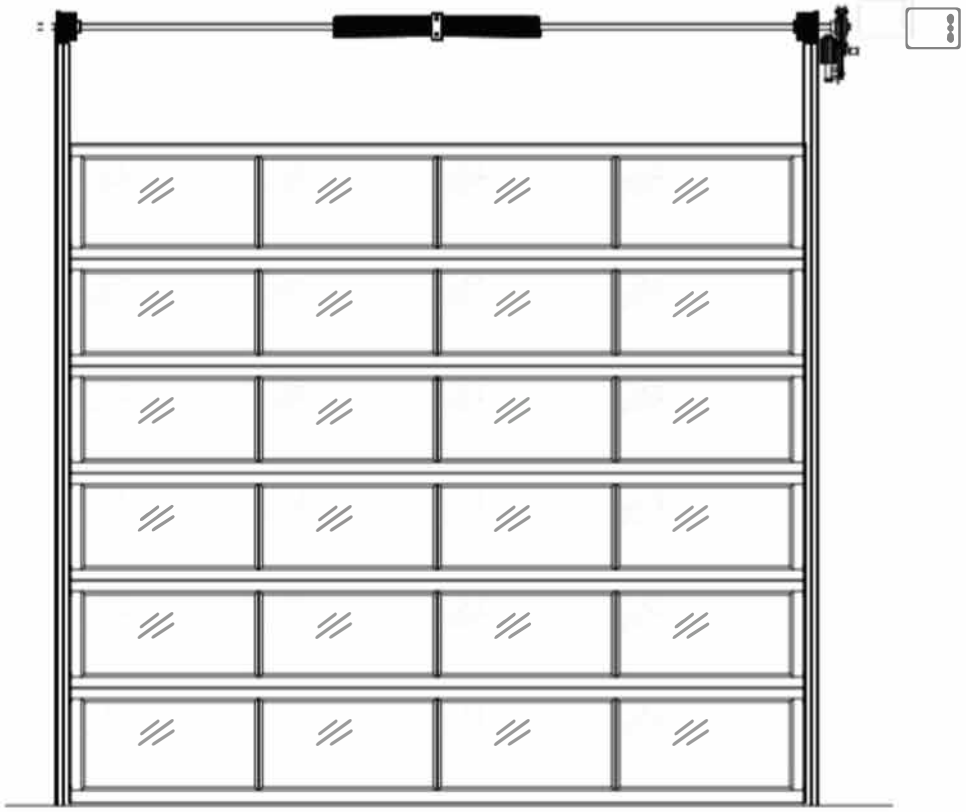
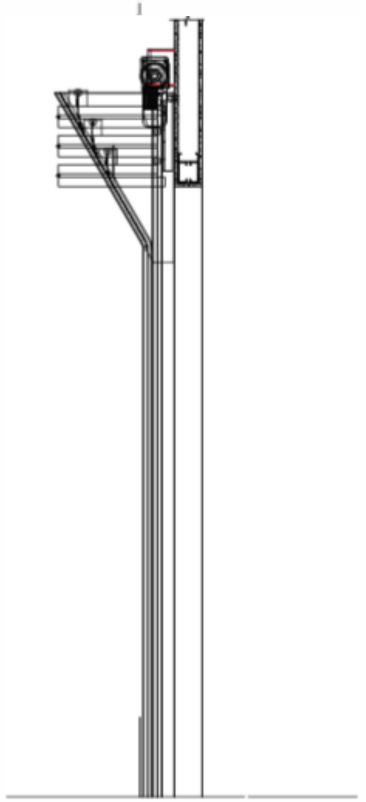
Installation Instructions for the Metro Stack-Fold

Refer to the shop drawings to see the specifics that are particular to the door you are installing because we custom design our doors for each customer's order, and the images below only represent the basic framework of the Metro Stack-Fold





What you need to know before you begin:

- Only factory trained installers may install Renlita doors because only they have the training to install them correctly, which is critical for quality and safety.

- Make sure you obtain and follow the shop drawings in each shipment because they alone specify each door's particular configuration. Do not begin an installation without them.

- Never substitute the hardware and components that Renlita Doors provides. If you need new parts, contact Renlita at the number below.

- Use the appropriate tools, equipment, and personal protective gear to install the door so that you ensure a safe and quality installation.

