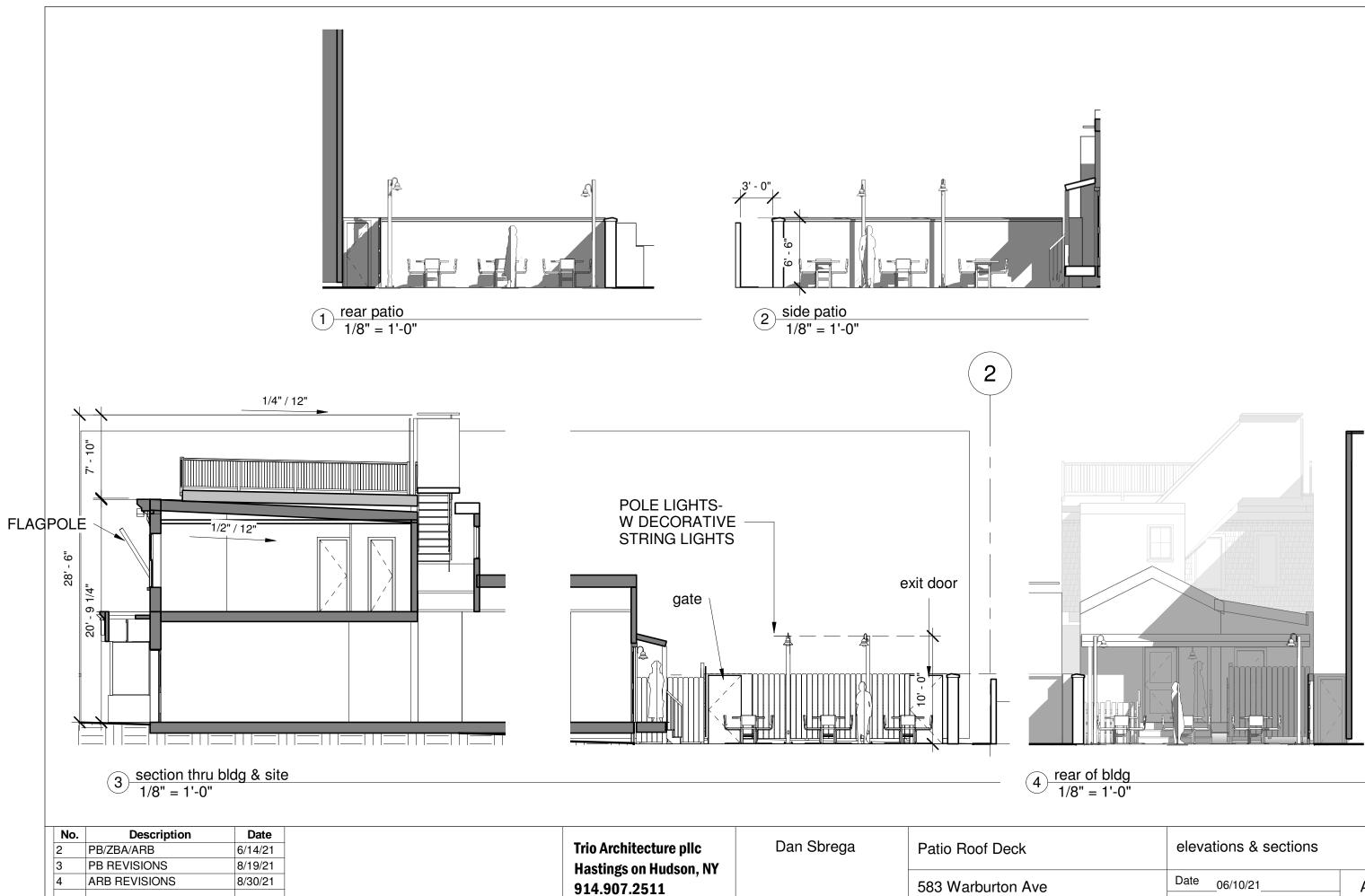
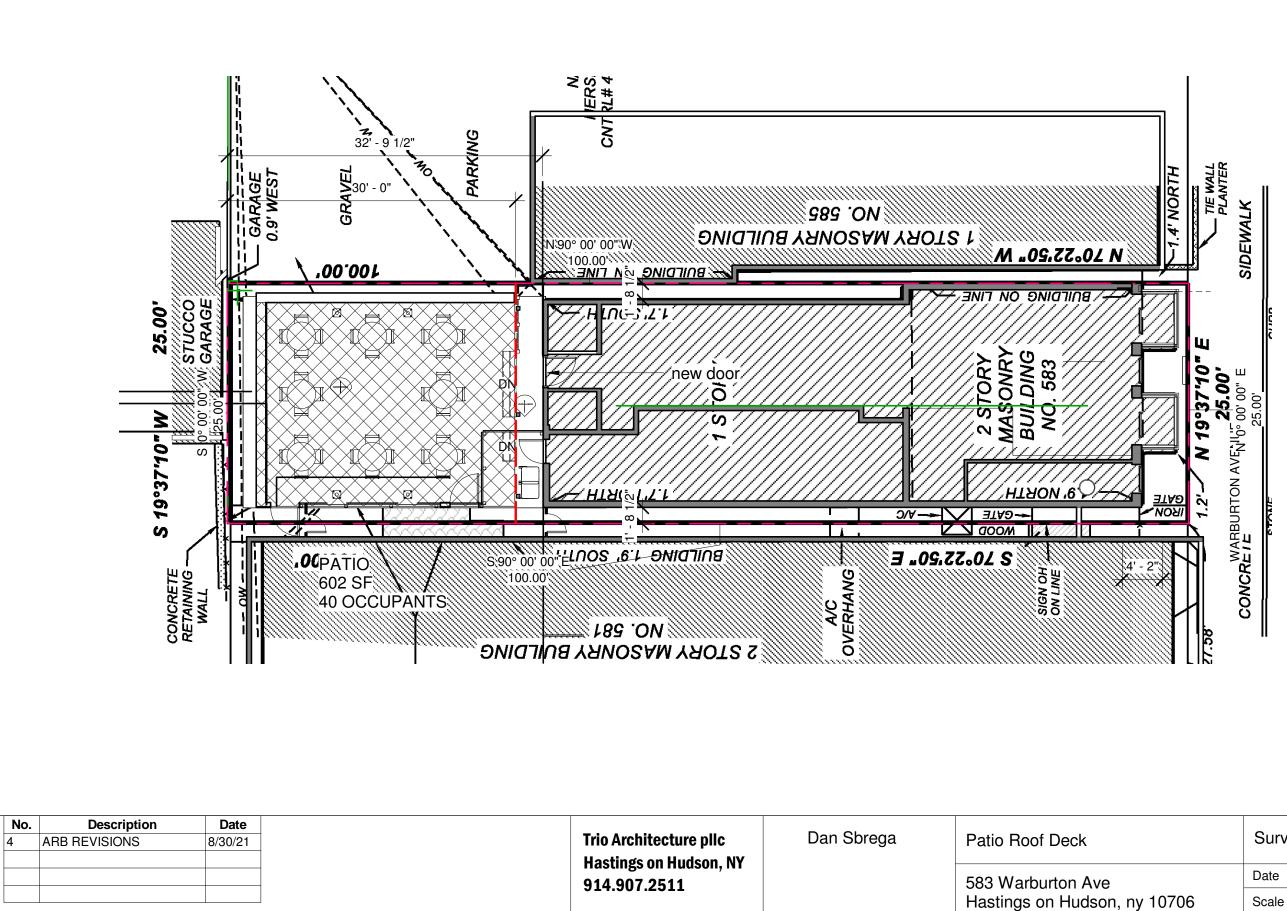


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Hastings on Hudson,

			Md 6
	elevations & sections		1 2:48:49
	Date 06/10/21	A200	8/30/2021
, ny 10706	Scale 1/8" = 1'-0"		8/30



	Survey	
	Date06/18/21	A201
, ny 10706	Scale 1" = 10'-0"	

8/30/2021 2:48:49 PM







<b>No.</b> 2	Description PB/ZBA/ARB	Date 6/14/21			Patio Roof Deck	Front		
3	PB REVISIONS	8/19/21	Hastings on Hudson,	Hastings on Hudson, NY				
4	ARB REVISIONS	8/30/21	ny 10706	914.907.2511	Dan Sbrega	Date Issue Date	A202	
					5	Scale 1/8" = 1'-0"		

# 8/30/2021 2:48:50 PM

## ECO-PRIORA™ GREENBURGH, NEW YORK

## Architectural design with engineered performance.

Available in multiple shapes, this permeable paver is also produced using face-mix technology that will increase the durability of the product and provide better color retention. Custom colors and finishes are available to offer unlimited design possibilities. Combined with a surface infiltration rate of up to 140 inches per hour, Eco-Priora offers both aesthetics and performance.





STEEL GREY BLEND

#### Special Order Colors

OPAL



BEECHWOOD STANDARD FINISH SPECIAL ORDER



CLASSIC FINISH



FINISH

GRANITE BLEND NATURAL SMOOTH ENDURACOLOR STANDARE



NATURAL STANDARD FINISH SPECIAL ORDER



STANDARD FINISH

SABLE BLEND SMOOTH ENDURACOLOR FINISH



SIERRA CLASSIC FINISH

Minimum quantities and special pricing may apply. Contact us for more details.



