the aluminum used in the building and construction industry contain a high percentage of both post-consumer and post-industrial recycled content, at the end of its long, useful life in your building application it is 100% recyclable. Aluminum building components can be repeatedly recycled back into similar products with no loss of quality, and aluminum in its various forms provides the most valuable component for most municipal recycling efforts.

To produce aluminum from recycled material requires only \sim 5% of the energy required to produce aluminum from bauxite ore, and every ton of recycled aluminum saves 4 tons of bauxite. Additionally, using recycled aluminum instead of raw materials reduces air pollution generation such as CO2, SOx, and NOx by 95% and water pollution by 97%.

For additional information on aluminum products for the building and construction industry, please contact your local supplier.

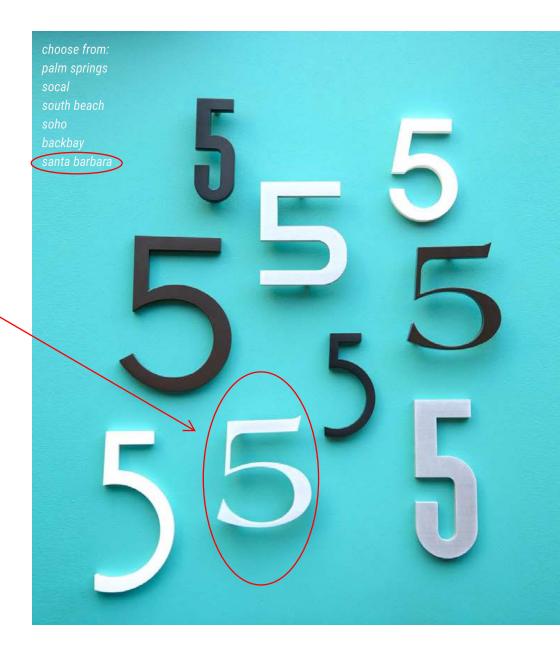
numbers, letters, symbols

Santa Barbara Font —

NUMBERS, LETTERS + SYMBOLS AVAILABLE IN

6 FONTS

From bold to narrow, classic to mod, we've got your number. Choose from one of our six carefully selected iconic typefaces, or request a custom font to create a unique look all your own.



Brushed Aluminum Finish

numbers, letters, symbols

NUMBERS, LETTERS + SYMBOLS AVAILABLE IN

5 FINISHES

Classic and modern finish options to help your project stand the test of time. Choose from UV-resistant brushed aluminum or our durable powder coat finishes.



GENERAL PRODUCT INFORMATION

CUSTOM MADE ALUMINUM AND POWDER COATED NUMBERS, LETTERS AND SYMBOLS, AND PLAQUES

SIZES: Aluminum or powder coated house numbers and letters available in : 4", 6", 8", 12" and/or 15" high. Additional sizes and custom symbols available upon request. See dimensional charts for specific character heights and widths.

PLAQUE SIZES: Aluminum or powder coated plaques sizes available in the following sizes: 5", 7" and 10" diameter circle, 8"x8" square, 3x8", 4x11, and 5"x16" rectangle. Additional sizes available upon request. Refer to Visibility Chart for plaque viewing distances.

FONTS: Aluminum and powder coated house numbers available in six standard typefaces: Palm Springs, SoCal, Austin, Backbay, Santa Barbara, Soho and South Beach. Additional fonts available with a nominal set up fee.

PLAQUE FONTS: Aluminum and powder coated plaques avilable in two standard typefaces: Palm Springs and SoCal. Text is stencil cut from solid 3/8" thick aluminum. Our other standard fonts available upon request, at no charge. Custom fonts available with additional setup fee.

ALUMINUM FINISH: Aluminum products are finished with two coats of clear, matte sealant to protect them from UV, salt air and other environmental corrosives. Regular cleaning with water and mild soap required to maintain finish.

POWDER COATED FINISHES: Powder coat finishes are more durable that standard paint and are **highly recommended for costal and industrial areas**. Available in the following colors: white, matte black, matte bronze, and dark bronze. Additional colors available for large quantities, upon request at additional fee.