- Contact Renlita if you need technical support: 903-583-7500

Process 1- Preparations

1. Bring these tool and materials

A. Power drill and drill bits-(Phillips, Flat-head, Sockets,etc.)

B. Rivet Gun that Sets 1/4 inch Rivets

C. Straight line laser

D. Adjustable Wrench

E. Allen Wrenches/ Hex Keys

F. Winding Bars (at least 2)

G. Sockets and Wrenches

H. Utility Knife or Sheers

I. Wooden shims

2. Examine the area

A. Compare the shop drawings to the doorway to ensure it has these things;

a. A finished -floor height that matches the drawings

b. Space for the door to open and close without hitting the ceiling's furnishings

c. Space in the doorway for the door

d. Space on the doorjambs and at the ceiling for the tracks

e. Doorjambs that are the same material as those in the shop drawings

3. Set up a work zone

A. No one should run hoses or cords through the door way because you will need total clearance

B. Set a safety zone that meets your needs and the safety of others

2, Prepare the pieces

?, Thoroughly examine the cables to make sure they are in good condition. Do not install them if they have any damage

@,Contact Full View Door Company if you need a replacement

Process 2- Installing the Tracks

1. Install the tracks

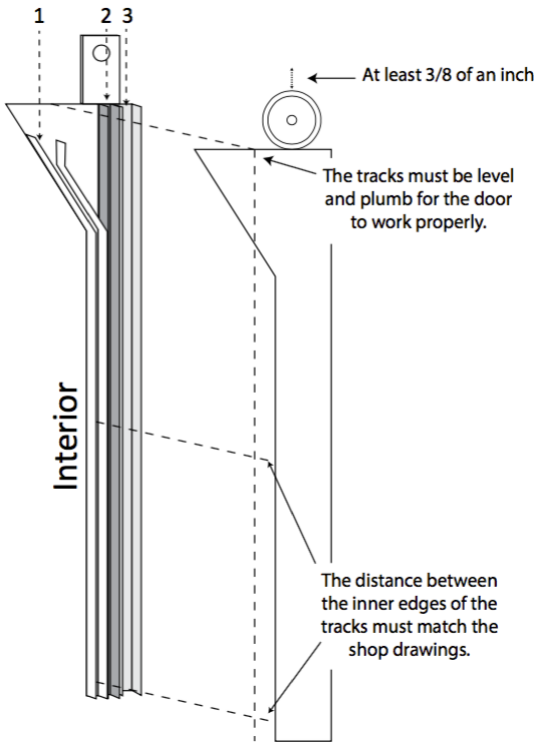
A. Find the measurement in the shop drawing the shows how far apart the interior edges of the tracks should be, and place them accordingly.

NOTE: THERE IS NO TOLERANCE IN THE TRACKS MEASUREMENTS. THEY HAVE TO BE SET TO THE CORRECT MEASUREMENTS.

B. Refer the the shop drawings to see where on the doorjambs you should place the tracks.

C. Set one track at a time and shim as need the keep the tops of the track straight. Making sure the tracks are not twisted in or out.

D. Make sure the space between the tops of the tracks and ceiling provides enough room for the drums and motor to have at least 3/8 inch clearance above them. (See The illustration.)



* NOTE: The door will operate well only if the tracks are plumb and level.

