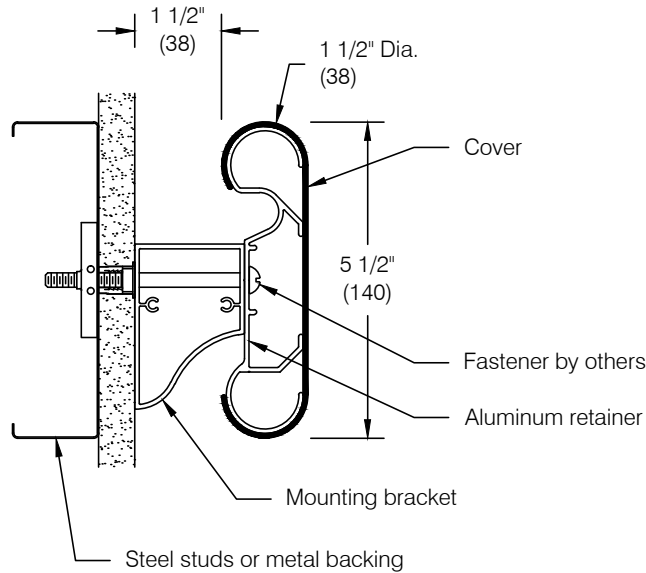
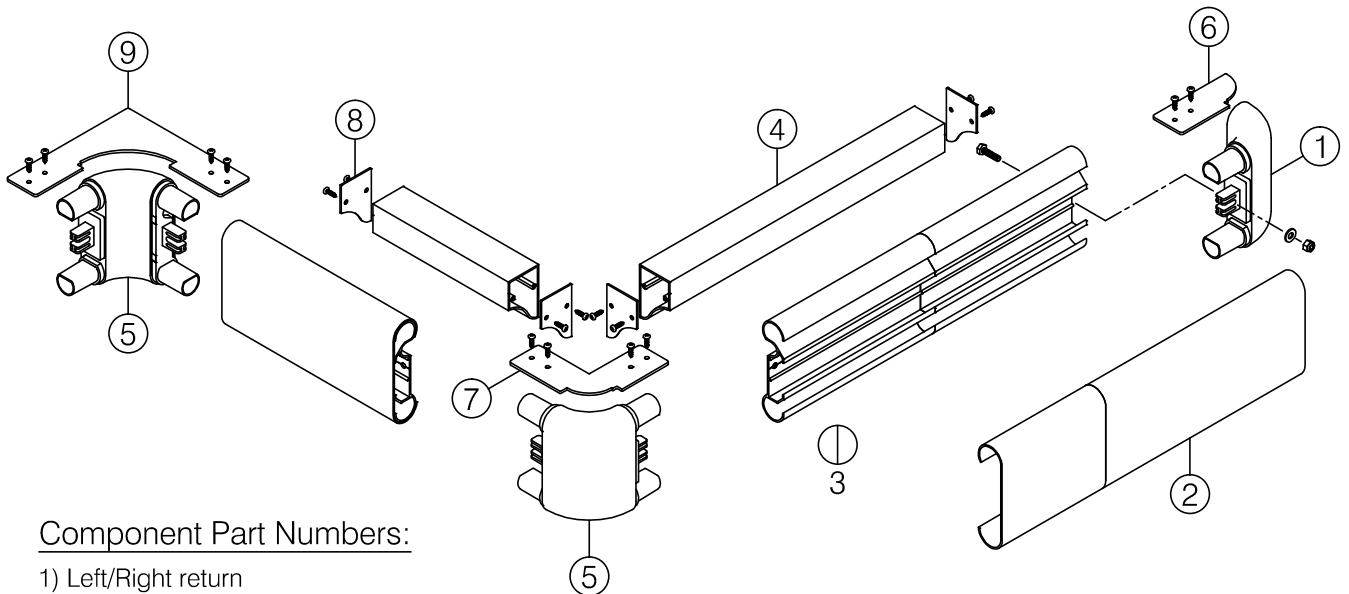


## Infinity Series 2021S



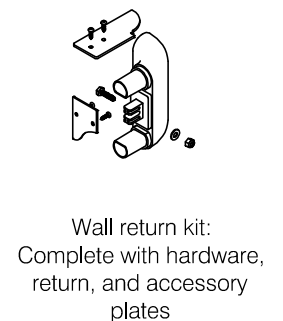
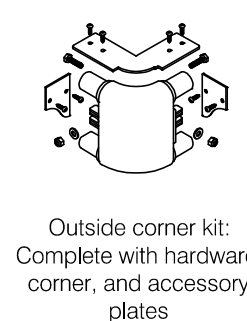
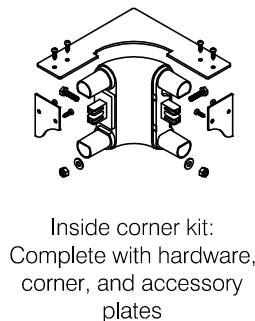
This installation instruction is applicable to:

2021S  
2021BS  
2021CS



### Component Part Numbers:

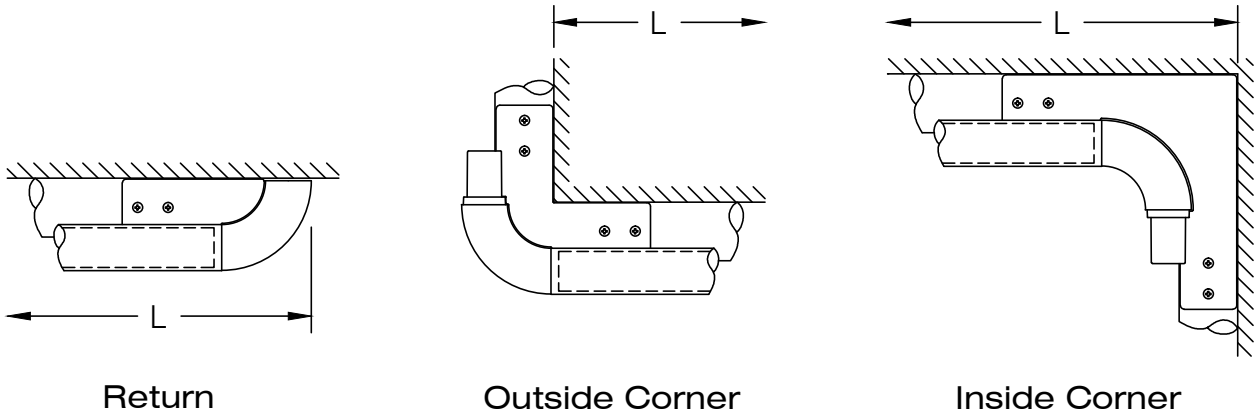
- 1) Left/Right return
- 2) Snap-on cover  
2021: Standard textured  
2021B: Accent stripe (1) and textured  
2021C: Grooved and textured
- 3) Aluminum retainer
- 4) Continuous bracket
- 5) Inside/Outside corner
- 6) Return plate
- 7) Outside corner plate
- 8) End plate
- 9) Inside corner plate



# wallguard.com Infinity Series 2021S Handrail Installation Instructions

- Step 1:** Determine top of handrail height and snap a chalk line 2 3/4" below for centerline of 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:** Cut aluminum retainer and continuous bracket. See **Cutting Adjustment Diagrams and Schedule** for adjustments to aluminum retainer and bracket length at wall returns, inside corners, and outside corners. To allow for accessory mounting hardware continuous bracket must be cut 1" shorter than aluminum retainer at all accessories, see **fig 2**. Refer to **Minimum Layout Configurations** 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 in aluminum retainer and continuous bracket. Be sure to offset continuous bracket 1" in from end of retainer at each accessory location, see **fig 2**.  
**Note:** Use V-groove in retainer and bracket extrusions to locate centerline for drilling. The grooves are located in each extrusion to ensure proper vertical alignment between retainer and bracket, see **fig 3**.  
**Bracket mounting holes must be spaced:**
- Not to exceed 32" on center
  - 2" to 6" from end of aluminum retainer at returns and corner accessories
  - To align with metal studs (on metal stud construction) or preferably with horizontal metal backer plate (by others)
- Step 4:** Locate and drill bracket mounting holes in wall construction using the aluminum retainer as a template or by careful measurement. Choice of hardware will dictate hole diameter.
- Step 5:** Assemble inside and outside corner accessories by snapping corner insert into the molded return, see **fig 4**. Always install the insert with finger notch up and in toward wall. It may be necessary to reverse the position of the molded return to accomplish the correct insert orientation.  
**Note:** Symmetry of the molded return accessory allows for installation in the aluminum retainer in any orientation. The correct choice will allow for proper installation of the insert to form inside and outside corners with finger notch toward the wall as shown in **fig 4**.
- Important:** Failure to install the insert in the proper orientation will interfere with installation of the aluminum corner plates, see **step 9** and **fig 5**.
- Step 6:** 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 6**.
- Step 7:** Attach molded returns, outside corners and inside corners to retainer with accessory seated firmly and squarely while tightening. Fasten with 1/4" bolt, flat washer and nylon lock-nut provided. Attach corners on one side only at this time. Do not attach corners on both sides and do not attempt to install corner sections as an assembly. Doing so will not allow for installation of the inside and outside corner plates after the rail has been secured to the wall.  
**Caution:** Do not use a lock washer, use flat washer only. Always place a flat washer between nut and molded tab. Tighten to 10 ft-lbs maximum torque, see **fig 7**.
- Step 8:** Attach end plates to open ends of continuous bracket using #8-32 x 3/8" type F Phillips pan head screws included. Install end plates only at ends occurring at molded accessory locations, see **fig 8**.
- Step 9:** Mount continuous bracket and aluminum retainer (with molded accessories attached) to wall with the appropriate hardware according to wall construction. See **step 11** for splicing information. Install railing from one end of a section to the other. Do not start at each end and work toward the middle.  
**Important:** Position inside and outside corner plates at each corner condition before attaching the second end of the corner accessory to the next section of retainer. Secure second end of corner accessories to aluminum retainer only after the corner plates have been loosely set in place. The corner plates are too wide to be set in place after the handrail has been mounted. Position the corner plates with the multi-cut corner away from the removable corner insert, see **fig 5**.  
**Suggested hardware:**
- Drywall: Toggler® brand toggle bolts
  - Masonry: Plastic Alligator® insert
- Step 10:** Place a return plate at each wall return. Secure return plates and corner plates to continuous bracket using the #8 x 1/2" Phillips pan head self drilling screws. An optional pilot hole may be drilled using a #29 bit.
- Step 11:** Additional splice hardware is not required with a continuous mounting bracket. For best results offset butt joints in aluminum retainer from butt joints in continuous bracket and offset butt joints in cover from butt joints in aluminum retainer.
- Step 12:** Measure between accessories (corners and returns) and cut handrail cover.  
**Important:** All cuts must be square and deburred
- Step 13:** Snap the cover over the retainer by installing along the top edge first then rotating the cover down and in, see **fig 9**.  
**Note:** The top edge of the cover extends around the back further than the bottom edge.

