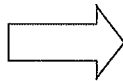
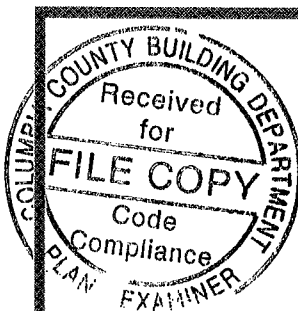


Soon to be known as:



**FoldTite
Systems**

Assembly, Installation and Operating Instructions for:
CSA-2.5-FT RGC EXT — Fold-Tite Stacker Door System
Externally Hung with Recessed Guide Channel

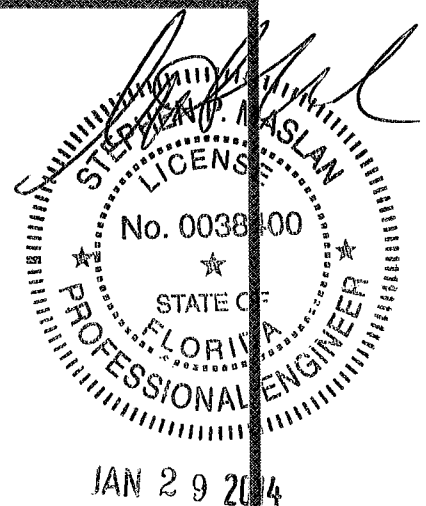


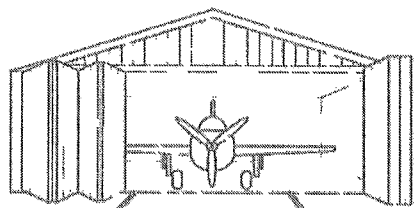
This door is built for:

Hawke Ag

And is:

60' X 17'5"





Doors

From Cool-Air, Inc.

Contact Info:

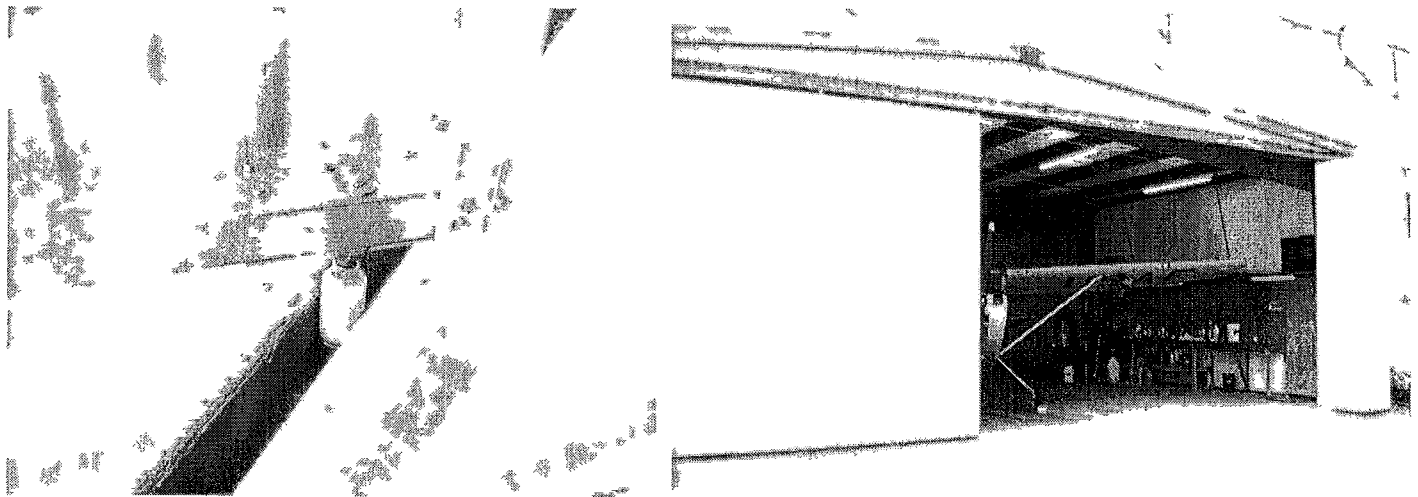
Dave Coolman: 518-852-3767

Phillip Coolman: 518-480-5009

email:

dave@foldtite.com

phil@foldtite.com



Assembly, Installation and Operating Instructions for:
CSA-2.5-FT RGC EXT — Fold-Tite Stacker Door System
2.5 inches Thick — Utilizing Recessed Guide Channel — Externally Hung

Our doors are easy to operate. However, the instructions must be followed to insure correct assembly and installation. It is imperative that the dimensions, squareness, and levels are adhered to, to insure that the door is hung properly and operates freely. Not all structures are square and not all structures have even dimensions from top to bottom and side to side, so allowances will have to be made to install the door properly. We have carefully highlighted those areas in the instructions, where the assembly and installation are critical to the operation of the door. Should you have any questions during the assembly and installation process, we are here to help you through the project to insure good operation of the door. DO NOT HESITATE to call us. At times we may be not be reachable at the moment but we will get back to you. Thank you for buying our door.

Assembly, Installation and Operating Instructions for: CSA-2.5-FT Fold-Tite Stacker Door System
Externally Hung — with Recessed Guide Channel

Page

Table of Contents

0 1	Table of contents	3
0 2	Beginning Notes	4
1 0	Un-crating	5
2 0	Inspection of box and materials	5
3 0	Track Installation	5-6
3 1	Installation of Track	5-6
3 2	Installation of Track Cover Brackets	6
4 0	Recessed Channel Guide Construction	7
5 0	Assembly of panels	8-20
5 1	Panel Assembly Introduction	8-14
5 2	Brace and Lock Panel (Outboard Panels)	9
5 3	Assembly of the bottom rail on the active panels	10-11
5 4	Hinging the Panel sets together	14
5 5	Panel Assembly Sequence Summary	15
5 6	Installing the side Hinges	18
5 7	Installing the trolley & Lock Pins	17
5 8	Diagram & P/N Identification of Outboard Brace Panel Set	19
5 8	Assembly of Standard or Excess Panel Set	20
5 9	Diagram & P/N Identification of Excess Panel Set	21
5 10	Assembly of Center Offset Panel	20
5 11	Diagram & P/N Identification of Center Offset Panel Set	21
6 0	Hanging Panel Sets	22
7 0	Hinging Panel sets	23-24
8 0	Hinge the door to the building columns and top view of hinge placement on column	25-26
9 0	Installation of the rollers for the lower guide system	27
10 0	Installation of the cable Keeper and exterior Sheeting Operation	28
11 0	Lock Assembly	29-30
12 0	Bottom lock pin assembly	31
13 0	Bottom Roller assembly	32
14 0	Installation of Seals	33
15 0	Operation of the Door	34
16 0	Maintenance	35
17 0	Tools Necessary for the Assembly and Installation	36
18 0	Print for rain cover	37
19 0	Print for your specific Door	
20 0	Structure List for your door	

Assembly, Installation and Operating Instructions for: CSA-2.5-FT Fold-Tite Stacker Door System
Externally Hung — with Recessed Guide Channel

Beginning Notes:

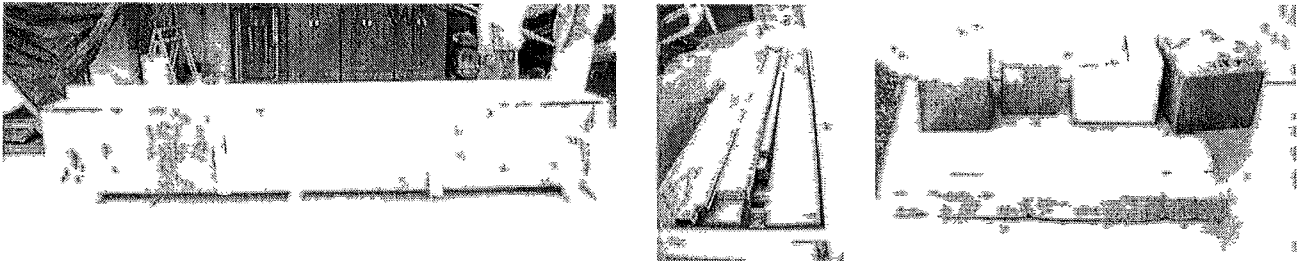
1. Please take an inventory of all materials received as soon as possible. We strive to be as accurate as possible, but sometimes there are mistakes. We will insure that any discrepancies will be taken care of as soon as possible. However, shortages must be reported within 60 days of receipt.
2. This instruction set is general in nature. Please review your print (included in this instruction set) for exact measurements and number of girts etc. for your specific door.
3. We have taken care to highlight some important text in this instruction set. It is very important that these highlighted texts be followed to insure that the door operates properly. As an example, it is very important that the door be level and it is very important that the panels be square and that there is no bowing in the verticals.
4. Before you start the assembly of the door, it would be very helpful that you read through the instruction set and to review the foldout sheets entitled "Overview of Fold-Tite assembly" and "Overview of Hinge Placement". These two foldouts will give you a perspective of how the door is assembled and the placement of key components.
5. You will be utilizing a variable speed drill to insert many TEK screws. It may take a few seconds before the screw begins to penetrate the steel girt or the steel hinge reinforcement, once the screw does begin to burrow into the steel, you should be prepared to back off on the torque of the drive and stop the drill as soon as the screw completes its penetration. Otherwise, you may strip the screw.
6. Although the text indicates this, it would be helpful to layout the components in front of the door in panel sets to visualize the placement of the girts and active components (lock pins and Trolleys). This can be done in combination with reviewing the foldout overview drawings.
7. The panels should be assembled with the front of the panel (front of the door) facing up. When you do this, observe that the seam of the girt is up or toward the front of the door and the "J" trim of the verticals is up or facing toward the front of the door.
8. As you hinge the panel sets do NOT rotate the panel from side to side rather turn each panel over top to bottom. Otherwise the hinge relationship will be changed.
9. We enjoy receiving feedback from our customers, whether good or bad. Please let us know what you think of this instruction set or the door itself. Should you have a chance we encourage you to send us photos (hardcopy or electronic). These would be greatly appreciated.
10. Should you have any issues or questions during your project, please DO NOT hesitate to call us. We want your project to be as trouble free as possible. It would be to our mutual benefit if we are able to address your problems head on and as soon as possible. Our best form of marketing is word of mouth, and therefore we want you to be successful.

Dave Coolman—President and Phil Coolman—Partner

Cool-Air, Inc. soon to be FoldTite Systems

Assembly, Installation and Operating Instructions for: CSA-2.5-FT Fold-Tite Stacker Door System Externally Hung — with Recessed Guide Channel

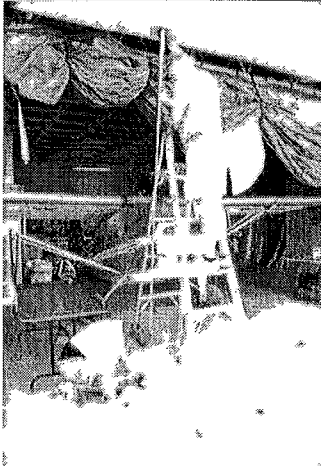
- 1.0 Inspect the packaging for damage. Before opening, document (Photos) any signs of damage on the outside which may result in damage on the inside. Should you find damage to the material on the inside, please contact the shipping carrier.
- 2.0 Open all structural component and hardware boxes and compare with the itemized packing list. Note: structural components and hardware may arrive in separate shipments.



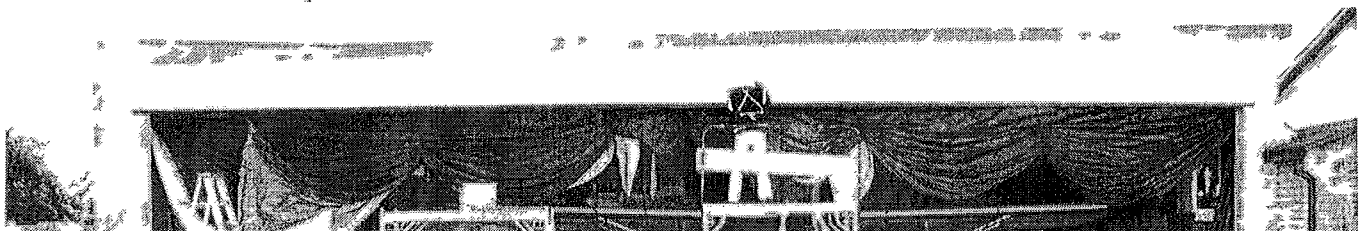
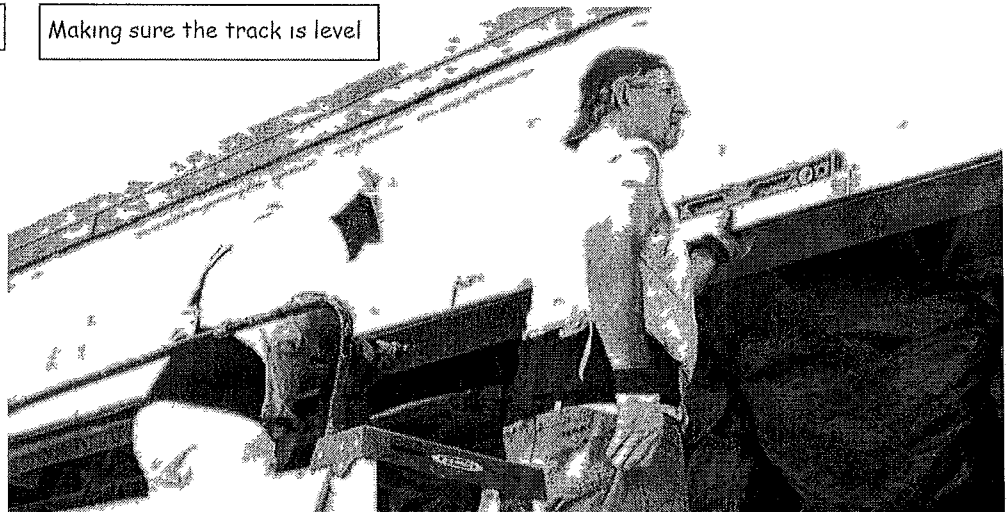
3.0 Installation of the Box Track

3.1 **Track Installation** — Install box track, with top of track bracket (#727979) located 4.5" above bottom of header. It is very important that the track be level. You can accomplish this by using a chalk line snapped in place utilizing a level. Insure that the distance from the bottom of the track bracket to the finished floor meets print from left to right to insure proper fit. The finished floor may not be level. Make adjustments with the track as necessary, up or down, to insure this distance will allow door to hang properly over the entire width of the door. The track brackets are installed 24" on center except at each end over the area where the door is stacked when open, where they are mounted 6" OC. Splice brackets (#714944) will be used at each joint of the track.

Checking the height along track



Making sure the track is level

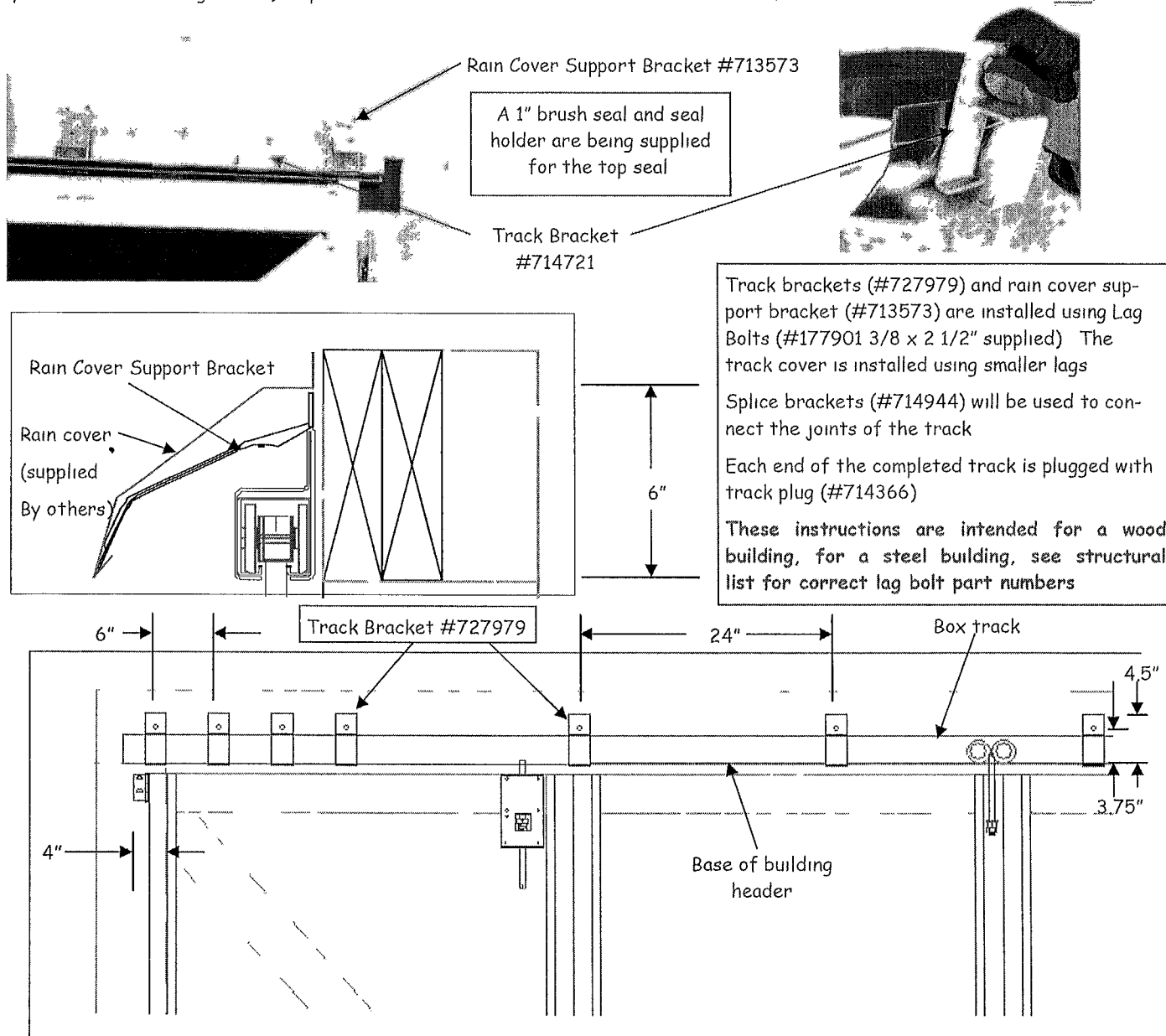


Assembly, Installation and Operating Instructions for: CSA-2.5-FT Fold-Tite Stacker Door System

Externally Hung — with Recessed Guide Channel

3 1(Cont) The door has been designed with the track extending at least 4" past the opening on each side. The 6" rubber top seal is supplied (#500835). This should be installed by placing between the track and the header. Allow 1-1/2" of this seal to hang below the header. Use nails (not supplied) to hold the seal in place. Use Lag bolts #177901 3/8 X 2 1/2" to install brackets.

