INSTRUCTION MANUAL

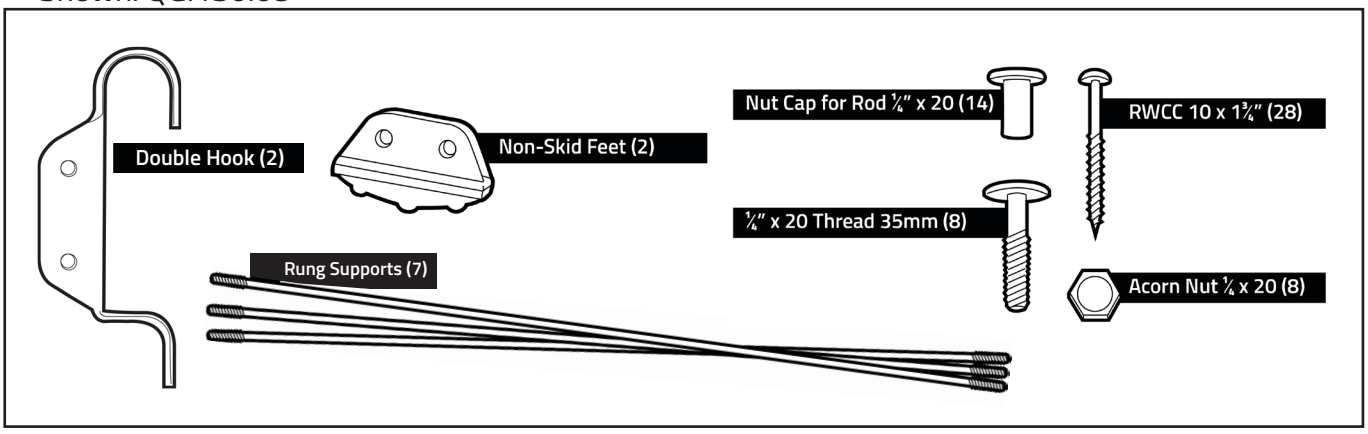
for Installing

DOUBLE-HOOK HARDWARE

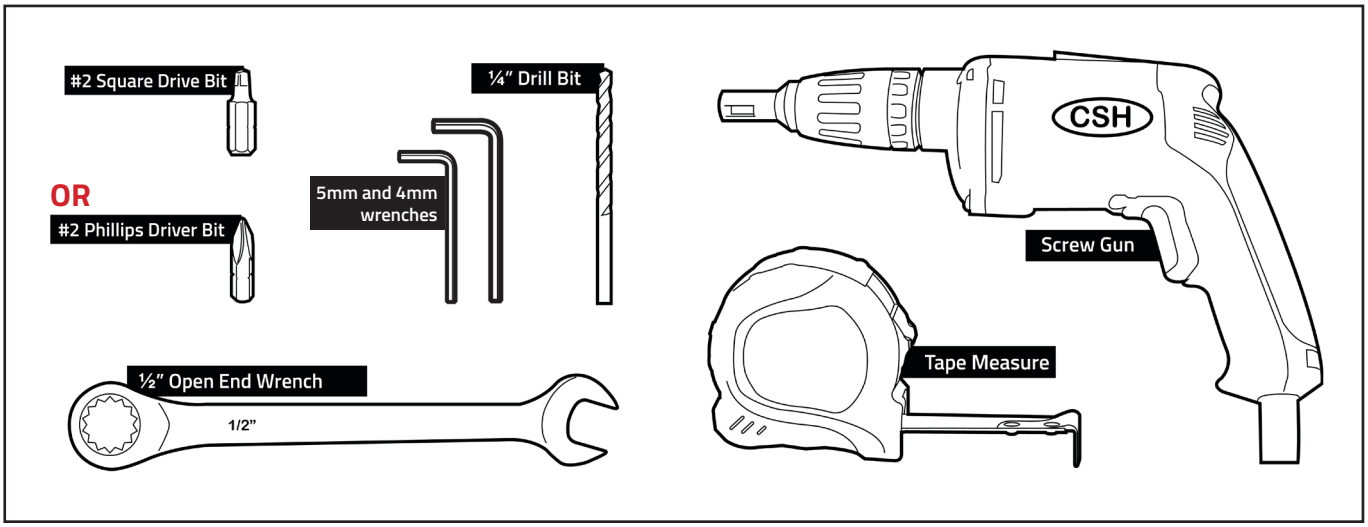
QG.130 Series

Instruction Manual for Installing Double-Hook Hardware

Shown: QG.130.08



Installation Tools Needed:

