INSTALLATION MANUAL

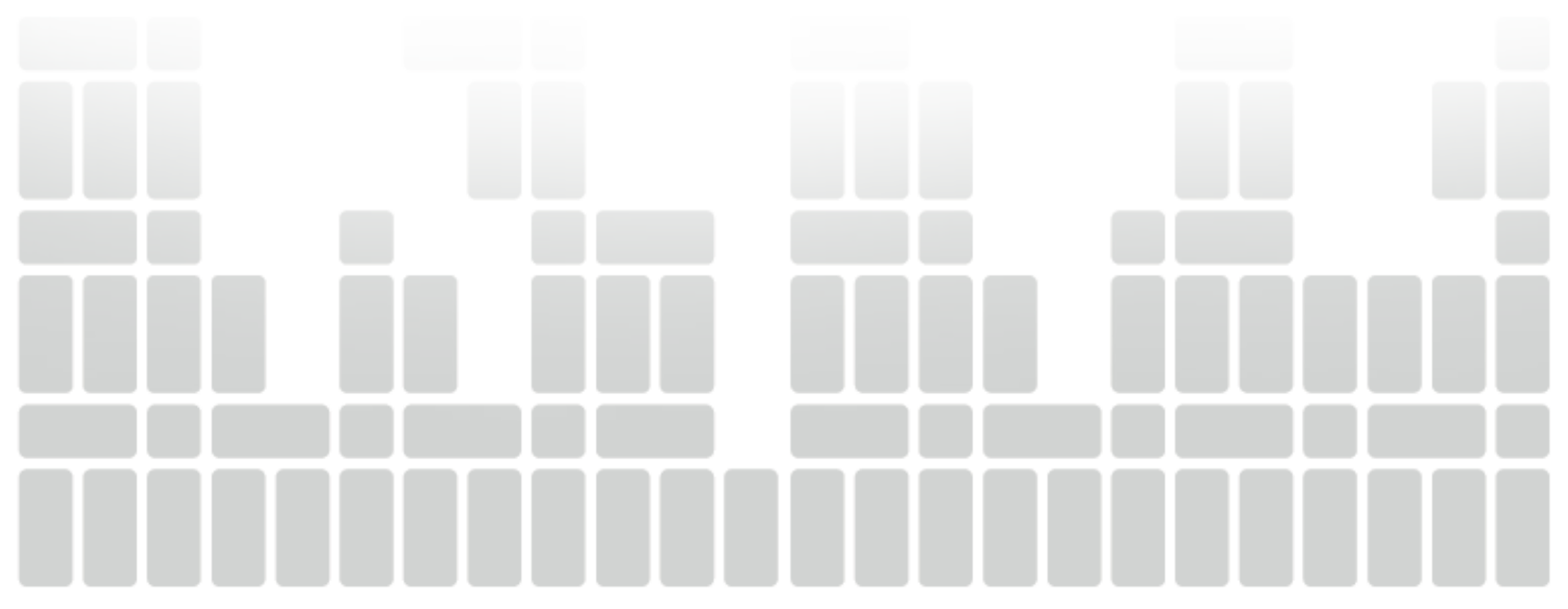# Matis ®
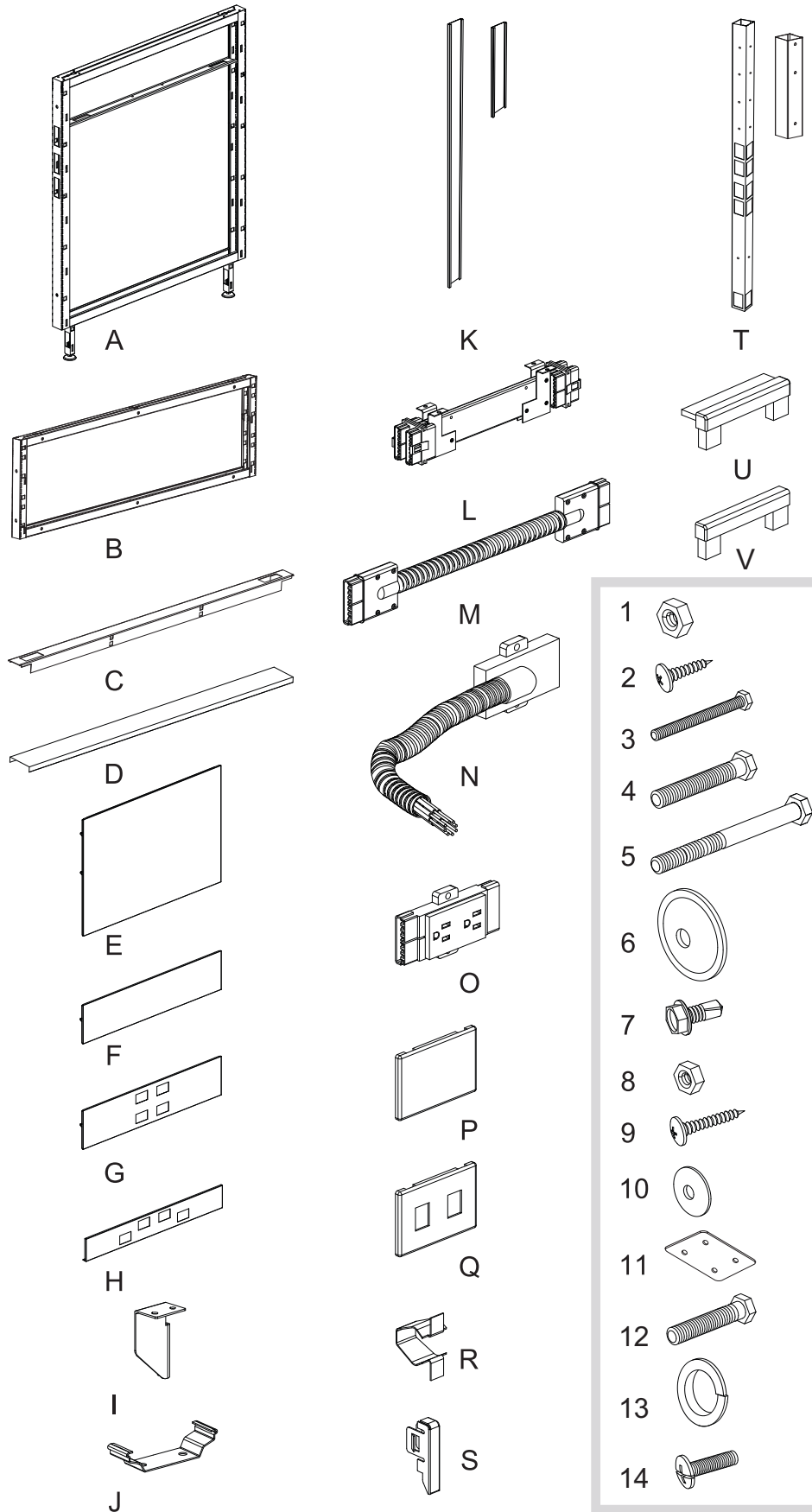
Interion Components

PANEL COMPONENTS

A) Interion Frame 38"
B) Stacking Frame 16"
C) Tile Converter
D) Top Cap
E) Tile 24"
F) Tile 8"
G) Tile 8" for Receptacles
H) Raceway Cover
I) Corner support bracket
J) Panel Top Cap Clip
K) End Cap 38" / 16"
L) Harness
M) Jumper
N) Power Feed
O) Receptacle
P) Black Faceplate
Q) Jack Housing
R) Omega Clip
S) Rectangular Clip
T) Connector 38" / 16"
U) End Cap Top Cap
V) Middle Top Cap

HARDWARE

1. 3/8" Hex Nut
2. #10-16 x 5/8" Screw
3. 5/16" x 2" Hex Head Bolt
4. 3/8" x 2-1/2" Hex Head Bolt
5. 3/8" x 3-1/2" Hex Head Bolt
6. 2" Washer
7. #10 x 1/2" Hex Head Screw
8. #8-32 Hex Nut
9. #10-12 x 3/4" Screw
10. 3/8" Flat Washer
11. Flat Bracket
12. 3/8" x 1" Hex Head Bolt
13. 3/8" Lock Washer
14. #8-32 x 1/2" Machine screw
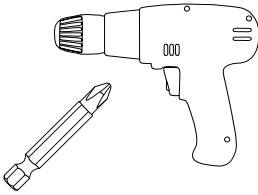   slotted round head

TREMAIN®

▸ Interion Components

A) Wrench 9/16"

- 3/8" Hex Nut
- 3/8" x 2-1/2" Hex Head Bolt
- 3/8" x 3-1/2" Hex Head Bolt
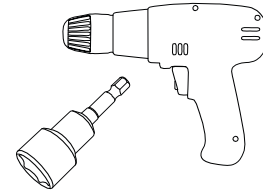- 3/8" x 1" Hex Head Bolt
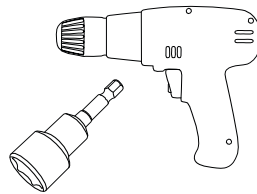
B) Wrench 1/2"

- 5/16" x 2" Hex Head Bolt

C) Cross slot Phillips

- #10-16 x 5/8" Screw
- #10-12 x 3/4" Screw
- #8-32 x 1/2" Machine screw slotted round head

D) 5/16" Hex bit fot drill
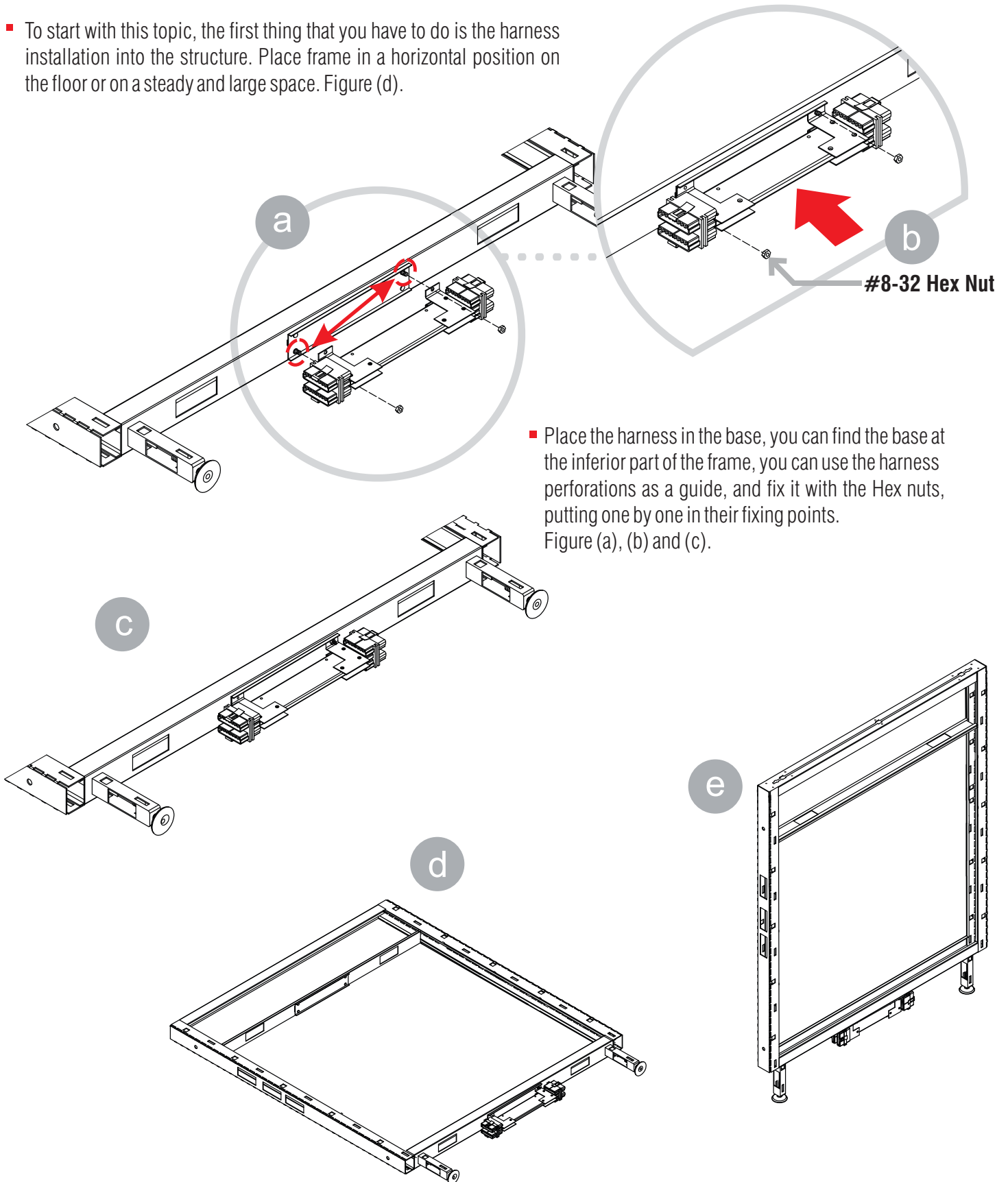
- #10 x 1/2" Hex Head Screw

E) 11/32" Hex bit for drill

- #8-32 Hex Nut

**TREMAIN**®

▶ Harness Installation

- To start with this topic, the first thing that you have to do is the harness installation into the structure. Place frame in a horizontal position on the floor or on a steady and large space. Figure (d).

#8-32 Hex Nut

- Place the harness in the base, you can find the base at the inferior part of the frame, you can use the harness perforations as a guide, and fix it with the Hex nuts, putting one by one in their fixing points.
Figure (a), (b) and (c).

TREMAIN®

Harness Installation at the Beltline Position

- In addition to the standard installation of the harness in the raceway, you have the beltline area within the frame to install the beltline harness. Using the machine screws and hex nuts fix the harness to the support.

- It´s recommended that when installing on the inferior structure the first harness, you install any other harness required on the same frame, before moving to the next step.
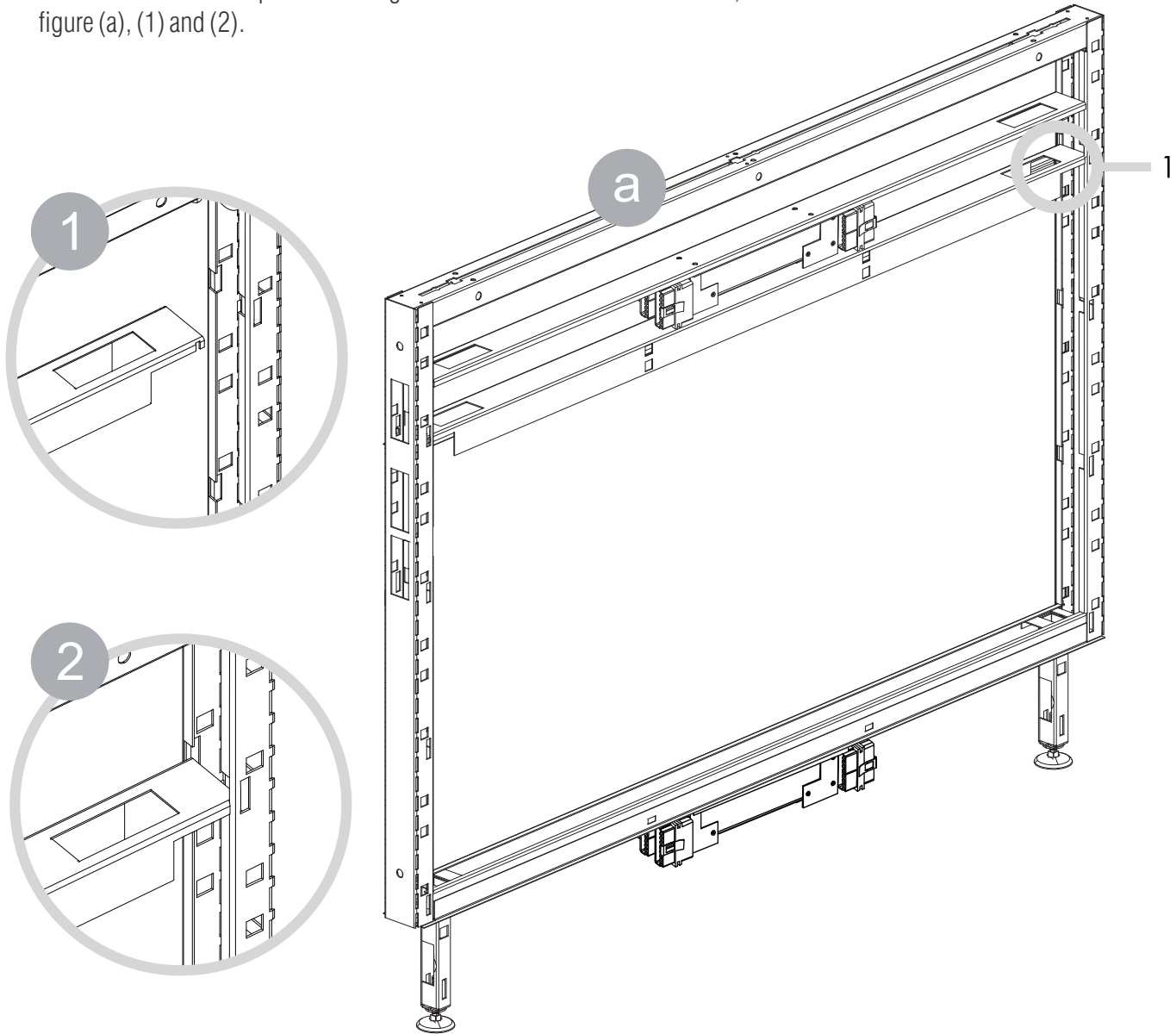
#8-32 Hex Nut

#8-32 x 1/2"
Machine
screw slotted
round head

a

Harness

b
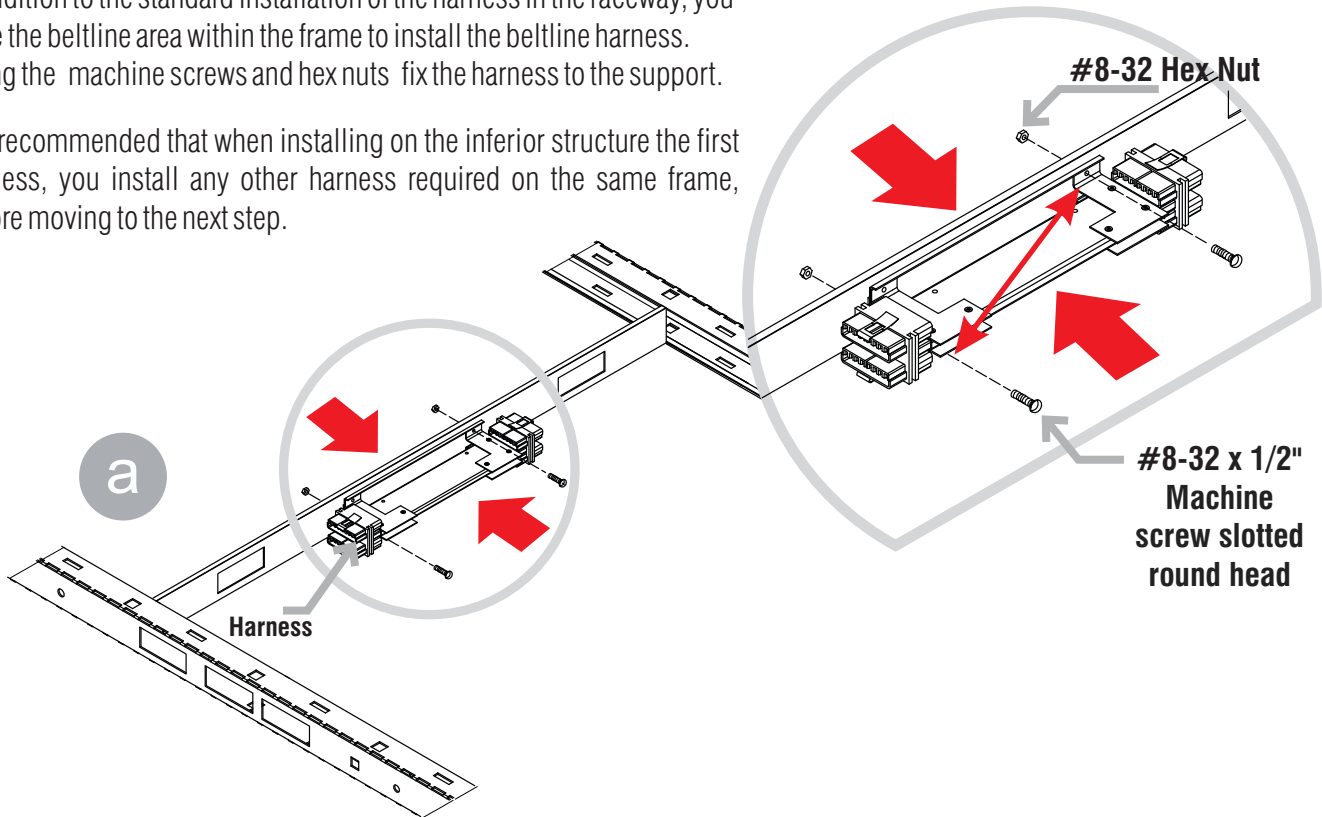
NOTE: If you don´t need a beltline harness, just install the harness of the raceway and continue with the next step.
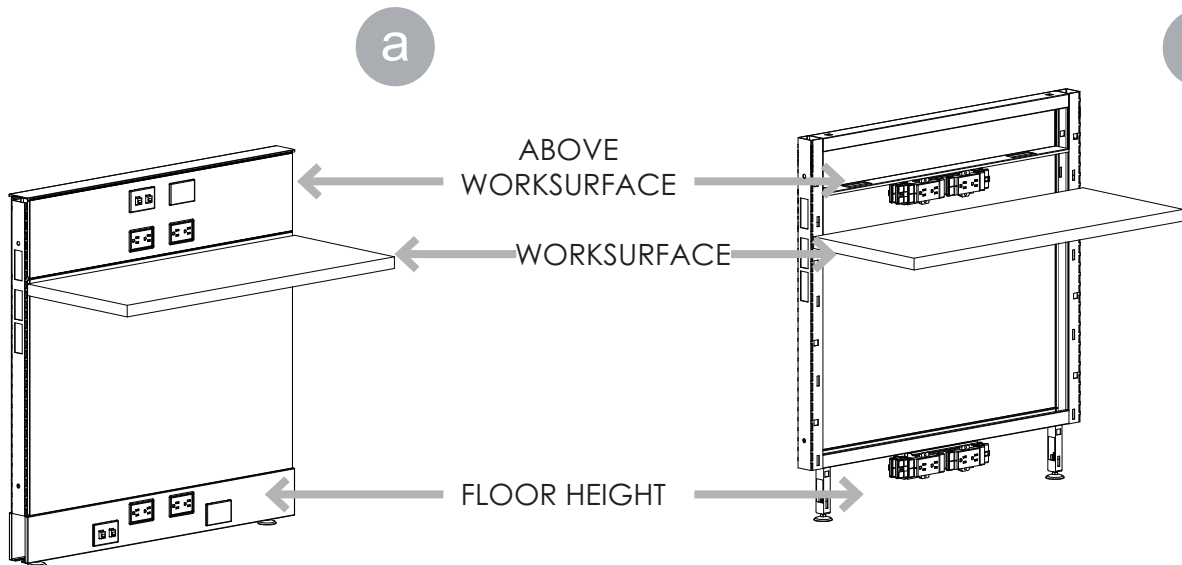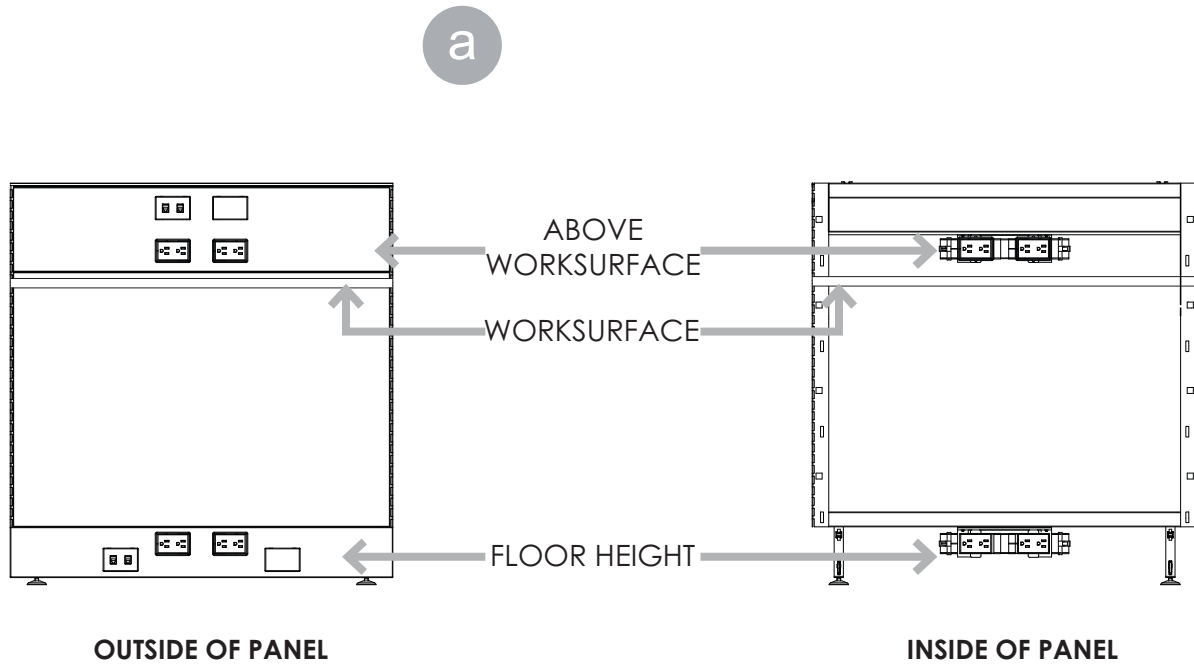
TREMAIN®
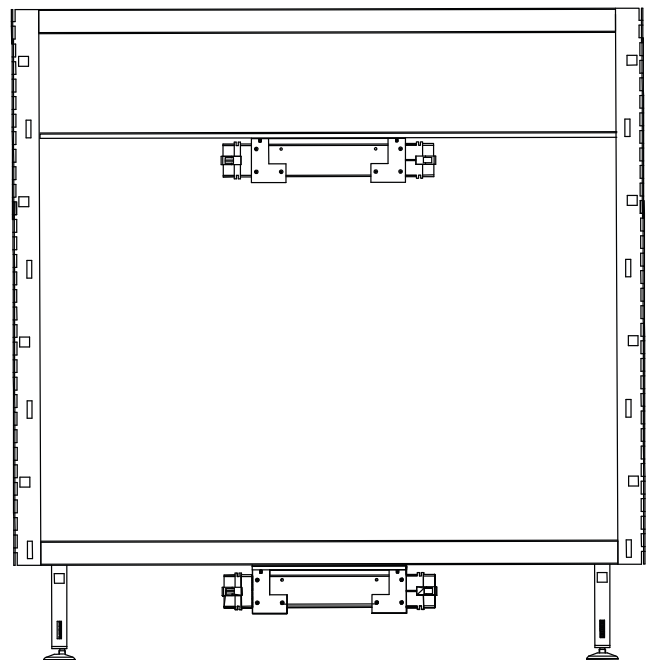
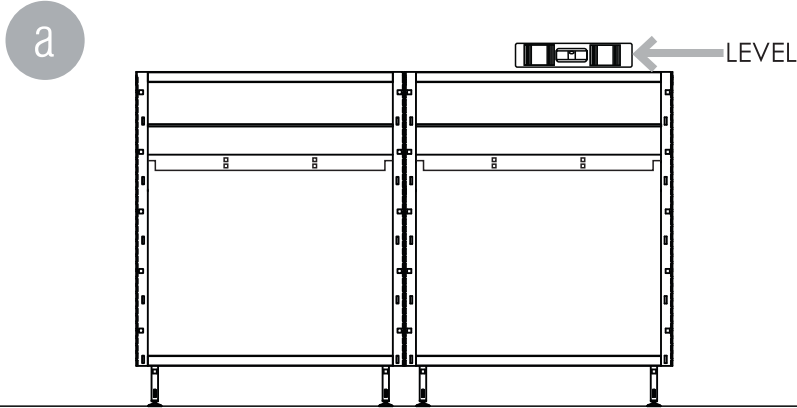# Installing the Tile Converters on the Panel Frame

- Before installing the jumpers or voice and data cables, you will need to install the tile converters, these will give support to the structure and prevent tiles from deformation.

