1. CAGE COMPONENTS

Corner Post *(ref. Section 2)*
Linear Post *(ref. Section 2)*
Wall Panel *(ref. Section 2)*
Partial Height Wall Panel *(ref. Section 2)*
Corner Top Frame *(ref. Section 3)*
Linear Top Frame Channel *(ref. Section 3)*
Door Lock Assembly *(ref. Section 4)*
Door Assembly *(ref. Section 4)*
Ceiling Support Channel *(ref. Section 5)*
Ceiling Panel *(ref. Section 5)*

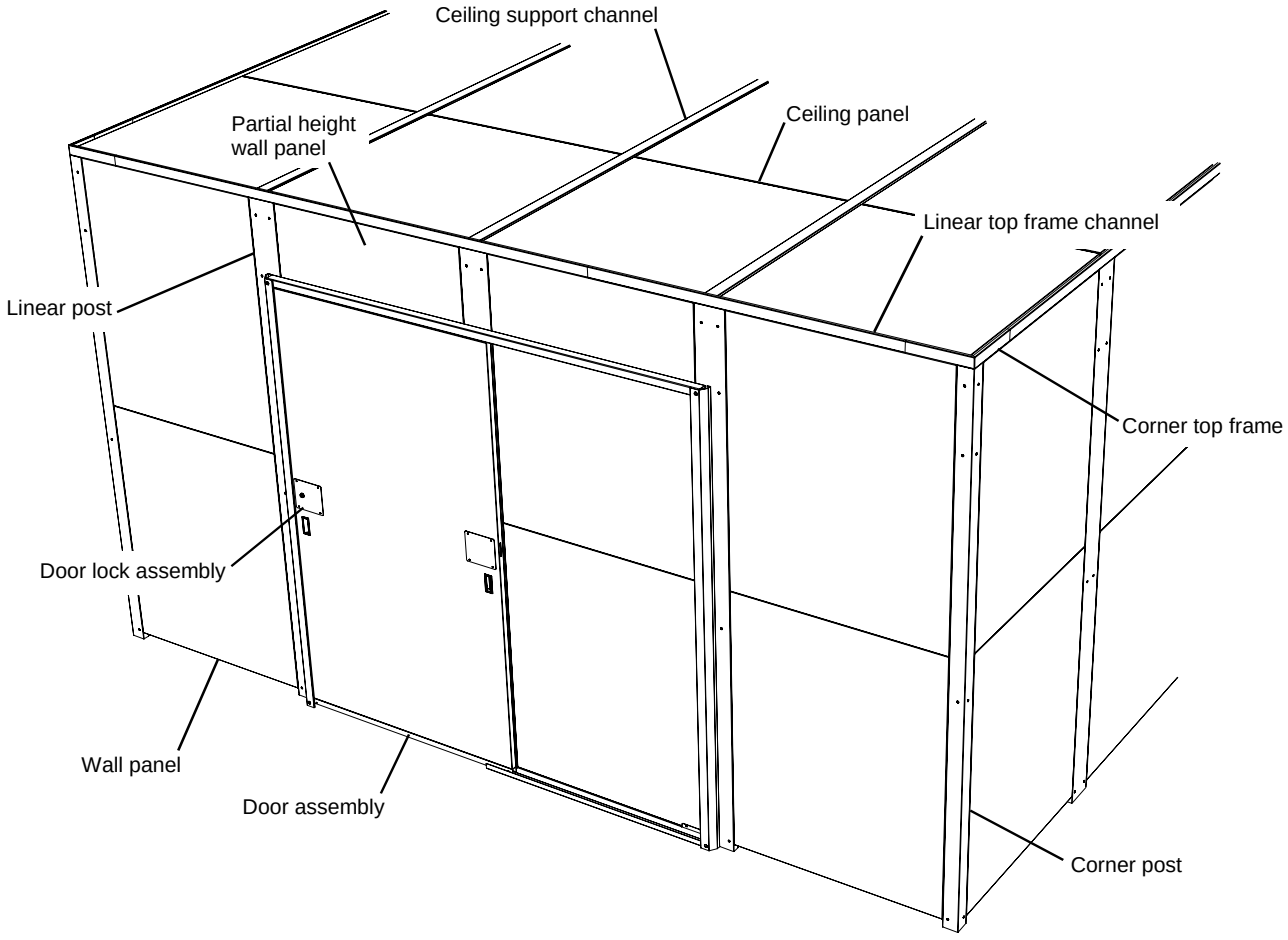


Figure 1

2. CAGE WALL ASSEMBLY

TOOLS REQUIRED (not provided)
Tape measure
3/8" Socket wrench

CAGE WALL INVENTORY

For each Wall Panel:
(2) Half-high Wall Panels *(width and height vary)*
(8) ¼-20 x ½" hex head self tapping screws

For each Partial Height Wall Panel *(used above door openings; width and height vary):*
(1) Partial Height Wall Panel
(4) ¼-20 x ½" hex head self tapping screws

For each Corner Post:
(1) Corner Post *(height varies)*
(1) Corner Top Frame *(refer to section 3 for assembly instructions)*
(5) ¼-20 x ½" hex head self tapping screws

For each Linear Post:
(1) Linear Post *(height varies)*

CAGE WALL MODULARITY

Cage wall panels are available in four standard modular widths: 1', 2', 3' and 4'. The wall panel width is measured from the center of one linear post to the center of the next linear post. A linear post is 6" wide. The face of a corner post is 3" wide, equal to half the width of a linear post. When fully assembled, the total length of each cage wall will always end up on an even one-foot increment. See figure 2.

Cage posts and wall panels are available in three standard heights: 7'10", 8'10" and 9'10" *. Each wall panel is divided into two half-high panels to ease assembly. See figure 2.

**NOTE: The addition of the linear top frame channels, which are 2" tall, will result in a total cage wall height of 8', 9' or 10'.*

Partial height wall panels are available to finish off the cage wall above a door opening. The partial height wall panels are available in 3' and 4' widths.

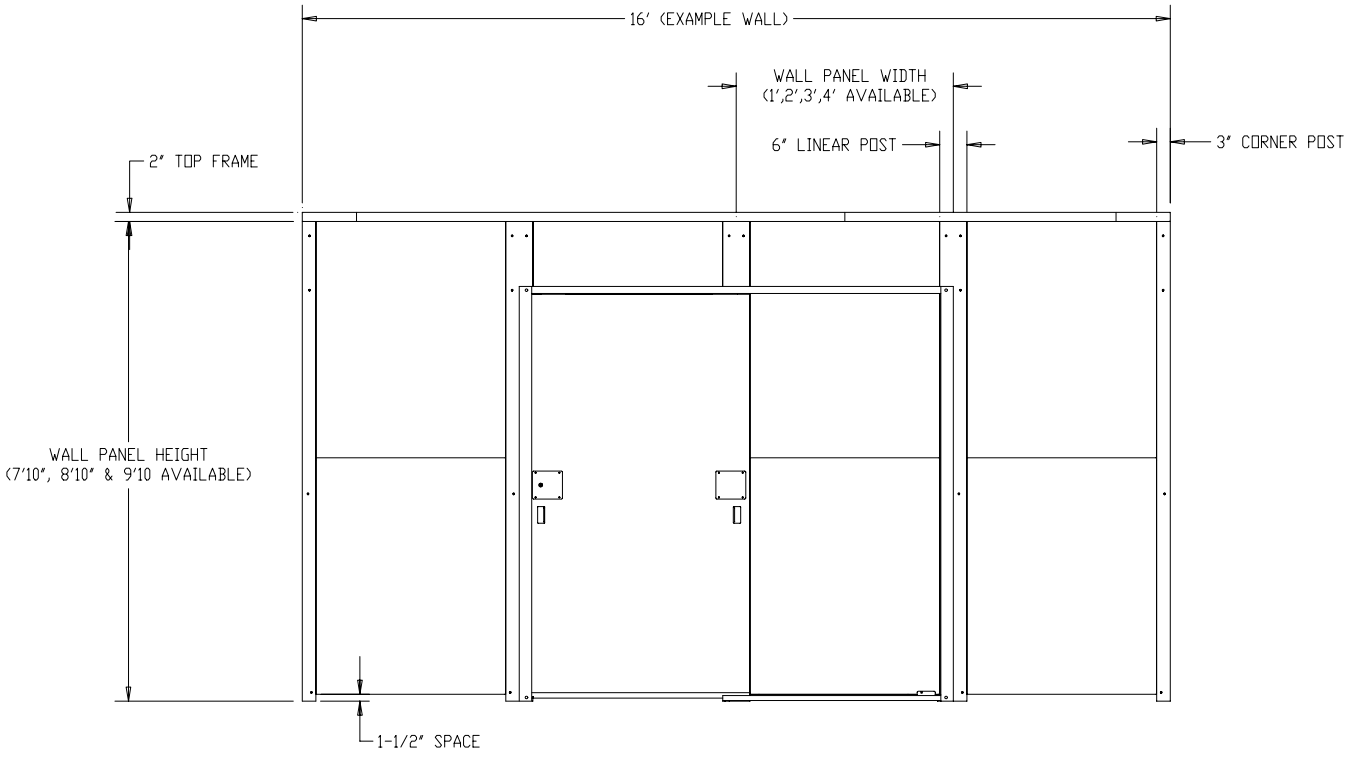


Figure 2

CAGE WALL ASSEMBLY

Start to assemble the cage walls at one corner of the cage. Work progressively outward on each of the adjacent walls so that the structure remains self-supporting. When assembling a long cage wall, the wall may require a temporary support until the cage is complete.

