

OUTDOOR LOUVERED PERGOLA

INSTRUCTION MANUAL

edition.24



Model: 8816SBL, 8830SBLGR



Rev. 01

THANK YOU FOR PURCHASING THIS PERGOLA!

IMPORTANT

The whole pergola is shipped in several boxes, please wait patiently before you receive all of them.

If you have any problems with damaged or missing accessories after receiving it, please contact us in time through shopping email and provide the necessary photos, our team will help you solve it.

Please read the entire manual carefully before installing and using your pergola, and please ensure the manual is kept in a safe place for future reference.

This pergola is suitable for outdoor use, and is primarily intended to protect users from direct sunlight, glare and heat.

Any use or modification to the pergola not included in this manual shall be considered as improper use, which may cause considerable danger to users and property and will void the product warranty.

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BEFORE ASSEMBLING THE PERGOLA

Please read all the instructions carefully before you begin, and follow the steps in the order they are presented.

The installation of a pergola must be done with care due to its constraints and requires a certain level of skills :

- Measurement and leveling of supports and structure.
- Floor drilling Installation of chemical sealing or suitable fixation.
- Work at height and handling heavy loads.

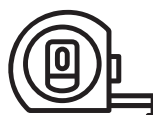
Make sure you have all the tools required for assembling your pergola. In order to assemble your pergola safely and correctly, please ensure you have access to the following tools and accessories, all of which are not provided.



Working gloves
and safety hats



Box cutter



Tape measure
> 3m



Spirit level



Screwdriver



Cordless
screwdriver



Wrench set



Hammer



Hammer drill



Drill bit
Φ12



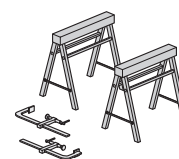
Glue gun



Pencil / Marker

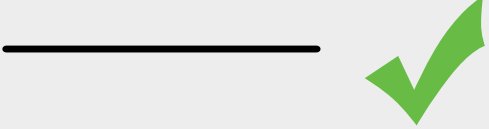

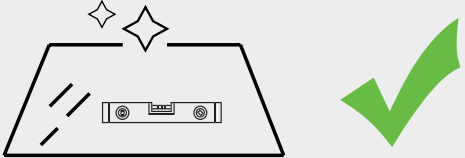
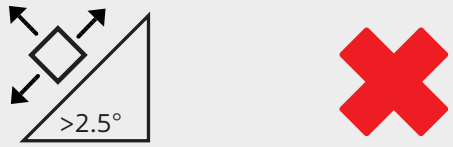




Ladder x2
> 1.5m



Stands and clamps

Select a suitable location:

The ground should be solid and flat	
	
The ground should be level	
	
Sufficient water drainage	No overhanging trees and powerlines
	

Warning:

Most terraces or patios are designed with a slight slope to prevent (rain) water from forming pools or reaching the house or other structures. For the perfect pergola installation, a level surface without such a slope is required. Small pebbles could also prevent the pergola from being safely secured on the ground.

If the pergola is installed on an uneven surface, it may prevent accessory components from working correctly and may void the product warranty.

Additional adjustment of the pillar heights would also be necessary.

Prepare a foundation:

To prepare it, you need to:

- check for underground pipes and cables (Call 811 before you dig if you live in the USA)
- check with your local authorities regarding any building permits that may be required
- contact a reliable contractor if you decide to have a concrete base




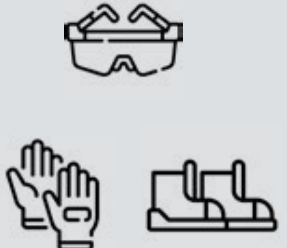
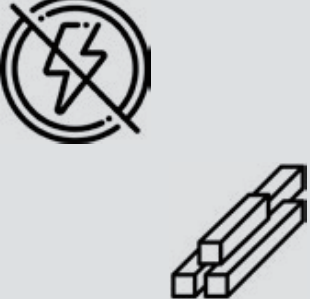





IMPORTANT SAFETY ADVICE





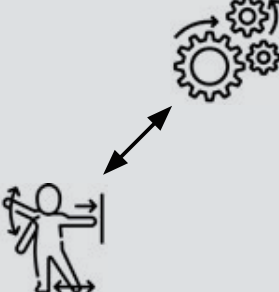
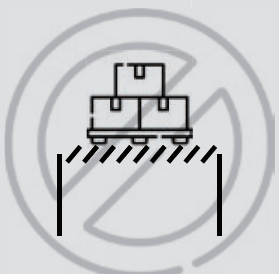
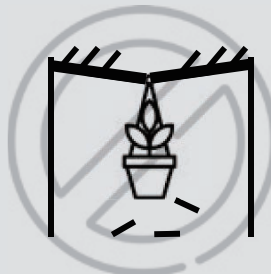


CAUTIONS

1. 3-6 adults or more are recommended to install your pergola (one of steps need at least 3 people to move whole pergola frame). Make sure you are wearing closed toe shoes and installing in a safe environment.
2. DO NOT attempt to assemble or use the pergola in moderate or heavy wind conditions. Always keep the pergola open and secure it during heavy winds or extreme weather conditions to avoid damage to the pergola or personal injury.
3. It is essential to place the pergola on level ground and not less than 6 feet from any obstruction such as fences, pergolas, the house, overhanging branches, laundry lines, or electrical wires.
4. For the convenience to adjust parts connection, never fully tighten the screws until you finish the installation, tighten screws to 80%-90% is enough. (Using the electric drill at a lower rotating speed to avoid damaging the product and screws.)
5. Do not install the pergola when you find damage parts are that parts are missing. Contact your dealer.

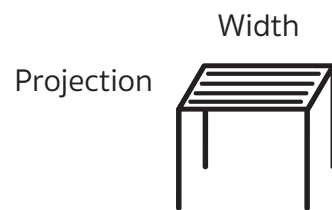
WARNINGS

1. NEVER leave children unattended around/under this pergola before it finish assembly.
2. CHOKER HAZARD: This item contains small parts which can be swallowed by children. please keep it away from children under 3 years old and pets during installation.
3. DO NOT allow snow to accumulate on the louver roof. In the case of high winds, heavy snow or other extreme weather conditions, open the louvers and remove manual crank or other unnecessary accessories to avoid potential damage to your pergola.
4. This structure is a non-permanent structure and the warranty does not cover damage incurred under extreme weather conditions including heavy rain, high winds, natural disasters or if exposed to high heat from heaters or BBQs. Warranty does not cover products subject to negligence, abuse usage, inappropriate installation. Damage from exposure to chemicals (including but not only oils ,spills, fluids) won't be covered by warranty.
5. Some parts have sharp edges/corners. Please follow basic safety precautions to reduce the risk of hurts.

<p>The pergola must be positioned and fixed on flat level surface.</p>	<p>Dispose of all plastic bags safely. Keep them out of the reach of children.</p>	<p>Keep children and pets away from the assembly area until the work is completed.</p>	<p>Always wear appropriate work shoes, gloves and eye protection when working.</p>
			
<p>Work well away from power lines, particularly when handling metal parts.</p>	<p>Do not attempt to assemble the pergola in windy or wet conditions.</p>	<p>If using power tools or a ladder, always follow the manufacturer's safety instructions.</p>	<p>Hot items such as recently used grills, blowtorches etc. must not be stored under or close to the pergola.</p>
			
<p>Make sure the pergola complies with local building regulatory codes.</p>	<p>Working at heights can be dangerous. Always wear protective clothing to prevent injury in the event of a fall.</p>		
			



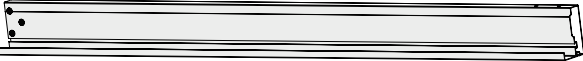
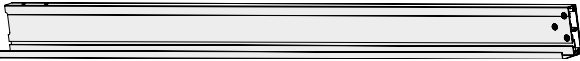
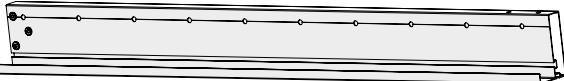
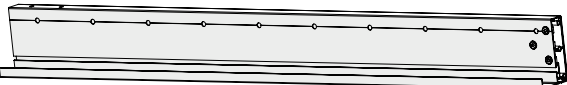
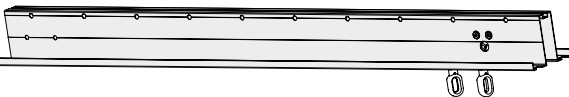

<p>Only use ladders and scaffolding with a sufficiently high load bearing capacity</p>	<p>Dispose of all plastic bags safely. Keep them out of the reach of children.</p>	<p>Prior to each operation, visually check the pergola for damage. If damage is visible, stop using it immediately and contact authorized personnel to repair the damage</p>	<p>Do not touch moving parts during operation.</p>
			
<p>Keep clothing and body parts away from the pergola to prevent them from getting caught in the moving parts .</p>	<p>Do not place anything on the louvers</p>	<p>Hanging objects on the pergola may cause serious damage and is not permitted.</p>	<p>Foliage or other foreign objects on the louvers and in the guide rails should be removed regularly, to prevent damage to the pergola</p>
			
<p>Put the louvers into the vertical position during snowfall or wind to avoid damage.</p>			
			

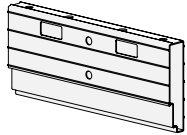
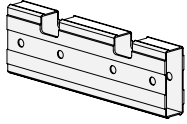




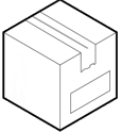
LIST OF PARTS







Please carefully check that the quantity of parts matches with that of the model you have purchased.

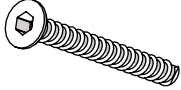
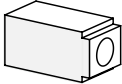


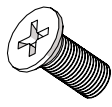
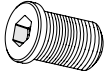

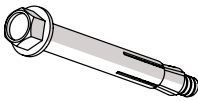
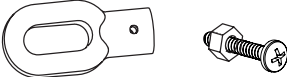

PLEASE NOTE that the anchor bolts provided may not be suitable for your chosen installation location.



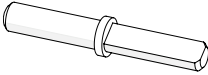


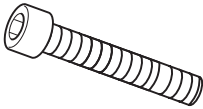

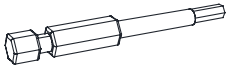
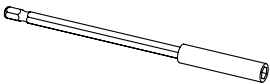
Ref	Box	Projection
		10ft. / 3m
L  Louver	A/B	40 pcs
A  Corner pillar	D	4 pcs
B  End beam 1	C	2 pcs
C  End beam 2	C	2 pcs
D  Side beam 1	C	2 pcs
E  Side beam 2	C	2 pcs
F  Middle beam 1 with gear boxes	C	1 pc
G  Middle beam 2	C	1 pc

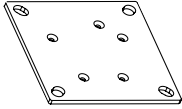
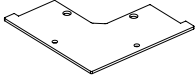
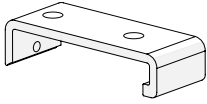
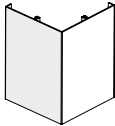
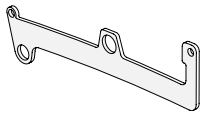
Ref	Box	Projection
		10ft. / 3m
H  End beam and Side beam connector	C	4 pcs
I  Middle beam connector	C	1 pcs
J1 	C	1 pc
J2 		1 pc
J3 		2 pcs
K  Crank	C	1 pc
 Spare parts box	C	1 pc

In spare parts box you can find:



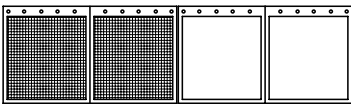
Ref	Box	Projection
		10ft. / 3m
1  Screw ST 5x30	spare parts box	20 pcs
4  Screw ST 3.9x20	spare parts box	168 pcs
5  Screw M8x12	spare parts box	24 pcs
6  Screw M8x18	spare parts box	4 pcs

Ref	Box	Projection	
		10ft. / 3m	
7		spare parts box	2 pcs
	Screw M6x35		
8		spare parts box	2 pcs
	Drive shaft		
9		spare parts box	40 pcs
	Screw M6x12 (Adhesive Dispensing)		
10		spare parts box	8 pcs
	Screw M6x12		
11		spare parts box	8 pcs
	Screw M5x10		
12		spare parts box	2 pcs
	Screw M6x10		
13		spare parts box	2 pcs
	Washer M6		
14		spare parts box	16 pcs
	Anchor bolt M8x70		
15		spare parts box	2 pcs
	Ring cap set		
16		spare parts box	80 pcs
	Rubber grommet		

Ref	Box	Projection
		10ft. / 3m
17	 Plastic washer	spare parts box 40 pcs
18	 Plastic buckle	spare parts box 40 pcs
19	 Louver plug	spare parts box 80 pcs
20	 Washer M8	spare parts box 48 pcs
22	 Connecting strip connector	spare parts box 2 pcs
23	 Screw M8x30	spare parts box 24 pcs
24	 Slot nut and screws	spare parts box 9 sets
25	 3mm / 4mm / 5mm / 6mm Hex bit	spare parts box 1 set
26	 Drill bit extension holder	spare parts box 1 pc

Ref	Box	Projection
		10ft. / 3m
M	Spare Parts Box	4 pcs
 Pillar plate		
N	Spare Parts Box	4 pcs
 Pillar cover		
O	Spare Parts Box	2 pcs
 Middle beam supporter		
P	Spare Parts Box	4 pcs
 Corner cover		
Q	Spare Parts Box	80 pcs
 Louver end cap		

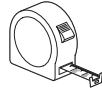
* If you buy the pergola with curtain, you will get below additional accessories:

Ref	Box	Projection
		10ft. / 3m
3	Spare Parts Box	80 pcs
 Plastic hook		
R	C	8 pcs
 Curtain track 1		
S	C	1 set
 Curtain and netting		

PREPARATION

Drill holes at supporting surface

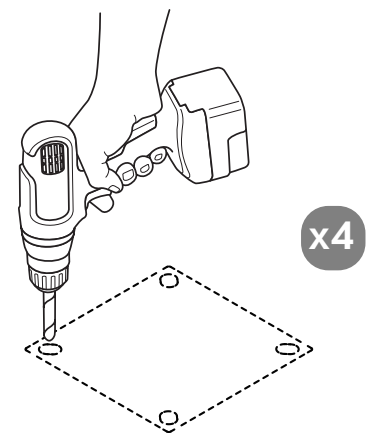
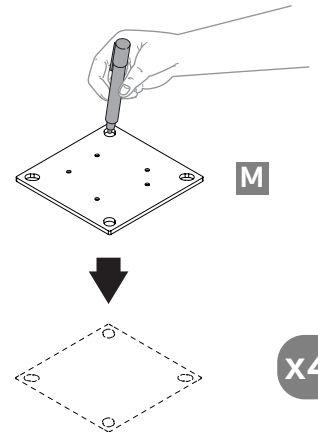
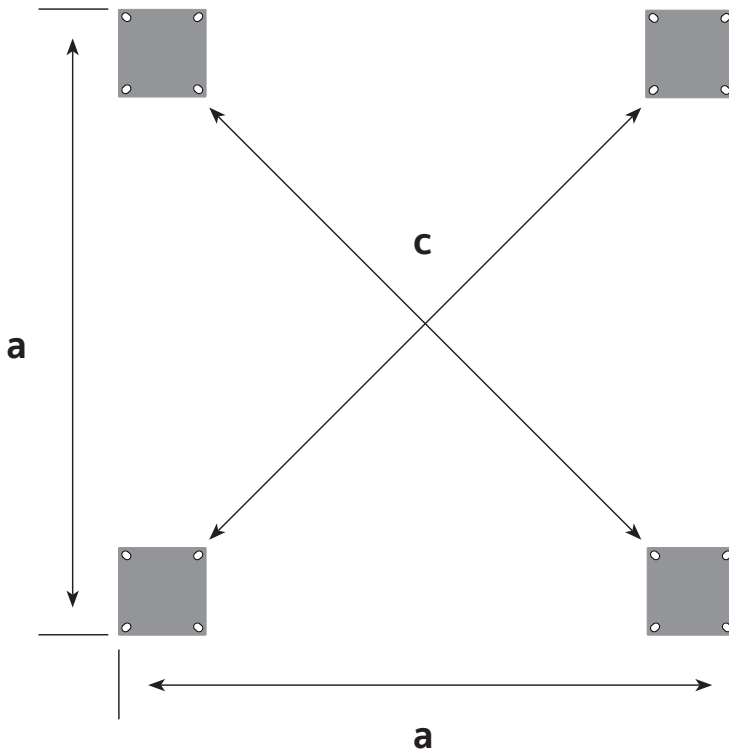
TOOLS TO BE USED:



Drill bit $\Phi 12$



Refer to the diagram and measurement dimensions below to mark and drill the holes. You may choose to skip this step, as it will be completed in Step 5. However, doing so will require at least **4 people** or **2 clamps** for **Step 4 and Step 5**.



NOTE:

The tolerance limit must correspond to maximum 0.394 in (10 mm).

