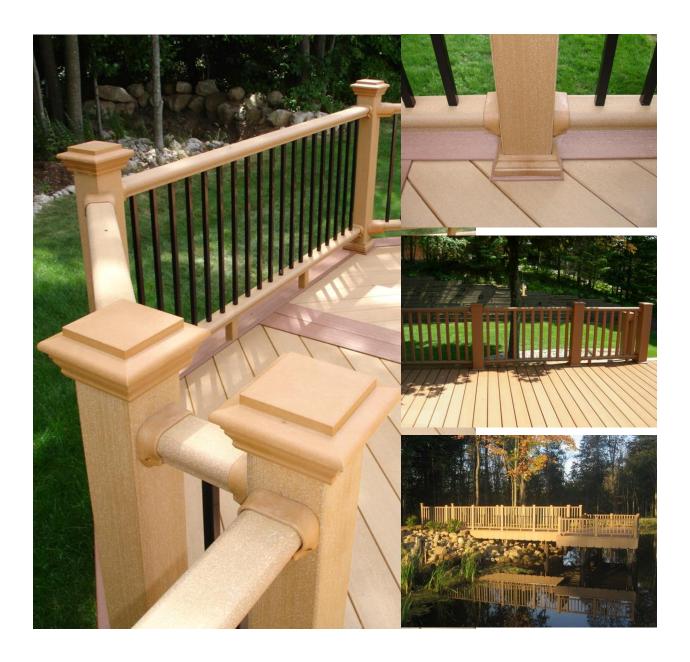
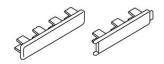


RAILING SYSTEM INSTALLATION INSTRUCTIONS



Failure to follow these instructions risks voiding the GeoDeck warranty.

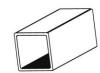
Railing System Components and Specifications



*End Caps available for all profiles

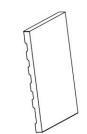
END CAP*

Height: 1 1/4" Width: 5 1/2" Length: 1" Weight: .2



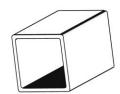
4" X 4" POST SLEEVE

Height: 4.315" Width: 4.315" Length: 8' Weight: 17.6 lbs.



FASCIA BOARD

Height: 7/16" Width: 12" Length: 12' Weight: 2.5 lbs



6" X 6" POST SLEEVE

Height: 6.410" Width: 6.410" Length: 12' Weight: 39.5 lbs.



POST CAP

Height: 4" Width: 4" Weight: .22 lbs.

Notes: Standard Post Cap also available in 6" x 6"

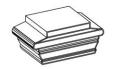


POST BASE TRIM

Height: 4" Width: 4" Weight: .20 lbs.

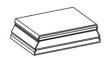
Notes: Standard Post Base Trim

also available in 6" x 6"



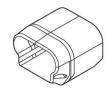
DECORATIVE POST CAP

Height: 4" Width: 4" Weight: .22 lbs.



DECORATIVE POST BASE TRIM

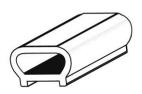
Height: 4" Width: 4" Weight: .20 lbs.



STAIR RAIL COLLAR



HAND RAIL COLLAR



RAIL

TABLE OF CONTENTS

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CLEANING YOUR GEODECK

Your railing system will require occasional light cleaning to keep it looking fresh. Additionally, cleaning may help Tongue & Groove boards to drain properly. A pressure washer may be used with a fan-tip that is guided to move in the direction of the deck grain. Be careful not to damage the boards and follow proper safety precautions.

Scratches

Although GeoRail is durable, care should be taken to avoid scratching. If scratches do appear it may be possible to carefully draw a stainless brush across the scratches in the direction of the grain to remove or reduce the scratches. Always test a small area to assure that the surface texture is not removed.

Removing Oily Stains

Most stains can be removed with a generalpurpose household cleaner, concentrated dish soap, laundry detergent, degreaser or composite deck cleaner. A plastic bristle brush will make the task easier. Remember that it is usually easier to remove fresh stains.

Removing Microbial Stains

Microbial stains, such as algae and black mold, will not damage your railing system. Algae and black mold can generally be removed with a pressure washer and plastic bristle scrub brush, and cleaners designed to remove mold and mildew.