3 2 Installation of the rain cover support brackets — The rain cover support brackets can be installed at the same time as the track. The Track cover support bracket is supplied and should be placed over the track brackets (24" OC). Rain cover will be installed after the door is installed. The rain cover is not supplied by Cool-Air, Inc. (you will want to match the color of your door and building on site). A print for the rain cover is located towards the end of this instruction set in section 17.0. The

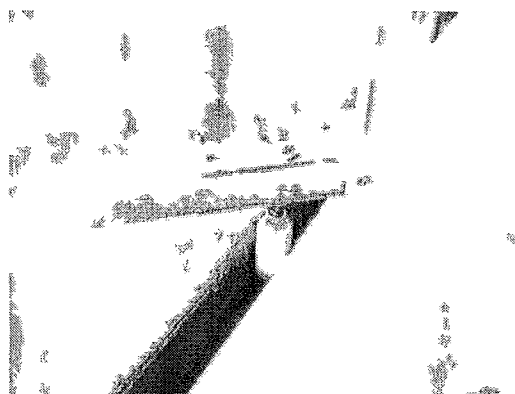


Assembly, Installation and Operating Instructions for: CSA-2.5-FT Fold-Tite Stacker Door System

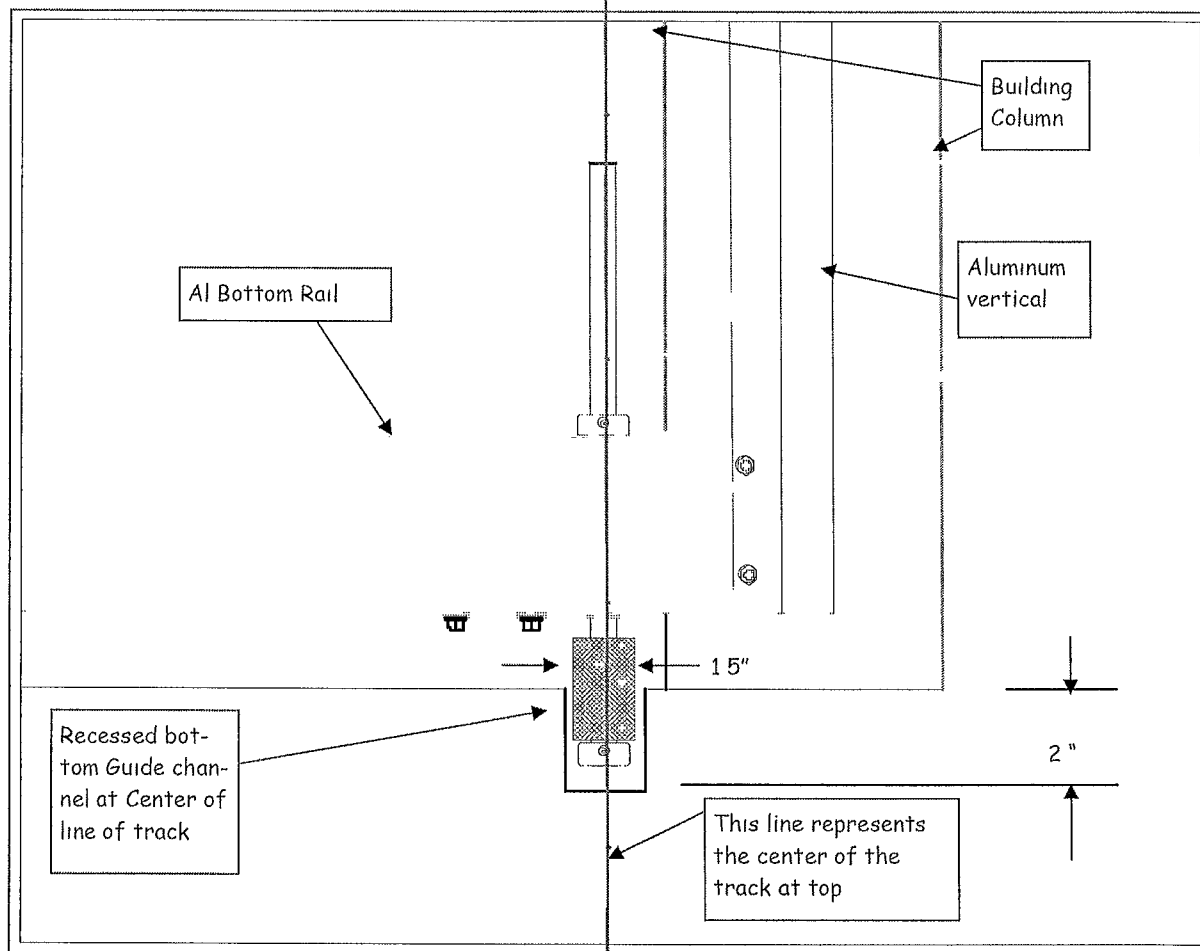
Externally Hung — with Recessed Guide Channel

4.0 Creating the Recessed Guide Channel (RGC)

The Recessed Guide Channel (RGC) can be formed when the concrete is poured or by cutting the concrete. The RGC is centered on the center of the track installed in section 3. If the concrete has already been poured, using a plum hanging from the center of the installed track, cut a channel 1 1/2" wide and a minimum of 2" deep. This is a photo of the channel with the door installed and the roller riding in the channel. The drawing shows the approximate location of the channel with the roller hardware installed in the door panel. Picture is of a 4' 2 1/2" thick door. Your door is 2' 5" thick. This photo and drawing is of the center door panel.



This line represents an extension from the center of the track at top. Your door is "a maximum opening installation". The building has a framed opening of a specific size and there is a framed opening set on the face of the building. See page 7 for correct placement of the channel for your door. The center of the channel is 4' 2 1/2" from the existing column.



Assembly, Installation and Operating Instructions for: CSA-2.5-FT Fold-Tite Stacker Door System

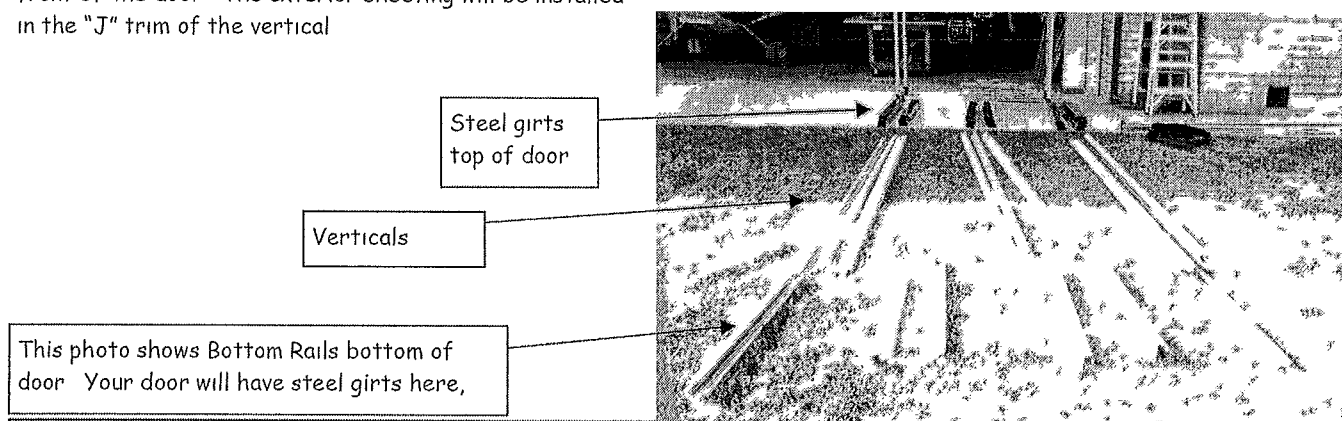
Externally Hung — with Recessed Guide Channel

5.0 Door Panel Assembly Introduction — Panels are assembled individually, then hinged in the rear in sets of two. The panels will be hung as sets of two. After hanging, the sets are hinged together from the front. The door is then hinged to the side columns. The standard panel width is 40 25". The two panels that meet between the two door halves will be wider than the standard panels by 4". This is to allow the trolleys to be inset. By inseting the trolleys, the door will fully close. These two panels are each paired with a standard size panel. There also may be an excess panel width on two or four of the panels to adjust the final width of the total door to meet your specifications for opening width. The print for your door is included in this instruction set to inform you of the actual dimension of your door to include the panel widths.

As you assemble the panels, it is very important that the panels are square. This will be mentioned several times in this instruction set. We have two suggestions on how to insure that the panels are square. The first is to build a jig that utilizes either metal or wood sides and is the width of the standard panel which is 40 25". This way each panel can be easily squared and bows in the vertical are eliminated. You can adjust this jig for any excess panel widths which may be called out in your print. Alternatively, after installing the TEK screws in each of the four corners, you can measure from the left upper corner to the right lower corner and compare this measurement with the same measurement from the right upper corner to the left lower corner. These two measurements should be identical, which will insure that the panel is square. If they are not the same, the panel should be adjusted to make the two dimensions equal. At the same time, you should eyeball the verticals to determine if any bowing is occurring. Any apparent bowing should be eliminated. This will be done by adjusting the fit of the steel girts in the verticals.

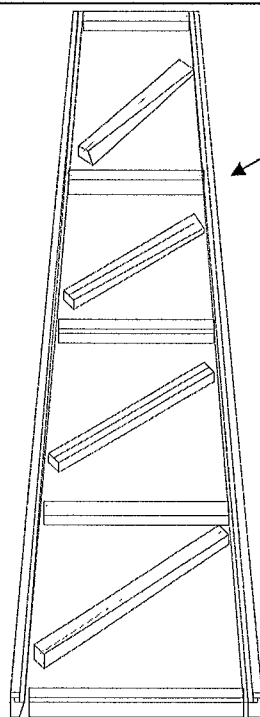
5.1 Panel Overview — Please review fold-out sheets entitled "Overview — Fold-Tite Assembly" and "Overview — Hinge Installation". These overviews will give you a perspective of each type of panel, on which verticals the hinges are installed, whether on the back or on the front of the door. These overviews will also indicate which verticals receive a hinge doubler. The hinge doubler is installed to provide strength in the vertical where the TEK screws do not screw into the steel girt but rather screw into the doubler. Screw through the front of the vertical and then into the steel doubler. This overview also provides a view of the locations of the trolley and lock pins. It should be noted that other than the excess panels and the very center verticals, the right side of the door is a mirror image of the left side of the door. Therefore, the trolleys and lock pins are located on opposite sides of the corresponding panels. We have included a full page drawing with associated part numbers of each type of panel set.

5.2 Panel Assembly — We recommend that you physically lay out all of the major components associated with each panel set in front of the opening of the door. This will help you visualize the panel and how it is hung from the track. We term the far left and right panels as the Outboard Brace Panel. For this door configuration the panel paired with the Outboard Brace Panel will have both top and bottom locks. We term the panel which will house the trolley and the lock and latch mechanisms as active panels. The panel which is neither is a standard panel. The panels will be assembled separately. Then the panels will be hinged in sets of two. Then the panels will be hung as sets before hinging the panels sets together with front facing hinges. The top rail (steel girt) is pre drilled for the trolley and lock pins. We suggest that the panels be assembled in pairs in the order provided in the instruction set. They should be folded and set aside while you complete each set. Assemble the panels face up with the "J" trim of the vertical facing up and the seam of the steel girt facing up. This will represent the front of the door. The exterior sheeting will be installed in the "J" trim of the vertical.



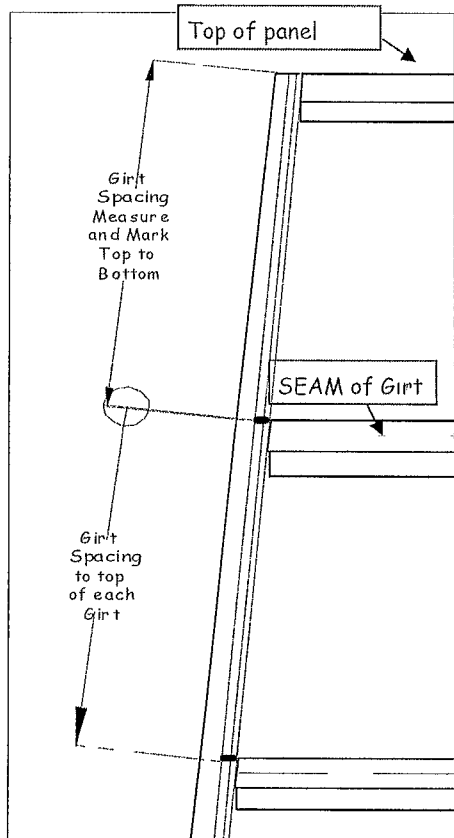
Assembly, Installation and Operating Instructions for: CSA-2 5-FT Fold-Tite Stacker Door System Externally Hung — with Recessed Guide Channel

5.3 Outboard Brace Panel Set — Assemble the active panel. Assemble the panels starting with the with one outboard brace panel and then an active panel page 14. As previously stated, it is important that each It is necessary that the panels are square. The door. Measure and mark each vertical for the girt spacing: the top of the door to the top of the next girt, use the. Please observe that on the active panels the top girts are pre drilled for insertion of the lock mechanism and trolley. The



Fitting the steel girts into the verticals

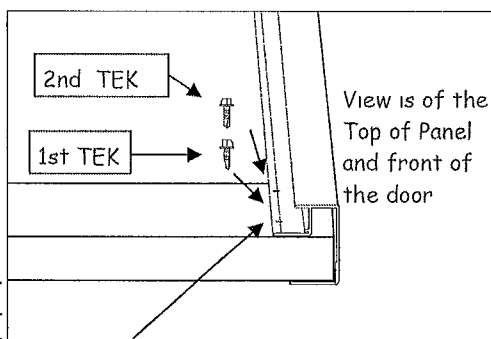
panels in sets of one active panel and one non-panel which will attach (hinge) to the column. Assembly and part numbers used are shown on horizontal girt is firmly fitted into the vertical. **SEAM** of the steel girt faces the front of the ing listed in YOUR print. This spacing is from same dimension to mark the top of each girt.



RIGHT side of the door will be the MIRROR image of the LEFT side of the door.

Starting at the top of the outboard panel, insert the top girt into the side of each of the

two verticals and screw in one 12-14 X 3/4" TEK screw (#500815) (close to the top, one on each side). There is a locator line on the vertical for placement of the screw. This will locate the screw in a position that will allow the sheeting to fit into the vertical "J" trim. Measure the vertical, as indicated to the left, for placement of subsequent girts. Insert the girts. Insure that



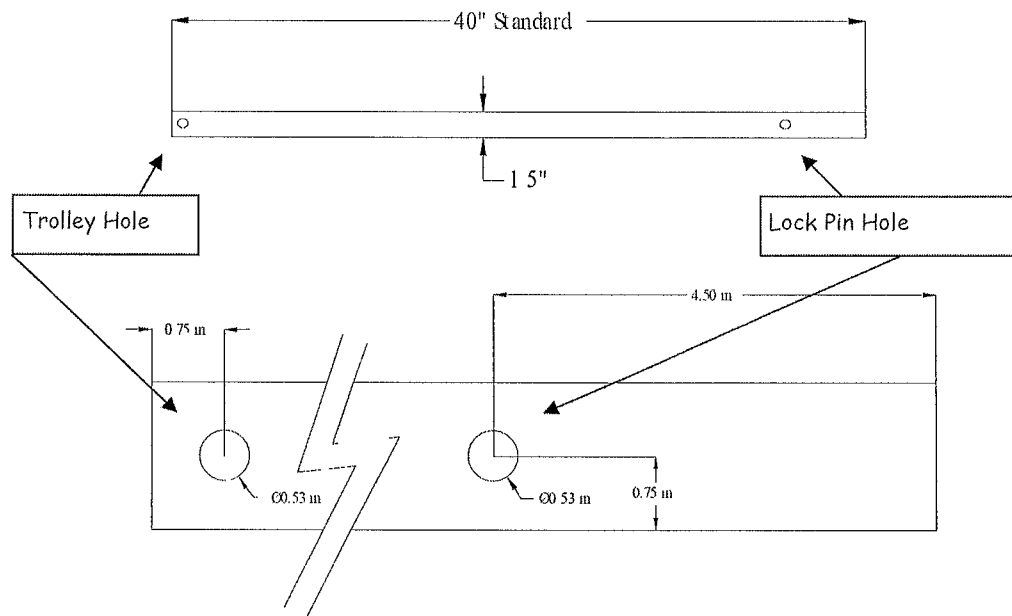
View is of the Top of Panel and front of the door

First TEK Screw place along locator line of vertical

the girts are fitted flush to the vertical. A diagonal brace girt is installed in each bay of the Outboard Brace panel. These brace girts are sized to fit without cutting and the supplied butt end of the girt will be stronger than having the end cut at an angle. The panel must be square for these to fit properly. Once the 4 corners are secured with a TEK screw, square the panel. Then TEK the rest of the horizontal girts and then the diagonal girts with two TEK screws at each joint.