With so many different options for customization we ask that you contact your local Unilock Representative for more information about customizing this product.

Minimum quantities will apply.



RECTANGLE 24 CM X 12 CM X 8 CM 9.5" X 4.75" X 3.125" LARGE SQUARE 24 CM X 24 CM X 8 CM 25 X 9.5" X 3.125" 24 CM X 8 CM 25 X 3.125" 25 X 3.125"

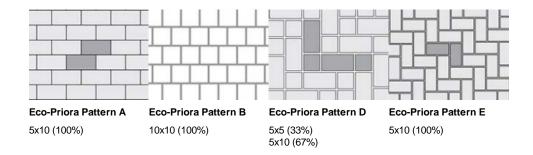
SQUARE 12 CM X 12 CM X 8 CM 4.75" X 4.75" X 3.125" SPECIAL ORDER -PREMIUMS MAY APPLY

Eco-Priora can be manufactured in a herringbone pattern for mechanical installation. This is only available by special order, please contact your representative for details. Installation rates up to 12,000 sq.ft. per machine per day have been documented. This makes Eco-Priora a very competitive permeable pavement that can be

installed even in adverse weather conditions.

	Unit	S	SqFt Per		Per Bundle	Soldier	LnFt Per	Sailor	LnFt Per	Uni	ts Per	Lbs	Per
Stones & Bundling	Thickness	Bundle	Layer	Stone	Layers	SqFt	Bundle	SqFt	Bundle	SqFt	Bundle	Layers	Bundle
Rectangle	3-1/8" (8cm)	75.95	10.85	0.3	7	0.77	96.5	0.39	192.9	3.29	245	381	2669

Notes: Special Order - lead time required, minimum quantities apply. Sold in full bundles only and is shipped on a refundable skid. Eco-Priora<sup>™</sup> can be manufactured in a variety of custom colors and textures. Availability may vary by region. Contact your Unilock representative for more information. Important: Textured surfaces require a buffer between the plate compactor and the paver surface to prevent scuffing. Specially graded aggregates must be used for the joints. Contact Unilock for information. All measurements are nominal.



Lunch n' Learn Seminars

Sample Request

Info Request

# thegreatoutdoors®

Item #
8106-A138-L
Product Family Name:
Kirkham™
Category:
POST MOUNT LANTERN
Certification
3057374
Patents:
Notes:

UPC Code: 747396087221 Finish: Aspen Bronze™ Category Type: Post Light

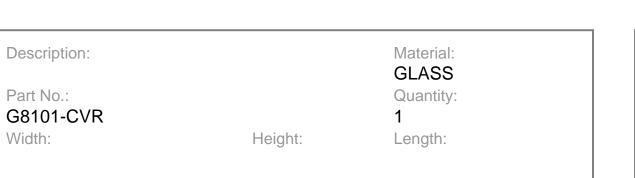


Image File Name: 8106-A138-L.jpg



Width: 8.5	Length:	Height: 11	Extension: 11.75
Height Adjustable: <b>No</b>	Min Overall Height:	Max Overall Height:	Slope: No
Wire Length: 7	Chain Length:	Safety Cable Included: No	Net Weight: 1.59
Canopy Width:	Canopy Height:	Canopy Length:	Center to Bottom:
Backplate Width:	Backplate Height:	Center to Top:	

No. of Bulbs: 1 Max Bulb Wattage: 10	Light Type: L-AC10-MOE Socket: LED MODUL			
Dimmable: Yes	Ballast:	Rated Life Hours: <b>30000</b>	Photocell Included: <b>No</b>	Bulb/LED Included:
Bulb/LED Included:	Color Temp.: 2700	CRI: 78	Initial Lumens: 450.0	Delivered Lumens: 313.26





SHIP	PING

Carton Width:	Carton Height:	Carton Length:
10.5	13.0	14.0
Carton Weight:	Carton Cubic Feet:	Small Package Shippable:
3.124	1.106	Yes
Master Pack Width:	Master Pack Height:	Master Pack Length:
Master Pack Weight:	Master Cubic Feet:	Multi-Pack: Master Pack: 1





LED

LED

Dark Sky

Wet

ETL

#### Location

Intertek

**WARNING:**Handling this product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands with soap and water after installing, handling, cleaning or otherwise touching this product. For more information go to: www.P65Warnings.ca.gov. /!

For additional information, please contact Customer Care: 1-800-221-7977 | Product depicted on this spec sheet is protected by United States Federal and/or State laws including US Patent, Trademark and/or Copyright and unfair competition laws. Unauthorized reproduction or use carries severe legal penalties.

Rev 09.30.2020 01:07 PM

# thegreatoutdoors®

Item # 7900-166 Product Family Name: Category: POST Certification	UPC Code: 747396049533 Finish: Corona Bronze™ Category Type:
Patents:	
Notes:	



Image File Name: 7900-166.jpg



Width: 3	Length: 3	Height: 96	Extension:
0 ,	Min Overall Height:	Max Overall Height:	
No			No
Wire Length:	Chain Length:	Safety Cable Included: No	Net Weight: 5.78
Canopy Width:	Canopy Height:	Canopy Length:	Center to Bottom:
Backplate Width:	Backplate Height:	Center to Top:	

No. of Bulbs: 0	Light Type:				
Max Bulb Wattage:	Socket:				
Dimmable: <b>No</b>	Ballast:	Rated Life Hours:	Photocell Included: No	Bulb/LED Included: <b>N</b>	
Bulb/LED Included:	Color Temp.:	CRI:	Initial Lumens:	Delivered Lumens:	

1			
	Description:		Material:
	Part No.:		Quantity:
	Width:	Height:	Length:



Carton Width: 3.75 Carton Weight: 7.66	Carton Height: 3.75 Carton Cubic Feet: 0.793	Carton Length: 97.5 Small Package Shippable: No
Master Pack Width:	Master Pack Height:	Master Pack Length:
Master Pack Weight:	Master Cubic Feet:	Multi-Pack: Master Pack: 1 1



**WARNING:**Handling this product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands with soap and water after installing, handling, cleaning or otherwise touching this product. For more information go to: www.P65Warnings.ca.gov.

For additional information, please contact Customer Care: 1-800-221-7977 | Product depicted on this spec sheet is protected by United States Federal and/or State laws including US Patent, Trademark and/or Copyright and unfair competition laws. Unauthorized reproduction or use carries severe legal penalties.

Rev 08.05.2020 04:54 PM

## LED LIFESTYLE SMALL DECORATIVE AREA LIGHTS (XDLS)



#### US patent 7,828,456 8,002,428, 8,177,386 8,434,893 8,567,983 and US & int'l. patents pending

- SMARTTEC<sup>™</sup> LSI drivers feature integral sensor which reduces drive current when ambient temperatures exceed rated temperature
- ENERGY SAVING CONTROL OPTION DIM 0-10 volt dimming enabled with controls by others. BLS - Bi-level switching responds to external line voltage signal from separate 120-277V controller or sensor (by others), with low light level decreased to 30% maximum drive current.
- **LEDS** Select high-brightness LEDs in Cool White (5000K), Neutral White (4000K) or Warm White (3500K) color temperature. 70 CRI CW. 80 CRI NW and WW.
- **DISTRIBUTION PATTERN** Types 3, FT and 5. Exceptional uniformity creates bright environment at lower light levels. Improved backlight cutoff minimizes light trespass.
- **CROWN** Cast aluminum. Wiring emerges from crown through compression seal fitting to prevent water entry. One-piece silicone gasket seals crown to shade for water- and dust-tight construction.
- SHADES Spun aluminum. Two shade styles available A Angle and B Bell.
- **OPTICAL UNIT** Optical unit and aluminum door frame recessed into shade and sealed with one-piece silicone gasket. Clear tempered flat glass lens sealed with silicone gasket to door frame (includes pressure-stabilizing breather). Optical unit is tethered and provides access to driver. Door frame retaining fasteners are captive.
- **BRACKETS** Brackets are extruded and cast aluminum assemblies or fabrications. All decorative elements are die cast or extruded aluminum.
- **MOUNTING** Classic Hook (CH) and Side Arm (SA 4" 0.D. minimum pole top required) available. See Steel Round Pole and Aluminum Round Pole data sheets for pole selection information. Side Arm pole mount requires 3" reduced drilling pattern. Classic hook mount requires a 4" 0.D. pole or tenon.
- **ELECTRICAL** Two-stage surge protection (including separate surge protection built into electronic driver) meets IEEE C62.41.2-2002, Location Category C. Available with universal voltage power supply 120-277VAC (UE 50/60Hz input), and 347-480 VAC. Optional button-type photocells (PCI) are available in 120, 208, 240, 277 or 347 volt (supply voltage must be specified).
- **DRIVERS** Available in SS (Super Saver) and HO (High Output) drive currents (Drive currents are factory programmed.). Components are fully encased in potting material for moisture resistance. Driver complies with FCC standards. Driver and key electronic components can easily be accessed.

OPERATING TEMPERATURE - -40°C to +50°C (-40°F to +122°F).

