

GENERAL INSTALLATION GUIDE:

- Unless otherwise indicated, all Seven Oaks M.U. Architectural Products materials are to be used for decorative purposes only.
- All products must be installed using ample amount of urethane-based adhesives such as PL Premium and non-corrosive mechanical fasteners.
- All products are supplied with a factory applied primer coat. Any exposed surfaces that do not have these coatings (such as cut or sanded surfaces) must be primed and painted immediately before applying the final finish coatings on site.
- All products can be patched and repaired using a high-quality, exterior, non-shrinking wood patch compound or regular Bondo. After patching the damaged area, sand the patch smooth, prime and paint.
- Broken pieces can be re-attached using urethane-based adhesive.
- All products must be acclimatized for a minimum of 24 hours prior to installation.

ALL INSTALLATION PROCEDURES LISTED IN THIS CATALOG ARE TO BE USED AS GUIDELINES ONLY! SEVEN OAKS MOLDED URETHANE, LLC ASSUMES NO LIABILITY FOR ANY DAMAGES, INCLUDING BUT NOT LIMITED TO PERSONAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR INSTALLATION OF ITS PRODUCTS.

WARRANTY:

SOMU, LLC Limited Lifetime Warranty, warrants to the original purchaser, it's HDP material will be free from defects in material and workmanship for as long as the original purchaser resides in the home that the product was installed, when the polyurethane is installed, finish painted, and used under recommended conditions and instructions. SOMU, LLC also warrants to the original purchaser, for a period of one (1) year from the date of purchase, it's exterior primer paint applied to the polyurethane, will be free from blistering and peeling, when used, installed, and finish painted under recommended conditions and instructions. The Balustrades and Columns are warranted for a period of five (5) years from the date of purchase. The original purchaser and their Installer(s) must inspect every piece prior to installation and mark any damages on the freight ticket at time of delivery. Both parties must waive all defects which could have been discovered by reasonable inspection prior to installation. Warranty will automatically be void if a SOMU, LLC approved adhesive is not used. Failure to follow SOMU, LLC storage and handling instructions will void this warranty. In the event that a claim is made under this warranty and conditions have been met, the Original Purchaser must notify SOMU, LLC in writing within thirty (5) days of making the discovery. SOMU, LLC reserves the right to inspect the defective product on site, or request that the original purchaser at their expense, return the defective product to the SOMU, LLC factory for inspection. SOMU, LLC will then determine if the product failed, and whether or not it will repair, replace, or refund said defective parts. SOMU, LLC shall have no liability to any person, firm, or corporation whatsoever for incidental or consequential damages such as, but not limited to, labor, finishing, parts damaged in transit, freight charges, installation, lost profits, lost sales, acts of nature, civil unrest, or acts of terrorism. No purchaser may take any deduction or credits against any amount owed to SOMU, LLC, or make any charge back with regards to a warranty claim. This limited warranty is exclusive, and made in lieu of all other express warranties, whether written, oral, or implied (including any warranty of merchantability or fitness for purpose), and extends only to the original purchaser's purchase.

ARCHITECTURAL SPECIFICATIONS

1.0 GENERAL

1.1 DESCRIPTION

- A. SOMU high-density polyurethane (HDP) products are pressure molded polyurethane to achieve a density similar to white pine
- B. HDP Products shall be factory primed with exterior latex primer to receive exterior latex top-coat on jobsite.

1.2 SUBMITTALS

- A. Product data: Submit manufacturer's descriptive literature, specifications, installation instructions and warranty.
- B. Shop drawings: Submit full-size details and method of installation.
- C. Samples: Provide samples of standard design or profile of custom design (custom designs submittals only available in form of CAD)

2.0 PRODUCTS

2.1 ACCEPTABLE MANUFACTURER

- A. Seven Oaks Molded Urethane, LLC
PO Box 4045
Wheaton, IL 60189-4045
T. 888-319-7477
F. 877-509-7495
www.somuhdp.com

3.0 EXECUTION

3.1 INSTALLATION

- A. Follow manufacturer's detailed installation procedures, available to download on the website, or call 888-319-7477

3.2 WARRANTY

- A. Our High Density Polyurethane products have a limited warranty on the product. For in depth warranty information please send an email to sales@somuhdp.com

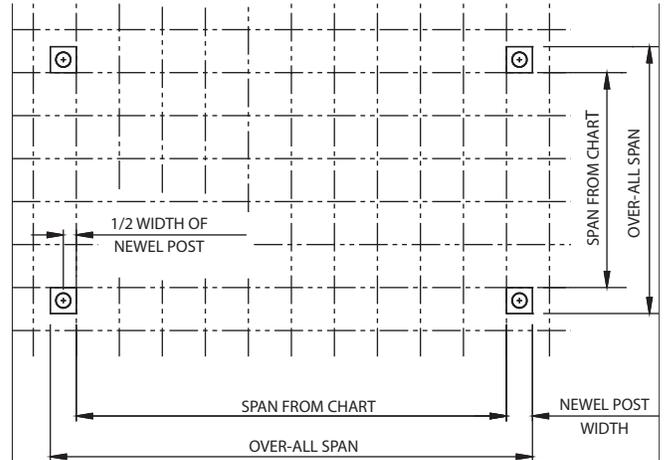
BALUSTRADE SYSTEM

Step 1: Using Existing or Alternate Attachment Supports for your Railing System

- 1.1 If existing or alternate supports, newel posts, porch posts, etc. will be used for attaching a Seven Oaks Molded Urethane railing system, please install them according to the manufacturer's specifications, and skip to **Step 3**.

