

ProTek Systems, Inc. Installation Instruction

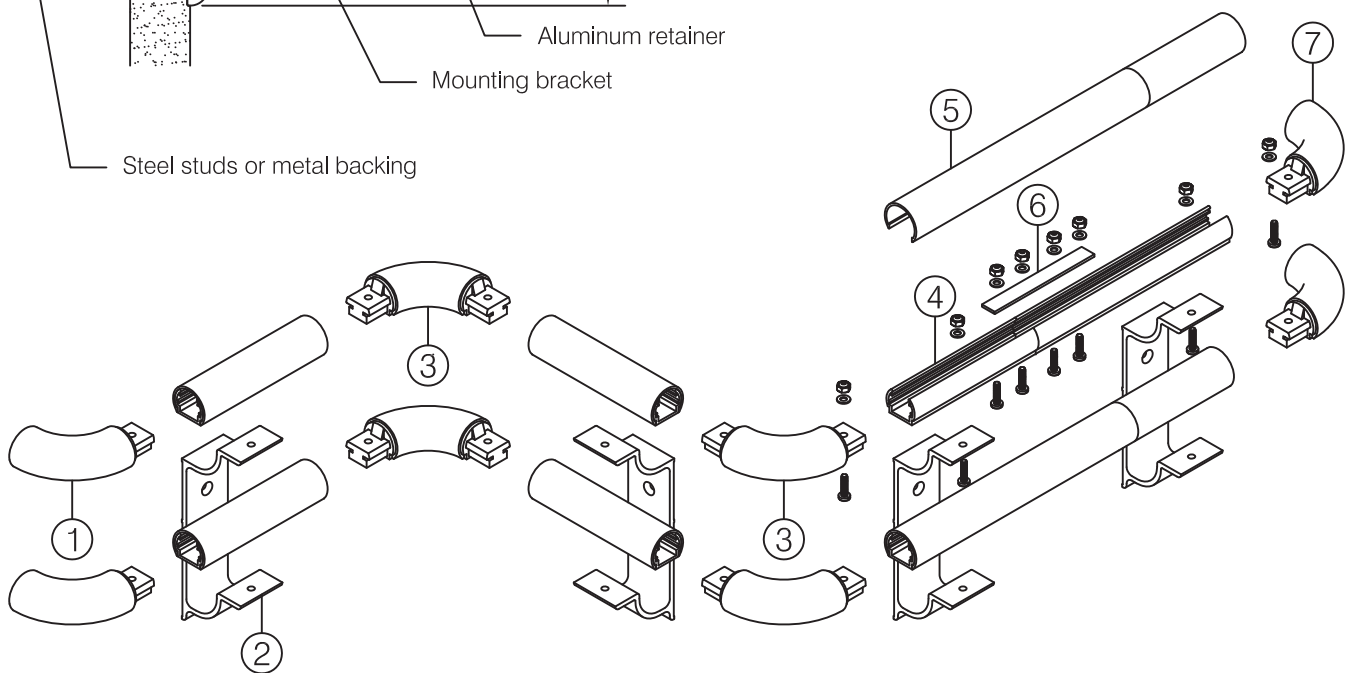
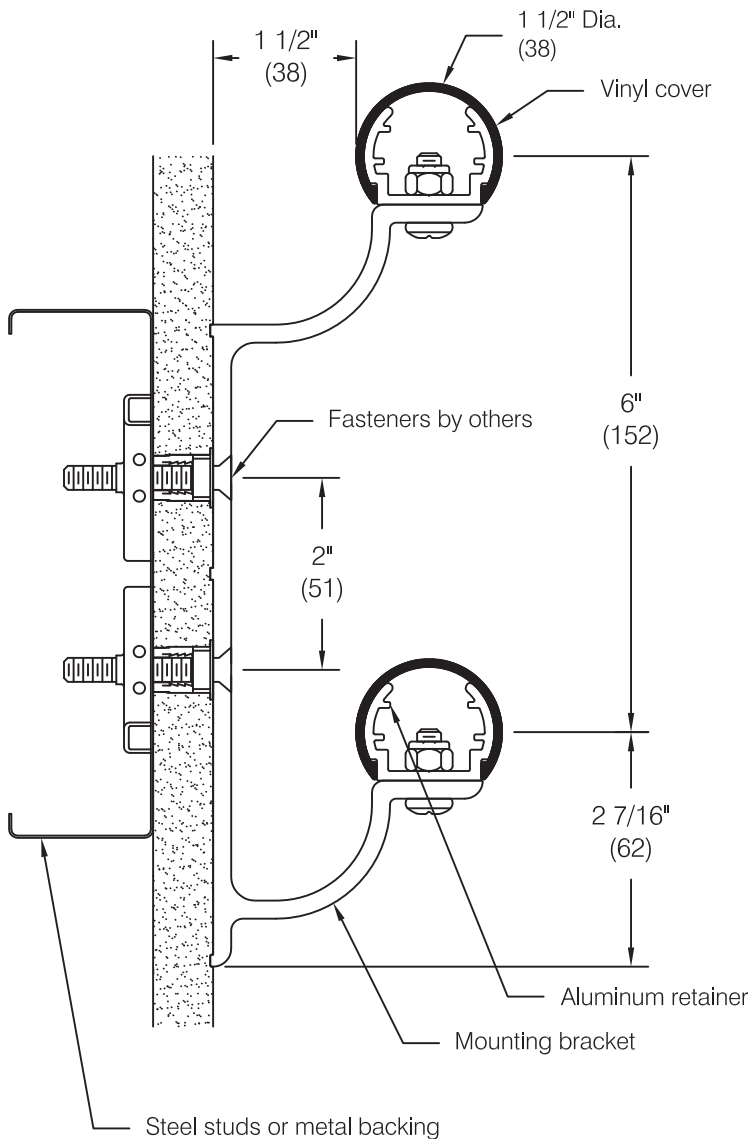
BR-2400 Series Handrail

