














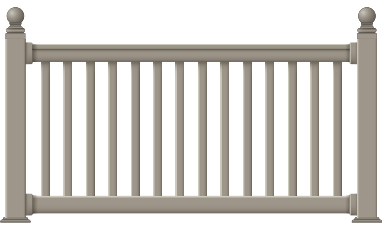
# INSTALLATION & MAINTENANCE


	Part #	QTY.	DESCRIPTION	USE	CALCULATION
<b>DECKING</b>					*LF = linear feet
	D*5145	bag 4/skid 48	12' Deck Board 5/4"	Deck & fascia	(Sq ft of deck & stairs x 2.2) + (LF of fascia x2)
	D*5193	bag 4/skid 48	16' Deck Board 5/4"	Deck & fascia	(Sq ft of deck & stairs x 2.2) + (LF of fascia x2)
	D*5241	bag 4/skid 48	20' Deck Board 5/4"	Deck & fascia	(Sq ft of deck & stairs x 2.2) + (LF of fascia x2)
	D*5289	bag 4/skid 48	24' Deck Board 5/4"	Deck & fascia	(Sq ft of deck & stairs x 2.2) + (LF of fascia x2)



<b>TRIMS</b>					
	D*S5350	15	Stair Plug Kit 5/4"	Surface fastening	1 kit per 12 LF of stairs, fascia & last board on deck
	D*5244 D*4244	12	12' Deck C-Channel 5/4"	Perimeter trim	LF of perimeter & stair edges/12
	D*5572 D*4572	12	12' Flexible Trim Strip 5/4"	Radius trim	LF of radius/12
	D*5544 D*4544	10	12' Deck Starter 5/4"	Starter	LF of starter (including stairs)/12
	D*5572 D*4572	35	6' Step Trim 5/4"	Front edge of stair	LF of steps/6
	D*5596 D*4596	35	8' Step Trim 5/4"	Front edge of stair	LF of steps/8
	D*945 D*944	5	12' Riser Board (7 1/4") or 12' Stringer Cover (12")	Riser & stringer cover	LF of riser & stringer/12

<b>TRANSITION BOARD</b>					
	D*5193E D*4193E	Bag 1/Skid 24	16' Transition Board 5/4"	For miter joints, change of direction, or butt joints	As needed
	D*5193P D*4193P	Bag 1/Skid 24	16' Perimeter Board 5/4"	For picture framing around the perimeter of the deck	As needed
					




	Part #	QTY.	DESCRIPTION	USE	CALCULATION
<b>Accessories</b>					
	DW103	10	#8 x 3/4 S.S. screw (50/Box)	Screw for trim pieces	1 box for every 6 pieces of trim
	DW104	10	#8 x 1 1/2 S.S. screw (250/Box)	Screws for decking & starter	1 box for every 125 sq ft of decking
	D*015	20	#10 x 1 1/2 Colored S.S. Screw (50/Box)	Screws for trim boards	1 bag for every trim board
	AW945	18	Genova Vinyl Sealant (4.5 oz)	Adhesive for step trim/railing parts	25 LF of bead per tube

<b>RAILING</b>					
		1	6' Deck Rail	Deck railing	as needed
		1	8' Deck Rail	Deck railing	as needed
		1	10' Deck Rail	Deck railing	as needed
		1	6' Stair Rail	Deck railing	as needed
		1	8' Stair Rail	Deck railing	as needed

<b>POST COVERS</b>					
	D*038	6	4 x 38 Railing Post Cover	Deck rail post cover	1 for ea. deck rail plus 1
	D*050	6	4 x 50 Stair Rail Post Cover	Stair rail post cover	1 for ea. stair rail
		6	4 x 96 Railing Post Cover	8' post cover	as needed
		30	4 Post Trim Base	Trim ring for post cover base	1 for ea. post cover

<b>POST CAPS</b>					
	D*003	30	4 Bevel Post Top	Post cap	1 for ea. post cover
	D*004	6	4 New England Cap-Classic	Post cap	1 for ea. post cover
		18	Genova Vinyl Sealant (4.5 OZ)	adhesive for post caps	25 LF of bead per tube

## POST WRAPS

	D*920	5	10' 6 x 6 OR 4 x 4 Post Wrap	Wrap for 6 x 6 or 4 x 4 posts	1 for ea. 10' of post needed to be wrapped
	D*902	5	Post Wrap Base	Trim ring for post wrap	as needed
	D*901	5	Post Wrap Top	Cap for post wrap	as needed

## POST BRACKETS

	D*250	5	Colonial Rail Bracket Kit	Bracket kit used when cutting a deck rail section in two	1 kit for ea. railing section side (2 needed for ea. railing)
	D*S250	4	Colonial Stair Rail Bracket Kit	Bracket kit used when cutting a deck rail section in two	1 kit for ea. railing section
	D*260	6	22 1/2° Colonial Angle Rail Adapter Kit	Adapter for 22 1/2° rail	1 set for ea. railing section angled
	D*270	6	45° Colonial Angle Rail Adapter Kit	Adapter for 45° rail	1 set for ea. railing section angled
	D*280	15	Colonial Rail Adapter for Round Column	Adapter to connect to round column	1 set for every side of a railing section mounted to a round column
	DW011	15	Post Mounting Plate (Steel)	Plate for mounting to concrete	1 for ea. post as needed

**POST BRACKETS**  
(cont.)



D\*290 2 An angle adapter for up to 45° on a stair section or to lengthen a rail section that is too short.



D\*190 2 An angle adapter for up to 45° on a stair section or to lengthen a rail section that is too short.

## Genovations Care & Maintenance:

Because Genovations Deck Flooring® is an entirely PVC product containing no wood or organic fibers, it will resist most stains and provide a virtually maintenance free surface. Normal airborne pollutants and dirt from every day foot traffic can be easily washed away with a garden hose and spray nozzle. For tougher stains due to spills of food and beverage products, the following additional steps may be necessary:

1. Use a non-abrasive soap and water applied with a soft bristle brush. Work the brush in the direction of the deck board grain. Rinse thoroughly.

2. A power washer may be used to clean decking at a maximum of 1,500 PSI with a fan tip nozzle 12 inches above the deck surface. Spray in the direction of the deck board grain. Use caution not to damage the surface and always take the proper safety precautions when operating a power washer.

### Additional Considerations:

#### Mold & Mildew

Mold and mildew will only appear on the surface of Genovations PVC Deck Flooring from the decomposition of dead organic material in contact with the surface. It can be easily washed away with a garden hose and nozzle or power washer as described above.

#### Snow & Ice Removal

Use calcium chloride for ice removal. Remove snow with broom or plastic shovel. Do not chop ice and snow off of your deck with sharp edge tools or shovels.

#### Stubborn Stains

The following products have been found to be effective in the removal of a variety of non-food substances

that may appear on your deck. These products should be used with caution as a slight discoloration or loss of finish on the deck board may occur. Test in an inconspicuous area before using:

- Vinyl siding cleaner (Krud Kutter) (removes stubborn stains not removed with soap and water)
- Lift Off Tape Remover (removes adhesive residue, gum, and crayon)
- Lift Off Spray Paint & Graffiti Remover (removes paint and permanent marker)
- Eco Lab "Clean Strike" heavy duty degreaser
- CLR calcium/lime/rust remover

For the best results and to prevent damage to the board please consider the following:

- It is best to complete cleaning during the early morning or evening hours when the deck surface is cool to prevent cleaners from drying and/or evaporating on the deck surface.
- When applying cleaners, spray the deck boards with a power washer or garden hose to pre-wet the deck surface.
- Follow the manufacturer's dilution and application instructions.
- It is important to thoroughly remove all cleaner from the deck surface. It is recommended to use a power washer according to the instructions above.

