



**BELGARD**  
PAVES THE WAY™

# ARTFORMS™

MODULAR PANEL SYSTEM



# INSTALLATION GUIDE



# TABLE OF CONTENTS

## SYSTEM OVERVIEW

- 03 PARTS LIST
- 05 TOOLS & SAFETY EQUIPMENT
- 06 APPLICATIONS
- 07 MODULARITY – THE SYSTEM & REFERENCES
- 09 PANEL CONFIGURATIONS

## INSTALLATION

- 10 OUTER CORNER INSTALLATION
- 11 INNER CORNER INSTALLATION
- 12 JOINING PLATE INSTALLATION
- 13 STRETCHER BAR INSTALLATION
- 15 6 x 36 PANEL - COPING & ACCENT INSTALLATION
- 18 INTEGRATING WOOD
- 22 BASE PREPARATION
- 23 PLANTER BOX DETAIL
- 24 ROOFTOP APPLICATIONS
- 26 HANDLING
- 27 TIPS AND TRICKS



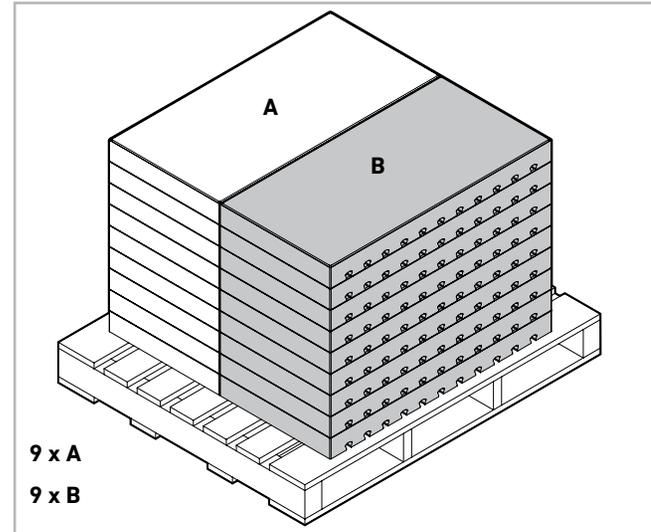
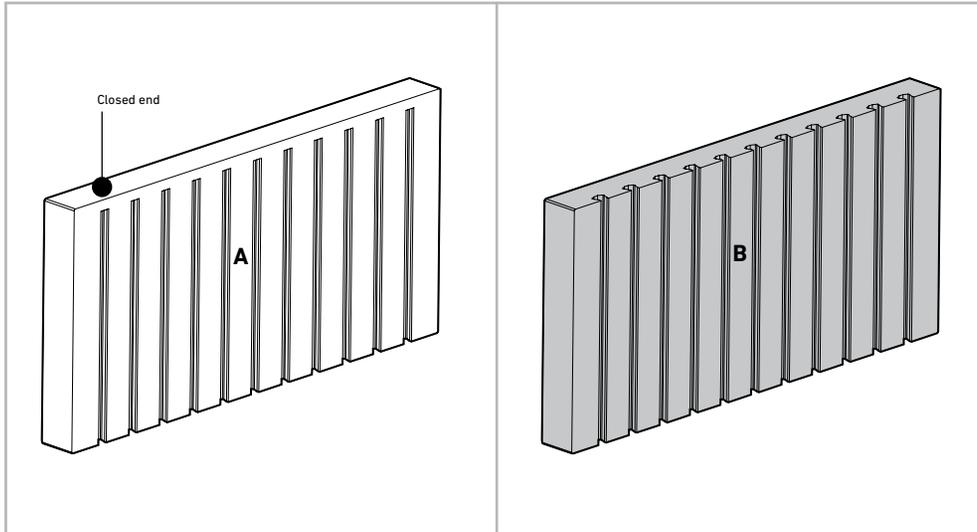
SCAN HERE  
TO SEE SOME  
ARTFORMS™ BUILDS  
IN BELGARD ROOMS

# 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)

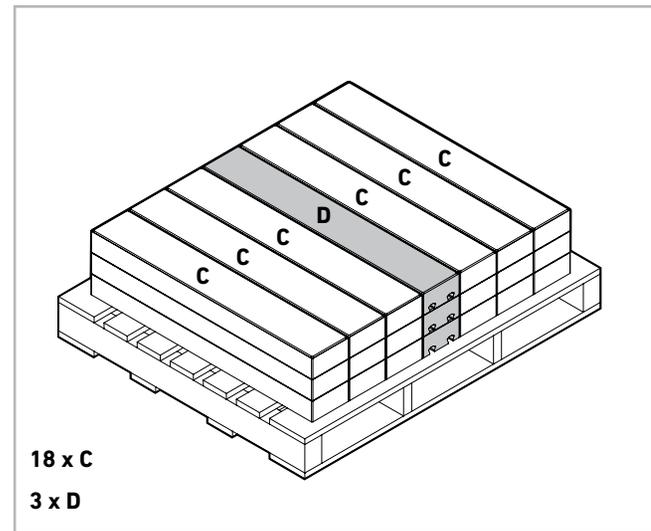
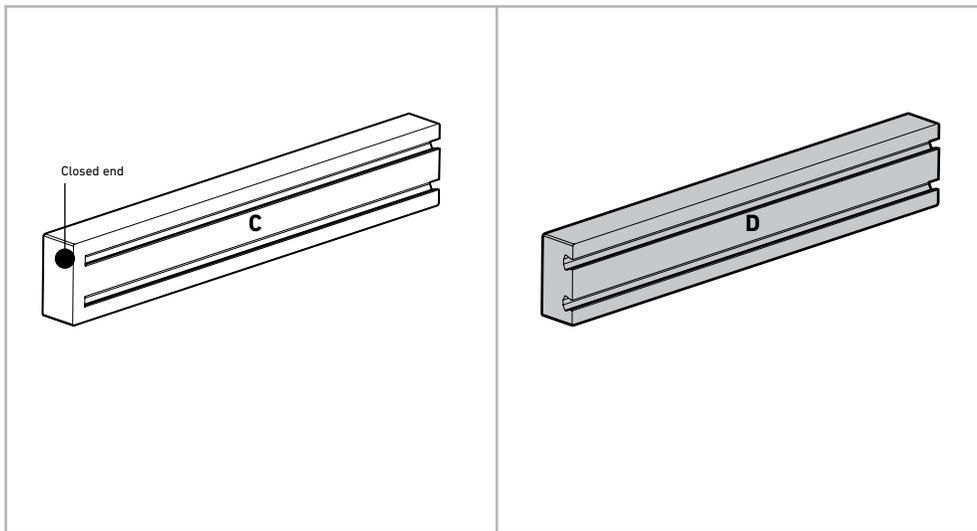
**\*40 x 48 Pallet (18 units/pallet)**



**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)

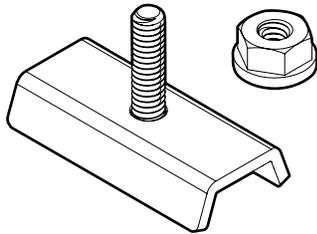
**\*40 x 48 Pallet (21 units/pallet)**



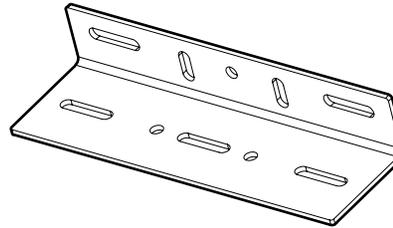
**\*IMPORTANT:** 18 x 36 panels are sold in pair/layer or in full pallet only. 6 x 36 panels are sold per unit or in layer or in full pallet.

# PARTS LIST - HARDWARE (STAINLESS STEEL)

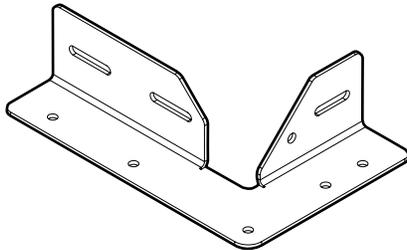
**Anchor Slide – ¼ x 20 stud & nut**  
2 x 1¼ x 1 (51 x 33 x 25 mm)  
50 units/box



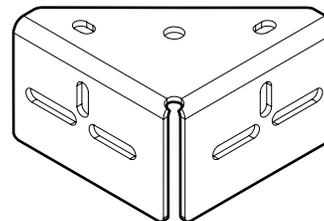
**\*Joining Plate**  
8¼ x 2½ x 1½ (209 x 63 x 38 mm)  
10 units/box



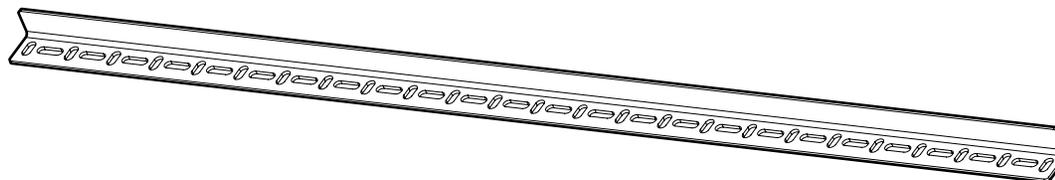
**\*Inner Corner**  
9 x 6 x 2½ (232 x 155 x 63 mm)  
10 units/box



**\*Outer Corner**  
4 x 4 x 2½ (101 x 101 x 63 mm)  
10 units/box



**\*Stretcher Bar**  
36¾ x 1¼ x 1 (933 x 33 x 25 mm)  
10 units/box

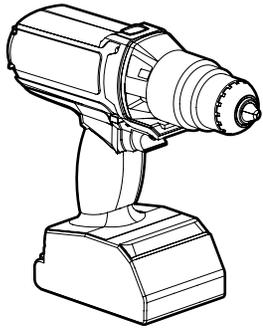


**\*NOTE:** Can be sold separately.

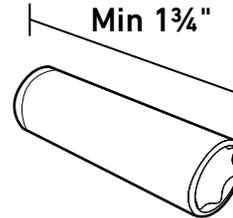
# TOOLS & SAFETY EQUIPMENT

## REQUIRED TOOLS

Drill



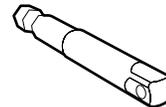
Deep Hex Socket  
7/16" with 1/4" Drive



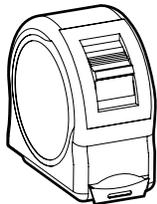
Mallet



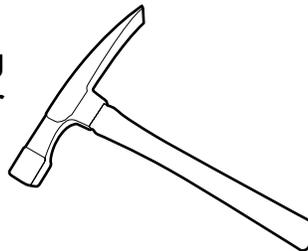
Socket Adaptor  
1/4" Hex Shank to  
1/4" Drive



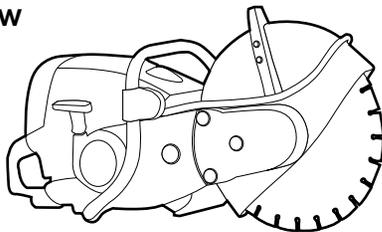
Measuring  
Tape



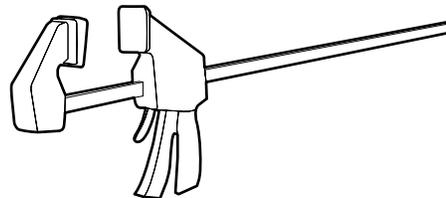
Chipping  
Hammer



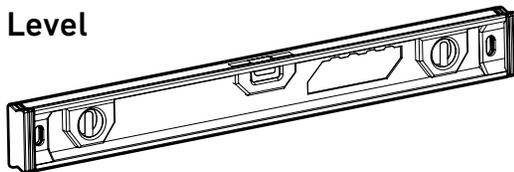
Saw



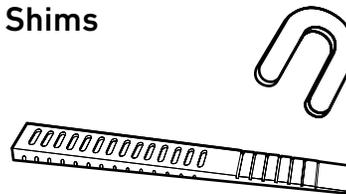
Bar Clamp (48")



Level



Plastic Shims



## SAFETY EQUIPMENT

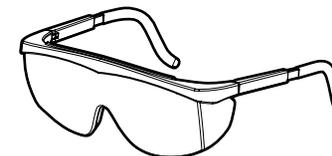
Safety Boots



Gloves



Safety Glasses



Mask



# APPLICATIONS



Planter Box/Bench



Corner Planter Box/Bench



Vertical Planter Box/Bench



Privacy Wall



\* Fire Pit



Raised Garden



\* Outdoor Kitchen



\* Outdoor Kitchen

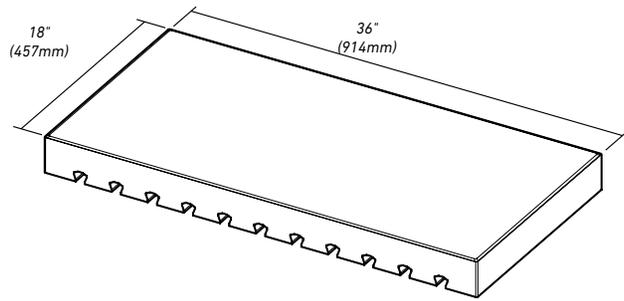


Counter

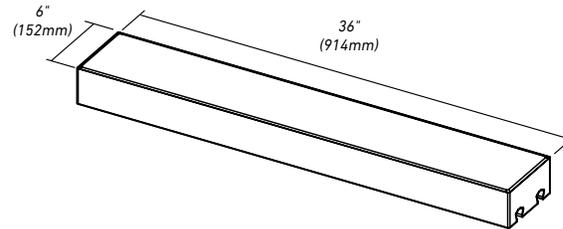
**\*IMPORTANT:** For all complementary appliances/accessories to the Artforms panel system, follow manufacturer's instructions/guidelines. Consult qualified services person/ experts to validate installations, repairs, safety recommendations and any other related topics.

# MODULARITY - THE SYSTEM

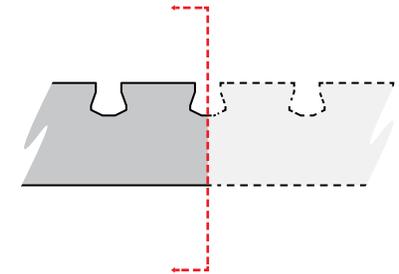
**18 x 36 x 3 PANEL**



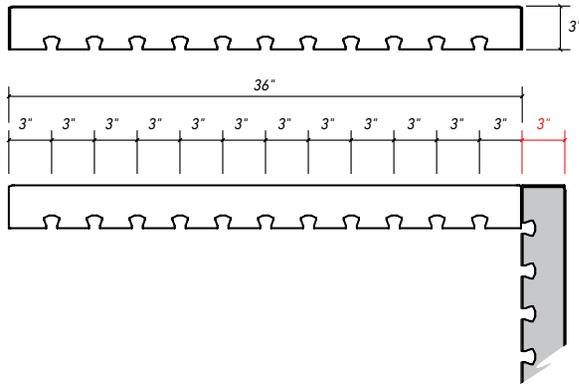
**6 x 36 x 3 PANEL**



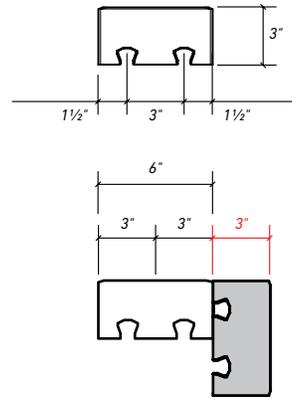
RECOMMENDED: CUT IN THE MIDDLE OF DOVETAIL



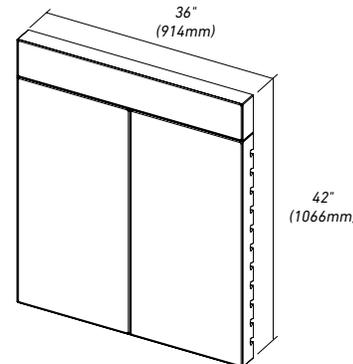
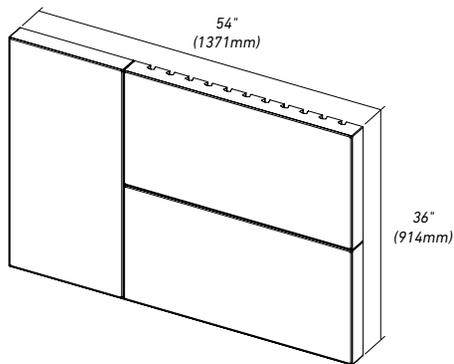
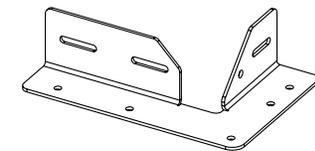
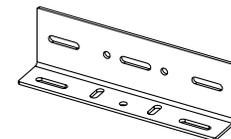
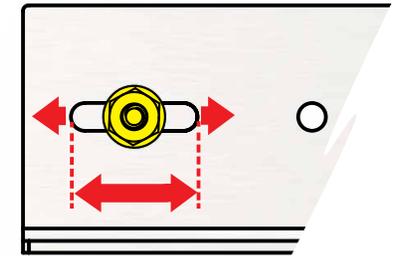
**3" = 76mm**



