

# ARTFORMS

PANEL SYSTEM

## INSTALLATION GUIDE



# TABLE OF CONTENT

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**SYSTEM OVERVIEW**

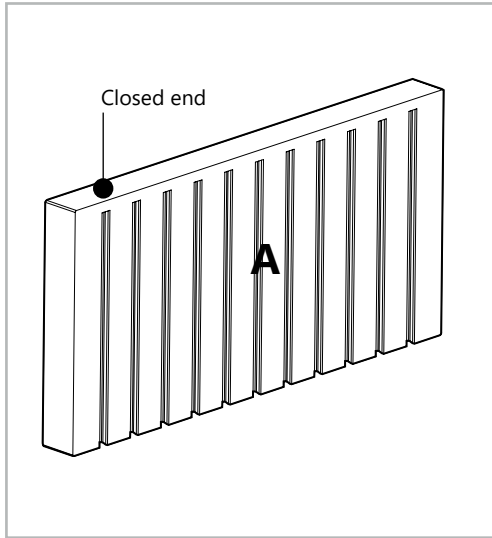
**INSTALLATION**



# PARTS LIST - CONCRETE PANELS

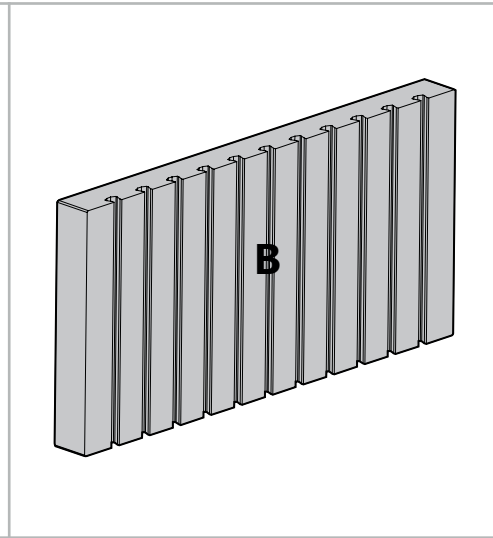
## 18 x 36 x 3" (150 lb)

457 x 914 x 76 mm (67 kg)

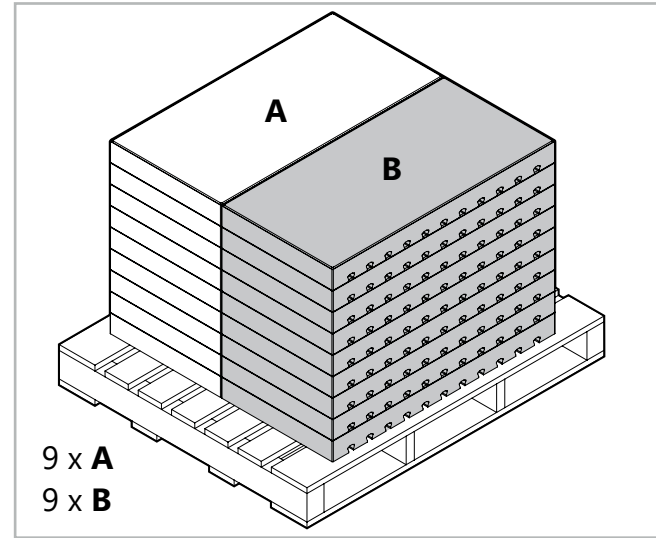


## 18 x 36 x 3" (148 lb)

457 x 914 x 76 mm (66 kg)

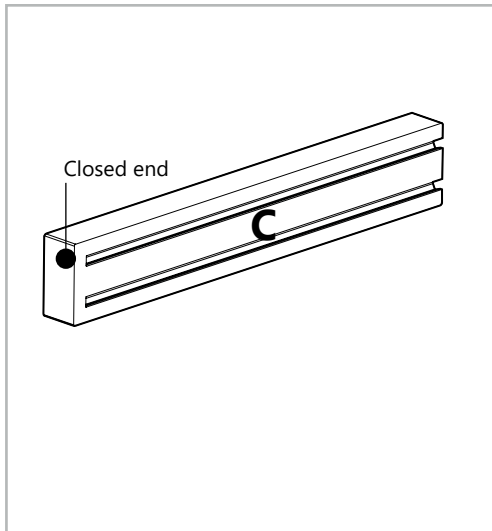


## \*40 x 48" Pallet (18 units/pallet)



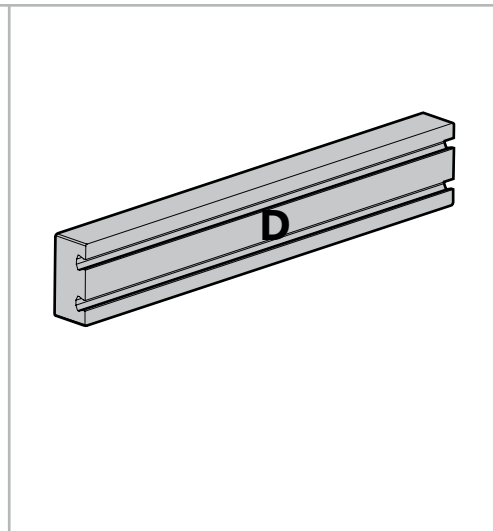
## 6 x 36 x 3" (49 lb)

152 x 914 x 76 mm (22 kg)

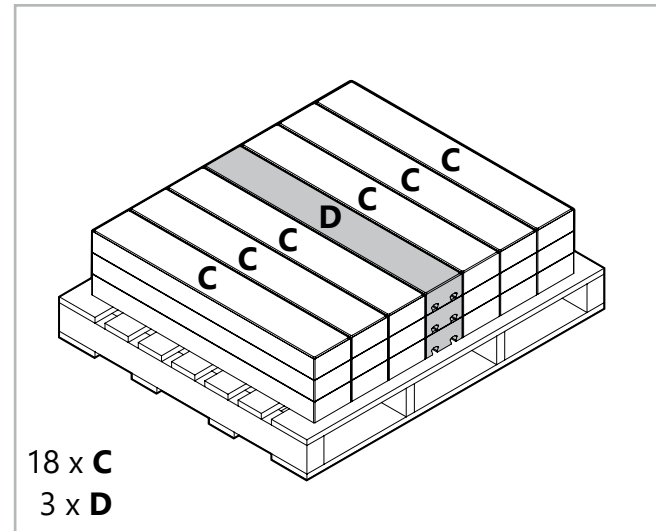


## 6 x 36 x 3" (49 lb)

152 x 914 x 76 mm (22 kg)



## \*40 x 48" Pallet (21 units/pallet)



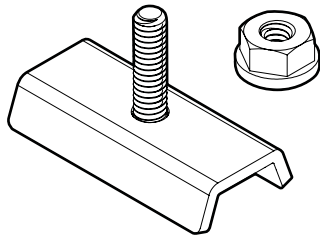
**\*IMPORTANT:** 18x36" panels are sold in pair/layer or in full pallet only. 6x36" panels are sold per unit or in layer or in full pallet.

## PARTS LIST - HARDWARE (STAINLESS STEEL)

### **Anchor Slide – ¼" x 20 stud & nut**

2 x 1¼ x 1" (51 x 33 x 25 mm)

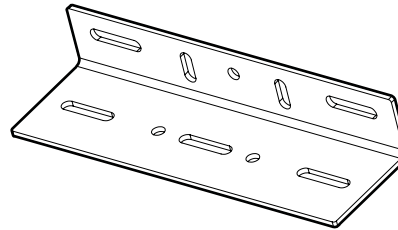
100 units/box



### **\*Joining Plate**

8¼ x 2½ x 1½" (209 x 63 x 38 mm)

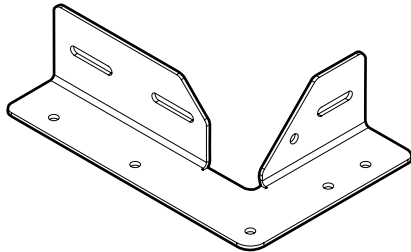
40 units/box



### **\*Inner Corner**

9 x 6 x 2½" (232 x 155 x 63 mm)

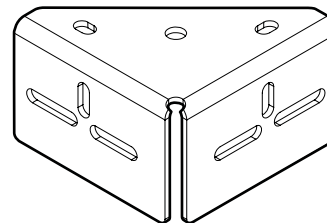
24 units/box



### **\*Outer Corner**

4 x 4 x 2½" (101 x 101 x 63 mm)

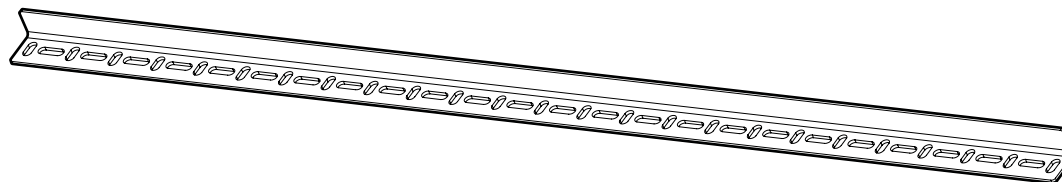
48 units/box



### **\*Stretcher Bar**

36¾ x 1¼ x 1" (933 x 33 x 25 mm)

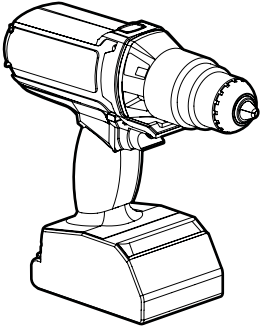
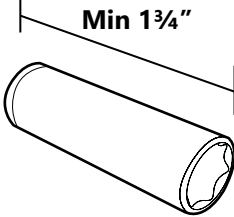

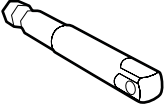
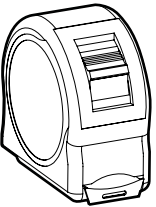
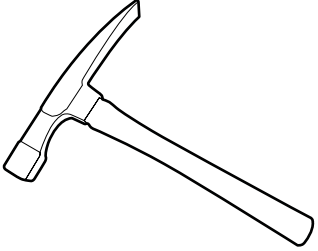
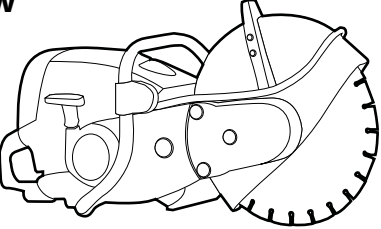
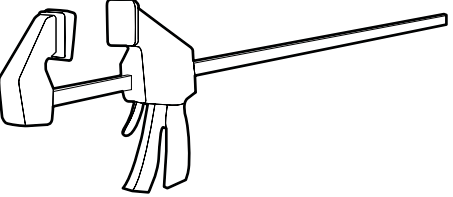
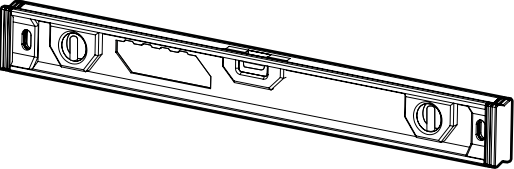
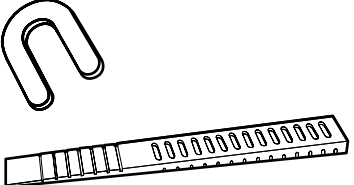
10 units/box



\* **NOTE:** Can be sold separately.

# TOOLS & SAFETY EQUIPMENT

## REQUIRED TOOLS

<b>Drill</b>		<b>Deep Hex Socket 7/16" with 1/4" Drive</b>	
<b>Mallet</b>		<b>Socket Adaptor 1/4" Hex shank to 1/4" Drive</b>	
<b>Measuring tape</b>		<b>Chipping Hammer</b>	
<b>Saw</b>		<b>Bar Clamp (48")</b>	
<b>Level</b>		<b>Plastic shims</b>	

## SAFETY EQUIPMENT

<b>Safety boots</b>	
<b>Gloves</b>	
<b>Safety glasses</b>	
<b>Mask</b>	

# APPLICATIONS

## Planter Box/Bench



## Privacy Wall



## \* Fire pit



## Raised Garden



## \* Outdoor Kitchen



## Counter

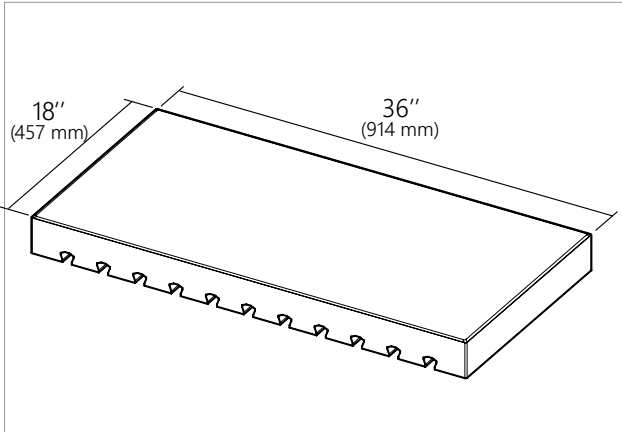


CLICK TO SEE  
MORE  
APPLICATIONS

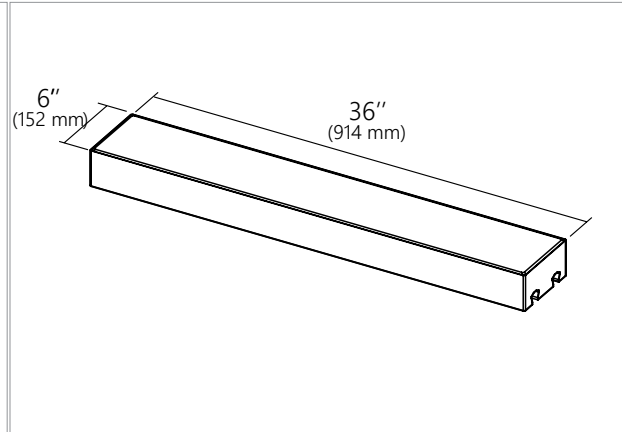
\* **IMPORTANT:** For all complementary appliances/accessories to the **Artforms panel system**, follow manufacturer's instructions/guidelines. Consult qualified services person/ experts to validate installations, repairs, safety recommendations and any other related topics.

# MODULARITY – THE SYSTEM

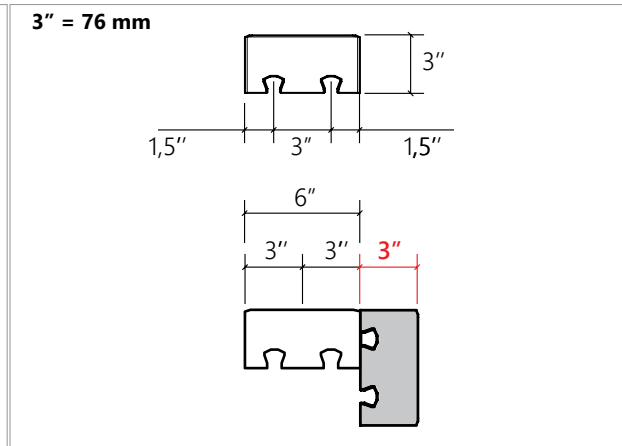
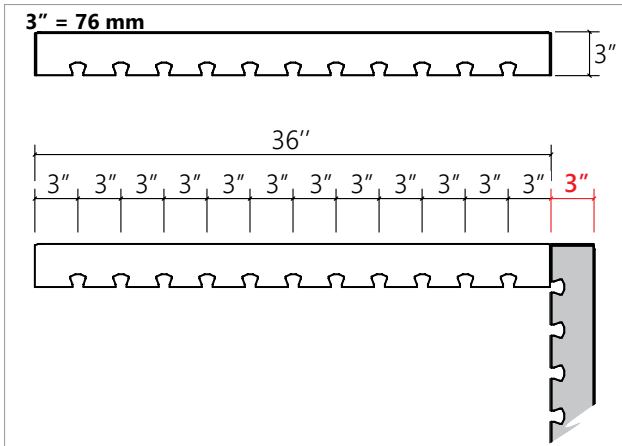
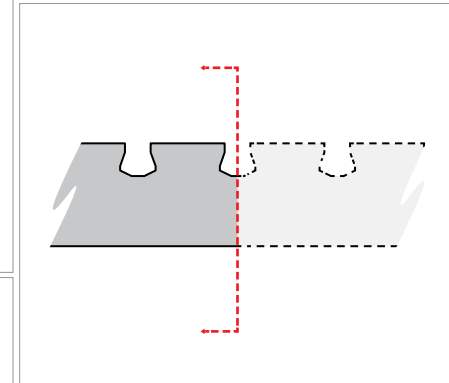
**18 x 36 x 3" PANEL**