Assembly, Installation and Operating Instructions for: CSA-2 5-FT Fold-Tite Stacker Door System
Externally Hung — with Recessed Guide Channel

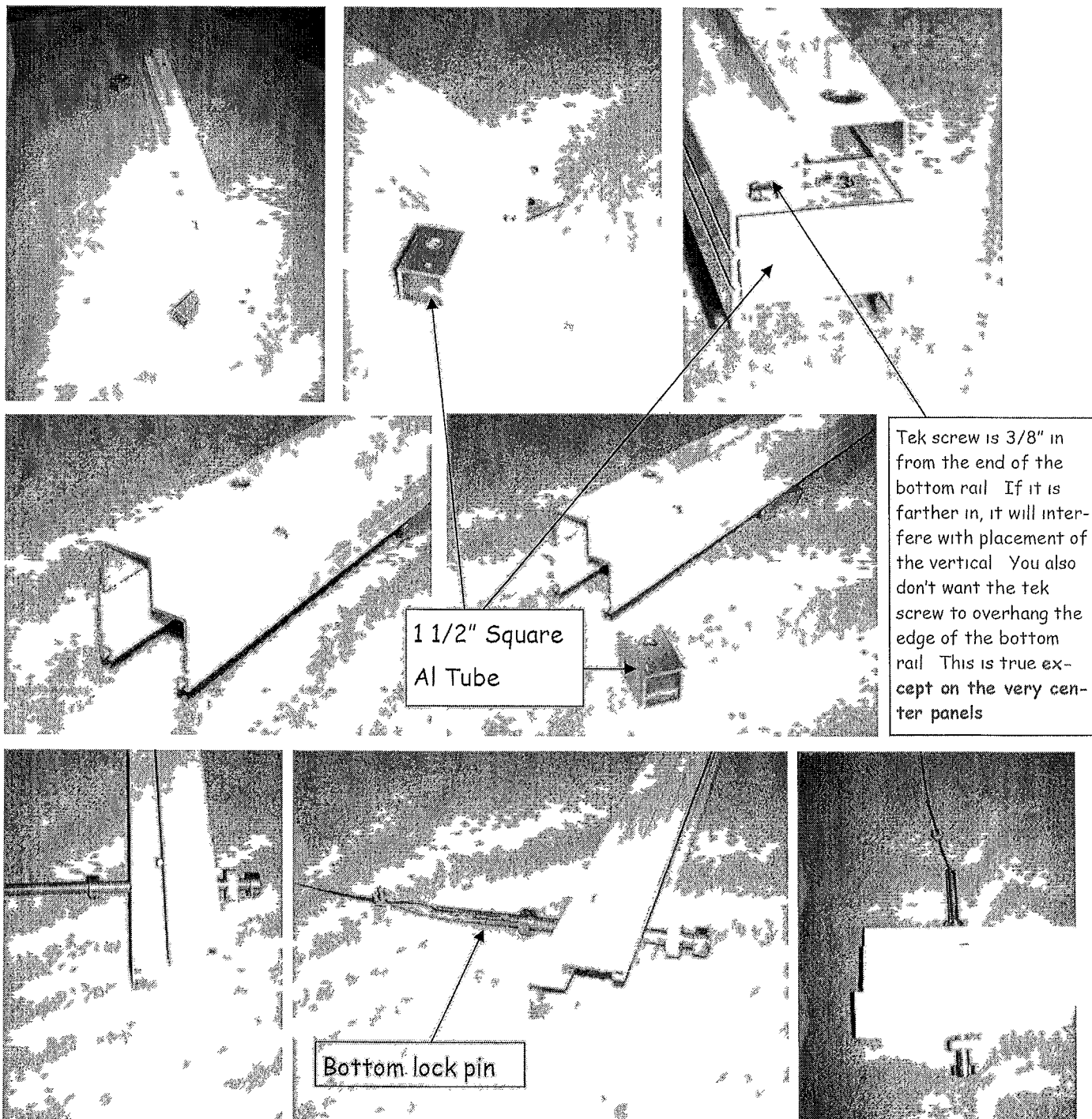
Top views of pre-drilled Steel Girt
500891



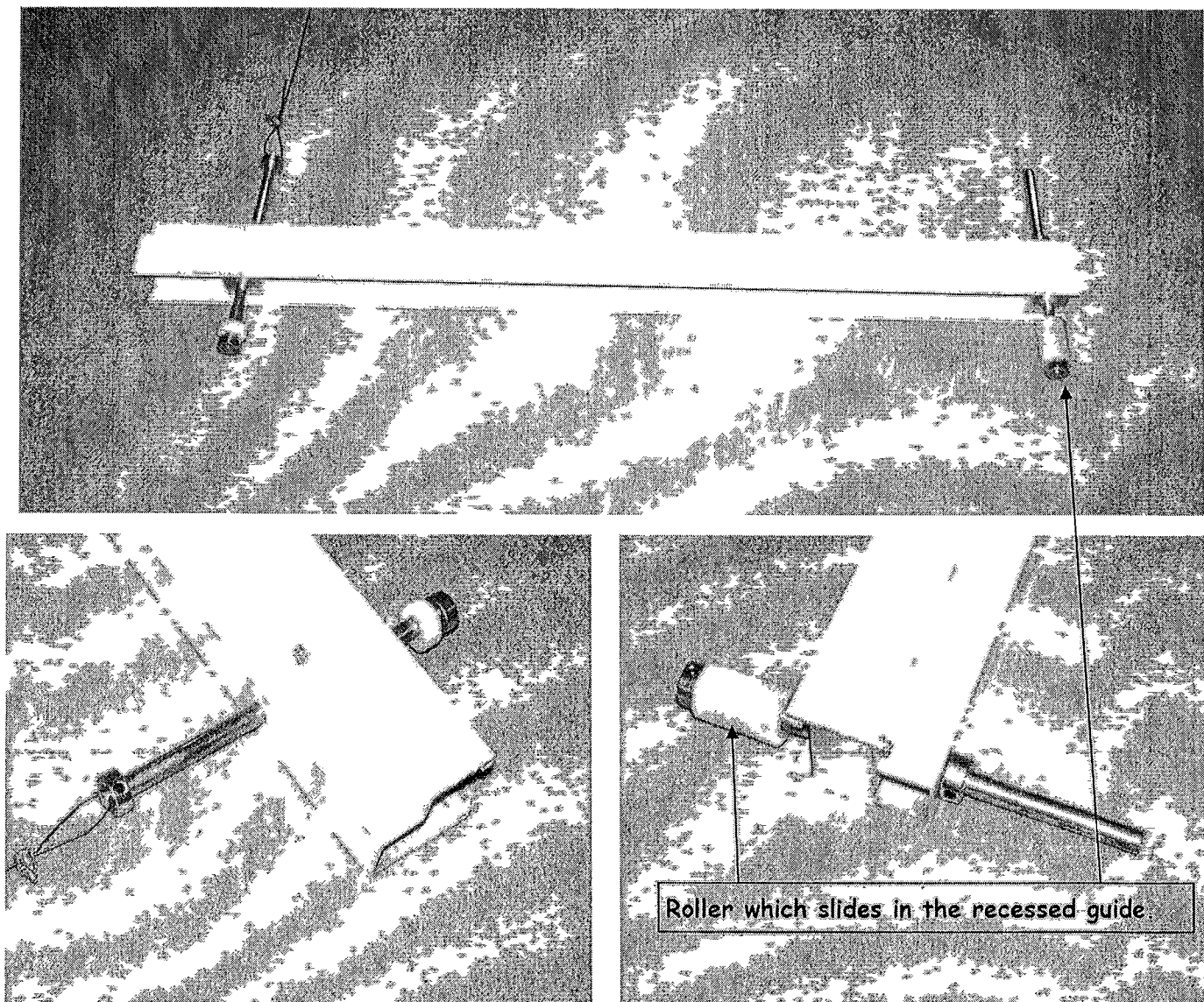
During the process of assembling the front of each panel, should a gap between the vertical and girt be noticed (or bowing of the vertical), remove the TEK screw, position the girt fully into the vertical and reposition the TEK screw at a new location.

Assembly, Installation and Operating Instructions for: CSA-2 5-FT Fold-Tite Stacker Door System
Externally Hung — with Recessed Guide Channel

Photos on this and the next page show construction of the Aluminum bottom rail with Al blocks, bottom lock pin and guide roller. These are a part of each active panel. See pages 30 and 31 for detail.



See pages 30 and 31 for detail concerning the lock pin and bottom roller assemblies



Please note that the center offset panel will place the Roller in 4.5" rather than even with the end of the Bottom Rail. Check page 21 for reference of the placement of the lock pin and the bottom roller.

Assembly, Installation and Operating Instructions for: CSA-2.5-FT Fold-Tite Stacker Door System

Externally Hung — with Recessed Guide Channel

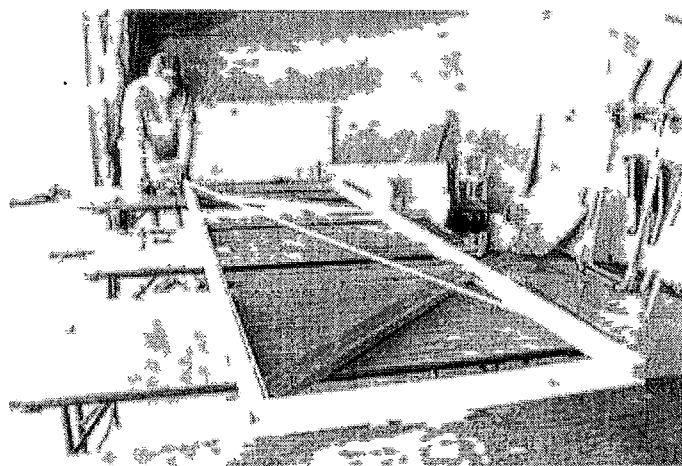
5.3 (Continued) After fitting the horizontal and diagonal girts, tightly insert the bottom rail to the bottom of the panel. Insert one TEK screw at each corner using the locator line on the vertical as a guide.

After insuring that

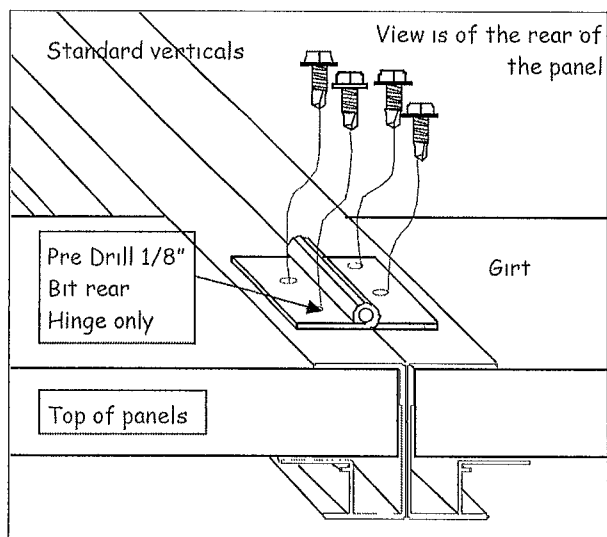
1. The panel is square
2. The girts fit firmly in the verticals
3. The verticals are not bowed

Insert a second TEK screw near the bottom of each horizontal girt and a second screw beside the first screw in the bottom rail. After you have completed installing TEK screws in the horizontal components, install TEK screws in the diagonal brace girts (two places in each vertical).

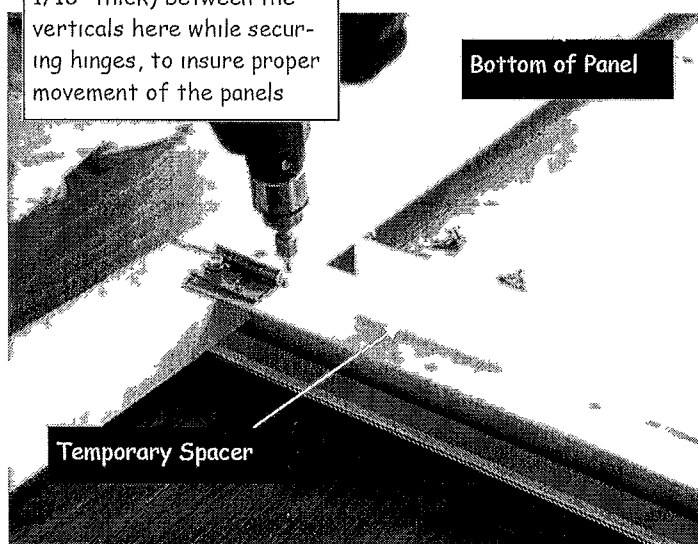
Repeat this entire process for the active panel to be paired with the Outboard Brace Panel. Observe the location of the pre-drilled holes in the top girt. There are no diagonal braces in the rest of the panels.



This photo demonstrates the utilization of measuring from corner to opposite corner and matching the dimension with the opposite corners to insure that the panel is square. The bottom rail on your door will be a steel girt.



Place a spacer (say a thin piece of cardboard about 1/16" thick) between the verticals here while securing hinges, to insure proper movement of the panels.



5.4 Hinging the Outboard Panel Set

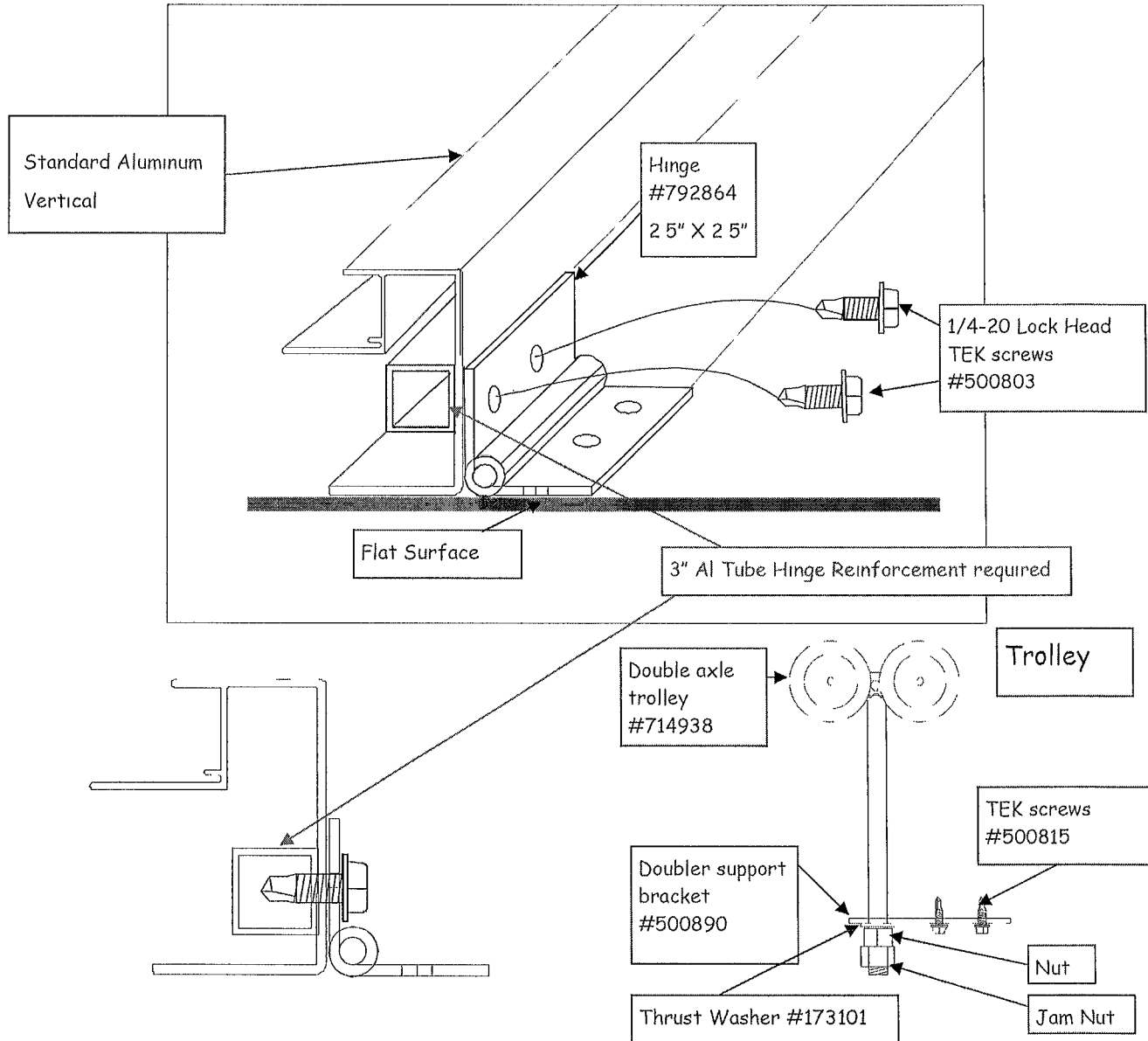
The first hinges to install are on the rear of the Outboard Brace Panel Set. The hinge is attached at each location with four (4) 1/4x20 Lock Head TEK screw (#500803). Use a temporary 1/16" spacer between the verticals when installing the hinges to insure proper movement of the panels. You should Pre Drill the rear hinge hole locations with a 1/8" bit. Not all joints are hinged together. On larger doors, the door will operate in 2 or more sections going each way. At joints that are not hinged, an astragal will be supplied to close off any gap. ONLY attach Hinges to the rear of the two panels and the side hinges to the outboard brace panel at this time. The Front Hinges will be attached after all panels are hung.