E. Fasten the Door tracks to the doorjambs according to the shop drawings.

Process 3- Installing the Panels

1. Overview

A. Each door will have at least two panels, These panels come hinged as a pair from the factory.

B. The panels are to the track by five types of hinges brackets:

a. Left hand / Right hand - Top hinge

b. Left hand / Right hand - Center hinge

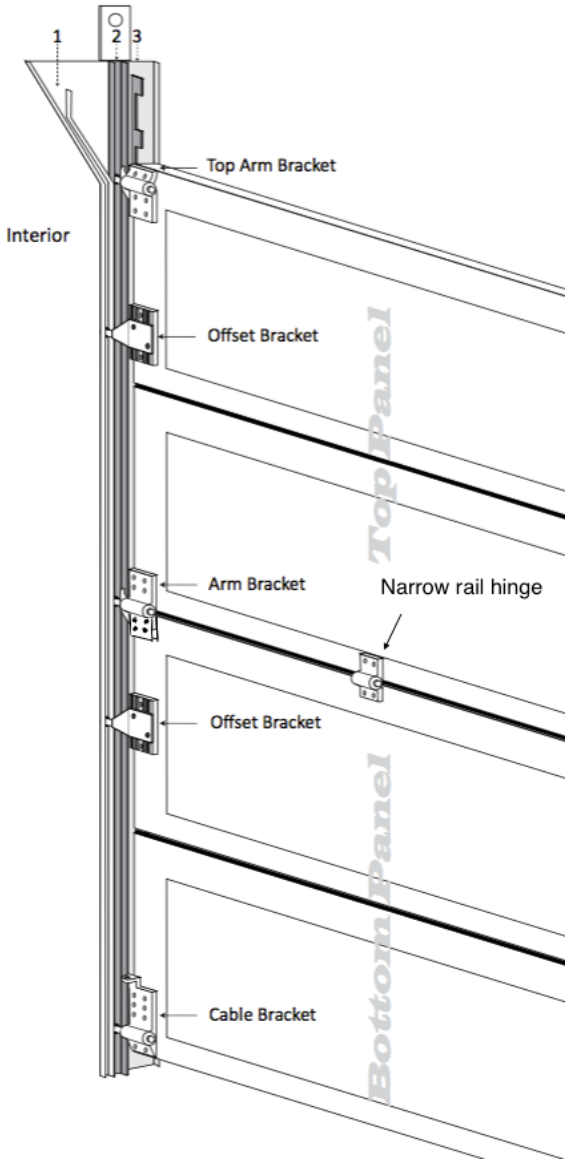
c. Offset Bearing Brackets

d. Bottom hinge/ cable bracket

e. Narrow rail hinge

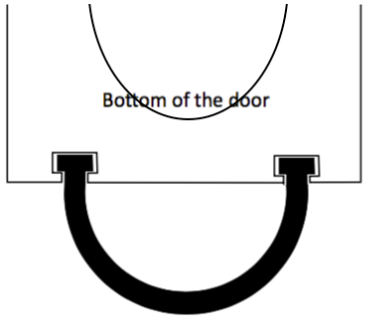
C. Channel 3 of each track should sit against the doorjamb on the interior side. The shop drawings will show specifically where on the doorjambs you should place the tracks.

The track measurement should be checked again to make sure the correct placement before moving forward.



2. Install the bottom seal

A. Insert the seal into the Lateral slots on the bottom os the door as the illustration shows.



Note: The Bottom panel will have the Cable plug on each side.

B. Install the hinge line seals by sliding

2A. Install hinge seal into panels

A. This is done by sliding the square bulb seal into each panel. Each panel will have only 1 seal. They slide into the panels built in retainer. The panels that are hinges together from the factory will have only one slot accessible to slide the seal the full length of the panel.

This must be done before the panels are installed. There is no way to install the exterior seal once the panels are in place.

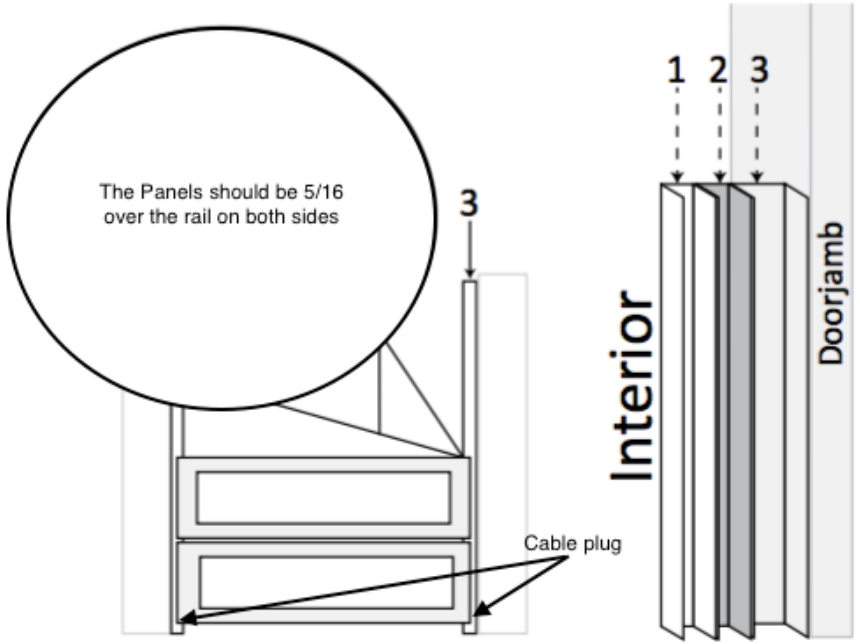
3. Install the bottom panel

Note: If Bottom seal is not installed DO NOT PROCEED

A. Place the bottom panel in the doorway.

B. Adjust door to 5/16 overlap on each side. This panel will set in channel #3. (See the illustration.)

DO NOT LET GO OF PANEL once positioned into place



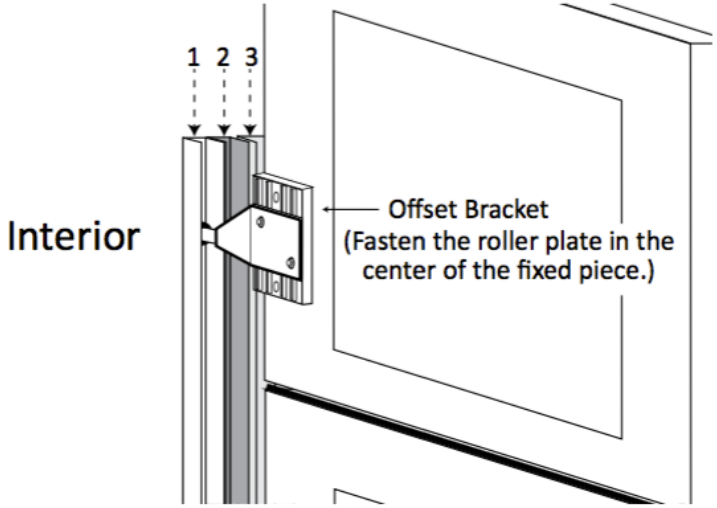
4. Install the offset brackets

A. The Offset Bracket should have two star washers per Bolt. One goes behind the offset bearing bracket towards the bolt head,(These will go in between the track on the door and the offset bearing brackets when installed.).The other one goes on the inside of the offset bearing bracket on the nut side.