This installation instruction is applicable to:

BR-2400

Component Part Numbers:

- 1) BRL-1225 Left hand wall return
- 2) BR-2405 Bracket
- 3) IOC-1250 Inside/Outside corner
- 4) BRA-1200 Aluminum retainer
- 5) BRV-1200 Vinyl cover
- 6) SPL-1200 Splice
- 7) BRR-1225 Right hand wall return



BR-2400 Handrail Installation Instructions

Step 1: Determine top of handrail height and snap a chalk line 3 3/4" below for centerline of upper mounting hardware, 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: Cut aluminum retainer. See **Cutting Adjustment Diagrams and Schedule** for adjustments to aluminum retainer length at wall returns, inside corners and outside corners. Refer to **Minimum Layout Configurations** and **Clearance With Adjoining Construction** for additional information.

Important: All cuts must be square and deburred

Step 3: Layout aluminum retainer "face up", mark and drill bracket mounting hole locations.

Bracket mounting holes must be spaced:

- Not to exceed 32" on center
- 1 1/2" to 6" from end of aluminum retainer at returns and corner accessories
- A minimum of 4" from end of retainer at splices to avoid interference with splice hardware (shown in **fig 5**)
- To align with metal studs (on metal stud construction) or preferably with horizontal metal backer plate (by others)

Note: Use groove in retainer to locate centerline for drilling, see **fig 2**.

Step 4: Locate and drill the bracket mounting holes in wall construction using the aluminum retainer as a template or by careful measurement. Choice of hardware will dictate hole diameter. Use the bracket as a centerline reference between upper and lower mounting holes.

Step 5: Insert molded accessories into end of retainer, press firmly to ensure molded part is seated squarely against the end of the retainer. Drill accessory mounting holes using the accessory as a template, see **fig 3**.

Step 6: Attach molded returns, outside corners and inside corners to retainer with accessory seated firmly and squarely while tightening. Fasten with 1/4" machine screw, flat washers and nylon lock jam-nut provided.

Caution: Do not use lock washers, use flat washers only. Install a flat washer between nut and molded tab. Tighten to 10 ft-lbs maximum torque, see **fig 4**.

Step 7: Attach brackets to retainer using 1/4" machine screw, flat washers and standard nylon lock nut provided. Do not tighten until rail has been mounted in place and all brackets are secured to wall.

Step 8: Mount assembly to wall with the appropriate hardware according to wall construction. See **step 9** for splicing information. Finish tightening brackets to rail fasteners with 10 ft-lbs maximum torque.

Suggested wall mount hardware:

- Drywall: Toggler[®] brand toggle bolts
- Masonry: Plastic Alligator[®] insert

Step 9: Refer to **fig 5** for splicing of aluminum retainer as required on longer handrail lengths. Locate splice joints a minimum of 4" from bracket locations to allow for clearance of splice hardware. For best results offset butt joints in cover from splice in aluminum retainer. Match drill splice plate and aluminum retainer as shown and secure with 1/4"-20 fasteners provided.

Step 10: Measure between accessories (corners and returns) and cut vinyl cover. The cover is not supplied with square cut ends. All ends must be cut square by installer.

Important: All cuts must be square and deburred

Step 11: Snap the cover in place over the aluminum retainer. Install cover to span butt joints in retainer.

