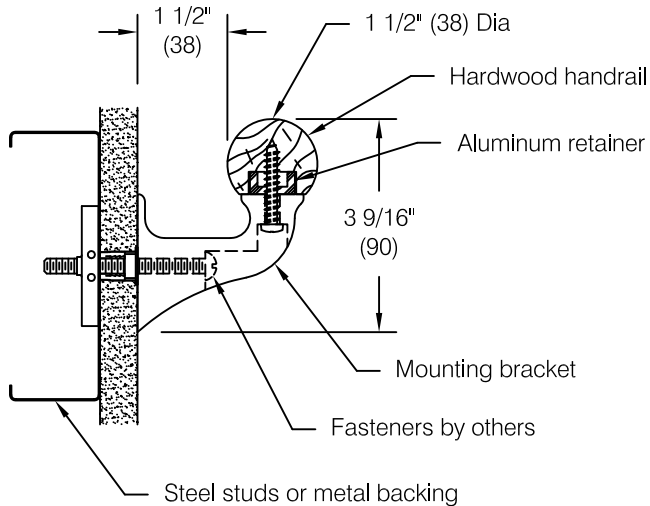
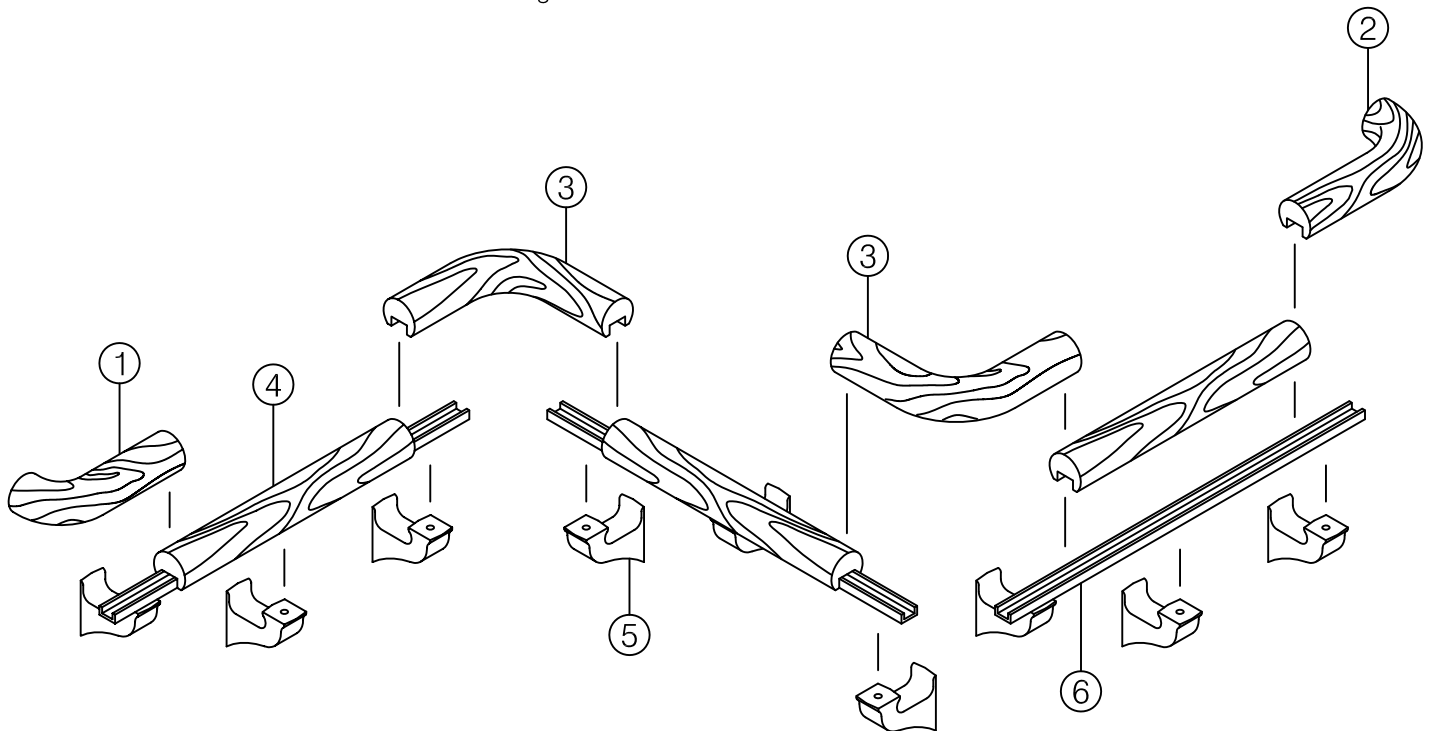


