



LUXPATIO INC  
2605 Technology Dr, Ste 300,  
Plano, TX 75074  
Email: [support@luxpatio.com](mailto:support@luxpatio.com)



User's Manual



Assembly Video

## USER'S MANUAL

# NESTGRILL LITE 7.2'×6.6' GRILL PERGOLA



**MODEL # : N5-LITE**

ENG 7.2x6.6 N5-Lite Nestgrill Lite V250623  
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For the most up to date assembly manual, please scan the QR codes  
on top, or to order replacement parts , please visit [www.luxpatio.com](http://www.luxpatio.com)

# WELCOME TO THE LUXPATIO LIFESTYLE!

Thank you for choosing LuxPatio! We believe your outdoor space should be a sanctuary, a place to relax, connect, and enjoy life's simple pleasures.

Just as our team envisioned, LuxPatio redefines what it means to unwind in your backyard. Imagine a shaded retreat where moments are made: morning coffee under soft sunlight, afternoon gatherings with loved ones, or quiet evenings beneath the stars.

With LuxPatio, your Pergola becomes more than just a structure—it becomes the heart of your outdoor living, crafted for both elegance and ease. From cutting-edge engineering to refined outdoor solutions, LuxPatio simplifies life so you can focus on what matters most.

Because your backyard isn't just part of your home—it's where memories begin.

**LuxPatio**  
**Spaces for What Matters.**



This Instruction manual will gives you a comprehensive illustration about our product, including Parts, Installation, Warranty Policy, Care and Maintenance. Please carefully read the manual, and make sure NO important information is missed.

# CATALOG

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# **INSTALLATION GUIDELINES AND SAFETY PRECAUTIONS**

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The installation of a Pergola demands meticulous attention to technical requirements and professional expertise due to its structural complexity. Key considerations include:

## **1.Precision Engineering**

Accurate measurement and leveling of supports and framework.

Secure floor drilling with correct anchoring or approved fastening systems.

## **2.Operational Safety Requirements**

Work at height and heavy load handling necessitate a minimum team of at least two capable adults equipped with PPE ( Personal Protective Equipment) and three capable installers will be mostly recommended.

All operations must comply with relevant industrial safety standards.

## **3.Strict Supervision**

In case of uncertainty regarding installation safety or structural integrity, consult a certified professional.

Strict adherence to assembly instructions is critical to prevent falls or structural failure.

# **SAFETY INFORMATION**

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- Keep children and pets away from any plastic bags, tools, fittings, and the assembly area until work is complete.
- Some components are heavy. Use proper lifting posture and technique. Ask for assistance if needed.
- Be careful when using sharp tools.
- Don't climb or stand on the roof.
- The Pergola should not be assembled directly under trees and powerlines.
- DO NOT assemble the Pergola in windy or wet conditions.
- Avoid using strong solvents such as thinners, or solutions containing chlorinated hydrocarbons, esters, or ketones. Do not use abrasive cleaners or cutting compounds.

## DISCLAIMERS

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- **DO NOT** modify this product, use unauthorized tools, or substitute parts only. Unauthorized modify will void your warranty.
- LuxPatio is not responsible for any damage resulting from normal wear and tear, improper assembly, misuse, or negligence.
- Manufacturer disclaims responsibility for damage arising from non-compliant installation, natural disasters, or extreme weather events. Immediate snow removal is mandatory to prevent structural overload during heavy snowfall.
- LuxPatio is not liable for typographical errors, content inaccuracies. The contents in this manual are subject to change without notice.
- The LuxPatio Pergola should only be connected to power sources installed by a licensed electrician.

## BEFORE ASSEMBLY

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- △ Remove all parts and hardware from the box. Place all items on a carpeted or scratch-free work surface, as this will avoid damaging parts during assembly.
- △ The shipping box can provide an ideal work surface if none is available.
- △ To avoid accidentally discarding small components or hardware, do not dispose of any packaging or contents of the shipping carton until assembly is complete.
- △ **DO NOT** fully tighten all fasteners / screws until all parts are in place. Failure to follow these instructions may cause the fasteners / screws to misalign during assembly.

## ASSEMBLY NOTES

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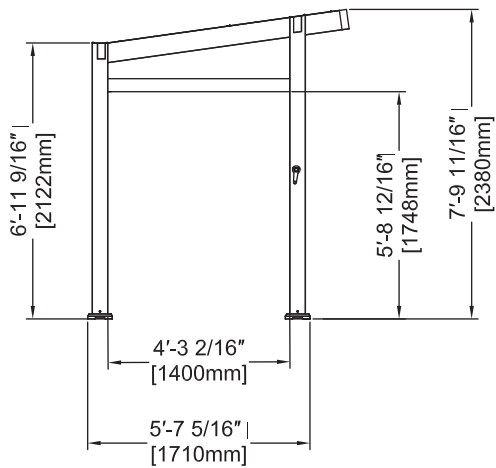
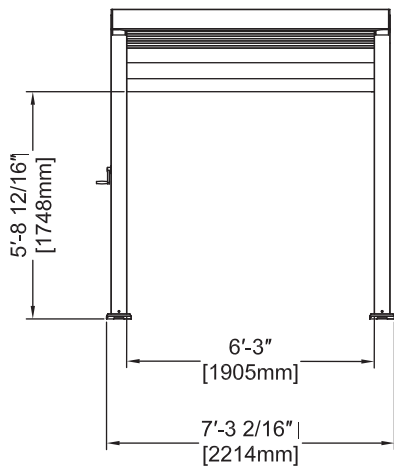
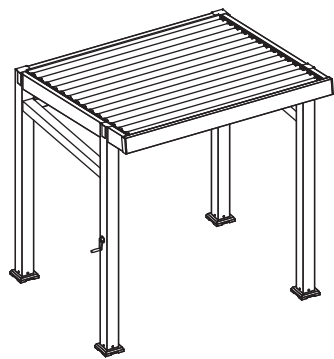
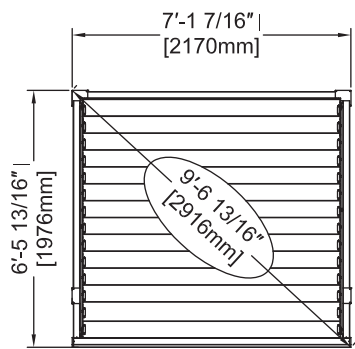
**It is critical to begin with square, level footings, namely a flat surface such as a concrete pad or deck before attaching your structure.**

- Carefully review the required items for each step. Always use the correct hardware, as incorrect hardware may cause structural damage or insufficient clearance.
- Always double-check for underground utilities and overhead electrical lines clearance before installation.

**Post mounts are included, allowing you to permanently install your structure onto an existing or new wood or concrete surface. See Anchoring Layout for further details and recommendations.**

- Hardware to connect the post mounts to the structure is included.
- Hardware for permanent concrete installation is also provided.
- Ensure there is adequate structural support beneath the deck before permanent attaching.

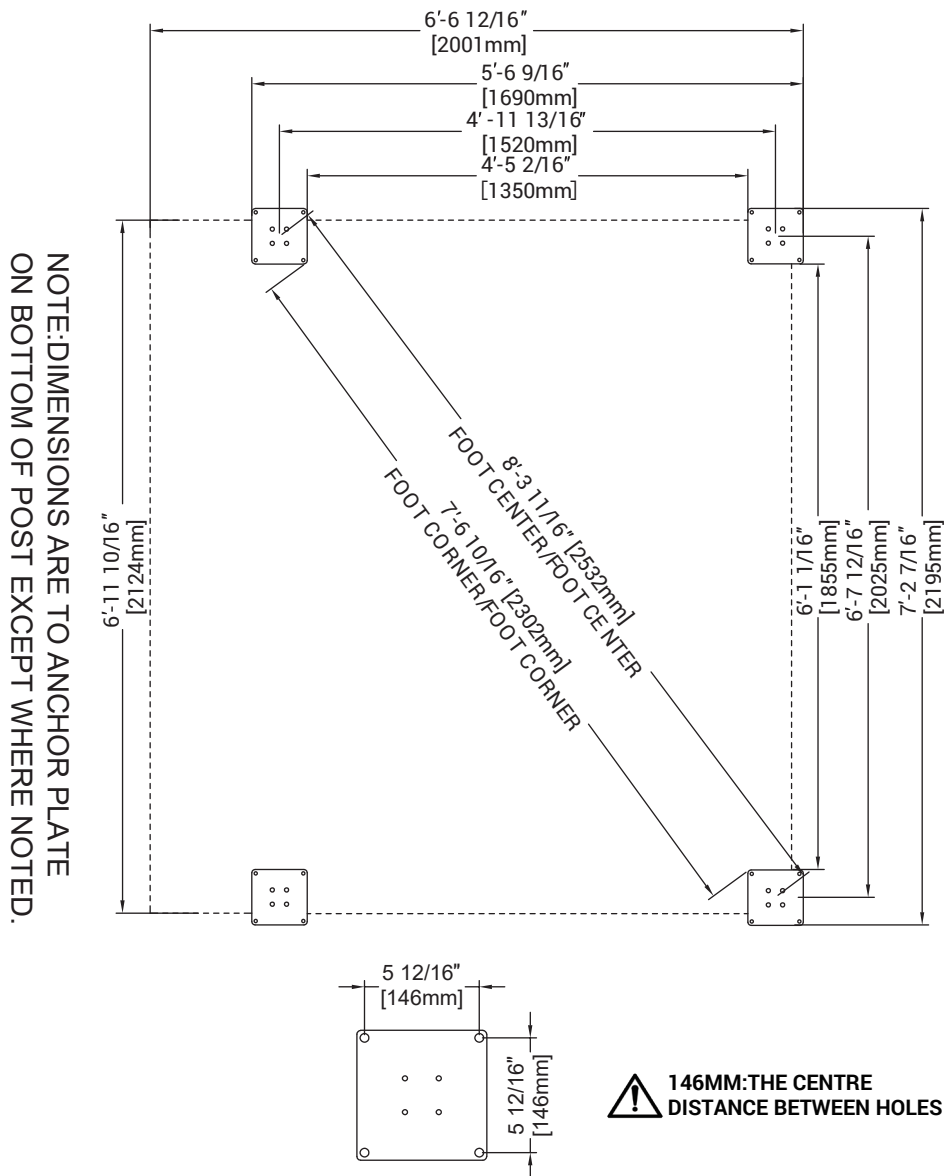
DIMENSIONS



# ANCHORING LAYOUT

NOTE: DIMENSIONS ARE TO ANCHOR PLATE ON BOTTOMS OF POST EXCEPT WHERE NOTED

THE PROTRUDING ROOFTOP MAY REQUIRE EXTRA CLEARANCE. ENSURE CLEARANCE IS SUFFICIENT FOR PERGOLA INSTALLATION.