B. Install a pair of offset brackets on the panel according to the shop drawings. This will allow the panel to stand on it own while you level the panels to the track. (See illustration to the right.)

C. Align Each off set bearing bracket should be set to the center of track that is fastened to the door panel, and 3/16 off the door track.

D. Once the offset bearing bracket are tightened up on the bottom panel the panel must be leveled.



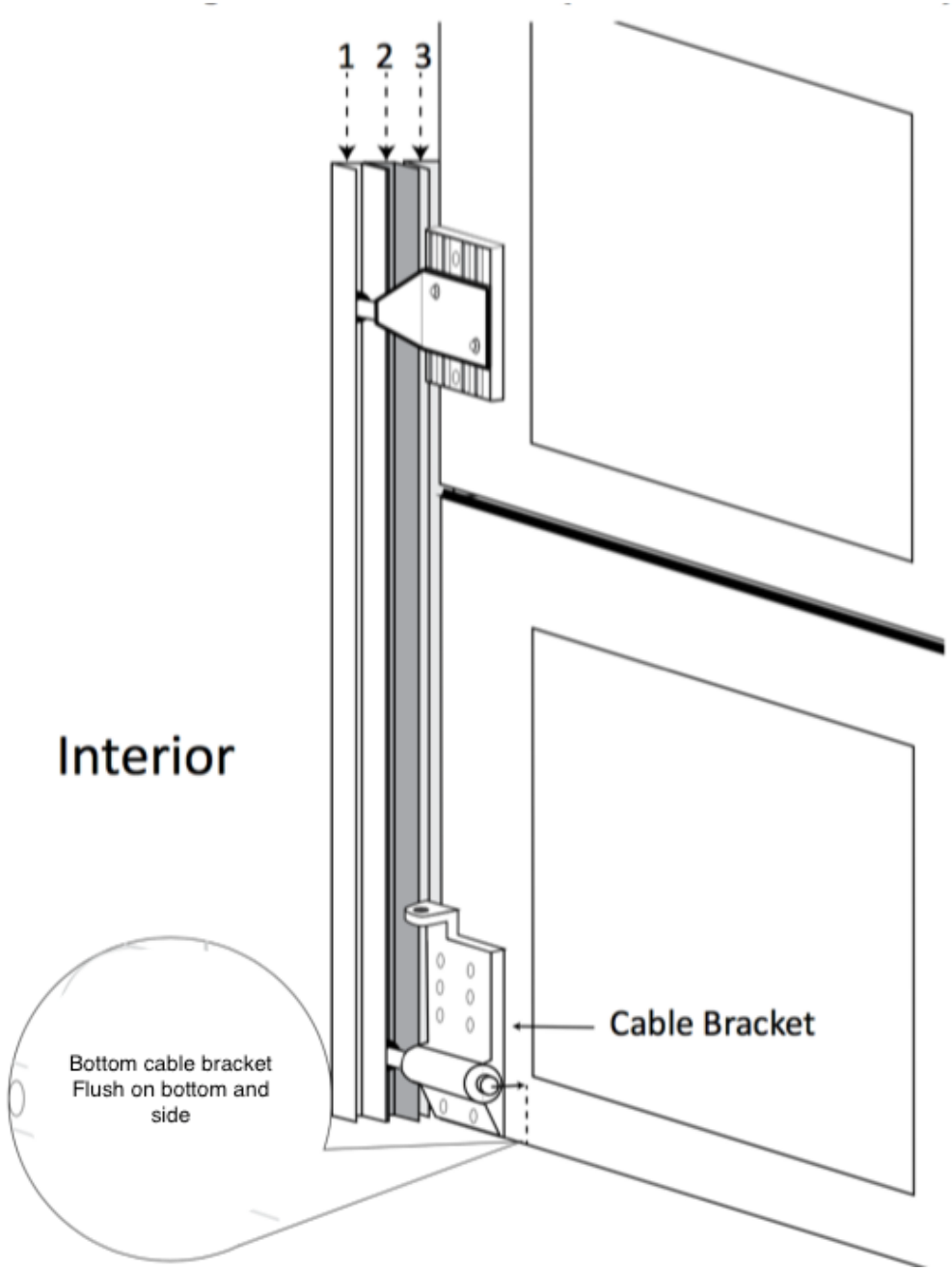
NOTE: There are 1/8 gaps in the hinges these should line up with the top and bottom panels.