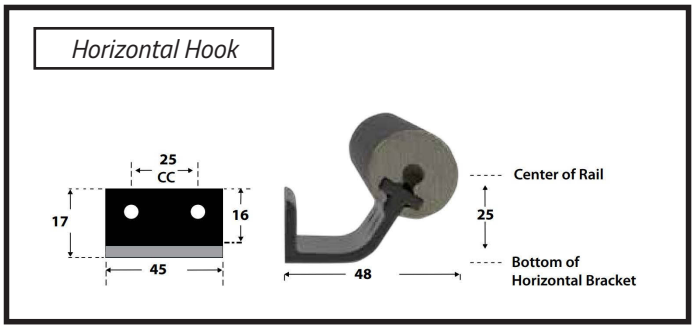


Step 1: Rail Installation

Special application notes:

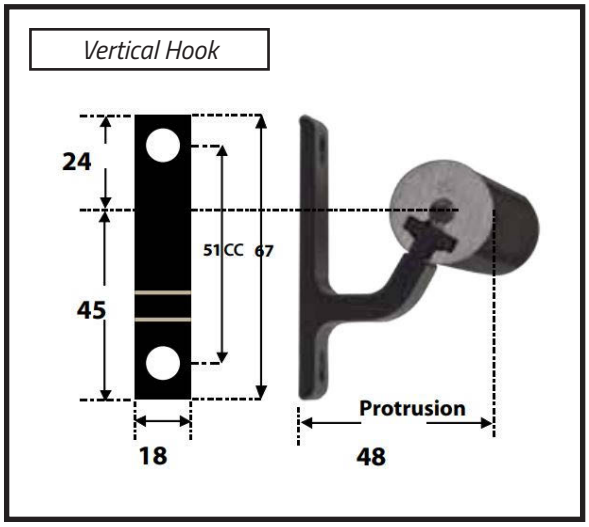
- Leave at least 7"(178mm) of clearance between the center of the rail and the ceiling, crown moulding or other overhanging protrusions when the ladder is in the stored position (close to the wall/cabinet/bookshelf).
- In the climbing position, leave at least 3"(76.2mm) of clearance between the center of the rail and any upper cabinet doors. This will enable the doors to be opened when the ladder is in front of the doors.
- Do not mount rail brackets directly onto a drywall surface. Always mount these brackets to solid wood, and remember to predrill the holes to avoid splitting the wood.

1. Determine the installation height of the center rail, then mark the location on the wood surface where the bottom of the mounting bracket will be located.



(The distance between the center of the rail and the bottom of the bracket is different for different brackets. See the bracket dimensional specs on the right for proper measurements).

Using a quality leveling device, verify that the horizontal locations of the brackets are level and true, and draw a line on the wood where the brackets will be located.



2. To splice rails together using the Quiet Glide splice kit (QG.41), complete the following steps.

- *Insert half the length of the roll pin into one of the rails (Figure 1a).*
- *Slide the steel bar halfway into the rail and tighten one of the set screws to lock the bar and roll pin into the rail (Figure 1b).*

Figure 1a

Figure 1b

- *Line up the roll pin hole and slot for the steel bar on the other rail and slide the rail over the pin and bar till a tight connection is made between rails (Figures 2a & b).*
- *Complete the splice by tightening the remaining set screw.*

Figure 2a

Figure 2b

3. Slide all the brackets onto the rail (recommended spacing of the brackets is approximately 32" (813mm) apart).
4. Using the level horizontal line you drew in step 1 as a guide, secure each bracket to the wood surface with the included screws.
5. Install the end caps to the rail.
   - *Using a ¼"-20 tapping tool, tap the ends of the rail (see Figure 3b).*
   - *Secure the end cap to the rail using the supplied ¼"-20 KD bolt and a 4mm Allen wrench (see Figure 3c).*

Figure 3a

Figure 3b

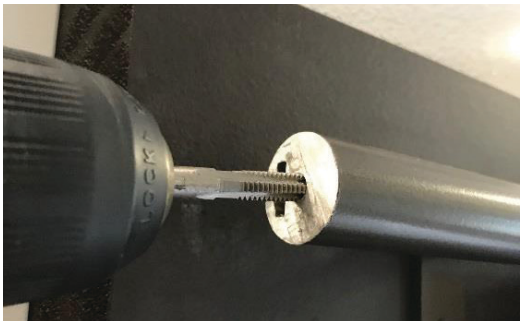


Figure 3c

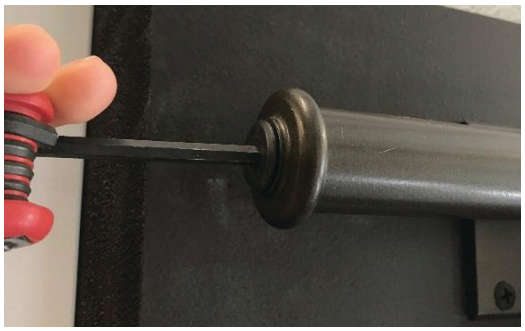


Figure 3d

QG Ladder Assembly Instructions

Critical steps to protect and prepare the ladder prior to assembly.