10'x10':

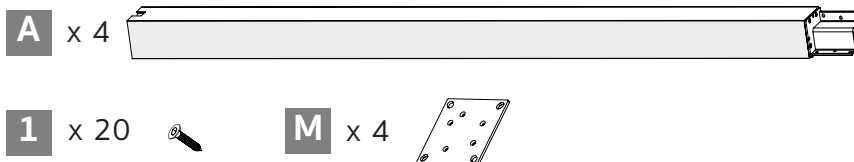
a= 117.72 in (2990mm),

c= 149.77 in (3804.23mm)

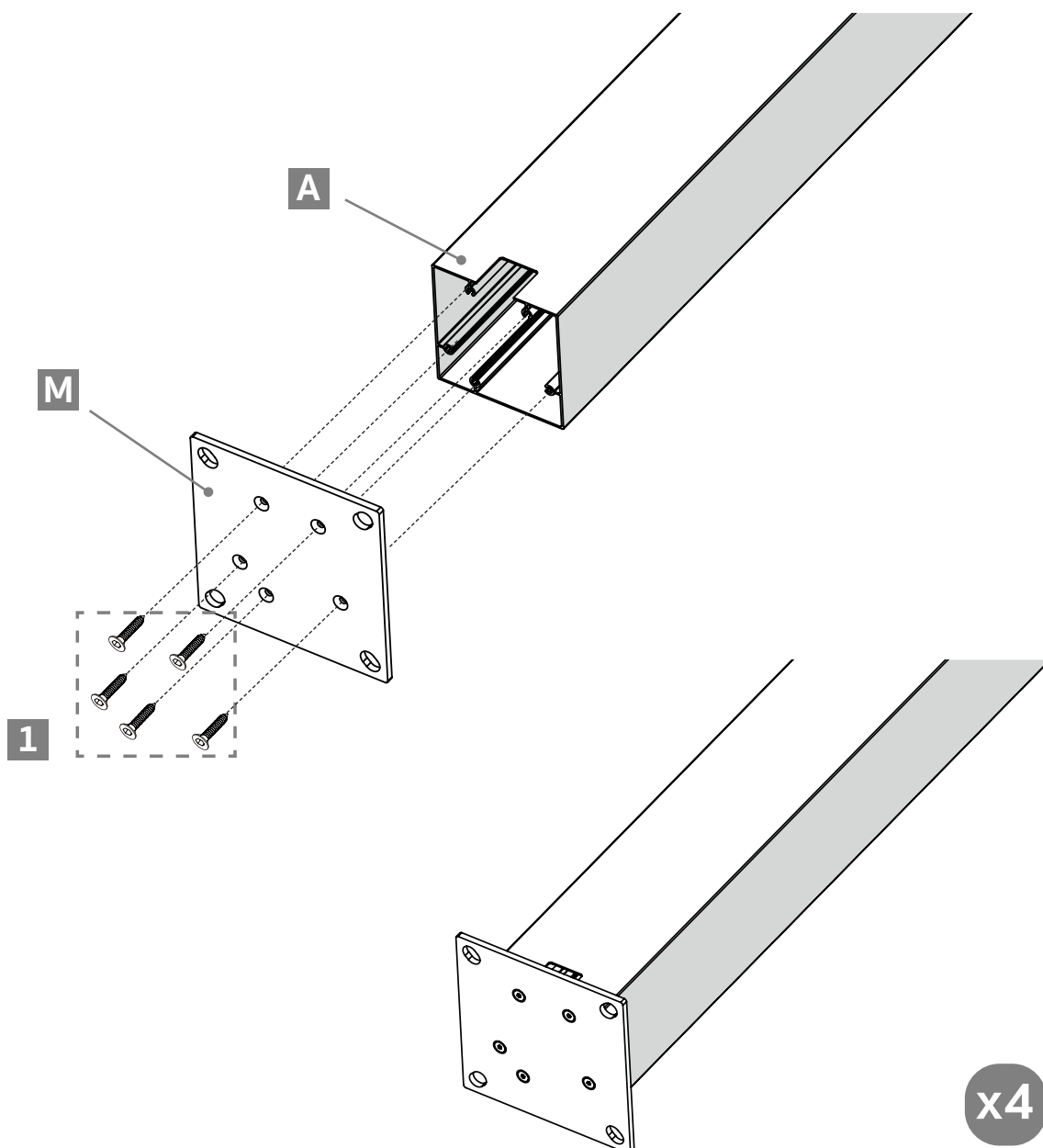
INSTALLATION

01 Set up the pillars

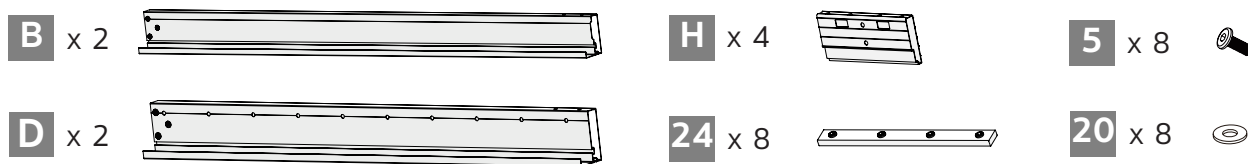
PARTS TO BE USED:



Push the pillar plate **M** against the straight end of the corner pillar **A**. If in doubt, rotate it until it fits easily. Screw in the pillar plate **M** with 5 screws **1** using the M3 hex bit.



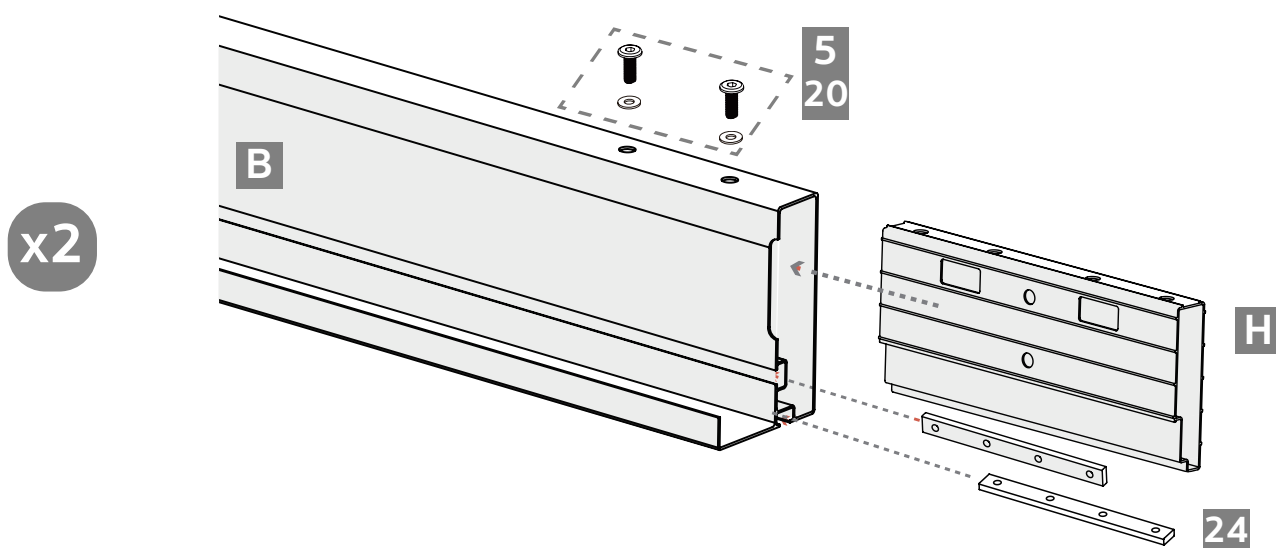
PARTS TO BE USED:



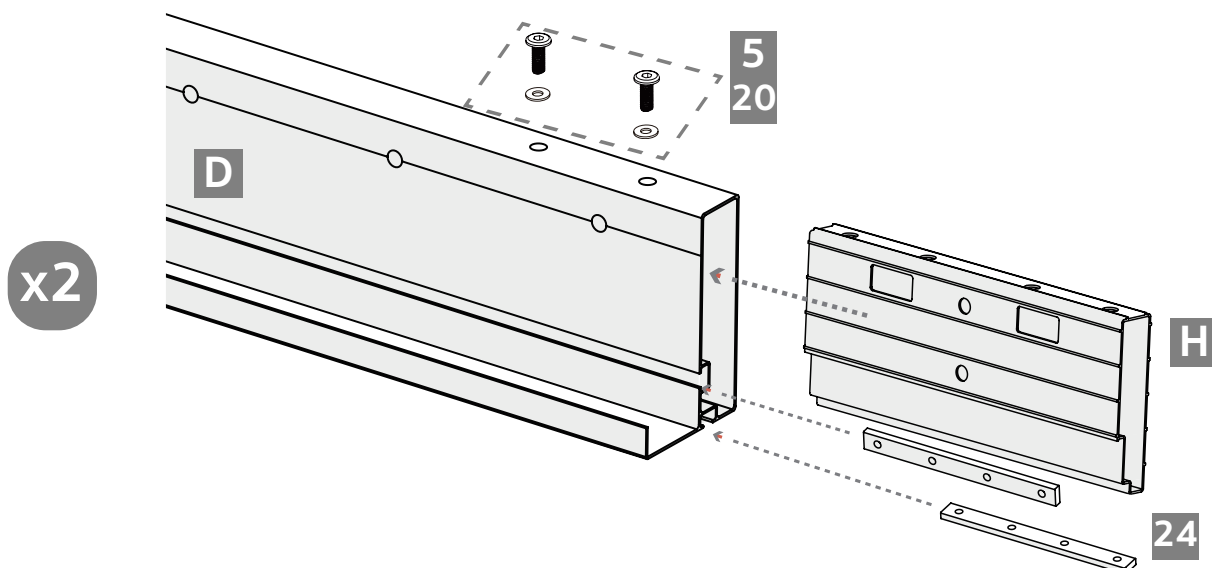
2a



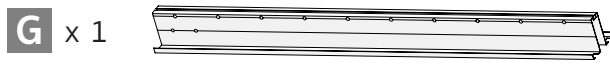
Slot the end beam connector **H** into the end beam **B**, screw in the 2 screws **5** and washers **20** using the M5 hex bit, loosely tighten the screws to allow for adjustment in next steps. Slide the nut strip **24** into the track of end beam B.



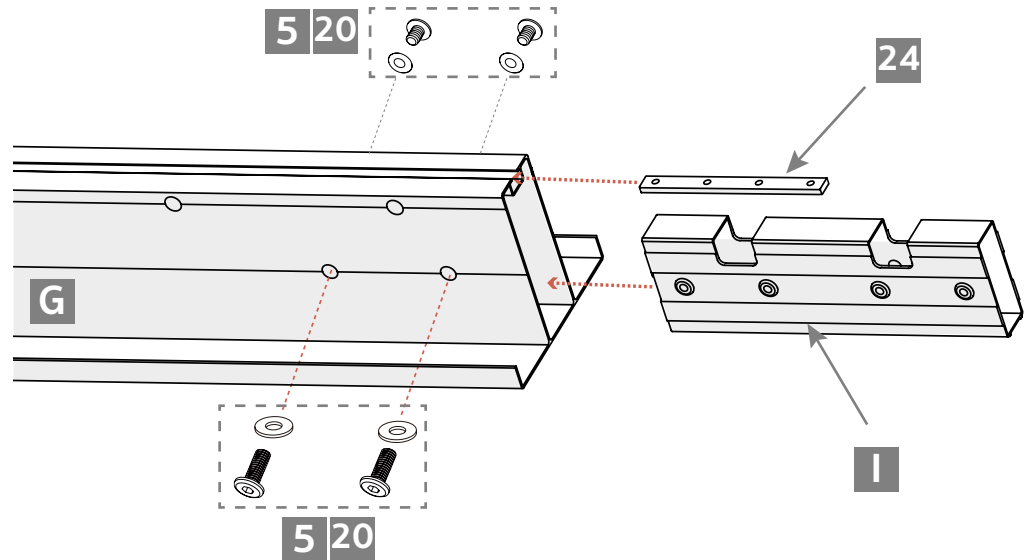
Slot the side beam connector **H** into the side beam **D**, screw in the 2 screws **5** and washers **20** using the M5 hex bit, loosely tighten the screws to allow for adjustment in next steps. Slide the nut strip **24** into the track of side beam D.



PARTS TO BE USED:

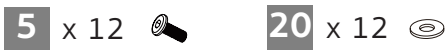
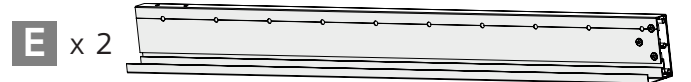
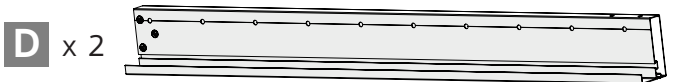


Slot the middle connector **I** into the middle beam **G**, screw in the 4 screws **5** and washers **20** using the M5 hex bit, loosely tighten the screws to allow for adjustment in next steps. Slide the nut strip **24** into the track of middle beam **G**.



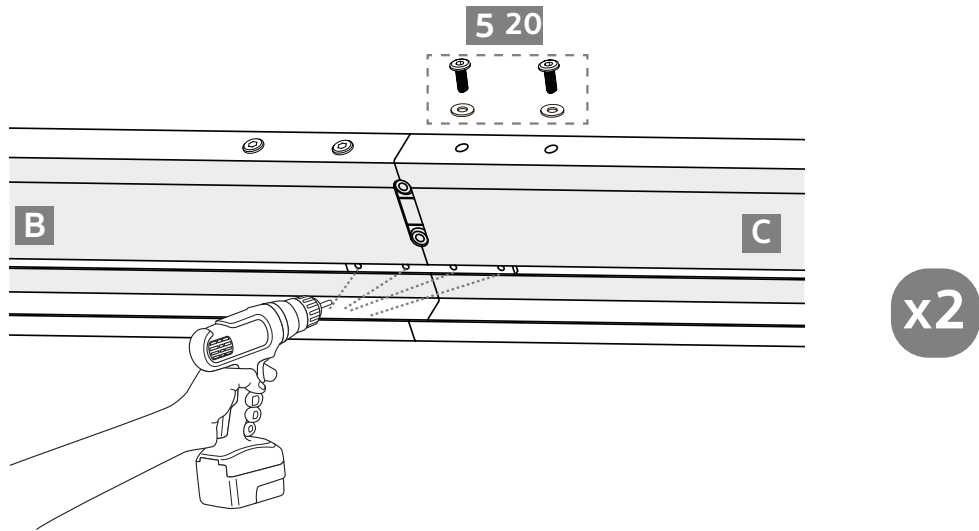
2b


PARTS TO BE USED:

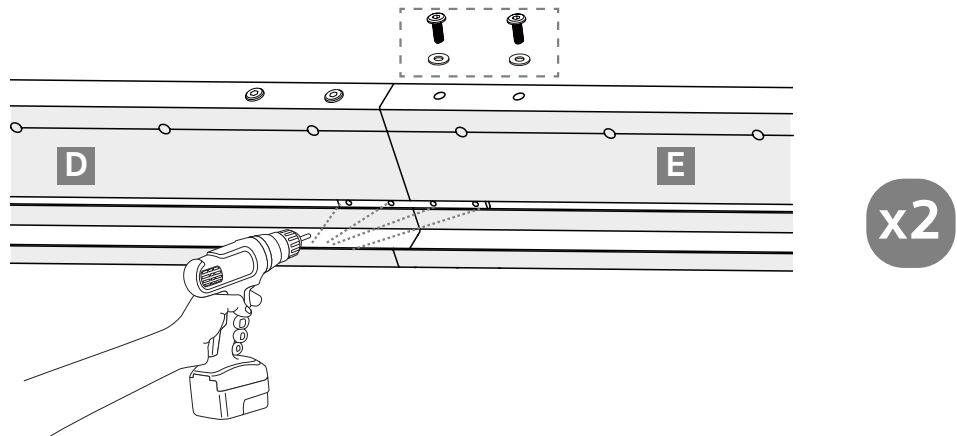



Slot the end beam **B** into the end beam **C** until the end section of end beam **B** has been fully inserted and is no longer visible, screw in the 2 screws **5** and washers **20** using the M5 hex bit.

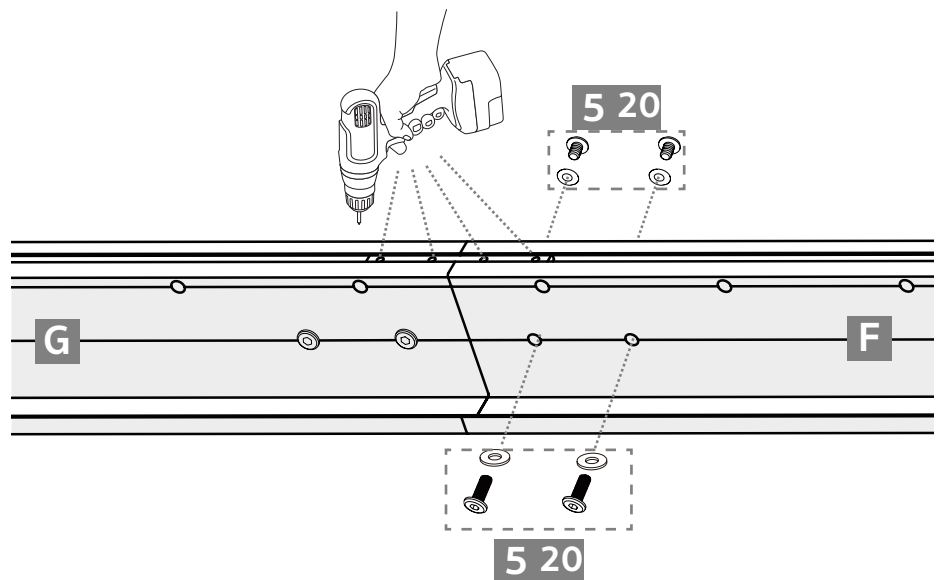
Slide the 2 nut strip **24** to the middle of end beam **B** and end beam **C**, tighten nut strip with 8 screws **24**, using the M3 hex bit.



 Slot the side beam **D** into the side beam **E** until the end section of side beam D has been fully inserted and is no longer visible, screw in the 2 screws **5** and washers **20** using the M5 hex bit. Slide the 2 nut strip **24** to the middle of side beam D and side beam E, tighten nut strip with 8 screws **24**, using the M3 hex bit.



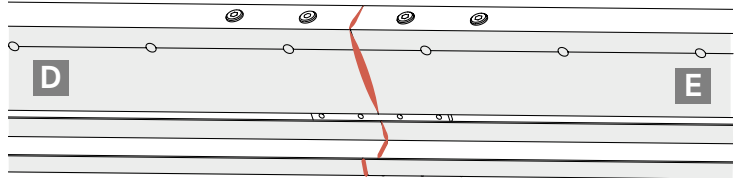
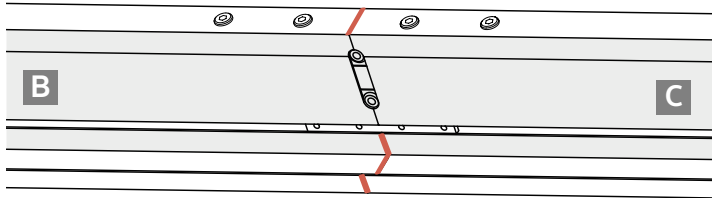
 Slot the middle beam **G** into the middle beam **F** until the end section of end beam G has been fully inserted and is no longer visible, screw in the 4 screws **5** and washers **20** using the M5 hex bit. Slide the nut strip **24** to the middle of middle beam G and middle beam F, tighten nut strip with 8 screws **24**, using the M3 hex bit.