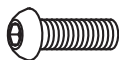
# **SORTING PARTS**

## **HARDWARE PARTS:**

- Hardware blisters pack are labeled with alphanumeric part numbers.
- It is highly recommended to pre-organize hardware by part number or type (e.g., bolts, nuts, etc.).
- Parts can also be sorted by the alphabetical portion of their part code, which helps guide the order of installation.
- Fasteners should only be selected during their designated assembly step to avoid losing.
- The quantity listed on the Parts page reflects the number of components required for installation. (There are a few spare screws for backup)
- It is recommended to remove stickers from large parts only after installation is complete.
- Additional spare fasteners are available and individually packaged.

CARTONS ARE NOT ORGANIZED BY PART NUMBER. IT IS RECOMMENDED TO LEAVE LOUVER COMPONENTS IN THE BOX UNTIL NEEDED FOR ASSEMBLY.

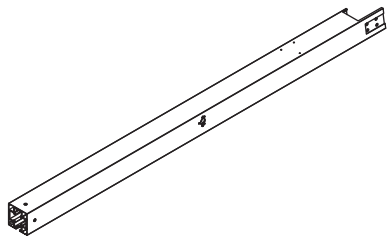
## **PARTS IDENTIFICATION EXAMPLE**



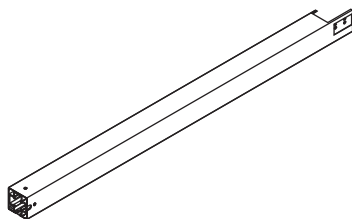
Part No.	Quantity	Name Description	Specifications
S8	x20	Hex Button Screw	M6x20 mm

## PARTS IDENTIFICATION

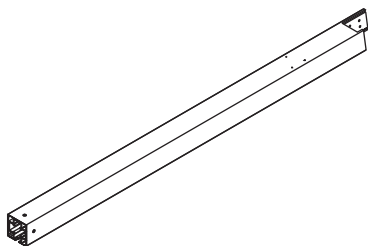
### METAL COMPONENTS (NOT TO SCALE)



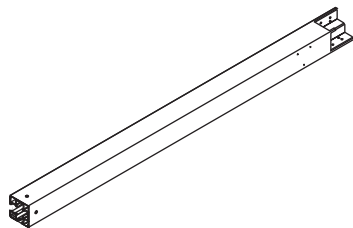
**A1 (x1) Column**  
7'-7 5/8" x 4 3/4" x 4 3/4"  
(2328\*120\*120mm)



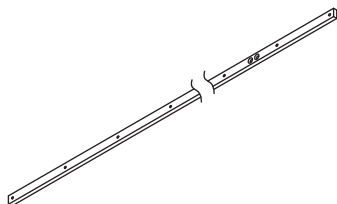
**A2 (x1) Column**  
6'-11 3/16" x 4 3/4" x 4 3/4"  
(2113\*120\*120mm)



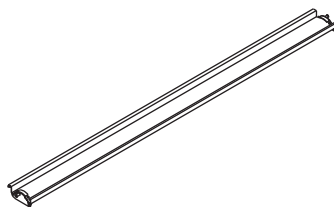
**A3 (x1) Column**  
7'-7 5/8" x 4 3/4" x 4 3/4"  
(2328\*120\*120mm)



**A4 (x1) Column**  
6'-11 3/16" x 4 3/4" x 4 3/4"  
(2113\*120\*120mm)



**E (x1) Pushrod**  
5'-7 13/16" x 11/16" x 5/16"  
(1723\*18\*8mm)



**D (x14) Louvers**  
6'7/8" x 5 11/16" x 2 3/16"  
(2023\*145\*55mm)

# PARTS IDENTIFICATION

## METAL COMPONENTS (NOT TO SCALE)



**B3 (x1) Left Crossbeam**  
6' 2 3/16" x 5 7/8" x 3 15/16"  
(1885\*150\*100mm)



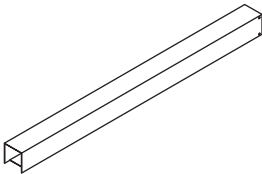
**B4 (x1) Right Crossbeam**  
6' 2 3/16" x 5 7/8" x 3 15/16"  
(1885\*150\*100mm)



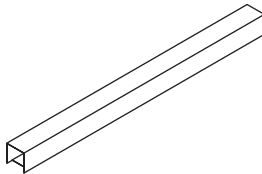
**B2 (x1) Rear Crossbeam**  
6' 7 11/16" x 5 7/8" x 3 15/16"  
(2024.4\*150\*100mm)



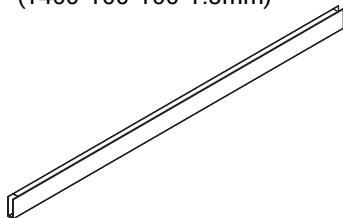
**B1 (x1) Front Crossbeam**  
7' 7/16" x 5 7/8" x 3 15/16"  
(2144\*150\*100mm)



**C1 (x1) Left Lower Beam**  
4'-7 1/8"x3 15/16"x3 15/16"x1/16"  
(1400\*100\*100\*1.3mm)



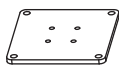
**C2 (x1) Right Lower Beam**  
4'-7 1/8" x 3 15/16" x 3 15/16" x 1/16"  
(1400\*100\*100\*1.3mm)



**C3 (x1) Rear Lower Beam**  
6'-3 3/4" x 3 15/16" x 1 3/16" x 1/16"  
(1924\*100\*30\*1.45mm)

# PARTS IDENTIFICATION

## METAL COMPONENTS (NOT TO SCALE)



**K1 (x4) Base Plate**  
 $5 \frac{7}{8}'' \times 5 \frac{7}{8}'' \times \frac{5}{16}''$   
 (170 x 170 x 8mm)



**K2 (x4) C-Shape Connector**  
 $3 \frac{14}{16}'' \times 3 \frac{13}{16}'' \times 1 \frac{3}{16}''$   
 (98.5 x 97 x 30mm)



**K3 (x2) O-Shape Connector**  
 $3 \frac{14}{16}'' \times 1 \frac{1}{16}'' \times 1 \frac{3}{16}''$   
 (98 x 5 x 27 x 30mm)



**K5 (x1) Decorative Plate**  
 $5 \frac{3}{16}'' \times 5 \frac{7}{8}'' \times \frac{5}{16}''$   
 (131.6 x 74 x 5mm)



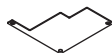
**K6 (x4) Decorative Plate**  
 $4 \frac{3}{4}'' \times 2 \frac{15}{16}'' \times \frac{3}{16}''$   
 (120 x 74 x 5mm)



**K7 (x1) Decorative Plate**  
 $5 \frac{3}{16}'' \times 2 \frac{15}{16}'' \times \frac{3}{16}''$   
 (131.6 x 74 x 5mm)



**K8 (x2) Top Cover Plate**  
 $4 \frac{3}{4}'' \times 2 \frac{6}{16}'' \times \frac{1}{16}''$   
 (120 x 60 x 1.5mm)



**K9 (x2) Top Cover Plate**  
 $4 \frac{3}{4}'' \times 4 \frac{3}{4}'' \times \frac{1}{16}''$   
 (120 x 120 x 1.5mm)



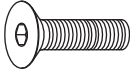
**K11 (x1) Rocker Handle**  
 $6 \frac{9}{16}'' \times 5 \frac{7}{16}'' \times 2 \frac{6}{16}''$   
 (167 x 138 x 60mm)



**K12 (x8) Base Plate Cover**  
 $7 \frac{8}{16}'' \times 7 \frac{8}{16}'' \times 1 \frac{9}{16}''$   
 (190 x 190 x 39mm)

# PARTS IDENTIFICATION

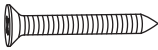
## FASTENERS (NOT TO SCALE)



**S1 (x40) Hexagon Socket  
Countersunk Head Screws**  
M6 x 25mm



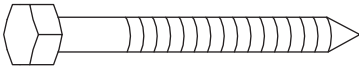
**S2 (x4) Cross Recessed Pan  
Head Screws**  
M6 x 16mm



**S3 (x12) Cross Recessed Flat  
Head Self-Tapping Screws**  
ST4.8 x 40mm



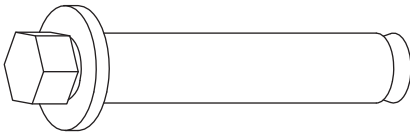
**S4 (x11) Cross Recessed Countersunk  
Head Screws**  
M5 x 16mm



**S5 (x16) Hex Lag Screws**  
M8 x 75mm



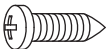
**S6 (x16) Flat Washers**  
φ8 x φ20 x 1.2mm



**S7 (x16) Hex Head Expansion Bolts**  
M8 x 80mm



**S8 (x14) Phillips Shoulder Screws**  
M6 x 13 x M5mm



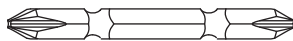
**S10 (x10) Cross Recessed Pan Head  
Self-Tapping Screws**  
ST5.5 x 16mm



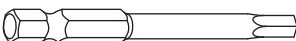
**S11 (x8) Cross Flat Head Self-Tapping Screws**  
ST3.5 x 13mm

# PARTS IDENTIFICATION

TOOL (NOT TO SCALE)



**T1 (x1) Phillips Screwdriver Bit**  
PH2 65mm HRC60



**T2 (x1) Hex Screwdriver Bit**  
4mm 65mm HRC60



**T3 (x1) Hex Wrench**  
4mm 140 x 25mm HRC60



**T4 (x1) Carbide-Tipped SDS Rotary Hammer Bit**  
φ12 x 150mm



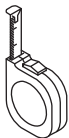
**T5 (x1) Sealant**  
85g

# TOOLS REQUIRED

## WHAT YOU MAY NEED?



**Ladder x2**



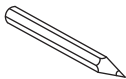
**Tapeline**



**Mallet**



**Level**



**Marker Pen**



**Wrench**



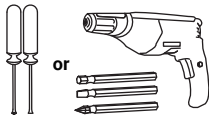
**Glove**



**Ø10mm  
Electric Screwdriver**



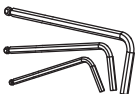
**Safety Hat**



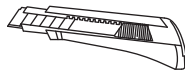
**Screwdriver or  
Electric Screwdriver**



