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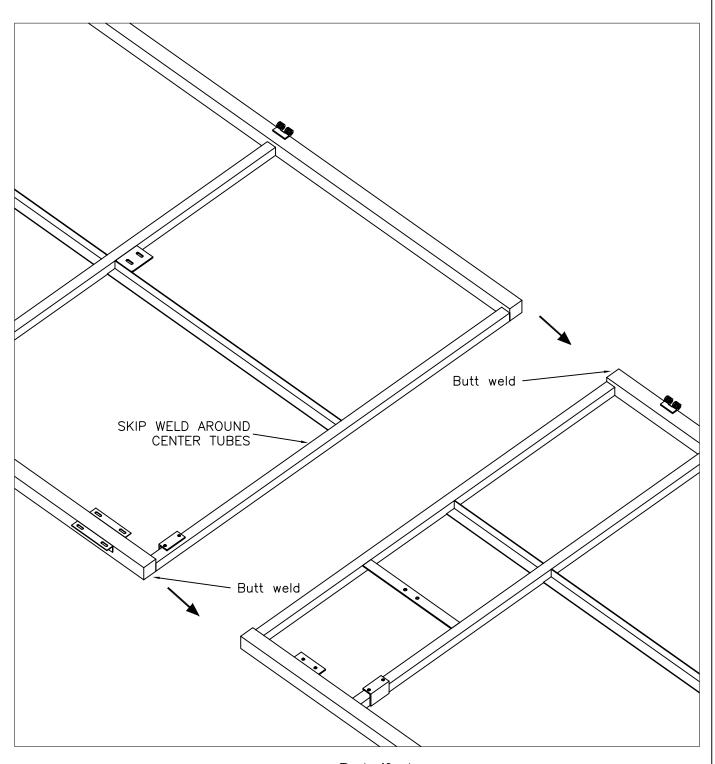
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STEP 1:

Check door opening frame to be sure height and width are correct. Header must be straight and level. Jambs must be plumb.

STEP 2:

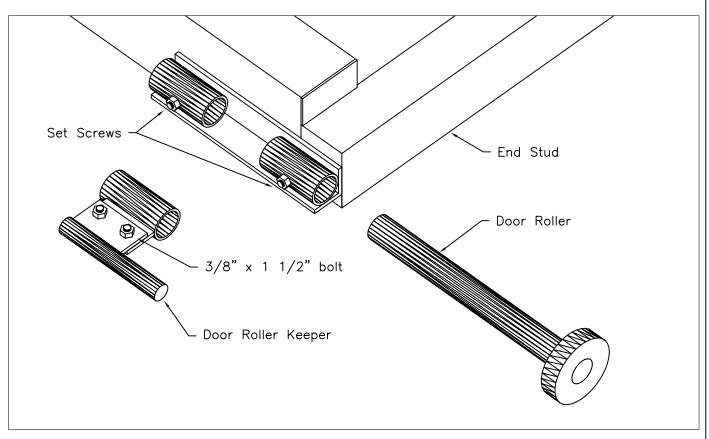
Place the bottom two panels out on a flat level surface with the bottom of the door against the door col., line the panels up straight and level and butt weld the tubes together as shown in detail 1.



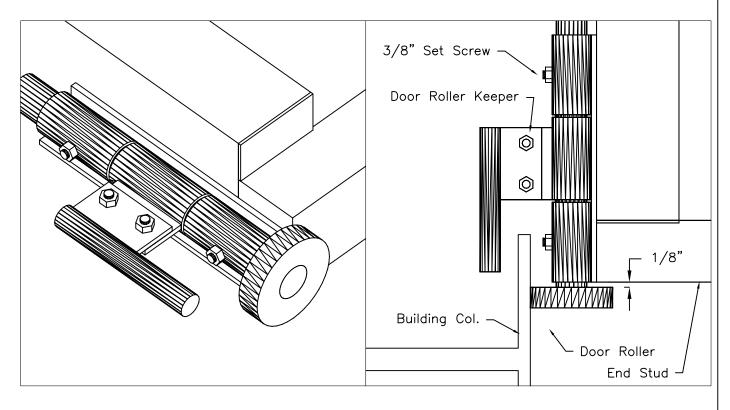
Detail 1

STEP 3:

Install door roller and door roller keeper as shown in detail 2. Place around building col. as in detail 4 Be sure to leave 1/8" between roller and end stud on door. Then tighten the set screws to hold door roller in place.