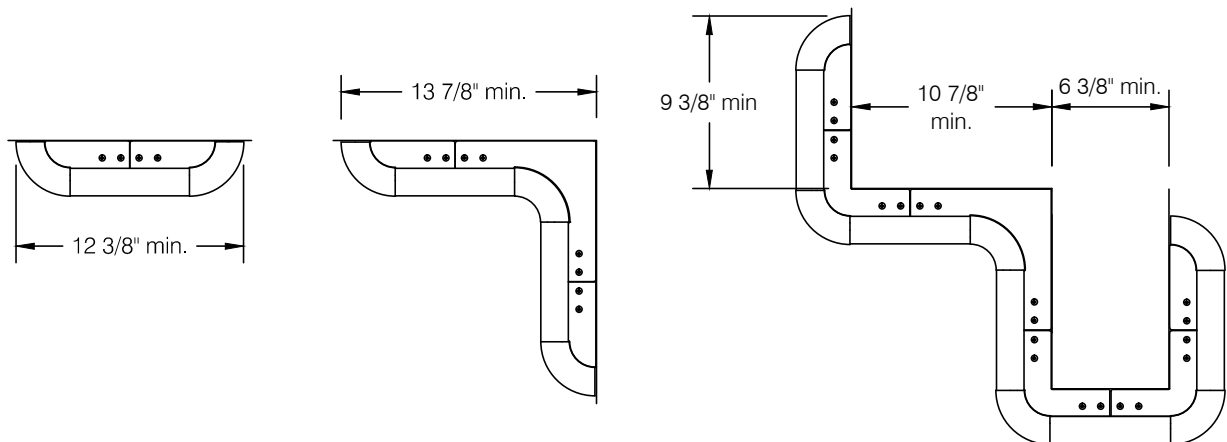
## Cutting Adjustment Diagrams and Schedule



	Aluminum Retainer	Snap-on Cover	Continuous Bracket
Return	L - 3 3/16"	L - 2 15/16"	L - 4 3/16"
Outside Corner	L - 3/16"	L + 1/16"	L - 1 3/16"
Inside Corner	L - 4 11/16"	L - 4 7/16"	L - 5 11/16"

Important: install aluminum retainer, continuous bracket, and molded accessories before cutting the snap-on cover.