**Sleeve Tool**

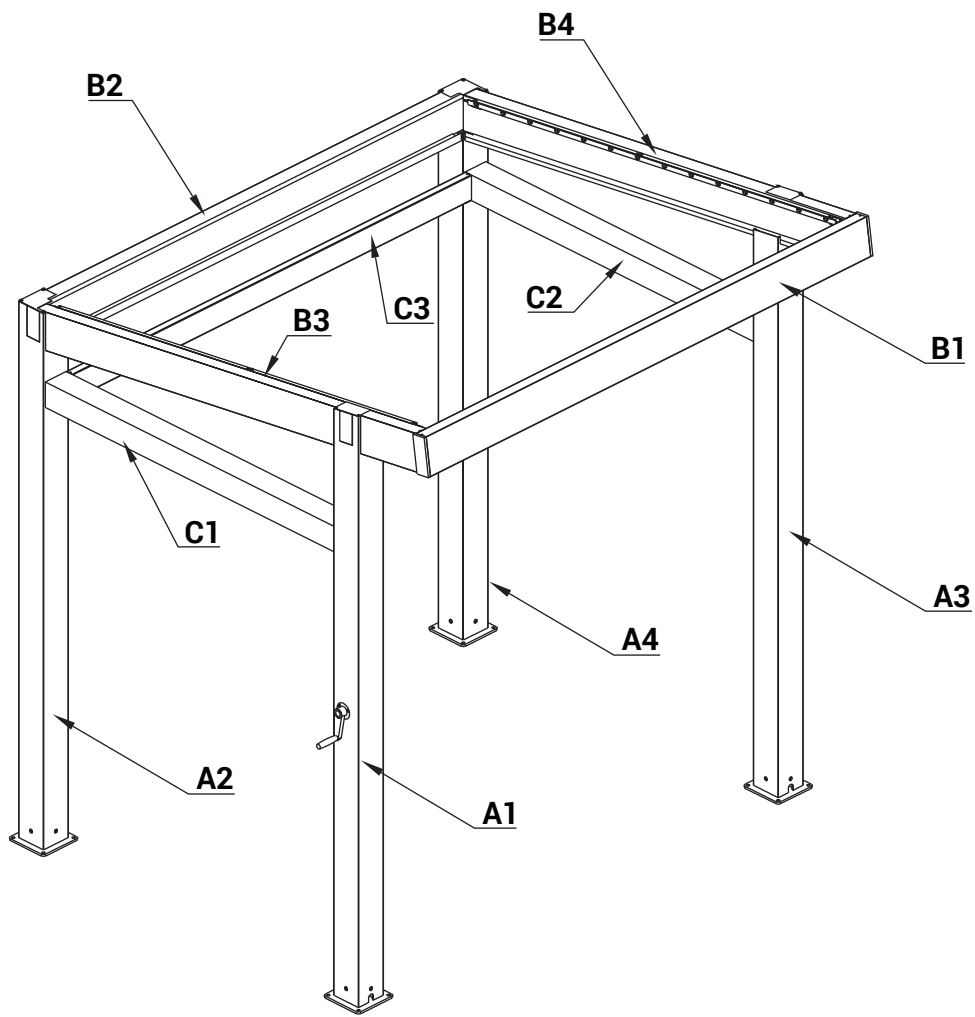


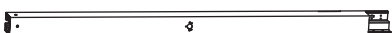



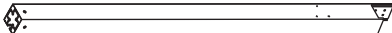

**Allen Key**

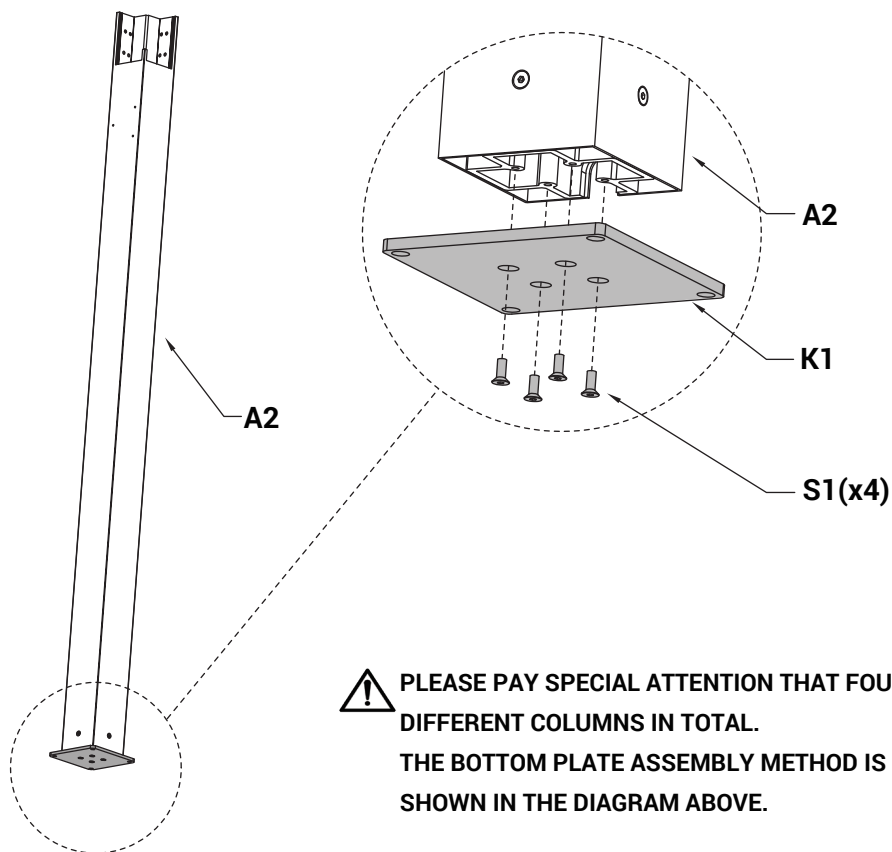


**Utility Knife**



# OVERVIEW OF THE FRAMEWORK

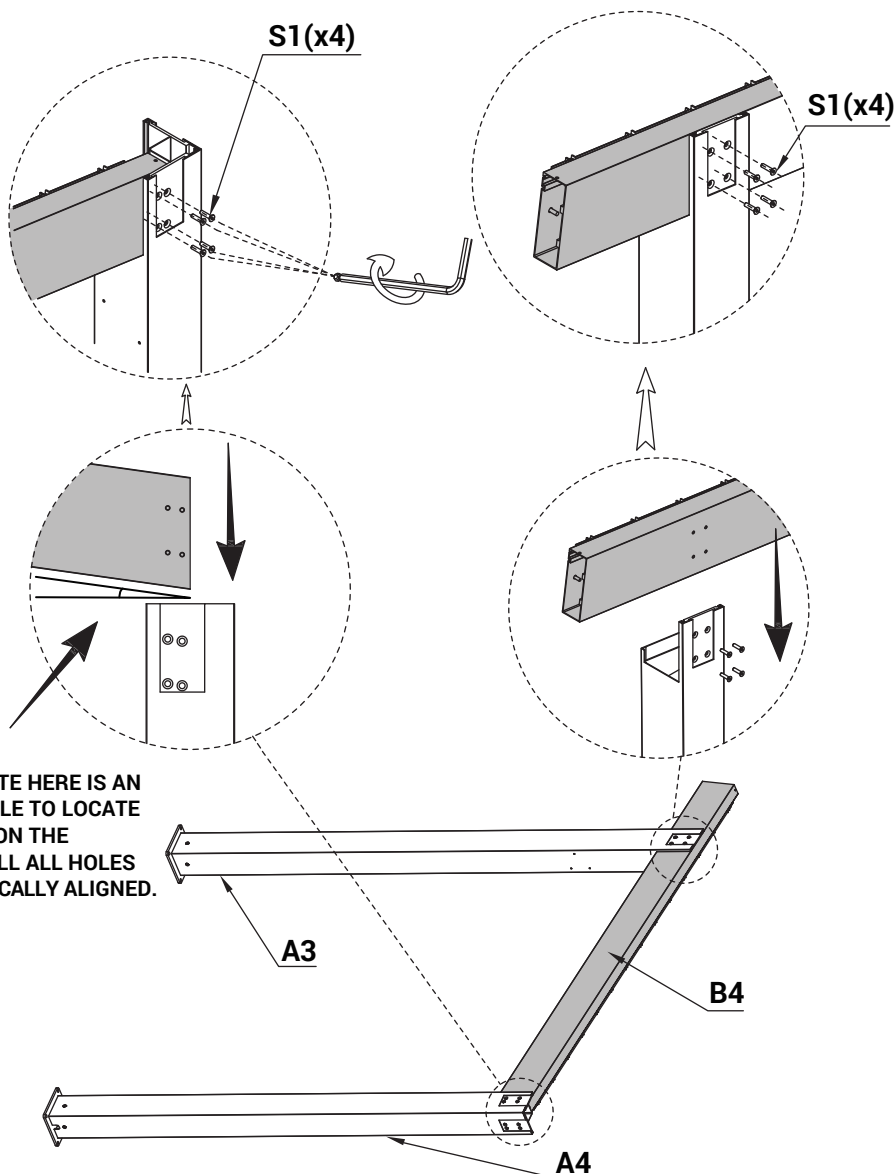


<b>A1</b>		<b>x1</b>	<b>K1</b>		<b>x4</b>
<b>A2</b>		<b>x1</b>	<b>S1</b>		<b>x4</b>
<b>A3</b>		<b>x1</b>			
<b>A4</b>		<b>x1</b>			



# 2

S1		x8	B4		x1
----	---	----	----	---	----



PLEASE NOTE HERE IS AN ACUTE ANGLE TO LOCATE THE BEAM ON THE COLUMN TILL ALL HOLES ARE CENTRICALLY ALIGNED.



LAY DOWN TWO COLUMNS AND THE BEAM ON THE GROUND, THEN START TO ASSEMBLE.