MATERIAL: All aluminum and powder coated house numbers, letters, symbols and plaques are made from solid, 3/8" thick recycled aluminum.

HARDWARE: All aluminum and powder coated house numbers/plaques include 3/16" diameter x 2" long steel studs and 3/16" inside diameter x 1/2" long aluminum spacers. Hardware is concealed with proper installation. If a subtle shadow / floating effect is desired, aluminum standoffs are included to slide over studs. All aluminum and powder coated house numbers/plaques have 3/16" pre-drilled stud holes (not visible from face of number). See attached diagrams for more information.

EXTERIOR GRADE VINYL

SIZES: Available in 1", 2", 3", 4", 6", 8" and 12" high. Additional sizes available at no additional cost. See dimensional charts for heights and widths of specific characters.

COLORS: Available in silver, black, blue, brass, bronze, copper, green, orange and white. Visit moderhousenumbers.com for examples.

MATERIAL: Custom made from high quality exterior grade vinyl with a peel-and-stick adhesive backing. User removes both front and back layers. Note: Smooth, dry mounting surface required.

CURB STENCILS

SIZE: Curb Stencil text is 4" tall. Surrounding vinyl border is 1/2" on all sides. Note: 6" curb height recommended.

COLORS: Spray paint not included. Visit moderhousenumbers.com for list of recommended colors that coordinate with our exterior vinyl colors.

MATERIAL: Made from high quality exterior grade vinyl with a peel-and-stick adhesive backing. User removes both front and back layers. Note: smooth, dry surface required.

SUPPLIES REQUIRED FOR INSTALLATION - NOT INCLUDED

HOUSE NUMBERS AND PLAQUES: Drill, 11/64" drill bit (metal, wood or masonry depending on installation surface), hammer, epoxy (clear, muli-purpose and exterior grade) and masking tape. Also helpful are a rubber mallet, paper towels, ruler and level. Hammer drill for stone and concrete surfaces may be required. See installation tips for more information.

VINYL: Ruler, masking tape and materials to clean mailbox prior to insulation. See attached for additional installation tips. Viny productsl wll not stick if surface is cold/frozen, wet, rough, or dirty.

SANTA BARBARA TYPEFACE

vi	nyl only size	es	number width - aluminum and vinyl							
	*1"	*2"	*3"	4"	6"	8"	12"	15"		
0	1	2	2.84	3.79	5.67	7.6	11.4	14.25		
1	0.25	0.75	1.02	1.37	2.05	2.73	4.1	5.12		
2	0.75	1.75	2.5	3.34	5	6.67	10.01	12.51		
3	1	1.75	2.65	3.7	5.31	7.08	10.61	13.27		
4	1	2	2.82	3.76	5.65	7.54	11.31	14.14		
5	1	1.75	2.7	3.6	5.41	6.74	10.82	13.52		
6	1	1.75	2.69	3.58	5.37	7.16	10.74	13.42		
7	1	1.75	2.67	3.56	5.36	7.15	10.73	13.36		
8	1	1.75	2.69	3.58	5.36	7.2	10.72	13.40		
9	1	1.75	2.69	3.58	5.36	7.15	10.73	13.41		

	quantity of	pre-drilled s	stud holes		
	4"	6"	8"	12"	15"
0	2	2	2	4	4
1	2	2	2	3	3
2	3	3	3	4	6
3	3	3	3	4	4
4	2	2	2	3	5
5	3	3	3	4	4
6	2	2	3	4	6
7	2	3	3	4	5
8	3	3	3	4	6
9	2	2	3	4	6

