# **Curved Railing & Safety Cables** INSTALLATION INSTRUCTIONS

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All top and bottom curved railings use serrated PVC pipe. Both the top and bottom railings come with PVC sleeves and the top railing only comes with a safety cable. IMPORTANT: PVC sleeves and safety cable must be used in all curved railing installations. Newel posts should be placed between each section of curved railing and no more than 8' apart.

### Materials needed:

- Tape Measure
- Exterior Spackling
- Caulk Gun ٠
- **PVC Compatible Adhesive**
- PVC Pipe Cleaner
- PVC Pipe Cement
- Pencil
- Safety Glasses
- Strap Clamps
- Combination Square

- Sandpaper ٠
- **Corrosion-Resistant Fasteners**
- Paint Brush
- Latex Paint
- Circular or Hand Saw 3/16" Drill Bit
- - Power Drill
    - Phillips Head Driver
    - Putty Knife
    - 3/4" Open End Wrench or Adjustable Wrench

# 1. Rail Section Assembly

- A) Measure and cut the matching top and bottom rails to length for each respective section. Cement the PVC pipe sleeves (supplied), using PVC pipe cleaner and cement, into the PVC pipe (or pipes) at each end of both railings. Push the PVC sleeves in until flush with the rail ends making sure the slot in the sleeves is up. Layout centerlines on both the top and bottom rails and mark the baluster positions. Drill the appropriate size hole in the rails to accept the baluster. Tip: A drill press with a standard woodworking drill bit works well for drilling these holes.
- B) Apply a 1/4" bead of a urethane based construction adhesive on each end of the baluster. Insert each baluster into the top and bottom rail. Lay the rail assembly on a flat surface. Use strap clamps as needed to draw the rail assembly together. Clamp tightly, make sure assembly is square and that the balusters are square to the rail. Clean off any excess glue before it sets. After adhesive has cured, rail assembly can be painted if desired.

#### **Safety Cable Installation** (Note: Safety cable is used in the top rail only) 2

- A) Secure the flexible wire cable (supplied) at the starting point. The starting point is either a threaded hook in the wall or the 1/2" threaded rod in the center of the newel post. For a newel post application, drill a hole in the newel post level with the center of the railing pipe. If two pipes are present, drill the hole level with the center of the outside pipe.
- B) From the inside of the newel post, feed the wire through the drilled hole to the outside of the newel post. Remove the hex nut, lock washer and C-channel at the top of 1/2" threaded rod and place the looped end of the cable over the rod. Reattach the C-channel, lock washer and hex nut to the 1/2" rod and tighten.
- C) Run the cable through the entire length of the curved rail passing through the newel posts, if used. Note: 30 ft. and 50 ft. cable assemblies are available when multiple rail sections with multiple newel posts are used but must be ordered separate. Make sure the cable is in the outside pipe of the railing if the railing has two pipes. Also make sure the cable passes to the inside of the 1/2" threaded rods in all newel posts.
- D) Run the cable out of the last pipe and down through the hole in the angle bracket attached to the newel post or wall. This procedure requires the installer to drill a 3/16" hole in the angle bracket and machine a notch at the end of the rail so that the cable will not interfere with the installation of the railing to the newel post. This hole should be drilled in the bracket directly below where the cable is coming out of the pipe. Adhesive should be applied to both ends of the top and bottom rails. Using a wire puller, pull the cable snug and secure it with the mechanical collar and setscrew (supplied). Finish securing the rails to the wall or newel post by attaching them to the angle brackets.

#### **Rail Support Block Installation** 3.

Rail support blocks should be placed under the bottom rail at a span of every 48" or less. These blocks can be trimmed for height.

#### 4. Finishing

All exposed fastener heads should be countersunk and fill with exterior wood putty. Allow the filler to cure then sand flush to the millwork surface. Caulk any gaps and finish as desired.

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# **General Installation Notes**

Any adhesives, sealants, fillers or paint used must be compatible with the material that is being installed *(see manufacturer's recommendations in the Finishing and Adhesives section below)*. Always use corrosion-resistant mechanical nails or screws along with manufacturer's recommended adhesive product when installing all Fypon products. This combination provides a secure, long-lasting bond. Countersink all fasteners about <sup>1</sup>/<sub>8</sub>" and fill with product compatible filler. Exterior installations should be finished using a manufacturer's recommended caulk to prevent water infiltration behind siding, windows and doors. Some exterior installations, in particular new construction before siding is applied, may require a J-channel and/or flashing to prevent water infiltration. Installers must determine which installation technique is best for the specific situation.

## **Finishing and Adhesives**

**Polyurethane (PUR)** – Fypon polyurethane products are factory primed. Depending on product location, always use interior/exterior-grade, PUR compatible adhesives, sealants, and fillers when installing Fypon products. Consult the manufacturer's recommendations for your particular climate and the substrate you are installing to.

**Cellular PVC** – Depending on product location, always use interior/exterior-grade, PVC compatible adhesives, sealants, and fillers when installing Fypon products. Consult the manufacturer's recommendations for your particular climate and the substrate you are installing to. If painting is desired, a 100% acrylic latex paint with a Light Reflectance Value (LRV) of 55% or higher must be used. **Applying paint with an LRV of 54% or lower will void the warranty.** 

### IMPORTANT:

Please read these installation guidelines thoroughly before beginning installation. Please note that these guidelines are provided only to assist with the installation of Fypon moulding and millwork products. Modified procedures may be required in order to meet specific situations, unique applications and local building codes. The manufacturer does not, under any circumstances, warrant the installation of its products. Be sure to wear appropriate protective clothing, gloves and safety glasses when working with any tools. Installer should check for and relocate all electrical wiring within the proposed installation area, as needed (be sure to disconnect all electric power before working with any electrical wiring and follow all applicable local electrical codes and safety procedures).