2c

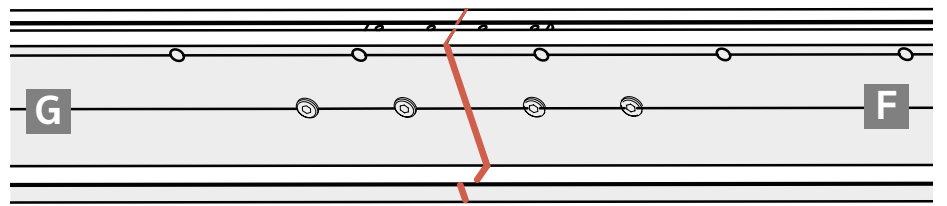
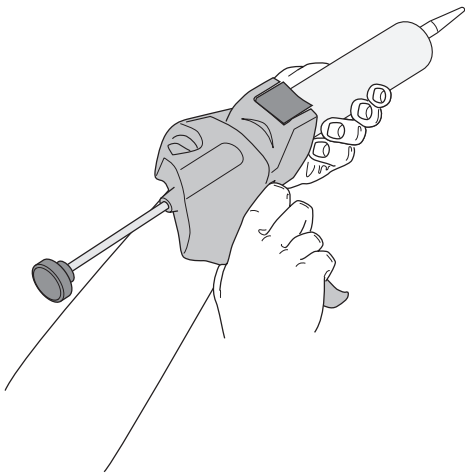


Before attaching the beams to the pillars, apply silicone sealing grout to the slot in the gutter seal.



x2

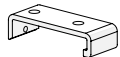
x2



2d

PARTS TO BE USED:

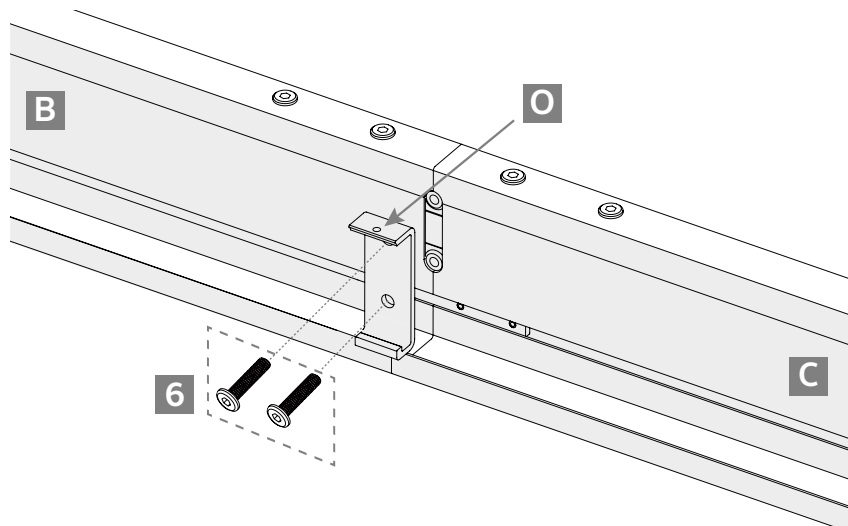
O x 2



6 x 4



Attach the middle beam supporter **O** to middle of the end beam **B** and the end beam **C** with 2 screws **6** using an M5 hex bit.



x2

10'x10' with curtains

10'x10' GO TO STEP 3

2e


PARTS TO BE USED:

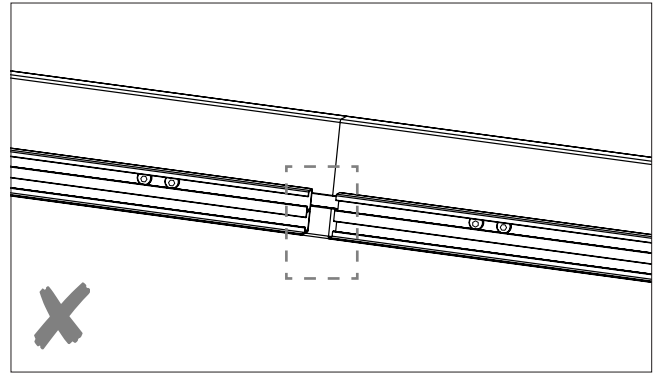
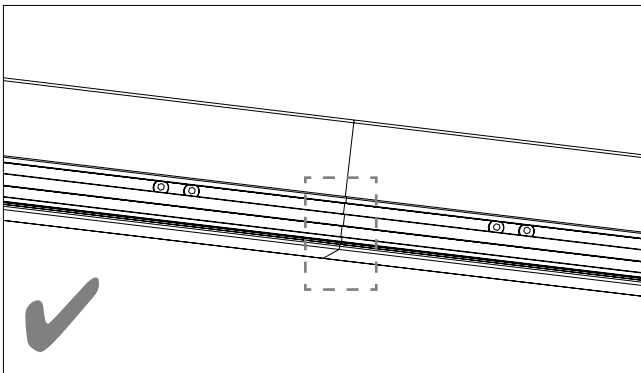
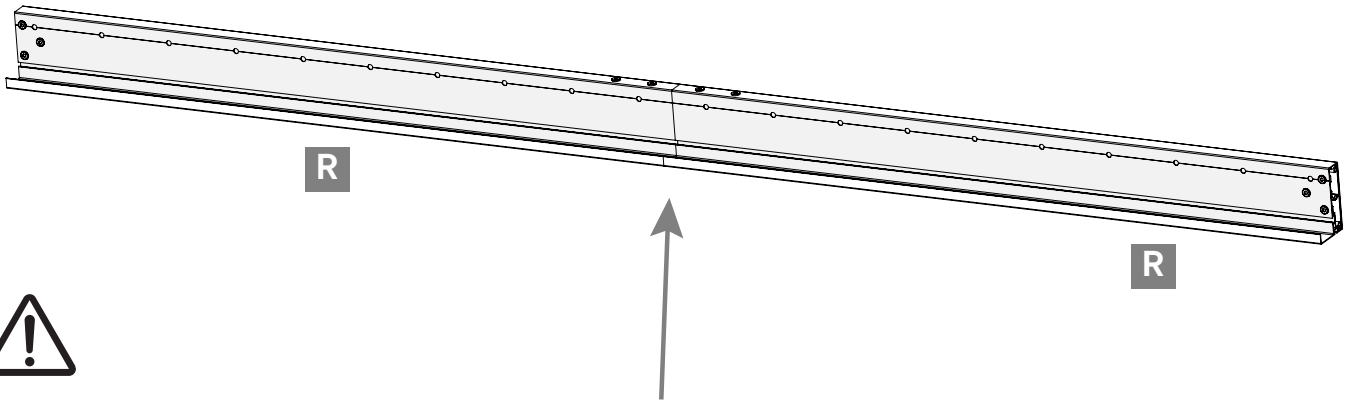
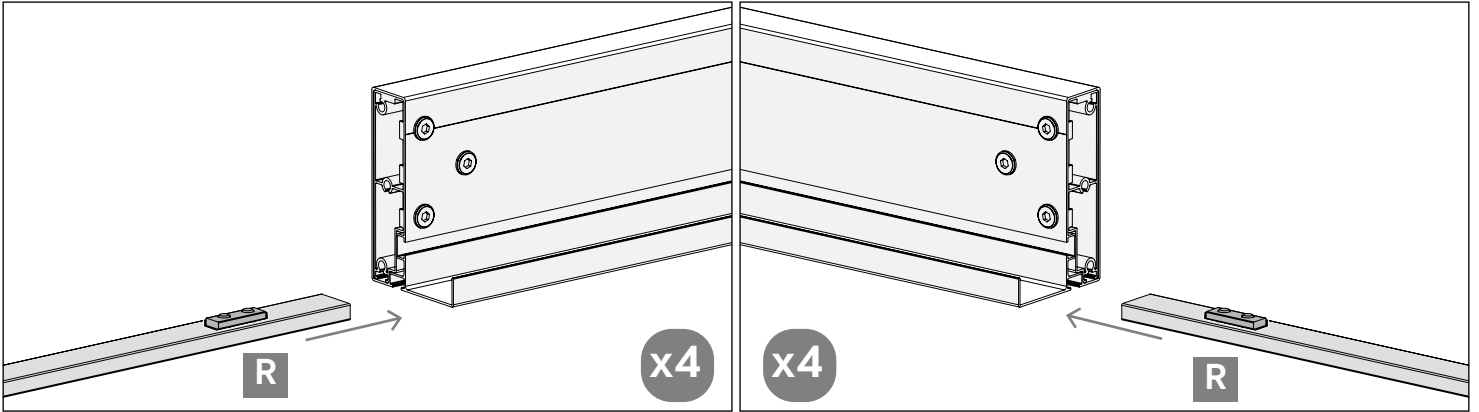
R x 8



3 x 80

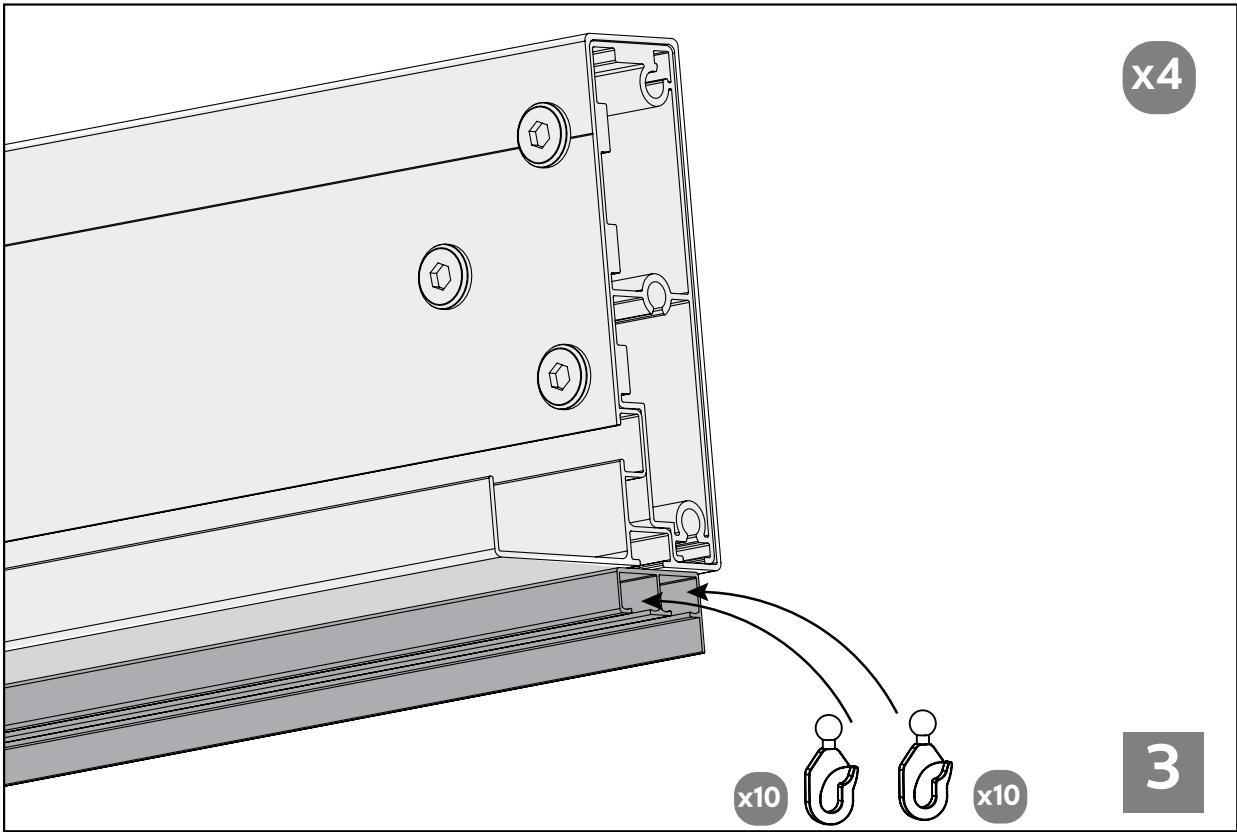


 Using an M3 hex bit, slightly loosen the 4 built-in screws at the each end of the curtain rails **R**. Slide the curtain tracks into the grooves of side beams and end beams. Tighten the 4 built-in screws on curtain rails.





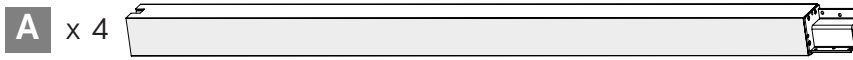
Slide the curtain hooks into the curtain rails. Use the specified number of curtain hooks as indicated in next page:



03

Connect end beams and side beams to the corner pillar

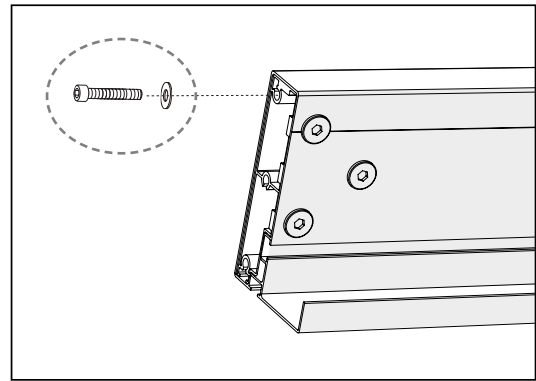
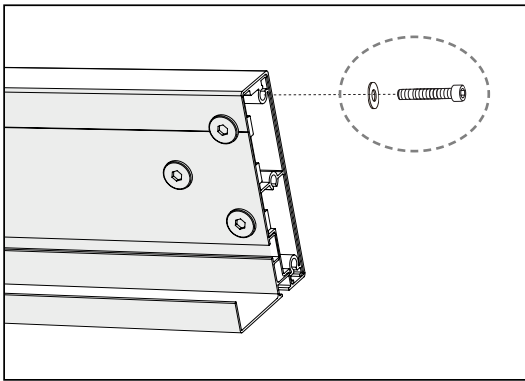
PARTS TO BE USED:



3a



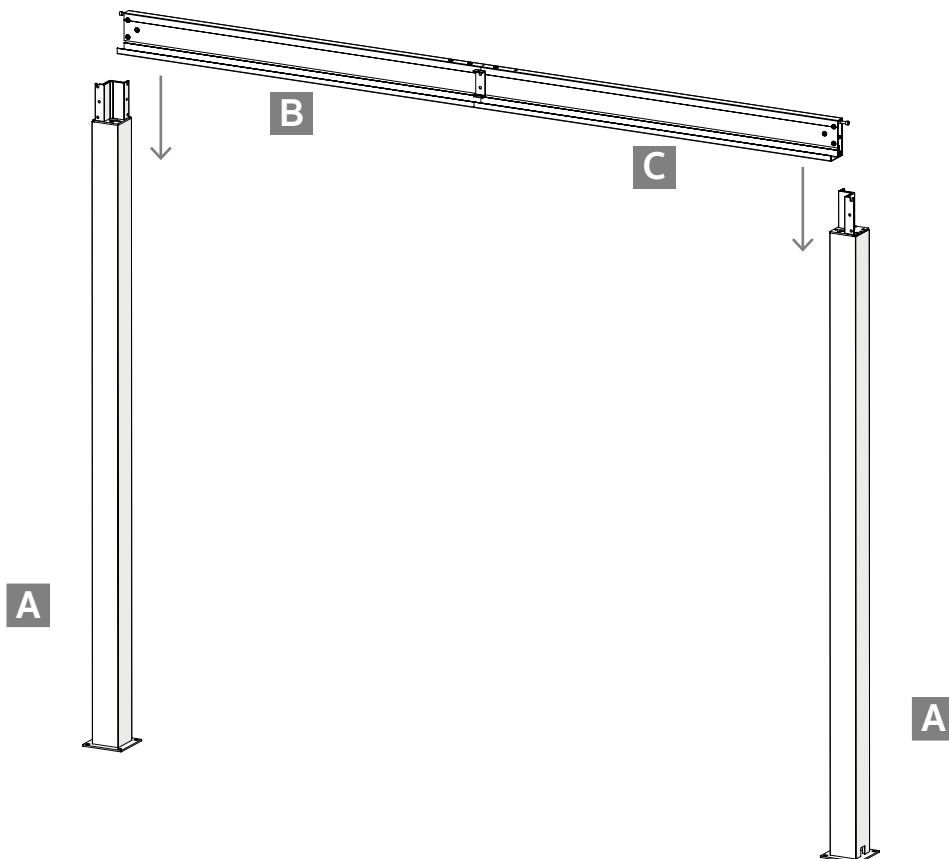
Screw the screw **23** and washer **20** into the screw holes at the end of the beams about **10 mm**, **do not tighten them completely.**

