

Component Part Numbers:

- | | |
|--|------------------------------------|
| 1.) BR-1625 left/right return | 3.) BRS-1600S stainless steel rail |
| 2.) BR-1607FE bracket | 4.) IOC-1650 inside/outside corner |
| a. Base plate and rod, welded assembly | 5.) SPL-1600S splice |
| b. Flange cover | |
| c. Shim | |

- Step 1:** Determine top of handrail height and snap a chalk line 3 1/2" below for the centerline of the two uppermost mounting holes, see **fig 1**.
- Important:** Store material in a clean dry place where the temperature is maintained above 50°F (10°C). Walls and rooms should be maintained at a minimum of 65°F (18°C) for at least 48 hours prior to installation. Acclimate materials to normal building conditions for at least 24 hours before cutting and installing.
- Step 2:** Layout and cut stainless handrail. See **Cutting Adjustment Diagrams and Schedule** for adjustments to handrail length at wall returns and corners. Refer to **Minimum Layout Configurations** for additional information. See **step 8** for splicing information.
- Important:** All cuts must be square. Select a cutting method that will minimize creation of heat during the cut. Excessive heat will cause discoloration of the stainless steel that is not easily removed without special equipment or damage to the finish of the rail. Deburr using smooth cut file being careful to minimize damage to the external finish of the handrail tubing.
- Step 3:** Attach wall returns and one side of corners to rail by applying a layer of two-part urethane adhesive (included) to the inside of handrail and accessory tubing, see **fig 2**. Follow mixing and curing instructions on the adhesive packaging for proper use. Install the internal compression splice into the accessory first, and then install the splice/accessory combination into the rail.
- Important:** Lay the rail on a flat surface in order to ensure accessories are aligned with one another. Allow the adhesive to cure to handling strength before proceeding with the next step in installation.
- Step 4:** After the adhesive has been allowed to cure to at least handling strength, lay the railing on a flat surface with the underside facing up. The wall return and corner accessories will help to stabilize the rail while bracket mounting holes are added. Using a 1/4" diameter drill, locate and drill bracket mounting holes through the underside of the handrail tubing. If the bracket occurs within the area of an internal splice, drill through both the handrail and splice. Thread bracket mounting holes with a 5/16"-18 taper tap, see **fig 3**.
- Brackets must be spaced:**
- Not to exceed 32" on center
 - 1 7/8" to 6" on center from end of rail at returns and corner accessories. Take into account allowance required for application of corner guards at outside corners. Space bracket a minimum of 3 1/4" in from end of rail for a 3" corner guard at outside corners.
 - A maximum of 12" from end of rail at splice to provide support at splice.
 - To align with metal studs (on metal stud construction) or preferably with horizontal metal backer plate (by others).
- Step 5:** Slide a flange cover loosely over the bracket base plate and rod assembly. Slide a shim over the threaded stud with the "cup" facing upward, see **fig 4**. Thread a bracket into each hole and tighten to align base plates in line with each other and parallel to the rail. Be sure cup of shim is seated properly against rail.
- Step 6:** Using the rail and bracket assembly as a template, locate and drill mounting holes in wall construction. Mark the location of all three holes while aligning the center of the two uppermost holes with the chalk line provided in **step 1**. Choice of hardware will dictate hole diameter.
- Step 7:** Mount rail and bracket assembly to wall with the appropriate hardware according to wall construction.
- Suggested hardware:**
- Drywall: Toggler® brand toggle bolts
 - Masonry: Plastic Alligator® insert
- Important:** Be sure to install corner accessories between rails before securing rail at both sides of corner. Use adhesive to install second side of corner accessories, see **step 3**.
- Step 8:** Refer to **fig 5** for splicing of rail. Locate splice a maximum of 12" from bracket. Install splice by applying a layer of two-part urethane adhesive (included) to the inside of handrail on each side of the joint. Install splice so that it is engaged at least 1" on both sides of the joint.