**3" = 76mm**



ADJUSTMENT: ADJUSTABLE SLOT-HOLE



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

# MODULARITY - REFERENCES

## KITCHEN TABLE



FRONT VIEW

## BAR TABLE

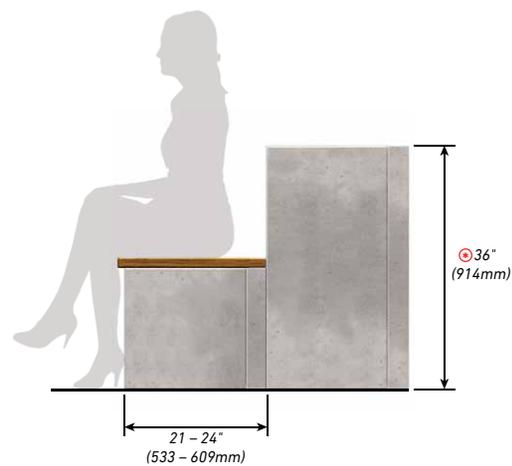


FRONT VIEW

## SEATING



FRONT VIEW

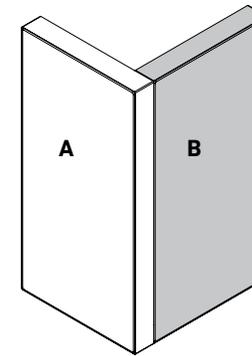
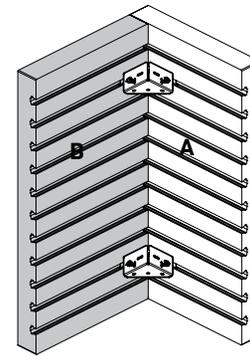
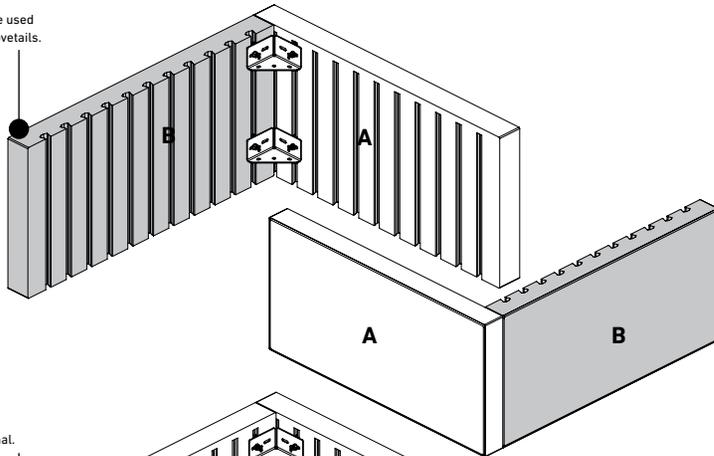


SIDE VIEW

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

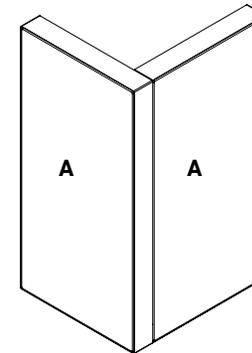
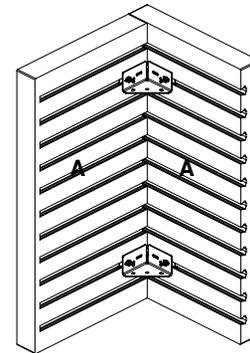
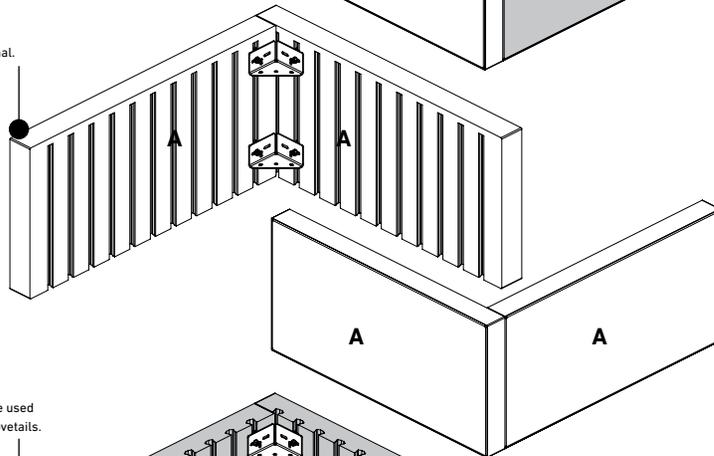
# PANEL CONFIGURATIONS

Coping can be used to hide the dovetails.



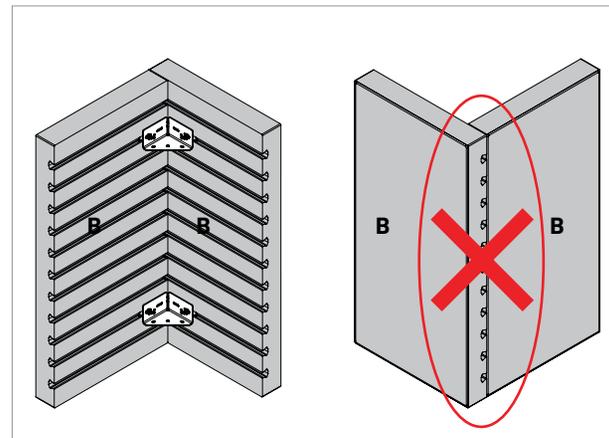
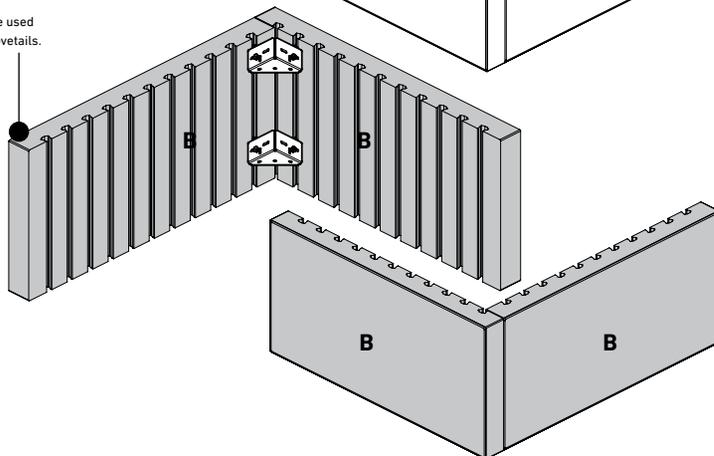
**\* IDEAL:**  
This configuration uses equal number of panel A and panel B.

Coping optional.



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

Coping can be used to hide the dovetails.

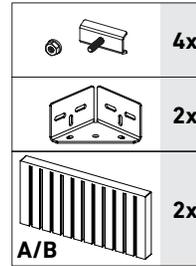
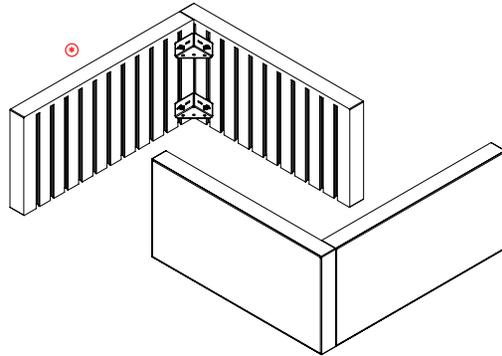


**\* NOT RECOMMENDED:**  
This configuration uses panel B only and the dovetails are exposed. Use ideal configuration as shown above.

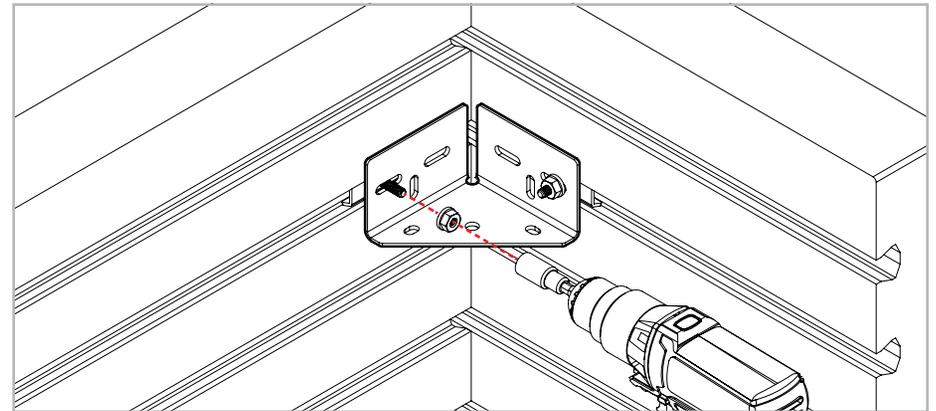
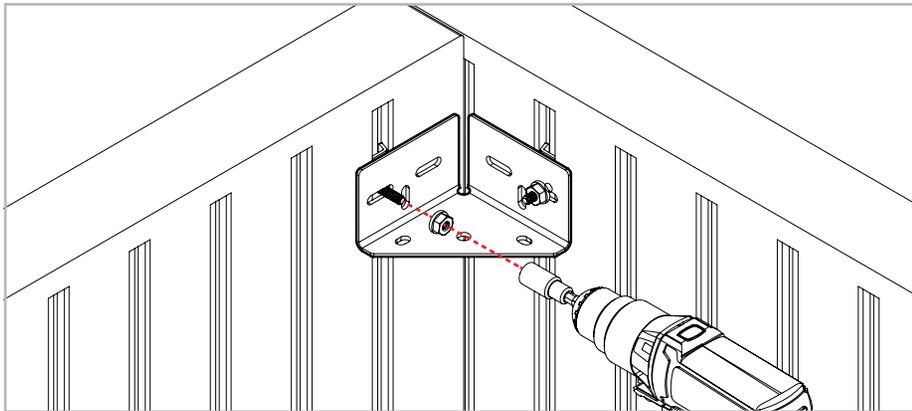
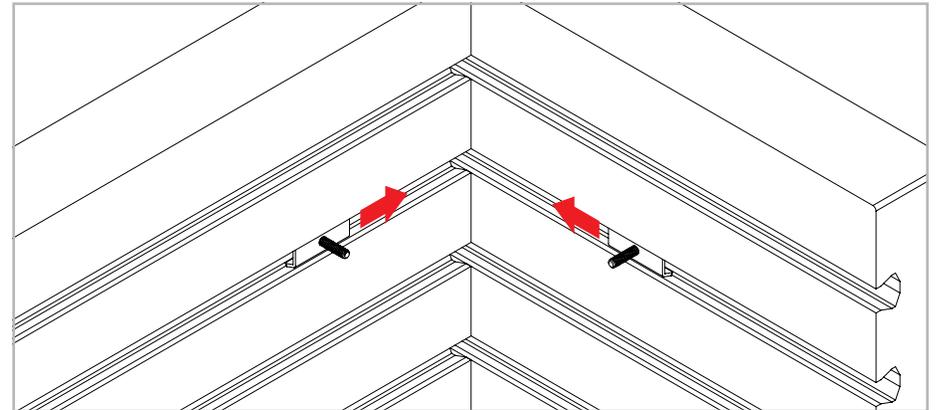
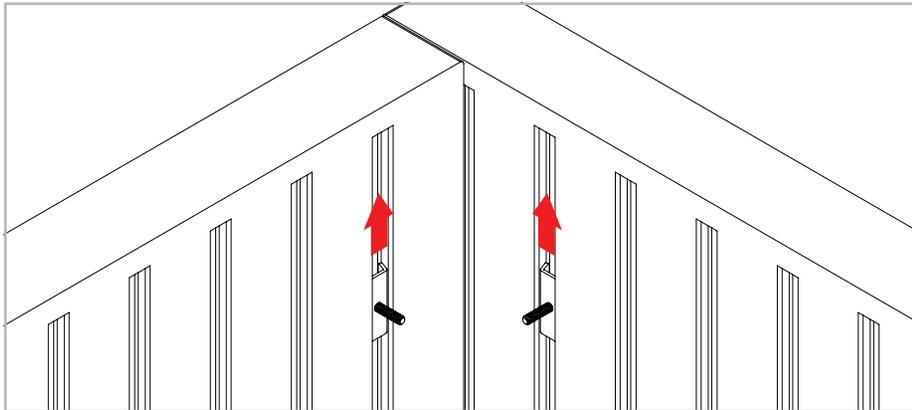
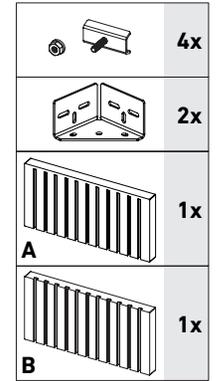
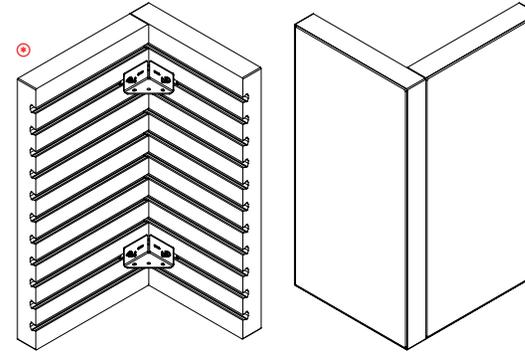
**\*IMPORTANT:** When planning configurations, consider the amount of panel A and panel B on a pallet. 18 x 36 panels are sold in pair/layer or in full pallet only. 6 x 36 panels are sold in layer or in full pallet only.

# OUTER CORNER INSTALLATION

## HORIZONTAL PANELS



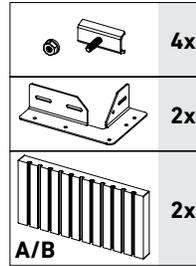
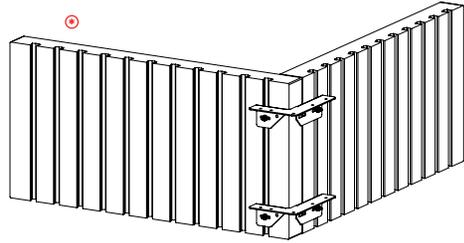
## VERTICAL PANELS



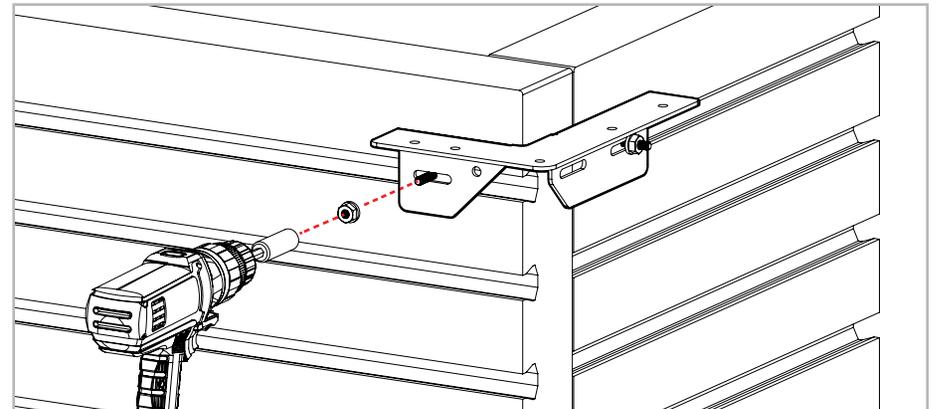
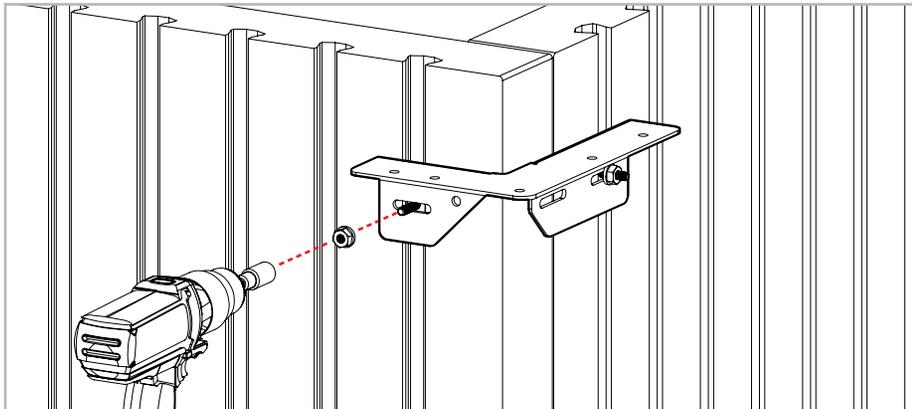
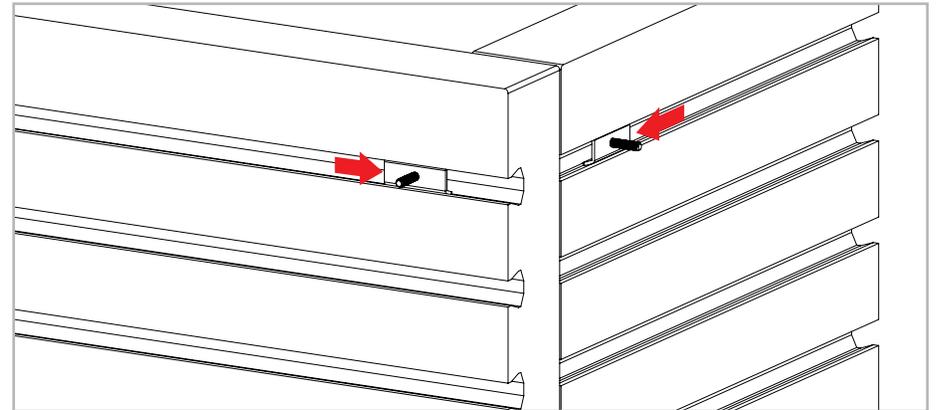
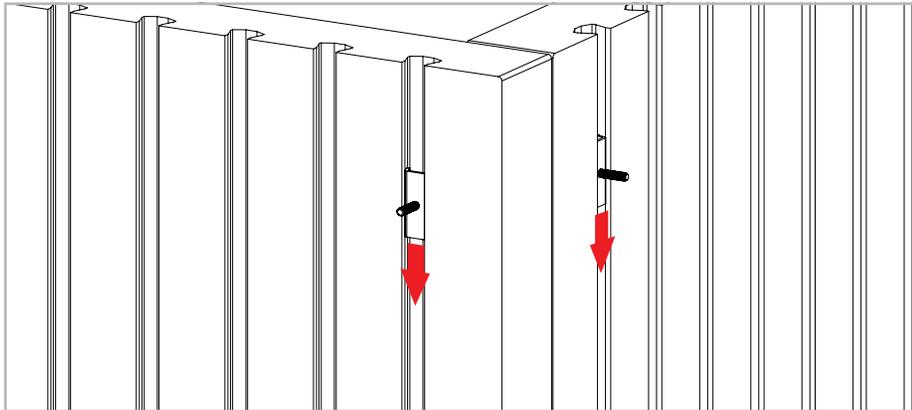
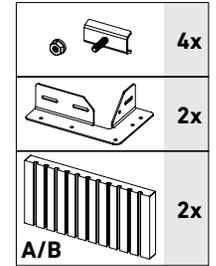
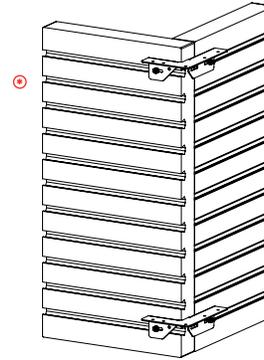
© **IMPORTANT:** Always use a minimum of 2 outer corner brackets per corner assembly. See Tips and Tricks from page 27 for more details.