**FINISH** - Each fixture is finished with LSI's DuraGrip polyester powder coat process. The DuraGrip finish withstands extreme weather changes without cracking or peeling.

**WARRANTY** - LSI LED fixtures carry a limited 5-year warranty.

PHOTOMETRICS - Please visit our web site at <u>www.lsi-industries.com</u> for detailed photometric data.

SHIPPING WEIGHT (IN CARTON) - 24 lbs. (10.8 kg)

LISTINGS - UL listed to U.S. and Canadian safety standards. Suitable for wet locations

This product, or selected versions of this product, meet the standards listed below. Please consult factory for your specific requirements.



LIGHT	LIGHT OUTPUT - XDLS						
		Lu	Lumens (Nominal)				
		Type 3	Type FT	Type 5	(Nominal)		
Cool White	SS	7100	6540	6220	71		
23	HO	9600	8990	8500	106		
ite	SS	6510	5840	5680	71		
Neutral White	HO	8810	7890	7780	106		
Warm White	SS	4790	5170	5010	71		
S≥	HO	6460	6880	6740	106		

LED Chips are frequently updated therefore values may increase.



🔄 Fixture Type 🔄

## LED LIFESTYLE SMALL DECORATIVE AREA LIGHTS (XDLS)

## PRODUCT ORDERING INFORMATION

## TYPICAL ORDER EXAMPLE: XDLSB 3 LED SS CW UE BLK CH S PCI120

Prefix	Distribution	Light Sourc	Drive e Current	Color Temp	Input Voltage	Finish	Mounting Style <sup>1,2</sup>	Mounting Configuration <sup>1,2</sup>	Options
XDLSA <sup>1</sup> Angle Shade XDLSB <sup>1</sup> Bell Shade	3 - Type III 5 - Type V FT - Forward Throw		Saver HO - High	CW - Cool White (5000K) NW - Neutral White (4000K) WW - Warm White (3500K)	(120-277V)	BLK - Black BRZ - Bronze WHT - White GPT - Graphite MSV - Metallic Silver PLP - Platinum Plus SVG - Satin Verde Green	CH - Classic Hook SA4 - Side Arm Mount for 4" O.D. Round Poles <sup>3</sup> SA5 - Side Arm Mount for 5" O.D. Round Poles <sup>3</sup>	S - Single D180 - Double D90 - Double <sup>4</sup> T90 - Triple <sup>4</sup> TN120 - Triple <sup>4</sup> Q90 - Quad <sup>4</sup> W - Wall Mount (For use with CH or Side Arm Mounting Style)	DIM - 0-10 Volt Dimming (from external signal) <sup>5</sup> BLS - Bi-level Switching (from external 120-277V signal) <sup>5</sup> Button Type Photocells PCI120 - 120V PCI208-277V - 208-277V PCI347 - 347V

ACCESSORY ORDERING INFORMATION	(Accessories are	(Accessories are field installed)			LUMINA	IRE E
Description	Order Number	Description	Order Number			Sing
FK120 Single Fusing (120V)	FK1206	DFK480 Double Fusing (480V)	DFK4806			D18
FK277 Single Fusing (277V)	FK2776	FK347 Single Fusing (347V)	FK3476			010
DFK208, 240 Double Fusing (208V, 240V)	DFK208, 2406					D9

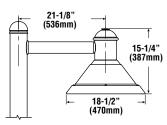
#### FOOTNOTES:

1- When ordering a multiple configuration (D180, etc.) order one fixture/bracket configuration per pole - i.e. order one XDLSB 3 LED SS CW UE BLK CH D180 PCI120 to receive two fixtures and one CH D180 bracket (see drawing on this page). See STEEL ROUND POLES and ALUMINUM ROUND POLES data sheets for pole ordering information.

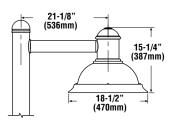
- 2- See Lifestyle Bracket ordering chart for Mounting Style/Configurations availability.
- 3- 3" reduced drilling pattern required.
- 4- For use with SA4 and SA5 mounting styles only
- 5- DIM and BLS cannot be ordered together.
- 6- Fusing must be located in the hand hole of pole.

	LUMINAIRE EPA CHART - XDLS				
	💻 Single	1.6			
	<b>■</b> ■ D180°	2.7			
	<b>9</b> 0°	2.3			
-	■- <sup>7</sup> = T90°	3.3			
ıly.	📕 TN120°	3.4			
ny.	<b>■</b>	4.1			
le.	Note: Includes Bracke	t			

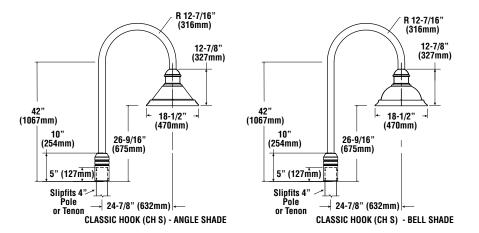
#### DIMENSIONS



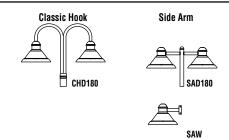
SIDE ARM (SA4 S) - ANGLE SHADE



SIDE ARM (SA4 S) - BELL SHADE



See Lifestyle Brackets and Mounts in outdoor section of latest Buyers Guide for details on other bracket sizes.







A luxurious look that lasts

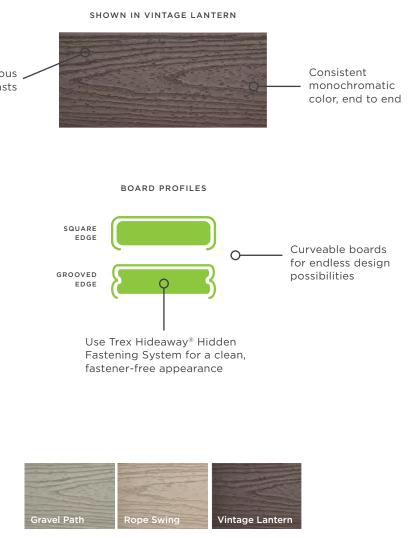
# **Trex**Transcend®

EARTH TONES

## A CLASSIC LOOK FOR

## UNCOMPROMISING HOMES

Like its tropical counterpart, Trex Transcend® Earth Tones gives homeowners the freedom and confidence to design to every curve of the imagination. These premium composite boards stand apart with a monochromatic color palette as timeless as its inspiration: nature itself.

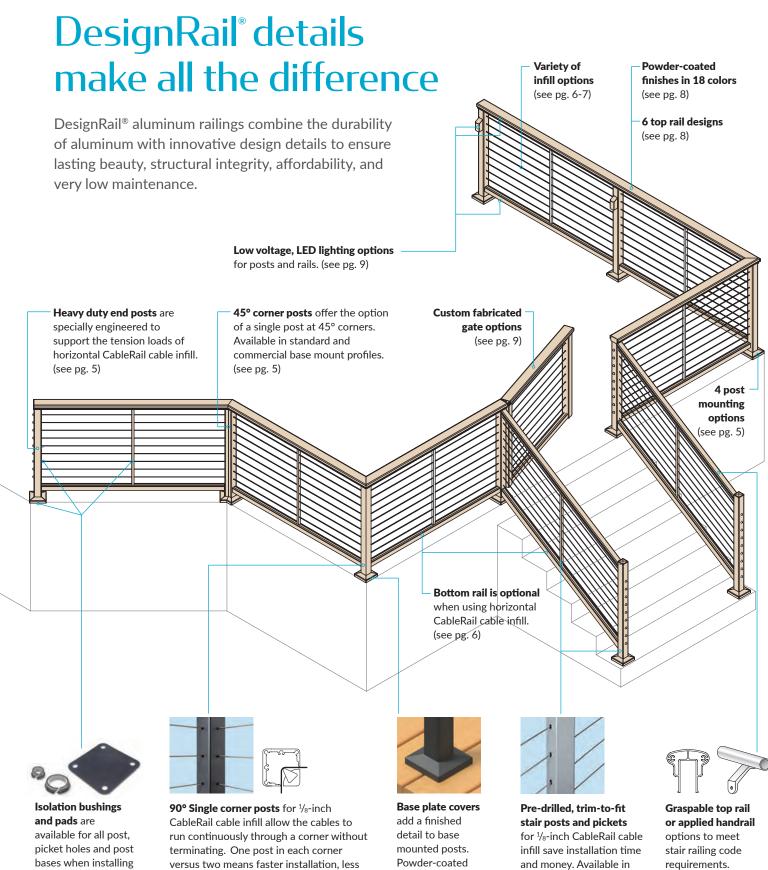






# feeney () DesignRail

Create Your Own Railing Systems



versus two means faster installation, less railings in harsh, saltcost, and a more open, beautiful view. Available in all post mounting styles, except stanchion mount. Use Curved Lacing Needle (#3221-curve) to install cables.

Powder-coated to match the railing color. (see pg. 9)

requirements.

(see pgs. 9)

3 angle ranges (23°-28°,

29°-34°, 35°-39°) and all

post mounting styles.

air environments.

# Create Your Own

DesignRail<sup>®</sup> railings are easily adaptable to any exterior, interior, commercial, or residential project. Simply choose from the style options to create your perfect railing design.