Please go to www.GreenBayDecking.com for additional tips.

GENERAL INTRODUCTION

GeoRail railing system is available in eight railing kit types:

Standard Railing: 36" & 42" height
Available in 6' and 8' lengths

Stair Railing: 36" & 42" height
Available in 6' and 8' lengths

 Individual components are also available to create custom designs and applications

GeoRail railing comes in a variety of colors. See www.GreenBayDecking.com for more details.

The complete GeoRail railing system includes post sleeves, railings, balusters, end caps, post caps, post base trim, and handrail collars — everything needed to create a great-looking railing around your deck.

Since GeoRail is made from a combination of reclaimed paper by-product, rice hulls (a rapidly renewable resource), and other high-quality materials, its properties differ from those of wood products. Therefore, GeoRail has different handling and installation requirements, which need to be taken into consideration during the planning of your deck installation.

The following illustrated instructions have been provided to help you understand and take advantage of these differences with appropriate installation techniques. Following these instructions along with good building practices will deliver the highest quality installation. Failure to follow these instructions and the instructions outlined in ICC-ES ESR-1369 also risks voiding the GeoDeck warranty.

Tools Needed

- ✓ Drill ✓ Miter (chop) saw
- ✓ Pencil ✓ Mallet
- ✓ Utility knife
 ✓ Ratchet strap
- ✓ Phillips screwdriver or driver bit

Local Building Codes

Installation shall follow all local codes and good construction practices when designing and installing the deck sub-structure. Many municipal building codes have specific railing construction requirements. Failure to follow local building codes, including filing plans and scheduling inspections with the municipal building inspector, result in costly post-construction modifications. There are many excellent deck construction books on the market, many of which are available at your local lumberyard. In addition to local codes, be sure to follow the instructions in this manual that specifically pertain to the GeoRail products. Failure to do so will void your GeoDeck warranty.

SCHEDULING YOUR PROJECT

Unloading, Storage, and Handling of GeoDeck

GeoDeck boards shall be stored on a dry, flat surface on a pallet or with supports. Do not stack GeoDeck more than four skids high. Cutting and drilling of GeoDeck does not produce respirable dust. However, it is good practice to always wear protective equipment such as safety glasses and hearing protection when operating power equipment.

Cautions





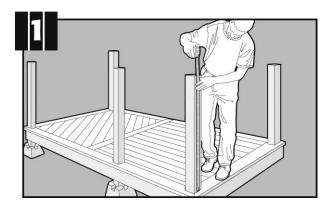


Temperature Notes

Avoid potential problems by budgeting time for proper acclimation of GeoRail to local temperatures.

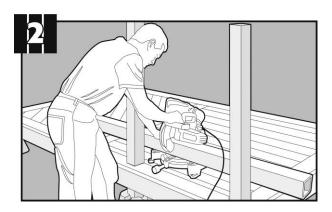
It is best to mark, cut, and install boards when they are all at roughly the same temperature.

RAILING SYSTEM INSTALLATION

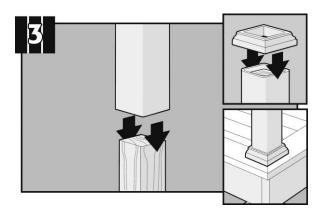


Measure post height.

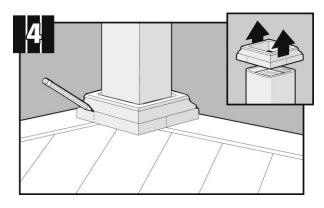
NOTE: Check local building codes for height requirements.



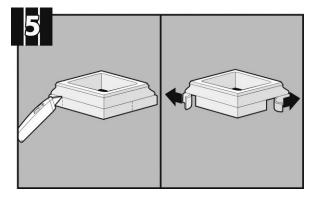
Cut post sleeve long enough so that a post cap can fit cleanly above the handrail. This height will vary according to the style of post cap being used.



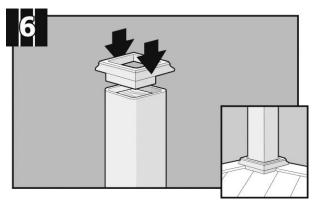
Slide post sleeve and base trim on to wood post.