Refer to figure 3 to identify the top and bottom of the corner and linear posts. Then, with the aid of an assistant, assemble the appropriate size wall panels to each side of the corner post using ¼-20 x ½" hex head self tapping screws. Install the screws only part way into the posts. Orient the panels with the "teardrop" screw holes as shown in figure 4. Align the holes with the screws and drop the panels down. Tighten the screws securely. Continue to assemble linear posts and wall panels as required to complete the sides of the cage. See figure 5.

Refer to the following section for instructions on preparing an opening for the Cage Door.

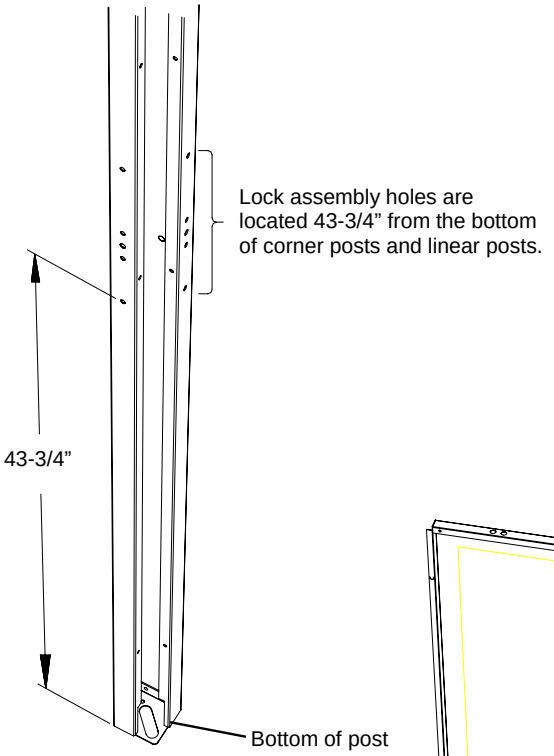


Figure 3
Corner post shown

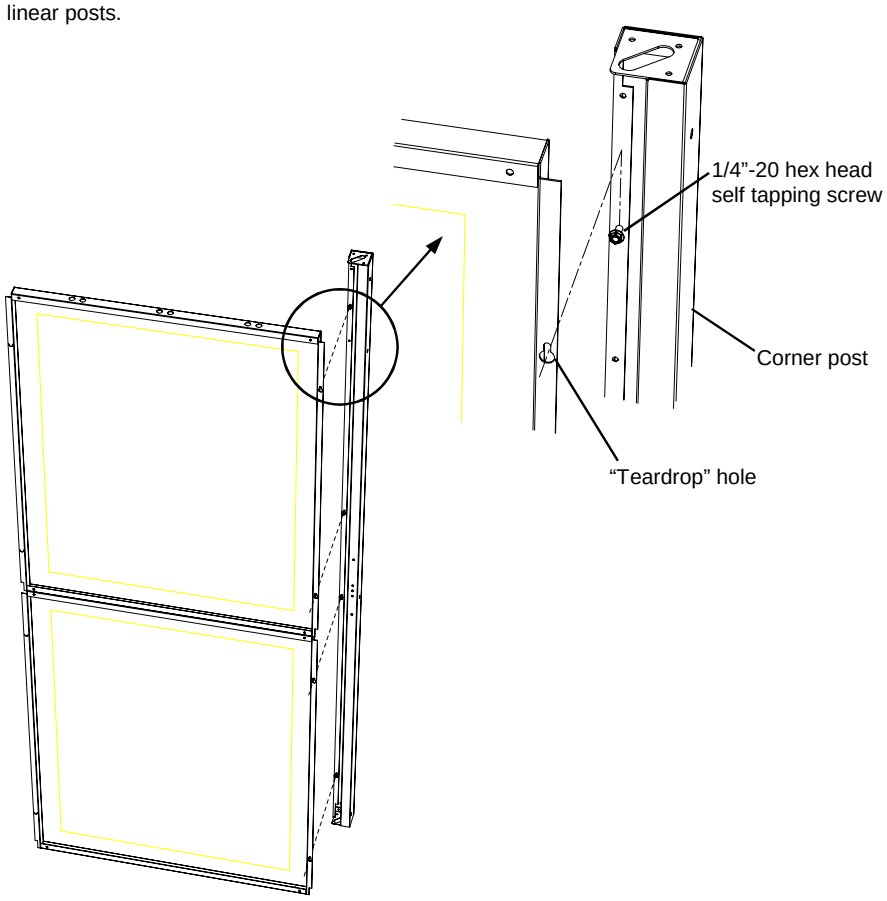


Figure 4

CAGE WALL ASSEMBLY (cont.)

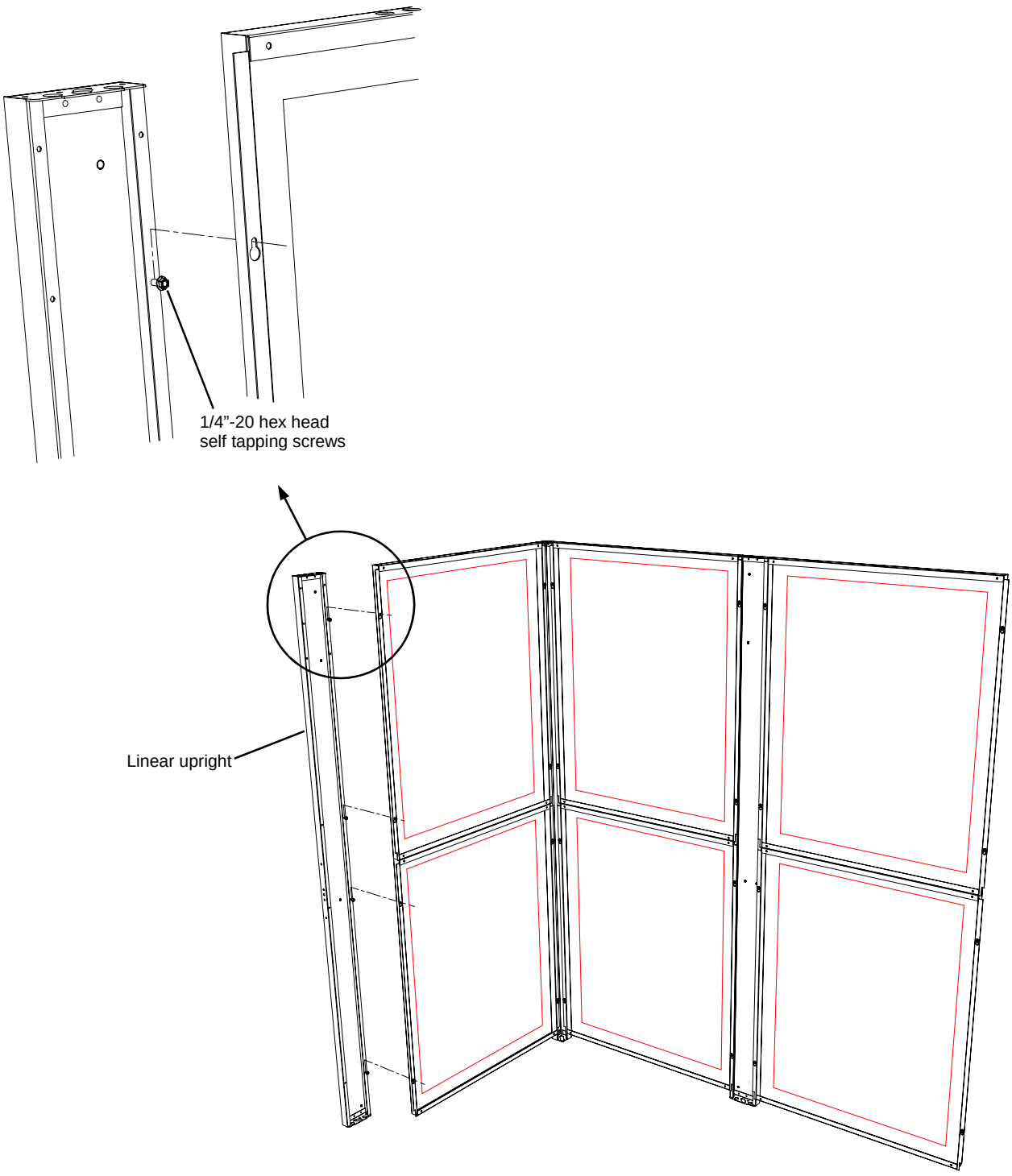


Figure 5

CAGE DOOR OPENINGS

Cage doors are available in 3' and 4' widths, and in heights of 7'6" and 8'6". Partial height wall panels are available to finish off the wall section above the door opening. The partial height panels are available in 4", 16" and 28" heights. Cage door openings may be located adjacent to a corner post or between two linear posts anywhere along the length of the cage wall.