SOUTH BEACH TYPEFACE

vi	nyl only size	es	n	umber width	- aluminum	and vinyl				quantity of p	re-drilled st	ud holes		
	*1"	*2"	*3"	4"	6"	8"	12"	15"		4"	6"	8"	12"	15"
0	1	1.75	2.75	3.66	5.49	7.32	10.99	13.73	0	2	2	2	4	4
1	0.25	0.25	0.5	0.67	1	1.33	2	2.5	1	2	2	2	3	3
2	0.75	1.75	2.46	3.28	4.91	6.55	9.83	12.29	2	2	2	2	4	4
3	0.75	1.5	2.3	3.08	4.61	6.15	9.23	11.54	3	2	2	2	4	4
4	1	1.75	2.79	3.72	5.58	7.44	11.17	13.96	4	3	3	3	3	4
5	0.75	1.75	2.51	3.35	5.02	6.69	10.04	12.54	5	2	2	2	4	5
6	0.75	1.75	2.55	3.4	5.11	6.81	10.22	12.77	6	2	2	2	4	4
7	0.75	1.75	2.54	3.38	5.08	6.77	10.15	12.69	7	2	2	2	4	4
8	1	1.75	2.74	3.64	5.48	7.3	10.95	13.69	8	2	2	2	4	4
9	0.75	1.75	2.59	3.45	5.17	6.9	10.35	12.93	9	2	2	2	4	4

GENERAL PRODUCT INFORMATION

CUSTOM MADE ALUMINUM AND POWDER COATED NUMBERS, LETTERS AND SYMBOLS, AND PLAQUES

SIZES: Aluminum or powder coated house numbers and letters available in : 4", 6", 8", 12" and/or 15" high. Additional sizes and custom symbols available upon request. See dimensional charts for specific character heights and widths.

PLAQUE SIZES: Aluminum or powder coated plaques sizes available in the following sizes: 5", 7" and 10" diameter circle, 8"x8" square, 3x8", 4x11, and 5"x16" rectangle. Additional sizes available upon request. Refer to Visibility Chart for plaque viewing distances.

FONTS: Aluminum and powder coated house numbers available in six standard typefaces: Palm Springs, SoCal, Austin, Backbay, Santa Barbara, Soho and South Beach. Additional fonts available with a nominal set up fee.

PLAQUE FONTS: Aluminum and powder coated plaques avilable in two standard typefaces: Palm Springs and SoCal. Text is stencil cut from solid 3/8" thick aluminum. Our other standard fonts available upon request, at no charge. Custom fonts available with additional setup fee.

ALUMINUM FINISH: Aluminum products are finished with two coats of clear, matte sealant to protect them from UV, salt air and other environmental corrosives. Regular cleaning with water and mild soap required to maintain finish.

POWDER COATED FINISHES: Powder coat finishes are more durable that standard paint and are **highly recommended for costal and industrial areas**. Available in the following colors: white, matte black, matte bronze, and dark bronze. Additional colors available for large quantities, upon request at additional fee.

MATERIAL: All aluminum and powder coated house numbers, letters, symbols and plaques are made from solid, 3/8" thick recycled aluminum.

HARDWARE: All aluminum and powder coated house numbers/plaques include 3/16" diameter x 2" long steel studs and 3/16" inside diameter x 1/2" long aluminum spacers. Hardware is concealed with proper installation. If a subtle shadow / floating effect is desired, aluminum standoffs are included to slide over studs. All aluminum and powder coated house numbers/plaques have 3/16" pre-drilled stud holes (not visible from face of number). See attached diagrams for more information.

EXTERIOR GRADE VINYL

SIZES: Available in 1", 2", 3", 4", 6", 8" and 12" high. Additional sizes available at no additional cost. See dimensional charts for heights and widths of specific characters.

COLORS: Available in silver, black, blue, brass, bronze, copper, green, orange and white. Visit moderhousenumbers.com for examples.

MATERIAL: Custom made from high quality exterior grade vinyl with a peel-and-stick adhesive backing. User removes both front and back layers. Note: Smooth, dry mounting surface required.

CURB STENCILS

SIZE: Curb Stencil text is 4" tall. Surrounding vinyl border is 1/2" on all sides. Note: 6" curb height recommended.

COLORS: Spray paint not included. Visit moderhousenumbers.com for list of recommended colors that coordinate with our exterior vinyl colors.