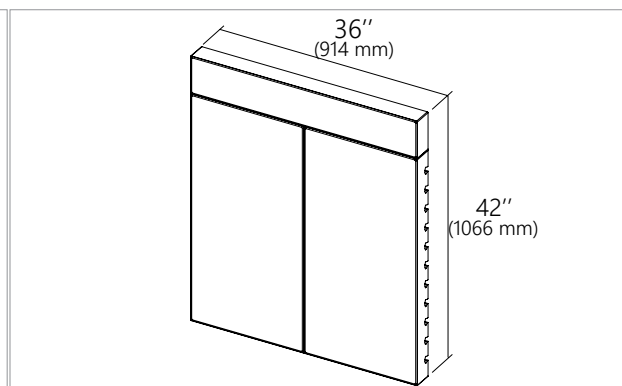
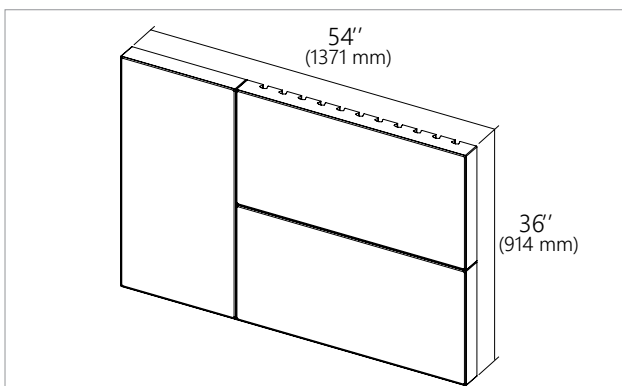
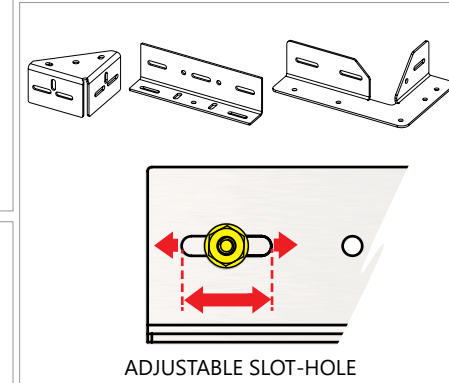
**6 x 36 x 3" PANEL**



**RECOMMENDED :  
CUT IN THE MIDDLE OF  
DOVETAIL**



**ADJUSTMENT**



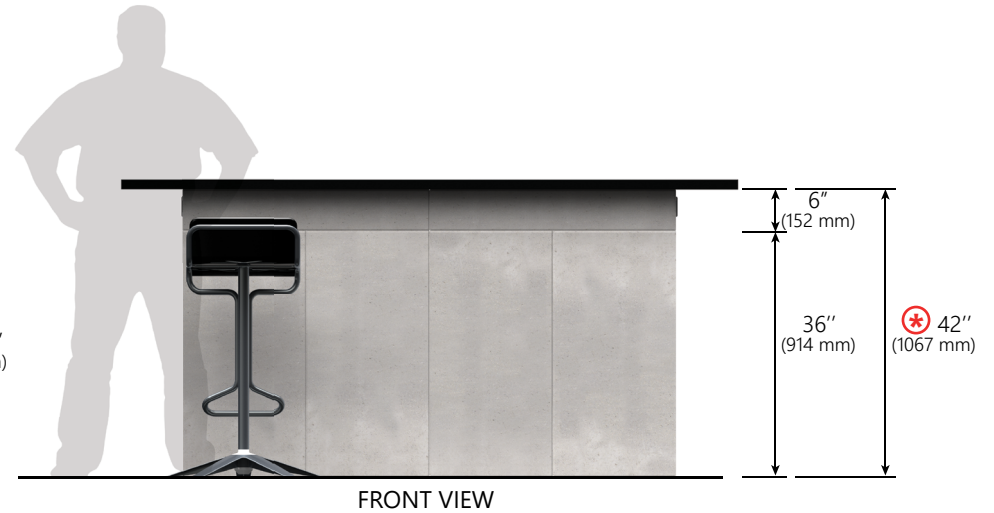
**NOTE:** It is recommended to design structures with overall dimensions using increments of **3" (76mm)**.

# MODULARITY – REFERENCES

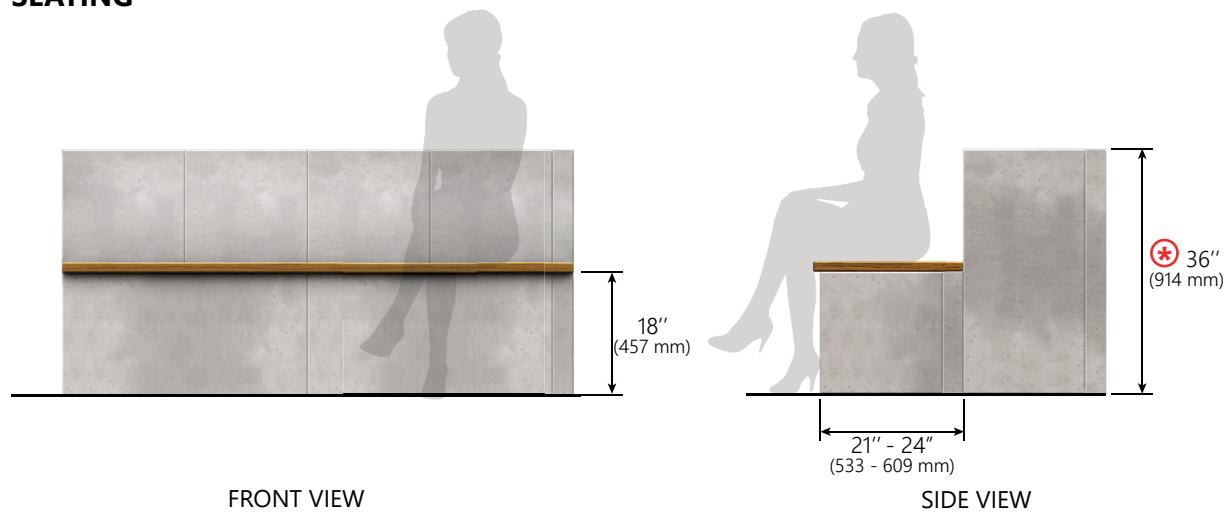
## KITCHEN TABLE



## BAR TABLE



## SEATING

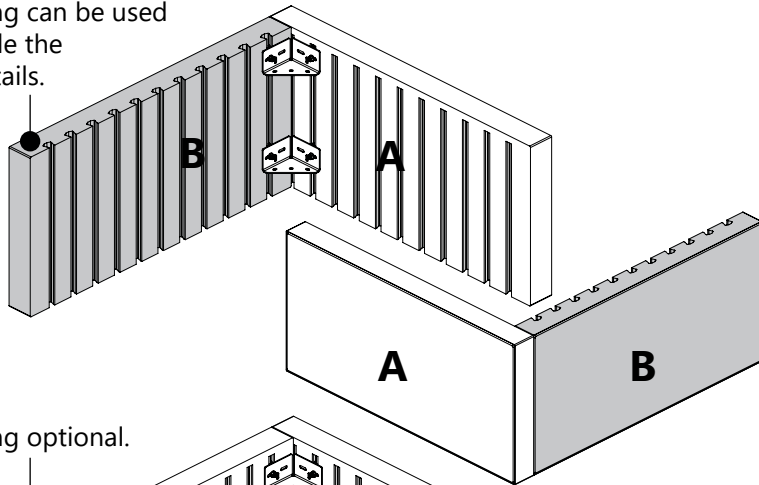


⊛ **NOTE:** Maximum height of **36"** for planter box and **42"** for outdoor living structure. Any higher structure must be designed by an engineer.

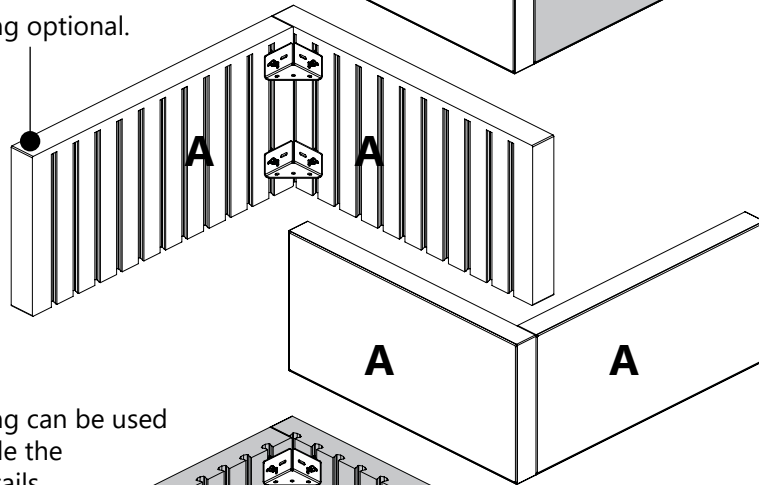


# PANEL CONFIGURATIONS

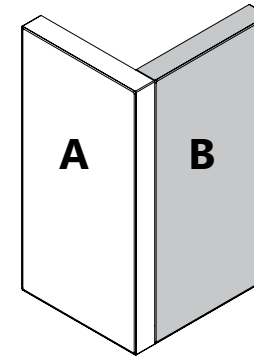
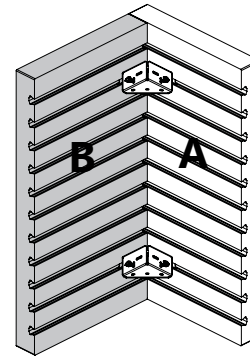
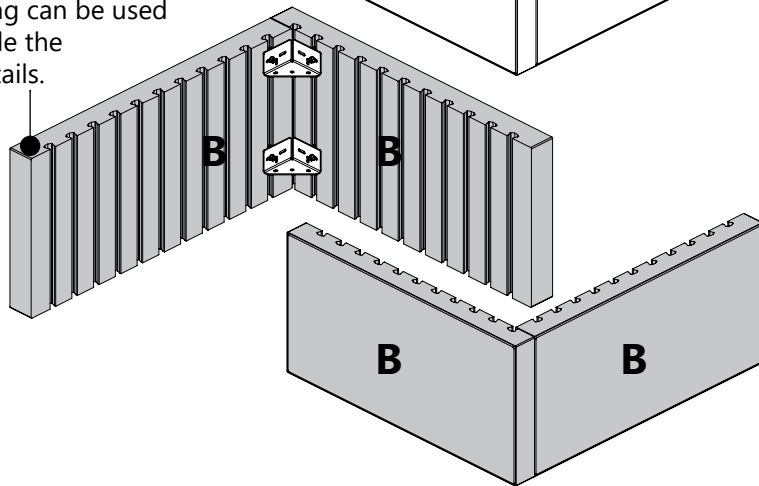
Coping can be used to hide the dovetails.



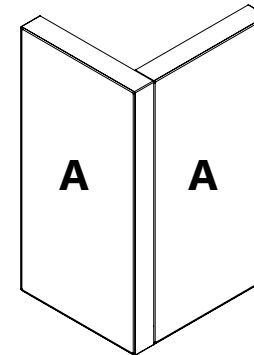
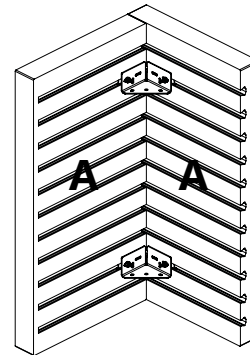
Coping optional.



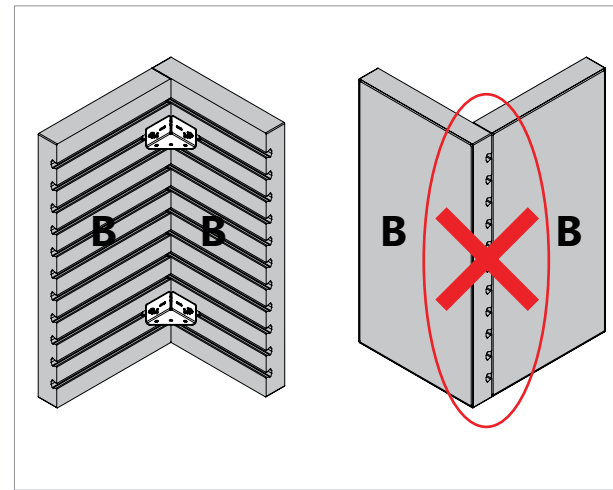
Coping can be used to hide the dovetails.



**\* IDEAL:**  
This configuration uses equal number of panel A and panel B.



**\* NOT OPTIMAL:**  
This configuration uses panel A only.

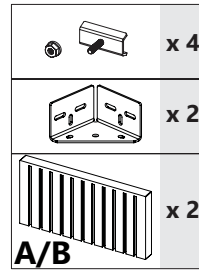
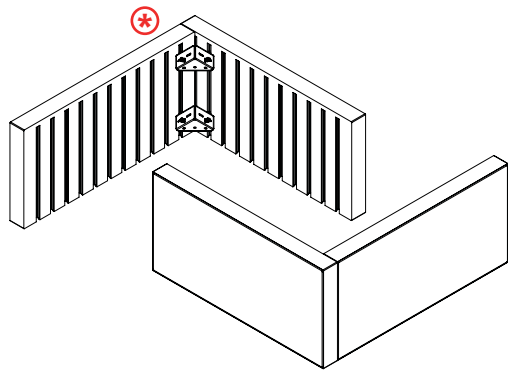


**\* NOT RECOMMENDED:**  
This configuration uses panel B only and the dovetails are exposed. Use ideal configuration as shown above.

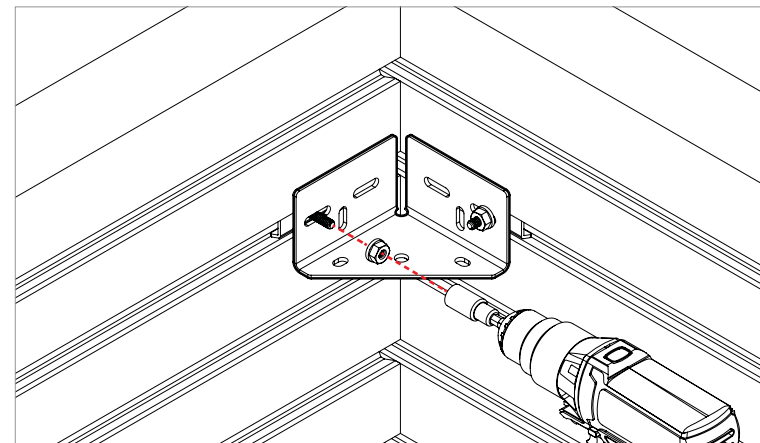
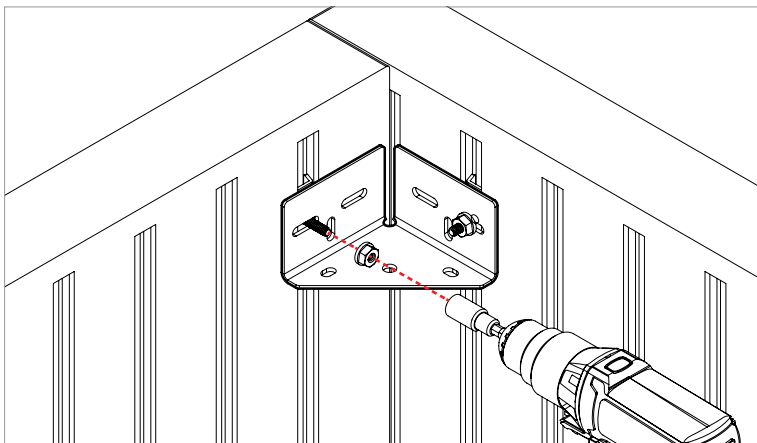
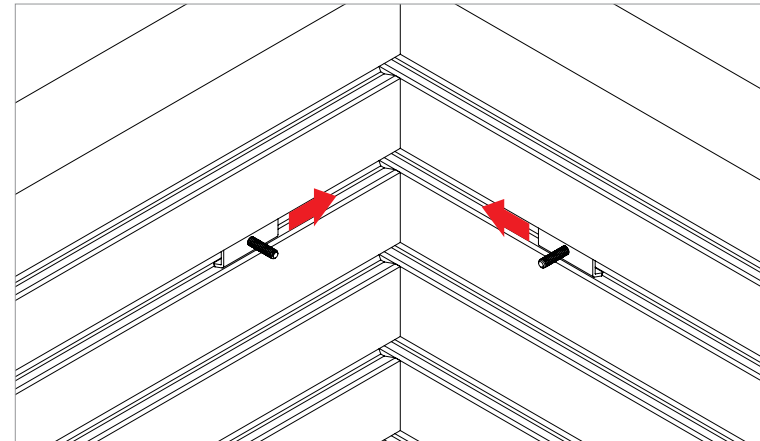
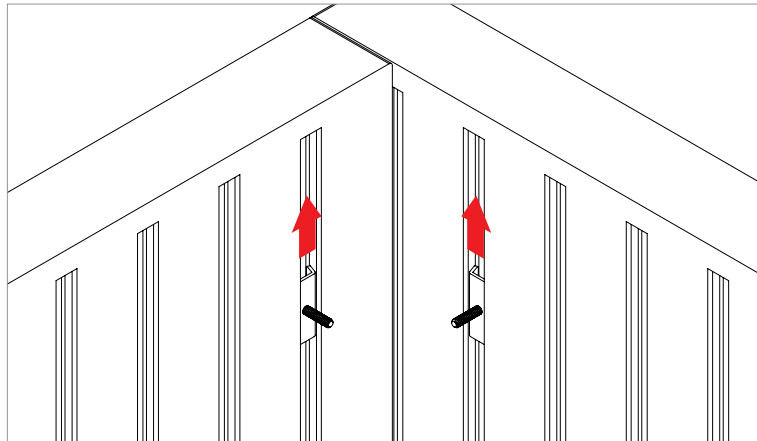
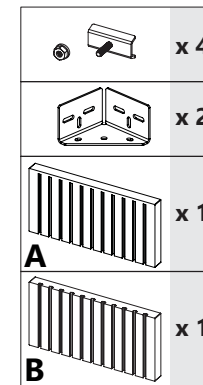
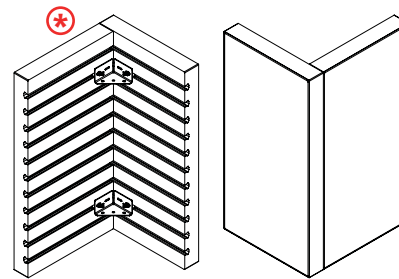
**\*IMPORTANT:** When planning configurations, consider the amount of panel A and panel B on a pallet. 18x36" panels are sold in pair/layer or in full pallet only. 6x36" panels are sold in layer or in full pallet only.