BR-1500 Series Handrail



This installation instruction
is applicable to:

BR-1500



Component Part Numbers:

- | | |
|-----------------------------------|------------------------------|
| 1) BRL-1525 Left return | 4) BR-1500 Wood rail |
| 2) BRR-1525 Right return | 5) BR-1506 Mounting brackets |
| 3) IOC-1550 Inside/Outside corner | 6) BRA-1500 Aluminum channel |

BR-1500 Series Handrail Installation Instructions

- Step 1:** Determine top of handrail height and snap a chalk line 2 7/16" below to locate centerline of the mounting hardware, see **fig 1**.
- Important:** Store material in a clean dry place where the temperature is maintained between 50°F (10°C) and 100°F (38°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:** Wall return and corner accessories must be supported with a mounting bracket. At wall returns, locate a bracket 4 1/2" on center from where the handrail will terminate, see **fig 2**. At outside corners, locate brackets 1 1/2" on center from the corner, see **fig 3a**. At inside corners locate brackets 6" on center from the corner, see **fig 3b**.
- Step 3:** Cut aluminum alignment channel. See **Cutting Adjustment Diagrams and Schedule** for adjustments to aluminum channel length at wall returns, inside corners and outside corners. Refer to **Minimum Layout Configurations** for additional information.
- Important:** To accomplish the bracket spacing described in **step 2** proper allowance must be provided for wall return and corner accessories.
- Step 4:** Layout aluminum alignment channel and drill for bracket attachment hardware using a 1/4" diameter drill bit. This will provide clearance for #12 screws used to secure the handrail to the bracket. Drill along the centerline of the channel as shown in **fig 4**. Space holes to allow for channel to stop and start at return and corner accessories as noted above.
- Brackets must be spaced:**
- Not to exceed 32" on center, see **fig 7**
 - Under accessories as described in **step 2** and **fig 6a** and **fig 6b**
 - To align with metal studs (on metal stud construction) or preferably with horizontal metal backer plate (by others)
- Step 5:** Using a 3/16" diameter bit, drill and countersink aluminum channel for #8 flathead fasteners on center between bracket mounting holes, see **fig 7**. Drill and countersink two additional holes at each accessory and a third hole between 3/4" and 1 1/4" in from the end of the adjoining handrail, see **fig 6a** and **fig 6b**. Drill and countersink along the centerline of the channel as shown in **fig 5**.
- Step 6:** Locate and drill bracket mounting holes in wall construction using the aluminum alignment channel as a template or by careful measurement. Choice of hardware will dictate hole diameter.
- Step 7:** Mount brackets to wall with the appropriate hardware according to wall construction.
- Suggested hardware:**
- Drywall: Toggler® brand toggle bolts
 - Masonry: Plastic Alligator® insert
- Step 8:** Using a 5/32" bit, drill pilot holes in wall return accessories for #12 fastener at bracket mounting location. Using a 1/8" drill bit, drill pilot holes for the two #8 flathead fasteners. Use the drilled aluminum channel as a hole location guide making sure to align the wood return with its end perpendicular to the channel before drilling, see **fig 6a**. Attach wall returns using the #8 flathead screws provided.
- Important:** Use caution to avoid drilling through exposed surface of the wood rail. Select accessories of similar grain and coloration for use at opposite ends of each handrail section.
- Step 9:** Position aluminum channel over brackets. Secure in place at pre-attached wall return locations using the #12 fasteners provided. Position corner accessories over aluminum and drill pilot holes for fasteners as described in **step 8**. Secure corners in place with #8 flat head and #12 pan head fasteners provided.
- Step 10:** Layout and cut wood rail to fit between previously mounted wall return and corner accessories. Cut handrail so butt joints in wood occur no more than 4" from a mounting bracket, see **fig 8**, and a minimum of 2" from a joint in the aluminum channel, see **fig 9**. Add an additional countersunk hole and #8 fastener 3/4" to 1 1/4" in on each side of a handrail butt joint, see **fig 8**.
- Important:** Care should be taken to select the straightest lengths of wood for the longest handrail spans. Select wood of similar grain and coloration to best match accessories and when joining sections end to end. All cuts must be square. Deburr using a 120 grit sandpaper and being careful not to damage the finish.
- Step 11:** Color the perimeter of unfinished wood rail ends using a coordinated color stain pen or touch-up stain, see **fig 10**.
- Step 12:** Position handrail over aluminum and drill pilot holes for fasteners as described in **step 8**. Secure handrail in place with #8 flat head and #12 pan head fasteners provided. Install handrail to span aluminum alignment channel butt joints, see **fig 9**.
- Note:** To achieve optimal alignment minimal shimming at accessory and handrail butt joints may be required. If necessary, loosen the handrail or accessory components and shim in the machined groove provided for the aluminum channel. Reposition components and tighten in place.