- The tile converters are placed in the grooves located in the metal frames, as shown in figure (a), (1) and (2).

Location of Power Connections in Panels

a

b

ABOVE WORKSURFACE

WORKSURFACE

FLOOR HEIGHT

OUTSIDE OF PANEL

INSIDE OF PANEL

a

b

ABOVE WORKSURFACE

WORKSURFACE

FLOOR HEIGHT

TREMAIN®

▶ Frame Leveling
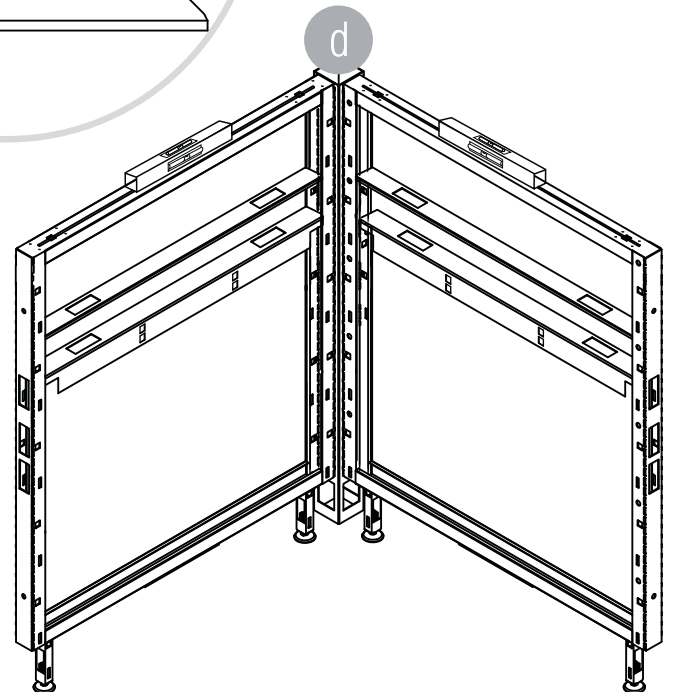
LEVEL

NOTE: The height of the panel is leveled by an adjustable height leveler at the bottom of the frame; that you can turn clockwise to add height or counter clockwise to reduce height of the frame.

NOTE: The level is placed on top of each frame to confirm that these are aligned with the floor, eliminating the existence of inclinations. View Image (a) and (d).
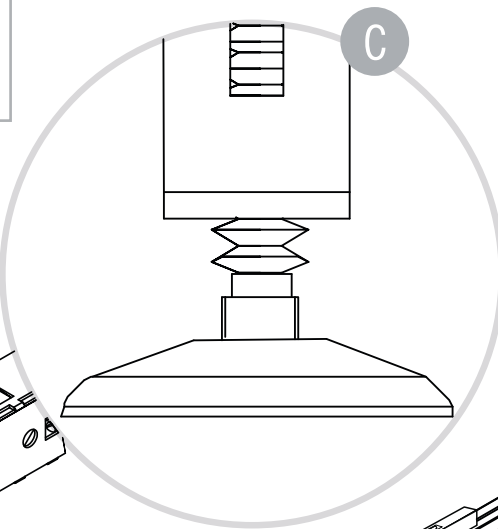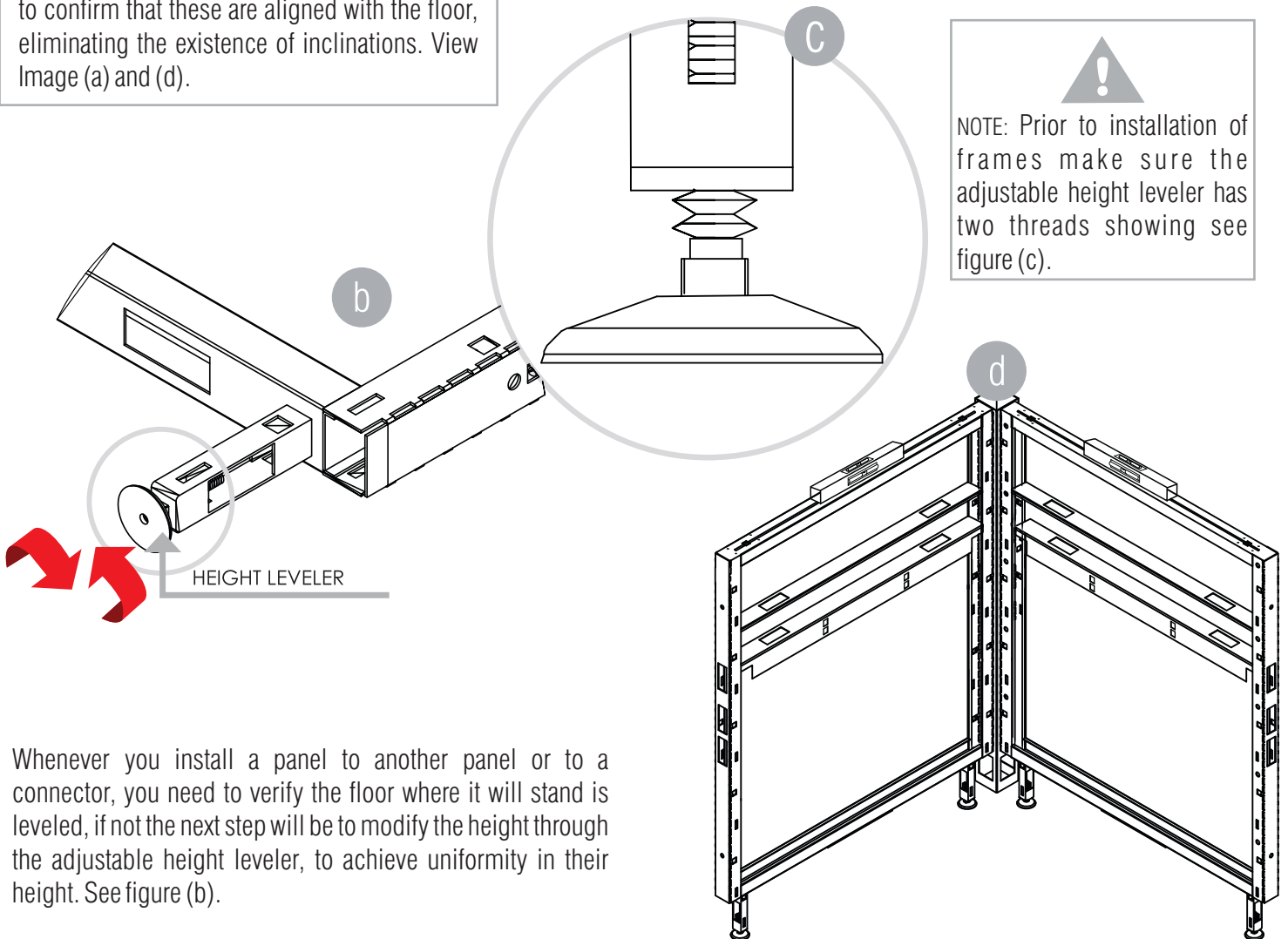
NOTE: Prior to installation of frames make sure the adjustable height leveler has two threads showing see figure (c).

HEIGHT LEVELER

- Whenever you install a panel to another panel or to a connector, you need to verify the floor where it will stand is leveled, if not the next step will be to modify the height through the adjustable height leveler, to achieve uniformity in their height. See figure (b).
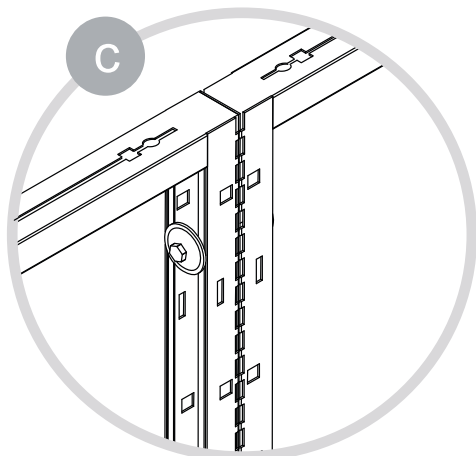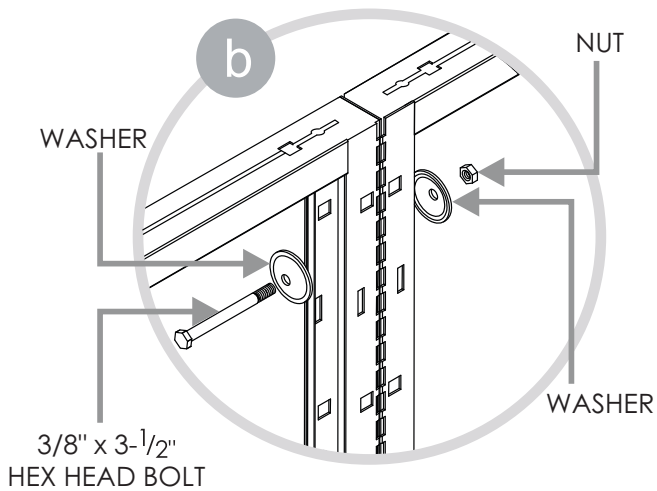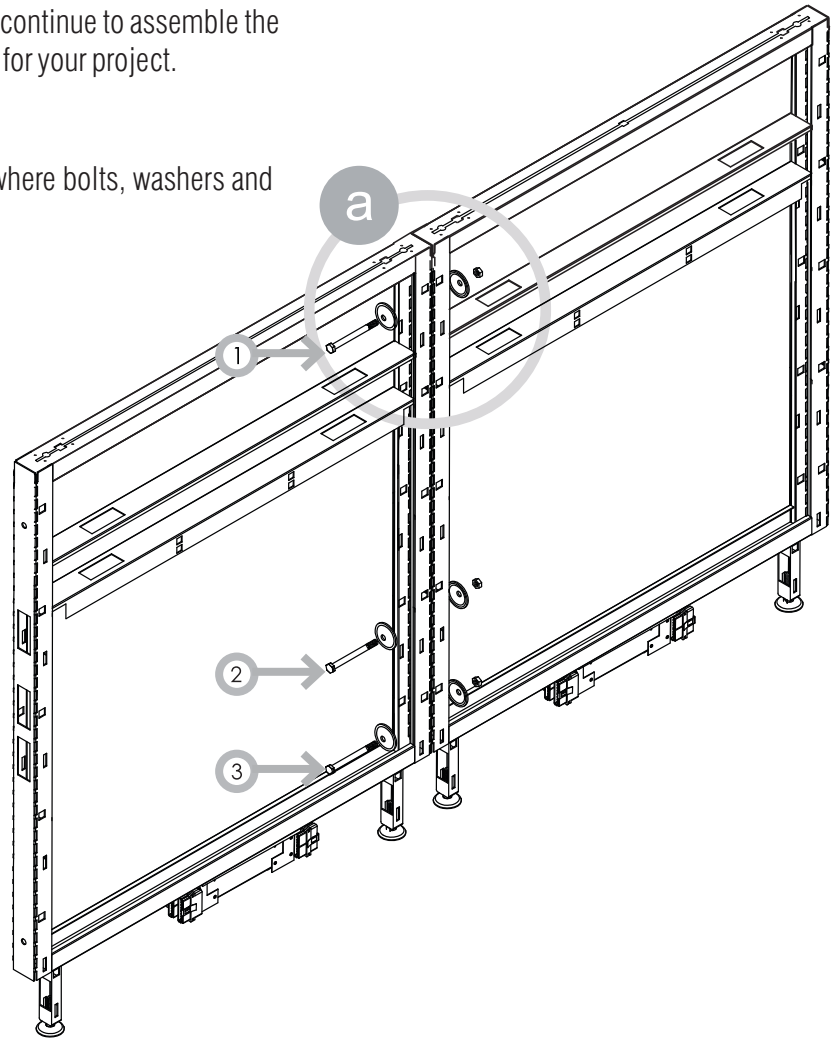
▶ Panel to Panel Installation

- Once you are finished assembling the harnesses, you can continue to assemble the frames together that will give you the work station structure for your project.

- Fig. (a) shows the order of the perforations on the frame where bolts, washers and nuts should be assembled together.

⚠

NOTE: For the installation you need:
3 » $\frac{3}{8}$" x 3-$\frac{1}{2}$" Hex Head Bolts
6 » 2" Washers
3 » $\frac{3}{8}$" Hex Nuts

The bolts are installed as shown in Fig. (a)
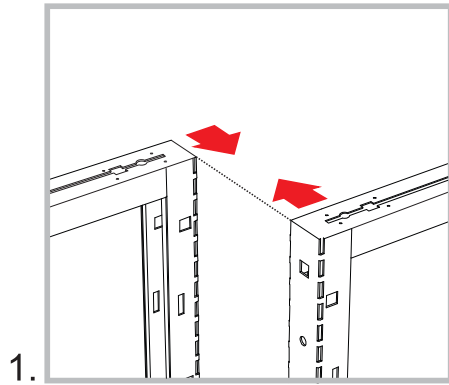
a

1
2
3

b

NUT

WASHER

WASHER

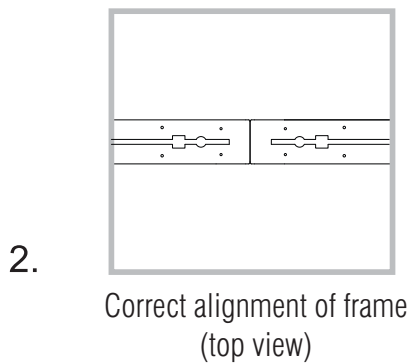3/8" x 3-$\frac{1}{2}$"
HEX HEAD BOLT

c

⚠

As shown in figure (b) it shows the required hardware for attaching frames together. The four pieces will give the proper support for your installation.

▶ Panel Alignment

1.

1. The panel frames must be aligned horizontally as shown in figure 2.

2.

Correct alignment of frame
(top view)

2. Panel frames should be aligned frame to frame as shown.

3.
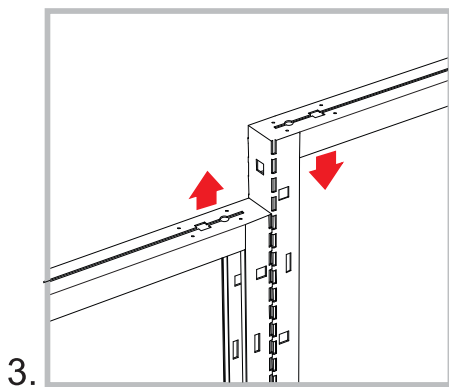
3. The panel frames must be aligned vertically as shown in figure 4.

4.

Correct alignment of
frame
(front view)
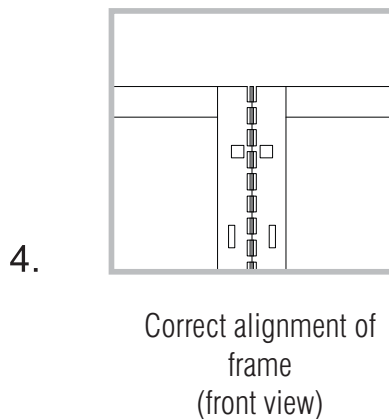
4. The panel frames should be aligned by the frame bracket slots.

⚠

NOTE: For proper installation you must make sure the panel frames are correctly aligned before installing and adjusting the panel connectors.

TREMAIN®

▪The connectors are used when the diagram indicates the location of a change of panel direction, these are fixed in the same order as the "Panel – Panel Installation".

* The connector has a fastening system by means of threaded rivets. No additional nuts needed.

⚠

NOTE: Beltline Power jumpers should be passed from panel frame through connector to adjacent panel at 90° connections prior to attaching connector to panel frames.

c

CONNECTOR

FRAME

b

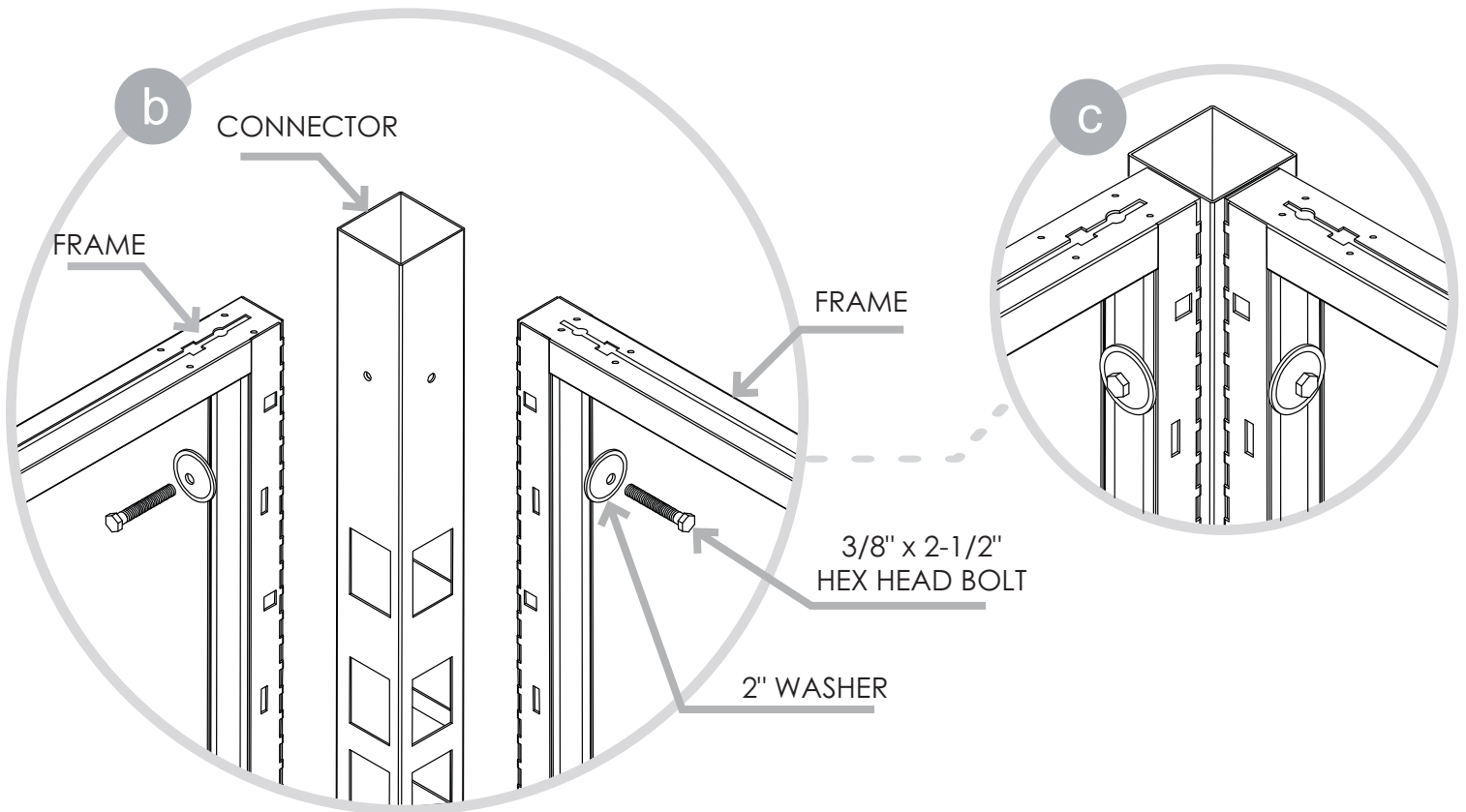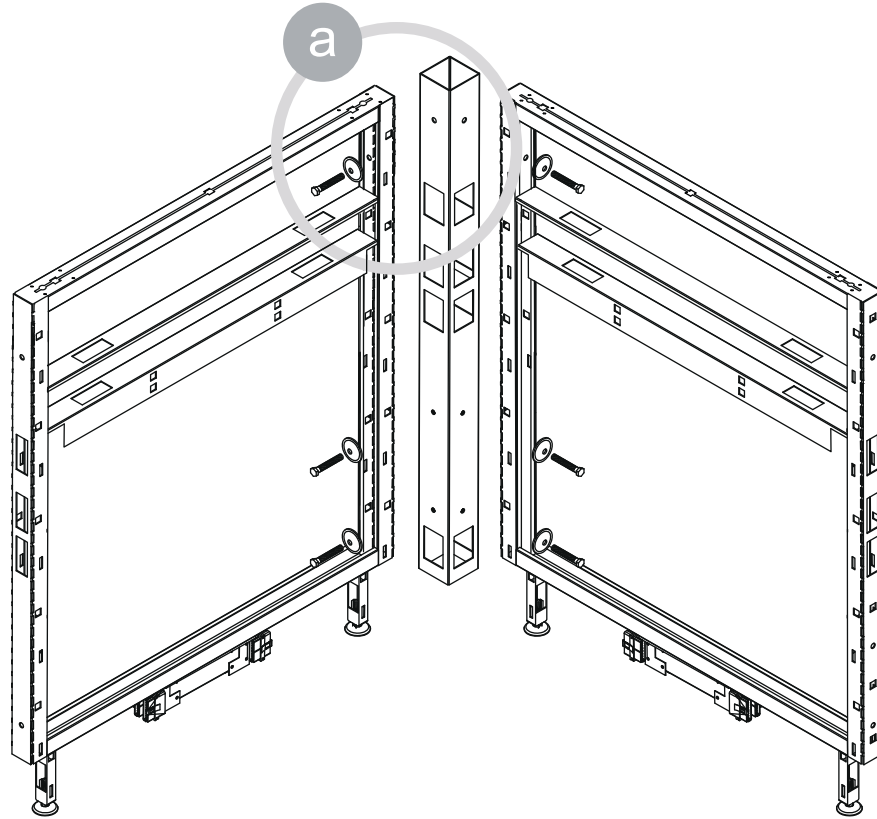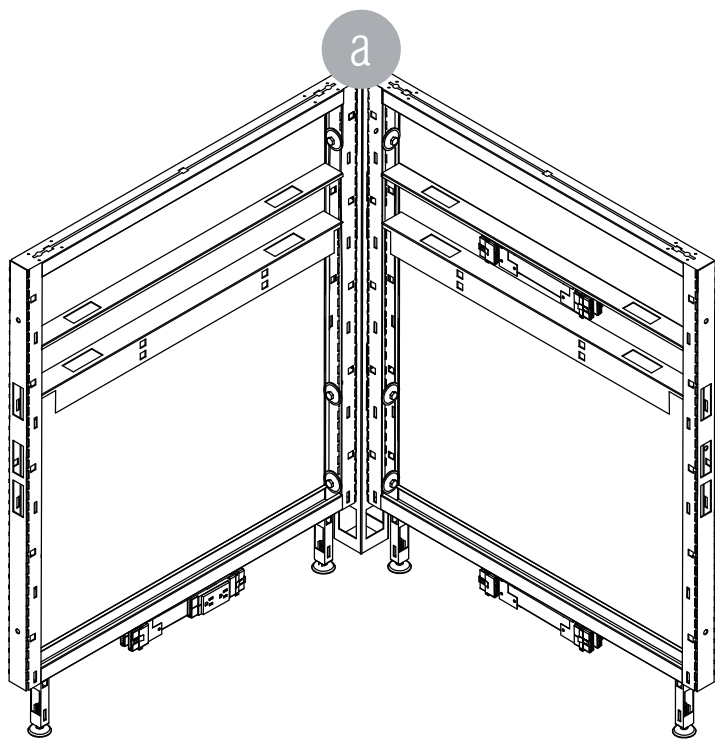3/8" x 2-1/2"
HEX HEAD BOLT

2" WASHER

⚠
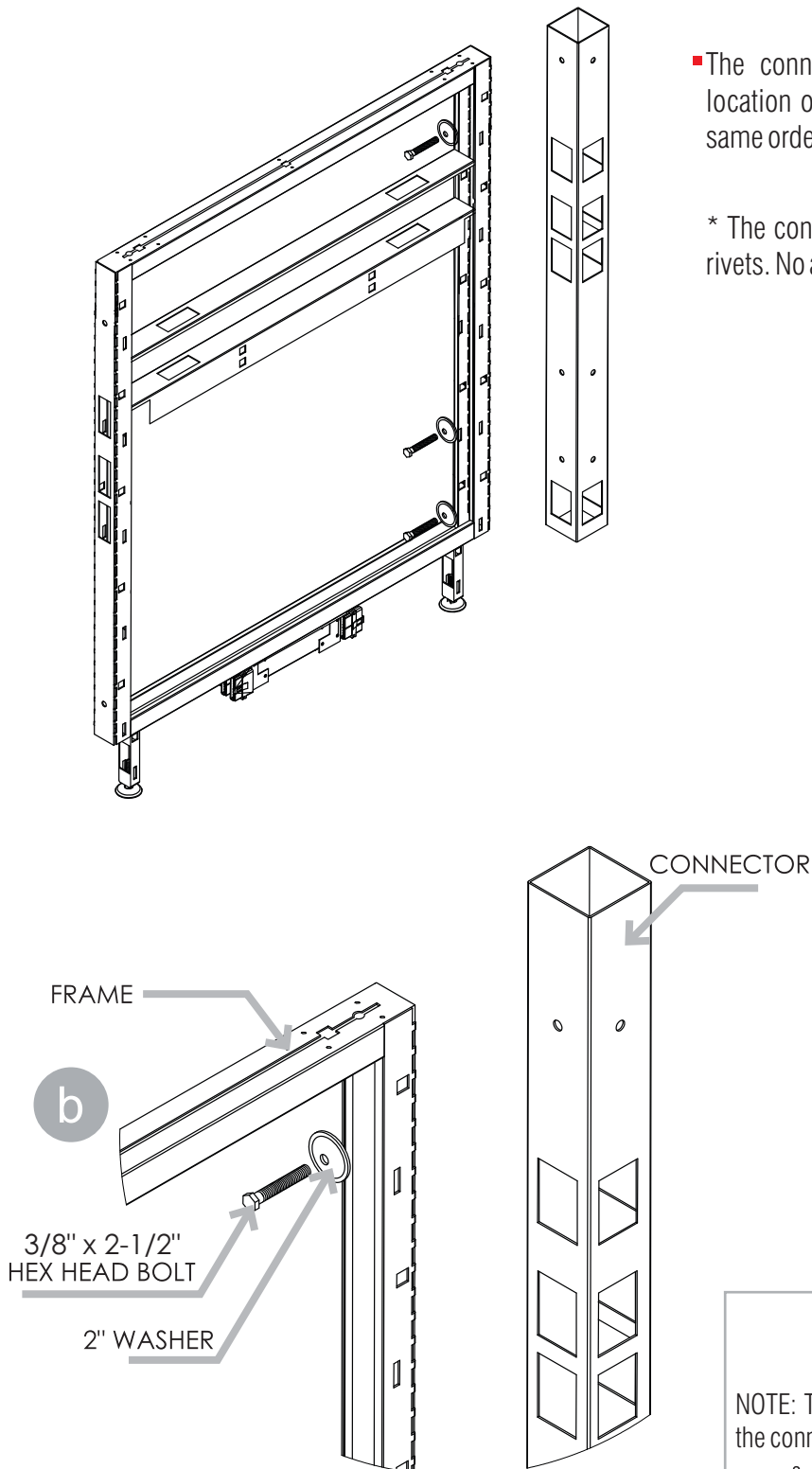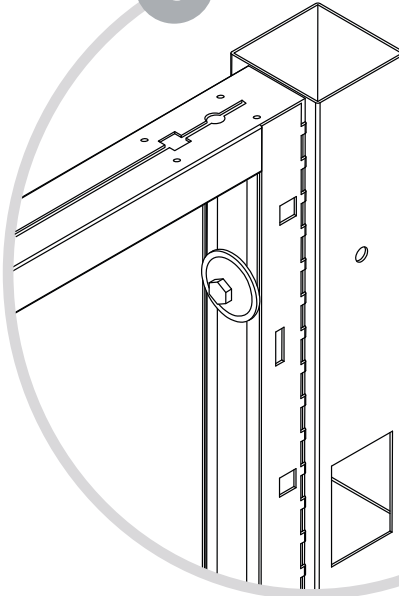
NOTE: To unite and fix the panel to the connector, you will use:

3» $^3/_8$" x 2-$^1/_2$" Hex head bolts

3» 2" Washers

Panel - Connector - Panel Installation

a

b

CONNECTOR

FRAME

c

FRAME

3/8" x 2-1/2"
HEX HEAD BOLT

2" WASHER

Installation of Receptacles in Harnesses

- After installing frames, it is required to complement each one of them with their components, starting with the power receptacles, these will be connected to the harnesses previously prepared on the frames.

