

HDPE INSTALLATION INSTRUCTIONS

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“READ ENTIRE GUIDE BEFORE STARTING WORK!”

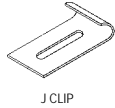
Joist Spacing

Deck Board	Residential Use 60 psf	Commercial Use 100 psf
2x6	24 inches	16 inches
C Deck G&G	16 inches	12 inches
1x6 T&G	12 inches	Not Recommended

For decking on a 45 degree angle to joist, subtract 4" from joist spacing

Deck Board Installation

STEP 1. When installing boards parallel to the home, install J-clips with screws at every joist against house. Slide board into J-Clip.

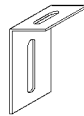


J CLIP

STEP 2. For all deck board installations at every joist, first insert the toe screw diagonally through the clip, into the groove of the deck board and into each joist with the screw provided. Then insert the vertical screw through clip and into joist. Please use a coated or stainless trim head screw as supplied by the manufacturer.

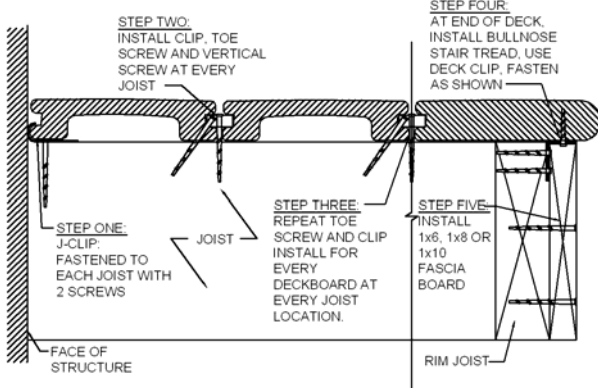
STEP 3. Repeat step 2 for the next boards until the end of the deck. Use longer deck boards than needed, leaving excess hanging over outside of edge. Cut excess of boards at same time to ensure all boards are even and square.

STEP 4. Use bull nose stair tread to install last board into previous row of clips. Install EC-clip at every joist with 1 1/2" bugle head screws into joist and 1" wood screw into bottom of overhanging board. Screws should all be stainless or coated.



ECCLIP

STEP 5. Install 1x6, 1x8 or 1x10 fascia board to cover clip and structure. Fasten to joist with no less than (2) #10 1 7/8" finish screws every 12-16 inches on center.



T MOLDING – manufacturer-preferred method.

When installing using the T Molding, prepare joists by attaching a 2X4 nailer between two joists for optimum width. Make sure nailer is flush with the joist tops. Slide finished T Molding into position and toe screw opposite side of the T Molding into the joist or screw vertically down through the top of the T Molding every 8 to 12 inches. Install decking under T Molding, which will hide any expansion and contraction that might occur due to temperature variation. See Diagram 2 below.

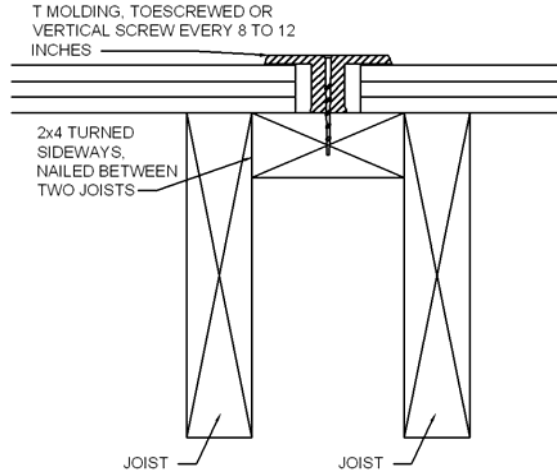


DIAGRAM 2

FEATURE STRIP – alternate method

When installing using the Feature Strip, prepare joists by attaching a 2X6 nailer between two joists for optimum width. Make sure nailer is flush with the joist tops. First, slide finished feature strip board into position and toe screw opposite side of board between grooves into feature strip joist then install deck boards. When installing in 40 degree or less temperature, leave 1/8" gap between end of deck board and feature strip. Above 40 degrees, butt decking tight to the feature strip, as normal contraction will occur leaving a small gap. Do not install this method in temperatures over 75 degrees. See Diagram 3 below.

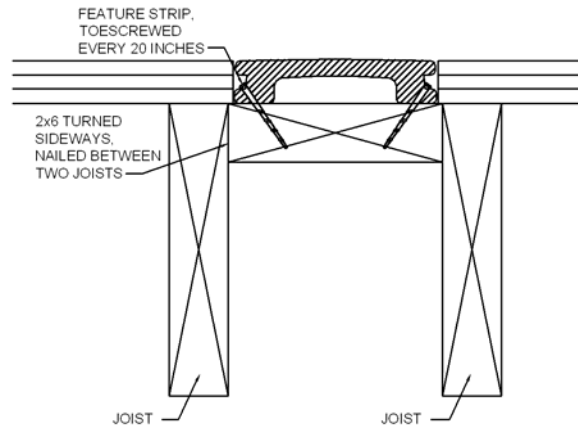


DIAGRAM 3

NOTE: By using the "feature strip" method as diagramed above, slight gapping between the decking and feature strip may occur. It is not recommended to install the feature strip method in temperatures over 75 degrees. The preferred method is to utilize the use of T Molding.

