

Installation Instructions

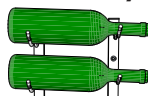
Required tools:	Phillips Head Screw Driver	Included Parts:	1 Base Strip	4 Spiral Drywall Anchors†
	Level		1 Neck Strip	6 Screws†
	Pencil		6 Mounting Hole Capst	2 Toggle Bolts
	Tape Measure		2 Plastic Couplers	
	Drill and 13/32 inch (10.3mm) drill bit			† WS1x will come with 2 fewer

Fasteners:

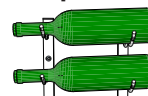
There are three pre-drilled mounting holes in each strip, six total per rack (WS1x have 2 holes per strip, 4 total). Appropriate fasteners for your wall surface must be utilized in every mounting hole for proper installation. Fasteners for drywall or wood wall surfaces are included with your rack. We recommend the following fasteners for these surfaces:

- Attaching to drywall, use all of the included Spiral Drywall Anchors and corresponding number of Screws along with 2 Toggle Bolts
- Wood wall surfaces can use the included Screws
- Concrete, Brick or Stucco: 3/16" x 1 1/4" masonry screw or #8 x 1 1/4" screw with appropriate size expanding concrete anchor - not included
- Floor to Ceiling Frame (FCF-HD): Each FCF-HD comes with self-drilling screws to attach WS series racks to the frames

Before you begin, choose the direction the bottle necks should point



If the bottle necks are to point to the right, the base strip must be installed to the left of the neck strip.



If the bottle necks are to point to the left, the base strip must be installed to the right of the neck strip.

1. Lay out the wall - Starting at least 2-3/4 inches (70mm) from adjacent walls or other obstructions, mark the centerline of the first strip. From there, measure 7-1/2 inches (190.5mm) to the centerline between the neck and base strip and mark the location.

Optional: If installing multiple columns, mark the centerline for the next strip 5-1/2 inches (139.7mm) from the second mark and mark again 7-1/2 inches (190.5mm) from that mark for the distance between the neck and the base strips of the second column. To lay out additional columns, mark the wall, alternating between 5-1/2 and 7-1/2 inches (139.7mm and 190.5mm).

Note: If installing rack-ing for 375mL bottles, please adjust the centerline dimension to approximately 5-1/2 inches (139.7mm) between the base and neck strips. Modify this dimension as appropriate for the actual bottle size you have to ensure that less than 1/3 of the base of the bottle overhangs the base strip and the bottle will not fall between the rods when the shoulder of the bottle rests against the neck rod.

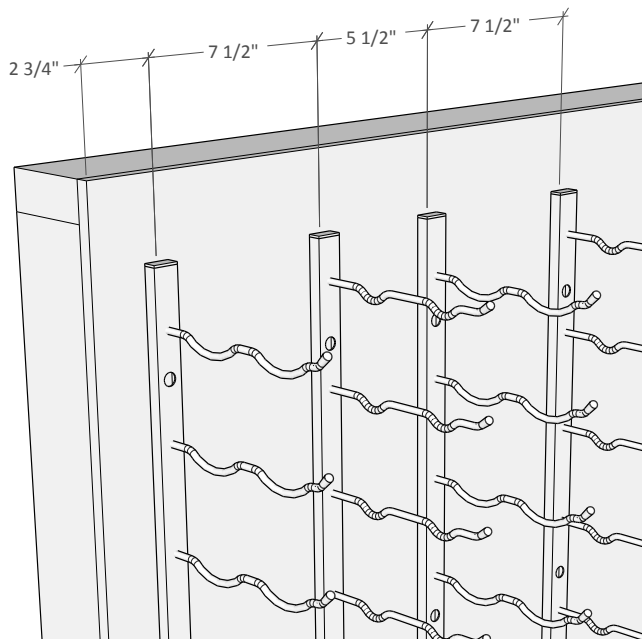


Figure A

2. Mark the hole locations for the strip - Hold either the neck or base strip of the rack in place against the wall, centered on the first mark the appropriate distance above the floor. Ensure that the rack is vertical using a level and mark the hole locations with a pencil (Figure B) then set the strip aside.