- Recall the harnesses are located at the bottom of the frame or at the beltline area of the frame. This will be where to install receptacles.

#10-16 x 5/8" screw
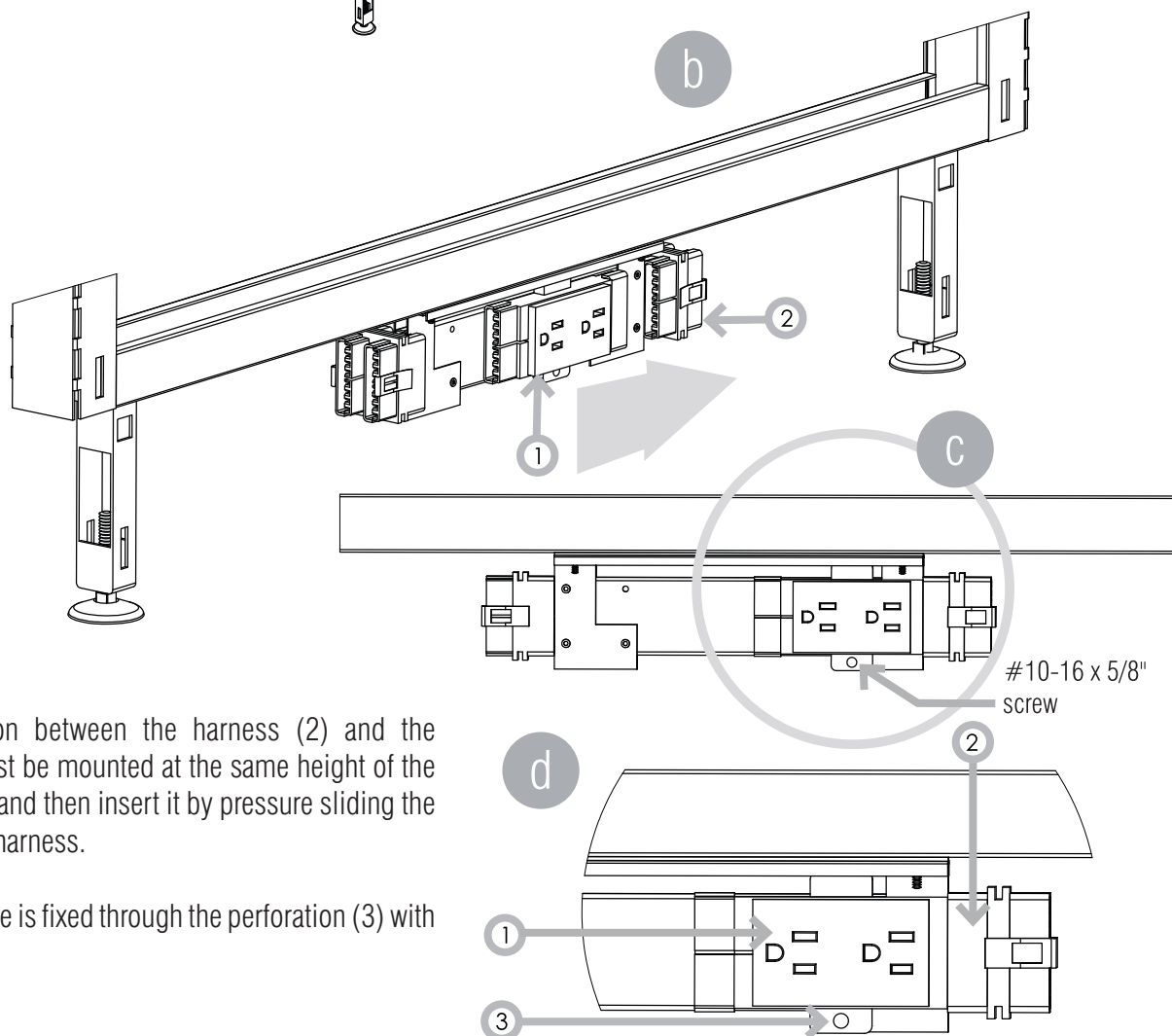
- For correct installation between the harness (2) and the receptacle (1) this must be mounted at the same height of the inputs for connection, and then insert it by pressure sliding the receptacle inside their harness.

- After that, the receptacle is fixed through the perforation (3) with a #10-16 x 5/8" screw.

▸ Jumper Connections

- When the frames have been assembled you can proceed to install the wiring that feeds energy to the receptacles that were placed before. See Image (a).

- For wiring installation, you will need the jumpers; their function is to guide the electrical energy through the frames. View Fig. (b)

- The jumpers have terminals that are connected to feed receptacles with a power line providing energy to the work area. See Image (d).
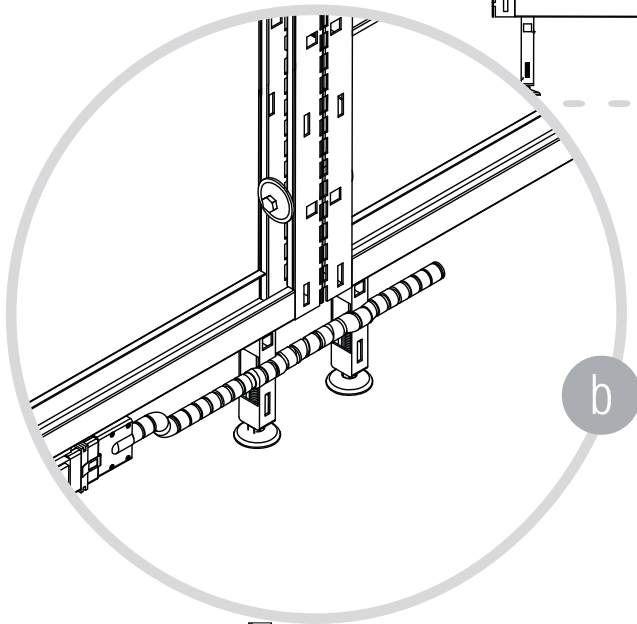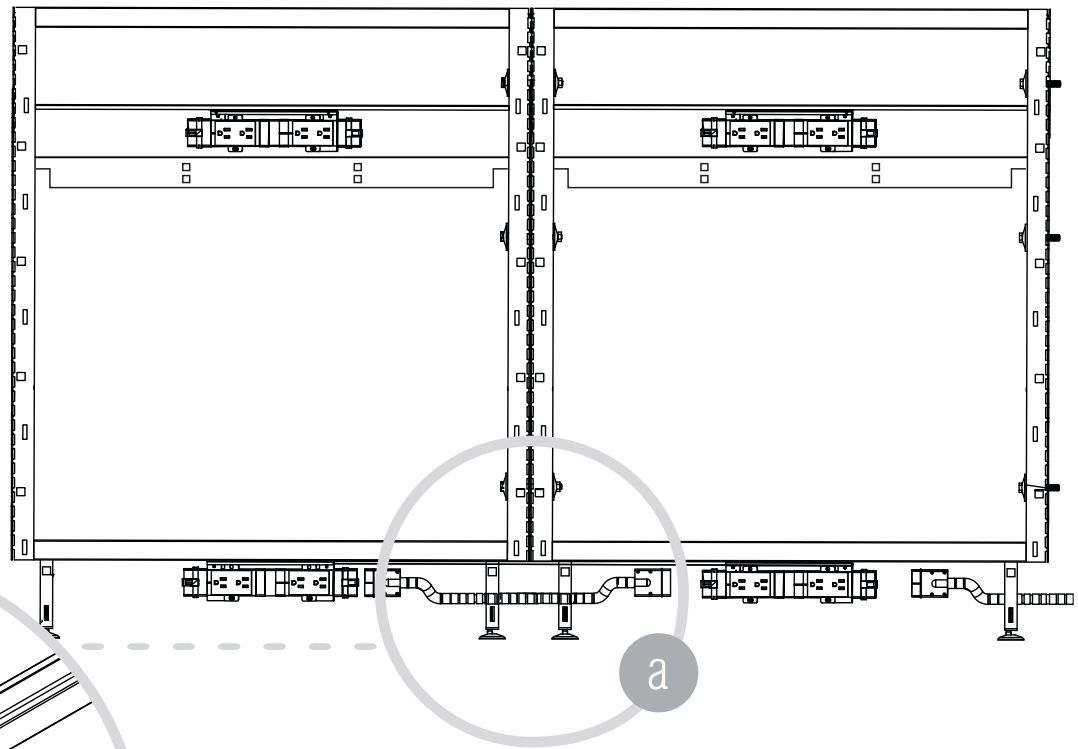

JUMPER

RECEPTACLE
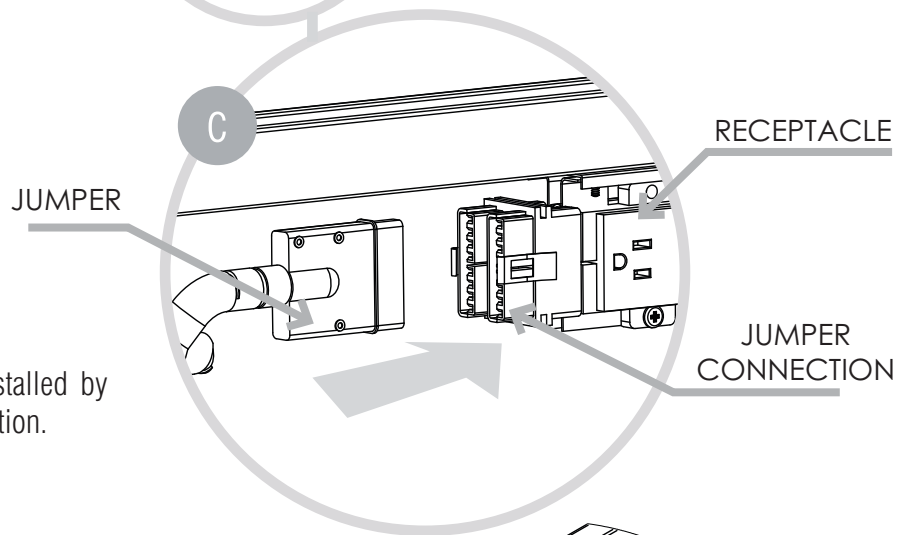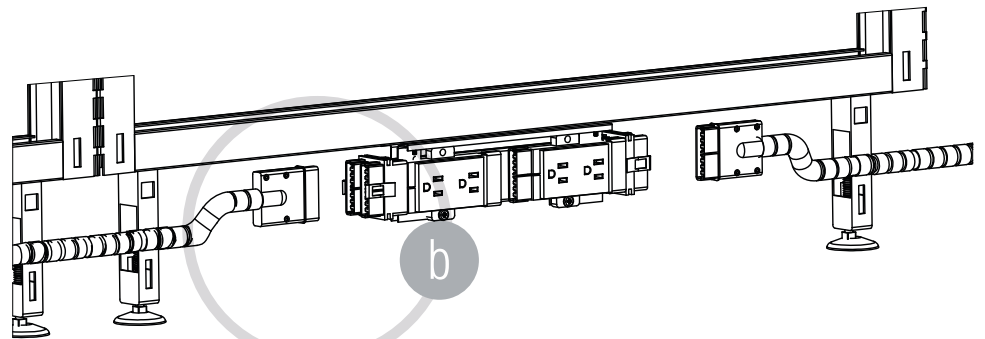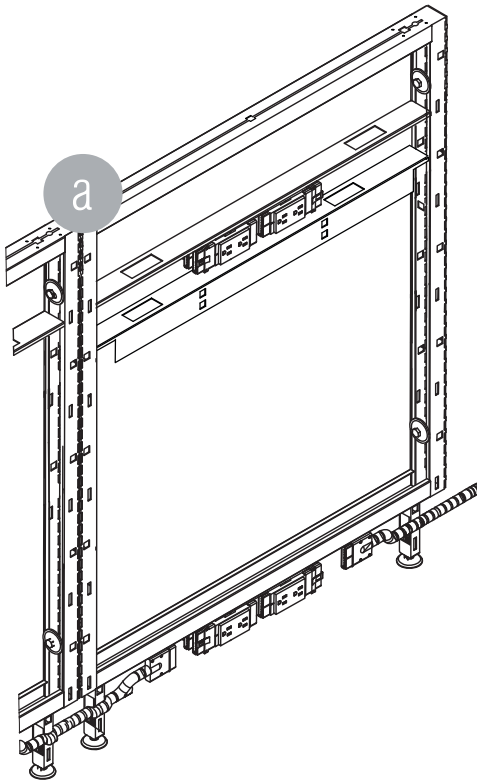
JUMPER
CONNECTION

- Figure (c) indicates that the jumper is installed by inserting the terminal into the jumper connection.

RECEPTACLE

JUMPER
CONNECTION
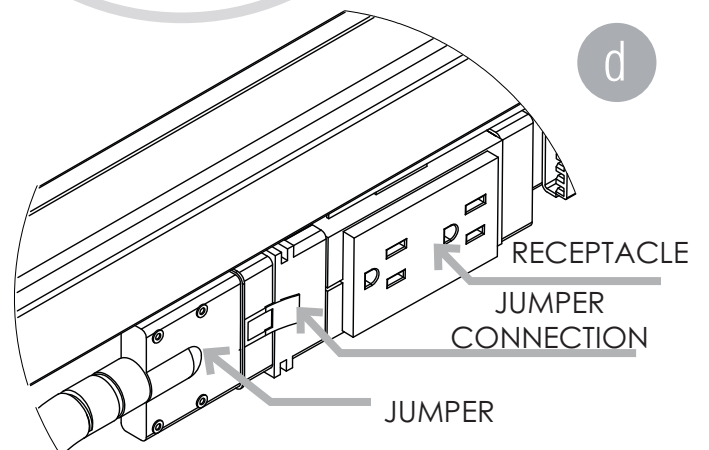
JUMPER

Harness - Jumper - Harness Connections

- When you connect a jumper to the harness, you can see how the electrification communicates from frame to frame, with this your electrical installation will be ready. As shown in image (a).

- Figure (b) shows how the jumpers are communicated between bases running on the outside of the frame support.

a

b

NOTE: Do not run jumper through frame support.

c

FRAME

JUMPER

JUMPER

FRAME
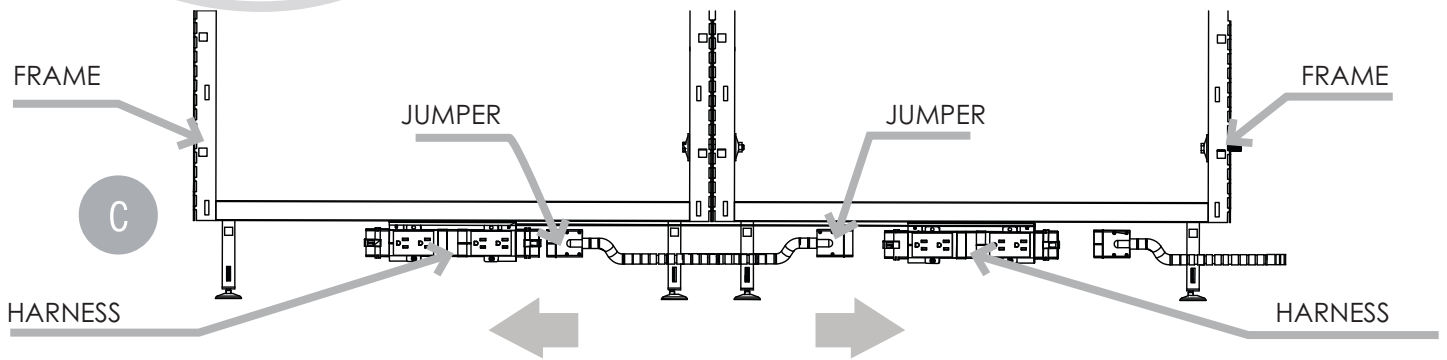
HARNESS

HARNESS

NOTE: A jumper is an extension of electrification to communicate frame to frame and create a network. Figure (c) shows the connection of two harnesses through a jumper.

TREMAIN®

Jumper Connections with Different Route
BELTLINE LEVEL

a

b

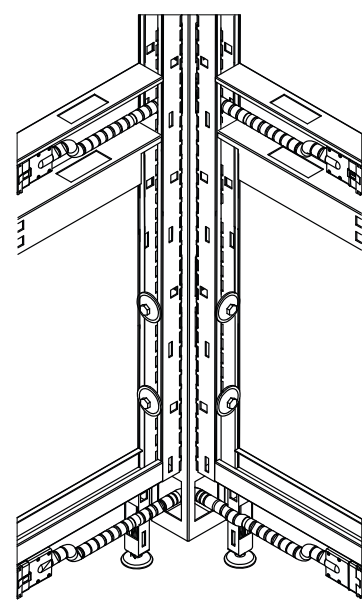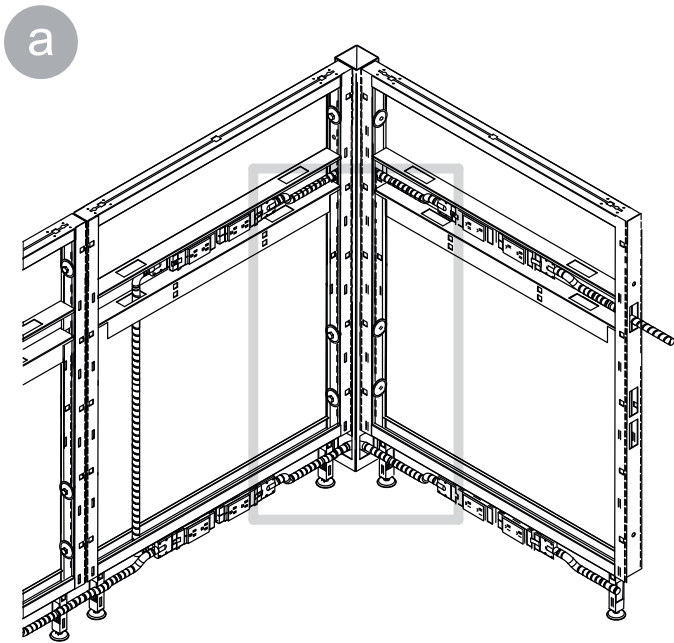- Figure (b) illustrates how the wiring makes its route inside the frames and through the connector to connect to the next frame and continue with the electrical current line.

- Sometimes in assembling jumpers you can find variations in the courses, and may find you need to connect the wiring another way.

- If required to electrify at a different height or different position, the harnesses are prepared to receive up to two jumpers on each side, this allows you to make the configuration that is needed. View Image (d).

NOTE: BELTLINE ONLY - Beltline Power jumpers should be passed from panel frame through connector to adjacent panel at 90º connections prior to attaching connector to panel frames.

c

d
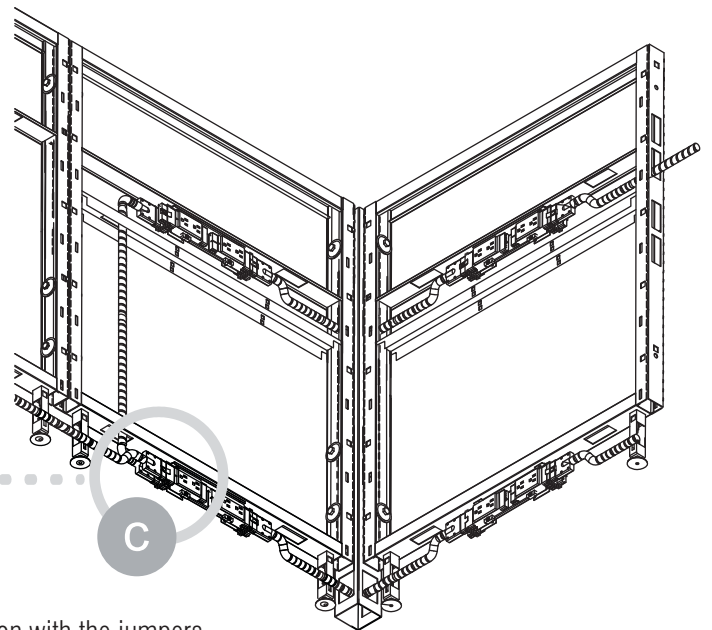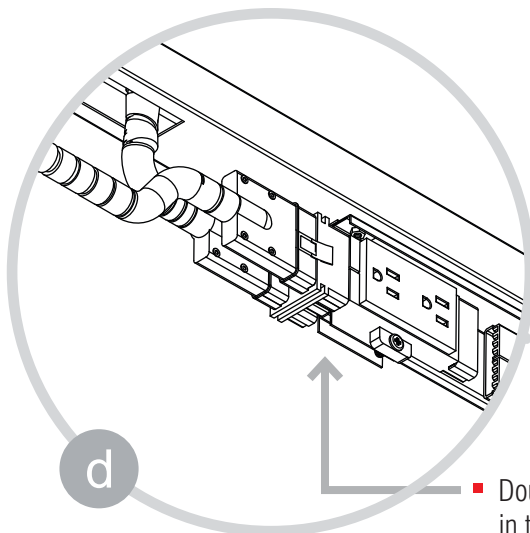
- Double connection with the jumpers in the harness.

TREMAIN®

▶ Preparing Voice and Data Wiring Installation
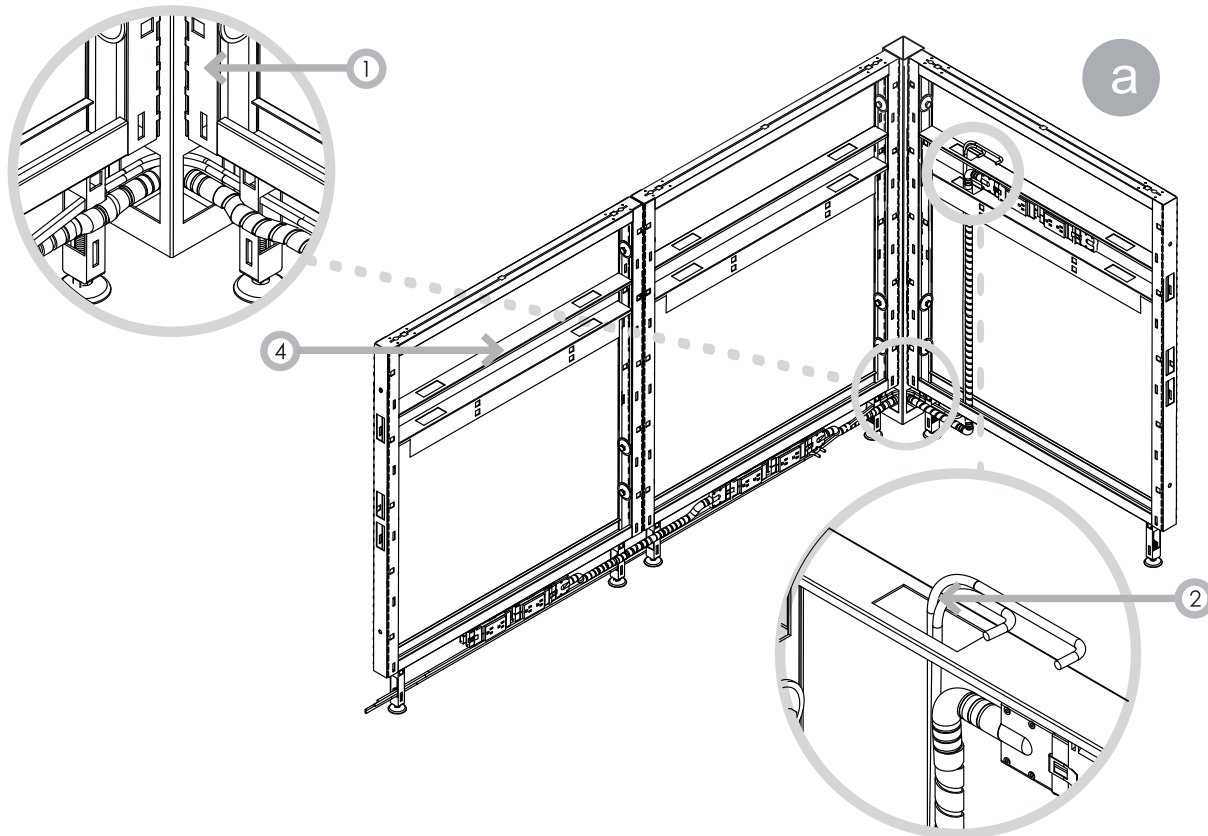
- To integrate voice and data cables, you need to use the same pattern of connection like the jumpers, you can guide them through the drilled frames of the same spaces used to bring energy to different electrical sockets (1).