MATERIAL: Made from high quality exterior grade vinyl with a peel-and-stick adhesive backing. User removes both front and back layers. Note: smooth, dry surface required.

SUPPLIES REQUIRED FOR INSTALLATION - NOT INCLUDED

HOUSE NUMBERS AND PLAQUES: Drill, 11/64" drill bit (metal, wood or masonry depending on installation surface), hammer, epoxy (clear, muli-purpose and exterior grade) and masking tape. Also helpful are a rubber mallet, paper towels, ruler and level. Hammer drill for stone and concrete surfaces may be required. See installation tips for more information.

VINYL: Ruler, masking tape and materials to clean mailbox prior to insulation. See attached for additional installation tips. Viny productsl wll not stick if surface is cold/frozen, wet, rough, or dirty.

SANTA BARBARA TYPEFACE

vi	nyl only size	es	number width - aluminum and vinyl							
	*1"	*2"	*3"	4"	6"	8"	12"	15"		
0	1	2	2.84	3.79	5.67	7.6	11.4	14.25		
1	0.25	0.75	1.02	1.37	2.05	2.73	4.1	5.12		
2	0.75	1.75	2.5	3.34	5	6.67	10.01	12.51		
3	1	1.75	2.65	3.7	5.31	7.08	10.61	13.27		
4	1	2	2.82	3.76	5.65	7.54	11.31	14.14		
5	1	1.75	2.7	3.6	5.41	6.74	10.82	13.52		
6	1	1.75	2.69	3.58	5.37	7.16	10.74	13.42		
7	1	1.75	2.67	3.56	5.36	7.15	10.73	13.36		
8	1	1.75	2.69	3.58	5.36	7.2	10.72	13.40		
9	1	1.75	2.69	3.58	5.36	7.15	10.73	13.41		

qua	ntity of	pre-drilled s	stud holes		
	4"	6"	8"	12"	15"
0	2	2	2	4	4
1	2	2	2	3	3
2	3	3	3	4	6
3	3	3	3	4	4
4	2	2	2	3	5
5	3	3	3	4	4
6	2	2	3	4	6
7	2	3	3	4	5
8	3	3	3	4	6
9	2	2	3	4	6

SOUTH BEACH TYPEFACE

vi	nyl only size	es	n	umber width	- aluminum	and vinyl				quantity of p	re-drilled st	ud holes		
	*1"	*2"	*3"	4"	6"	8"	12"	15"		4"	6"	8"	12"	15"
0	1	1.75	2.75	3.66	5.49	7.32	10.99	13.73	0	2	2	2	4	4
1	0.25	0.25	0.5	0.67	1	1.33	2	2.5	1	2	2	2	3	3
2	0.75	1.75	2.46	3.28	4.91	6.55	9.83	12.29	2	2	2	2	4	4
3	0.75	1.5	2.3	3.08	4.61	6.15	9.23	11.54	3	2	2	2	4	4
4	1	1.75	2.79	3.72	5.58	7.44	11.17	13.96	4	3	3	3	3	4
5	0.75	1.75	2.51	3.35	5.02	6.69	10.04	12.54	5	2	2	2	4	5
6	0.75	1.75	2.55	3.4	5.11	6.81	10.22	12.77	6	2	2	2	4	4
7	0.75	1.75	2.54	3.38	5.08	6.77	10.15	12.69	7	2	2	2	4	4
8	1	1.75	2.74	3.64	5.48	7.3	10.95	13.69	8	2	2	2	4	4
9	0.75	1.75	2.59	3.45	5.17	6.9	10.35	12.93	9	2	2	2	4	4

