AXIA STAIR & RAILING SYSTEMS

Glass Railing Systems

GLASS STANDOFF INSTALLATION

AX30.017.040.A.SP	(Round glass standoff)
AX30.017.042.F	(Leveling shim for round standoff)
AX30.017.041.A.SP	(Square glass standoff)
AX30.017.043.F	(Leveling shim for square standoff)

TOOLS REQUIRED

- **Spanner Wrench - round (AX30.070.530)**
- **Spanner Wrench - square (AX30.070.531)**
- **Circular Saw**
- **Tape Measure**
- **Magnetic bit holder**
- **Cordless or electric drill**
- **Cutting fluid**

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

STEPS REQUIRED

1. Layout wall for recommended Layout of Standoff Clamps for Balcony or Stair application.

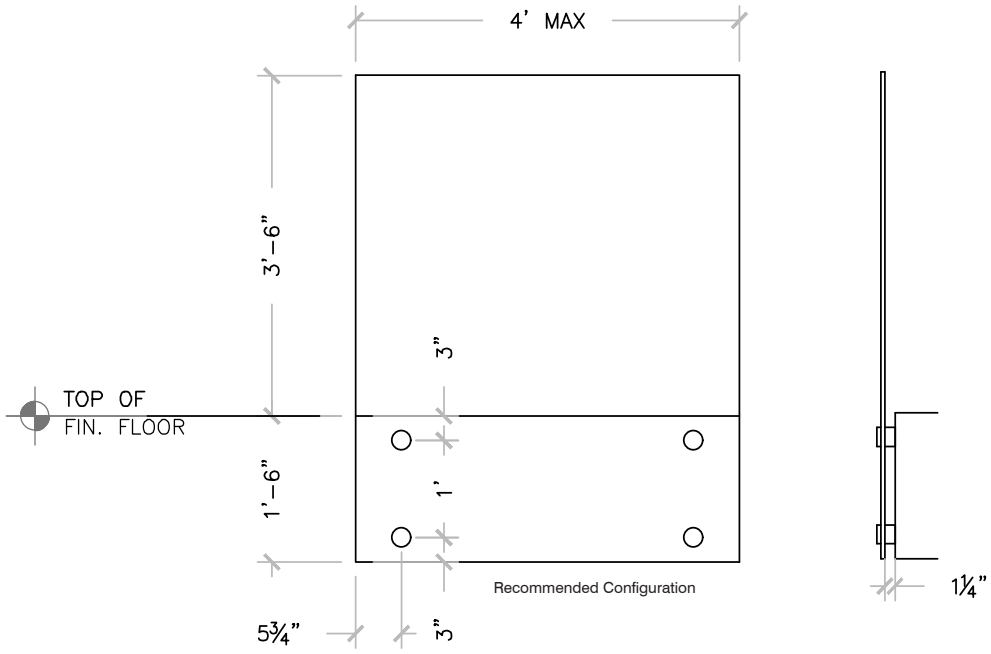
We recommend 18" from floor to the bottom of the glass if possible. With 3 inches up and 3 inches down to center of clamp and 3 inches from each side for center. This will give you 12" from center to center vertically. Minimum recommend vertical dimension from center to center of each clamp is 7 ½" Inches. Maximum recommended width of glass panel is 4' with a minimum of 4 Stand-off clamps per panel. Allow a minimum ½ Space between glass panels.

Solid Blocking must be provided for Standoff Clamps to be screwed into.

See figure on pg. 2

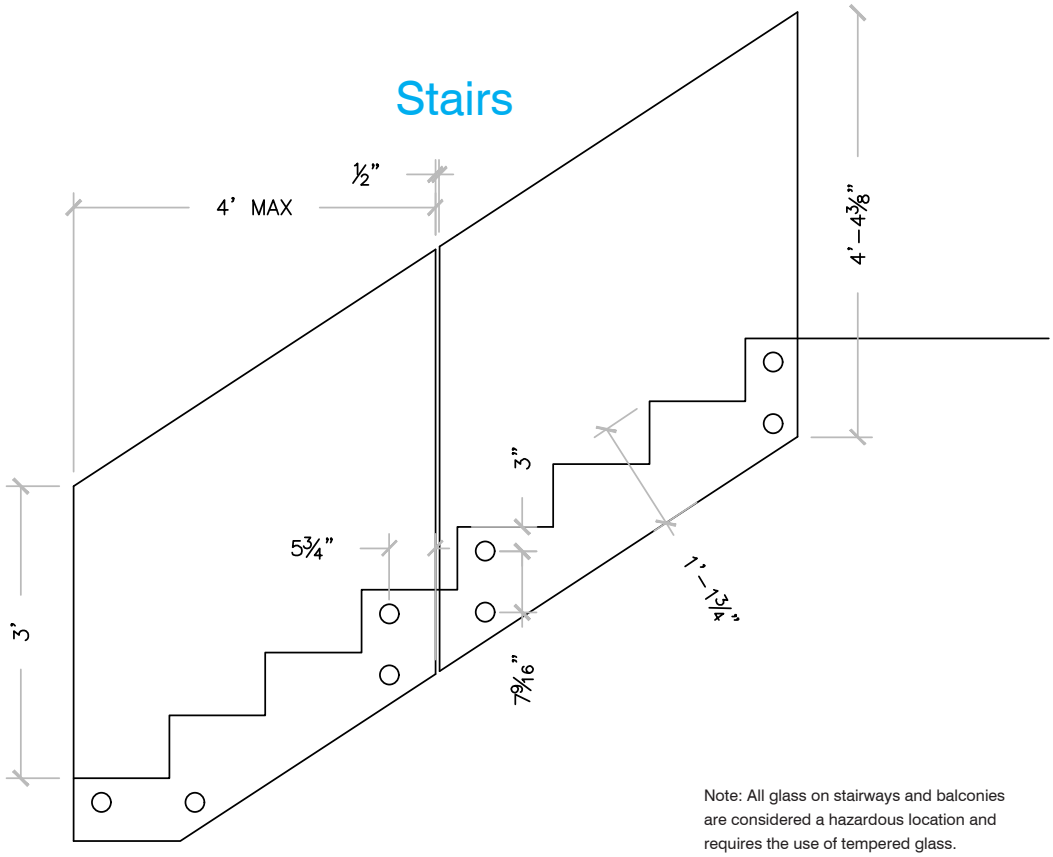
AXIA STAIR & RAILING SYSTEMS

Balcony



Recommended Configuration

Stairs



Recommended Configuration

Cap rail required on glass for stairs to meet IRC code and recommended for balconies. Check your local municipality for requirements