### Avoid the Following:

#### Rubber or Vinyl Products

Avoid using rubber or vinyl welcome mats, planters, tarps, pool toys or any other similar item on the surface of Genovations Deck Flooring® for any extended period of time.

Additives in these items have a tendency to migrate to the surface of Genovations boards and may discolor them. This is a common occurrence with all decking products with a PVC surface. Welcome mats, grill mats or other similar products can be used provided they have a fiber backing.

### Sun Screens & Bug Sprays

Sun screens and bug sprays contain active ingredients that will react negatively with the surface of any PVC based decking product. If these types of products come in contact with the surface of your Genovations Deck Flooring, clean it off immediately. Check product labels and consult with the manufacturer as to the product compatibility with plastic materials prior to use on or near your deck.

### Patio Furniture & Heavy Objects

Use caution when moving metal chairs, patio furniture, heavy wood and/or iron planters, etc. as items like these may scratch the surface of your deck.

### Citrus Based Cleaners

Acid contained in citrus based cleaners may have a negative reaction to the surface of Genovations PVC Deck Flooring® and are not recommended for use.

### Before You Begin:

Genovations PVC Deck Flooring® is unlike any other alternative decking product on the market today. Spending a few minutes now to fully understand the installation process as well as the performance advantages of Genovations® will enhance your installation experience and provide you with a completed project that will last a lifetime. Please visit [www.genovationsdeck.com](http://www.genovationsdeck.com) to view the most recent installation instructions and videos.

These installation methods are required by Genova Products however they may not cover every installation scenario. Improper installation may void your warranty so it is extremely important that you contact us with any questions you may have regarding your situation. Please feel free to call us at 800-521-7488 with any questions you may have.



It is recommended that all designs be reviewed by a licensed architect, engineer, or local building official before installation. Make sure your project meets local building codes before you begin. Call your local service provider to locate all utilities before starting your deck installation. Genovations PVC Deck Flooring is ICC approved for residential applications. The complete ICC-ES report is available for download at: [http://www.icc-es.org/Reports/pdf\\_files/ESR-1904.pdf](http://www.icc-es.org/Reports/pdf_files/ESR-1904.pdf)

## Prepare for Success:

Genovations can be easily installed using a minimal number of tools. The list of tools and supplies you will need are as follows:

- Measuring Tape
- Table Saw
- Safety Glasses
- Cordless Screwdriver
- Carpenter Square
- Jig Saw
- Skill Saw
- 5/8" Forstner Drill Bit

Properly choosing the saw blade you will be using for your project is critical to the look and performance of your deck. For smooth and accurate deck board cuts, select a 12" thin kerf carbide blade with a minimum of 80 teeth. 96 tooth blades are also an excellent choice for larger deck projects that may require multiple trim piece cuts (Starter Strip and C-Channel).

Proper fastener choice is also a critical factor in the installation of your deck flooring. For optimal performance and ease of installation, Genovations brand #8 stainless steel truss head screws (1¼" for deck boards and Starter Strip; ¾" for C-Channel) are required. When installing your deck flooring, be sure to remember this simple rule: "Straight and tight is right!"

## Additional Considerations:

### Static Electricity

Static build-up is a naturally occurring phenomenon that can happen with many plastic products. Rinsing the deck off with water from a garden hose typically resolves this issue.

### Thermal Expansion & Contraction

Extremely warm or cold outdoor temperatures play a significant role in the installation and performance of all PVC based decking products. Genovations® is no exception. PVC products will exhibit linear thermal expansion and contraction with changes in temperature. Linear movement may be noticed in butt joints when this occurs. Fastening Genovations according to the installation instructions will help manage and reduce the effects of thermal expansion and contraction. Genovations provides installation advantages over other PVC products in that there is no manual end-to-end or side-to-side board gapping required. Deck designs that minimize butt joints and are installed during normal or cooler seasonal temperatures will provide the best results. Allow Genovations to acclimate to the exterior temperature before cutting and installing.

### Extreme Heat Warning

Genovations® PVC Deck Flooring is typically cooler than other decking products; however the darker the color the warmer the surface temperature will be. Footwear may be required in extreme heat situations. Allow for adequate air flow around gas and charcoal grills. Avoid splattering cooking grease.

As is the case with all materials, external sources of heat will cause Genovations® to increase in surface temperature. These heat sources include but are not limited to the following:

- Reflected sunlight by low emissivity (Low-E) or insulated glass in windows and door walls. Elevated surface temperatures caused by

Low-E glass may result in warping, sagging and/or increased thermal expansion and contraction of Genovations PVC Deck Flooring.

- Fire from exterior fireplaces, fire pits, etc. could potentially lead to heat build-up and cause damage to deck flooring.

If you have questions regarding these potential risks please contact the manufacturer of these products prior to installation for recommendations on how to reduce or eliminate the temperature accumulation.

### Cantilevering

Genovations PVC Deck Flooring can be cantilevered to a maximum of 2½" beyond the square edge of the outer most framing support (joist or fascia.)

### Deck Surface Appearance

Genovations® PVC Deck Flooring is designed to replicate the appearance of real wood. As a result, there will be a degree of color and grain variation from board to board. To achieve the surface look that is most aesthetically pleasing it is recommended that you lay out your boards prior to installation. Be sure to pull boards from different 4 pack bags to achieve the look you want. The color variation will in no way affect the performance of the deck boards.

# Decking



<https://youtu.be/5NEse8LE4vY>



Place the Starter Strip flush and square with the edge of the rim joist next to the house and make sure the starter strip extends beyond the ends of the framing in order to account for the eventual installation of the trim and fascia.\*

\*If you're using Genovations® trim board, the Starter Strip will need to extend over the edge by 1½"; if you're using one of our deck boards as fascia, you'll need a 2½" overhang.



Once the overhang is set, screw a 1¼" stainless steel truss head screw into each support along the length of the starter strip. Fasten tightly. If the holes line up over the joists, fasten one of the truss head screws through the hole; if they do not line up, screw directly through the screw flange to avoid screws going in at an angle.



Account for the proper overhang for finishing trim pieces and rim joist coverings. Place the tongue of the first deck board into the groove of the starter strip. Tightly fasten the deck board into the framing in the same way that you fastened the starter strip: one truss head screw placed vertically through the screw flange at every joist location, 16" apart.



Repeat the previous step for each consecutive deck board until you reach the last board. Cut the last deck board to width by ripping down on a table saw, making sure to account for the proper overhang.



To fasten the last deck board, drill a 5/8" hole through the surface of the board using a Forstner bit, directly over the outer rim joist. Using a Genovations® stair plug kit, drop the cylinder into the hole with the screw hole facing down. Put a truss head screw into the bottom of the cylinder to tightly fasten the deck board to the outer rim joist, followed by the pressure-fitting cap. Repeat the process every 16" along the outer rim joist.