Detail 2

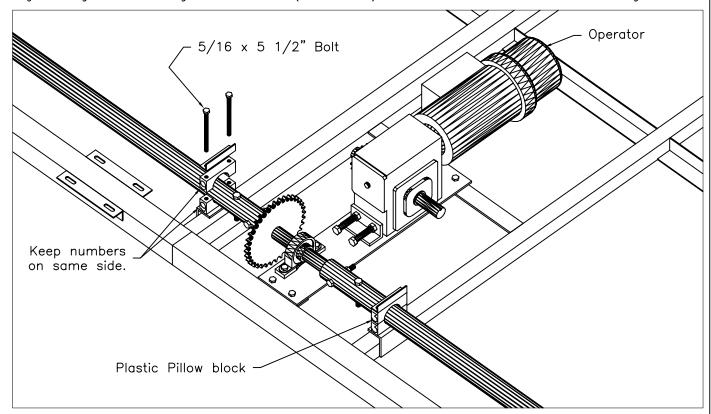


Detail 3

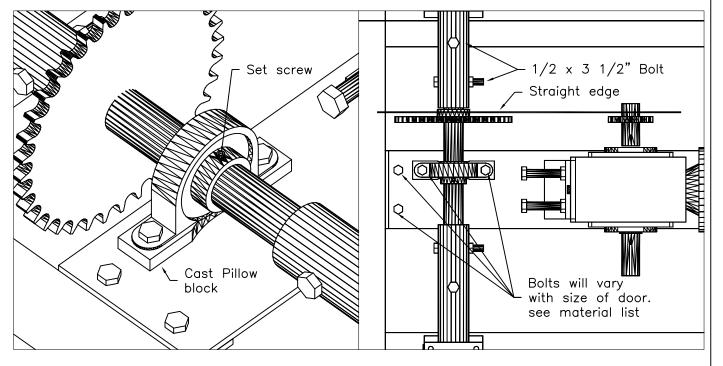
Detail 4

STEP 4: 3

Install and bolt operator in place, next place the drive shaft with the cast iron pillow block in place. Put the bottom 1/2 of the poly-plastic pillow blocks in place, keeping the numbers on the side of the blocks match. Place line shafts in and align lifting eyes to the top of the door. Tighten set screws on the cast pillow block. (See Detail 6) Put the top 1/2 of the pillow blocks on and tighten. Line up both sprockets with a straight edge and tighten the bushing and set screws. (See Detail 7) Place chain on and bolt the line shaft together.



Detail 5

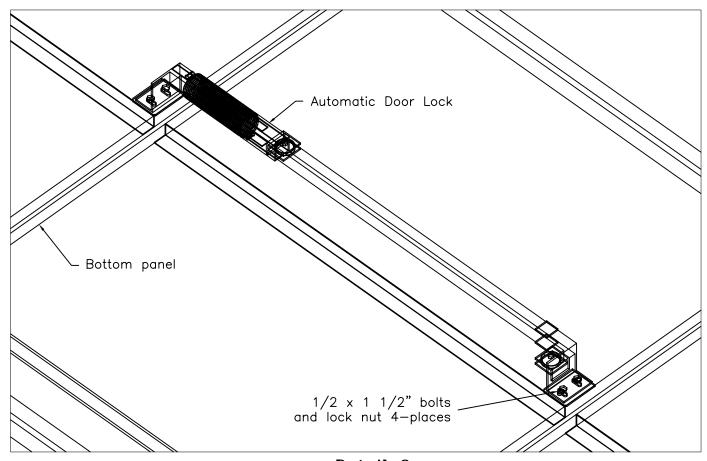


Detail 6 Detail 7

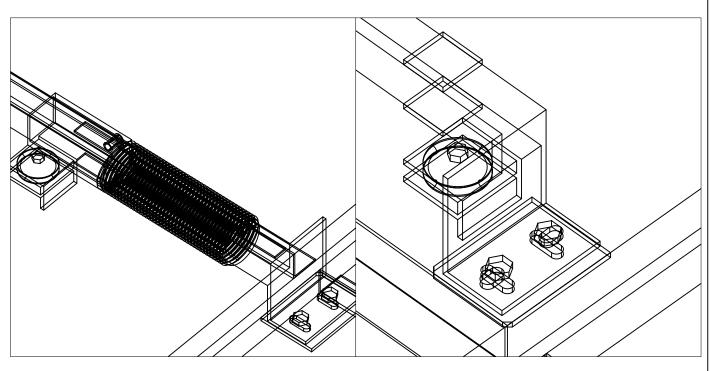
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STEP 5: 4

Place Automatic Door Lock in place and tighten.



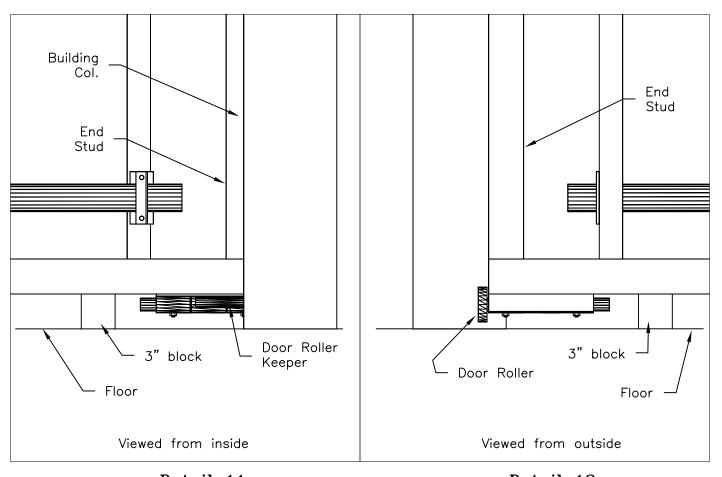
Detail 8



Detail 9 Detail 10

STEP 6: 5

Now set the assembled panels on 3" blocks to make sure door is at the proper elevation, straight and level. Be sure that each side of the door is overlapped 1 1/2" as showed in detail 14. When the door is in position clamp to columns at each end. the panel should be 3" above the finish floor.