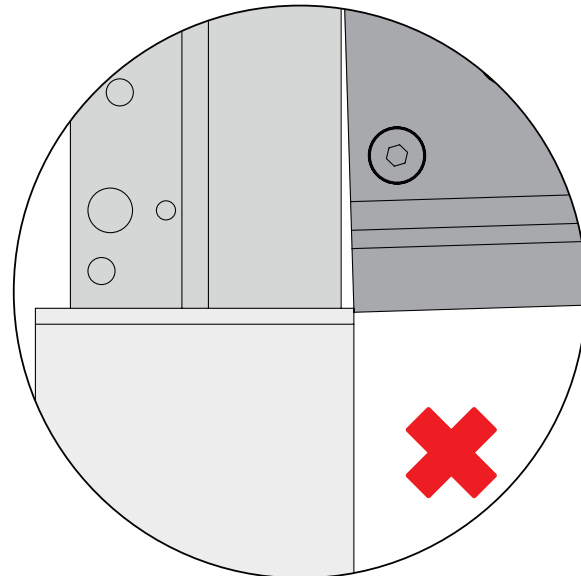
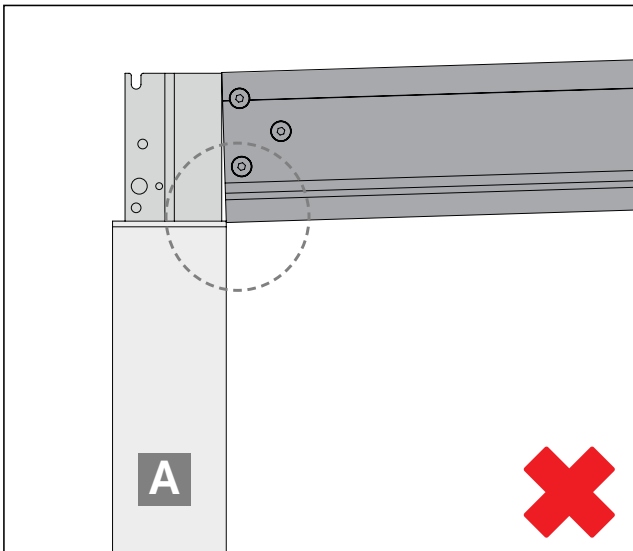
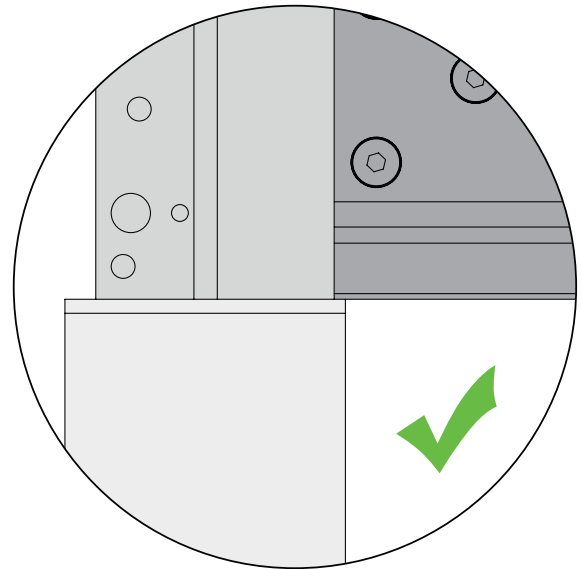
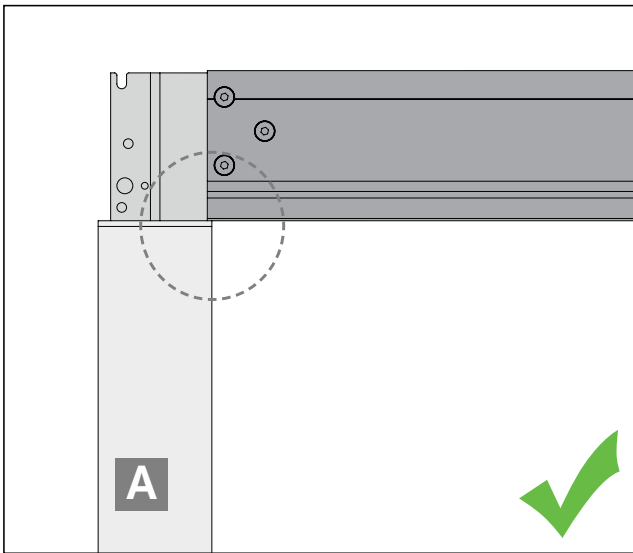
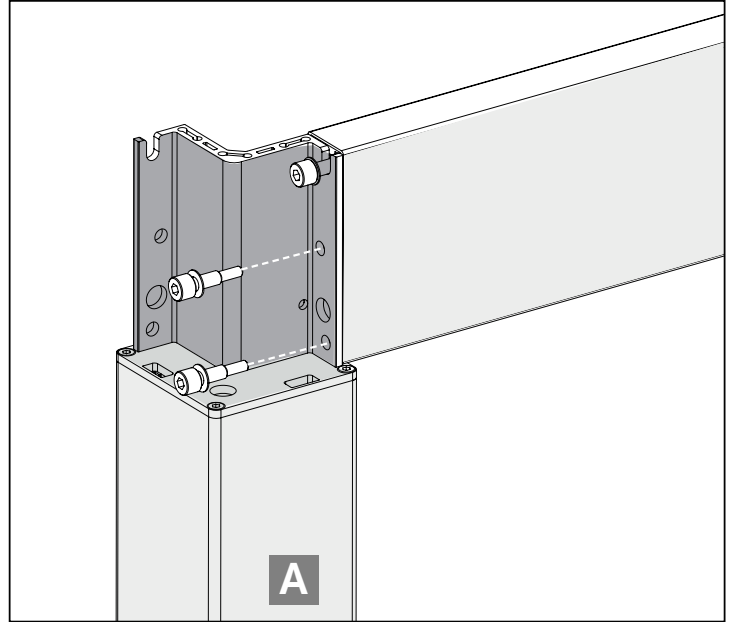
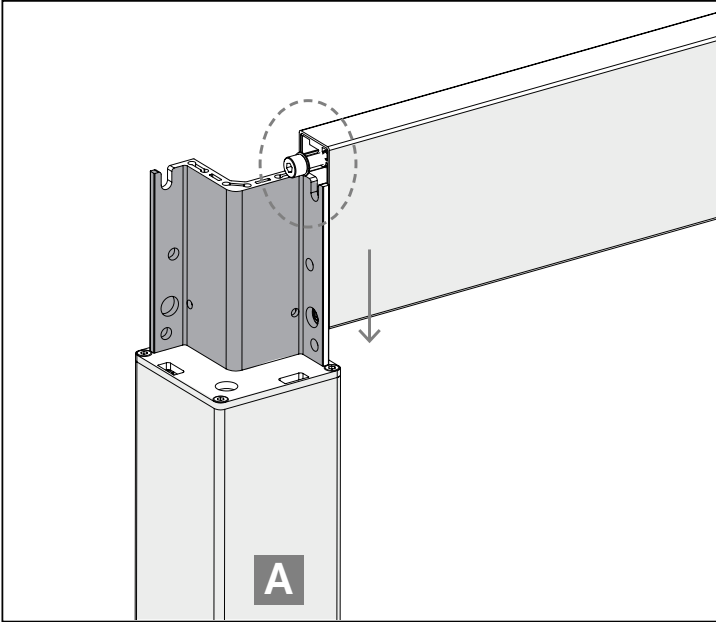


3b




Hang the end beam **B+C** to the top of the pillars, tighten with screws **23** and washers **20**, using the M6 hex bit.





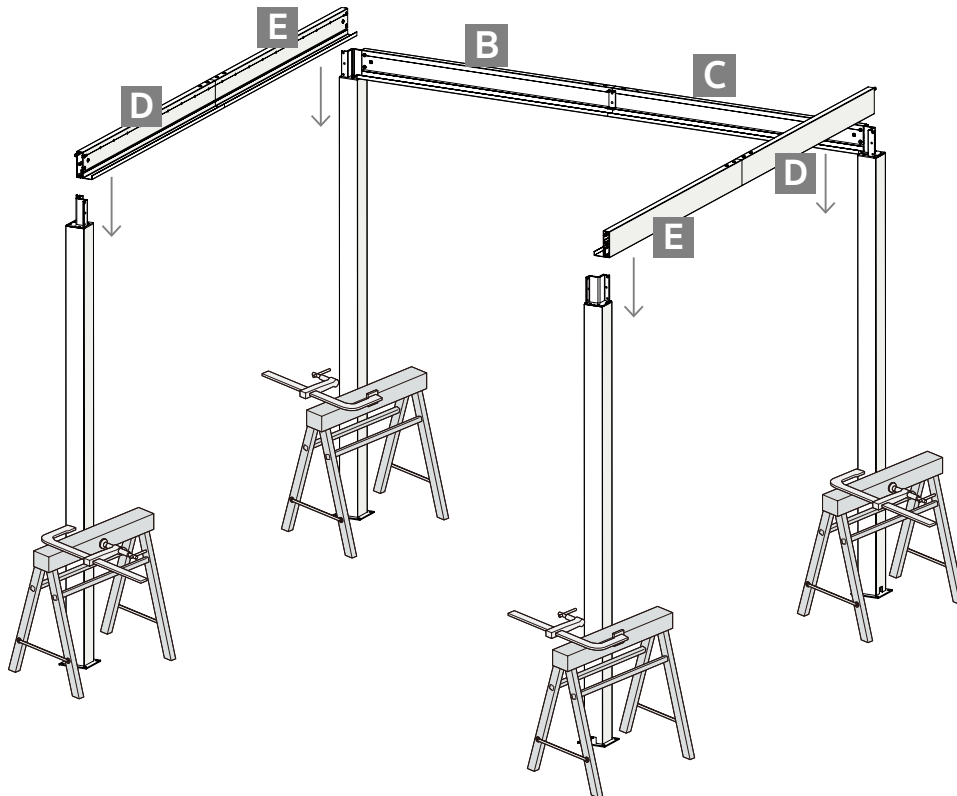
3c

 If the **PREPARATION STEP is complete**, refer to Steps 4b and 4c to secure the structure assembled in Step 3b to the supporting surface in this step.

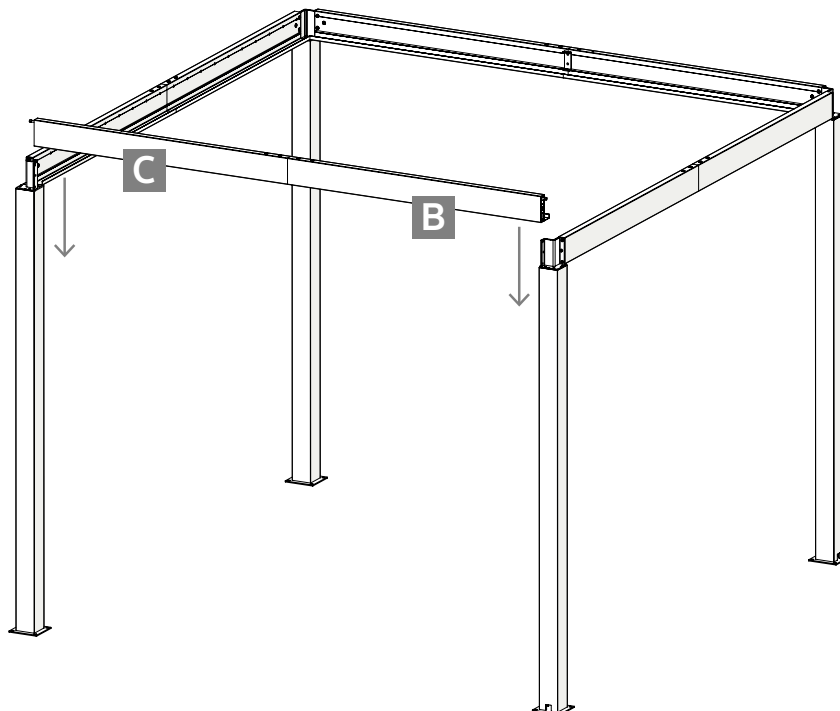
Position the structure assembled in Step 3b upright and repeat step 3a and 3b to install the side beams **D+E** to the corner pillar.



If the preparation step is not complete, ensure that each corner pillar A is supported by a person or stabilized using stands and clamps to prevent the structures from falling.



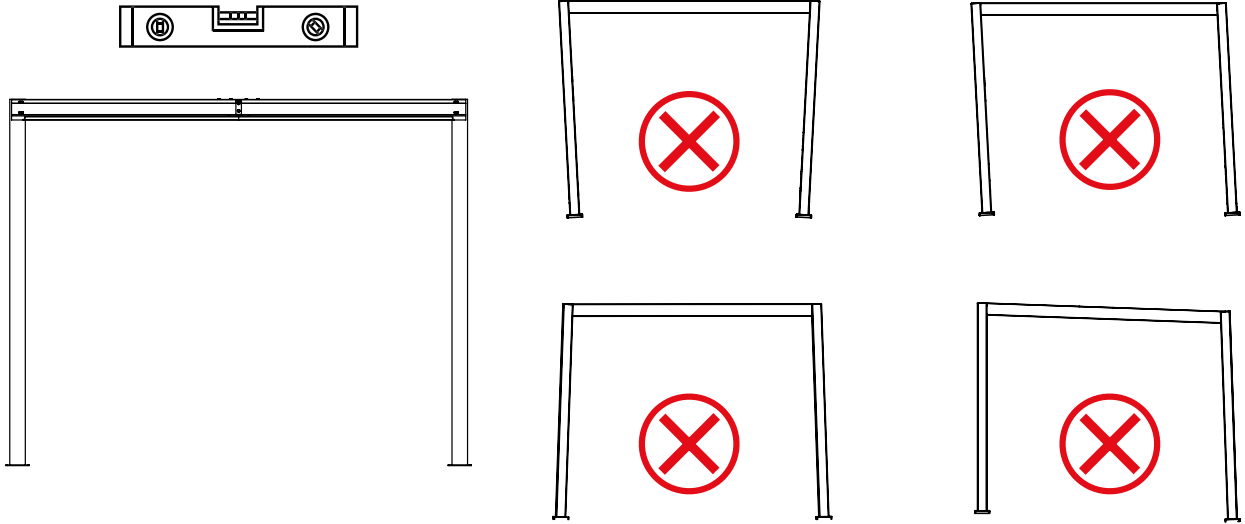
Repeat step 3a and 3b to install the end beams **B+C** to the corner pillar.



3d

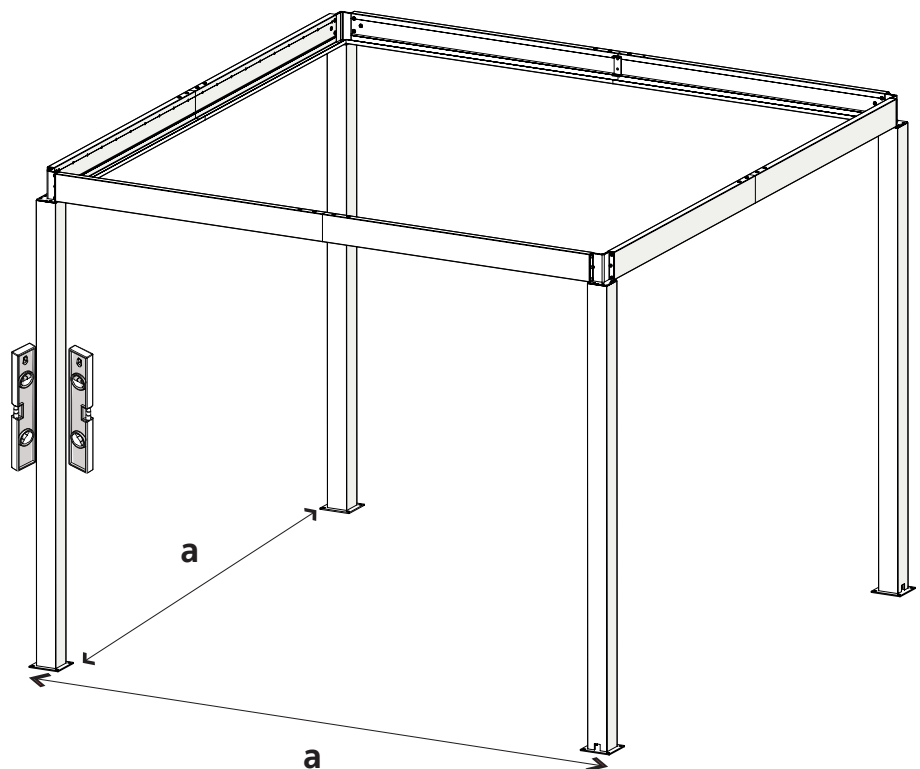


Using a leveler to check that all corner pillars are straight and level. If the corner pillars or beams are still not level, this means that your main building surface isn't sufficiently level, and that you will need to raise the corner pillars that are positioned lower than the others. (Contact qualified workers if needed)



You are now almost done installing the main frame of the pergola. Please double check to ensure all corner pillars and beams have been installed and fitted correctly. You may have to unscrew certain bolts during this step. You will also need a tape measure and a leveler to complete this step.

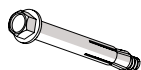
Measure the distances between the adjacent corner pillars. Adjust accordingly and ensure the distances match those shown in the opposite figure.



04 Secure the pillars to the ground

PARTS TO BE USED:

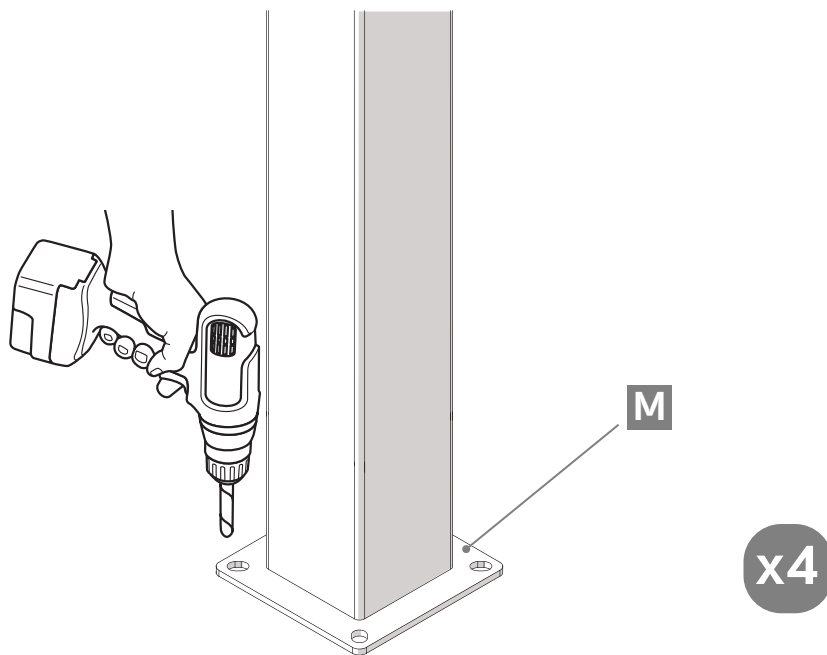
14 x 16



4a



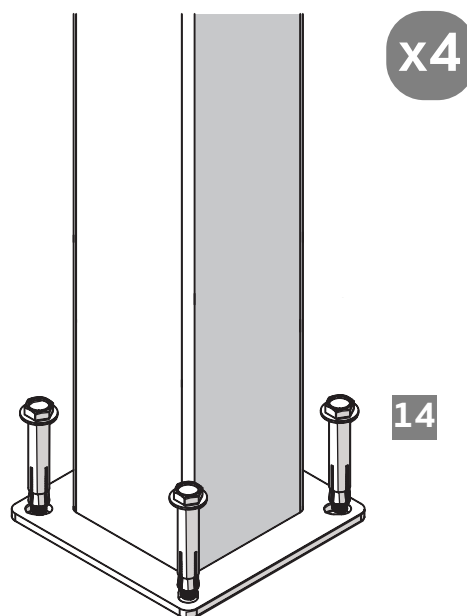
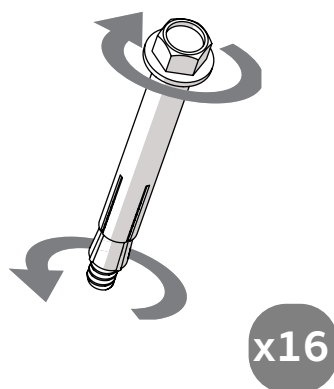
To fix the corner pillars with the 4 pillar plates **M**, drill through each hole with a hammer drill.