# OUTER CORNER INSTALLATION

## HORIZONTAL PANELS



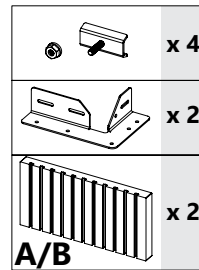
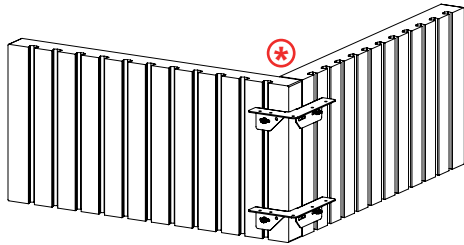
## VERTICAL PANELS



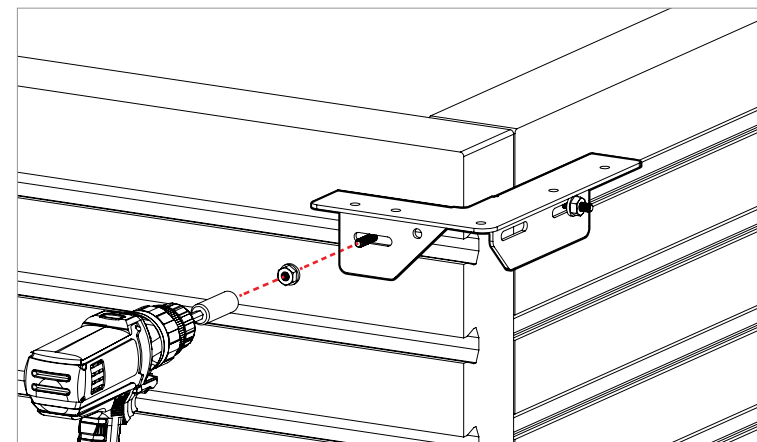
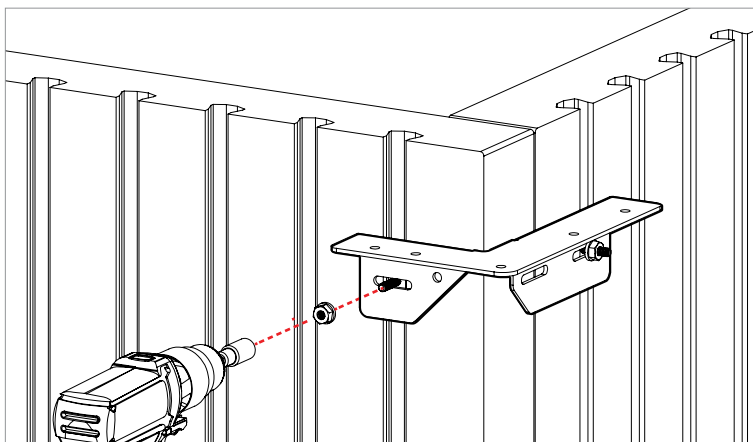
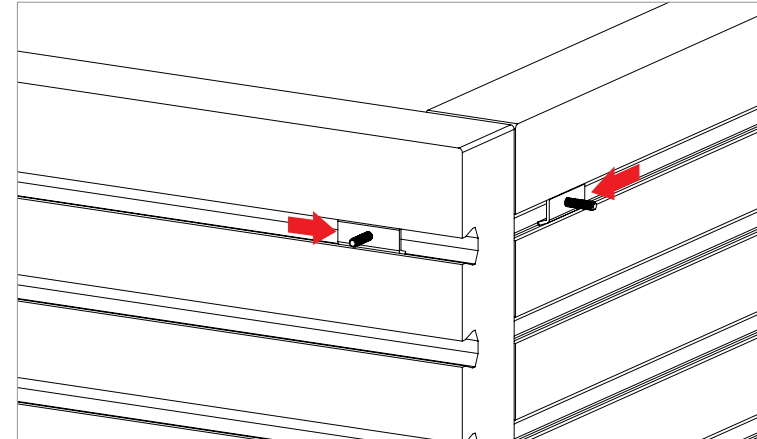
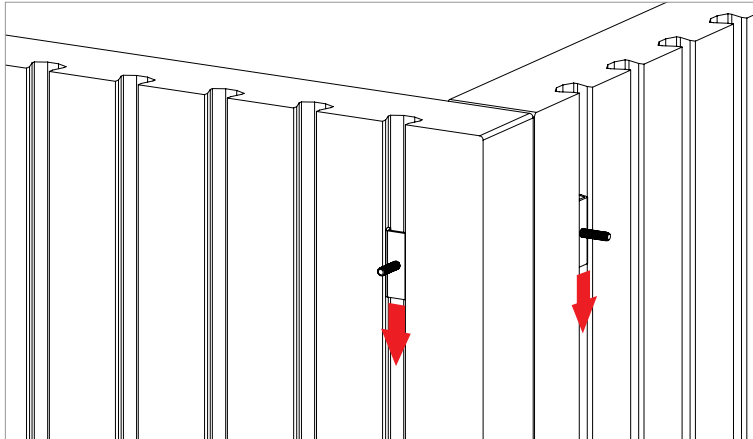
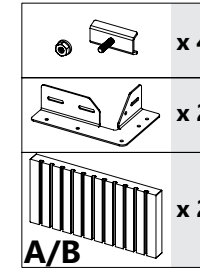
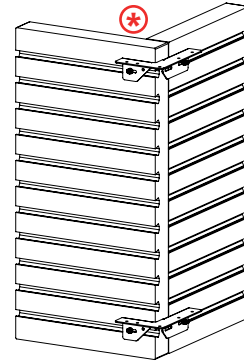
**\* IMPORTANT:** Always use a minimum of 2 outer corner brackets per corner assembly.  
 ▶ See Tips and tricks from page 26 for more details.

# INNER CORNER INSTALLATION

## HORIZONTAL PANELS



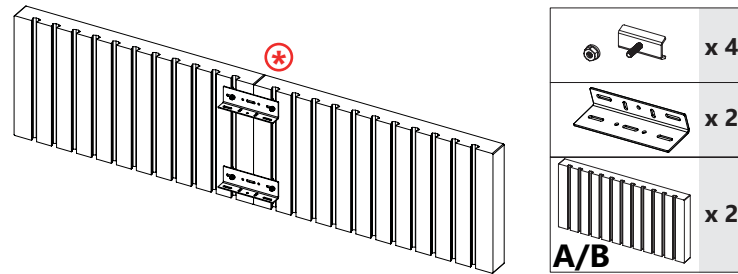
## VERTICAL PANELS



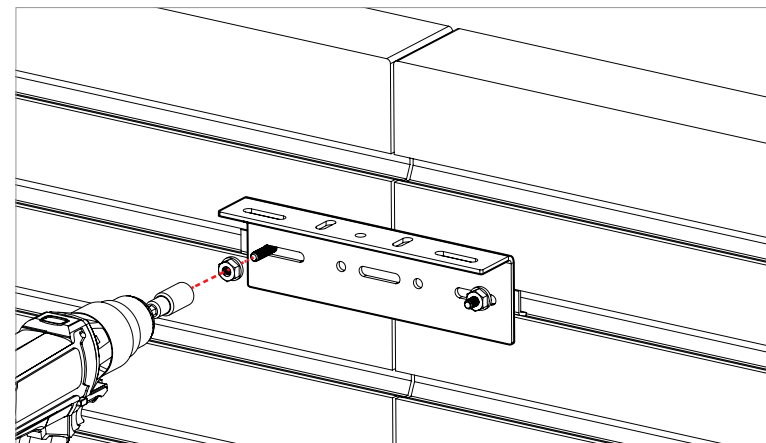
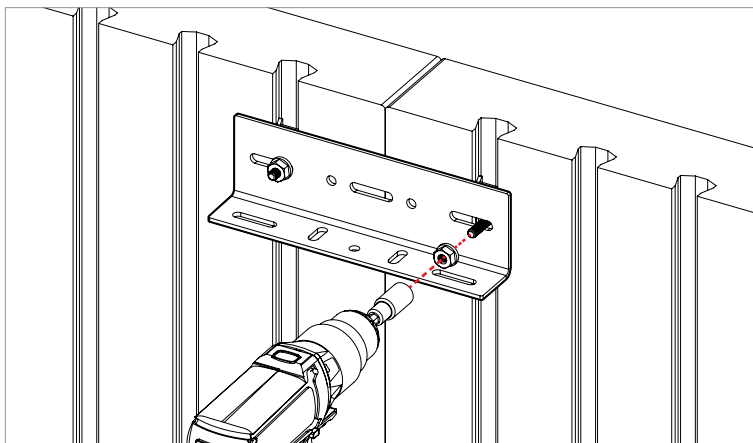
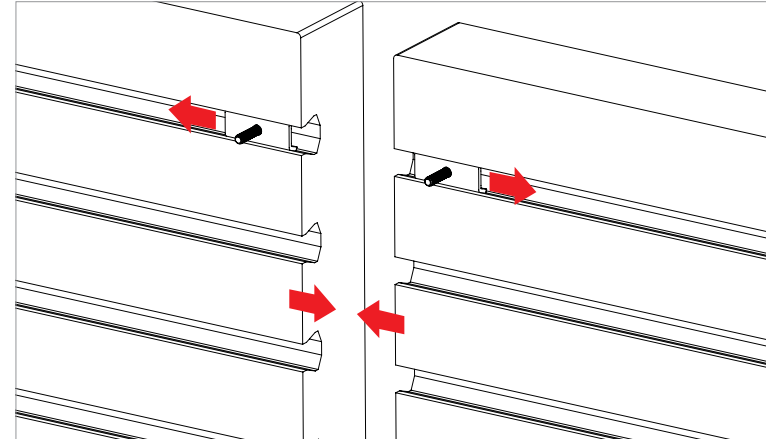
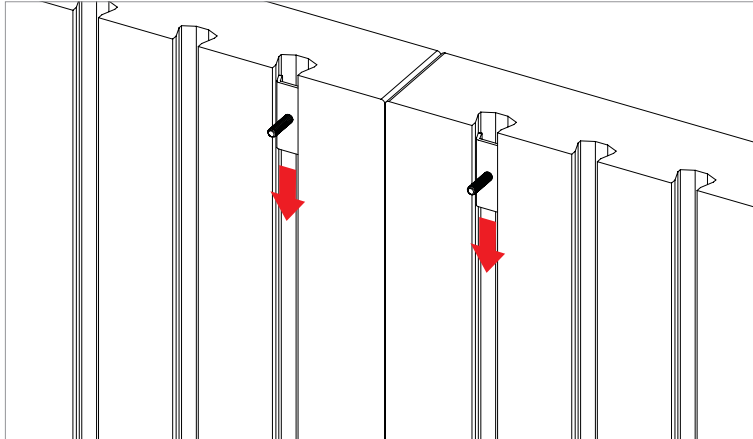
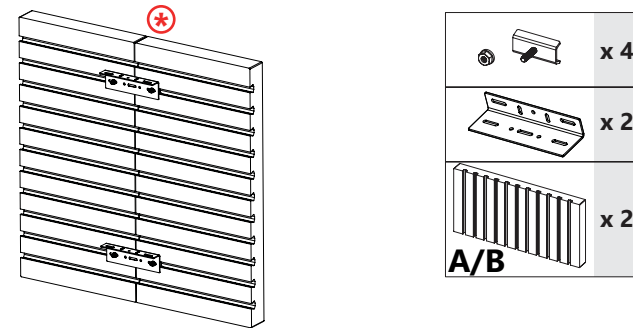
**⊛ IMPORTANT:** Always use a minimum of 2 inner corner brackets per corner assembly.  
 ▶ See Tips and tricks from page 26 for more details.

# JOINING PLATE INSTALLATION

## HORIZONTAL PANELS



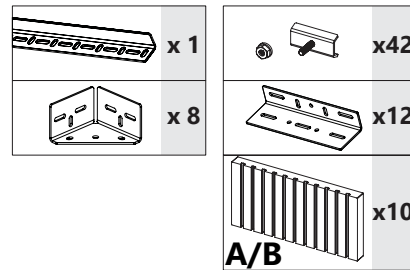
## VERTICAL PANELS



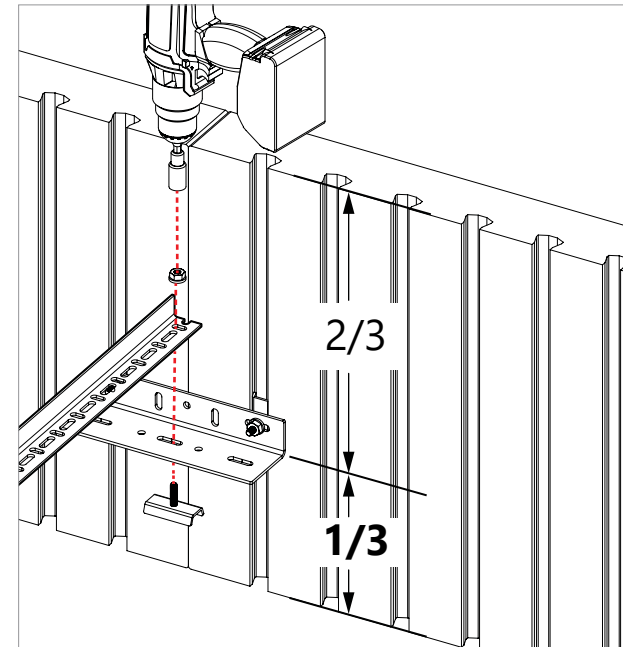
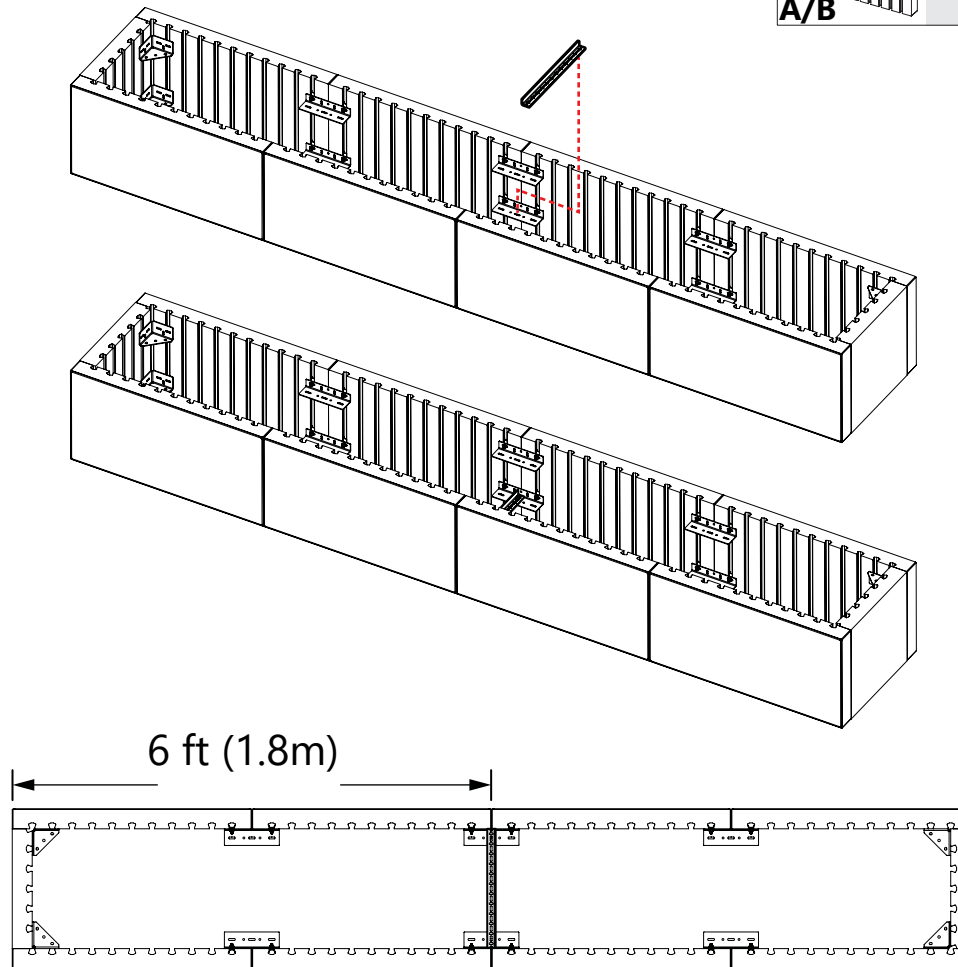
**\* IMPORTANT:** Always use a minimum of 2 joining plates when joining two parallel panels.  
 ▶ See Tips and tricks from page 26 for more details.

# STRETCHER BAR INSTALLATION

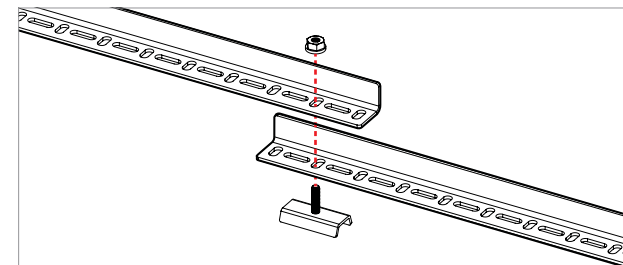
## HORIZONTAL PANELS



The stretcher bar keeps parallel 2 sets of panels facing each other. It is recommended to attach the stretcher bar to the joining plate every 6ft (1.8m). Place it at 1/3 of the total height from the bottom of assembly. The stretcher bar must be cut to fit distance between 2 sets of panels.



