TECH GUIDE



2022 TECHNICAL GUIDE

DECKING • RAILING • BALUSTERS • ACCESSORIES • POST CAPS • LIGHTING • LATTICE • PORCH

HOW TO BUY

- 3 ALX Contemporary Pre-assembled Railing
- 4 ALX Contemporary Cable Railing
- 5 ALX Classic Railing

INSTALLATION GUIDES

- 6 Mineral-Based Composite Decking
- 9 Deckorators Solid Decking
- 11 Deckorators Trailhead Solid Decking
- 13 Deckorators Grooved Decking
- 17 Decking as Cladding
- 21 Porch Flooring
- 23 Stair Tread
- 25 Fascia
- 26 Sleeper System
- 27 Dock & Deck Board
- 30 ALX Contemporary Pre-assembled Railing
- 33 ALX Contemporary Pre-assembled Railing with Continuous Top Rail Brackets
- 41 ALX Contemporary Cable Railing
- 52 ALX Contemporary Cable Railing with Continuous Top Rail Brackets
- 60 ALX Classic Railing
- 63 ALX 2.5" Post Extension
- 64 Secondary Handrail
- 66 Classic Balusters
- 68 Estate Balusters
- 70 Arc, Traditional and Baroque Balusters
- 72 Scenic Glass
- 76 Post Caps
- 78 Transformers
- 82 LED Recessed Lighting
- 84 Postcovers
- 87 Plastic Lattice

WARRANTY INFORMATION

88 Warranties

ON COVER: Voyage Decking in Sedona with ALX Contemporary Pre-assembled Railing in Textured Black and 2½" Solar Post Caps in Black



GO BEYOND ORDINARY.

Deckorators takes the enjoyment of personalizing your outdoor living space to a whole new level. With decking and railing products that excite and inspire, you can accessorize and enhance the world outside your four walls with the newest, on-trend styles from the brand always leading design innovation. Deckorators offers the quality and selection to transform decks into a reflection of each homeowner. The first name in outdoor decorating, we've staked our reputation on your satisfaction.

In fact, we're so confident, we stand firmly behind that reputation with some of the best, first-of-their-kind product warranties in the industry.

DECKORATORS CERTIFIED PRO PROGRAM

Our 2021 Deckorators Certified Pro program is designed to help your business by aligning you with the leader in decking, railing, post caps, and accessories. Certified Pros receive:

- · Preferred contractor listing on Deckorators.com
- · Access to the Deckorators Pro-Only site
- \cdot Sample kits
- · Special promotions
- \cdot Hands-on training by a Deckorators representative
- · Deckorators Rewards Program

Our new rewards program allows you to earn points for every Deckorators purchase you make. Use points to purchase Deckorators products, marketing materials, apparel or cash.



Scan QR code for access to installation videos on YouTube



Go Beyond Ordinary

HOW TO BUY: Dec orators ALX CONTEMPORARY PREASSEMBLED

6 0 0 pc q 2 5 会

NOTE: STEP 3 AND STEP 4 NOT SHOWN ON DIAGRAM

STEP 1 - CHOOSE YOUR RAILING	the second se		
ALX CONTEMPORARY PREASSEMBLED RAIL - PURCHASE (1) KIT PER 6' OR 8' C	ON CENTER IN LINE RAIL SECTION. HARDWARE INCLUDED.		
5' On-Center* Rectangle ALX Contemporary Preassembled Rail (36" or 42")	Available colors: Textured Black, Textured White, Weathered		
8' On-Center* Rectangle ALX Contemporary Preassembled Rail (36" or 42")	Brown, Bronze and Brushed Titanium		
*Sized for on-center lengths when installed with 2.5" posts			
STEP 2 - CHOOSE YOUR POSTS			
2.5" x 2.5" ALUMINUM POST KITS - PURCHASE (1) POST KIT PER RAILING, PLUS	(1) TO END EACH RUN. TRIM AND POST CAP INCLUDED		
39" Aluminum Post Kit with Leveling Plate (for 36' rail)	Available colors: Textured Black, Textured White, Weathered		
44" Aluminum Post Kit with Leveling Plate (for 42" rail)	Brown, Bronze and Brushed Titanium		
STEP 3 - CHOOSE YOUR STAIR RAILING			
ALX CONTEMPORARY PREASSEMBLED RAIL - PURCHASE (1) KIT PER 6' OR 8' S	TAIR RAIL SECTION. HARDWARE INCLUDED		
6' Rectangle ALX Contemporary Preassembled Stair Rail (36" or 42")	Available colors: Textured Black, Textured White, Weathered		
8' Rectangle ALX Contemporary Preassembled Stair Rail (36" or 42")	Brown, Bronze and Brushed Titanium		
STEP 4 - CHOOSE YOUR STAIR POSTS			
2.5" x 2.5" ALUMINUM POST KITS - PURCHASE (1) POST KIT PER STAIR RAILING	, PLUS (1) TO END EACH RUN. TRIM AND POST CAP INCLUDED.		
49" Aluminum Post Kit with Leveling Plate (for 36' stair rail)	Available colors: Textured Black, Textured White, Weathered		
54" Aluminum Post Kit with Leveling Plate (for 42" stair rail)	Brown, Bronze and Brushed Titanium		
STEP 5 - CHOOSE YOUR POST CAPS			
2.5" Luna Low voltage post caps	Available colors: Black, Textured White, Weathered Brown and Brushed Titanium		
2.5" Solar Post Cap	Available colors' Textured Black, White and Weathered Brown		
2.5" Nouveau Solar Post Cap	Available colors: Black and White		

ALX CONTEMPORARY CABLE RAILING ORDER GUIDE



Purchase (1) kit per 6' or 8' on-center (o.c) in-line rail section. Hardware included. Available in 36" or 42" heights. Spacers are included:

36"x 6' o.c. length includes 1 spacer with

10 pre-drilled holes - 8' length includes 2 spacers

6' stair rail includes 1 spacer with 12 pre-drilled holes

42" x 6' o.c. length includes 1 spacer with 12 pre-drilled holes - 8' length includes 2 spacers





Go Beyond Ordinary



Dec orators

TEXTURE

Available colors:



 $2.5" \times 2.5"$ Cable Post Kits - Purchase (1) line post kit for in between two railing sections, plus (2) end posts, 1 to start and 1 to end each cable run. Trim and post cap included.

39" Cable Line Post Kits with Leveling Plate for 36" railing height available (10 pre-drilled holes on post)

44" Cable Line Post Kits with Leveling Plates with leveling plate for 42" railing height available (12 pre-drilled holes on post)

STEP 3 - CHOOSE YOUR STAIR RAILING

Purchase (1) kit per 6' stair rail section. Hardware included. 6' and 8' lengths available. *46" stair spacers included for 36" and 42" stair heights. Trim to fit.

STEP 4 - CHOOSE YOUR STAIR POSTS

2.5" x 2.5" Aluminum Post Kits - Purchase (1) middle stair post kit for in between two stair railing sections, plus (1) bottom stair post to end the cable run at the bottom. Trim and post cap included.

49" Cable Stair Middle and Bottom Post Kits with Leveling Plate for 36" railing height available (10 pre-drilled holes on post)

54" Cable Stair Middle and Bottom Post Kits with Leveling Plate for 42" railing height available (12 pre-drilled holes on post)

STEP 5 - CHOOSE YOUR CABLE

Cable is available in individual pre-cut lengths. Purchase (10) for each 36" railing run and (12) for each 42" railing run. Multiple lengths may be required based on the deck layout. Trim to fit.

1/8" SS Cable with pre-attached threaded stud and pull-lock fitting, in 5', 10', 15', 20', 25', 30', 40' and 50' lengths

STEP 6 - CUSTOMIZE WITH POST CAPS

2.5" Solar Post Caps available



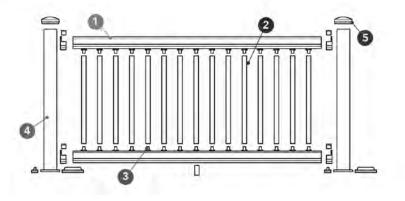








HOW TO BUY: ALX CLASSIC



STEP 1 - CHOOSE YOUR ALX CLASSIC COMPLETE RAIL KIT			
TOP & BOTTOM RAIL WITH CONNECTORS INSTALLED, BALUSTERS AND BRA	CKETS INCLUDED		
6' On Center Rail Kit - Classic (Round) Balusters for 36" or 42" Rail Height			
6' On Center Rail Kit - Estate (Square) Balusters for 36" or 42" Rail Height	Available colors: Textured Black, Textured White and		
8' On Center Rail Kit - Classic (Round) Balusters for 36" or 42" Rail Height	Weathered Brown		
8' On Center Rail Kit - Classic (Round) Balusters for 36" or 42" Rail Height			
STEP 2 - CHOOSE YOUR ALUMINUM POST KITS (2.5" x 2.5" ALX (CLASSIC POST KITS)		
PURCHASE (1) POST KIT PER RAILING KIT PLUS (1) TO END EACH RUN. TRIM A	AND POST CAP INCLUDED		
39" Post Kit (with leveling plate) for 36" Rail Height Available colors: Textured Black, Textured White and			
44" Post Kit (with leveling plate) for 42" Rail Height	Weathered Brown		
STEP 3 - CHOOOSE YOUR ALX CLASSIC COMPLETE STAIR RAIL KI	π		
EACH KIT INCLUDES (2) ALUMINUM RAILS WITH BALUSTER CONNECTORS IN BRACKETS (8) #8 x 3/4" & (8) #8 x 1-3/4" SCREWS, (12) BALUSTERS FOR & FOR	A STORE AND A S		
6' Stair Rail Kit - Classic (Round) Balusters for 36" or 42" Rail Height			
6' Stair Rail Kit - Estate (Square) Balusters for 36" or 42" Rail Height	Available colors: Textured Black, Textured White and		
8' Stair Rail Kit - Classic (Round) Balusters for 36" or 42" Rail Height	Weathered Brown		
8' Stair Rail Kit - Estate (Square) Balusters for 36" or 42" Rail Height			
STEP 4 - CHOOSE YOUR STAIR POST KITS			
2.5" x 2.5* ALUMINUM POST KITS - PURCHASE (1) POST KIT PER STAIR RAILING	3, PLUS (1) TO END EACH RUN. TRIM AND POST CAP INCLUDED.		
49" Aluminum Post Kit with Leveling Plate (for 36' stair rail)	Available colors: Textured Black, Textured White and		
54" Aluminum Post Kit with Leveling Plate (for 42" stair rail)	Weathered Brown		
STEP 5 - CHOOSE YOUR OPTIONAL, ALTERNATIVE POST CAPS			
ALUMINUM BASE POST CAPS - PURCHASE (1) OPTIONAL, ALTERNATIVE POS	T CAP PER POST IF DESIRED		
2.5" Luna Low voltage post caps	Available colors: Black, Textured White and Weathered Brown		
2.5" Solar Post Cap	Available colors: Textured Black, White and Weathered Brow		
2.5" Nouveau Solar Post Cap	Available colors: Black and White		



MINERAL-BASED COMPOSITE INSTALLATION GUIDE

Items you will need

- Safety glasses
- Pencil or pen
- Tape measure
- Utility knife
- Jigsaw
- Carpenter square (speed square)
- Power screw gun or drill
- Soft mallet
- Portable power saw
- Fine-tooth saw blades (40-tooth minimum, sharp carbide-tipped wood or finish/trim blades)
- Large file or medium-grit sandpaper
- Chalk line
- Spacing tools
- Fastener-specific tools recommended by manufacturer

Each Deckorators Voyage and Vault board has a unique appearance and should be arranged according to the end user's preference. Prior to construction, check with your local regulatory agency's code requirements. For best results, follow all installation instructions, paying close attention to gapping, spacing and fastener requirements.

Joist spacing requirements

	Installation style						
	Standard	Picture frame	Diagonal (45°)				
Residential	16"	16"	12"				
Commercial	12"	12"	12"				

Note: All dimensions are on-center.

Note: Joist spacing, stair stringer spacing and fastener requirements remain the same for all Mineral-Based Composite deck board widths (3.5", 5.5", 7.25", and 9.25").

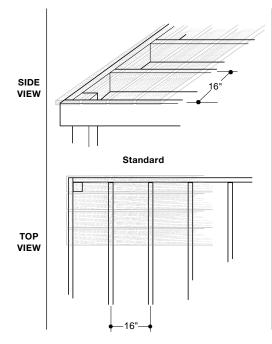
Gapping requirements							
Installation temperature							
	Above 32° F Below 32° F (0° C) (0° C)						
Side-to-Side	1/8"	3/16"					
End-to-End	1/16"	1/8"					
End-to-Side	1/16"	1/8"					
Abutting Solid Objects	1/8"	1/4"					

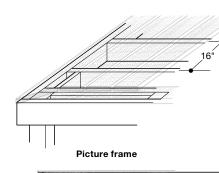


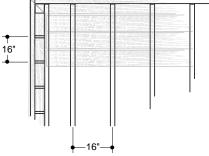
End Tag

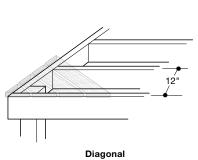
Note: Always follow best workmanship practices. Including, but not limited to, square cutting both board ends prior to installation.

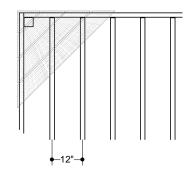












INSTALLATION INSTRUCTIONS • MINERAL-BASED COMPOSITE DECKING INSTALLATION

Cutting

- 10" 40T 80T circular blade (Carbide)
- 12" 40T 80T circular blade (Carbide)

For Mineral-Based Composite Decking:

- Use a sharp utility knife or jigsaw to finish cuts where a circular saw cannot fully complete cut. (Marking on the back side when needed.)
- Use a jigsaw to cut openings for protrusions. (8-12T per inch on the blade.)

• If necessary, use a large file or medium-grit sandpaper to clean cut edges.

• Use utility knife to cut any fibers or strands.

(In the rare event that a strand or fiber protrudes from the board, do not pull it.) If you are using a painted blade, you can remove the paint residue with medium grit sandpaper.

Fastener requirements

- Corrosion-resistant, galvanized or stainless steel fasteners
- Reverse-thread composite screw
- Minimum of 2-1/2" long screws
- 1-1/4" minimum penetration into joist
- Set power driver such that screws are slightly counter sunk. Do not overdrive.
- If using a hidden fastener system, use the manufacturer's recommended fastener and follow the manufacturer's instructions.

Installation

- Two fasteners per joist minimum.
- Ends of each board must fall on a joist.
- Double joist or use blocking where two board ends meet (fig.1).
- 1" maximum cantilever.
- Install entire deck at same temperature.
- Install the deck boards starting from the outside edge of the platform and work toward anchor wall so that ripped pieces abut the wall. Start installing from one end of the board and work toward the other end of the board.

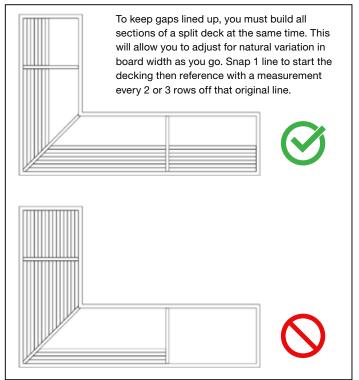
OR: Start installing from the center of the board and work out toward the ends of the board. Do not install by fastening each end first and working toward the middle. To keep the interior boards from moving over time, we recommend pinning the boards at the center of their length using a #8, 2" stainless steel screw. This holds the deck board in place at the center of each board and allows the decking to expand/contract at the ends. Pre-drill in the groove of the deck board with an 1/8" drill bit (fig. 2a). Drive screw into the groove so it's flush with the bottom of the groove (fig. 2b). This will allow you to properly fit a Stowaway hidden fastener into the groove.

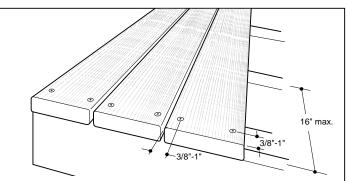
• Continue installing deck boards, adhering to the gapping requirements. Ensure consistent appearance by aligning each plank so that the cathedrals of the emboss pattern point in the same direction.

NOTE: Cutting all ends of boards prior to installation recommended.

Stair installation

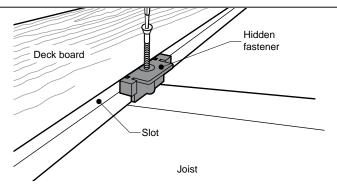
- Stairs must be constructed according to national and local building codes. Generally, building codes require 3' minimum wide treads and 11" minimum tread depth.
- 9" maximum center-to-center spacing of stringers is required.





Face screw installation

- · Use reverse-threaded composite deck screws.
- Screws must be 3/8" to 1" from side of board, 3/8" to 1" from end of board.
- Use color-matched screws for best results.
- Use caution not to overdrive screw.



Hidden fastener installation

- Please refer to the compatible fastener information on Deckorators.com/FastenerInfo.
- Fastener slots may be routed into the side of the deck boards, as needed.
- Follow hidden fastener manufacturer's instructions.

INSTALLATION INSTRUCTIONS • MINERAL-BASED COMPOSITE DECKING INSTALLATION

- Stair treads should be fastened over a minimum of 5 stringers to meet code requirements.
- 1/2" maximum tread overhang over stringers.
- 1/8" minimum gap between stair-tread boards. Local building codes may require the gap to be increased to 1/4" - 3/8" in order to maintain the minimum tread depth.

Color variation

Like most composites, Deckorators Decking will have color variations from piece to piece. This is due to naturally occurring variations in polymers. Purchasing all required decking material at one time is recommended, as manufacturing runs can produce slightly different colors. Do not install if color variation is not acceptable.

Mold and mildew growth

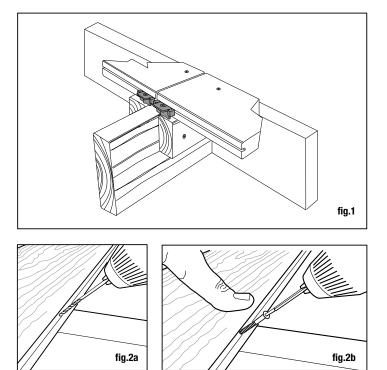
Mold and mildew can be a nuisance on any exterior building surface, regardless of the material. If the conditions are right, they will grow on wood, plastic, concrete, metal, and other surfaces. Mold formation is most prevalent in consistently wet, shaded areas. Spores from the natural environment are carried by the wind and commonly land on decks surfaces. It is important to note that the appearance of mold/mildew is a function of nature, not necessarily a deficiency with any of the material on which it grows.

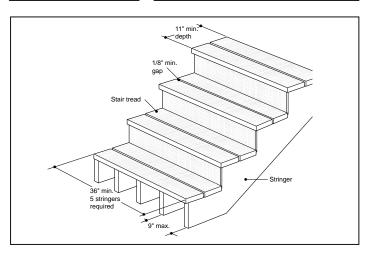
Cleaning

Periodic washing with soap/mild detergent and water will help remove surface dirt. This will also help prevent the buildup of pollen, debris and spores that can cause and accelerate mold/mildew growth.

Caution: A pressure washer must not be used to "blast" mold/mildew or soils from a deck surface. The abrasive nature of the water stream can potentially cause damage by driving the spores deeper into the material, which may create a more challenging problem to remedy. A pressure washer with a fan-tipped nozzle must only be used to lightly wet or rinse wood or composite deck surfaces.

There are many deck wash and exterior cleaning products available at retail. Only use cleaners intended for your application. Instructions provided by the manufacturer must be followed. Some cleaning products and inhibitors may be more effective than others, depending on the environmental conditions your deck issubjected to. Additionally, it is





always a good idea to test the cleaner in a small, inconspicuous area prior to applying it to the entire deck (www.deckorators.com).

Tips for snow removal: Care should be taken when removing snow from your deck to avoid damaging the deck surface. Use a plastic snow shovel, one without a metal edge. A stiff push broom can work very well and minimizes lifting. Light snow can be cleared using a leaf blower. Do not attempt to break up or scrape ice from the deck surface; use ice melt products when needed. No concerns have been reported using ice melt products labeled "Safe for Pets".

Mold inhibitors

As with deck washes, there are several mold-inhibitor products available from paint stores, hardware stores, online outlets, and home centers to help prevent long-term mold/mildew growth. For any product selected, be certain to read, understand, and follow all instructions provided by the manufacturer. Depending upon the environmental factors affecting your deck, some preventive cleaning products may be more effective than others. It may be necessary to try more than one product. For ongoing preventive maintenance, follow the manufacturer's recommendation.

Note: Deckorators is not suitable for structural use. It must not be used for primary load-bearing members such as posts, joists, beams, or stringers. The same commonsense precautions should be taken when handling Deckorators as with wood or other building materials. Dust masks and eye protection devices are recommended to avoid possible irritation from sawdust and chips. Gloves will help protect hands. Hands should be washed after construction work.

THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCORDANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMER ASSUMES ALL RISKS AND LIABILITY ASSOCIATED WITH THE CONSTRUCTION OR USE OF THIS PRODUCT. THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL NECESSARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. UNIVERSAL FOREST PRODUCTS, INC., MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING 8529



DECKORATORS SOLID DECKING INSTALLATION INSTRUCTIONS

Tools and Items Needed

• Tape measure

• Carpenter's pencil

Notice to installers

impact drivers

Safety glasses/goggles

• DO NOT use cordless

- Drill/power screwdriver
- 3/16" drill bit for predrilling surface or pro plug screws
- Circular saw with carbide-tip blade
 216" composite wood do
- 21/2" composite wood deck screws

- Set drill speed to 1500-1750 RPM
 - Max torque not to exceed
 - 23 inch poundsPre-drill knots
 - or dense hardwood

Each Deckorators Trailhead, Vista, Heritage, Vault, and Voyage board has a unique appearance and should be arranged according to the end user's preference. Prior to construction, check with your local regulatory agency for special code requirements in your area. For best results, follow these simple installation instructions, paying close attention to gapping, spacing and fastener requirements.

Joist Span

16" on-center for residential perpendicular applications. Residential parquet patterns and diagonal or herringbone designs all require joist spacing 12" on-center. Contact Deckorators product support at 800-332-5724 for commercial applications. Use 1/4" for side gapping.

End-to-End Spacing

Allow a minimum of 1/16" gap between board ends for every 20°F of difference between installation temperature and the hottest temperature expected (fig. 1). Use two fasteners per deck board at each joist. For any decking where two boards meet end-to-end over a joist, additional blocking must be used for proper board end support (fig. 2). Allow 1/4" distance between all decking material and any permanent structure or post. After all decking has been attached, snap a chalk line (white or yellow chalk recommended) flush with or up to 1-1/2" out from the deck framing and trim with a circular saw. Deckorators decking, like all wood and composite decking products, requires proper ventilation and drainage in order to ensure its longevity. When using a minimum 2x6 joist standing on edge, with the suggested 1/4" side gap, there must be a minimum a 2" clear space between the bottom edge of the joists and grade to allow for proper ventilation. Adequate drainage is also needed to prevent water from pooling under the deck.

NOTE: ONLY Deckorators Voyage, Vault, and Frontier deck material, manufactured with Eovations[™] technology, may be installed in contact with the ground or incidental submersion in water when a project design requires those conditions.

Cutting

- 10" 40T 80T circular blade (Carbide)
- 12" 40T 80T circular blade (Carbide)

For Mineral-Based Composite Decking:

• Use a sharp utility knife or jigsaw to finish cuts where a circular saw cannot fully complete cut. (Marking on the back side when needed.)

• Use a jigsaw to cut openings for protrusions. (8-12T per inch on the blade.)

• If necessary, use a large file or medium-grit sandpaper to clean cut edges.

• Use utility knife to cut any fibers or strands.

(In the rare event that a strand or fiber protrudes from the board, do not pull it.) If you are using a painted blade, you can remove the paint residue with medium grit sandpaper.

For Wood Plastic Composite Decking:

• Use fine tooth carbide trim blade to cut.

• Use a sharp utility knife or jigsaw to finish cuts where a circular saw cannot fully complete cut. (Marking on the back side when needed.)

(A) End Tag 1X6-16' GR. DKR.

(B) Product Sticker



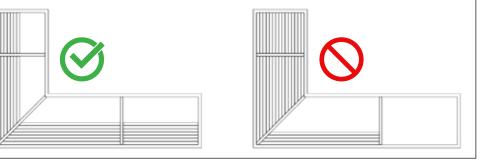
Note: Always follow best workmanship practices. Including, and not limited to, square cutting both board ends prior to installation.

			Во	ard-En	d to Boa	rd-End	Gapping	Requiren	nents			
				Warm	est annu	al temper	ature °F e	expected in	region			
ы.	°F	20	30	40	50	60	70	80	90	100	110	120
on day of installation	20	1/8	1/8	1/8	1/8	1/8	3/16	3/16	1/4	1/4	5/16	5/16
ısta	30		1/8	1/8	1/8	1/8	1/8	3/16	3/16	1/4	1/4	5/16
ofi	40			1/8	1/8	1/8	1/8	1/8	3/16	3/16	1/4	1/4
day	50				1/8	1/8	1/8	1/8	1/8	3/16	3/16	1/4
	60					1/8	1/8	1/8	1/8	1/8	3/16	3/16
е°F	70						1/8	1/8	1/8	1/8	1/8	3/16
Temperature	80							1/8	1/8	1/8	1/8	1/8
ber	90								1/8	1/8	1/8	1/8
Tem	100									1/8	1/8	1/8
	110										1/8	1/8
	120											1/8

Note: Cut all board ends prior to installation recommended.

fig. 1

To keep gaps lined up, you must build all sections of a split deck at the same time. This will allow you to adjust for natural variation in board width as you go. Snap 1 line to start the decking then reference with a measurement every 2 or 3 rows off that original line.



INSTALLATION INSTRUCTIONS • SOLID DECKING

- Use a jigsaw to cut openings for protrusions. (8-12T per inch on the blade.)
- If necessary, use a large file or medium-grit sandpaper to clean cut edges.
- Use utility knife to cut any fibers or strands.

(In the rare event that a strand or fiber protrudes from the board, do not pull it.) If you are using a painted blade, you can remove the paint residue with medium grit sandpaper.

Fasteners

For a list of recommended and compatible fasteners please visit www.Deckorators.com/ FastenerInfo. Recommended fasteners are those which are recommended by the manufacturer of Deckorators Decking. Compatible fasteners are those which have been tested and recommended for use with Deckorators Decking by the fastener manufacturer. The use of a nonrecommended fastener will not void the Deckorators Decking Warranty; however if a decking failure is caused by the use of a non-recommended fastener, any corresponding warranty claim will be denied.

For ease of installation, we recommend using 2-1/2" corrosion-resistant, composite wood deck screws. These screws help minimize the common "mushroom" effect that sometimes occurs when using standard fasteners. Always pre-drill a pilot hole and countersink prior to driving screws.

fig. 2

Pre-drill and countersink all deck screws, regardless of type and location.

Screws must be driven flush with the Deckorators decking surface. Do not over-tighten. Use two fasteners per deck board at each joist. For any decking where two boards meet end-to-end over a joist, additional blocking must be used for proper board end support (fig. 2). Always pre-drill a pilot hole and countersink when using either composite or wood screws. Be careful not to over-tighten screws near board ends.

Please refer to PFS-TECO RR-0100 for stringer spacing when deck boards are used as stair treads.

Color Variation

Like most composites, Deckorators Decking will have color variations from piece to piece. This is due to naturally occurring variations in wood fibers and polymers. Purchasing all required decking material at one time is recommended, as manufacturing runs can produce slightly different colors. Do not install if color variation is not acceptable.

Preventing Mold and Mildew Growth

Mold and mildew can be a nuisance on any exterior building surface, regardless of the material. If the conditions are right, they will grow on wood, plastic, concrete, metal, and other surfaces. Mold formation is most prevalent in consistently wet, shaded areas. Spores from the natural environment are carried by the wind and commonly land on decks surfaces. It is important to note that the appearance of mold/mildew is a function of nature, not necessarily a deficiency with any of the material on which it grows.

Cleaning

Periodic washing with soap/mild detergent and water will help remove surface dirt. This will also help prevent the buildup of pollen, debris and spores that can cause and accelerate mold/mildew growth. Caution: A pressure washer must not be used to "blast" mold/mildew or soils from a deck surface. The abrasive nature of the water stream can potentially cause damage by driving the spores deeper into the material, which may create a more challenging problem to remedy. A pressure washer with a fan-tipped nozzle must only be used to lightly wet or rinse wood or composite deck surfaces.

There are many deck wash and exterior cleaning products available at retail. It is important to only use a cleaner specifically intended for your application. After selecting a product, be certain to read, understand and follow all instructions supplied by the manufacturer. Some cleaning products and inhibitors may be more effective than others, depending on the environmental conditions your deck is subjected to. Additionally, it is always a good idea to test the cleaner in a small, inconspicuous area prior to applying it to the entire deck (www.deckorators.com).

Tips for snow removal: Care should be taken when removing snow from your deck to avoid damaging the deck surface. Use a plastic snow shovel, one without a metal edge. A stiff push broom can work very well and minimizes lifting. Light snow can be cleared using a leaf blower. Do not attempt to break up or scrape ice from the deck surface; use ice melt products when needed. No concerns have been reported using ice melt products labeled "Safe for Pets".

Mold Inhibitors

As with deck washes, there are several mold-inhibitor products available from paint stores, hardware stores, online outlets and home centers to help prevent long-term mold/mildew growth. For any product selected, be certain to read, understand and follow all instructions provided by the manufacturer. Depending upon the environmental factors affecting your deck, some preventive cleaning products may be more effective than others. It may be necessary to try more than one product. For ongoing preventive maintenance, follow the manufacturer's recommendation.

Note: Deckorators is not suitable for structural use. It must not be used for primary load-bearing members such as posts, joists, beams, or stringers. The same common-sense precautions should be taken when handling Deckorators as with wood or other building materials. Dust masks and eye protection devices are recommended to avoid possible irritation from sawdust and chips. Gloves will help protect hands. Hands should be washed after construction work.

THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCORDANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMER ASSUMES ALL RISKS AND LIABILITY ASSOCIATED WITH THE CONSTRUCTION OR USE OF THIS PRODUCT. THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL NECES-SARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WRITTEN LIMITED WARRANTY, THE 7903



DECKORATORS TRAILHEAD SOLID-EDGE DECKING INSTALLATION INSTRUCTIONS

Tools and Items Needed

- Drill/power screwdriver • 3/16" drill bit for predrilling surface or pro plug screws
- Circular saw with carbide-tip blade
- 21/2" composite wood deck screws (Surface Fastening)
- 2¾" Cap-Tor[®] xd Epoxy Coated composite wood deck screws (Hidden Surface Fastening)
- Pro Plug[®] Hidden Fastening System
 Set drill speed to 1500-1750 RPM Tape measure
- · Carpenter's pencil · Safety glasses/goggles
- Notice to installers • DO NOT use cordless
- impact drivers
- Max torque not to exceed
- 23 inch pounds
 - Pre-drill knots or dense hardwood



Note: Always follow best workmanship practices. Including, and not limited to, square cutting both board ends prior to installation.

Boards from multiple factory packages must be intermixed to ensure a satisfactory color blend across the deck surface. Prior to construction, check with your local regulatory agency for special code requirements in your area. Store on flat surface and allow to acclimate to jobsite conditions prior to installation. For best results, follow these simple installation instructions, paying close attention to gapping, spacing and fastener requirements.

Joist Span

Depending on local building code requirements, refer to BD21-017 in Canada for joist spacing and stair tread support options. Homeowner/ Contractor to install solid bridging at locations where sustained heavy point loads from BBQ's, fire pits, etc., are anticipated. Such bridging shall be installed perpendicular to the deck joists at 12" on-center in the area(s) where the point load(s) will be applied. Alternatively, the joist spacing in these areas can be reduced from 16" to 12" on-center.

	Board-End to Board-End Gapping Requirements												
		Warmest annual temperature °F expected in region											
_	°F	20	30	40	50	60	70	80	90	100	110	120	
installation	20	1/8	1/8	1/8	1/8	1/8	3/16	3/16	1/4	1/4	5/16	5/16	
stall	30		1/8	1/8	1/8	1/8	1/8	3/16	3/16	1/4	1/4	5/16	
fin	40			1/8	1/8	1/8	1/8	1/8	3/16	3/16	1/4	1/4	
on day of	50				1/8	1/8	1/8	1/8	1/8	3/16	3/16	1/4	
p u o	60					1/8	1/8	1/8	1/8	1/8	3/16	3/16	
÷	70						1/8	1/8	1/8	1/8	1/8	3/16	
ture	80							1/8	1/8	1/8	1/8	1/8	
oera	90								1/8	1/8	1/8	1/8	
Temperature	100									1/8	1/8	1/8	
-	110										1/8	1/8	
	120											1/8	

Note: Cut all board ends prior to installation recommended.

End-to-End Spacing

Allow a minimum of 1/16" gap between board ends for every 20°F of difference between installation temperature and the hottest temperature expected (fig. 1). Use two fasteners per deck board at each joist. For any decking where two boards meet end-to-end over a joist, additional blocking must be used for proper board end support (fig. 2). Allow 1/4" distance between all decking material and any permanent structure or post. After all decking has been attached, snap a chalk line (white or yellow chalk recommended) flush with or up to 1-1/2" out from the deck framing and trim with a circular saw. Deckorators decking, like all wood and composite decking products, requires proper ventilation and drainage in order to ensure its longevity. When using a minimum 2x6 joist standing on edge, with the suggested 1/4" side gap, there must be a minimum a 2" clear space between the bottom edge of the joists and grade to allow for proper ventilation. Adequate drainage is also needed to prevent water from pooling under the deck.

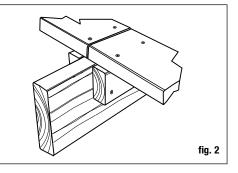


fig. 1

Note: Pre-drill and countersink all deck screws. regardless of type and location.

NOTE: ONLY Deckorators Voyage, Vault, and Frontier deck material, manufactured with Eovations™ technology, may be installed in contact with the ground or incidental submersion in water when a project design requires those conditions.

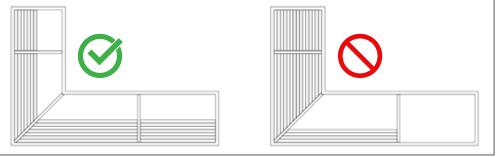
Cutting

- 10" 40T 80T circular blade (Carbide)
- 12" 40T 80T circular blade (Carbide)

For Wood Plastic Composite Decking:

- Use fine tooth carbide trim blade to cut.
- Use a sharp utility knife or jigsaw to finish cuts where a circular saw cannot fully complete cut. (Marking on the back side when needed.)
- Use a jigsaw to cut openings for protrusions. (8-12T per inch on the blade.)
- · If necessary, use a large file or medium-grit sandpaper to clean cut edges.
- Use utility knife to cut any fibers or strands.