4b



Remove all the debris and dirt. Slightly tighten the anchor bolts, firmly insert the anchor bolts **14** into each hole, using a hammer.

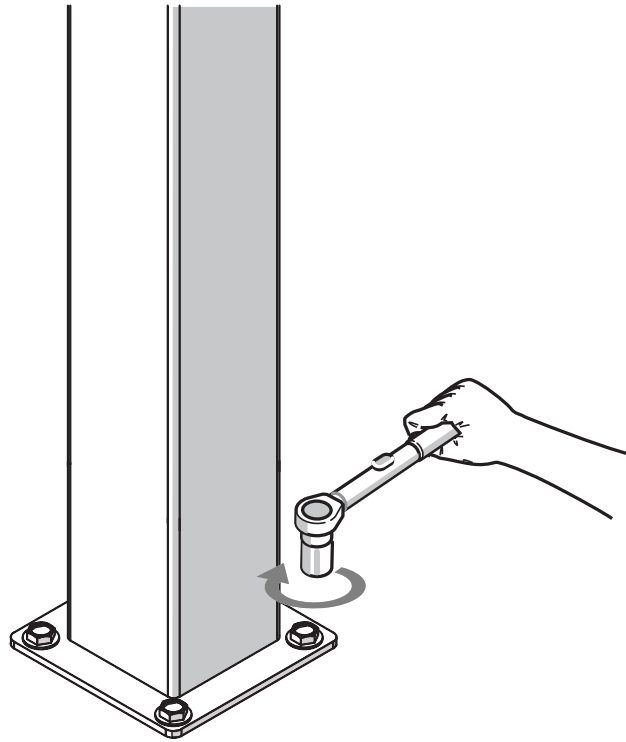


4c

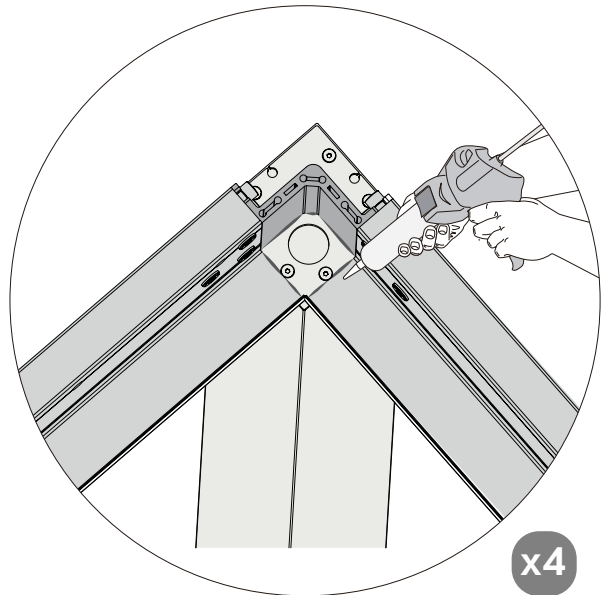
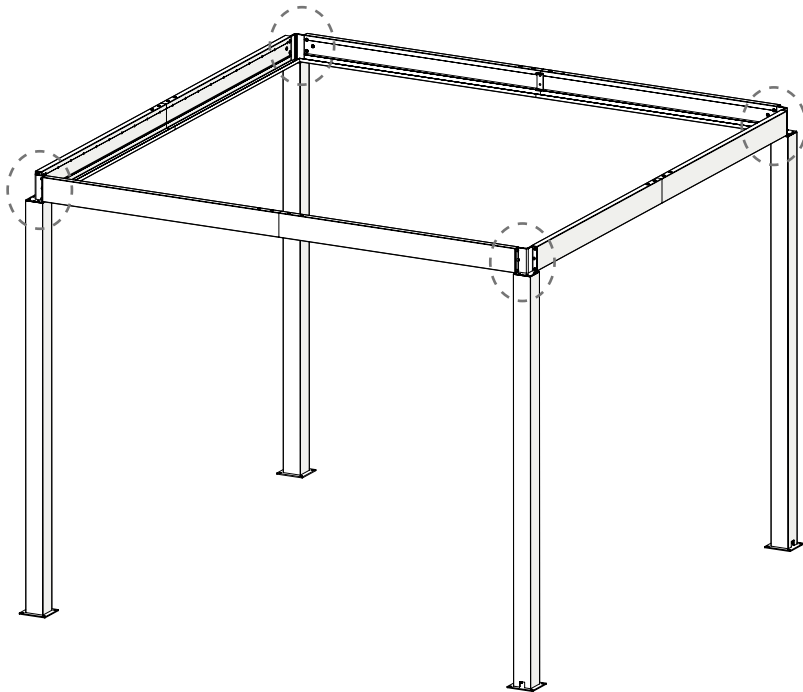


Tighten the hexagonal ends of each bolt with a spanner/wrench.

x4



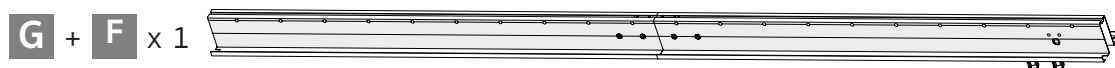
Apply silicone sealing grout to the corner of beams.




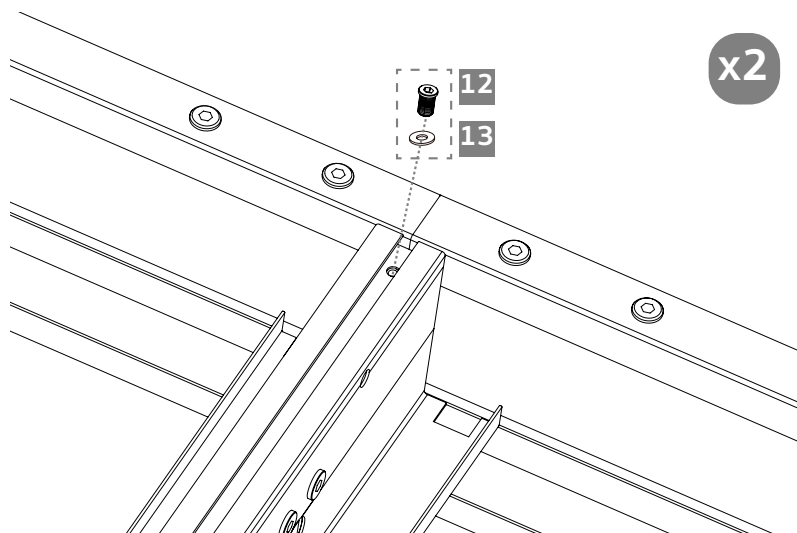
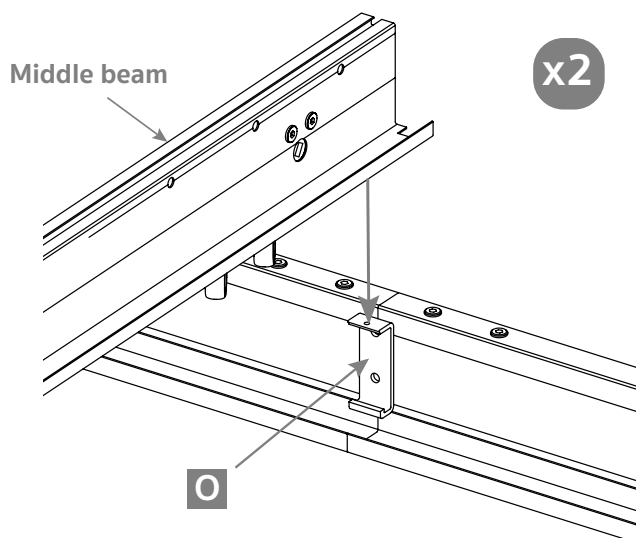
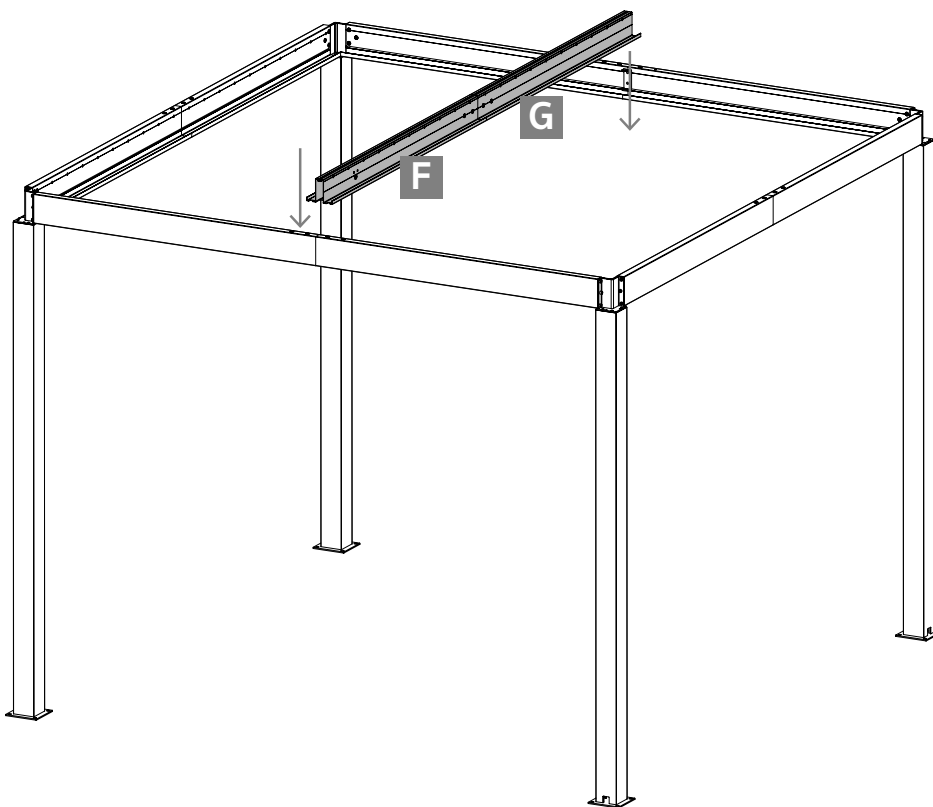
x4

05 Install the middle beam

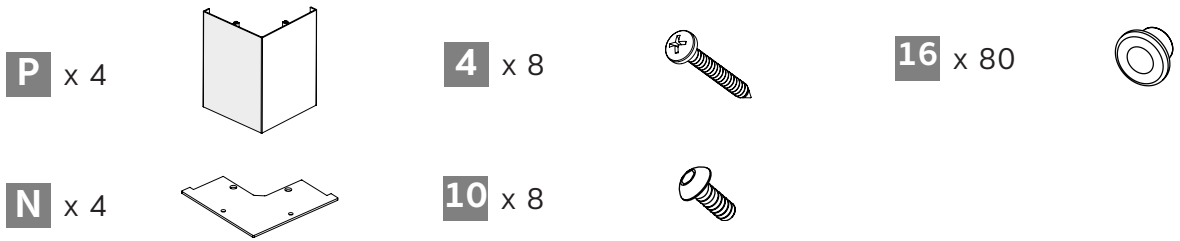
PARTS TO BE USED:



 To install the middle beam **G+F**, fix each end of middle beam to the top of middle beam supporter with 2 screws **12** and washers **13**. Fix them using the M3 hex bit.



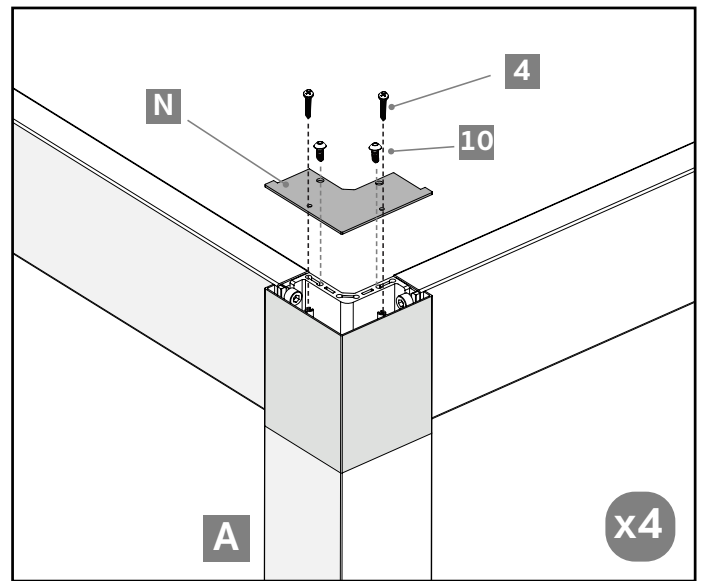
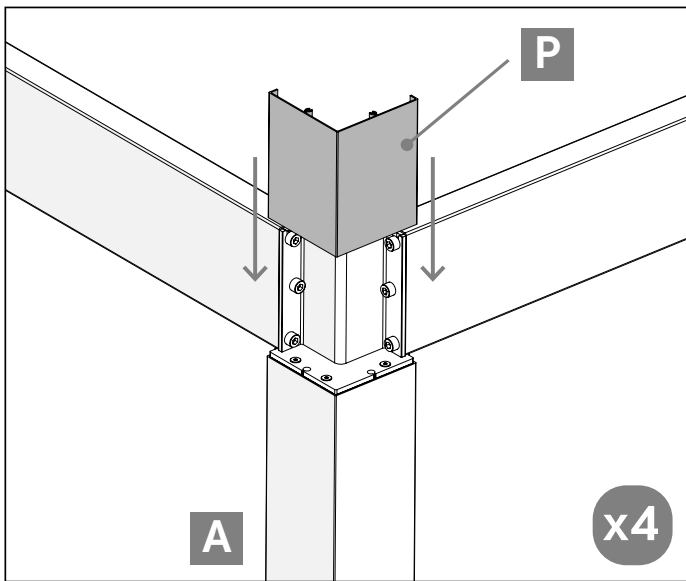
PARTS TO BE USED:



6a



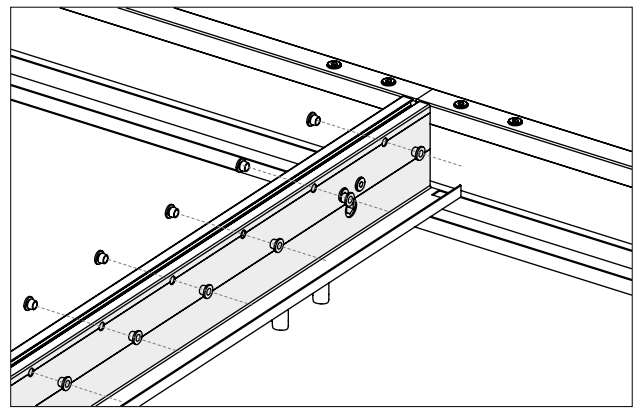
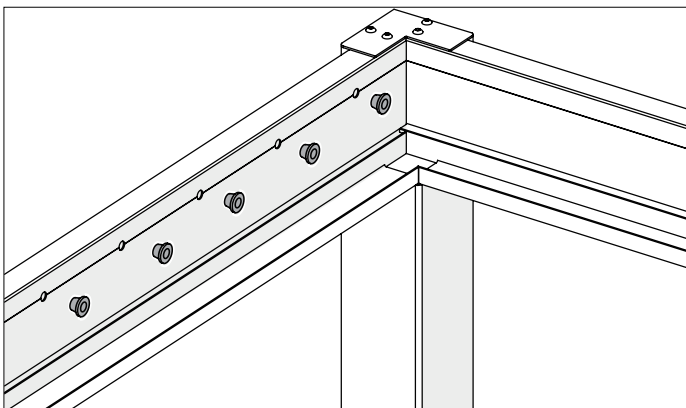
To install the pillar cover, fix the corner pillar cover **N** to the top of each corner pillar with 2 screws **4** and with 2 screws **10**.



6b



Insert rubber grommets **16** into the holes on the side beams and middle beam.