Storage:

- Store the ladder in its original packaging in a humidity-controlled environment until ready to finish/assemble.
- Lay the stored ladder on a dry, level surface, preferably off the floor (do not lean against wall for any extended period, this can cause bowing/warping of the ladder).

Surface prep:

- After removing from shipping packaging, allow the ladder parts to acclimate to the temperature/humidity of the area where the ladder will be installed.
  (Acclimation times vary by species and product, but a rule of thumb is to acclimate the wood ladders for **at least three days**. The goal is to reach an equilibrium between the moisture content of the wood materials and the air where the product is being installed)
- Sand all wooden parts with a 220-grit sanding pad just prior to finishing.
  (This opens the wood pores creating a more uniform and consistent finish on the ladder)
- Remove all dust from the ladder prior to finishing.
- It is highly recommended that a high-quality top-coat finish is applied to the raw, stained, or painted wood ladder to protect and preserve the beauty of the wood.

Ladder Assembly:

Critical note: A flat, level surface is required. The use of 18mm thick plywood spacers are also highly recommended to maintain proper orientation while assembling to minimize twisting of the ladder.

1. Lay out the parts to be assembled on the table (Fig. 1)
2. Install the nut caps for the truss rods, use a rubber mallet if necessary (Fig. 2)

Fig. 1

Fig. 2

3. Install the truss rods loosely into the nut caps using a 5mm Allen wrench, allowing room to slide the steps into the dados (detailed in Step 5). For ladders with top turned rungs, install by gluing the top turned rung loosely in the side rails (Fig 3 & 4).

Fig. 3

Fig. 4

4. Slide 2 plywood spacers under the ladder side rails, as shown in Fig. 5 & 6 below.
(Only use 2 spacers for this operation, additional spacers can result in uneven side rails)

Fig. 5

Fig. 6

5. Slide the steps into the dados, verifying that the compound miter is lined up in the proper orientation with the dado. (Fig.7 & 8). Confirm that the ladder side rails are all lying flat in contact with the spacers and the bottom of the ladder side rails are even with each other and perpendicular to the sides.

Fig. 7

Fig. 8

6. Begin tightening the truss rods. (Do not tighten securely at this time, need to be able to adjust the height of the steps to align with the dados while fastening with the supplied screws). (Fig. 9 & 10)
   Truss rods should be spaced evenly between the ladder side rails. The amount of exposed threads on the truss rods, as viewed on the inside, should be relatively even.

Fig. 9

Fig. 10

7. Align the compound miter of the step to the dado. Begin fastening, pushing the side rail down in tight contact with the plywood spacers (Fig. 11). Completely fasten each step (both sides) before moving onto the next step (Fig. 12)

Fig. 11

Fig. 12

8. When all the steps have been installed, tighten the truss rods completely (Fig.13
   If assembled properly, the ladder side rails will be in tight contact with the plywood spacers (all 4 contact points). There will also be a slight, even gap between the table and the edge of the steps (Fig. 14).

Fig. 13

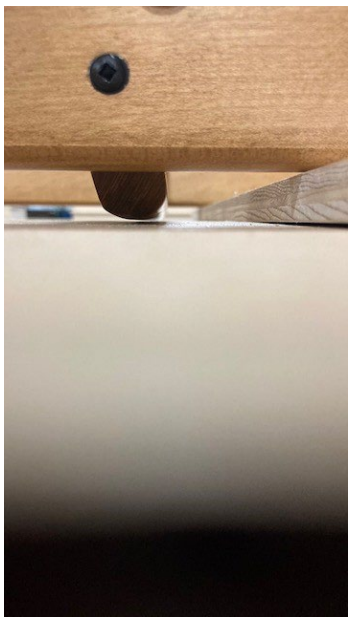


Fig. 14

9. For ladders with top turned rungs, clamp the ladder side rails together in the area of the top turned rung. On the angled edge of the ladder where the upper guides are to be installed, use a mechanical fastener to hold the top turned rung in place (Fig 15).