4.4 Sequence of Panel Set Assembly

1. Lay out panel components in front of door.
2. Insert steel doublers where indicated in overview.
3. "J" Trim of Aluminum Vertical is up (toward front of panel or front of door).
4. SEAM of Steel Girt is up (toward front of panel).
5. Measure and mark girt locations on verticals.
6. Start at top and insert top girt into place and secure with one (1) TEK Screw in each corner.
7. Place remainder of girt components in place as pictured on page 14.
8. Fit the bottom steel girt in place between the two vertical.
9. Screw in one TEK screw in the bottom corner securing the bottom girt then insert TEK screw in the opposite corner.
10. SQUARE the panel using one of the methods provided.
11. Insure that the girts fit tightly and that the verticals aren't bowed.
12. Insert a second TEK screw near bottom of each girt and a second screw beside the first screw in the bottom rail.
13. TEK Screw the horizontal girts.
14. After the horizontal girts are secured, TEK screw the diagonal brace girts (in the outboard brace panel), two places each vertical.
15. Complete the active panel in the same manner.

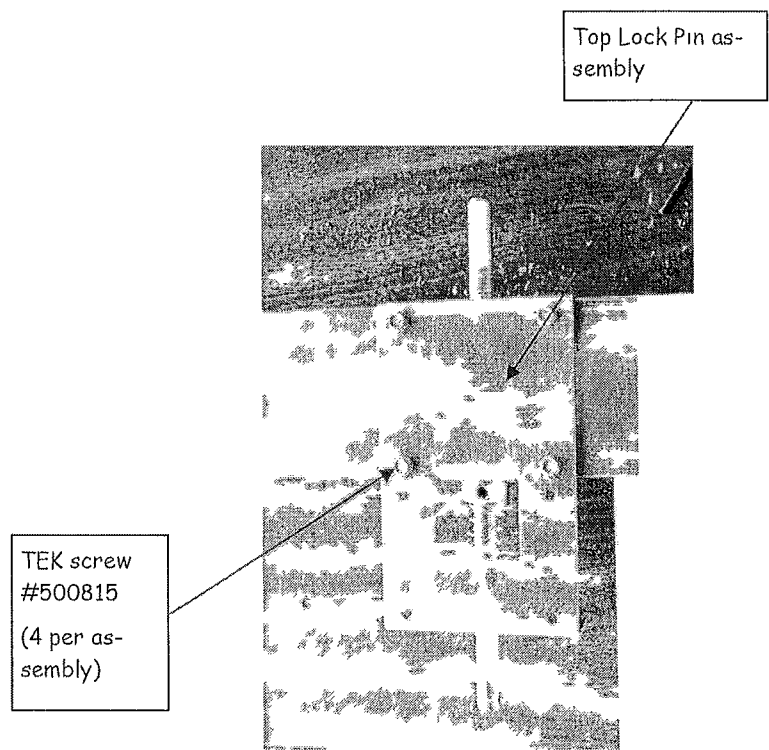
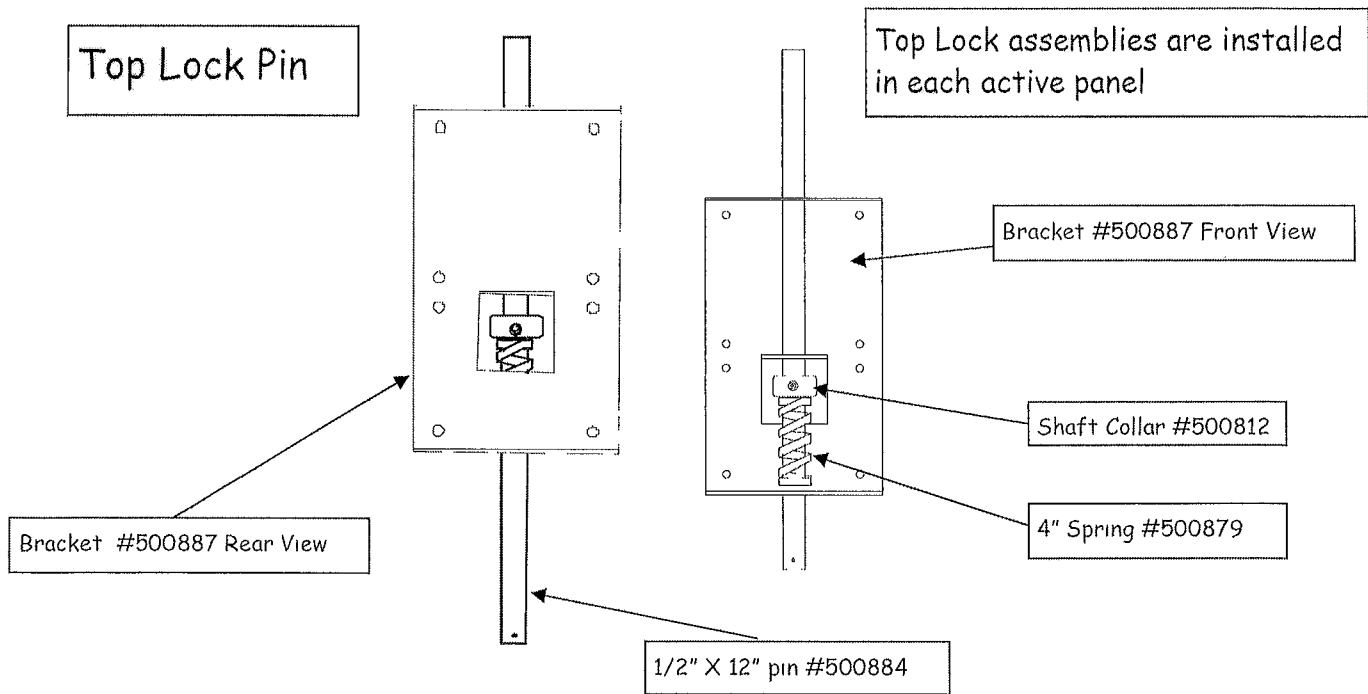
Assembly, Installation and Operating Instructions for: CSA-2.5-FT Fold-Tite Stacker Door System
Externally Hung — with Recessed Guide Channel

5.5 Installing Side Hinges — Attach the Outboard Brace Panel side hinges to the side of the Outboard Brace Panel with 1/4-20 Lock Head TEK screws (# 500803) locating one hinge at just above or below the girt. Use a flat surface to facilitate proper attachment. Hinges will be placed



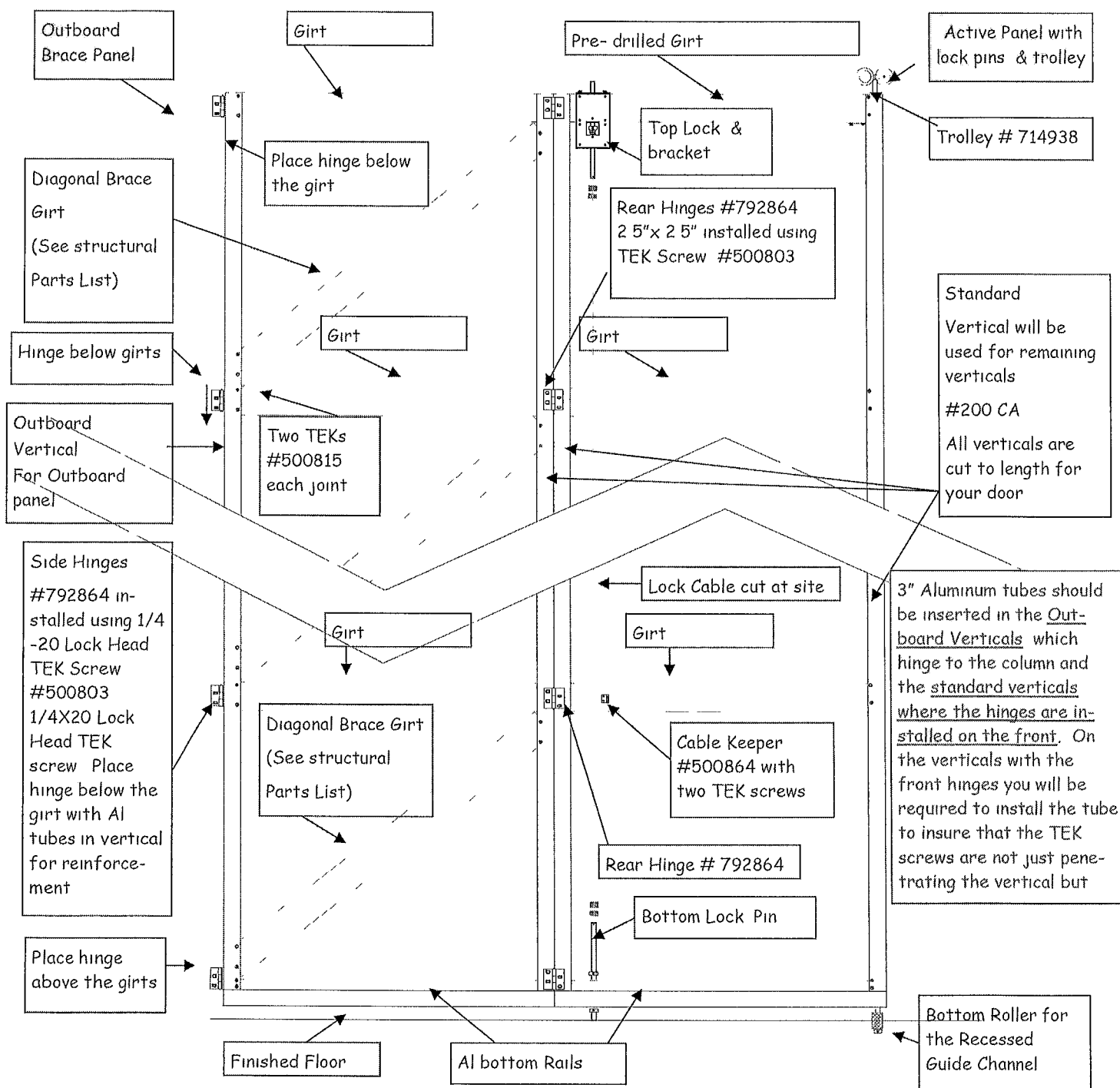
5.6 Installing the trolley and the lock pins — Install the Lock Brackets #500887 for the top lock pins and support plate (#500890) for the trolley. Use standard #500815 TEK screws. The holes for the lock pins should be reamed for the lock pin. Install the trolley and the lock pins. The top and bottom girts are pre-drilled for the trolleys and lock pins. When installing the trolleys, should the assembly TEK screws cause interference, take the TEK screw out and reinstall in an area that does not cause the interference. Measure, Cut and Connect the cable between the top and bottom lock pins using wire rope clips #500827. The cable should be long enough to be able to pull the pins and then secure the cable behind the keeper (#500864).

Assembly, Installation and Operating Instructions for: CSA-2.5-FT Fold-Tite Stacker Door System
Externally Hung — with Recessed Guide Channel

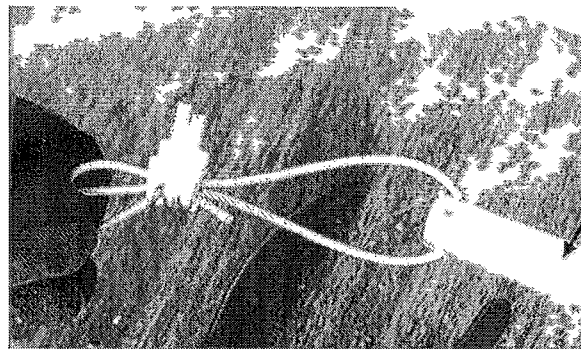


Assembly, Installation and Operating Instructions for: CSA-2.5-FT Fold-Tite Stacker Door System
Externally Hung — with Recessed Guide Channel

4.7 Outboard panel set for the Recessed Guide Channel (RGC) system. Both panels are 2'6.7". View of this panel set is from the inside of the hangar looking out. This panel set will be hung on the left side of the hangar (left as you are facing the hangar door from the inside).

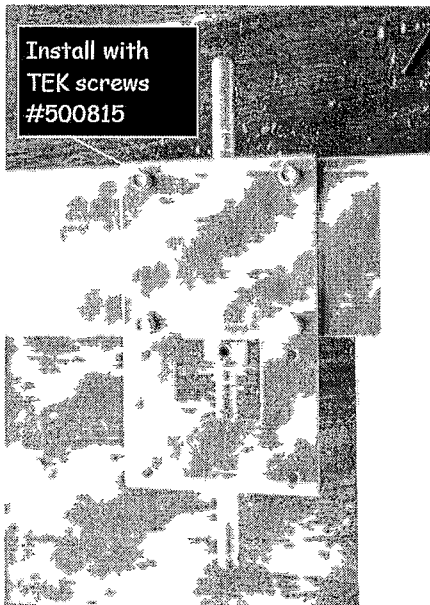


Assembly, Installation and Operating Instructions for: CSA-2.5-FT Fold-Tite Stacker Door System
Externally Hung — with Recessed Guide Channel



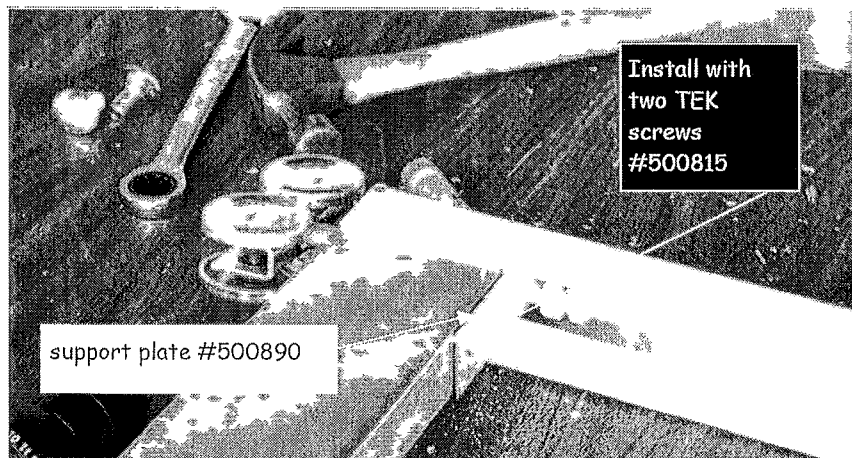
Top or bottom
Lock Pin

Photo showing assembly of the lock cable in the lock pin



Install with
TEK screws
#500815

Installation of top lock in top girt.
Photo is from rear of panel



support plate #500890

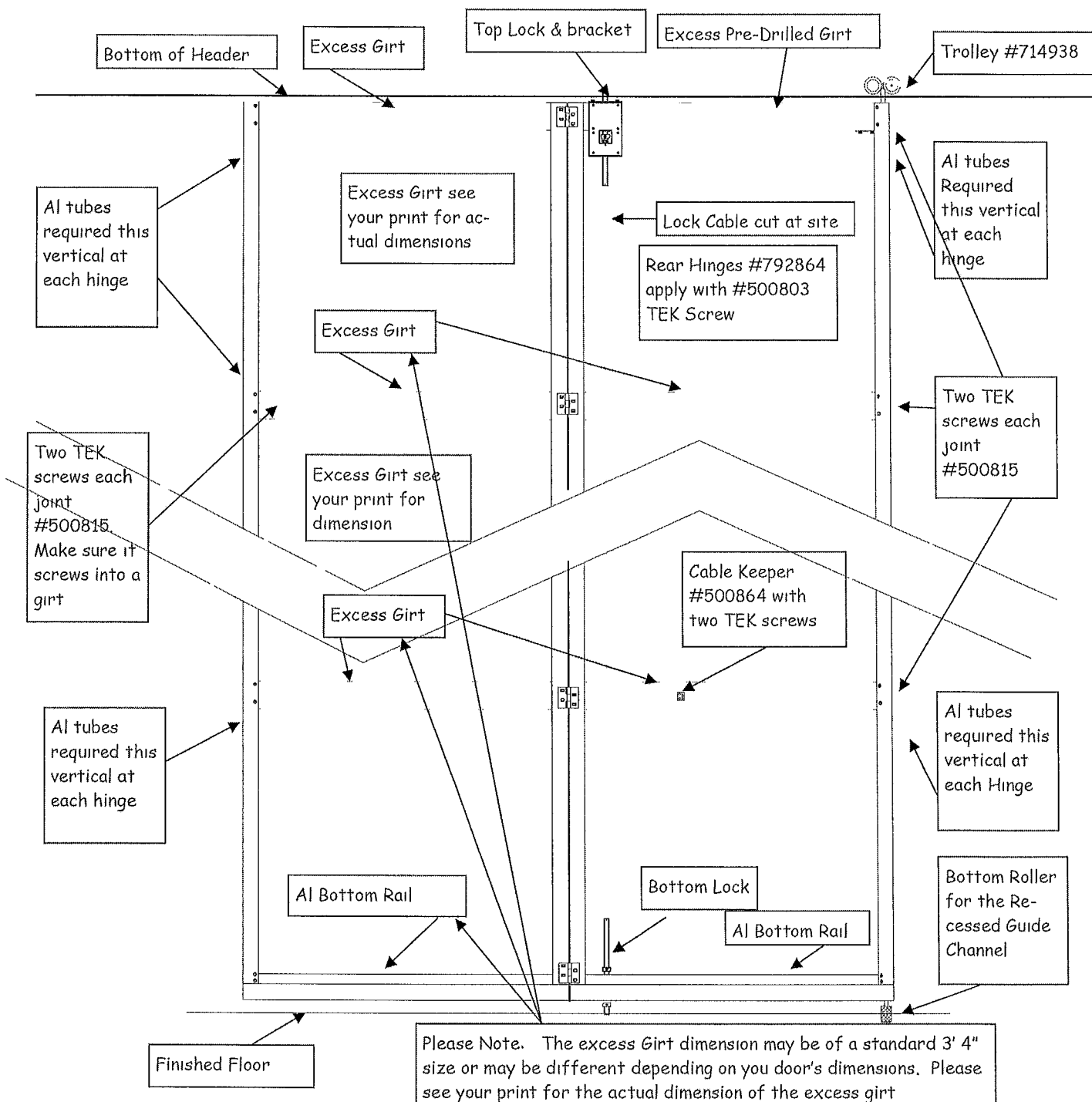
Photo showing the installation of the trolley

5.8 Assembly of the Standard or Excess Panel Set — In order to meet the full dimension of the closed door, there may be two or four panels which may be excess in width. Please see your print to determine if you have an excess panel set and if you do, your print will provide the dimensions of the width of the panels in this excess panel set.