Mark where base trim needs to be notched to accommodate perimeter strips. Remove base trim. (For an alternative method, please review the installation and care page on our website at www.greenbaydecking.com/installation-and-care/).



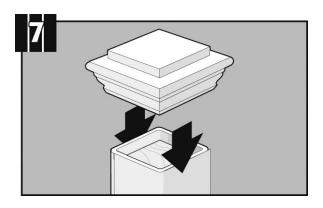
Cut through the breakaway tab on the base trim. Tear away portion that will rest on perimeter strips.



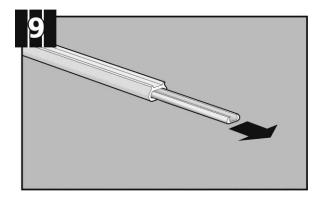
Slide base trim onto wood post.

wwwGreenBayDecking.com

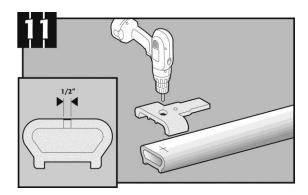
June 2014: V14 R.1



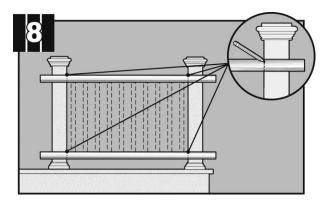
Place cap and nail to post with brads.



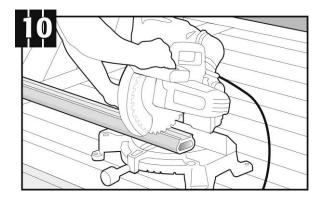
Remove aluminum insert from top rails.



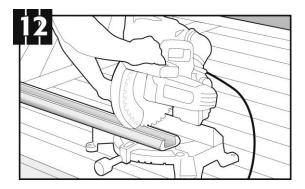
Use drilling jig to drill a 1/2" hole through the top rail 3/8" from each end.



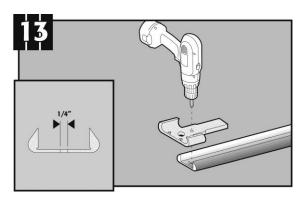
Center top and bottom rail on posts and mark. Note where balusters will be and if current post distance allows them to be equally spaced.



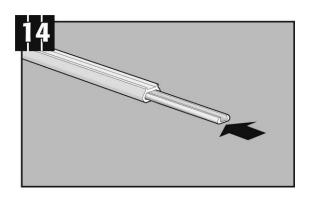
Cut rails 1/4" shorter than post-to-post distance.



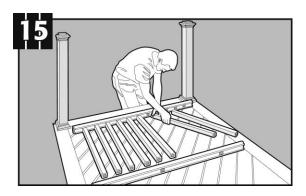
Cut aluminum insert 1/8" shorter than the post-to-post distance



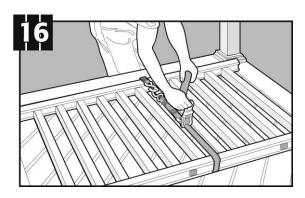
Use drilling jig to drill a 1/4" hole in aluminum insert 7/16" from each end.



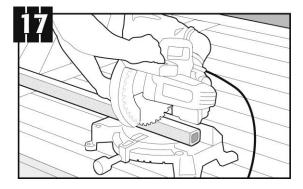
Slide aluminum insert back into top rail.



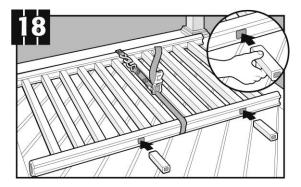
Assemble top and bottom rails and balusters. If you are using the Baluster Pro Clips, please refer to Addendum 1 (Page 13).



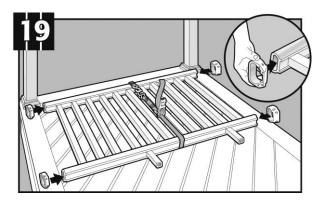
Attach ratchet strap to hold system together. Nail balusters with brads to top and bottom back sides of rails.