To keep gaps lined up, you must build all sections of a split deck at the same time. This will allow you to adjust for natural variation in board width as you go. Snap 1 line to start the decking then reference with a measurement every 2 or 3 rows off that original line.



(In the rare event that a strand or fiber protrudes from the board, do not pull it.) If you are using a painted blade, you can remove the paint residue with medium grit sandpaper.

Fasteners

For a list of recommended and compatible fasteners please visit www.Deckorators. com/FastenerInfo. Recommended fasteners are those which are recommended by the manufacturer of Deckorators Decking. Compatible fasteners are those which have been tested and recommended for use with Deckorators Decking by the fastener manufacturer. The use of a non-recommended fastener will not void the Deckorators Decking Warranty; however if a decking failure is caused by the use of a non-recommended fastener, any corresponding warranty claim will be denied.

Surface Fastening:

For ease of installation, we recommend using 2-1/2" corrosion-resistant, composite wood deck screws. These screws help minimize the common "mushroom" effect that sometimes occurs when using standard deck fasteners. Always pre-drill a pilot hole and countersink prior to driving screws. (diag.)

Hidden Fastening:

For ease of installation, we recommend using 2-3/4" Cap-Tor® xd Epoxy Coated composite wood deck screws with Pro Plugs. These screws help minimize the common "mushroom" effect that sometimes occurs when using standard fasteners. Always predrill a pilot hole prior to driving screws. Screws must be driven using the Pro Plug® Hidden Fastener tool to ensure the screws will be driven to the preset level below the deck surface (diag).

Installation - Screw Placement

A) Standard Surface Fastening: Use two fasteners per deck board at each joist. It is required that screws be placed ¾" from both edges to ensure screws are in the thickest lobed area (fig. 3a)

B) Picture Frame Surface Fastening: Use two fasteners per deck board. It is required that the screw into the Rim Joist be placed either ³/₄" or 2" from the edge of the deck board. The screw into the Joist must be ³/₄" from the edge of the board (fig. 3b) to ensure screws are in the thickest lobed area.

C) Board End Fastening: For any decking where two boards meet end-to-end over a joist, you must add additional blocking (fig. 4a). It is required that screws be placed 3/" from both edges to ensure screws are in the thickest lobed area. Screws must also be placed at least 3/" from the ends of the deck boards. Be careful to not to over-tighten screws near board ends.

D) Stair Tread Fastening: Please refer to BPER-0100 for stringer spacing when deck boards are used as stair treads.

For all deck board fastening, it is recommended that you use the locator tool to ensure accurate screw placements into the thickest lobed areas (fig. 5). For more information and instructions on how to use the locator tool please visit www.Deckorators/locatortool.com.

To order your locator tool, go to:



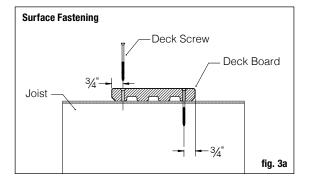
Color Variation

Like most composites, Deckorators Decking will have color variations from piece to piece. This is due to naturally occurring variations in wood fibers and polymers. Purchasing all required decking material at one time is recommended, as manufacturing runs can produce slightly different colors. Mix boards from multiple units to blend colors. Do not install if color variation is not acceptable. Installing boards means you've accepted the color and appearance of the planks.

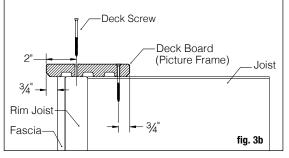
Preventing Mold and Mildew Growth

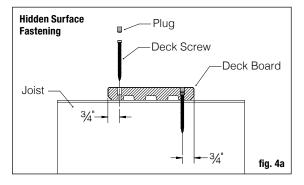
Mold and mildew can be a nuisance on any exterior building surface, regardless of the material. If the conditions are right, they will grow on wood, plastic, concrete, metal, and other surfaces. Mold formation is most prevalent in consistently wet, shaded areas. Spores from the natural environment are carried by the wind and commonly land on decks surfaces. It is important to note that the appearance of mold/mildew is a function of nature, not necessarily a deficiency with any of the material on which it grows.

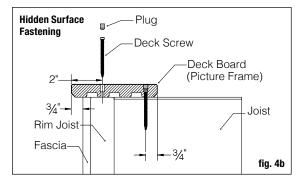
7903

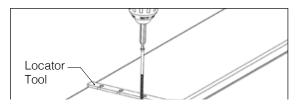


Surface Fastening











GROOVED DECKING INSTALLATION INSTRUCTIONS USING STOWAWAY™ HIDDEN FASTENERS

Tools and Items Needed

- Drill/power screwdriver
- 1/8" drill bit
- Circular saw with carbide-tip blade
- Assorted fasteners (see instructions)
- Tape measure
- Carpenter's pencil
- Safety glasses/goggles
- Set drill speed at 1500-1750 RPM
 Max torque not to

impact drivers

Notice to installers:

 Use 305 stainless steel, black head screws

DO NOT use cordless

exceed 23 inch poundsPre-drill knots or dense hardwood

Each Deckorators Vista, Heritage, Vault, Voyage, and Trailhead board has a unique appearance and should be arranged according to the end user's preference. Prior to construction, check with your local regulatory agency for special code requirements in your area. For best results, follow these simple installation instructions, paying close attention to gapping, spacing and fastener requirements.

Joist Span

Depending on local building code requirements, refer to BD21-017 in Canada for Trailhead Decking. Homeowner/Contractor to install solid bridging at locations where sustained heavy point loads from BBQ's, fire pits, etc., are anticipated. Such bridging shall be installed perpendicular to the deck joists at 12" on-center in the area(s) where the point load(s) will be applied. Alternatively, the joist spacing in these areas can be reduced from 16" to 12" on-center.

End-to-End Spacing

Follow the gapping requirements listed in fig. 1. For any decking where two boards meet end-toend over a joist, add additional blocking (fig. 2 on the following page). Allow 1/4" distance between all decking material and any permanent structure or post. After all of the decking has been attached, snap a chalk line (white or yellow chalk recommended) flush with or up to 1-1/2" out from the deck framing and trim with a circular saw.

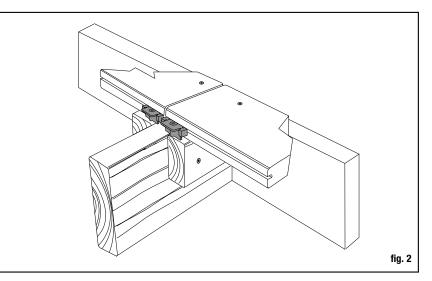
All wood and composite decking products require proper ventilation and drainage to ensure their longevity. When using a minimum 2x6 joist standing on edge and the suggested 1/4" side gap, there must be a minimum 2" clear space between the bottom edge of the joists and grade in order to allow for proper ventilation. Adequate drainage is also needed to prevent water from pooling under the deck.

Note: ONLY Deckorators Voyage, Vault, and Frontier decking material, manufactured with Eovations technology, may be installed with the ground or incidental submersion in water when a project design requires those conditions.

STOWAWAY [™] HIDDEN FASTENERS	JOIST SPACING			
DECK SIZE	12" on-center	16" on-center		
100 sq. ft.	210 fasteners	175 fasteners		
200 sq. ft.	441 fasteners	336 fasteners		
300 sq. ft.	672 fasteners	512 fasteners		
400 sq. ft.	882 fasteners	672 fasteners		
500 sq. ft.	1,113 fasteners	848 fasteners		

			E	Board-E	nd to B	oard-En	d Gappin	g Require	ements			
				Warm	est annu	al temper	ature °F e	expected in	region			
	°F	20	30	40	50	60	70	80	90	100	110	120
of installation	20	1/8	1/8	1/8	1/8	1/8	3/16	3/16	1/4	1/4	5/16	5/16
stall	30		1/8	1/8	1/8	1/8	1/8	3/16	3/16	1/4	1/4	5/16
fins	40			1/8	1/8	1/8	1/8	1/8	3/16	3/16	1/4	1/4
ay o	50				1/8	1/8	1/8	1/8	1/8	3/16	3/16	1/4
on day	60					1/8	1/8	1/8	1/8	1/8	3/16	3/16
÷	70						1/8	1/8	1/8	1/8	1/8	3/16
ture	80							1/8	1/8	1/8	1/8	1/8
era	90								1/8	1/8	1/8	1/8
Temperature	100									1/8	1/8	1/8
	110										1/8	1/8
	120											1/8

Note: Always follow best workmanship practices. Including, and not limited to, square fig. 1 cutting both board ends prior to installation. Cutting all ends of boards prior to installation recommended.



Fasten the outside edge of the first board to the rim joist with screws. Pre-drill and countersink all deck screws, regardless of type, that are within 1-1/2" of the end of the deck board. On the other side of the board, place a Stowaway hidden fastener into the slot and center on the joist.

Cutting

- 10" 40T 80T circular blade (Carbide)
- 12" 40T 80T circular blade (Carbide)

For Mineral-Based Composite Decking:

• Use a sharp utility knife or jigsaw to finish cuts where a circular saw cannot fully complete cut. (Marking on the back side when needed.)

• Use a jigsaw to cut openings for protrusions. (8-12T per inch on the blade)

• If necessary, use a large file or medium-grit sandpaper to clean cut edges.

• Use utility knife to cut any fibers or strands.

(In the rare event that a strand or fiber protrudes from the board, do not pull it.) If you are using a painted blade, you can remove the paint residue with medium grit sandpaper.

For Wood Plastic Composite Decking:

• Use fine tooth carbide trim blade to cut.

• Use a sharp utility knife or jigsaw to finish cuts where a circular saw cannot fully complete cut. (Marking on the back side when needed.)

• Use a jigsaw to cut openings for protrusions. (8-12T per inch on the blade)

• If necessary, use a large file or medium-grit sandpaper to clean cut edges.

• Use utility knife to cut any fibers or strands.

(In the rare event that a strand or fiber protrudes from the board, do not pull it.) If you are using a painted blade, you can remove the paint residue with medium grit sandpaper.

Fasteners

For ease of installation, our Stowaway fastener fits into the groove on each side of the deck board to eliminate pre-drilling and provide a fastener-free deck surface. The deck boards require traditional fasteners on the outside and inside edges of the deck.

Step 1 Begin by fastening the outside edge of the first board to the rim joist every 16". For this, we recommend using 2-1/2" corrosion-resistant, composite wood deck screws. These screws help minimize the common "mushroom" effect that sometimes occurs when using standard fasteners. They can also reduce the amount of pre-drilling and countersinking.

Note: If using ordinary coarse-thread deck screws, always pre-drill a pilot hole and countersink prior to driving screws. Screws must be driven flush with the surface. Do not over-tighten. Use one

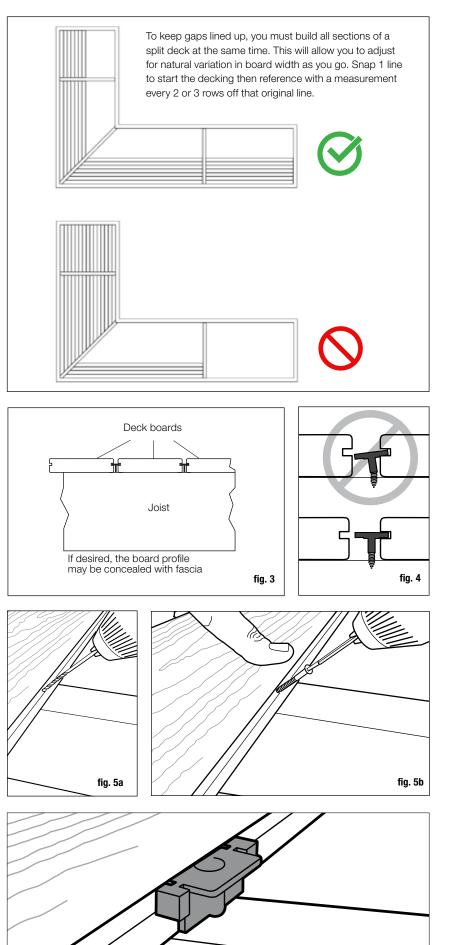


fig. 6

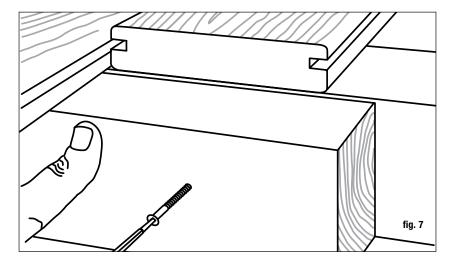
fastener per board every 16".

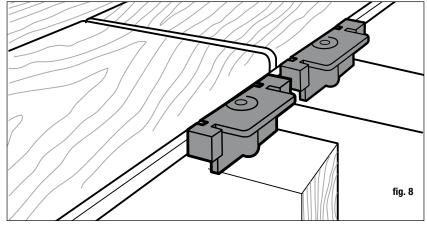
Step 2 Use two fasteners per deck board at each joist. For any decking where two boards meet end-to-end over a joist, additional blocking must be used for proper board end support (fig. 2). Always predrill a pilot hole when fastening within 1-1/2" of board ends, whether using composite or wood screws. Do not over-tighten screws at board ends.

Step 3 On the other side of the board, place a Stowaway hidden fastener into the groove and center on the joist (fig. 3). Install the preset screw at a 90° angle through the Stowaway fastener and drive flush. Do not over-tighten. The fastener wings must remain level with the joist for the next board to fit correctly (fig. 4).

Step 4 Install one Stowaway fastener at each joist location. Slide the next board into place so the wings on the previous fasteners fit into the groove on the side of the board. Make sure the side gap between the boards is 1/4".

Step 5 To keep the interior boards from moving over time, the boards must be pinned at the center of their length using a #8, 2" stainless steel screw. This holds the deck board in place at the center of each board and allows the decking to expand/contract at the ends. Pre-drill in the groove of the deck board with an 1/8" drill bit (fig. 5a). Drive screw into the groove so it's flush with the bottom of the groove (fig. 5b). This will





allow you to properly fit a Stowaway hidden fastener into the groove.

Step 6 Install a Stowaway hidden fastener clip over the screw and centered over the joist. Fasten using preset screw at a 90° angle through the Stowaway hidden fastener and drive flush with the clip (fig. 6). The fastener wings must remain level with the joist for the next board to fit correctly (fig. 4).

Note: To predrill a groove on one side of deck board, we recommend using a 5/32" T-slot cutter.

Step 7 Install one Stowaway fastener at each joist location along the length of the board. For installations where deck boards are butted end-to-end at the joist, an 8" block must be added using a Stowaway hidden fastener clip at the end of each board (fig. 7 and fig. 8). Be sure to gap the boards as previously described.

Step 8 Repeat the process for each board until the outside edge of the final board is fastened with screws. Use fascia to conceal the board profile and inhibit board movement over time. Please refer to the fascia installation instructions for the approved fastening methods for fascia boards.

Step 9 If no fascia is being used, the entire perimeter of the deck should be fastened to the rim joist with screws. Use two screws per joist on the perimeter board. These screws will be inconspicuous once the railing is installed. Decking should be fastened with screws when being used as stair treads.

Preventing Mold and Mildew Growth

Mold and mildew can be a nuisance on any exterior building surface, regardless of the material. If the conditions are right, they will spawn on wood, plastic, concrete, metal, and other surfaces. Mold formation is most prevalent in consistently wet, shaded areas. Spores from the natural environment are carried by the wind and commonly land on deck surfaces. It is important to note that the appearance of mold/mildew is a function of nature, not necessarily a deficiency with any of the material on which it grows.

Cleaning

Periodic washing with soap/detergent and water will help remove surface dirt. This will also help prevent the buildup of pollen, debris and spores that can cause and accelerate mold/mildew growth.

INSTALLATION INSTRUCTIONS • STOWAWAY HIDDEN FASTENER

CAUTION: A pressure washer must not be used to "blast" mold/mildew or soils from a deck surface. The abrasive nature of the water stream can potentially damage the material by driving the spores into the material, which may create a more challenging problem to remediate. A pressure washer with a fan-tipped nozzle must only be used to lightly wet or rinse wood or composite deck surfaces.

There are many deck wash and exterior cleaning products available at retail stores. Only use cleaners intended for your application. Instructions provided by the manufacturer must be followed. Some cleaning products and inhibitors may be more effective than others, depending on the environmental conditions your deck is subjected to. Additionally, it is always a good idea to test the cleaner in a small, inconspicuous area prior to applying it to the entire deck.

Tips for snow removal: Care should be taken when removing snow from your deck to avoid damaging the deck surface. Use a plastic snow shovel, one without a metal edge. A stiff push broom can work very well and minimizes lifting. Light snow can be cleared using a leaf blower. Do not attempt to break up or scrape ice from the deck surface; use ice melt products when needed. No concerns have been reported using ice melt products labeled "Safe for Pets".

Mold Inhibitors

As with deck washes, there are several mold-inhibitor products available from paint stores, hardware stores, online outlets and home centers to help prevent long-term mold/mildew growth. For any product selected, be certain to read, understand, and follow all instructions provided by the manufacturer. Depending upon the environmental factors affecting your deck, some preventive cleaning products may be more effective than others. It may be necessary to try more than one. For ongoing preventive maintenance, follow the manufacturer's recommendation.

Note: Deckorators is not suitable for structural use. It must not be used for primary load-bearing members such as posts, joists, beams, or stringers. The same common-sense precautions should be taken when handling Deckorators as with wood or other building materials. Dust masks and eye protection devices are recommended to avoid possible irritation from sawdust and chips. Gloves will help protect hands. Hands should be washed after construction work.

THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCORDANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMER ASSUMES ALL RISKS AND LIABILITY ASSOCIATED WITH THE CONSTRUCTION OR USE OF THIS PRODUCT. THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL NECESSARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WRITTEN LIMITED WARRANTY, THE WARRANTOR DOES NOT PROVIDE ANY OTHER WARRANTY, EITHER EXPRESS OR IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES.

7904



DECKING AS CLADDING INSTALLATION INSTRUCTIONS

Itomo Vou Will Nood	Deckeystere Approved Cledding
Items You Will Need	Deckorators - Approved Cladding
• Drill	Frontier, Vault and Voyage Deck Boards
Chalk Line	(A) Deckorators Solid-Edge Boards
Tape Measure	(B) Deckorators Grooved-Edge Boards
• Saw	
• Level	Size
Spacing Tool	• 7/8 in. x 3-1/2 in. Note: For available
 Safety Glasses 	• 7/8 in. x 5-1/2 in. lengths please see
	• 7/8 in. x 7-1/4 in. Deckorators.com
Note: When working with Deckorators decking as	
cladding product be sure to	
vear proper clothing and	
afety equpiment. Safety	
plasses should be used during he entire installation process.	<u> </u>

Important:

Outside wall of structure must be weather tight and water proof prior to installing Deckorators decking used as cladding. Deckorators decking used as cladding is not designed to prevent water infiltration. It is the responsibility of the engineer, architect, and installer to ensure the design and installation of the wall and building are weather tight and code compliant behind the Deckorators cladding product. Deckorators decking used as cladding must not be used in load bearing applications.

Installation Preparation

Follow these guidelines for best installation:

- Deckorators decking is a one-sided product and must be installed with the grain side out.
- Prior to installation, be sure that the wall is structurally sound, weather tight, stud locations are identified and marked, and that there are no nails or screws protruding.
- Ensure that the wall and substructure is flat, as the boards will conform to the surface contour of the wall.
- Spacing of wall studs/supports shall not exceed 16" on center, furring strips should not exceed 24" on center (fig. 5).

Approved Product For Cladding Applications

Note: The fasteners listed below are all approved fasteners for attachment of Deckorators decking as cladding to furring strips (fig. 2, fig. 3 and fig. 4).

- 1. Furring Strip Attachment to Framing/Sheathing:
- #8 x 1-5/8" Starborn Deckfast Flathead Stainless Deck Screw (fig. 4)
- 2. Eovation Cladding Attachment to Furring Strips:
 - Starborn Pro Plug® System (fig. 2)
 - #10 x 2" Starborn Cap-Tor® xd Epoxy Coated & Stainless (fig. 2)
 - Deckorators[®] Stowaway[™] Hidden Fasteners (fig. 3)
- 3. See ICC-ES Report ESR-4548 for allowable wind speeds.

Note: Furring strips are not required to be attached to studs. Strips are required to be attached to 7/16" thick rated OSB wall-sheathing.

Gapping & Overhang / Expansion & Contraction

 Gapping is necessary for airflow and the slight thermal expansion and contraction of the Deckorators cladding boards.

Gapping Requirements							
Installation temperature							
	Above 32° F Below 32 (0° C) (0° C)						
Side-to-Side	1/8"	3/16"					
End-to-End	1/16"	1/8"					
End-to-Side	1/16"	1/8"					
Abutting Solid Objects	1/8"	1/4"					

O PLUG SYSTEM

fig. 3

in the second

fig. 4

fig. 1



fig. 2

Installation - Face Attachment / Pro Plug® System

Approved for Horizontal, Vertical and Diagonal Installation. See figures 5, 7, and 8. Note: Install code-approved water-resistant barrier as required, before installing furring strips.

(A) Furring Strips

- Chalk a level line based on the lowest point where siding will be installed optional.
- Maintain a minimum of 1/2" of clearance off grade.
- Attach furring strips to weather tight wall or building structure at no more than maximum spacing of 24" center to center.

(B) Installing First Course

- Determine location of starting course and place the Deckorators Solid-Edge board into position.
- Pre-drill and countersink all deck screws for surface application. If using the Pro Plug[®] System, pre-drill a pilot hole prior to driving screws. Screws must be driven using the Pro Plug[®] Hidden Fastener tool to ensure the screws will be driven to the preset level below the deck surface. Fill holes with plugs soon after inserting screw to reduce risk of water, debris or other materials from entering.
- If installing horizontal, check for level and secure board length using two screws per vertical furring strip. If installing vertically, check for plumb and secure board length using two screws per horizontal furring strip.
- Position each screw 1" from cladding board edge.

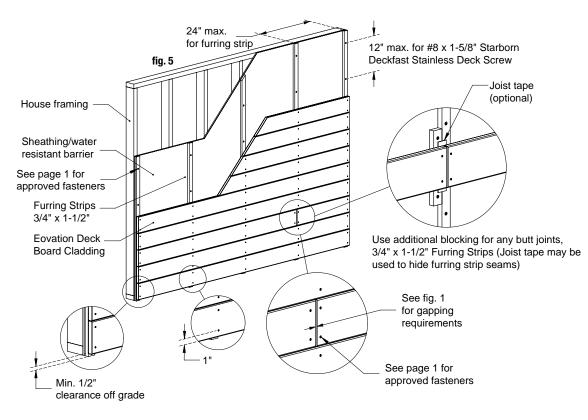
(C) Spacing and Remaining Courses

- Use spacers for consistent gapping and for air circulation.
- Secure the next course making sure to check for level/plumb between boards.
- Stagger all butt joints accordingly to ensure that the joints don't fall on one single furring member. Use additional blocking for any butt joints.

(D) Butt Joints, Adjoining Walls, Windows & Doors

Note: Additional furring may be needed at corners or around wall openings such as doors or windows.

- Frequently check that courses are level at the corners to ensure boards are all aligned.
- Notch boards around openings in the wall.



Important:

- Furring strip spacing to be less than or equal to 24" o.c.
- Furring strip screws to be placed less than or equal to 12" apart
- Maintain a minimum of 1/2" clearance off grade
- Screws for cladding to be placed 1" from edge
- Add additional blocking for any butt joints (3/4" x 1-1/2" Furring Strips)
- Always check that boards are level and plumb

Installation - Deckorators[®] Stowaway™ Hidden Fasteners

Approved for Horizontal Installation only. See figure 6a.

Note: Install code-approved water-resistant barrier as required, before installing furring strips.

(A) Furring Strips

- Chalk a level line based on the lowest point where siding will be installed optional.
- Maintain a minimum of 1/2" of clearance off grade.
- Attach furring strips to weather tight wall or building structure at maximum spacing of 24" center to center.

(B) Installing First Course

- Determine location of starting board/strip and place the Deckorators Grooved-Edge board into position.
- Pre-drill and countersink all deck screws for surface application. If using the Pro Plug[®] System, pre-drill a pilot hole prior to driving screws. Screws should be driven using the Pro Plug[®] Hidden Fastener tool to a preset level below the cladding board surface. Fill holes with plugs soon after inserting screw to reduce risk of water, debris or other materials from entering.
- Check for level and secure board length using two screws per vertical furring strip.
- Position each screw 1" from cladding board edge.

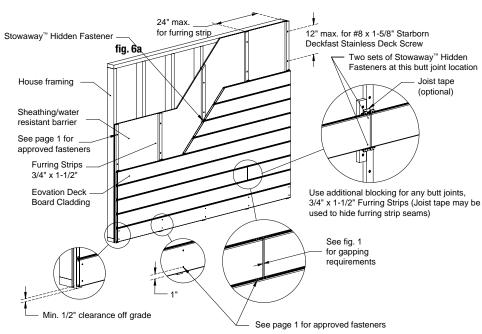
(C) Spacing and Remaining Courses

- The Deckorators[®] Stowaway[™] Hidden Fastener fits into the groove on each side of the cladding board to eliminate pre-drilling and provides a fastener-free cladding surface. To keep the interior boards from moving over time, we require pinning the boards at the center of their length using a #8, 2" stainless steel screw. This holds the deck board in place at the center of each board and allows the decking to expand/contract at the ends. Pre-drill in the groove of the deck board with an 1/8" drill bit (fig. 6b). Drive screw into the groove so it's flush with the bottom of the groove (fig 6c). This will allow you to properly fit a Stowaway hidden fastener into the groove.
- After installing the first row, place a Stowaway[™] Hidden Fastener into the cladding board groove and center on the furring strip. Install the preset screw at a 90° angle through the Stowaway[™] Hidden Fastener and drive flush. Do not over-tighten. The fastener wings must remain level with the furring strip for the next board to fit correctly (fig. 6d).
- Check for level between boards and continue to repeat previous step.
- Stagger all butt joints accordingly to ensure that the joints don't fall on one single furring member. Use additional blocking for any butt joints.

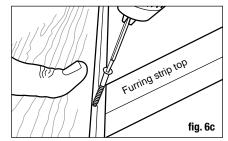
(D) Butt Joints, Adjoining Walls, Windows & Doors

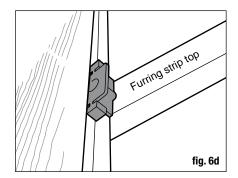
Note: Additional furring may be needed are corners or around wall openings such as doors or windows.

- Frequently check that courses are level at the corners to ensure boards are all aligned.
- Notch boards around openings in the wall.







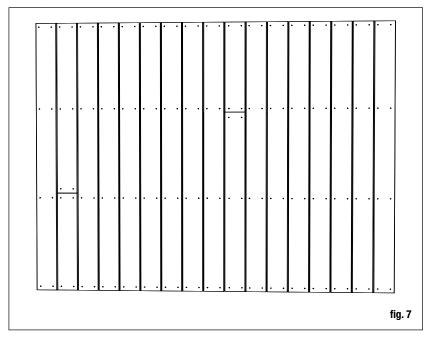


Important:

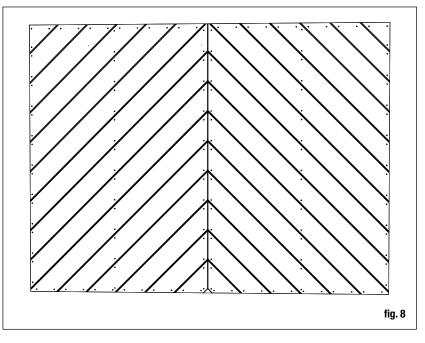
- Furring strip spacing to be less than or equal to 24" o.c.
- Furring strip screws to be placed less than or equal to 12" apart
- Maintain a minimum of 1/2" clearance off grade
- Begin first row with screws as seen illustrated
- Stowaway Hidden Fasteners to be centered on each furring strip
- Add additional blocking for any butt joints (3/4" x 1-1/2" Furring Strips)
- Always check that boards are level and plumb

Alternate Configurations

Vertical (Use face mounted screws only, see fig. 2)



Diagonal (Use face mounted screws only, see fig. 2)



THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCORDANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMER ASSUMES ALL RISKS AND LIABILITY ASSOCIATED WITH THE CONSTRUCTION OR USE OF THIS PRODUCT. THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL NECESSARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WRITTEN LIMITED WARRANTY, THE WARRANTOR DOES NOT PROVIDE ANY OTHER WARRANTY, EITHER EXPRESS OR IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES.

11375



PORCH FLOORING INSTALLATION INSTRUCTIONS MADE WITH EOVATIONS[™] TECHNOLOGY

Tools and Items Needed Safety glasses · Power screw gun or drill · Large file or medium-grit sandpaper Flooring nailer Pencil or pen • Chalk line • Tape measure Soft mallet · Spacing tools • Utility knife • Portable power saw • Fastener-specific tools · Fine-tooth saw blades (40- Jigsaw recommended by tooth minimum, sharp car-

Deckorators® porch flooring has a unique appearance and should be arranged according to the end user's preference. Prior to construction, check with your local regulatory agency's code requirements. For best results, follow all installation instructions, paying close attention to gapping, spacing and fastener requirements.

manufacturer

Deckorators porch flooring is a one-sided product and must be installed with the embossed surface up. Deckorators porch flooring must be installed over a code-compliant substructure and is not intended to support structural columns or porch posts. Structural support for columns and porch posts must be incorporated into the substructure design. Deckorators porch flooring is not intended to be used in applications that require a watertight surface. Caulk and adhesives should not be used in the tongue and groove. Painting is not recommended.

Joist Spacing Requirements					
ſ	Standard	Picture Frame	Diagonal (45°)		
	16"	16"	12"		

bide-tipped wood or finish/

trim blades

Gapping Requirements							
	Above 32°F (0°C)	Below 32°F (0°C)					
End-to-End	1/8"	3/16"					
End-to-Side	1/8"	3/16"					
Abutting Solid Objects	1/8"	1/4"					

Cutting

• 10" 40T, 80T circular blade.

• Carpenter's square

(speed square)

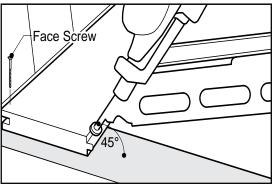
- 12" 40T, 72T, 80T circular blade.
- Upcut with a clean/smooth jigsaw blade.

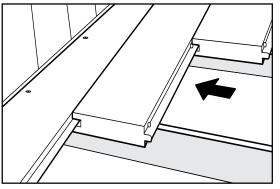
• Cut porch flooring with the leading edge of the saw blade, cutting into the exposed face. Use a sharp utility knife or jigsaw to finish cuts where a circular saw cannot fully complete cut.

- Use a jigsaw to cut openings to protrusions.
- If necessary, use a large file or medium-grit sandpaper to clean cut edges.
- Use a utility knife to cut any fibers or strands. (In the rare even that a strand or fiber protrudes from the board, do not pull it.)

Fastener Requirements

- For best results, use a 2" SS "L" or "T" shape cleat nails.
- Where face fasteners are used, use corrosion-resistant, galvanized or stainless steel fasteners.
- #8x2" SS trim head screws.
- Reverse thread composite screws.
- Set power driver such that screws are slightly counter sunk. Do not overdrive.





Note: Always follow best workmanship practices. Including, and not limited to, square cutting both board ends prior to installation.

INSTALLATION INSTRUCTIONS • PORCH FLOORING

- If using a hidden fastener system, use the manufacturer's recommended fastener and follow the manufacturer's instructions.
- One fastener per joist minimum.
- Ends of each board must fall on a joist.
- Double joist or use blocking where two board ends meet.
- 1" maximum cantilever.
- Install entire porch at same temperature.

• Square the first board to the house, paying attention to gapping requirements, and secure in place using face screws on the groove side.

• The tongue side is fastened using cleat nails with a flooring nailer, or screws. If using screws, insert the screw just above the tongue at a 45° angle and counter sink the screw 1/6" into the material to allow for the next board. If using a flooring nailer, ensure the nailer is properly seated on the tongue side of board and drive cleat into the board, following the proper nailer instructions. If the nailer is not properly seated it could cause difficulty installing the next board and in some instances, even cause blemishes on the surface of the porch flooring.

• Install the porch flooring starting from the outside edge of the platform and work toward anchor wall so that ripped pieces abut the wall.

• Start installing from one end of the board and work toward the other end of the board. **OR:** Start installing from the center of the board and work out toward the ends of the board. Do not install by fastening each end first and working toward the middle.

• Continue installing porch flooring, adhering to the gapping requirements. Note: **ONLY** Deckorators Frontier and Vault decking material and porch flooring, manufactured with Eovations[™] technology, may be installed in contact with the ground or incidental submersion in water when a project design requires those conditions.

Like most composites, Deckorators porch flooring will have color variations from piece to piece. This is due to naturally occuring variations in polymers. Purchasing all required porch flooring material at one time is recommended, as manufacturing runs can produce slightly different colors. Do not install if color variation is not acceptable.

Mold and mildew can be a nuisance on any exterior building surface, regardless of the material. If the conditions are right, they will grow on wood, plastic, concrete, metal and other surfaces. Mold formation is most prevalent in consistently wet, shaded areas. Spores from the natural environment are carried by the wind and commonly land on porch surfaces. It is important to note that the apperance of mold/mildew is a function of nature, not necessarily a deficiency with any of the material on which it grows.

Periodic washing with soap/mild detergent and water will help remove surface dirt. This will also help prevent the buildup of pollen, debris and spores that can cause and accelerate mold/mildew growth. *Caution: A pressure washer should not be used to "blast" mold/mildew or soils from a porch surface. The abrasive nature of the water stream can potentially cause damage by driving the spores deeper into the material, which may create a more challenging problem to remedy. The water stream can also cut into the surface of the board if it is too intense. A pressure washer with a fan-tipped nozzle should be used only to lightly wet or rinse wood or composite porch surfaces.*

There are many deck/porch wash and exterior cleaning products available at retail. It is important to make sure you use a cleaner specifically intended for your application. After selecting a product, be certain to read, understand and follow all instructions supplied by the manufacturer. Some cleaning products and inhibitors may be more effective than others, depending on the environmental conditions your porch is subjected to. Additionally, it is always a good idea to test the cleaner in a small, inconspicuous area prior to applying it to the entire porch (www.deckorators.com).

As with deck/porch washes, there are several mold-inhibitor products available from paint stores, hardware stores, online outlets and home centers to help prevent long-term mold/mildew growth. For any product selected, be certain to read, understand and follow all instructions provided by the manufacturer. Depending upon the environmental factors affecting your porch, some preventive cleaning products may be more effective than others. It may be necessary to try more than one product. For ongoing preventive maintenance, follow the manufacturer's recommendation.

Note: Deckorators is not suitable to structural use. It should not be used for primary load-bearing members such as posts, joists, beams or stringers. The same commonsense precautions should be taken when handling Deckortaors as with wood or other building materials. Dust masks and eye protection devices are recommended to avoid possible irritation from sawdust and chips. Gloves will help protect hands. Hands should be washed after construction work.

THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCORDANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMER ASSUMES ALL RISKS AND LIABILITY ASSOCIATED WITH THE CONSTRUCTION OR USE OF THIS PRODUCT. THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL NECESSARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WRITTEN LIMITED WARRANTY, [UNIVERSAL CONSUMER PRODUCTS, INC.] DOES NOT PROVIDE ANY OTHER WARRANTY, EITHER EXPRESS OR IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES.



STAIR TREAD INSTALLATION INSTRUCTIONS

Tools and Items Needed

Drill/power screwdriver

• Tape measure

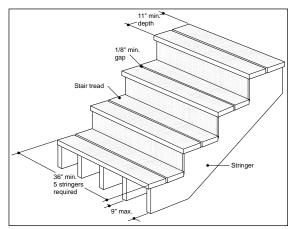
• 1/8" drill bit

- Carpenter's pencil
 - Safety glasses/goggles
- Circular saw with carbide-tip blade
 2 1/2" composite wood deck screws

Notice to installers:

- DO NOT use cordless impact drivers
- Set drill speed to 1500-1750 RPM
- Max torque not to exceed 23 inch pounds
- Pre-drill knots or dense hardwood

Prior to construction, check with your local regulatory agency for special code requirements in your area. For best results, follow these simple installation instructions, paying close attention to gapping, spacing and fastener requirements.



Note: Always follow best workmanship practices. Including, but not limited to, square cutting both board ends prior to installation.

Stringer Spacing

Stringers spacing is a maximum of 9" on-center. Minimum of 5 stringers with 4 spans. For commercial applications, maximum of 8" on-center.

Spacing

Allow a minimum of 1/8" between board ends. Allow 1/4" distance between all stair tread material and any permanent structure or post.

Fasteners

For a list of recommended and compatible fasteners please visit http://deckorators.com/plan-install/literature.aspx. Recommended fasteners are those which are recommended by the manufacturer of Deckorators Stair Tread. Compatible fasteners are those which have been tested and recommended for use with Deckorators Stair Tread by the fastener manufacturer. The use of a non-recommended fastener will not void the Deckorators Decking Warranty; however if a stair tread failure is caused by the use of a non-recommended fastener, any corresponding warranty claim will be denied.

For ease of installation, we recommend using 3" corrosion-resistant, composite wood deck screws. These screws help minimize the common "mushroom" effect that sometimes occurs when using standard fasteners. They can also reduce the amount of pre-drilling and countersinking. If using ordinary coarse thread deck screws, always pre-drill a pilot hole and countersink prior to driving screws.

Screws must be driven flush with the Deckorators stair tread surface. Do not over-tighten.

Use two fasteners per stair tread at each stringer. For any stair tread where two boards meet end-to-end, an additional stringer is required so each end is supported (Figure 2). Always pre-drill a pilot hole and countersink at board ends when using other composite or wood screws. Be careful not to over-tighten screws near board ends.

Color Variation

Like most composites, Deckorators stair tread will have color variations from piece to piece. This is due to naturally occuring variations in wood fibers and polymers. Purchasing all required stair tread material at one time is recommended, as manufacturing runs can produce slightly different colors. Do not install if color variation is not acceptable.

Preventing Mold and Mildew Growth

Mold and mildew can be a nuisance on any exterior building surface, regardless of the material. If the conditions are right, they will grow on wood, plastic, concrete, metal, and other surfaces. Mold formation is the most prevalent in consistently wet, shaded areas. Spores from the natural environment are carried by the wind and commonly land on deck surfaces. It is important to note that the appearance of mold/mildew is a function of nature, not necessarily a deficiency with any of the material on which it grows.

Cleaning

Periodic washing with soap/mild detergent and water will help remove surface dirt. This will also help prevent the buildup of pollen, debris and spores that can cause and accelerate mold/mildew growth. *Caution: A pressure washer must not be used to "blast" mold/mildew or soils from a deck surface. The abrasive nature of water stream can potentially cause damage by driving spores deeper into the material,*

INSTALLATION INSTRUCTIONS • STAIR TREAD

which may create a more challenging problem to remedy. A pressure washer with a fan-tipped nozzle must only be used to lightly wet or rinse wood or composite deck surfaces.

There are many deck wash and exterior cleaning products available at retail. Only use cleaners intended for your application. Instructions provided by the manufacturer must be followed. Some cleaning products and inhibitors may be more effective than others, depending on the environmental conditions your deck is subjected to. Additionally, it is always a good idea to test the cleaner in a small, inconspicuous area prior to applying it the the entire deck (www.deckorators.com).

Mold Inhibitors

As with deck washes, there are several mold-inhibitor products available from paint stores, hardware stores, online outlets and home centers to prevent long-term mold/mildew growth. For any product selected, be certain to read, understand, and follow all instructions provided by the manufacturer. Depending upon the enviornmental factors affecting your deck, some preventative cleaning products may be more effective than others. It may be necessary to try more than one product. For ongoing preventive maintenance, follow the manufacturer's recommendation. *Note: Deckorators is not suitable for structural use. It must not be used for primary load-bearing members such as posts, joists, beams, or stringers. The same common-sense precautions should be taken when handling Deckorators as with wood or other building materials. Dust masks and eye protection devices are recommended to avoid possible irritation from sawdust chips. Gloves will help protect hands. Hands should be washed after construction work.*

THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCORDANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMER ASSUMES ALL RISKS AND LIABILITY ASSOCIATED WITH THE CONSTRUCTION OR USE OF THIS PRODUCT. THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL NECESSARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WRITTEN LIMITED WARRANTY, [UNIVERSAL CONSUMER PRODUCTS, INC.] DOES NOT PROVIDE ANY OTHER WARRANTY, EITHER EXPRESS OR IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES.

Notice to Installers • DO NOT use cordless impact drivers

• Max torque not to exceed 23 inch pounds

Set drill speed to 1500-1750 RPM



DECKORATORS FASCIA INSTALLATION INSTRUCTIONS

Tools and Items Needed

• Tape measure

Carpenter's pencil

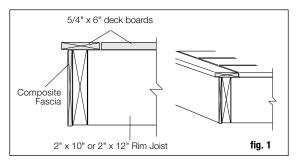
Safety glasses/goggles

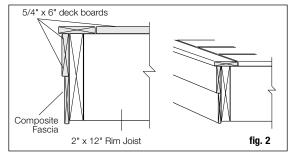
- Drill/power screwdriver
- 1/8" drill bit
- · Circular saw with carbide-tip blade
- 2½" composite wood deck screws

· Pre-drill knots or dense hardwood 1/8" butt joint gap 1/8" gap to solid surface 1/8" miter gap 2 screws 2 screws 12" apart 16" apart for DECK for FASCIA screws screws

Attach fascia to the rim joist using 2 screws spaced no further apart than 16" on-center when using fascia fasteners and 12" on center with deck fasteners. Fasten the fascia from one end to the other, or from the center out to each end. Never fasten the fascia from both ends to the center. Leave a 1/8" gap between the fascia ends where two pieces meet or wherever a piece meets a solid surface (i.e., a corner or a building wall) to allow for expansion of the material. Use one of the recommended installation configurations below for best results. Do not install fascia board flush with decking that runs perpendicular (see figures 1-2 for possible configurations to conceal 2x10 and 2x12 joists).

Note: Deckorators Fascia is not suitable for structural use. It must not be used for primary load-bearing members such as posts, joists, beams or stringers. The same common sense precautions should be taken when handling Deckorators products as with any wood or other building materials. Dust masks and eye protection devices are recommended to avoid possible irritation from sawdust and chips. Gloves will help protect hands. Hands should be washed after construction work.





THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCORDANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMER ASSUMES ALL RISKS AND LIABILITY ASSOCIATED WITH THE CONSTRUCTION OR USE OF THIS PRODUCT. THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL NECESSARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WRITTEN LIMITED WARRANTY, THE WARRANTOR DOES NOT PROVIDE ANY OTHER WARRANTY, EITHER EXPRESS OR IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES.

7972



SLEEPER SYSTEM INSTALLATION INSTRUCTIONS

Prior to construction, check with your local regulatory agency for code requirements in your area. For best results, follow all installation instructions, paying close attention to gapping, spacing and fastener requirements.

The Sleepers are not structural and must be fully supported along the underside. They are intended to create a floating deck surface on top of an appropriate structure, such as a flat membrane roof or concrete slab. Care must be taken during construction to avoid damaging the roof's surface.

A roof top deck is a unique application. Consult with a licensed contractor to ensure your roof is a good candidate for a roof top deck. The roof must have sufficient load bearing capacity for a roof deck and be in good condition prior to installation. It must have an appropriate guard, typically a kneewall that meets minimum height and strength requirements in your area (minimum height is measured from the finished walking surface.)

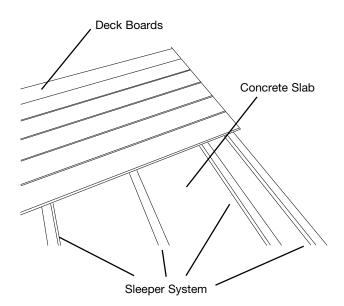
Sleeper gapping and spacing

1/4" minimum gap between the sleeper and any solid object. Space sleepers according to deck board and application requirements.

Note: The Deckorators[®] Sleeper System should only be used with Deckorators decking or porch flooring featuring Eovations[™] technology. For best results, we recommend laying strips of EPDM underneath the sleeper system.

Step 1: Determine the layout and spacing of the sleepers. Arrange sleepers so they do not block drainage flow. Sleeper ends may be arranged to create "panels" or staggered to tie the surface together. A "panel" type installation allows for easier access to the roof surface for maintenance or cleaning later on. Shims can be cut from scrap sleepers as needed.

Step 2: Ensure fasteners are sized correctly and will not extend past the sleeper causing damage to the roof surface. Typically, maximum 2" long face screws. Fasten deck boards according to deck board instructions. Do not overdrive screws.



THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCORDANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMER ASSUMES ALL RISKS AND LIABILITY ASSOCIATED WITH THE CONSTRUCTION OR USE OF THIS PRODUCT. THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL NECESSARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WRITTEN LIMITED WARRANTY, THE WARRANTOR DOES NOT PROVIDE ANY OTHER WARRANTY, EITHER EXPRESS OR IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES. 10457



DOCK & DECK BOARD INSTALLATION INSTRUCTIONS

Items you will need

- Safety glasses
- Pencil or pen
- Tape measure
- Utility knife
- Jigsaw
- Carpenter square (speed square)
- Power screw gun or drill
- Soft mallet
- Portable power saw
- Fine-tooth saw blades (40-tooth minimum, sharp carbide-tipped wood or finish/trim blades)
- Large file or medium-grit sandpaper
- Chalk line
- Spacing tools
- Fastener-specific tools recommended by manufacturer

Each Deckorators Dock & Deck board has a unique appearance and should be arranged according to the end user's preference. Prior to construction, check with your local regulatory agency's code requirements. For best results, follow all installation instructions, paying close attention to gapping, spacing and fastener requirements.

Joist spacing requirements

	Installation style			
	Standard	Picture frame	Diagonal (45°)	
Residential	24"	24"	16"	
Commercial	24"	24"	16"	

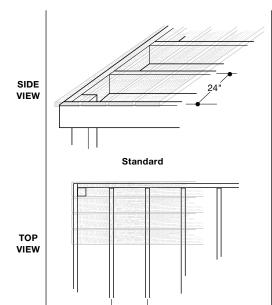
Note: All dimensions are on-center.

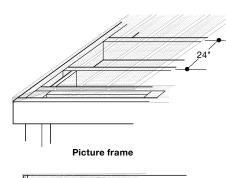
Note: Always follow best workmanship practices. Including, but not limited to, square cutting both board ends prior to installation.

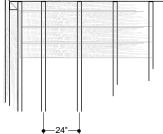
Gapping requirements				
Installation temperature				
	Above 32° F (0° C)	Below 32° F (0° C)		
Side-to-Side	1/8"	3/16"		
End-to-End	1/16"	1/8"		
End-to-Side	1/16"	1/8"		
Abutting Solid Objects	1/8"	1/4"		

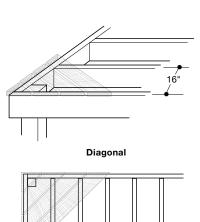


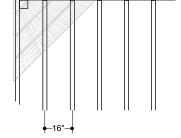
End Tag











INSTALLATION INSTRUCTIONS • DOCK & DECK BOARD

Cutting

- 10" 40T, 80T circular blade
- 12" 40T, 72T, 80T circular blade
- Upcut with a clean/smooth saw blade.
- Cut deck boards with the leading edge of the saw blade, cutting into the exposed face. Use a sharp utility knife or jigsaw to finish cuts where a circular saw cannot fully complete cut.
- Use a jigsaw to cut openings for protrusions.
- If necessary, use a large file or medium-grit sandpaper to clean cut edges.
- Use utility knife to cut any fibers or strands.
 (In the rare event that a strand or fiber protrudes from the board, do not pull it.)

Fastener requirements

- Corrosion-resistant, galvanized or stainless steel fasteners
- Reverse-thread composite screw
- Minimum of 3" long screws
- 1-1/4" minimum penetration into joist
- Set power driver such that screws are slightly counter sunk. Do not overdrive.

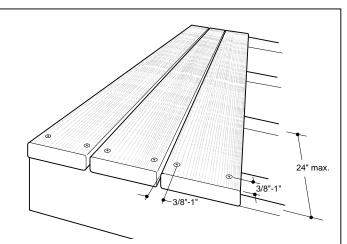
Installation

- Two fasteners per joist minimum.
- Ends of each board must fall on a joist.
- Double joist or use blocking where two board ends meet (fig.1).
- 1" maximum cantilever.
- Install entire deck at same temperature.
- Install the deck boards starting from the outside edge of the platform and work toward anchor wall so that ripped pieces abut the wall. Start installing from one end of the board and work toward the other end of the board.

OR: Start installing from the center of the board and work out toward the ends of the board. Do not install by fastening each end first and working toward the middle. To keep the interior boards from moving over time, we recommend pinning the boards at the center of their length using a #8, 2" stainless steel screw. This holds the deck board in place at the center of each board and allows the decking to expand/ contract at the ends. Pre-drill in the groove of the deck board with an 1/8" drill bit (fig. 2a). Drive screw into the groove so it's flush with the bottom of the groove (fig. 2b). This will allow you to properly fit a Stowaway hidden fastener into the groove.

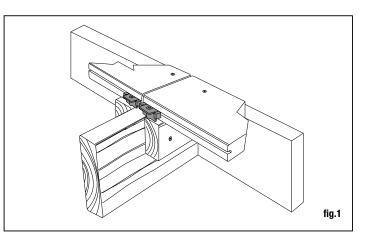
• Continue installing deck boards, adhering to the gapping requirements. Ensure consistent appearance by aligning each plank so that the cathedrals of the emboss pattern point in the same direction.

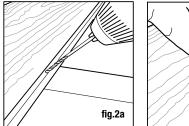
NOTE: Cutting all ends of boards prior to installation recommended.

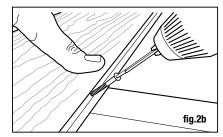


Face screw installation

- Use reverse-threaded composite deck screws.
- Screws must be 3/8" to 1" from side of board, 3/8" to 1" from end of board.
- Use color-matched screws for best results.
- Use caution not to overdrive screw.







INSTALLATION INSTRUCTIONS • DOCK & DECK BOARD

Stair installation

- Stairs must be constructed according to national and local building codes. Generally, building codes require 3' minimum wide treads and 11" minimum tread depth.
- 12" maximum center-to-center spacing of stringers is required.
- Stair treads should be fastened over a minimum of 4 stringers to meet code requirements.
- 1/2" maximum tread overhang over stringers.
- 1/8" minimum gap between stair-tread boards. Local building codes may require the gap to be increased to 1/4" - 3/8" in order to maintain the minimum tread depth.

Color variation

Like most composites, Deckorators Decking will have color variations from piece to piece. This is due to naturally occurring variations in polymers. Purchasing all required decking material at one time is recommended, as manufacturing runs can produce slightly different colors. Do not install if color variation is not acceptable.

Mold and mildew growth

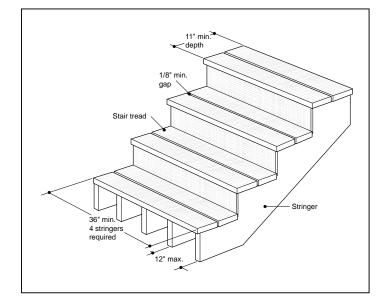
Mold and mildew can be a nuisance on any exterior building surface, regardless of the material. If the conditions are right, they will grow on wood, plastic, concrete, metal and other surfaces. Mold formation is most prevalent in consistently wet, shaded areas. Spores from the natural environment are carried by the wind and commonly land on decks surfaces. It is important to note that the appearance of mold/ mildew is a function of nature, not necessarily a deficiency with any of the material on which it grows.

Cleaning

Periodic washing with soap/mild detergent and water will help remove surface dirt. This will also help prevent the buildup of pollen, debris and spores that can cause and accelerate mold/mildew growth.

Caution: A pressure washer must not be used to "blast" mold/mildew or soils from a deck surface. The abrasive nature of the water stream can potentially cause damage by driving the spores deeper into the material, which may create a more challenging problem to remedy. A pressure washer with a fan-tipped nozzle must only be used to lightly wet or rinse wood or composite deck surfaces.

There are many deck wash and exterior cleaning products available at retail. Only use cleaners intended for your application. Instructions provided by the manufacturer must be followed. Some cleaning products and inhibitors may be more effective than others, depending on the environmental conditions your deck is subjected to. Additionally, it is always a good idea to test the cleaner in a small, inconspicuous area prior to applying it to the entire deck (www.deckorators.com).

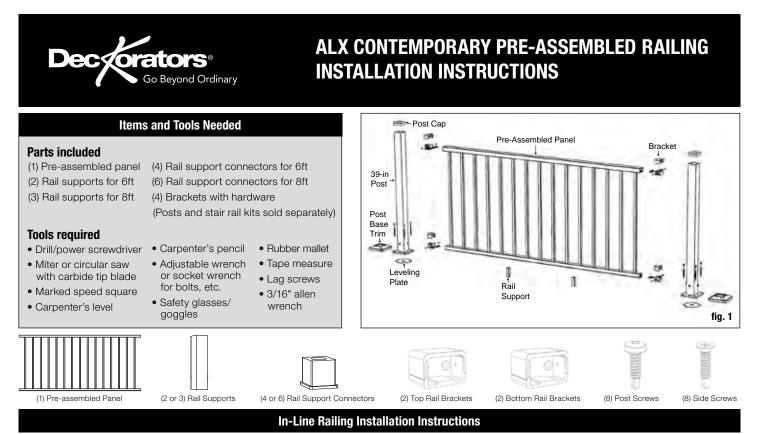


Mold inhibitors

As with deck washes, there are several mold-inhibitor products available from paint stores, hardware stores, online outlets, and home centers to help prevent long-term mold/mildew growth. For any product selected, be certain to read, understand, and follow all instructions provided by the manufacturer. Depending upon the environmental factors affecting your deck, some preventive cleaning products may be more effective than others. It may be necessary to try more than one product. For ongoing preventive maintenance, follow the manufacturer's recommendation.

Note: Deckorators is not suitable for structural use. It must not be used for primary load-bearing members such as posts, joists, beams, or stringers. The same commonsense precautions should be taken when handling Deckorators as with wood or other building materials. Dust masks and eye protection devices are recommended to avoid possible irritation from sawdust and chips. Gloves will help protect hands. Hands should be washed after construction work.

THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCORDANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMER ASSUMES ALL RISKS AND LIABILITY ASSOCIATED WITH THE CONSTRUCTION OR USE OF THIS PRODUCT. THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL NECESSARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. UNIVERSAL FOREST PRODUCTS, INC., MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES. 10530



Posts Installation

Prior to construction:

• Check with your local regulatory agency for special code requirements in your area. Common railing height is 36" or 42". Read instructions completely to get an understanding of how the product goes together and how each piece affects the other.

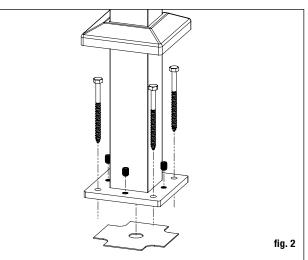
• Determine the number of railing posts needed for your deck. Post spacing is 6' or 8' on-center. Example: A 12' x 16' deck attached to a building with a 4' access opening on one side will need a total of eight posts.

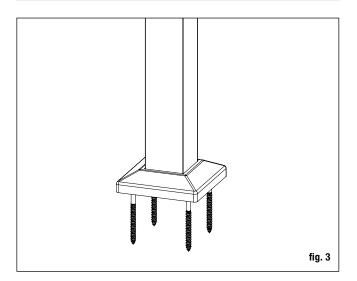
Step 1 Install posts by attaching the aluminum base to the surface of the deck. Position the post so the fastener will go into the floor joist, and make sure the decking is firmly attached to the joist at the location of the posts. If necessary, use wood blocking securely attached to the joist structure as reinforcement underneath the decking where the posts are located. Fasteners that hold the post base to the surface should be able to secure to joist or reinforcement braces, not just the decking itself. *Note: When installing aluminum post on top of a wood surface, screws must be lagged into at least 3" of solid wood (not including the decking). 5/4" or 1 1/2" deck boards do not provide sufficient material for a safe installation. If necessary, add additional material to the underside of the surface (fig. 2).*

Step 2 Position the post assembly onto the location where it will attach to the deck. Four 3/8" diameter mounting holes are provided on the base. When the final position is determined, mark the base hole locations. Remove the post assembly and drill 15/64" holes in the marked locations through the decking and into structural blocking.

Step 3 Reposition the post assembly with the leveling plate inserted between the deck and the post base, and aligned with the predrilled holes. Insert the post fasteners (**NOT INCLUDED**), and partially tighten. Using a level, adjust the leveling set screws with a 3/16" allen wrench until the post is plumb. Fully tighten the post fasteners to secure the base to the deck structure. *Note: Recommended 5/16*" x 4" or longer lag screws.

STOP – Make sure post base trim is installed before continuing.





Railing Installation

Prior to construction:

• Check building code requirements for maximum spacing between deck surface and bottom of rail (sweep). Spacing of 3" is recommended for 36" or 42" finished rail height.

Step 1 Measure the distance between installed posts to determine the length of the top and bottom rails. Position rail adjacent to installed posts. The distance between the post and the first baluster should be less than 4" and equal on both ends. Mark the length on top and bottom rails.

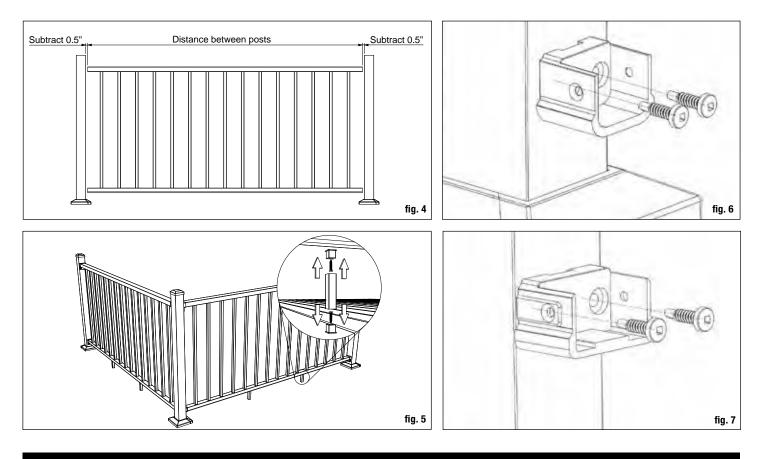
Step 2 Remove an additional 1/2" on both ends (1" overall) for the bracket to fit between the rail and post. Trim the top and bottom rails to length (fig. 4).

Step 3 Prop rail in place and mark the bracket holes on both posts. Remove rail. Predrill screw locations through the posts, using a 3/16" drill bit at top and bottom bracket locations.

Step 4 A rail support is needed every 2 feet (2 are included in the 6ft kit, 3 in the 8ft kit). Attach rail support connectors to the bottom of the lower rail at 2-foot intervals. Predrill using a 1/8" drill bit. Attach the rail supports to the support block connectors. Mark the location of the rail support on the deck surface and attach the other rail support connector to the deck using the included screw (fig. 5). For Anodized Brushed Titanium Railing drill two 1/4" drain holes through the bottom of the rail to prevent trapping water. Center drain holes between two baluster locations as baluster can block the pathway and stop water from properly draining.

Step 5 Position the rail between the posts. Check for level end-to-end and vertically. Attach brackets to the post at one end. Repeat for the other end. *Note: Use a driver extension bit to avoid marring the rail with the drill chuck* (fig. 6 and fig. 7).

Step 6 Set post caps on each post. Gently tap with rubber mallet to secure.



Stair Railing Installation Instructions

Prior to construction:

• Ensure post location is compatible with railing, prior to securing to the deck, place both posts in position, and lay the bottom rail along the stair nosing from top to bottom adjacent to both posts. On the rail side of the post, measure up from the top of the rail and ensure there is a minimum of 34" to the top of the post. Post location may need to be adjusted to ensure minimum is obtained. Repeat this step for the bottom post.

• For a wood deck, position the post so the fasteners will go into the joists, and make sure the decking is firmly attached to the joists at the location of the posts. Proper structural blocking/framing under the decking material is required when attaching the post to a wood frame deck because decking alone is not approved as structural framing.

INSTALLATION INSTRUCTIONS • ALX CONTEMPORARY PRE-ASSEMBLED RAILING

Step 1 Begin by determining where the top and bottom post will be located. Mark the desired location of the post.

Step 2 Four 3/8" diameter mounting holes are provided on the base. When final position is determined, mark hole locations and remove the post assembly. Drill the marked locations through decking and into structural blocking.

Step 3 Reposition the post assembly with the leveling plate inserted between the deck and the post base, and aligned with the predrilled holes. Insert the post fasteners (**NOT INCLUDED**), and partially tighten. Using a level, adjust the leveling set screws with a 3/16" allen wrench until the post is plumb. Fully tighten the post fasteners to secure the base to the deck structure.

STOP - Make sure post base trim is installed before continuing.

Step 4 Measure the distance between installed posts to determine the length of the top and bottom rails. Position the railing on the stairs on top of a spacer block along the stair nosings. Ensure the balusters are plumb. The distance between the post and the first baluster should be less than 4" and equal on both ends. Once the railing is in position, clamp the railing to the posts.

Step 5 Temporarily assemble the swivel brackets. Position the swivel bracket in location and mark the rail and post. Repeat for other end of railing. Note: The distance from the end of the top rail to the first stair baluster will be 1-1/16" longer than the bottom rail to ensure the balusters are plumb. Add 3/4" to the marked location on the railing and cut to length.

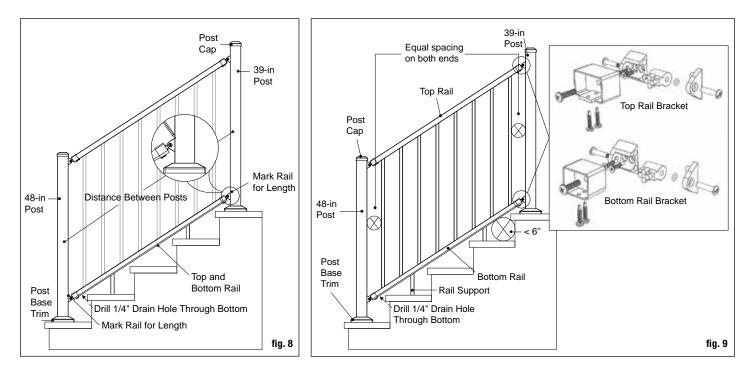
Step 6 Mark locations of the bracket screw holes on the rails. Remove brackets. Predrill through the rail only, using a 9/64" drill bit. Attach the front end of bracket to rails.

Step 7 Mark location of the bracket base screw holes on the post. Include the bracket side cover when determining the center location. Predrill through the post, using a 9/64" drill bit. Position the base of each bracket with the bracket cover side facing the stairs, and attach to the post with two screws.

Step 8 A rail support is needed every 2 feet (2 are included in the 6ft rail kit, 3 in the 8ft kit). Attach rail support connectors to the bottom of the lower rail at 2-foot intervals using included screws. Predrill using a 1/8" drill bit. Mark the location of the rail support on the step tread and attach the other rail support connectors to the step tread (fig. 8). Drill one 1/4" drain hole through the bottom of the rail to prevent trapping water. Position the hole toward the lower end of the rail, roughly 1.5" from rail end to avoid the lower bracket.

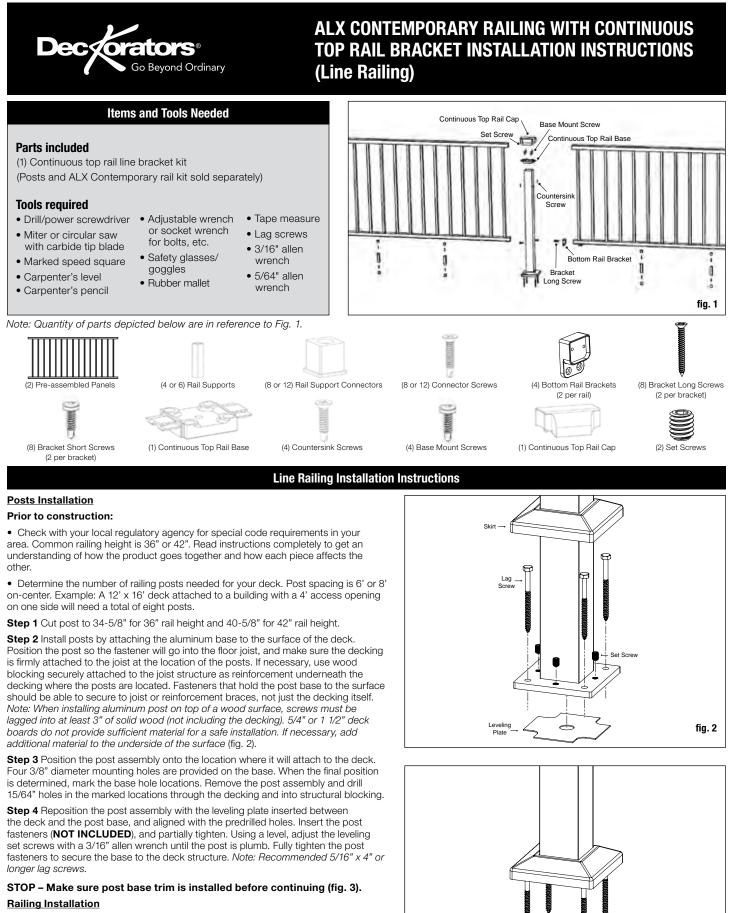
Step 9 Install the bottom railing between the posts by sliding the brackets together. Attach the side of the bracket with the barrel bolt to secure in place.

Step 10 Set post caps on each post. Gently tap with rubber mallet to secure.



THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCORDANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMER ASSUMES ALL RISKS AND LIABILITY ASSOCIATED WITH THE CONSTRUCTION OR USE OF THIS PRODUCT. THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL NECESSARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WRITTEN LIMITED WARRANTY, THE WARRANTOR DOES NOT PROVIDE ANY OTHER WARRANTY, EITHER EXPRESS OR IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES.

10930



Prior to construction:

Check building code requirements for maximum spacing between deck surface

fig. 3

INSTALLATION INSTRUCTIONS • ALX CONTEMPORARY PRE-ASSEMBLED RAILING WITH CONTINUOUS TOP RAIL BRACKET

and bottom of rail (sweep). Spacing of 3" is recommended for 36" or 42" finished rail height.

Step 1 Measure the distance between installed posts to determine the length of the top and bottom rails. Position rail adjacent to installed posts. The distance between the post and the first baluster should be less than 4" and equal on both ends. Mark the length on top and bottom rails.

Step 2 Remove an additional 1/2" on both ends (1" overall) for the bracket to fit between the rail and post. Trim the top and bottom rails to length (fig. 4).

Step 3 Place the bottom brackets on ends of the rails. Attach the brackets to the rails with a screw attached through back of bracket into each internal screw boss (fig. 5).

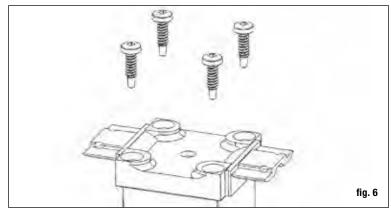
Step 4 Prop rail in place and mark the bracket holes on both posts. Remove rail. Predrill screw locations through the posts, using a 3/16" drill bit at the bracket locations.

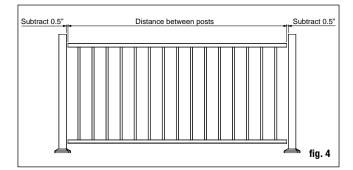
Step 5 Secure the continuous top rail base to the top of the post using the provided base screws (fig. 6) *Note: If left slightly loose you can make minor adjustments to correct rail level issues later.*

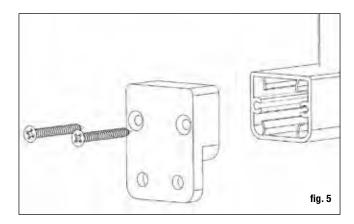
Step 6 A rail support is needed every 2 feet (2 are included in the 6ft kit, 3 in the 8ft kit). Attach rail support connectors to the bottom of the lower rail at 2-foot intervals. Predrill using a 1/8" drill bit. Attach the rail supports to the support block connectors. Mark the location of the rail support on the deck surface and attach the other rail support connector to the deck using the included screw (fig. 7). For Anodized Brushed Titanium Railing drill two ¼" drain holes through the bottom of the rail to prevent trapping water. Center drain holes between two baluster locations as baluster can block the pathway and stop water from properly draining.

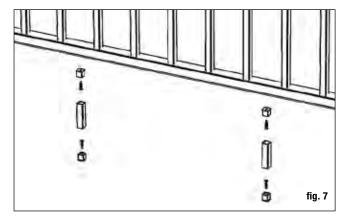
Step 7 Position the rail between the posts. Check for level end-to-end and vertically. Predrill rail using a 7/64" drill bit. Attach brackets to the post at one end. Repeat for the other end. *Note: Use a driver extension bit to avoid marring the rail with the drill chuck* (fig. 8 and fig. 9).

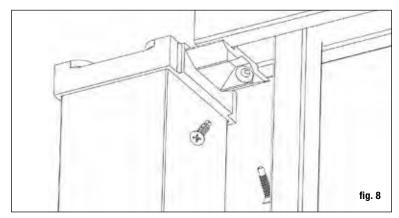
 $\ensuremath{\text{Step 8}}$ Set post caps on each post. Secure using provided set screw using a 5/64" allen wrench.