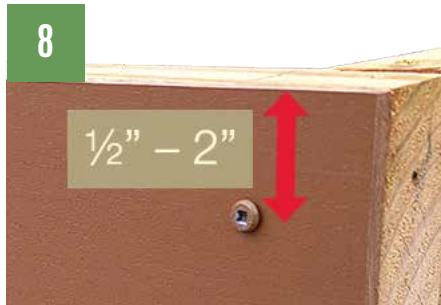
You'll now need to install the deck board trimming. There are two options available for this: The Trim Strip and the C-Channel. Installation for either piece is identical. The pieces will snap into place over the ends of the exposed deck boards, and the edge of the last deckboard installed.\*

\*Reversing the action on your saw blade will provide a cleaner cut on all trim pieces.





Tightly fasten the Trim Strip or C-Channel to the deck boards from underneath using  $\frac{3}{4}$ " stainless steel truss head screws; one screw in each screw hole. Where the trim pieces meet, add additional screws from underneath the deck board, locating a screw  $\frac{1}{2}$ " from the corner on both sides of the joint to help manage the expansion and contraction of the material.



To cover the fascia, on small decks under 12 ft in length, you can use Genovations® Trim Board. Using color matched  $\frac{1}{4}$ " truss head screws, fasten this piece to the rim joist for a finished appearance. To allow for expansion and contraction, drill two  $\frac{1}{4}$ " oversized holes, one above the other, not closer than 1" to the edge of the Trim Board, and not farther than 2". Drill these holes every 16" along the length of the Trim Board. Finally, screw the Trim Board to the joist, being careful not to over-torque the screw. For aesthetic and performance purposes, we recommend that deck boards be used to trim rim joists on decks with dimensions greater than 12 ft in length



Using #8  $1\frac{1}{4}$ " truss head screws every 16", secure the Starter Strip along the bottom edge of the front rim joist, allowing for a 1" extension beyond the corners of the framing. Drop the first board into the Starter Strip and secure through the fastening flange. Rip a second board to the proper width and slide it into place. Securely fasten the second board every 16" using the method described on Page 5, Illustration #5. Cover the outside corners with C-Channel cut to length. Secure with #8  $\frac{3}{4}$ " truss head trim screws at the top and bottom of both sides of the corner.



Deck boards can also be installed as fascia in a vertical position. Cut a Starter Strip to  $1\frac{1}{4}$ " longer than width of rim joist. Beginning on either side of the deck, attach the Starter Strip to rim joist in the corner where it meets the attached structure using Genovations #8  $1\frac{1}{4}$ " truss head screws. Tightly fasten boards to rim joist by screwing through the flange 1" from the top and from the bottom of the joist. Continue this process along the side of the deck. Cut the last board to proper width, ending flush with the corner framing and tightly secure with 2 Genovations Stair Plugs and #8  $1\frac{1}{4}$ " truss head screws. Repeat this process on opposite side of deck. Install remaining boards by working across the front of the deck from left to right. Attach a piece of C-Channel to the end of the first board using Genovations #8  $\frac{3}{4}$ " truss head screws prior to securing the board to the framing using Stair Plugs and #8  $1\frac{1}{4}$ " truss head screws. Install boards as previously directed. Attach a piece of C-Channel to the end of the last board installed prior to securing it to the framing. Open ends of left and right side of deck fascia will butt into the side of the corner C-Channel. Complete installation by attaching C-Channel to bottom of deck fascia using Genovations #8  $\frac{3}{4}$ " truss head screws every 16".

# Other Installation Patterns

On decks exceeding 24' in length, consider a perpendicular or diagonal deck board installation. This is the preferred method to control expansion and contraction at butt joints. Support joists must run parallel to the house in these installations. For perpendicular installations:

1

Create a "Starter Board" by ripping a deck board back to the outside wall of the interior "I-Beam" closest to the tongue edge of the board.

2

Allowing for a minimum 1¼" overhang beyond your deck frame (up to 2 ½" if you are using deck boards as fascia), tightly secure your Starter Board to the rim joist beginning on the left or right side of the deck framing. Screw through the flange every 16" using a Genovations® #8 1 ¼" stainless steel truss head screw. Secure an additional screw directly through the deck board as shown on Page 6 Illustration #5, every 16".

3

Continue to install boards as directed on Page 6.

\*Your support joists must run parallel to the house or adjacent structure for a perpendicular deck board installation.

# Transition Boards <https://youtu.be/GS-pnDbhKHE>

for miter joints, change of direction, or butt joints

The hollow core design of Genovations® PVC Deck Flooring offers the unique ability to hide the effects of thermal expansion and contraction along the seams of boards meeting at a 45° or 90° angle, or meeting end-to-end.



1 Proper framing is essential to a successful transition board installation. A minimum combination of one 2 x 6, with a joist on either side, must be used to provide the required framing surface needed to secure and support the transition board and the adjacent deck boards. The framing should run the full length of the transition board.



2 Leave a 3 1/2" gap between the ends of the boards that fall over the transition board framing. Secure the deck boards to the framing by double screwing the ends; one through the slot in the board screw flange, and a second screw directly through the flange, directly behind or in front of the previously installed screw, as the framing allows. All screws must be straight and tight. Install the vinyl shim (included) as pictured before installing the transition board.



3 Center the transition board between the deck boards, leaving a 1/4" gap on either side. Butt the outside end into the edge of the finishing trim piece (C-Channel or Trim Strip) or to the inside edge of picture frame board. Place the house end flush with the starter strip, or butt into the inside edge of the picture frame board.



4 Secure the transition board from underneath using 2" deck screws. Place two screws every 16" centered between the left and center "I" beam, and the right and center "I" beam. Hold the transition board down from the top surface and run 2" deck screws up through the framing from underneath. Do not over-tighten. The ends of the transition board must be secured through the top surface into the rim joists using a Stair Plug Kit (see step 5).



5 If you can't gain access from underneath, drill holes through the top surface of the transition board using a 5/8" Forstner drill bit. Center the holes between the "I" beams. Drop the Stair Plug cylinder into the hole with the small screw hole facing down. Place a Genovations® #8 1 1/4" truss head screw into the bottom of the cylinder and tightly fasten through the bottom of the transition board. Fill the hole with the plastic cap included in kit. Place two Stair Plugs every 16".



6 Using the dauber, lay a thick bed of adhesive (part#DW745) directly on top of the transition board shim, 12" either side of the transition board joint. The shim must be a solid piece under the transition board joint. Place the transition boards on top of the bed of adhesive quickly, before it has a chance to set. Secure the transition boards tightly together at the joint, per the instructions in step 4 or 5.

# Perimeter Boards <https://youtu.be/XZ20kNdmx1c>

for picture framing around the perimeter of the deck

The hollow core design of Genovations® PVC Deck Flooring offers the unique ability to hide the effects of thermal expansion and contraction along the perimeter of the deck.



Proper framing is essential to a successful perimeter board installation. Solid 2x10 blocking is needed to secure and support the perimeter board and the adjacent deck boards.



Measure and mark where the interior deck boards will end. To determine that mark, take  $8\frac{1}{4}$ " and subtract the thickness of the fascia, then add  $\frac{3}{8}$ " for the gap between the interior deck boards and the perimeter boards. If using Genovations® deck boards for fascia, as recommended, the measurement from the outside of the framing to that mark would be  $7\frac{5}{8}$ ".