# INNER CORNER INSTALLATION

## HORIZONTAL PANELS



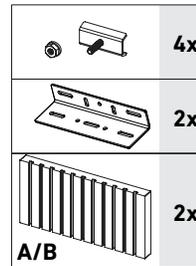
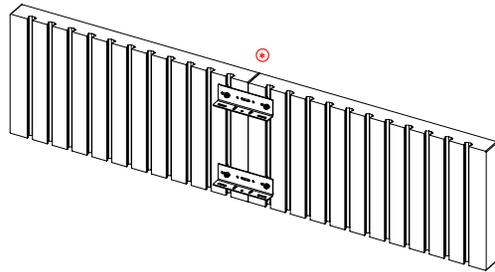
## VERTICAL PANELS



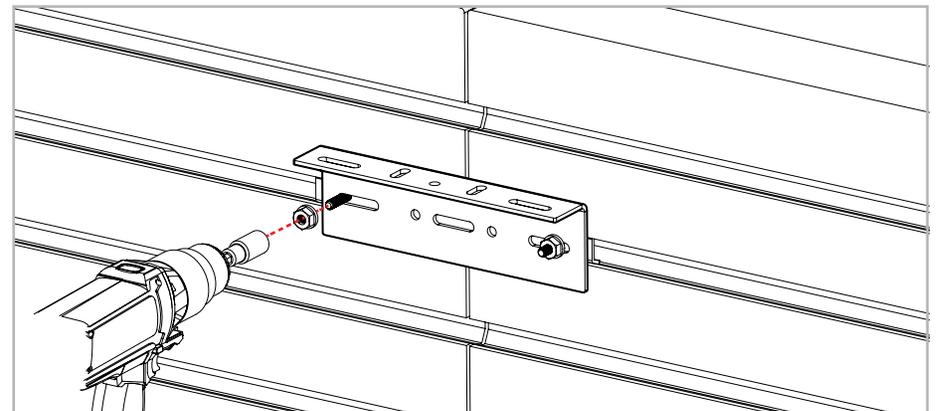
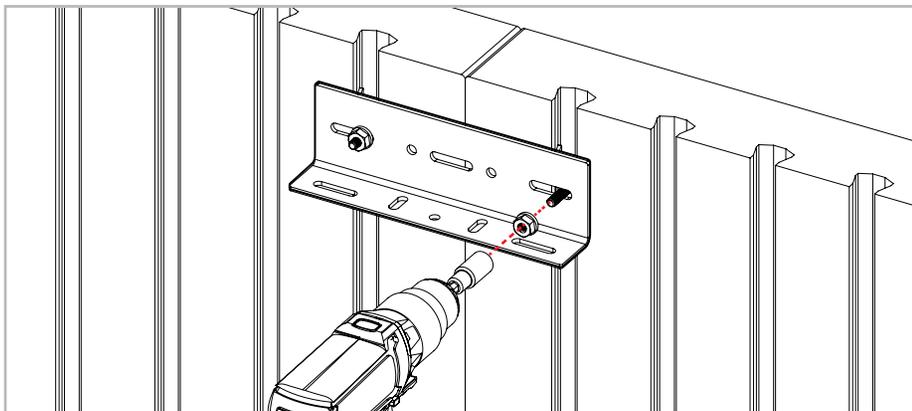
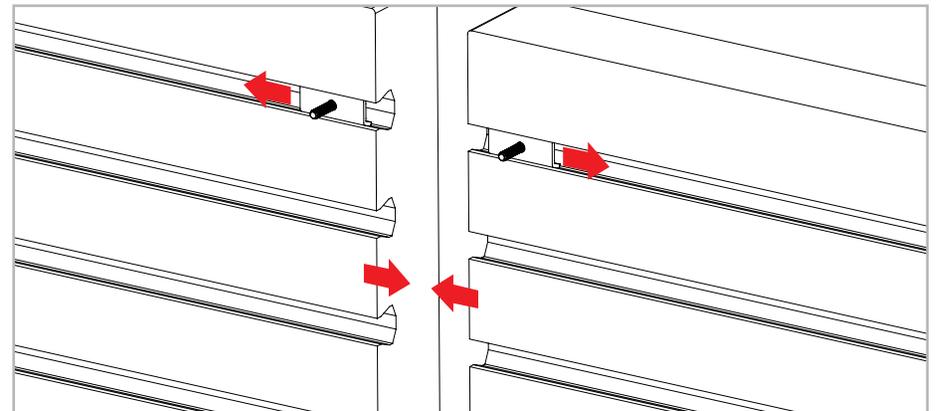
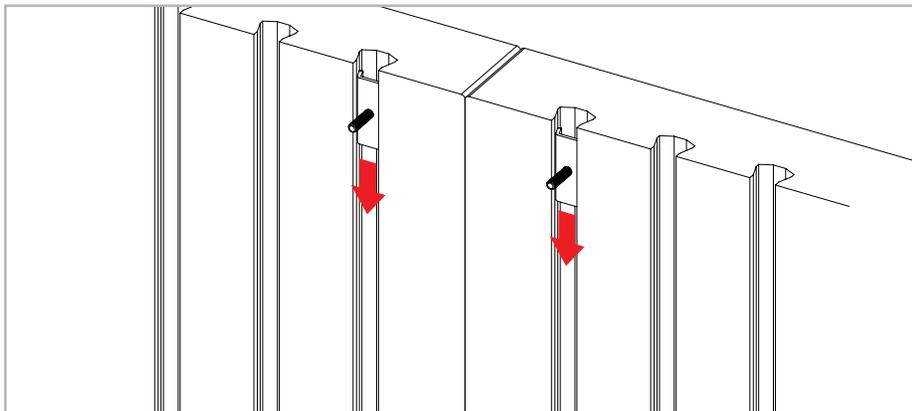
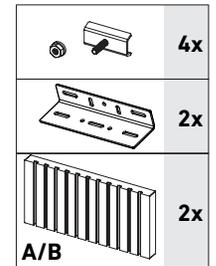
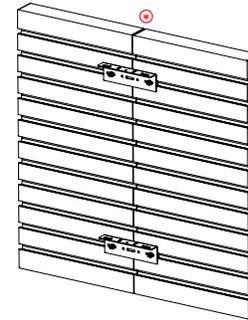
Ⓞ **IMPORTANT:** Always use a minimum of 2 outer corner brackets per corner assembly. See Tips and Tricks from page 27 for more details.

# JOINING PLATE INSTALLATION

## HORIZONTAL PANELS



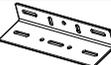
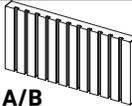
## VERTICAL PANELS

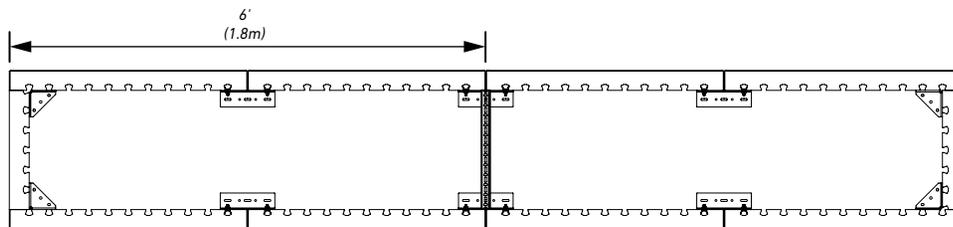
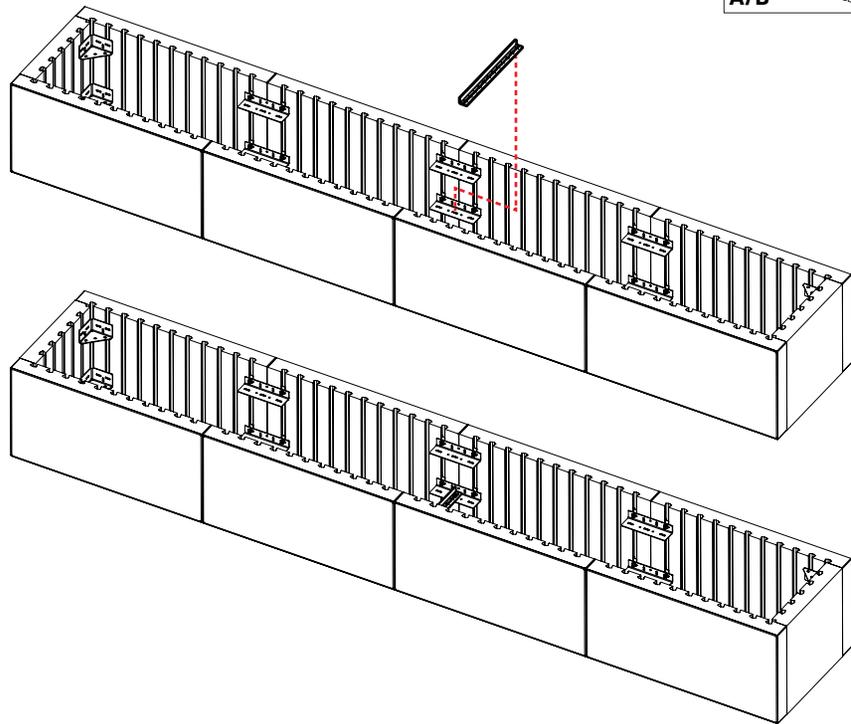


Ⓢ **IMPORTANT:** Always use a minimum of 2 joining plates when joining two parallel panels. See Tips and Tricks from page 27 for more details.

# STRETCHER BAR INSTALLATION

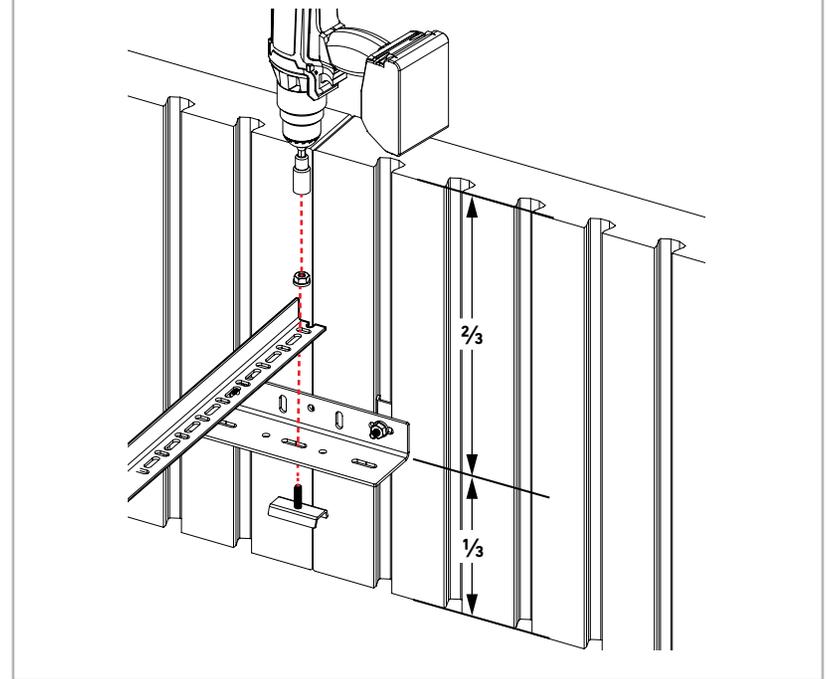
## HORIZONTAL PANELS

	1x		4x
	8x		2x
	A/B		2x

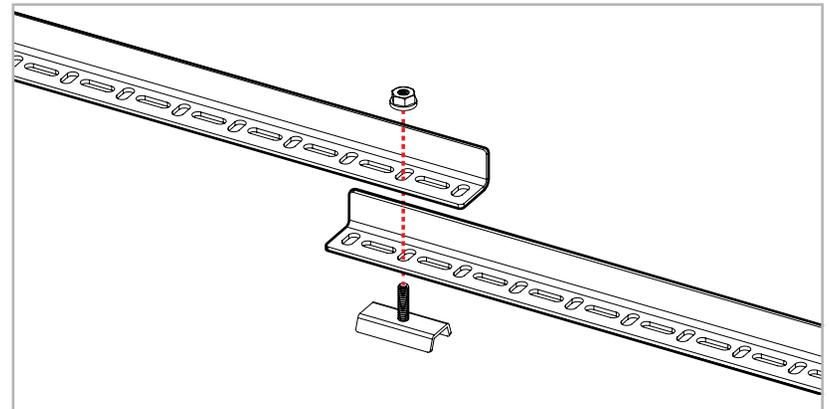


**NOTE:** See Tips and Tricks from page 27 for more details.

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  $\frac{1}{2}$  of the total height from the bottom of assembly. The stretcher bar must be cut to fit distance between 2 sets of panels.

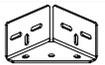
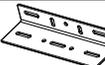
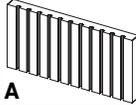
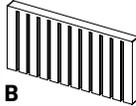


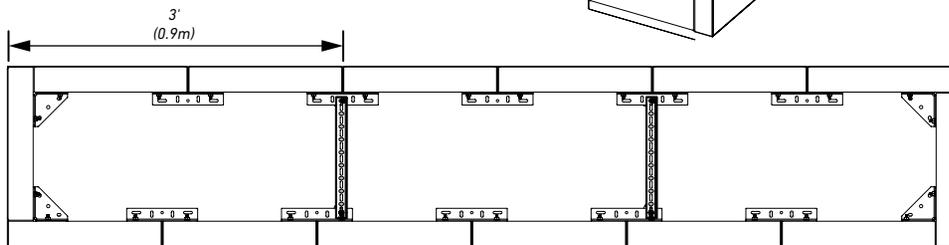
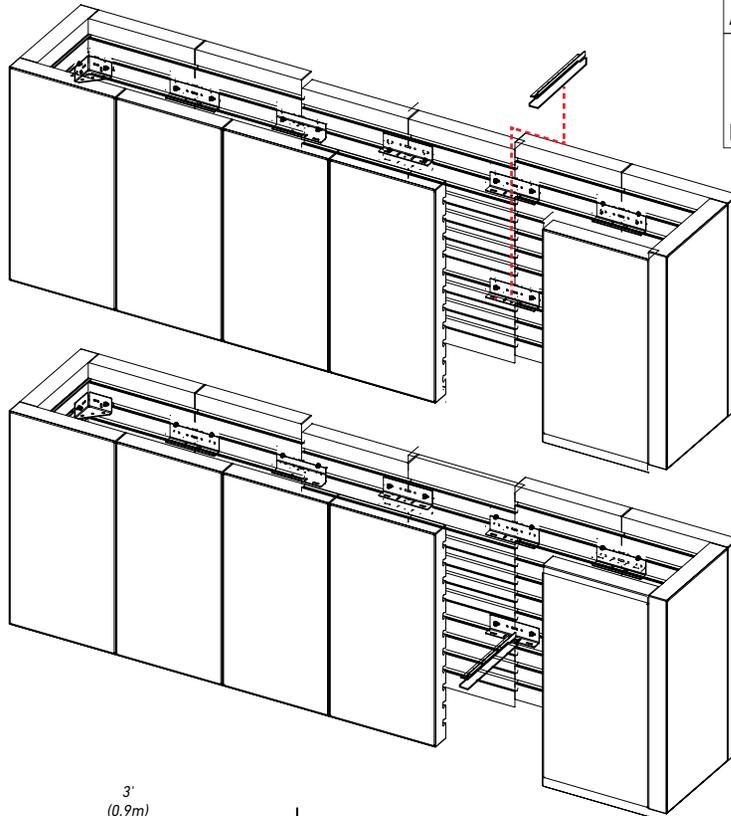
**NOTE:** The stretcher bar can be extended.



