

Glass Railing Systems

U-CHANNEL INSTALLATION

- AX40.020.050.D.M** (U-Channel, floor mount, 16'-4" length)
AX40.020.051.D.M (U-Channel, floor mount, 8'-2" length)
AX40.020.051.D.M (U-Channel Cladding for floor mount, 8'-2" length)
AX40.023.272.D.M (U-Channel inside corner, floor mount)
AX40.023.274.D.M (U-Channel outside corner, floor mount)
AX40.021.285.R (U-Channel glass gasket & wedge kit, covers 8'-2" length)

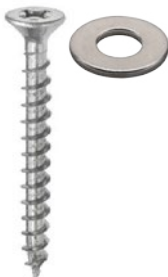
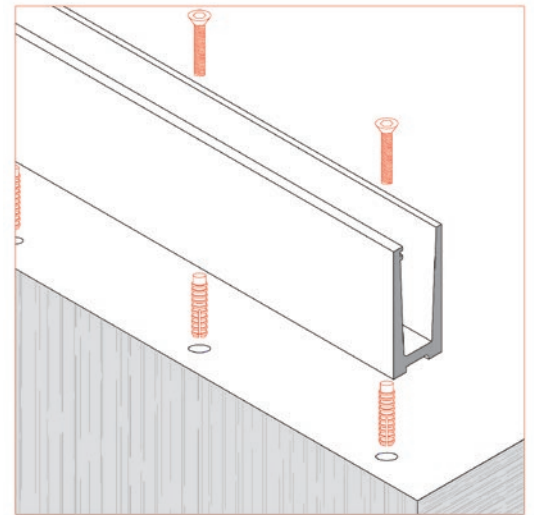
TOOLS REQUIRED

- Power Drill
- Circular Saw
- Hammer Drill (for concrete mounting)
- Stainless Steel Cutting Saw (Cold Cut Saw, Bench top Portable Bandsaw, Chop Saw with Stainless Steel Cutting Blade)
- Axia Wedge Tool

STEPS REQUIRED

For more detailed information on tools please visit:
www.axiarailing.com/recommended-tools

1. Layout Location of U-Channel on cap or floor
2. Measure and cut u channel sections to fit your balcony or stair.
 AX40.020.050.D.M 16'4" Pcs or AX40.020.051.D.M 8'2" Pcs
3. Use premade corners for all 90-degree corners. AX40.023.272.D.M inside or AX40.023.274.D.M outside corner
4. Once all pieces are cut and placed, use drill bit to predrill holes for anchor screws if concrete drill correct size hole for drop in anchors. ½" X 2 ½" drop in anchors or #14 x 3" wood screw with a 3/8" washer.
5. Install anchor bolts in predrilled holes. Check to make sure channel is plumb vertically, shim as necessary along length of U-Channel to make plumb / level. Tighten all anchor bolts.