Detail 11

Detail 12

Door Roller Keeper

Door Roller

Some Door Roller

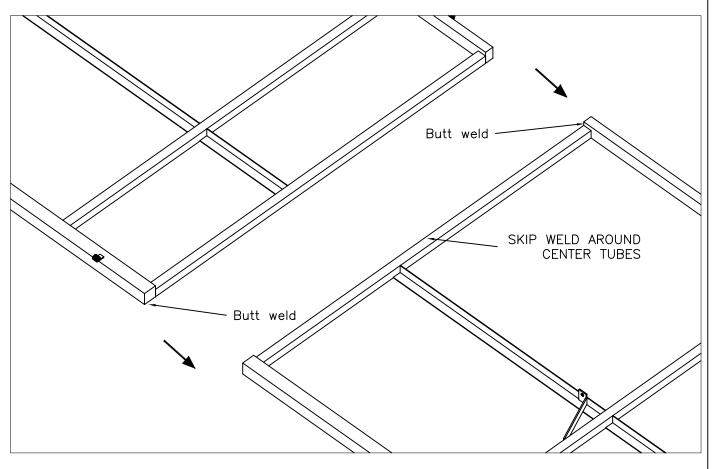
Building Col.

Building Col.

Detail 13 Detail 14

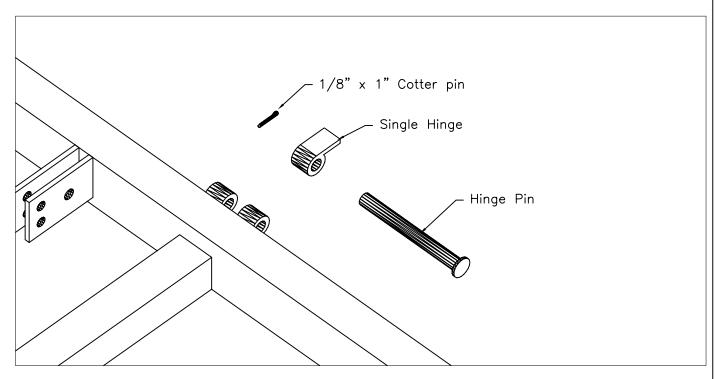
STEP 7: 6

Lay out the two top panels. Be sure panels are straight and level. Buttweld and skip weld panels together as shown in detail 15.



STEP 8: Detail 15

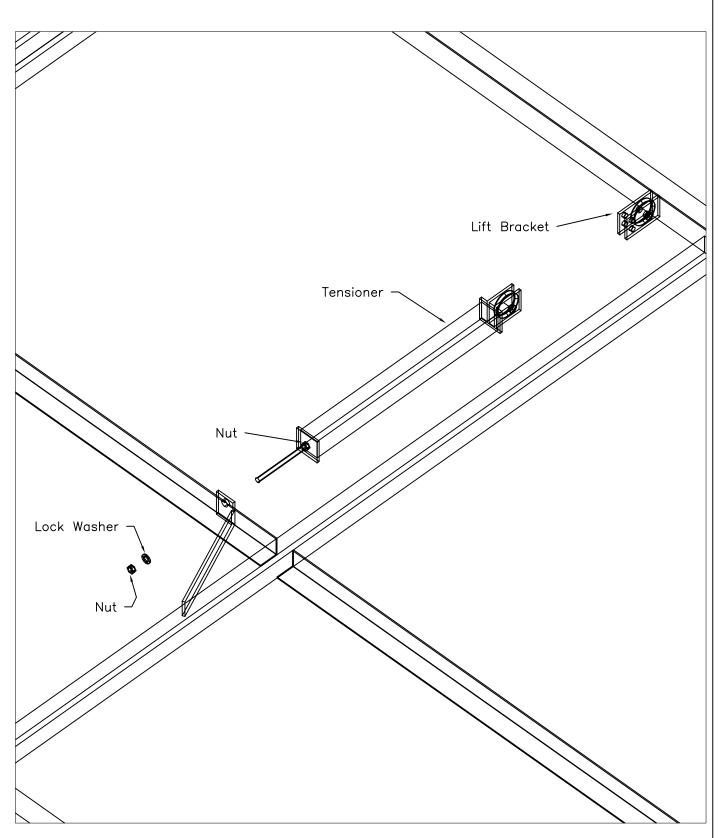
Install the top hinges, hinge pins and cotter pins in place as shown in detail 16. Be sure to grease hinge pins before installing.