# 3

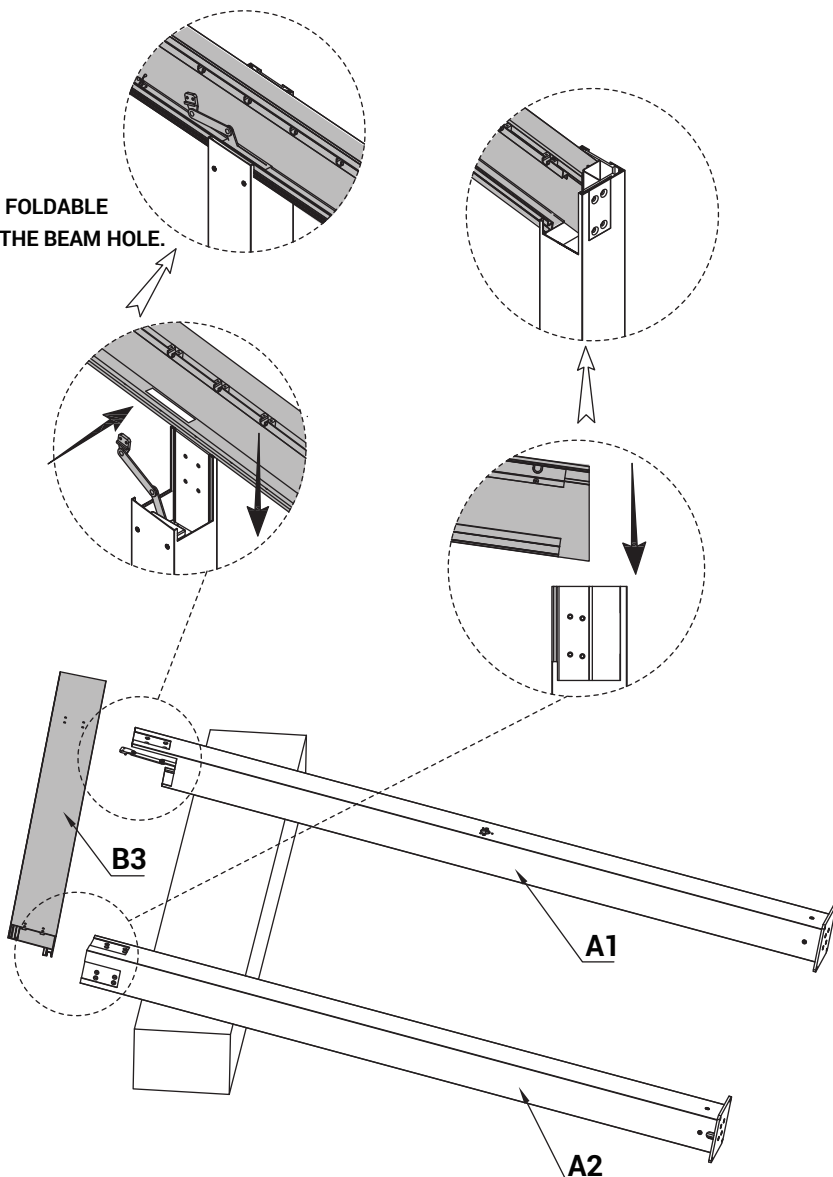
**B3**



**x1**

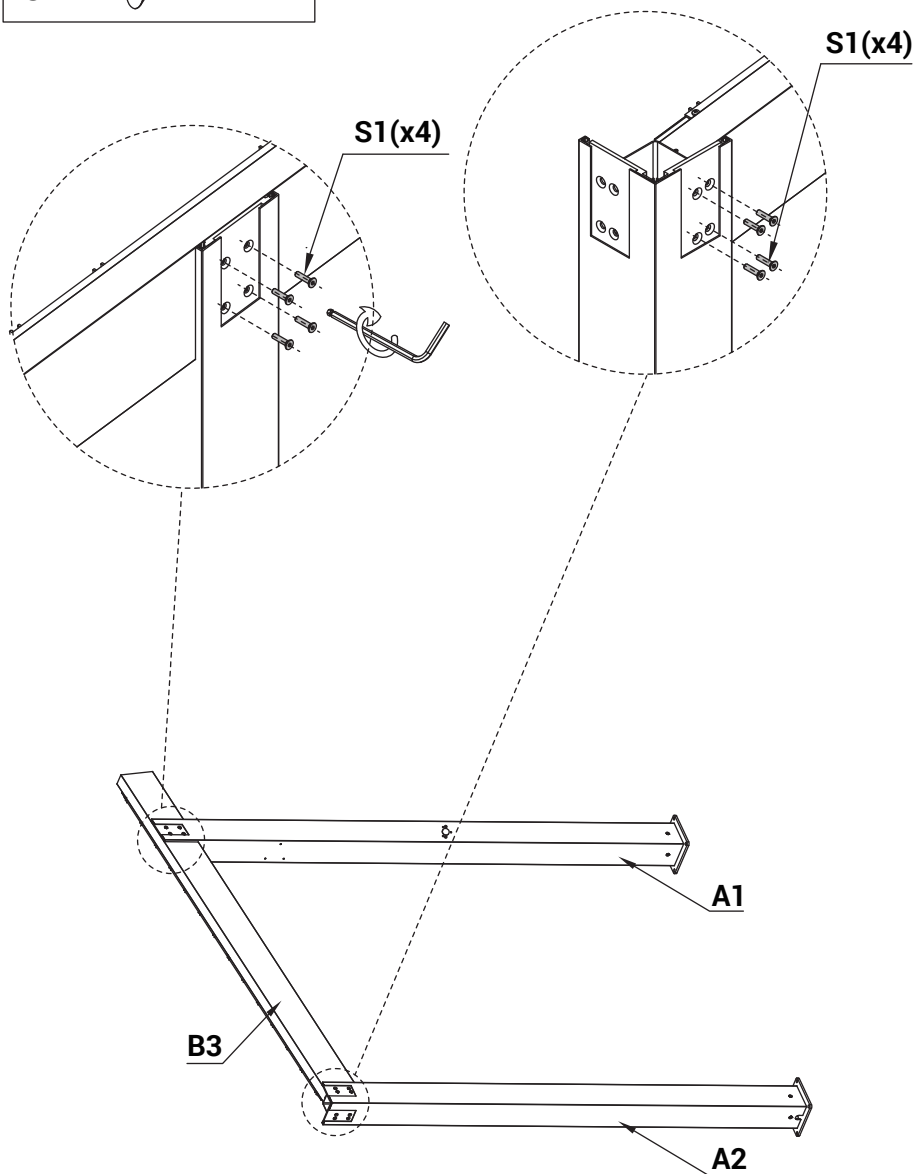
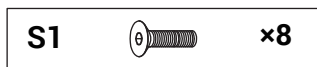


**THREAD THE FOLDABLE  
SHAFT INTO THE BEAM HOLE.**




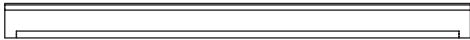
**PUT TWO COLUMNS A1/A2 AND THE BEAM B3 ON THE CARTON AS THE  
DIAGRAM SHOWN, THREAD THE FOLDABLE SHAFT INTO THE BEAM HOLE.**

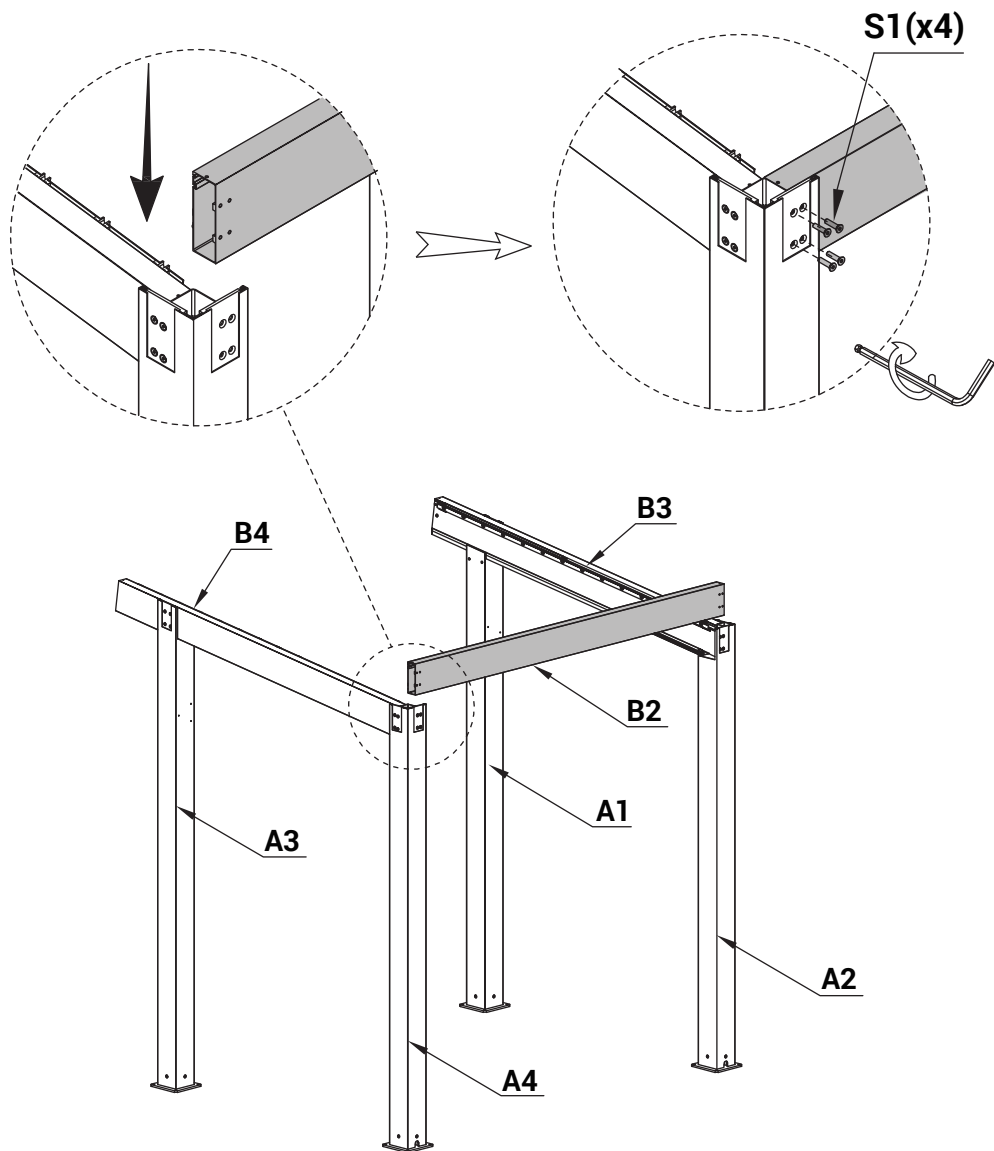
# 4



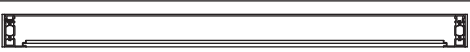
REMOVE THE CARTON, CENTRICALLY ALIGN ALL HOLES AND THEN START TO ASSEMBLE.