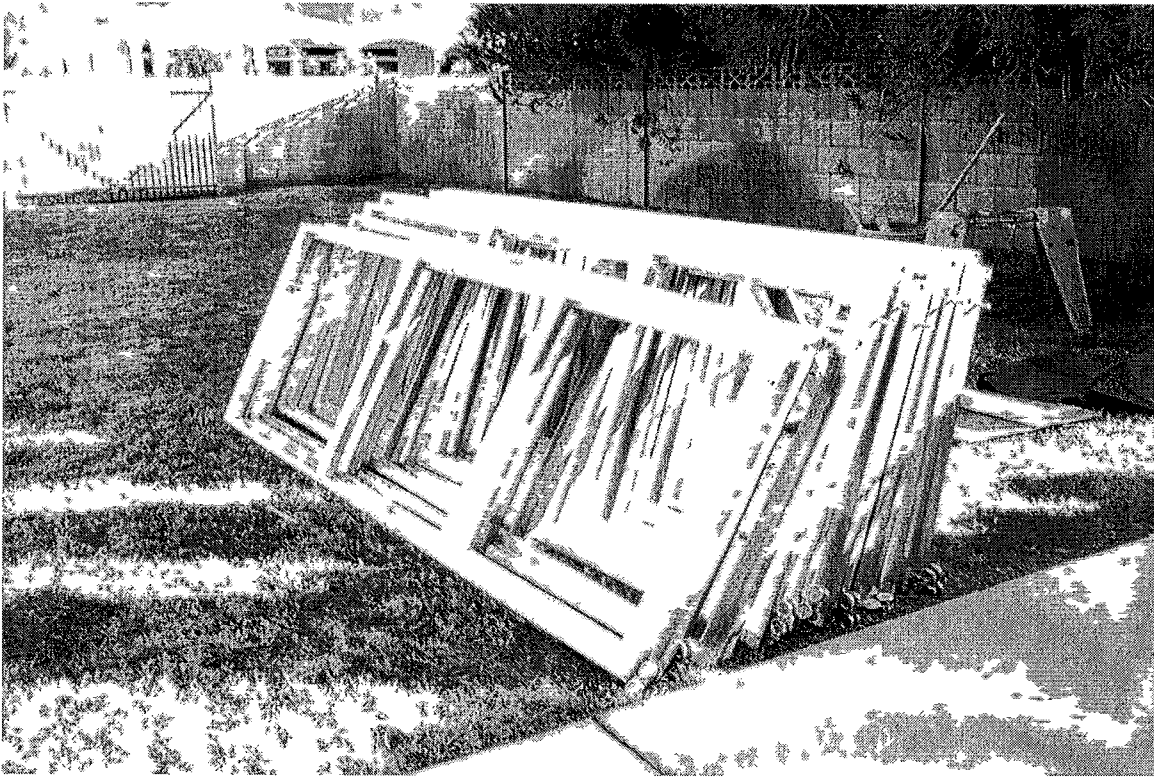
Utilizing the diagram on the next page, Assemble this panel set just as you had the Outboard Brace Panel set. There will be no diagonal braces in this panel set. Fold this panel set and gently stack with the previously assembled Outboard Brace Panel set.

Assembly, Installation and Operating Instructions for: CSA-2.5-FT Fold-Tite Stacker Door System
Externally Hung — with Recessed Guide Channel

5.9 Standard or excess panel set for the Recessed Guide Channel (RGC) system. View of this panel set is from the inside of the hangar looking out on the left side of the door. These two panels will either be 3'4" or will be two equally sized Excess Panels as called out on your print.

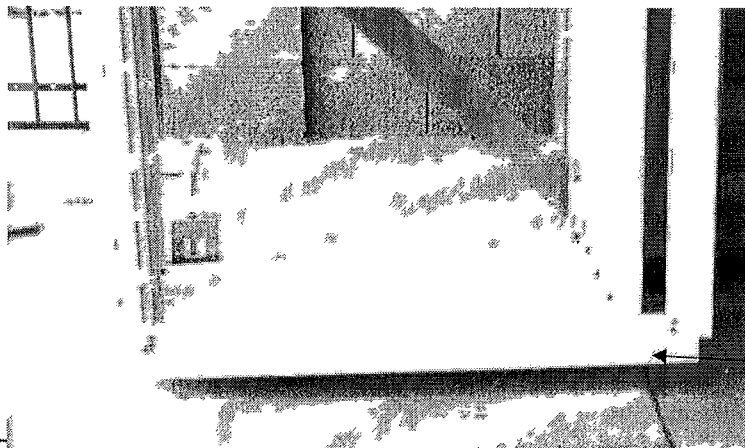


Assembly, Installation and Operating Instructions for: CSA-2.5-FT Fold-Tite Stacker Door System
Externally Hung — with Recessed Guide Channel



Folding and stacking the assembled panel sets prior to hanging

5.10 Assembly of Center Offset Panel Set — The adjoining panel sets (where the door from the left meets the door from the right when the door is closed) will have the very center panel assembled with Girts measuring 3'8". The Trolley is inset 4'5" to allow the center two panels (from the left and right side of the doors) to meet without a gap. One of the center verticals will be a special vertical with a double astragal which provides for overlap when the door is fully closed. (See diagram next page) Please note that this may or may not be the physical center of the door. If the door has an odd number of panels (that is odd as you divide by 2 for 10, 14, 18), there will be more panels on one side of the door than on the other. Does not matter which side. The offset panel is paired with a standard panel. When the door is open and stacked this center offset

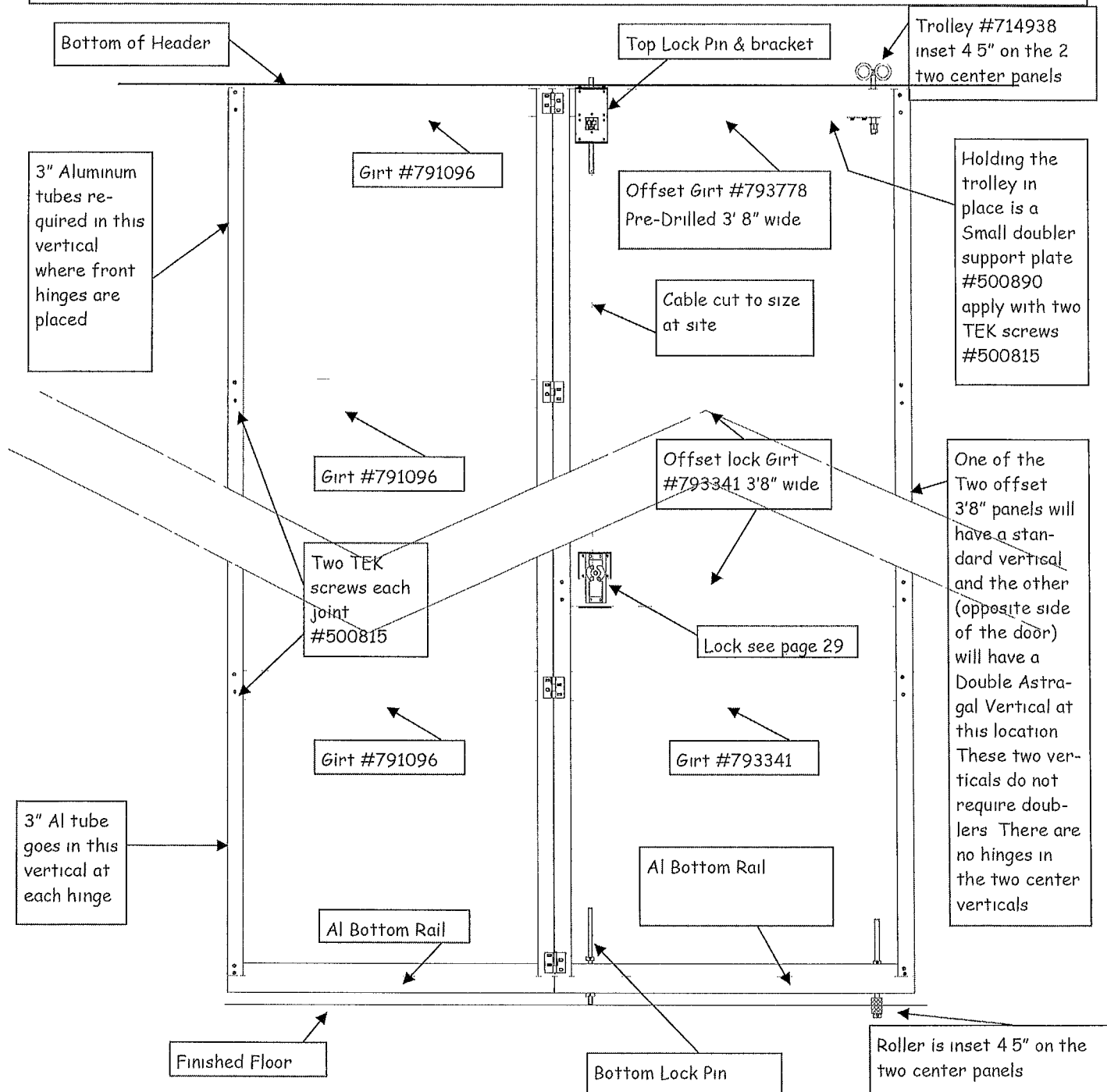


panel will extend into the hangar

Note your door will have a steel girt as the bottom rail and not the aluminum rail shown

Assembly, Installation and Operating Instructions for: CSA-2.5-FT Fold-Tite Stacker Door System
Externally Hung — with Recessed Guide Channel

Center Offset Panel Set for the Recessed Guide Channel System. This set consists of a center panel which is 3'8" and another standard panel which is 3'4". This view is from the inside looking toward the outside. This is the rear of the panel set. Other than the vertical with the astragal, the panel set on the right side of the door is the mirror image of this panel set.

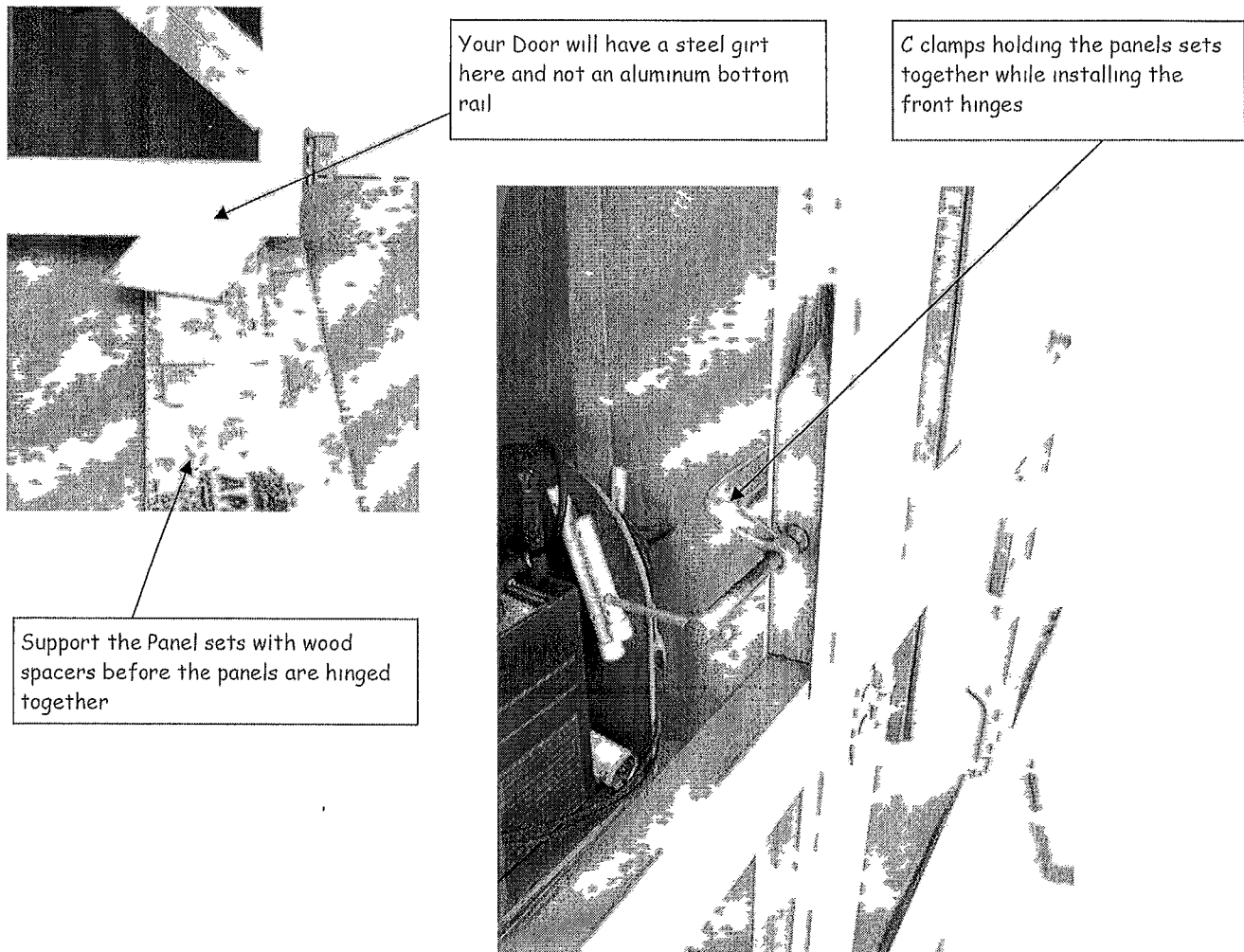


Assembly, Installation and Operating Instructions for: CSA-2.5-FT Fold-Tite Stacker Door System

Externally Hung — with Recessed Guide Channel

6.0 Hanging the Panel Sets — Place wood spacers on the floor. These spacers will support the panel sets until the panel sets are hinged together.

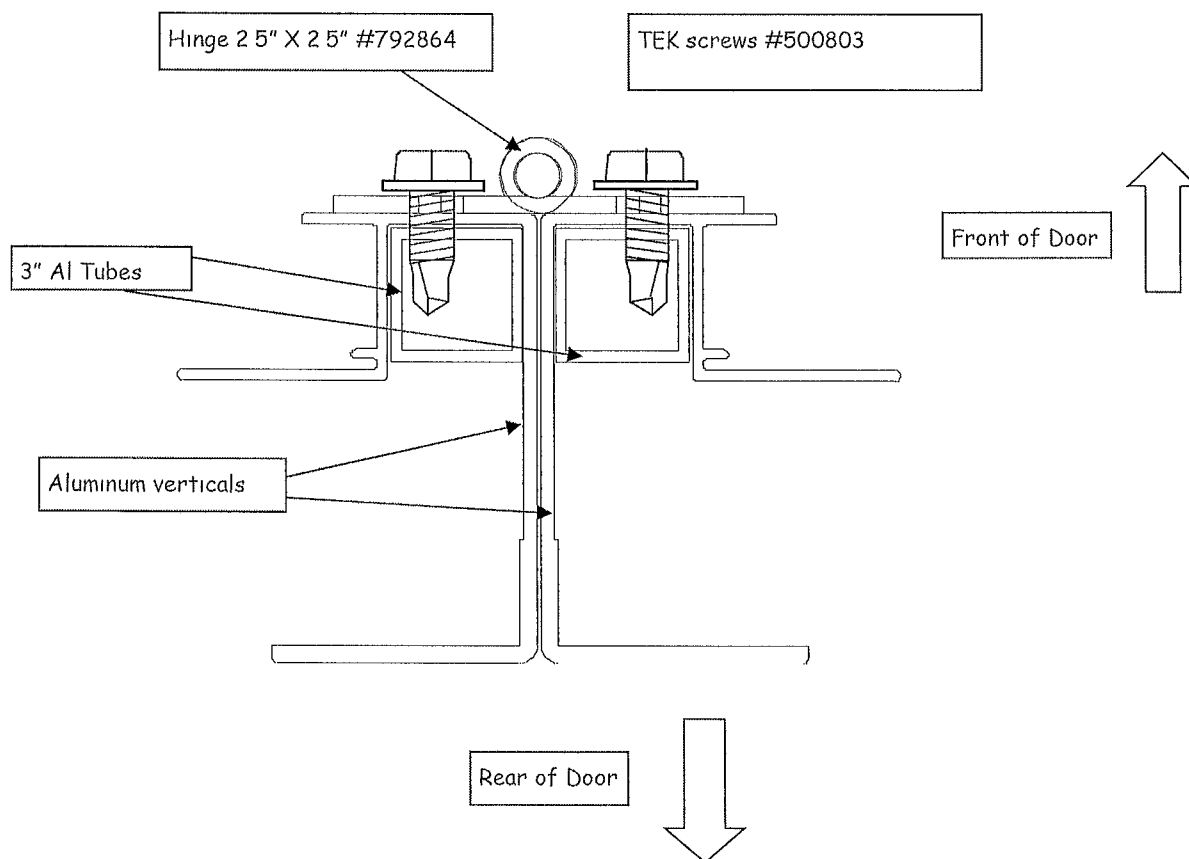
Utilizing 2 to 3 individuals, insert the trolley for the assembled Offset set (center panel) into the track and move towards the middle of the opening. Then insert the excess or standard panel set. Finish with the Outboard Brace Panel Set. Repeat on the other half of the door.