L MOLDING– manufacturer-preferred method.

When installing the L molding around the edge of the deck, leave a small gap from the end of the deck board to the face of the fascia board. Using the 2 1/4" edge in the vertical plane, fasten the L Molding to the fascia board using a #7, 1 7/8" stainless steel trim head screw every 12 to 16 inches.

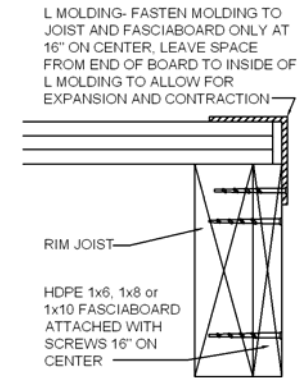


DIAGRAM 4

“PICTURE FRAME” Method – alternate method

The "picture frame" method allows for installation that does not utilize the L Molding. When installing the product in this fashion, careful consideration must be taken into account regarding expansion and contraction. When installing in 40 degree or less temperature, leave 1/8" gap between end of deck board and the fascia board. Above 40 degrees, butt the decking tight against the fascia board, as normal contraction will occur leaving a small gap. Install the fascia board using no less than (2) #7 1 7/8" finish screws every 12-16 inches on center. Please refer to Diagram 5 for details.

When installing the fascia board parallel to the decking, if the final board must be ripped down to fit the deck, the Custom Stair Tread can be ripped down to fit the required dimensions. Pre-drill and toe screw the front edge of the board as shown and then install the fascia board using no less than (2) #7 1 7/8" finish screws every 12-16 inches on center. Please refer to Diagram 6 for details. Repeat for each riser and tread.

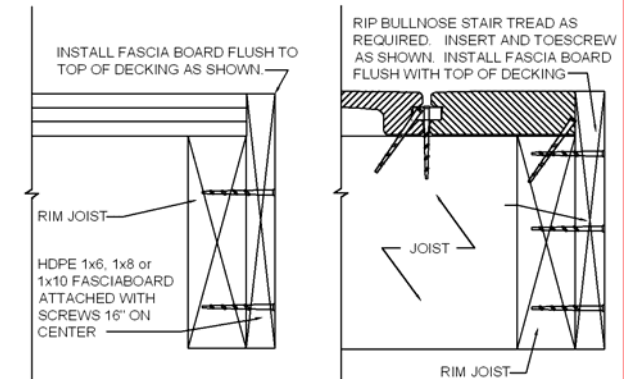


DIAGRAM 5

DIAGRAM 6

NOTE: By using the "picture frame" method as diagramed above, slight gapping between the decking and fascia board may occur. It is not recommended to install the feature strip method in temperatures over 75 degrees. The preferred method is to utilize the use of the L Molding.

Railing Installation

Attach posts to structure as per the instructions below, ensuring that the posts are plumb. Measure the distance between the two posts, cut the Top and Bottom Rail, and Custom Trim molding to the required length. (The maximum span for Carefree-Xteriors® Handrail system is 6'-0" from center of post to center of post, as detailed by ICC Legacy Report 97-63.1.) Please refer to Diagram 7 below for clarification.

Assemble the rail and baluster sections first, and then attach assembly to the posts. Screw through the Customer Trim Molding into the top of the balusters, and through the bottom rail in to the bottom of the balusters. (Clearance between balusters must not exceed 4" to meet national building codes.) Then screw through the Customer Trim molding into the underside of the top rail cap. This method will conceal fasteners.

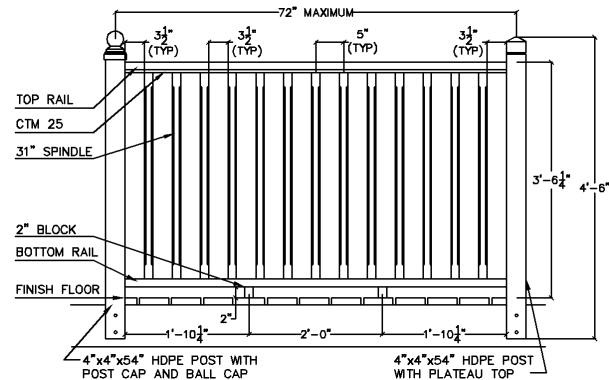


DIAGRAM 7

1. **DO NOT NOTCH THE 4x4 POSTS.**
2. Locate 2 holes for the 1/2" hex head bolts on the vertical center line of each 4x4 post, with the top hole located 1 1/4" from the top of the perimeter joist. Secure post to frame with no less than (2) 1/2" diameter bolts per post. Use (2) SAE washers, installing one on each end of every bolt. Install one 3/8" lock nut on each side.
3. Each spindle is fastened to the bottom rail with one, #10, 2 1/2" long flat head screw, and to the custom trim molding with one, #8, 2 1/2" long flat head screw. Two screws are recommended at either end to keep the spindles in the desired location.
4. **SUPPORTS ARE REQUIRED** every 2 feet between the top of the decking and the underside of the railing. Support the railing no greater than 24" apart, and fasten the support blocks from the bottom of the support block up through the support with #10, 3" flat head screws to maintain the hidden fasteners.
5. Attach top rail from the underside of the custom trim molding up into the top rail with #8, 1 5/8" flat head screws. Use seven screws for a 4-foot assemblies rail and twelve for a 6-foot assembly.
6. Connect each rail section to two nominal 4x4 posts with four stainless steel rail clips. Fasten rail clip to rail with two, #10, 1 1/2" pan head screws. Please review to Diagram 8 for detailed drawing.

