



Supplemental Installation Instructions for Glass Panel Rail Sets

INTEX[®]
MILLWORK SOLUTIONS

Please Read Before Getting Started

INTEX Glass Panel rail kits are designed to be used with 3/8" thick tempered glass panels, supplied by others. To maintain building code requirements tempered glass panel height should be 27-1/2" for a 36" finished rail height, and 33-1/2" for a 42" finished rail height. The width of the tempered glass panel required should be 6" less than the distance between the finished newel covers.

Important Information about the Dartmouth Rail System

Dark Paint Caution

If you choose to paint your INTEX Millwork Product, INTEX recommends the use of premium grade latex paints with solar reflective pigment. Preferably paints designed for use with PVC products. Please contact your local paint dealer for professional assistance. Due to the inherent expansion and contraction characteristics of PVC, INTEX PVC millwork products should only be painted colors with an LVR (light reflective value) greater than 55. Use of darker colors may cause damage due to excessive expansion/contraction, and will void the product warranty.

Cleaning Products for INTEX Millwork Products

Cleaning all INTEX Millwork Products is easy and fast with most major household cleaners. There are many cleaners on the market and the glass cleaners seem to be the best candidate for keeping the finish looking great. The cleaning solution should be applied and immediately wiped dry. As with any cleaning material, the cleaning solution should not be left to stand on the components for an extended period of time.

INTEX recommends the following cleaners:

Windex[®] 409 Glass and Surface Cleaner[®]
Spic & Span Cinch[®] Fantastik All-Purpose[®]
Fantastik Orange Action[®] Regency[®] (Glass and Surface)
Clorox Clean-Up[®] Glass Plus[®]
Fantastik Oxy Power Multi-Purpose Cleaner[®]

What to Avoid

Harsh cleaners with glycol ethers or ethanol type solvents and/or isopropyl alcohol are not recommended. Examples of these harmful cleaners are Goof Off[®], Walmart "Great Value All Purpose Cleaner[®]" (glycol ether), 409 General Purpose[®] (2- Butoxyethanol) and Greased Lightning[®] (glycol ether), citrus cleaners, abrasive cleaners, and solvents such as acetone, paint remover and lacquer.

INTEX RS35 Dartmouth Rail System Glass Panel Installation Instructions

INTEX has many how-to videos available on our website to assist you in installing Hampton Rail in various applications. Please go to www.intexmillwork.com and click on the 'Video Help' link at the top of the page.

1. Measure and cut rail components to length.

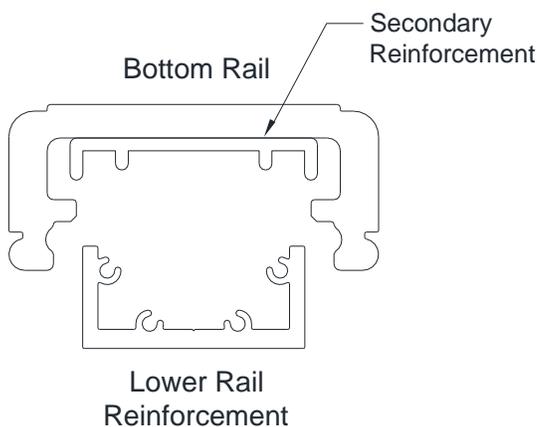
- a. Ensure newels or columns to which rail will be mounted are plumb and sturdy enough to support rail. If newel / column covers are used, ensure they have blocking at each location where railing will be attached.
- b. Measure span at top and bottom rail mounting locations.
- c. Cut rail components to required length. Note: all aluminum rail reinforcements should be cut 1/4" shorter than rail sections to allow for mounting brackets.

2. Determine glass clamp/crush block layout and drill mounting holes for clamps in PVC rail components and aluminum reinforcements.

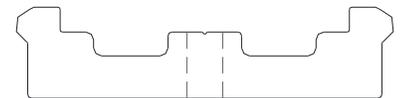
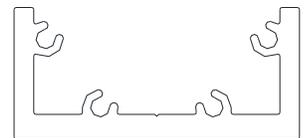
a. Six glass clamps are required for spans up to 72" and eight clamps for spans up to 96". The appropriate number of clamps and hardware are supplied with the two kit lengths.

b. Measure 5" from either end of the PVC baluster cap and bottom rail and mark for end holes. For spans less than 72", measure the distance between these marks to determine and mark the center. Drill a 5/16" diameter hole at each of these locations, centered on the rail component. For spans up to 96", measure the distance between the end marks, divide by three and mark a location at that distance from each end mark. This will equally space the two inner sets of clamps for the longer span. Drill a 5/16" diameter hole at each of these locations, centered on the rail component.

c. Orient the top aluminum reinforcement as shown and place into the baluster cap, centering the aluminum on the PVC, as it is 3/8" shorter. Using the 3 or 4 holes drilled through the baluster cap in step 2-b above, mark the hole centers and drill 5/16" holes through the reinforcement. Align the lower aluminum reinforcement with the upper, flat to flat, and mark the locations of the center or inner two holes. Do not drill the lower reinforcement at this time.



Upper Rail Reinforcement



Baluster Cap

d. From the underside of the bottom rail, orient the secondary aluminum reinforcement as shown. Slide the secondary reinforcement into the bottom rail. Using the 3 or 4 holes drilled through the bottom rail in step 2-b above, mark the hole centers and drill 5/16" holes through the secondary reinforcement.