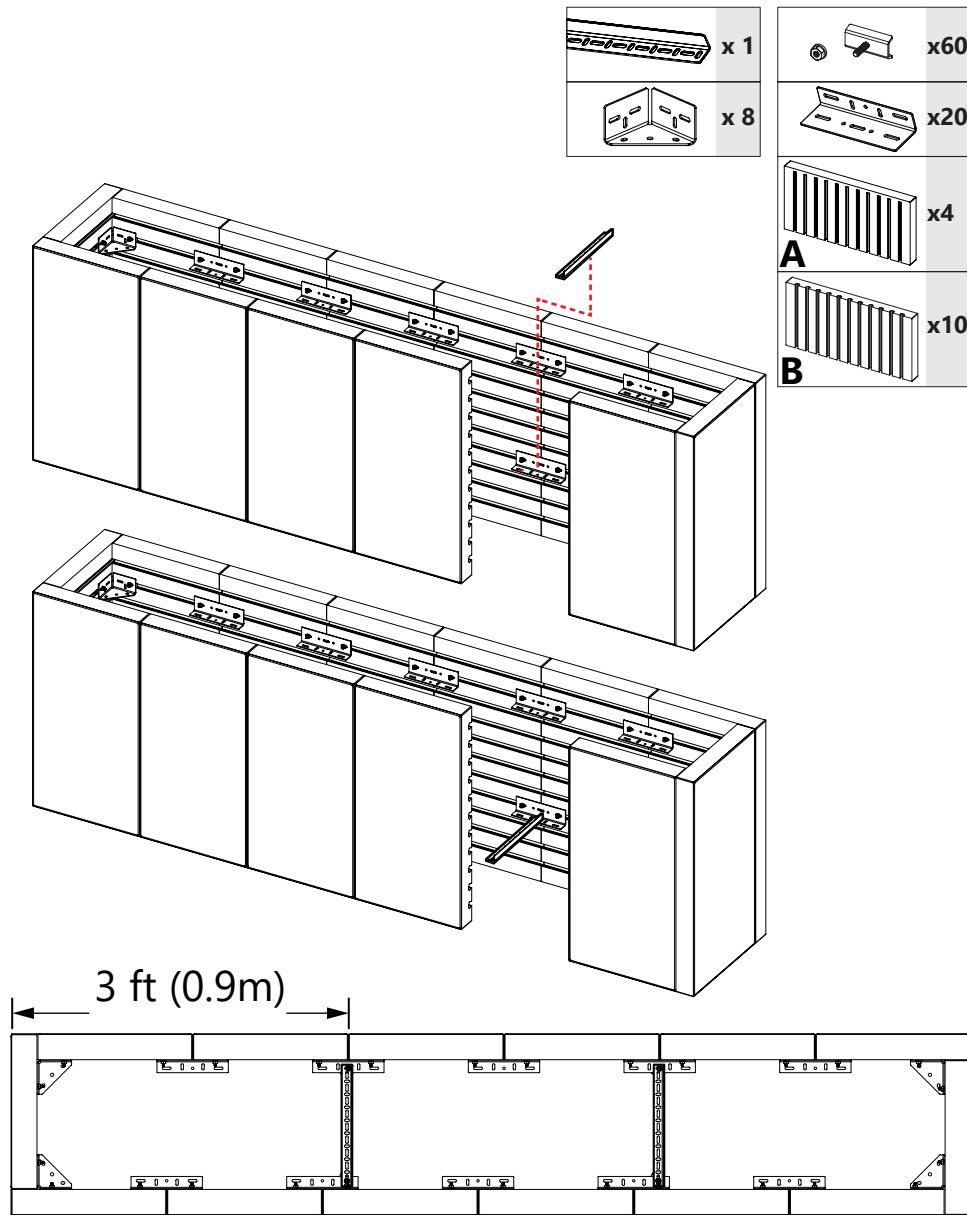
**NOTE:** The stretcher bar can be extended.



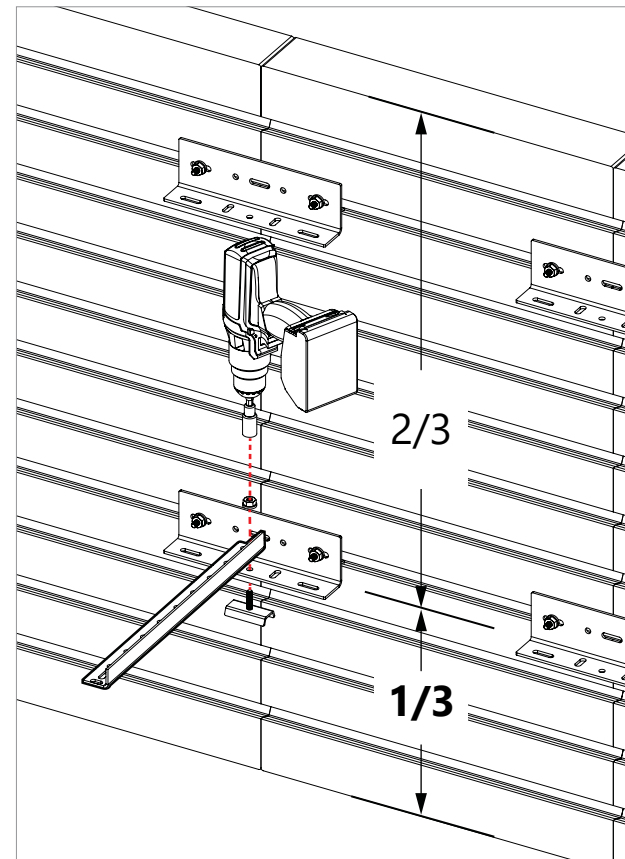
► See Tips and tricks from page 26 for more details.

# STRETCHER BAR INSTALLATION

## VERTICAL PANELS



The stretcher bar keeps parallel 2 sets of panels facing each other. It is recommended to attach the stretcher bar to the joining plate every 3ft (0.9m). Place it at approximately 1/3 of the total height from the bottom of assembly. The stretcher bar must be cut to fit distance between 2 sets of panels.

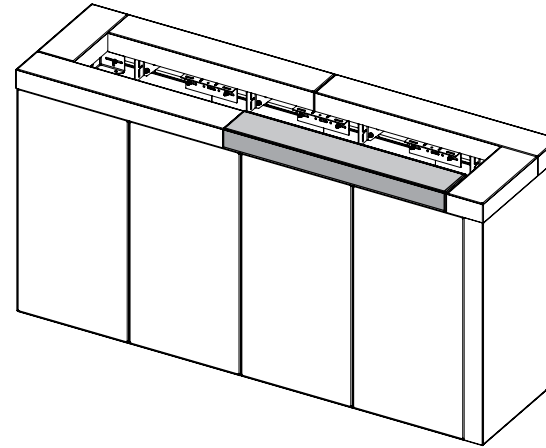
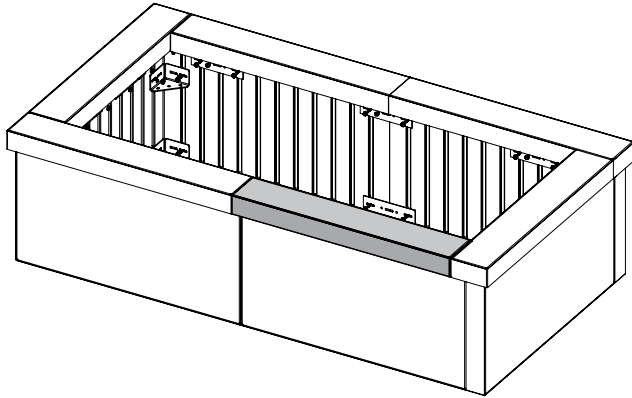


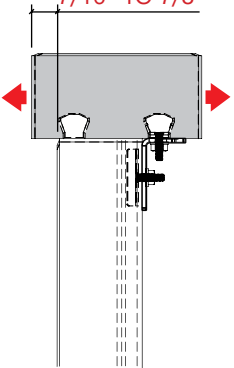
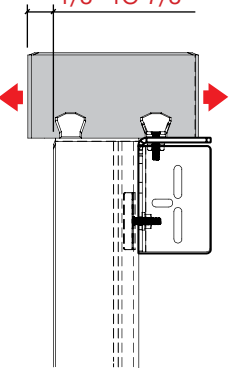
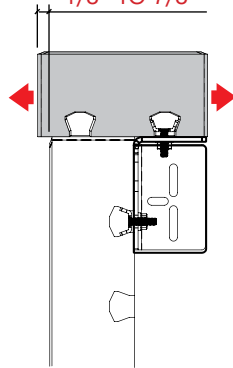
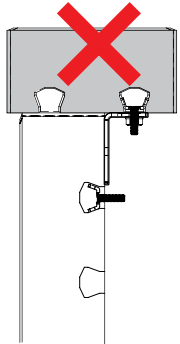
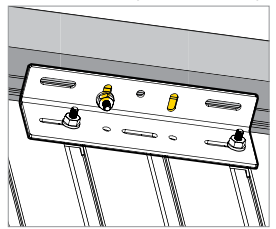
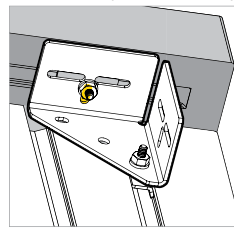
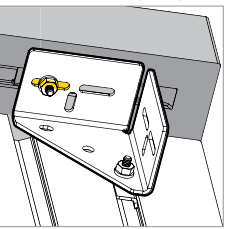
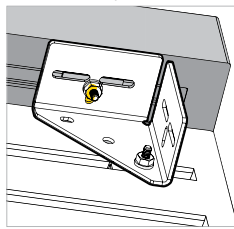
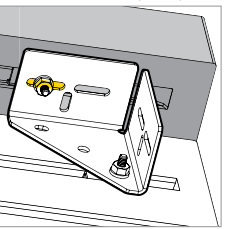
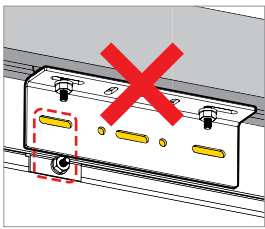
► See Tips and tricks from page 26 for more details.

# 6x36 PANEL – COPING INSTALLATION (MECHANICALLY FIXED)

18 x 36 x 3" HORIZONTAL PANELS

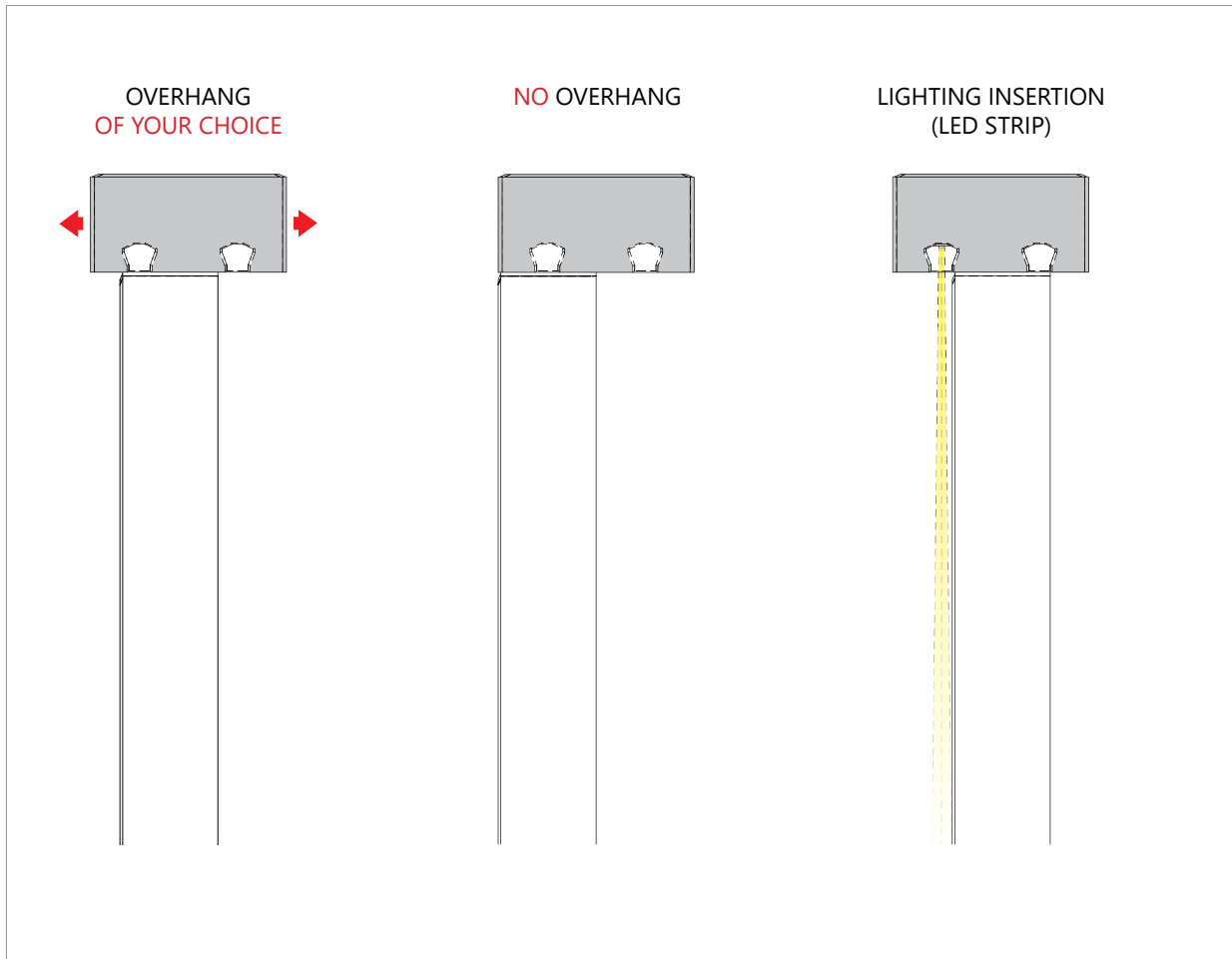
18 x 36 x 3" VERTICAL PANELS



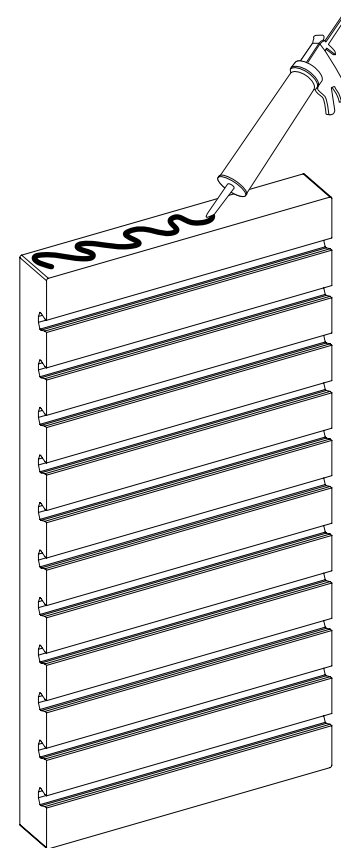
<p>OVERHANG FROM <b>7/16" TO 7/8"</b></p> 		<p>OVERHANG FROM <b>1/8" TO 7/8"</b></p> 		<p>OVERHANG FROM <b>1/8" TO 7/8"</b></p> 		
<p><b>OVERHANG (7/16" to 7/8")</b></p> 	<p><b>OPTION 1 (7/16" to 7/8")</b></p> 	<p><b>OPTION 2 (1/8")</b></p> 	<p><b>OPTION 1 (7/16" to 7/8")</b></p> 	<p><b>OPTION 2 (1/8")</b></p> 		

► See Tips and tricks from page 26 for more details.