7.0 Hinging the Panel Sets Together — Clamp the adjacent panel sets together. Note: all doors have an even number of panels, but on doors that have an uneven number of panel sets (please see your print for exact number of panels) the door will have one more set going one way than there is going in the other direction. It does not matter whether the right half or the left half of the door has the extra panel set. Attach the front hinges at the joint between the panel sets. These hinges are supported by the steel hinge doublers and therefore you DO NOT have to locate the hinges at the girt. Locate one hinge at the top and one hinge at the bottom of the door, then another within the 36" doubler. Some doors have a single center hinge, a smaller doubler (#500894) should have been inserted to support the hinge installation.

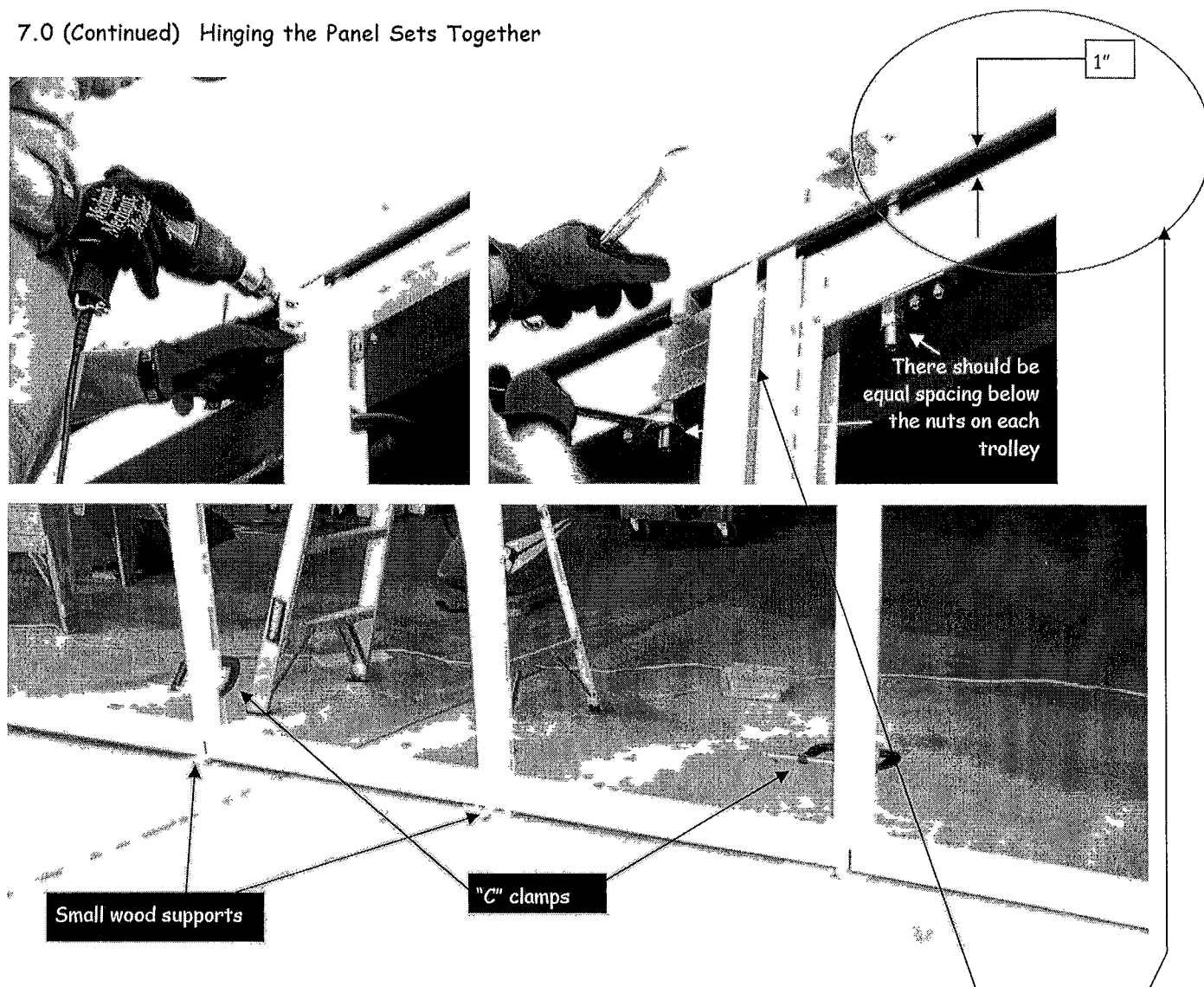
Assembly, Installation and Operating Instructions for: CSA-2 5-FT Fold-Tite Stacker Door System
Externally Hung — with Recessed Guide Channel

Front hinge placement with utilization of the 3" aluminum tube for reinforcement



Assembly, Installation and Operating Instructions for: CSA-2 5-FT Fold-Tite Stacker Door System
Externally Hung — with Recessed Guide Channel

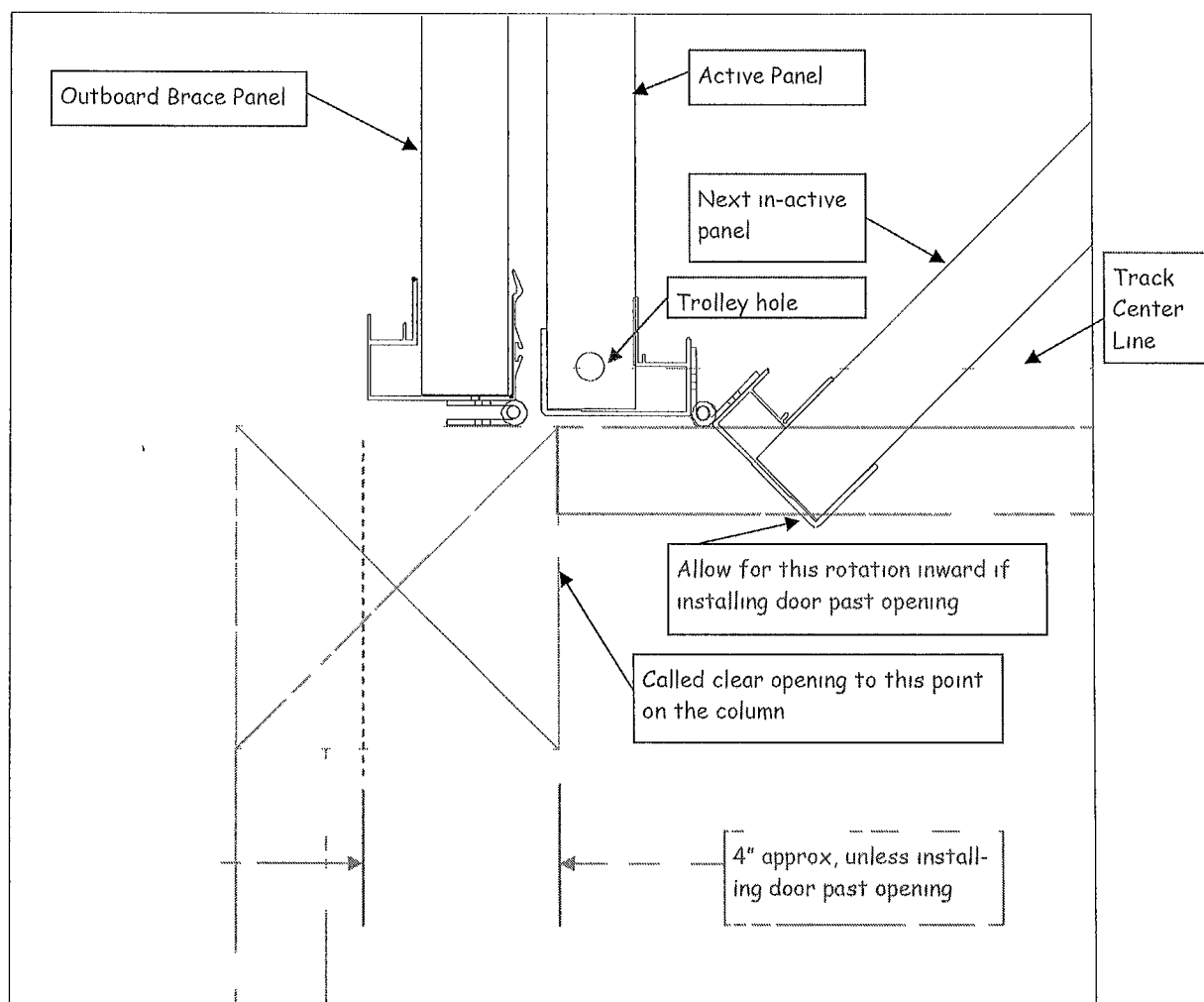
7.0 (Continued) Hinging the Panel Sets Together



Level the door at each trolley by adjusting the nuts to approximately the same height to cause the top of the door to be 1" below the header. After the door is completed and final adjustments are made to the trolley height, jam the lock nut to the first nut on the trolley.

8.0 Hinge the door to the building columns — Center the door in the opening, allowing a little space between the panel with the double astragal and the adjacent panel such that the joint is not too tight. Temporarily screw one screw per hinge for the outboard brace panel to the building column at the top, center and bottom hinge; this can be a smaller screw than the lag bolts supplied for final attachment. Open the door and confirm that the outboard brace panel is hinged to the column at the right height. If this panel is hinged to low or too high, binding will occur and not allow the door to smoothly open. If this is the case, close the door, mark the hinge width location on the column. Remove the screws from the hinge at the column. Open the door and mark the hinge height with the door open. Close the door enough to access the hinges and again place screws into the hinge to the column at the width and height marks. Confirm that the panels will open again. Once this is completed, the hinge height is established unless the trolley height is changed. In that instance, it may be necessary to adjust the hinge height. When the door operates easily, complete the installation by screwing in the remainder of the bolts in the hinges to the column.

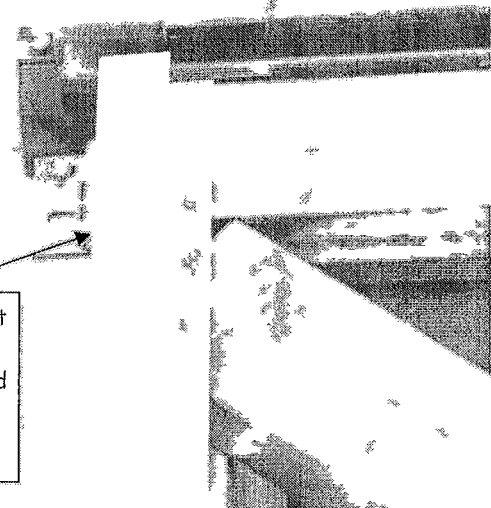
8.1 Top View of hinge placement on Column of the building



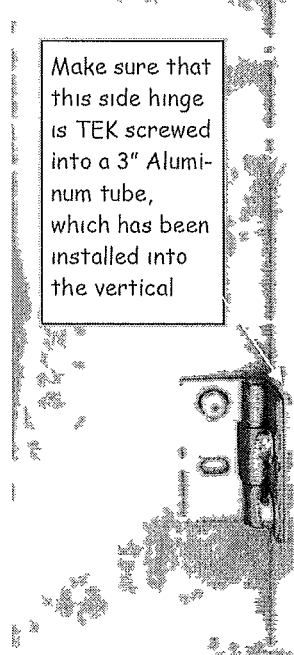
NOTE. If your door is designed to extend an additional distance past the opening to optimize the opening width, then refer to your print to determine dimensions of framing needed to accommodate the entire door when closed. The framing must be at least 3" in depth in order to accommodate the door panels as they rotate in a stacked fashion. In addition, the dimension of the offset in the offset panel will have to be taken into account when determining the depth of the framing.

Assembly, Installation and Operating Instructions for: CSA-2.5-FT Fold-Tite Stacker Door System
Externally Hung — with Recessed Guide Channel

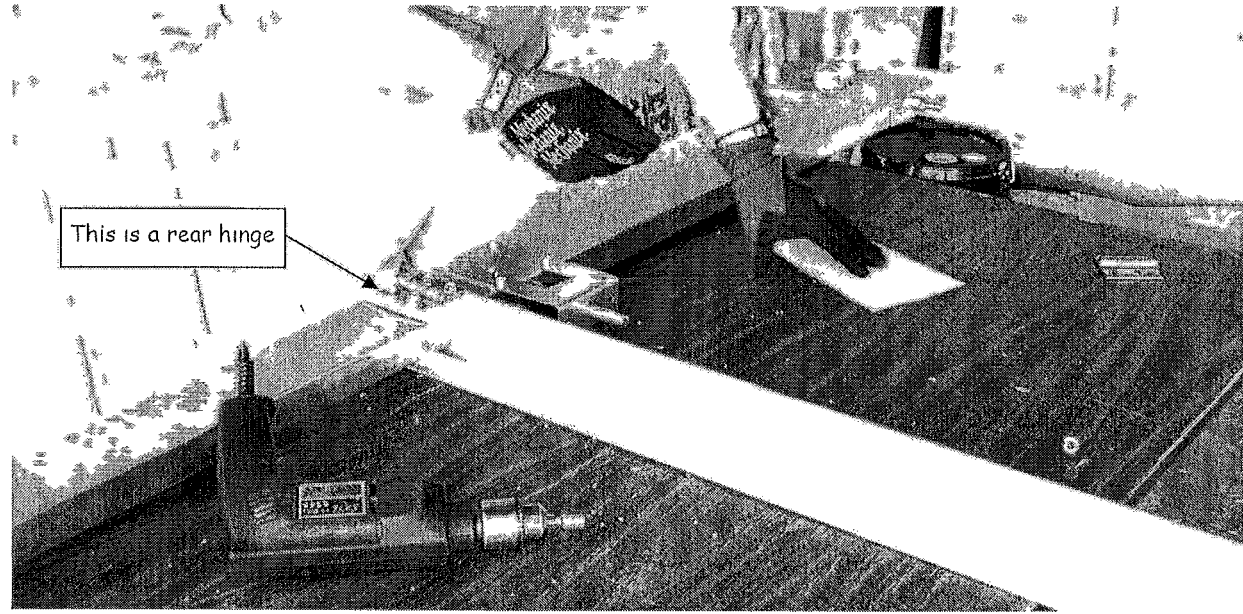
Photos showing hinging the panel sets together and hinging the door to the columns.