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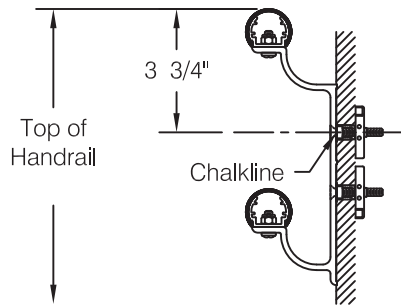


fig 1

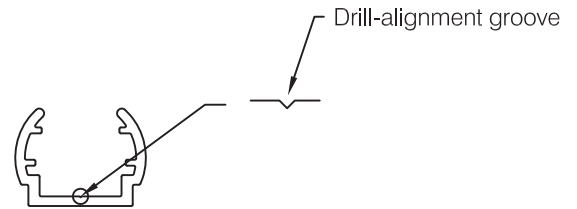


fig 2

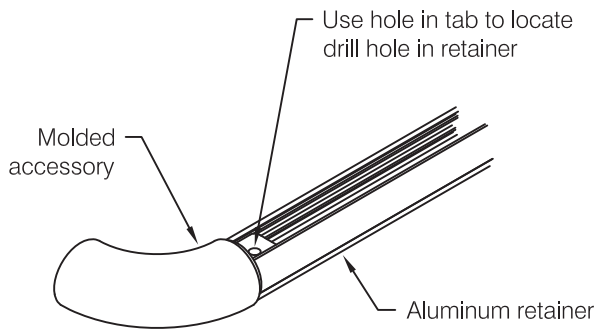


fig 3

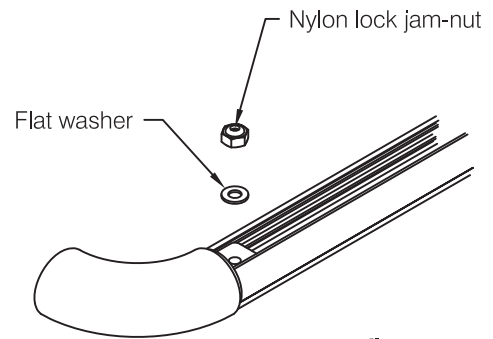


fig 4

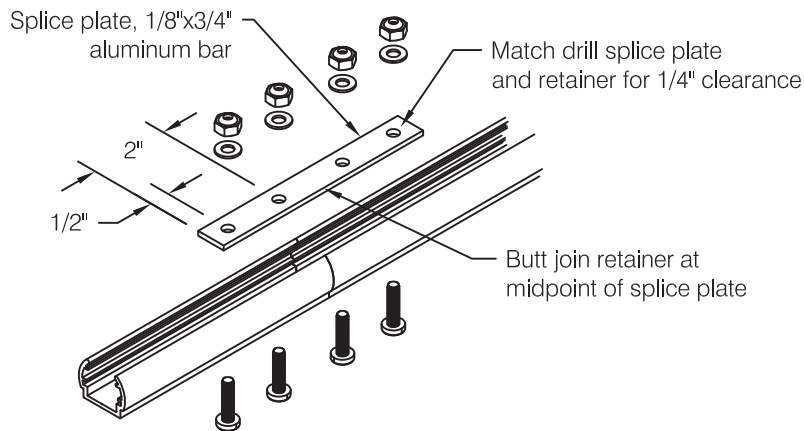
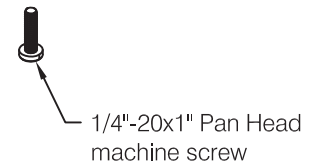
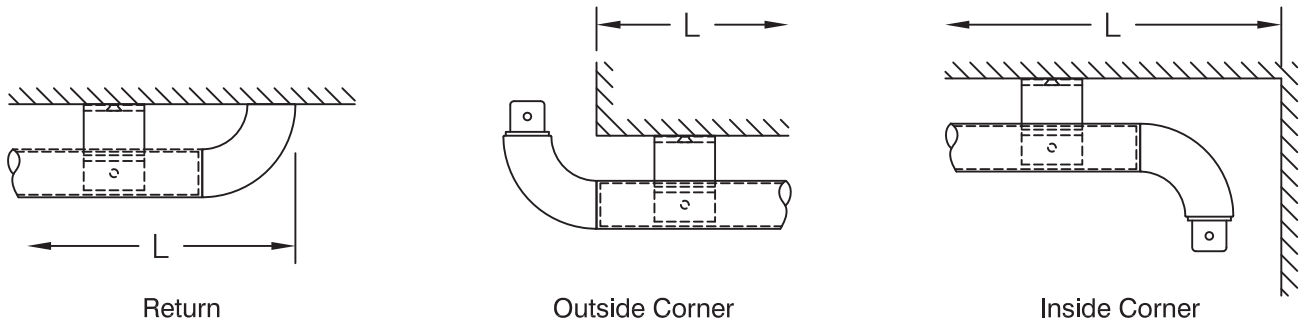