Detail 16

STEP 9:

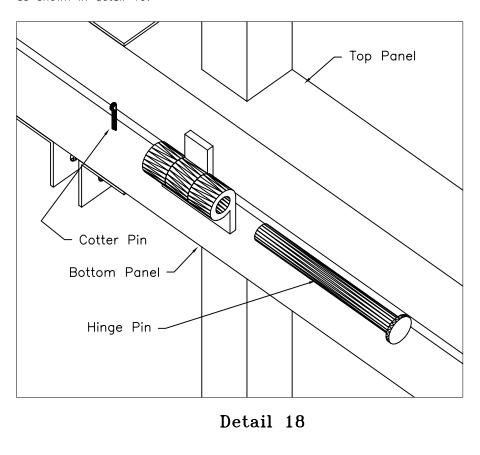
Install the Tensioner (TI-22) as followed. With the Cable Tensioner (TI-22) under no tension, run one nut up to the bottom of the Tensioner. Slide the Tensioner (TI-22) into the bracket and place a lock washer and other nut on and tighten. See Detail 17.

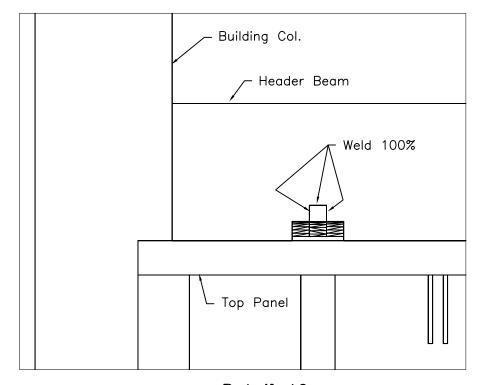


Detail 17

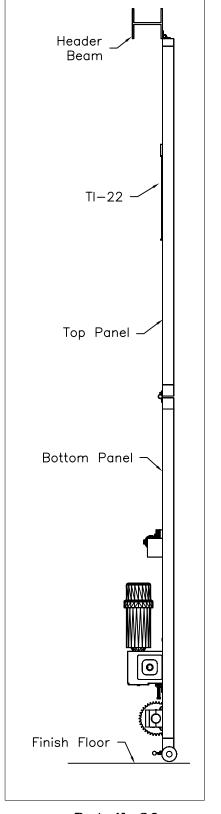
STEP 10: 8

After top panel is assembled tip up and lift into position on top of the bottom panel. Install hinge pins and cotter pins at all center door hinges as in detail 18. Be sure to grease hinge pins before installing. Check door to be sure it is centered in the opening and that it is level. The door should be 3" off the finished floor. After checking to be sure that the door is centered and level, field weld header hinges to the header beam as shown in detail 19.





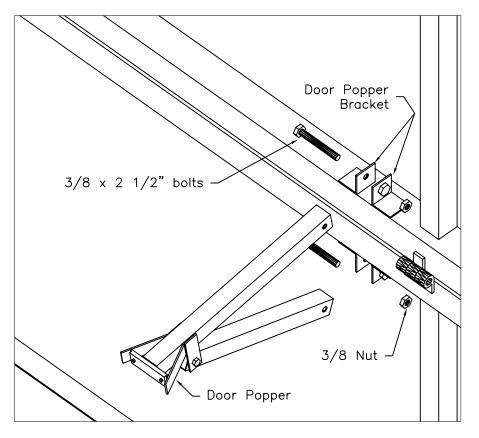
Detail 19



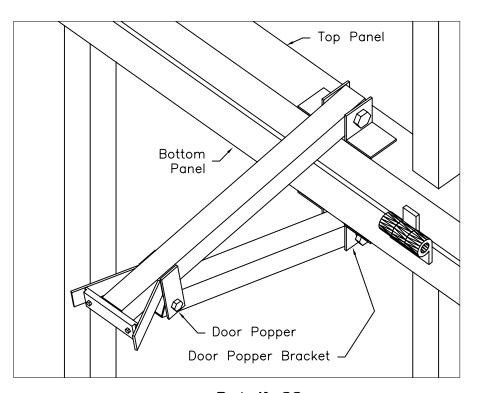
Detail 20

STEP 11:

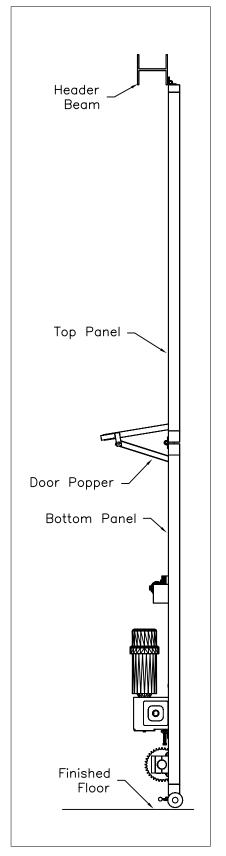
Install Door Poppers as shown.