# 6x36 PANEL – COPING INSTALLATION (FIXED WITH ADHESIVE)



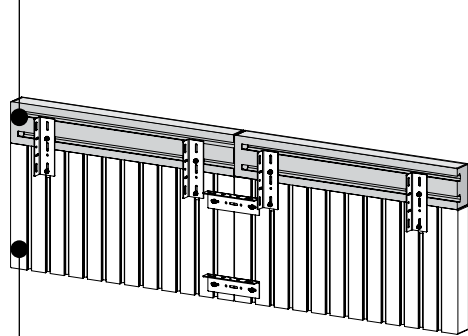
**FIXED USING  
CONSTRUCTION GLUE  
OR STRUCTURE BOND**


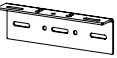






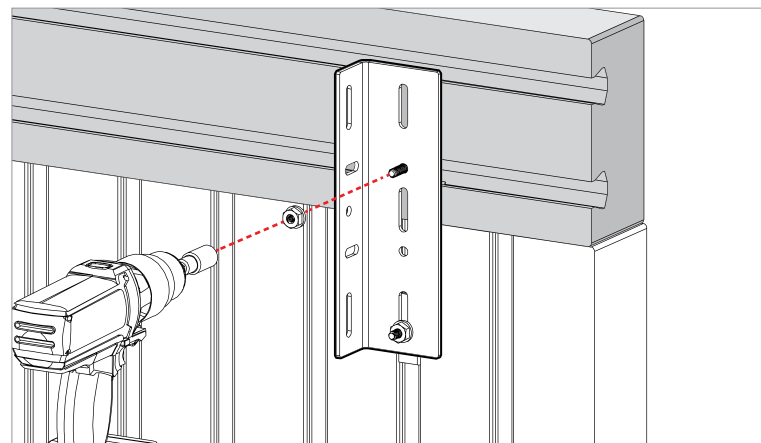
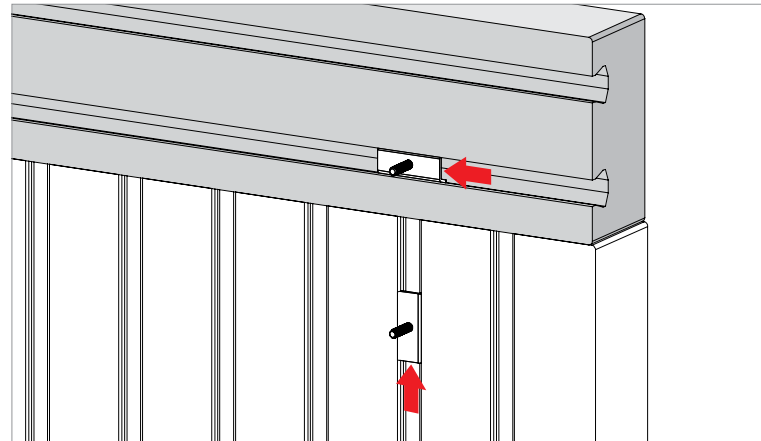
# 6X36 PANEL – ACCENT INSTALLATION

6 x 36 x 3" PANEL

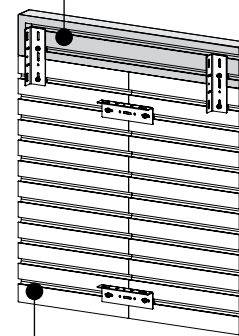



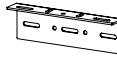


	x12
	x 6
	x 2
<b>C/D</b>	
	x 2
<b>A/B</b>	

18 x 36 x 3" HORIZONTAL PANEL

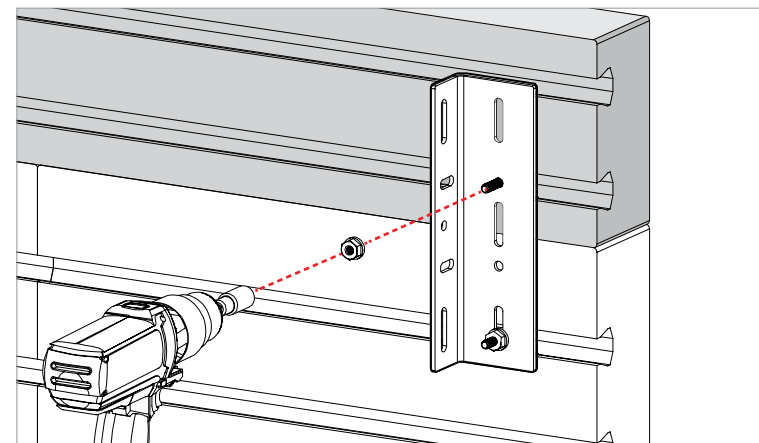
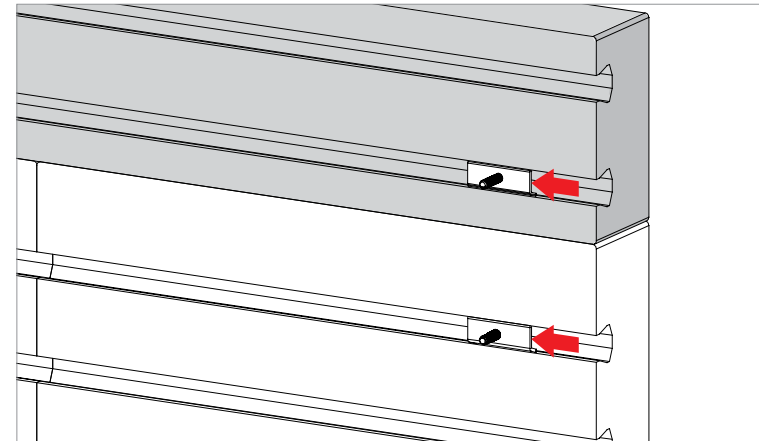


6 x 36 x 3" PANEL



	x 8
	x 4
	x 1
<b>C/D</b>	
	x 2
<b>A/B</b>	

18 x 36 x 3" VERTICAL PANEL

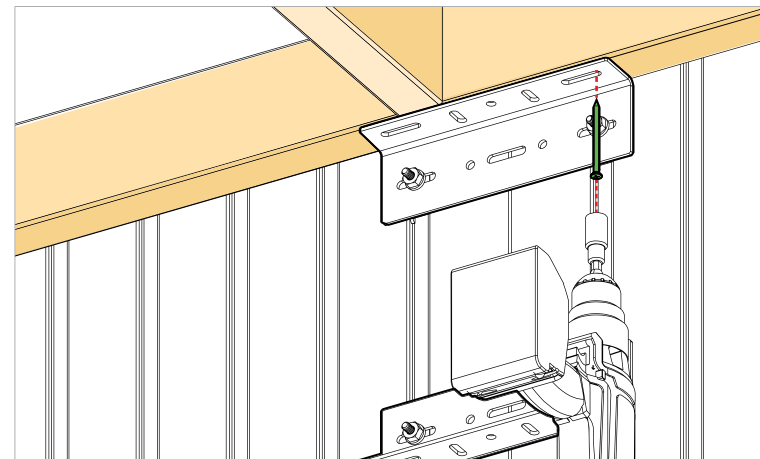
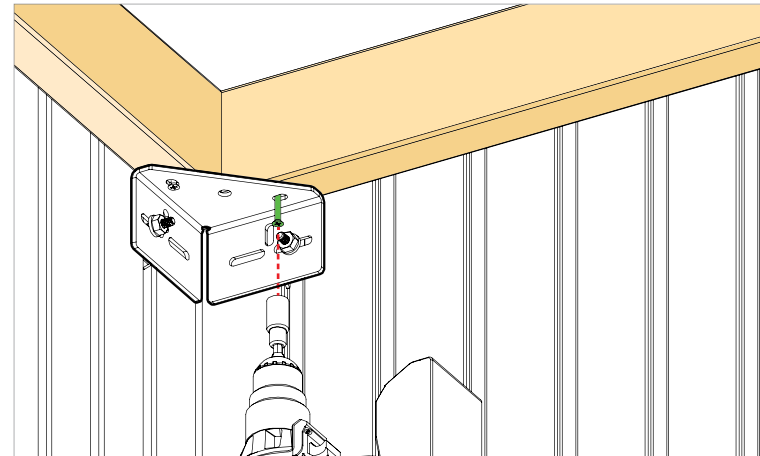
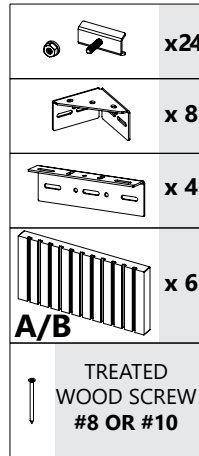
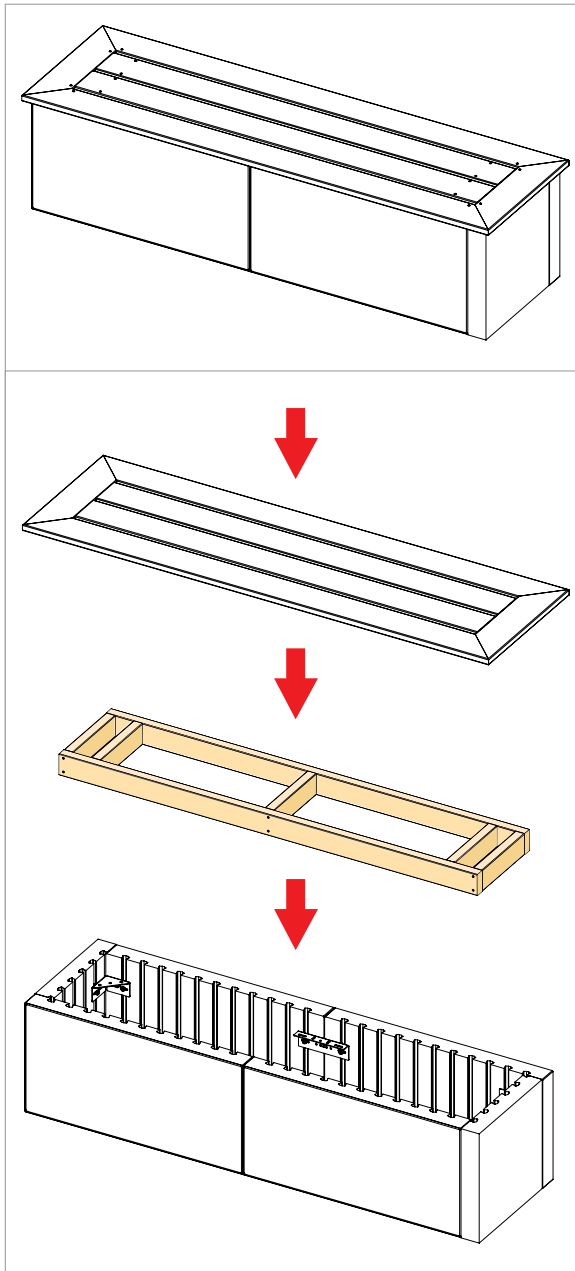


**⊛ IMPORTANT:** Always use a minimum of 2 joining plates when joining 6x36 panel with 18x36 panel

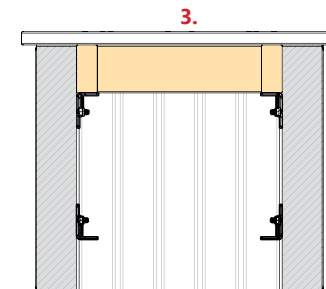
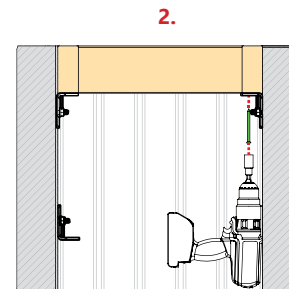
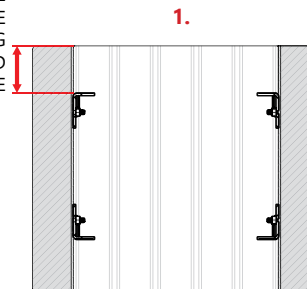
► See Tips and tricks from page 26 for more details.

# INTEGRATING WOOD

## BENCH



INSTALL THE  
HARDWARE  
ACCORDING  
TO WOOD  
SIZE

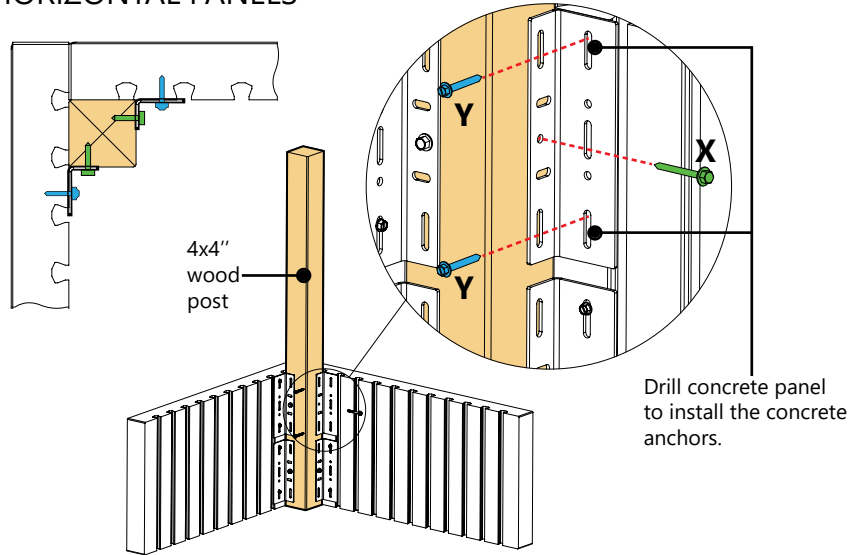


SECTION VIEW

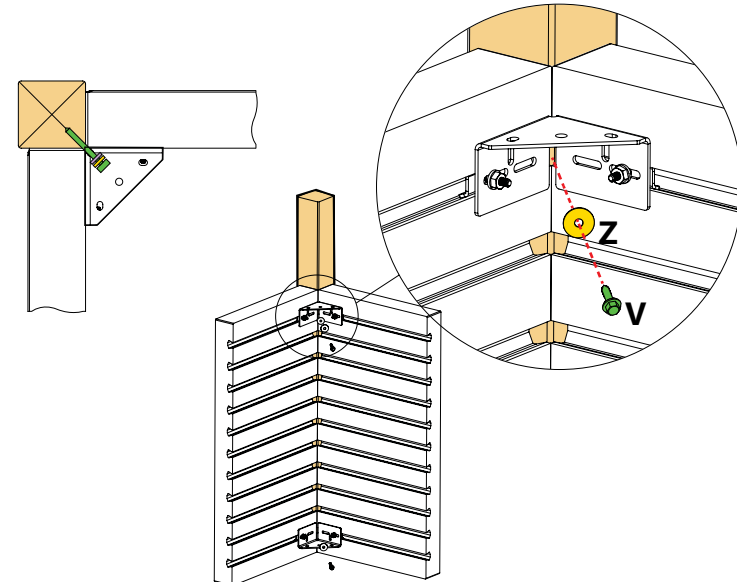
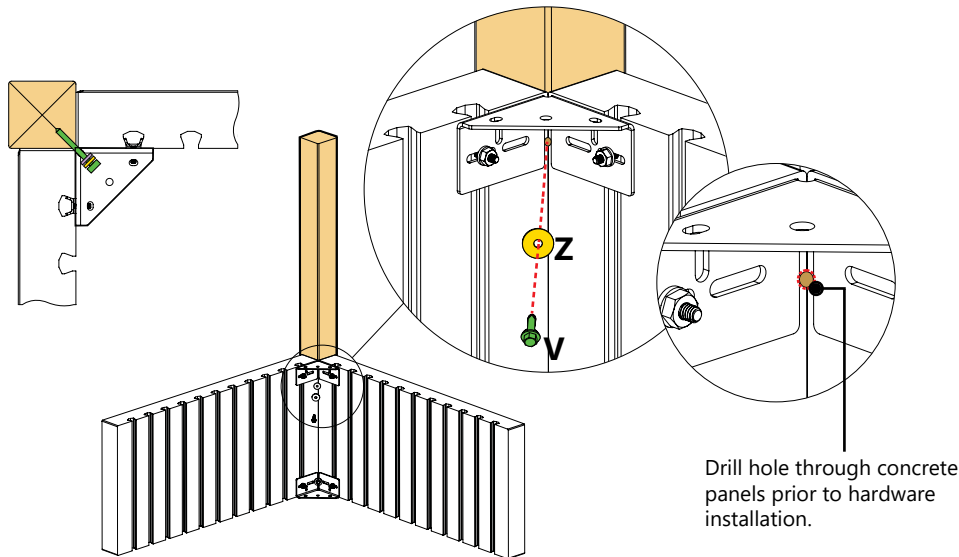
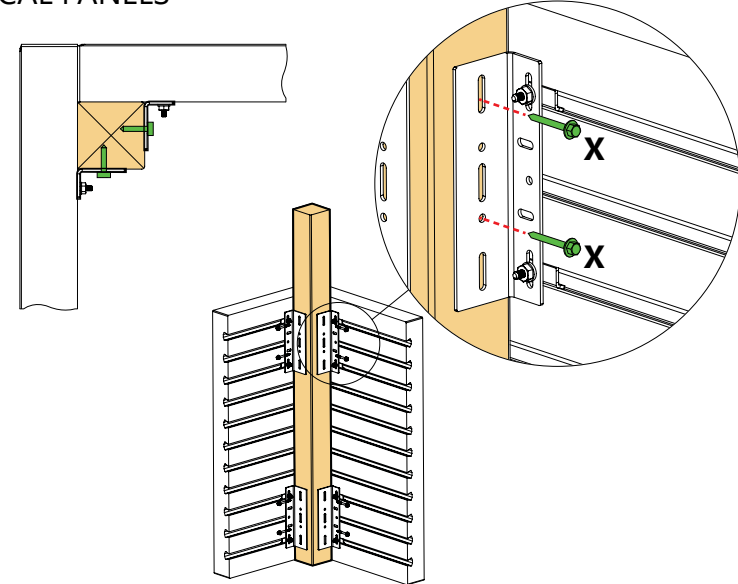
► See Tips and tricks from page 26 for more details.