Make sure that this side hinge is TEK screwed into a 3" Al tube



Make sure that this side hinge is TEK screwed into a 3" Aluminum tube, which has been installed into the vertical



This is a rear hinge

To see a video of the operation of the door opening and closing, go to You Tube URL

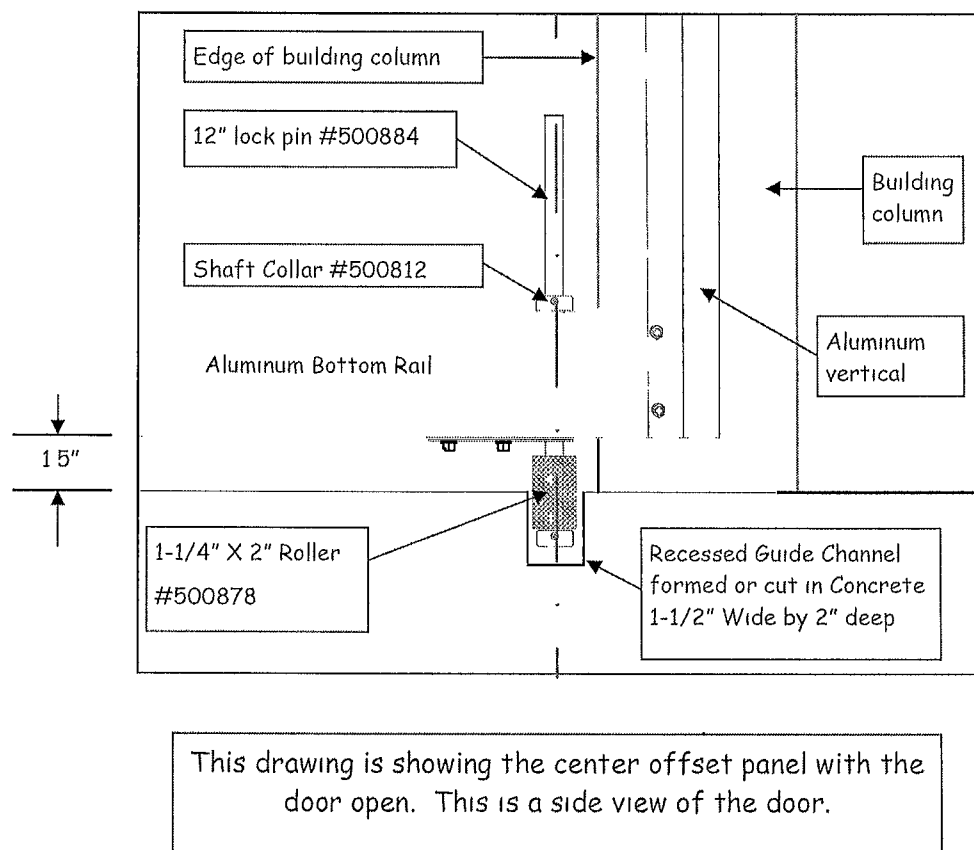
<http://www.youtube.com/watch?v=g-BUqX16SOU>

Assembly, Installation and Operating Instructions for: CSA-2.5-FT Fold-Tite Stacker Door System
Externally Hung — with Recessed Guide Channel

9.0 Recessed Guide Channel location, Roller installation & Lock installation.

Fold-Tite Stack door Recessed Guide Channel roller installation steps

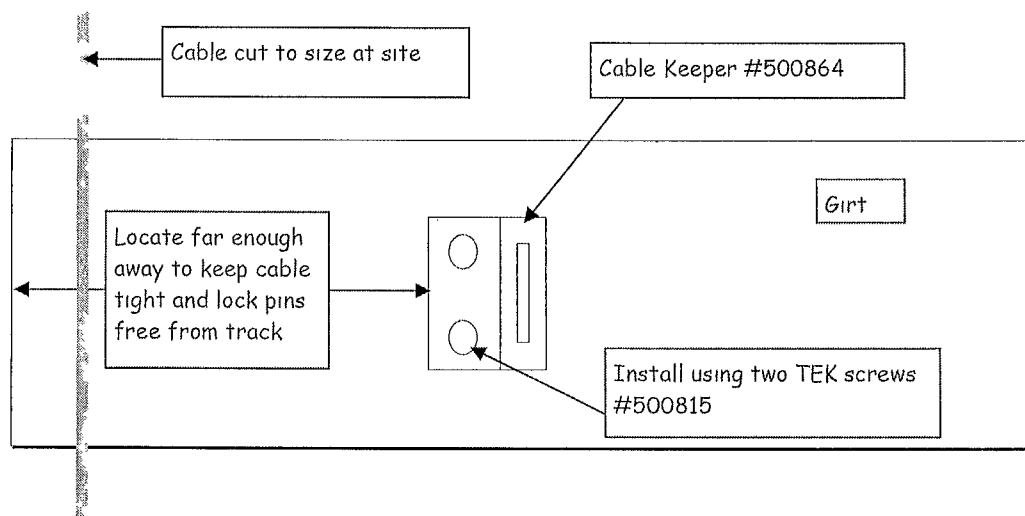
1. Drill all the active door panels girts top and bottom for lock pins bottom rollers and trolleys prior to assembly (if they have not been pre-drilled)
2. Insert the bottom roller into the bottom rail and secure with shaft collars
3. Adjust the height of the roller so it does not drag in the recess channel
4. Repeat on each door panel



Assembly, Installation and Operating Instructions for: CSA-2.5-FT Fold-Tite Stacker Door System

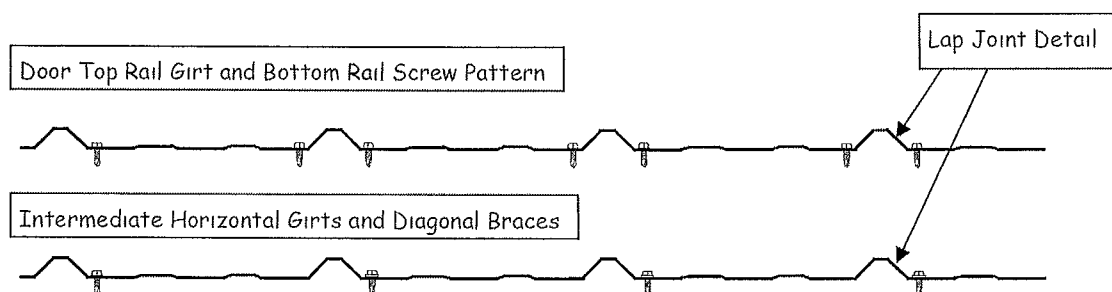
Externally Hung — with Recessed Guide Channel

10.0 Installation of the Cable Keeper — All of the lock pins on the panels without the latch system can be operated from the interior just by pulling the cable and hooking it on the cable keeper. The Keeper, #500864, is installed at a comfortable working height to hold the cable and keep the lock retracted as the door is opened.



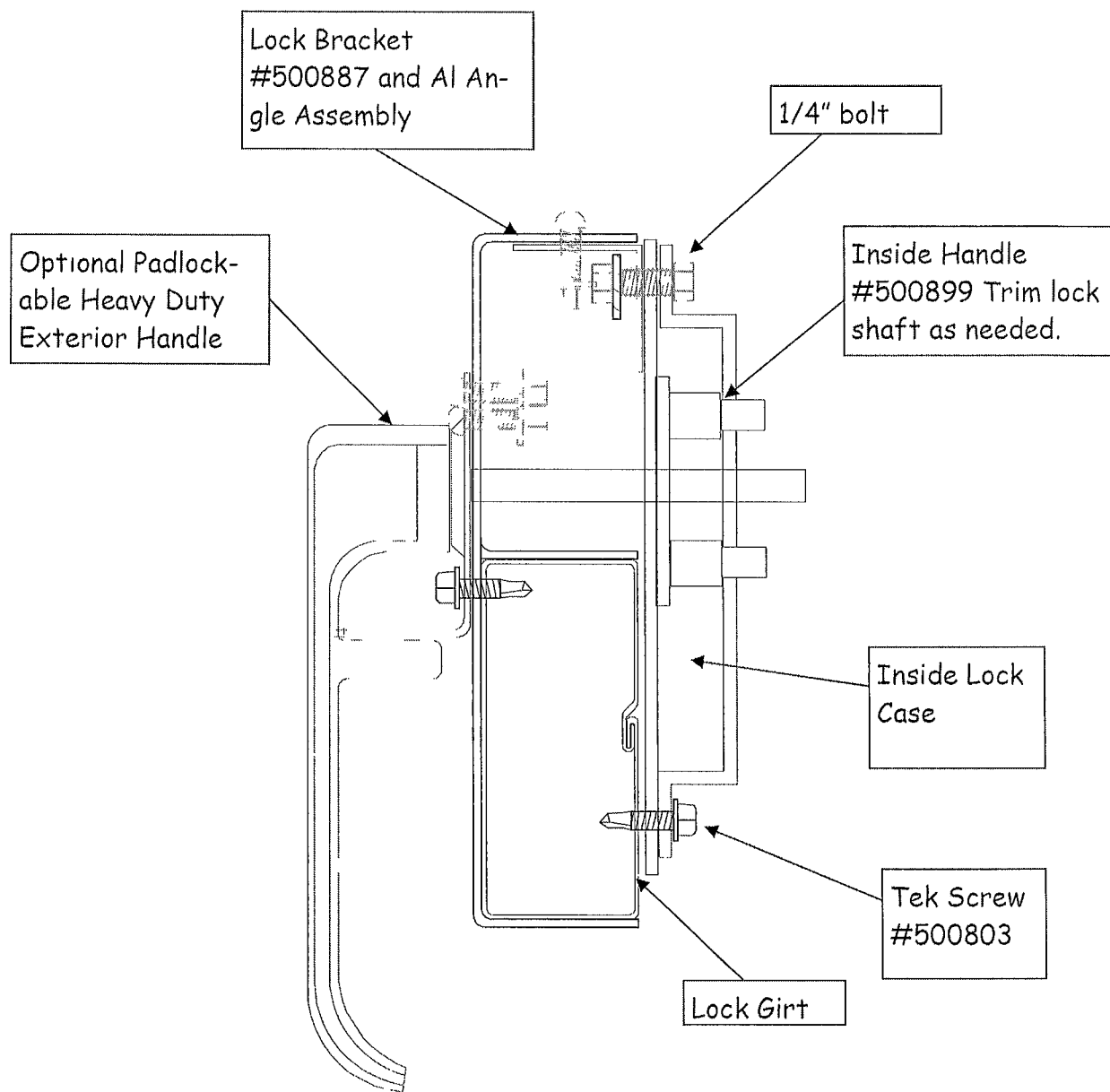
10.0 Install the Exterior Sheeting — First Determine where the ribs of sheeting will be located on the panels and mark the location of the portion of the sheeting which is flat. Locate the where the Lock will be located on the flat area so that the exterior handle can rotate and not hit the ribs of the sheeting.

This screw pattern layout is for the steel sheeting purchased locally. If polycarbonate is utilized, pre-drill the polycarbonate with a minimum 1/4" drill bit before attaching to the door panel. If Polycarbonate is supplied, a "J" trim is supplied for the top of the door and a starter strip for the bottom. Mark the location of the ribs of the polycarbonate on the door panel and TEK screw the "J" trim and starter at the rib location.



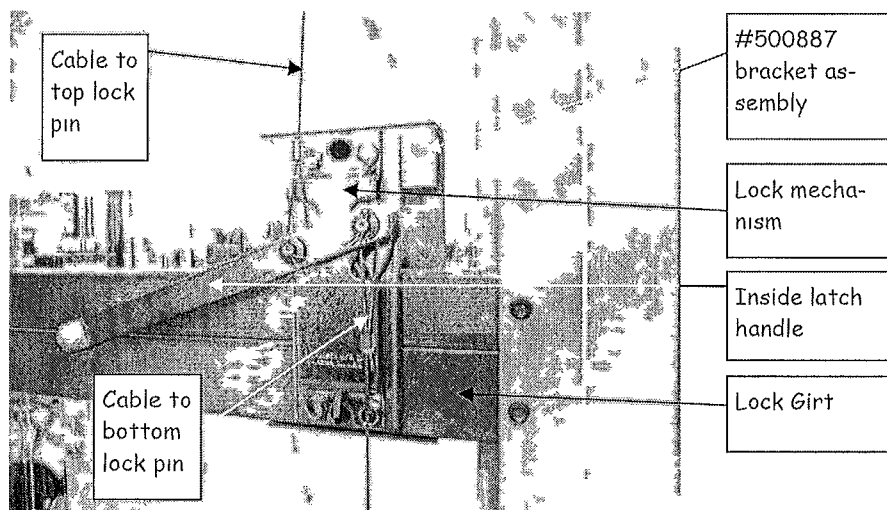
Steel Panel Screw Pattern Recommendations The top horizontal rail and the bottom rail will have one screw at each side of each major rib. The remaining horizontal girts and diagonal braces will need one screw at one side of each major rib. For other configurations of steel sheeting and other types of sheeting, follow the manufactures recommendations, but use 80 to 100 screws per square of sheeting.

11 Lock Assembly

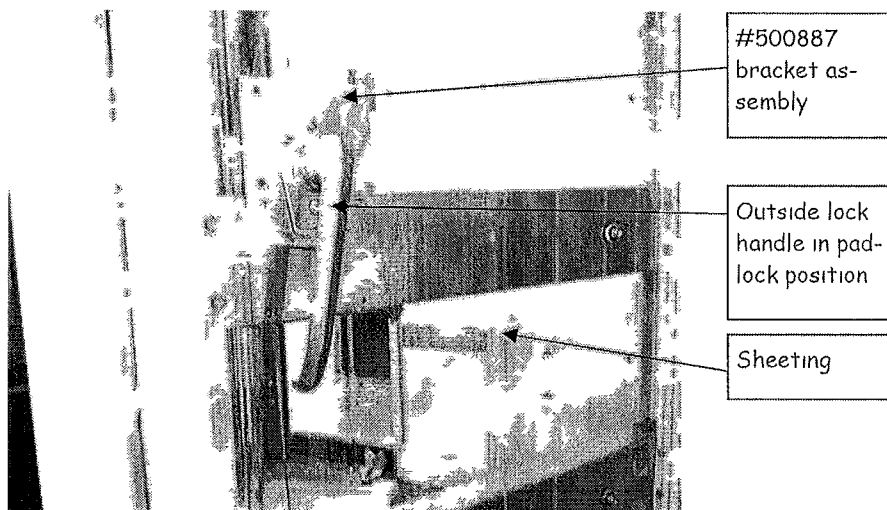


Assembly, Installation and Operating Instructions for: CSA-2.5-FT Fold-Tite Stacker Door System

Externally Hung — with Recessed Guide Channel

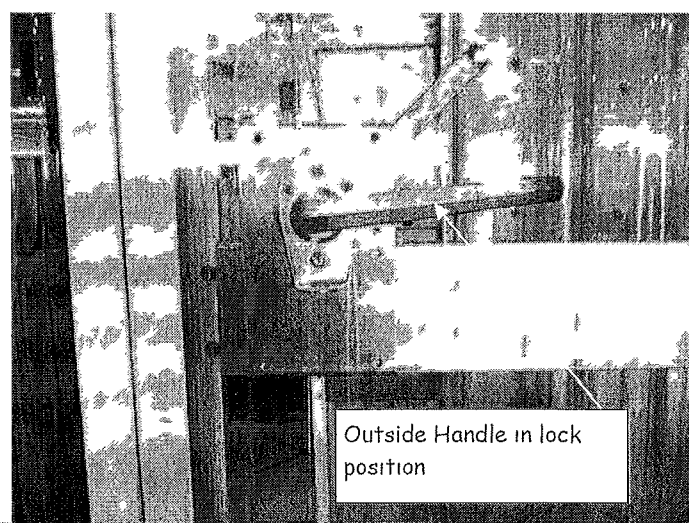
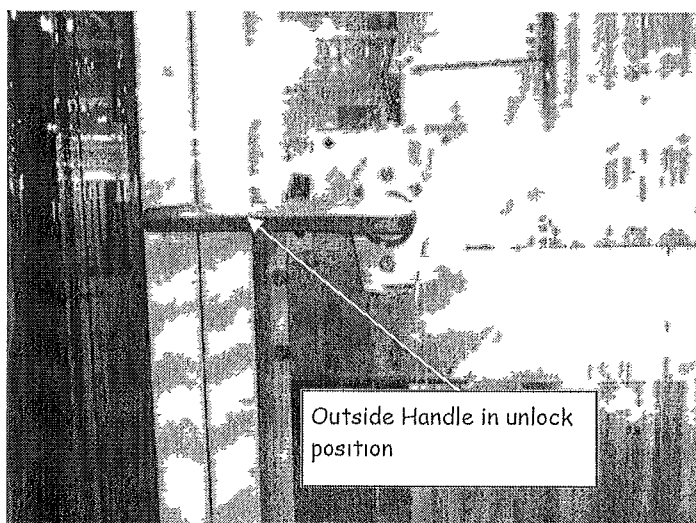


View of lock from inside the door as it is mounted on the lock girt. The bracket assembly (#500887) is placed over the girt from outside the door. The lock mechanism is secured by bolts and Tek Screws as shown on previous page. The inside latch handle is put in place as shown and secured by washer and cotter pin with cable wrapped around the pin from the lock bracket and secured with a cable tie. Place the lock in the unlock position as shown in photo before attaching the outside handle. The sheeting is put in place before attaching the outside lock handle.