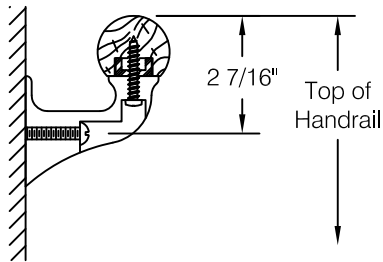


fig 1

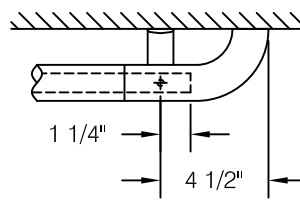


fig 2

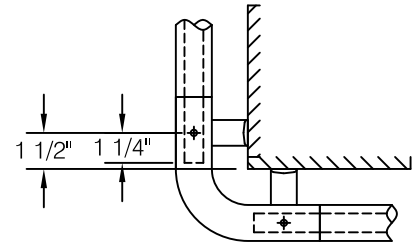


fig 3a

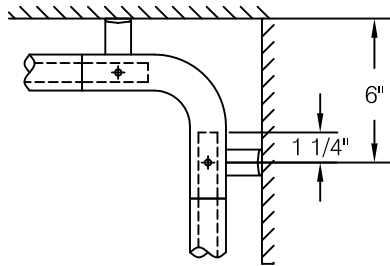


fig 3b

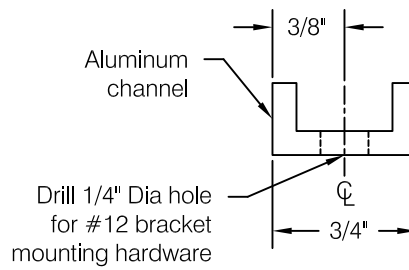


fig 4

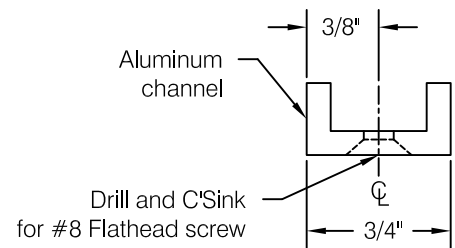


fig 5

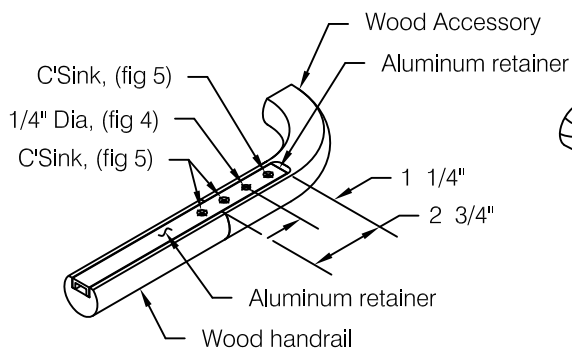


fig 6a

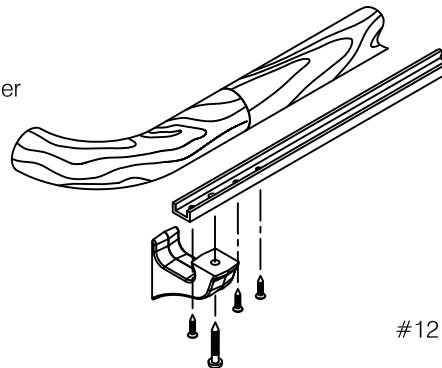


fig 6b