# STRETCHER BAR INSTALLATION

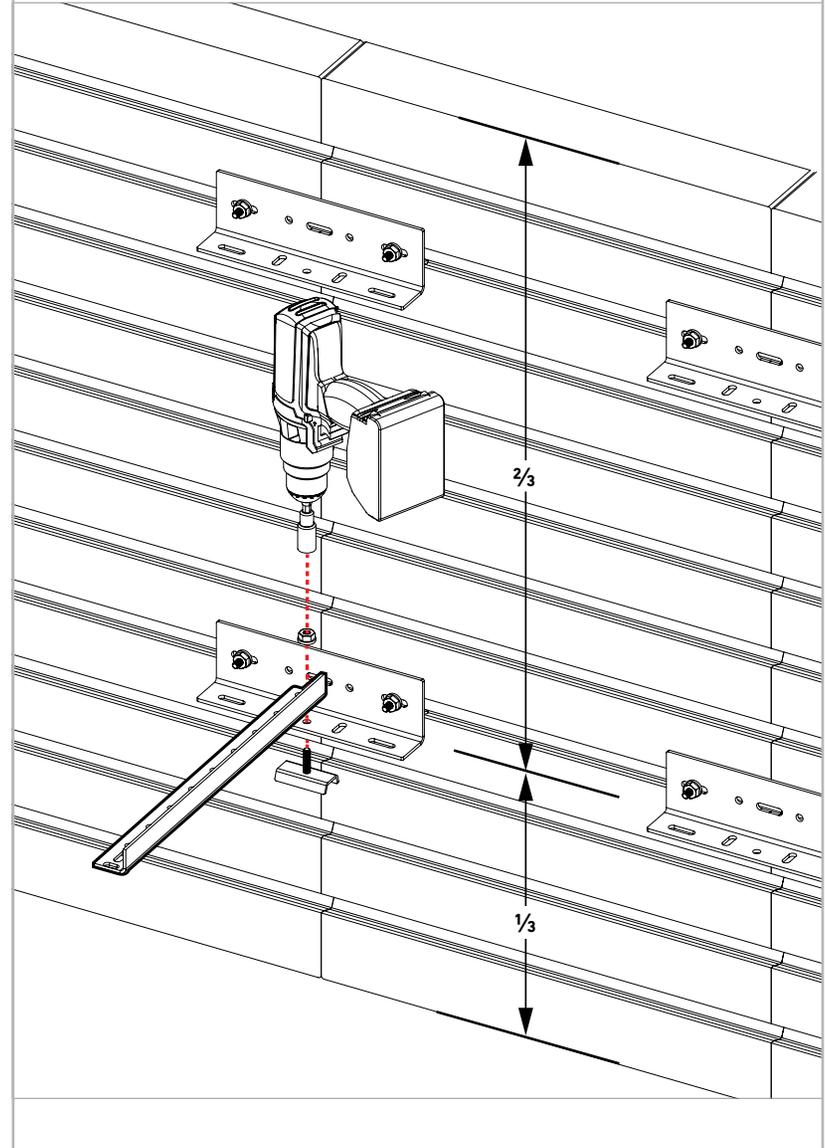
## VERTICAL PANELS

	1x		60x
	8x		20x
			4x
			10x



**NOTE:** See Tips and Tricks from page 27 for more details.

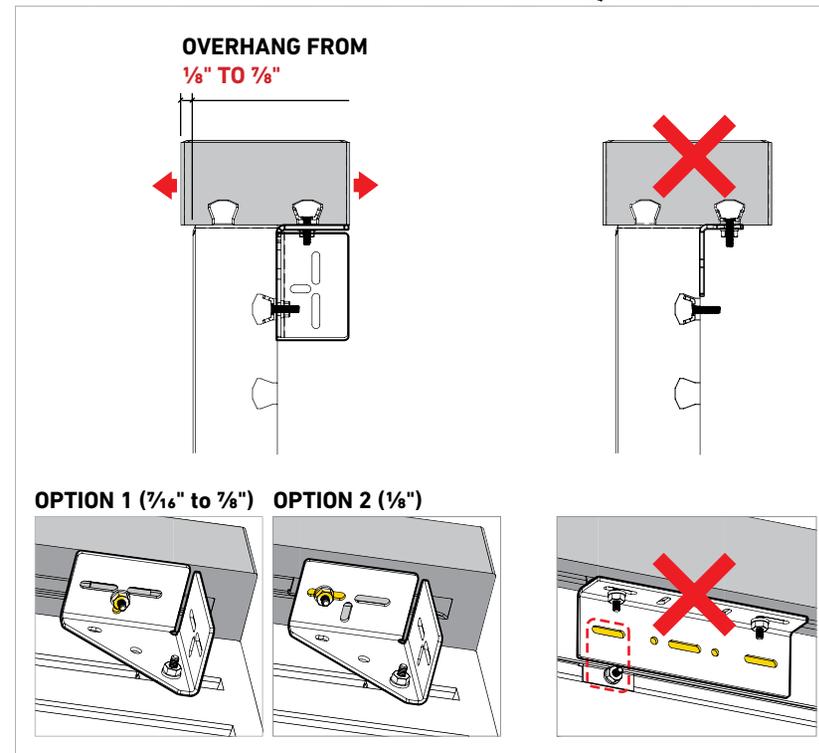
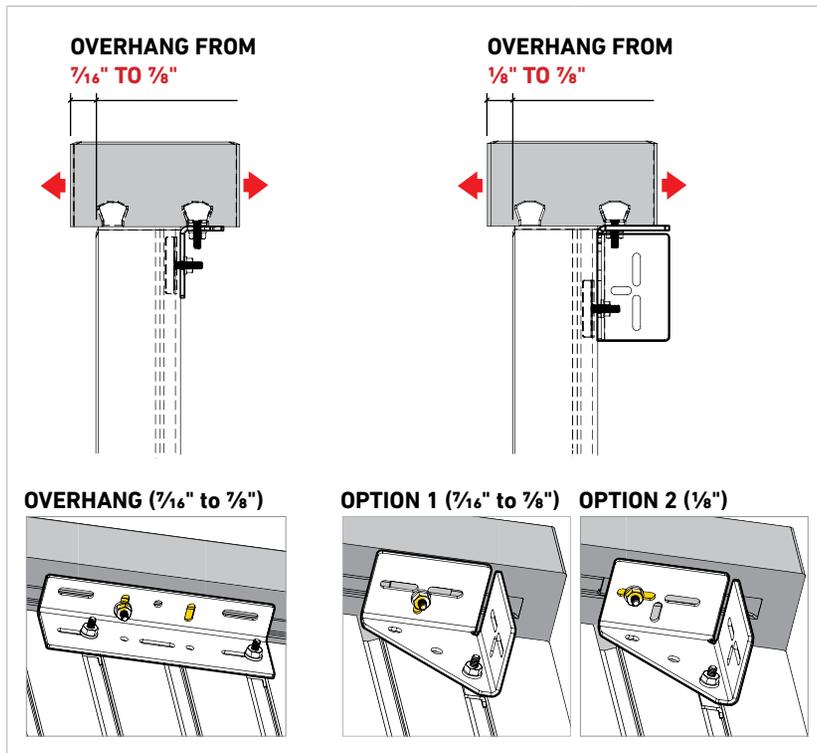
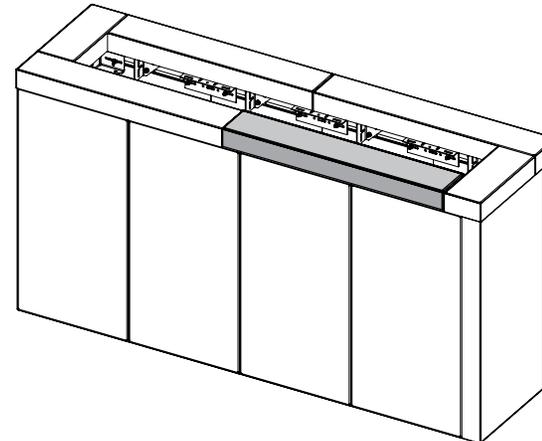
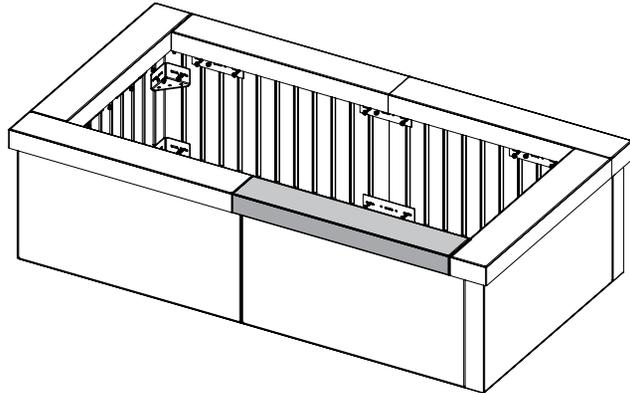
The stretcher bar keeps parallel 2 sets of panels facing each other. It is recommended to attach the stretcher bar to the joining plate every 3ft (0.9m). Place it at approximately 1/3 of the total height from the bottom of assembly. The stretcher bar must be cut to fit distance between 2 sets of panels.