## Minimum Layout Configurations



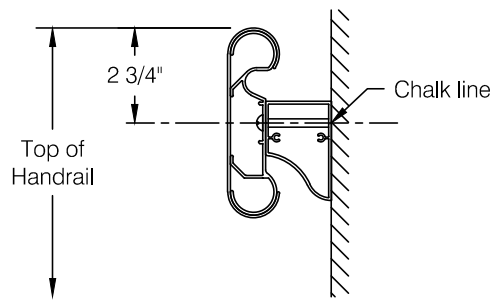


fig 1

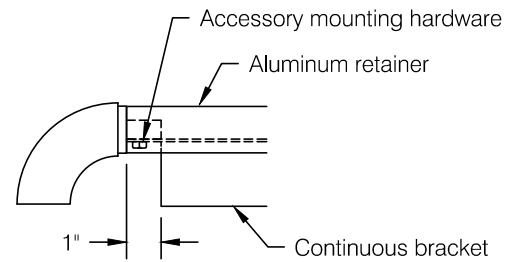


fig 2

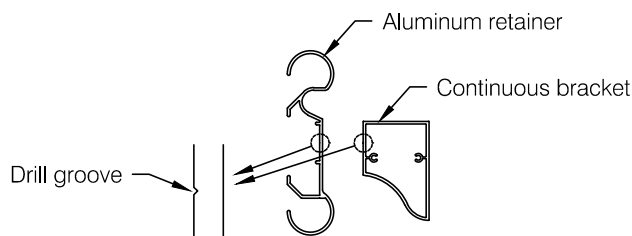


fig 3

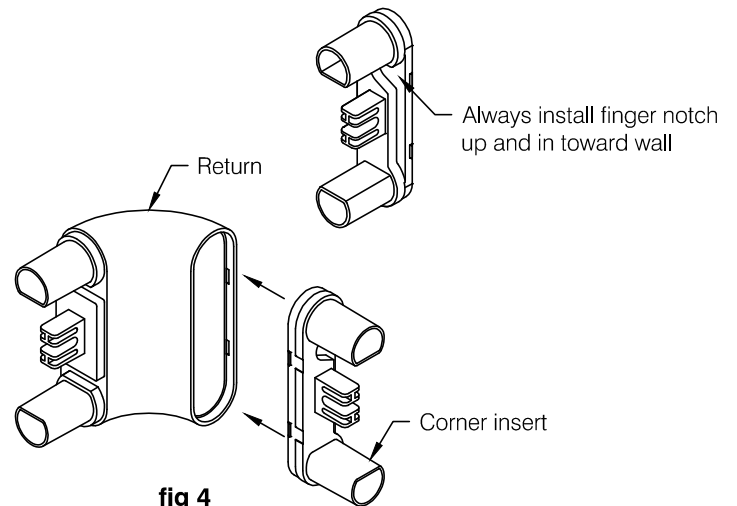
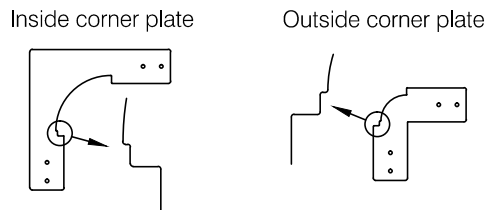


fig 4



Position multi-cut corner toward fixed end of mold (opposite end from removable insert)

fig 5

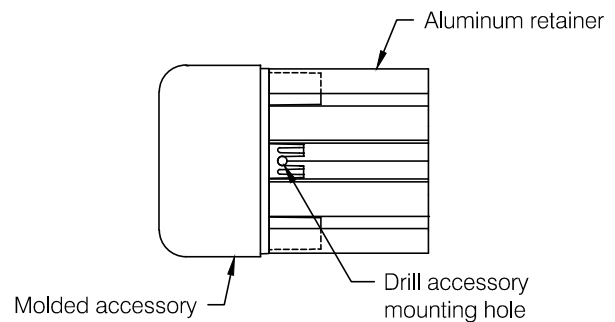


fig 6

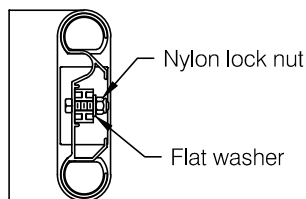


fig 7

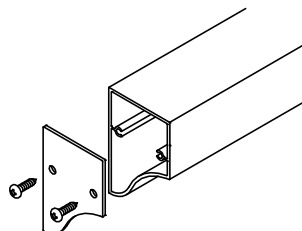


fig 8

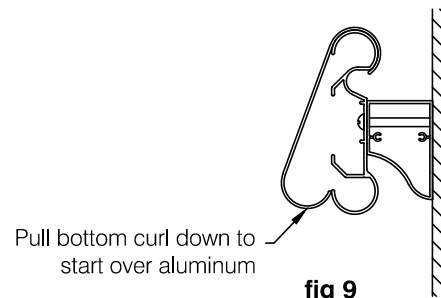


fig 9