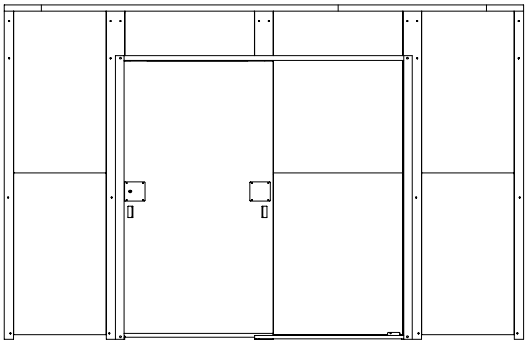
Cage Door Dimensions	Partial Height Panel Required		
	8' High Wall	9' High Wall	10' High Wall
3' Wide x 7'6" High	3' Wide x 4" High	3' Wide x 16" High	3' Wide x 28" High
3' Wide x 8'6" High	-	3' Wide x 4" High	3' Wide x 16" High
4' Wide x 7'6" High	4' Wide x 4" High	4' Wide x 16" High	4' Wide x 28" High
4' Wide x 8'6" High	-	4' Wide x 4" High	4' Wide x 16" High

IMPORTANT:

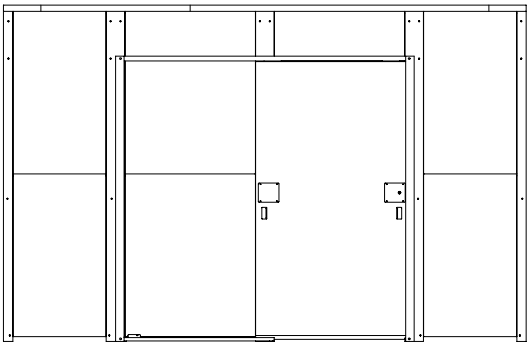
For a Left Hand Door (slides to the right to open): The width of the wall panel located to the right of the door opening must be the same width as the width of the door opening itself.

For a Right Hand Door (slides to the left to open): The width of the wall panel located to the left of the door opening must be the same width as the width of the door opening itself.

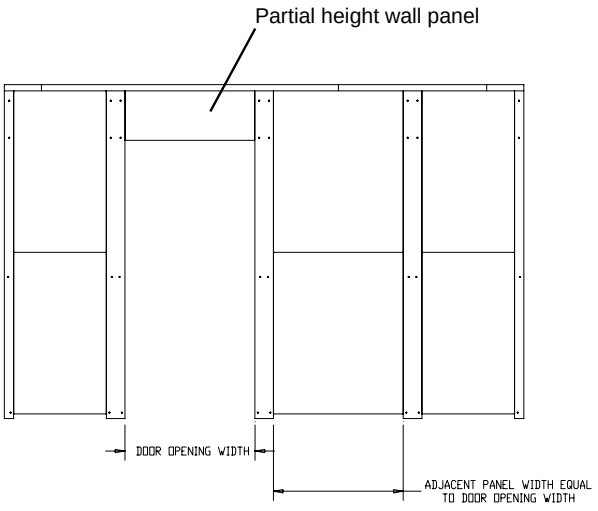
Refer to figure 6A and 6B for a typical door opening layouts.



Left Hand Door
(slides to the right to open)

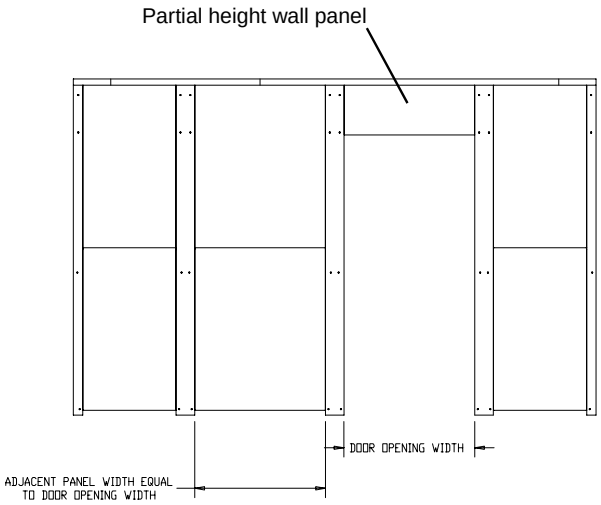


Right Hand Door
(slides to the left to open)



Left Hand Door Opening

Figure 6a



Right Hand Door Opening

Figure 6b

3. CAGE TOP FRAME ASSEMBLY

TOOLS REQUIRED (not provided)
Tape measure
3/8" Socket wrench

TOP FRAME INVENTORY

For each Corner Top Frame:
(1) Corner Top Frame
(5) ¼-20 x ½" hex head self tapping screws

For each Linear Top Frame:
(1) Linear Top Frame Channel *(length varies)*
¼-20 x ½" hex head self tapping screws *(quantity varies depending on Linear Top Frame Channel length)*

TOP FRAME MODULARITY
The top frame components finish off the top of the cage walls and also stiffen the walls. The linear top frame channels are available in 1 foot incremental lengths, from 1foot to 10 feet.

Each corner post ships with a corner top frame. The corner top frame measures 1 foot on each side. Therefore, the total length of linear top frame channels required is 2 feet less than the total length of the cage wall. Several linear top frame channels may be spliced together for cage walls that exceed 12 feet in length. See figure 7.

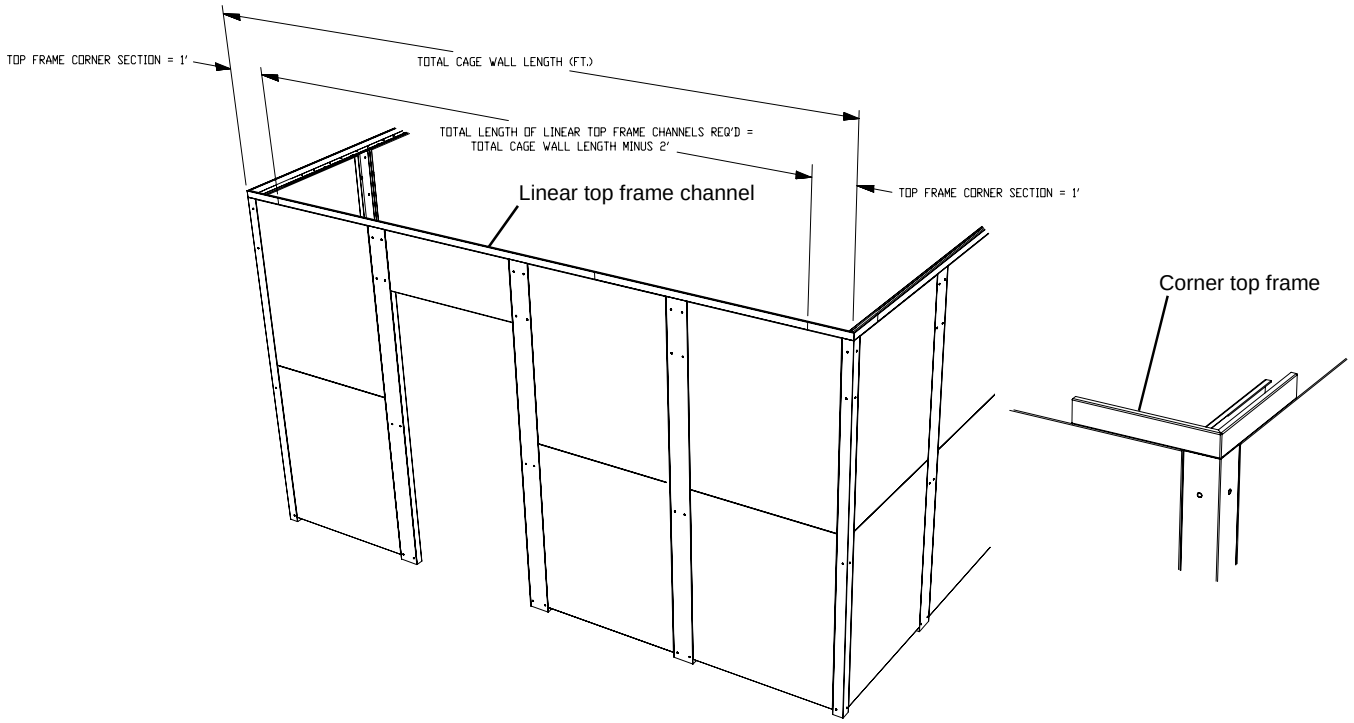


Figure 7

CAGE TOP FRAME ASSEMBLY

1. Assemble the top frame sections to the top of the cage wall, working from right to left (as viewed from outside the cage). Start by assembling a corner top frame to the top of the right hand corner post using (3) ¼-20 x ½" hex head self tapping screws. See figure 8.

2. Add linear top frame channels as required so that the last section falls 1 foot short of the left end of the cage wall. Fasten the linear sections to the top of each linear post with (2) ¼-20 x ½" hex head self tapping screws. Also fasten each splice between adjoining top frame sections with (2) ¼-20 x ½" hex head self tapping screws. See figures 8 and 9.

