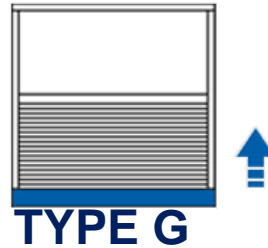




Installation Instruction



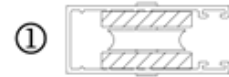
Please read these instructions entirely before attempting to install your order!!!

Before Installation

Unpack all shutters and accessories and inspect for damage. Also check to ensure that all shutter accessories have been sent that are needed for installation; e.g. switches, screws, spacers. If any parts are missing or any damage is found, please contact Alutech United immediately.

Installation

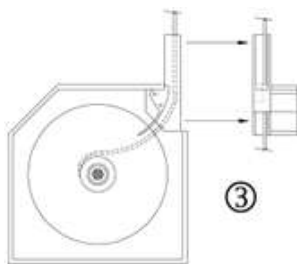
These instructions are for Studio Star shutters type G, which include shutters that are only rectangular in shape. This example of an installation pictures a shutter motorized on the right side; however, the same applies to a motor left shutter except the position of the "motor side" guiderail and the "pulley side" guiderail are opposite.



Step 1. Install L-angle sill onto wall of structure. The sill will support the housing of the shutter; it must be secured to the wall every 12" using stainless steel #12 flat head sheet metal screws or a similar type fastener.

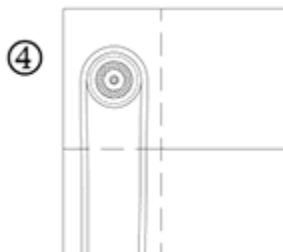
Step 2. Locate the guiderails. **NOTICE:** Each of the two guiderails are different from one another. Having a single cord guide at the top of the guiderail (1) can identify the guiderail that will be installed on the motor side of the shutter; the guiderail to be installed on the pulley side of the shutter is identified by having a double cord guide (2). Place each guiderail on the corresponding side of the shutter (do not attach to the shutter yet).

Step 3. Remove the front housing cover and find the "pulley" side of the shutter. Four slots can be identified on the inside of the pulley that will be used to attach the tension cord to. One end of the cord is already attached to the pulley. Notice how the tension cord is fished through the slot furthest from you and out of the accompanying slot - the same method will be used to tie the loose end of the tension cord to the pulley at a later time with the other two unused slots in the pulley. Unravel the tension cord that is supplied with the shutter. If there is a "tail" of extra string from the knot inside the pulley, tuck it into the hole that the string is fished through. Now the cord must be run through the double cord guide(3) inside the end cap.



Very important:

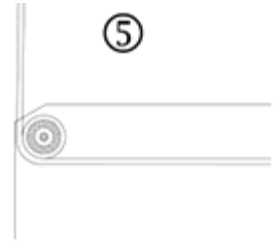
The double cord guide on the inside of the end cap has two grooves in it; the tension cord **MUST** ride on the innermost (facing the curtain of the shutter) groove (3)



Step 4. Fish the tension cord into the guiderail through the 1x1 square channel of the guiderail. Very important: At the top of the guiderail, the tension cord must ride on the groove of the double cord guide that is closest to you, **NOT** the groove closest to the wall. Now run the tension cord over top of the double cord guide in the guiderail (4) and down the same guiderail through the "U" shaped channel.



Step 5. The tension cord must now be run down to the base slat of the shutter (5). Both ends of the base slat will have a small cord guide installed (it is visible only from an edge-on view). The tension cord must be run underneath the cord guide in the end slat and fished from one end of the base slat to the other. On the other end of the base slat, the tension cord must also be underneath of the cord guide in the end of the base slat.



Step 6. The tension cord must now be run up the "U" shaped channel of the guiderail on the motor side (6). At the top of the guiderail, the tension cord must run over top of the single groove of the cord guide.

Step 7. The tension cord must be run from the cord guide on the motor side straight back to the cord guide on the pulley side of the shutter (7). The cord must be strung through the remaining groove (the groove FURTHEST from you, closest to the wall) in the top of the guiderail and down into the square shaped channel of the guiderail. Fish the cord down the guiderail and into the double-cord guide in the end cap. The cord must ride in the remaining groove of the cord guide (the groove towards the OUTSIDE of the shutter, NOT closest to the curtain).



Step 8. The cord must now be attached to the pulley using the remaining two holes. First, you must rotate the pulley towards you ONE complete revolution. This will ensure that the cords do not cross over each other when the shutter is in operation. After rotating the pulley, fish the tension cord through the remaining slot that is furthest from you and out of the accompanying slot. Tie a double knot and tuck in any remaining "tail".



Step 9. Place each guiderail onto the corresponding "ear" protruding from the end caps. Attach the guiderails to the wall using the installation screws provided. Make sure that the guiderails are plumb and that the shutter is a perfect square using a level and measuring tape. **VERY IMPORTANT:** When attaching the guiderails, you must be **ABSOLUTELY CERTAIN** that the installation screws **ARE NOT TOUCHING** the tension cord. If the tension cord is in the way of the screws when you are installing, the cord may be damaged. If the cord is damaged the shutter could break while operating and cause serious problems. Note the screw locations at the top of the guiderail in picture (8). Screw locations at the top of the guiderails are important - the cord guides bear the weight of the shutter and need **support via the fasteners as shown in the picture**.

Step 10. Pull any slack in the cord up by carefully rotating the pulley towards you.

Step 11. Attach 1X3 top sill to guide rails using 1/4" hex head self-tapping stainless steel fasteners. Attach the end caps to the L-angle sill and wall using the supplied fasteners.

Step 12. Attach a tester cable to the motor and adjust the limit settings, followed by the torque settings (refer to the Motor Adjustment Instructions and Torque Setting Adjustment instructions supplied by Alutech United). All Studio Star shutters come pre-adjusted by a factory technician; adjustment should only be made if the preset limits or torque settings are not correct. Before operating the shutter for the first time, make sure that you remove all packing materials from inside the housing. During the initial run you must also remove any paper or foam that was installed inside the curtain to prevent shipment damages.

Step 13. Re-attach the front housing cover to the shutter and weatherproof the installation using caulk or sealant.