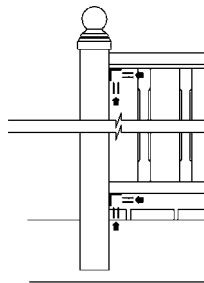


DIAGRAM 8

Railing Required Fasteners

Fasteners for 72" Post Spacing (typical)

- (13) #10 2 1/2" Flathead Screws
- (12) #8 1 5/8" Flathead Screws
- (13) #8 2" Flathead Screws
- (16) #10 1 1/2" Flathead Screws
- (2) #10 3" Flathead Screws

(Quantity or length may be less for reduced post spacing)

Parts List for 72" Railing Section

- (2) Custom Rail Caps, 6'-0"
- (1) CTM 25, 2 1/2" Custom Trim Molding, 6'-0"
- (13) Spindles, 31"

ALL SCREWS, WASHERS, NUTS AND BOLTS MUST BE STAINLESS STEEL OR COATED.

Stairs

When using Carefree-Xteriors® Building Products in stair applications, make certain that stringer spacing is a maximum of 12". The Carefree-Xteriors® custom stair tread with a bullnose edge is recommended for this application. Please refer to Diagram 1, Step Four for installation of Custom Stair Tread on Stairs, or as an alternate option, please refer to Diagram 5 and Diagram 6 for alternate options.

Carefree-Xteriors® HDPE materials are not to be used for the stair stringers.

General Information

- Always consult Local Building Codes. Local building codes govern when a discrepancy arises. Please refer to ICC Legacy Report 97-63.1.

Expansion and Contraction

- The product does not expand and contract from side to side; the HDPE product only expands and contracts in the lengthwise fashion.
- The expansion and contraction is based on the temperature variation.
- The preferred method for hiding expansion and contraction is through the use of T Molding and L Moldings.

Storage and Handling

- Cut and remove all banding materials and wrappings and lay the decking materials loosely and flat on the joisting materials to allow the product to acclimate for a minimum of 48 hours before installation.
- Do not dump when unloading.
- Store on a flat surface, supporting product with blocks every 2 feet
- Do not store directly on asphalt or concrete or grass.
- It is important to keep the product lying flat and straight at all times as the product will take the shape of anything it is lying on or against, creating difficulty and frustration in working with the product.

Layout Considerations

- Two deck boards from center of clip to center of clip, when installed properly will cover approximately 10 1/2". Each deck board is 5 1/8" wide by 1 1/4" high.
- Be sure deck structure is square.
- When using a wood structure, be sure that all joists are of similar material, and installed so joists are all at the same height to avoid visual variations.
- Deck slope should be approximately 1/2" for every 8' away from house to aid in water run-off.
- Layout the location of T Molding or Feature Strip before beginning construction on the structure of the deck to allow for efficient implementation of the horizontal nailer as shown in Diagram 2 and Diagram 3.
- Blocking must be installed between joists when joist length exceeds 6'. Install blocking between joists every 4' of joist projection. See Diagram 9.

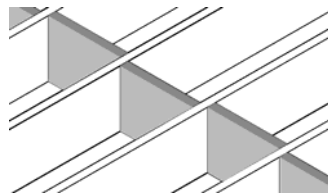


DIAGRAM 9

Decking Clips—How many?

- 100 Square feet, Residential, Joists at 16" on center will require approximately 150 to 200 clips.
- 100 Square feet, Commercial, Joists at 12" on center will require approximately 200 to 250 clips.

Cantilevering

- Carefree-Xteriors® deck planks should not extend beyond the edge of the structure.

Safety

- Safety First! Always wear proper eye protection.

Important Notes:

Expansion and Contraction is a natural phenomenon to all products, but is more noticeable in products manufactured with plastic resin. Proper installation of this product is extremely important. Normal expansion/contraction of this product is approximately 1/4 inch on each end of a 12 foot board. This expansion and contraction is calculated over a temperature variance of 32 to 110°F. The product is at its natural length at 70 degrees. Expansion and Contraction can be minimized by proper installation, for best results follow the installation guidelines. It is highly recommended to utilize the T Molding and L Molding to help to hide any potential expansion and contraction.

This summary is intended to provide the Carefree-Xteriors® building product installer with basic guidelines for properly installing residential decking systems that utilize Carefree-Xteriors® Building Products. However, the installer and/or purchaser of any Carefree-Xteriors® products is solely responsible for interpreting specific job conditions, determining the suitability of use or application of any Carefree-Xteriors® products, or whether structures meet requirements of applicable building codes or safety codes for specific applications.