# INTEGRATING 4x4" WOOD POSTS

## HORIZONTAL PANELS



## VERTICAL PANELS



**X=Stainless Steel Wood Screw Flat Head #10 x 2 1/2"**

**V=Stainless Steel Lag screws 1/4 x 2 1/2" or 5/16 x 2 1/2"**

**Y=Treated Concrete Anchor (Tapcon®) 1/4"x1 3/4" or 3/16"x1 3/4"**

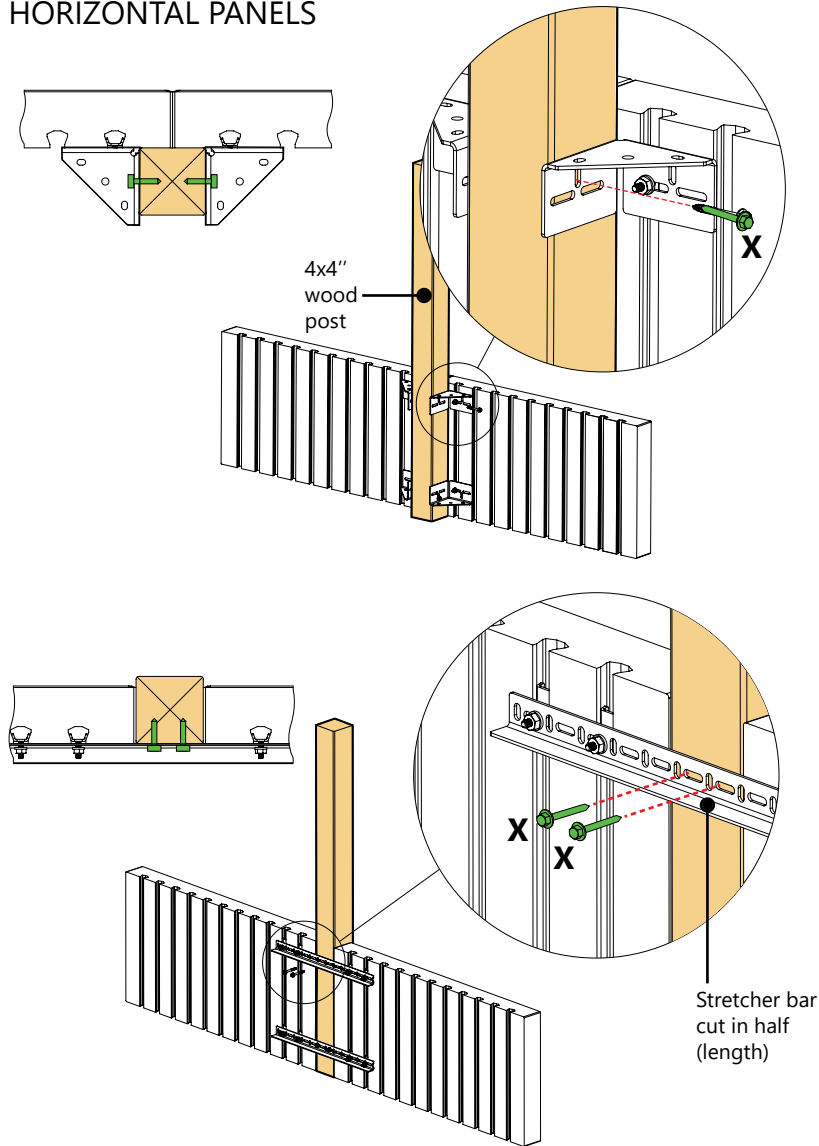
**Z=Stainless Steel Oversized Washer 5/16"**

**IMPORTANT:** Other types of hardware (not included) may be required to make these assemblies (wood screws, concrete anchors, etc.).

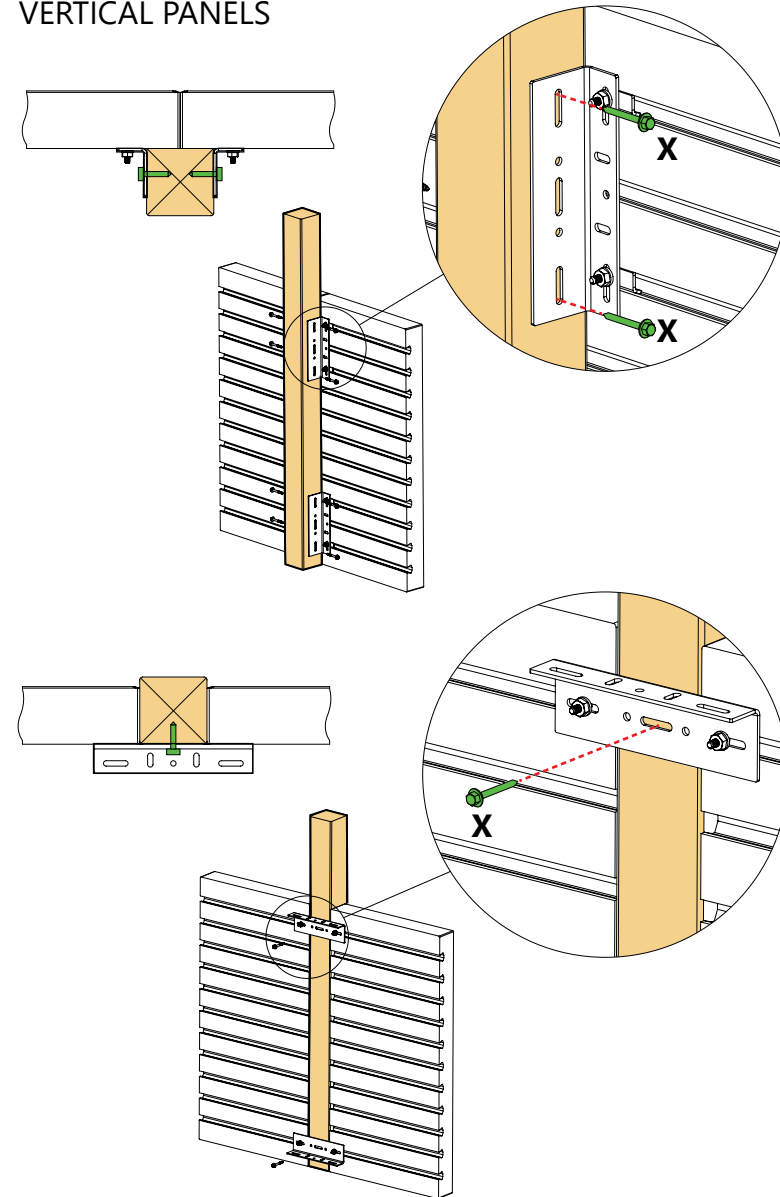
**BELGARD** is not responsible for any issue regarding other materials, accessories, other types of hardware, etc. We recommend consulting an expert/engineer to determine the design limitations of the screen panels based on wind loads.

# INTEGRATING 4x4" WOOD POSTS

## HORIZONTAL PANELS



## VERTICAL PANELS



**X=Stainless Steel Wood Screw Flat Head #10 x 2 1/2"**

**Y=Treated Concrete Anchor (Tapcon®) 1/4"x1 3/4" or 3/16"x1 3/4"**

**V=Stainless Steel Lag screws 1/4 x 2 1/2" or 5/16 x 2 1/2"**

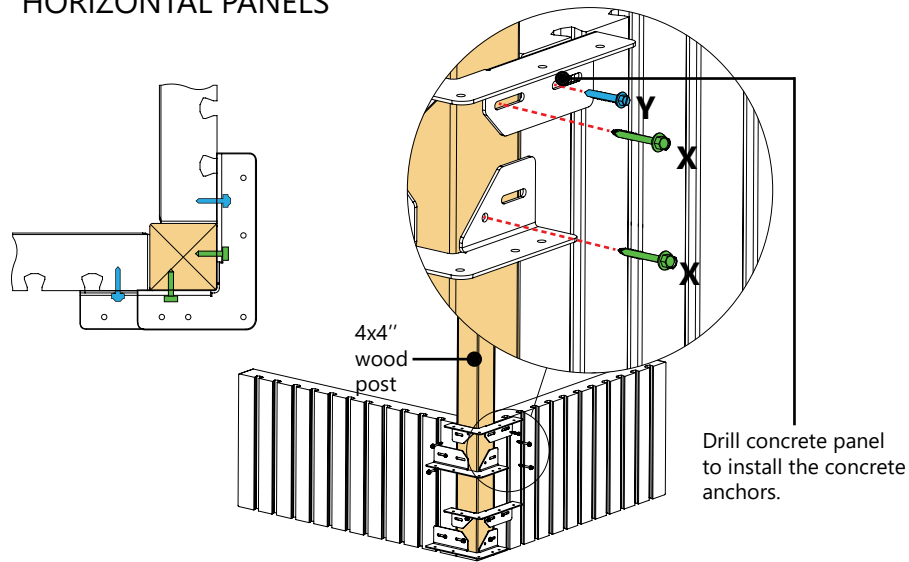
**Z=Stainless Steel Oversized Washer 5/16"**

**IMPORTANT:** Other types of hardware (not included) may be required to make these assemblies (wood screws, concrete anchors, etc.).

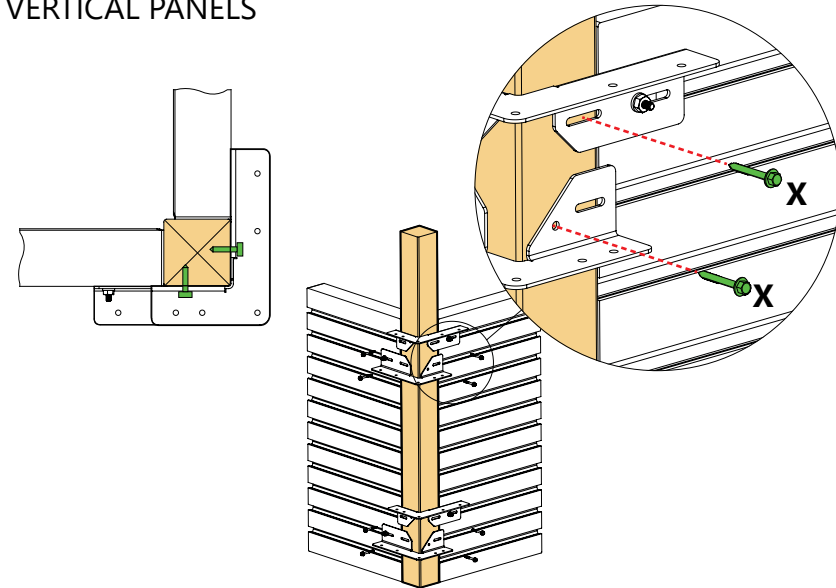
**BELGARD** is not responsible for any issue regarding other materials, accessories, other types of hardware, etc. We recommend consulting an expert/engineer to determine the design limitations of the screen panels based on wind loads.

# INTEGRATING 4x4" WOOD POSTS

## HORIZONTAL PANELS



## VERTICAL PANELS



**X=Stainless Steel Wood Screw Flat Head #10 x 2½"**

**Y=Treated Concrete Anchor (Tapcon®) 1/4"x1¾" or 3/16"x1¾"**

**V=Stainless Steel Lag screws 1/4 x 2½" or 5/16 x 2½"**

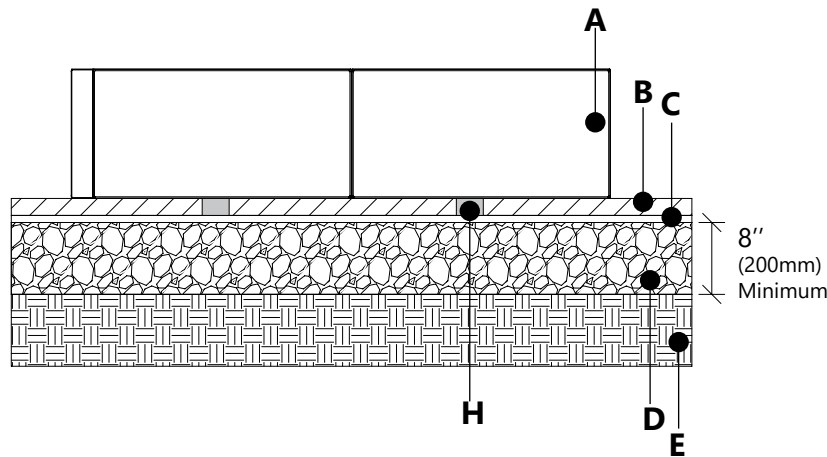
**Z=Stainless Steel Oversized Washer 5/16"**

**IMPORTANT:** Other types of hardware (not included) may be required to make these assemblies (wood screws, concrete anchors, etc.).

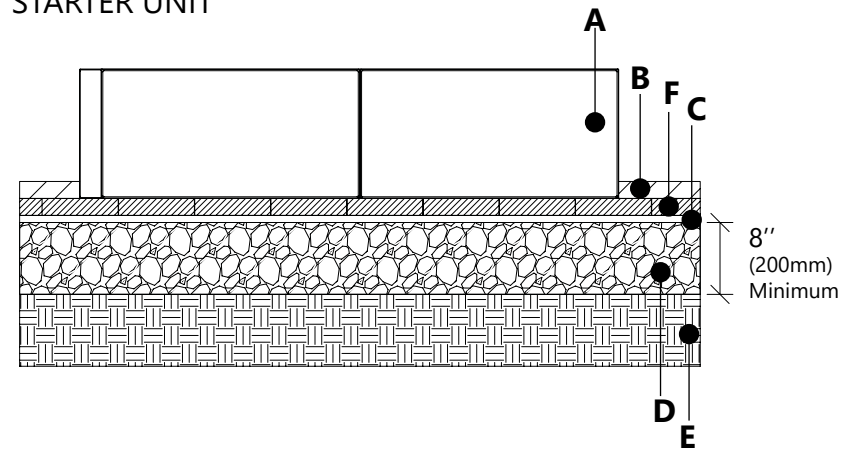
**BELGARD** is not responsible for any issue regarding other materials, accessories, other types of hardware, etc. *We recommend consulting an expert/engineer to determine the design limitations of the screen panels based on wind loads.*

# BASE PREPARATION

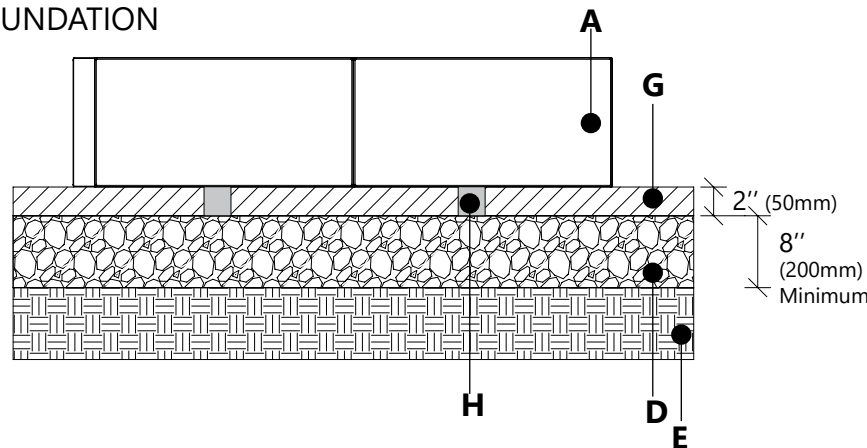
## ON EXISTING PATIO



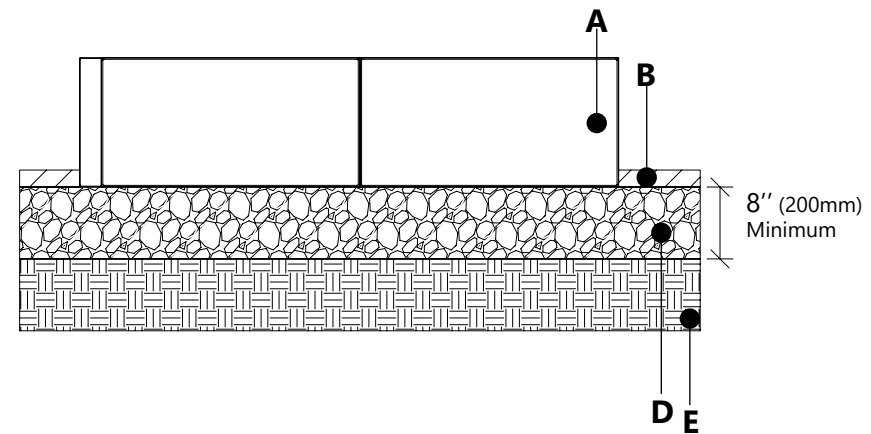
## ON COMPACTED FOUNDATION USING STARTER UNIT



## ON POURED CONCRETE FOUNDATION



## ON COMPACTED FOUNDATION

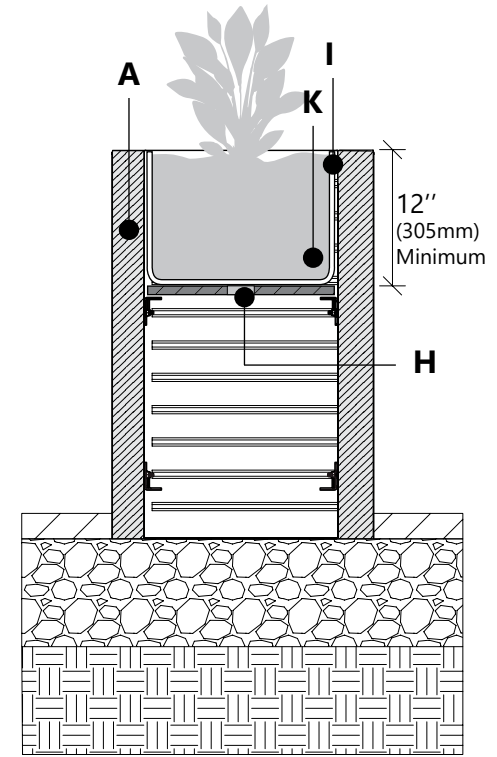
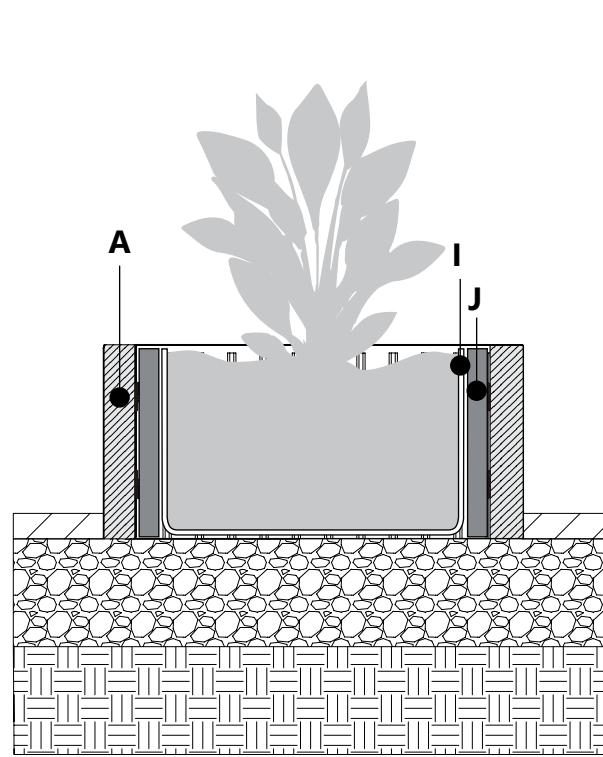
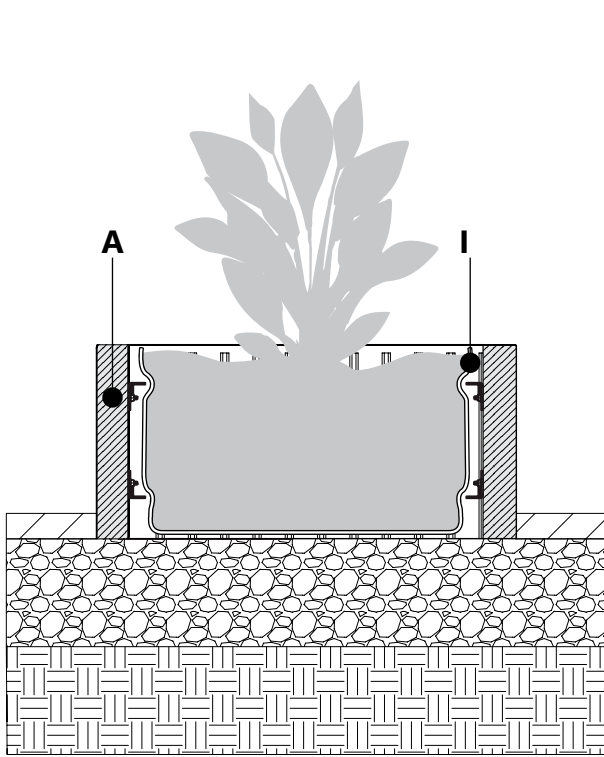