# 6 x 36 PANEL - COPING INSTALLATION (MECHANICALLY FIXED)

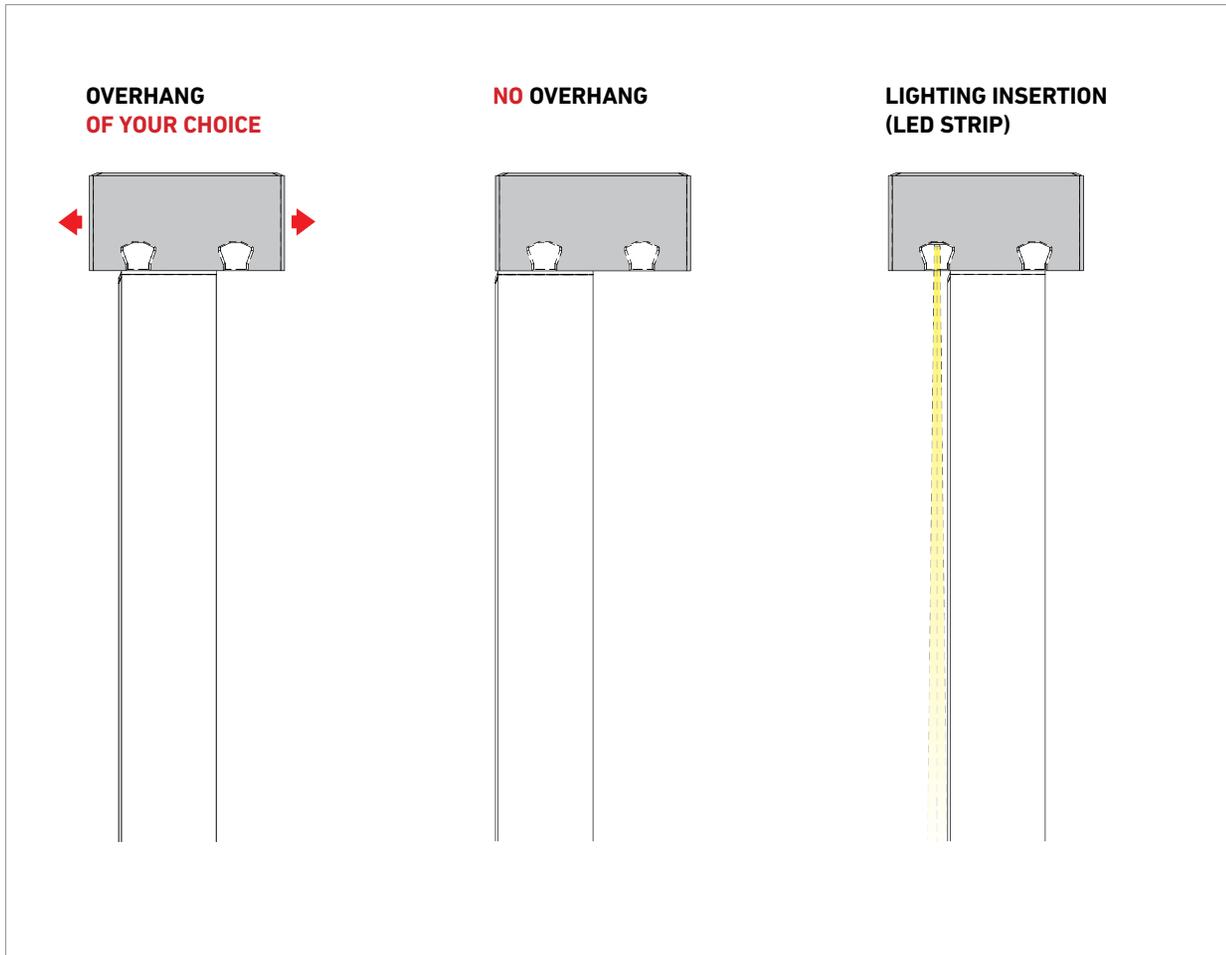
## 18 x 36 x 3 HORIZONTAL PANELS

## 18 x 36 x 3 VERTICAL PANELS

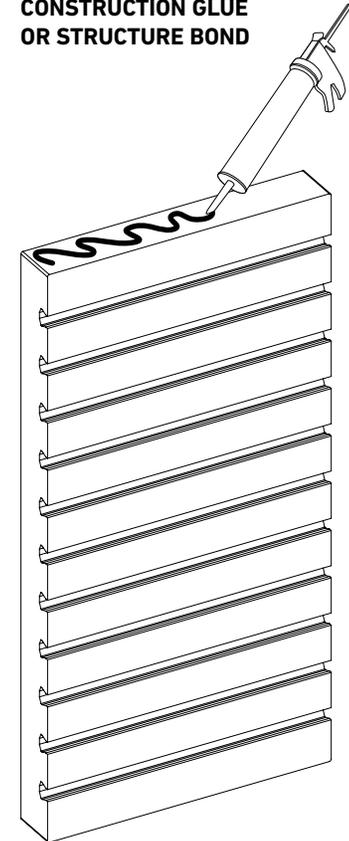


**NOTE:** See Tips and Tricks from page 27 for more details.

# 6 x 36 PANEL - COPING INSTALLATION (FIXED WITH ADHESIVE)

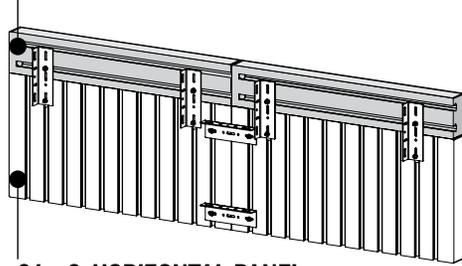


**FIXED USING  
CONSTRUCTION GLUE  
OR STRUCTURE BOND**



# 6 x 36 PANEL - ACCENT INSTALLATION

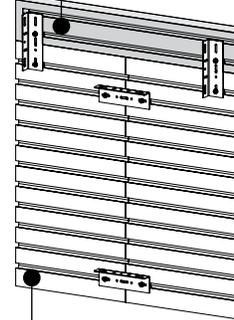
6 x 36 x 3 PANEL



18 x 36 x 3 HORIZONTAL PANEL

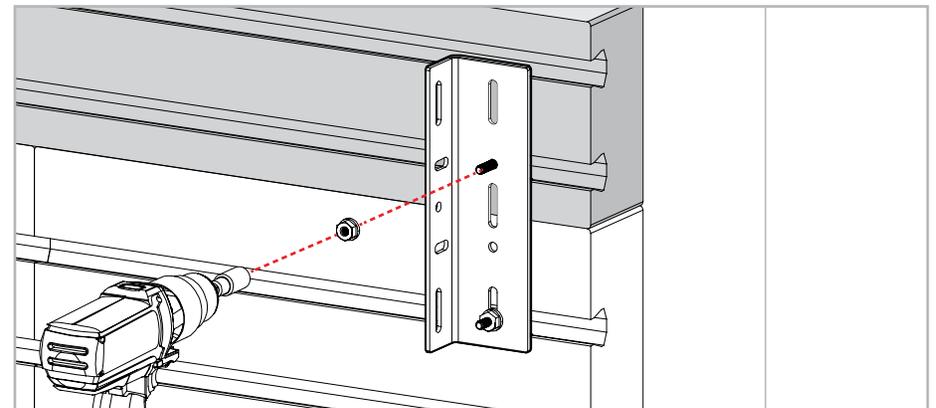
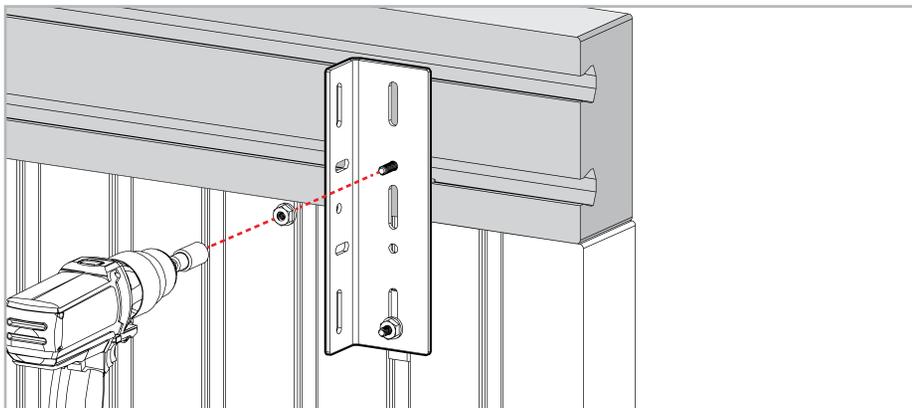
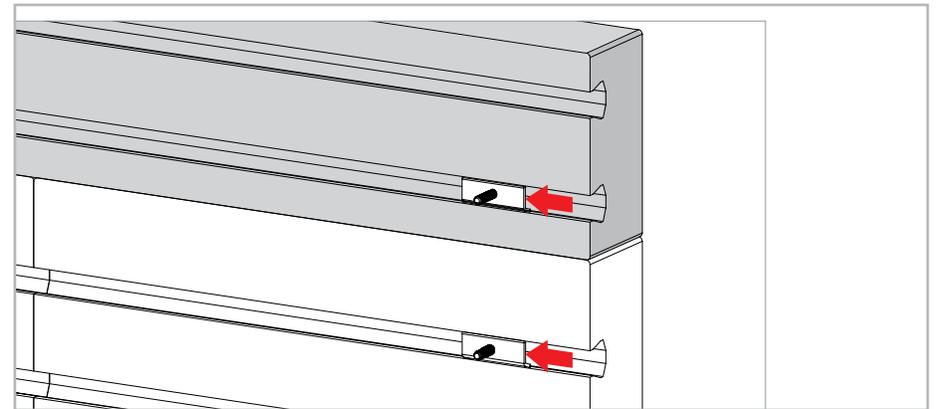
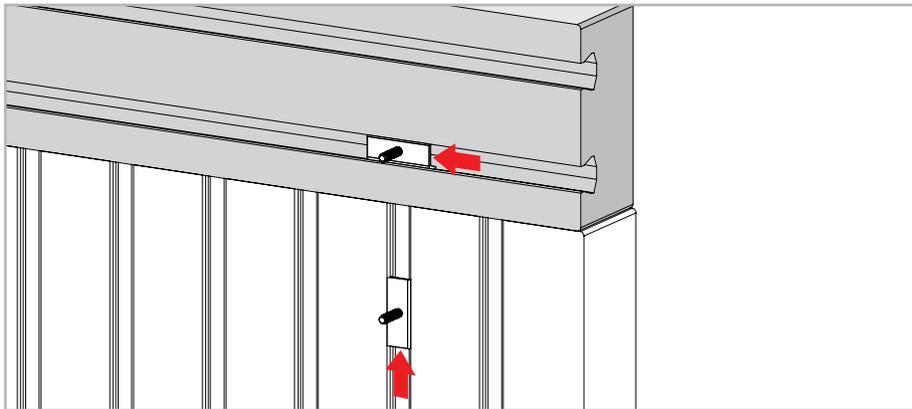
	12x
	6x
	2x
	2x

6 x 36 x 3 PANEL



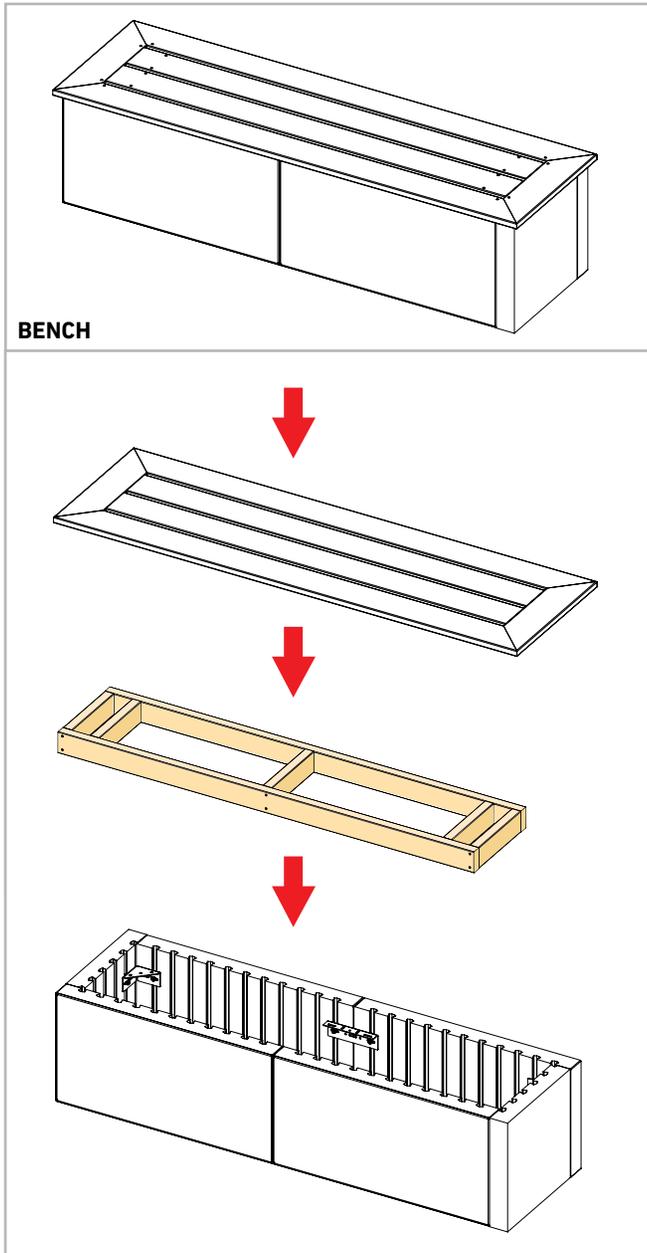
18 x 36 x 3 VERTICAL PANEL

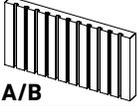
	8x
	4x
	1x
	2x

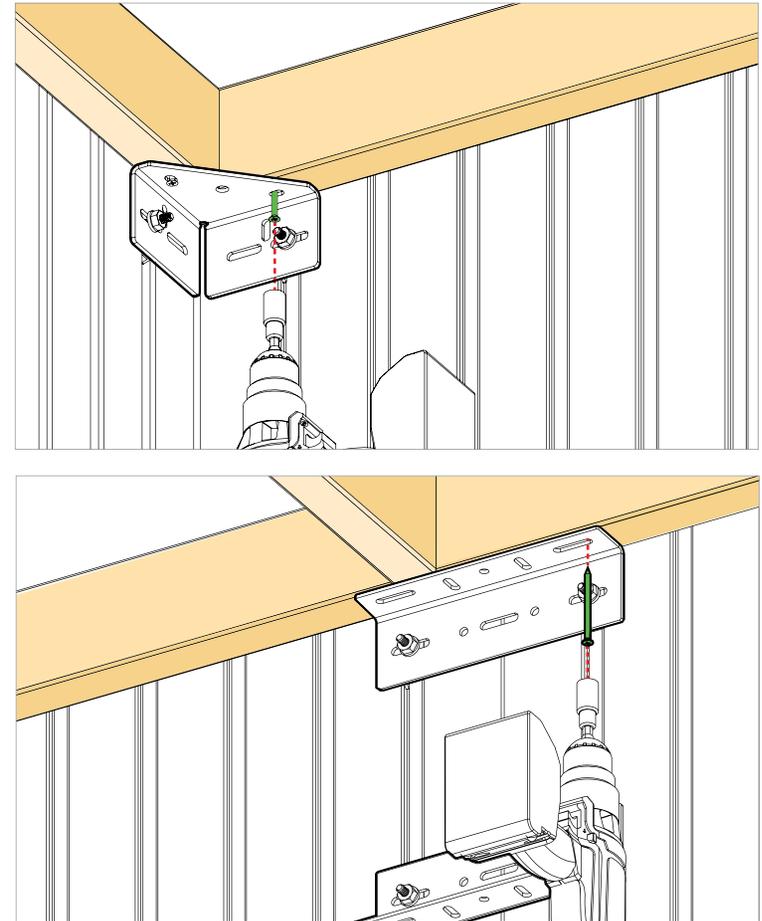


© **IMPORTANT:** Always use a minimum of 2 joining plates when joining 6 x 36 panel with 18 x 36 panel. See Tips and Tricks from page 27 for more details.

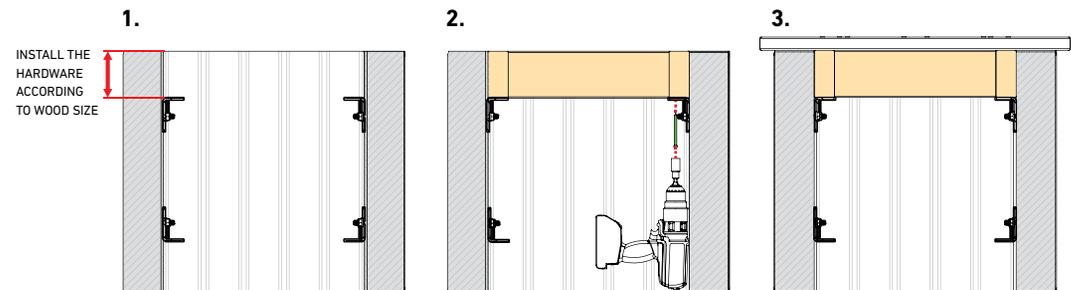
# INTEGRATING WOOD



-  24x
-  8x
-  4x
-  6x
- A/B**
-  **TREATED WOOD SCREW #8 OR #10**



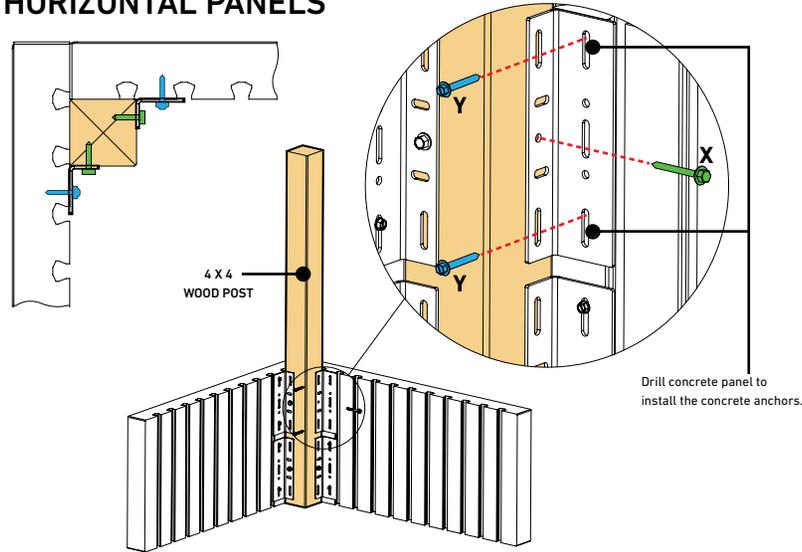
## SECTION VIEW



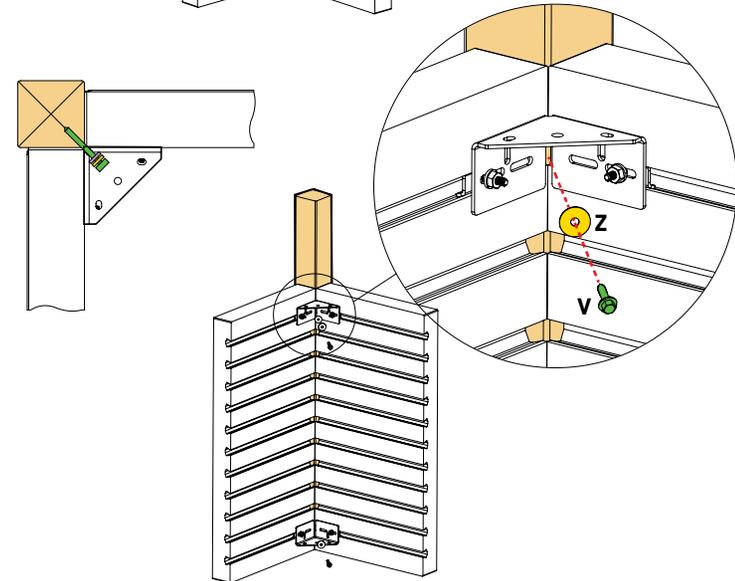
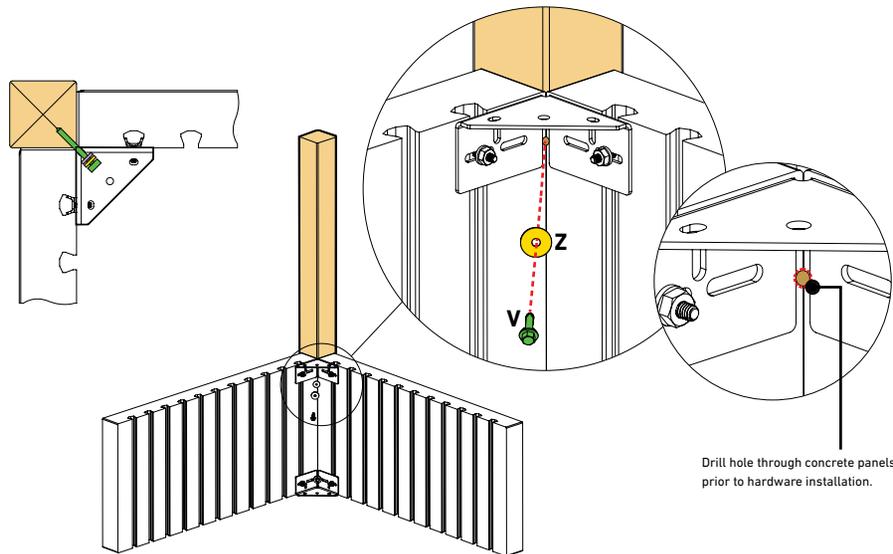
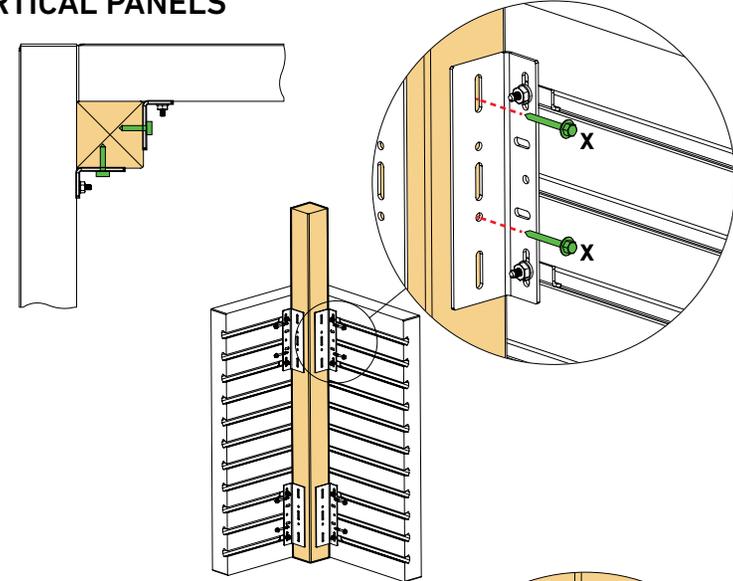
**NOTE:** See Tips and Tricks from page 27 for more details.