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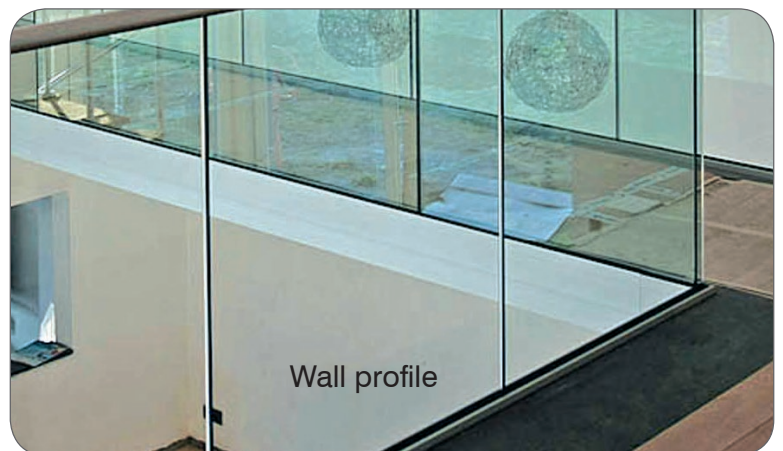
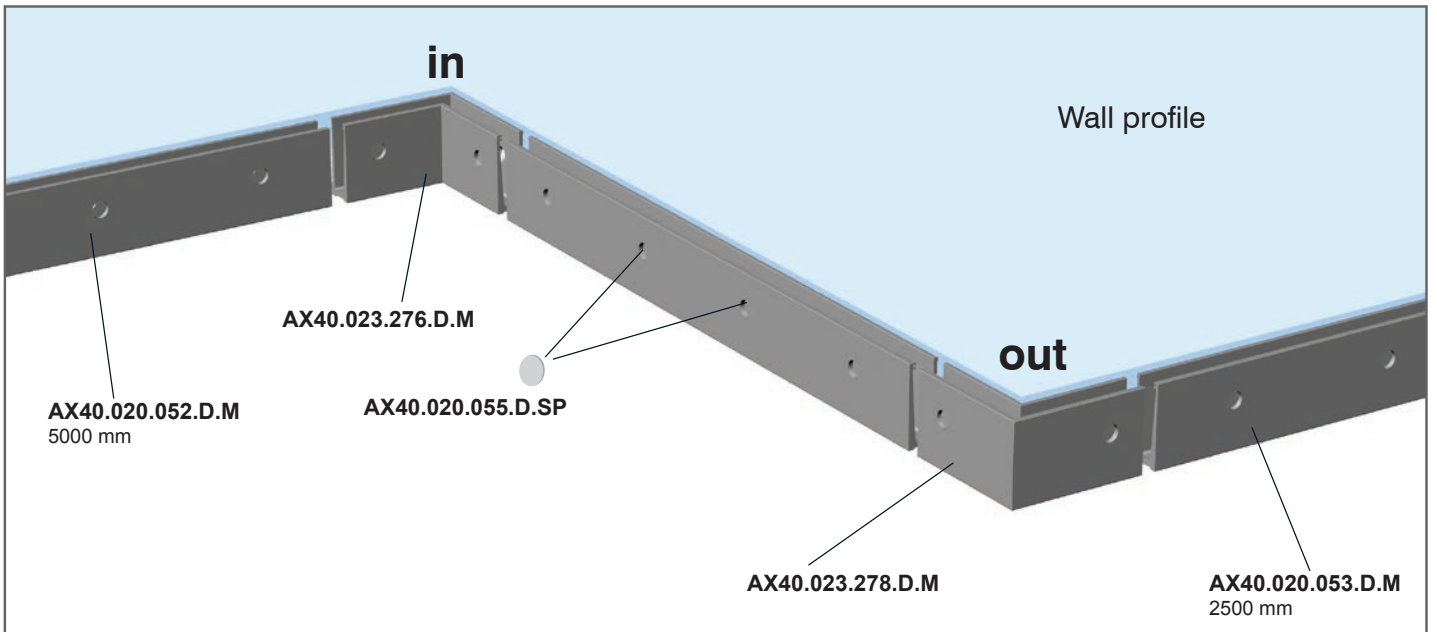
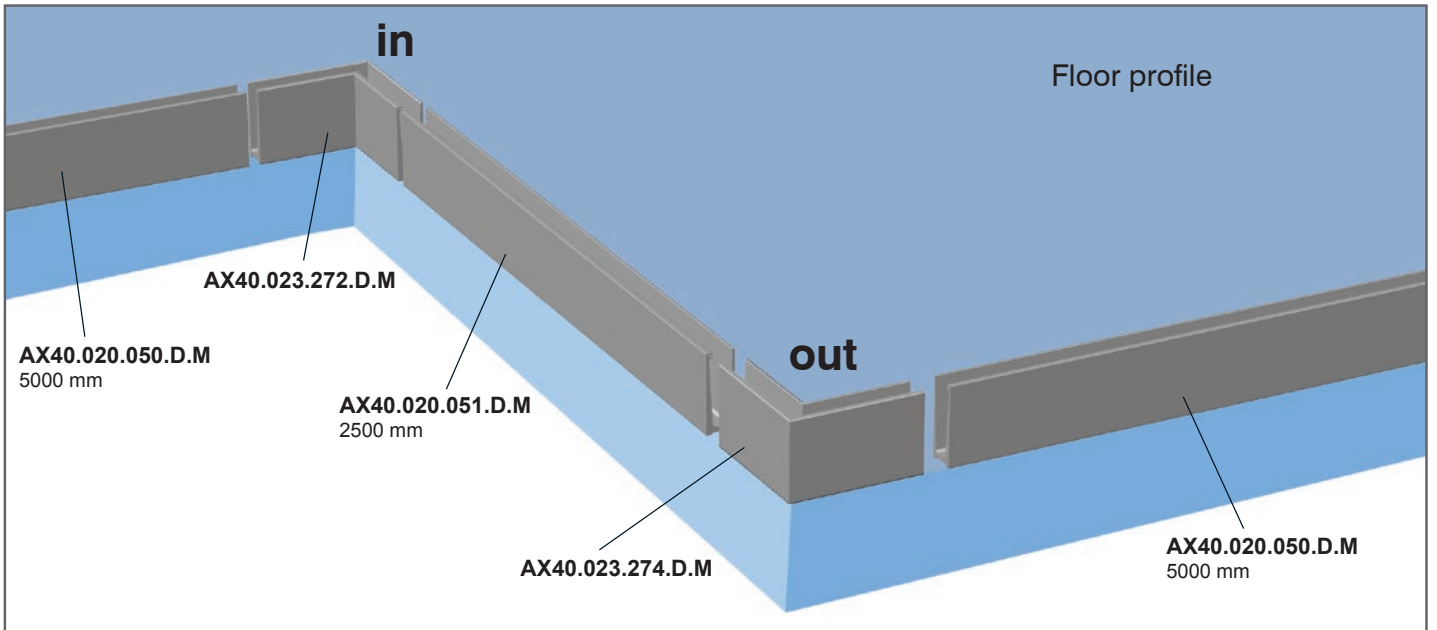