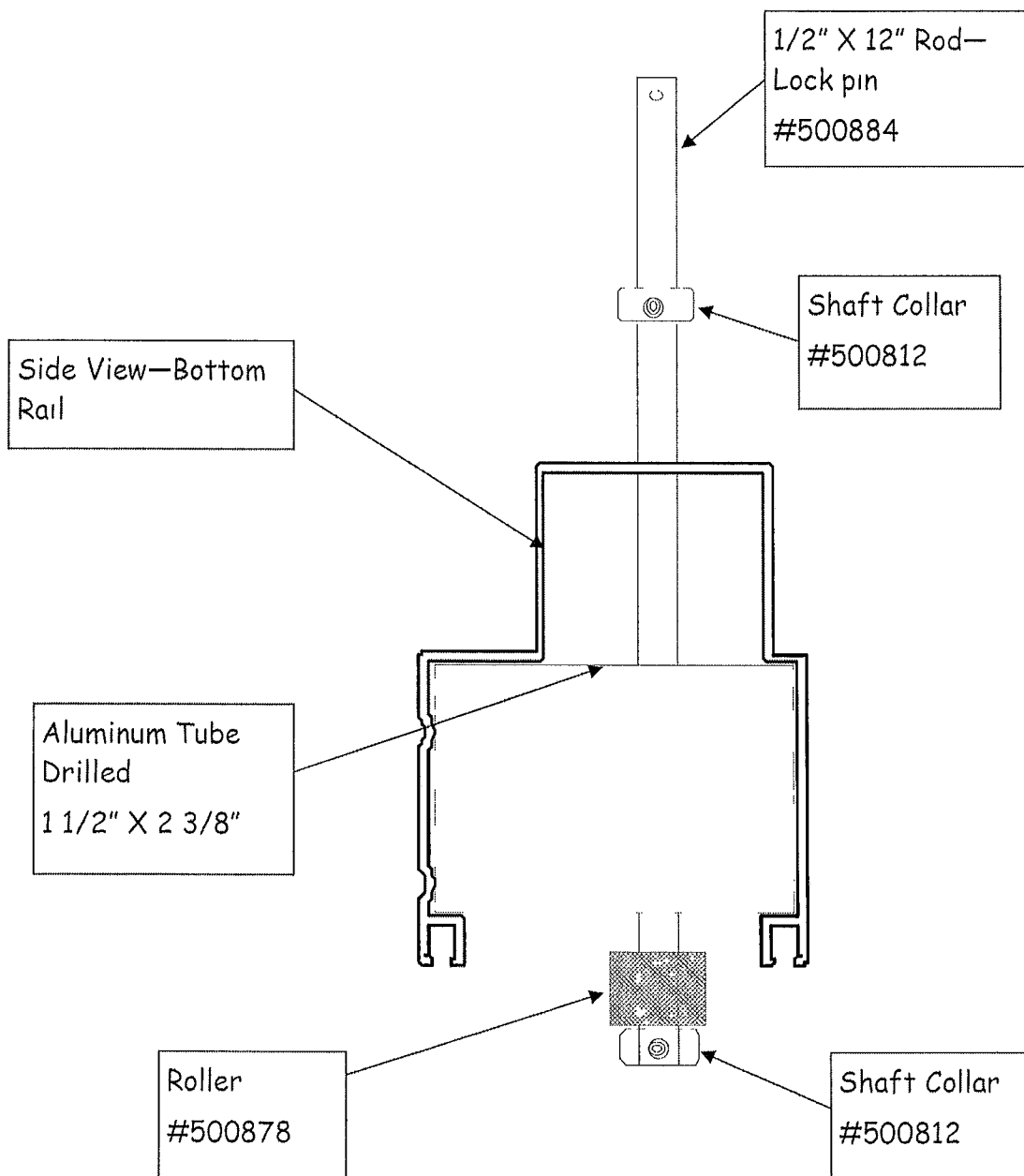


View of the lock from outside the door as it is mounted on the lock girt. The outside lock handle is placed on the lock assembly with the outside handle down and the inside handle in the unlock position. The handle is shown in the padlock position.

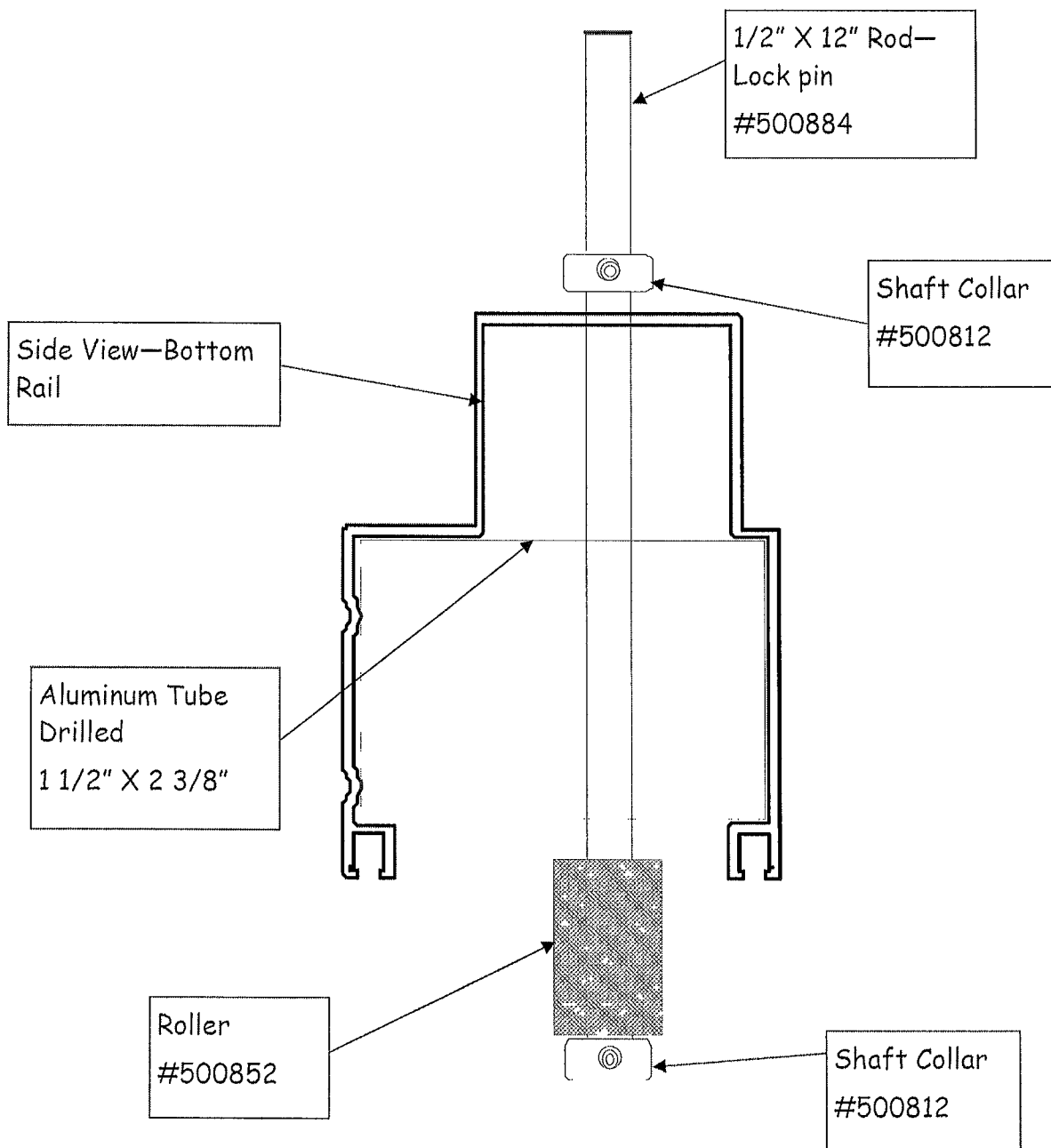
For a video of lock assembly attach and operation go to You Tube URL
TBD



12 Bottom Lock Pin Assembly

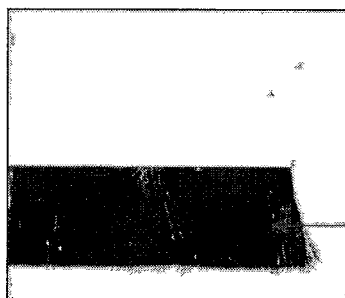
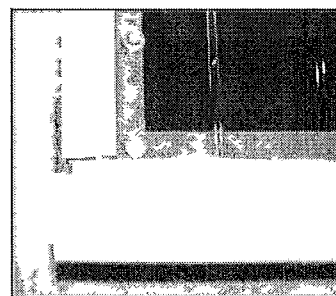
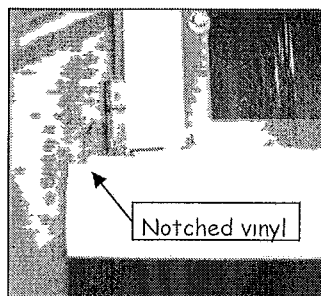


13 Bottom Roller for Recessed Guide Channel (RGC)



Assembly, Installation and Operating Instructions for: CSA-2.5-FT Fold-Tite Stacker Door System Externally Hung — with Recessed Guide Channel

14.0 Installation of Seals — The standard vinyl seal (#500905) is installed using the built in holders on the Aluminum bottom rail. See attached sheet for installation instruction. The vinyl bottom seal is cut to 1/2" width past each side of bottom rail and is notched on each side before securing by pinching the channel on the retainer.



Optional
Brush seal
#500904

Additionally, foam weather-strip insulation seal is provided (#500897). This will be placed on one of the verticals which is hinged on the rear and one of the verticals which is hinged in the front. This will seal the gap between the verticals when the door is closed.

Foam seal supplied can be used on the left and right sides of the door, in between the side column and the outboard panel verticals.

A 1" brush seal is being supplied with the seal holder for the top seal. See attached sheet for installation instruction.

15.0 Operation of the Door

Opening the door from the inside of the building:

- 15.1 First unlock the pins in the panel set closest to the building column
- 15.2 Push the hinge joint of this panel set out and pull the remaining panels towards you.
- 15.3 Pull the top lock pin and operate the second panel set the same as the first, then continue until this half of the door is open. On doors with manual foot bolts, only raise the foot bolts for the group of panels to be opened, do not raise all foot bolts at one time.
- 15.4 Repeat on the opposite side
- 15.5 Secure the lock pin in the floor strike to hold the door in the open position
- 15.6 Open from outside. enter thru center panel and proceed to outboard panel listed in 14.1

Closing the door.

- 15.6 Close the door by closing one two panel set at a time starting with the panels that will be at the center of the door.
- 15.7 Release the lock pin into the top track and guide the door closed.
- 15.8 Repeat until the door is closed.
- 15.9 The door can be locked from the outside, leave a gap at the center by not fully closing one half of the door, then push in the panel set with the external lock attached and secure the locks in the top track and bottom floor strike.

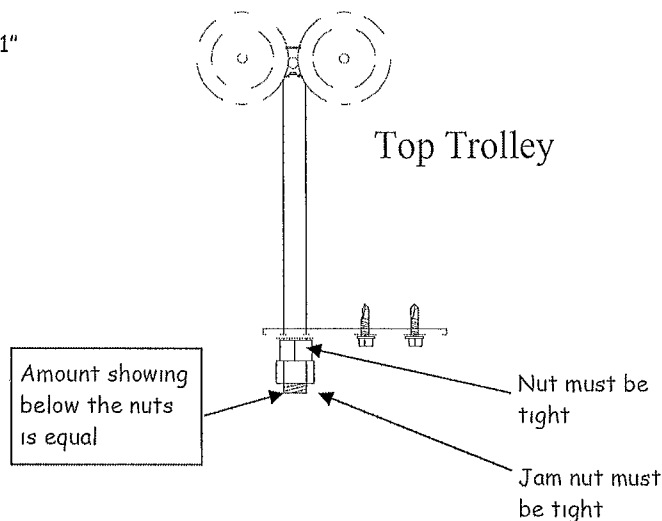
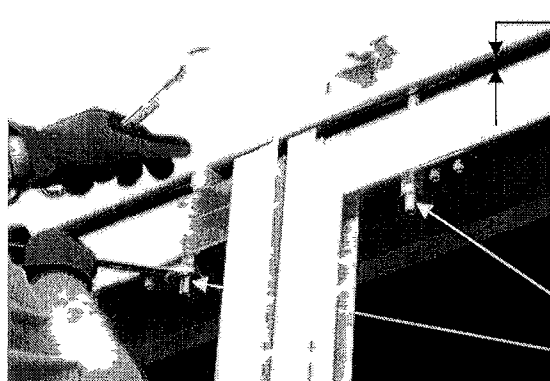
For a video presentation of the correct procedure to open and close a FT door, please go to the following YOU TUBE URL address.

<http://www.youtube.com/watch?v=BUqX16SOU>

16.0 Maintenance of the Door

16.1 Lubricate hinges and locks with dry graphite annually or when needed

16.2 Confirm that all trolley nuts are tight All trolleys must be adjusted to give equal support. Equal support generally means that the trolley pendant bolt has the same amount showing below the nuts

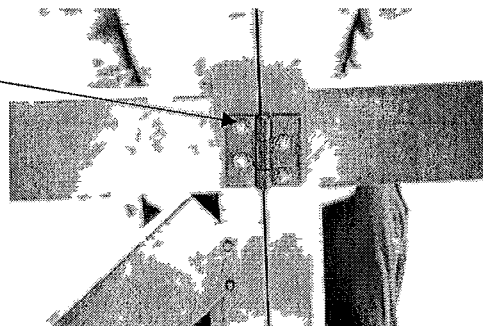


16.3 Trolley lubrication is **NOT** recommended

16.4 Confirm that all locks move smoothly and fit into the top track a minimum of 1". Make sure that the bottom lock fits into the recess guide channel minimum 1".

16.5 Confirm that all hinge TEK screws are tight.

16.6 Check bottom roller systems periodically. Confirm that the bottom rollers are tuning and are tightly installed in the bottom rail.



16.7 Lubrication of the upturned edges of the track (where the trolley can rub) at the stack area and for the next four feet will smooth the initial closing and final opening of the door

16.0 Tools required for the assembly and installation

Screw Gun (or variable speed drill)

Electric Drill (with hammer function for drilling concrete)

Drill bits including

- 5/16" (long enough to drill through the building column)

- 1/2" (metal for lock install)

- 17/32" or 9/16" (to ream predrilled trolley and lock pin holes)

- 1/2" or 17/32" (Masonry for hole in concrete for stay roller)

Drive sockets for screw gun — 5/16", 3/8", 7/16", 1/2"

Drift punch to align holes

Square

Chalk Line (to aid in track install)

Level

25' minimum tape measure

Box end wrenches

Socket and ratchet set

Cable cutter to cut control cable to size

Box cutter to cut bottom seal to length

Allen wrench set

Hammer

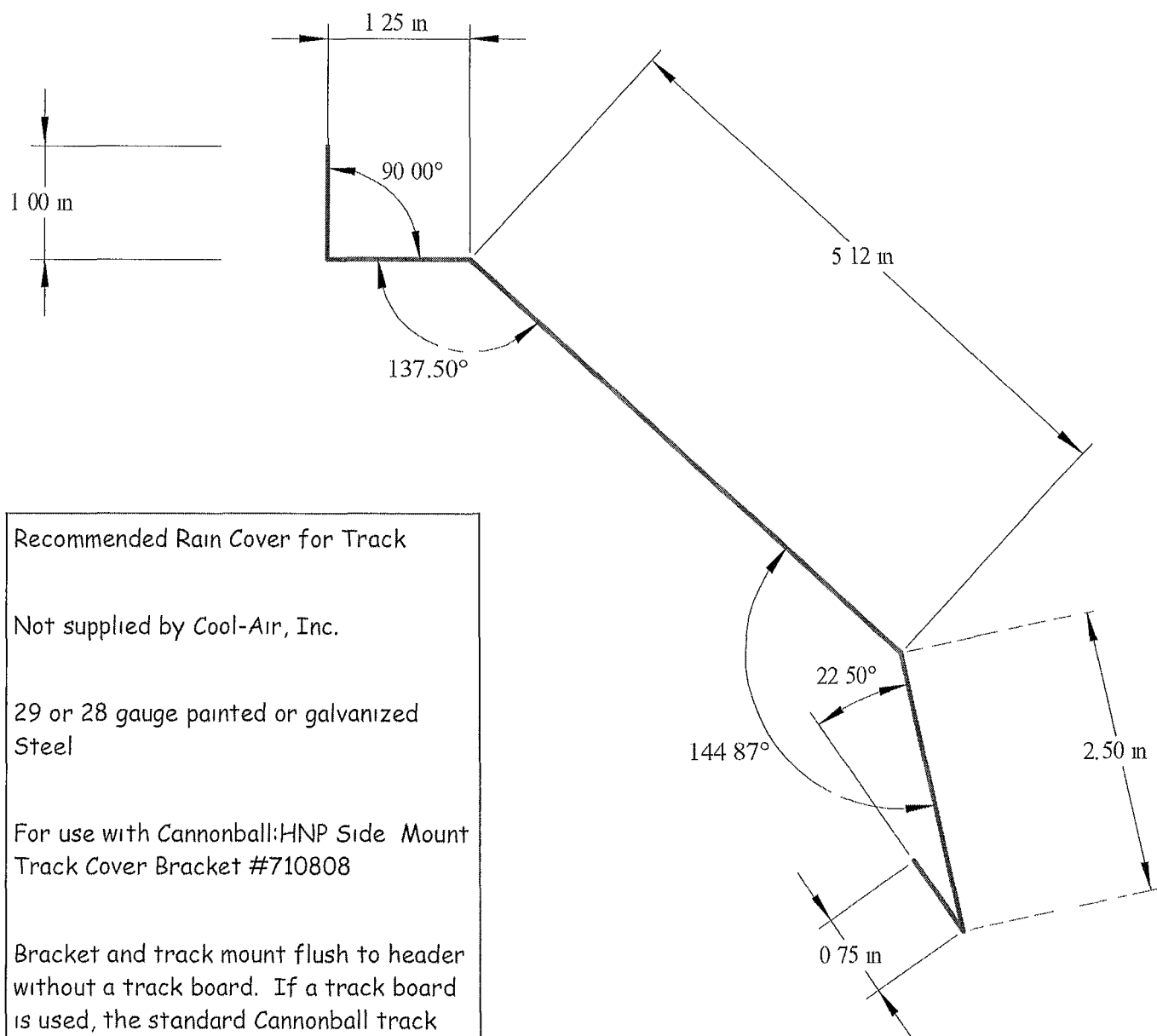
"C" clamps (4) for holding panels together during hinging

Tin Snips for trimming girt inside vertical at hinge

Hack saw or Cut Off saw for trimming track as required

Wood shims (to aid in supporting door while hinging the panel sets and clamping)

18.0 Print for the rain cover (to be installed after door is completed)



Recommended Rain Cover for Track

Not supplied by Cool-Air, Inc.

29 or 28 gauge painted or galvanized
Steel

For use with Cannonball:HNP Side Mount
Track Cover Bracket #710808

Bracket and track mount flush to header
without a track board. If a track board
is used, the standard Cannonball track
cover will work, but the vertical column
must be spaced out the same distance as
the track board for hinge attachment.