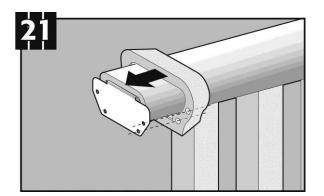
Measure and cut support blocks (no more than 5.5" long).



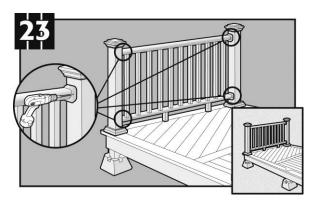
Insert support blocks into bottom of rail. Nail with brads to back side of rails.



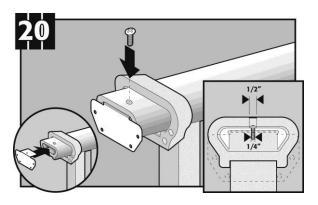
Add collars to rails (flat edges face posts).



Slide collar back into place.



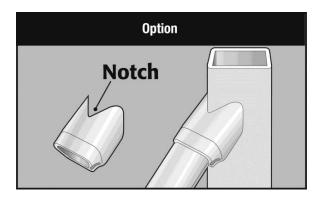
Attach with screws provided. Remove ratchet strap.



Insert rail bracket and attach with screw on each end of the top rail.

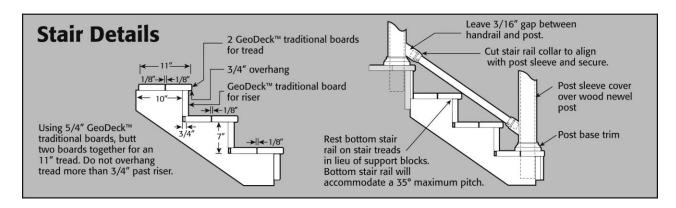


Stand railing system up.

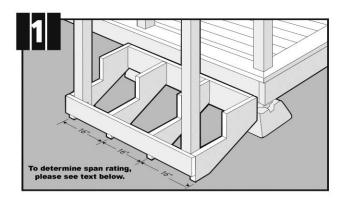


If hand or stair rails are angled, collar may be notched.

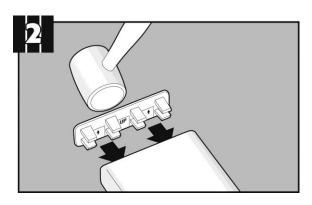
EXAMPLE OF STAIR TREADS AND RISERS INSTALLATION



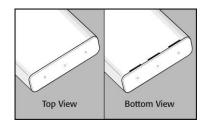
STAIR TREADS AND RISERS INSTALLATION

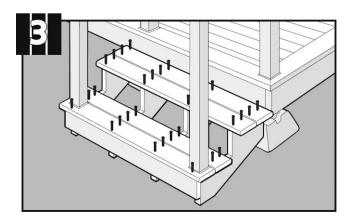


Place stair carriages no more than 12" on center for T&G or S4S deck boards. If using classic T&G or S4S, stair carriages can be spanned 16" on center.

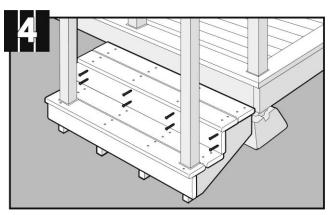


Cut treads and risers to length. Tap end caps into position.





Place two 5/4" GeoDeckTM traditional boards per step for treads. Use two fasteners each time boards cross stair carriages.



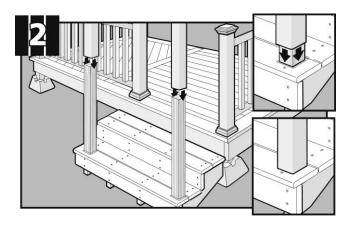
Place one 5/4" GeoDeckTM traditional board for risers and attach with fasteners.