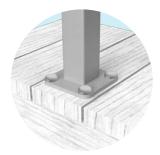


Posts for horizontal railings come pre-cut for 36-in, 39-in and 42-in railing heights. Stair or custom posts must be cut to height in the field and extrusions can be ordered in 10-ft or 20-ft lengths for that purpose. When using horizontal cable infill, all posts, including stair posts, are available pre-drilled for the cables.

2 Select a mounting type

Posts are made from 2%-in square tube extrusions in three distinct crosssectional profiles: Standard, Commercial Base Mount, and Heavy Duty. Each is specially engineered to provide optimal structural strength and design performance for specific usage and load conditions. Our customer service team will determine which posts are required depending on the type of project and the railing design options selected.

Our 90° single corner posts and pre-drilled stair posts and pickets will reduce installation time and save money when using horizontal CableRail cable infill (see pg.6).





## **BASE MOUNT**

- For top mounting to deck, patio, floor, or stair tread surfaces
- %-in thick by 5-in square base plate for square posts and %-in thick with a 15%-in contour reveal for 45° posts
- Plates come pre-attached to posts
- Optional decorative base plate covers are available (see pg. 9)

## **STANCHION MOUNT**

- For mounting with stone or tile covered concrete slabs or on roof decks where penetration of waterproof roofing membranes must be minimized
- Stanchions are attached to the structural members prior to pouring the slab or laying the roof membrane. Railing posts are then sleeved over the protruding stanchion and secured with screws
- Available in steel, aluminum or stainless steel



Building codes in your area may require your rails to meet a minimum height. Consult your local building codes when choosing a height for your project.

**POST TYPES** (Determined by project type, railing usage and conditions)





Standard and Commercial

Base Mount profiles available.

Square posts Standard, Commercial Base Mount, and Heavy Duty profiles available.



## **FASCIA BRACKET MOUNT**

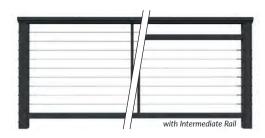
- For side mounting to fascia or rim joists when decking or nosing trim extends beyond the edge of the fascia board
- Posts are attached using metal brackets that have 1¼-in standoff
- Railing may require a bottom rail when using this method

## **FASCIA MOUNT**

- For side mounting to fascia boards, joists, or walls
- Posts come with pre-drilled bolt holes

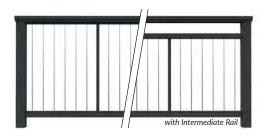
# **Select an infill type**

With limitless design potential, Feeney makes it easy to create a cohesive look and feel from the inside-out with multiple infill and railing solutions that complement an array of interior and exterior styles.



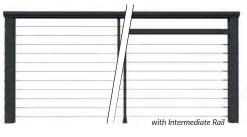
#### **HORIZONTAL CABLES - BOTTOM RAIL**

- Pre-fabricated ¼<sub>8</sub>-in diameter stainless steel CableRail Kits for easy cable installation
- A vertical intermediate picket is used mid-span to minimize cable deflection
- All posts and pickets come pre-drilled for cables



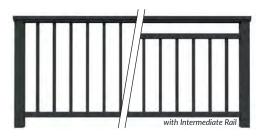
## **VERTICAL CABLES**

- 1/8-in diameter 316-grade stainless steel cables come prefabricated to size with all of the attachment fittings, ready to install
- Two vertical intermediate pickets are spaced mid-span to maximize frame rigidity



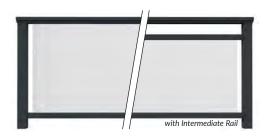
## HORIZONTAL CABLES - NO BOTTOM RAIL

- Pre-fabricated <sup>1</sup>/<sub>8</sub>-in diameter stainless steel CableRail Kits for easy cable installation
- A vertical intermediate picket is used mid-span to minimize cable deflection
- All posts and pickets come pre-drilled for cables



## **VERTICAL PICKETS**

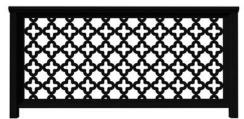
- <sup>3</sup>/<sub>4</sub>-in square aluminum pickets powder-coated to match the frame color
- Available in pre-assembled panels that can be trimmed to length



## **TEMPERED GLASS**

- Clear or custom tinted panels that are easily inserted into vinyl lined slots in the Top Rail and Bottom Rail
- No special mounting hardware needed
- Glass panels are pre-cut to fit the final opening measurements





#### LASER CUT ALUMINUM PANELS

Eye-catching, bold patterns - Feeney offers an added level of intrigue with powder-coated laser-cut aluminum panels. Engineered with style, Feeney product designers created 9 patterns making it easy to customize your space.

- Available in ColorEASY<sup>™</sup> powder-coasted colors
- At 36-in height, max width is 6ft
- At 42-in height, max width is 5ft



#### **RESIN PANELS**

Feeney has partnered with 3Form, the leading resin provider for the Designer community, to offer nine standard panel styles with embedded organic materials. Feeney's DesignRail® AAMA 2604 Powder coated aluminum railing frame + 3Form's Resin panels is an award-winning combination of both beauty and durability.

- At 36-in and 42-in height, max width is 5ft
- Interior applications only



## STAINLESS STEEL MESH PANELS

Whether you are looking for a traditional welded wire or a basket press mesh, Feeney product designers crafted four stylistic mesh patterns that are made of plished and passivated 316-grade stainless steel for long-lasting performance.

- At 36-in height, max width is 6ft
- At 42-in height, max width is 5ft



BOUND™

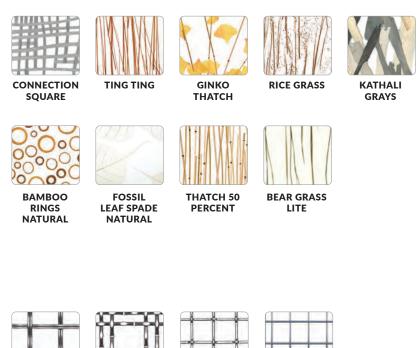
SEAGRASS™

TORRENT

AGAMA™

TRILLIUM®

Additional Laser-Cut patterns and custom designs are available through Feeney Design Services.



ALLURE<sup>™</sup> 0.120" Dia. Wire 1-1/2" mesh, Double wire

DAZZLE<sup>™</sup> 0.120" Dia. Wire 1" Mesh, Basket press top

METROPOLITAN<sup>™</sup> 0.105" Dia. Wire 3/4" mesh, Smooth lock crimp

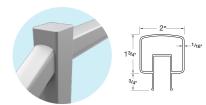
HORIZON<sup>™</sup> 0.185" Dia. Wire

#### 3" mesh, welded wire (no weave)

For samples of resin, mesh and laser please go to feeneyinc.com/samples

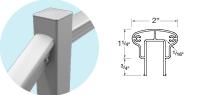
# 4 Select a top rail style

Top rails come in 6 styles and are sold in 10-ft and 20-ft lengths that can be trimmed to size in the field. Series 150 Graspable Top Rails are used on stairs to provide a graspable rail option. Series 150 and Series 100 Top Rails are attached to the faces of the posts using Rail Connecting Brackets (RCBs). Series 200, 300, and 450 Top Rails rest on the tops of the posts and are secured with stainless steel screws. Applied Continuous Handrails with extensions and returns are available as an accessory item to meet ADA and code handrail requirements (see page 14).



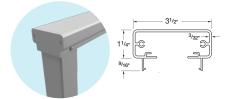
## SQUARE TOP RAIL (Series 100)

- 2-in wide square-shaped top rail
- The narrow width allows it to be installed between posts (using RCBs) instead of on top of posts, creating a newel-post-style railing with posts rising above the top rail
- Post to post top rail



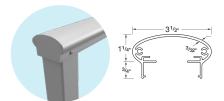
#### **GRASPABLE TOP RAIL** (Series 150)

- 2-in wide top rail with easy-to-grasp shape
- Can be used for both stair and horizontal railings
- Meets residential code requirements for stair handrail sizing. Requires a handrail when used on stairs in commercial settings
- Available in new woodgrain colors\* (Weathered Gray, Cherry, Walnut)



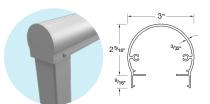
## **RECTANGLE TOP RAIL** (Series 200)

- 3<sup>1</sup>/<sub>2</sub>-in wide rectangular top rail
- The flat surface is a convenient perch for your favorite beverage as you relax and gaze at the view
- Requires a handrail when used on stairs
- Available in new woodgrain colors\* (Weathered Gray, Cherry, Walnut)
- Over the post top rail



#### **ELLIPTICAL TOP RAIL** (Series 350)

- 3<sup>1</sup>/<sub>2</sub>-in wide elliptical top rail
- The sleek, stylish design offers another option for those who prefer a less angular top rail appearance
- Requires a handrail when used on stairs
- Over the post top rail



#### **ROUND TOP RAIL** (Series 300)

- 1<sup>1</sup>/<sub>2</sub>-in radius top rail
- The smooth rounded shape offers a more contemporary accent to those less traditional architectural designs
- Requires a handrail when used on stairs
- Over the post top rail



#### -PROFILE TOP RAIL (Series 450)

- Low-profile top for adding your own wood or composite cap rails
- Cap rails are optional and are not included
- Requires a handrail when used on stairs
- Over the post top rail

# Select a frametop rail color

Durable, powder coated finishes adhere to AAMA-2604 coating specifications for superior color retention, impact resistance, and weather protection.