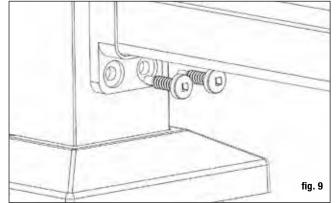




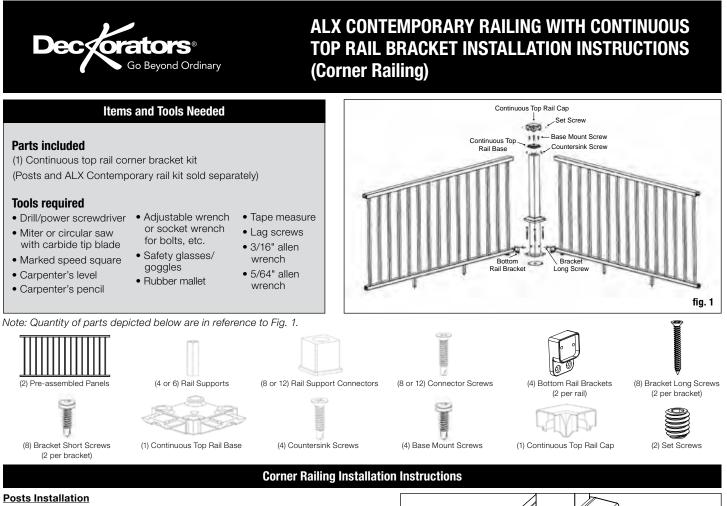








THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCORDANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMES ALL RISKS AND LIABILITY ASSOCIATED WITH THE CONSTRUCTION OR USE OF THIS PRODUCT. THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL RECES-SARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WRITTEN LIMITED WARRANTY, THE WARRANTOR DOES NOT PROVIDE ANY OTHER WARRANTY, EITHER EXPRESS OR IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES. 11294



Prior to construction:

• Check with your local regulatory agency for special code requirements in your area. Common railing height is 36" or 42". Read instructions completely to get an understanding of how the product goes together and how each piece affects the other.

• Determine the number of railing posts needed for your deck. Post spacing is 6' or 8' on-center. Example: A 12' x 16' deck attached to a building with a 4' access opening on one side will need a total of eight posts.

Step 1 Cut post to 34-5/8" for 36" rail height and 40-5/8" for 42" rail height.

Step 2 Install posts by attaching the aluminum base to the surface of the deck. Position the post so the fastener will go into the floor joist, and make sure the decking is firmly attached to the joist at the location of the posts. If necessary, use wood blocking securely attached to the joist structure as reinforcement underneath the decking where the posts are located. Fasteners that hold the post base to the surface should be able to secure to joist or reinforcement braces, not just the decking itself. *Note: When installing aluminum post on top of a wood surface, screws must be lagged into at least 3" of solid wood (not including the decking). 5/4" or 1 1/2" deck boards do not provide sufficient material for a safe installation. If necessary, add additional material to the underside of the surface (fig. 2).*

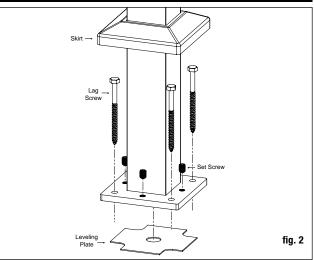
Step 3 Position the post assembly onto the location where it will attach to the deck. Four 3/8" diameter mounting holes are provided on the base. When the final position is determined, mark the base hole locations. Remove the post assembly and drill 15/64" holes in the marked locations through the decking and into structural blocking.

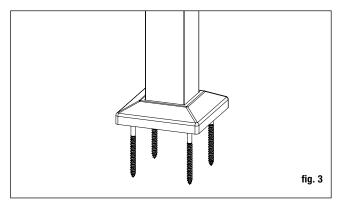
Step 4 Reposition the post assembly with the leveling plate inserted between the deck and the post base, and aligned with the predrilled holes. Insert the post fasteners (**NOT INCLUDED**), and partially tighten. Using a level, adjust the leveling set screws with a 3/16" allen wrench until the post is plumb. Fully tighten the post fasteners to secure the base to the deck structure. *Note: Recommended 5/16" x 4" or longer lag screws*.

STOP – Make sure post skirt is installed before continuing (fig. 3). Railing Installation

Prior to construction:

• Check building code requirements for maximum spacing between deck surface and bottom of rail (sweep). Spacing of 3" is recommended for 36" or 42" finished rail





INSTALLATION INSTRUCTIONS • ALX CONTEMPORARY PRE-ASSEMBLED RAILING WITH CONTINUOUS TOP RAIL BRACKET

height.

Step 1 Measure the distance between installed posts to determine the length of the top and bottom rails. Position rail adjacent to installed posts. The distance between the post and the first baluster should be less than 4" and equal on both ends. Mark the length on top and bottom rails.

Step 2 Remove an additional 1/2" on both ends (1" overall) for the bracket to fit between the rail and post. Trim the top and bottom rails to length (fig. 4).

Step 3 Place the bottom brackets on ends of the rails. Attach the brackets to the rails with a screw attached through back of bracket into each internal screw boss (fig. 5).

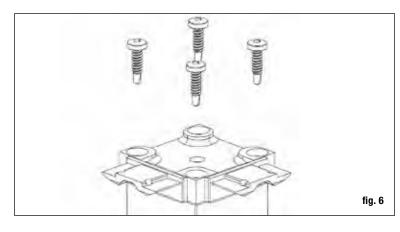
Step 4 Prop rail in place and mark the bracket holes on both posts. Remove rail. Predrill screw locations through the posts, using a 3/16" drill bit at the bracket locations.

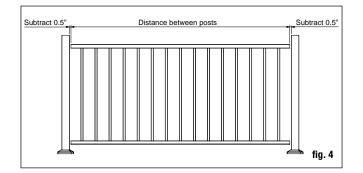
Step 5 Secure the continuous top rail base to the top of the post using the provided base screws (fig. 6) *Note: If left slightly loose you can make minor adjustments to correct rail level issues later.*

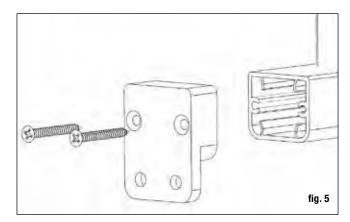
Step 6 A rail support is needed every 2 feet (2 are included in the 6ft kit, 3 in the 8ft kit). Attach rail support connectors to the bottom of the lower rail at 2-foot intervals. Predrill using a 1/8" drill bit. Attach the rail supports to the support block connectors. Mark the location of the rail support on the deck surface and attach the other rail support connector to the deck using the included screw (fig. 7). For Anodized Brushed Titanium Railing drill two 1/4" drain holes through the bottom of the rail to prevent trapping water. Center drain holes between two baluster locations as baluster can block the pathway and stop water from properly draining.

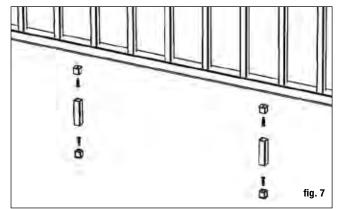
Step 7 Position the rail between the posts. Check for level end-to-end and vertically. Predrill rail using a 7/64" drill bit. Attach brackets to the post at one end. Repeat for the other end. *Note: Use a driver extension bit to avoid marring the rail with the drill chuck* (fig. 8 and fig. 9).

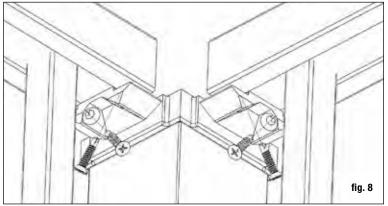
Step 8 Set post caps on each post. Secure using provided set screw using a 5/64" allen wrench.

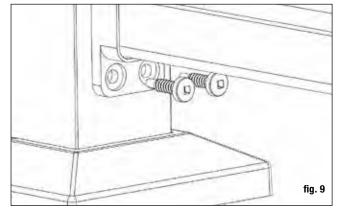




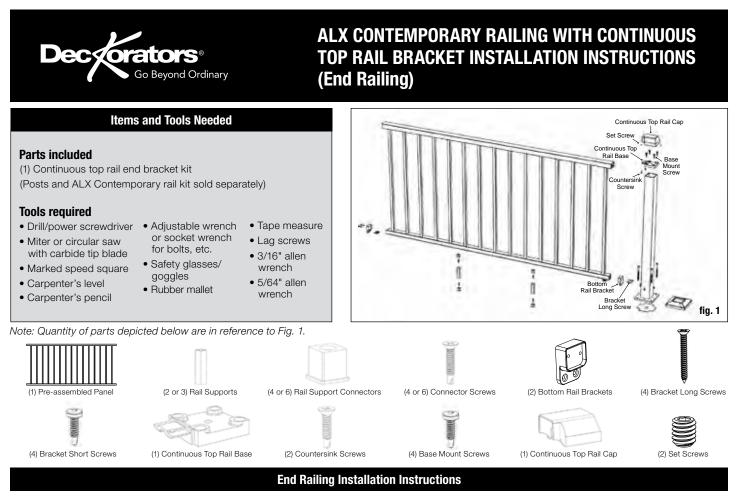








THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCORDANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMES ALL RISKS AND LIABILITY ASSOCIATED WITH THE CONSTRUCTION OR USE OF THIS PRODUCT. THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL NECES-SARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WRITTEN LIMITED WARRANTY, THE WARRANTOR DOES NOT PROVIDE ANY OTHER WARRANTY, EITHER EXPRESS OR IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES. 11294



Posts Installation

Prior to construction:

• Check with your local regulatory agency for special code requirements in your area. Common railing height is 36" or 42". Read instructions completely to get an understanding of how the product goes together and how each piece affects the other.

• Determine the number of railing posts needed for your deck. Post spacing is 6' or 8' on-center. Example: A 12' x 16' deck attached to a building with a 4' access opening on one side will need a total of eight posts.

Step 1 Cut post to 34-5/8" for 36" rail height and 40-5/8" for 42" rail height.

Step 2 Install posts by attaching the aluminum base to the surface of the deck. Position the post so the fastener will go into the floor joist, and make sure the decking is firmly attached to the joist at the location of the posts. If necessary, use wood blocking securely attached to the joist structure as reinforcement underneath the decking where the posts are located. Fasteners that hold the post base to the surface should be able to secure to joist or reinforcement braces, not just the decking itself. *Note: When installing aluminum post on top of a wood surface, screws must be lagged into at least 3" of solid wood (not including the decking). 5/4" or 1 1/2" deck boards do not provide sufficient material for a safe installation. If necessary, add additional material to the underside of the surface (fig. 2).*

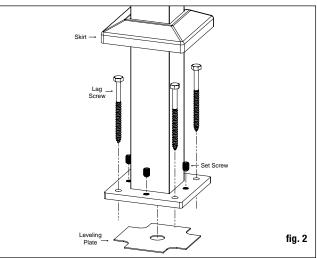
Step 3 Position the post assembly onto the location where it will attach to the deck. Four 3/8" diameter mounting holes are provided on the base. When the final position is determined, mark the base hole locations. Remove the post assembly and drill 15/64" holes in the marked locations through the decking and into structural blocking.

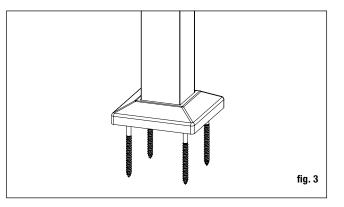
Step 4 Reposition the post assembly with the leveling plate inserted between the deck and the post base, and aligned with the predrilled holes. Insert the post fasteners (**NOT INCLUDED**), and partially tighten. Using a level, adjust the leveling set screws with a 3/16" allen wrench until the post is plumb. Fully tighten the post fasteners to secure the base to the deck structure. *Note: Recommended 5/16" x 4" or longer lag screws*.

STOP – Make sure post skirt is installed before continuing (fig. 3). Railing Installation

Prior to construction:

• Check building code requirements for maximum spacing between deck surface





INSTALLATION INSTRUCTIONS • ALX CONTEMPORARY PRE-ASSEMBLED RAILING WITH CONTINUOUS TOP RAIL BRACKET

and bottom of rail (sweep). Spacing of 3" is recommended for 36" or 42" finished rail height.

Step 1 Measure the distance between installed posts to determine the length of the top and bottom rails. Position rail adjacent to installed posts. The distance between the post and the first baluster should be less than 4" and equal on both ends. Mark the length on top and bottom rails.

Step 2 Remove an additional 1/2" on both ends (1" overall) for the bracket to fit between the rail and post. Trim the top and bottom rails to length (fig. 4).

Step 3 Place the bottom brackets on ends of the rails. Attach the brackets to the rails with a screw attached through back of bracket into each internal screw boss (fig. 5).

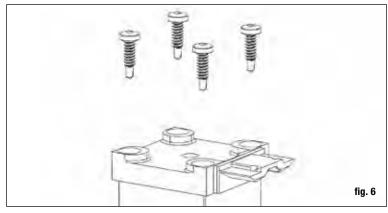
Step 4 Prop rail in place and mark the bracket holes on both posts. Remove rail. Predrill screw locations through the posts, using a 3/16" drill bit at the bracket locations.

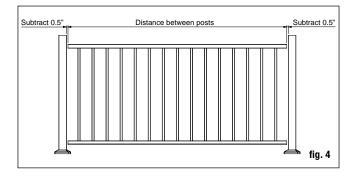
Step 5 Secure the continuous top rail base to the top of the post using the provided base screws (fig. 6) *Note: If left slightly loose you can make minor adjustments to correct rail level issues later.*

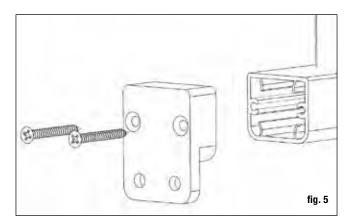
Step 6 A rail support is needed every 2 feet (2 are included in the 6ft kit, 3 in the 8ft kit). Attach rail support connectors to the bottom of the lower rail at 2-foot intervals. Predrill using a 1/8" drill bit. Attach the rail supports to the support block connectors. Mark the location of the rail support on the deck surface and attach the other rail support connector to the deck using the included screw (fig. 7). For Anodized Brushed Titanium Railing drill two ¼" drain holes through the bottom of the rail to prevent trapping water. Center drain holes between two baluster locations as baluster can block the pathway and stop water from properly draining.

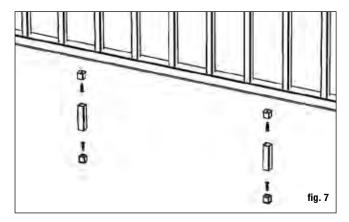
Step 7 Position the rail between the posts. Check for level end-to-end and vertically. Predrill rail using a 7/64" drill bit. Attach brackets to the post at one end. Repeat for the other end. *Note: Use a driver extension bit to avoid marring the rail with the drill chuck* (fig. 8 and fig. 9).

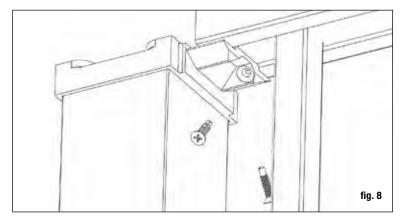
Step 8 Set post caps on each post. Secure using provided set screw using a 5/64" allen wrench.

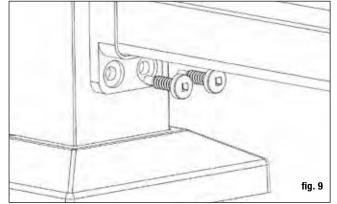




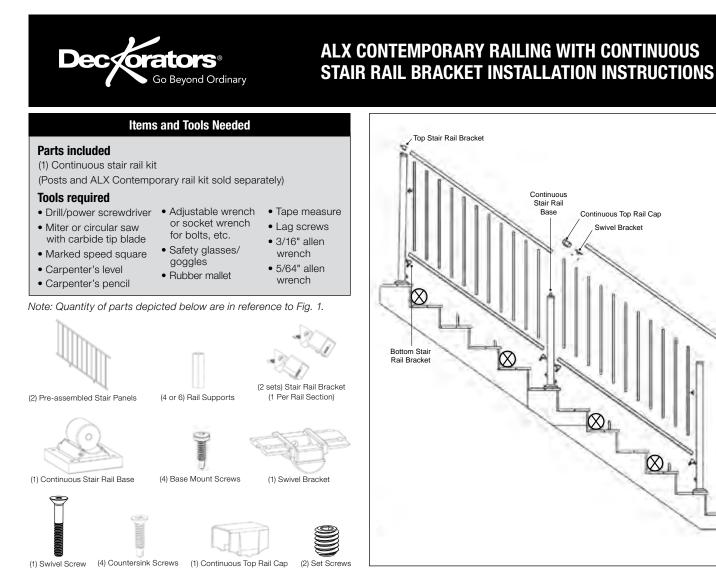








THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCORDANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMER ASSUMES ALL RISKS AND LIABILITY ASSOCIATED WITH THE CONSTRUCTION OR USE OF THIS PRODUCT. THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL NECES-SARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WRITTEN LIMITED WARRANTY, THE WARRANTOR DOES NOT PROVIDE ANY OTHER WARRANTY, EITHER EXPRESS OR IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES. 11294



Stair Railing Installation Instructions

Prior to construction:

• Ensure post location is compatible with railing, prior to securing to the deck, place both posts in position, and lay the bottom rail along the stair nosing from top to bottom adjacent to both posts. On the rail side of the post, measure up from the top of the rail and ensure there is a minimum of 34" to the top of the post. Post location may need to be adjusted to ensure minimum is obtained. Repeat this step for the bottom post.

• For a wood deck, position the post so the fasteners will go into the blocking, and make sure the decking is firmly attached to the joists at the location of the posts. Proper structural blocking/framing under the decking material is required when attaching the post to a wood frame deck because decking alone is not approved as structural framing.

Step 1 Begin by determining where the top and bottom post will be located. Mark the desired location of the post (fig. 1).

Step 2 Four 3/8" diameter mounting holes are provided on the base. When final position is determined, mark hole locations and remove the post assembly. Drill the marked locations through decking and into structural blocking.

Step 3 Reposition the post assembly with the leveling plate inserted between the deck and the post base, and aligned with the predrilled holes. Insert the post fasteners (**NOT INCLUDED**), and partially tighten. Using a level, adjust the leveling set screws with a 3/16" allen wrench until the post is plumb. Fully tighten the post fasteners to secure the base to the deck structure (fig. 2).

STOP – Make sure post base trim is installed before continuing.

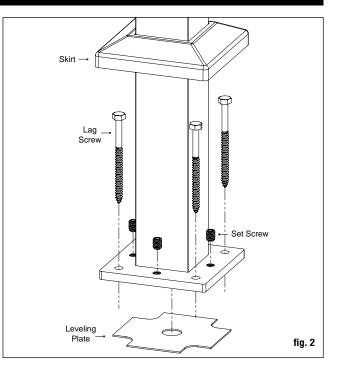


fig. 1

INSTALLATION INSTRUCTIONS • ALX CONTEMPORARY PRE-ASSEMBLED STAIR RAILING WITH CONTINUOUS TOP RAIL BRACKET

Step 4 Measure the distance between installed posts to determine the length of the top and bottom rails. *Note: For continuous rail only applications, the bottom rail will need to be cut 2-1/2" from both ends to allow for differences in the top rail and bottom rail mounting points. For a mixed rail (Swivel brackets and Continuous rail brackets), cut 5/8" from the swivel bracket side and 2-1/2" from the continuous rail bracket side of the bottom rail. Position the railing on the stairs on top of a spacer block along the stair nosings. Ensure the balusters are plumb. The distance between the post and the first baluster should be less than 4" and equal on both ends (fig. 3). Once the railing is in position, clamp the railing to the posts.*

Step 5 Temporarily assemble the swivel brackets. Position the swivel bracket in location and mark the rail and post. Repeat for other end of railing. *Note: The distance from the end of the top rail to the first stair baluster will be* 1-1/16"longer than the bottom rail to ensure the balusters are plumb. Add ³/₄" to the marked location on the railing and cut to length.

Step 6 Now, mark the locations of the bracket screw holes on the rails. Remove brackets. Predrill through the rail only, using a 7/64" drill bit. Attach the front end of bracket to rails.

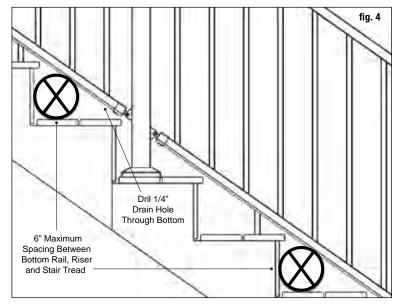
Step 7 Position the rail alongside the posts using 6" maximum spacing between bottom rail, riser, and stair tread. With the top railing resting on the continuous stair rail, center the continuous stair bracket to be centered on the post. Mark the bottom of the bracket. Then cut the post 3/8" above the mark to allow for the flange on the bottom side of the bracket (fig. 4).

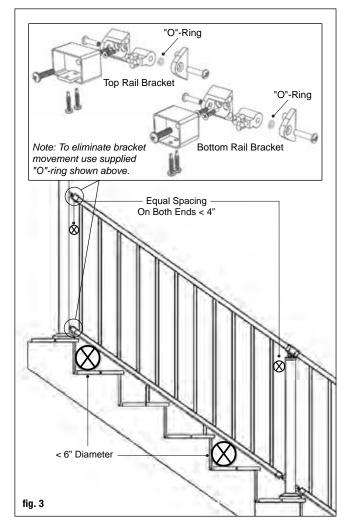
Step 8 Mark location of the bracket base screw holes on the post. Include the bracket side cover when determining the center location. Predrill through the post, using a 9/64" drill bit. Position the base of each bracket with the bracket cover side facing the stairs, and attach to the post with two screws.

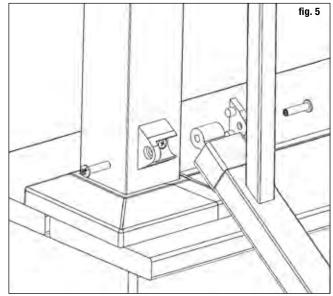
Step 9 A rail support is needed every 2 feet (2 are included in the 6ft rail kit, 3 in the 8ft kit). Attach rail support connectors to the bottom of the lower rail at 2-foot intervals using included screws. Predrill using a 1/8" drill bit. Mark the location of the rail support on the step tread and attach the other rail support connectors to the step tread. Drill one 1/4" drain hole through the bottom of the rail to prevent trapping water. Position the hole toward the lower end of the rail, roughly 1.5" from rail end to avoid the lower bracket (fig. 4).

Step 10 Install the bottom railing between the posts by sliding the brackets together. Attach the side of the bracket with the barrel bolt to secure in place (fig 5).

Step 11 Set post caps on each post. Secure cap using a 5/64" allen wrench.







THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCORDANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMER ASSUMES ALL RISKS AND LIABILITY ASSOCIATED WITH THE CONSTRUCTION OR USE OF THIS PRODUCT. THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL NECES-SARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WRITTEN LIMITED WARRANTY, THE WARRANTOR DOES NOT PROVIDE ANY OTHER WARRANTY, EITHER EXPRESS OR IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES. 11294



ALX CONTEMPORARY CABLE RAILING INSTALLATION INSTRUCTIONS

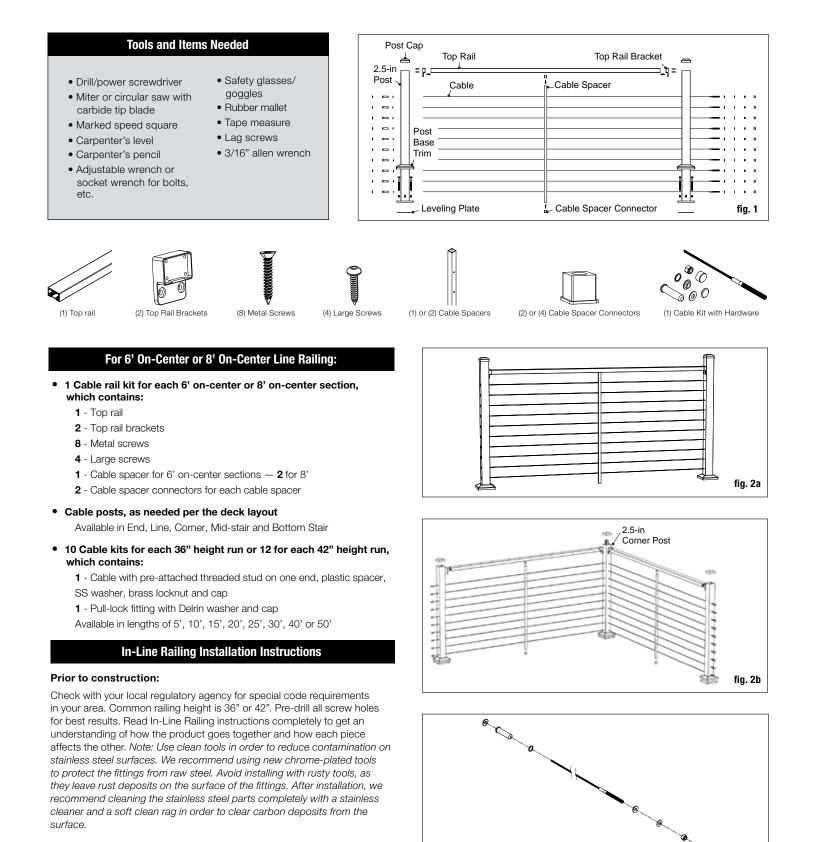


fig. 3

 $\hat{\mathcal{O}}$

INSTALLATION INSTRUCTIONS • ALX CONTEMPORARY CABLE RAILING

Step 1 Determine the layout and number of railing posts needed for your deck. Post spacing is 6' or 8' on-center. Cable posts are available predrilled for end, line and corner posts. Cable is available in lengths of 5', 10', 15', 20', 25', 30', 40' and 50'. Many layout options are possible. One tip is to start with the most visible run. It's the one on which you want the least interference with the view, so you can start from there and build around it. Corner applications: When taking cable through a corner, do not bend the cable past 45° at any time. When turning 90°, use a corner post (fig. 2b) or make a 2-step turn using a double corner post configuration (fig. 4), or stop the cable run and start a new run. Example: A 12' x 16' deck attached to a building with a 4' access opening on one side will require a total of nine posts (eight if using corner post).

Once the layout is determined, all posts, rails and spacers are installed prior to the cable.

Step 2 Installing Posts: Install posts by attaching the aluminum base to the surface of the deck. Position the post so the fastener will go into the floor joist, and make sure the decking is firmly attached to the joist at the location of the posts. Proper structural blocking/ framing under the decking material is required when attaching the post to a wood frame deck because decking alone is not approved as structural framing (fig. 5).

Step 3 Ensure the end, line and corner posts are used in the correct location and oriented the proper way. The larger diameter hole on the end posts should face away from the cable run. Position the post assembly onto the location where it will attach to the deck. Four 3/8" diameter mounting holes are provided on the base. When the final position is determined, mark the base hole locations. Remove the post assembly and drill 15/64" holes in the marked locations through the decking and into structural blocking.

Step 4 Reposition the post assembly with the leveling plate inserted between the deck and the post base, and aligned with the predrilled holes. Insert the post fasteners (**NOT INCLUDED**), and partially tighten. Using a level, adjust the leveling set screws with a 3/16" allen wrench until the post is plumb. Fully tighten the post fasteners to secure the base to the deck structure. Note: Recommended $5/16" \times 4"$ or longer lag screws (fig. 6).

Step 5 Finish by sliding a post base trim (optional) over each post for a finished look.

Step 6 Measure the distance between installed posts to determine the length of the top rail. The rails are sized for 6' and 8' on-center posts, when using 2.5" posts, and include space for the brackets. Position rail adjacent to installed posts. The distance between the post and the spacer should be equal on both ends. Use one spacer for 6' rails and two for 8'. Never span more than 36" without a spacer to maintain proper cable spacing. As needed, trim the top rail to length for runs that are less than 6' or 8' on-center. Mark the length on top rail, and remove an additional 1/2" from both ends (1" overall) for the bracket to fit between the rail and post (fig. 8).

Step 7 Place the brackets on ends of the rail. Attach the brackets to the rail with a screw attached through back of bracket into each internal screw boss (fig. 9).

Step 8 The finished rail height is typically a minimum of 36" or 42". Using the cable spacer, prop rail in place and level. Mark the bracket holes on both posts. Remove rail. Predrill screw locations through the posts, using a 3/16" drill bit at top bracket locations (fig. 10).

STOP - Make sure post base trim is installed before continuing.

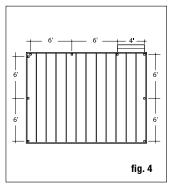
Step 9 A cable spacer is needed at least every 3 feet (1 is included in the 6ft kit, 2 in the 8ft kit). Attach spacer connectors to the bottom of the top rail. Predrill using a 1/8" drill bit. Attach the spacers to the spacer connectors. Mark the location of the spacer on the deck surface and attach the other spacer connector to the deck using the included screw.

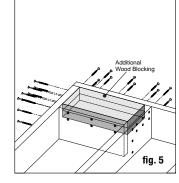
Step 10 Position the rail between the posts. Check for level end-to-end and vertically. Attach brackets to the post at one end. Repeat for the other end. *Tip: Use a driver extension bit to avoid marring the rail with the drill chuck. Install all rails prior to installing cable* (fig. 10).

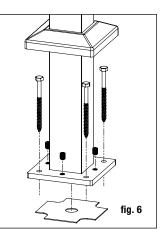
Step 11 Set post caps on each post. Gently tap with rubber mallet to secure.

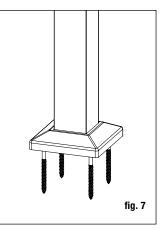
Install cable according to the cable instructions.

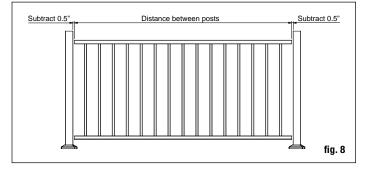
Tips for cable corner post. The cable corner post comes with an insert to feed the cable around the corner without binding and plastic threading needles. Ensure the insert is in the correct corner. Place the threading needle on the cable and push it onto the end to lock in place. Thread the needle through the corner. Make sure to push and pull the cable at the same

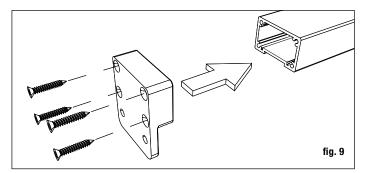


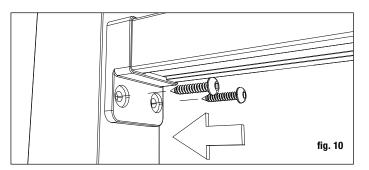












time. Once the threading needle is through the post, it can be removed. Continue the push/pull motion to feed the rest of the cable through.

Stair Railing Installation Instructions

Prior to construction:

Step 1 Begin by determining where the top and bottom post will be located. Mark the desired location of the post. *Note: For stair rails that are in-line with the deck rail, a line post can be used at the top stair location.* For stair rails that are perpendicular to the deck rail, a corner post can be used at the top stair location, or terminate the cable run and start a new run for the stairs, using a double post configuration. Position the post so the fasteners will go into the joists, and make sure the decking is firmly attached to the joists at the location of the posts. Proper structural blocking/framing under the decking material is required when attaching the post to a wood frame deck because decking alone is not structural framing.

Step 2 Four 3/8" diameter mounting holes are provided on the base. When final position is determined, mark hole locations and remove the post assembly. Drill the marked locations through decking and into structural blocking.

Step 3 Reposition the post assembly with the leveling plate inserted between the deck and the post base, and aligned with the predrilled holes. Insert the post fasteners (**NOT INCLUDED**), and partially tighten. Using a level, adjust the leveling set screws with a 3/16" allen wrench until the post is plumb. Fully tighten the post fasteners to secure the base to the deck structure. Note: Recommended 5/16" x 4" or longer lag screws.

Step 4 Finish by sliding a post base trim (optional) over each post sleeve for a finished look.

Step 5 Measure the distance between installed posts to determine the length of the top rail. Position the railing on the stairs on top of a spacer block along the stair nosings. The distance between the post and the cable spacer should be equal on both ends. Once the railing is in position, clamp the railing to the posts. Temporarily assemble the swivel brackets. Position the swivel bracket in location and mark the rail and post. Repeat for other end of railing. Add 3/4" to the marked location on the railing and cut to length.

Step 6 Mark locations of the bracket screw holes on the rails. Remove brackets. Predrill through the rail only, using a 9/64" drill bit. Attach the front end of bracket to rails.

Step 7 Mark location of the bracket base screw holes on the post. Include the bracket side cover when determining the center location. Predrill through the post, using a 9/64" drill bit. Position the base of each bracket with the bracket cover side facing the stairs, and attach to the post with two screws.

Step 8 A cable spacer is needed at least every 3 feet (1 is included in the 6ft rail kit, 2 in the 8ft kit). Trim the cable spacer as needed. Attach cable spacer connectors to the bottom of the rail using included screws. Predrill using a 1/8" drill bit. Mark the location of the cable spacer on the step tread and attach the other cable spacer connector to the step tread.

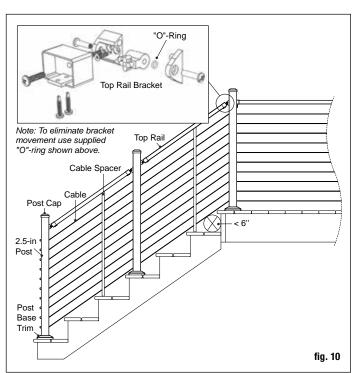
Step 9 Install the railing between the posts by sliding the brackets together. Attach the side of the bracket with the barrel bolt to secure in place.

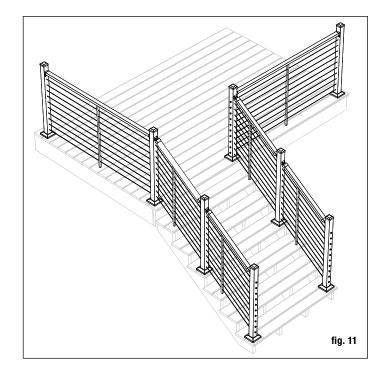
Step 10 Set post caps on each post. Gently tap with rubber mallet to secure.

Install cable according to the cable instructions.

THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCORDANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMER ASSUMES ALL RISKS AND LIABILITY ASSOCIATED WITH THE CONSTRUCTION OR USE OF THIS PRODUCT. THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL NECESSARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WRITTEN LIMITED WARRANTY, THE WARRANTOR DOES NOT PROVIDE ANY OTHER WARRANTY, EITHER EXPRESS OR IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES. 10944

INSTALLATION INSTRUCTIONS • ALX CONTEMPORARY CABLE RAILING





Deckorators® ALX Contemporary Cable Installation Instructions for Level Runs

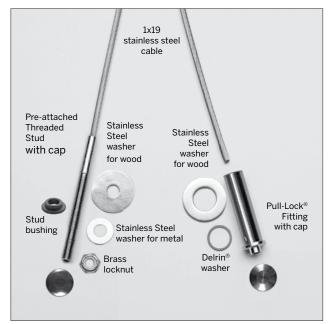
Tools Required for Installation

- 5/32" Drill Bit
- 1/4" Drill Bit
- 7/16" Wrench • RFXPL-KEY
- Cut Off Kit (mandrel)
- 29/64" Drill Bit • 1/8" Hex Wrench
- Cut Off Kit (wheel)

Cut-off Tool

Used to cut cable flush with the end of the Pull-Lock[®] fittings, and to cut excess threads off stud-type Receivers. Includes mandrel and two cut-off wheels.