- In figure (2) you can see two cable preparations for voice and data, unlike the receptacles, these are located in the upper part of the harness bridge.

⚠
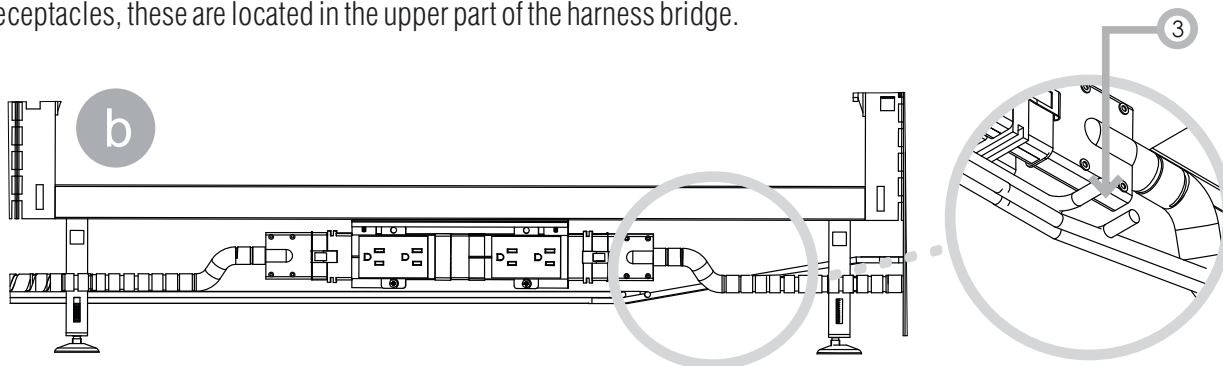
The connections of voice and data that are in the raceway need to be installed at the same height as the receptacles (3), unlike the beltline preparation inside the frame (4), the cable connections for voice and data are installed above the receptacles, like in figure (2).

TREMAIN®

- 8 wire / 4 Circuit.

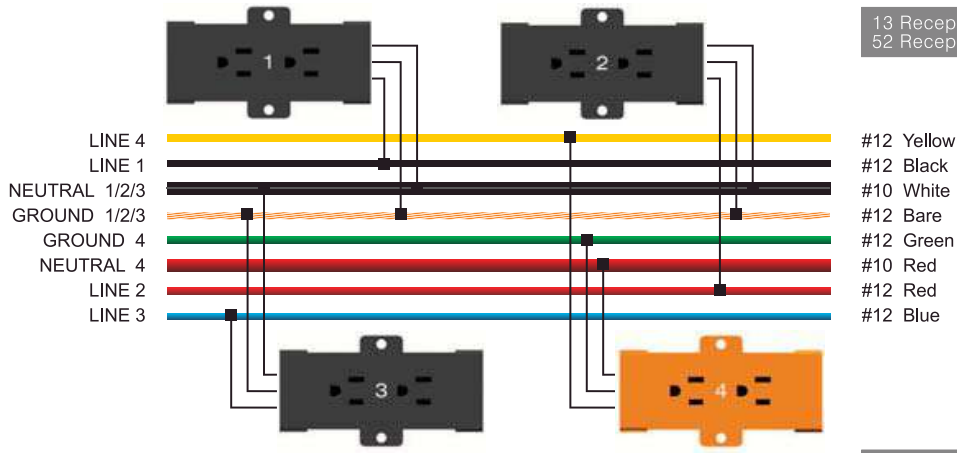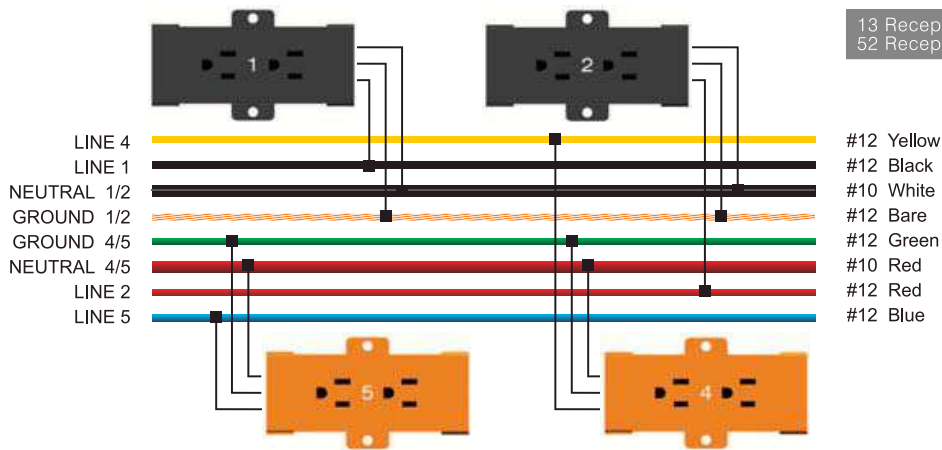| 3 Utility + 1 Dedicated | 3 Normales + 1 Dedicado |

13 Receptacles per line.
52 Receptacles per infeed.

LINE 4 — #12 Yellow
LINE 1 — #12 Black
NEUTRAL 1/2/3 — #10 White
GROUND 1/2/3 — #12 Bare
GROUND 4 — #12 Green
NEUTRAL 4 — #10 Red
LINE 2 — #12 Red
LINE 3 — #12 Blue

13 Receptáculos por línea.
52 Receptáculos por entrada.

| 2 Utility + 2 Dedicated | 2 Normales + 2 Dedicados |

13 Receptacles per line.
52 Receptacles per infeed.

LINE 4 — #12 Yellow
LINE 1 — #12 Black
NEUTRAL 1/2 — #10 White
GROUND 1/2 — #12 Bare
GROUND 4/5 — #12 Green
NEUTRAL 4/5 — #10 Red
LINE 2 — #12 Red
LINE 5 — #12 Blue

13 Receptáculos por línea.
52 Receptáculos por entrada.

| Cable Cross Section | Corte transversal de cableado |

120 VAC system rated at 20A
Receptacles are 20A

12 ga. BLACK - Line 1
12 ga. RED - Line 2
12 ga. BARE - Ground 1/2/3
12 ga. YELLOW - Line 4

10 ga. WHITE - Neutral 1/2/3
12 ga. GREEN - Ground 4/5
12 ga. BLUE - Line 3/5
10 ga. RED - Neutral 4/5
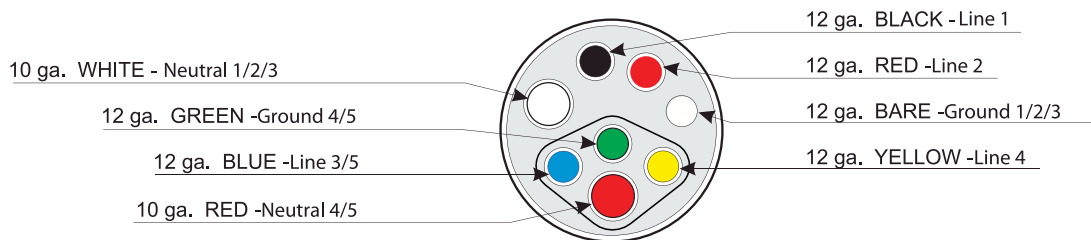
Sistema de corriente alterna variable, 120 volts y contactos eléctricos de 20 amperes.

MEETS NEXT CERTIFICATIONS

Power Feed Installation

Figure (a) shows the power entry feed installed into the harness using the same application as you would for a receptacle. Harness to harness connection figure (b). You can also jump from raceway harness to beltline harness passing a jumper through a connector or the side of a frame as shown in figure (c).
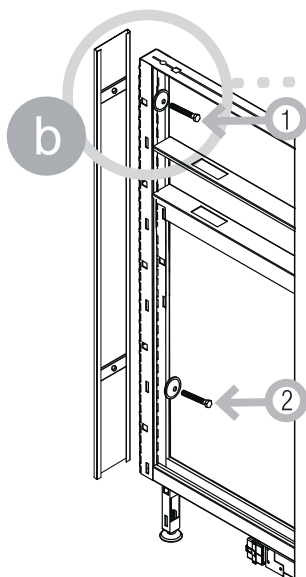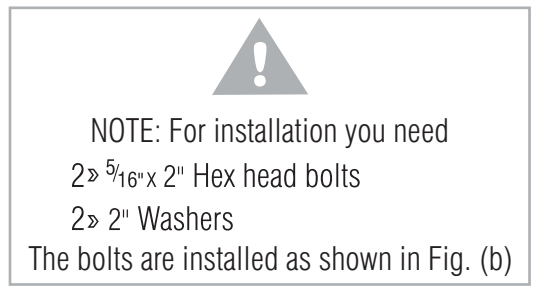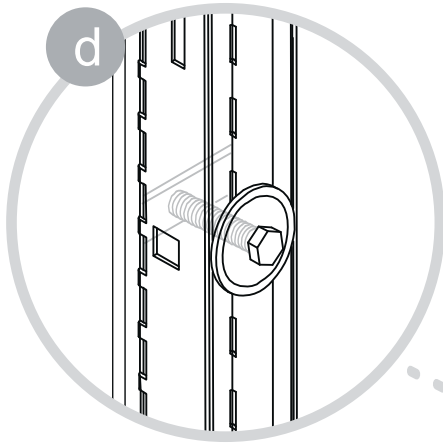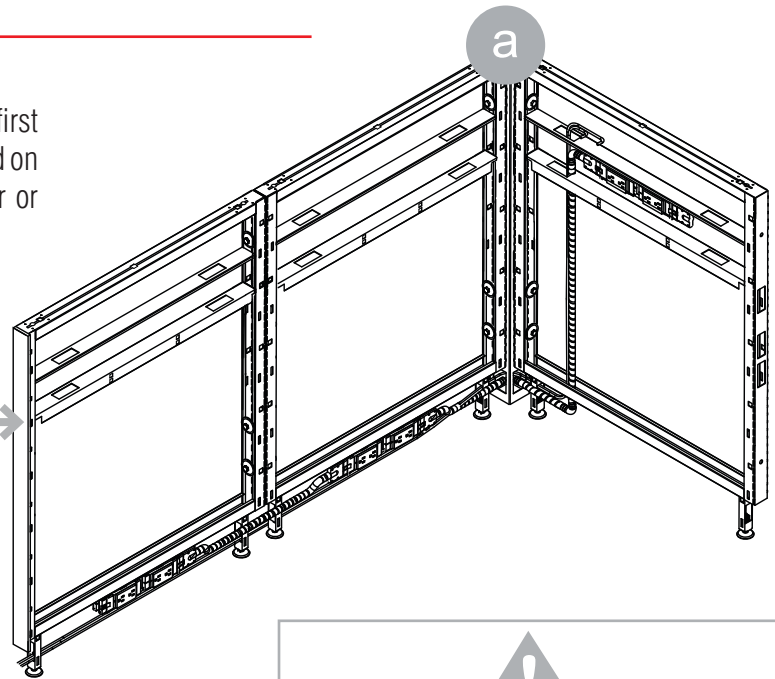
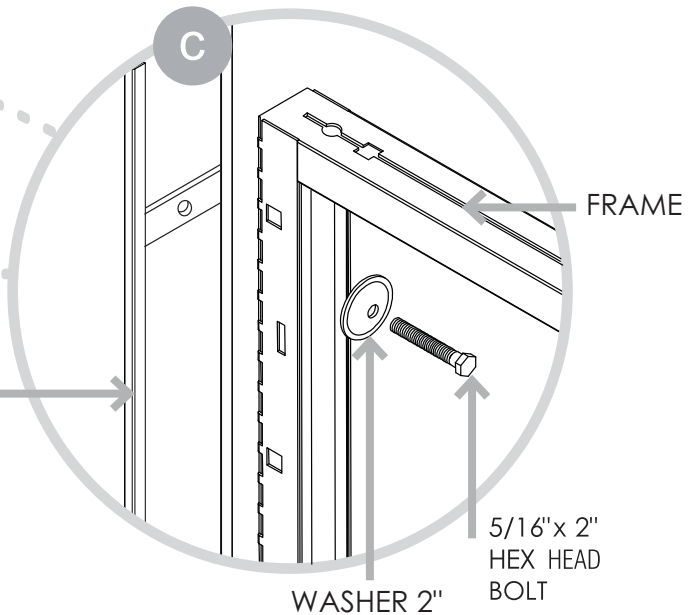⚠️ NOTE: The pathway for jumpers also applies to Voice and Data wiring.
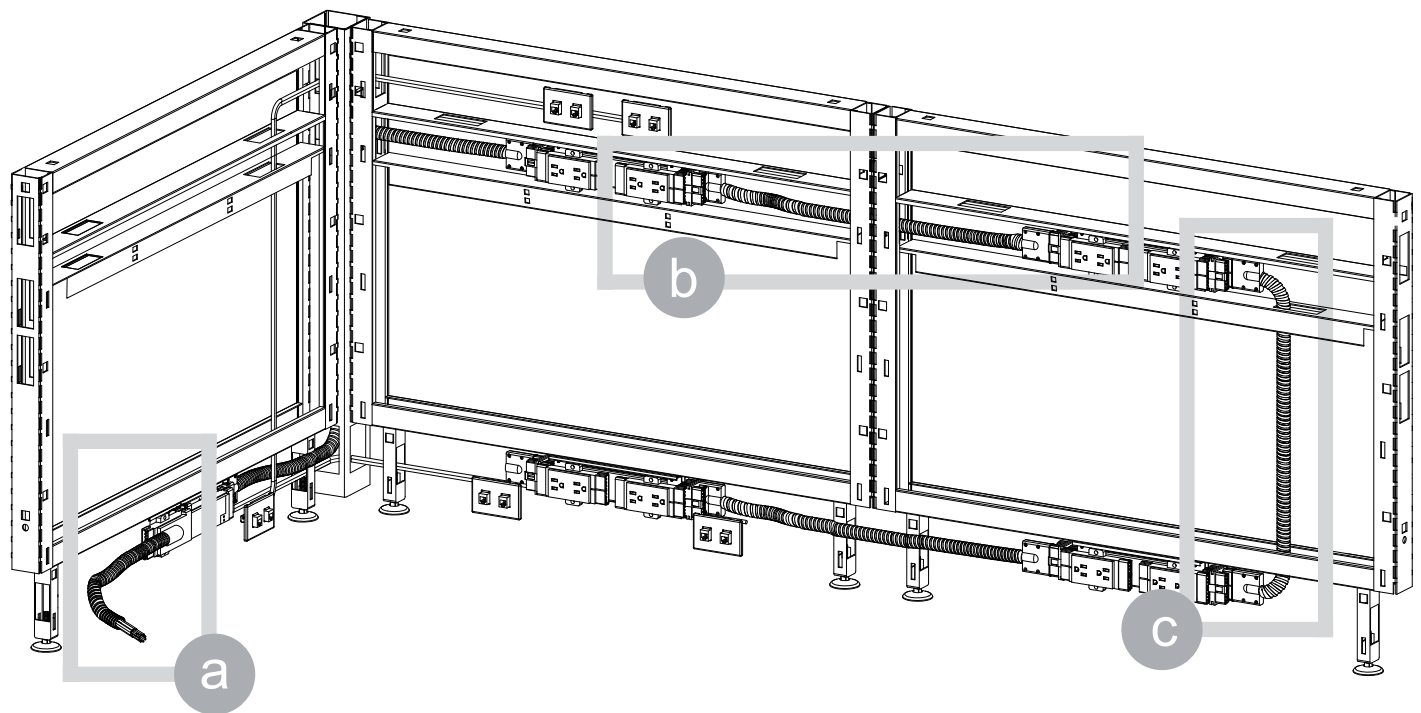
▪ To place the tiles that will cover the metal structure, first you need to install the end caps. These will be installed on the end of the frames not connecting to a connector or another frame.

a

⚠

NOTE: Repeat this step for the end cap on a stacking frame.

END CAP ON THE FRAME

d

⚠

NOTE: For installation you need
2» $5/16$" x 2" Hex head bolts
2» 2" Washers
The bolts are installed as shown in Fig. (b)

c

FRAME
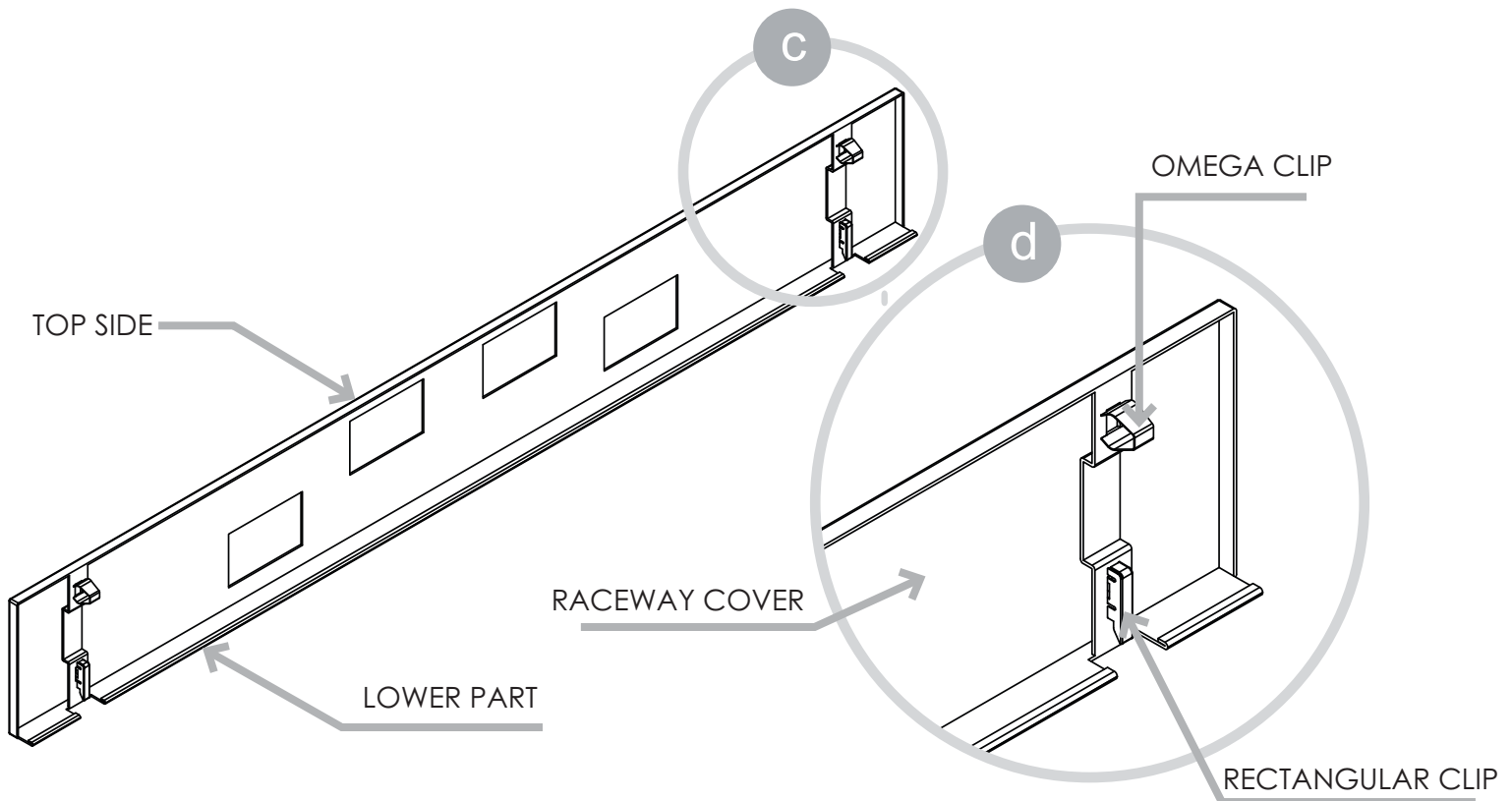
b

1

END CAP

2

5/16" x 2" HEX HEAD BOLT

WASHER 2"

▪ First, you need to guide the bolts through the perforations that coincide with the inserts united to the plaques of the end cap to finally secure the cap to the metal structure. The bolts are installed as shown in Figure (b).
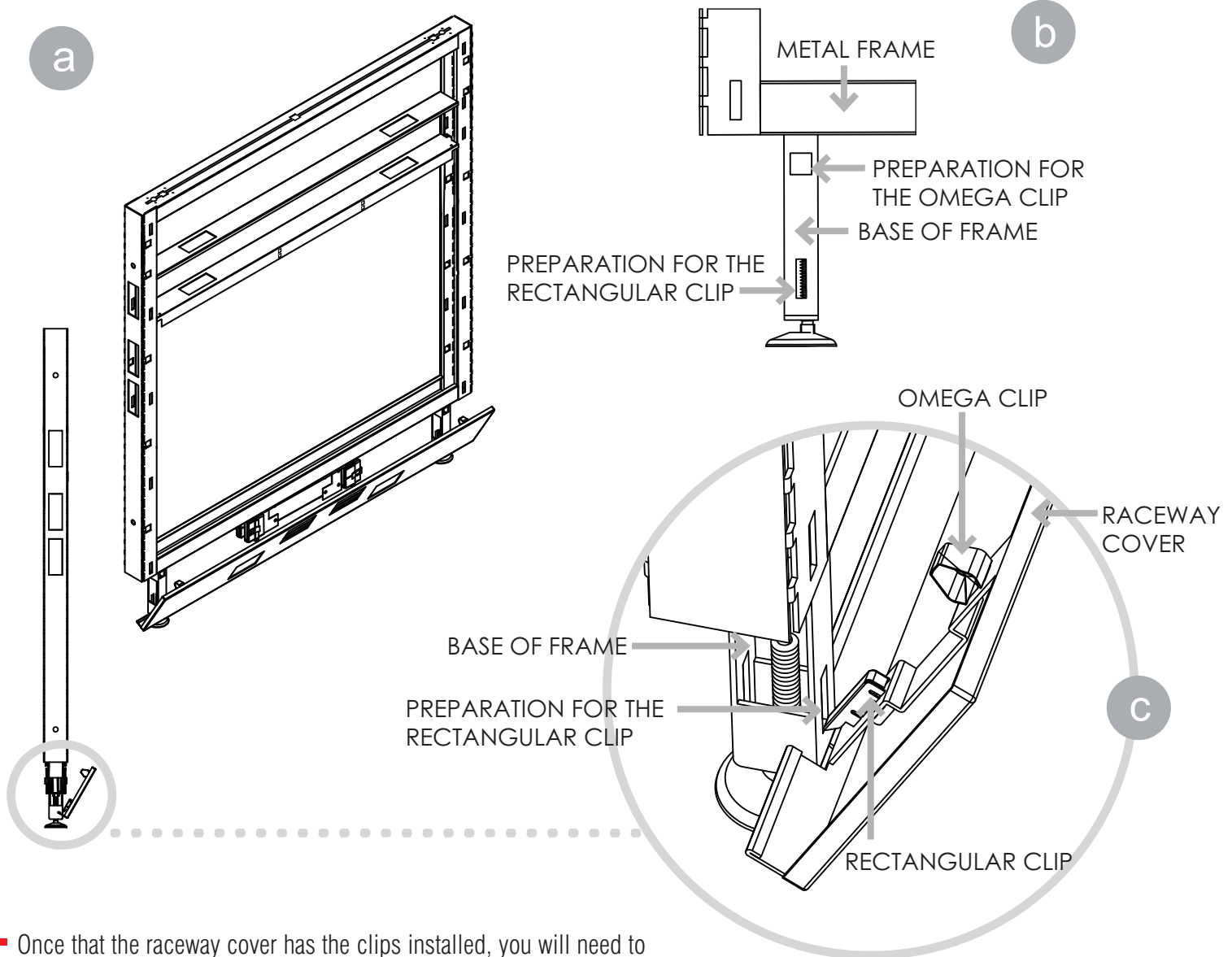
Installation of Clips for the Raceway Cover

- To cover the frames with the raceway cover, you need to assemble the raceway cover with its clips, which maintain and hold a correct position for the raceway cover on the structure. The order of assembly is as shown on figures (a) and (b).
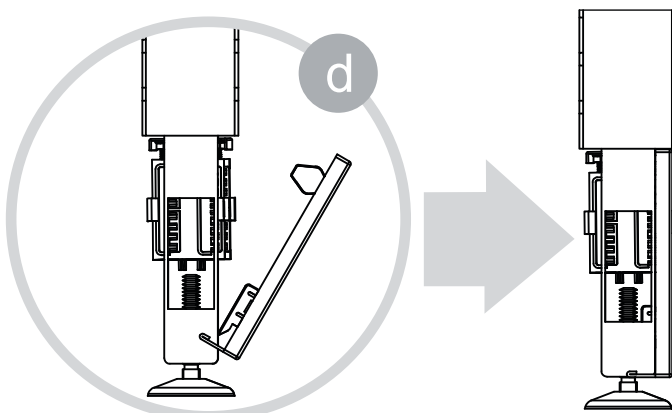
OMEGA CLIP