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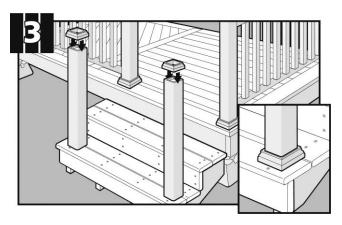
STAIR RAILING INSTALLATION



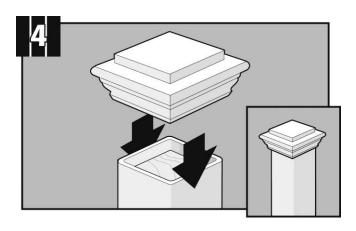
Cut post sleeve long enough so that a post cap can fit cleanly above the handrail. This height will vary according to the style of post cap being used.



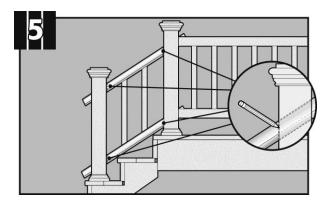
Slide post sleeve over post.



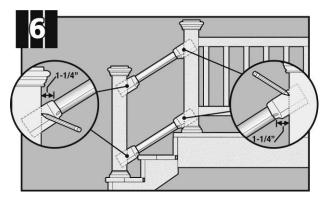
Slide post base trim over post.



Place cap and nail to newel with brads.

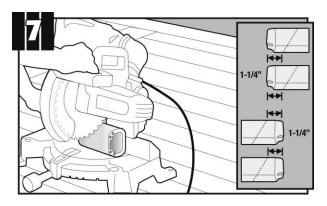


Hold rails on stair treads and mark as shown. Cut upper and lower rails to length. Spaces between newel post and baluster should not exceed 4" on center.

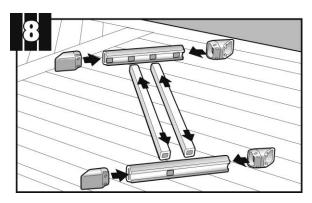


Slide collars onto rails. Check for correct orientation and mark angle to be cut.

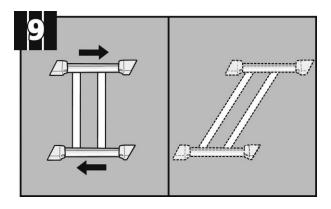
wwwGreenBayDecking.com June 2014: V14 R.1 Page 10 of 15



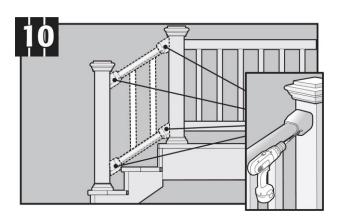
Place collars on their side and cut on the marked angle. Use a section of railing to keep collar from rotating in saw NOTE: All collars are not cut the same. *Top collars are cut at opposite angles than bottom collars.*



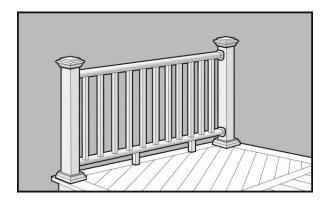
Assemble parts. Aluminum should be inserted into the top stair rail prior to adding the collars. Please see step 4 on page 7 for a visual.



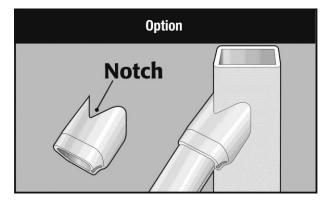
Shift assembly as shown.



Place assembly between posts and attach with screws provided.



Complete.



If hand or stair rails are angled, collar may be notched.



Congratulations! As a GeoDeck $^{\text{TM}}$ owner, you have made a wise investment and you are protected by our twenty-five year limited warranty, which provides coverage against:

- Splintering and Splitting
- Rot and Decay Damage
- Termite Damage

25 Year Limited Warranty

Green Bay Decking, LLC (hereinafter "Manufacturer") warrants that its GeoDeck products are manufactured from recovered cellulose and plastic, and will not split or splinter, suffer structural damage from termites, rot, mildew, fungal decay, or mold for a period of 25 years from the time of shipment to customer when properly installed and maintained. Mildew or mold may form on the surface of your deck as a result of air pollution and environmental debris. Such surface contamination will not harm your deck and can be removed by occasional cleaning with mild household cleaners or commercial deck cleaning products using a nylon brush or a power washer equipped with a fan tipped wand. GeoDeck is designed to resist the effects of exposure to the sun and environmental elements and will provide many years of excellent service. However, like all materials, GeoDeck will be subject to color change when exposed to the sun's ultraviolet rays.