Detail 21



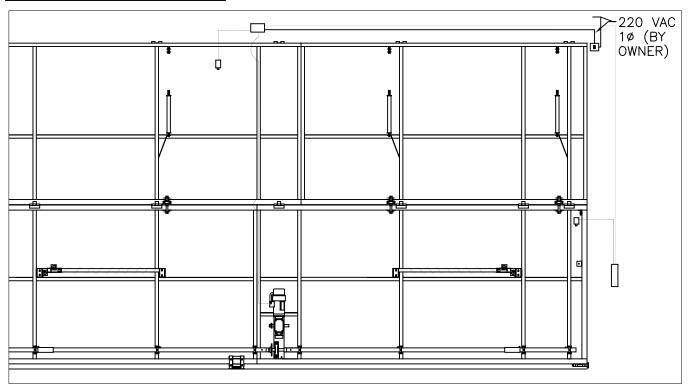
Detail 22



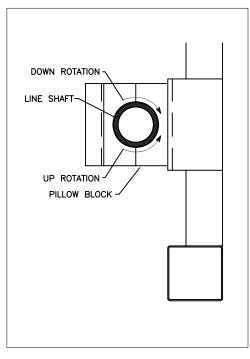
Detail 23

STEP 12:

Run electric cord from the motor to junction box (by others) at top of door. Be sure to leave a loop at the center of the door and a longer loop at the top of the door. Run electric cord from pushbutton station to juction box at top of door and connect wires. Also connect limit switches. Run operators and check direction of the rotation. To check the rotation, place right shoulder on the inside of the door. The line shaft should turn clockwise for down and counterclockwise for up. Make wiring changes if incorrect. CAUTION: CONTACT HANGAR DOOR CO. BEFORE MAKING ANY WIRING CHANGES TO AVOID VOIDING OF FACTORY WARRANTY ON THE ELECTRICAL EQUIPMENT.



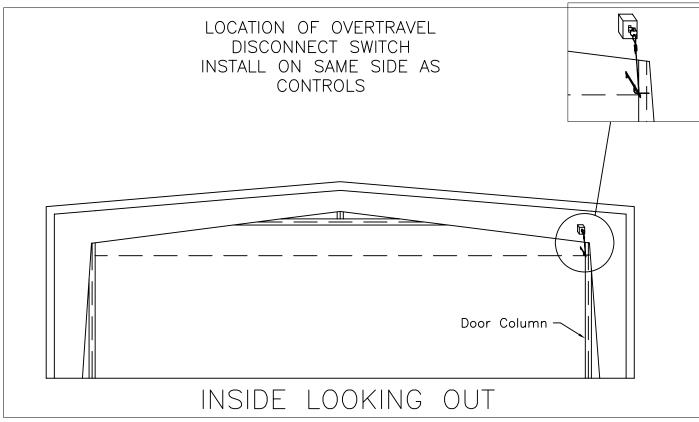
Detail 24



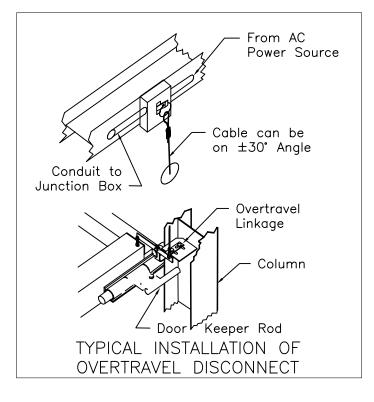
Detail 26

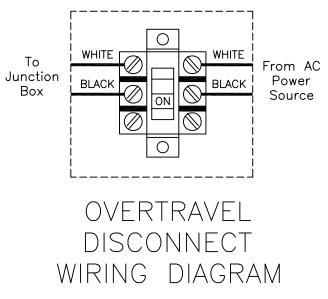
OVERTRAVEL DISCONNECT SWITCH

This switch is activated mechanically by the door if it travels over the set clear opening height. The mechanical part is designed to be mounted on the interior of the column and welded in place. The activator arm makes contact with the bottom door cord and pulls on the disconnect switch. See figures below.



Detail 27

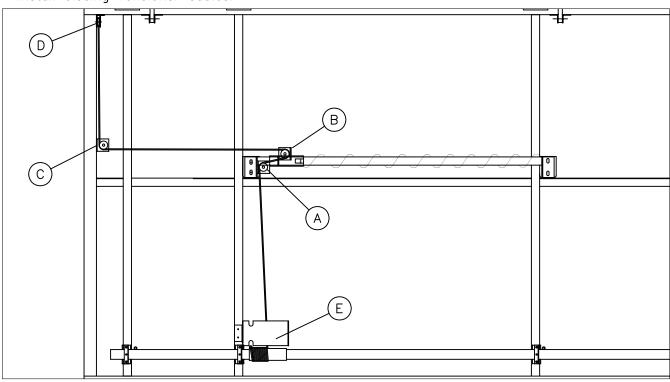




Detail 28

Detail 29

Install closing Tensioner cables.



Detail 30

<u>Important Note:</u> Prior to installing lock cables be sire door is at full closed position and clamped closed to door jamb.

Automatic Jamb Lock Installation Instructions

Step 1: Install Jamb Lock Brackets on the inside of the jamb columns as shown in detail 31. Be sure that the bottom of the 2" pipe lines up with the top of pulley "D".

