
HR1 Wood Handrail

Pre-assembled Installation

ACCESSORY

BRK Mounting Bracket

**Material must be stored, installed and used
in environmentally controlled conditions**

HR1 - Pre-assembled. Installers should be familiar with the installation of fine finished wood products. Recommended tools: tape measure, level, chalk line, power drill, power nailer, drill bits, socket or hex drive set, and phillips head screwdriver. **NOTE:** All handrails ship in pre-cut lengths with returns pre-assembled. If outside and inside corners are required, an extra four inches is included for the installer to miter and pin nail these corners. All boxes and components are marked to coincide with the floor plan drawings. Layout and identify the components needed for each section to be installed.

- [1] Snap a level chalk line at the required height for the mounting holes. The holes for the mounting bracket are $3\frac{3}{4}$ " (95mm) from the top of the handrail.
- [2] Inside and outside corner conditions: When corners are part of the installation the installer must miter cut, glue and pin nail these conditions.
 - a. Determine the cut length of the rail by measuring the distance from where the rail starts on the wall to the corner of the wall. For outside corners add 3" (76mm). For inside corners add $1\frac{1}{2}$ " (38mm). Miter cut the rail in the proper direction.
 - b. Glue inside corners and pin nail them before mounting the rail to the wall. Glue outside corners after one section is on the wall and pin nail after both sections are on the wall.
 - c. To join the two miter cut pieces of rail, butt them together, apply glue to the mating surfaces, and pin nail the two pieces together with four $1\frac{1}{4}$ " finish nails. Fill the void with putty from the touch-up kit. Wipe off any excess glue with a damp cloth.
- [3] Determine the location of the brackets on the wall. Brackets should be 10" (254mm) from the returns, and corners and spaced a maximum of 32" (813mm).
- [4] Locate and mark the bracket locations on the wall. Drill holes in the wall with a $\frac{3}{4}$ " drill bit for toggle bolts into metal studs, a $\frac{5}{32}$ " drill bit for wood screws into wood studs, and a $\frac{1}{4}$ " drill bit for ALLIGATOR anchors into masonry construction.
- [5] Mount the brackets to the wall by inserting the appropriate fastener with a flat washer and a lock washer through the front of the bracket. If using toggle wings or lead anchors, attach these to the back of the bracket. Mount the brackets into the holes on the wall and tighten the fasteners to secure the brackets.
- [6] Longer sections of the rail will require draw bolt splices and dowels. Holes for the draw bolt assembly are factory drilled into the sections of rail. Apply glue to both surfaces of the pieces to be joined and into the dowel holes. Insert the dowels into the holes and the unassembled parts of the draw bolt into the holes. Tighten the draw bolts with the tightening tool. Wipe off any excess glue with a damp cloth.
- [7] Apply a small amount of construction adhesive (installer supplied) between the bracket and the back of the rail. Attach the rail to the brackets with two #8 x $2\frac{1}{4}$ " trim head screws per bracket. The trim head screws should be $\frac{1}{2}$ " (13mm) on each side of the center of the bracket. Determine the location of the trim head screws on the rail and drill $\frac{1}{8}$ " (3mm) holes through the rail and in to the mounting brackets. Fasten the rail to the brackets and drive the head of the screw until it is just below the surface of the wood. As an option, attach the rail with a power nailer and two $2\frac{1}{4}$ " finish nails per bracket.
- [8] Fill any holes in the wood with putty from the touch-up kit. Clean up any wood glue with a damp cloth.
- [9] Remove any surplus materials, and debris upon completion of the installation.

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Pre-assembled Drawing