   Acceptable fasteners:

   o 18-gauge brad nail x 38mm long, or

   o 38mm finish nail, need to predrill using a 1.5mm drill bit

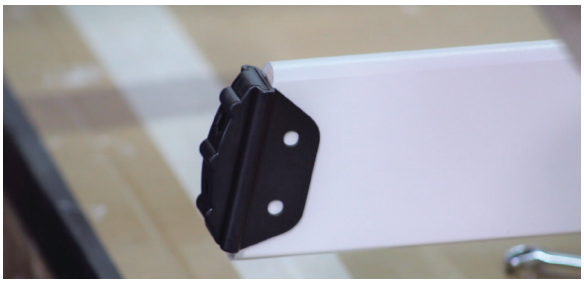
Fig 15

Step 3: Installing the Bottom Foot on the Ladder

1. From the back edge of the ladder side rails, draw a line on the bottom of the rail ¼" (6.35mm) in from the edge *(see figure 10a)*.
2. Align the back edge of bottom foot hardware to the scribed line, pushing the bottom foot hardware tight and flush to the bottom surface of the ladder *(see figure 10b)*.

Figure 10a

Figure 10b



3. Fasten the bottom foot onto the rail with the ¼" x 20 KD bolts and acorn nuts following the procedure detailed below.

Figure 11

Using the holes in the top roller guide as a drill guide, drill a hole halfway through the thickness of the ladder slide rail using a ¼" drill bit (see figure 11).

Figure 12

Drill the same hole on the opposite side of the top roller guide, producing a ¼" through hole in the ladder side rail (see figure 12).

Follow this same procedure for all four through holes and complete the assembly by securing the Bottom Foot with the supplied ¼" x 20 KD bolts and acorn nuts.

Top Ladder Hardware (Double-Hook, non-adjustable upper guide)

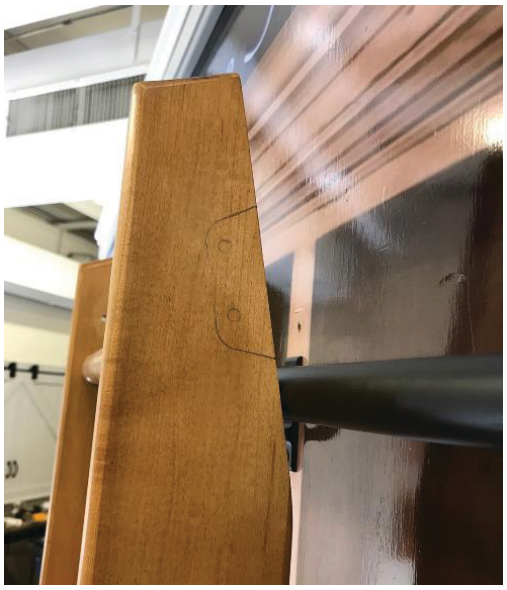
Figure 13

1. After the non-skid feet are installed, take the ladder and stand it up parallel to the wall in its stored position, leaning on the mounting rail *(Figure 13)*.

2. Take one of the double hook upper guides and loosely attach it to the angled portion of the ladder side rail above the mounting rail, hooks pointing down.
3. Pull the ladder slightly away from the mounting rail and slide the Double-Hook upper guide down so that the lower hook engages firmly onto the mounting rail. This will be the location of this upper guide on the ladder *(Figure 14a)*.
4. Outline the location of this upper guide on the ladder side rail *(Figure 14b)*.

Figure 14a

Figure 14b



5. Remove the upper guide from the ladder, lay the ladder down, and measure from the tip of the ladder to the outlined mark where the top of the upper guide is located. Transfer this same measurement onto the other ladder side rail (the location of the upper guide on each of the ladder side rails need to be the same for the ladder to function properly).
6. Using a ¼" drill bit, drill the holes for the ¼-20 KD bolt fasteners that will fasten the double hook upper guide to the top of the ladder.
Follow the same procedure used in Step 3, Bottom Foot installation *(Figure 15)*.

Figure 15

7. Install the ladder on the mounting rail using the bottom hook of the upper guide. The ladder should now stand upright parallel to the wall. This is the stored position *(Figure 16a)*.
8. Remove the ladder from the rail and reinstall it on the upper hook. The ladder should now be in the climbing position, approximately at a 12-degree angle, and the steps parallel to the floor (Figure 16b).

Figure 16a

Figure 16b

Application Photos of Rolling Ladders