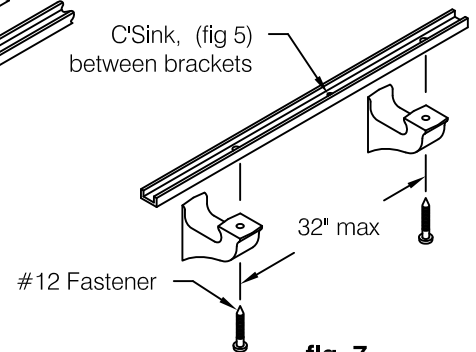


fig 7

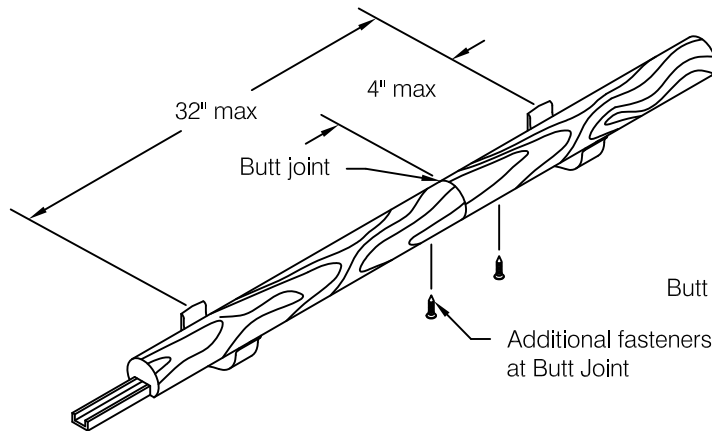


fig 8

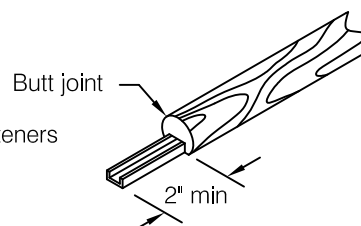


fig 9

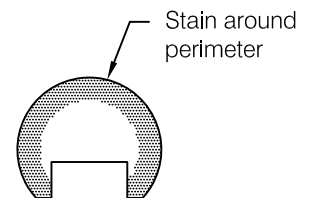
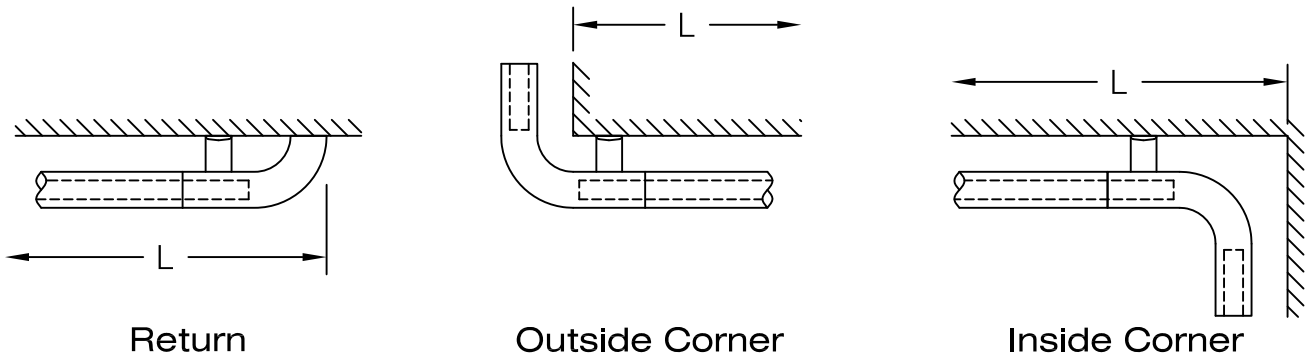


fig 10

Cutting Adjustment Diagrams and Schedule



	Wood Rail	Aluminum Rail
Return	L - 6"	L - 3 1/4"
Outside Corner	L - 3"	L - 1/4"
Inside Corner	L - 7 1/2"	L - 4 3/4"

Minimum Layout Configurations