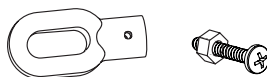



07

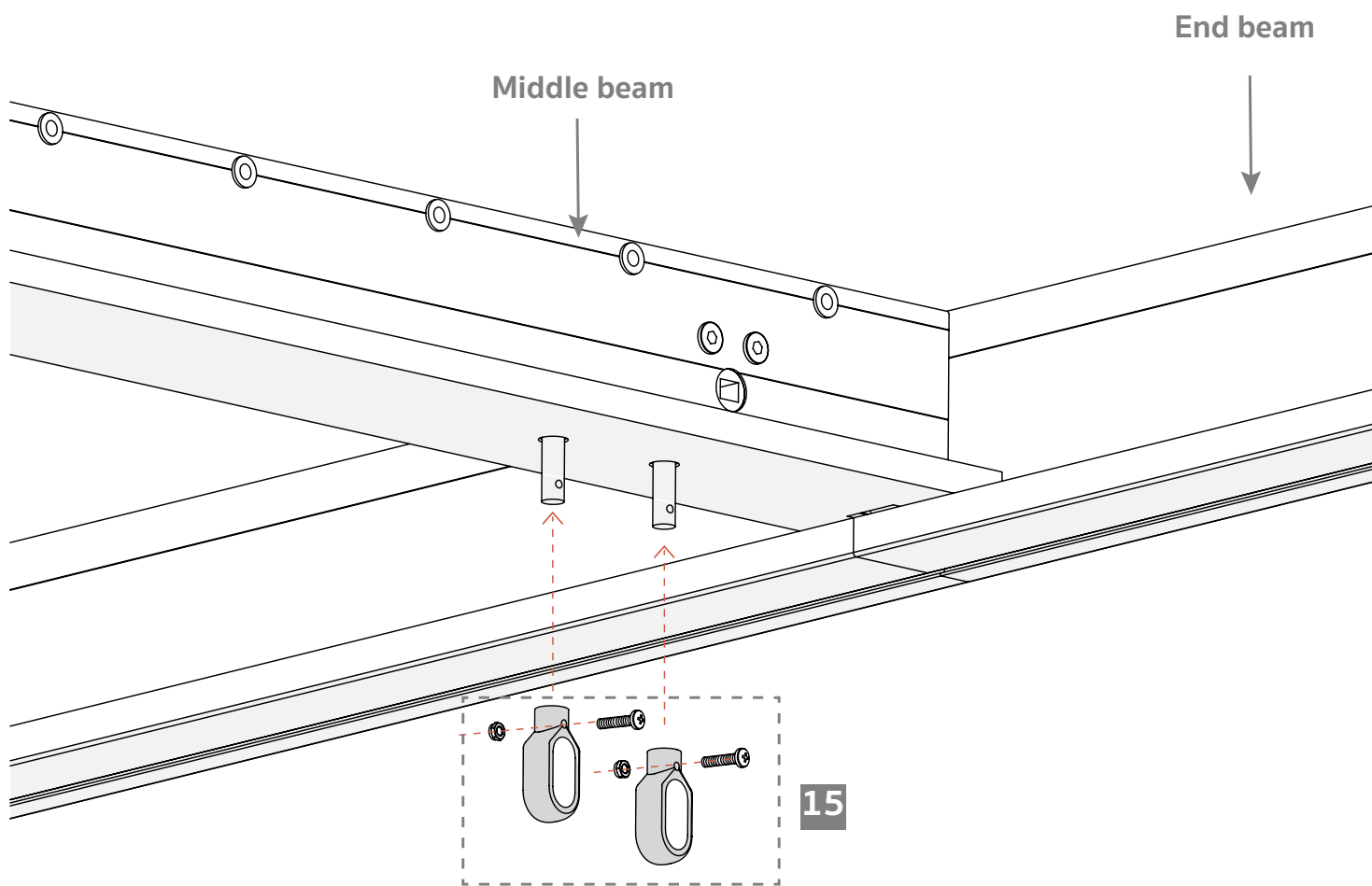
Install the ring cap

PARTS TO BE USED:

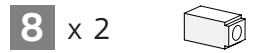
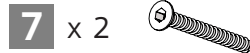
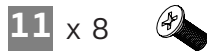
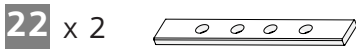
15 x 2



 Attach the 2 ring caps **15** to the gear box on the middle beam **F** with screws and nuts **15**.



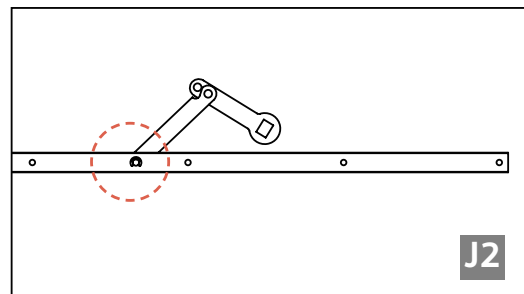
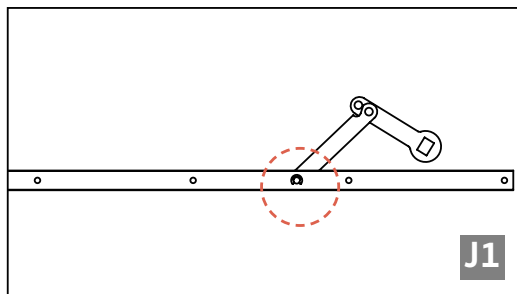
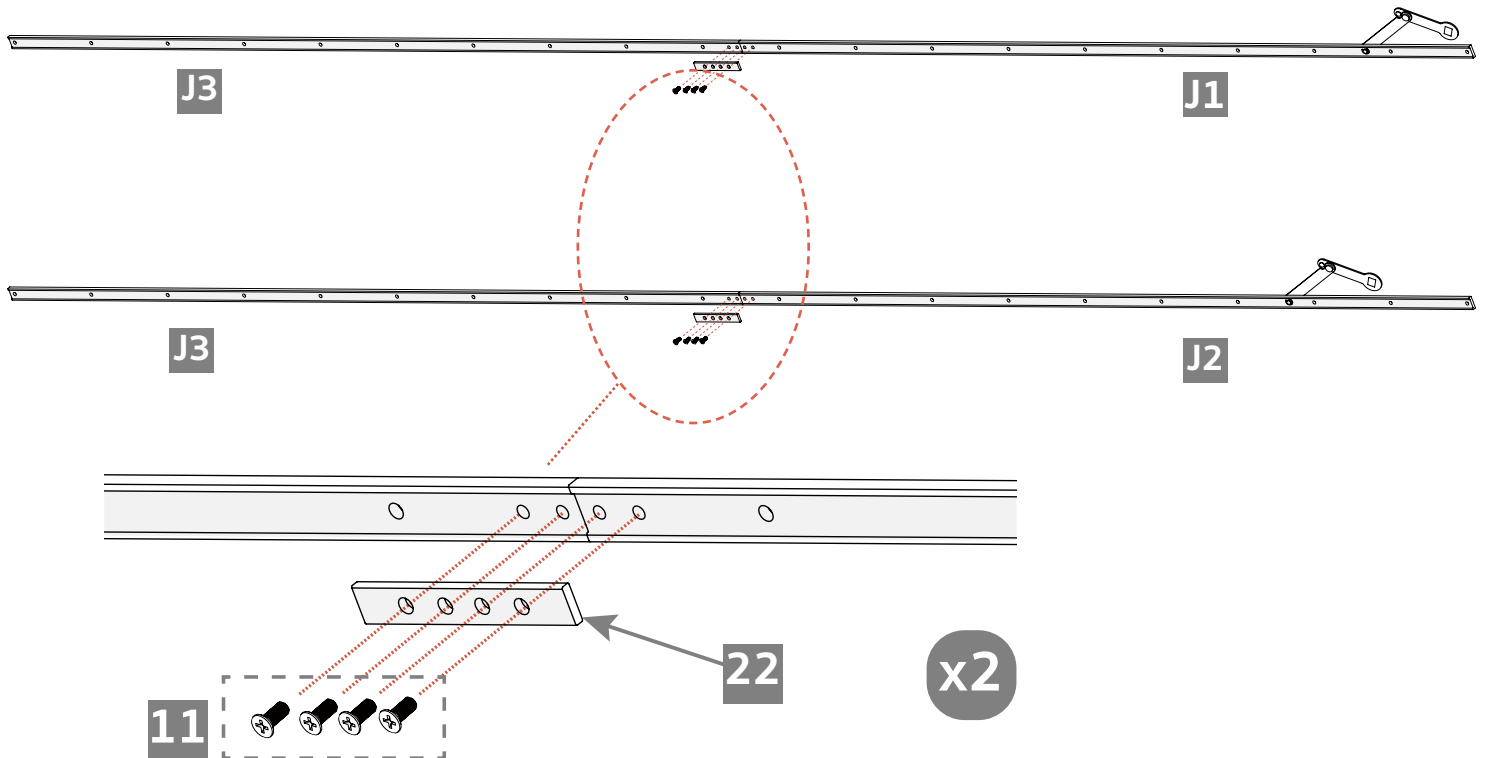
PARTS TO BE USED:



8a



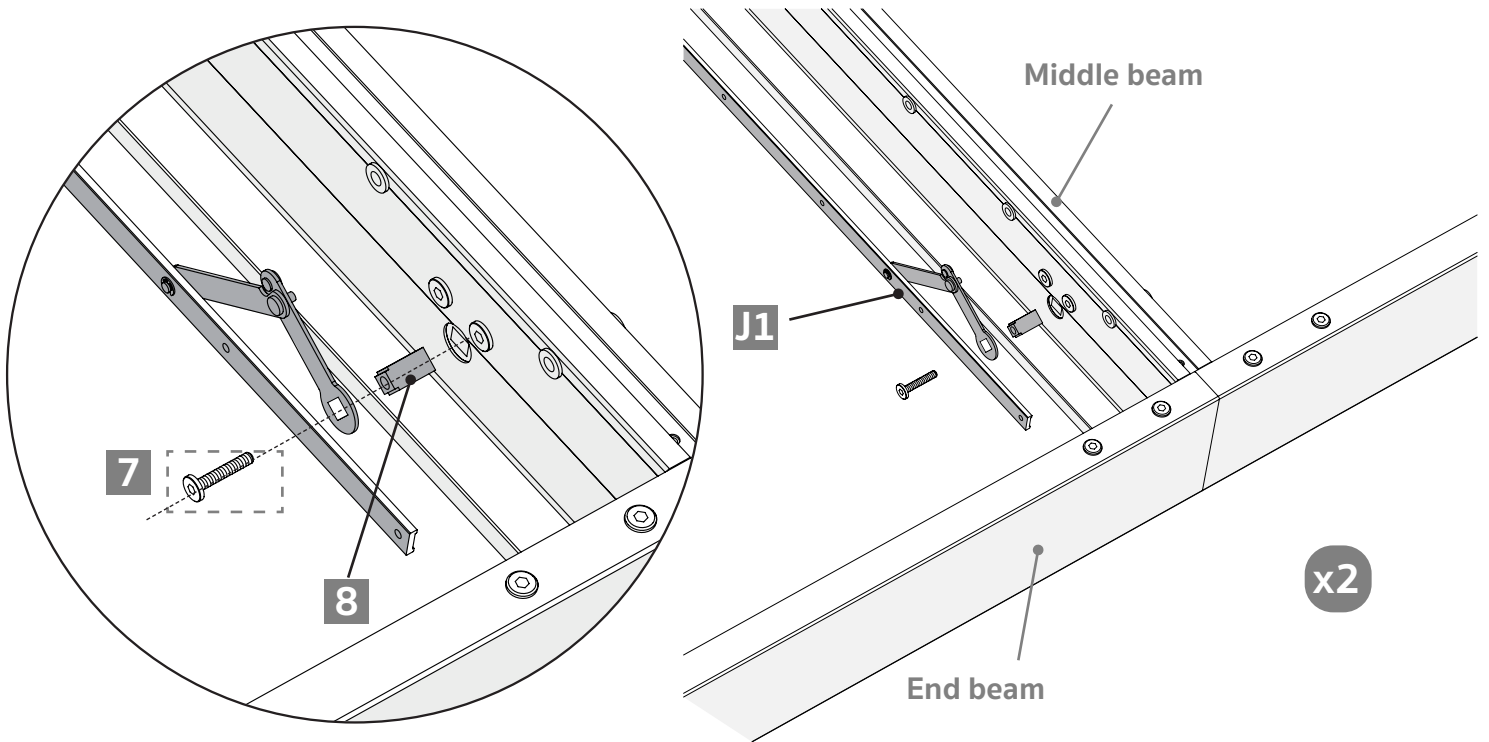
Connecting **J1**, **J2** and **J3** with connecting strip **22** and 8 screws **11**, using a cordless screwdriver.



8b

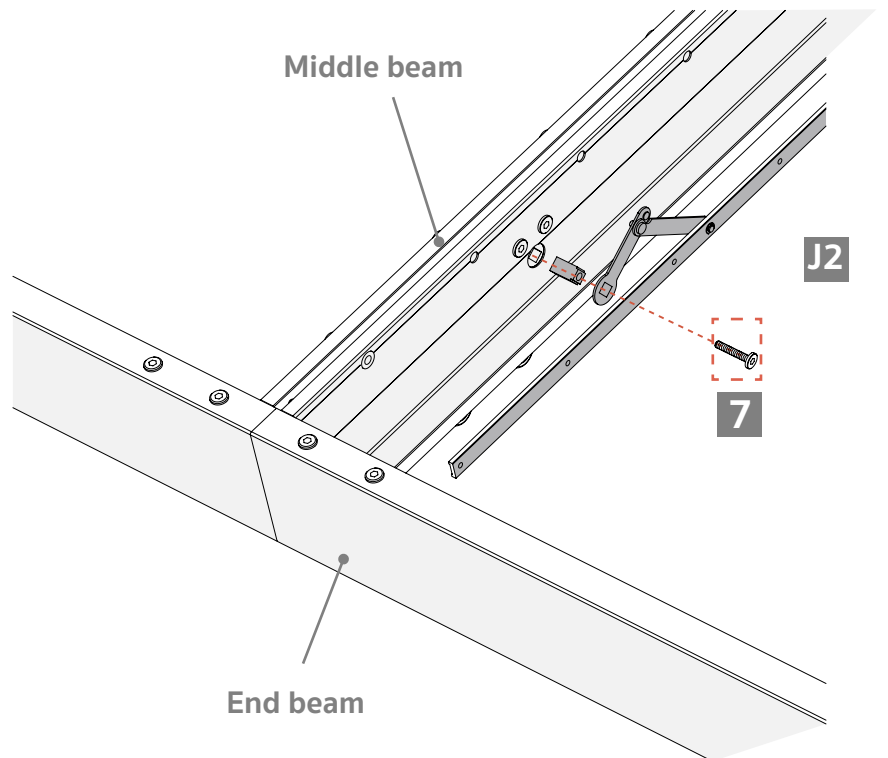


Insert the drive shaft **8** into the gearbox on middle beam. Screw the control arm to gearbox with screws **7**, using a M4 hex key.



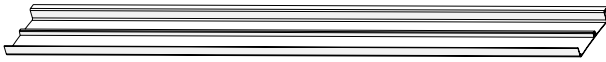
ATTENTION

Install control arm **J1** and **J2** as the direction shown in the pictures.

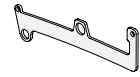


PARTS TO BE USED:

L x 40



Q x 80



4 x 160



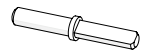
17 x 40



18 x 40



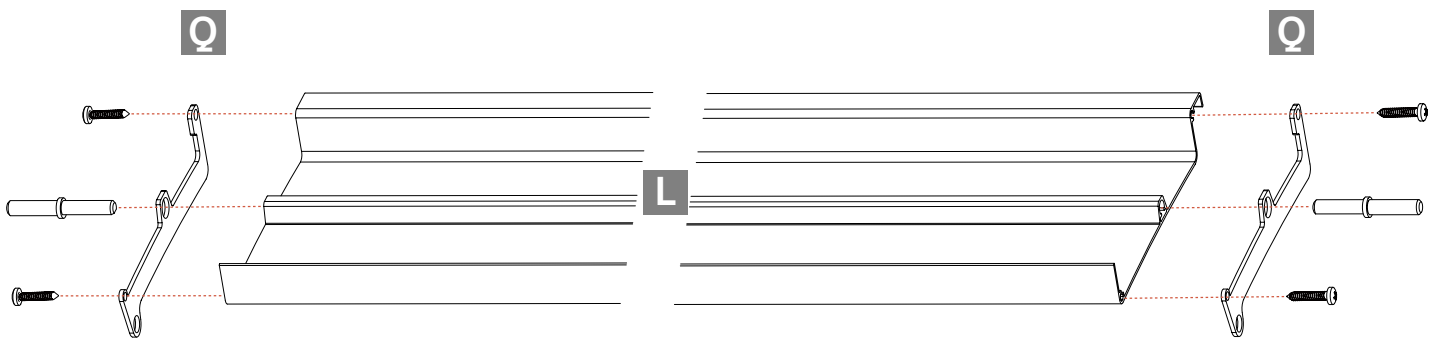
19 x 80



9a



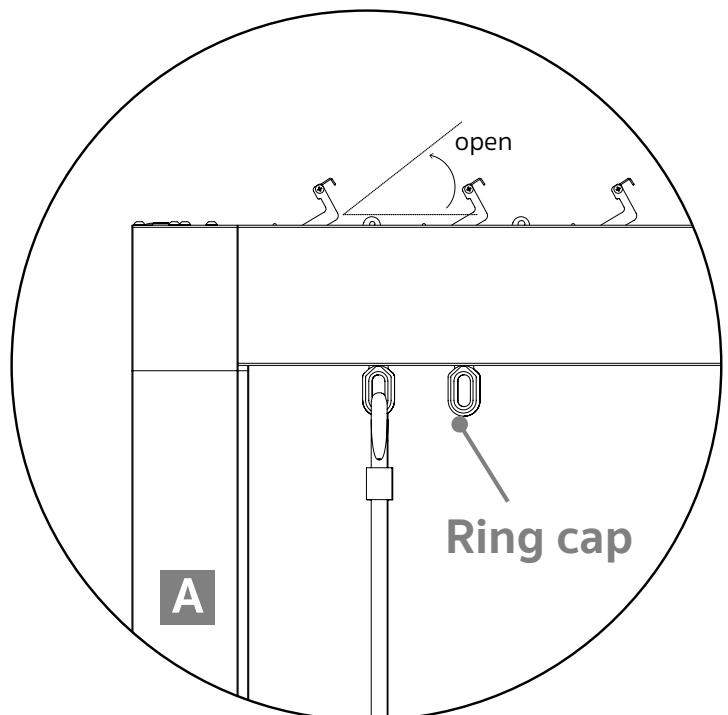
Attach the louver end caps **Q** to each end of the louvers **L** with screws **4**, using a cordless screwdriver. Hammer the smaller end of louver plug **19** into the groove of louver **L**.




