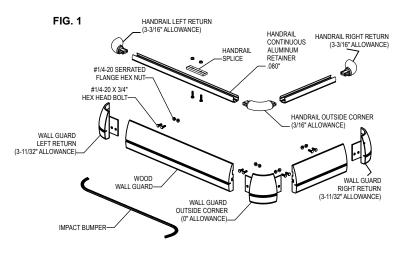
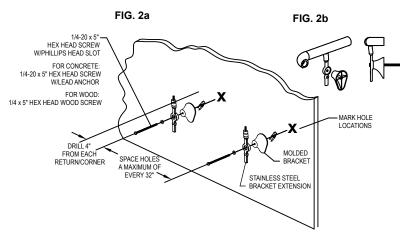
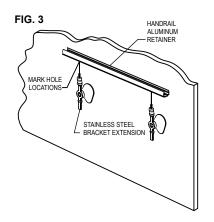
Installation Instructions 3500VWB Handrail

Please read all instructions before installing handrail.
Install product in environmentally controlled conditions.
Acclimate the handrail to room temperature 24 hours before installation. When storing straight lengths of materials, lay product flat on a supported surface. Do not lean the rails or lay them on unsupported parallel saw horses.







Note: Wood is a natural material therefore component color may vary. Sort the parts by color (light to dark) before use. Parts may appear different when viewed from the left or the right (metamerism). Keep this in mind when sorting parts.

1. Cut the aluminum handrail top and wood wall guard to the desired lengths leaving allowances for returns and corners. Break or chamfer edges on straight wood pieces to match return/corner edges. Finish as needed. The handrail aluminum is 3/8" shorter than the wall guard. See Figure 1.

> Handrail Allowances: Returns - 3-3/16" Outside Corners - 3/16" Wall Guard Allowances: Returns - 3-11/32' Outside Corners - 0"

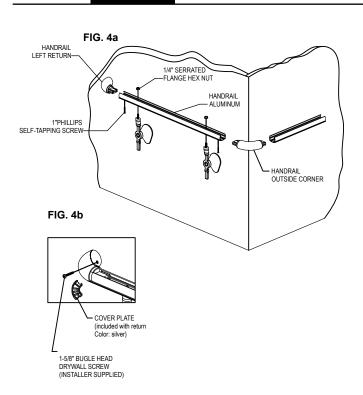
2. Snap a chalk line 4 7/16" below the top of the handrail. Drill ¾" holes for toggle bolts (drywall/metal stud installation), ½" holes for lead anchor (concrete wall installation) or 1/8" pilot hole (wood screw into wood studs). Holes should be 4" from each return or corner and spaced a maximum of 32" O.C. Attached the molded bracket and stainless steel bracket extension to the wall using one ¾-20 x 5" hex head screw, lock washer and toggle wing (concrete-¾-20 x 5" hex head screw, lock washer and lead anchor), (wood stud-5" hex head wood screw and lock washer) per bracket. See Figure 2a.

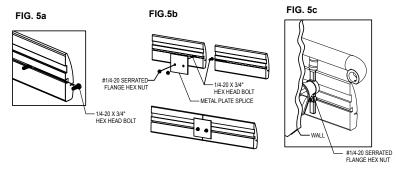
Note: Orientation of extension brackets. See Figure 2b.

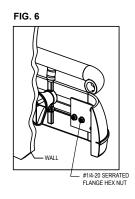
3. Measure and transfer the handrail mounting hole locations from the top of the bracket extensions to the handrail aluminum retainer making sure you allow for the returns and corners. Drill 5/16" holes at these marks. See Figure 3.

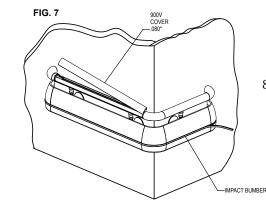


Installation Instructions 3500VWB Handrail









- 4. Attach returns and corners to the aluminum retainer using 1" phillips self-taping screw. See Figure 4a. Attach the handrail retainer to the stainless steel bracket extensions using a lock washer and nut.
- Note: Handrail Return should be secured to the wall. Remove the bottom plate of the handrail return and fasten the return with installer supplied screws through the hole location in the return. Re-attach bottom plate. See Figure 4b.
- 5. Slide the hex head of the ¼-20 x ¾" bolts into the channel on the back of the wood wall guard. Slide them into position so they align with the holes in the bracket extensions. See Figure 5a. With lengths longer than 12', use a metal plate splice and ¼-20 x ¾" bolts to join sections. See Figure 5b. Attach the wood wall guard to the bracket extension using a serrated flange hex nut at each location. See Figure 5c. The handrail aluminum is 3/8" shorter than the wall guard. Center the wallguard aluminum between the ends of the handrail aluminum.
- 6. Attach wall guard returns and corners to the straight lengths using ¼-20 x ¾" hex head screws and nuts. See Figure 6.
- 7. Cut impact bumper to the required length. Squeeze a small amount of glue into the bumper slot on the front of the wood wall guard. Work a four-foot area of handrail at a time since the glue will set up quickly. Do not allow glue to touch exposed wood surface. Push the bumper into the slot. A rubber hammer may help press the bumper into the slot. See Figure 7.
- 8. Measure and cut the handrail covers to length. Snap covers on the aluminum retainers. See Figure 7.