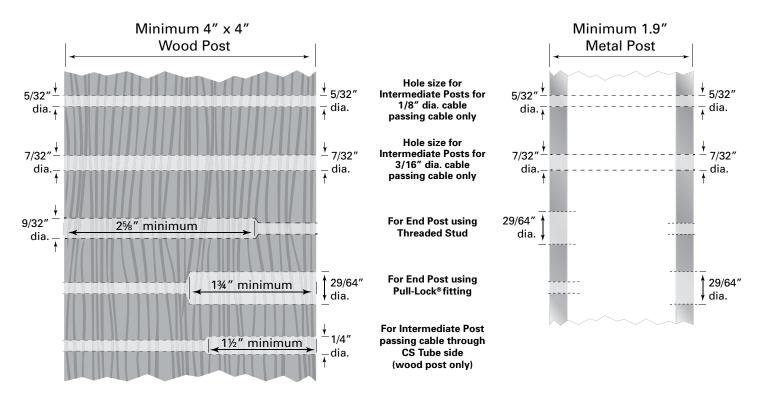




NOTE: Parts must be kept clean and free of debris before installation for best results.

A. Drill Posts

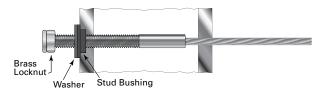
Hole size for 1/8" or 3/16" dia. cable installation



B. Install Tensioning Terminal

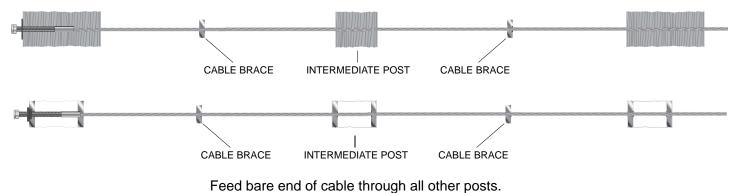
1. Install the Threaded Stud end first. Feed the cable and stud through the end post. If using metal posts, start by inserting the plastic stud bushing into the pre-drilled hole in the post. Slide the stainless steel washer (smaller for metal post, larger for wood post) onto the Threaded Stud and start the brass locknut onto the threads as far as possible by hand.





C. Feed Cable through Intermediate Posts

1. Feed the bare end of the cable through all intermediate posts/cable braces and through the end post where you will be installing the Pull-Lock[®] fitting.

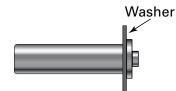


D. Feed/Crimp Cable through Corner Posts

Instructions for going through corners for both wood and metal posts are available at our website. Scan the QR Code at right with your smart phone, or call us at 800-851-2961 and ask for Cable Railing Technical Support and we'll email it to you.

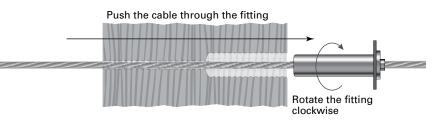
E. Install Swageless Terminal

1. Slip the appropriate washer over the body of the Pull-Lock[®] fitting (Delrin® for metal post, stainless steel for wood post).





2. Rotate the Pull-Lock[®] fitting clockwise as you push it onto the cable. If the cable begins to "unravel," you are rotating the fitting in the wrong direction.



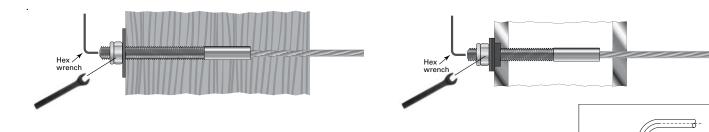
Note: If you have trouble inserting the cable into the fitting, it may be because the locking wedges have become stuck. This is not a defect! Here's what you can do to "free the wedges" - For Pull-Lock® or Push-Lock® fittings for 1/8" cable, using either a PL-KEY or 1/4" diameter bolt, insert the PL-KEY or bolt into the hole and press until the wedges move freely. Perform the same operation for a 3/16" Pull-Lock® or Push-Lock®, except use a 16d nail or another tool with 1/8" or smaller diameter. Anything larger than what is recommended can actually get stuck inside the fitting - NOT what you want!

3. Push the Pull-Lock[®] fitting along the cable and firmly into the hole in your post. While holding the Pull-Lock[®] fitting against the end post, pull the bare end of the cable to remove as much slack in the cable as possible.

Pull cable tight Press to hold fitting against post

F. Tension Cables

 Return to the Threaded Stud end post. Insert an 1/8" hex wrench into broached opening on the tip of the stud. Tighten the locknut with a 7/16" wrench while holding the hex wrench to prevent the stud from turning.



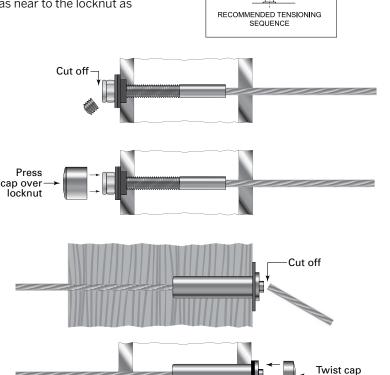
2. Tension all cables to desired amount in sequence, beginning with the center cables, moving up and down toward the top and bottom. As you tension each cable, give it a sharp pull downward mid-span to help set the wedges, then re-tension as necessary in the same sequence. Be aware that the cable may move as much as 3/16" toward the tensioning terminal as the wedges seat.

G. Trim Excess Cable

1. When all of the cables are tight, cut off any exposed thread as near to the locknut as possible by using a cut-off wheel or hack saw.



- **2.** Twist the cap over the locknut.
- **3.** Return to the swageless terminal. Cut the cable flush with the hole in the back of the fitting using a cut-off wheel.
- **4.** Twist the cap onto the lip of the Pull-Lock $^{\ensuremath{\mathbb{R}}}$ fitting.



onto lip

12 10

8

9

(11)

Deckorators[®] ALX Contemporary Cable Installation Instructions for Stairs

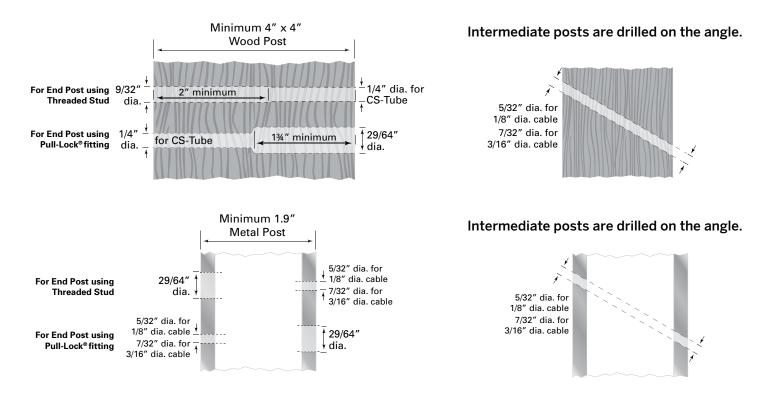
Tools Required for Installation - see page 1, plus:

- Hammer
- Small block of wood

A. Drill Posts

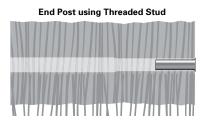
Neither the threaded stud nor the Pull-Lock[®] will reach all the way through wood end posts, so you will need to add post protector tubes (aka CS-TUBE) to the inside face of your end posts to protect the wood from the cable as it exits the post at the stair angle. Not needed for metal posts.

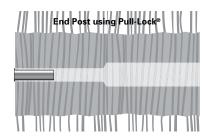
Hole size for 1/8" or 3/16" dia. cable installation



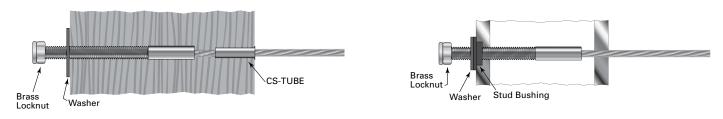
B. Install Tensioning Terminal

1. If a wood post, insert the post protector tube first into the face of both end posts. Force each tube into post so it is flush with post face.



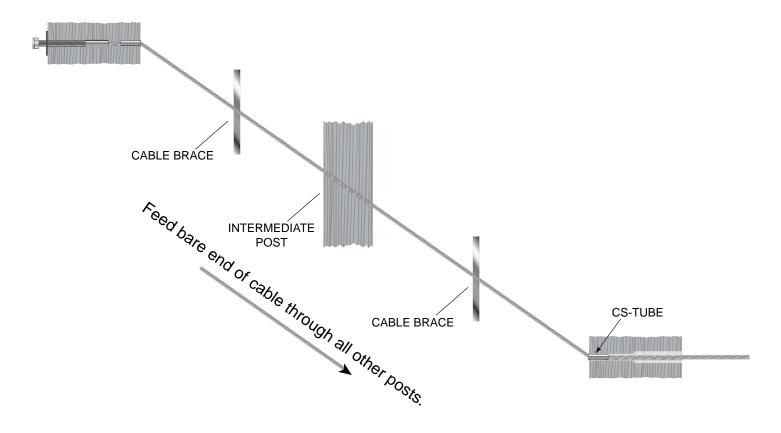


2. If using metal posts, start by inserting the plastic stud bushing into the pre-drilled hole in the post. Slide the stainless steel washer onto the threaded stud (smaller for metal post, larger for wood) and start the brass locknut onto the threads as far as possible by hand. Feed the cable through the end post, pulling the threaded stud into place.



C. Feed Cable through Intermediate Posts

1. Pass bare end of cable through intermediate post(s), and through other end post (which includes post protector tube if wood post).

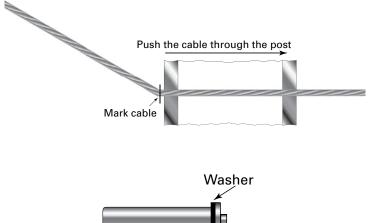


D. Feed/Crimp Cable through Corner Posts

As this section deals with passing cables through corners, which you will not be doing with stairs, please proceed to Section E.

E. Install Swageless Terminal

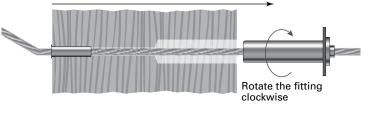
1. Push the bare cable through the other end post and mark the cable at the point where it enters the end post.



2. Slip the appropriate washer over the body of the Pull-Lock[®] fitting (Delrin[®] for metal post, stainless steel for wood post).

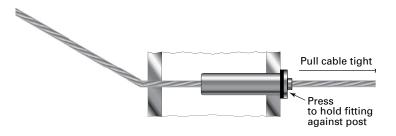
3. Rotate the Pull-Lock[®] fitting clockwise as you push it onto the cable. If the cable begins to "unravel," you are rotating the fitting in the wrong direction.

Push the cable through the fitting



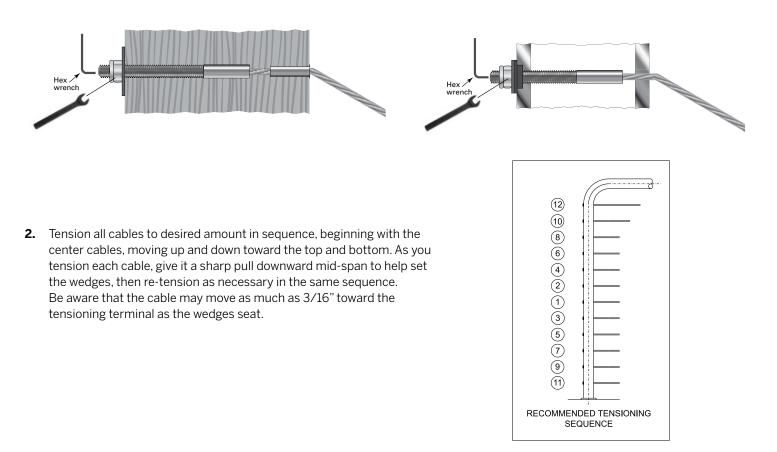
Note: If you have trouble inserting the cable into the fitting, it may be because the locking wedges have become stuck. This is not a defect! Here's what you can do to "free the wedges" — For Pull-Lock® or Push-Lock® fittings for 1/8" cable, using either an PL-KEY or 1/4" diameter bolt, insert the PL-KEY or bolt into the hole and press until the wedges move freely. Perform the same operation for a 3/16" Pull-Lock® or Push-Lock®, except use a 16d nail or another tool with 1/8" or smaller diameter. Anything larger than what is recommended can actually get stuck inside the fitting – NOT what you want!

4. Push the Pull-Lock[®] fitting along the cable and firmly into the hole in your post. Pull on the cable (cable gripping pliers are helpful for this) to create as much tension as possible as you seat the Pull-Lock[®] fitting into the hole.



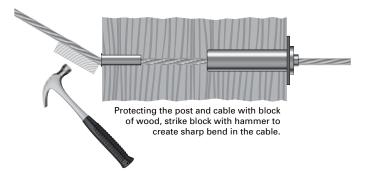
F. Tension Cables

1. Return to the Threaded Stud end post. Insert an 1/8" hex wrench into broached opening on the tip of the stud. Tighten the locknut with a 7/16" wrench while holding the hex wrench to prevent the stud from turning.



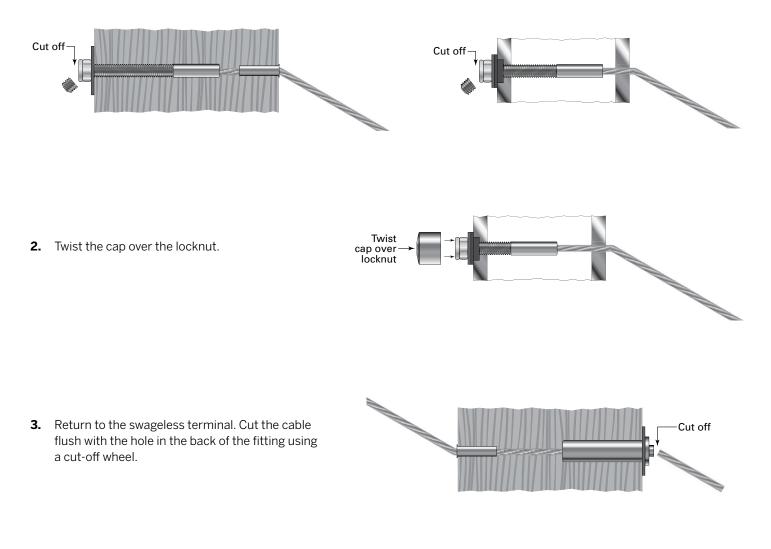
3. At both ends of the run, you are going to create a sharp bend in the cable where it exits the post (post protector tube in the wood post) by placing a block of wood (for protection of the post) on the cable next to the post / tube at the face of each post and striking it with a hammer.

If tension has diminished slightly as a result of the bending of the cable, re-tension the threaded stud back up to desired amount, as in Step F-2.



G. Trim Excess Cable

1. When all of the cables are tight, cut off any exposed thread as near to the locknut as possible by using a cut-off wheel or hack saw.



4. Twist the cap onto the lip of the Pull-Lock[®] fitting.

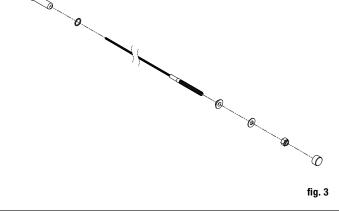


Twist cap onto lip



in your area. Common railing height is 36" or 42". Pre-drill all screw holes for best results. Read In-Line Railing instructions completely to get an understanding of how the product goes together and how each piece affects the other. *Note: Use clean tools in order to reduce contamination on stainless steel surfaces. We recommend using new chrome-plated tools to protect the fittings from raw steel. Avoid installing with rusty tools, as they leave rust deposits on the surface of the fittings. After installation, we recommend cleaning the stainless steel parts completely with a stainless cleaner and a soft clean rag in order to clear carbon deposits from the surface.*

Step 1 Determine the layout and number of railing posts needed for your deck. Post spacing is 6' or 8' on-center. Posts are available predrilled for end and line posts. Cable is available in lengths of 5', 10',



INSTALLATION INSTRUCTIONS • ALX CONTEMPORARY CABLE RAILING WITH CONTINUOUS TOP RAIL BRACKET

15', 20', 25', 30', 40' and 50'. Many layout options are possible. One tip is to start with the most visible run. It's the one on which you want the least interference with the view, so you can start from there and build around it. Corner applications: When taking cable through a corner, do not bend the cable past 45° at any time. When turning 90°, a 2-step turn using a double corner post configuration is required, or stop the cable run and start a new run. Example: A 12' x 16' deck attached to a building with a 4' access opening on one side will require a total of nine posts (fig. 4).

Once the layout is determined, all posts, rails and spacers are installed prior to the cable.

Step 2 Cut post to 34-5/8" for 36" rail height and 40-5/8" for 42" rail height.

Step 3 Installing Posts: Install posts by attaching the aluminum base to the surface of the deck. Position the post so the fastener will go into the floor joist, and make sure the decking is firmly attached to the joist at the location of the posts. Proper structural blocking/ framing under the decking material is required when attaching the post to a wood frame deck because decking alone is not approved as structural framing (fig. 5).

Step 4 Ensure the end and line posts are used in the correct location and oriented the proper way. The larger diameter hole on the end posts should face away from the cable run. Position the post assembly onto the location where it will attach to the deck. Four 3/8" diameter mounting holes are provided on the base. When the final position is determined, mark the base hole locations. Remove the post assembly and drill 15/64" holes in the marked locations through the decking and into structural blocking.

Step 5 Reposition the post assembly with the leveling plate inserted between the deck and the post base, and aligned with the predrilled holes. Insert the post fasteners (**NOT INCLUDED**), and partially tighten. Using a level, adjust the leveling set screws with a 3/16" allen wrench until the post is plumb. Fully tighten the post fasteners to secure the base to the deck structure. *Note: Recommended 5/16" x 4" or longer lag screws.* (fig. 6)

Step 6 Finish by sliding a post base trim (optional) over each post for a finished look.

Step 7 Measure the distance between installed posts to determine the length of the top rail. The rails are sized for 6' and 8' on-center posts, when using 2.5" posts, and include space for the brackets. Position rail adjacent to installed posts. The distance between the post and the spacer should be equal on both ends. Use one spacer for 6' rails and two for 8'. Never span more than 36" without a spacer to maintain proper cable spacing. As needed, trim the top rail to length for runs that are less than 6' or 8' on-center. Mark the length on top rail, and remove an additional 1/2" from both ends (1" overall) for the bracket to fit between the rail and post.

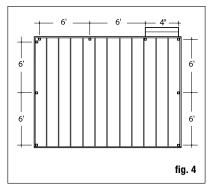
Step 8 Place the base on the post and measure the height to the flange. This number minus the desired rail height (36" or 42") will result in the amount that needs to be removed from the post.

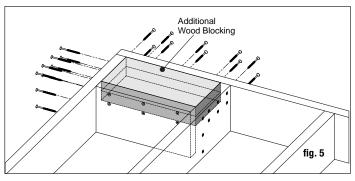
STOP – Make sure post base trim is installed before continuing.

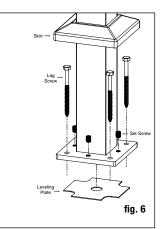
Step 9 A cable spacer is needed at least every 3 feet (1 is included in the 6ft kit, 2 in the 8ft kit). Attach spacer connectors to the bottom of the top rail. Predrill using a 1/8" drill bit. Attach the spacers to the spacer connectors. Mark the location of the spacer on the deck surface and attach the other spacer connector to the deck using the included screw.

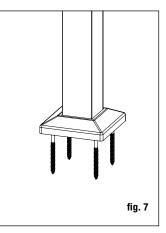
Step 10 Position the rail between the posts. Check for level end-to-end and vertically. Attach brackets to the post at one end. Repeat for the other end. *Tip: Use a driver extension bit to avoid marring the rail with the drill chuck. Install all rails prior to installing cable.* (fig. 9) Predrill rail using a 7/64" drill bit.

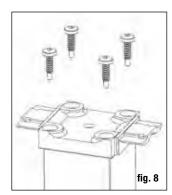
Step 11 Set post caps on each post then gently tighten the set screws to secure the cap using a 5/64" allen wrench. Install cable according to the cable instructions.

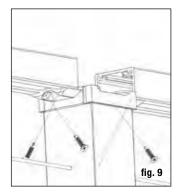




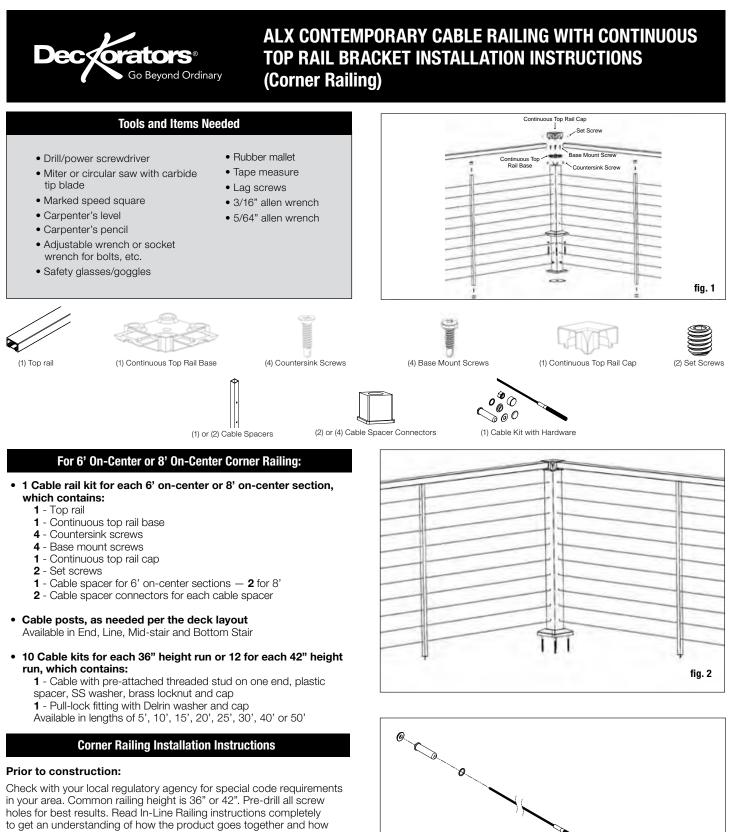








THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCORDANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMER ASSUMES ALL NEXES AND LIABILITY ASSOCIATED WITH THE CONSTRUCTION OR USE OF THIS PRODUCT. THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL NECESSARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WRITTEN LIMITED WARRANTY, THE WARRANTOR DOES NOT PROVIDE ANY OTHER WARRANTY, EITHER EXPRESS OR IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES.



to get an understanding of how the product goes together and how each piece affects the other. Note: Use clean tools in order to reduce contamination on stainless steel surfaces. We recommend using new chrome-plated tools to protect the fittings from raw steel. Avoid installing with rusty tools, as they leave rust deposits on the surface of the fittings. After installation, we recommend cleaning the stainless steel parts completely with a stainless cleaner and a soft clean rag in order to clear carbon deposits from the surface.

Step 1 Determine the layout and number of railing posts needed for your deck. Post spacing is 6' or 8' on-center. Posts are available predrilled for end and line posts. Cable is available in lengths of 5', 10', Q

Q.

Ô

fig. 3

INSTALLATION INSTRUCTIONS • ALX CONTEMPORARY CABLE RAILING WITH CONTINUOUS TOP RAIL BRACKET

15', 20', 25', 30', 40' and 50'. Many layout options are possible. One tip is to start with the most visible run. It's the one on which you want the least interference with the view, so you can start from there and build around it. Corner applications: When taking cable through a corner, do not bend the cable past 45° at any time. When turning 90°, a 2-step turn using a double corner post configuration is required, or stop the cable run and start a new run. Example: A 12' x 16' deck attached to a building with a 4' access opening on one side will require a total of nine posts (fig. 4).

Once the layout is determined, all posts, rails and spacers are installed prior to the cable.

Step 2 Cut post to 34-5/8" for 36" rail height and 40-5/8" for 42" rail height.

Step 3 Installing Posts: Install posts by attaching the aluminum base to the surface of the deck. Position the post so the fastener will go into the floor joist, and make sure the decking is firmly attached to the joist at the location of the posts. Proper structural blocking/ framing under the decking material is required when attaching the post to a wood frame deck because decking alone is not approved as structural framing (fig. 5).

Step 4 Ensure the end and line posts are used in the correct location and oriented the proper way. The larger diameter hole on the end posts should face away from the cable run. Position the post assembly onto the location where it will attach to the deck. Four 3/8" diameter mounting holes are provided on the base. When the final position is determined, mark the base hole locations. Remove the post assembly and drill 15/64" holes in the marked locations through the decking and into structural blocking.

Step 5 Reposition the post assembly with the leveling plate inserted between the deck and the post base, and aligned with the predrilled holes. Insert the post fasteners (**NOT INCLUDED**), and partially tighten. Using a level, adjust the leveling set screws with a 3/16" allen wrench until the post is plumb. Fully tighten the post fasteners to secure the base to the deck structure. *Note: Recommended 5/16" x 4" or longer lag screws.* (fig. 6)

Step 6 Finish by sliding a post base trim (optional) over each post for a finished look.

Step 7 Measure the distance between installed posts to determine the length of the top rail. The rails are sized for 6' and 8' on-center posts, when using 2.5" posts, and include space for the brackets. Position rail adjacent to installed posts. The distance between the post and the spacer should be equal on both ends. Use one spacer for 6' rails and two for 8'. Never span more than 36" without a spacer to maintain proper cable spacing. As needed, trim the top rail to length for runs that are less than 6' or 8' on-center. Mark the length on top rail, and remove an additional 1/2" from both ends (1" overall) for the bracket to fit between the rail and post.

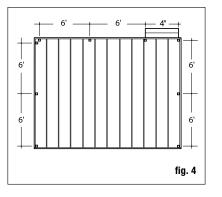
Step 8 Place the base on the post and measure the height to the flange. This number minus the desired rail height (36" or 42") will result in the amount that needs to be removed from the post.

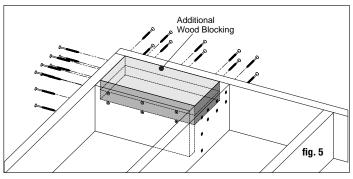
STOP – Make sure post base trim is installed before continuing.

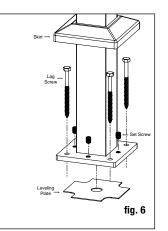
Step 9 A cable spacer is needed at least every 3 feet (1 is included in the 6ft kit, 2 in the 8ft kit). Attach spacer connectors to the bottom of the top rail. Predrill using a 1/8" drill bit. Attach the spacers to the spacer connectors. Mark the location of the spacer on the deck surface and attach the other spacer connector to the deck using the included screw.

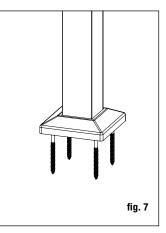
Step 10 Position the rail between the posts. Check for level end-to-end and vertically. Attach brackets to the post at one end. Predrill rail using a 7/64" drill bit. Repeat for the other end. *Tip: Use a driver extension bit to avoid marring the rail with the drill chuck. Install all rails prior to installing cable.* (fig. 9)

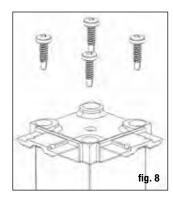
Step 11 Set post caps on each post then gently tighten the set screws to secure the cap using a 5/64" allen wrench. Install cable according to the cable instructions.

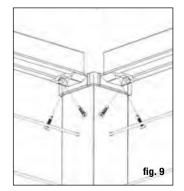




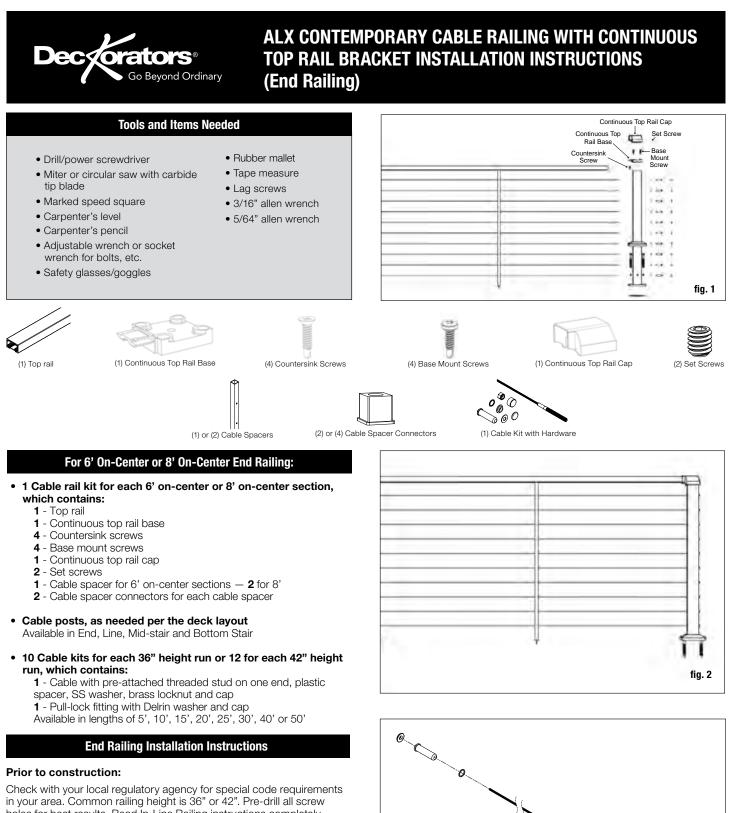






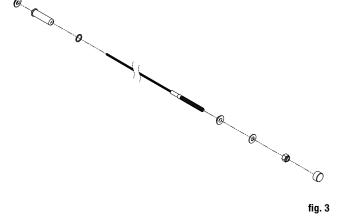


THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCORDANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMER ASSUMES ALL NISKS AND LIABILITY ASSOCIATED WITH THE CONSTRUCTION OR USE OF THIS PRODUCT. THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL NECESSARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WRITTEN LIMITED WARRANTY, THE WARRANTOR DOES NOT PROVIDE ANY OTHER WARRANTY, EITHER EXPRESS OR INVOLVED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES. 11297



in your area. Common railing height is 36" or 42". Pre-drill all screw holes for best results. Read In-Line Railing instructions completely to get an understanding of how the product goes together and how each piece affects the other. Note: Use clean tools in order to reduce contamination on stainless steel surfaces. We recommend using new chrome-plated tools to protect the fittings from raw steel. Avoid installing with rusty tools, as they leave rust deposits on the surface of the fittings. After installation, we recommend cleaning the stainless steel parts completely with a stainless cleaner and a soft clean rag in order to clear carbon deposits from the surface.

Step 1 Determine the layout and number of railing posts needed for your deck. Post spacing is 6' or 8' on-center. Posts are available predrilled for end and line posts. Cable is available in lengths of 5', 10',



INSTALLATION INSTRUCTIONS • ALX CONTEMPORARY CABLE RAILING WITH CONTINUOUS TOP RAIL BRACKET

15', 20', 25', 30', 40' and 50'. Many layout options are possible. One tip is to start with the most visible run. It's the one on which you want the least interference with the view, so you can start from there and build around it. Corner applications: When taking cable through a corner, do not bend the cable past 45° at any time. When turning 90°, a 2-step turn using a double corner post configuration is required, or stop the cable run and start a new run. Example: A 12' x 16' deck attached to a building with a 4' access opening on one side will require a total of nine posts (fig. 4).

Once the layout is determined, all posts, rails and spacers are installed prior to the cable.

Step 2 Cut post to 34-5/8" for 36" rail height and 40-5/8" for 42" rail height.

Step 3 Installing Posts: Install posts by attaching the aluminum base to the surface of the deck. Position the post so the fastener will go into the floor joist, and make sure the decking is firmly attached to the joist at the location of the posts. Proper structural blocking/ framing under the decking material is required when attaching the post to a wood frame deck because decking alone is not approved as structural framing (fig. 5).

Step 4 Ensure the end and line posts are used in the correct location and oriented the proper way. The larger diameter hole on the end posts should face away from the cable run. Position the post assembly onto the location where it will attach to the deck. Four 3/8" diameter mounting holes are provided on the base. When the final position is determined, mark the base hole locations. Remove the post assembly and drill 15/64" holes in the marked locations through the decking and into structural blocking.

Step 5 Reposition the post assembly with the leveling plate inserted between the deck and the post base, and aligned with the predrilled holes. Insert the post fasteners (**NOT INCLUDED**), and partially tighten. Using a level, adjust the leveling set screws with a 3/16" allen wrench until the post is plumb. Fully tighten the post fasteners to secure the base to the deck structure. *Note: Recommended 5/16" x 4" or longer lag screws.* (fig. 6)

Step 6 Finish by sliding a post base trim (optional) over each post for a finished look.

Step 7 Measure the distance between installed posts to determine the length of the top rail. The rails are sized for 6' and 8' on-center posts, when using 2.5" posts, and include space for the brackets. Position rail adjacent to installed posts. The distance between the post and the spacer should be equal on both ends. Use one spacer for 6' rails and two for 8'. Never span more than 36" without a spacer to maintain proper cable spacing. As needed, trim the top rail to length for runs that are less than 6' or 8' on-center. Mark the length on top rail, and remove an additional 1/2" from both ends (1" overall) for the bracket to fit between the rail and post.

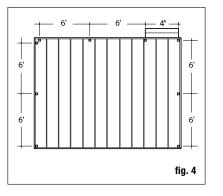
Step 8 Place the base on the post and measure the height to the flange. This number minus the desired rail height (36" or 42") will result in the amount that needs to be removed from the post.

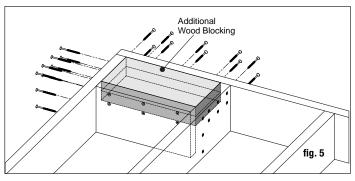
STOP – Make sure post base trim is installed before continuing.

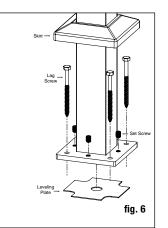
Step 9 A cable spacer is needed at least every 3 feet (1 is included in the 6ft kit, 2 in the 8ft kit). Attach spacer connectors to the bottom of the top rail. Predrill using a 1/8" drill bit. Attach the spacers to the spacer connectors. Mark the location of the spacer on the deck surface and attach the other spacer connector to the deck using the included screw.