Install the deck boards ending them at the line previously marked. Secure the deck boards to the framing by double screwing the ends; one through the slot in the board screw flange, and a second screw directly through the flange directly behind or in front of the previously installed screw. All screws must be straight and tight.



Measure  $5\frac{3}{8}$ " from the end of the interior installed deck boards and mark a line. Install vinyl shims (included) flush with this line, tacking them down to stay immobile. Secure the perimeter board with the screw flange placed along this line. The screws must go through both the screw flange and shim, every 16". Place a second fastener between the I-beam every 16". Screw from underneath, through the framing using 2" deck screws, or from the top using stair plugs.



Once the perimeter boards have been secured, install the second board. This is a regular deck board with the screw flange cut off. Secure using stair plugs into the outside rim joist, every 16" inches. Be sure to leave a  $\frac{3}{8}$ " gap around solid objects such as railing posts or walls.



We recommend that the butt ends be square-cut in a basket weave pattern as opposed to miter cutting. Perimeter boards will expand and contract with changes in temperature and using a square-cut joint provides a nicer appearance.





If your deck is longer than the perimeter board, you will need to butt the perimeter boards end-to-end. To help manage gapping in the butt joint during temperature changes, we recommended that you use a shim to bridge the butt joint by at least 12" in both directions. Spread a generous amount of adhesive (part#DW745) on the shim, 12" in both directions, and lay the perimeter board on top, and fasten.



When using perimeter boards along with transition boards, butt the transition board into the perimeter board.



Finish the ends and edges by using Genovations® c-channel around the perimeter.



Boxed perimeter boards are cut from Genovations® 5/4 deck boards and are available in 16' lengths only. If other lengths are needed, they can be field cut with a table saw. First cut off the tongue and then stand the board on edge. Rip the board leaving the thickness of the top surface. Now lay the board flat and rip along the outside edge of the I-beam.



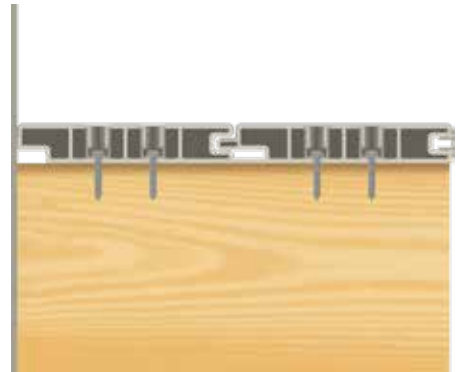
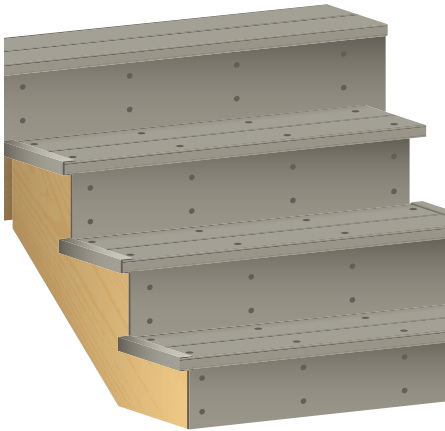
When cutting is complete, the perimeter board should look like this with the tongue side removed. Genovations® perimeter boards need to be shimmed to the proper height so when field cutting you must purchase Genovations® shims separately. You will need 2 linear feet of shim for every linear foot of perimeter board.



# Stair Tread



<https://youtu.be/-jTvCHI9qRw>



1

Stair steps must be supported with step stringers on maximum 16" centers (Figure D). Each step requires 2 deck boards, 1 Trim Board, and 1 Step Trim. Cut stringers with a maximum rise of 7" and a run of 10 $\frac{1}{4}$ " to provide stair treads with a  $\frac{3}{4}$ " nosing. Add filler boards (if necessary) to adjust the deck board to overhang  $\frac{3}{4}$ ".

2

Cut the Trim Board length flush with the outside edge of the stringers. Attach Trim Boards using two 1 $\frac{1}{4}$ " color matched screws on every stringer. Install screws not less than  $\frac{1}{2}$ " and no more than 2" from the edge of the Trim Board and not less than 1" and no more than 2" from the bottom of the Trim Board to allow for the height of the deck board.

3

Position the deck board to center the screw slots over the stair stringers. Cut the deck board length to provide a 1 $\frac{1}{4}$ " overhang on each side of the end stringers.

4

Cut the tongue off the first deck board and place the cut edge against the Trim Board (Figure E). Insert screws in the screw slots at each stringer and tighten securely. Cut the screw flange off the second deck board then cut to length. Insert tongue of the second deck board into the groove of the first deck board.

5

Drill holes through the top surface of each deck board using a  $\frac{5}{8}$ " Forstner bit. Center the holes between the deck board ribs and over each stringer (Figure E).

6

Insert the cylinder from a Stair Plug Kit (small hole down) into each drilled hole. Insert a Genova's #8 x 1 $\frac{1}{4}$ " truss head screw into the cylinder and secure tightly through the bottom of the deck board. Insert plugs into cylinders and secure with Genova Vinyl Sealant. Ensure that they are flush with the deck surface. Cut Step Trim to length and secure it into groove of the second deck board using Genova Deck Joint Adhesive and a disposable brush (Figure E). Insert the step trim into the stair board groove. Press it firmly into place, ensuring that the step trim is inserted completely into place along the full length of the board.

# Railing



<https://youtu.be/VFyg84qrKt4>

**!** Be sure to check with your local building department to ensure that you are constructing your railing according to local building codes:

- 6' section: Maximum of 71 $\frac{3}{4}$ " on center
- 8' section: Maximum of 95 $\frac{3}{4}$ " on center
- 10' section: Maximum of 119 $\frac{3}{4}$ " on center



When mounting your post, be sure to secure it to the framing and not the deck surface. Cut the decking around the post leaving  $\frac{3}{8}$ " relief to allow for expansion and contraction, and cut the wood posts to 38" above the deck board surface (when installing 36" high railing).



Add the trim ring to the bottom of the 38" PVC post cover, and slide it over the 4" X 4" wood post. If the post cover is loose, you may need to install shims between the wood post and the post cover in order to prevent the cover from buckling in during installation of the brackets.



Find the center line of the post and mark it to aid in the placement of the brackets. The bottom of the bottom bracket is 1  $\frac{3}{4}$ " up from the decking surface. The bottom of the upper bracket is 32  $\frac{3}{8}$ " from the decking surface. Mark the bolt holes in the bracket, along the center line of the post. Pre-drill holes using  $\frac{1}{8}$ " drill bit, then secure the brackets in place with the lag bolts provided.



For shorter sections than provided, cut the upper and lower rails to length. To find the length of the aluminum step channel, place the tape measure inside the bottom post bracket where it says, "Insert to here" and measure to the same location on the bottom bracket of the opposite post. Repeat this step for the top post brackets to find the length of the aluminum P-Channel.



Cut the 2 X 4 vinyl rails 1  $\frac{3}{8}$ " shorter than the aluminum channels (equal amounts from each end.) Do not cut through a routed hole. If necessary, cut more from one end and less from the other to maintain overall length.