# INTEGRATING 4 x 4 WOOD POSTS

## HORIZONTAL PANELS



## VERTICAL PANELS

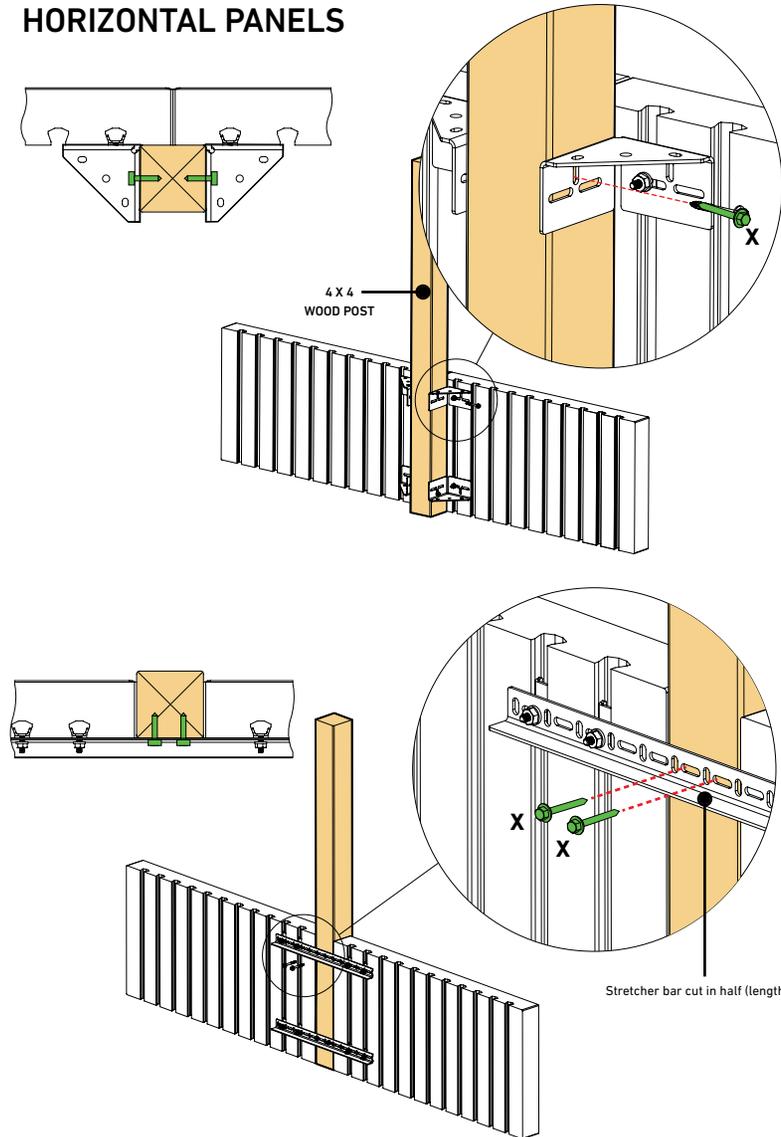


- X- Stainless Steel Wood Screw Flat Head #10 x 2½
- Y- Treated Concrete Anchor (Tapcon®) ¼ x 1¾ or ⅜ x 1¾
- V- Stainless Steel Lag screws ¼ x 2½ or ⅜ x 2½
- Z- Stainless Steel Oversized Washer ⅜

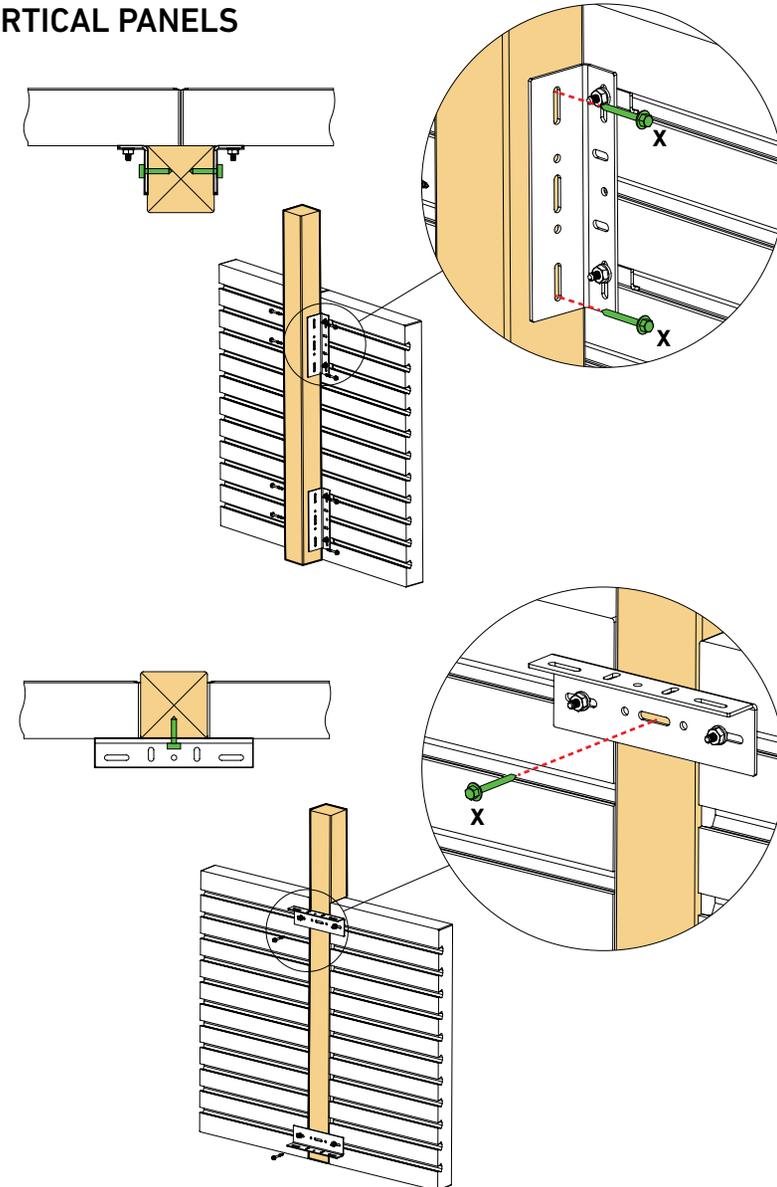
**IMPORTANT:** Other types of hardware (not included) may be required to make these assemblies (wood screws, concrete anchors, etc.). BELGARD is not responsible for any issue regarding other materials, accessories, other types of hardware, etc. We recommend consulting an expert/engineer to determine the design limitations of the screen panels based on wind loads.

# INTEGRATING 4 x 4 WOOD POSTS

## HORIZONTAL PANELS



## VERTICAL PANELS

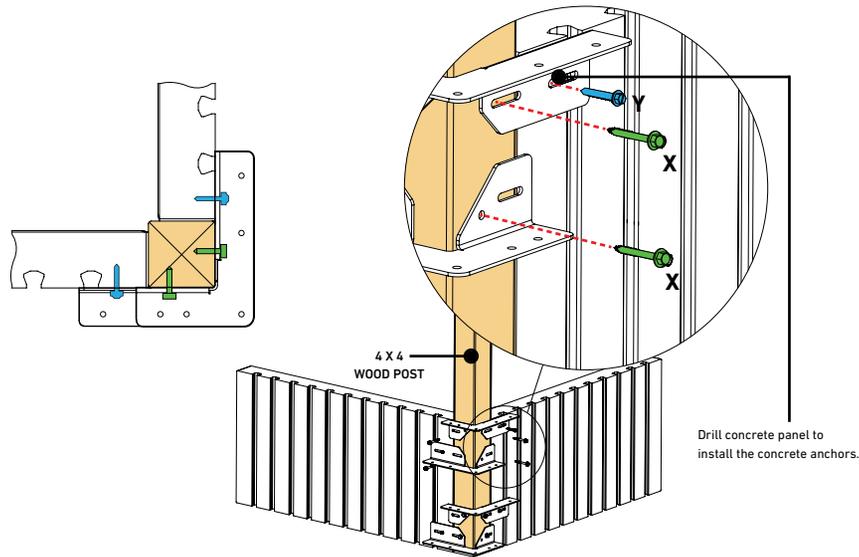


- X- Stainless Steel Wood Screw Flat Head #10 x 2½
- Y- Treated Concrete Anchor (Tapcon®) ¼ x 1¾ or ⅜ x 1¾
- V- Stainless Steel Lag screws ¼ x 2½ or ⅜ x 2½
- Z- Stainless Steel Oversized Washer ⅜

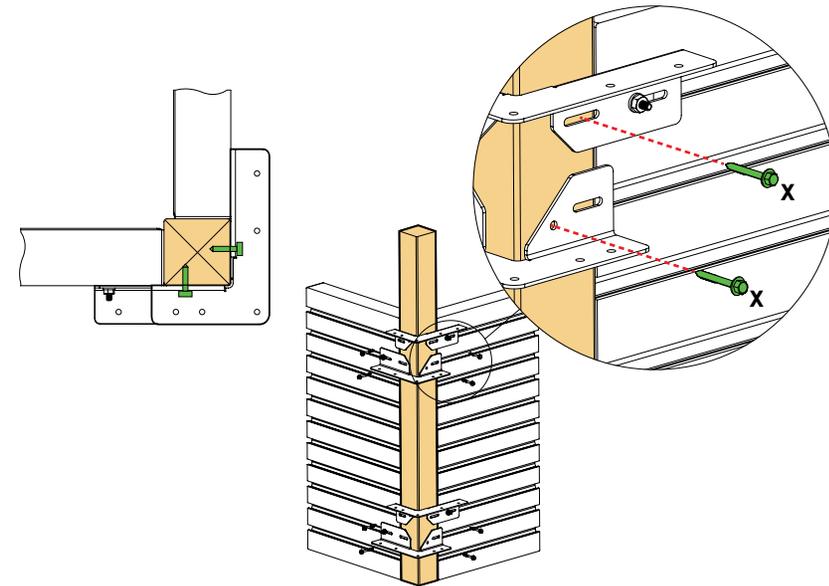
**IMPORTANT:** Other types of hardware (not included) may be required to make these assemblies (wood screws, concrete anchors, etc.). BELGARD is not responsible for any issue regarding other materials, accessories, other types of hardware, etc. We recommend consulting an expert/engineer to determine the design limitations of the screen panels based on wind loads.

# INTEGRATING 4 x 4 WOOD POSTS

## HORIZONTAL PANELS



## VERTICAL PANELS

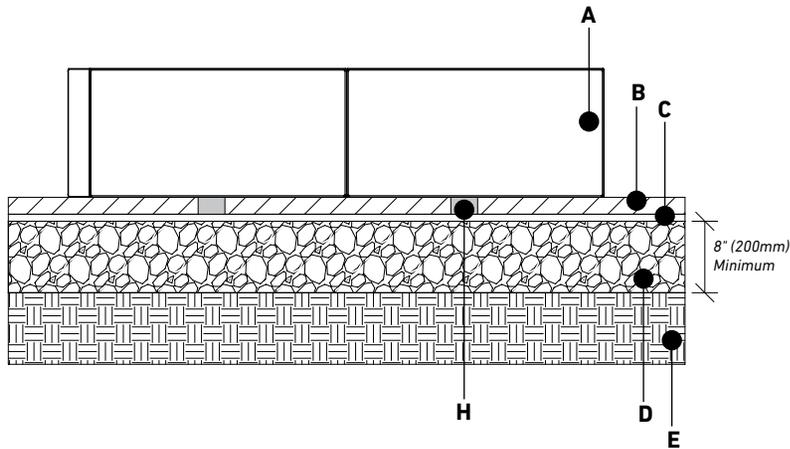


- X- Stainless Steel Wood Screw Flat Head #10 x 2½
- Y- Treated Concrete Anchor (Tapcon®) ¼ x 1¾ or ⅜ x 1¾
- V- Stainless Steel Lag screws ¼ x 2½ or ⅝ x 2½
- Z- Stainless Steel Oversized Washer ⅜

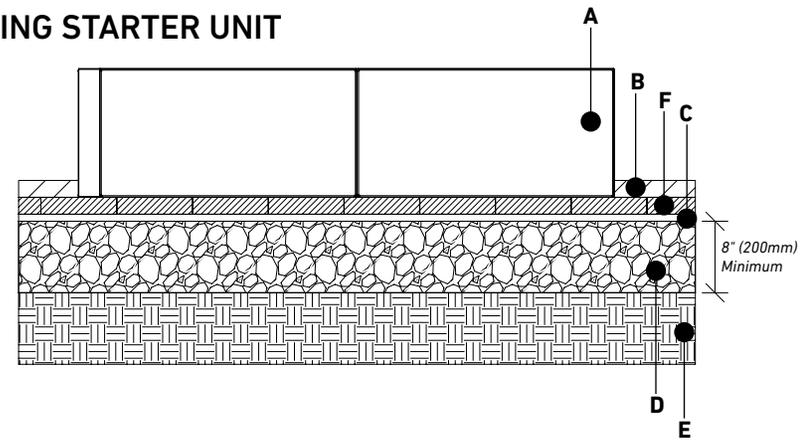
**IMPORTANT:** Other types of hardware (not included) may be required to make these assemblies (wood screws, concrete anchors, etc.). BELGARD is not responsible for any issue regarding other materials, accessories, other types of hardware, etc. We recommend consulting an expert/engineer to determine the design limitations of the screen panels based on wind loads.

# BASE PREPARATION

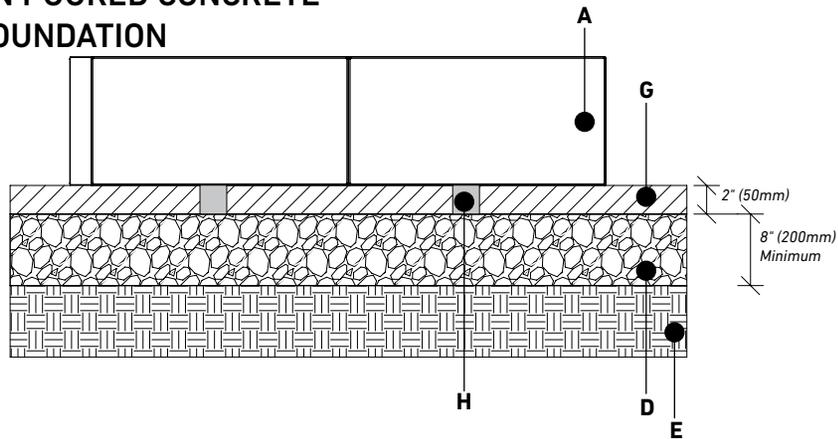
## ON EXISTING PATIO



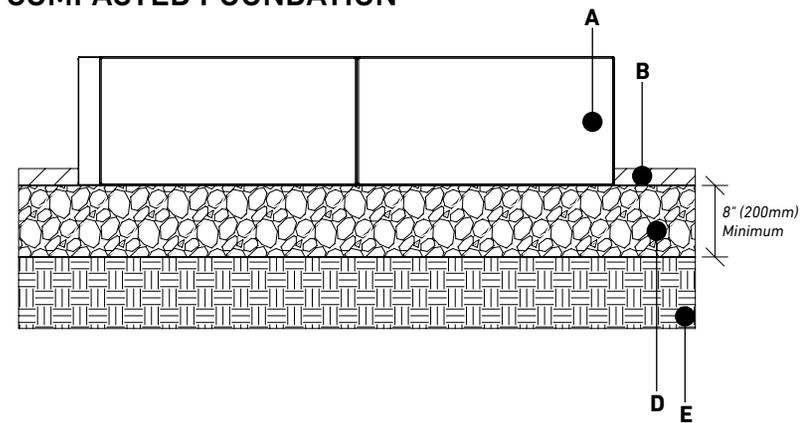
## ON COMPACTED FOUNDATION USING STARTER UNIT



## ON POURED CONCRETE FOUNDATION



## ON COMPACTED FOUNDATION

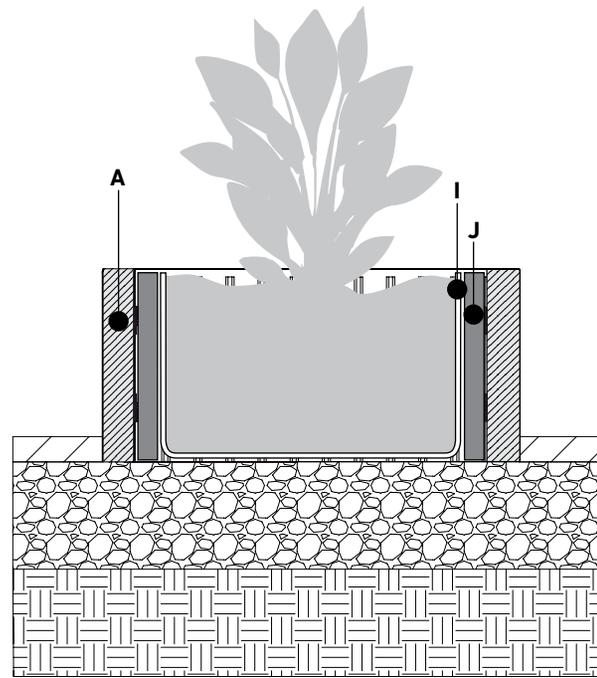
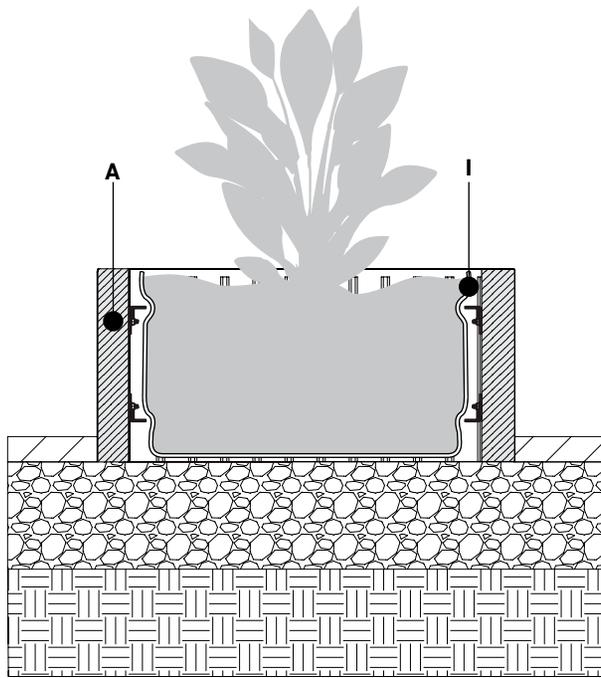