3. Now assemble a corner top frame to the top of the left corner post. Continue adding linear and corner sections around the entire perimeter of the cage.

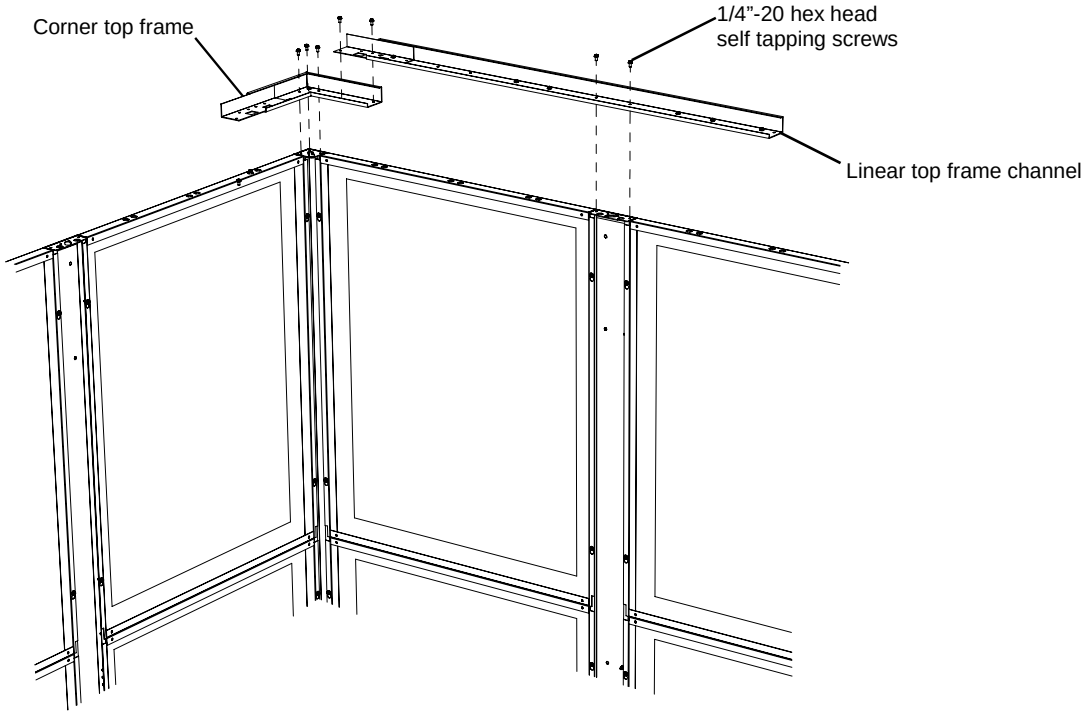


Figure 8

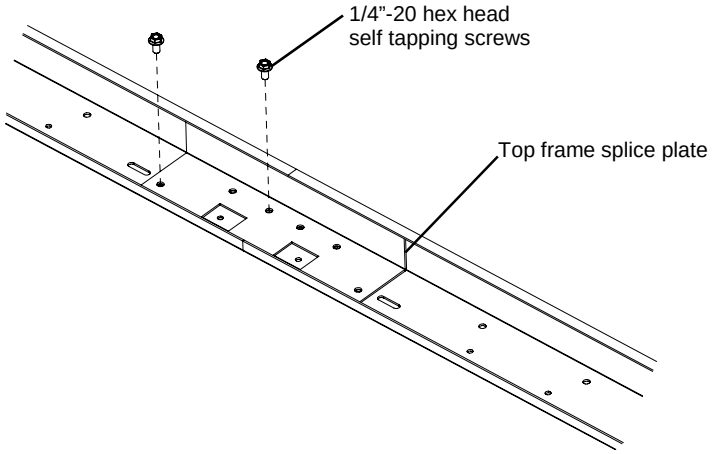


Figure 9

4. CAGE DOOR ASSEMBLY

TOOLS REQUIRED (not provided)
Flat blade screwdriver
Phillips screwdriver
3/8" Socket wrench
7/16" Socket wrench
5/32" Allen wrench
3/16" Allen wrench
7/16" Socket wrench

DOOR LOCK INVENTORY
(1) Lock Plate Assembly
(1) Blank Plate
(1) Emergency Lock Release Handle
(2) Spacers
(8) #10-24 lock nuts
(2) ¼-20 lock nuts
(3) ¼-20 x ¾" phillips pan head machine screws
(1) 9/32" I.D. oversized washers

CAGE DOOR INVENTORY
(1) Door Panel Assembly
(1) Upper Door Track
(1) Lower Door Track
(2) Trolley Assemblies
(2) Doorjambs
(1) RH End Stop Bracket
(1) LH End Stop Bracket
(1) Guide Bearing
(2) Plastic Glide Buttons
(2) Rubber Bumpers
(2) ¼-20 x 2-1/2" carriage bolts
(1) ¼-20 x 5/8" phillips flat head machine screw
(2) ½-20 x ½" hex head self tapping screws
(3) #10-24 x ½" phillips flat head self tapping screws
(1) 5/16-18 x 1-1/4" allen button head screw
(6) 5/16" flat washers
(4) #10 flat washers
(9) 5/16-18 lock nuts
(4) ¼-20 x 1" allen head screws
(4) ¼" lock washers

DOOR LOCK ASSEMBLY

Door lock assemblies must be ordered specifically for a left or right hand door. The door lock assemblies cannot be field reversed.

Each door assembly can be configured to slide open towards the left or towards the right. Refer to figure 6A and 6B for a typical door opening layouts.

NOTE: The key is only removable when the lock mechanism is in the locked position.

The following door lock assembly diagrams show a left hand door lock being assembled. A right hand door lock is a mirror image of a left hand door lock.

1. Assemble the emergency lock release handle to the cage post. See figure 10.
2. Position the lock plate assembly into the door cutout. Secure the lock plate assembly with four #10-24 lock nuts. See figure 11.
3. Position the blank plate into the remaining door cutout. Secure the blank plate with four #10-24 lock nuts. See figure 12.
4. Verify the operation of the emergency lock release handle. Refer to "*EMERGENCY LOCK RELEASE HANDLE OPERATION"* section on page 16. The emergency lock release handle should slide up and down smoothly.

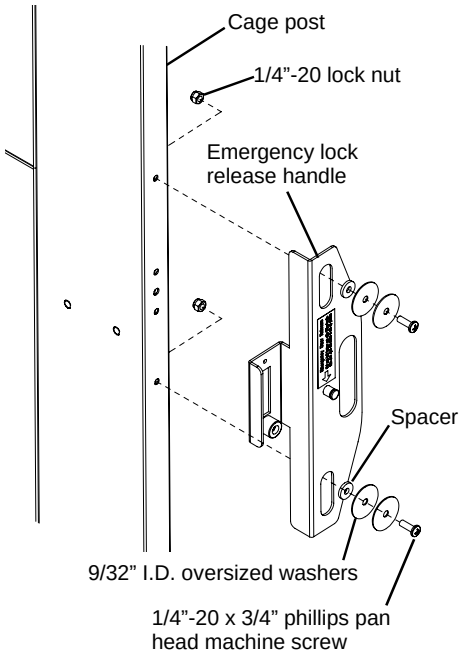


Figure 10
(Left hand door lock shown)

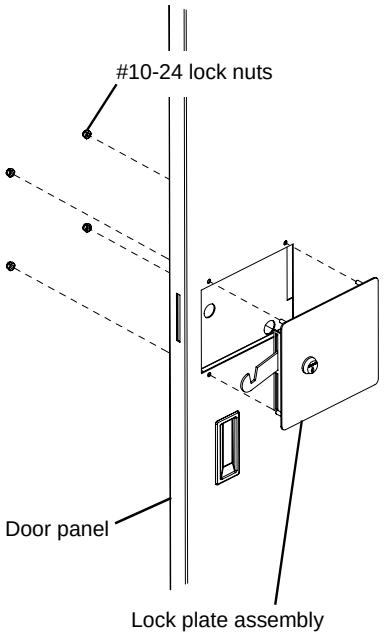


Figure 11
(Left hand door lock shown)

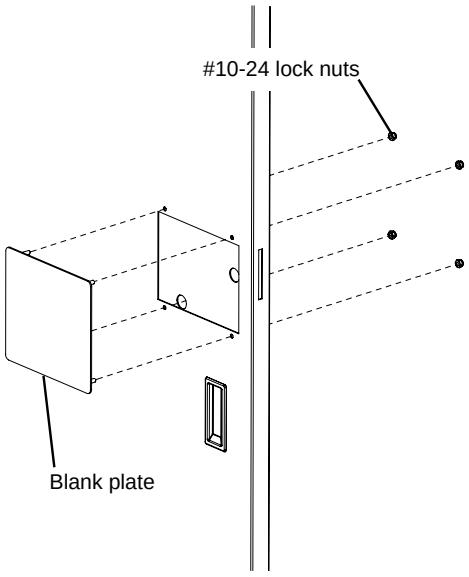


Figure 12
(Left hand door lock shown)

CAGE DOOR ASSEMBLY

IMPORTANT:
For a Left Hand Door (slides to the right to open): The width of the wall panel located to the right of the door opening must be the same width as the width of the door opening itself.