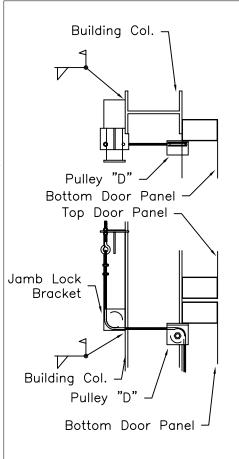
<u>Step 2:</u> On the Automatic Door Lock pull sleeve down to the stop and clamp in place. Install lock cables, pass thru pipe sleeve and make correct number of wraps on line shaft (see chart below) keep wraps neat and tight. <u>Be sure cable feeds off the line shaft between the shaft and the door.</u>

<u>Step 3:</u> Next take cable around pulley "A", then around pulley "B" on tube sleeve, around pulley "C" and "D", around 2' pipe to the eyebolt clamp with 2 cable clamps.

<u>Be sure to remove clamps at jamb and tension lock before operating door.</u>

Door Clear Opening	Number of Wraps on Drum
10'-0"	19 Full Wraps
12'-0"	22 Full Wraps
14'-0"	24 Full Wraps
16'-0"	27 Full Wraps

<u>Step 4:</u> Install ALG guard at location "E" on both sides of door approximately 1/2" above pillow block.



Detail 31

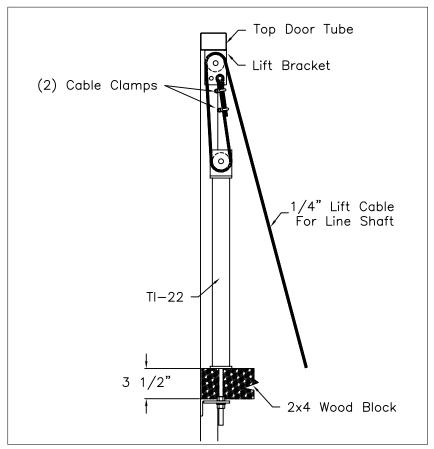
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Install lift cables.

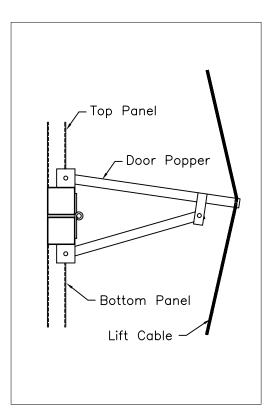
When door is ready for cabling, pull up on the TI-22 and insert a 2x4 block under it. This will provide the 3 1/2" space needed. Next run the cable thru the cable catch on the line shaft & around the shaft to make 2-full wraps, thru the cable guard, over the door popper, thru the pulley in the lift bracket, down to the cable tensioner (TI-22), thru the pulley & back up to the lift bracket. Work the slack out of the cable, BE SURE NOT TO LIFT THE TENSIONER OFF THE BLOCK. Clamp using (2) cable clamps, remove the block from under the TI-22.

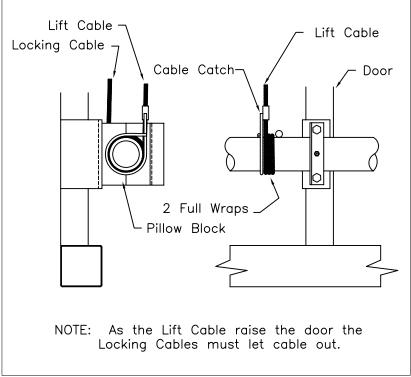
(Follow this procedure for the other tensioner. When done all the TI-22 should be 3 1/2" off the tensioner support brackets.)

NOTE: The lift cables must wrap from the outside of the line shaft.



Detail 32

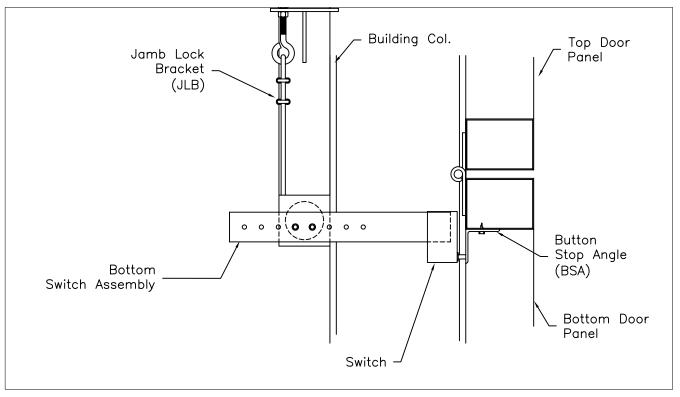




Detail 33

Detail 34

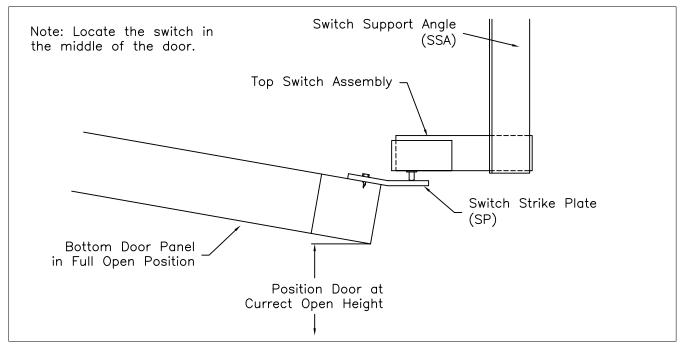
Install Bottom Down Limit Switch. Attach switch button stop angle (BSA) to door with two (SMS) sheet metal screws. Place switch box so switch will shut off as door pulls against door jamb. (Adjust for snug — not tight closure.) Attach switch assembly to Jamb Lock Bracket with sheet metal screws.



