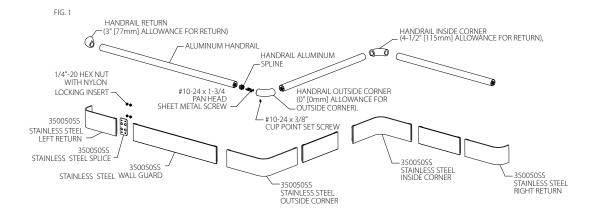
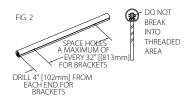
Installation Instructions

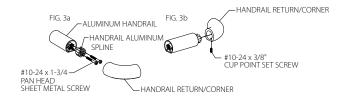
3500MS Handrail

Please read all instructions before installing handrail.

Note: Install product in environmentally controlled conditions. Acclimate the product to room temperature 24 hours before installation.









1. Cut the aluminum handrail to the desired lengths leaving allowances for returns, outside corners and inside corners. Break sharp edges with fine Emory cloth. See **Figure 1.**

Handrail Allowances:

Return - 3" [77mm]

Inside corner – 4-1/2" [115mm]

Outside corner – 0" [0mm]

Wall Guard Allowances: Stainless steel wall guards are manufactured to customer supplied measurements.

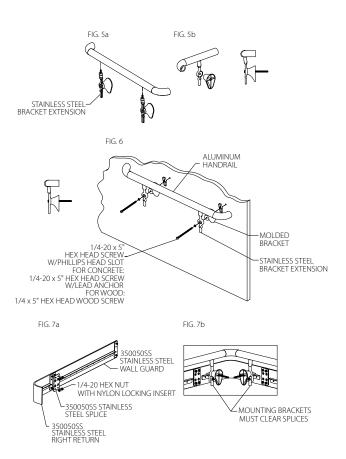
- 2. Bracket Spacing: Use brackets 4" [102mm] from each end and spaced a maximum of 32" [813mm] . Drill 1/4" holes on the bottom of the handrail aluminum for brackets. Be careful to drill only through the outer wall of the handrail aluminum. See **Figure 2**.
- 3. To attach returns and corners:
- a. Attach splines to handrail using two #10 x 1-34" sheet metal screws per spline. See Figure 3a.
- b. Attach returns and corners to handrail by sliding component over the spline and secure with setscrews. See **Figure 3b**.
- 4. For lengths longer than 12' [3.7M] use a splice to join sections. Butt the two sections together, using a splice as a template, mark the hole locations. See **Figure 4a**. Drill 1/4" holes on the bottom of the handrail aluminum for the splice. Connect the two pieces using the splice and two #10-24 x 5/16" Phillips truss head screws. (Note: splice must be positioned inside handrail). See **Figure 4b**.

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Installation Instructions

3500MS Handrail



- 5. Screw bracket extensions into the handrail holes on the bottom of the rail. Tighten and turn bracket extensions until aligned. See **Figure 5a**. Orientation of bracket extension is critical. See **Figure 5b**.
- 6. Snap a chalk line on the wall 4-7/16" [113mm] below the top of the handrail. Drill 3/4" holes for toggle bolts (drywall/metal stud installation), 1/2" [13mm] holes for lead anchor (concrete wall installation) or 1/8" pilot hole (wood screw into wood studs). Attach the molded bracket and stainless steel bracket extension/handrail assemble to the wall.
- 7. Attach the returns and corners to the straight lengths using splices. Align mating pieces and fit splice plate over 4 studs. Fasten 1/4 hex nut with nylon locking insert, using a 7/16 wrench or socket set. See **Figure 7a**. When determining handrail bracket extension locations, brackets must be clear of splice location. See **Figure 7b**.
- 8. Attach bracket adapters to the stainless steel bracket extensions, ½-20 x 3/4" hex head bolt and serrated hex flange nut. Level the adapters. See **Figure 8**.
- 9. Lift the wall guard assembly into position on the bracket adapters. See **Figure 9a.** Secure using two set screws in each adapter.
 See **Figure 9b.**