MANUFACTURER'S LIABILITY UNDER THIS WARRANTY IS LIMITED SOLELY TO REPLACEMENT OF DEFECTIVE GEODECK PRODUCTS OR REFUND, WITH THE FIRST 10 YEARS NON-PRORATED AND THE FOLLOWING 15 YEARS ON A STRAIGHT-LINE DEPRECIATING BASIS, AT MANUFACTURER'S OPTION. Purchaser's sole and exclusive remedy for any claim whatsoever, whether in contract, warranty, tort or strict liability, arising out of the use, storage or possession of GeoDeck products, including without limitation any claim that GeoDeck products failed to perform as warranted, shall be replacement with substituted GeoDeck products or completely refunded in the first 10 years, with the following 15 years based on a straight-line depreciating basis, at Manufacturer's option. To obtain replacement or refund, the original owner must submit its claim together with this warranty certificate, the original purchase invoice indicating the date of purchase, pictures of the defective GeoDeck products, and a detailed written description to Green Bay Decking, LLC. 1518 South Broadway, Green Bay, WI 54304. This new 25 Year Limited Warranty applies only to GeoDeck products purchased on or after January 01, 2013.

THE WARRANTY SHALL NOT APPLY TO GEODECK PRODUCTS THAT HAVE NOT BEEN INSTALLED IN ACCORDANCE WITH MANUFACTURER'S AND ICC GUIDELINES (REPORT NO. ESR-1369, DATED MAY 1, 2012 or later). "Installation Instructions" can be found at www.GreenBayDecking.com. This warranty shall not cover defects due to (i) natural disasters, including fire, smoke, water, earthquake, lightning or static electricity; (ii) causes external to the GeoDeck product such as, but not limited to, weather; (iii) the neglect, abuse, misuse (including faulty installation, repair or maintenance by other than Manufacturer), improper storage of the GeoDeck product or other failure to comply with the instructions set forth in the documentation and/or manual accompanying GeoDeck product; (iv) a modification of the GeoDeck product not provided by the Manufacturer; (v) a malfunction of any product not provided by Manufacturer with which the GeoDeck product is used or combined; (vi) use, modification or other treatment of the GeoDeck product in a manner for which it was not designed or intended; (vii) defects in articles purchased by Manufacturer and resold by it without alteration and effects in materials purchased by Manufacturer which cannot be discovered by warranty factory inspection; (viii) placement under or subjection to abnormal use conditions; (ix) normal wear and tear; or (x) expansion and contraction. This warranty does not cover product defects on installed decks that were apparent at or prior to installation.

MANUFACTURER'S WARRANTY SHALL APPLY ONLY TO GEODECK PRODUCTS. IN NO EVENT SHALL MANUFACTURER BE LIABLE FOR LABOR OR OTHER EXPENSES INCURRED BY THE PURCHASER, OR SPECIAL, INCIDENTAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES OF ANY KIND WHATSOEVER. MANUFACTURER'S LIABILITY ARISING OUT OF THE MANUFACTURE, SALE OR SUPPLY OF THE GEODECK PRODUCTS OR THEIR USE, WHETHER BASED UPON WARRANTY, CONTRACT, TORT, OR OTHERWISE, SHALL NOT EXCEED THE ACTUAL PURCHASE PRICE PAID BY THE PURCHASER FOR THE GEODECK PRODUCTS.

Purchaser acknowledges that the GeoDeck products are not structural lumber and therefore may not be used as such. PURCHASER IS SOLELY RESPONSIBLE FOR DETERMINING THE SUITABILITY FOR USE OR APPLICATION OF ANY GEODECK PRODUCT, OR WHETHER GEODECK PRODUCTS MEET REQUIREMENTS OF APPLICABLE BUILDING CODES OR SAFETY CODES FOR SPECIFIC APPLICATIONS.