5. Install the cable brackets

A. Secure the bottom panel by installing the Cable brackets.(See the illustration to the right.)

a. The bottom cable bracket should have an axle and a roller inserted into each one. This roller will go into track 2. The bracket will be flush with the bottom edge of the door panel at the bottom. The edge of the bracket will be flush to the edge of the side of the door panel you are installing.

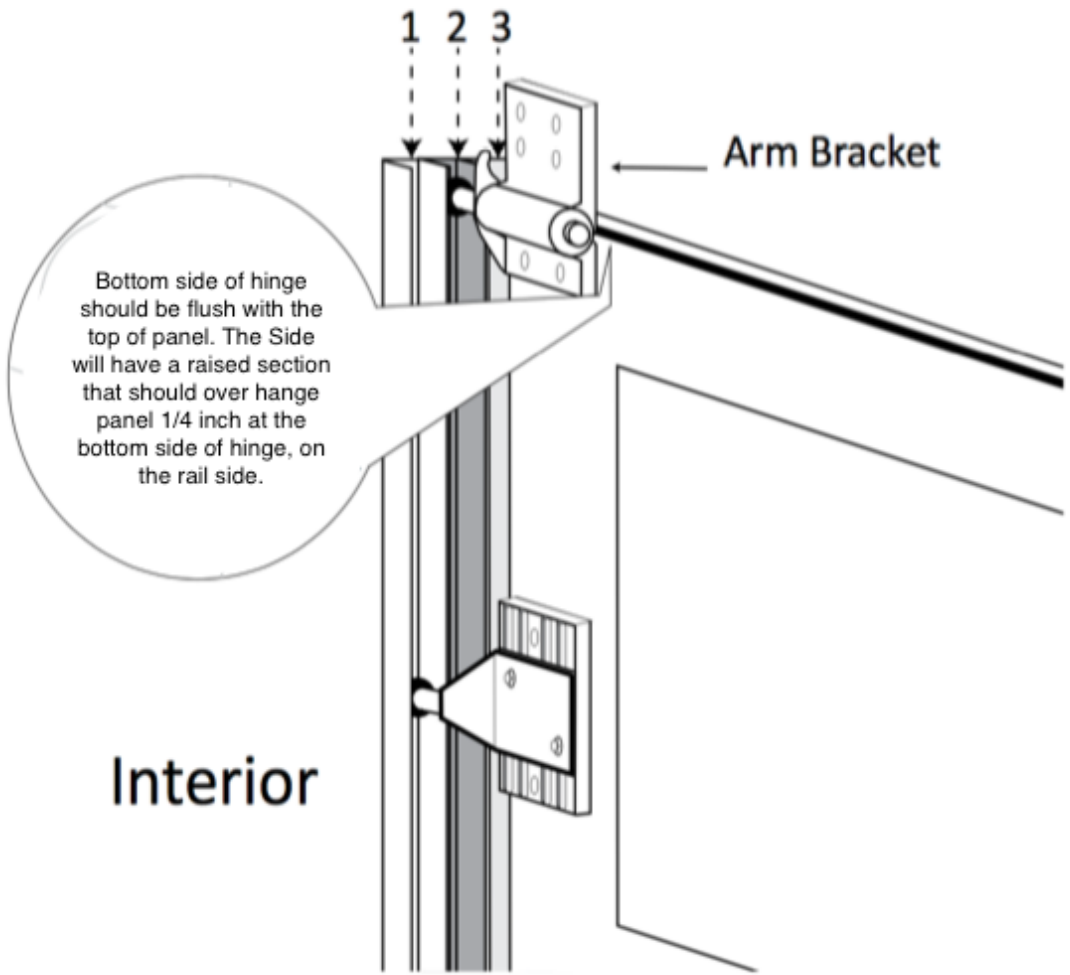
NOTE: DO NOT SUBSITUTE RIVETS.



6. Install Center Hinges

A. The center hinge is over hanging the panel 1/4 inch on the bottom side of hinge. The bottom sections top will be flush with the top of the panel. **B. The Hinge Between panel 2 and 3 will not have a roller. It will have a Slide stop (a 6" black delrin slide) This will go in with the long side down pointing towards the ground.**

NOTE: Hinge placement is critical and could cause issues if placement is off.



7. Installing the top panels

A. Making sure you have 1/8 inch shims in-between panels to keep the panels at the correct spacing.
B. Install the top remaining panels by lifting the panels a section at a time to the top of the previous panel.
C. Make sure that you align the panels to line the ends up with the panel below. You can feel the panels by feeling in behind the hinge.
D. Install the offset Brackets the hold the panels into place and riveted to each hinge to the panel with the rivets provided.
DO NOT SUPSITUTE RIVETS

E. Fasten the top Hinge to the upper corners of the top panel. The hinge's edge must be flush at the top of panel and 1/4 inch raised section over hanging the door panel at the side.