Note: All glass on stairways and balconies are considered a hazardous location and requires the use of tempered glass.

Note: Use flat polished edges on glass with radius or bumped corners when ordering glass from your glass supplier. All railing requires the use of tempered glass.

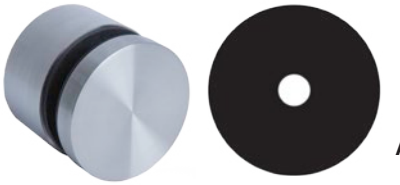
2. Once layout has been completed, drill pilot hole for screws into wood or metal structure.

3. If Mounting Stand-off Glass Clamps directly on Sheetrock, sheetrock should be removed from behind glass clamp and install plywood of the appropriate thickness that is same thickness as the sheetrock e.g. ½" or 5/8" Plywood. By using a 1 ¾" Hole Saw (which is smaller than the diameter of the stand-off clamp) Glue and nail plywood plug in place.

4. Install AXIA Standoff clamp using 2-AX00.091.900.A.SP 6MM wood screws or 2-AX00.091.905.A.SP 6mm metal screws if mounting to metal stringer.

5. Once clamps are installed and tight to the mounting surface, remove outer half of clamps

6. Place 4 level vertically across clamps to check for plumb when glass is installed. Add Round Shim or Square Shim for 1/16" Shims. Stack up to make clamps vertically plumb before placing glass on the clamps.



AX30.017.042.F

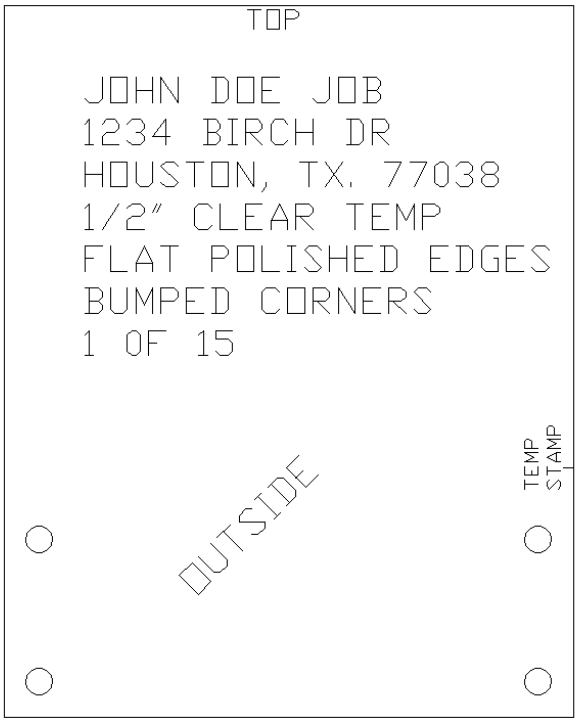
AX30.017.043.F

7. Cut ½" Plywood template to size of glass with desired spacing around panel and desired height of glass. Drill holes 1 ¼" in template (and glass) for glass clamps. This will allow for adjustment of glass panels once in place.

8. Install all templates in place and install and tighten glass clamp outer half.

9. Check margins around perimeter of glass to be even or equal measurements. Scribe as needed to make margins equal and even.

10. 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 inspector can't see the etched tempered stamp, he will likely not pass the staircase for final inspection as he cannot determine it is tempered glass. Home inspectors on resale also look for this Tempered stamp and assures the homeowner it is tempered glass. Be sure to make a drawing of staircase to know location of panels and what number goes where. This will avoid confusion of where the glass panels go when receiving the glass.



11. Installing glass panels, use 2- Suction Cup lifters and two people are required.
While one person is on balcony or stair holding panel in place, the other person is aligning up glass clamps to the glass panel and installing the outer half of the glass clamp. Install one on each side to relieve the person holding the weight of the glass. Install outer halves only hand tight.

12. Install all the glass panels in place before tightening clamps

13. Check the spacing (margins) around the glass are equal dimensions loosen clamps and adjust panel as necessary to get equal dimensions around the panels. Continue this with all the panels before tightening glass standoffs.

14. Once all margins are correct, tighten glass clamps using the spanner wrench. Do not overtighten.
Spray lubrication between glass and clamp shim to allow to tighten freely.

AX30.070.530

AX30.070.531

15. On the Square glass clamps use black electrical tape to attach the square shim to the outer half bring tape around the side and to the face of the outer half. Place a piece of this tape on all 4 sides of the square to firmly hold the gasket in place while tightening the clamp. Spray lubrication on the glass between the shim to allow gasket to turn freely while tightening.

16. Align square clamp so that is vertically aligned with wall side (back half) of clamps.
If round be sure to put the tightening hole on edge of the outer half in an inconspicuous location

17. Install Cap Rail on top of glass to keep panels from moving independently.

18. Clean Stainless Clamps with Degreaser and Polish.

Cloth Rag

Step 2

Cleaner/Polish

AX00.080.510