STEP 16:

Detail 35

Install Top Limit Switch. Clamp switch assembly to (SSA) angle. Then attach Switch Strike Plate to door with two (SMS) screws. Note do not place the (SP) more than 2" below the bottom of the door. Raise the door to the full open position. (NOTE: Do not go over the full open height, because this will damage the door.) Position the switch so that the top limit switch will strike the switch strike plate in the center. When in place be sure switch is level and weld angle to header and switch assembly to angle.

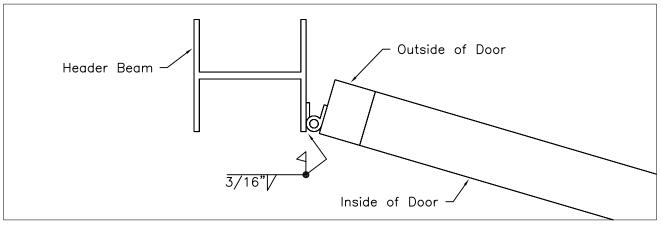


Detail 36

STEP 17: 15

IMPORTANT:

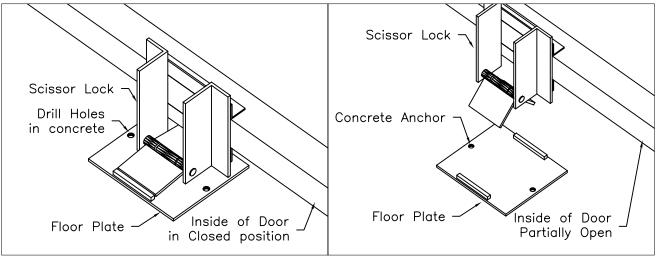
Open door and weld along the bottom edge of the hinges on the header beam.



Detail 37

STEP 18:

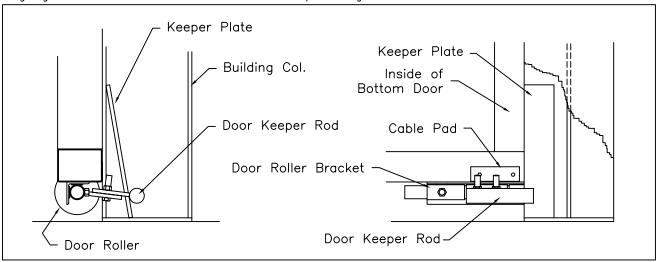
Install door base automatic scissor locks on bottom inside of door. Bolt scissor lock angles to bottom panel with $(4) \ 3/8 \ x \ 1"$ bolts & locknuts. Field drill floor plate for concrete anchors.



STEP 19: Detail 38

Detail 39

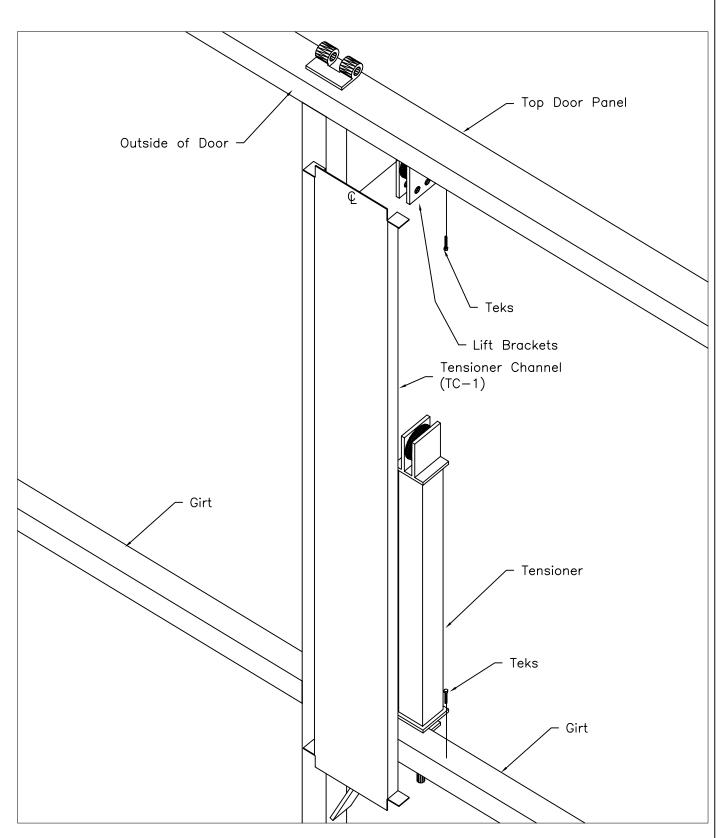
Place keeper plate in position as shown below. tack into place. Then open door & check to make sure that door keeper doesn't bind on keeper plate. If not weld in place. Open door to locate where the cable is going to run on bottom tube and add a cable pad using sheet metal screws.