- |   |                                       |
|---|---------------------------------------|
| <b>A- ARTFORMS</b> Panels                         | <b>E- Soil</b>                        |
| <b>B- Slab or Paver</b>                           | <b>F- Starter Unit/ Slab or Paver</b> |
| <b>C- Bedding Sand</b> 1" (25mm)                  | <b>G- Reinforced Poured Concrete</b>  |
| <b>D- Compacted aggregates</b> 8" (200mm) minimum | <b>Foundation</b> 2" (50mm) minimum   |
|   | <b>H- Opening for drainage</b>        |

**IMPORTANT:** Provide adequate drainage and adjust according to soil type. Maximum height of **36"** for planter box and **42"** for outdoor living structure. Any higher structure must be designed by an engineer. Dimensions and information above are general recommendations only. Contact experts/engineers to validate the base preparation, the drainage, the plants & roots growth/management. The use of plastic shims can facilitate the installation of **Artforms** panels in order to adapt to the slope of the site.

# PLANTER BOX DETAIL

ON COMPACTED FOUNDATION



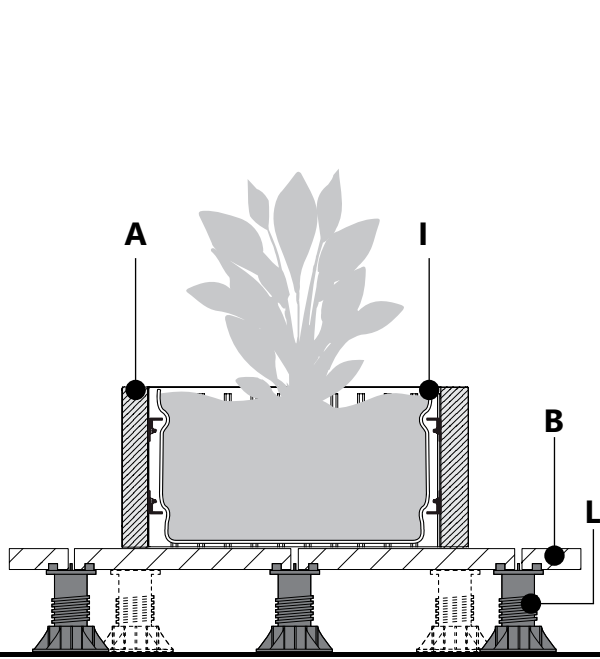
**Recommended:**  
Place insulated panels to protect plants from cold conditions.

**Recommended:**  
Place a cement board on top of the Artforms hardware to reduce the amount of infill material.

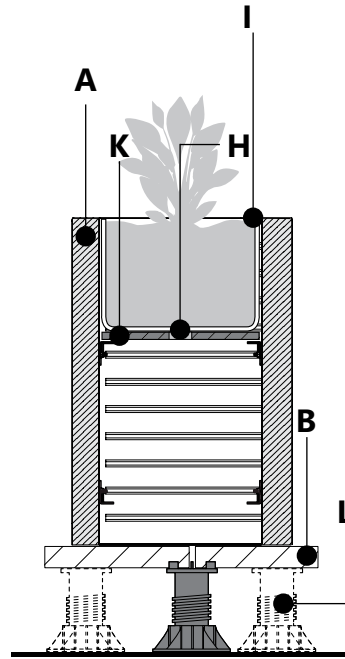
- A- **ARTFORMS** Panels
- H- Opening for drainage
- I- Geotextile membrane
- J- Insulated panel
- K- Structural Water Resistant Panel

**IMPORTANT:** Provide adequate drainage and adjust according to soil type. Maximum height of **36"** for planter box and **42"** for outdoor living structure. Any higher structure must be designed by an engineer. Dimensions and information above are general recommendations only. Contact experts/engineers to validate the base preparation, the drainage, the plants & roots growth/management. The use of plastic shims can facilitate the installation of **Artforms** panels in order to adapt to the slope of the site.

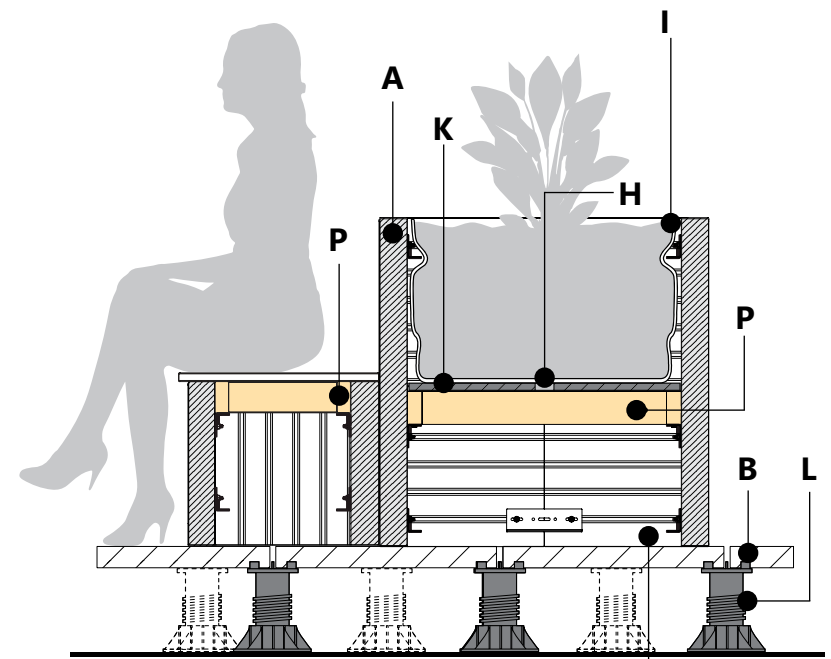
# ROOFTOP APPLICATIONS



PLANTER BOX WITH HORIZONTAL  
PANELS SITTING ON SLABS/TILES - SECTION VIEW

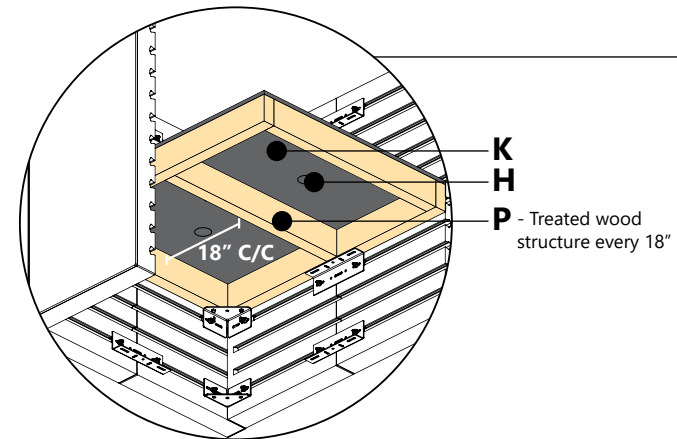


PLANTER BOX WITH VERTICAL  
PANELS SITTING ON SLABS/TILES  
- SECTION VIEW



PLANTER BOX AND BENCH SITTING ON SLABS/TILES  
- SECTION VIEW

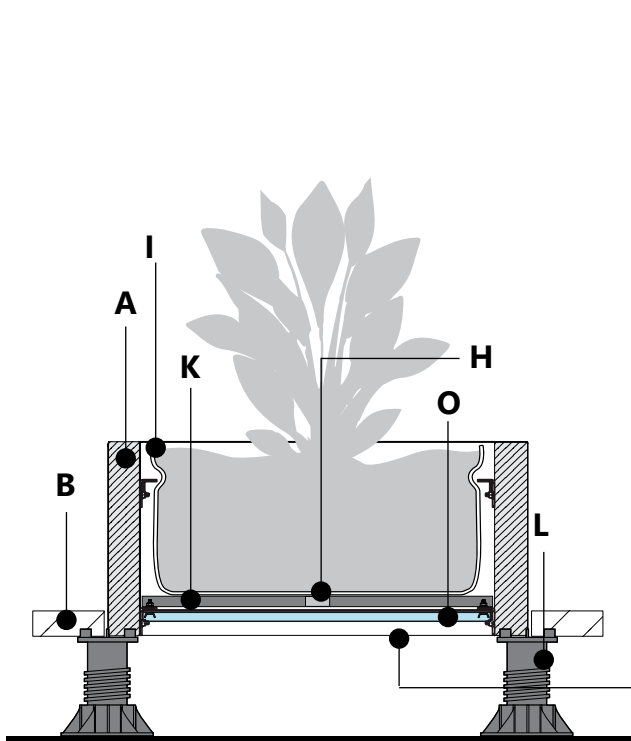
- A- ARTFORMS** Panels
- B-** Slab or Tile
- H-** Opening for drainage
- I -** Geotextile Membrane
- K-** Structural Water Resistant Panel
- L-** Pedestal
- P-** Treated Wood Structure



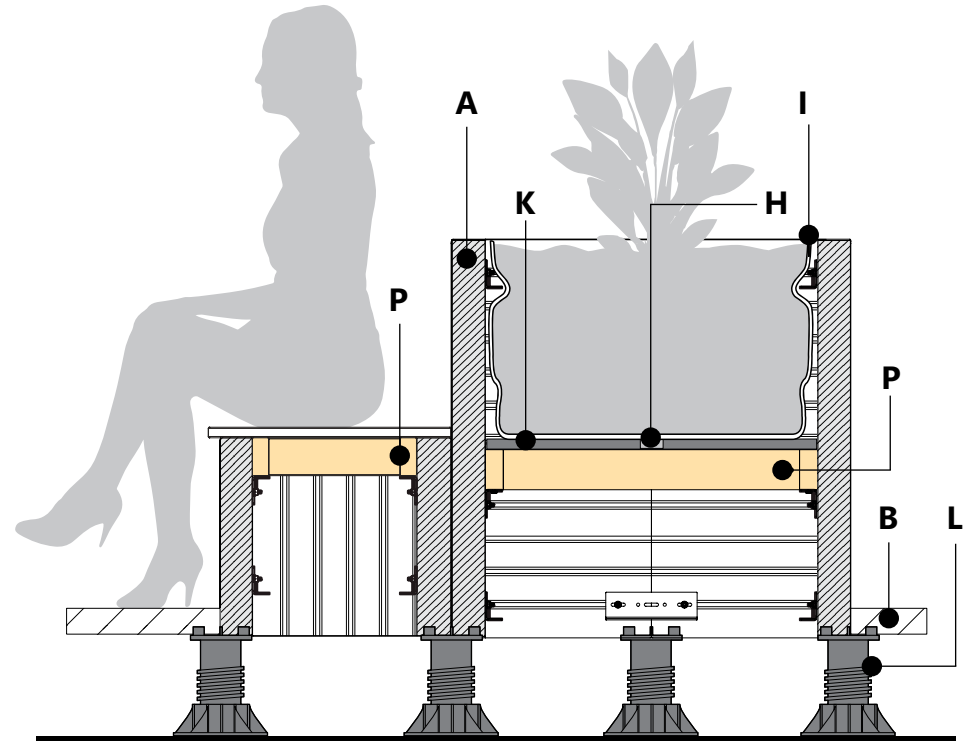
**IMPORTANT:** Contact experts/engineers for proper staging on existing rooftop surfaces.



# ROOFTOP APPLICATIONS

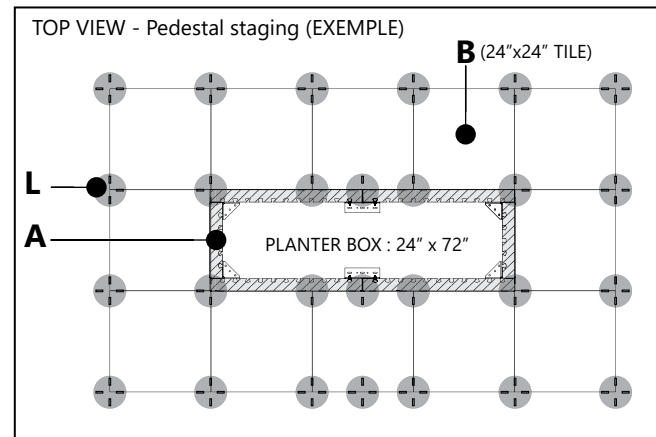
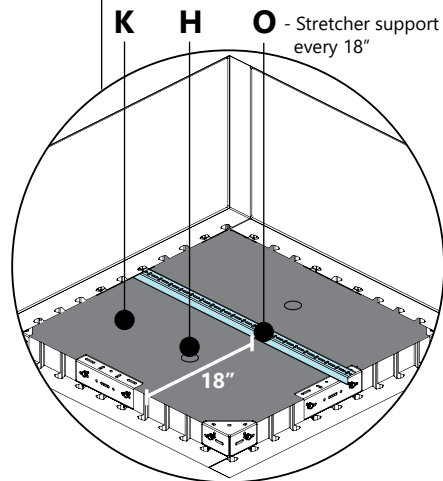


PLANTER BOX SITTING ON PEDESTALS - SECTION VIEW



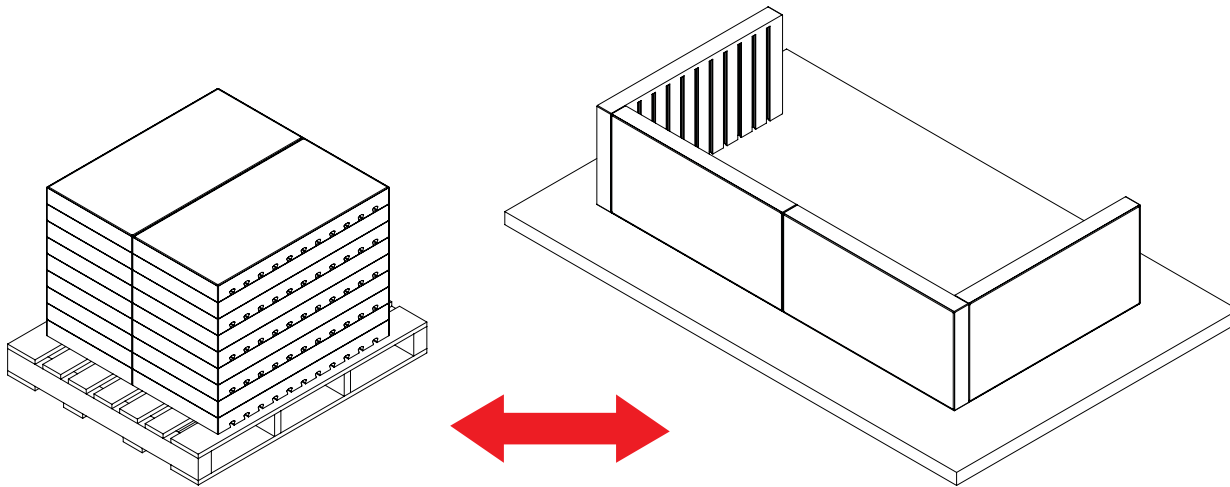
BENCH AND PLANTER BOX SITTING ON PEDESTALS - SECTION VIEW

- A**- ARTFORMS Panels
- B**- Slab or Tile
- H**- Opening for drainage
- I** - Geotextile Membrane
- K**- Structural Water Resistant Panel
- L**- Pedestal
- O**- Stretcher bar
- P**- Treated Wood Structure