Exterior Exhaust Vents





Home

About Us

Products & Services

FAQ Contact

RL-100, RLW-100, RLBL-100 & RLB-100 Series

HOME » PRODUCTS & SERVICES » ROUND ALUMINUM LOUVERS » RL-100, RLBL-100 & RLB-100 SERIES



RLB-100 (Brown finish) RLB-100 (Brown finish) 6/1/2021

RL-100, RLW-100, RLBL-100 & RLB-100 Series | Maurice Franklin Louver Company



Aluminum Spec Sheet RL-100, RLW-100, RLBL-100 & RLB-100 Series *(standard with insect screen)* Dimensional Specifications 3" - 72 each - Bath

Dimension	in Inches					Exhaust At Soffit 4" - 80 each - Kit	
Louver Size	Α	В	С	D Screen Dia.	E No. Fins	Net Free Exhaust Area Square Inches	
1	0.985	1.219	0.406	0.875	5	0.185	
1.5	1.485	1.813	0.563	1.375	5	0.399	
2	1.980	2.391	0.625	1.938	6	0.803	
2.5	2.485	2.907	0.625	2.344	6	1.210	
3	2.980	3.530	0.688	2.875	6	1.735	
4	3.980	4.625	0.750	3.875	9	3.500	C
6	5.990	6.688	0.813	5.875	8	5.490	

Specifications subject to change without notification

We use a minimum of .020-gauge aluminum for our round aluminum louvers, screens and plugs - most manufacturers use a thinner gauge, which leads to a weaker product. This thick, durable material maximizes lifespan and ensures proper ventilation needs.

Our round aluminum louver features include:

- Easy installation
- Rugged construction
- Sizes from 1" to 6" as well as 1.5" and 2.5"
- Stocked in a mill, white, black or brown finish

Main menu

Damper is field removed for intake applications. Screen is field removed for dryer vent applications.

WALL VENTS



BIG MOUTH HOOD DESIGN WALL VENT - WVEB____



Qty's: 3" - 200 each - Bath Exhaust At Soffit 4" - 80 each - Kitchen Exhaust

GALVANI	ZED	ALUMINU	JM	BLACK		BROWN		WHITE	
ITEM #	SIZE	ITEM #	SIZE	ITEM #	SIZE	ITEM #	SIZE	ITEM #	SIZE
WVEB3	3	WVEB3A	3	WVEB3BK	3	WVEB3BR	3	WVEB3WH	3
WVEB4	4	WVEB4A	4	WVEB4BK	4	WVEB4BR	4	WVEB4WH	4
WVEB5	5	WVEB5A	5	WVEB5BK	5	WVEB5BR	5	WVEB5WH	5
WVEB6	6	WVEB6A	6	WVEB6BK	6	WVEB6BR	6	WVEB6WH	6
WVEB7	7	WVEB7A	7	WVEB7BK	7	WVEB7BR	7	WVEB7WH	7
WVEB8	8	WVEB8A	8	WVEB8BK	8	WVEB8BR	8	WVEB8WH	8
WVEB10	10	WVEB10A	10	WVEB10BK	10	WVEB10BR	10	WVEB10WH	10

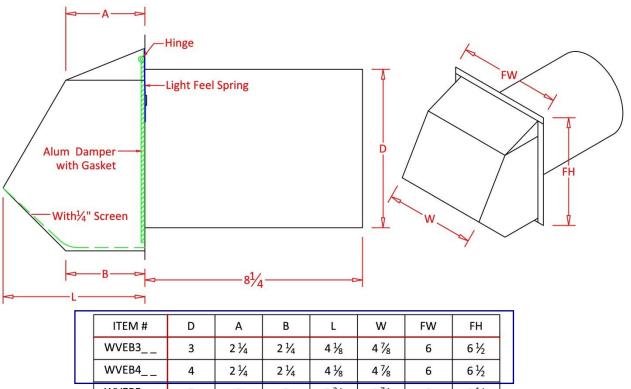
- Less restriction to air flow.
- > Dampers equipped with light spring and gasket.
- ➢ ¼" removable screen available.
- Galvanized, Aluminum, or painted Black, Brown or White.