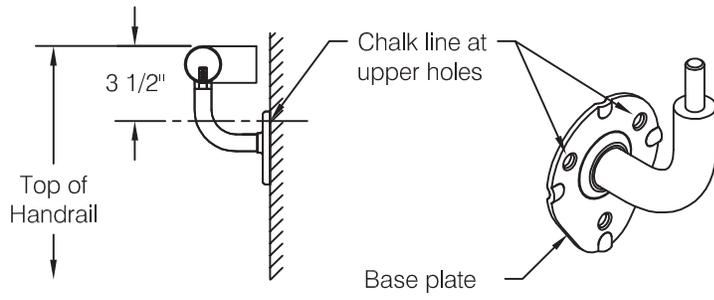


fig 1

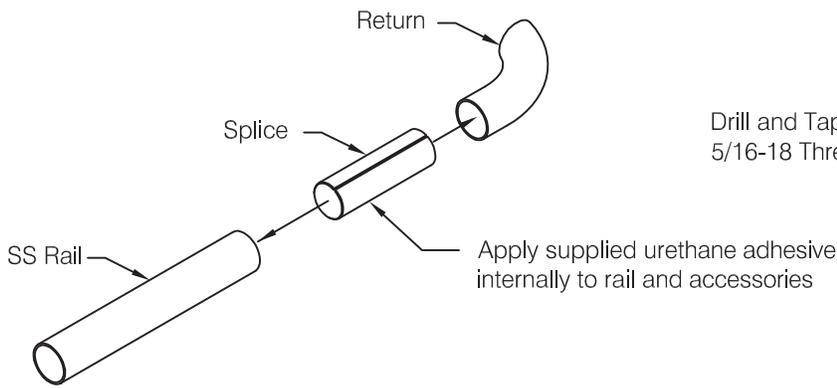


fig 2

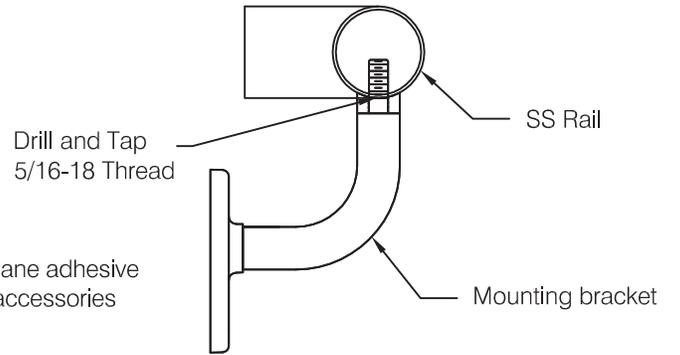


fig 3

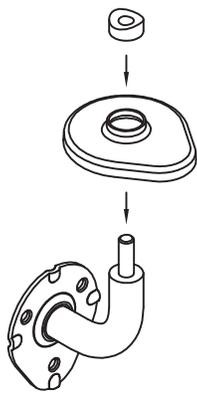


fig 4

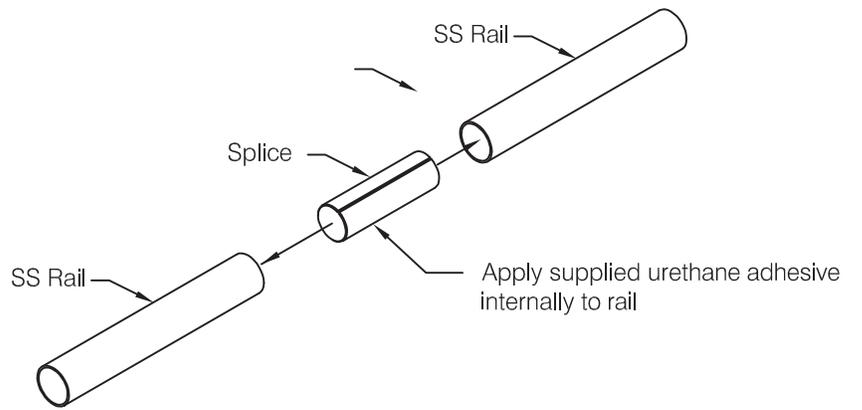
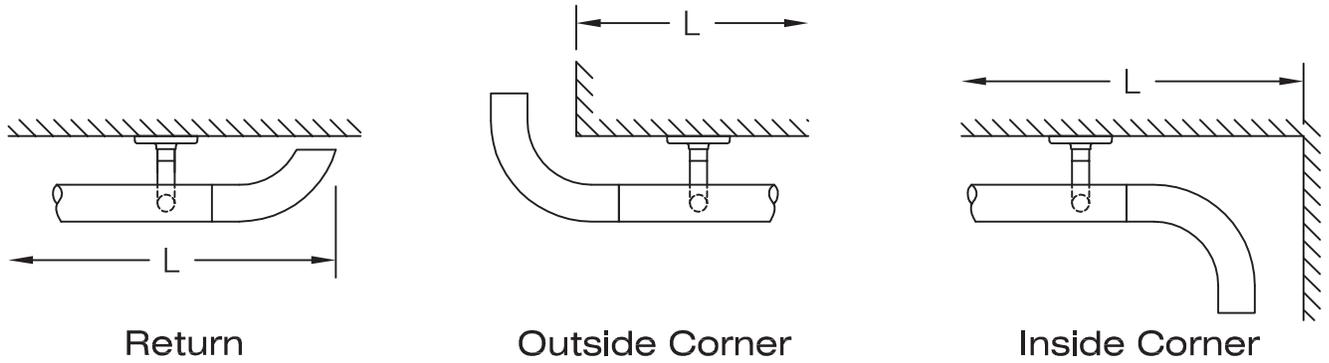


fig 5

Cutting Adjustment Diagrams and Schedule



SS Rail	
Return	L - 5 1/16"
Outside Corner	L - 1 3/4"
Inside Corner	L - 7 1/4"

Minimum Layout Configurations