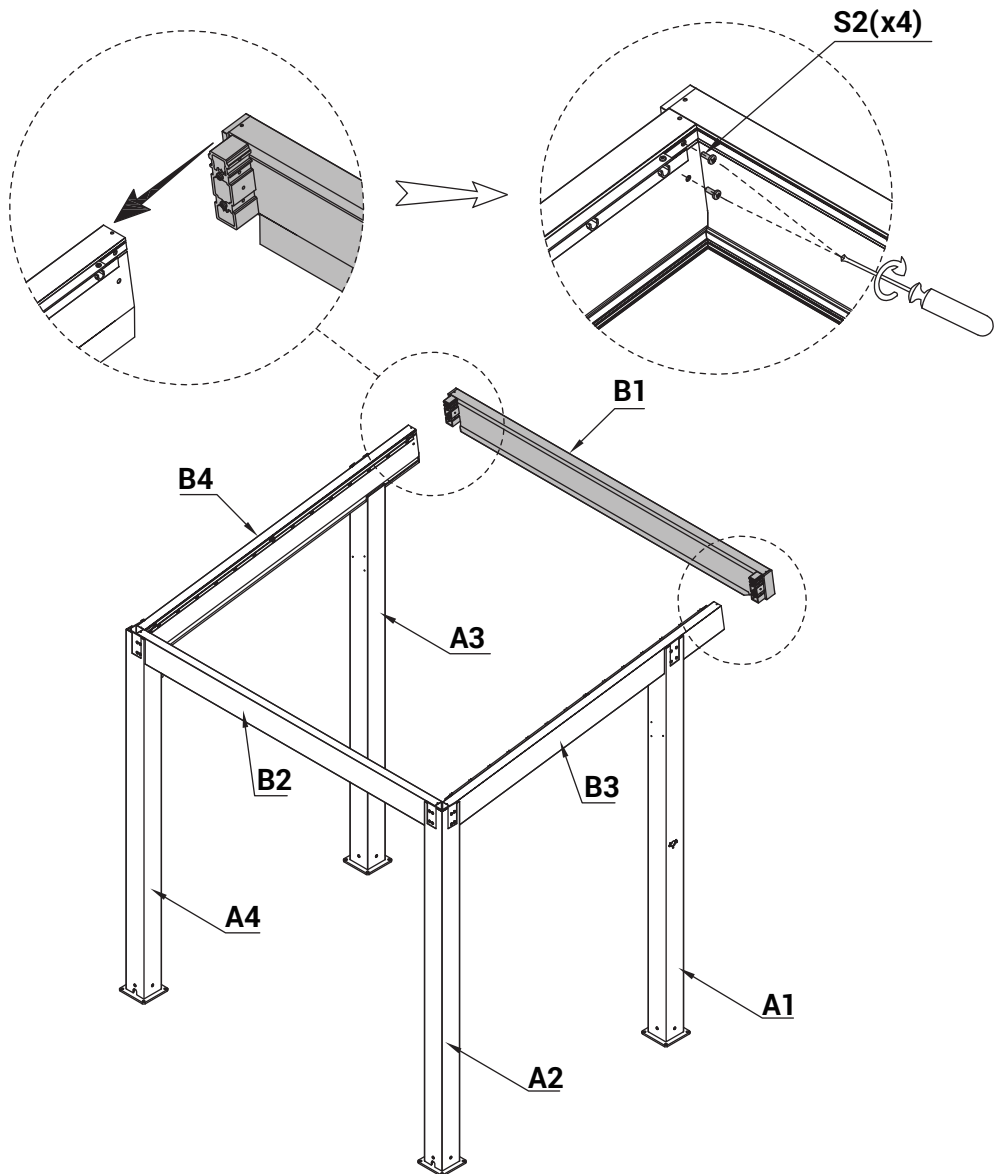
# 5

S1		x8	B2		x1
----	---	----	----	---	----






# 6

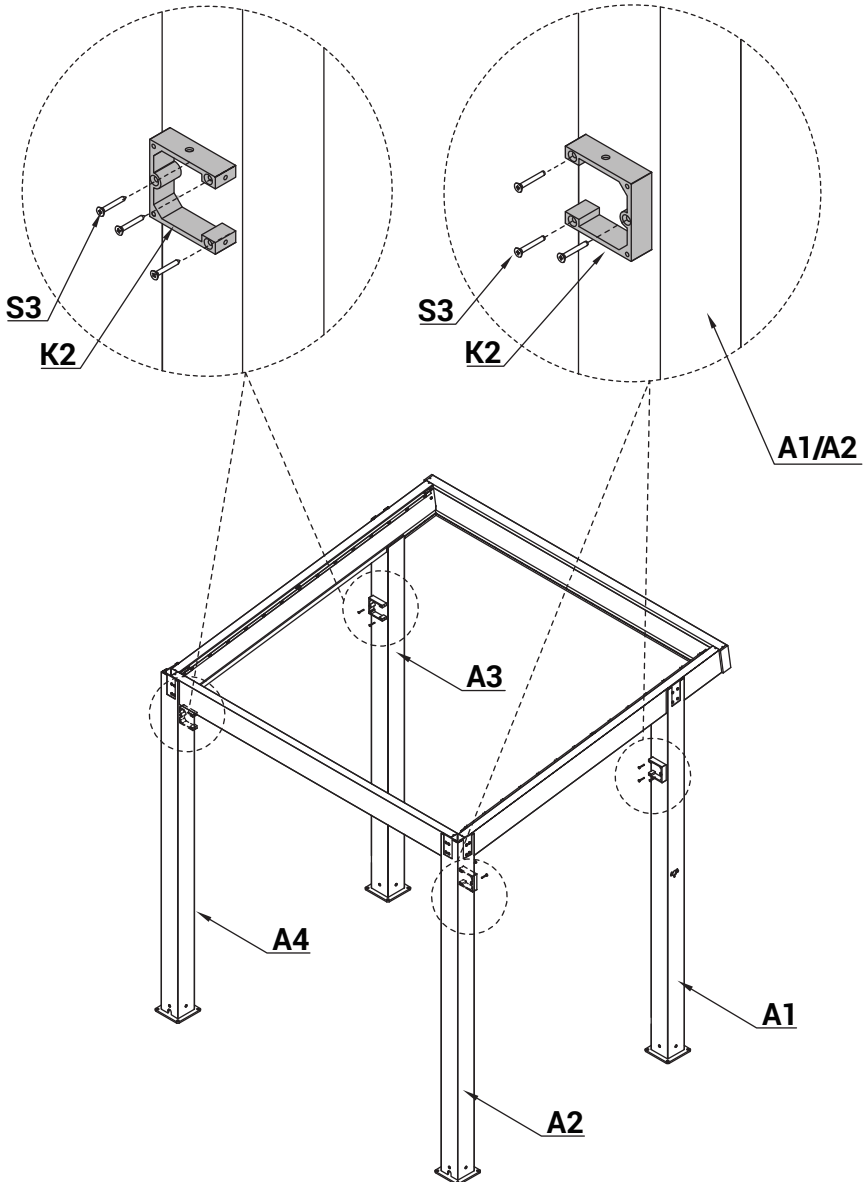
S2		x4	B1		x1
----	---	----	----	---	----



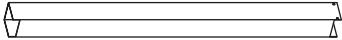
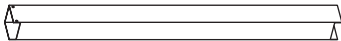
# 7

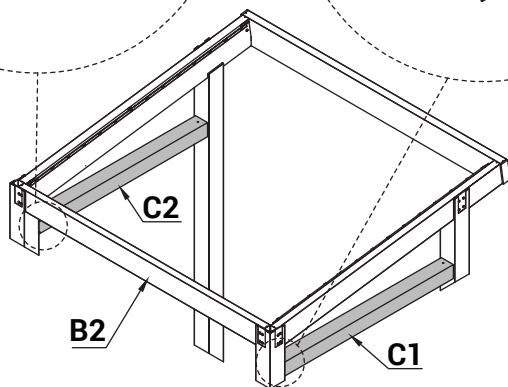
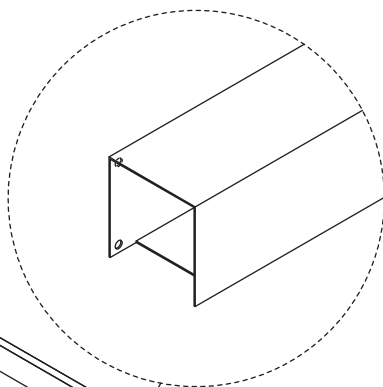
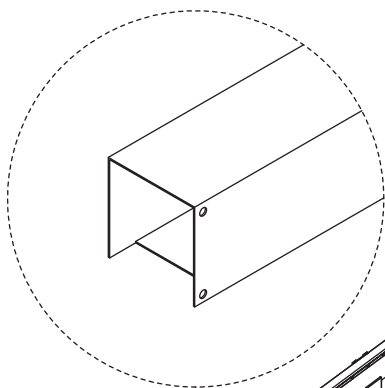
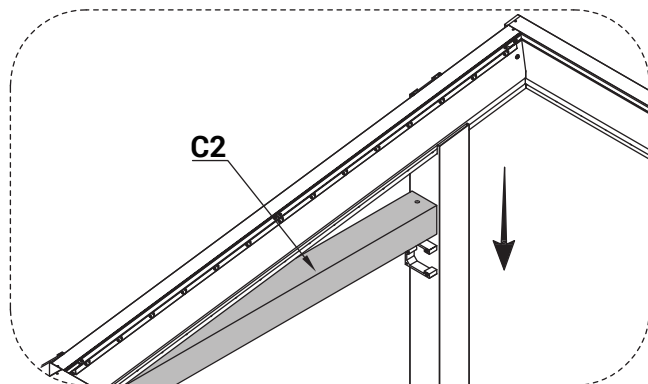
K2		x4	S3		x12
----	---	----	----	---	-----

 PLEASE NOTE: HOLES SIDE UP!