Detail 40

STEP 20:

If the door is to be insulated, Install the Tensioner Channel (TC-1). Center the TC-1 using the lift bracket as the center location.

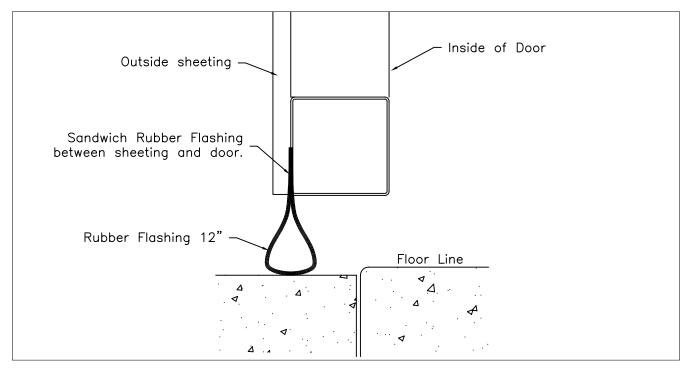


Detail 41

NOTE: IF YOUR DOOR IS EQUIPPED WITH A MILLER EDGE, SEE PAGE 22 FOR STEP 21.

STEP 21:

Base seal installation.

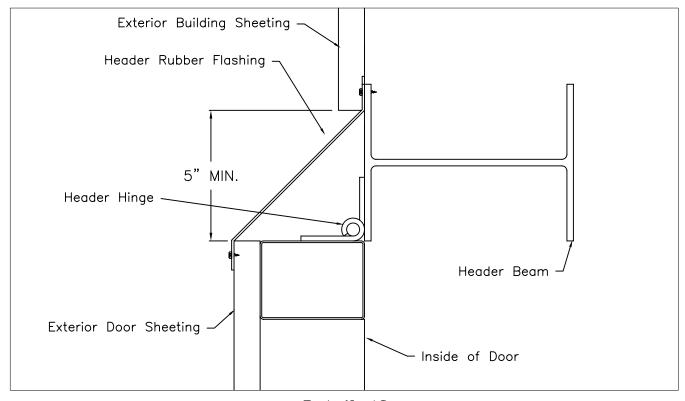


Detail 42

NOTE: IF YOUR DOOR IS EQUIPPED WITH A PASS DOOR SEE PAGE 17 BEFORE CONTINUING.

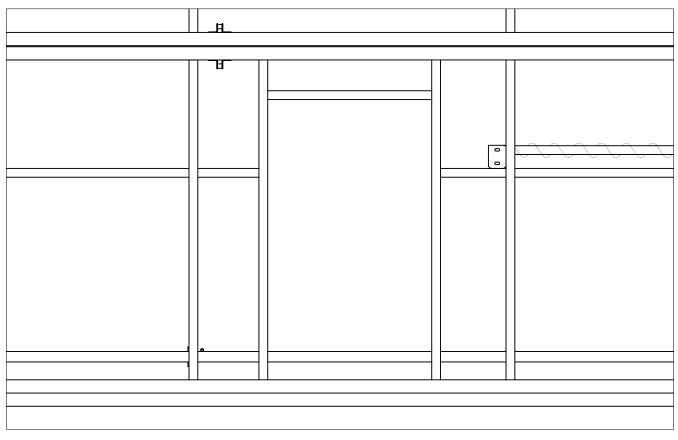
STEP 22:

Door is now ready for exterior sheeting and header rubber flashing, installed at the same time.



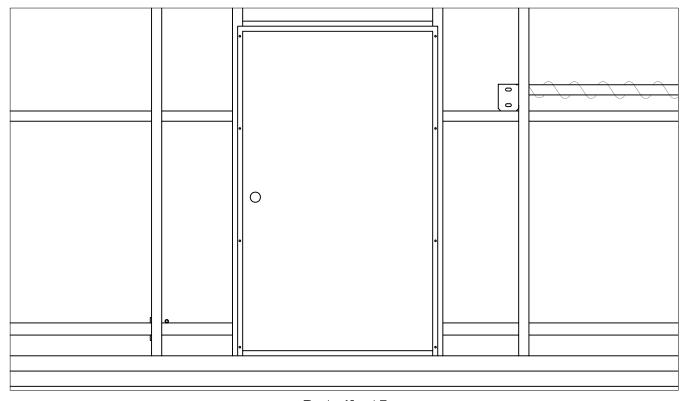
Detail 43

Locate the Pass Door opening.



Detail 44

Slide Pass Door into opening from the outside of the door panel. Fasten door in place with 8 sheet metal screws. NOTE: Be sure that the door opens to the outside of the building.



Detail 45