FRESH AIR MANUFACTURING CO. Technologies in Ventilation 649 N. Ralstin St., Meridian, ID 83642 * (208)884-8931 * (800)-234-1903 * FAX: (208)884-8943 WALL VENTS



BIG MOUTH HOOD DESIGN WALL VENT - WVEB____



	<u>\$</u> 2		100 A			255	- • 2
WVEB5	5	3	3	5 ¾	6 7/8	8	8½
WVEB6	6	3	3	5 3/8	6 7/8	8	8 1/2
WVEB7	7	3	4 1/16	6 ¹ 1⁄ ₁₆	8 7/8	10	10 ½
WVEB8	8	3	4 7⁄16	6 ¹ / ₁₆	8 7/8	10	10 ½
WVEB10	10	2 7/8	4 ¾ ₁₆	6 ¹ / ₁₆	11 7/8	13	13 ½

- Less restriction to air flow.
- Dampers equipped with light spring and gasket.
- ➢ ¼" removable screen available.
- Salvanized, Aluminum, or painted Black, Brown or White.



FRESH AIR MANUFACTURING CO. Technologies in Ventilation 649 N. Ralstin St., Meridian, ID 83642 * (208)884-8931 * (800)-234-1903 * FAX: (208)884-8943 SOFFIT & FOUNDATION VENTS

LOUVERED FOUNDATION & SOFFIT VENT- VD_

Available in Galvanized, Black, Brown, or White



	LOUVERED FOUNDATION VENT						
ITEM #	WITH SCREEN	WITH DAMPER	WITH DAMPER AND SCREEN				
V416_	VS416	VD416	VDS416				
V616_	V\$616	VD616	VDS616				
V816_	VS816	VD816	VDS816				

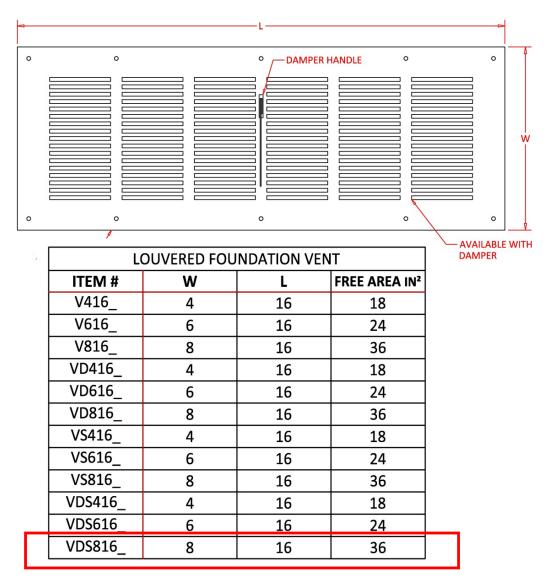
Qty: 204 each - Foundation

- Promotes free air movement in a crawl space or attic
- Available with or without a damper and/or screen
- Hemmed edge for strength
- Corrosion proof hinges on the dampers
- Quality construction in galvanized, painted, or aluminum metals
- Large mounting flange
- Available with pr without insect screen. (Standard 1/8" screen, 1/4" screen available)



FRESH AIR MANUFACTURING CO. Technologies in Ventilation 649 N. Ralstin St., Meridian, ID 83642 * (208)884-8931 * (800)-234-1903 * FAX: (208)884-8943 SOFFIT & FOUNDATION VENTS

LOUVERED FOUNDATION & SOFFIT VENT- VD_



Promotes free air movement in a crawl space or attic

- Available with or without a damper and/or screen
- Hemmed edge for strength
- Corrosion proof hinges on the dampers
- Quality construction in galvanized, painted, or aluminum metals



FRESH AIR MANUFACTURING CO. Technologies in Ventilation

649 N. Ralstin St., Meridian, ID 83642 * (208)884-8931 * (800)-234-1903 * FAX: (208)884-8943

Exterior Lights

Estella 12" LED Wall Light Textured Architectural Bronze

49607AZTLED

© 2021 Kichler Lighting LLC. All Rights Reserved.