To learn more visit feeneyinc.com/ColorEasy

# **7** Easy installation



For a complete step-by-step installation instructions and details, visit feeneyinc.com/designrail

INSTALL POSTS



Install the posts starting with the end and corner posts, continuing on to the intermediate posts.



Measure and cut the top rails and attach to posts using screws. If using Series 450 top rail, cut and screw on the wood or composite cap rail. If using the Resin, Mesh or Laser Infill, the top rail will go on after the panels are inserted into the frame. (see below)

## 3 ATTACH RCBs



If using bottom rails, screw the Rail Connecting Brackets (RCBs) to the posts for attaching the bottom rails.

## 4 PREPARE INFILL SUPPORT



Measure and cut top rail inserts and bottom rails for each panel section.

#### 5 INSTALL INFILL (CHOOSE ONE)



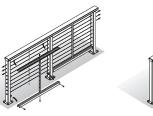
PICKET INFILL

Trim the pre-fabricated panels to length. Lift the complete panel into position on the railing frame and screw in place.



#### GLASS INFILL

Attach top rail insert and bottom rail to railing frame and insert vinyl liners. Lift the pre-cut panel into the top rail insert, then lower into final position in bottom rail slot.



#### HORIZONTAL CABLE INFILL

Screw intermediate pickets to top rail insert and bottom rail (if using bottom rail), then lift into position on frame and screw in place. Lace cables through pre-drilled holes in posts and pickets, then tighten and trim.



#### VERTICAL CABLE INFILL

Screw intermediate pickets to top rail insert and bottom rail and loosely attach cables. Lift entire panel into position on railing frame and screw in place. Tighten nuts at bottom for final cable tension.



#### RESIN, MESH OR LASER PANEL INFILL

Slide the panel into the railing frame and then attach the top rail.

## Care and Maintenance

Categorized by material for a more streamlined experience, Feeney offers two care and maintenance documents for both stainless steel and powder-coated aluminum.

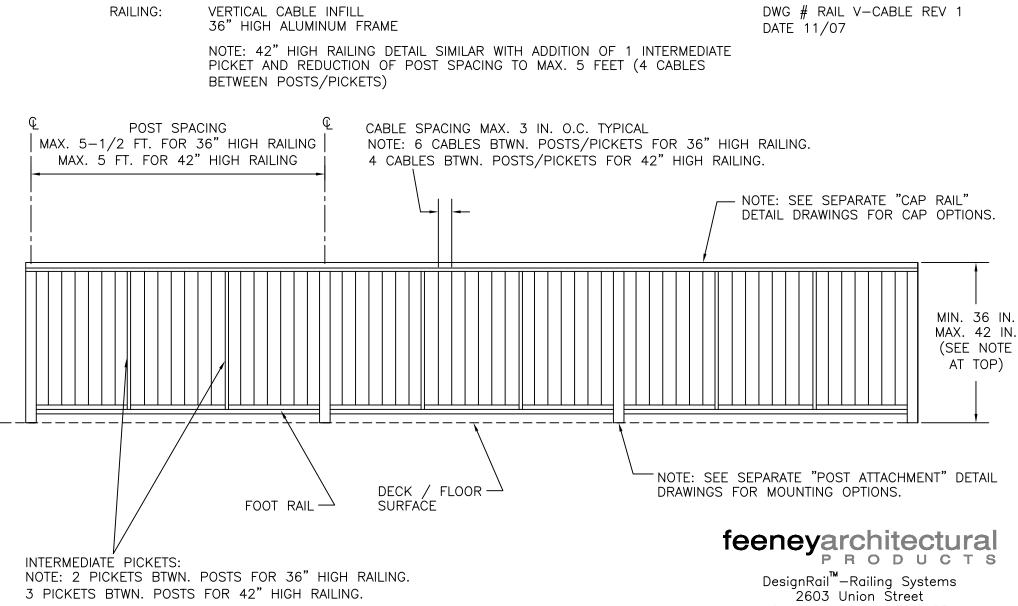
To access this material, visit feeneyinc.com/Warranty-and-Care at your convenience.

## SteelRenewal<sup>™</sup> & SteelProtect<sup>™</sup>

For best protection of CableRail, Feeney recommends using SteelRenewal<sup>™</sup> and SteelProtect,<sup>™</sup> a stainless steel cleaner and protectant kit combo pack to help maintain your stainless steel surfaces.

For more information and to purchase these products, visit feeneyinc.com/Feeney-Steel-Renewal-Steel-Protect.





Oakland, CA 94607-2423 Ph: 800-888-2418 or 510-893-9473 Fx: 510-893-9484, www.designrail.com

## ALUMINUM RAILING INSTALLATION INSTRUCTIONS

## Vertical Cable Systems

**Important Note:** These instructions are for a standardized frame system. Bay infills may vary depending on your distance between posts. Infill rails should be cut so the space between pickets, cables and posts should all appear to be consistent. For systems with 150 or 450 Cap Rail, see detail pages at the end of these instructions.

1) Check Contents Of Packages: Verify that all parts have arrived and that they match the packing list.

2) Gather and Identify All Posts: Use the rail connecting bracket (RCB) holes on each post to identify the post type:

- End posts RCB holes on one side only.
- Intermediate posts RCB holes on opposite sides.
- Single corner posts RCB holes on adjacent sides.

2) Anchor Posts: Position all main posts. The proper penetration for your lag bolts is critical and will vary depending on your installation. Base See drawing at the end of this document for details on lag bolt lengths Mounting for your project.

- Base mounting: anchor each post using provided hardware (see detailed sheet included in your order) with retaining washers and large plastic caps.
- Fascia mounting: anchor each post using provided hardware with retaining washers and large plastic caps. Cover bottom of each post with an post cap; pre-drill post & screw an H screw through the side of the post to secure the post cap.
- If you are mounting posts using the stanchion mount or fascia bracket mount methods, please call for additional installation Butt Splice details.

3) Cut & Snap Top Rails: Cut the top rail to length and then snap it into position on top of the posts or see detail drawing if using 150 Series. Be sure to attach decorative end plates to any ends that buttup against a wall face or that have limited access.

- Butt splices: always cut the top rail at 90 degrees and center the joint over a post. Use a rectangular splice plate with four H screws\* to secure this joint.
- Mitered joints with double corner posts: the top rail will extend past each of the corner posts and the actual miter joint will be unsupported. Remember to cut each top rail miter at 1/2 the total corner angle (i.e. if the corner angle is 90 degrees, cut each miter at 45 degrees). Add one splice plate to connect and stabilize the miter joint. Insert the plate before setting the two rail sections down on top of the posts; use eight (8) H screws<sup>\*</sup> to secure the splice plate to the rails.
- Mitered joints with single corner posts: cut each top rail miter at 1/2 the total corner angle (i.e. if the corner angle is 90 degrees, cut each miter at 45 degrees) Center the joint over the corner post. \*Use shorter G screws when installing the Series 450 top rail

H Screws H Screws G Screws for Series 450

Splice

Plate

Splice Plate

 $\bigcirc$ 

AF#2010-307E

DesignRail

RCB

Holes

RCB

Holes

H Screw

Splice Plate

G Screws for Series 450

H Screws

G Screws for

Series 450

H Screws

Fascia Mounting

bolt number & pattern varies, depending on

your system

Intermediate Posts

**EndPost** 

End Post

RCB Holes

HH Washer

3/8" SS

Hex Head Lag Screw

Post Cap

 $\bigcirc$ 

Single Corner

Post Miter

0

0°

Can

3/8" SS

Hex Head ag Screw

HH Washe

90°

90

45

0

Double Corner

Post Miter

45

45

45

Add one splice plate to connect and stabilize the miter joint. Insert the plate before setting the two rail sections down on top of the post; use eight H screws\* to secure the splice plate to the rails. Also, on each side of the miter cut, screw an H screw through the cap rail flange and into the post face.

**4) Fasten Top Rails:** Secure the top rail to each post using two H screws (four screws for butt splices); screws should run through the cap rail flange and into the center of the post face. Attach screws to both the front and back of each post.

**5) Attach Decorative End Caps:** Attach the decorative end caps to all of the exposed top rail ends using two A screws. This applies to 200, 300, 350, and 450 Top Rail options.

**5A) Cut & Attach Wood/Composite Cap Rails (for Series-450 Top Rails only):** A wood or composite cap rail may be used with the Low-Profile Top Rail (Series-450). Cut the wood or composite cap rails to fit the top rails (cap rails supplied by customer). Pre-drill holes through the top rail and use G Pan Head Screws from underneath. Alternatively the wood can be attached with construction adhesive that has a minimum shear strength of 30 psi.

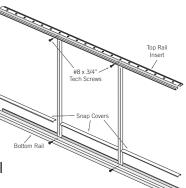
**6) Attach RCBs:** For the bottom rail, locate the rail connecting bracket (RCB) holes on each post (these are pre-drilled) except on stair rail posts where all the holes must be drilled in the field). Attach the RCBs to the posts using two K screws. The RCBs should be mounted wings up for frames using vertical cable systems.