Step 2: Positioning Seven Oaks Molded Urethane Newel Posts

- 2.1 Temporarily place the Newel Posts in the proper locations on your substrate, or measure the O/S dimensions of your posts.
- 2.2 Draw (or trace) these measurements in the proper locations on your substrate. Make sure these markings are straight and square.
- 2.3 Carefully and accurately, measure the distance(s) between each newel post(s). These measurements will be used to cut your rails to the appropriate lengths.
- 2.4 Remove the newel posts revealing the markings on your substrate.
- 2.5 Determine the center point of each newel post on your substrate by drawing intersecting diagonal lines from each corner of your marked newel post locations.
- 2.6



Concrete Substrate: If your substrate is not concrete, skip to 2.7.

- 2.6.1 Drill a 7/8" diameter hole 2 1/4" deep at this center point.
- 2.7 2.6.2 Using a hammer, insert the concrete anchor and tap flush with the substrate surface.
- 2.6.3 Continue with Step 3.

Wood and Composite Substrate:

- 2.7.1 Locate the round anchor plate with a center-mounted nut.
- 2.7.2 Center this plate on your centerline newel post markings and mark the location of the four bolt holes.
- 2.7.3 Remove the plate and drill four small 3/16" pilot holes at these locations.
- 2.7.4 Replace the round metal anchor plate and bolt it to the substrate using four (4) 5/16" x 3" lag bolts.

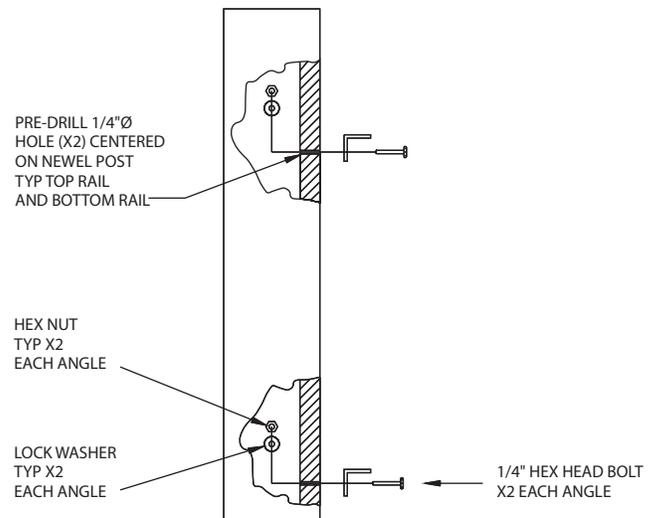
Step 3: Securing Angle Brackets to Supporting Posts

- 3.1 Determine the placement of your top and bottom rails.

You will need:

- 3.1.1 Height of Baluster (not including pipe)
- 3.1.2 Height of Bottom Rail
- 3.1.3 Distance between bottom rail and substrate
- 3.1.4 Four (4) Aluminum L-brackets
- 3.1.5 Eight (8) 1/4" Hex Head bolts
- 3.1.6 Eight (8) 1/4" Lock washers
- 3.1.7 Eight (8) 1/4" Hex Head nuts

- 3.2 The position of the top L-bracket will be at the height of the sum of the three measurements above (3.1.1 + 3.1.2 + 3.1.3).
- 3.3 The top of the lower L-bracket should be positioned below the bottom rail that you measured in 3.1.2.
- 3.4 Center and mark the position of the aluminum L-brackets (3.1.4) on the face of the newel (or other support) post (Normal fastening methods mount the L-brackets to the underside of the rails).
- 3.5 Mark the hole locations of the brackets (use the non-tapered holes) on the face of the newel (or other support) post.
- 3.6 Remove the brackets and drill four (4) 1/4" holes into the newel post and through the internal pipe (other support structures may require alternate attachment hardware and fastening techniques).
- 3.7 Secure the brackets to the Seven Oaks Molded Urethane newel posts using the 1/4" bolts (3.1.5), washers (3.1.6) and nuts (3.1.7).