No person or entity is authorized by Manufacturer to make and Manufacturer shall not be bound by any statement of representation as to the performance of GeoDeck products other than what is contained in this warranty. This warranty shall not be amended or altered except in written instrument signed by Manufacturer and Purchaser.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTIES WITH RESPECT TO GEODECK PRODUCTS, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTY OR MERCHANTABILITY, FITNESS FOR A PARTICULAR PURCHASE OR NON-INFRINGEMENT. Laws from time to time in force in certain jurisdictions may imply warranties that cannot be excluded or can only be excluded to limited extent. This warranty shall be read and construed subject to any such statutory provisions. This warranty gives you specific legal rights. You may have other rights, which vary from state to state. To activate the warranty, please fill out and send the warranty card within 30 days of purchase.

This warranty certificate was issued on		Effective January	y 01.	, 2014

Addendum 1

Baluster Pro Clips



Round Aluminum HR

- Box Qty: 50 PCS.
- Case Qty: 27 Boxes (1,350 PCS.)



Square Aluminum HR

- Box Qty: 50 PCS.
- Case Qty: 27 Boxes (1,350 PCS.)



Standard GeoRail Baluster HR

- Box Qty: 30 PCS.
- Case Qty: 27 Boxes (810 PCS.)



Round Aluminum SR

- Box Qtv: 50 PCS.
- Case Qty: 27 Boxes (1,350 PCS.)



Square Aluminum SR

- Box Qty: 50 PCS.
 - Case Qty: 27 Boxes (1,350 PCS.)



Standard GeoRail Baluster SR

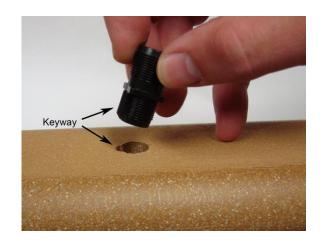
- Box Qty: 20 PCS.
 - Case Qty: 27 Boxes (540 PCS.)

Notes:

- Baluster pro clips are offered in 3 styles available in level and stair rail applications.
- There are 15 preroutered holes in each 6' rail, and 20 preroutered holes in each 8' rail (excluding squash blocks for bottome rails).
- For each 6' bottom rail, there are 2 holes preroutered on the bottom of the rail for the squash blocks. In addition, for each 8' bottom rail, there are 3 holes preroutered on the bottom of the rail for the squash blocks.
- Tested to AC-174 Standard

Baluster Pro Clip Installation

Select the proper clip style for your project and determine the number needed. To complete your first rail section, place the bottom rail on a flat surface with the preroutered holes for the balusters facing up, and the holes for the squash blocks facing down. Insert the first baluster pro clip in to the far left hole, matching the keyways so that the clip is inserted properly (see illustration). Note: round aluminum hand rail baluster pro clips do not have a keyway; therefore, insert the end with the smaller diameter into the preroutered hole.



Firmly insert the baluster pro clip into the keyway as far as it will permit, and finish inserting the clip with a rubber mallet (see illustration). Insert the clip until the top of the keyway is flush with the rail. The keyway will be flush with the rail when about half of the baluster pro clip is inserted.



Following the same steps, install all of the clips for both the top and bottom rail, including the squash blocks.



Baluster Installation

Once all of the baluster pro clips are installed, cut all of the balusters to length, including the baluster pieces for the squash blocks.

Note: When using standard GeoRail baluster pro clips for stair rail, the 2 x 2 balusters will need to be cut to the corresponding angle so they are flush with the railing.

Starting with the bottom rail, place a precut baluster onto each of the baluster pro clips.





Once all of the balusters are properly installed, line up the corresponding balusters to the top rail clips and insert the clips into the balusters (see illustration).



Follow the same process and install the squash blocks on the underside of the bottom rail. Continue rail section installation with Step 19 on page 8.



Product Features

Superior Color Retention
Strength & Durability
Low Maintenance
Eco-Friendly
Easy To Install

For The Pros

Our unique tongue & groove board requires no hidden fastener system

Boards can be used for any decking styles including diagonal, octagon and herringbone patterns

For the most up-to-date installation instructions, please visit our website at www.GreenBayDecking.com



Green Bay Decking, LLC 1510 South Broadway Green Bay, WI 54304 (877) 804-0137