9b

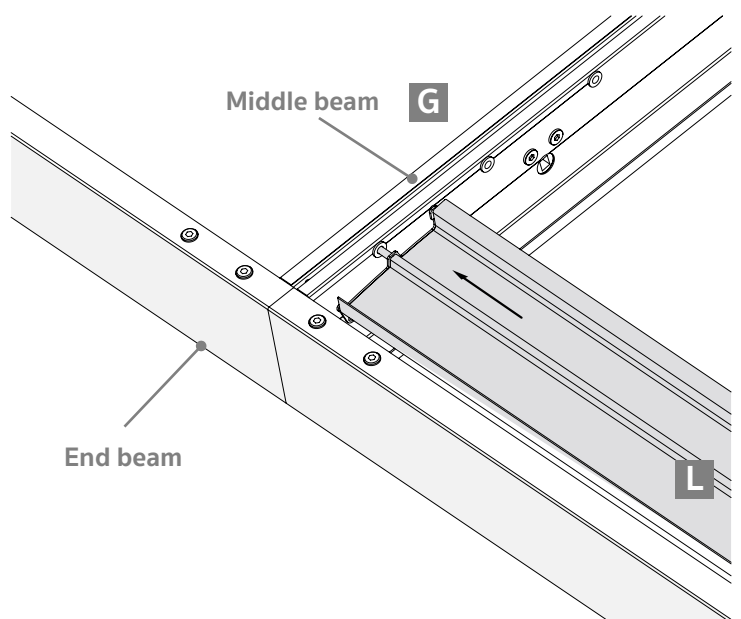
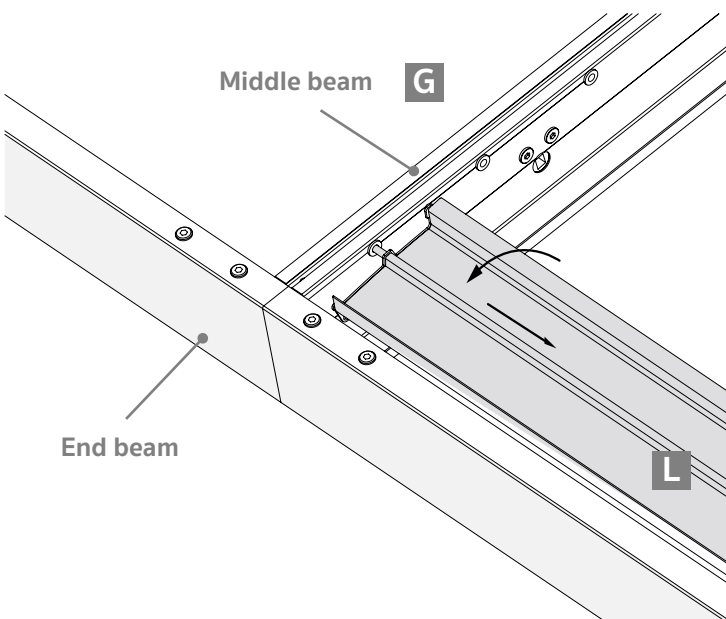
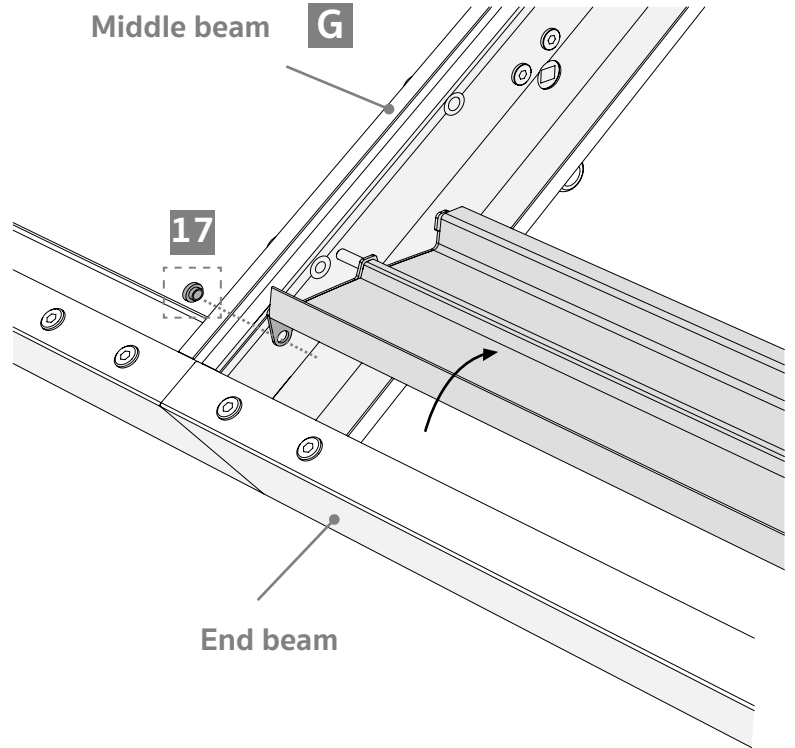
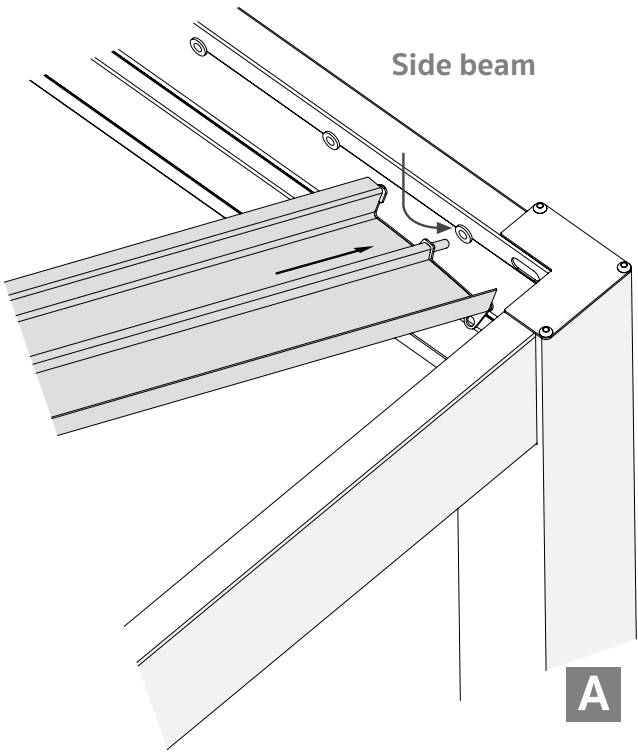


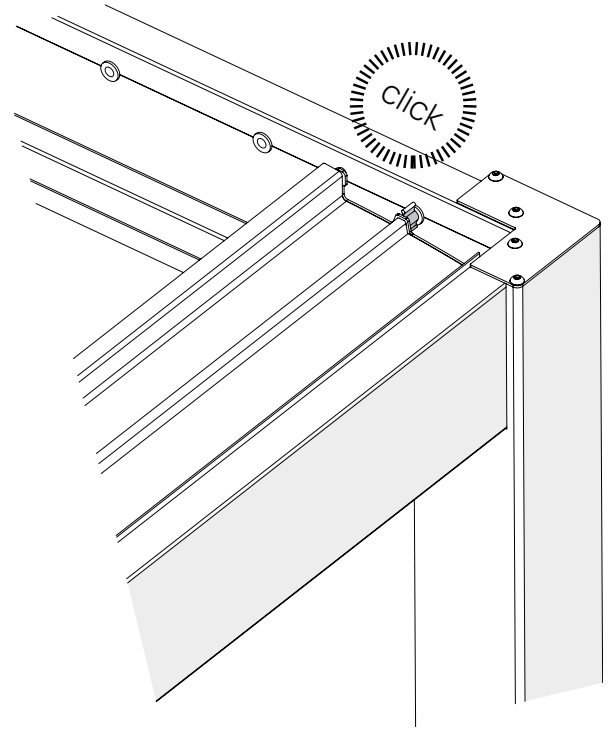
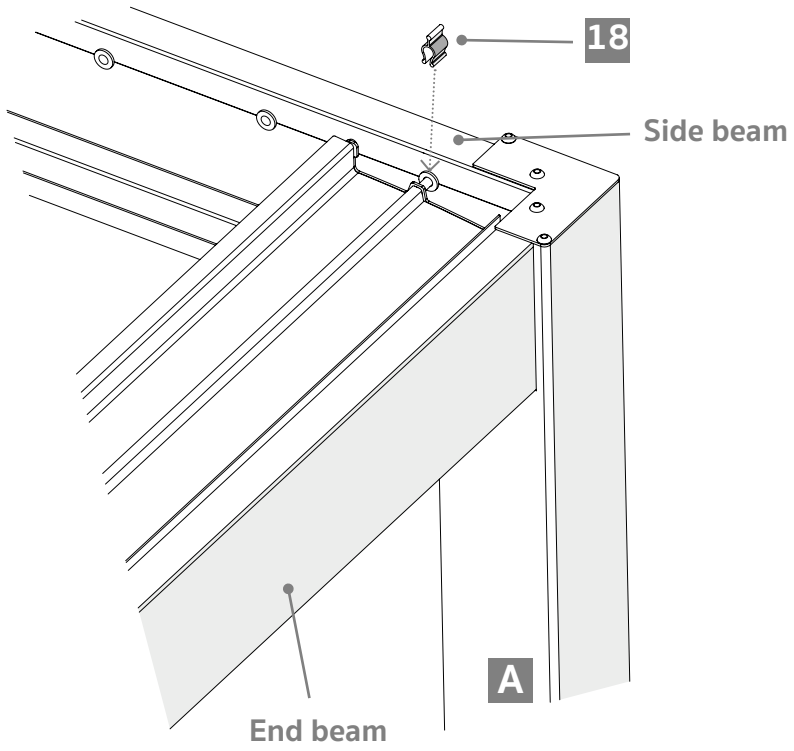
ATTENTION
Refer to this direction to install the louvers.



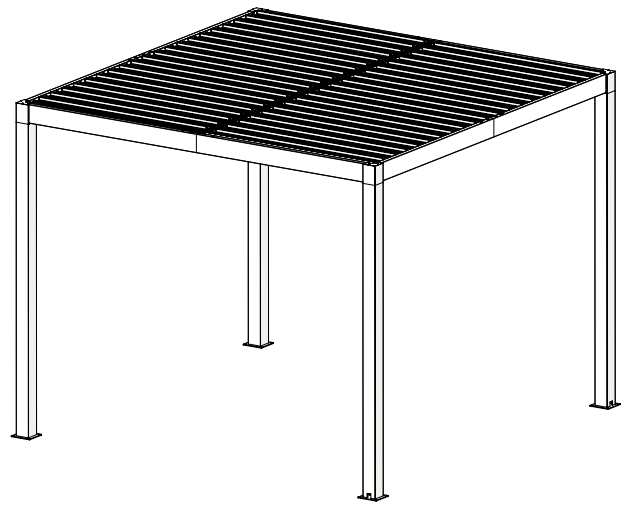
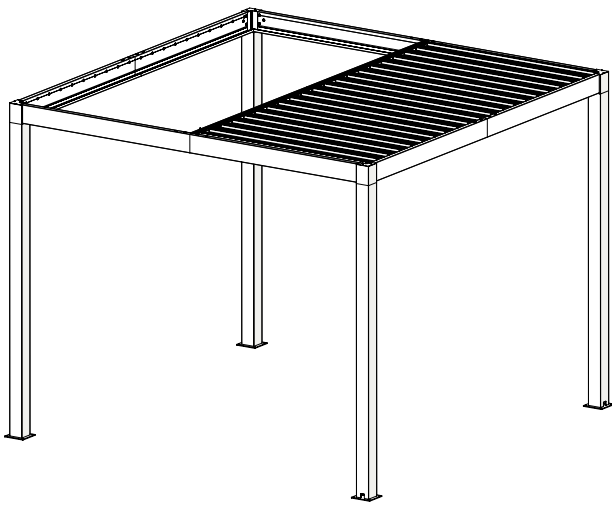
 Slide the louver at a slight angle into the holes on the side beam. Push the louver through as far as possible so that it fits into the middle beam on the other side. Lower the louver slightly until you can slide this into the holes on middle beam.

Insert the plastic washer **17** into the hole of the louver end cap near the side of the middle beam.





Install all the louvers one by one in the order shown in the diagram.



PARTS TO BE USED:

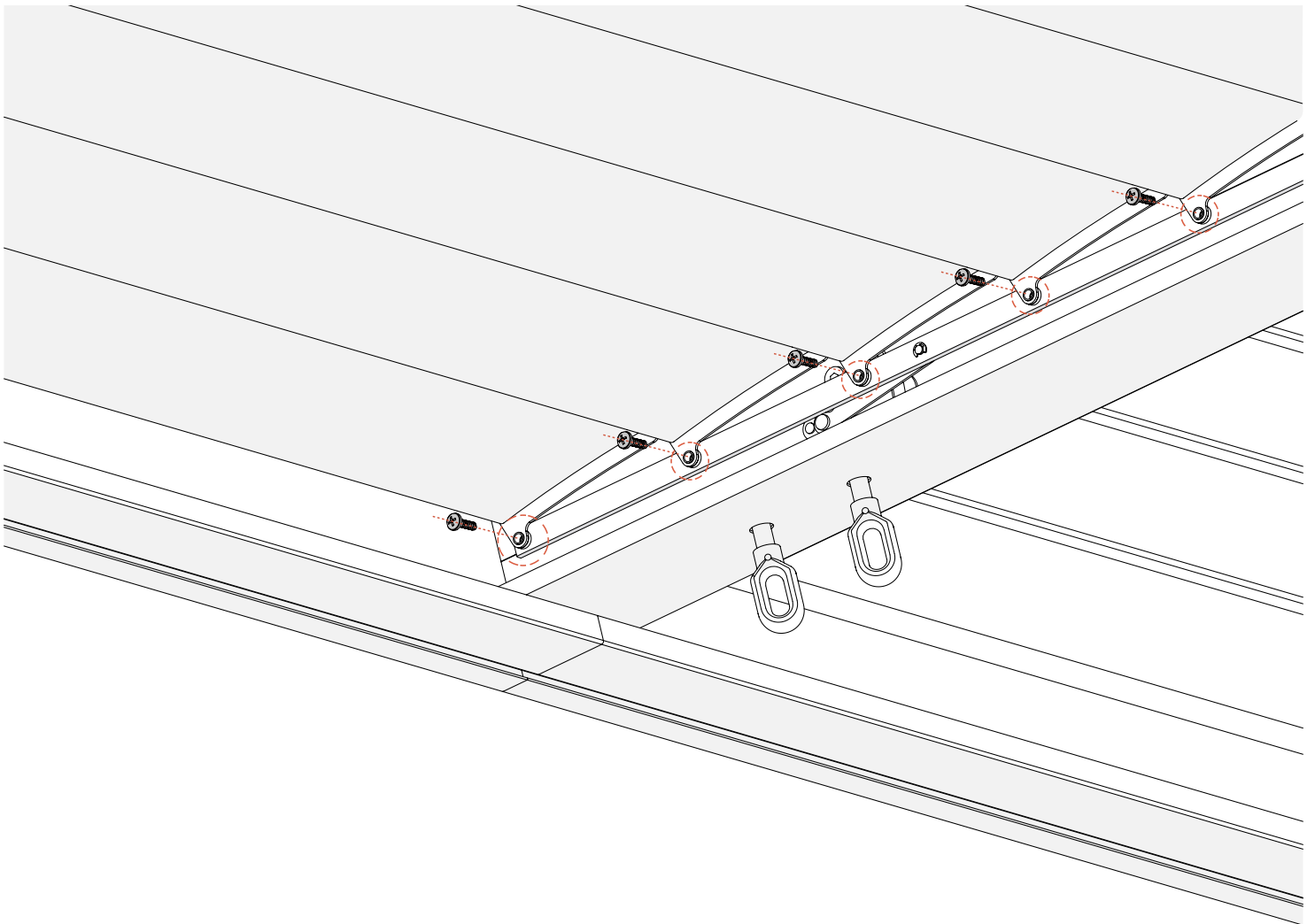
9 x 40

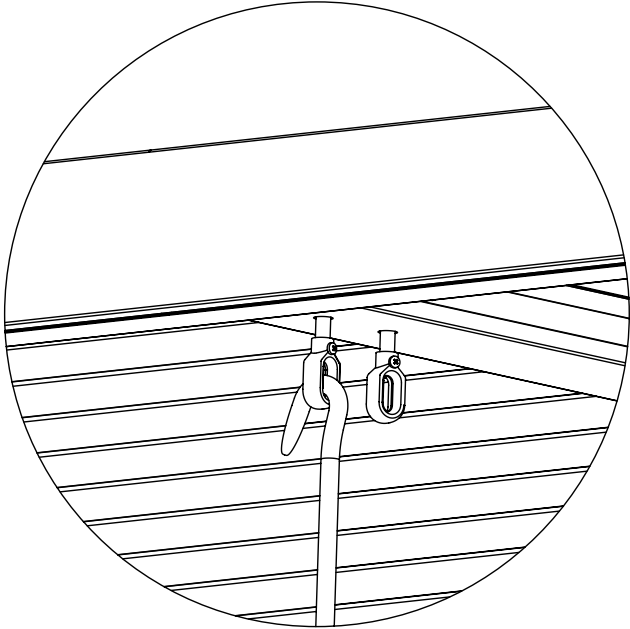
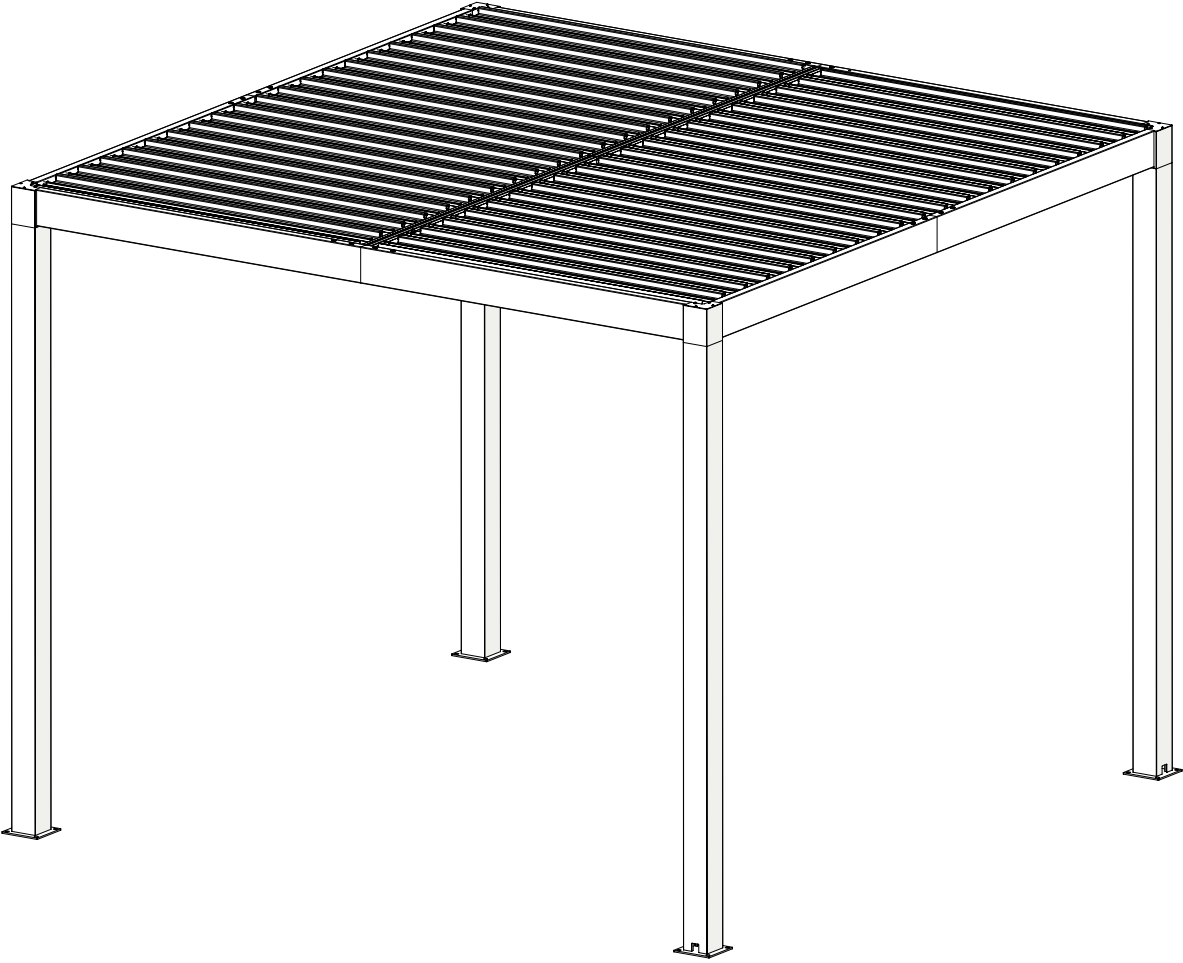


9c

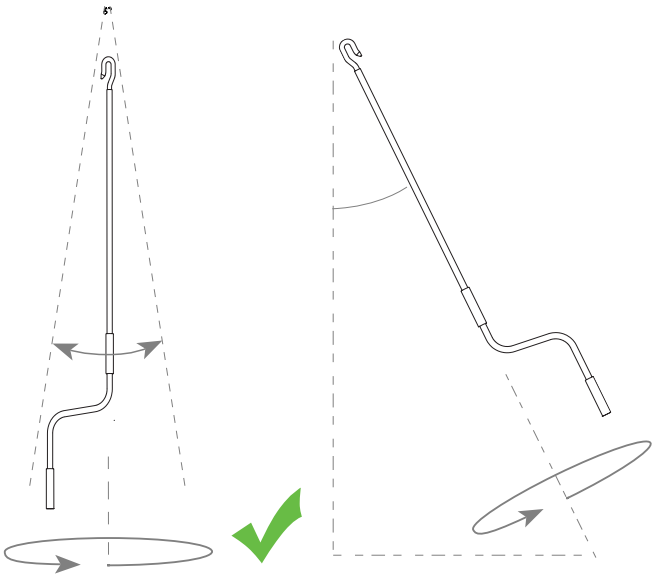


Connect the louver end caps **Q** and connecting strip with 40 screws **9**, using the M4 hex bit.






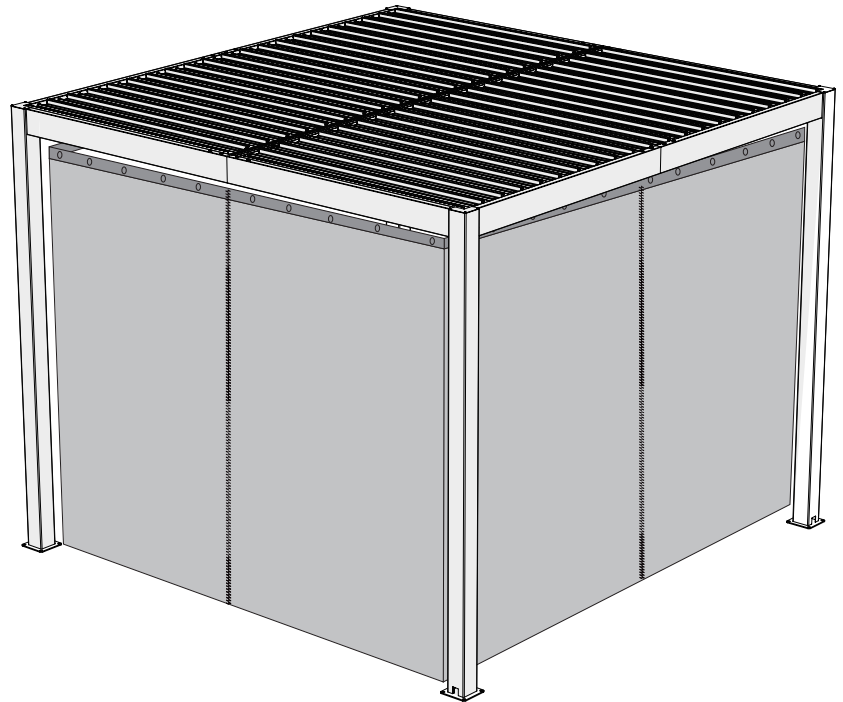
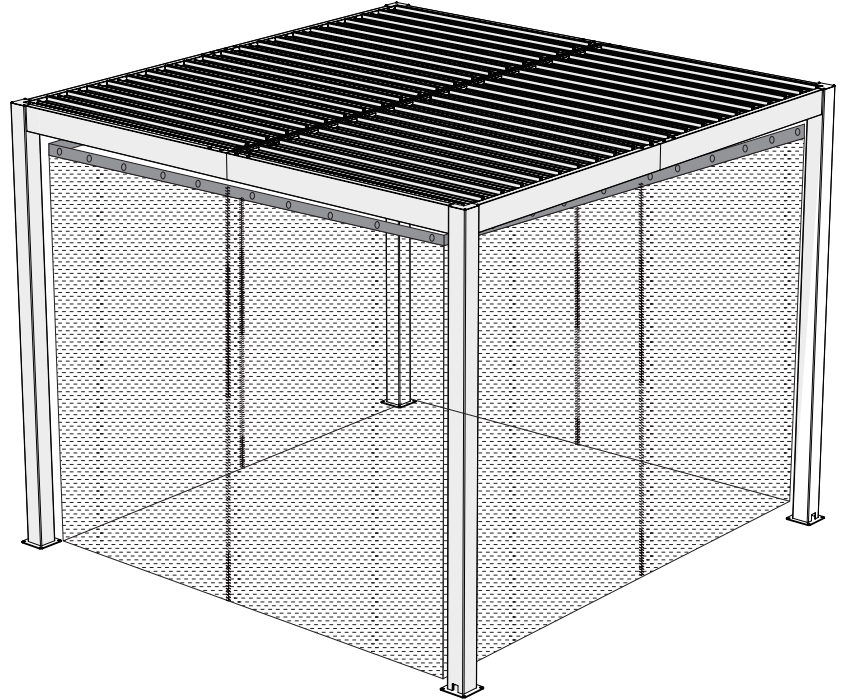
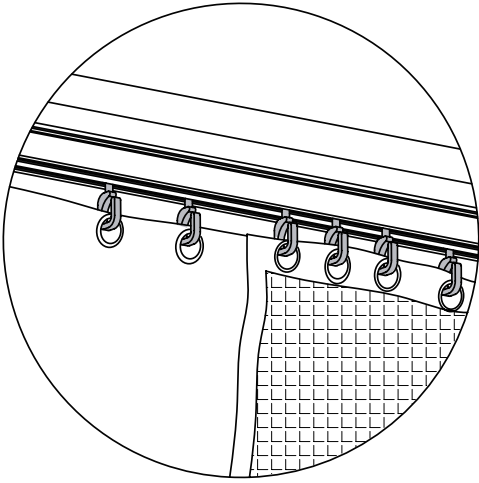
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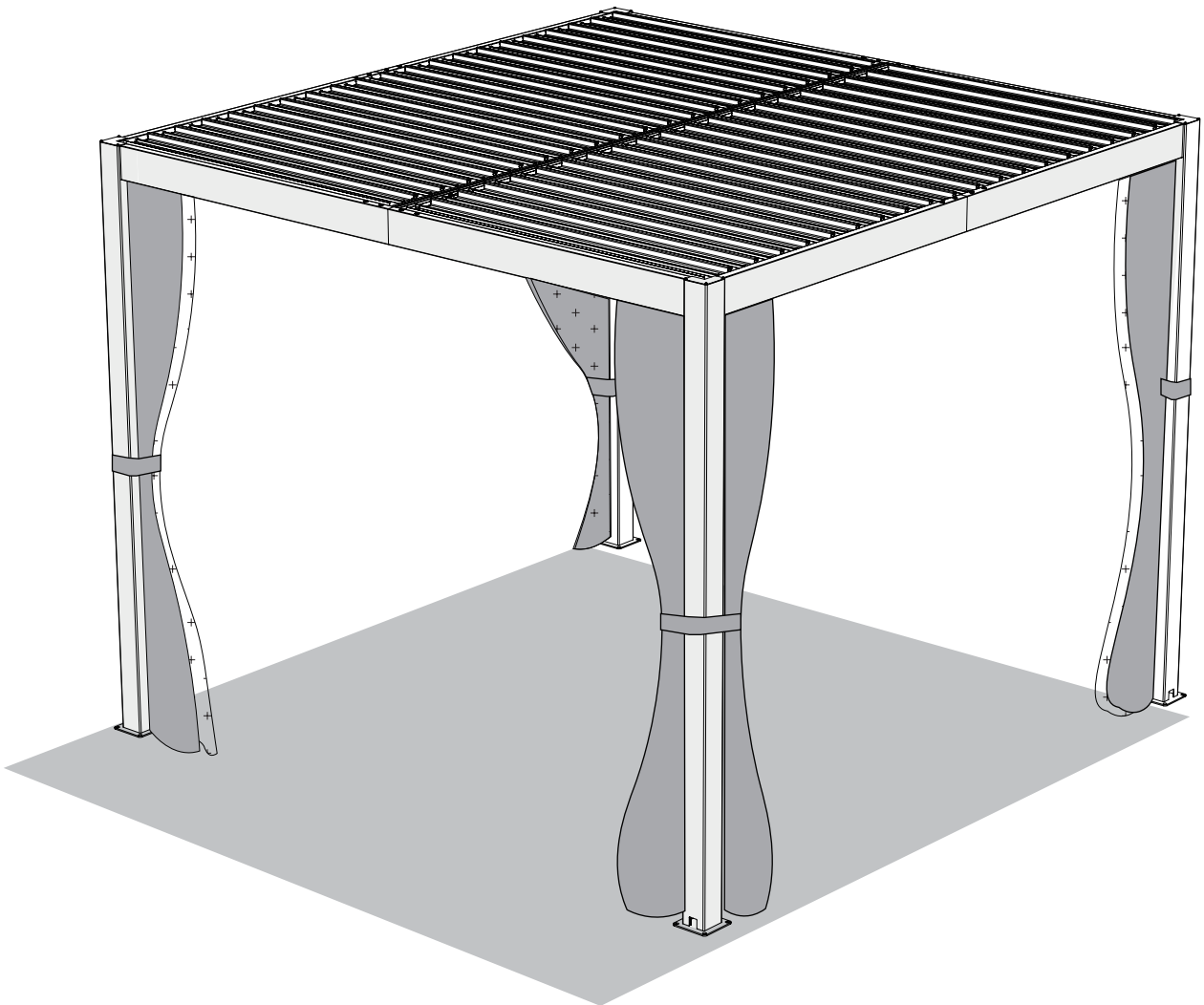
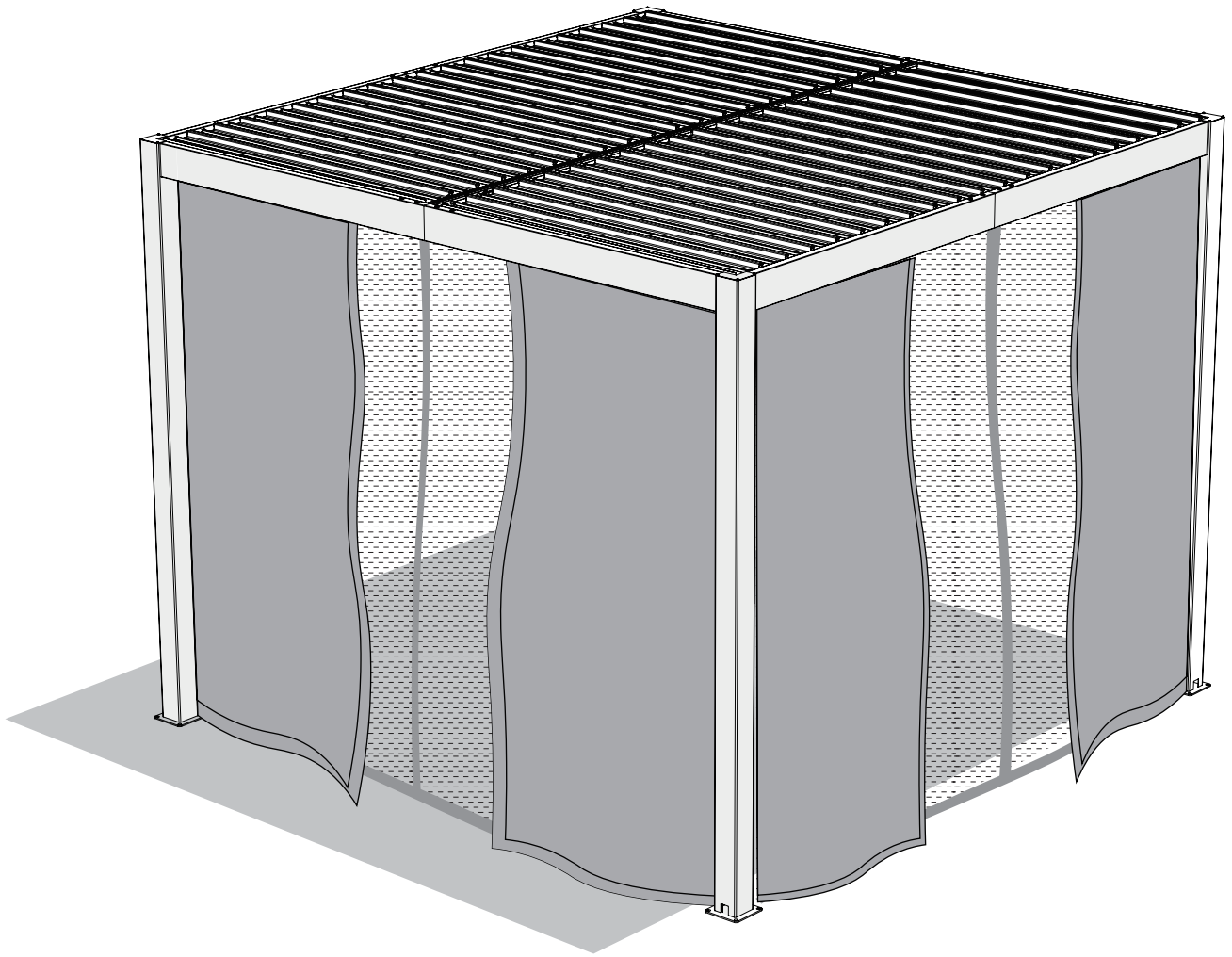


10'x10' with curtains

10'x10' GO TO STEP 3

-  Identify the edges of the curtains and mesh that match the pergola's size, then hang the metal rings at the top of each curtain and mesh onto the plastic hooks **3**, one by one.





GENERAL CARE & MAINTENANCE

1. Check all bolts for tightness before use. Check and tighten bolts at least once in half a year to ensure your pergola works properly to extend service life.
2. Pergola does not need to be painted, varnished, or otherwise cared for in any way. Just keep your aluminum pergola clean. Use normal detergent and water for cleaning. Be careful not to use wire brushes or sharp objects for cleaning.
3. Clean debris such as fallen leaves regularly to prevent them from blocking the drain.
4. Do not set all the louvers blades upright immediately after rain in case of ponding on the louver blades pour.
5. If the weather forecasts snowstorm or high winds, please open the louver blades in advance and remove manual cranks or other unnecessary accessories to avoid potential damage to your pergola.
6. Do not allow snow to accumulate on the louver roof. Don't control louver blades on a frost or snowy day. Remove all the louver blades before the blizzard or other natural disasters.