F. Install the narrow rail hinges by: lining up the gap on the hinge to the gap of the door

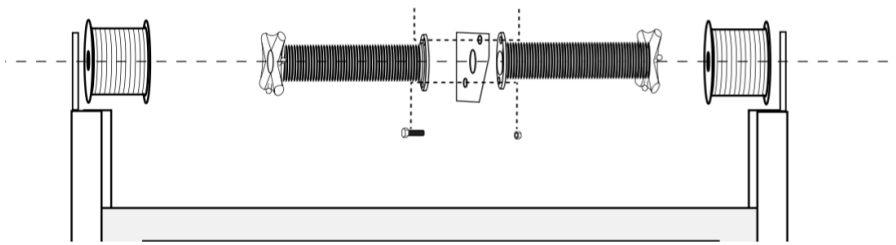
line up the center of the hinge with the verticals in the door frame

Process 4- Installing the Spring Unit

1 Install the springs

A. Insert the torsion shaft through the following items according to the sequence in the illustration:

a. Cable drums (2)
b. Torsion springs (1 or 2)
c. Center support bracket (1)



NOTE THE CABLES DRUMS SHOULD ALWAYS WIND UP IN TRACK 3

B. The springs and the cable drums will have a mark of red or black to indicate which side to place them. Looking on the door from the interior, place the items makes with black on the right and the item marked with red on the left.

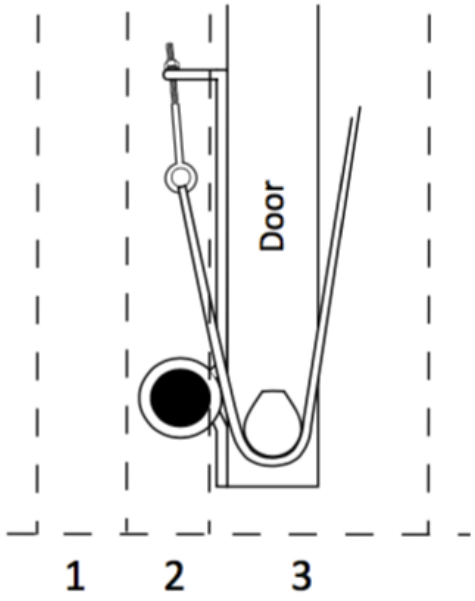
C. Fasten the center support bracket to the lintel according to the shop drawing.

D. Secure the springs' stationary cones to the center support bracket with the hardware from the shipment.

2. Run the cables

A. Connect the cables to the drums, and feed them down the tracks in channel 3 to the thimbles on the bottom of the door.(See the illustration.)

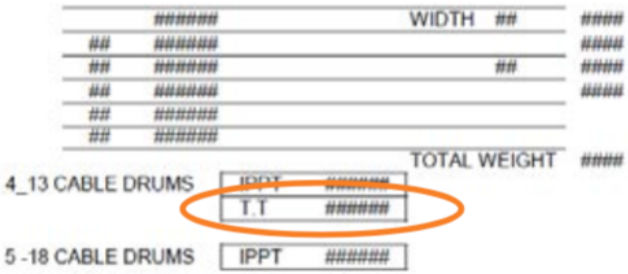
B. Fasten the ye bolts into the lips of the cable brakes, and run the nuts all the way down to the bottom of the threads and tighten the top nut down.



3. Wind the springs

A. Refer to the cover page of the shop drawings to find the T.T(Total turns) number. The illustration on the right shows you where on the page you will find it. This number indicates how many turns are estimated to achieve the balance of the door. The T.T number will vary with each door.

B. Tighten the springs by turning each winding cone up and and equal number of times.



C. Tighten the bolts in the winding cones to lock the spring to the shaft.

Caution: The torque of the springs can injure you if the winding bar slips out of your hands while you are tightening the spring.

Process 5- Testing the Door

1. Balance the door

A. Manually open and close the door to make sure the springs have enough to counterbalance the weight of the door.

a. IF the door is inclined to stay open, the springs are to tight, and you need to loosen them.

b. If the door is inclined to stay closed, the springs are to loose, and you need to tighten them.