**7) Cut Top Rail Inserts:** Measure between each set of posts just below the top rail. Cut the top rail insert for each section to -1/16" of your corresponding measurement. Do not attach the top rail inserts to the top rail at this time. The distance between post and cable holes should be between 1-1/2" and 3" inches and equal on both ends. Standard configurations have 6 cables between posts and pickets. Number of cables and pickets may vary due to panel size. Consult your layout sheet.

**8) Cut Bottom Rails:** Measure between each set of posts just above the RCBs. Cut the bottom rail for each section to -1/16" of your corresponding measurement. Make sure the holes in the bottom rail are in similar placement to the top rail insert so the cables run plumb vertically. Do not attach the bottom rails to the frame at this time.

**9)** Cut Snap Covers: Measure distance between posts and pickets, cut snap covers to -1/16" length. Standard infill bays will have 20 1/4" length of snap cover to use between the two installed pickets. End snap cover sections will vary depending on size of bay.

**10) Cut & Install Pickets:** Pickets should come cut to length for level railing installations, if not, call for measurements for your particular installation (residential or commercial). Pickets slip in slots in top rail insert and bottom rail and are secured with H screws through <u>side</u> of inserts (see illustration).



Fnd

Can Rail

RCB

continued on next page

**11) Assemble Panels:** Thread center cables through center holes on the top rail insert. The threaded terminal of the cable feeds through first, to eventually lace through the bottom rail insert. Position the 20-1/4" section of snap cover over the bottom rail in between the two pickets. Thread the cable through the snap cover and continue through the holes in the bottom rail. Hold snap cover up at this time. Attach washers and nuts on the protruding threaded terminals. Drop the remaining cable assemblies through the remaining holes in the top rail insert and thread through snap covers and bottom rail. Attach remaining washers and nuts.

**12) Install Panels:** Place the assembled panel between posts and lift up into opening of the underside of the top rail. Make sure the RCBs fit into the upper channel of the bottom rail below the snap cover. Snap the top rail insert into the top rail once the infill is aligned.

**13) Secure Panels:** Screw the top rail insert into the top rail from underneath with six "I" screws per panel, two on each end, two in center. Install bottom rails to RCBs with H screws.

**14) Tension Cables:** Tension cables by spinning nuts concealed under bottom rail. Hold the threaded terminal above the bottom rail with vise-grip pliers while tightening the nut with a socket below. Tension evenly until taught.

**15) Fasten Snap Covers:** Fasten snap covers to top of bottom rail after tensioning cables. Push down and snap into place.

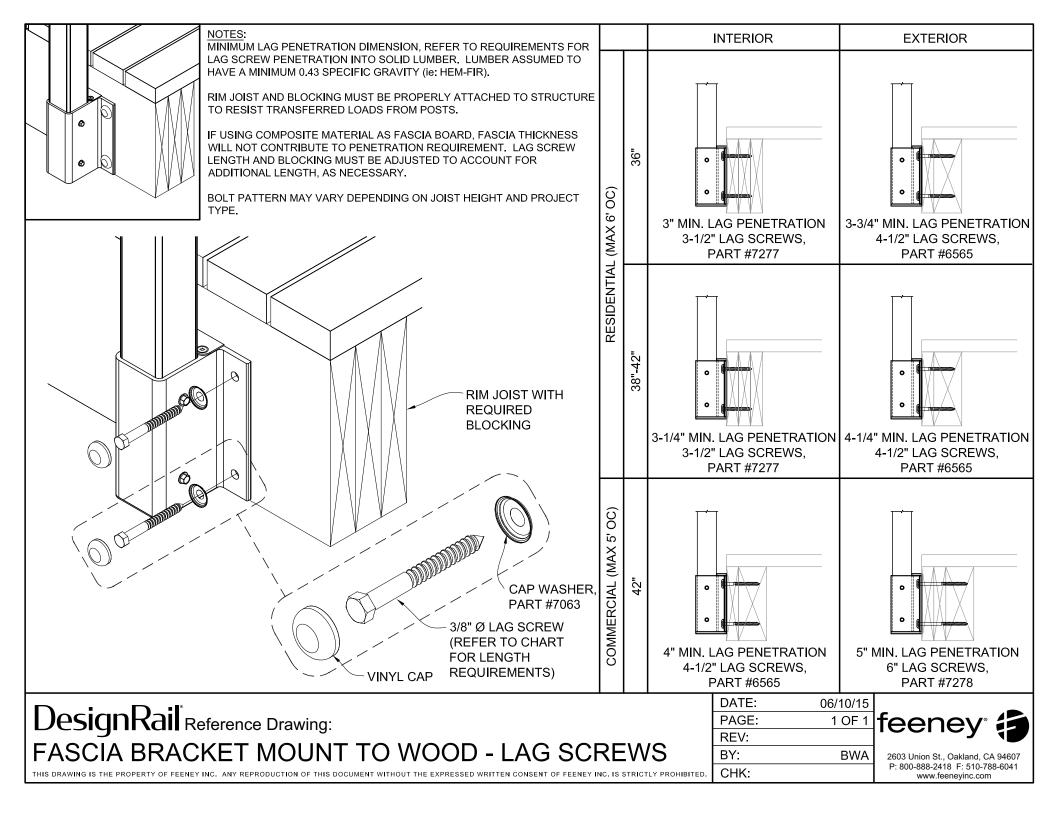
nuts erminal ightening taught. op of bottom into place.

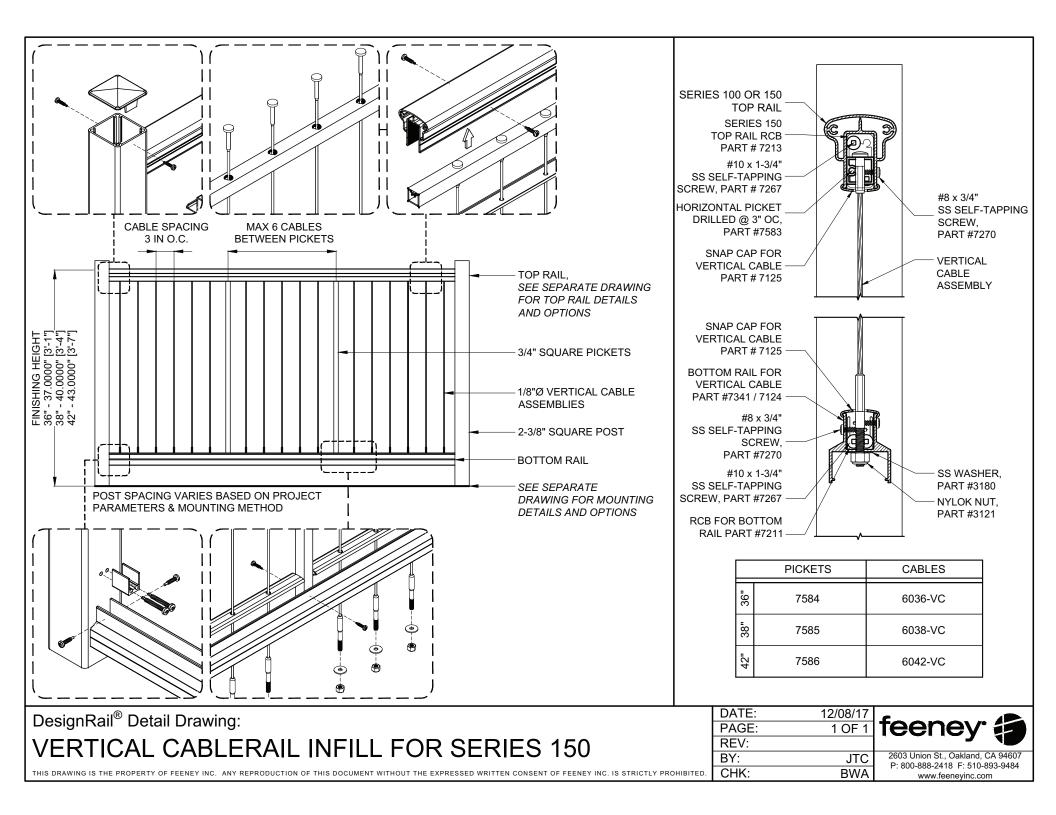
> Bottom Rail Post —

Bottom Rail

Top Rail Insert

Termina







**RETHINK THE RAIL.** 

Canada Cana

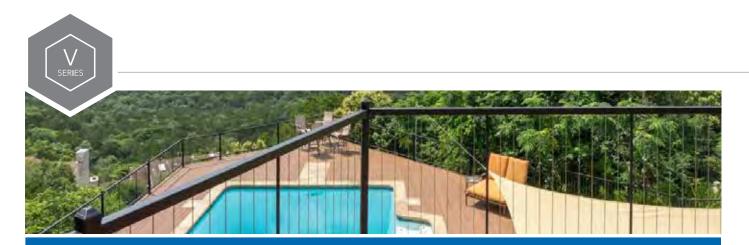
JOIN THE REVOLUTION. FortressBP.com | 866.323.4766

10 1

II

TTR





## TO REACH NEW HEIGHTS IN DESIGN, GO VERTICAL

Fortress<sup>®</sup> set out on a mission to create the first vertical cable railing system in the industry—and we succeeded. Now, FortressCable V-Series steel cable railing is not only affordable, but anyone can install it. The sleek top and bottom rail make this option a great choice for style and function.