Slide the P-Channel into the top rail with the long side of the channel pointing towards the routed holes. Slide the Step Channel into the bottom rail, with the long side of the channel pointing towards the routed holes. Slide the bracket covers over the ends of the rails with the larger opening facing out. Place the bottom rail into the bottom post brackets.



Place the balusters into the routed holes in the bottom rail, with notches facing the ends of the rail. Push the balusters in until they snap into place. Rest the top rail into the top post brackets with the routed holes facing down. While holding the top rail, push the balusters up into the routed holes.



Both top and bottom rails should be resting on the bottom of the metal post brackets. Check to make sure the balusters are plum, then fasten the rails into the brackets using the self-tapping screws provided; two in each bracket. Make sure not to over-tighten.



To finish the assembly, slide bracket covers until they snap up against the posts.

# Stair Railing



<https://youtu.be/ikgoZd1zjM4>



Turn off the power before installing or removing connectors. Use products in accordance with local and national codes. Stairways without railings offer no protection from falling. Falling from a stairway could result in serious injury. Stair rails and a handrail are required on stairs with a total rise exceeding thirty inches.



## Tools

Measuring Tape	Pencil/Marker	Handsaw
Hacksaw	Drill w/ 1/8" & 5/32" Drill Bits	Screwdriver
Level	7/16" Socket Wrench	Rope

## Components

6' Square	8' Square	6' Deluxe Square/ Colonial	8' Deluxe Square/ Colonial	
2	2	2	2	2' x 4' Vinyl Rails
		1	1	Colonial Rail Cover
1	1	1	1	Aluminum P-Channel (Top Rail Insert)
1	1	1	1	Aluminum Step-Channel (Bottom Rail Insert)
12	16	12	16	Balusters
4	4	4	4	Mounting Brackets
4	4	4	4	Mounting Bracket Covers
4	4	4	4	Stair Rail Adapters
4	4	4	4	1/4" x 3" Lag Screws (attach Adapters to Posts)
4	4	4	4	1/4" x 4" Lag Screws (attach Adapters to Posts)
8	8	8	8	#10 x 3/4" Pan Head Sheet Metal Screws (attach Aluminum Inserts to Brackets)

## Parts Need to Assemble Rail Section

4" x 4" x 38" Post Cover	4" x 4" x 50" Stair Rail Post Cover	4" x 4" Treated Wood Post
4" Post Trim Base	Genova Vinyl Sealant	Post Tops: Gothic, Ball, Bevel, or New England

**Optional Parts:** Bracket kits (to make two shorter sections from one section), Round Handrail Cover, Handrail Bracket Kit, Universal Rail Adapter Kit

## Before You Start...

Be sure to consult your local building department for codes and regulations for guardrail installations. Your new railings have been evaluated and quality-tested to ensure that they comply with the International Residential Code (IRC) requirements and AC-174 entitled, "Acceptance Criteria for Deck Board Span Ratings and Guardrail Systems" (Guards and Handrails), and have been assigned ICC Evaluation Service Reports #ESR-1904. This product is not to be used for commercial installations. This product is not to be used in access ramps for the disabled. This product is not to be used in marine fueling stations. This product is to be used only in exterior applications for residential construction.

## Sizing Chart

Based upon a 7" x 11" step system

# of Steps	Center Dimensions $\pm\frac{1}{4}$ "	Stair Section Kit Size
2	22"	6'
3	31 $\frac{3}{8}$ "	6'
4	45 $\frac{3}{8}$ "	6'
5	54 $\frac{3}{4}$ "	6'
6	64 $\frac{3}{8}$ "	6'
7	79 $\frac{1}{8}$ "	8'
8	83 $\frac{7}{8}$ "	8'

## 1 - Posts

### 1.1

Install treated wood posts in accordance with building code requirements. See the sizing chart for post locations.

### 1.2

Cut upper wood posts to 38" above the deck surface. Cut the lower wood posts to 42" above the stair tread.

### 1.3

Slide the Genova 4" x 38" Post Cover over the upper posts and a Genova 4" x 50" Post Cover over the lower posts. Cut the 4" x 50" Post Cover to 42" if it sits on the stair tread.

### 1.4

Install shims between the wood post and the Post Cover on all four sides. We recommend strips of plywood or a solid weather resistant material as shim stock.

### 1.5

Slide the 4" Post Trim Base over the Post Cover and push it down so it is flush with the deck.

## 2 - Mounting Brackets

### 2.1

To determine the locations of the Brackets, lay a straight edge across the nose of the stairs and against the side of the Post Covers and mark with a pencil (Figure B.1). Transfer the pencil marks to the side of the top post facing down the stair and to the side of the bottom post facing up the stairs.

### 2.2

Mark the upper and lower Stair Rail Posts at  $\frac{1}{4}$ " and at 29  $\frac{9}{16}$ " above this mark (Figure B.2). These marks locate the bottom edge of the Stair Rail Adapters. Center the Stair Rail Adapters with the webbed side against the post and pre-drill  $\frac{1}{8}$ " holes for the mounting screws.

*Deluxe Square and Colonial Sections only:* The 2 square adapters go on the bottom of the Post. The "A" Colonial Adapter attaches to the top of the upper Post and the "B" Colonial Adapter attaches to the top of the lower Post.

### 2.3

Mate the Mounting Brackets to the Stair Rail Adapters using the 2 locating pins on the flat side of the Adapters. Attach the Mounting Bracket and Stair Rail Adapter at the appropriate post locations with one 3" and one 4" Lag Screw (Figure C).