For a Right Hand Door (slides to the left to open): The width of the wall panel located to the left of the door opening must be the same width as the width of the door opening itself.

The following door assembly diagrams show a left hand door being assembled. A right hand door is a mirror image of a left hand door.

1. The corner and linear cage posts are punched with "knock-out" style screw holes. When assembling door components to the posts, use a flat blade screwdriver to remove the appropriate knock-out hole slugs from the posts. See figure 13.

2. Assemble the upper door track, one doorjamb, and one end stop bracket to the cage posts. See figures 14, 15, 16 and 17. (*Note the use of three 5/16" flat washers at the top doorjamb screw. See figure 16.)*

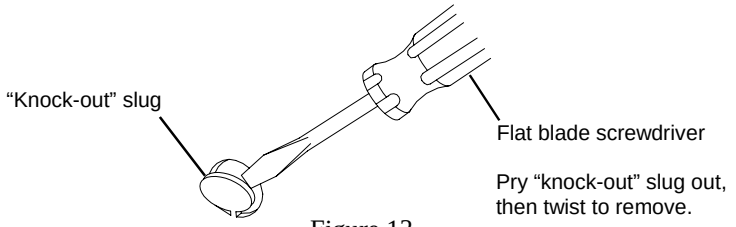


Figure 13

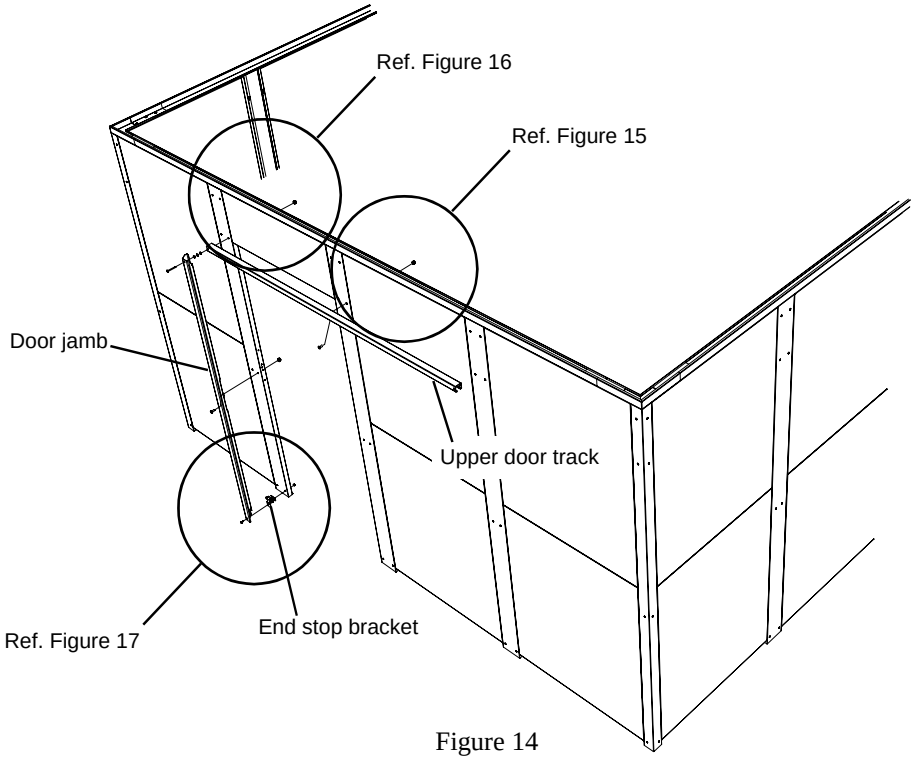


Figure 14

CAGE DOOR ASSEMBLY (cont.)

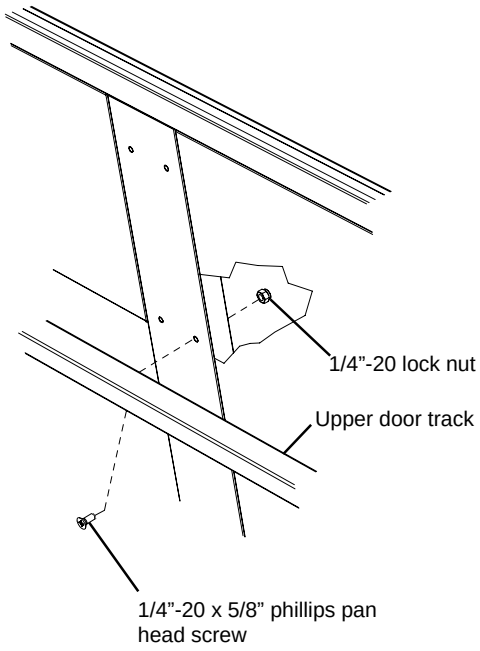


Figure 15

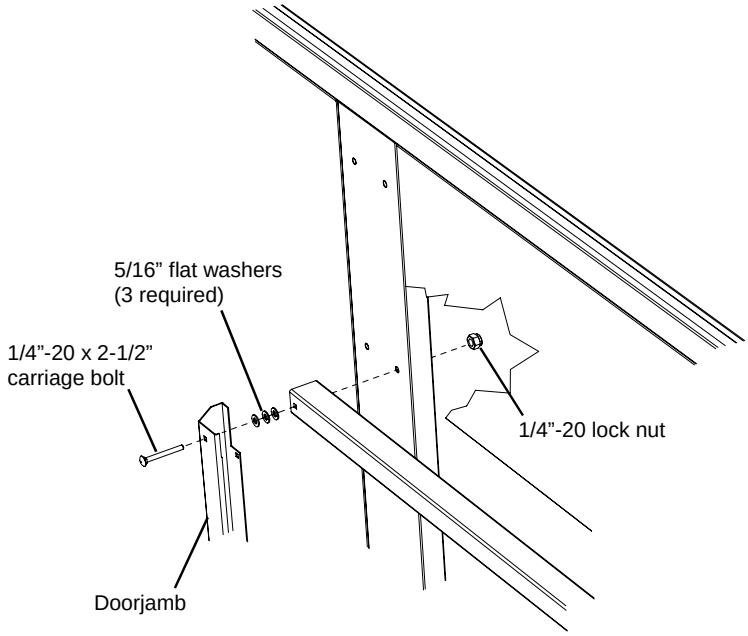


Figure 16

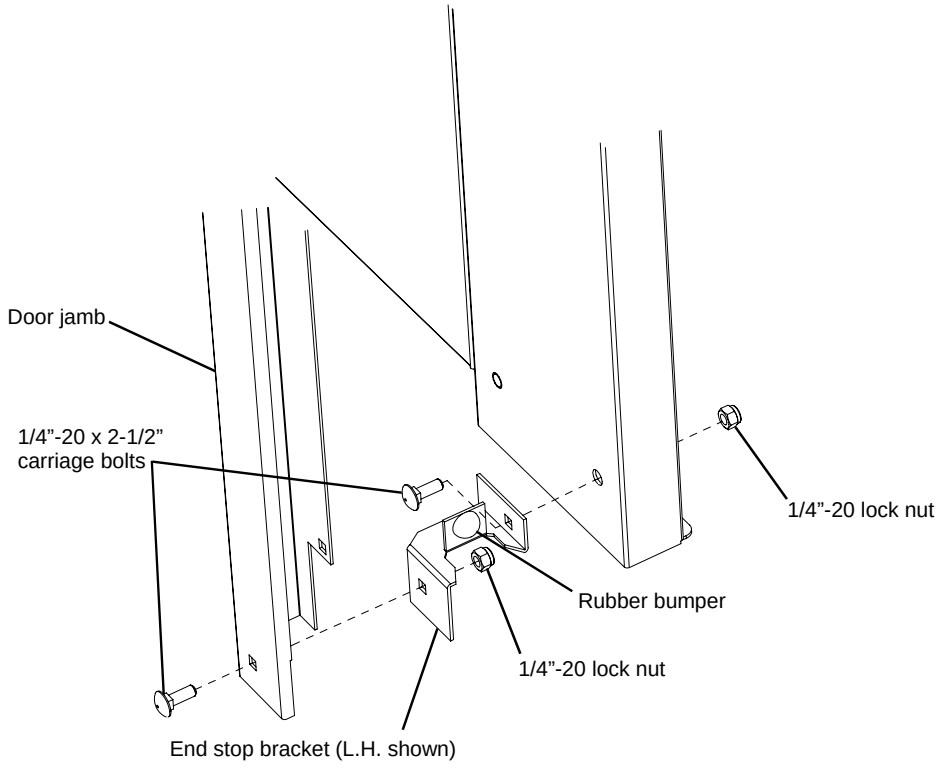


Figure 17

CAGE DOOR ASSEMBLY (cont.)

3. Assemble 2 plastic glide buttons to the bottom of the door panel. See figure 18. (*Note the use of two #10 flat washers on the inner side of the door panel. See figure 18)*
4. Assemble the two trolleys to the top of the door with 1/4”-20 x 1.00” allen head screws and 1/4” lock washers. See figure 18.
5. Slide the door panel into the open end of the upper door track. See figure 19.