- A- ARTFORMS Panels
- B- Slab or Paver
- C- Bedding Sand 1" (25mm)
- D- Compacted Aggregates 8" (200mm) minimum
- E- Soil
- F- Starter Unit/ Slab or Paver
- G- Reinforced Poured Concrete Foundation 2" (50mm) minimum
- H- Opening for Drainage

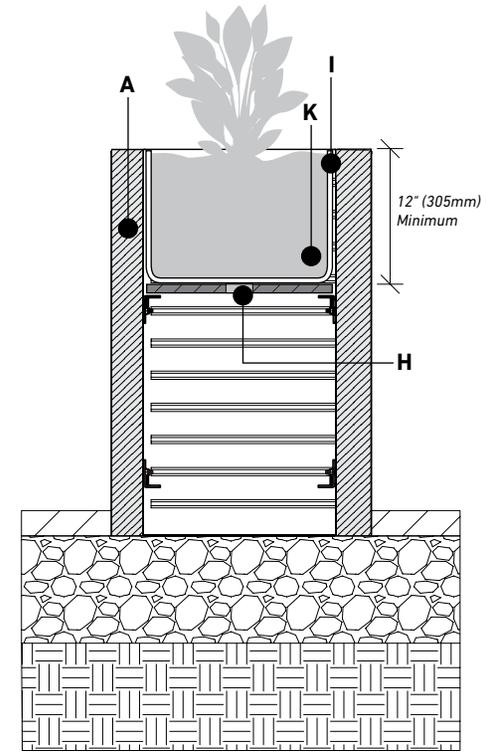
**IMPORTANT:** Provide adequate drainage and adjust according to soil type. Maximum height of 36" for planter box and 42" for outdoor living structure. Any higher structure must be designed by an engineer. Dimensions and information above are general recommendations only. Contact experts/engineers to 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.

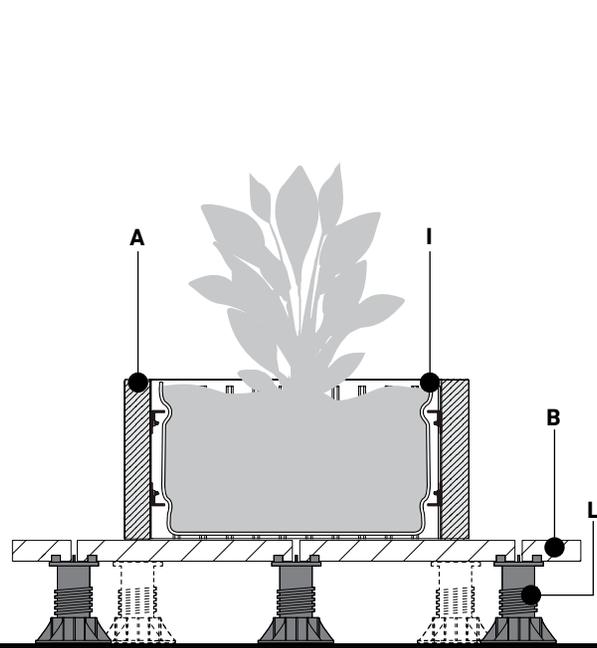


**RECOMMENDED:**  
Place a cement board on top of the Artforms hardware to reduce the amount of infill material.

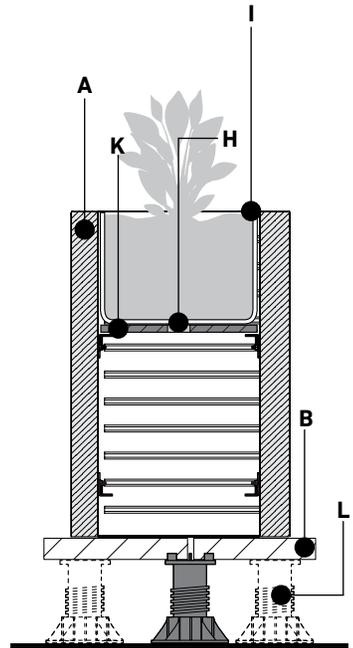
- A- ARTFORMS Panels
- H- Opening for Drainage
- I- Geotextile Membrane
- J- Insulated Panel
- K- Structural Water Resistant Panel

**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.

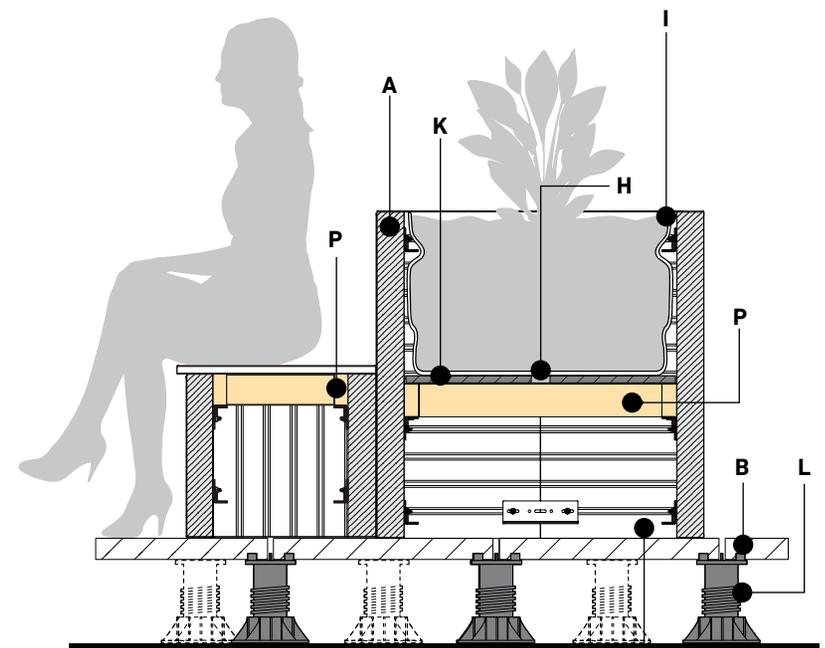
# ROOFTOP APPLICATIONS



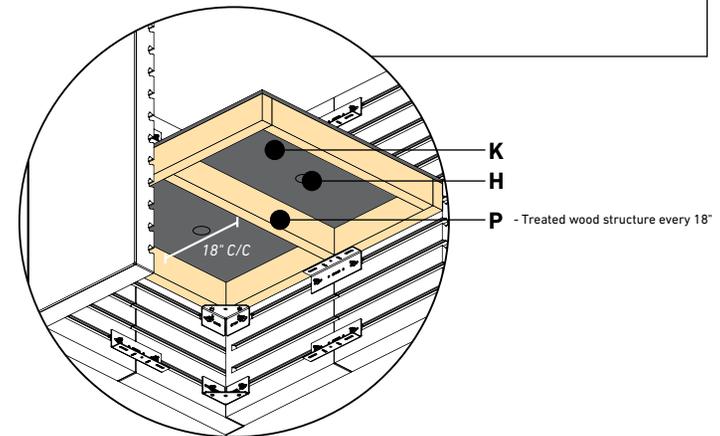
**PLANTER BOX WITH HORIZONTAL  
PANELS SITTING ON SLABS/TILES  
- SECTION VIEW**



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

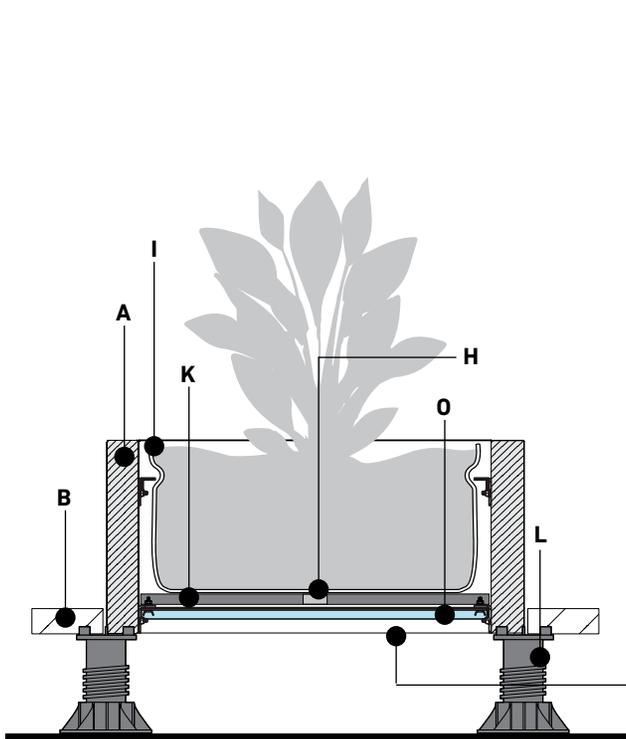


**PLANTER BOX AND BENCH  
SITTING ON SLABS/TILES  
- SECTION VIEW**

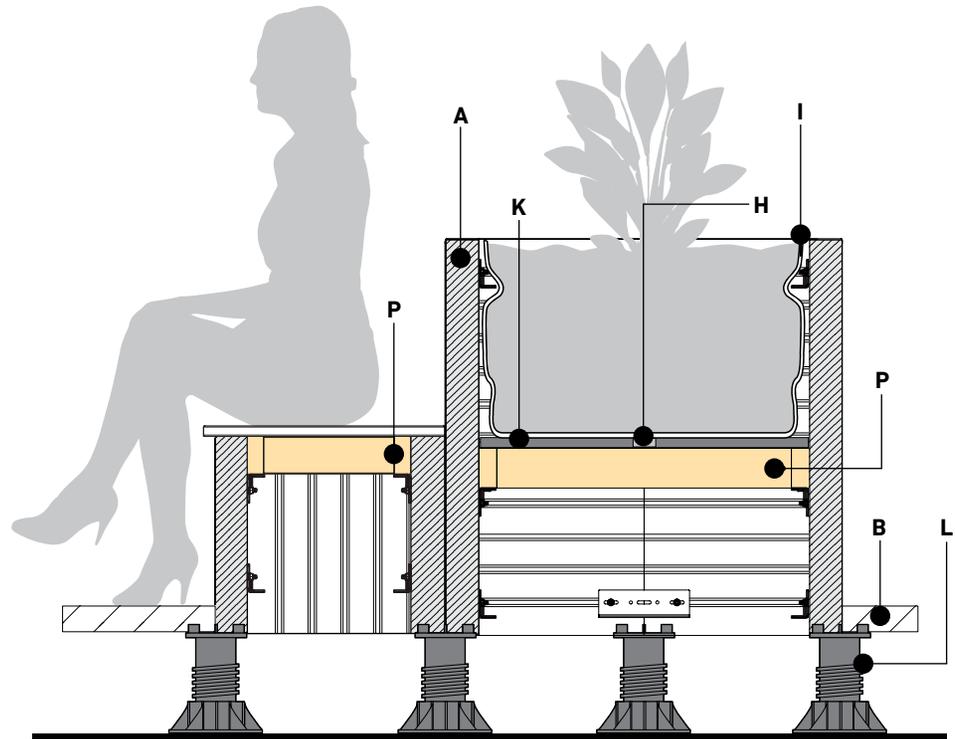


- A- ARTFORMS Panels
- B- Slab or Tile
- H- Opening for Drainage
- I - Geotextile Membrane
- K- Structural Water Resistant Panel
- L- Pedestal
- P- Treated Wood Structure
- R- Opening for drainage

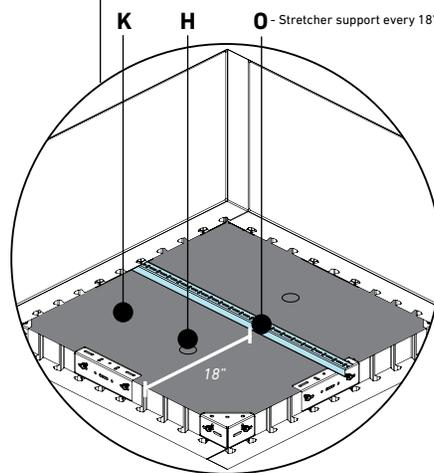
**IMPORTANT:** Contact experts/engineers for proper staging on existing rooftop surfaces.



**PLANTER BOX SITTING ON PEDESTALS - SECTION VIEW**

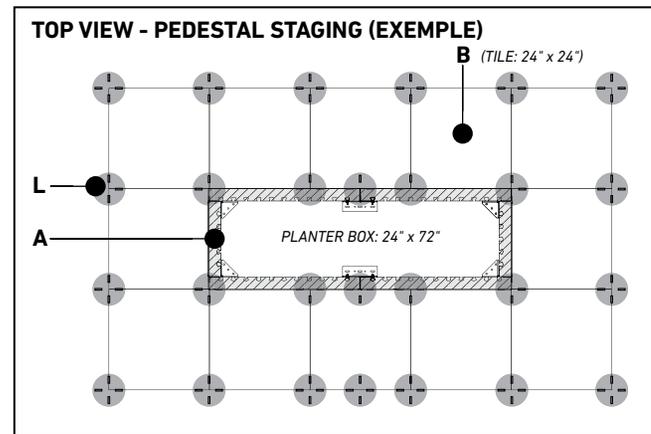


**BENCH AND PLANTER BOX SITTING ON PEDESTALS - SECTION VIEW**

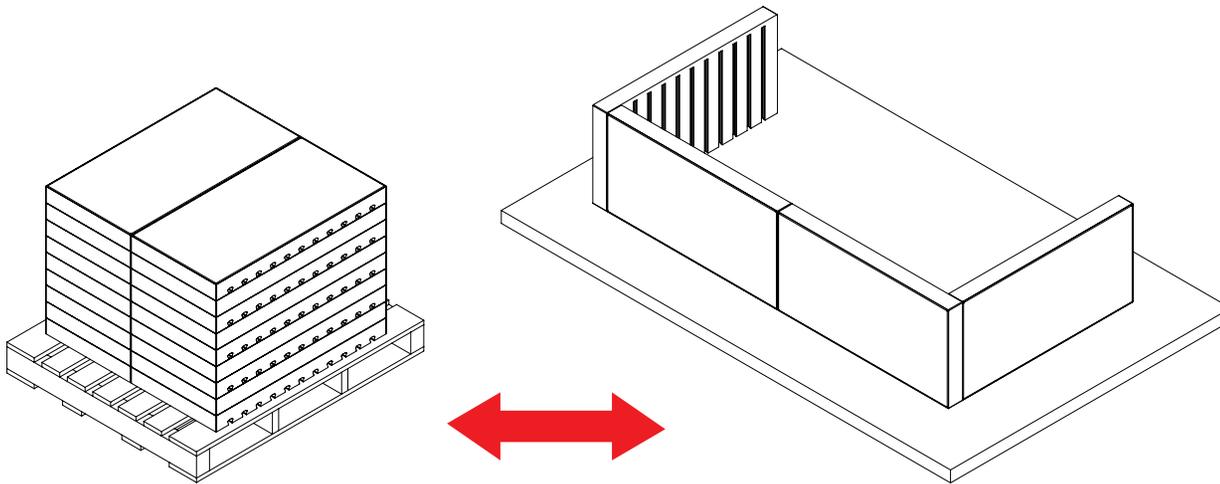


- A- ARTFORMS Panels**
- B- Slab or Tile**
- H- Opening for Drainage**
- I- Geotextile Membrane**
- K- Structural Water Resistant Panel**
- L- Pedestal**
- O- Stretcher Bar**
- P- Treated Wood Structure**

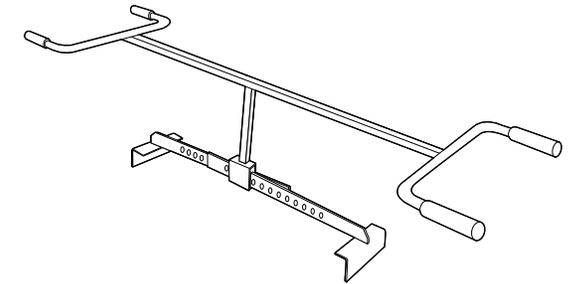
**IMPORTANT:** Contact experts/engineers for proper staging on existing rooftop surfaces.