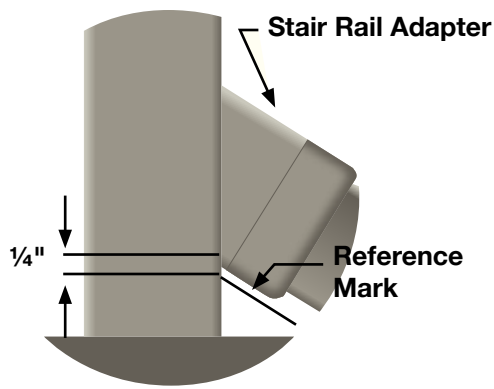


Figure B.1

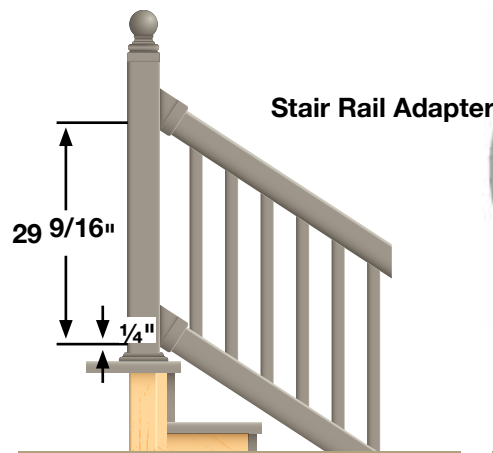


Figure B.2

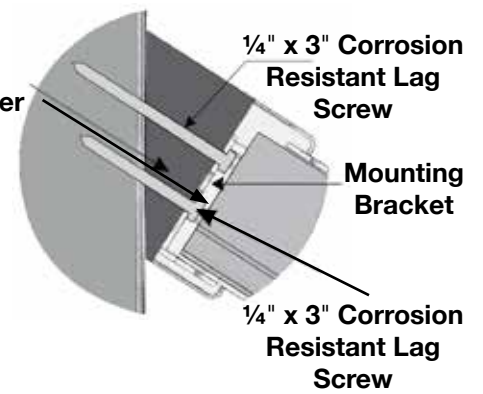


Figure C

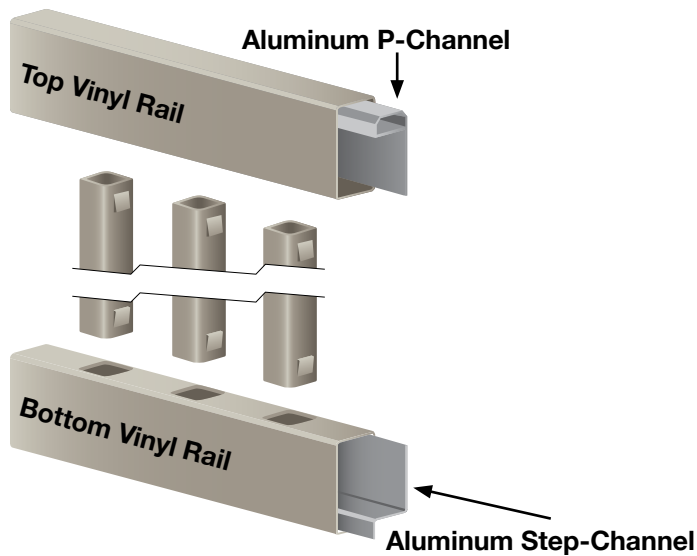


Figure D

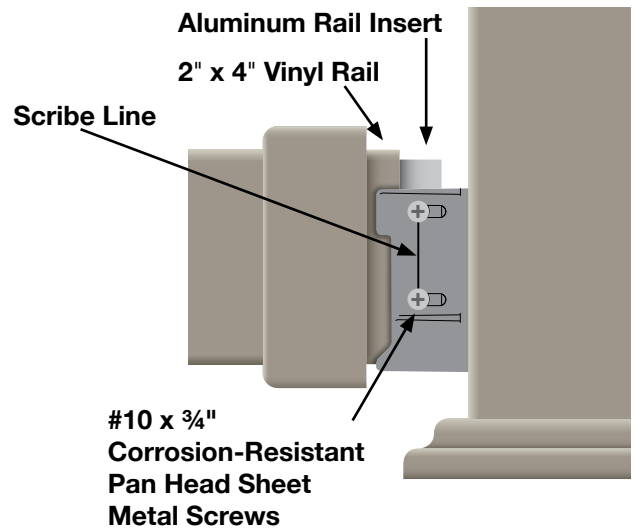


Figure E

## 3 - Rails

### 3.1

Measure the distance between the "Insert to Here" windows in the top Mounting Brackets (hook the measuring tape onto one window and measure the distance to the opposing window). Cut, if necessary, the Aluminum P-Channel Rail Inserts to this length.

### 3.2

Measure the distance between the "Insert to Here" window in the bottom Mounting Brackets. Cut (if necessary) the Aluminum Step-Channel Insert to this length.

### 3.3

Subtract 1 3/8" from the (cut) Aluminum Rail Insert lengths, and cut the corresponding 2" x 4" Vinyl Rails to that length. When cutting the Rails, observe the "Top Rail-Cut This End Only" sticker and the "Bottom Rail Cut This End Only" sticker. These stickers must both be oriented toward the top of the stairs.

## 3.4

*Deluxe Square and Colonial Sections Only:* Cut the Colonial Rail Cover to the same length as the top Vinyl Rail. Apply a generous bead of Genova Vinyl Sealant down the center and on the sides of the rough portion of the Colonial Rail Cover. Insert the 2" x 4" Vinyl Rail in the trough so the Baluster holes are visible (opposite and away from the Colonial Rail Cover.) Square up the ends and clamp the pieces together. Wipe off any excess Sealant. Allow the Sealant to set approximately 30 minutes before continuing.

# 4 - Section Assembly

---

## 4.1

Lay Vinyl Rails on a clean, flat surface with the Baluster holes facing each other. Insert the Aluminum P-Channel Rail Insert into the top Vinyl Rail. The long leg of the Aluminum P-Channel Rail Insert must point down and toward the holes, (Figure D)

## 4.2

Insert the remaining Aluminum Step-Channel into the bottom Vinyl Rail. The long leg of the Aluminum Step-Channel must point up and toward the holes. The long leg of both Aluminum Rail Inserts must be on the same side of the holes.

## 4.3

With the bottom Rail lying on its side, insert the Balusters into the routed holes.

## 4.4

While still lying on its side, insert the Balusters into the Top Rail, working from one end to the other.

## 4.5

Use rope to cinch the rail assembly together. This holds the entire assembly together while moving it into place.

## 4.6

Slide the Mounting Bracket Covers over the ends of the Vinyl Rails with the notched ends on the bottom and facing toward the Balusters. (To accommodate a close Baluster, rotate the Bottom Bracket Cover, so the "notched" side faces up. If necessary, split the cover and glue together after installation.)

## 4.7

Slide the assembled rail section into the Mounting Brackets with the long legs of the Aluminum Rail Inserts facing the stairs. Center the assembly by aligning the Aluminum Rail Inserts with the "Insert to Here" windows in the Brackets. The Aluminum Rail Inserts should extend 11/16" beyond the Vinyl Rail at each end.

## 4.8

Locate the Scribe Lines in the center of the elongated holes on the Mounting Brackets. Drill 5/32" diameter holes through the long legs of both Aluminum Rail Inserts at these locations (two per bracket). (Figure E)

## 4.9

Secure the Aluminum Rail Inserts to the Mounting Brackets using #10 x 3/4" Pan Head Sheet Metal Screws in each of the holes. **CAUTION: Do not over tighten the screws.**

## 4.10

Slide the Mounting Bracket Covers over the Mounting Brackets until they snap into place. Remove the rope.

## 4.11

Apply Genova Vinyl Sealant to the inside flat surfaces of the Post Tops and attach them to the Post Covers.

# 4" Post Wrap

**!** To avoid serious eye and hand injuries or blindness, always wear safety glasses and gloves.

## Tools

Measuring Tape	Pencil/Marker	Fine-Toothed Saw
Masking Tape	Rubber Mallet	Square

## Components

10' Flat Panels x4    10' Vertical Corners x4

## Designed for nominal size 4" x 4" Wood Posts

**!** Remember that this product is a cover and not a seal. The end grain at the base and top of any wood product being covered should be properly sealed prior to the installation of this product.

## Vertical Corner Strips and Flat Panels Assembly

Measure the length of the wood post, which is to be covered with the Post Wrap Kit. Cut four Vertical Corner Strips and four Flat Panels 1" shorter than the exposed portion of the wood post they will be covering.