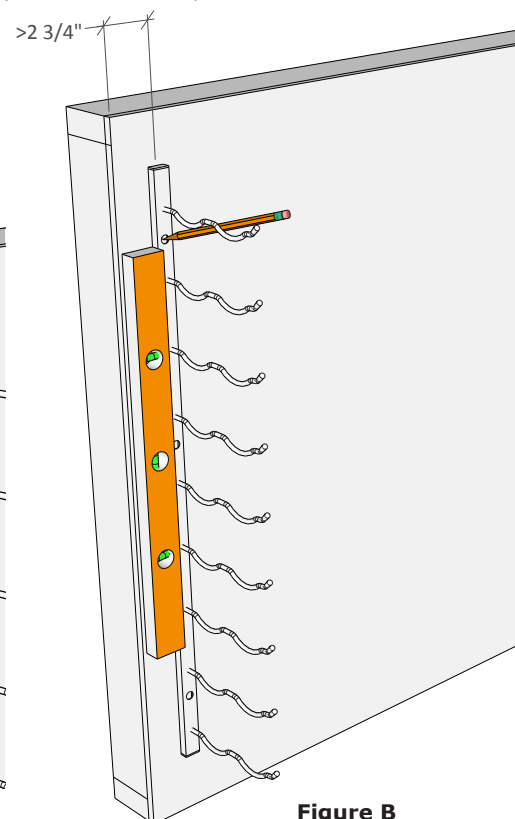


Figure B

3. Install the Anchors - For the lower 2 holes only, use a Phillips head screw driver to screw the Spiral Drywall Anchors into the wall at the marked hole locations until the head of the anchor is flush with the wall surface (Figure C). For the TOP mounting point, drill a 13/32 inch (10.3mm) hole for a Toggle Bolt (Figure D).

Note: If a strip location is over a stud, the Toggle Bolt and Drywall Anchors should not be used. Extra Screws are supplied and can be used to directly fasten that strip into the stud.

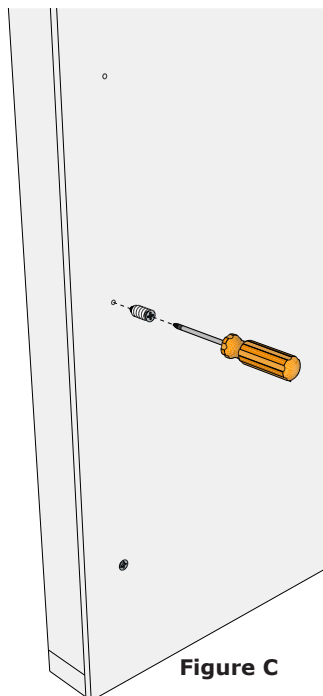


Figure C

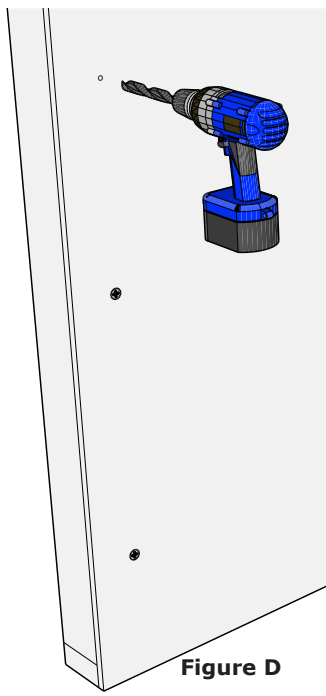


Figure D

4. Hang the first strip - Take a toggle bolt and remove the expanding nut. Insert the bolt through the top mounting hole of either the base or neck strip, as it corresponds with the bottle direction chosen earlier. With the wings of the nut oriented to fold toward the head of the bolt, thread the expanding nut onto the bolt so the tip of the bolt starts to protrude from the end of the nut. Hold the strip so the toggle bolt aligns with the 13/32 inch hole and gently push the expanding nut through the wall (Figure E). Ensure that the wings of the expanding nut have fully expanded on the back side of the wall and gently tighten the bolt, verifying that the bottom 2 mounting holes align with the anchors in the wall. Secure the rest of the strip in place through the bottom two mounting holes with the provided Screws (Figure F) and fully tighten the toggle bolt.

Note: For ease of removal when stacking racks, it is recommended that the end plugs are taken out prior to installation.