RACEWAY COVER

RECTANGULAR CLIP

a

b
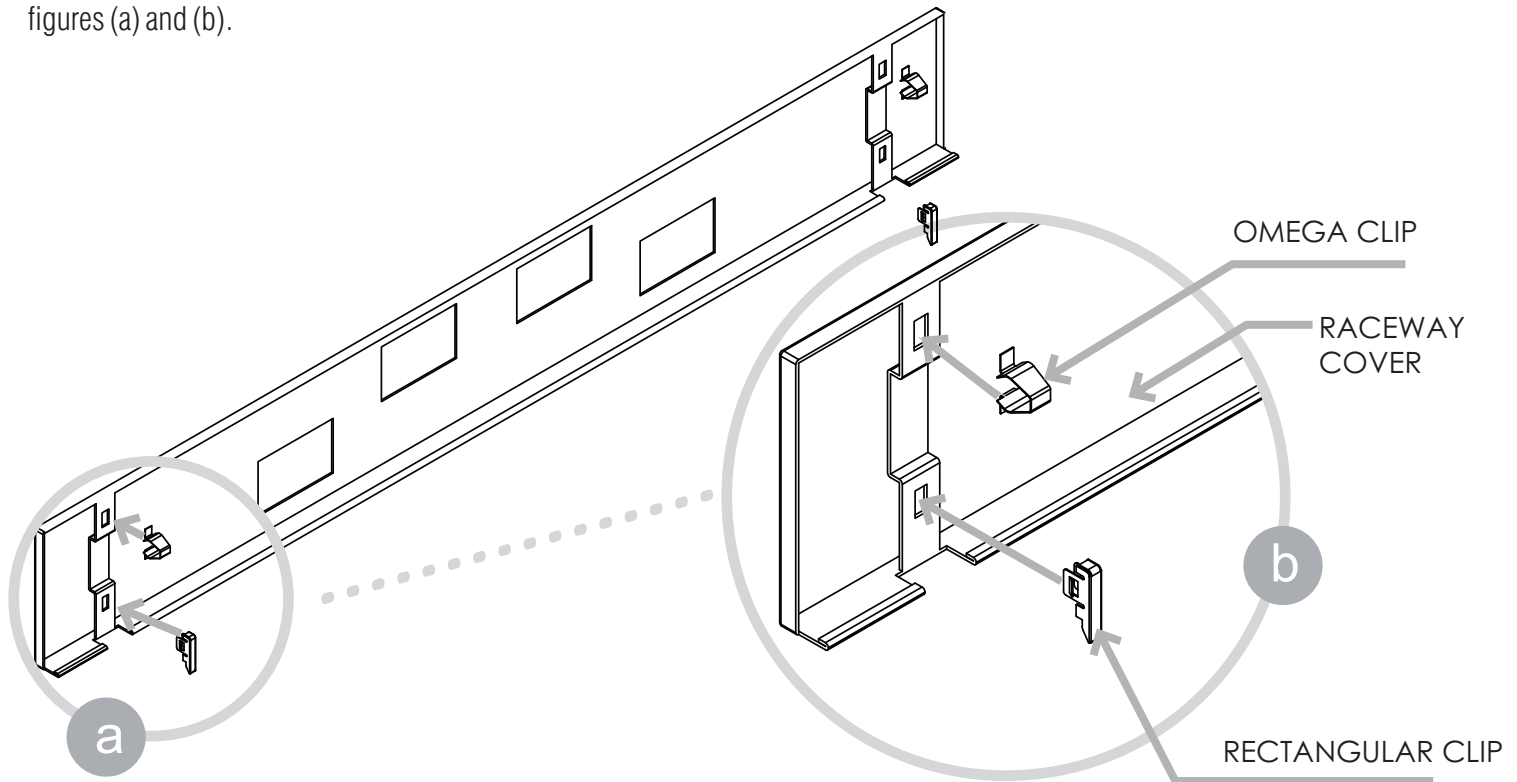
- Figure (c) and (d) shows the clips installed on its corresponding grooves.

c

d

OMEGA CLIP

TOP SIDE

RACEWAY COVER

LOWER PART

RECTANGULAR CLIP

Installing Raceway Covers on the Frame

a

b

METAL FRAME

PREPARATION FOR
THE OMEGA CLIP

BASE OF FRAME

PREPARATION FOR THE
RECTANGULAR CLIP

OMEGA CLIP

RACEWAY
COVER

BASE OF FRAME

PREPARATION FOR THE
RECTANGULAR CLIP
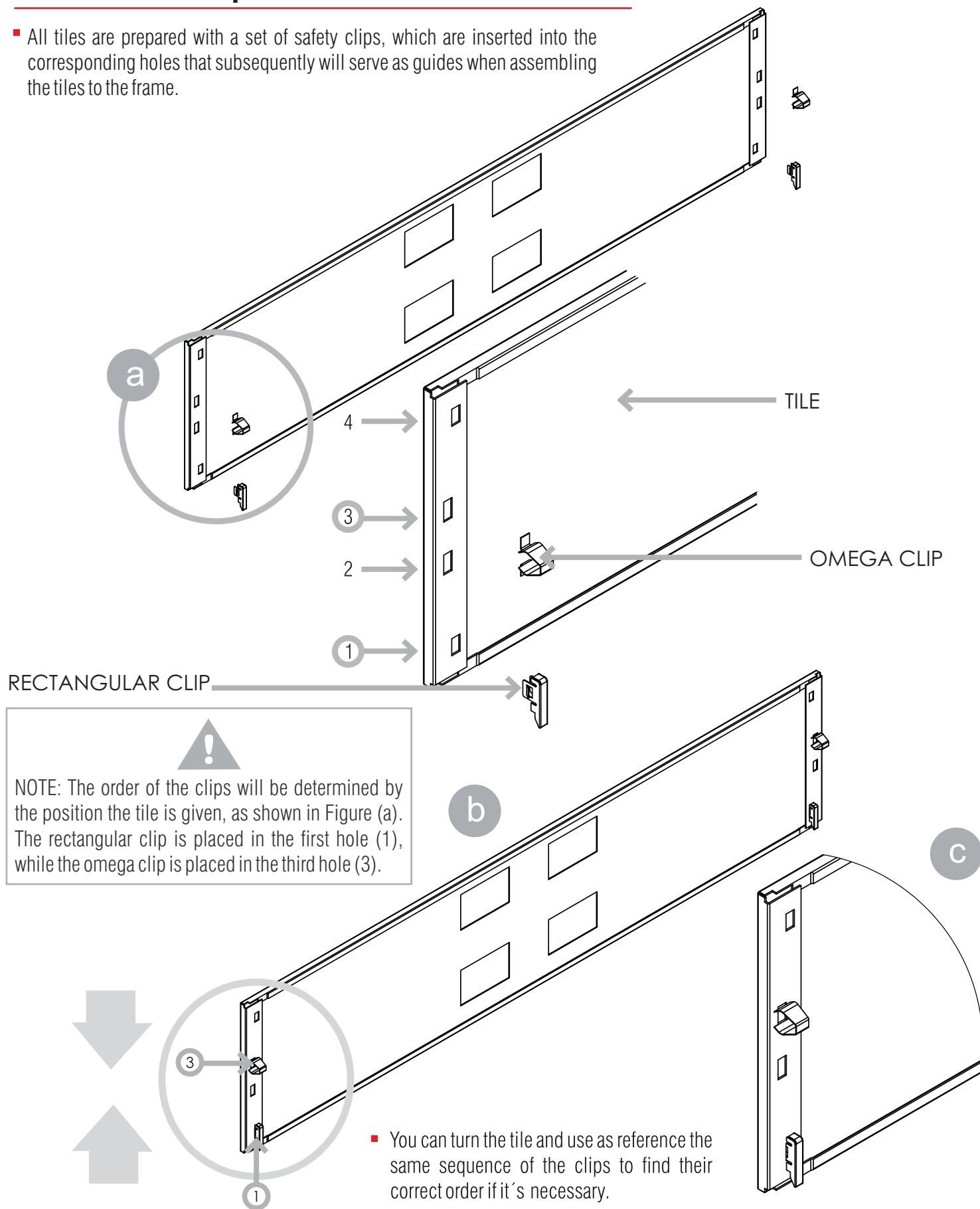
c

RECTANGULAR CLIP

- Once that the raceway cover has the clips installed, you will need to affix the raceway cover to the frame base, using the holes to assemble the raceway cover to the frame (c).
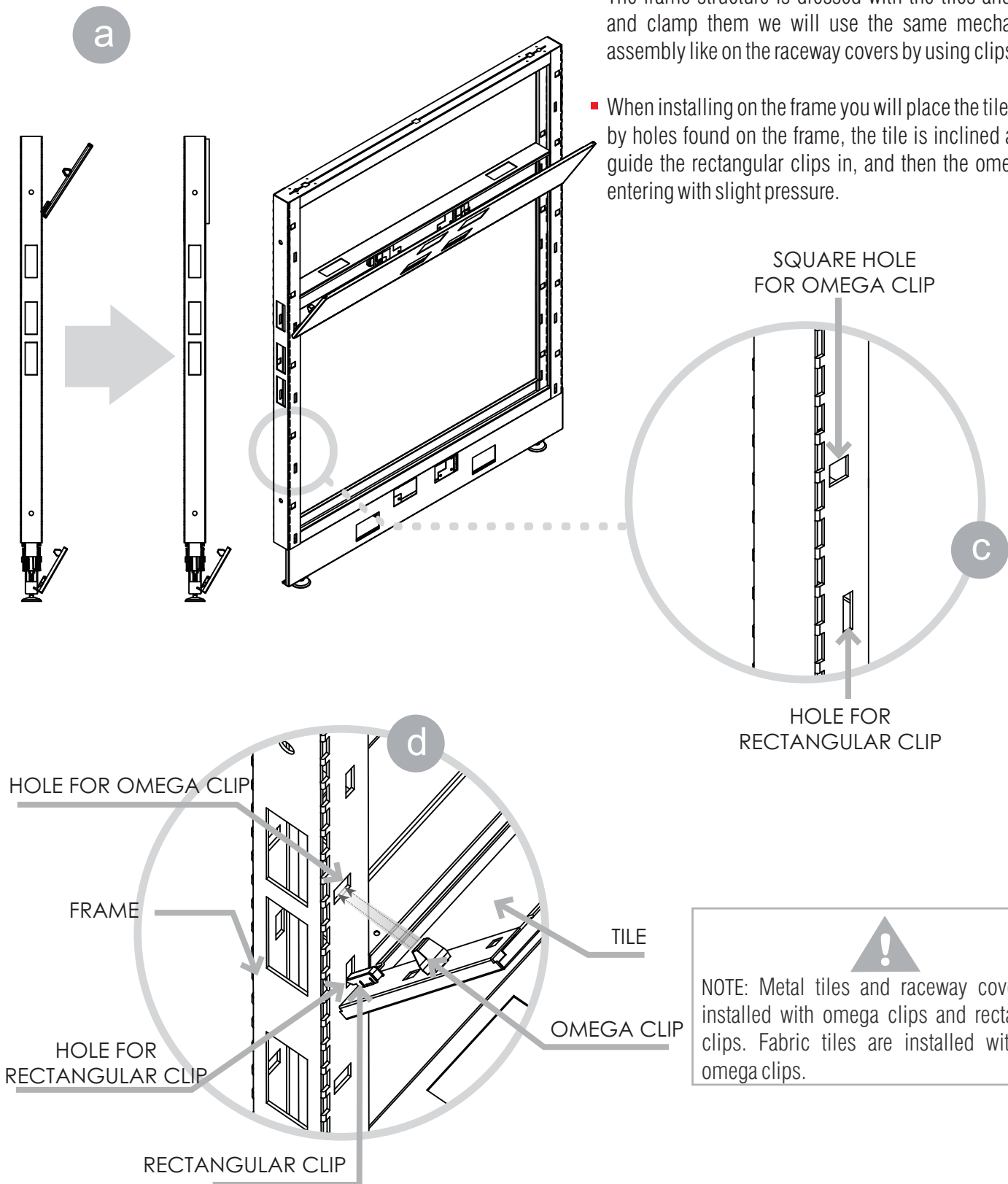
d

- As shown in figure (d) you are required to angle the piece to insert the rectangular clips in the holes and later be able to insert the omega clips with a little pressure in the corresponding holes, with this the raceway cover will remain secure on the frame.

TREMAIN®

Installation of Clips for the Tiles

- All tiles are prepared with a set of safety clips, which are inserted into the corresponding holes that subsequently will serve as guides when assembling the tiles to the frame.
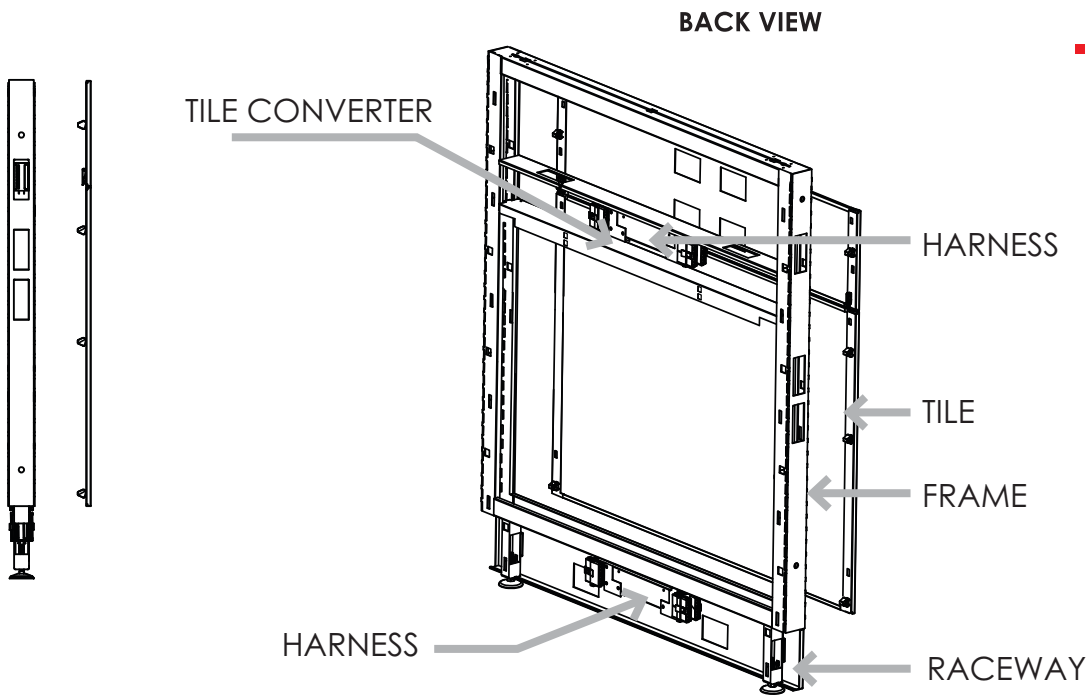
a

4

3

2

1

TILE

OMEGA CLIP

RECTANGULAR CLIP

NOTE: The order of the clips will be determined by the position the tile is given, as shown in Figure (a). The rectangular clip is placed in the first hole (1), while the omega clip is placed in the third hole (3).

b

c

3

1

- You can turn the tile and use as reference the same sequence of the clips to find their correct order if it´s necessary.

Installation of Interior Tiles on the Frame

a

- The frame structure is dressed with the tiles and to hold and clamp them we will use the same mechanism of assembly like on the raceway covers by using clips.

- When installing on the frame you will place the tiles guided by holes found on the frame, the tile is inclined a little to guide the rectangular clips in, and then the omega clips entering with slight pressure.

SQUARE HOLE
FOR OMEGA CLIP

c

HOLE FOR
RECTANGULAR CLIP

d

HOLE FOR OMEGA CLIP

FRAME

TILE

HOLE FOR
RECTANGULAR CLIP

OMEGA CLIP

RECTANGULAR CLIP

NOTE: Metal tiles and raceway covers are installed with omega clips and rectangular clips. Fabric tiles are installed with only omega clips.

Installation of Front Tiles on the Frame

a

BACK VIEW

TILE CONVERTER

HARNESS

TILE

FRAME

HARNESS

RACEWAY

- Figure (b) shows how the tile converter helps provide support at the junction of the tiles that are on the frame.

b

⚠️
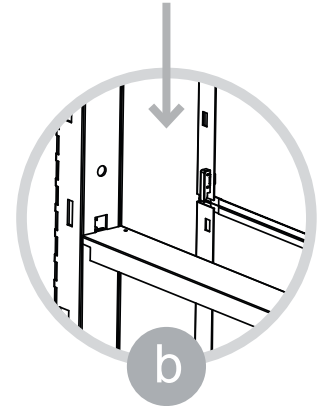
NOTE: Fabric tiles are installed with only omega clips.

OMEGA CLIP

OMEGA CLIP

c
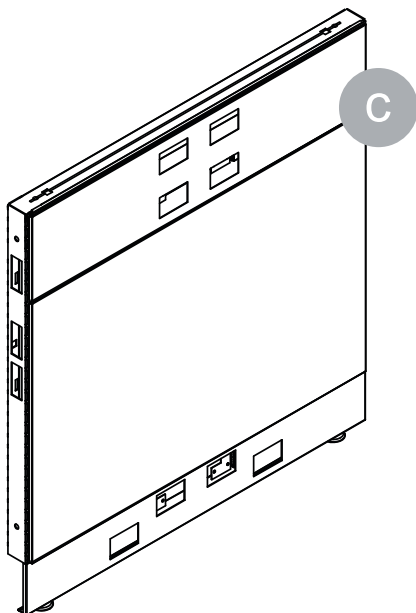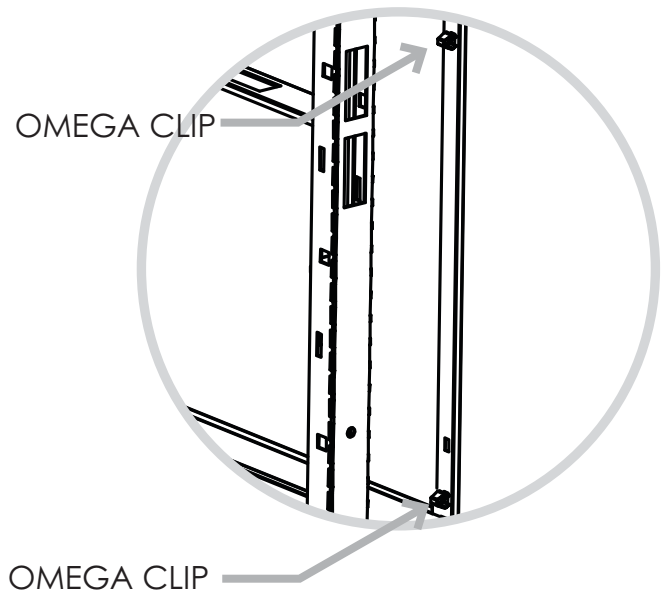
- The tile converters are installed when installing tiles, to provide extra support in some of the joints of the tile segments.

Installation of Complementary Tiles

- The installation of these tiles is the same as the front tiles, the only difference is that the complementary tiles are assembled in the back of the frame; with this step the panel is almost fully assembled.

- The installation time varies by project requirements, same that is established previously, where the order of the location of the harnesses, placement of the tiles and their measures are stipulated, among other topics.

BACK VIEW

HARNESS

TILE CONVERTER

TILE

FRAME

HARNESS

RACEWAY

⚠️
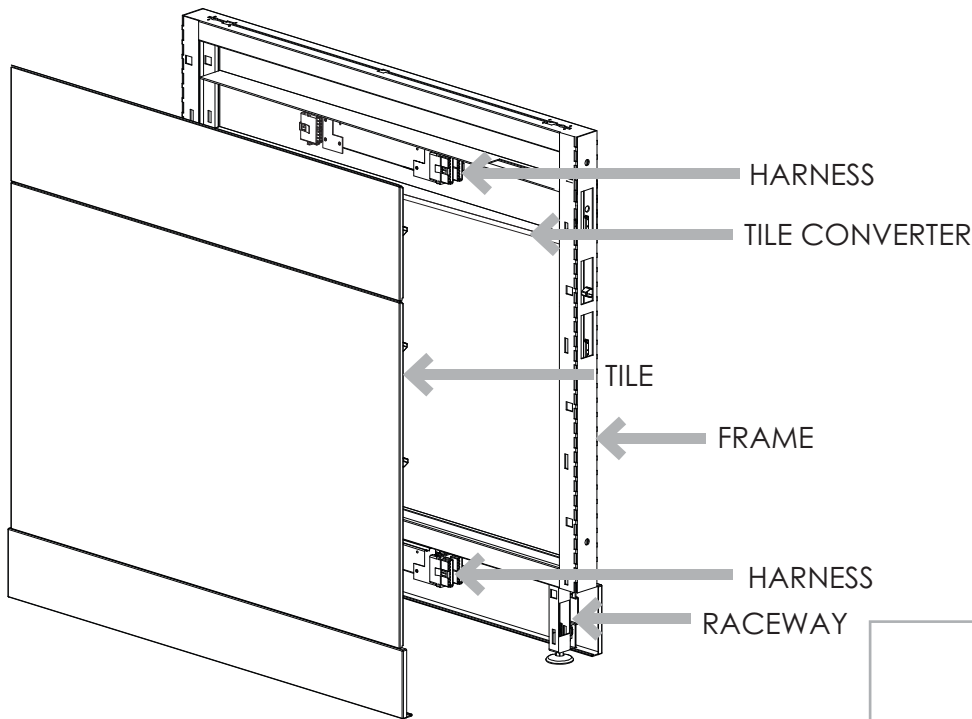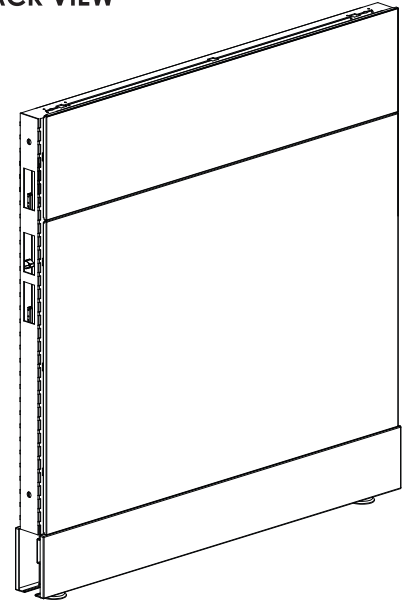
NOTE: Workstations that share Electrical and Data will have the same tile design on either side; otherwise it will only have a flat segment with no punches.

TREMAIN®

▶ Panel Top Cap Installation

1.

a

#10 x 1/2"
HEX HEAD SCREW
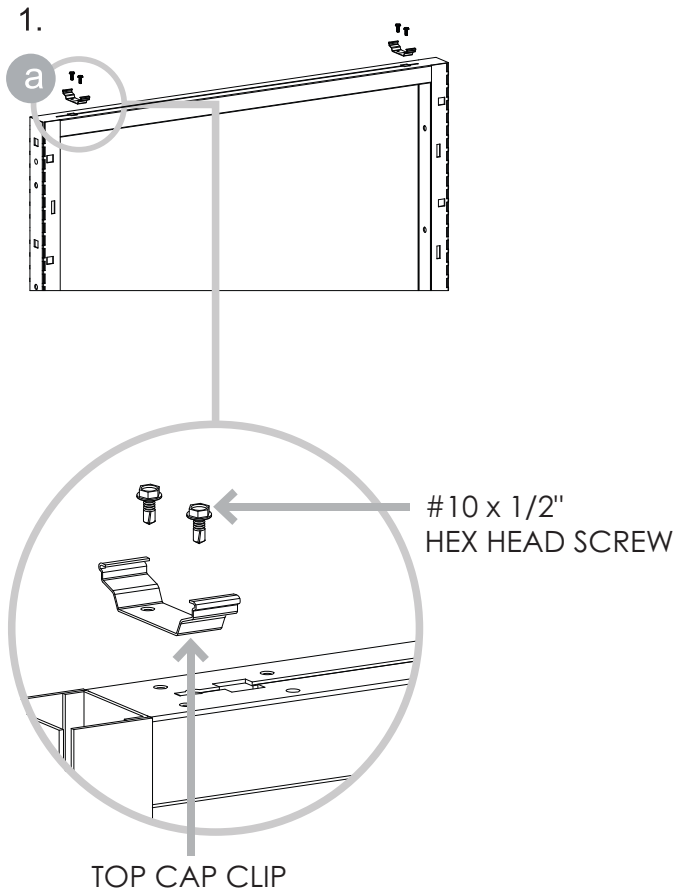
TOP CAP CLIP

- For the panel top cap installation, first you must screw the top cap clips on the panel frames top crossbar.

PANEL TOP CAP with
END CAP TOP CAP

TOP CAP

TOP
CAP CLIP

PANEL END CAP

3.

c

TOP CAP
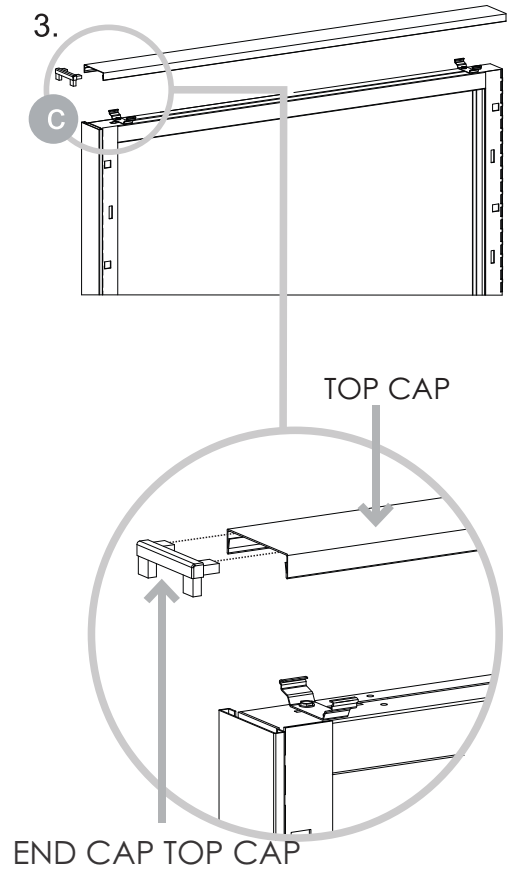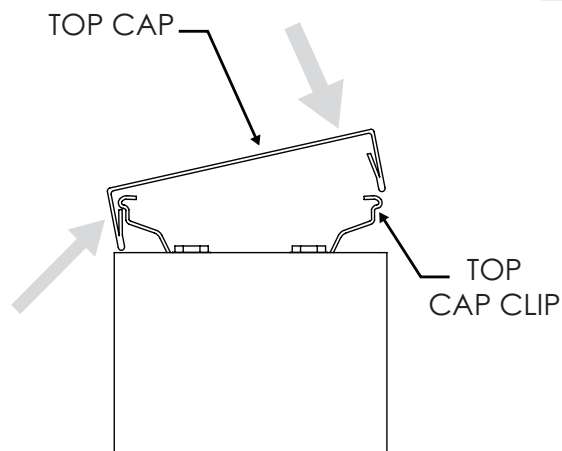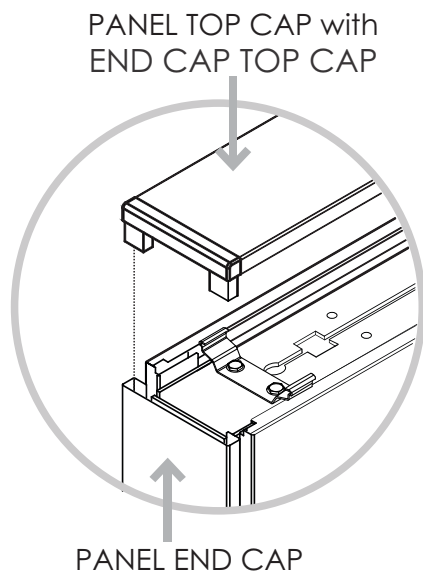
END CAP TOP CAP

- Finally, you must place the end cap top cap to the panel top cap before mounting it over the top cap clip.