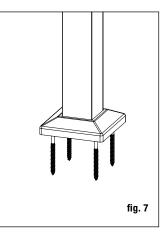
Step 10 Position the rail between the posts. Check for level end-to-end and vertically. Attach brackets to the post at one end. Predrill using a 7/64" drill bit. Repeat for the other end. *Tip: Use a driver extension bit to avoid marring the rail with the drill chuck. Install all rails prior to installing cable.* (fig. 9)

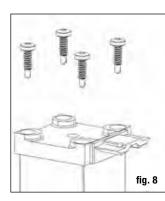
Step 11 Set post caps on each post then gently tighten the set screws to secure the cap using a 5/64" allen wrench. Install cable according to the cable instructions.

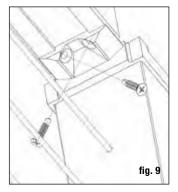




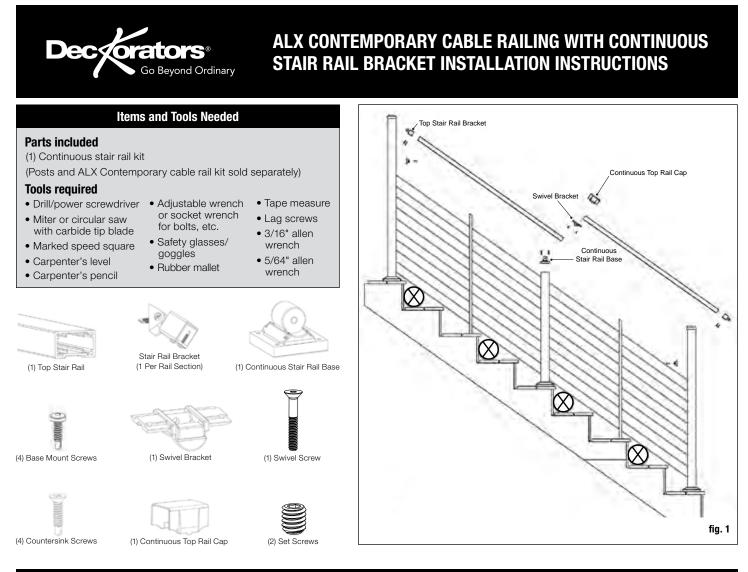








THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCORDANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMES ALL NECESSARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL NECESSARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WRITTEN LIMITED WARRANTY, THE WARRANTOR DOES NOT PROVIDE ANY OTHER WARRANTY, EITHER EXPRESS OR IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES.



Stair Railing Installation Instructions

Note: Maximum top rail length for Continuous Stair is 85-13/16" for mixed continuous rail and stair rail brackets while it will be 88" for two continuous rail brackets. Cut equal lengths from both ends to keep proper spacing of center support.

Prior to construction:

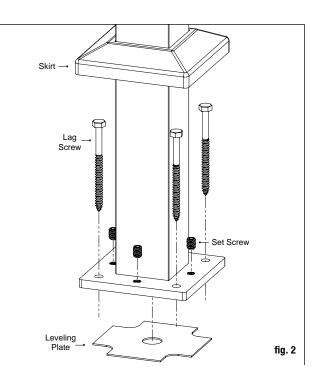
• Ensure post location is compatible with railing, prior to securing to the deck, place both posts in position, and lay the bottom rail along the stair nosing from top to bottom adjacent to both posts. On the rail side of the post, measure up from the top of the rail and ensure there is a minimum of 34" to the top of the post. Post location may need to be adjusted to ensure minimum is obtained. Repeat this step for the bottom post.

• For a wood deck, position the post so the fasteners will go into the blocking, and make sure the decking is firmly attached to the joists at the location of the posts. Proper structural blocking/framing under the decking material is required when attaching the post to a wood frame deck because decking alone is not approved as structural framing.

Step 1 Begin by determining where the top and bottom post will be located. Mark the desired location of the post.

Step 2 Four 3/8" diameter mounting holes are provided on the base. When final position is determined, mark hole locations and remove the post assembly. Drill the marked locations through decking and into structural blocking.

Step 3 Reposition the post assembly with the leveling plate inserted between the deck and the post base, and aligned with the predrilled holes. Insert the post fasteners (**NOT INCLUDED**), and partially tighten. Using a level, adjust the leveling set screws with a 3/16" allen wrench until the post is plumb. Fully



STOP – Make sure post base trim is installed before continuing.

Step 4 Measure the distance between installed posts to determine the length of the top and bottom rails. Position the railing on the stairs on top of a spacer block along the stair nosings. Once the railing is in position, clamp the railing to the posts.

Step 5 Temporarily assemble the swivel brackets. Position the swivel bracket in location and mark the rail and post. Repeat for other end of railing. *Note: Add %*" to the marked location on the railing and cut to length.

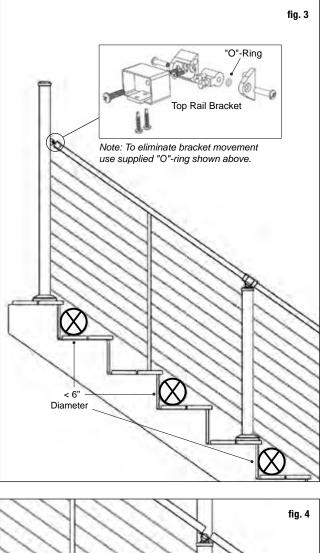
Step 6 Now, mark the locations of the bracket screw holes on the rails. Remove brackets. Predrill through the rail only, using a 7/64" drill bit. Attach the front end of bracket to rails.

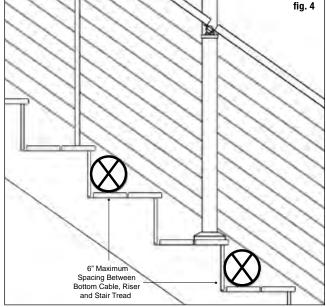
Step 7 Position the rail alongside the posts using 6" maximum spacing between bottom cable, riser, and stair tread. With the top railing resting on the continuous stair rail, center the continuous stair bracket to be centered on the post. Mark the bottom of the bracket. Then cut the post 3/8" above the mark to allow for the flange on the bottom side of the bracket (fig. 4).

Step 8 Mark location of the bracket base screw holes on the post. Include the bracket side cover when determining the center location. Predrill through the post, using a 3/16" drill bit. Position the base of each bracket with the bracket cover side facing the stairs, and attach to the post with two screws.

Step 9 Locate the cable center support near the center of the top rail while allowing for proper cable routing around the stair tread.

Step 10 Set post caps on each post. Secure cap using a 5/64" allen wrench.

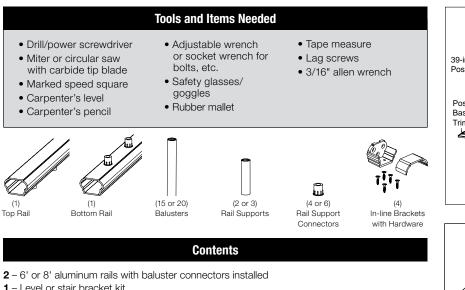


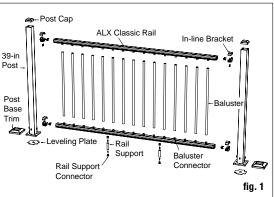


THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCORDANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMER ASSUMES ALL RISKS AND LIABILITY ASSOCIATED WITH THE CONSTRUCTION OR USE OF THIS PRODUCT. THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL NECES-SARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WRITTEN LIMITED WARRANTY, THE WARRANTOR DOES NOT PROVIDE ANY OTHER WARRANTY, EITHER EXPRESS OR IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES.



ALX CLASSIC INSTALLATION INSTRUCTIONS





1 - Level or stair bracket kit

16 - #8 x 3/4" screws (8 - #8 x 3/4" and 8 - #8 x 1-3/4" screws for stair kits)

15 - Balusters (12 for stair kits, 20 for 8' line kits)

2 - Rail supports (3 for 8' kits)

NOTE: Recommend 5/16" x 4" or longer lags

In-Line Railing Installation Instructions

Posts Installation

Prior to construction:

· Check with your local regulatory agency for special code requirements in your area. Common railing height is 36" or 42". Read instructions completely to get an understanding of how the product goes together and how each piece affects the other.

• Determine the number of railing posts needed for your deck. Post spacing is 6' or 8' oncenter. Example: A 12' x 16' deck attached to a building with a 4' access opening on one side will need a total of eight posts. To minimize cutting, use as many full panels as possible.

• If installing low-voltage lighting, wiring must be installed before securing posts to deck surface.

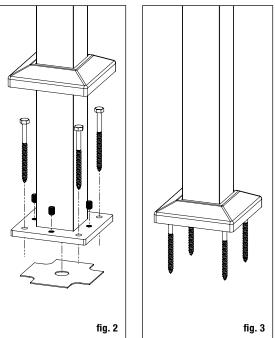
Step 1 Install posts by attaching the aluminum base to the surface of the deck. Position the post so the fastener will go into the floor joist, and make sure the decking is firmly attached to the joist at the location of the posts. If necessary, use wood blocking securely attached to the joist structure as reinforcement underneath the decking where the posts are located. Fasteners that hold the post base to the surface should be able to secure to joist or reinforcement braces, not just the decking itself. Note: When installing aluminum post on top of a wood surface, screws must be lagged into at least 3" of solid wood (not including the decking). 5/4" or 1 1/2" deck boards do not provide sufficient material for a safe installation. If necessary, add additional material to the underside of the surface (fig. 2).

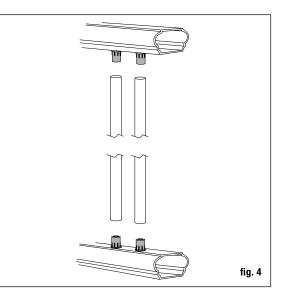
Step 2 Position the post assembly onto the location where it will be attached to the deck. Four 11/32" diameter mounting holes are provided on the base. When the final position is determined, mark the base hole locations. Remove the post assembly and drill 15/64" holes in the marked locations into the deck and reinforcement.

Step 3 Reposition the post assembly with the leveling plate inserted between the deck and the post base, and aligned with the predrilled holes. Insert the post fasteners (NOT INCLUDED), and partially tighten. Using a level, adjust the leveling set screws with a 3/16" allen wrench until the post is plumb. Fully tighten the post fasteners to secure the base to the deck structure. Note: Recommended 5/16" x 4" or longer lag screws.

STOP: Make sure post base trim is installed before continuing.

For rail kits: Baluster connectors are attached to bottom and top rail, but should be fully tightened by hand to railing before being installed. Do not over tighten.





Railing Installation

Prior to construction:

• Check building code requirements for maximum spacing between deck surface and bottom of rail (sweep). Spacing of 3" is recommended for 36" or 42" finished rail height.

Step 1 Measure the distance between installed posts to determine the length of the top and bottom rails. The rails are sized for 6' and 8' on-center posts, when using 2.5" posts, and include space for the brackets. Position rail adjacent to installed posts. The distance between the post and the first baluster should be less than 4" and equal on both ends. As needed, mark the length on top and bottom rails, trim the rails to length for runs that are less than 6' or 8' o.c. and remove an additional 1/4" on both ends (1/2" overall) for the bracket to fit between the rail and post.

Step 2 Temporarily place the brackets on either end of the bottom rail. Position the bottom rail between posts and center. Mark the location of the bracket on both posts. Remove rail and brackets. Mark the screw locations and predrill through the posts only, using a 1/8" drill bit.

Step 3 Attach each bracket to the posts with three 3/4" screws.

Step 4 A rail support is needed every 2 feet (2 are included in the 6ft kit, 3 in the 8ft kit). Attach rail support connectors to the bottom of the lower rail at 2 foot intervals. Predrill using a 1/8" drill bit. Attach the rail supports to the rail support connectors. Mark the location of the rail support on the deck surface and attach the other rail support connector to the deck using the included screw.

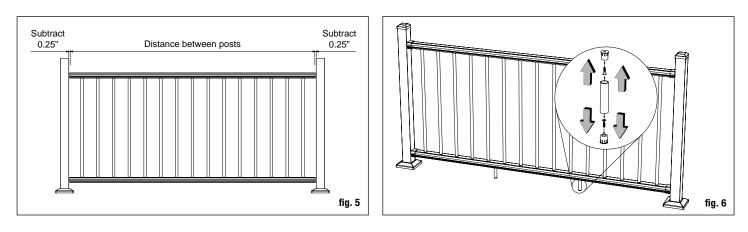
Step 5 Install the bottom rail between the posts by setting it in the brackets. Snap top trim piece to the rail bracket.

Step 6 Attach baluster to the lower rail by sliding onto connection (fig. 4).

Step 7 Position the top rail between the posts. Check for level end-to-end and vertically. Mark the bracket location on post and remove rail. Mark the screw locations using the bracket as a guide, and predrill using a 1/8" drill bit. Attach bracket to the post with three 3/4" screws at one end. Repeat for the other end.

Step 8 Lower the top rail into position, placing the balusters onto the connectors while working from one end of the railing to the other. Tap with a rubber mallet if needed to eliminate any gaps. Attach the rail to each bracket by predrilling with a 1/8" drill bit and using two 3/4" screws. *Tip: Use a driver extension bit to avoid marring the rail with the drill chuck.*

Step 9 Set post caps on each post. Gently tap with rubber mallet to secure.



Stair Railing Installation Instructions

Step 1 Begin by determining where the top and bottom post will be located. Mark the desired location of the post. Note: To ensure post location is compatible with railing, prior to securing to the deck, place both posts in position, and lay the bottom rail along the stair nosing from top to bottom adjacent to both posts. On the rail side of the post, measure up from the top of the rail and ensure there is a minimum of 34" to the top of the post. Post location may need to be adjusted to ensure minimum is obtained. Repeat this step for the bottom post. For a wood deck, position the post so the fasteners will go into the floor joists, and make sure the decking is firmly attached to the joists at the location of the posts. Proper structural blocking/framing under the decking material is required when attaching the post to a wood frame deck because decking alone is not approved as structural framing. Use 49" post for 36" stair railing and 54" post for 42" stair railing.

Step 2 Four 3/8" diameter mounting holes are provided on the base. When final position is determined, mark hole locations and remove the post assembly. Drill the marked locations into decking and reinforcement braces.

Step 3 Reposition the post assembly with the leveling plate inserted between the deck and the post base, and aligned with the predrilled holes. Insert the post fasteners (NOT INCLUDED), and partially tighten. Using a level, adjust the leveling set screws with a 3/16" allen wrench until the post is plumb. Fully tighten the post fasteners to secure the base to the deck structure.

STOP: Make sure post base trim is installed before continuing.

Step 4 Measure the distance between installed posts to determine the length of the top and bottom rails. Lay bottom rail on stairs with the predrilled holes facing up. The distance between the post and the first baluster should be less than 4" and equal on both ends. Mark the length on top face at both ends of rail using a square or straight edge where it meets the posts. Remove an additional 1.25" at the uphill end of rail, and 1/8" at downhill end of rail, to allow for the stair connectors. Cut bottom rail to length. *Note: The distance from the end of the top rail to the first stair baluster will be 1-1/16" longer than the bottom rail to ensure the balusters are plumb.*

On the cut bottom rail, measure to the underside of the top rail. Add 1-1/16" to this measurement and cut the uphill end of top rail. Measuring from the cut end, mark and cut the other end of top rail to match overall length of bottom rail (fig. 7).

Step 5 Mark location of the bracket screw holes on bottom rails. Remove bracket. Predrill through the rail only, using a 1/8" drill bit.

INSTALLATION INSTRUCTIONS • ALX CLASSIC RAILING

Step 6 Attach each bracket to the post with two 1-3/4" screws.

For rail kits: Baluster connectors are attached to bottom and top rail, but should be fully tightened by hand to railing before being installed. Do not over tighten.

Step 7 Lay bottom rail on stairs against the posts with the predrilled holes facing up. The distance between the post and the first baluster should be less than 4" and equal on both ends. Mark the rail where it meets the inside of the installed brackets. Do the same with the top rail, but with the predrilled holes facing down. Trim the top and bottom rails to length with a 90 degree cut.

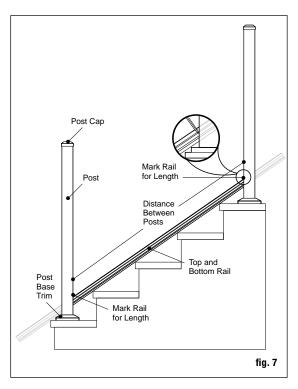
Step 8 A rail support is needed every 2 feet (2 are included in the 6ft kit, 3 in the 8ft kit). Attach rail support connectors to the bottom of the lower rail at 2 foot intervals using included screws. Predrill using a 1/8" drill bit. Mark the location of the rail support on the step tread and attach the other rail support connectors to the step tread.

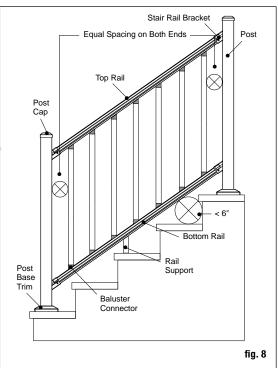
Step 9 Install the bottom rail between the posts by setting rail in brackets. Secure bottom rail to brackets using two 3/4" screws. Tip: Use a driver extension bit to avoid marring the rail or post with the drill chuck. Snap top trim piece to the rail bracket.

Step 10 Attach balusters to the lower rail by sliding onto the connectors. Stair connectors are set at 35°.

Step 11 Position the top rail between the posts. Check for plumb end-to-end and vertically. Mark the bracket location on post and remove rail. Mark the screw locations using the bracket as a guide, and predrill using a 1/8" drill bit. Attach a bracket to the post with two 1-3/4" screws at one end. Repeat for the other end. Lower the top rail into position, placing the balusters onto the stair connectors while working from one end of the railing to the other. Tap with a rubber mallet if needed to eliminate any gaps. Attach the rail to each bracket by predrilling with a 1/8" drill bit and using two 3/4" screws. *Tip: Use a driver extension bit to avoid marring the rail or post with the drill chuck.*

Step 12 Set post caps on each post. Gently tap with rubber mallet to secure.





10942

THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCORDANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMER ASSUMES ALL RISKS AND LIABILITY ASSOCIATED WITH THE CONSTRUCTION OR USE OF THIS PRODUCT. THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL NECESSARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WRITTEN LIMITED WARRANTY, THE WARRANTOR DOES NOT PROVIDE ANY OTHER WARRANTY, EITHER EXPRESS OR IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES.



ALX 2.5" POST EXTENSION INSTALLATION INSTRUCTIONS

MWARNING!

- Use extra caution when using power tools. Always use safety tools when cutting or drilling components.
- Not for load-bearing use. Do not use as supports for structures (including pergolas and roofs) or furniture (including hammocks and porch swings).
- Post extension is designed to attach to Deckorators ALX guardrail posts that are securely fastened to a deck or walking surface. Do not use if posts are insecure or are attached to a structure that is in poor condition.
- When hanging string lights, consult local electrical code requirements, closely follow all instructions included with the lights, and consult a licensed electrical contractor if you have guestions.
- Prior to installation, ensure that no people, animals, furniture, or other objects are below the railing.
- · Do not install during high wind or inclement weather conditions.

Tools and Items Needed

- Drill/power screwdriver
- Safety glasses/gogglesRubber mallet
- Miter or circular saw
 with carbide tip blade
- Tape measure
- Carpenter's pencil
- Tape measure

Contents

- 1 2.5" x 66" Aluminum Post Extension with coupler
- 8 Screws
- 1 Stainless steel pad eye with screws
- 1 Stainless steel snap link

Note: The Aluminum Post Extension is designed to be used with a Deckorators 2.5" Post.

Step 1 Determine the desired finished height of the post. The post extension is 66" long, creating an 8' - 9" tall post if used with a 39" post and a 9' - 2" tall post is used with a 44" post. Cut the post extension to the desired finished height.

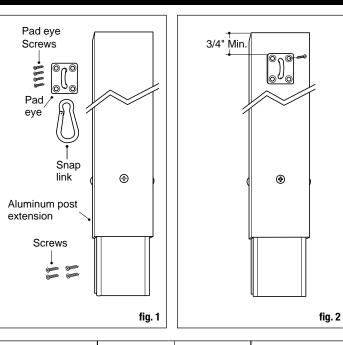
Step 2 Attach the pad eye and snap link to the end of the post without the coupler. Leave at least 3/4" between the end of the post and the top of the pad eye to accommodate the post cap. Pre-drill the screw holes for the pad eye.

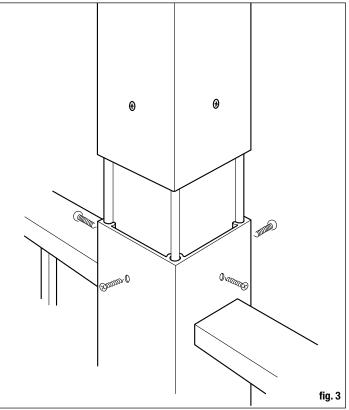
Step 3 Remove the post cap from the installed post. Attach the post cap onto the end of the extension by tapping it into place with a rubber mallet.

Step 4 Slide the inserted coupler out from the post extension so that it extends 6" and the predrilled holes line up. Secure the coupler to the post extension in this position using 4 of the $\#10 \times 3^{4}$ " screws, one on each side (fig. 3).

Step 5 Measure 3" from the top of the installed post and predrill a hole in the center of each side using a 1/8" HSS (High Speed Steel) drill bit. (*If installing a railing to the post do not predrill for the post extension screws on that side, follow instructions for railing installation*).

Step 6 Attach the post extension by inserting the coupler into the top of the installed post and into the screw bosses. **Make sure you orient the pad eye and snap link, at the top of the post, in the desired direction.** Secure each side with the included screws. (*If attaching to post with an already installed railing measure the distance from the top of the post to the top screws and cut the coupler to fit*).





THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL CONTRACTOR. ANY INSTALLATION OR USE OF THIS PRODUCT MUST COMPLY WITH ALL LOCAL ZONING AND/OR BUILDING CODES, WHICH SUPERSEDE THESE INSTRUCTIONS, HOMEOWNER AND NEIGHBORHOOD ASSOCIATIONS AND HISTORIC DISTRICTS MAY IMPOSE ADDITIONAL RESTRICTIONS OR RE-QUIREMENTS. THE CONSUMER ASSUMES ALL RISKS AND LIABILITY ASSOCIATED WITH THE INSTALLATION OR USE OF THIS PRODUCT. THE CONSUMER ASSUMES AND HISTORIC DISTRICTS MAY IMPOSE ADDITIONAL RESTRICTIONS OR RE-QUIREMENTS. THE CONSUMER ASSUMES ALL RISKS AND LIABILITY ASSOCIATED WITH THE INSTALLATION OR USE OF THIS PRODUCT. THE CONSUMER OR SOUNDER OR SHOULD TAKE ALL ARTOR STEPS TO ENSURE THE SAFETY OF EVERYORE INVOLVED IN THE INSTALLATION PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPORPTIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WARRANTOR'S WRITTEN LIMITED TO, WEARING THE APPORPTIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WARRANTOR'S WRITTEN LIMITED TO, WEARING THE APPORPTIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WARRANTOR'S WRITTEN LIMITED WARRANTY, THE WAR-RANTOR DOES NOT PROVIDE ANY WARRANTY, EITHER EXPRESS OR IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING BUT NOT LIMITED TO CONSEQUENTIAL DAMAGES.

Decyorators® Go Beyond Ordinary

Items You Will Need

Pencil

• Tape Measure

- Drill
- Chop/Miter Saw
- Level#2 Square Drive Bit
- Quick Clamps
- Beauty Ring Joint Cover 46 Components: ADA Secondary Handrail 95" 2 6" Straight Joine 3 3 4" Inside/Outside Corner 4 Straight End Wall Bracket 8 or 10 Inside Corner Bracke 6 End Cap P-Loop Return or 10 8 A 8 6" Adjustable Joine 90° Quick Return Bracket 10 External Swive Offset Bracket

Prior to construction, check with your local regulatory agency for special code requirements in your area.

Start with an Inside Corner piece when applicable.

Guidelines:

- The height of the secondary handrail must be installed between 34" and 38" above the surface, regardless of the height of the guard.
- We recommend that handrails be dry fit prior to final installation to eliminate cutting and fastening errors.
- IMPORTANT: The secondary handrail must be attached to a structural support. When installing mounting brackets on post sleeves, ensure the hardware attaches to the structural support.
- For maximum strength, brackets should be used at every post and every joint, or as closely as possible to the joint.
- An adhesive may be applied to further reinforce construction.
- Handrails must be supported every 6' on-center by a mounting bracket.

ADA Compliant Handrail Guidelines and Installation

1" self-drilling metal screws and 2-1/4" wood screws are included for attaching brackets. Use the appropriate screws for your application.

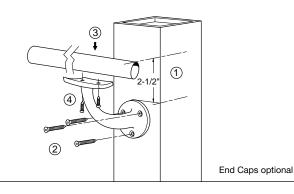
Offset Bracket (Line Post Mounting Bracket)

Step 1: Measure 2-1/2" less than the handrail height to determine bracket position. Mark surface.

Step 2: Align the top of the bracket mounting plate with the mark made in Step 1. Drill 5/32" pilot holes and attach to the desired surface using the appropriate screws.

Step 3: Clamp handrail to bracket at appropriate location to secure in place.

Step 4: Drill 5/32" pilot holes and attach handrail using the 1" screws provided.



Handrail

Step 1: Dry fit handrails to determine proper lengths prior to cutting rails.

Step 2: Measure and cut rails to proper lengths for all runs. **Step 3:** Install to handrail component, following instructions for the components.

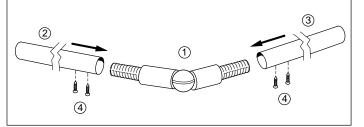
External Swivel

Step 1: Adjust external swivel to desired angle and install set screw.

Step 2: Cut handrail to desired length.

Step 3: Insert external swivel bracket into the handrail.

Step 4: Pre-drill handrail and bracket with 5/32" drill bit and install 1" screw provided.

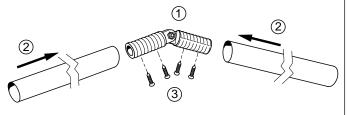


Adjustable Joiner

Step 1: Measure the angle needed. Adjoin the two joiner halves together by inserting the bolt. Place the joiner halves at the desired angle, and tighten bolt to set.

Step 2: Cut handrails at ½ the desired angle. Slide handrails onto adjustable joiner.

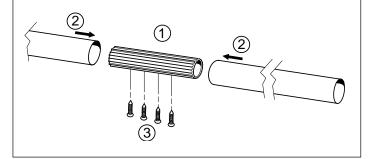
Step 3: Drill 5/32" pilot holes and fasten handrails together using 1" screws.



Aluminum Joiner Kit

Step 1: Use aluminum joiner to fasten handrail components at straight joints.

Step 2: Slide joiner an equal distance into both components. Drill 5/32" pilot holes and fasten using 1" screws provided. *Note: All joiners should be supported by an aluminum bracket as closely as possible to the joint.*

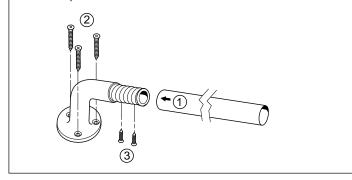


90° Post Return

Step 1: Slide 90° post return into handrail.

Step 2: Drill 5/32" pilot holes into the desired surface and attach post return using the appropriate screws.

Step 3: Drill 5/32" pilot holes into handrail and attach using 1" screws provided.

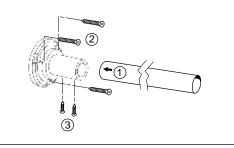


Straight Aluminum Wall Mount

Step 1: Slide aluminum wall mount into handrail.

Step 2: Drill 5/32" pilot holes into desired surface and attach wall mount using the appropriate screws.

Step 3: Drill 5/32" pilot holes into handrail and attach using 1" screws provided.



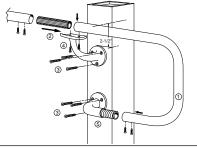
P-Loop Return

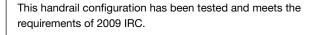
Step 1: Attach top bracket at desired location using appropriate connectors.

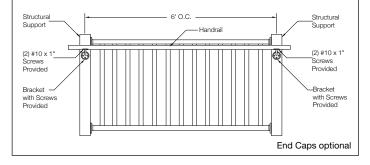
Step 2: Cut P-Loop to desired length.

Step 3: Connect P-Loop to secondary handrail tube using the appropriate joiners (Straight, Adjustable joiners or External swivel). **Step 4:** Set P-Loop on top of bracket and pre drill with drill bit and install 1" screw provided.

Step 5: Install desired lower bracket.







The diagrams and instructions in this brochure are for illustration purposes only and are not meant to replace a licensed professional. Any construction or use of the product must be in accordance with all local zoning and/or building codes. The consumer assumes all risks and liability associated with the construction or use of this product. The consumer or contractor should take all necessary steps to ensure the safety of everyone involved in the project, including, but not limited to, wearing the appropriate safety equipment. Seller makes no warranty for this product, either express or implied. Seller expressly disclaims any and all liability for damages arising out of the use or ownership of the product, including disclaiming incidental and consequential damages, unless otherwise required by state law.



CLASSIC BALUSTER INSTALLATION INSTRUCTIONS

Kit Contents:

• 10 - Aluminum balusters (2.5 balusters required per linear foot of railing)

Items You Will Need:

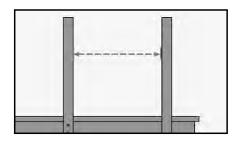
- Deckorators baluster connectors (sold separately)
- Clamps
- Deckorators stair connectors set at 35° (sold separately)
- Deckorators rail connectors (optional, sold separately)
- Drill driver
- Tape measure

- Safety glasses
- Carpenter's pencil
- White rubber mallet • Support blocks (can be cut
- from scrap rail material)

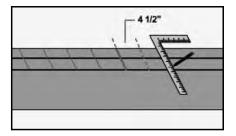
Installation Instructions:

INLINE RAILING

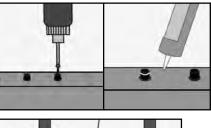
Prior to construction, check with your local regulatory agency for special code requirements in your area. Common railing height is 36". Structural support should come from either the continuation of deck support posts that extend up through the deck floor or from railing posts that are bolted to the inside of the rim or outer joist. 6' on-center post spacing is recommended. Never span more than 8' on-center between railing posts.

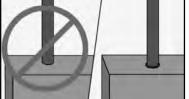


Step 1: Measure railing opening, from post to post to determine the length of each baluster rail section.



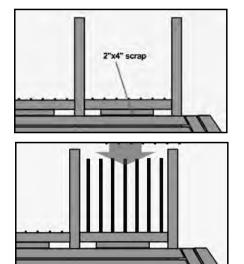
Step 2: Cut top and bottom rails (2x4s) to length and clamp together. Mark top and bottom rails 4-1/2" on-center, starting from the cetner of the rail.





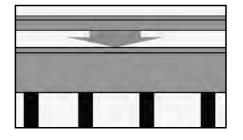
Step 3: Using a drill driver, screw on Deckorators baluster connectors (sold separately) on each mark using the screws provided. Apply silicone caulk on each connector to prevent balusters from turning or rattling after installation is complete. The caulk should be on the outside of the connector, where the baluster will make contact with the connector's outer edge.

Note: Specific types of treated lumber are known to corrode aluminum. Deckorators baluster connectors provide a barrier between the aluminum balusters and treated lumber to ensure long term performance.

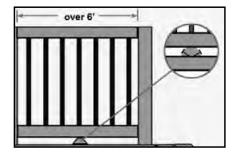


Step 4: Place the bottom rail between the rail posts, supported by a 3" block (2x4 scrap material works best). Secure rail to posts using Deckorators rail connectors (sold separately) and slide balusters over the bottom connectors. Carefully place top rail over the balusters, making sure each baluster is seated properly on each connector.

INSTALLATION INSTRUCTIONS • CLASSIC BALUSTERS



Step 5: Inspect finished railing for proper baluster spacing and secure top rail. Add a cap rail for a finished look.

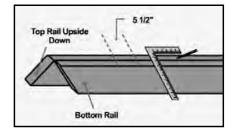


STAIR RAILING

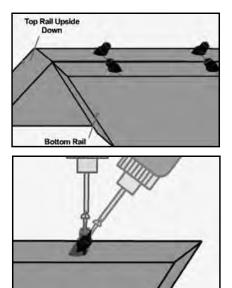
Step 6: For rail sections longer than 4', support blocks are recommended. These can be made from leftover 2x4 rail material. Properly position the support block and toe-nail it to the bottom rail and deck board.



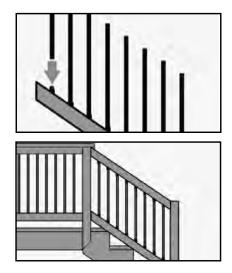
Step 7: Stair rails and balusters can present an installation challenge. Deckorators angled stair rail connectors (sold separately) create a snug and accurate baluster fit for stair angles at 35 degrees. Cut top and bottom stair rails at the proper angle. Lay top and bottom 2x4 rails alongside the posts and mark.



Step 8: Clamp the top and bottom rails together with the top 2x4 rail inverted. Position rails as shown and mark 5-1/2" on-center, working from the center out to the ends of the rails.



Step 9: Properly position the connectors on the rails. The top and bottom connectors will be facing opposite directions. Screw the connectors in place. To properly set angled connectors, begin screwing vertically until the screw bites into the wood. Reposition screw to the proper angle and tighten. Do not over-tighten, which can move the connector off center.



Step 10: Make sure connectors are properly aligned, apply silicone caulk to each stair connector, and assemble the top and bottom rails with the balusters. Then attach full rail section between the stair rail posts.

THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCORDANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMER ASSUMES ALL RISKS AND LIABILITY ASSOCIATED WITH THE CONSTRUCTION OR USE OF THIS PRODUCT. THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL NECESSARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WRITTEN LIMITED WARRANTY, THE WARRANTOR DOES NOT PROVIDE ANY OTHER WARRANTY, EITHER EXPRESS OR IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES.



ESTATE BALUSTER INSTALLATION INSTRUCTIONS

Kit Contents:

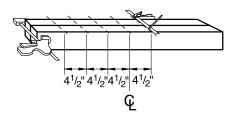
• 10 - Aluminum balusters (2.5 balusters required per linear foot of railing)

Items You Will Need:

- Estate baluster connectors (sold separately)
- Estate stair adaptors (sold separately)
- Deckorators rail connectors (optional, sold separately)
- Drill driver
- Tape measure

- Clamps
- Safety glasses
- Carpenter's pencil
- White rubber mallet
- Support blocks (can be cut from scrap rail material)

Step 2: Cut top and bottom rails (2x4s) to length and clamp together. Starting from the center of the rails, mark out 4-1/2" on-center using a tape measure or marked speed square. This will leave a 3-3/4" opening from baluster to baluster once the balusters are installed.



