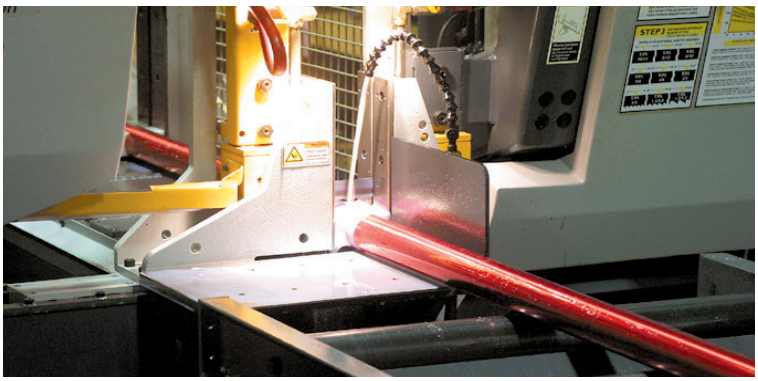
ATLANTIS®
RAIL SYSTEMS

ATLANTIS RAIL Contact Information:
Atlantis Rail Systems
70 Armstrong Road
Plymouth, MA 02360
3900 Civic Center Drive
North Las Vegas, NV 89030
☎ (800) 541-6829 or ☎ (508) 732-9191
(508) 732-9798
www.atlantisrail.com



⚠ Warning

Cutting Stainless Steel Railing

There are several methods of cutting stainless steel tubing used for railing. We used a very expensive automated band saw that is water-cooled and cuts several hundred feet of tube per day. For customers that need to make a small number of cuts we recommend a few different methods that are cost effective.

Table of Contents

⚠ ***PLEASE CONSIDER SAFETY AS YOUR PRIMARY FACTOR IN DECIDING HOW TO CUT TUBE. ALWAYS WEAR SAFETY GLASSES, LEATHER GLOVES, EAR PROTECTION AND A LONG SLEEVE SHIRT. BE CAREFUL, AS THE ENDS WILL GET EXTREMELY HOT.***

Tools

Required & Recommended


Safety Glasses


Work Gloves


Ear Protection


Long Sleeve Shirt


Chop Saw (Compound Miter Saw)


Grinder (Hand Grinder)


Magic Marker

Scotch-Brite™ Pad (Polishing/Buffing Pad)

Tips for a Successful Installation

- Read the instructions completely before beginning the installation.
- Check carton(s) to determine part count is complete.

Sidemount Fittings

If you are using female rail fittings such as the RailEasy™ Sidemounts (*See Figure E and Figure F*), there is a simple and inexpensive cutting method based on a common $5 blade and your existing saw. This cutting method will result in a slight discoloration, approx 1/4" away from the cut edge and a significant burr on the edge of the tube. The discoloration can be hidden by the RailEasy sidemounts and the burr can be filed off or ground off using common tools. As many as 25 or more cuts can be obtained from a 12" blade. At about the 15th cut the burr does become larger, but the cut remains straight.

Figure E. **(Left)** RailEasy Straight Sidemount (C0975-0002).
Figure F. **(Right)** RailEasy Adjustable Sidemount (C0976-0002).

Proposed Cutting of 2" Stainless Steel Tubing

Use a common "Chop Saw" available at a hardware store for between $99 and $150. The Chop Saw has a lower RPM than common Miter saws. Alternatively, you can use a 12" (or 10") Compound Miter Saw. (Our test was conducted on a 12" Compound Miter Saw). (*See Figure A and Figure B*).

Use an abrasive cutting disk (*See Figure C and Figure D*), (Tested with a "Norton 12" High Speed Cut Off Blade, #6360, 12" x 1/8" (3/4" arbor) $4.88 from Home Depot) There are thinner width blades, which may work better but will render less cuts.

Figure A. **(Left)** Use a common Chop Saw.
Figure B. **(Right)** Use a Compound Miter Saw.

Figure C. **(Left)** Use an abrasive cutting disk.
Figure D. **(Right)** Use a 3/4" Arbor.

Be sure the saw has been thoroughly cleaned out of any sawdust, as the sparks could ignite the saw dust (*See Figure E*). You can achieve this with a dust pan & brush, vacuum, can of air, etc. to remove the saw dust.

Figure E. Remove any and all saw dust from chop saw.

Mark, Cut, Grind and Polish (*See Figure F*)

1. Mark the area to be cut, firmly hold it in place (hand pressure is enough provided there is a back stop on the saw).
2. When cutting, let the saw get up to full speed. Bring it down with even and consistent pressure. During the cutting, it is possible to have an assistant spray water on the area being cut to reduce the discoloration. Follow through the cut with even pressure, making sure the disk goes through the tube at the end of the cut.
3. To remove the burr, which will be larger at the end of the cut, a disk grinder works fine. Any method that can sand would work. Hold the tube at a 45° angle to the grinding surface and rotate the tube to evenly de-burr the edge. The inside burr can be removed with a coarse half round file. Holding the tube firmly on a flat surface, file the inside edge of the tube.
4. If the coloration needs to be removed, a Scotch-Brite pad can take it away, however it can scratch a polished surface. A polishing/buffing pad and rouge compound would remove the color also.

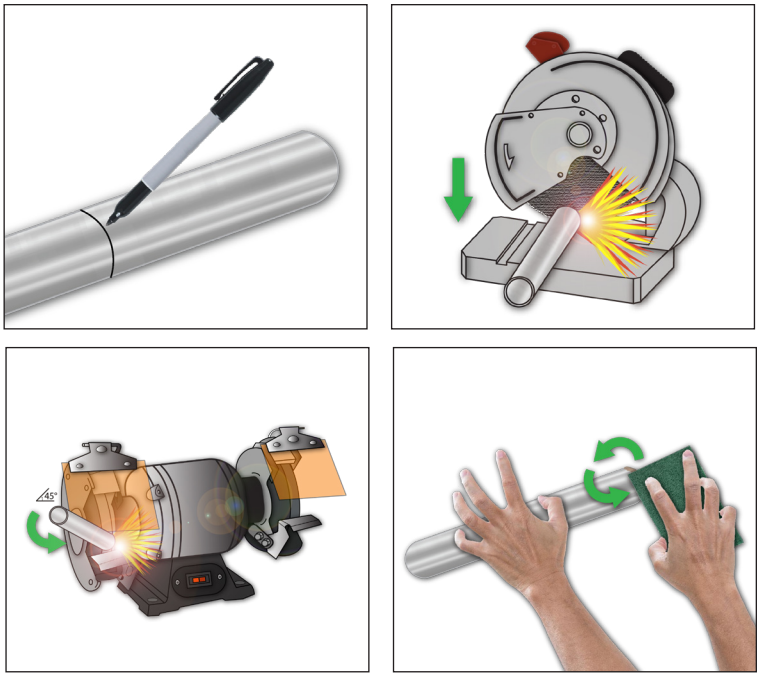


Figure F. 1. Mark the tubing. 2. Cut post to desired length. 3. De-burr the cut edge. 4. Remove any discoloration.