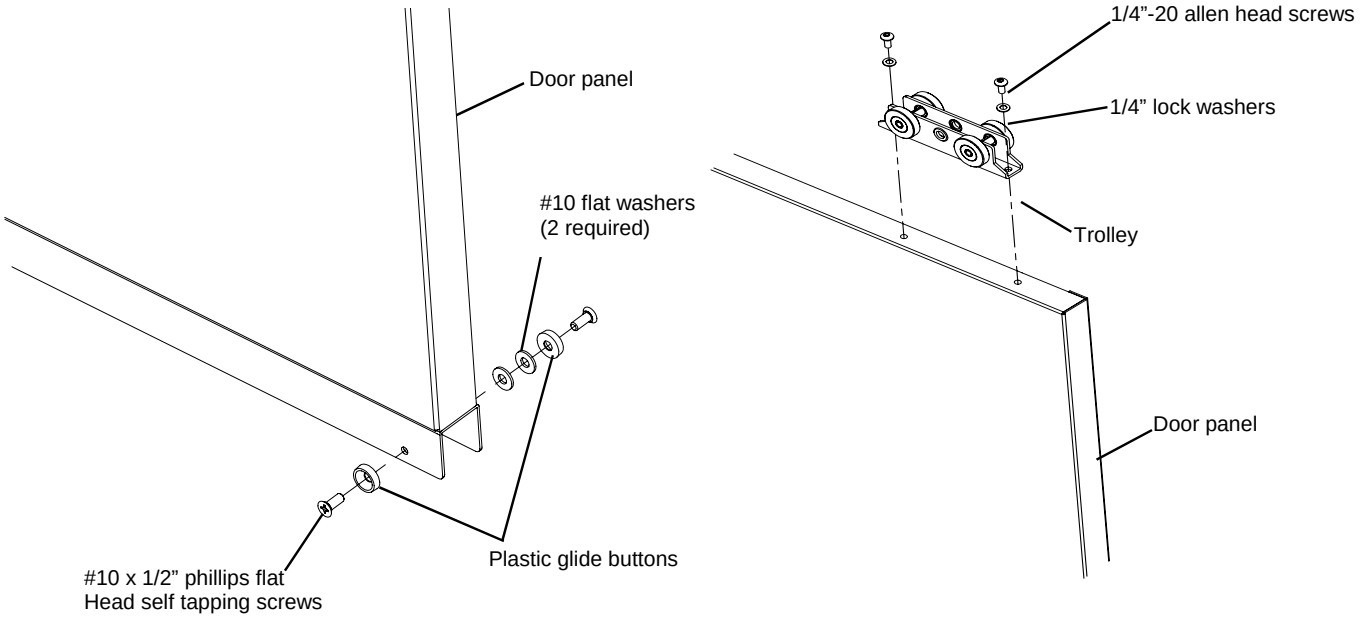


Figure 18

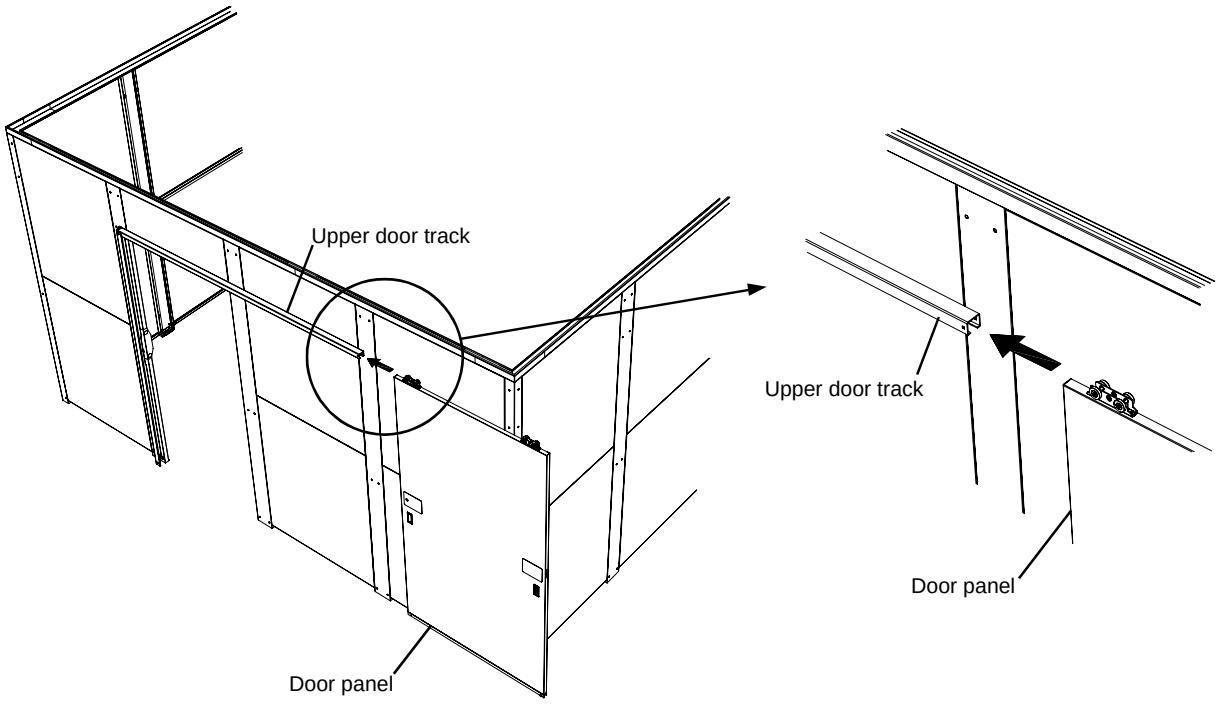


Figure 19

CAGE DOOR ASSEMBLY (cont.)

6. Assemble the remaining doorjamb and end stop bracket to the cage post. See figure 20.

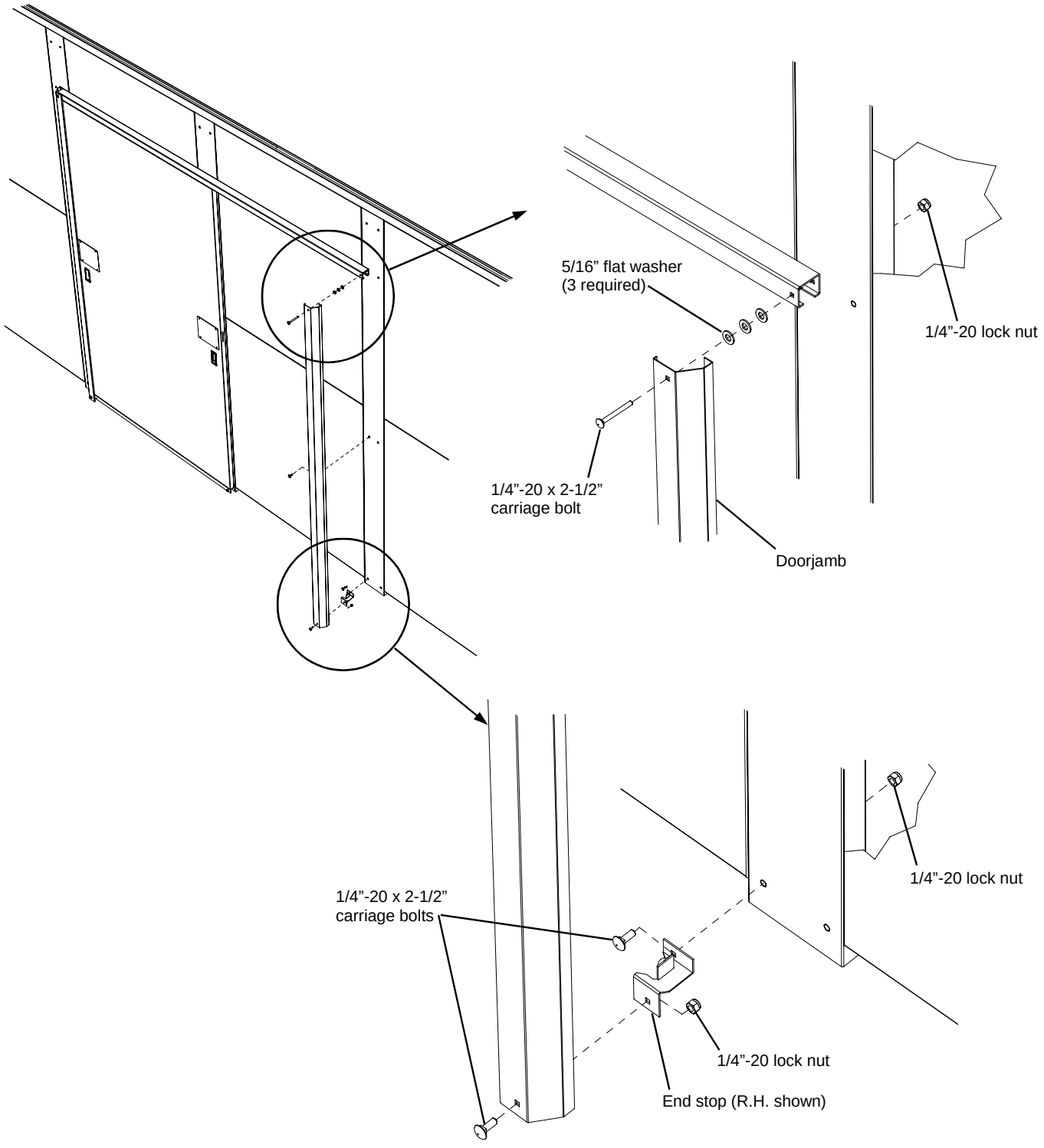


Figure 20

CAGE DOOR ASSEMBLY (cont.)