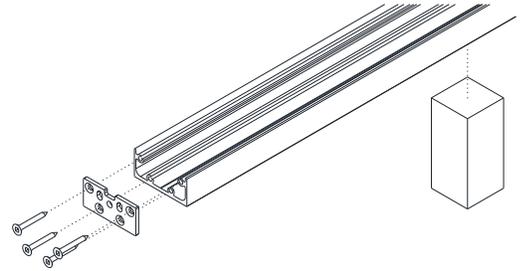
INTEX RS35 Dartmouth Rail System Glass Panel Installation Instructions

3. Attach rail mounting brackets and crush block(s) to aluminum reinforcements.

a. Attach a mounting bracket to both ends of each aluminum rail reinforcement, using four rail bracket screws. Lubricate the threads with soap to avoid binding and use a clutch type drill to avoid stripping screws.

b. On the lower aluminum reinforcement, drill 3/16" diameter holes at each location marked during **2-c** above. Locate and secure crush block(s) at these positions using one baluster screw each. This will position a crush block directly beneath each glass clamp. Note; the finished height of the rail can be adjusted by cutting the crush block(s) as necessary.

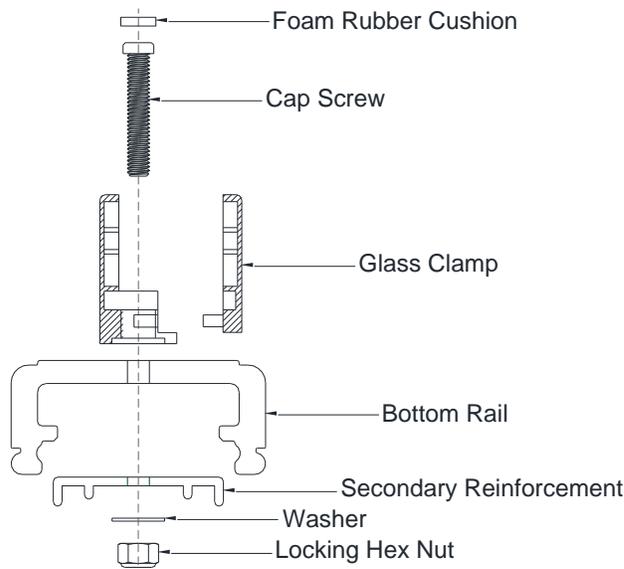
c. Drill one additional 3/16" hole approximately 2 inches from each end of the bottom aluminum rail reinforcement for drainage.



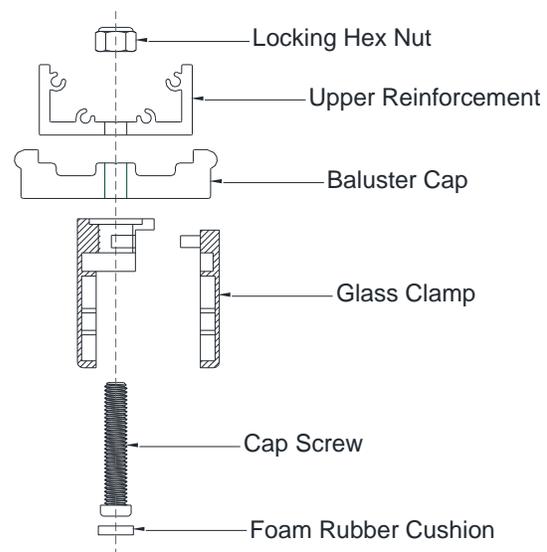
4. Assemble rail sections and install mounting clamps.

a. Open all glass clamps by removing the two hex set screws and discard the center pin and vinyl pin spacer. Note; when installing clamps on rails, and rails in openings, all clamps are to be oriented with the open sides of the clamp facing the same side of the rail sections.

**Lower Rail
Glass Clamp Assembly**



**Upper Rail
Glass Clamp Assembly**



b. Install the glass clamps to the lower rail assembly. Position a clamp over hole, insert the cap screw through the clamp, PVC bottom rail, and aluminum secondary reinforcement. Place a washer on the cap screw and tighten securely with locking hex nut. *Do not overtighten or PVC may crack.* Cut a 1" piece of self-adhesive foam rubber cushion from the strip supplied and attach across the inside the glass clamp to insulate the glass from contact with the metal of the clamp.

c. Install the glass clamps to the baluster cap assembly. Position a clamp over hole, insert a cap screw through the clamp, PVC baluster cap, and upper aluminum rail reinforcement. Place a locking hex nut on the cap screw and tighten securely. *Do not overtighten or PVC may crack.* Cut a 1" piece of self-adhesive foam rubber cushion from the strip supplied and attach across the inside the glass clamp to insulate the glass from contact with the metal of the clamp.

INTEX RS35 Dartmouth Rail System Glass Panel Installation Instructions

5. Install rail sections and glass panels.

a. Position lower rail aluminum reinforcement, with crush block(s) attached, between newels or columns, centered in newel or column face, and secure each end with two rail attachment screws. Ensure it is level. Note: to achieve a specific finished rail height, the crush block(s) may need to be trimmed. In most applications the 4" crush block will result in a 37" finished rail height.

b. Position lower rail assembly over the lower rail aluminum reinforcement and ensure it is fully seated and level. Take care not to mar the finished faces of the newels/columns.

c. Determine mounting height for baluster cap assembly to ensure glass will fit between glass clamps. Position, level and install top rail assembly between newels or columns, centered on newel or column face, and secure each end with two rail attachment screws. Ensure that all open faces of glass clamps are oriented to the same side of the rail section.

d. Apply a bead of latex caulk at the contact areas where the Rail Top Cap seats on the Baluster Cap. Seat the Rail Top Cap fully onto the Baluster Cap.

e. Ensure that all glass clamps have the foam rubber cushions applied as in **4-b** and **4-c** above, and center the tempered glass panel in the opening. Install and tighten the glass clamp face plates, pinching the glass between the two heavy rubber pads supplied with the clamps.