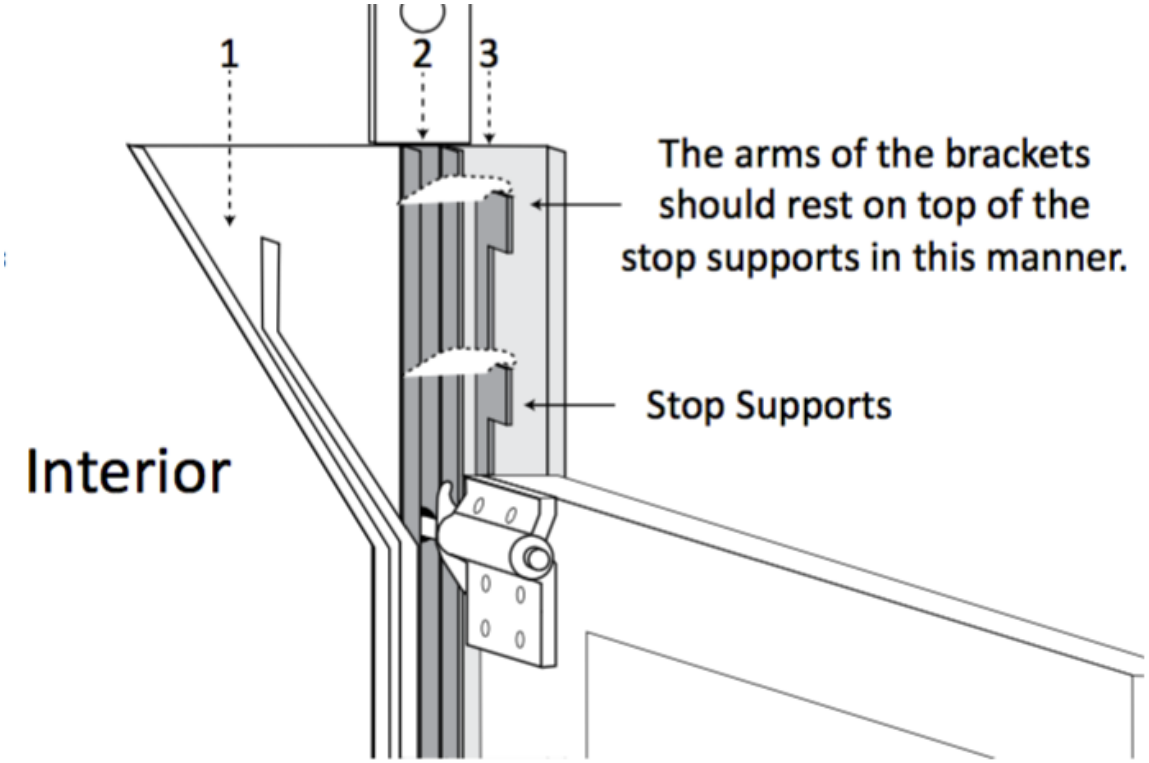
2. Test the arm brackets

A. Manually raise the door slowly, and watch to see if the hooks on the top and center hinges catch the stops in the rail. (See illustration.)

a. The offset bracket controls how high each panel rides up the track , so if the panel travels too high for the arm to rest on the stop supports, move the offset bearing in 1/4 inch increments down to push the top hinge up. Test the operation and verify that the stop are catching with each adjustment. (See illustration.)

NOTE: If the Hooks don't Catch the stops don't force them just return the door to the closed position and Adjust offset bearings.

NOTE: If the Hooks are sliding to the side of the stops- Either the measurements are not correct, or the hinges are not in the correct location.



3 Install the threshold

A. Measure the opening between the jambs, and cut the threshold 3 inches longer than the opening.

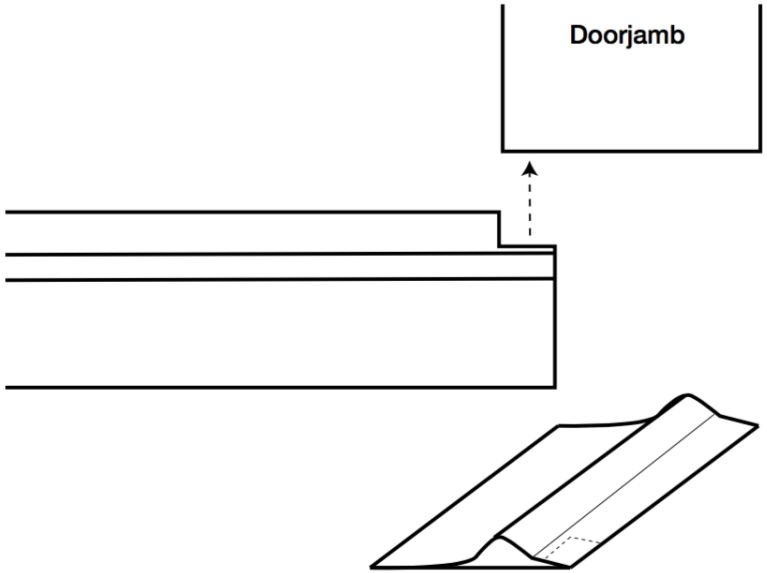
B. Cut a 1½ inch notch out of the short side on the ends of the threshold. (See the illustration.)