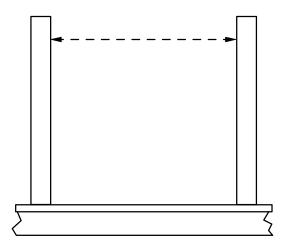
Step 3: Screw on Deckorators Estate baluster connectors (sold separately) on each mark.

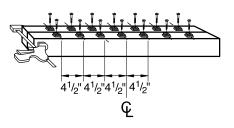
Installation Instructions:

INLINE RAILING

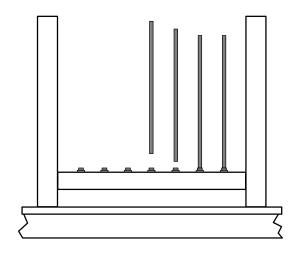
Prior to construction, check with your local regulatory agency for special code requirements in your area. Common railing height is 36". Structural support should come from either the continuation of deck support posts that extend up through the deck floor or from railing posts that are bolted to the inside of the rim or outer joist. **6' on-center post spacing is recommended. Never span more than 8' on-center between railing posts.**

Step 1: Measure railing opening, from post to post.

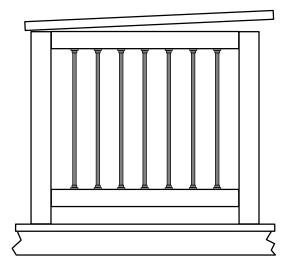




Step 4: Place the bottom rail (2x4) on 3" blocks (2x4 scrap material works best) and attach to the post. For easy rail-to-post connection, we recommend using Deckorators railing connectors (sold separately). Put clear adhesive on each connector to properly secure balusters and prevent spinning. Insert balusters over baluster connectors.

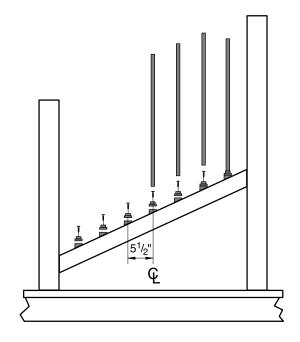


Step 5: Place top rail (2x4) over balusters. Install cap rails for a finished look. For rail sections longer than 4 feet, support blocks are recommended. These can be made from leftover rail material. Properly position the support block and toe-nail it to the bottom rail and deck board.



STAIR RAILING

Stairs: Follow Step 1 and cut 2x4s to length with proper angle. With 2x4s laying flat, start from the center of the rails and mark every 5-1/2" on-center. Screw on Deckorators Estate baluster connectors with stair adaptors (sold separately) to complete your stair rail. The adaptor works for 30- to 35-degree angles. Screw bottom rail (2x4) to post. Contingent upon how your stairs railing are built, you may need to run bottom rail (2x4) down alongside of the stringer to get proper height. Proceed to Step 5 to complete your stair rails.



THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCORDANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMER ASSUMES ALL RISKS AND LIABILITY ASSOCIATED WITH THE CONSTRUCTION OR USE OF THIS PRODUCT. THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL NECESSARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WRITTEN LIMITED WARRANTY, THE WARRANTOR DOES NOT PROVIDE ANY OTHER WARRANTY, EITHER EXPRESS OR IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES. 8567



Kit Contents:

- 5 Balusters for Arc and Baroque
- 10 Balusters for Traditional
- 20 Color-matched screws for Arc and Baroque
- 40 Color-matched screws for Traditional
 20 - Baluster end caps for Traditional (2.5 balusters
- required per linear foot of railing)

Items You Will Need:

• Drill driver

- ClampsSupport blocks
- 2-pt. square head drill bit
- Safety glasses

Tape measure

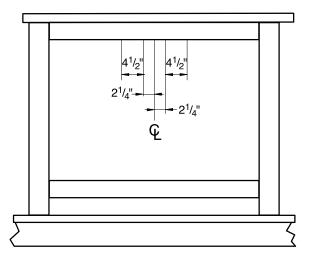
- Carpenter's pencil
- Support blocks (can be cut from
- scrap rail material)

Installation Instructions:

INLINE RAILING

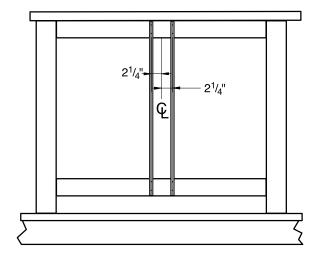
Prior to construction, check with your local regulatory agency for special code requirements in your area. Common railing height is 36". Structural support should come from either the continuation of deck support posts that extend up through the deck floor or from railing posts that are bolted to the inside of the rim or outer joist. **6' on-center post spacing is recommended. Never span more than 8' on-center between railing posts.**

Step 1: Attach top and bottom rails to posts according to local building codes. The distance from the deck surface to the top of the rail is typically 36". Use a baluster as a guide to determine placement of the bottom rail. Find the center of the top and bottom rails and mark. Rail length $\div 2 =$ center of rail.

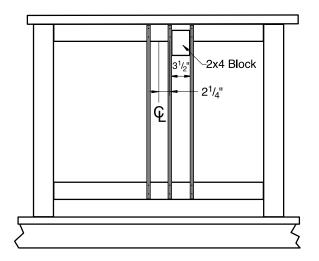


ARC, TRADITIONAL AND BAROQUE INSTALLATION INSTRUCTIONS

Step 2: The baluster spacing is 4-1/2" on-center and equal spacing for the end spacing. For posts set at 6' on-center, attach the first two balusters 2-1/4" on-center each side of the center line using four of the screws provided. Use the plastic washers when using treated lumber, to prevent direct contact. Place the washer in between the rail and baluster. When using Traditional balusters, install the end caps on the hollow ends of each baluster prior to installing the balusters on the rail.

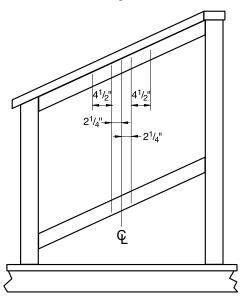


Step 3: Use a section of 2x4 to space the next baluster 3-1/2" from the first. Attach the rest of the balusters using the 2x4 as a spacer block. Cut two support blocks from the wood or composite railing material you're using. Glue support blocks to the bottom of the lower rail an equal distance from each post.

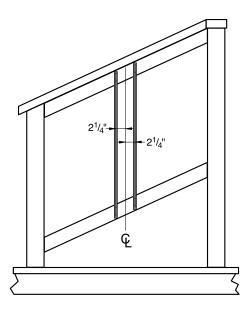


STAIR RAILING

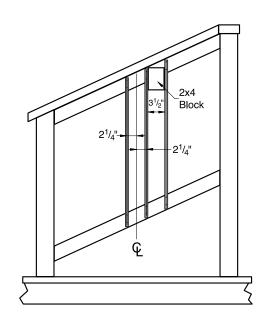
Step 1: Attach top and bottom stair rails to posts according to local building codes. The distance from the stair tread to the top of the rail is typically 36". Use a baluster as a guide to determine placement of the bottom rail. Find the center of the top and bottom rails and mark. Rail length $\div 2$ = center of rail.



Step 2: The baluster spacing is 4-1/2" on-center and equal spacing for the end spacing. For posts set at 6' on-center, attach the first two balusters 2-1/4" on-center each side of the center line using four of the screws provided. Use the plastic washers when using treated lumber, to prevent direct contact. Place the washer in between the rail and baluster.



Step 3: Use a section of 2x4 to space the next baluster 3-1/2" from the first. Attach the rest of the balusters using the 2x4 as a spacer block.



THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCORDANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMER ASSUMES ALL RISKS AND LIABILITY ASSOCIATED WITH THE CONSTRUCTION OR USE OF THIS PRODUCT. THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL NECESSARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WRITTEN LIMITED WARRANTY, THE WARRANTOR DOES NOT PROVIDE ANY OTHER WARRANTY, EITHER EXPRESS OR IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES.

8564



SCENIC AND FROSTED GLASS BALUSTER-FACE MOUNT INSTALLATION INSTRUCTIONS

Kit Contents:

OR

Scenic Glass Balusters

- 5 Glass balusters
- 20 Stainless steel screws (You will need 1.5 balusters per linear foot of handrail.)
- Frosted Glass Balusters
- 3 Glass balusters
- 12 Stainless steel screws

Items You Will Need:

- Drill driver
- Tape measure
- 2-pt. square head drill bit
- Safety glasses
- Carpenter's pencil
- Clamps
 Support blocks (can be cut from
- scrap rail material)

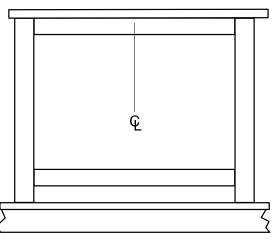
Prior to installation, insert rubber grommets (included) into the pre-drilled glass baluster holes. When assembling screws, drive each screw until the rubber grommet begins to mushroom. Do not over-tighten.

Installation Instructions:

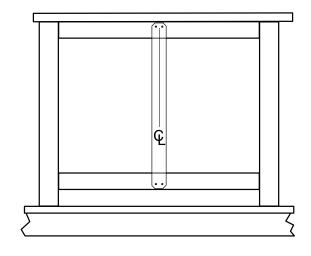
INLINE RAILING

Prior to construction, check with your local regulatory agency for special code requirements in your area. Common railing height is 36". Structural support should come from either the continuation of deck support posts that extend up through the deck floor or from railing posts that are bolted to the inside of the rim or outer joist. **6' on-center post spacing is recommended. Never span more than 8' on-center between railing posts.**

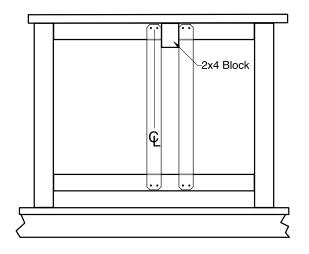
Step 1: Attach top and bottom rails to posts according to local building codes. The distance from the deck surface to the top of the rail is typically 36". Use a baluster as a guide to determine placement of the bottom rail. Find the center of the top and bottom rails and mark. Rail length $\div 2$ = center of rail.



Step 2: Attach the first baluster on-center of the center line using four of the screws provided. Drive each screw until the rubber grommet begins to mushroom. Do not over-tighten.

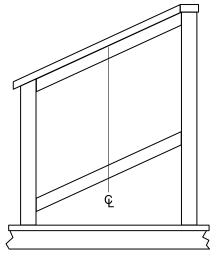


Step 3: Use a section of 2x4 to space the next baluster $3-1/2^{"}$ from the first. Attach the rest of the balusters using the 2x4 as a spacer block. Cut two support blocks from the wood or composite railing material you're using. Glue support blocks to the bottom of the lower rail an equal distance from each post.

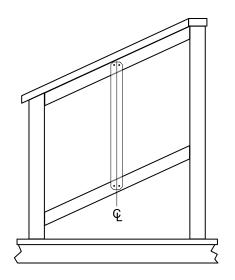


STAIR RAILING

Step 1: Attach top and bottom stair rails to posts according to local building codes. The distance from the front edge of the stair tread to the top of the rail is typically 36". Use a baluster as a guide to determine placement of the bottom rail. Find the center of the top and bottom rails and mark. Rail length $\div 2 =$ center of rail.



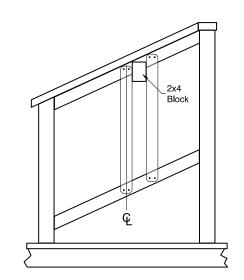
Step 2: Attach the first baluster on-center of the center line using four of the screws provided. Drive each screw until the rubber grommet begins to mushroom. Do not over-tighten.



THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCORDANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMER ASSUMES ALL RISKS AND LIABILITY ASSOCIATED WITH THE CONSTRUCTION OR USE OF THIS PRODUCT. THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL NECESSARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WRITTEN LIMITED WARRANTY, THE WARRANTOR DOES NOT PROVIDE ANY OTHER WARRANTY, EITHER EXPRESS OR IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES.

8565

Step 3: Use a section of 2x4 to space the next baluster 3-1/2" from the first. Attach the rest of the balusters using the 2x4 as a spacer block.





Kit Contents:

- 5 Glass balusters
- 20 Stainless steel screws (You will need 1.5 balusters per linear foot of handrail.)

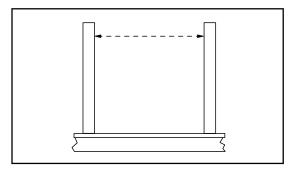
Items You Will Need:				
Drill driver Tape measure 2-pt. square head drill bit Safety glasses Carpenter's pencil Clamps	 Support blocks (can be cut from scrap rail material) Scenic baluster connectors (sold separately) Scenic baluster stair connectors (sold separately) 			

Prior to construction, check with your local regulatory agency for special code requirements in your area. Common railing height is 36" or 42". Structural support should come from either the continuation of deck support posts that extend up through the deck floor or from railing posts that are bolted to the inside of the rim or outer joist. **6' on-center spacing is recommended. Never span more than 8' between railing posts.**

Installation Instructions:

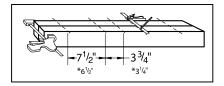
INLINE RAILING

Step 1: Measure railing opening from post to post to determine the length of each rail section.

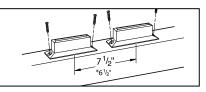


SCENIC GLASS BALUSTER INSTALLATION INSTRUCTIONS (CONNECTORS)

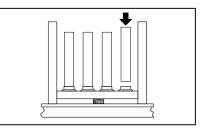
Step 2: Cut top and bottom rails to the proper length and clamp together. Locate the center of the rails and mark. If using an odd number of balusters, the balusters will start at the center of the rail. For Frontier Balusters: If using an even number of balusters, the balusters will start 3-3/4" either side of center, with all balusters 7-1/2" on-center. Mark both rails 7-1/2" on-center, starting from the desired location. For Contour Balusters: If using an even number of balusters, the balusters will start 3-1/4" either side of center, with all balusters of center, with all balusters 6-1/2" on-center. Mark both rails 6-1/2" on-center, starting from the desired location.*



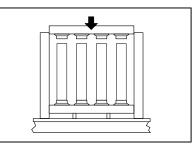
Step 3: Screw on one Deckorators Scenic baluster connector (sold separately) on each mark, using the screws provided.



Step 4: Place the bottom rail between the rail posts, supported by a 3" block (2x4 scrap material works best). Secure rail to posts using Deckorators rail connectors (sold separately). Insert one Scenic Baluster into each baluster connector.

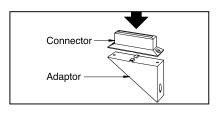


Step 5: Carefully place top rail over the balusters, making sure each baluster is seated properly in each baluster connector. Inspect finished railing for proper baluster spacing and secure top rail to posts. Attach support blocks to the bottom of the lower rail an equal distance from each post.

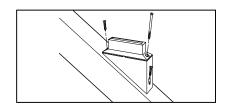


STAIR RAILING

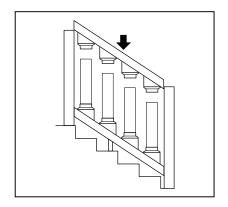
Step 6: Follow Step 1 and cut top and bottom rails to length, with proper angle. Clamp together and mark top and bottom rails every 9" on-center.



Step 7: Deckorators Scenic baluster stair connectors (sold separately) are composed of two parts: the connector and the adaptor. To install, place the connector on the adaptor, being sure the groove in the connector matches up with the knobs on the adaptor. Position one connector and adaptor on each mark and attach to the rail using the screws provided. Scenic baluster stair connectors work for 35-degree stair angles.



Step 8: Attach bottom rail to post. Insert one Scenic Baluster into each baluster stair connector. Carefully place top rail over the balusters, and secure top rail to post.



THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCORDANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMER ASSUMES ALL RISKS AND LIABILITY ASSOCIATED WITH THE CONSTRUCTION OR USE OF THIS PRODUCT. THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL NECESSARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WRITTEN LIMITED WARRANTY, THE WARRANTOR DOES NOT PROVIDE ANY OTHER WARRANTY, EITHER EXPRESS OR IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES.



POST CAP INSTALLATION INSTRUCTIONS

Installation

Post Caps

To attach each post cap style to the post, apply an exterior-grade silicone adhesive to the underside of the post cap and place firmly on the post (Figure 1).

Solar Post Caps

Important: All solar panels within post caps and lights need 24 hours of direct sunlight to fully charge.

To activate your new solar post cap:

Step 1 Access the inside of the solar light by pressing inward on the side of the clear lens, grasping the edge of the top and lifting it off (Figure 2), or grasping the top and twisting counterclockwise.

Step 2 Remove the plastic tab from the battery compartment to allow connection to the terminal. Ensure battery is firmly in place.

Step 3 Replace top by snapping onto side panels or twist the top counterclockwise into place.

Step 4 Your solar post cap light is now ready to be attached to your post (Figure 1).

Batteries are included with solar post caps but may not be installed. Ensure batteries are seated firmly in place when installed.

Solar Post Caps with Removable Solar Collector Unit

To activate:

Step 1 Remove the solar panel by lifting it straight up from the top of the cap (Figure 3).

Step 2 Remove the plastic tab from the battery compartment to allow connection to the terminal. Ensure battery is firmly in place (remove: switch is in "on" position - there is no on/off switch).

Step 3 Replace the solar panel.

Step 4 Your solar post cap light is now ready to be attached to your post (Figure 1).

Post and Stair Lights

Step 1 Slide plastic lens back to separate from top portion.

Step 2 Open battery compartment.

- Step 3 Remove the plastic tab from the battery compartment to allow connection to the terminal.
- Step 4 Ensure battery is firmly in place.
- Step 5 Attach bracket to post using screws included in package.

Step 6 Slide the Post and Stair Light onto the bracket.

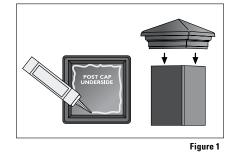
Deck and Dock Solar Lights

Step 1 Remove the exterior bottom cover using a regular screwdriver and remove the plastic tab to allow battery connection to the terminal.

Step 2 Reinstall the exterior bottom cover and tighten securely.

Step 3 Drill a 1-3/8" (35mm) hole in the desired location in your deck or stair tread and insert the solar deck and dock light into the hole.

Step 4 Light will need 24 hours to full charge.







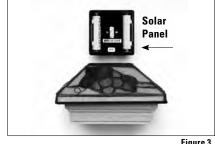


Figure 3

Solar Post Caps

Our Solar Post Caps are among the unique, yet classic touches you can add to your outdoor project. By day, they add beauty to your deck. By night, they enhance your setting with a welcoming glow, without the hassles of wiring or electricity.

By installing a solar post cap light on your deck, you are contributing to a greener enviornment. Solar post caps get their energy from the sun, the Earth's most available energy source. This helps offset greenhouse gases and reduces the need for dry-cell battery disposal. They are also economical: Keeping your deck illuminated with solar post caps will not increase your electric bill.

Looking for a softer glow? No need to illuminate all of your post caps. Batteries can be taken out of the post cap or the tab can be reinserted into the battery compartment to keep the light inactive. Keep in mind you will need to recharge batteries after reinserting them. Some post caps have on/off switches. Make sure the switch is in the "off" position if you don't want a particular cap to illuminate.

Included with each of our solar post caps are LED light bulbs and rechargeable batteries. With normal use of 6 to 8 hours per day, our LED light bulbs will have an average life of 10 years. The rechargeable batteries will last an average of one year. They must be replaced with rechargeable batteries; using regular batteries in the sun will destroy the solar collector in the post cap.

Please note that our LED light bulbs are part of the whole solar cell component and are not designed to be replaced. If it is necessary to replace your light bulb or your solar collector, we have Solar Collector Replacement Units available.

(Contains nickel-cadmium rechargeable batteries. Battery must be recycled or disposed properly.)

Post Cap Care and Maintenance

Metal Post Caps

Our copper and stainless steel post caps come with a thin, clear marine lacquer designed to protect them before and during installation. Once exposed to the elements, the sun's ultraviolet rays, moisture and pollution begin to break down this coating, exposing the metal underneath.

Copper

• In its natural state, copper breaks down in the elements and develops a patina. In general, copper progresses from a natural salmon color to a series of russet browns and grays, and finally to a blue-green or gray-green patina.

• To maintain the shiny look, apply a car wax immediately after purchasing the cap and reapply every 3 to 6 months.

• To remove an already tarnished finish, remove the old coating with mineral spirits and grade 0000 steel wool. Buff with grade 0000 steel wool for a satin finish. For a mirror-like finish, apply a car wax or spray with a clear lacquer or polyurethane and let dry, and then apply a car wax.

• To encourage a natural patina, remove the lacquer with mineral spirits and grade 0000 steel wool.

Stainless Steel

Stainless steel has a hard oxide coating, making it resistant to stains. To maintain this coating, clean periodically with a mixture of vinegar and club soda.

Black and White Post Caps

Our black and white post caps have a powder coated baked on finish that is extremely hard and durable, rarely requiring maintenance.

Wood Post Caps

As with all wood products, we recommend that you coat these with a high-quality exterior finish to preserve the wood's natural beauty and ensure a lifetime of enjoyment. Apply to all wood areas, including the underside of the cap, before installation.

Glass Post Caps

Exposure to the elements may cause the filigreed metal on your glass post cap to oxidize and lose its original color. Applying car wax before placing the post cap outdoors will help prevent the initial oxidation. Reapply the car wax every 3 to 6 months as needed.

Note: If your post cap has a wood base, apply a high quality exterior finish to all wood areas before installation. We recommend reapplying the finish annually to preserve the wood's natural beauty and protect it from the elements.



12 VOLT 12 WATT DC TRANSFORMER INSTALLATION INSTRUCTIONS

Preparation

- Follow all national and local building and electrical codes.
- Transformer must be plugged into a GFCI outlet that is marked "wet location."
- Transformer can support up to 12 watts. (30) 0.4 watt lights.
- Do not cut any wires. Any extra wire length can be coiled up.
- Do not use extension cords.
- Do not use within 10 feet of ponds, pools, or spas.
- Cover the photocell sensor with dark tape to make the lights work while testing.

• If using insulated wire staples to hold the wires in place, be sure not to pierce or crush the wires.

• There are no serviceable parts inside the power supply unit. Do not disassemble.

Installation Instructions

Step 1: Properly align the photocell plug with the transformer receptacle and firmly push the plug into place (fig. 1).

Step 2: Tighten the plastic nut by turning clockwise (fig. 2). If the photocell is already attached, check to make sure plastic nut is completely tight for a weatherproof seal.

Step 3: Use (4) #4 x $1/2^{\circ}$ screws (not supplied) to mount transformer to an exterior wall surface or deck face a minimum of 12" above ground level. Plug the transformer into the GFCI outlet (figs. 3 and 4).

Step 4: Mount the round photocell holder next to the transformer with the supplied screw (fig. 5). Ensure the location of the photocell can sense dusk and dawn. Do not install the photo sensor behind shrubs. This will affect the photo sensor. The photo sensor will not operate properly if installed too close to a light source.

Step 5: Peel off the protective film covering the adhesive on the top surface of the round photocell holder. Align the photocell and press firmly onto the adhesive (fig. 6).

Step 6: To test the power supply during installation, temporarily cover the photocell sensor with dark tape so the lights will come on during installation. Be sure to remove the tape for normal operation. (Location of Photocell Sensor shown in fig 6.)

Step 7: Run the 9' power cable from the photocell to the location of the first light fixture. If needed, the power cable can fit through a 1/2" hole (fig. 7).

Step 8: Plug the output connector from the photocell into the supplied T-Connector. Press firmly until the connection is fully engaged (fig. 8).

Step 9: Connection is fully engaged when there is minimal gap between the output and Tee connectors (fig. 9).

Step 10: Connect light fixtures per their instructions.

Step 11: Any unused Tee Connector terminals or splitters in the system must be sealed using the attached cap (fig. 10).

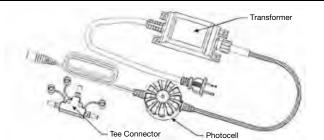
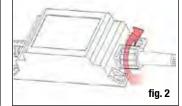
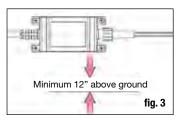
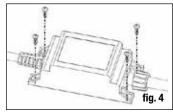
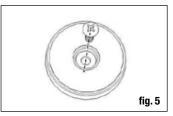


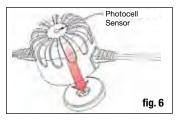
fig. 1

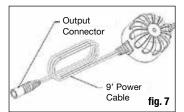


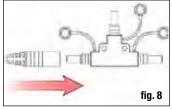


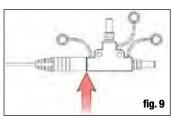


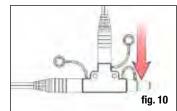












THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCOR-DANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMER ASSUMES ALL RISKS AND LIABILITY ASSOCIATED WITH THE CONSTRUCTION OR USE OF THIS PRODUCT. THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL NECESSARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WRITTEN LIMITED WARRANTY, THE WARRANTOR DOES NOT PROVIDE ANY OTHER WARRANTY, EITHER EXPRESS OR IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES.



12 VOLT 50 WATT DC TRANSFORMER INSTALLATION INSTRUCTIONS

Preparation

- Follow all national and local building and electrical codes.
- Transformer must be plugged into a GFCI outlet that is marked "wet location."
- Transformer can support up to 50 watts. (125) 0.4 watt lights.
- Do not cut any wires. Any extra wire length can be coiled up.
- Do not use extension cords.
- Do not use within 10 feet of ponds, pools, or spas.
- If using insulated wire staples to hold the wires in place, be sure not to pierce or crush the wires.
- Keep away from external heat sources.
- There are no serviceable parts inside the power supply unit. Do not disassemble.

• Set transformer mode to Always On to make sure the lights work while testing. Refer to control instructions.

Installation Instructions

Step 1: Use (4) stainless steel screws (not included) to mount the transformer a minimum of 12" above the ground level and within reach of a 120V AC GFCI outlet (fig. 1). The 120V AC power cord attached to the transformer is 5 feet long. The transformer can be mounted under the deck but the control panel on the transformer should be accessible to change settings.

Step 2: Plug the transformer into the GFCI outlet (fig. 2).

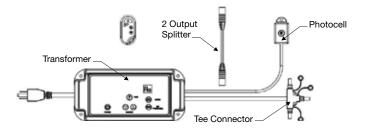
Step 3: Use a stainless steel screw (not included) to mount the photocell in a location that can sense dusk and dawn (night and day) conditions (fig. 3). The attached photocell cord is 5 feet long. Do not install the photo sensor behind shrubs. This will affect the photo sensor. The photo sensor will not operate properly if installed too close to a light source.

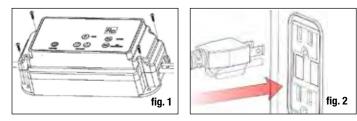
Step 4: Run the 4 foot output power cable with the Tee Connector attached to the location of the first light or a central location if lights will be located in multiple directions. The Tee Connector can be secured loosely using (2) #4 x 1" stainless steel screws (not supplied). Do not tighten the screws completely as this can damage the Tee Connector (fig. 4).

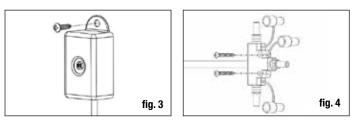
Step 5: If needed, all 3 of the output connectors on the Tee Connector are active and will supply equal power to the entire system (fig. 5).

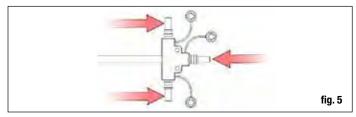
Step 6: Connect the female lead of light kit (not included) and install per the light kit instructions.

Step 7: Refer to the included Control instructions for operation of the transformer. The Control instructions should be retained for future reference.









THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCOR-DANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMER ASSUMES ALL RISKS AND LIABILITY ASSOCIATED WITH THE CONSTRUCTION OR USE OF THIS PRODUCT. THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL NECESSARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WRITTEN LIMITED WARRANTY, THE WARRANTOR DOES NOT PROVIDE ANY OTHER WARRANTY, EITHER EXPRESS OR IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES.



12 VOLT 50 WATT SMART TRANSFORMER CONTROL INSTALLATION INSTRUCTIONS

fig. 1

O

Powe

Power

Power

Turns the system power off and on (fig. 1). When the system power is off, the LCD display will be blank and the only button that will function is the Power button. When the system power is on, the LCD display will show the current mode or function that is active.

Mode and LCD Display

Pressing or holding in the mode button will cycle through the different modes settings. The mode settings are 1h, 2h, 3h,4h, 5h, 6h,7h, 8h, dd and Ao (fig. 2).

1 to 8 hour timer (1h, 2h, 3h,4h, 5h, 6h,7h, 8h):

• Uses the photocell to turn the lights on. When the photocell senses darkness continually for 30-40 seconds, the lights will turn on.

The lights shut off after the set time expires (1 hour for 1h mode, 2 hours for 2h, etc.). After the set time expires the lights will remain off.
Whether the timer has expired or is still active, when the photocell senses light continually for 30 - 40 seconds, the timer will be reset and ready for another cycle. If the lights are on, they will be shut off and the timer is reset.

Dusk to Dawn (dd):

• Uses the photocell to turn the lights on. When the photocell senses darkness continually for 30-40 seconds, it will turn on the lights.

• The lights will remain on until the photocell senses light continually for 30-40 seconds.

• When the photocell senses light continually for 30 - 40 seconds the lights will be shut off and ready for another cycle.

Always On (Ao):

• The lights are on all the time. The photocell is not used.

Dimmer

• Pressing or holding in the up button (▲) will make the lights brighter - if the lights are full brightness and the button is pressed again (or held in), the lights will flicker or flash to indicate the lights are at the brightest setting (fig. 3).

• Pressing or holding in the down button (∇) will make the lights dimmer - if the lights are dimmed to the lowest setting and the button is pressed again (or held in), the lights will flicker or flash to indicate the lights are at the dimmest setting (fig. 3).

• The dimmer buttons are only operational when the output lights are on.

Pair

Pairs a new wireless remote or bluetooth device (fig. 4).

To pair a new wireless remote (the included remote is already paired at the factory):

• Press and hold the Pair button on the transformer. At the same time press and hold the **M** button on the new remote. The LCD display will show rt to indicate that it is in remote pairing mode.

• Continue holding both buttons in for 8-10 seconds. When the new remote is paired, the output lights will flash and the transformer will cycle through the different modes until both buttons are released.

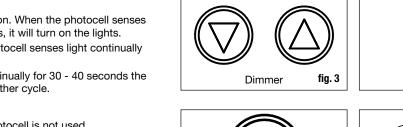
To pair a new bluetooth device (only needs to be done once per device):

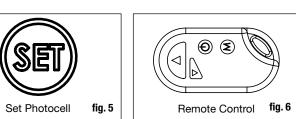
• Download and open SmartPower 50 app from Android or Apple stores.

• Press and release the Pair button on the transformer. The LCD display will show bt to indicate that it is in bluetooth pairing mode.

• When in bt mode, no buttons can be pushed for 30 seconds or until a new device or phone pairs with the transformer. The transformer will go back to the previous mode once 30 seconds has expired or a new device or phone has been paired with the transformer.

• A new device or phone that tries to pair with the transformer without being in bt mode will be rejected.





Set

Mode

Pair

fig. 2

fig. 4

Set Photocell

Sets the trigger point for turning the lights on and off (fig. 5).

To set the photocell level:

- Ensure mode is set to 1h, 2h, 3h,4h, 5h, 6h,7h, 8h, or dd. The Set Photocell button will only work when in these modes.
- Wait until the ambient outdoor light condition is at the desired level for when the lights are to come on (dusk).
- Press and continue to hold the Set Photocell button for 10-15 seconds. The LCD display will change to P5.
- The lights will flash or flicker once the new photocell setting has been saved.
- The lights will turn on in 30-45 seconds as long as the ambient light condition is lower than when it was set.

Remote Control

Controls the transformer remotely. Functions are the same as the transformer buttons (fig. 6).

- (▲) Brightens the lights if they are on.
- \bullet (\blacktriangledown) Dims the lights if they are on.
- (**((()**) Turns the system power off and on.
- (M) Changes the transformer mode.

• Pressing both (∇) and (M) in at the same time will put the transformer into bluetooth pairing mode (see above). The LCD display will show bt and no other functions will work for 30 seconds or until a new device is paired.

Additional Features

System Memory:

• Previous settings are saved if power is lost. Settings are saved 30 seconds after the last settings change.

Overload Protection:

• The transformer can sense an overload condition. When this occurs, the lights will shut off and the LCD display will show oL. This can be caused by having too many lights attached or a pinched wire causing a short circuit.

• Pressing the power button will reset the transformer. The system will continue to check for an overload condition every 10 seconds.

Over Temperature Protection:

• The transformer can sense an excessive internal temperature condition. When this occurs, the lights will shut off and the LCD display will show ot. This can be caused by having the transformer too close to an external heat source.

• The transformer will automatically restart once the temperature has returned to a safe level. The system will continue to check for an over temperature condition every 10 seconds.

Factory Reset:

• Unplugging the transformer for at least 10 seconds and holding in the power button while you plug the transformer in will force the system to return to factory settings. All settings will return to default. Any bluetooth devices or replacement remote controls will need to be paired again. The original remote control will not need to be paired again.

THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCOR-DANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMER ASSUMES ALL RISKS AND LIABILITY ASSOCIATED WITH THE CONSTRUCTION OR USE OF THIS PRODUCT. THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL NECESSARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WRITTEN LIMITED WARRANTY, THE WARRANTOR DOES NOT PROVIDE ANY OTHER WARRANTY, EITHER EXPRESS ON IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES.

> ©2021 UFP Retail Solutions, LLC. Deckorators is a registered trademark of UFP Industries, Inc. in the U.S. All rights reserved. 68956 U.S. Highway 131, White Pigeon, MI 49099 13865 11/21

> > www.deckorators.com



Kit Contents

8-Piece Kit:	2-Piece Kit:
 7 - Splitters 	 2 - Splitters
 8 - 5' Harnesses 	 2 - 5' Harnesses
 8 - Flush LED Lights 	 2 - Flush LED Lights
 8 - White Trim Rings 	 2 - White Trim Rings
 8 - Black Trim Rings 	 2 - Black Trim Rings

Tools Needed

- Power drill
- 1-1/4" diameter Forstner Bit or Bi-Metal Hole Saw

Preparation

- Do not cut any wires. Any extra wire length can be coiled up.
- If using insulated wire staples to hold the wires in place, be sure not to pierce or crush the wires.

• During installation, it is recommended that you temporarily cover the photocell on the transformer with dark tape so the lights will be on when you plug them in. This will help check for any issues during installation. Remove tape when done.

- Wiring harness should have enough slack so light fixture can be removed if future replacement is needed.
- Do not look directly into the light.

• For use with 12-volt, low-voltage outdoor landscape lighting system only.

Installation Instructions

Step 1: Prepare the Transformer: Follow instructions provided with the transformer.