7. Assemble the guide bearing to the lower door track. See figure 21.

8. Assemble the lower door track to the cage wall section. See figures 22 and 23.

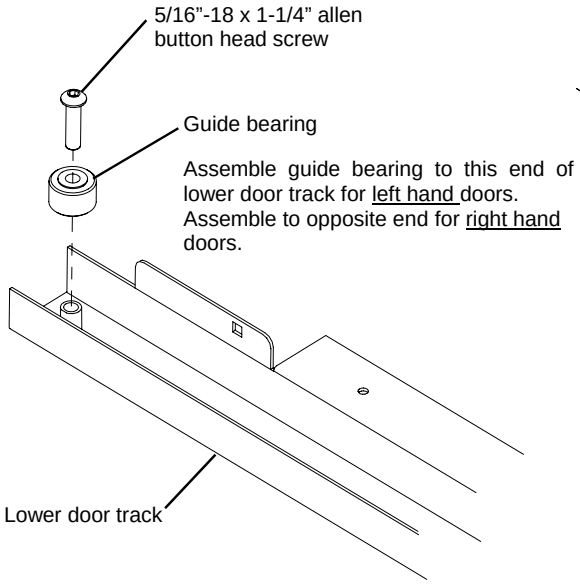


Figure 21

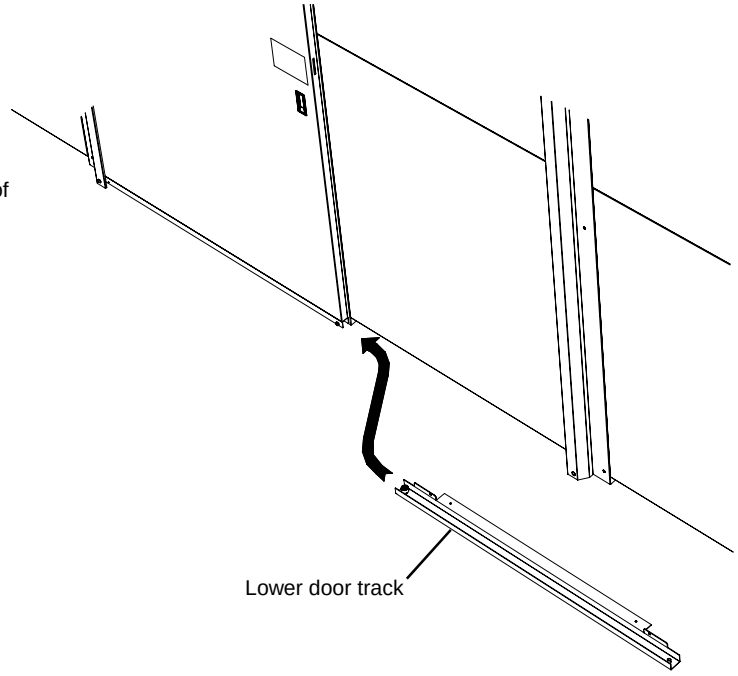


Figure 22

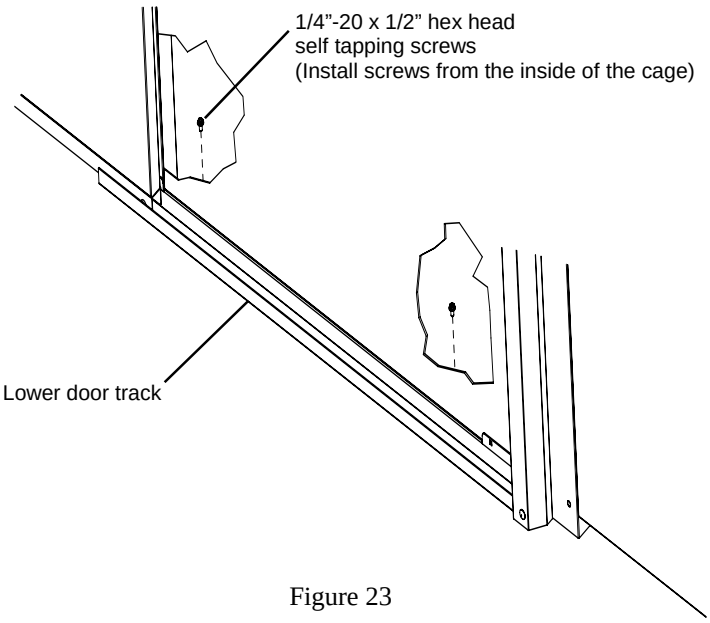


Figure 23

EMERGENCY LOCK RELEASE HANDLE OPERATION
The emergency lock release handle unlocks a locked cage door from within the cage, without the use of a key.

To release a locked cage door from inside the cage:

1. Pull and hold the safety release button out. See figure 24.
2. Lift the emergency lock release handle upwards. See figure 25.
3. While holding the emergency lock release handle in the "up" position, slide the cage door open. See figure 25.

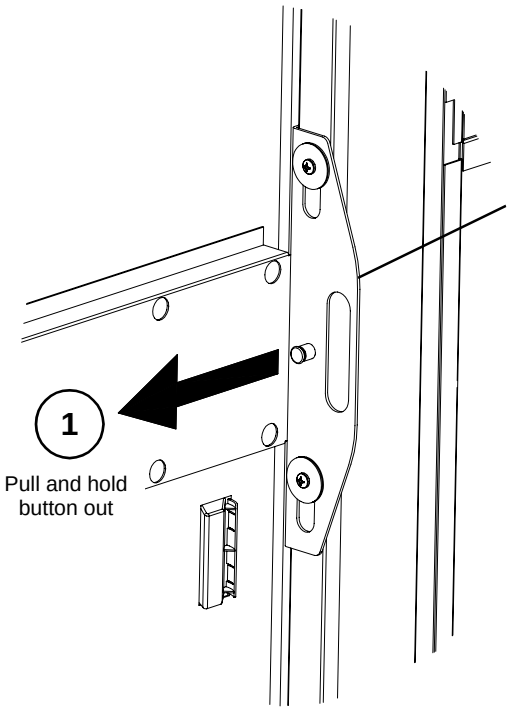


Figure 24

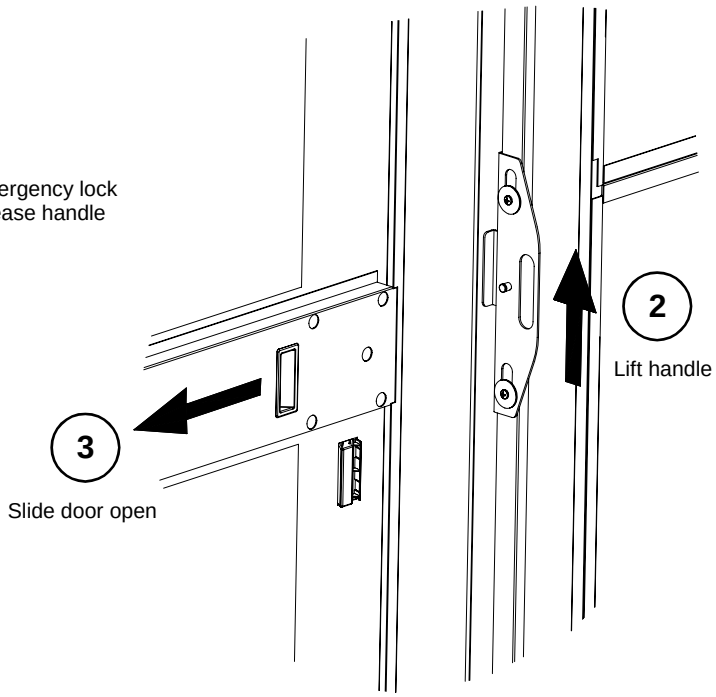


Figure 25

5. CAGE CEILING ASSEMBLY

TOOL REQUIRED (not provided)
3/8" Socket wrench

CEILING INVENTORY

For each Ceiling Support Channel – *4' through 10' long*:
(1) Ceiling Support Channel
(4) 1/4-20 x ½" hex head self tapping screws

For each Ceiling Support Channel – *11' and 12' long*:
(2) Ceiling Support Channels (lengths vary)
(1) Short Splice Plate
(12) ¼-20 x ½" hex head self tapping screws

For each Ceiling Support Channel – *13' through 16' long*:
(3) Ceiling Support Channels (lengths vary)
(2) Long Splice Plate
(16) ¼-20 x ½" hex head self tapping screws

For each Ceiling Panel:
(1) Ceiling Panel *(length and width vary)*
(3) ¼-20 x ½" hex head self tapping screws

CAGE CEILING MODULARITY
Ceiling support channels are available in 1 foot incremental lengths, from 4 feet to 16 feet. The construction of the ceiling support channel varies depending on the channel length. See figure 27. To minimize the ceiling support channel length, they should be oriented across the shortest cage dimension.