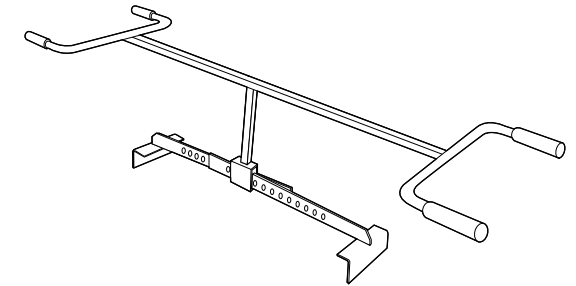


**IMPORTANT:** Contact experts/engineers for proper staging on existing rooftop surfaces.

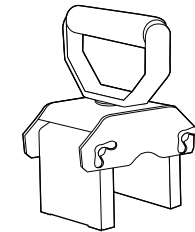
# HANDLING



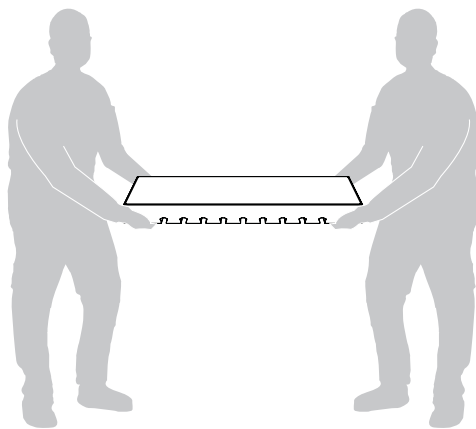
Place pallet close to installation area



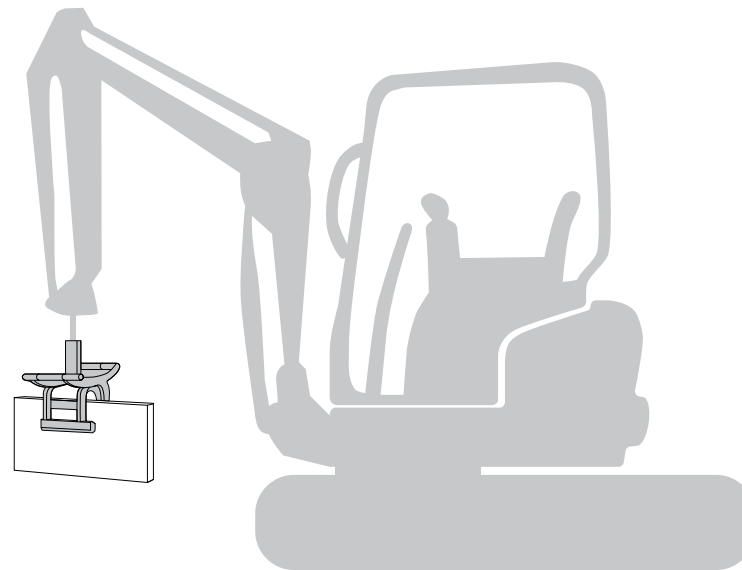
Recommended handling tool



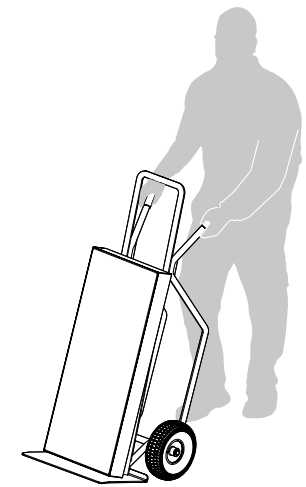
Recommended handling tool



Lift with two people



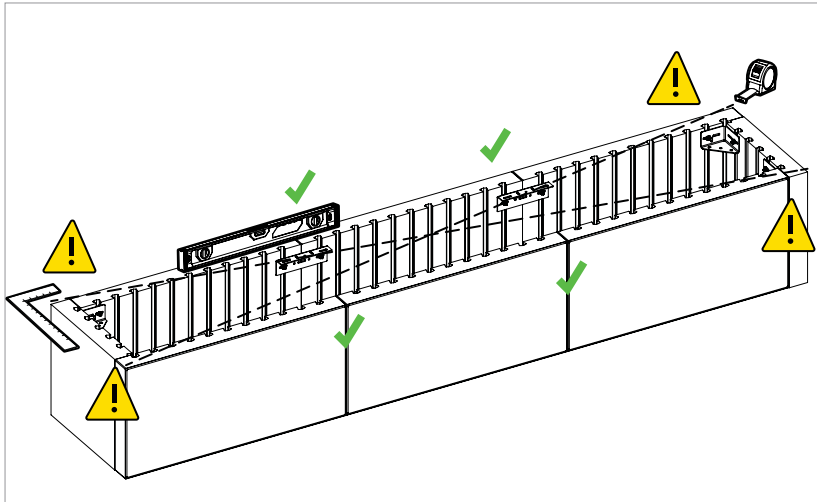
Mechanical lifting device



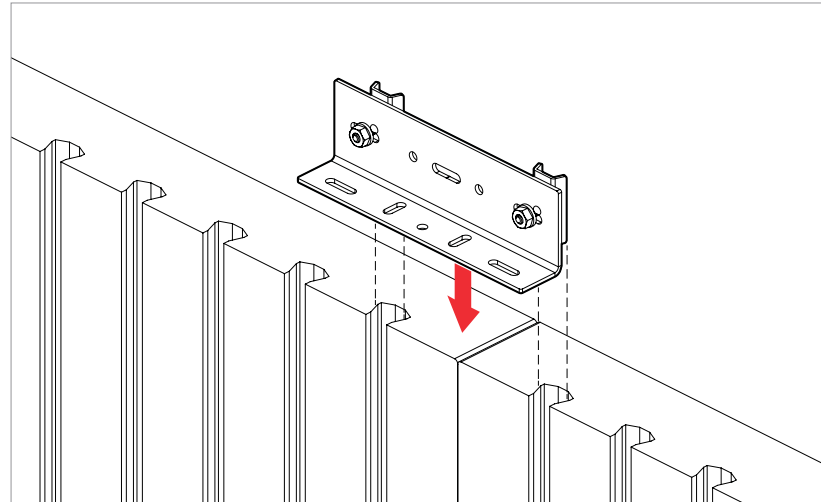
Use hand trolley if necessary

# TIPS AND TRICKS

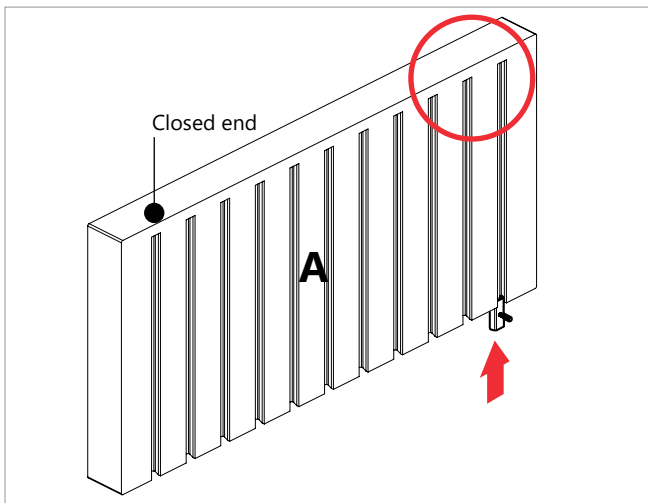
**#1** [General]: Ensure that all the panels are in place, levelled & aligned before fully tightening the hardware in the corners at the end of the installation.



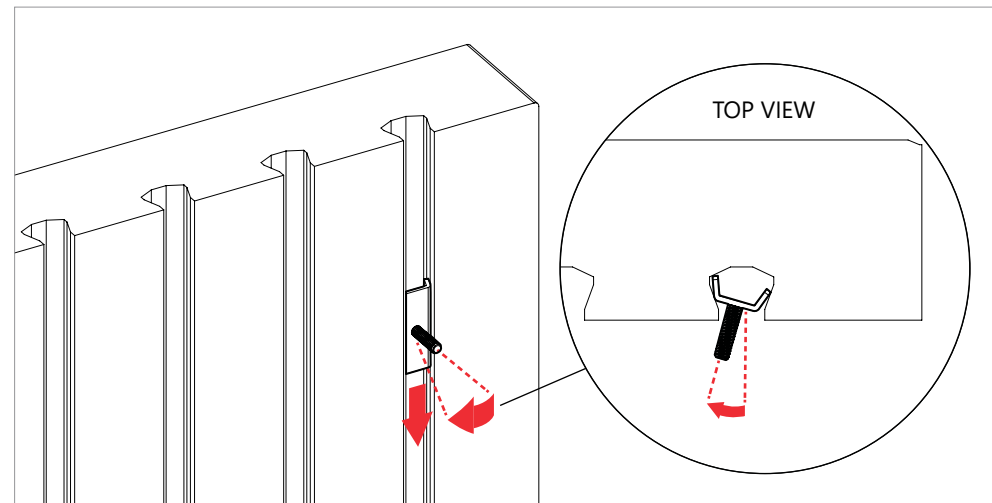
**#2** [General]: Pre-assemble hardware to facilitate its installation. Ensure that all the panels are in place, levelled & aligned before fully tighten the hardware at the end of the installation.



**#3** [Anchor slide]: Insert anchor slides from the bottom of the closed end panel (panel A) prior to its assembly.

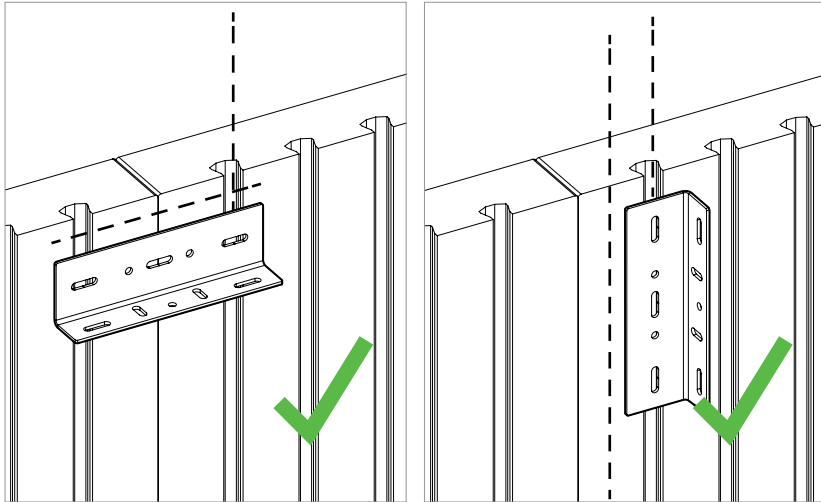


**#4** [Anchor slide]: Insert the anchor slide. Lock it into place to prevent it from sliding down and to facilitate assembly.

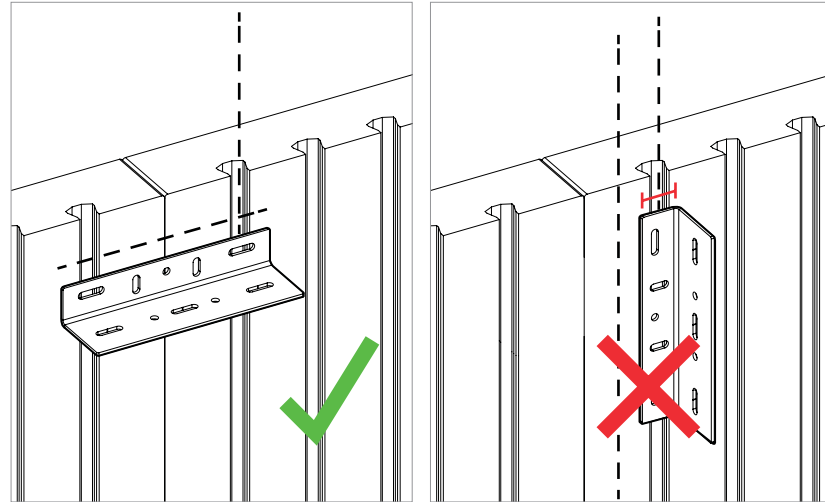


## TIPS AND TRICKS

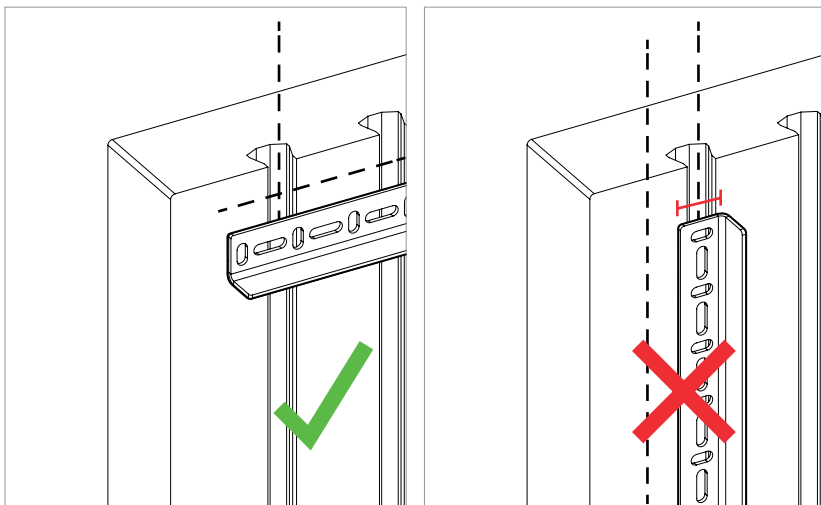
**#5** [Joining plate]: Use the larger tab of the joining plate when it is perpendicular or parallel to the dovetail slot.



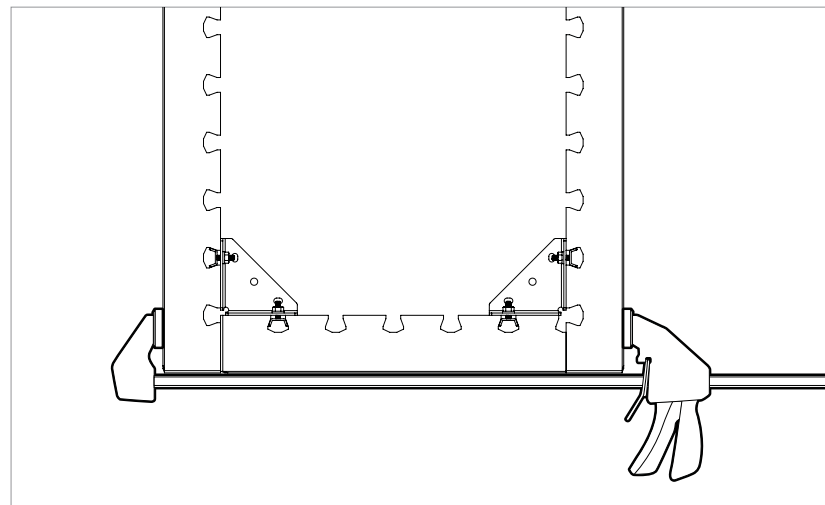
**#6** [Joining plate]: Only when the joining plate is perpendicular to the dovetail, the small tab can be used. Otherwise, the overlapping surface will be too narrow.



**#7** [Stretcher bar]: Use the stretcher bar when it is perpendicular to the dovetail. Otherwise, the overlapping surface will be too narrow.

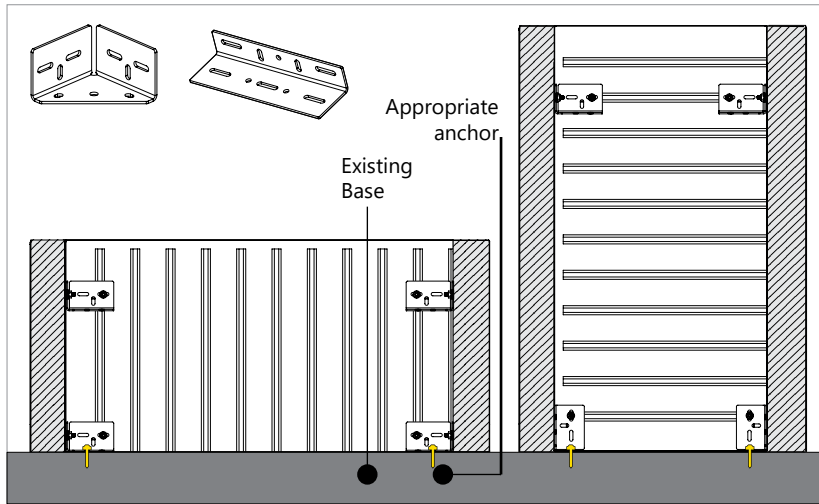


**#8** [Bar Clamp]: Use the bar clamp to keep the panels in place and to facilitate the hardware installation.

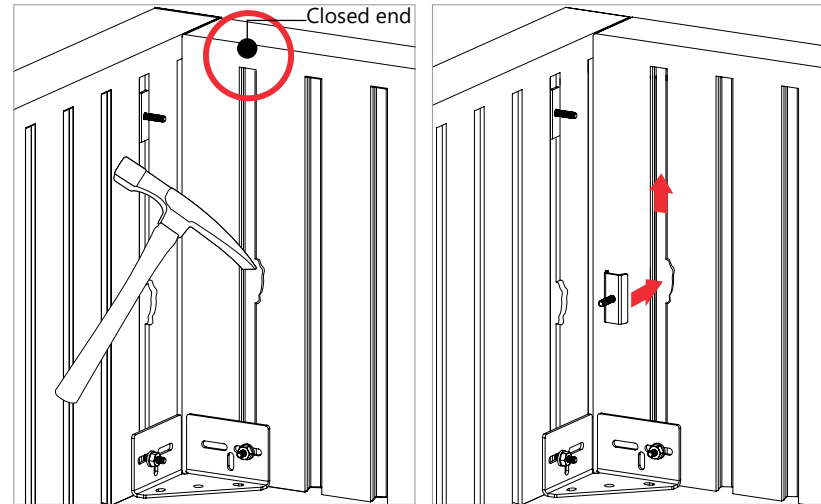


## TIPS AND TRICKS

**#9** [General]: If required it is possible to secure the **ARTFORMS** structure to the existing base by placing the hardware against it. Contact experts/engineers to validate the structure and any related matters.



**#11** [General]: In the case you forgot to place the anchor slides when the closed end panels (panel A) have already been assembled, use a chipping hammer to break a small section of the dovetail slot to insert the anchor slide.



**#10** [General]: If the side to side panels have a different thickness, use plastic shims to align the front face.