BALUSTRADE SYSTEM

4: Preparing the Rails

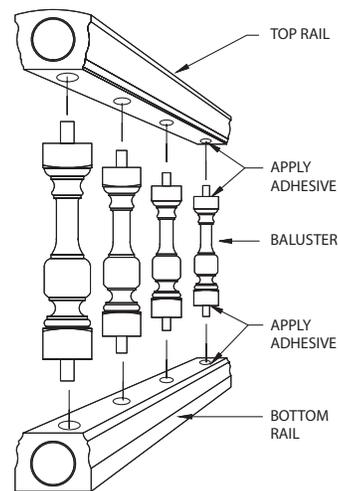
- 4.1 Lay out your rails and determine how they will be assembled with the proper surfaces facing up and down according to the Seven Oaks Molded Urethane product drawings.
- 4.2 Determine how many balusters will be required for each span by dividing the total rail length by the “On-Center” (O/C) spacing measurement found in the catalog for each baluster. Round UP if your measurement is not an even number. The O/C measurement is the MAXIMUM distance between the center-point of each baluster that guarantees that your finished railing will comply with the national 4” ball rule.
- 4.3 If you DID NOT have to round up, skip to Step 5.
- 4.4 If you DID round up, you have to re-calculate your O/C measurement. Take the total length of your span and divide it by the number of balusters that you calculated (after you rounded up). This is the O/C spacing that you will use for each baluster placement.

Step 5: Pre-drilling and Baluster Placement

- 5.1 Where do you drill the first baluster hole? Use the O/C measurement you calculated from Step 4, and divide it in half. Use this measurement as your starting point from the end of the rail (it should calculate to be the same as the space left after your last baluster at the opposite end of the rail).
- 5.2 Using a pencil, mark these spacing points along the UNDERSIDE of the top rail and the TOP of the bottom rail along the centerline. Be VERY CAREFUL to mark exactly the same locations on both rails so that the balusters sit perfectly vertical after assembly. Double-check your measurements and baluster quantities.
- 5.3 Check the Seven Oaks Urethane product drawings to determine the diameter of the pipe extending from each end of the baluster. Bore out a hole of the corresponding diameter to a depth of 1 1/2” also penetrating the internal pipe inside the rails.
- 5.4 Remove any excess product from the holes.

Step 6: Attaching the Balusters to the Rails

- 6.1 Use Seven Oaks Molded Urethane’s polyurethane based adhesive PL-Premium or approved equal (and optional mechanical fasteners) for this assembly process.
- 6.2 Check the length of all of the balusters. Some sanding or trimming may be required in order to make sure the balusters are all consistent.
- 6.3 Apply a generous bead of adhesive to all contact surfaces such that it will spread across the entire contact surface.
- 6.4 Place these balusters into your pre-drilled holes on the bottom rail first and ensure that they are turned straight and aligned.
- 6.5 Line up the balusters to your pre-drilled holes in your top rail and drop it in place. Use a rubber mallet to tap the top rail down ensuring a tight fit. “Toe-nail” the balusters in place to prevent the balusters from turning while the adhesive sets up.
- 6.6 Use multiple cargo or ratchet straps to clamp the railing system together during this adhesive drying time.
- 6.7 Follow the adhesive manufacturers recommended curing time and clean up procedures.
- 6.8 Remove excess adhesive as soon as possible (before it has set up). This will make the finishing process much easier. After the adhesive has set up, sand and patch any irregularities using an exterior, non-shrinking spackle, Bondo or equivalent wood filler.



Note: This diagram is showing only a segment of railing and is for display purposes only.

BALUSTRADE SYSTEM

Step 7: Attach railing sections to the Newel Posts

- 7.1 Attach the top and bottom rails to the newel post brackets that you installed in Step 3 using the screws provided with your rail hardware kit.

Step 8: Secure completed railing system onto substrate

- 8.1 Set your railing system into place over the previously marked newel post locations and mounting hardware from Step 2.
- 8.2 Insert the 1/2" threaded rod through the center of the newel posts and into the substrate anchors that were installed in Step 2. Thread the rod firmly into these substrate anchors.
- 8.3 Slide the top Tie Down bracket over the threaded rod and position the bracket into the pre-cut newel post grooves so that the top of the bracket is flush with the top of the newel post.
- 8.4 Secure this attachment with the 1/2" lock washer and nut. Using a hacksaw, mark and remove any excess threaded rod that may extend past the top of the newel post.

Step 9: Support Blocks

- 9.1 In order to ensure the stability and integrity of the balustrade system, support blocks should be placed under the bottom rail for any span that exceeds 48". Anchor these support blocks using adhesive on all contact surfaces and "Toe-Nail" screws.

Step 10: Decorative Balls and Caps

- 10.1 Locate and test-fit the caps and/or ball tops that you have chosen to complete the top of your newel posts.
- 10.2 Apply adhesive to all contact surfaces between the newel post and cap/ball top.
- 10.3 Center the cap on the post, and use screws to secure the cap until the adhesive has cured.
- 10.4 Patch, sand and prime all areas of your balustrade system where installation marks or holes have been made.

Your balustrade system is now ready for finishing. All Seven Oaks Urethane products are supplied with a white double primed coating, ready for customer applied finish topcoat. High quality latex or oil based paints should be used.