# 8

<b>C1</b>		<b>x1</b>
<b>C2</b>		<b>x1</b>

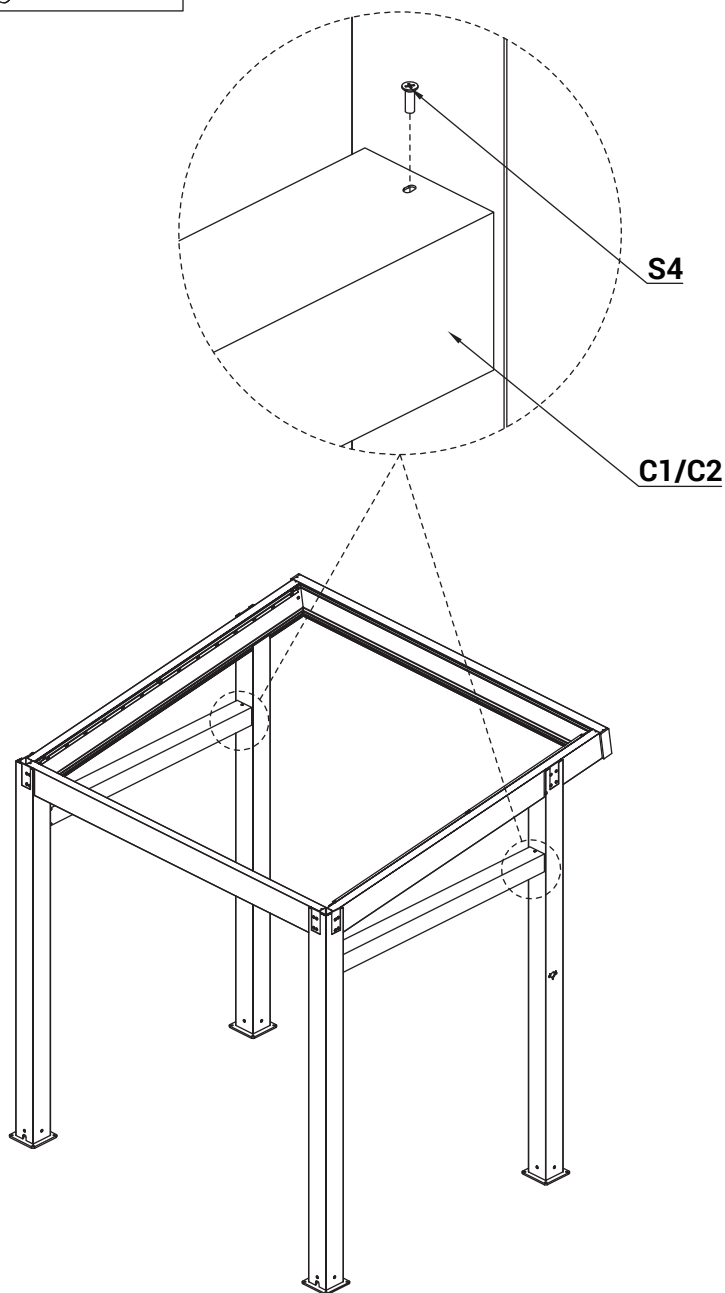


# 9



S4



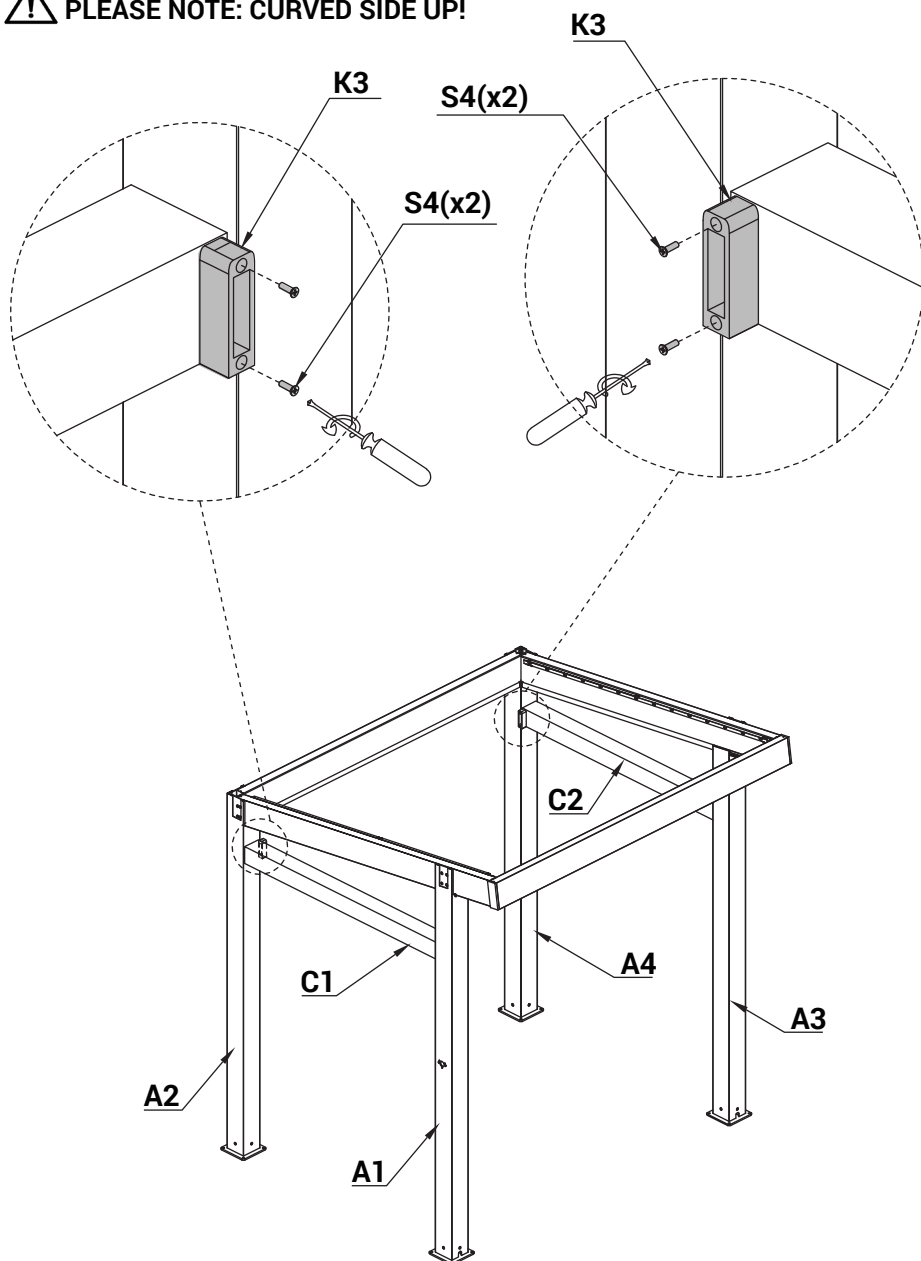
×2



# 10

K3		×2	S4		×4
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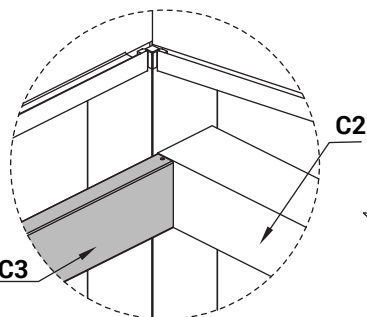
 PLEASE NOTE: CURVED SIDE UP!



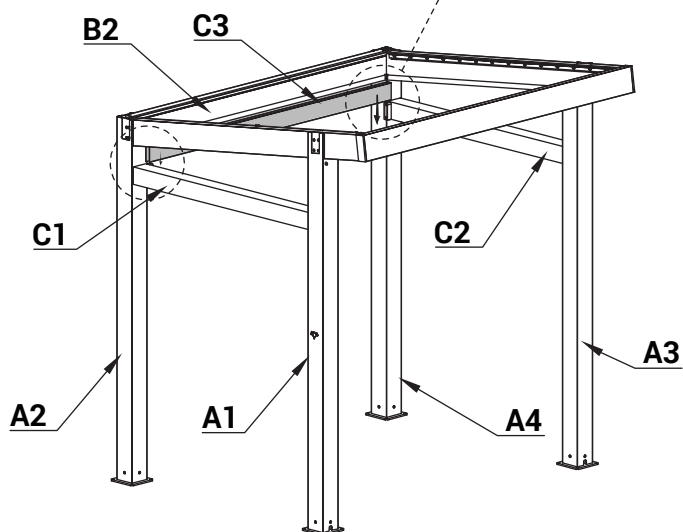
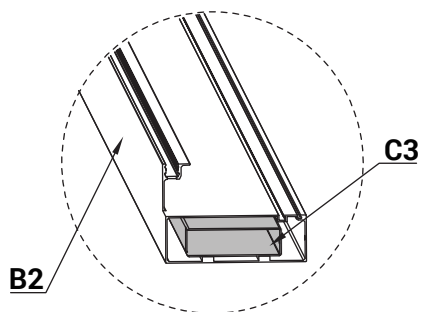
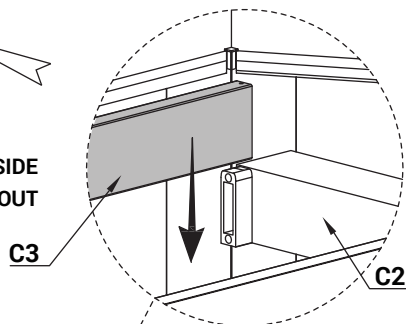
C3



x1



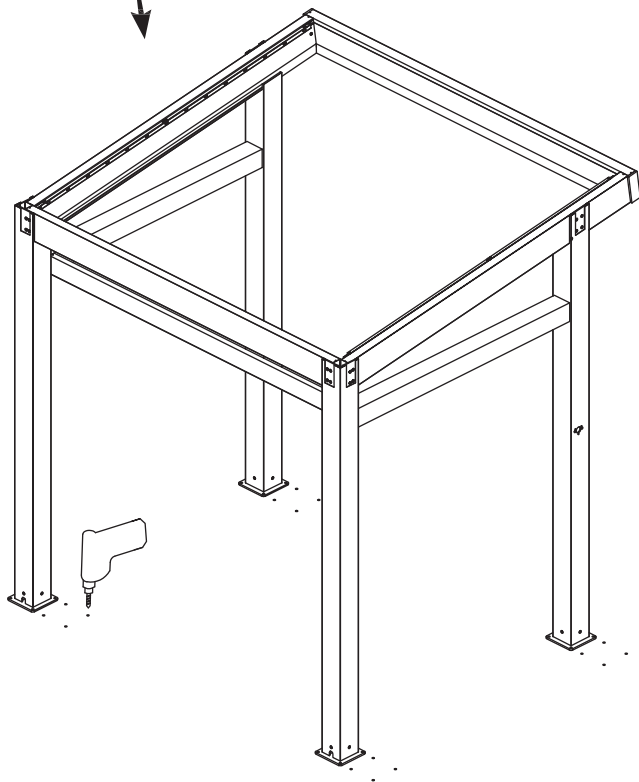
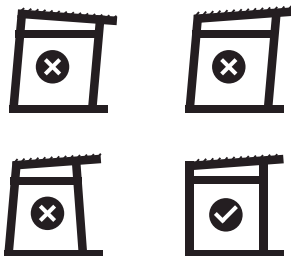
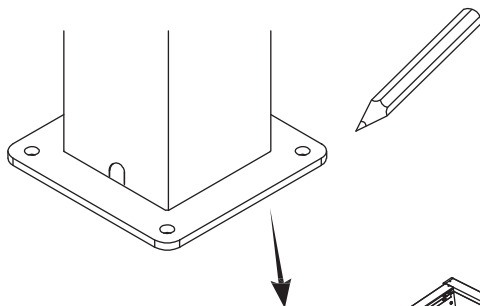
THE REAR LOWER BEAM (C3) IS PACKED INSIDE THE REAR CROSSBEAM (B2), PLEASE TAKE OUT C3 BEFORE INSTALLATION.