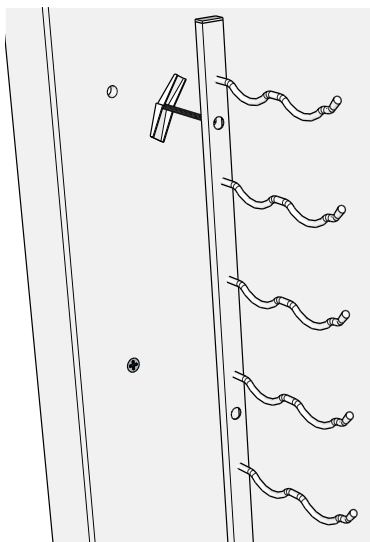


Figure E

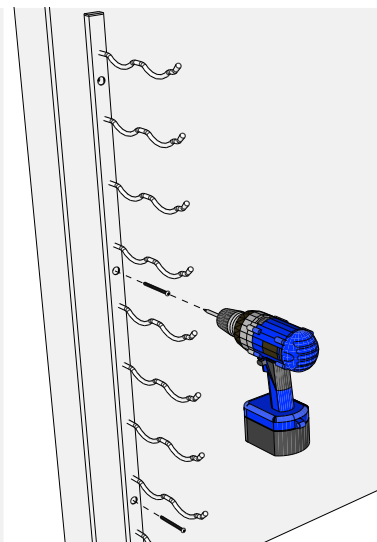


Figure F

5. Hang the second strip - Repeat Steps 2 through 4 with the second strip, centering it horizontally with the second mark on your wall from Step 1 and ensuring that the tops of the strips are even with each other (Figure G).

6. Finish up - Install the mounting hole caps in the 1/2 inch holes on the face of the rack by pressing into place (Figure H).

Stacking racks - WS series racks are designed to stack, one on top of the other. You may remove the pre-installed plastic end plugs from the appropriate rack ends and use the supplied couplers to align the two racks when stacking (Figure I).

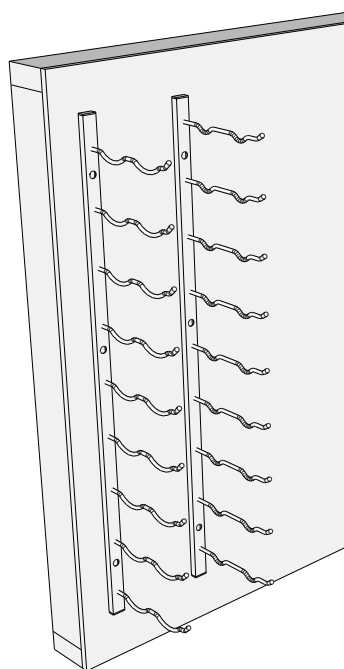


Figure G

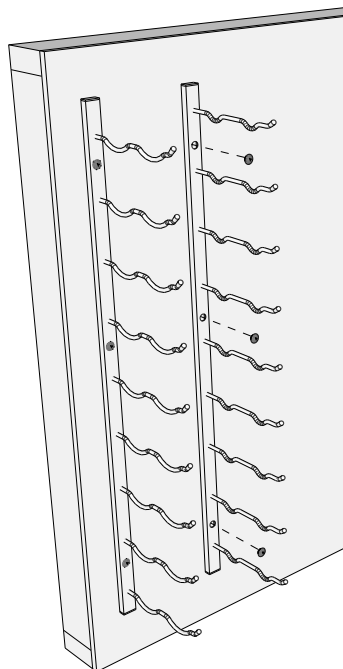


Figure H

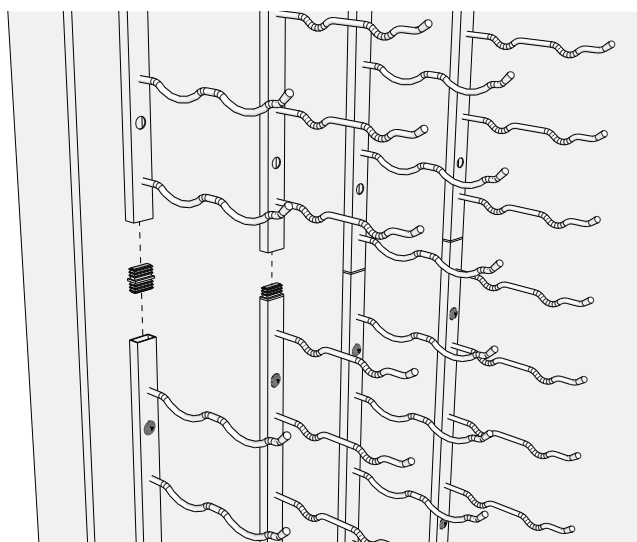


Figure I