## **KEY FEATURES**

- 1st vertical cable railing panel in the decking/railing industry
- FortressShield-Coated utilizing advanced automotive coating process to resist rust and corrosion
- Pre-assembled for ease of installation
- · 316 marine grade stainless steel cable and components
- Works with wood, composite, vinyl and Fortress steel posts
- Quick and easy installation
- Meets ICC-ES<sup>™</sup> AC273, NBCC, OBC, ABC and BCBC standards

## **PREMIUM FINISH**

Fortress Cable Railing Black Sand finish is engineered to withstand the elements.



Black Sand

## WARRANTY

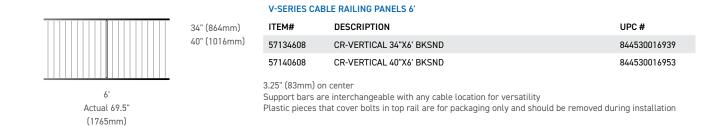
## **Manufacturer Warranty**

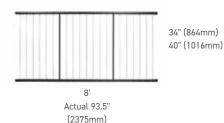
Historically, fortresses were built to protect. The same is true of Fortress Building Products. You can expect coverage the second you decide to embark on your journey with us. We cover our products and the people who buy them. At Fortress, we don't just stand behind our work ... we stand by your side.



## PANELS

Panels can be used with several types of posts such as steel, wood, vinyl or composite





V-SERIES CABLE RAILING PANELS 8'

ITEM#	DESCRIPTION	UPC #
57134808	CR-VERTICAL 34"X8' BKSND	844530016946
57140808	CR-VERTICAL 40"X8' BKSND	844530016960

3.25" (83 mm) on center

ITEM#

57234808

57240808

Support bars are interchangeable with any cable location for versatility

CR-VERTICAL STAIR 34"X8' BKSND

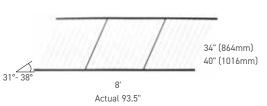
CR-VERTICAL STAIR 40"X8' BKSND

Support bars are interchangeable with any cable location for versatility

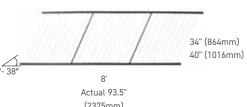
ADJUSTABLE STAIR V-SERIES CABLE RAILING PANELS 8'

DESCRIPTION

Plastic pieces that cover bolts in top rail are for packaging only and should be removed during installation



(2375mm)





#### **V-SERIES I-SUPPORT**

3.25" (83mm) on center

ITEM#	DESCRIPTION	UPC #
57504148	CR-VERTICAL I-SUPPORT BKSND	844530017042
57505148	CR-VERTICAL STAIR I-SUPPORT BKSND	844530019749

Plastic pieces that cover bolts in top rail are for packaging only and should be removed during installation

Install using Universal Bracket UB-05 and Universal Bracket Angle Adapter cannot be installed on a ramp



#### INSTALLATION TOOLS (TENSION GAUGE)

ITEM#	DESCRIPTION	UPC #
57500001	CABLE RAILING - TENSION GAUGE	844530017066



UPC #

844530016977

844530016984





ITEM#	DESCRIPTION	UPC #
660378	BKSND AEROSOL TOUCH UP PAINT 60Z	844530012634

Recommend 1 can per 15 panels purchased



Recommend 2 pens per job

## TOUCH UP PAINT PEN (WAREHOUSE ONLY)

ITEM#	DESCRIPTION	UPC #
660368	BKSND TOUCH UP PAINT PEN	844530012641

## **2 POST AND BRACKETS**



STEEL POST WITH BASE & BASE COVER 39.5"

ITEM#	DESCRIPTION	UPC #		
53302418	FE26-POST 2"X39.5" W/ 4" BASE/COVER BKSND	844530015284		
53303418	FE26-POST 3"X39.5" W/ 4" BASE/COVER BKSND	844530015345		
STEEL POS	T WITH BASE & BASE COVER 45.5"			
ITEM#	DESCRIPTION	UPC #		
53302478	FE26-POST 2"X45.5" W/ 4" BASE/COVER BKSND	844530015314		
53303478	FE26-POST 3"X45.5" W/ 4" BASE/COVER BKSND	844530015376		
STEEL POST WITH BASE & BASE COVER 55"				

ITEM#	DESCRIPTION	UPC #
53302558	FE26-POST 2"X55" W/4" BASE/COVER BKSND	844530027126
53303558	FE26-POST 3"X55" W/4" BASE/COVER BKSND	844530027102

## **2 POSTS & BRACKETS**

			FOR FASCIA MOUNT BRACKET 2" x 49"	UPC #
		ITEM# 53349158	DESCRIPTION FE26-POST 2"X49" BKSND (13GA)	844530013716
		55547156	FE20-PUSI 2 X47 DRSND (130A)	844550015718
	49" (1245mm) 55" (1397mm)			
		STEEL POST	FOR FASCIA MOUNT BRACKET 2"x 55"	
		ITEM#	DESCRIPTION	UPC #
		53355158	FE26-POST 2"X55" BKSND (13GA)	844530013747
2" (51mm)				
		STEEL POST	FOR FASCIA MOUNT BRACKET 3"x 49"	
		ITEM#	DESCRIPTION	UPC #
		53349168	FE26-POST 3"X49" BKSND	844530015406
	49" (1245mm) 55" (1397mm)			
		STEEL POST	FOR FASCIA MOUNT BRACKET 3" x 55"	
		ITEM#	DESCRIPTION	UPC #
		53355168	FE26-POST 3"X55" BKSND	844530015437
3" (76mm)				
		FASCIA MOU	NT BRACKET - STRAIGHT (WITH HEX HEAD BOLT COVER)	
• •		ITEM#	DESCRIPTION	UPC #
·		53502008	FM BRKT STRAIGHT 2" BKSND	844530013273
		53503008	FM BRKT STRAIGHT 3" BKSND	844530015161
		FASCIA MOU	NT BRACKET - OUTSIDE CORNER (WITH HEX HEAD BOLT COVER)	
		ITEM#	DESCRIPTION	UPC #
		50502018	UNIVERSAL FASCIA MNT BRKT 2" OUTSIDE CRNR BKSND	844530027966
		50503018	UNIVERSAL FASCIA MNT BRKT 3" OUTSIDE CRNR BKSND	844530027997
			NT BRACKET - INSIDE CORNER (WITH HEX HEAD BOLT COVER)	
		ITEM#		UPC#
Sec. 3		53502028	FM BRKT INSIDE CNR 2" BKSND	844530013334

53503028

FM BRKT INSIDE CNR 3" BKSND



....

844530015222



## **POST AND BRACKETS**



#### UNIVERSAL BRACKET 05 - 1.25" (32mm)

ITEM#	DESCRIPTION	UPC #
53505008	FE26-UB-05 BRACKET 1.25" BKSND (Bag of 4)	844530012467

Only 2 of the holes in bracket should be used in a diagonal fashion to attach to post Bags include 13 metal screws and 9 wood screws



Stair



Angle / Miter

#### UNIVERSAL BRACKET ANGLE ADAPTER 05 - 1.25" (32mm)

ITEM#	DESCRIPTION	UPC #		
53505018	FE26-UB-05 BRACKET ANGLE ADAPTER 1.25" BKSND (Bag of 4)	844530012474		
Universal Bracket and Angle Adapter must be used together				

Bags include 9 metal screws for attaching to Universal Bracket

## PERSONALIZATION



#### FLAT ACCENT TOP RAIL

ITEM#	DESCRIPTION	UPC #	
57513608	CR-FLAT ATR-6' BKSND	844530016915	
57513808	CR-FLAT ATR-8' BKSND	844530016922	
No other ATR (ATR) and he was double Tester and the second			

No other ATP/ATR can be used with FortressCable panel



ITEM#	DESCRIPTION	UPC #	
57505058	CR-CAP RAIL CLIP-1.25" BKSND (BAG 4)	844530016137	
Use to cover top rail with a deck board to create a "drink rail" Wood screws included 28" (711mm) spacing recommended			







3" (76mm)

2" (52mm)

PRESSED DOME CAP

ITEM#	DESCRIPTION	UPC #
53502108	FE26-PRESSED DOME CAP 2" BKSND	844530012399
53503108	FE26-PRESSED DOME CAP 3" BKSND	844530012856

For caps with lighting capabilities please visit fortressbp.com/lighting-accessories