⚠️

NOTE: Repeat this step when installing the Top Cap on a stacking frame.

⚠️

Make sure to place the End Cap Top Cap where the top cap is going to be installed, either 38" Frame or 16" Stacking Frame.

Stacking Frame Installation

For the stacking frame it is necessary to align the stacking frame to the superior part of the foundation frame. Using hardware provided, attach stacker to the frame.

Repeat steps for stacking Glass or Fabric stacking panel on top of installed Stacking panel. "Double Stacking"

a

Middle Top Cap →
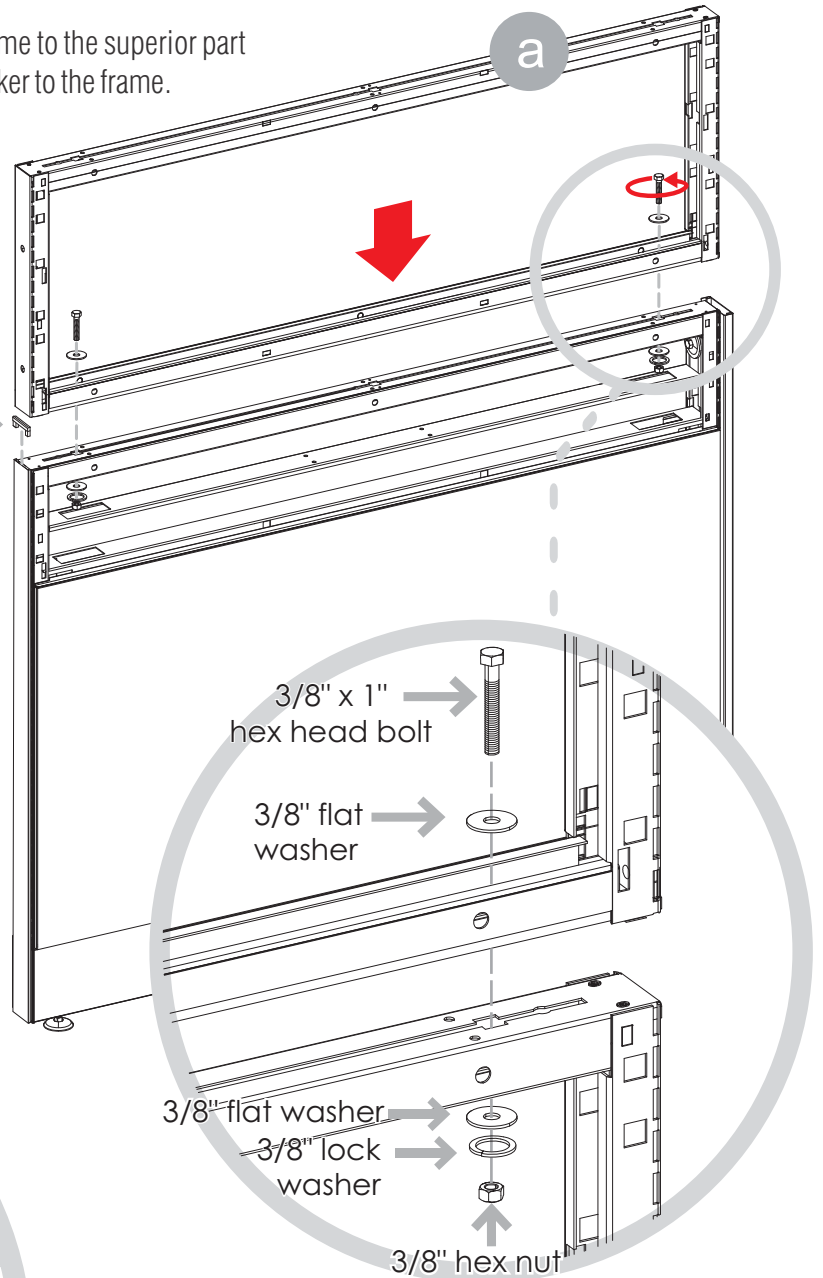
NOTE: For the installation you need:
- 2» $\frac{3}{8}$" x 1" Hex head bolts
- 4» $\frac{3}{8}$" Flat Washers
- 2» $\frac{3}{8}$" Hex nuts
- 2» $\frac{3}{8}$" Lock Washers

The bolts are installed in the perforations as shown in Fig. (a).

3/8" x 1" hex head bolt →

3/8" flat washer →

3/8" flat washer →
3/8" lock washer →

3/8" hex nut

NOTE: Repeat previous steps for fabric tile installation

-See pages 27-31 for glass tile installation.
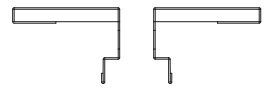
TREMAIN®

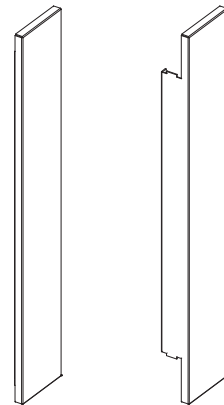# Glass tile Installation
▸ Components
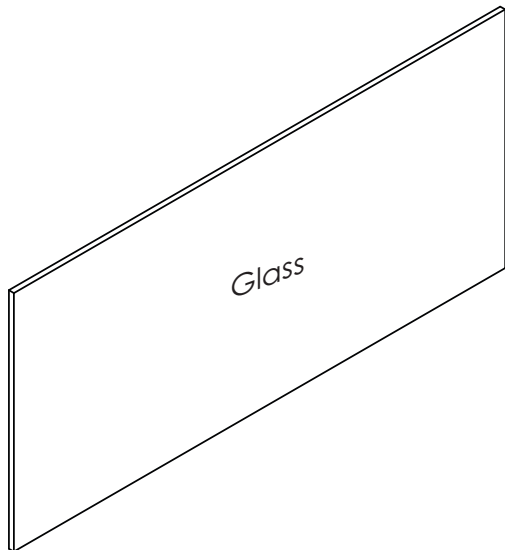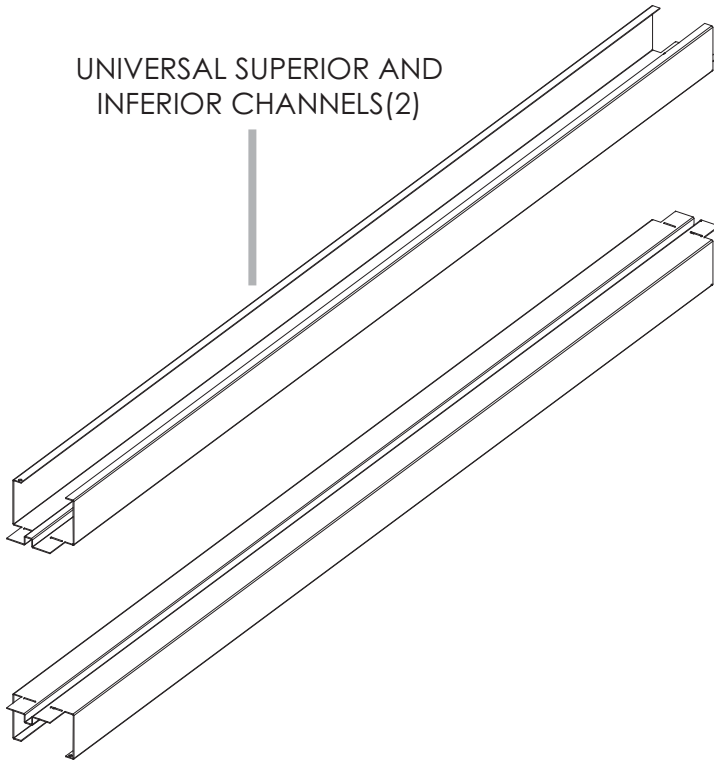
UNIVERSAL SUPERIOR AND
INFERIOR CHANNELS(2)

STAGGERED VERTICAL SUPPORT

TOP VIEW

LEFT   **RIGHT**

Glass

VERTICAL SUPPORT

TOP VIEW

LEFT   **RIGHT**

TREMAIN®
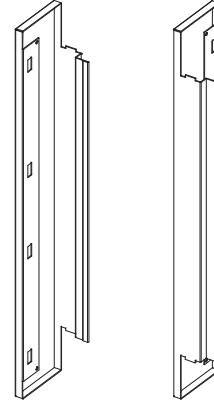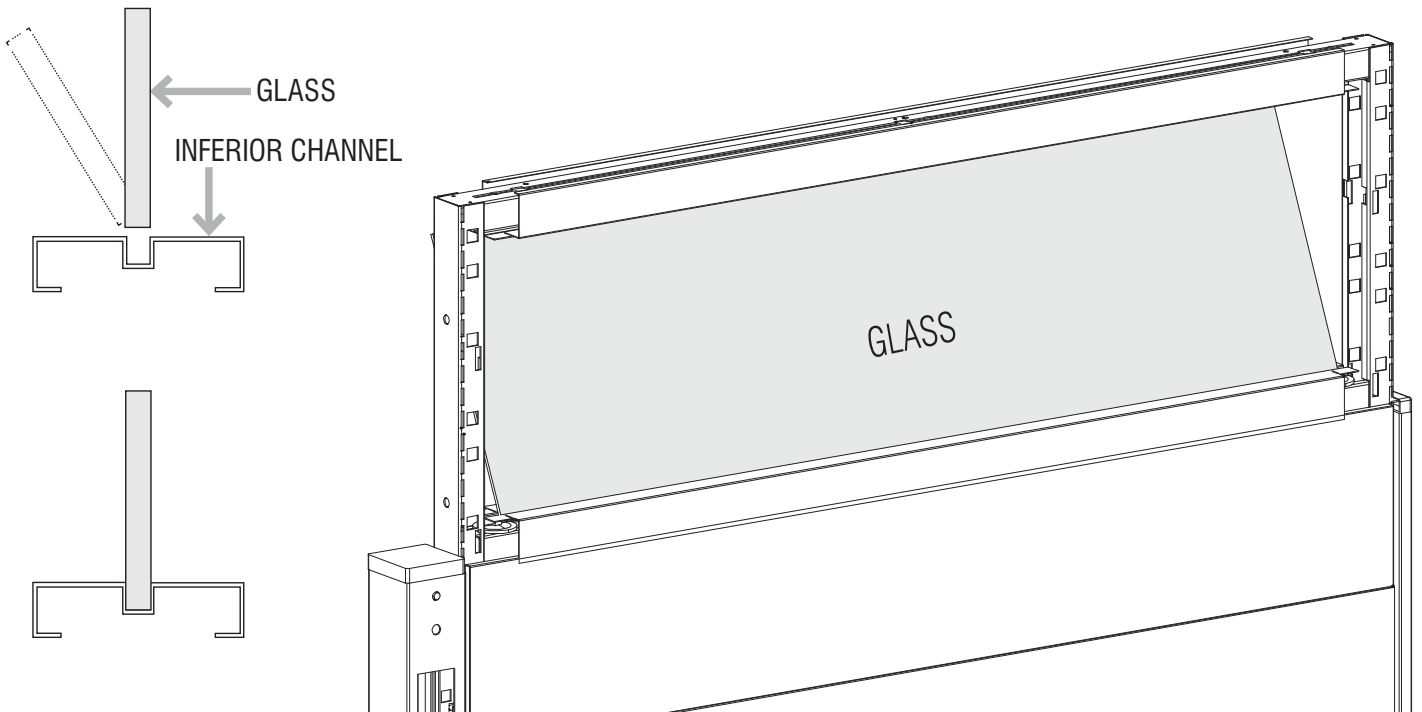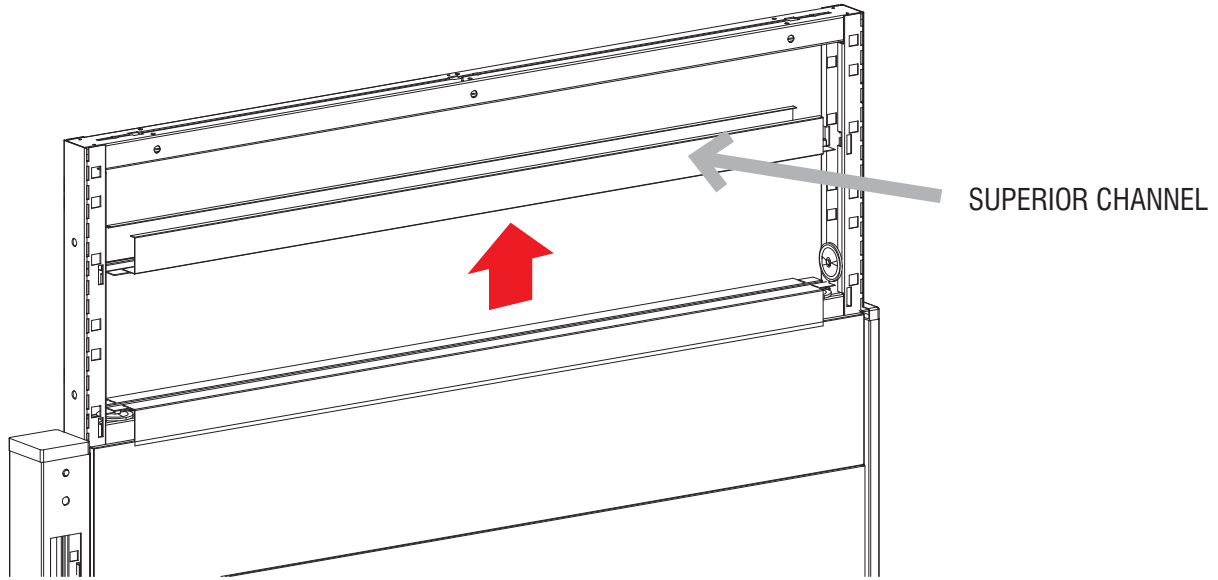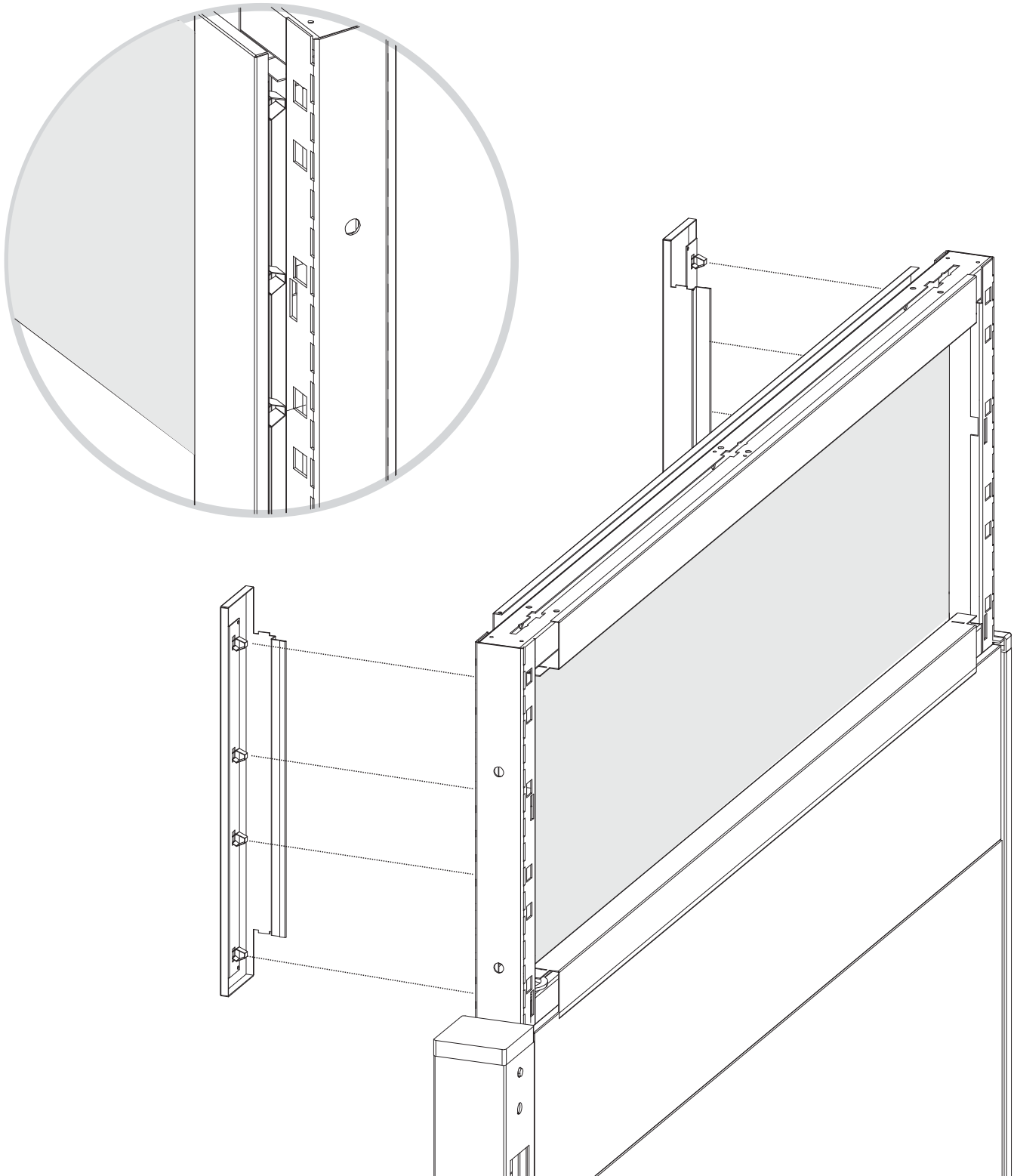
▸ Glass tile Installation

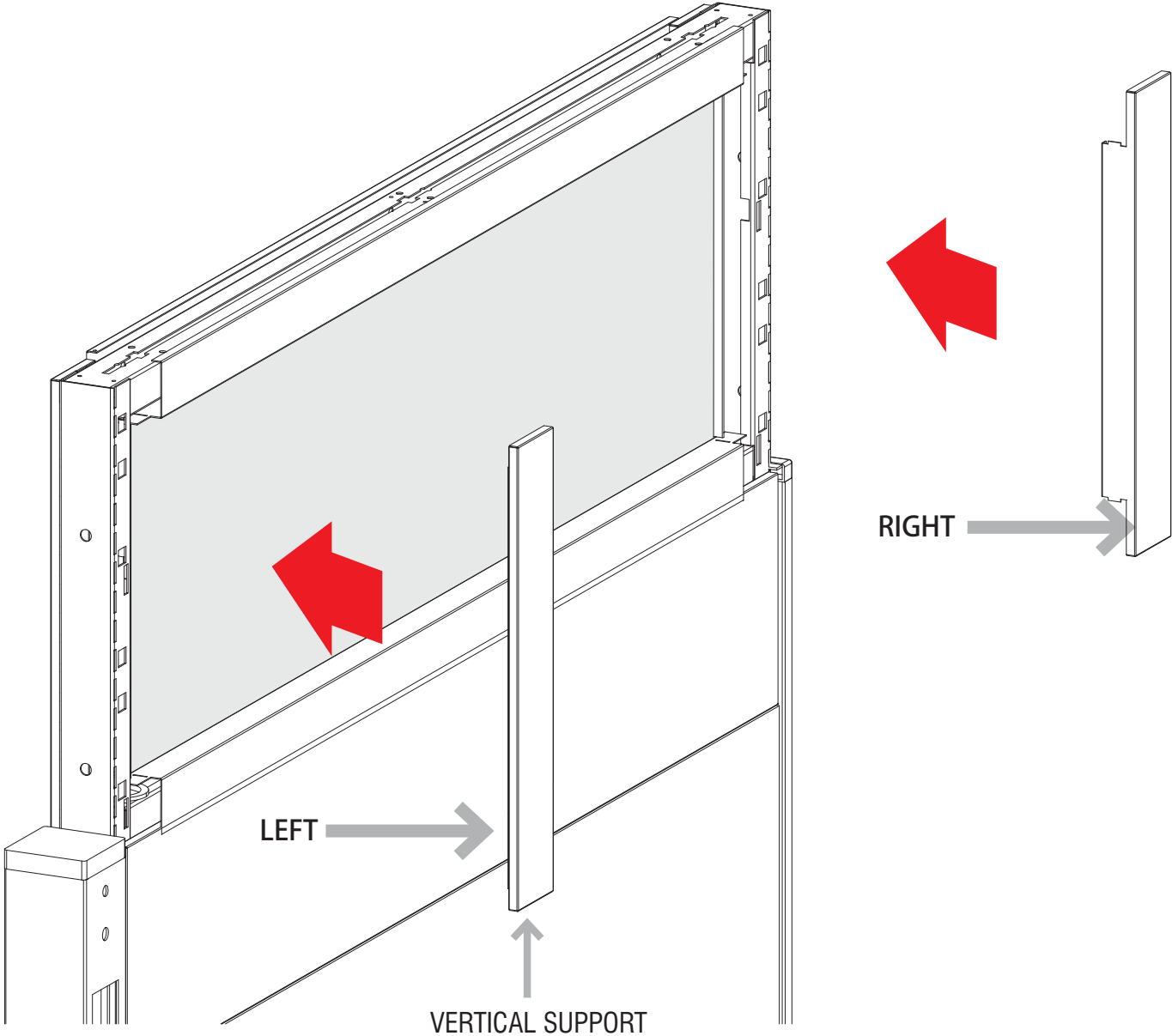As a first step it will be necessary to install the universal channel on the inferior part of the stacking frame.
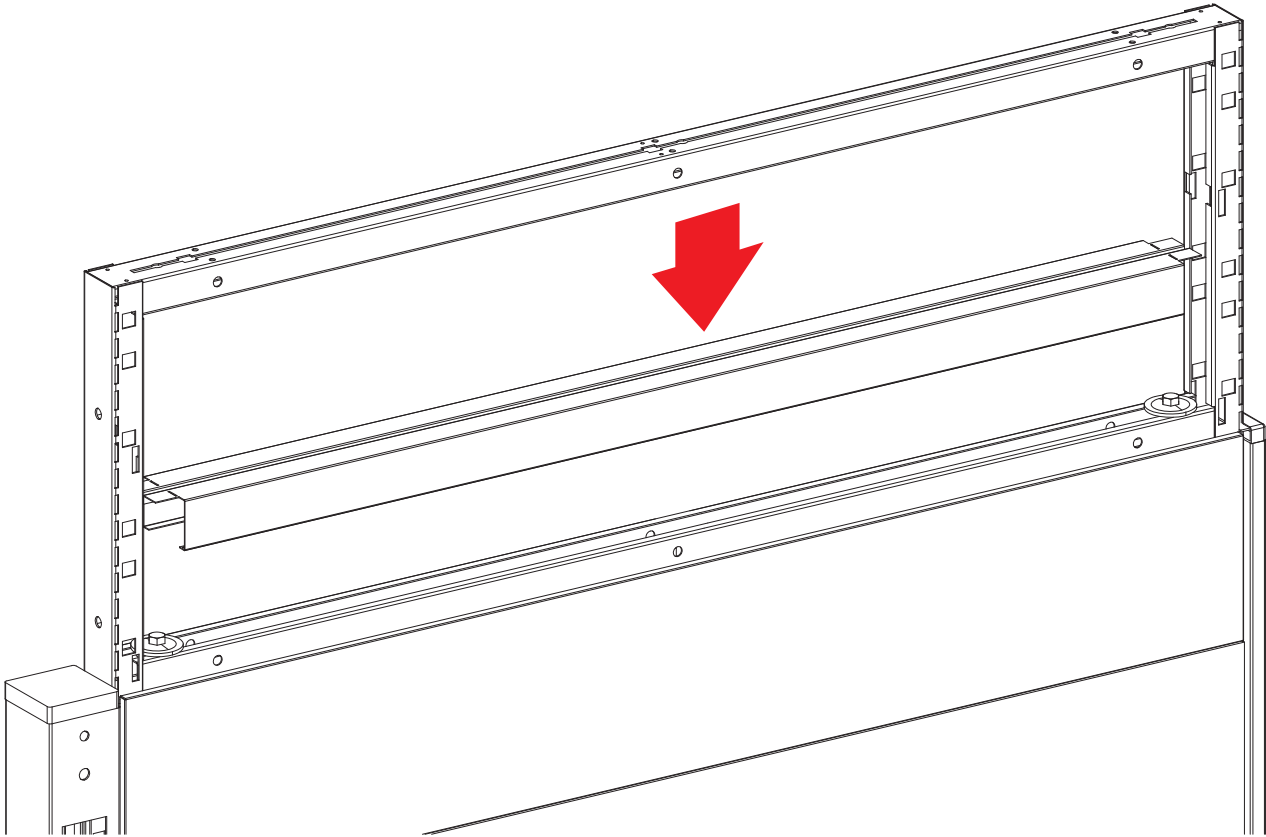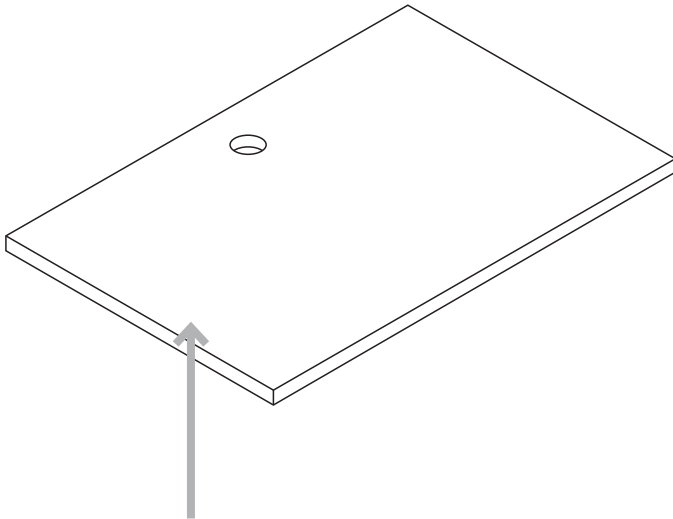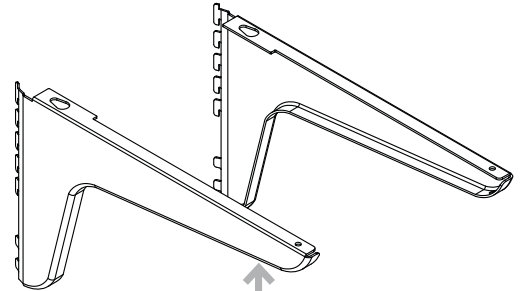
Superior channel and Glass