# 12

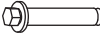
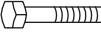



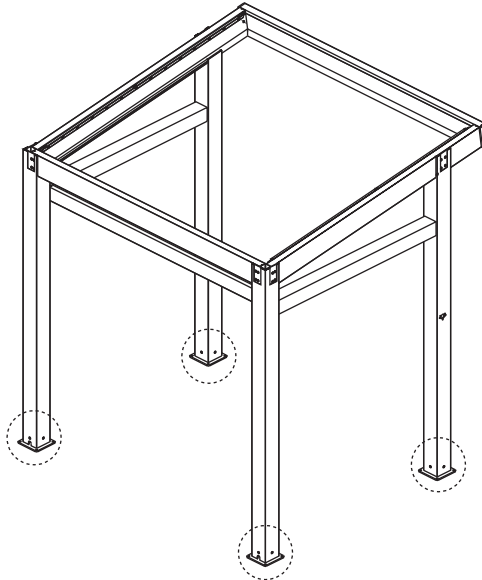
FIRSTLY, FOLLOW THE DIMENSIONS IN THE MANUAL, DETERMINE THE INSTALLATION LOCATION AND MAKE SURE THE FOUR COLUMNS ARE PERPENDICULAR TO THE GROUND, THEN MARK THE POINTS WITH A MARKER.



MOVE THE FRAME STRUCTURE AWAY FROM THE MARKS AND DRILL HOLES BY THE ROTARY HAMMER DRILL

# 13

S7		x16	S5		x16	S6		x16
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WE OFFER TWO TYPES OF ANCHOR METHOD.

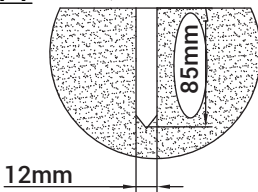
**FOR CONCRETE FLOOR**

**x16**



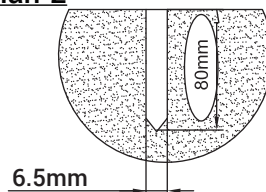
**DRILLING DEPTH**

Plan-1



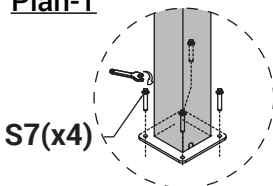
**FOR DECK**

Plan-2



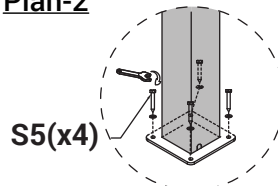
**TIGHTEN SCREWS  
BY # 13 WRENCH**

Plan-1



**x4**

Plan-2



**x4**

# 14

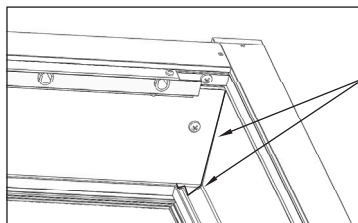
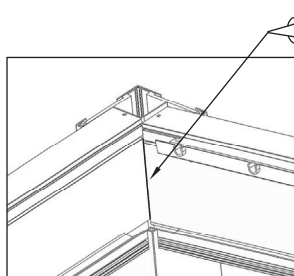
T5



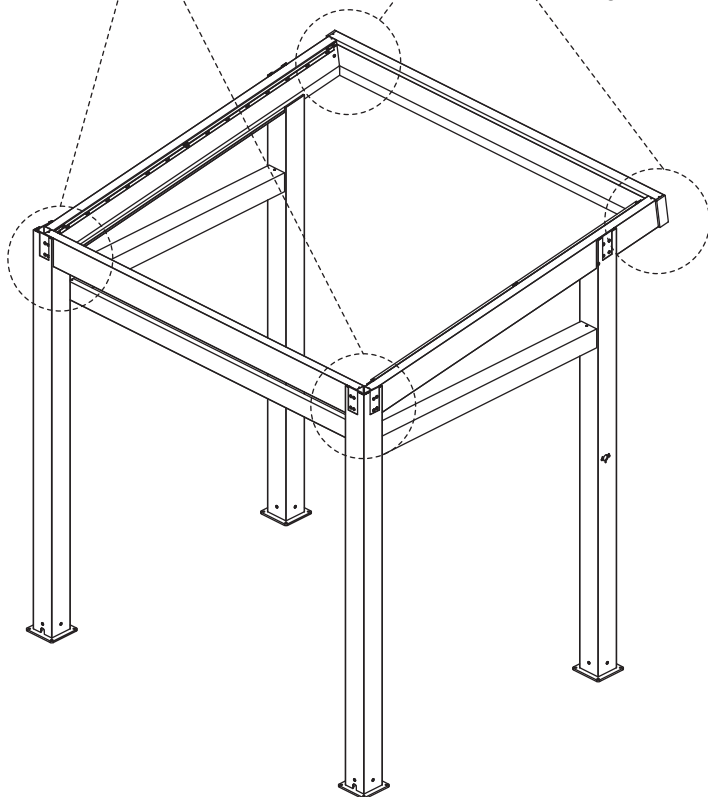
×1





**APPLY WATERPROOF GLASS ADHESIVE  
AT THE CONNECTION POINT**

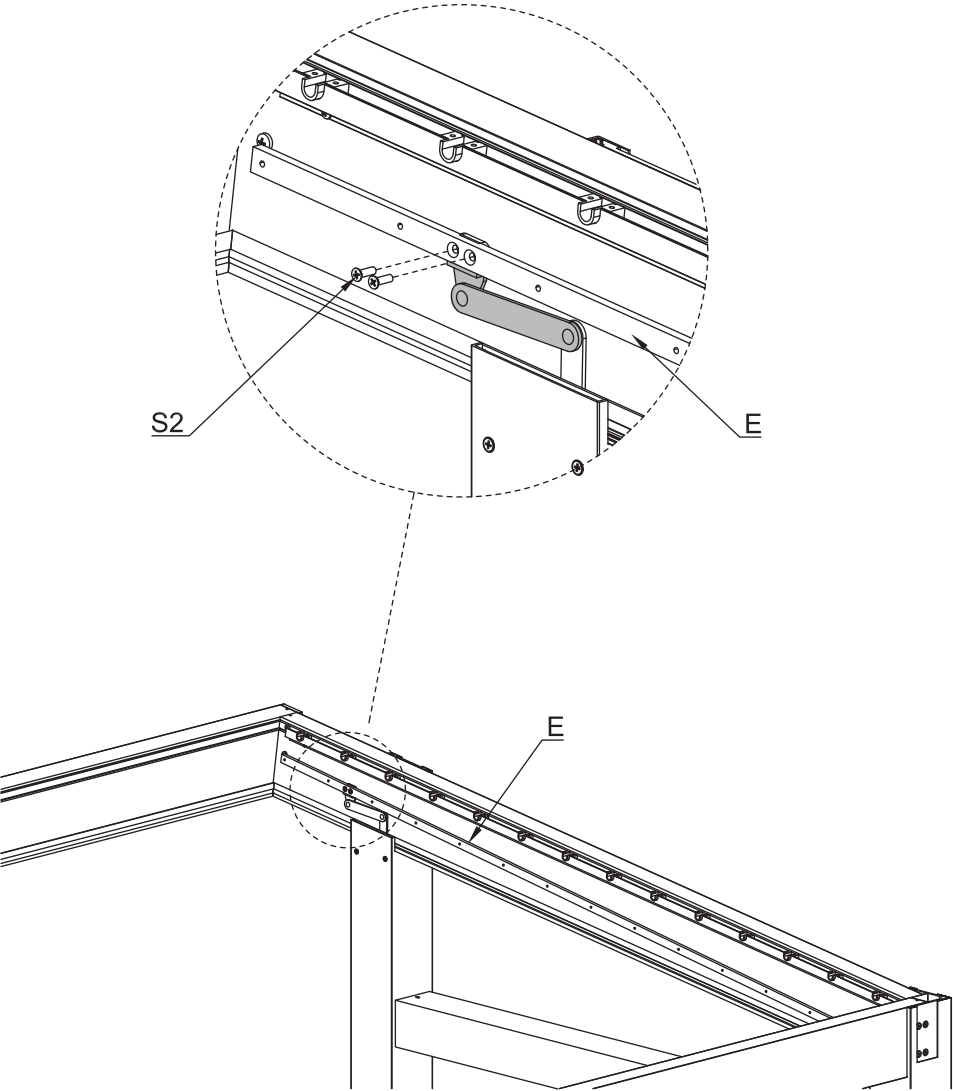


**APPLY THE SEALANT ON THE  
FRONT BEAM SEAM**






# 15

S4		x2	E		x1
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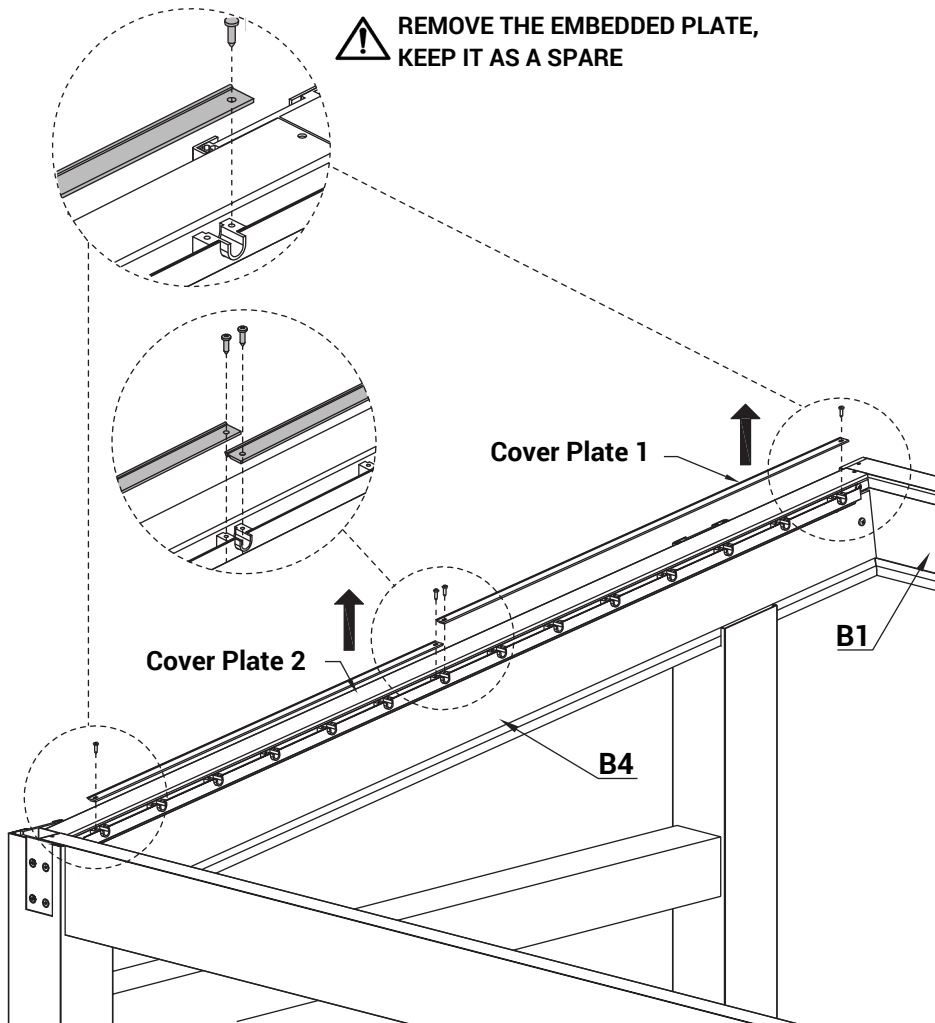