DECKING | RAILING | FENCING | FRAMING | LIGHTING | FASTENERS | CLADDING | PERGOLAS



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# ANCHOR-TITE DRIP EDGE

## ANSI/SPRI ES-1 TESTED

- NON-CURING SEALANT (BY OTHERS) - ROOFING MEMBRANE			
	H (2) FAS (PRO 7/8" FAS (PRO ANCHO DRIP ED	US. PATENT #9.284,734 B1 x 2" STAINLESS STEEL TENERS 12" O.C. DVIDED) DED	
NOTES:			
$\sim$	PROVIDED WITH 1" LAP JOINTS.		
(2) TYPICALLY CO	VERAGE SHOULD EXTEND A MIN. OF 1½" BLOCKING IF APPLICABLE	MATERIAL:	
ANCHOR-TITE	DRIP EDGE DIMENSIONS	24 GA. GALVANIZED STEEL	
PRODUCT ID. NO.	H DIM	040" ALUMINUM	
AFDE-30	3"	OTHER	
□ AFDE-45	41/2"	COLOR:	
□ AFDE-60			
AFDE-75	71⁄2"	FINISH:	
	oceed only after receipt of	QUANTITIES:	
Print App		LINEAL FEET 12'-0" LENGTHS	
Architect and/or c	ontractor shall verify all		
products to be ins	and quantities. All stalled in strict accordance	OUTSIDE MITER(S) @ 90°	
	rinted instructions.	INSIDE MITER(S) @ 90°	
		FOR NON-90 MITERS SEE PRINT APPROVAL #11010-1103	
PROJECT:			
ARCHITECT:		Corporate Offices, Manufacturing 1600 Airport Road; Waukesha, WI 53188	
		Phone: 800-558-2162	
ROOFING CONTRACTOR: REPRESENTATIVE/DISTRIBUTOR:		Fax: 800-373-9156 www.metalera.com	
<b>TEN</b>	IETAL-ERA® Roof Edge Solutions	DATE: 07/10/19         SHT.#OF           DRN BY: JJC         DWG#11010-20546         G	

FM

# Anchor-Tite

# MAXIMUM PROTECTION AND WATER DRAINAGE FOR YOUR ROOF

Anchor-Tite<sup>®</sup> Drip Edge combines custom engineering and superior performance with an attractive appearance.

The patented design of our extruded aluminum anchor bar securely terminates the EPDM, PVC, or TPO membrane, providing protection superior to any shop-fabricated drip edge.

With a variety of unique applications, the Anchor-Tite Drip Edge is easy to install and cuts down on the labor, while providing the strength and water drainage you need to protect your roof.









## WWW.METALERA.COM | 800-558-2162

# ANCHOR-TITE DRIP EDGE AT-A-GLANCE

215 MPH Lifetime Wind Warranty

ANSI/SPRI/FM 4435/ES-1 Tested

FM Approved for Wind Uplift Protection

**Provides Proper Water Drainage** 

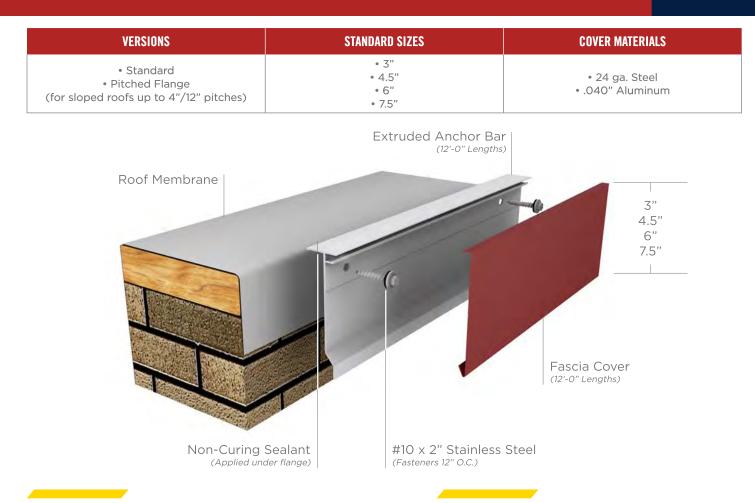
Variety of Colors, Sizes & Materials

Easy Install = Decreased Labor Costs



# Anchor-Tite



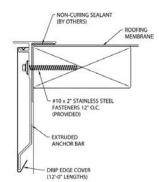


## 10 EXPRESS COLORS FOR QUICK SHIPPING

Express, standard, and premium colors and finishes are available to meet your job requirements and includes a 30-year Kynar 500<sup>®</sup> finish warranty on coil-coated standard colors. Custom colors are also available. For the most accurate color representation, contact us to request a paint chip.



## **EASY, EFFICIENT INSTALLATION**



Typical Installation Standard Version

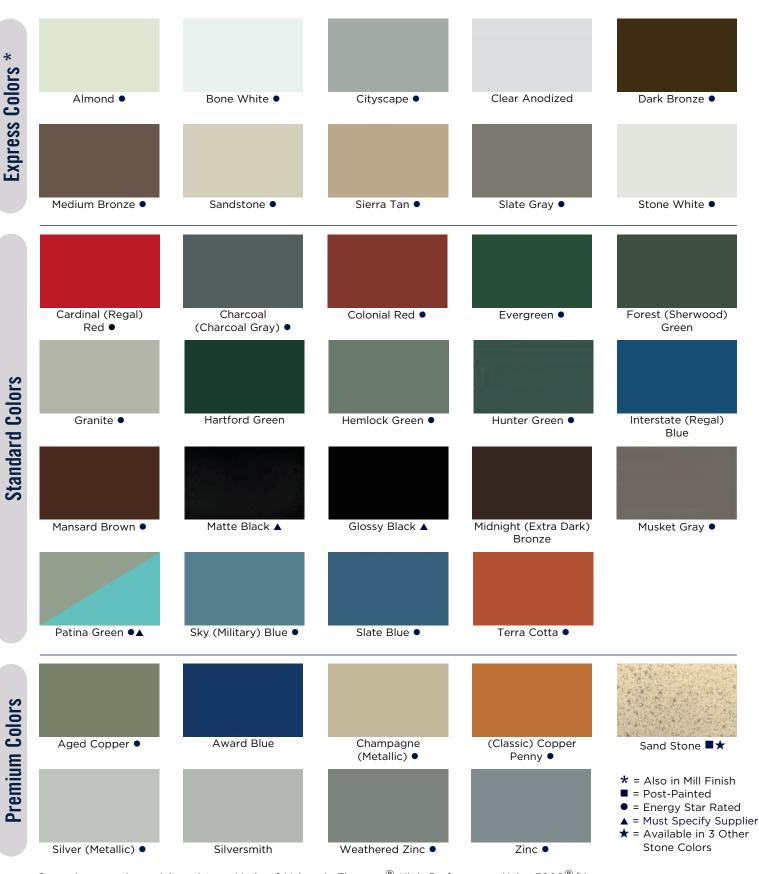
- Full snap-on design with extruded aluminum bar for easy installation
- No stripping-in or heat-welding typical with other systems for overall labor savings
- Prefabricated miters and accessories to prevent need for field fabrication
- Provided in 12'-0" lengths with prepunched holes for quicker installation

## WWW.METALERA.COM

All statements made herein are based on performance and testing and are believed to be accurate and reliable. However, the statements are made without guarantee and warranty on our part. Statements concerning possible use of our products are made without knowledge of infringement of any valid patent. No warranty, express or implied, other than that described in this literature, is made or intended. Kynar 500% is a registered trademark belonging to Arkema Inc.

# COLOR CHART





Our colors are deep, rich and true. Made of Valspar's Fluropon<sup>®</sup> High Performance Hylar  $500^{\$}$ /Kynar  $500^{\$}$  finish, they offer the ultimate in resistance against fading and weathering. Custom colors also available.

METL-0008

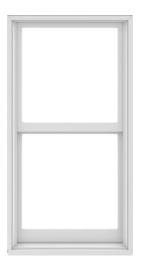
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## 400 SERIES WOODWRIGHT® DOUBLE-HUNG WINDOW



Interior



Exterior

## Summary

Product ID#	WDH2446
Unit Width	29 5/8"
Unit Height	56 7/8"
Interior Color	White
Glass	Low-E4® Glass
Hardware	Easy-Tilt Release Lock, White
Optional Hardware	None, White
Grille Pattern	None
Exterior Color	White
Exterior Trim Profile	None
Exterior Trim Color	White

## REJUVENATION



## Dayton Neoclassical 3-1/4" Fitter Wall Sconce Item #A2927

http://www.rejuvenation.com/s/1bo40

Specification	Detail
ltem #	A2927
Finish	Black Enamel
Socket Type	E26
Shade	B5105-OP
Shade SKU	B5105-OP
Maximum fixture wattage per socket	60 W
UL Listing	UL Listed Wet
Canopy	5"
Overall fixture width	6"
Length	10-1/2"
Overall fixture depth	9"
Shade height	6"
Base price: \$110.99	

Selected options total: \$50.00

## Total price as shown<sup>\*</sup>: \$160.99

\*Shipping and handling fees apply



## Smooth-Star®

Half Lite 2 Panel | Style No. S206 § S206 is rated 3.5 out of 5 by 16.

7 Available Sizes >



## THERMA-TRU VIBRANT PAINT OPTIONS



Looking for more information on finishing options? Check out our <u>finishing page</u> and learn how you can use finish to make your house a home with Therma-Tru.

## **GLASS OPTIONS ()**





Product name or item number...

## FLAGPOLES \* FLAGS \* HARDWARE \* FLAGPOLE LIGHTING \* ABOUT US

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