Step 2: Layout the location of the light(s). To prevent splitting, do not install within 1/2" of the edge of the light and the edge the deck board (fig. 1).

Important Note: Please make sure that you have properly calculated your distances and are confident of the positioning of the lights before drilling holes.

Step 3: Use a 1-1/4" Diameter Forstner Bit or Bi-Metal Hole Saw to bore a flat bottom hole through the deck board (fig. 2). Disconnect the male end of the harness from the female end of the light. Insert the male end of the harness through the back of the drilled hole.

Step 4: Insert the wire of the recessed deck light into the hole of the trim ring accessory, and press the face of the light so it is flush with the lip of the trim ring (fig. 3). Choice of black or white trim rings provided in the kit.

Step 5: Plug the male connector of the harness from Step 3 into the female connector attached to the light (fig. 4).

Step 6: Connection is fully engaged when there is minimal gap between the male and female connector (fig. 5).

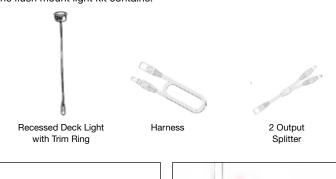
Step 7: Firmly insert the connected harnesses first, followed by the trim ring and seated light, into the hole drilled in Step 3. Press firmly until the lip of the trim ring rests atop the surface of the deck board (fig. 6).

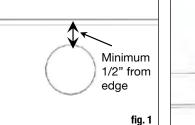
Step 8: The recessed deck light will now be illuminated if the transformer is on and providing power.

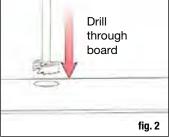
Note: If the drilled hole is too loose to hold the light snugly, a small amount of silicone caulk on the inside of the hole is recommended to hold the light in place.

LED RECESSED DECK LIGHT KIT INSTALLATION INSTRUCTIONS

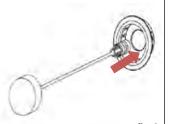
One flush mount light kit contains:



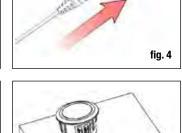


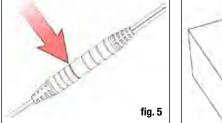


atternation











THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCOR-DANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMER ASSUMES ALL RISKS AND LIABILITY ASSOCIATED WITH THE CONSTRUCTION OR USE OF THIS PRODUCT. THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL NECESSARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WRITTEN LIMITED WARRANTY, THE WARRANTOR DOES NOT PROVIDE ANY OTHER WARRANTY, EITHER EXPRESS ON IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES.

LED RECESSED RISER LIGHT KIT **INSTALLATION INSTRUCTIONS**



Kit Contents

2-Piece Kit:

2 - Splitters

- 8-Piece Kit:
- 7 Splitters
- 8 5' Harnesses
- 8 Riser LED Lights
- 8 White Covers
- 8 Black Covers
- 2 5' Harnesses • 2 - Riser LED Lights
- 2 White Covers 2 - Black Covers
- **Tools Needed**
- Power drill
- 7/8" diameter Forstner Bit or Bi-Metal Hole Saw

Preparation

- Do not cut any wires. Any extra wire length can be coiled up.
- If using insulated wire staples to hold the wires in place, be sure not to pierce or crush the wires.
- Wiring harness should have enough slack so light fixture can be removed if future replacement is needed.
- Do not look directly into the light.

• For use with 12-volt, low-voltage outdoor landscape lighting system only.

• During installation, it is recommended that you temporarily cover the photocell on the transformer with dark tape so the lights will be on when you plug them in. This will help check for any issues during installation. Remove tape when done.

Installation Instructions

Step 1: Prepare the Transformer: Follow instructions provided with the transformer.

Step 2: Layout the location of the light(s). To prevent splitting, do not install within 1/2" of the edge of the light and the edge the deck board (fig. 1).

Step 3: Use a 7/8" Diameter Bi-Metal Hole Saw for aluminum posts or a 7/8" Forstner bit on nonmetal posts and boards to bore a flat bottom hole (fig. 2). Note: Ensure the diameter is no larger than 7/8", as the light requires a tight fit for ideal function. It is recommended to ensure the bit will provide a tight enough hole on a scrap piece of post or deck board before drilling. Disconnect the male end of the harness from the female end of the light. Insert the male end of the harness through the back of the drilled hole.

Step 4: Plug the male connector of the harness from Step 3 into the female connector attached to the light (fig. 3). Press firmly until the connection is fully engaged.

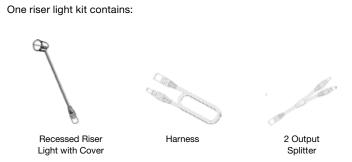
Step 5: Connection is fully engaged when there is minimal gap between the male and female connector (fig. 4).

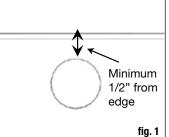
Step 6: Choice of black or white riser light covers are provided in the kit. Position cover on riser light. Place riser light with cover into the hole drilled in Step 3, inserting the connected harnesses and wire first. Firmly press the Riser Light and cover into the deck board until the assembly is fully seated (fig. 5).

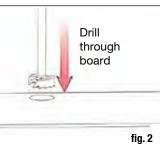
Step 7: The recessed riser light will now be illuminated if the transformer is on and providing power.

Note: If the drilled hole is too loose to hold the light snugly, a small amount of silicone caulk on the inside of the hole is recommended to hold the light in place.

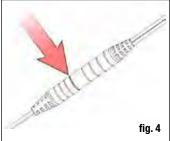
THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCOR-DANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMER ASSUMES ALL RISKS AND LIABILITY ASSOCIATED WITH THE CONSTRUCTION OR USE OF THIS PRODUCT. THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL NECESSARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WRITTEN LIMITED WARRANTY, THE WARRANTOR DOES NOT PROVIDE ANY OTHER WARRANTY, EITHER EXPRESS OR IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES.



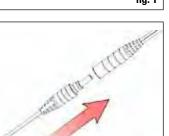
















42" AND 53" POSTCOVER INSTALLATION INSTRUCTIONS

Introduction

Carefully plan your entire deck, from deck boards to rails and stairs, before cutting your first board or drilling your first hole. Account for the unique design and dimensions of Deckorators[®] postcovers and your chosen rail system in the planning stage. Inventory all necessary postcovers and associated rail connectors and fasteners at the job site, before getting started. For installations over 4x4 nominal wood posts, you will need (2) 2x4-pieces of treated or cedar lumber per in-line rail postcover. The length of the 2x4 depends on the height of the postcover. 42" postcovers require 41" high 2x4s and the 53" requires 52" high pieces.

Items you may need to complete the installation:

- Exterior masonry adhesive (epoxy or silicone caulk)
 Wood shims
- VVUUL
- Drill
- 1/8" Masonry drill bit
- Saw (if trimming is required)Diamond masonry blade
- (if trimming is required)
- Carpenter's pencil
- 100 grit coarse aluminum oxide sandpaper
- 2x4s as required
- (see introduction section)2-1/2" wood deck screws
- as required
- #8 x 3-1/2" exterior grade screws* (2 per rail bracket)
- Safety glasses



Stacked Stone

Cobblestone

Fieldstone

Step 1 • Secure 4x4 or 6x6 nominal treated or cedar wood posts A The deck design will dictate how you install and secure the deck posts. Be sure the post extends 41 inches above the deck surface to ensure a proper fit with the 42" postcover and 52" above the deck for a proper fit with the 53" postcover. B Posts should be installed on the inside of the deck frame, to allow the postcover

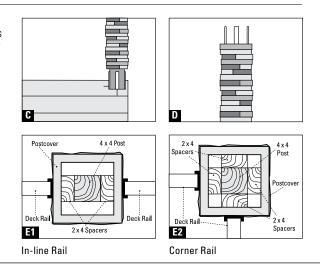
Note: Use a saw with a diamond masonry blade if trimming of the postcover is required. Always trim the bottom of the postcover, which is the side without the lip.

Step 2 • Install postcover

to rest entirely on the decking.

- **C** A 6x6 S4S (smooth four sides) wood post can vary from 5-1/4" to 5-5/8" in thickness and may be subject to slight irregularities. Use wood shims at the top and bottom of the post to ensure a snug fit. Shim the bottom and slide the postcover over the post to the deck base.
- **D** Shim the top of the post for a tight, level fit. It is important to shim evenly on all four sides so the post remains centered within the postcover.
- **E** If the installation is over a 4x4 nominal wood post, then wood 2x4s will need to be added to the sides of the 4x4 post. The number of 2x4s differs

based on the location of the wood posts. You will need (2) 2x4-pieces of lumber per in-line rail postcover and (4) 2x4 pieces of lumber per corner rail postcover. The length of the 2x4 depends on the height of the postcover. 42" postcovers require 41" high 2x4's and the 53" requires 52" high pieces. For inline rail posts, attach the 2x4s to the sides of the wood post where the connector and railing will be installed using 2-1/2" wood deck screws. For corner posts, install 2x4s to all four sides of the post using 2-1/2" wood deck screws.



Postcover Installation

Step 3 • Build rail section

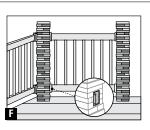
 F Deckorators Postcovers can be used with wood, composite material or vinyl rail sections. Rail connectors (sold separately) allow for trouble-free 2x4 rail installation of 90-degree, 22.5-degree and 45-degree rail angles, and 35-degree stair angles. If installing any railing besides a 2x4, use the connectors provided with the railing.

Build your first rail section to use as a template, before adding the rail connectors to the postcovers.

line it up with the vertical mark on

the postcover. Make sure it is level and plumb, and mark where the rail

connectors should go.



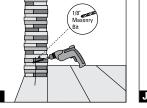
Step 4 • Rail connector placement

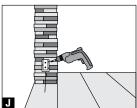
- **G** Before you install the rail connectors, you must first mark the center of the postcover. To do this, make a vertical mark on the postcover using a carpenter's pencil.
- H Lift the rail section into place and

Step 5 • Install rail connectors

- I Hold the connectors up to the postcover in their proper location, mark the connector holes and pre-drill using a 1/8" masonry drill bit.
- J Fasten the connectors to the postcover and wood post using #8 x 3-1/2" exterior grade screws* (sold separately). The screws MUST be attached to the wood post for proper structural support.

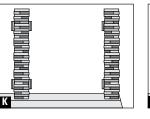
The postcover is for decorative use only. Although the postcover finish was designed with rail connectors in mind, some sanding may be required for a perfectly plumb installation. Simply sand the uneven spot within the location of the connector bracket using 100 grit coarse aluminum oxide sandpaper.

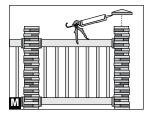




Step 6 • Finish the job

- **K** To complete the first rail section installation, drill holes and install connectors on the other side.
- L Cut rails to fit and place them as you go. Secure rails to connectors with the screws provided. Finish deck railing.
- M If using postcover post caps, use a strong exterior masonry adhesive to secure post cap to the postcover.





Note: If any chips or blemishes have occurred to the finish of the postcover due to mishandling, they can be touched up using

> Deckorators postcover touch up kits, sold separately.

* Screw must be compliant with ANSI/ASME Standard B18.6.1-1981 with a yield strength of 90,000 psi.

POSTCOVER INSTALLATION INSTRUCTIONS 85

Two Piece Stone Postcover Installation Instructions

Designed to be placed around an already installed 4x4 or 6x6 post.

Additional Tools:

Large clamp with padding or adjustable strapping

- The 4x4 or 6x6 post can be shimmed in the same way as the one piece post cover.
- Position one half of the stone post cover into place around the post. Modify shims as needed for a secure fit.
- Apply a bead of concrete adhesive to the edge of the first half, where the two halves meet, according to the directions on the concrete adhesive.
- Slide the second half of the post cover into place around the post. Press firmly into place.
- Remove any excess adhesive from the outside of the post cover.
- Hold the two sides together using two padded clamps or adjustable straps for the time recommeded on the concrete adhesive.

If installing a second stone post cover on top of the first:

- Measure the distance from the top of the lower post cover to the top of the available space and cut the upper stone post cover to the desired height.
- Apply a bead of concrete adhesive to the top edge of the lower post cover, and according to the directions on the concrete adhesive.
- Place half of the upper post cover on top of the lower one. Align with the botton post cover and press firmly into place. Apply a bead of concete adhesive to the edge of the first half, where the two halves meet. Slide the second half of the upper post cover into place around the post. Align with the bottom post cover and press firmly into place.
- Remove and excess adhesive from the outside of the post cover.
- Hold the two sides together using two padded clamps or adjustable straps for the time recommended on the concret adhesive.

If installing a two piece post cap on top of the bottom post cover and around a post:

- Choose the appropriate post cap for the size of your post: nominal 4x4 or 6x6.
- Apply a bead of concrete adhesive to the top edge of the lower post cover, to the edge of the post cap where the two halves meet, and according to
 the directions on the conrete adhesive.
- Place the two halves of the post cap around the post so that they interlock, and press down firmly. Remove an excess adhesive. Use a padded clamp
 or strap to hold in place necessary. Apply a bead of clear caulk to fill any gaps between the post cap and the post.

THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCORDANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMER ASSUMES ALL RISKS AND LIABILITY ASSOCIATED WITH THE CONSTRUCTION OR USE OF THIS PRODUCT. THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL NECESSARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WRITTEN LIMITED WARRANTY, [UNIVERSAL CONSUMER PRODUCTS, INC.] DOES NOT PROVIDE ANY OTHER WARRANTY, EITHER EXPRESS OR IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES.

6257



PLASTIC LATTICE INSTALLATION TIPS

Installation Tips

- Deckorators plastic lattice can be cut and drilled using standard tools.
- Use rustproof or rust-resistant fasteners to maintain the beauty of your project over time.
- For a distinguished look, frame panels with plastic caps and connect panels with plastic dividers (fig. 1).
- Always allow a 1/4" gap between the lattice edge and moulding for the panel to expand and contract with temperature changes (fig. 2).
- Lattice must be attached to a self-supporting structure or frame. Suspend lattice from top row of fasteners.
- Along the top, **predrill oversized holes** every two feet through both the moulding and lattice with a 1/4" drill bit and fasten with screws. Do not overtighten screws.
- Along the sides and bottom, predrill oversized holes every two feet through the moulding only and fasten with screws.
 DO NOT overtighten screws (fig. 3).
- **DO NOT** install lattice in a horizontal application. Without proper support, lattice will be prone to sagging, rippling and heat retention.

Finishing

Deckorators lattice is a nonporous material. Coatings such as paints and stains do not adhere well to the surface.

Plastic Lattice Painting Tips

Materials Needed

- · Aerosol paint
- Plastic lattice sheet

STEP 1

Clean the surface of the paintable plastic lattice sheet with a solution of warm water and dish soap.

Rinse and allow to dry.

STEP 2

Apply two thin coats of primer for plastic over the entire surface, as instructed on the can. Allow to dry between coats. Paint for plastic can be used without primer per product instructions.

STEP 3

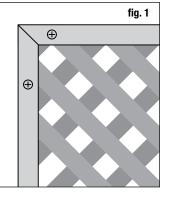
Once dry, apply a thin coat of any aerosol paint over the entire surface, per product directions. Allow to dry as directed.

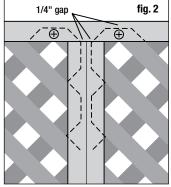
STEP 4

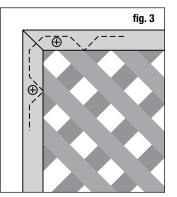
Apply a second coat of aerosol paint over entire lattice sheet. Allow to dry as directed.

This information is given in good faith, without warranty and for guidance purposes only, since the nature and quality of the paint or primer purchased by consumer is out of UFP's control. Under no circumstances should these instructions be followed if they are contrary to the instructions or advice of the primer or paint manufacturer.

THE DIAGRAMS AND INSTRUCTIONS IN THIS BROCHURE ARE FOR ILLUSTRATION PURPOSES ONLY AND ARE NOT MEANT TO REPLACE A LICENSED PROFESSIONAL. ANY CONSTRUCTION OR USE OF THE PRODUCT MUST BE IN ACCORDANCE WITH ALL LOCAL ZONING AND/OR BUILDING CODES. THE CONSUMER ASSUMES ALL RISKS AND LIABILITY ASSOCIATED WITH THE CONSTRUCTION OR USE OF THIS PRODUCT. THE CONSUMER OR CONTRACTOR SHOULD TAKE ALL NECESSARY STEPS TO ENSURE THE SAFETY OF EVERYONE INVOLVED IN THE PROJECT, INCLUDING, BUT NOT LIMITED TO, WEARING THE APPROPRIATE SAFETY EQUIPMENT. EXCEPT AS CONTAINED IN THE WRITTEN LIMITED WARRANTY, THE WARRANTOR DOES NOT PROVIDE ANY OTHER WARRANTY, EITHER EXPRESS OR IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES.









United States and Canada Decking, Porch Flooring and Composite Railing Limited Warranty

ELIGIBILITY

UFP Warranty Corporation (the "Warrantor") is pleased to extend this Warranty to you, the original Consumer of the Deckorators product. This Warranty is valid for original Consumers of Deckorators Decking, Porch Flooring and Composite Railing material used in standard single family residential dwellings and may not be assigned or transferred by you. This Warranty only applies to product purchased and installed in the United States or Canada. This warranty does not cover color variation, scratches, surface marks, marks left by floor coverings, or marks left by moving furniture or objects. Warrantor's sole obligation is limited to refund or replacement of the product, and warrantor shall have no further liability or obligation except as expressly stated herein, if a claim is made under this warranty on a product that is no longer available, warrantor reserves the right to substitute a similar product of equivalent value. Please refer to the Warranty Coverage Matrix below to determine what warranty coverage applies to your product.

DECKORATORS WARRANTY COVERAGE MATRIX					
Composite Material	Deck or Rail Product	Structural Performance	Stain & Fade	Removal & Replacement	
	Voyage	50-Year	25-Year	25-Year	
Mineral-	Dock & Deck	50-Year	25-Year	25-Year	
Based Composite	Vault	50-Year	25-Year	25-Year	
	T&G Porch	50-Year	25-Year	25-Year	
	Frontier	50-Year	25-Year	25-Year	
	Pioneer	25-Year	25-Year	Does Not Apply	
	Heritage	25-Year	25-Year	25-Year	
Wood &	Vista	25-Year	25-Year	25-Year	
Plastic	Trailhead	25-Year	25-Year	25-Year	
Composite	Classic	25-Year	25-Year	25-Year	
	Distressed	25-Year	25-Year	Does Not Apply	
	Tropics	25-Year	25-Year	Does Not Apply	
	Tradewinds	25-Year	25-Year	Does Not Apply	
	Co-Ex Rail	25-Year	25-Year	Does Not Apply	

* Warranty commences at the date of purchase.

LIMITED WARRANTY - STRUCTURAL PERFORMANCE

Warrantor will, at its option, either replace or refund the appropriate prorated portion of the purchase price as set forth in the "Prorated Refund Schedule" below for any Deckorators Decking, Porch Flooring or Composite Railing product used in a residential decking, porch flooring or railing application that splinters, corrodes or becomes structurally unfit due to rot, warp, cupping, checks or damage caused by termites or fungal decay pursuant to the Deckorators Warranty Coverage Matrix Chart herein.

25-YEAR LIMITED WARRANTY – STAIN RESISTANCE

Warrantor will, at its option, either replace or refund the appropriate prorated portion of the purchase price as set forth in the "Prorated Refund Schedule" below for any Deckorators Decking, Porch Flooring or Composite Railing product used in a residential decking or railing application that exhibits permanent staining in the first 25 years from the date of purchase when exposed to food and beverage spills, including wine, tea, coffee, fruit punch, sodas, catsup, salad oils, barbeque sauces, mustard and other food- or beverage- related items that would typically be present on a residential deck or porch. This Warranty will only apply if an attempt is made by Consumer to remove any such spill from the decking material with water and mild household cleaners within forty-eight (48) hours of exposure to the surface, and such attempt is unsuccessful. Staining as a result of spilled abrasive compounds of acidic or basic pH, strong solvents, oil-based paints or stains, metallic rust and other abnormal items not commonly used on a residential deck are not covered under this Warranty.

25-YEAR LIMITED WARRANTY – FADE RESISTANCE

Warrantor will, at its option, either replace or refund the appropriate prorated portion of the purchase price as set forth in the "Prorated Refund Schedule" below for any Deckorators Decking, Porch Flooring or Composite Railing product used in a residential decking or railing application that exhibits "Excessive Color Fade" within the first 25 years from the date of purchase. Excessive Color Fade is defined as a change in color greater than five (5) Delta E (CIE) when calculated according to ASTM D2244 for all non-variegated color surfaces. Excessive Color Fade for variegated color surfaces is defined as an unreasonable amount of color change in excess of "Normal Weathering."

25-YEAR REMOVAL AND REPLACEMENT WARRANTY

If a Deckorators Decking, Porch Flooring or Composite Railing product is proven to be defective and eligible for replacement or refund under the terms of this Warranty and was installed in strict accordance with the installation instructions, Warrantor will provide, in addition to replacement product or a prorated refund of the purchase price, a prorated portion of the reasonable and customary costs associated with installing replacement products, including removal and disposal of defective products ("Replacement Costs"). Replacement Costs will be prorated as set forth in the "Prorated Refund Schedule" and based off of the reasonable and customary Replacement Costs on the date of the original purchase. This amount shall not be adjusted for inflation. Replacement Costs shall not include the cost of permits required or obtained in connection with installing replacement products.

LIMITATIONS ON WARRANTY

Structural Limitations: ONLY the following Mineral-Based Composite may be installed in contact with the ground or submersion in water when a project design requires those conditions; Voyage, Dock & Deck, Vault, T&G Porch, Frontier and Pioneer.

WARRANTY • DECKING AND COMPOSITE RAILING

Stain Limitations: The Deckorators Decking, Porch Flooring and Composite Railing products are not stain-proof. Care must be taken to remove all food, beverage and other spilled materials with water and a mild household cleaner within forty-eight (48) hours of exposure. Stains resulting from spilled abrasive compounds of acidic or basic pH, strong solvents, oil-based paints or stains, metallic rust and other abnormal items not commonly used on a residential deck are excluded from coverage under this Warranty; Excluded stains include but are not limited to pet or human bodily fluids such as blood, vomit, urine or feces, and fungicides, bactericides, biocides and chemical-based plant food. Mold and mildew can settle and grow on any outdoor surface and, if not properly cleaned, can stain that surface. Staining associated with mold or mildew that is not properly cleaned within one week of first appearance is not covered under this Warranty. If stains persist, you will be required to produce documentation that you attempted to have the deck professionally cleaned at least one time prior to making a claim under this Warranty.

Fade Limitations: No decking or porch flooring material is fade-proof when exposed to sunlight and other common atmospheric conditions. Normal Weathering is to be expected over the life of the product and is not covered under this Warranty. Normal Weathering is defined as exposure to sunlight and extremes of weather and atmosphere that will cause any colored surface to gradually fade, chalk, or accumulate dirt or stains.

Warrantor shall not be liable for any incidental or consequential damages arising out of the use or ownership of this product. Some states do not allow limitations on how long an implied Warranty lasts and/or do not allow the exclusion of incidental or 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.

This Warranty does not cover any product that:

- Is damaged by physical abuse, acts of God, acts of war, or other chemical or biological factors.
- Has not been installed in accordance with the manufacturer's installation guidelines and local building codes.
- Has been abused, placed under or subjected to abnormal residential-use conditions or has surface damage or surface punctures.
- Has been painted, coated, used, modified or otherwise treated in any manner other than as intended by Warrantor.
- Has been directly or indirectly exposed to extreme heat (in excess of 250 degrees Fahrenheit).

Failure to follow any restrictions or warnings supplied with the product shall make the Warranty null and void and of no further effect. Warrantor reserves the right to investigate any claim and to inspect the materials for which a claim is made. Proper installation is a condition to coverage under this warranty. Warrantor shall be allowed the opportunity to inspect the materials in their installed condition to determine whether or not the materials were properly installed. Disassembly of the materials prior to inspection by warrantor shall make the warranty null and void. Any construction or use of this product must be in accordance with all local zoning and/or building codes. The Consumer assumes all risk and liability associated with the construction or use of this product. The Consumer or contractor should take all necessary steps to ensure the safety of everyone involved in the project, including, but not limited to, wearing the appropriate safety equipment.

This warranty sets forth the entire responsibility of the warrantor. Warrantor hereby disclaims any implied warranty of merchantability or fitness of the product for a particular purpose. Warrantor shall not be liable for any incidental or consequential damages arising out of the purchase, use, or ownership of the product. Purchase of the product is acceptance of the terms of this warranty.

CLAIM PROCEDURE

To make a claim under this Warranty, the Consumer must, within ninety (90) days of actual or constructive notice of damage covered by this Warranty, do the following:

1. Prepare a letter that includes the following information:

- A list of the number of pieces and the size of each piece for which the claim is made.
- · Proof of Purchase of the product, as shown on the original invoice or receipt.
- Proof of Warranty, as evidenced by the original UPC or end-tag from the product, or a copy of the mark on the product.

2. Mail the above information to:

UFP Warranty Corporation 2801 East Beltline NE Grand Rapids, MI 49525

25-YEAR PRORATED REFUND SCHEDULE

50-YEAR PRORATED REFUND SCHEDULE

Years since purchase	Percent purchase price covered	Years since purchase	Percent purchase price covered
Years 1 - 6	100%	Years 1 - 5	100%
Years 7 - 10	80%	Years 6 - 10	80%
Years 11 – 14	60%	Years 11 - 15	60%
Years 15 - 18	40%	Years 16 - 20	40%
Years 19 - 21	20%	Years 21 – 25	20%
Years 22 - 25	10%	Years 26 - 30	15%
		Years 31 - 40	10%
		Years 41 - 50	5%



ALX Railing and Baluster Limited Warranty

Salt Water Prorated Removal and Replacement Refund Schedule

ELIGIBILITY

Deckorators, Inc. (the "Warrantor") is pleased to extend this Warranty to you, the original consumer or end user (the "Consumer") of the Deckorators product. This Warranty is valid for Deckorators ALX Railings, Aluminum Balusters and Scenic (tempered glass) Balusters ("Railing Product") used in standard residential applications in the United States and Canada, and may not be assigned or transferred by you.

LIFETIME LIMITED WARRANTY AND TEN-YEAR SALT WATER APPLICATIONS LIMITED WARRANTY

Warrantor, at its sole option, will replace or refund the original purchase price for any Deckorators ALX Railings used in a decking/railing application where the coated surface chips, cracks, checks, chalks or peels. Warrantor will also, at its sole option, replace or refund the original purchase price for any manufacturing defects in any tempered glass material or aluminum extrusion for your Deckorators ALX Railings used in a decking/railing application. Installations located within one (1) mile of coastal salt water are limited to the first ten years from date of purchase.

Warrantor shall have no further liability or obligation except as expressly stated herein. If a claim is made under this Warranty on a product that is no longer available, Warrantor reserves the right to provide a similar product of equivalent quality and value.

TWENTY-FIVE-YEAR REMOVAL AND REPLACEMENT WARRANTY

If a Railing Product is proven to be defective and eligible for replacement or refund under the terms of this Warranty and was installed in strict accordance with the installation instructions, Warrantor will provide, in addition to replacement product or a refund of the original purchase price, a prorated portion of the reasonable and customary costs associated with installing replacement products, including removal and disposal of defective products ("Replacement Costs"). Replacement Costs will be prorated as set forth in the "Prorated Refund Schedule" and based off of the reasonable and customary Replacement Costs on the date of the original purchase. This amount shall not be adjusted for inflation. Replacement Costs shall not include the cost of freight and permits required or obtained in connection with installing replacement products.

Prorated Removal and Replacement Refund Schedule

Prorated Removal and Re	eplacement Refund Schedule	(Railing Product installed	within one mile of coastal salt water)
Years Since Purchase Years 1 - 6	% Purchase Price Covered 100%	Years Since Purchase Years 1 - 2	% Purchase Price Covered
Years 7 - 10	80%	Years 3 - 4	80%
Years 11 - 14	60%	Years 5 - 6	60%
Years 15 - 18	40%	Years 7 - 8	40%
Years 19 - 21	20%	Year 9	20%
Years 22 - 25	10%	Year 10	10%

LIMITATIONS ON WARRANTY

The Warranty does not apply to any product that:

- · Is damaged by physical abuse, acts of God, acts of war, exposure to acid rain, abrasive elements (including sand abrasion) or other chemical or biological factors.
- Has not been installed or maintained in accordance with Warrantor's installation and maintenance instructions.
- Has been abused or placed under or subjected to abnormal residential use conditions.
- Has been used, modified or otherwise treated in any manner other than as intended by Warrantor.
- Has been stored improperly prior to installation, resulting in excess exposure to moisture.
- Has been subjected to welding, bending, drilling, cutting or other fabrication not called for in Warrantor's installation guidelines.
- Has been exposed to a corrosive environment, including the use of adhesive tapes, sealants or mastics in direct contact with the coated product.
- Railing Product installed within one (1) mile of any coastal salt water must be regularly cleaned in strict accordance with the guidelines and frequency of Deckorators Care and Cleaning guidelines, and a log kept recording such cleanings.

Beyond Ordinary

ALX Railing and Baluster Limited Warranty

Failure to follow any restrictions or warnings supplied with the Railing Product shall make the Warranty null and void and of no further effect. Warrantor reserves the right to investigate any claim and to inspect any product, as installed prior to disassembly or demolition, for which a claim is made. Any construction or use of this product must be in accordance with all local zoning and/or building codes. The Consumer assumes all risk and liability associated with the installation or use of this product.

Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion of incidental or 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 that vary from state to state.

WARRANTOR SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR OWNERSHIP OF THIS

PRODUCT. The limited warranties expressly provided in this document are the only warranties given on the Product and are in lieu of all other warranties, and Deckorators expressly disclaims all other warranties of any kind, whether express or implied, including without limitation, the implied warranties of merchantability and fitness for a particular purpose or intended use. Purchase and installation of the Railing Product is acceptance of the terms of this Warranty.

CLAIM PROCEDURE

To make a claim under this Warranty to receive replacement product, the original owner must, within 90 days of actual or constructive notice of damage covered by this Warranty, do the following:

- 1. Prepare a letter that includes the following information:
 - A list of the number of pieces and the size of each piece for which the claim is made.
 - Proof of Purchase of the product, as shown on the original invoice.
 - Proof of Warranty, as evidenced by the original product label, or a copy of the mark on the product.

 Mail the above information to: UFP Warranty Corporation
 2801 East Beltline NE Grand Rapids, MI 49525

THERE ARE NO OTHER WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. WARRANTOR DOES NOT MAKE ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS OF THE PRODUCT FOR A PARTICULAR PURPOSE.

7944



WARRANTY INFORMATION

POSTCOVERS

15-year Limited Warranty. During the limited warranty period, Warrantor, at its soles option, will replace or refund a prorated portion of the purchase price for any Deckorators postcovers that exhibits a defect in material or workmanship in the form of splitting, rusting, cracking, or corrosion. The Warranty does not cover costs of installation, removal or reinstallation. Warrantor's sole obligation is limited to a prorated refund or replacement of the Deckorators postcover, and Warrantor shall have no further liability or obligation except as expressly stated herein. If a claim is made under this Warranty on a product that is no long available, Warrantor reserve right to provide a similar product of equivalent quality and value.

For complete warranty, please visit http://www.deckorators.com/.

POST CAPS

Limited Warranty. Warrantor will repair or replace any Post Cap that exhibits defects in material or workmanship, for all but the Solar Light Components in a solar post cap, for a period of two years following date of purchase. Warrantor will repair or replace any Post Cap that exhibits defects in materials or workmanship in the Solar Light Components for a period of one year following date of purchase. Solar Light Components includes the solar panel, the low voltage solar cell and the L.E.D. light bulb. This Warranty does not cover the rechargeable battery. This Warranty does not cover cost of installation, removal or reinstallation. Warrantor's sole obligation is limited to repair or replacement, and Warrantor shall have no further liability or obligation except as expressly stated herein. If a claim is made under this Warranty on a product that is no longer available, Warrantor reserves the right to provide a similar product of equivalent quality and value.

For complete warranty, please visit http://www.deckorators.com/.

LOW VOLTAGE

Limited Warranty. Warrantor's warranty obligation for Deckorators Recessed Lighting Kit is valid only for the standard application and use for which these products are intended. Warrantor, at its sole option, will repair or replace any Deckorators Recessed Lighting Kits used in a decking/railing application where the Product exhibits defects in materials or workmanship within five (5) years following the date of purchase. Warrantors warranty obligation for the Deckorators Transformer is valid only for the standard application and use for which this product is intended. Warrantor, at its sole option, will repair or replace any Deckorators Transformer used in a deck/ railing application where the Product exhibits defects in materials or workmanship within three (3) years following the date of purchase. This Warranty does not cover cost of installation, removal or reinstallation. Warrantor's sole obligation is limited to a replacement of the Product, and Warrantor shall have no further liability or obligation except as expressly stated herein. If a claim is made under this Warranty on a product that is no long available, Warrantor reserves the right to substitute replacement with a similar product of equivalent quality and value at Warrantor's discretion.

For complete warranty - please visit http://www.deckorators.com/

LATTICE

Lifetime Limited Warranty. Warrantor's warranty obligation for the Product is valid only for the standard residential application and use for which the Product is intended. When installed vertically according to UCP instructions and under normal proper use, the Product will uniformly maintain its color and will not peel, pit, rot, blister, warp, crack,

corrode or be consumed by insects. Warrantor, at its sole option, will repair or replace any Dimensions Plastic Lattice used in a standard residential application where the Product exhibits defects or degradations in materials or workmanship following the date of purchase. This Warranty does not cover costs of installation, removal or reinstallation. Warrantor's sole obligation is limited to a replacement of the Product, and Warrantor shall have no further liability or obligation except as expressly stated herein. If a claim is made under this Warranty on a product that is no longer

available, Warrantor reserves the right to substitute replacement with a similar product of equivalent quality and value at Warrantor's discretion.

For complete warranty - please visit http://www.deckorators.com/

GO BEYOND ORDINARY

#Deckorators



THE COLORS REPRESENTED HEREIN ARE REPRODUCED WITH PRINTER'S INKS AND MAY VARY FROM ACTUAL FACTORY PRODUCTS. FOR ACTUAL PRODUCT COLORS AND FINISHES, PLEASE VISIT YOUR DECKORATORS DEALER.

In direct sunlight, exterior building materials such as wood, wood alternatives, metal or concrete may experience increased surface temperatures that are hot to the touch.

Proposition 65 requires businesses to provide warnings to Californians about significant exposures to chemicals that cause cancer, birth defects or other reproductive harm. You can find Deckorators' Proposition 65 warnings at: www.Deckorators.com/Prop65

DECKORATORS.COM 800.556.8449

© 2022 UFP Retail Solutions, LLC. All rights reserved. Deckorators is a registered trademark of UFP Industries, Inc. 13959_3/22