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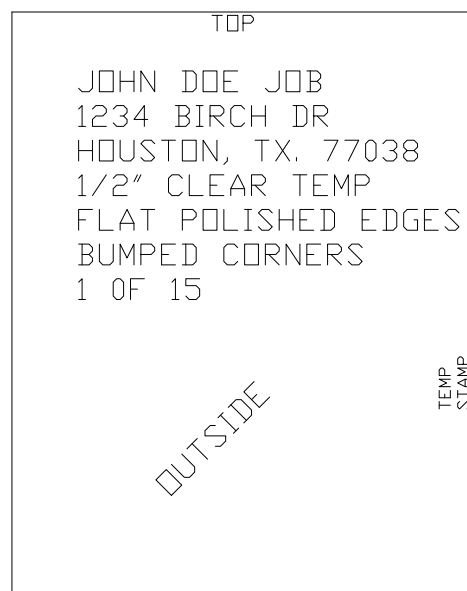


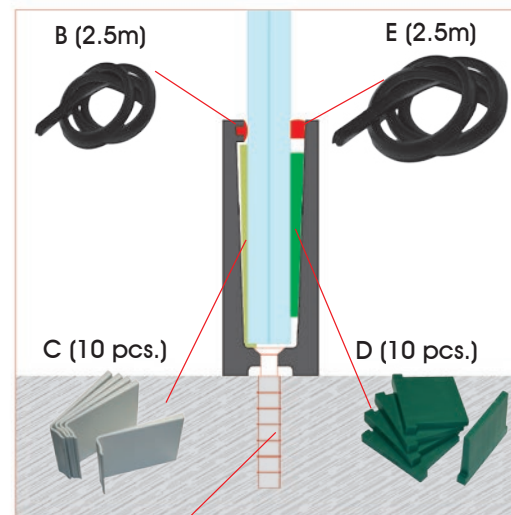
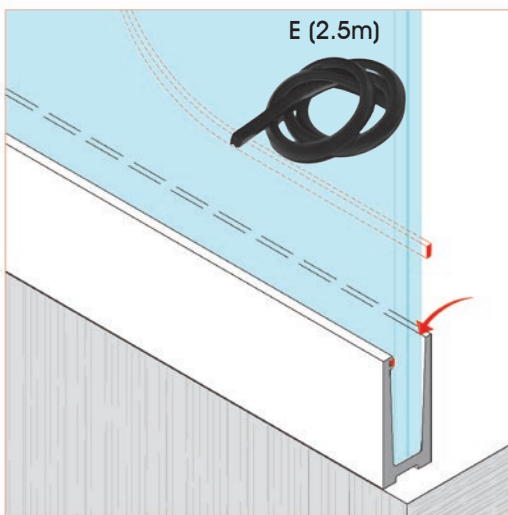
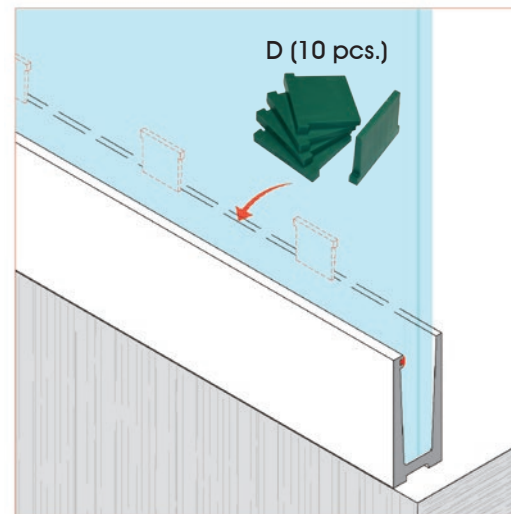
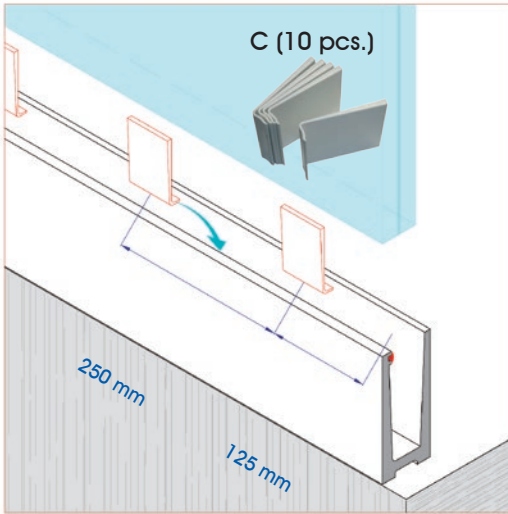
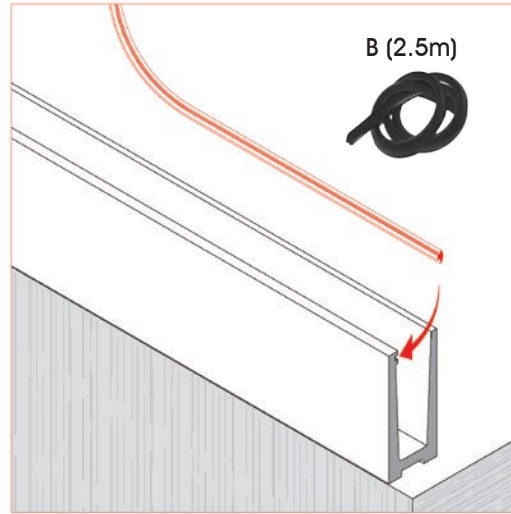
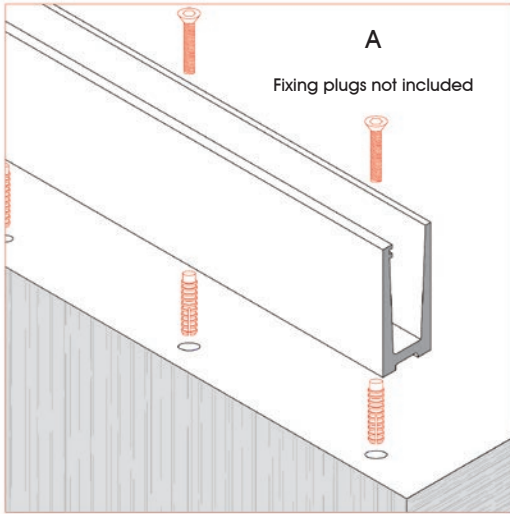
Composite Shims