SUPERIOR CHANNEL

GLASS

INFERIOR CHANNEL

GLASS

Staggered vertical support and Glass
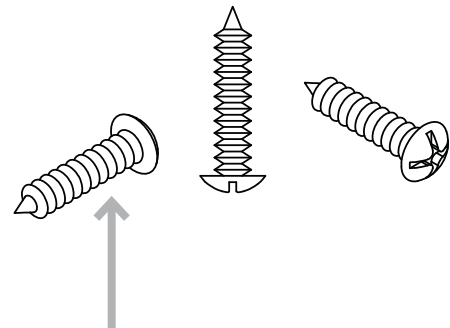
▶ Vertical support
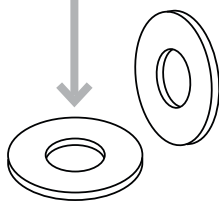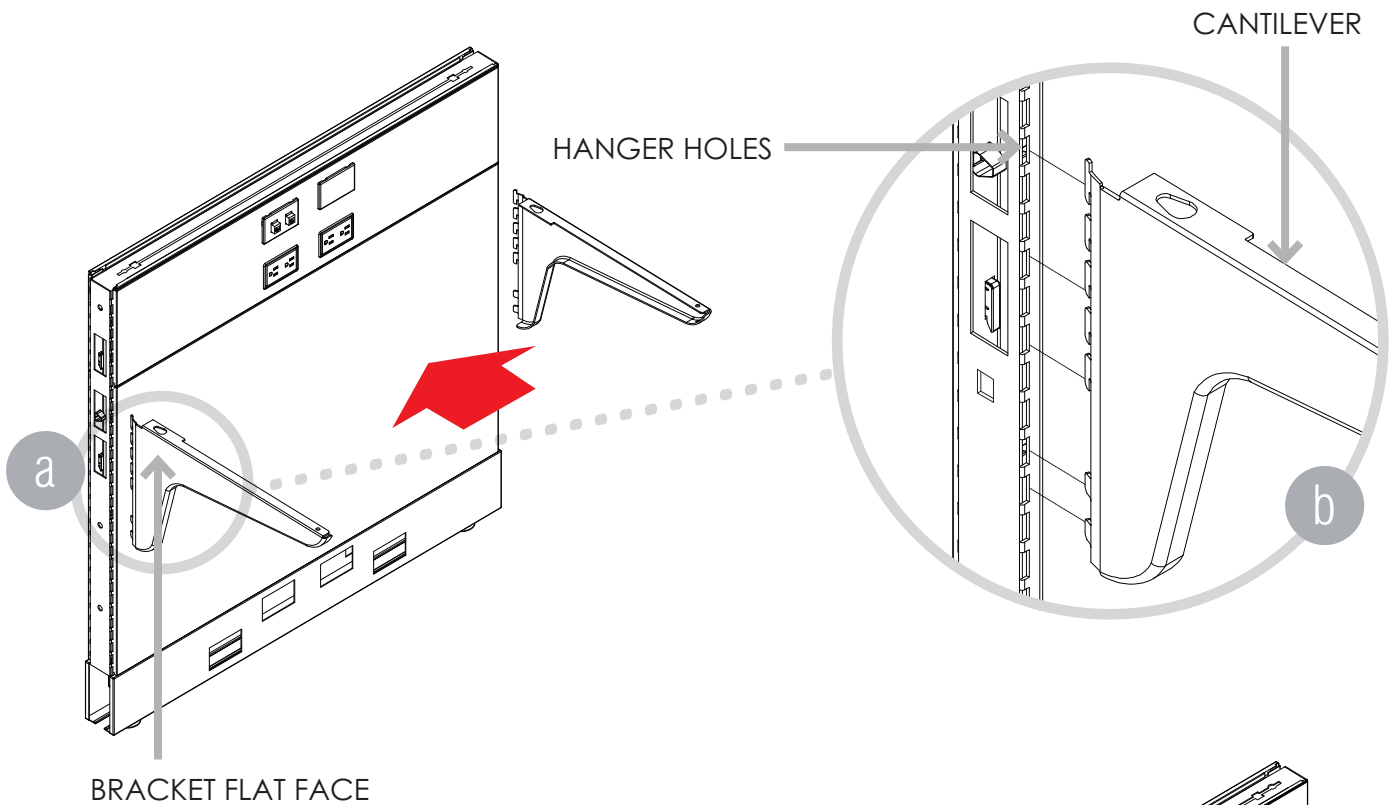
RIGHT

LEFT

VERTICAL SUPPORT

RECTANGULAR WORKSURFACE
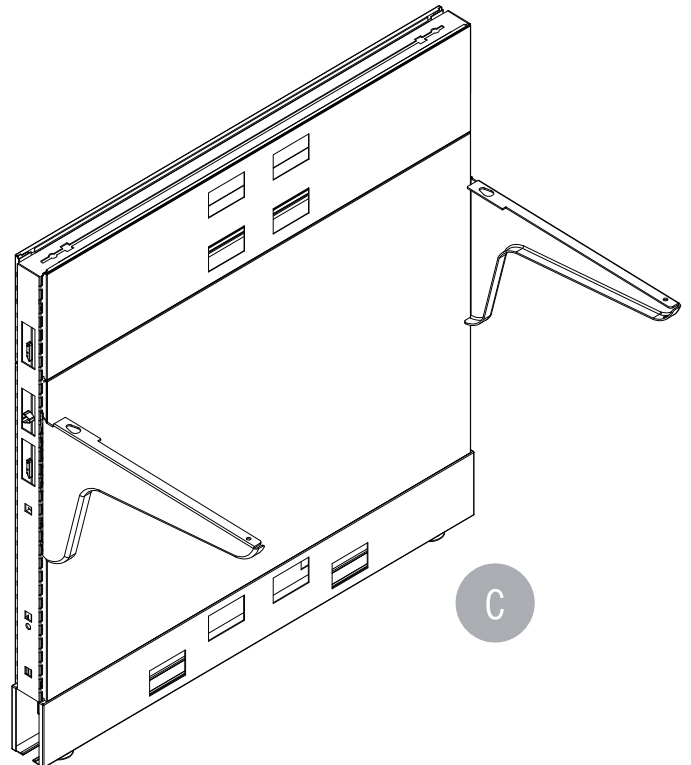
CANTILEVER BRACKET
LEFT/RIGHT (2)

5/16" WASHER (2)

#10-12 x 3/4" SCREW (4)

Installing the Cantilever Brackets to the Panel Frame
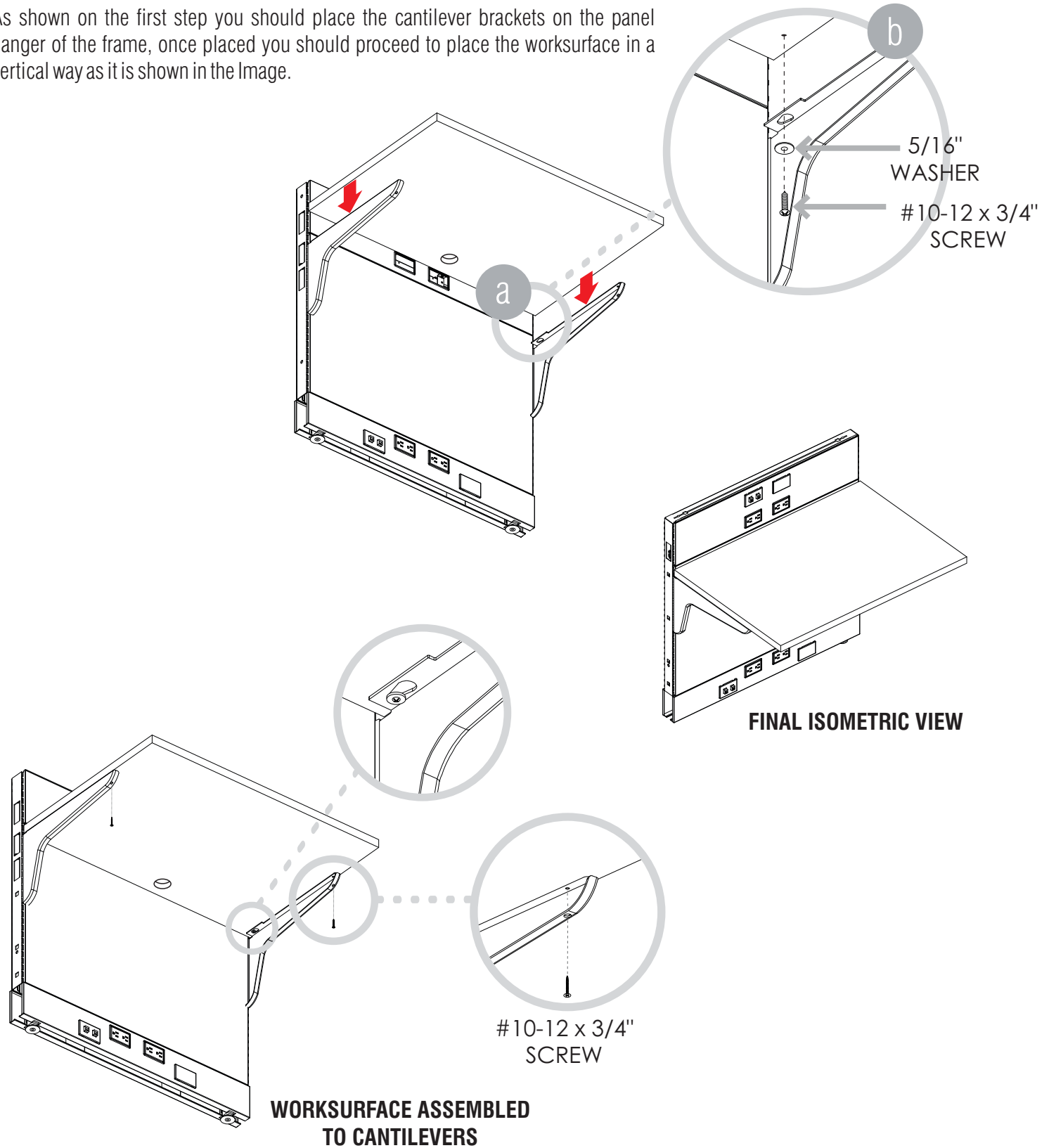
CANTILEVER

HANGER HOLES

a

b

BRACKET FLAT FACE

- To install the cantilevers you must properly locate the sense of direction of each, the flat faces of the bracket being positioned to the end of the panel.

- When the correct direction of each cantilever is determined (right or left) you can proceed to place them in the hanger holes of the frame, and finally install the worksurface.

- If pedestals are to be installed, you must install cantilever brackets at a minimum height of 27-3/8" from the floor to top of cantilever. This will provide clearance for installation of pedestals. Otherwise, you can place cantilevers at any height.
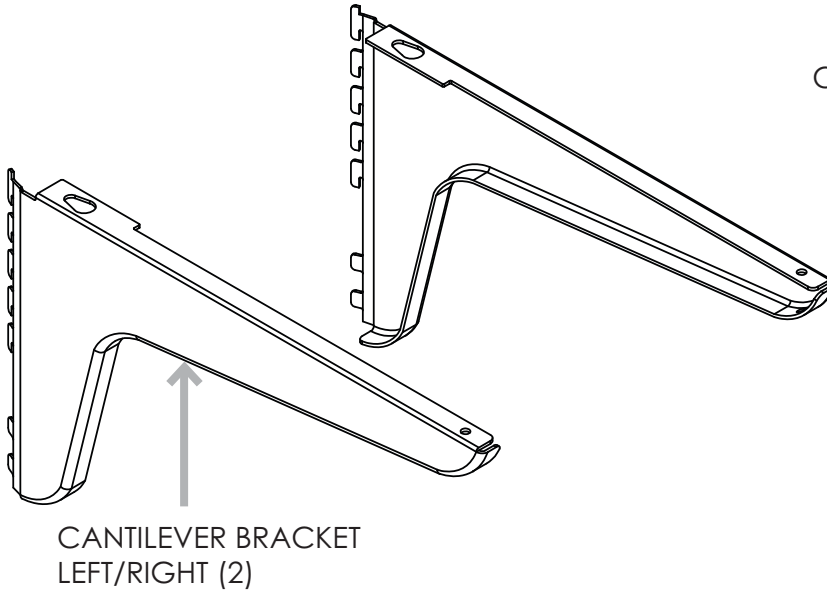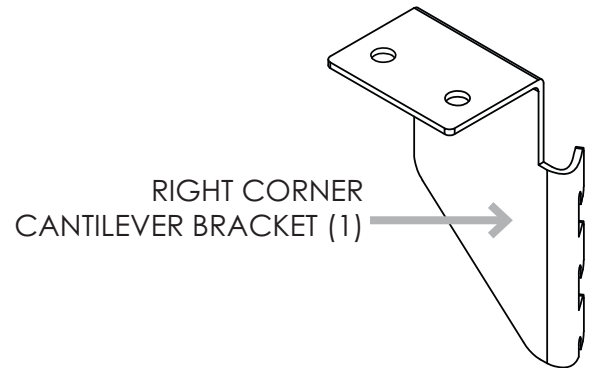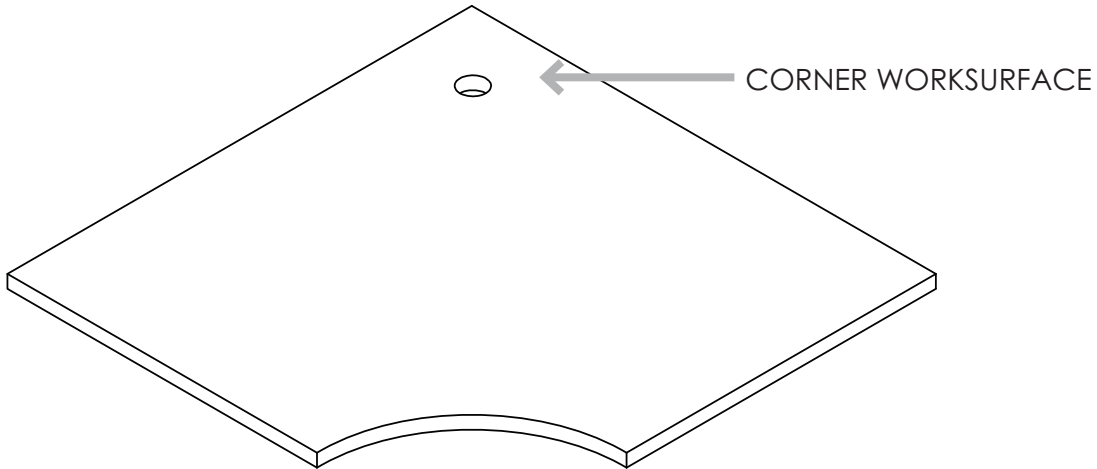
c

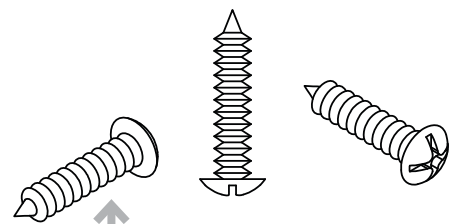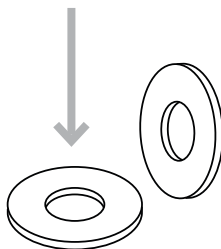# Assembling the Worksurface to the Cantilever Brackets

As shown on the first step you should place the cantilever brackets on the panel hanger of the frame, once placed you should proceed to place the worksurface in a vertical way as it is shown in the Image.

b

5/16" WASHER

#10-12 x 3/4" SCREW

a

FINAL ISOMETRIC VIEW

#10-12 x 3/4" SCREW

WORKSURFACE ASSEMBLED TO CANTILEVERS

CORNER WORKSURFACE

RIGHT CORNER
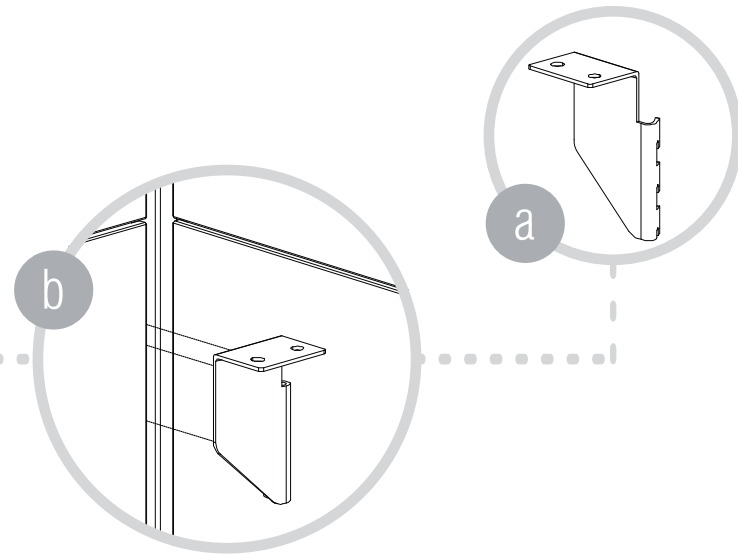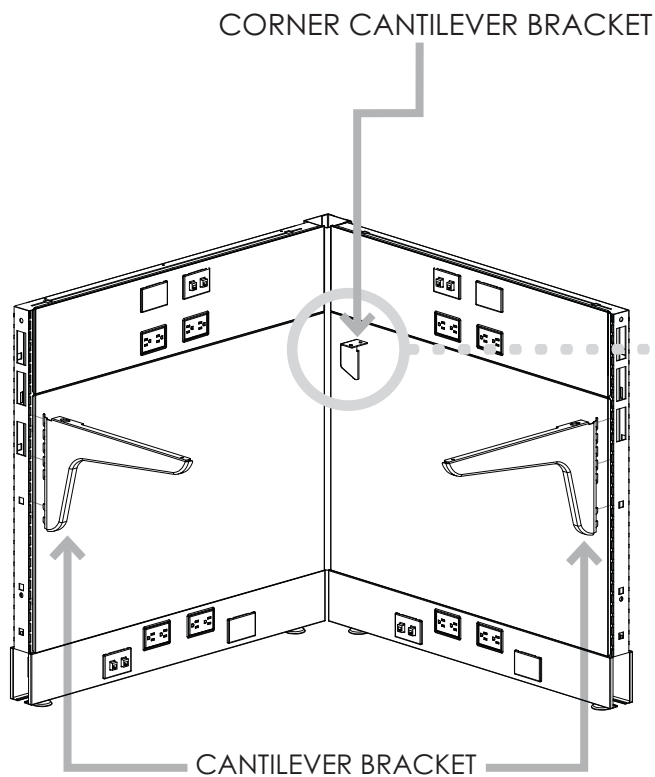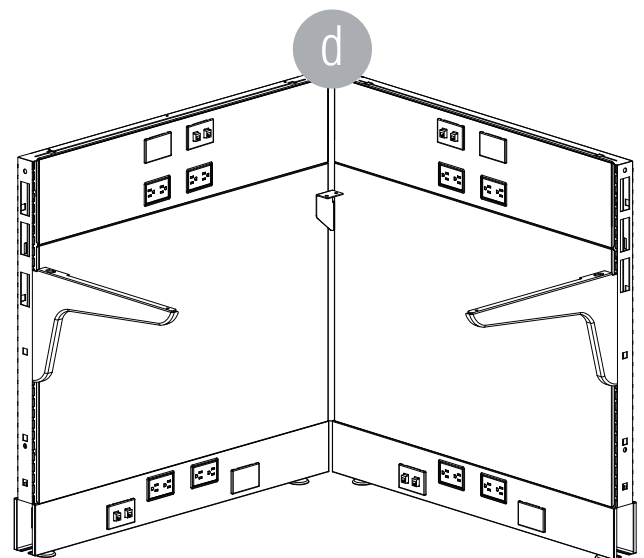CANTILEVER BRACKET (1)

CANTILEVER BRACKET
LEFT/RIGHT (2)

5/16" WASHER (2)

#10-12 x 3/4"
SCREW (6)

Preparing Brackets to Frames in Corner

CORNER CANTILEVER BRACKET

a

b

CANTILEVER BRACKET

- The bracket shown in Figure (a) is placed when two panels intersect at a 90º angle corner and a worksurface is to be installed; their function is to give support, steadiness and a correct height between the other two brackets, reinforcing the worksurface steadiness.

- These are installed into the hanger holes located in the metal frame sides, and then the worksurface is placed over with its screws and bushings to assemble the brackets to the worksurface.

d

TREMAIN®

▸ Corner Cantilever Brackets to Worksurface

WORKSURFACE

a

b

PANEL

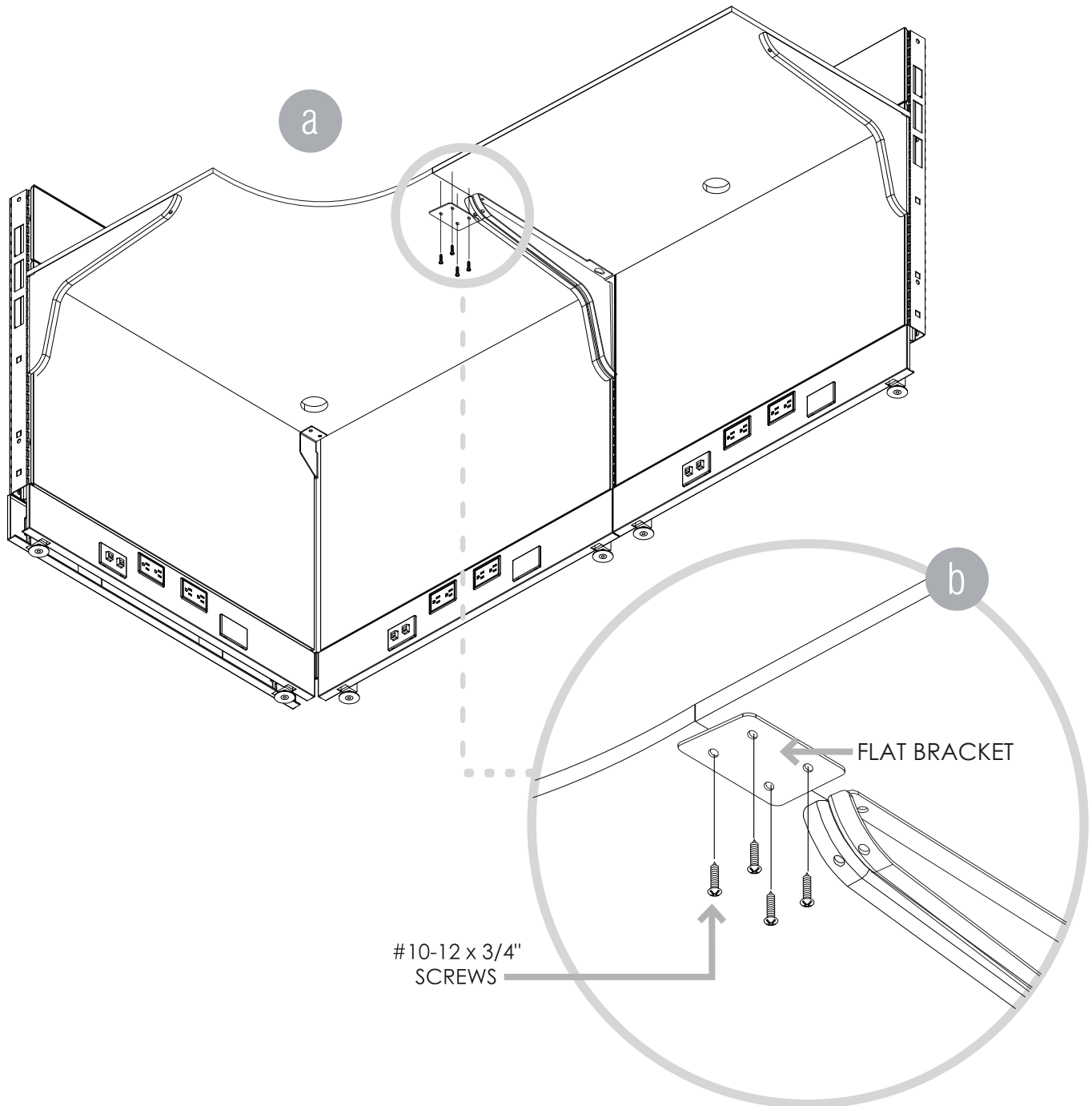PANEL

#10-12 x 3/4" SCREWS

CORNER CANTILEVER BRACKET

c
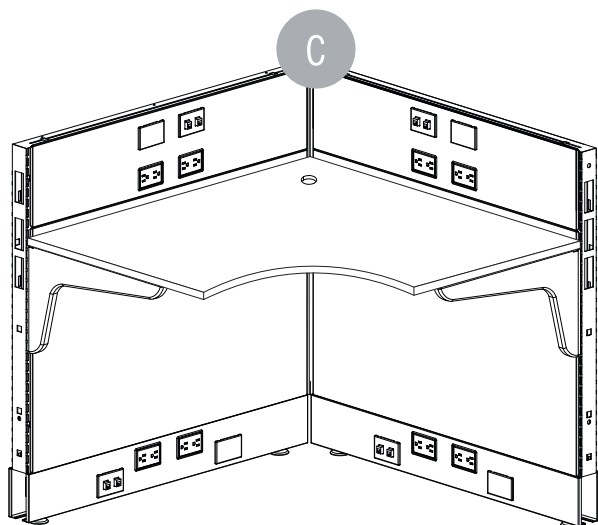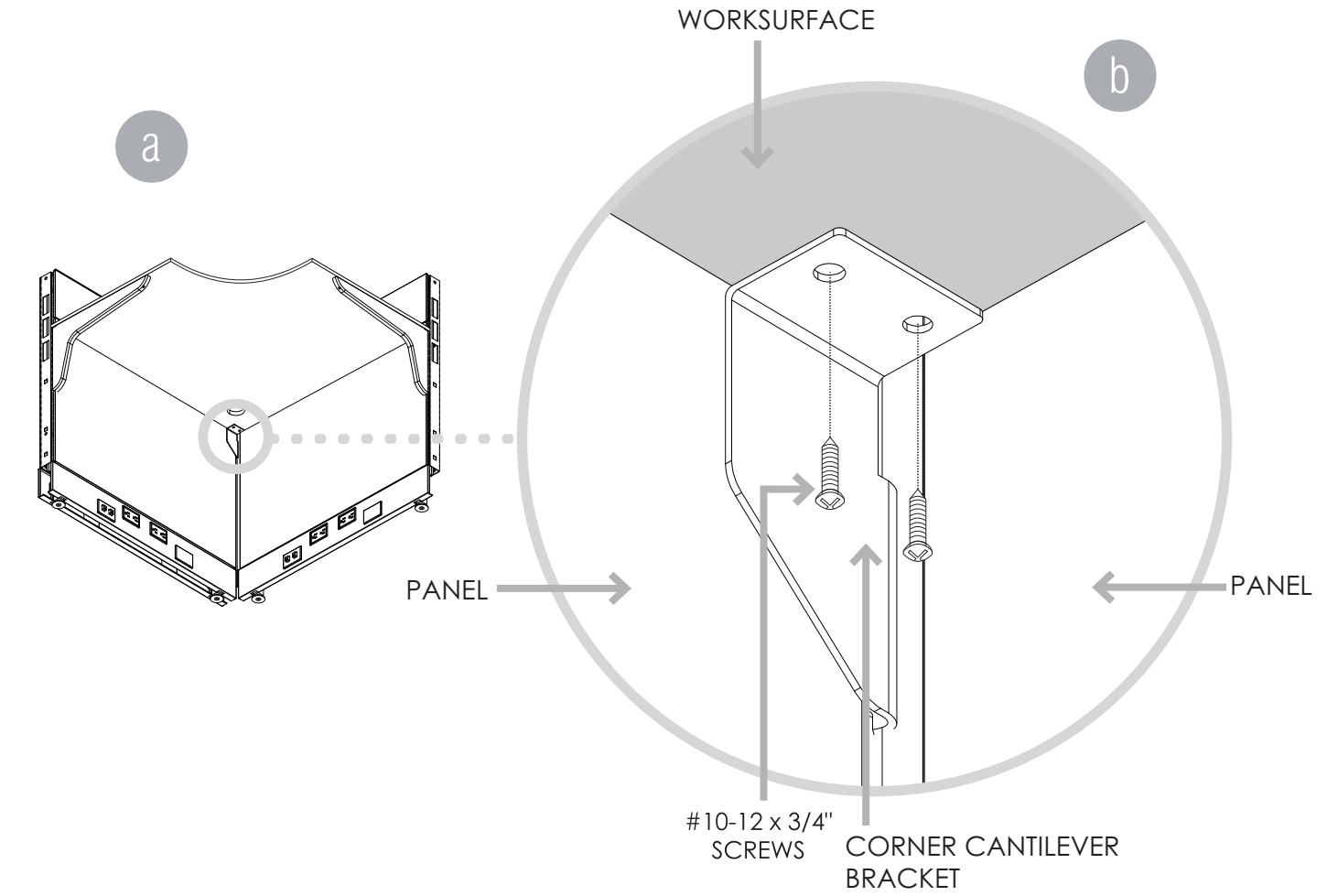
- Finally, the worksurface is secured by the corner bracket. Using 2 #10-12 x 3/4" screws.