Ceiling panels are available in 3' and 4' widths and in 3', 4' and 5' lengths.

CAGE CEILING ASSEMBLY

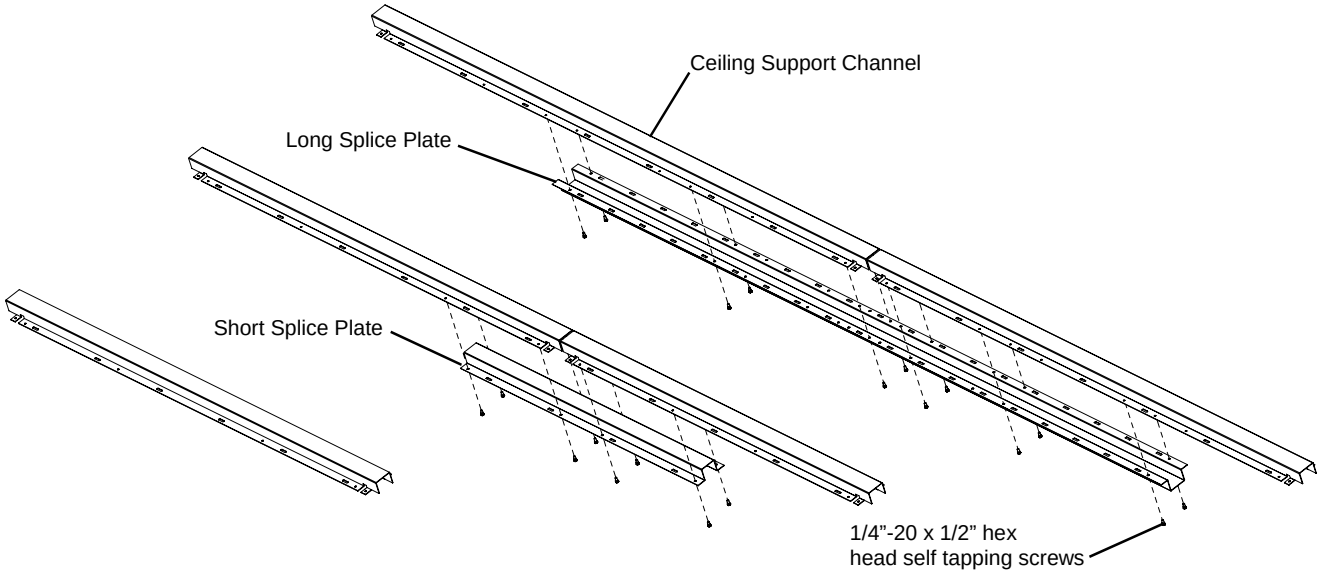
Pre-assemble the Ceiling Support Channels:

1. Ceiling support channels that are 11’ through 16’ long consist of two shorter channels spliced together. Refer to the chart in figure 26 to determine the channel lengths required.
2. Pre-assemble the ceiling support channels using ¼-20 x ½” hex head self tapping screws (quantity varies depending on channel length). See figure 27.

NOTE: Ceiling support channels that are 4’ through 10’ long do not require pre-assembly

Ceiling Support Channel (Assembled)	Channels Required	Splice Plate Required
11’	5’ & 6’	Short
12’	5’ & 7’	Short
13’	6’ & 7’	Long
14’	7’ & 7’	Long
15’	7’ & 8’	Long
16’	8’ & 8’	Long

Figure 26



4’ through 10’
Ceiling Support Channels
(No pre-assembly required)

11’ & 12’
Ceiling Support Channels

13’ through 16’
Ceiling Support Channels

Figure 27

CAGE CEILING ASSEMBLY (cont.)

Install the Ceiling Support Channels:
Attach the ceiling support channels to the cage's top frame with ¼-20 x ½" hex head self tapping screws. There are attachment positions along each linear top frame channel section at one foot increments. See figure 28.

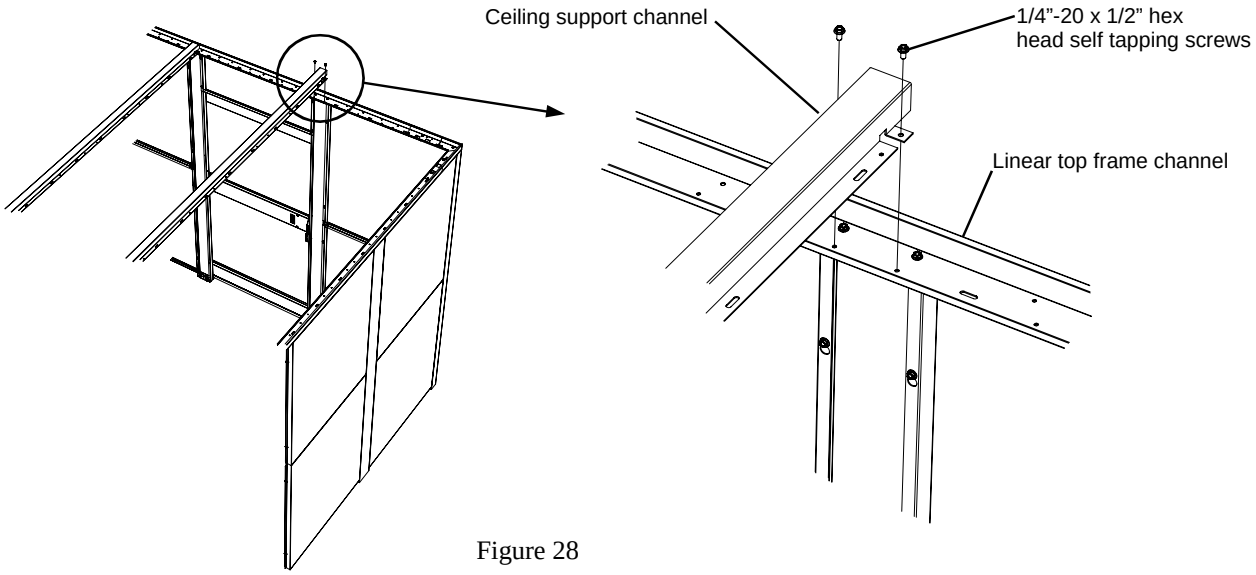


Figure 28

Install the Ceiling Panels:
Position the ceiling panel in place as shown in figure 29. Attach each ceiling panel with four ¼-20 x ½" hex washer head self tapping screws.

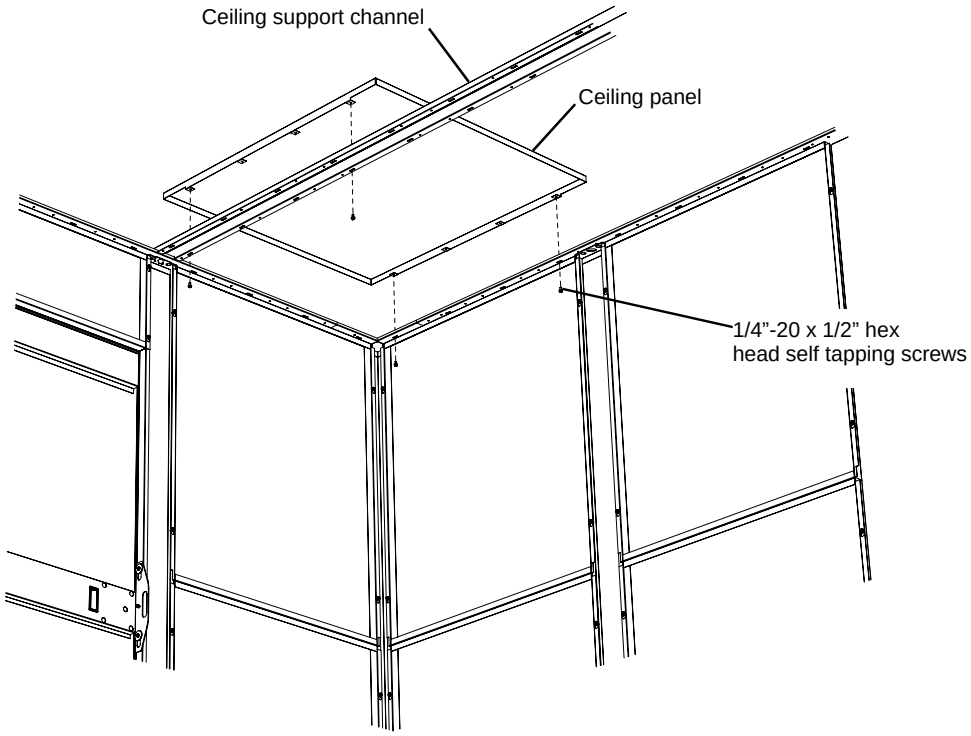


Figure 29