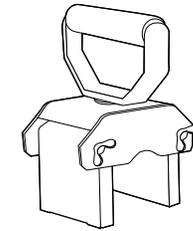
# HANDLING



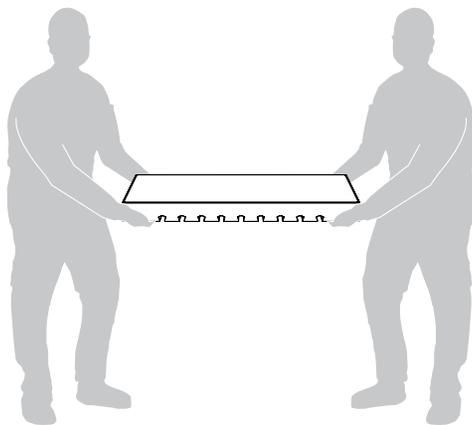
Place pallet close to installation area



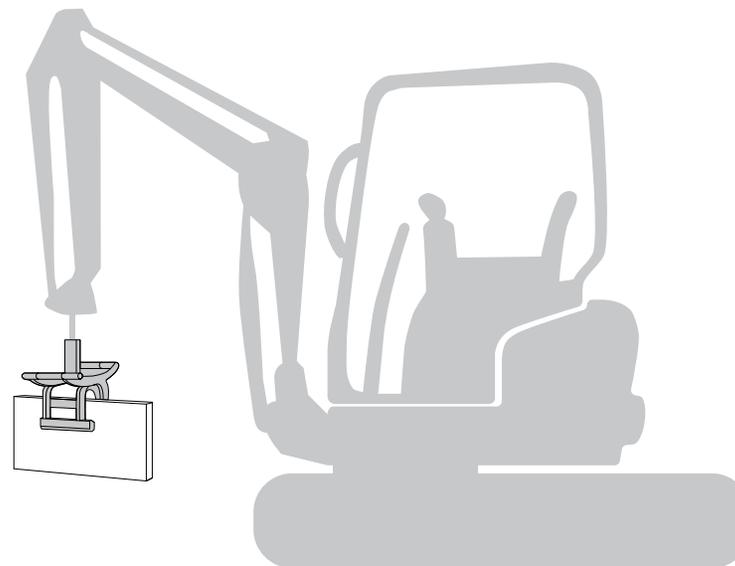
Recommended handling tool



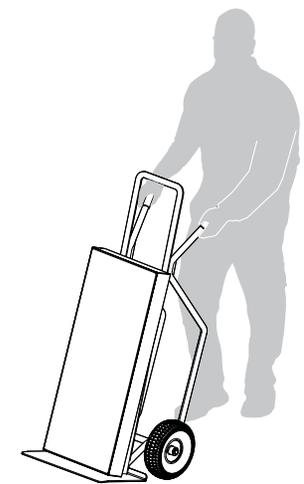
Recommended handling tool



Lift with two people



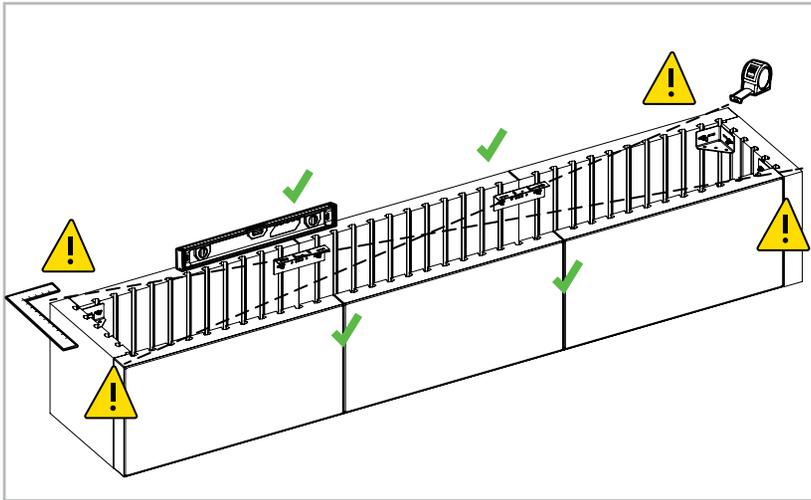
Mechanical lifting device



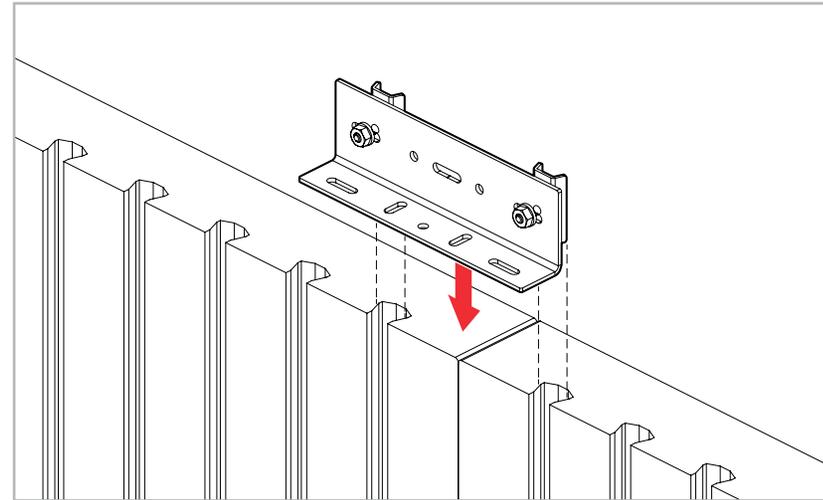
Use hand trolley if necessary

# TIPS AND TRICKS

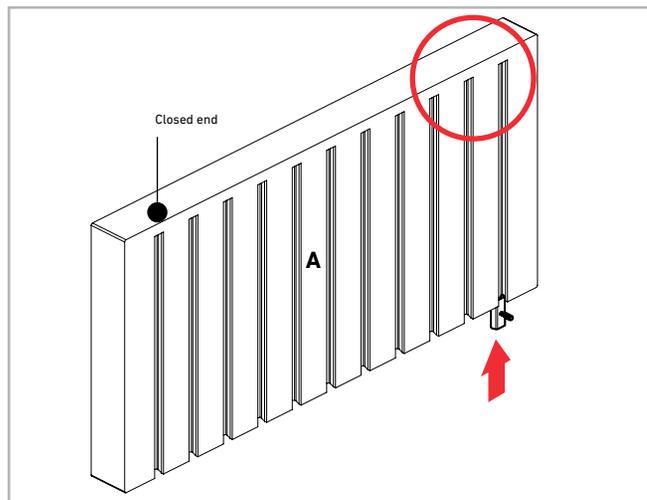
**1.** [General]: Ensure that all the panels are in place, levelled & aligned before fully tightening the hardware in the corners at the end of the installation.



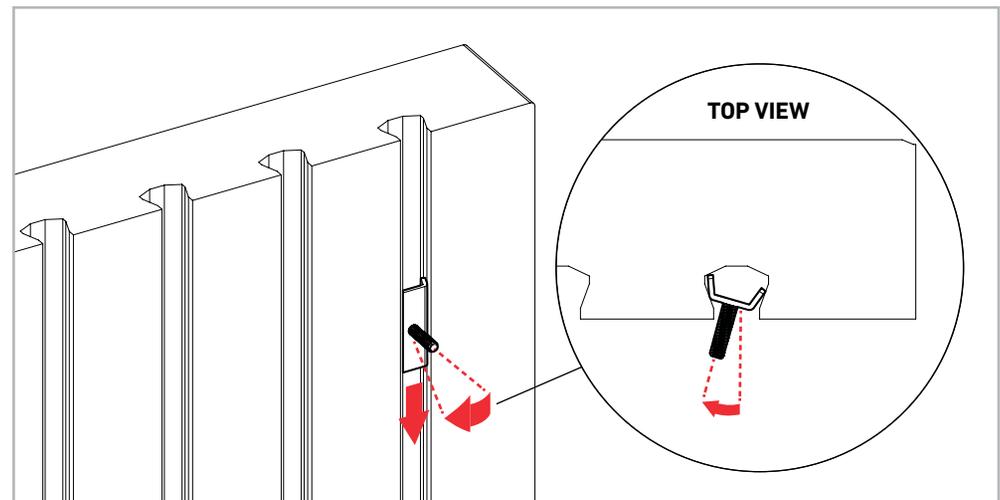
**2.** [General]: Pre-assemble hardware to facilitate its installation. Ensure that all the panels are in place, levelled & aligned before fully tightening the hardware at the end of the installation.



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

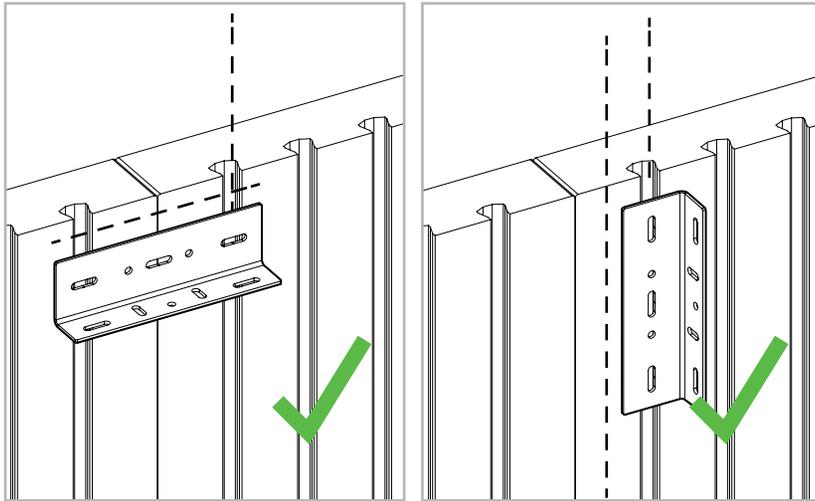


**4.** [Anchor slide]: Insert the anchor slide. Lock it into place to prevent it from sliding down and to facilitate assembly.

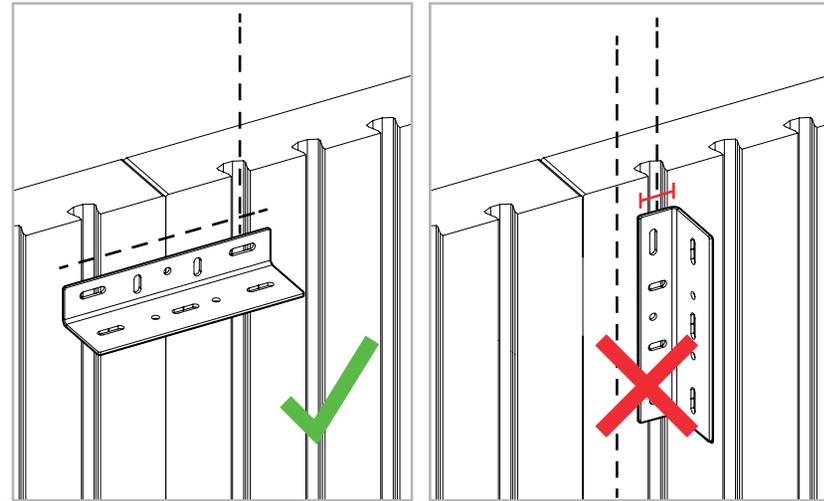


# TIPS AND TRICKS

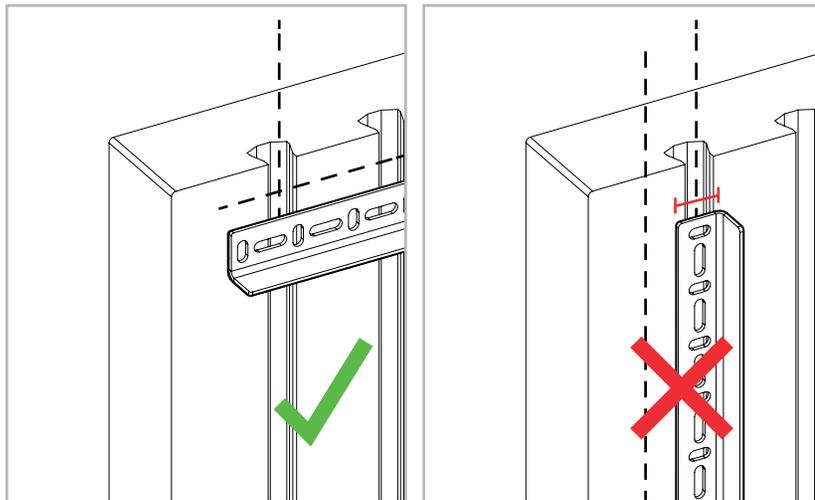
5. [Joining plate]: Use the larger tab of the joining plate when it is perpendicular or parallel to the dovetail slot.



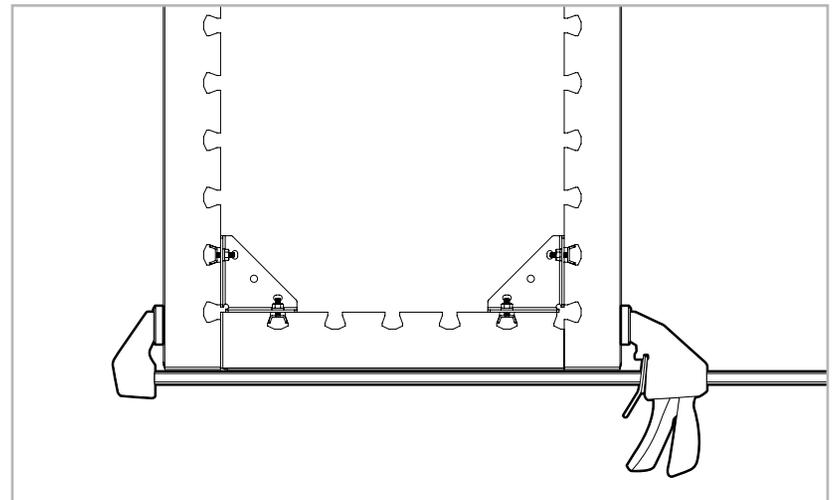
6. [Joining plate]: Only when the joining plate is perpendicular to the dovetail, the small tab can be used. Otherwise, the overlapping surface will be too narrow.



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

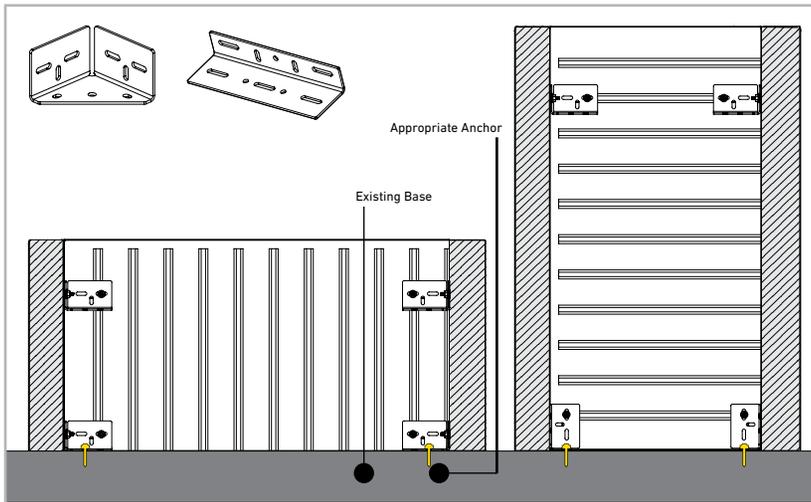


8. [Bar Clamp]: Use the bar clamp to keep the panels in place and to facilitate the hardware installation.

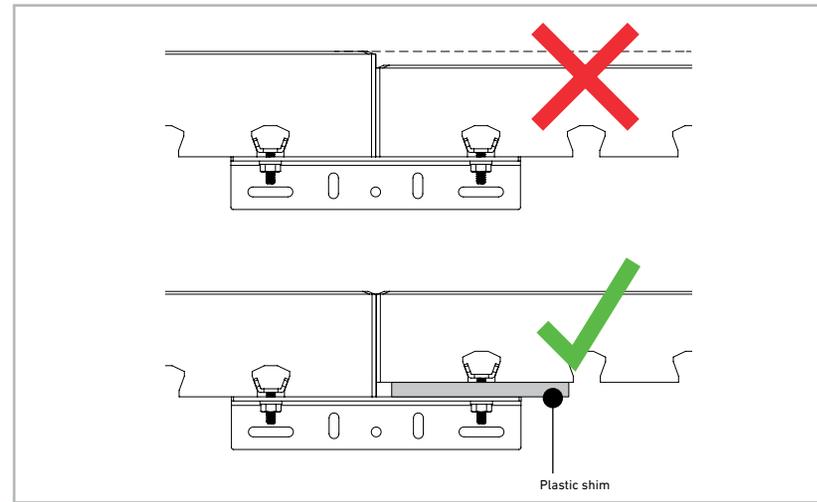


# TIPS AND TRICKS

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



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



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.