C. Seat the notches of the threshold on the outer corners of the doorjambs, and operate the door to make sure the bottom seal and the hump on the threshold make good contact without inhibiting the door's movement.

C. Drill pilot holes in the floor through each of the predrilled holes in the threshold. Move the threshold, and apply a bead of structural adhesive that is $^{5}/_{16}$ of an inch thick between the pilot holes where the threshold will lie.

D. Place the threshold in its position, and seat the screws.

* **NOTE:** If you need to splice the threshold, join the pieces where screws will be no more than 8 inches from both sides of the splice.



Process 6- Installing the Seals and the Threshold

1. Install the top seal

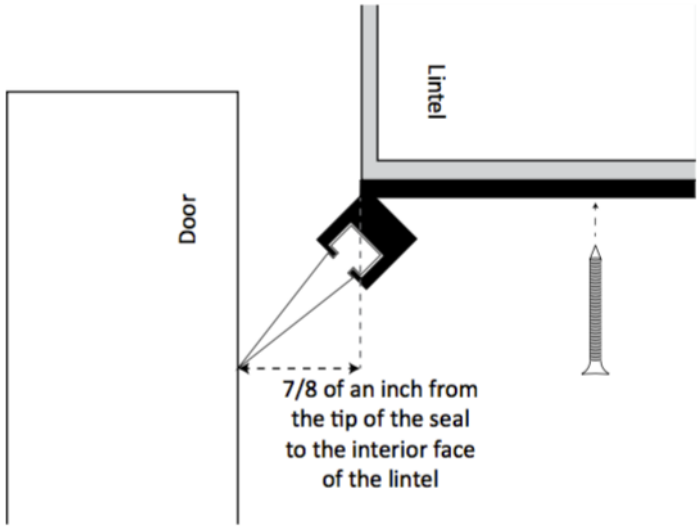
A. Cut retainer to fit between header.

B. Slide the veinal flap seal into the retainer. With the seal flush at the one end crimp that end to lock the seal down. Move to the opposite end and pull the seal tight (just enough to remove the ripples in the seal) and crimp the retainer to lock in the seal. this will ensure the seal stays straight.

a. Place each screw approximately 12 inch apart.

b. Fasten the top seal to the lintel with screws according to the drawing

c. There should be 7/8 of an inch from the face of the lintel



Process 7- Installing the Motor

1 Install the motor

A. Refer to the shop drawings to see how to orient the motor for your installation.

B. Refer to the motor’s installation manual for wiring and programing instructions.

Service and Repair

1 Replacing a glass panel

1. Remove the exterior rubber seal from the perimeter of the glass panel.
2. Remove the aluminum glazing beads from the perimeter of the panel.
3. Remove the panel from the interior, and insert the new one.
4. Apply a silicone adhesive around the perimeter of the panel, and reinstall the aluminum beads.
5. Replace the exterior rubber seal on the perimeter of the panel, and clean the class with glass cleaner and a cloth.

Troubleshooting

A. The door is difficult to open

a. Verify that the torsion springs are wound tight enough to counterbalance the door's weight; tighten the springs if they are not.
b. Make sure the bracket rollers are not binding or rubbing their channels.
c. Verify that the door panels are level

B. The door is difficult to close

a. Verify that the torsion springs are not too tight; loosen the them if it is necessary.
b. Make sure the bracket rollers are not binding or rubbing when they pass through a bend in the channels.
c. Verify that the door panels are level. If they are not, loosen the springs to relieve pressure from the cables, then adjust the nuts on the eye bolts of the cable brackets to level the door.
d. Make sure the plates on the offset brackets aren't rubbing the tracks.

* **NOTE:** Never adjust the nuts on the eye bolts while the springs are fully tightened because the tension on the bolts will cause their threads to strip when you adjust the nuts.

C. The bracket arms stop before they reach the stop supports.

a. The door panels are folding too soon, so move the roller plates on the offset brackets down in 1/2 inch intervals, testing the door after each turn, until the arms properly meet the stop supports.

D. The bracket arms stop above the stop supports.

a. The door panels are not folding soon enough, so move the roller plates on the offset brackets up in 1/2 inch intervals, testing the door each time, until the arms properly meet the stop supports.

E. The bracket arms slam down on the stop supports.

a. The door panels are not folding soon enough, so move the roller plates on the offset brackets up in 1/2 inch intervals, testing the door each time, until the arms properly meet the stop supports.

F. The stop arms do not meet the stop supports.

a. Make sure the distance between the tracks matches the distance shown in the shop drawings.
b. Make sure you have correctly installed the arm brackets and middle hinge.
c. Make sure the door panels are level.
d. Make sure the tracks are plumb and level.