fig 5

BR-2400 Series Handrail Installation Instructions

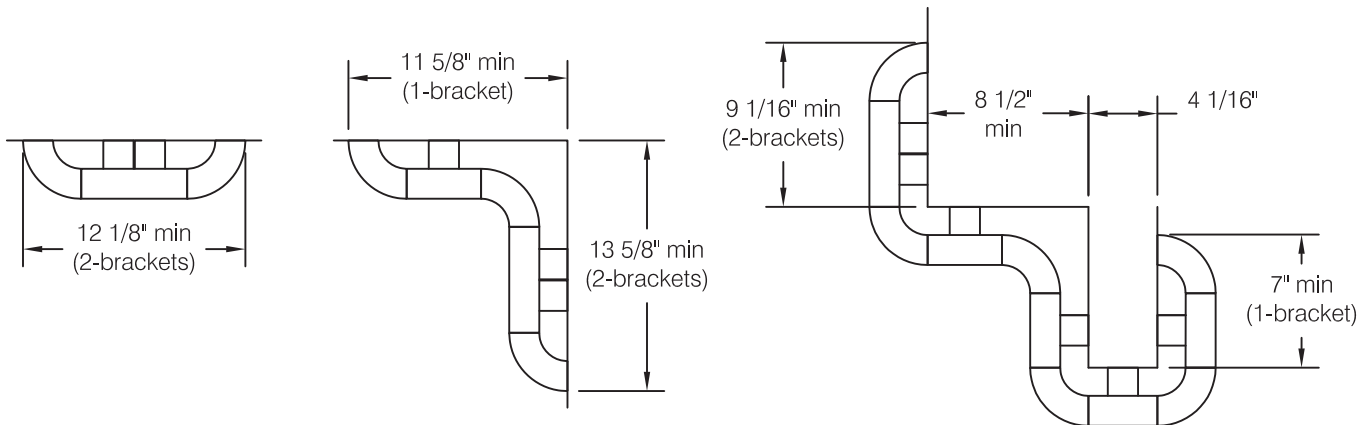
Cutting Adjustment Diagrams and Schedule



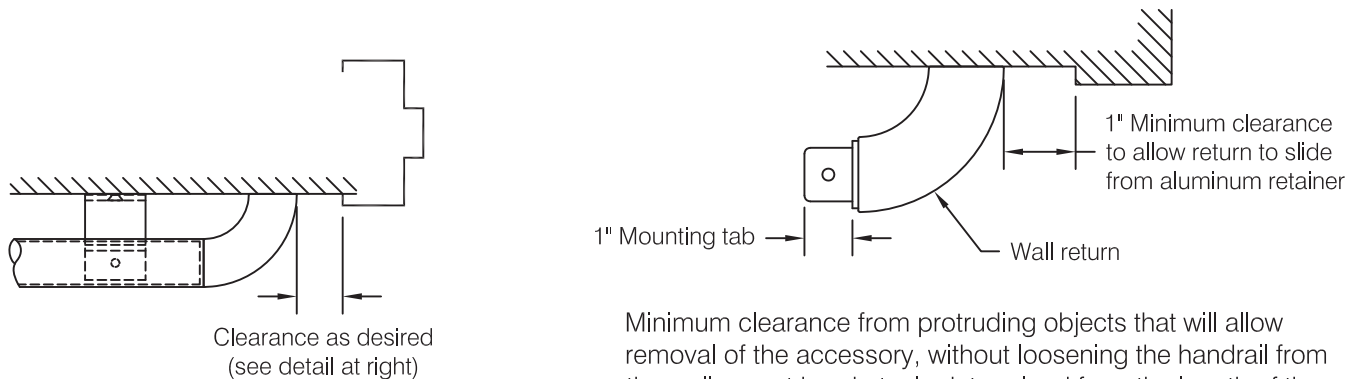
	Aluminum Retainer	Vinyl Cover
Return	L - 3 3/16"	L - 3 1/16"
Outside Corner	L - 1/8"	L - 0"
Inside Corner	L - 4 5/8"	L - 4 1/2"

Important: Install aluminum retainer and molded accessories before cutting the snap-on cover.

Minimum Layout Configurations



Clearance With Adjoining Construction



Minimum clearance from protruding objects that will allow removal of the accessory, without loosening the handrail from the wall mount brackets, is determined from the length of the mounting tab as shown.