SPECIFICATIONS

Certifications/Qualifications		
Dark Sky Compliant	Yes	
Title 24 Compliant	Yes	
	www.kichler.com/warranty	
Dimensions		
Base Backplate	4.50 X 5.75	
Extension	4.25"	
Weight Height from center of Wall opening	2.16 LBS 6.00"	
(Spec Sheet)	0.00	
Height	12.00"	
Width	6.00"	
Electrical		
Input Voltage	Single(120)V	
Light Source		
Delivered Lumens	720	
Dimmable	Yes	
Dimmable Notes	This LED is compatible with most standard incandescent dimmers.	
	LED dimmers, and electronic low	
	voltage dimmers. For more	
	information, go to	
	Kichler.com\dimming.	
Equivalent Light Source	Incandescent	
Expected Life Span (Hours) Lamp Included	35000 Integrated	ALSO IN
Light Source	LED	
Max or Nominal Watt	8W	
# of Bulbs/LED Modules	1	
Mounting/Installation		
Interior/Exterior	Exterior	
Location Rating	Wet	
Mounting Style	Wall Mount 2.16 LBS	49608
Mounting Weight	2.10 LB3	
Photometrics	90	
Color Rendering Index Color Temperature Range	3000	
Delivered Efficacy (Lumens/Watt)	90	
	00001/	

3000K

ALUMINUM

49607AZTLED

Contemporary

783927458740

Textured Architectural Bronze



N THIS FAMILY





Finish Options

Kelvin Temperature

Housing **Primary Material**

SKU

Finish

Style

UPC

FIXTURE ATTRIBUTES

Product/Ordering Information

Textured Architectural Bronze

Checking is for general compliance with the design intent and conformance with contract documents. Contractor is responsible for dimension, fabrication and techniques of construction and coordination with other trades and satisfactory performance of this work.

Reviewed by: Hip and Humble Architecture - No exceptions taken

Date:04/07/2021

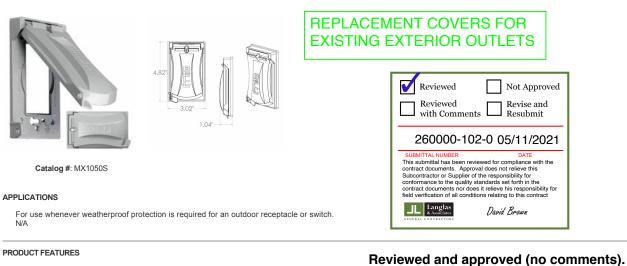
- Approved as noted
- Revise and resubmit

Exterior Outlet Covers

RACO' TAYMAC' BELL'

SINGLE GANG MULTI-CONFIGURATION FLIP COVERS

One Gang Universal Metal Flip Covers Vertical/Horizontal 12-in-1



Heavy duty die-cast metal construction Patented Quick-Fit™ keyhole mounting system allows installation in under a minute. Pre-configured for GFCI with patented knockout technology for alternate devices Includes attached gasket and mounting hardware Premium powder coat finish Lockable tab

Min Trapp David Saenz

UL LISTED

File E212332

NEMA

3R Rated

NEC

2014 Compliant (article 406.9A)

US PATENTS

5,763,831; 6,420,653 B1; 6,420,654 B1; 4,874,906; 6,770,814 B2; 5,243,135; 6,642,453 B2; 6,441,307 B1; 6,563,051 B1; 6,559,381 B2; 6,723,922 B1; 6,700,063 B2

GENERAL PRODUCT INFORMATION Color:	Gray
CONFIGURATION Gangs:	1
PRODUCT MEASUREMENTS Wt. Ea. (Lbs.):	0.305
PACKAGING Package Type: Std. Pkg.: Product UPC-A Labeled: Weight (Lbs. Per/C): Ship Carton Length (in.): Ship Carton Height (in.): Ship Carton Height (in.): Ctn Weight (Lbs.): Pallet Qty: UPC Number: I2of5:	Shrink 20 Yes 30.50 16.13 3.75 7.50 6.10 3000.00 092326110655 30092326110655