*Note: Flat Panels and Vertical Corner Strips can be easily cut using a fine tooth saw. An alternative method for cutting the Flat Panels is to make a deep scribe line utilizing a square and a Utility Knife. Then position the Panel on a flat surface (such as a table) with the scribe line even with the table's edge. Carefully bend the Flat Panel and it will snap off at the scribe line. Be sure to keep the ribbed edge side of the Flat Panel facing to the outside during installation. Masking tape is a helpful assistant in assembling the Vertical Corner Strips and Flat Panels.*

Center each of the Flat Panels against each of the four post surfaces (Figure A) and using masking tape temporarily secure the top edge of each Flat Panel to the top of the wood post. The bottom edge of each Flat Panel should be 1/2" below the top of the wood post. Working from the top down, insert the ribbed edges (facing outward, with the smooth side against the wood post) of each Flat Panel into a Vertical Corner strip. Working downward, gently squeeze the four Vertical Corner strips onto each Flat Panel.

Continue squeezing the four Vertical Corners until all the Flat Panels are firmly and evenly inserted, taking care to keep the Vertical Corner strips "Square" (Figure B) and using as much force as necessary to assure even and secure interior panel contact with each side of the wood post. Gentle taps with a rubber mallet may prove useful.

After the above is completed, drive one screw (Genovations #8 x 3/4" screw, part # DW013) into the bottom of the wood posts, between the bottom edge of all four Flat Panels and the floor, so to prevent the Flat Panels from sliding below the floor level.

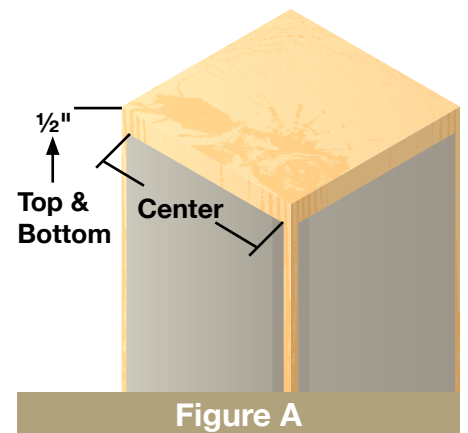
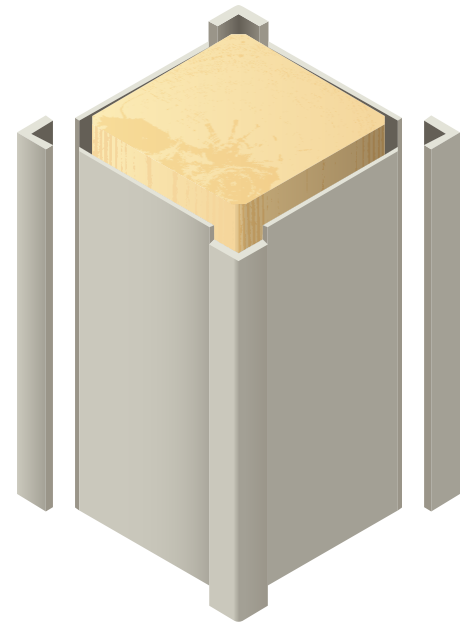


Figure A

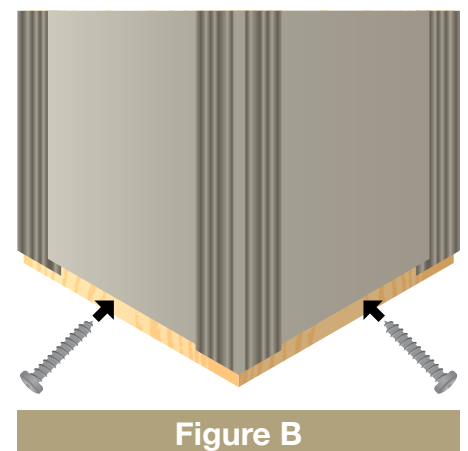


Figure B

## In Case You Need to Remove an Inserted Panel...

**1**

Insert a short length of scrap Flat Panel between a Vertical Corner and a Flat Panel with the ribbed side facing the post.

**2**

Slide the short length of the Flat Panel downwards and push the Corner Strip gripping surface away from the Flat Panel.

**3**

After one Flat Panel has been removed from one Vertical Corner, the other Flat Panels can be easily removed by rotating the Corners to disengage the ribbed edge of the Flat Panels.

## Post Wrap Finishing Trim Options

Post Wraps can be trimmed at each end using Genovations® Post Wrap Trim Bases (such as in Porch Post installations).

*Note: 4" Post Wraps are not designed to be used with Genovations® Railing. Use Genovations® 4" Post Sleeves with Genovations® rail sections.*

# 6" Post Wrap

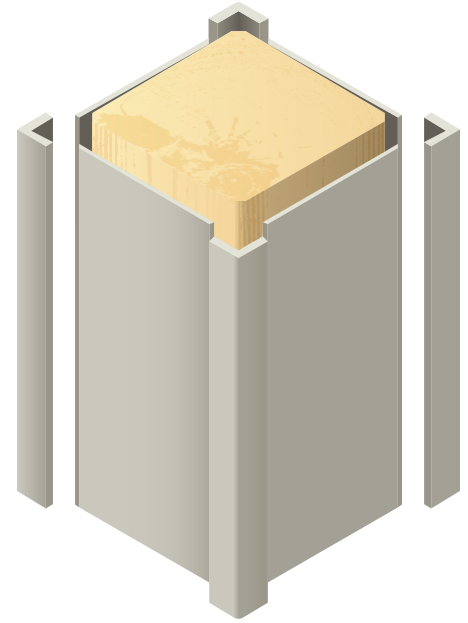
**!** To avoid serious eye and hand injuries or blindness, always wear safety glasses and gloves.

Measuring Tape	Pencil/Marker	Fine-Toothed Saw
Masking Tape	Rubber Mallet	Square

10' Flat Panels x4    10' Vertical Corners x4

## Designed for nominal size 4" x 4" Wood Posts

**!** Remember that this product is a cover and not a seal. The end grain at the base and top of any wood product being covered should be properly sealed prior to the installation of this product.



## Vertical Corner Strips and Flat Panels Assembly

Measure the length of the wood post, which is to be covered with the Post Wrap Kit. Cut four Vertical Corner Strips and four Flat Panels 1" shorter than the exposed portion of the wood post they will be covering.

*Note: Flat Panels and Vertical Corner Strips can be easily cut using a fine tooth saw. An alternative method for cutting the Flat Panels is to make a deep scribe line utilizing a square and a Utility Knife. Then position the Panel on a flat surface (such as a table) with the scribe line even with the table's edge. Carefully bend the Flat Panel and it will snap off at the scribe line. Be sure to keep the ribbed edge side of the Flat Panel facing to the outside during installation. Masking tape is a helpful assistant in assembling the Vertical Corner Strips and Flat Panels.*

Center each of the Flat Panels against each of the four post surfaces (Figure A) and using masking tape temporarily secure the top edge of each Flat Panel to the top of the wood post. The bottom edge of each Flat Panel should be 1/2" below the top of the wood post. Working from the top down, insert the ribbed edges (facing outward, with the smooth side against the wood post) of each Flat Panel into a Vertical Corner strip. Working downward, gently squeeze the four Vertical Corner strips onto each Flat Panel.

Continue squeezing the four Vertical Corners until all the Flat Panels are firmly and evenly inserted, taking care to keep the Vertical Corner strips "Square" (Figure B) and using as much force as necessary to assure even and secure interior panel contact with each side of the wood post. Gentle taps with a rubber mallet may prove useful.

After the above is completed, drive one screw (Genovations #8 x 3/4" screw, part # DW013) into the bottom of the wood posts, between the bottom edge of all four Flat Panels and the floor, so to prevent the Flat Panels from sliding below the floor level.