FINAL ISOMETRIC VIEW

▸ Flat Bracket to Worksurface

a

b

FLAT BRACKET

#10-12 x 3/4"
SCREWS

- It is important to remember that two worksurfaces need to be joined together by using a Flat Bracket leaving a small space between the front edge of the worksurface and the Flat Bracket. 4 #10-12 x 3/4" screws are needed to fix it.

3 Drawer Pedestal Components

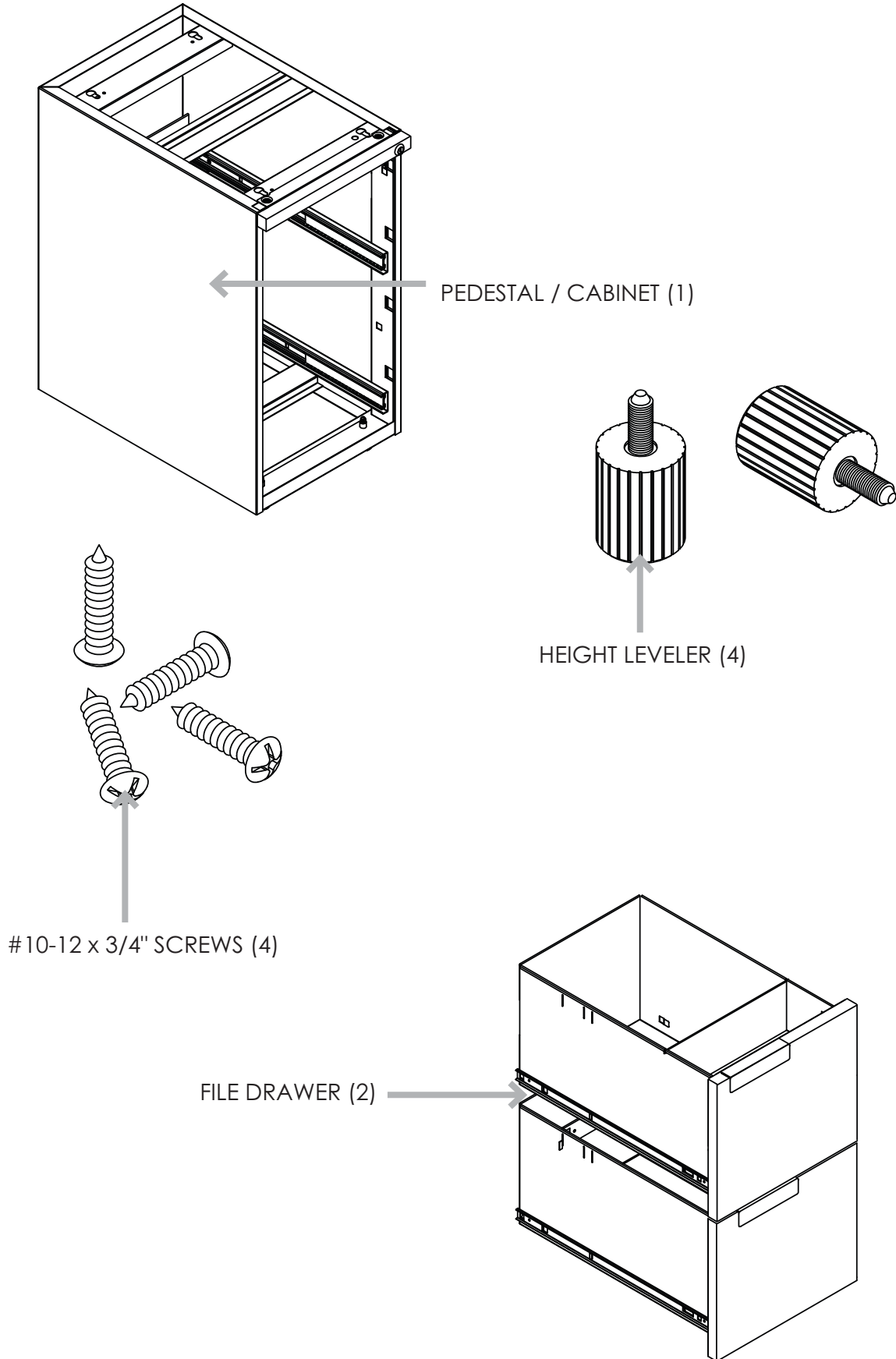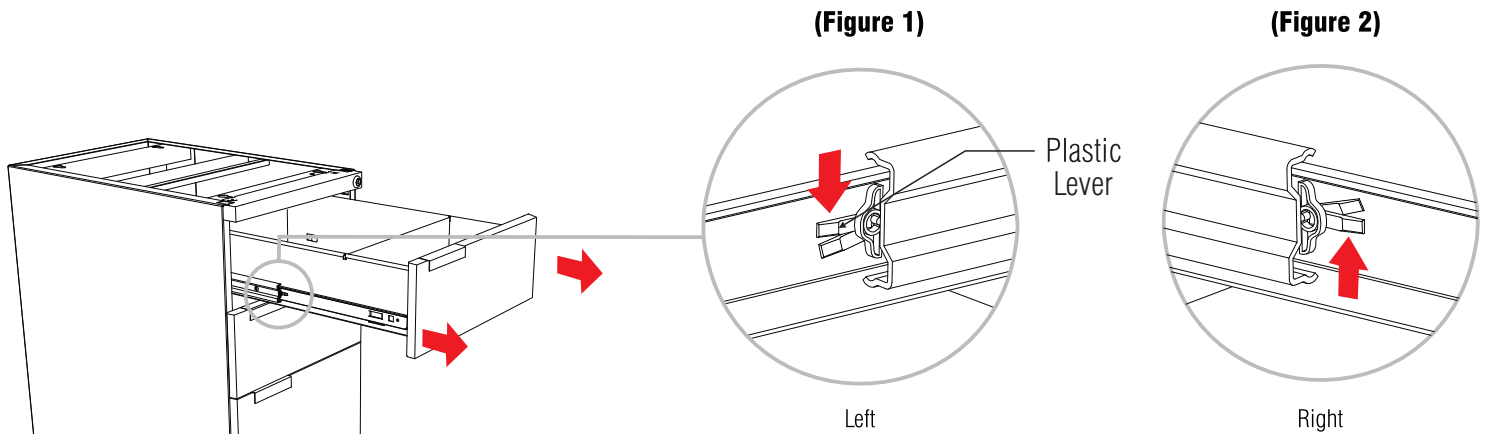PEDESTAL / CABINET (1)

HEIGHT LEVELER (4)

#10-12 x 3/4" SCREWS (4)

BOX DRAWER (2)

FILE DRAWER (1)

TREMAIN®

2 Drawer Pedestal Components

PEDESTAL / CABINET (1)

HEIGHT LEVELER (4)

#10-12 x 3/4" SCREWS (4)

FILE DRAWER (2)
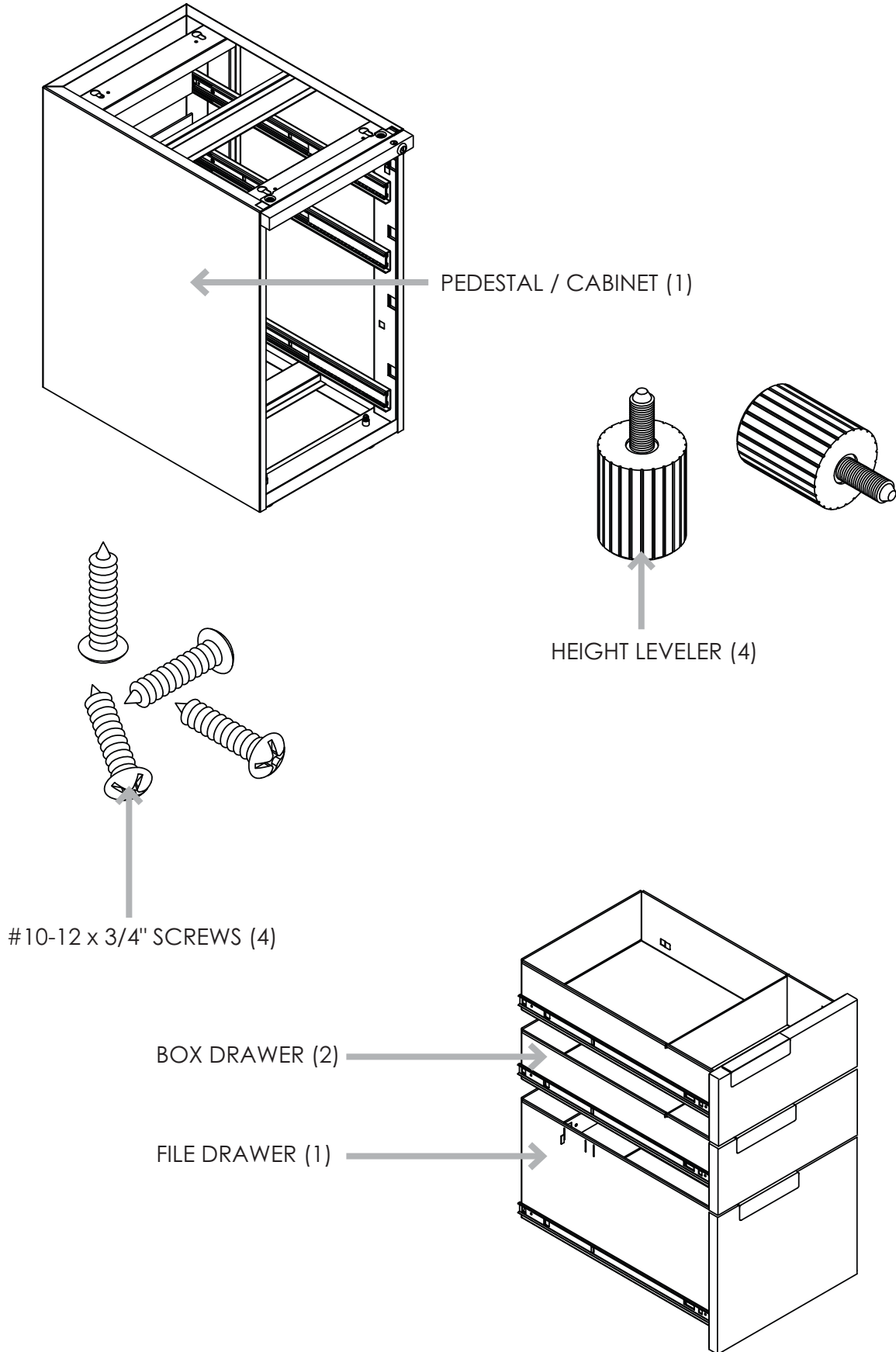
▶ Pedestal Drawer Removal

(Figure 1) **(Figure 2)**

Plastic
Lever

Left Right

To begin you must remove the top drawer and once you can see the plastic levers you must lower the lever on the right rail (**Figure 1**) and move the lever from the left rail up **(Figure 2)** once you´ve done this pull the drawer from the rails (repeat the same process for remaining drawers).

Figure 4

Figure 3

(Figure 3) **(Figure 4)**
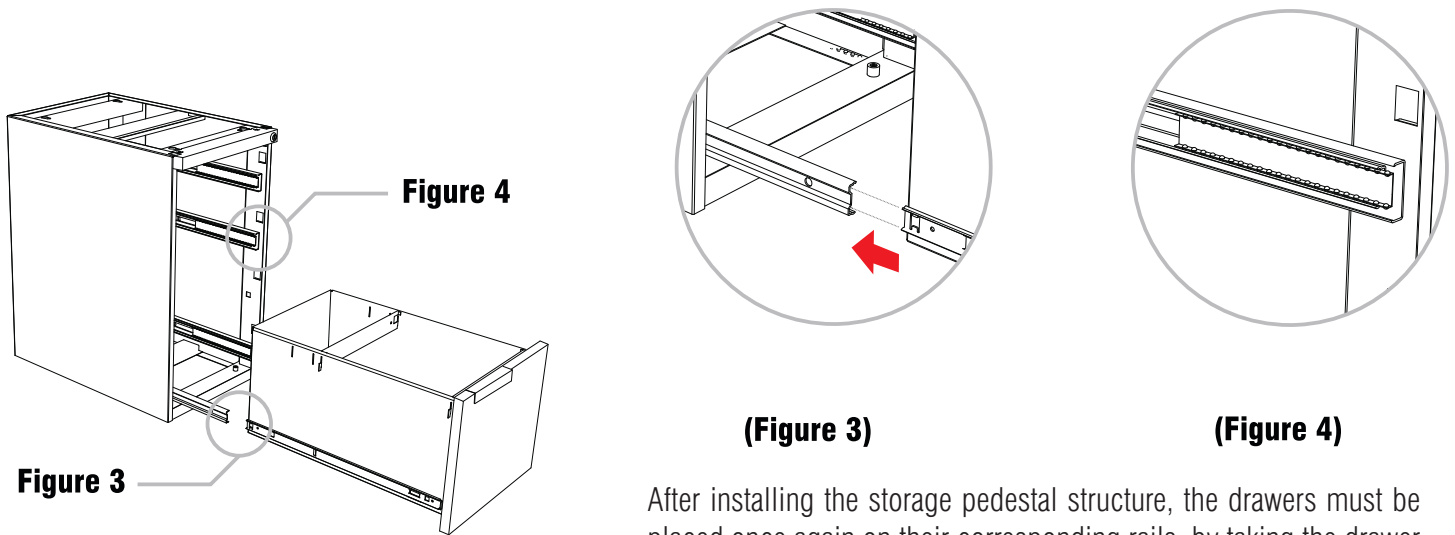
After installing the storage pedestal structure, the drawers must be placed once again on their corresponding rails, by taking the drawer slide rail and inserting into the drawer rail.
(Make sure that the bearings on the rails are at the front, Figure 4).

TREMAIN®
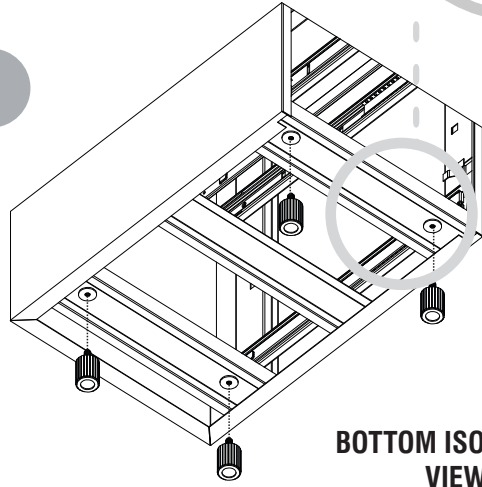
Installing Height Levelers to Pedestal

NOTE: Before installing the height levelers it is recommended that you remove the drawers to work without obstacles.
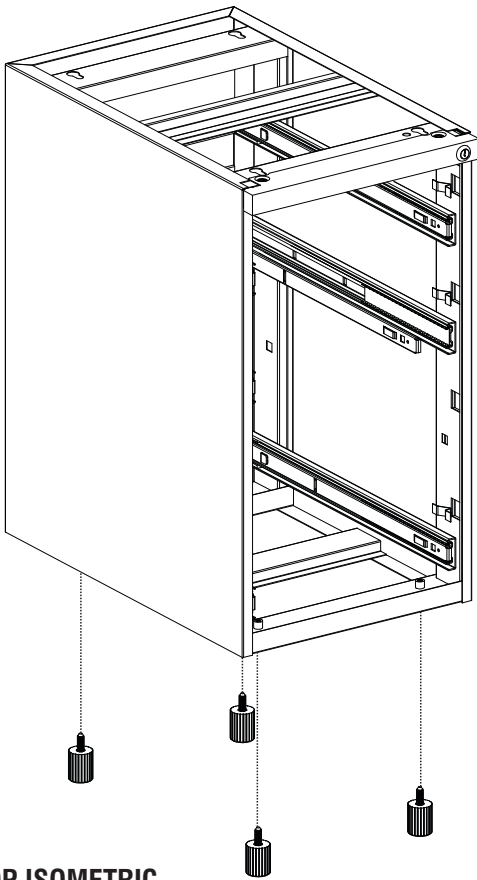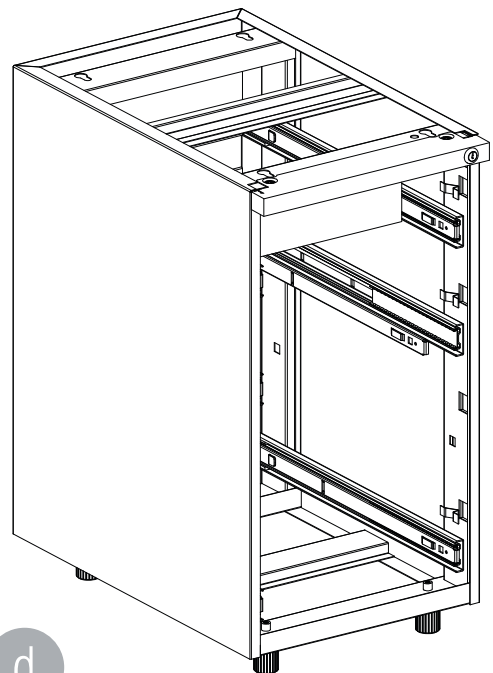
HEIGHT LEVELER SUPPORT

a

b
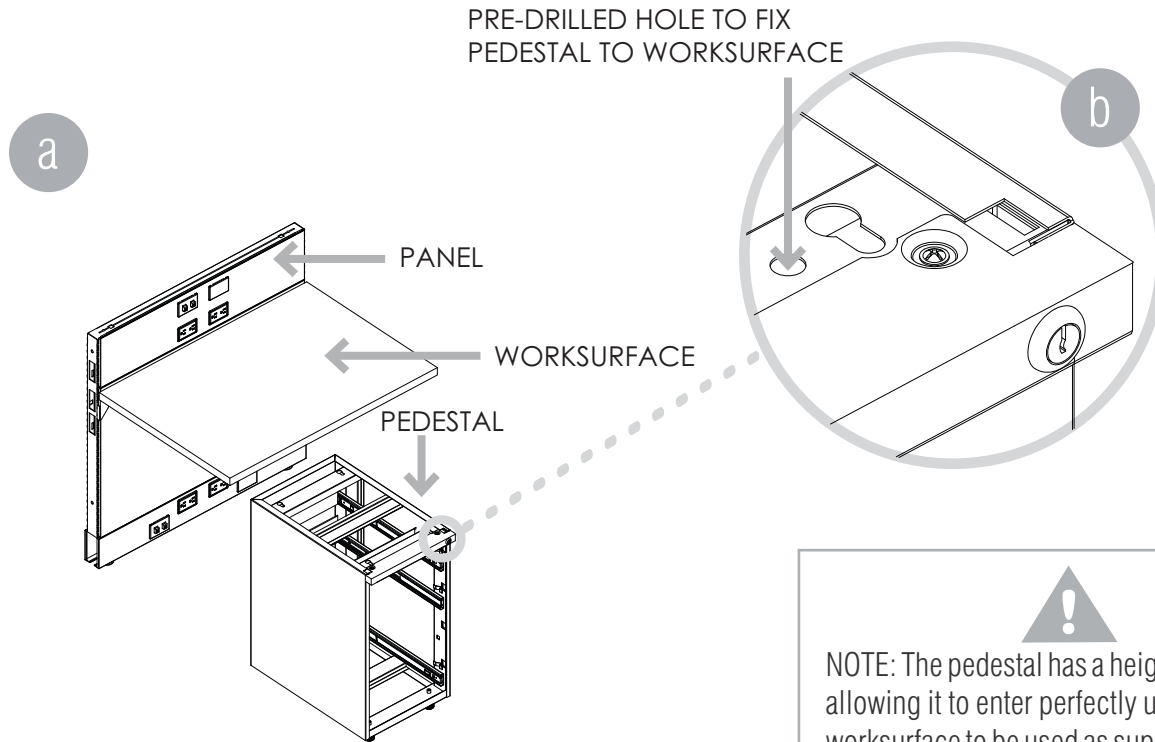
c
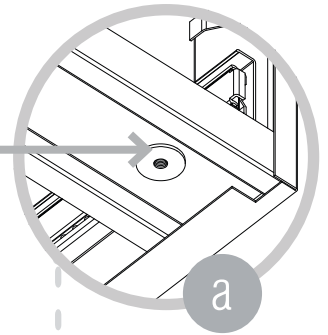
BOTTOM ISOMETRIC VIEW

TOP ISOMETRIC VIEW

- Prepare the pedestal with your height levelers in each preparation, punched on the botton of the metal cabinet. See figure (b).

d

Installing Pedestal to Worksurface

a

PRE-DRILLED HOLE TO FIX
PEDESTAL TO WORKSURFACE

b

PANEL

WORKSURFACE

PEDESTAL

- Once the height levelers are inserted to the pedestal, you can place it under the worksurface to finish installing it. See Fig. (c).

⚠

NOTE: The pedestal has a height of 27-3/8'', allowing it to enter perfectly underneath the worksurface to be used as support.

Make sure to install the corner Brackets behind the pedestals for support between the panel and worksurface (d).

PERFORATION

d

c

e
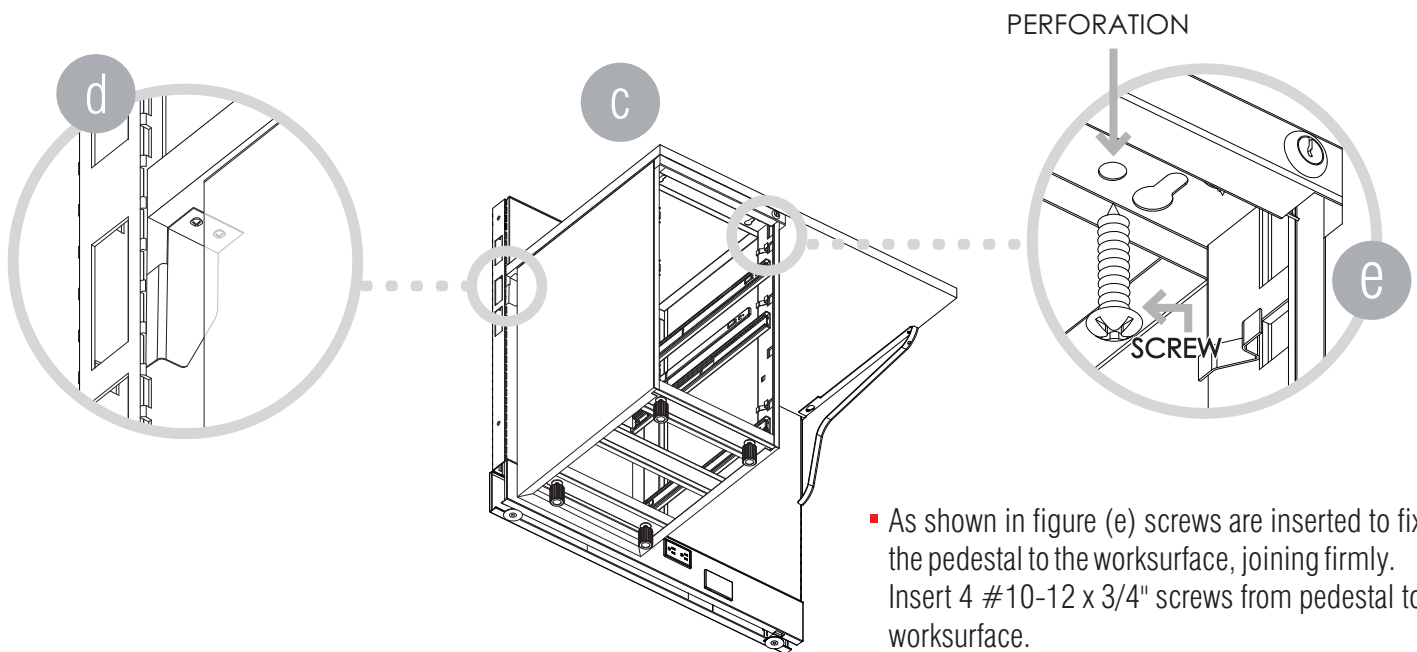
SCREW

- As shown in figure (e) screws are inserted to fix the pedestal to the worksurface, joining firmly. Insert 4 #10-12 x 3/4" screws from pedestal to worksurface.

Installing Pedestal Drawers

a

Metal drawer slide preparation in the pedestal´s internal structure. Fig. (a) and (b).

c

Metal drawer slide used to assemble with cabinet. It is integrated to each side of the drawers for easy installation and use. See Images (a), (b), (c) and (d).

b

d