

# IRON HANDRAILS

## LEVEL RAIL INSTALLATION INSTRUCTIONS

### Kit Contents:

- (1) Handrail
- (2) Posts
- (2) Newell Caps for Posts
- (2) Post Mounts
- (2) Post Escutcheons
- (4) Self Drilling Screws

### Required (not included):

- Drill / Driver
- Hammer / Rubber Mallet
- Level
- Fastening Hardware

#### 1. Align & Mark

- Position the handrail cap just below the top of the post.
- Center the handrail side to side on the post.
- Place a mark on the post through the upper and lower handrail tab holes.
- Do this for both posts.

#### 2. Predrill Holes

- Use the supplied self drilling screws to drill holes in the posts on your marks from step 2.
- It is not necessary to run the screws all the way into the post.
- Once a hole is drilled, remove the screw.

#### 3. Attach Post to Panel

- Use the supplied self drilling screws to attach the post to the handrail panel through the panel clip hole. NOTE: It is not necessary to overly tighten the self drilling screws.

#### 4. Prepare Post Mount

- Fold the green snug strip over the top of the post mounts.

#### 5. Install Post Mount

- The snug strips should be oriented to touch the sides of each post, as opposed to the front and back.
- Slide the post mount and snug strip assembly into the bottoms of the rail posts.
- **NOTE:** It will be necessary to tap the post mount assemblies into place.

#### 6. Drill Holes

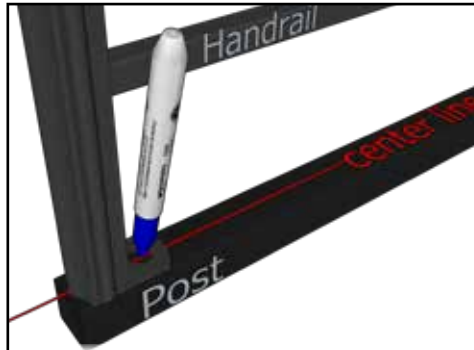
- Set the rail into its final position.
- Drill a hole through the post mount and use an anchor suitable for your materials to fasten the rail.
- Drill one hole and install one anchor at a time.

#### 7. Plumb The Posts

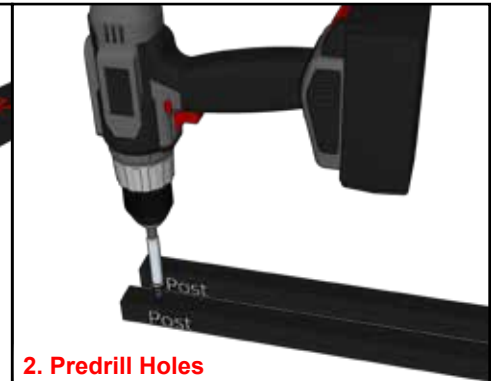
- To help plumb the rail posts side to side ( $\leftrightarrow$ ), use the stainless steel washers provided to shim underneath the mounting plates before tightening your anchors.

#### 8. Install Newell Caps

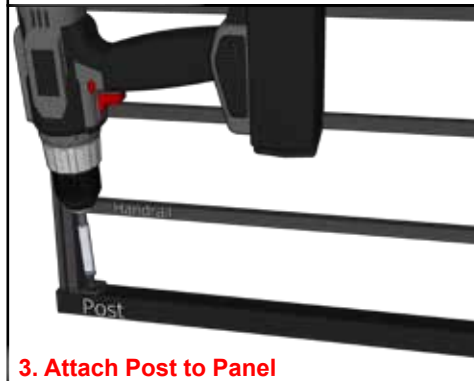
- Slide one newell cap into each post and tap into place with a rubber mallet.



1. Align & Mark



2. Predrill Holes



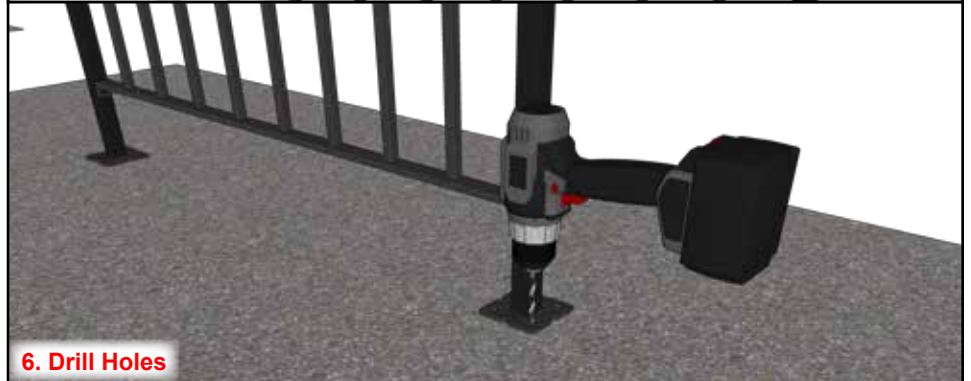
3. Attach Post to Panel



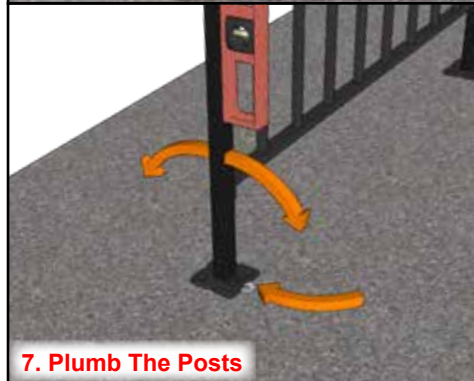
4. Prepare Post Mount



5. Install Post Mount



6. Drill Holes



7. Plumb The Posts



8. Install Newell Cap

## Keys to Installation Success

The success of your Iron X Handrail installation is dependant on the quality of your stair material as well as the type and quality of fastener you use. Not only does Fortin Ironworks manufacture Iron X Handrails but we also install them. Below is a list of tips and quality fasteners we use everyday when we install handrails.

Please ensure that your stairs are suitable to fasten handrails to them. Visually inspect your steps for cracks or splits. If you are unsure please contact a reputable contractor.



**Suitable Steps**



**NON-Suitable Steps - Holes, Cracks, Broken Tiles, Missing Bricks, Severly Slanted**

### What anchors do you suggest when installing Iron X Handrails?

**CONCRETE:** 5/16" x 2-1/4" Concrete Screw.

**CONCRETE BLOCK:** 5/16" x 5" Concrete Screw . It is advisable to buy an anchor long enough to get through the block into the substrate below.

**PAVER BRICKS** 5/16" x 5" Concrete Screw . It is advisable to buy an anchor long enough to get through the block into the substrate below.

**LIMESTONE:** It is not advisable to drill any holes into limestone as it is very soft and susceptible to cracking. If you must install into limestone we suggest 5/16" x 5" Concrete Screw . It is advisable to buy an anchor long enough to get through the block into the substrate below.

**WOOD:** 5/16" diameter stainless steel bolts completely through the steps with a washer and nut on the other side. Buy your anchors suitable length to go completely through the step.

**ALTERNATE WOOD:** 5/16" diameter stainless steel lag bolts. It is advisable to buy anchors long enough to get through the step and into the underlying wood structure.

**COMPOSITE DECKING:** 5/16" diameter stainless steel bolts completely through the steps with a washer and nut on the other side. Buy your anchors suitable length to go completely through the step.

**ALTERNATE COMPOSITE DECKING:** 5/16" diameter stainless steel bolts completely through the steps with a washer and nut on the other side. Buy your anchors suitable length to go completely through the step.



**Large Diameter Tapcon**



**Stainless Steel Hardware**

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