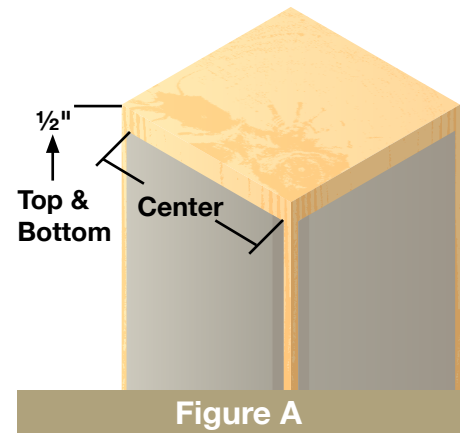


Figure A

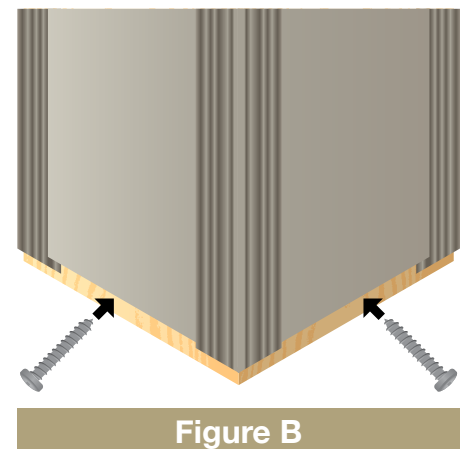


Figure B



## In Case You Need to Remove an Inserted Panel...

1

Insert a short length of scrap Flat Panel between a Vertical Corner and a Flat Panel with the ribbed side facing the post.

2

Slide the short length of the Flat Panel downwards and push the Corner Strip gripping surface away from the Flat Panel.

3

After one Flat Panel has been removed from one Vertical Corner, the other Flat Panels can be easily removed by rotating the Corners to disengage the ribbed edge of the Flat Panels.

**If Porch Rails are going to be attached after the Post Wrap kit has been installed, follow the additional instructions noted below:**

1

Carefully read the instructions accompanying the Porch Rail Kits.

2

Measure up from the floor 1 $\frac{3}{4}$ " and draw a short horizontal line.

3

Measure up from the floor 32 $\frac{3}{8}$ " (for a 36" Railing Kit) or measure up 38 $\frac{3}{8}$ " (for a 42" Railing Kit) and draw a short horizontal line.

4

Hold the metal brackets against the Flat Panel so the bottoms of the brackets are aligned with the two horizontal lines. While holding the metal brackets against the Flat Panels, use a pencil to trace the two bracket mounting holes onto the Flat Panels.

5

Use a 1 $\frac{1}{2}$ " paddle bit and drill four holes in the Flat Panels (only), where the bracket holes were circled.

6

The clearance holes will allow for expansion and contraction of the Flat Panels.

7

Drill the lag screw pilot holes into the wood post as per the Rail Kit instructions.

8

Place two  $\frac{3}{8}$ " x  $\frac{3}{4}$ " x 1/16" Flat Washers between each Porch rail mounting bracket hole (total of 4) and the wood post, centering the washers in the 1 $\frac{1}{2}$ " drilled holes.

9

Secure the mounting brackets to the post with lag screws, being careful to not over tighten them.

## Post Wrap Finishing Trim Options

Post Wraps can be trimmed at each end using Genovations® Post Wrap Trim Bases (such as in Porch Post installations). In other installations, Post Wraps can be trimmed by using a Post Wrap Trim Base at the bottom end and a Post Wrap Top Kit at the top end of the post.

# Post Wrap Top Installation

**!** To avoid serious eye and hand injuries or blindness, always wear safety glasses and gloves.

## Tools

Post Wrap Top Kit	Eight Genovations #8 x 3/4" stainless steel screws (part # DW013)	Square
Vinyl Sealant (part # AW945)	Screw Driver	Power Drill

**Designed for nominal size 6" x 6" Wood Posts**

## Installation

**1**  
After you attach the Post Wrap to the post, separate the components included in the Post Wrap Top Kit. (Figure A)

**2**  
Attach the 2 piece post wrap trim base to the underside (the side without the raised edge) of the flat base component using four Genovations screws, being careful not to over-tighten. (Figure B)

**3**  
Slide the assembly over the wood post.

**4**  
Center and square the assembly, then tighten the screws that are holding the 2 piece post wrap trim base to the flat base.

**5**  
Secure the centered assembly to the wood post using four Genovations screws. (Figure C)

**6**  
Insert the screw plugs with a dab of sealant.

**7**  
Apply sealant carefully in the groove on the underside of the bevel cover and secure it to the attached flat base by pressing the two pieces firmly together. Immediately remove any excess sealant.

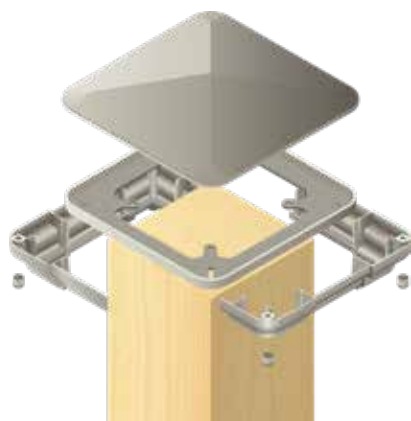


Figure A

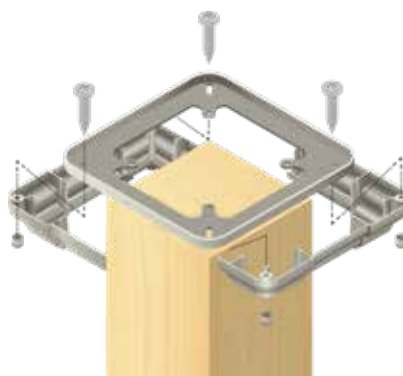


Figure B

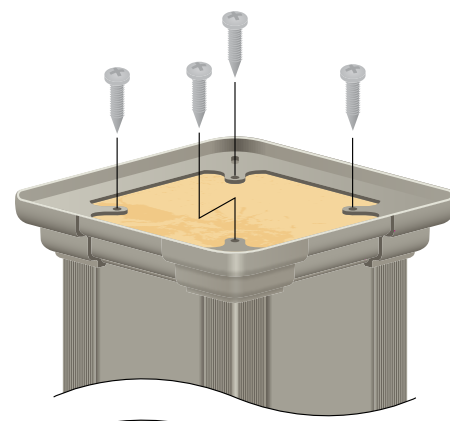


Figure C

# Installation Using a Post Wrap Trim Base at Both Ends



To avoid serious eye and hand injuries or blindness, always wear safety glasses and gloves.

## Tools

Post Wrap Trim Base Kit	Four Genovations #8 x 3/4" Stainless Steel Screws (part # DW013) or Concrete Screws	Square
Vinyl Sealant (part # AW945)	Screw Driver	Power Drill

## Installation

1

After the Post WRap has been attached to the post, place the two pieces of the post wrap trim base around the bottom of the finished post.

2

Center and square the assembly.

3

Secure the post wrap trim base to the floor and/or ceiling with four of the screws.

3

Insert the screw plugs with a dab of sealant.