AX00.110.710



6. Cut ½ plywood templates for glass panels to the desired rail height and max 4' wide panels for ease of handling. Divide sections of rail evenly so all panels are equal measurements. Leave minimum ½" space between panels not to exceed 3 15/16" between panels, and between panel and wall.
7. Place white plastic shims in u channel on the F or forked side of U-Channel (the F should be on the outside edge of the U-Channel) white shims should be 2500 mm or approx. 10" O.C. along entire length of channel. See fig. on page 4
8. Place rubber t gasket in front of channel and press in place. See fig. on page 4
9. Install plywood panel into U-Channel by setting on white shim and pushing panel against outside the rubber gasket. See fig. on page 4
10. Install green shims on inside of U-Channel between plywood and channel 2 or 3 to hold template. See fig. on page 4
11. Check spacing of templates and make sure all margins (gaps) around templates are equal dimensions. Scribe as needed to make measurements equal. Once all margins have been adjusted, Number all templates, e.g. 1 of 15, 2 of 15, 3 of 15 etc. Write Job name and address, glass type, thickness, edge treatment, corner treatment on every template. Make a template for each panel, even if it is the same size as another panel.
 Mark the desired location of tempered stamp on template. (inconspicuous but visible spot)
 If using cap rail or u channel be sure tempered stamp will be visible once installed and handrail is installed. Note: If the inspector can't see the tempered stamp, they will likely not pass the staircase for final inspection as he cannot determine it is tempered glass. Home inspectors on resale will also look for this Tempered stamp and it assures the (buyer) homeowner that it is tempered glass.
 Be sure to make a drawing of the staircase to know the location of panels and what number panel correspond to each location. This will avoid confusion of where the glass panels go when receiving the glass panels.





12. Installing glass panels in U-Channel. Place glass panel in U-Channel on white shim and against F (fork) rubber gasket. Install green shim between glass and inner side of channel. Using AXIA Multi-Function wedge tool drive the green shim down using mallet. Check glass for vertical plumb and drive shim as needed to make plumb. Green shims should be placed approx. every 10" on center and directly across from white shim on the opposite side of the glass. Quantity of 10 shims is needed for 8'2" length U-Channel and 20 shims for 16'4" length. See fig. on page 4



13. Check margins (gaps) around glass panels to make sure they are the same measurement and appear visually equal distance apart. Shim and adjust glass as necessary. If you need to remove green shims use tail hook on end of wedge tool and slide on each side of green shim and grab "ear" of shim on each side and then remove shim. Reinstall shim once glass is fully adjusted. See fig. on page 4

14. Once all glass panels are installed and gaps are equal, install the closing gasket on the inside top edge of the U-Channel (Included in Shim kit.) Spray U-Channel and glass at inside top edge of U-Channel with lubricant such as WD-40, place rubber closing gasket in between channel and glass and press firmly into place from one end to the other. Using the roller on the top side of the AXIA wedge tool roll the closing gasket into place. Clean all u channel with degreaser to remove lubricant. **Note: Stainless cladding will not adhere if all lubricant is not thoroughly removed from surface.** See fig. on page 4

15. Install stainless steel cladding on U-Channel, remove strip on double sided tape and press firmly onto U-Channel. Cut to length as needed to fit. If ends are exposed use the appropriate end cap for floor or wall profile / level or angle.



16. Clean all stainless steel cladding with degreaser then with cleaner/polish.



17. Install cap railing at this time.
See [AXIA Installation Guide #11 - Glass Cap Rail Installation](#)