# 16

	Cover Plate 1 (Pre-installed)	×2
	Cover Plate 2 (Pre-installed)	×2
 (Pre-installed) ×8		

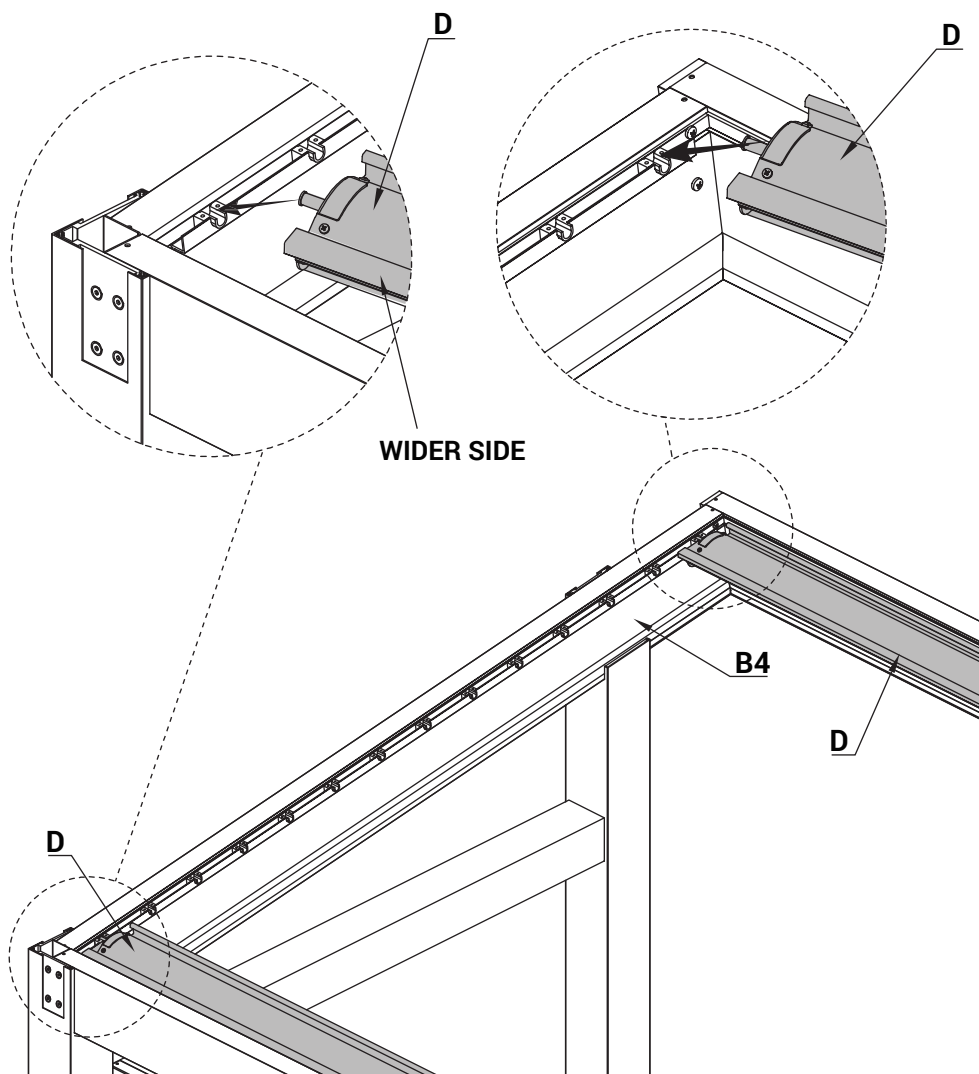


REMOVE THE EMBEDDED PLATE,  
KEEP IT AS A SPARE


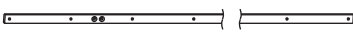



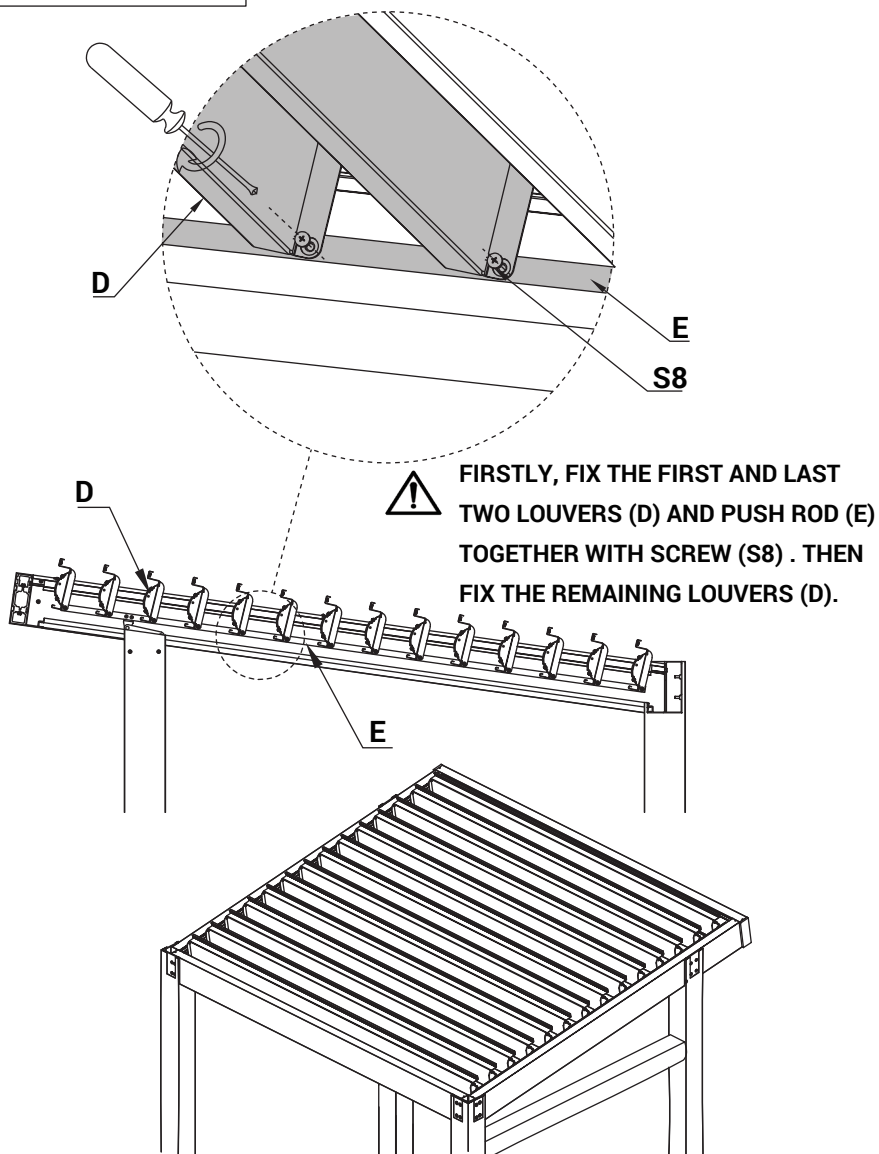


**! THE WIDER SIDE OF THE LOUVRE FACES THE REAR BEAM B2**






# 18

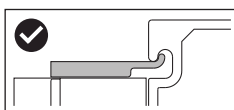
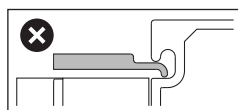
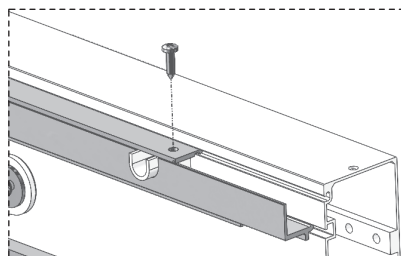
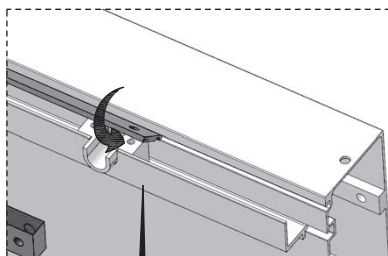
D		×12
E		×1
S8		×14



# 19

	Cover Plate 1 (Pre-installed) x2
	Cover Plate 2 (Pre-installed) x2
 (Pre-installed) x8	

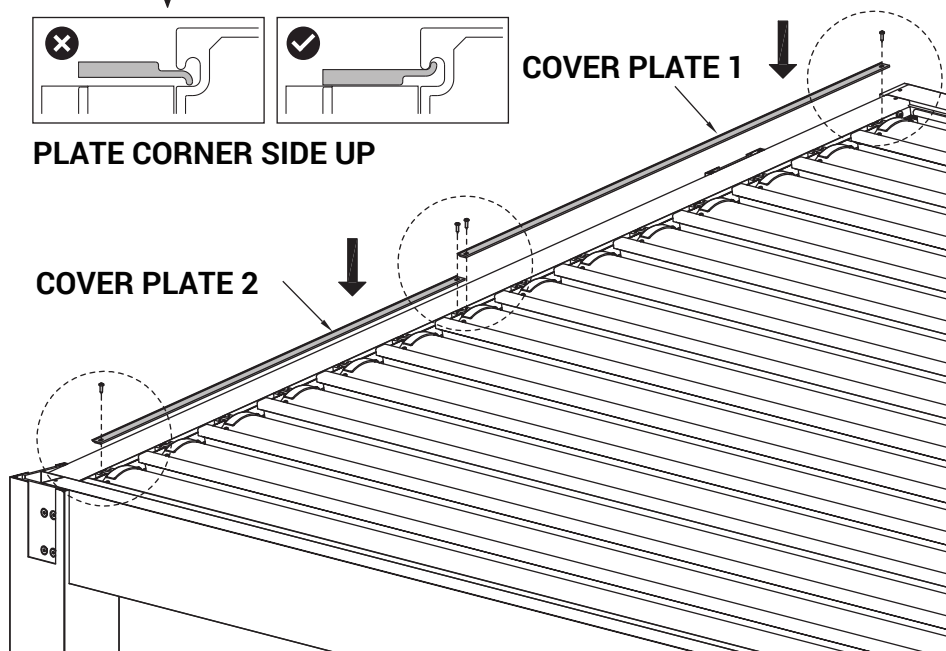
 **FIRSTLY EMBED THE LONG SLAT-COVER PLATE  
AND THEN FIX IT WITH SCREWS**



**PLATE CORNER SIDE UP**

**COVER PLATE 1**

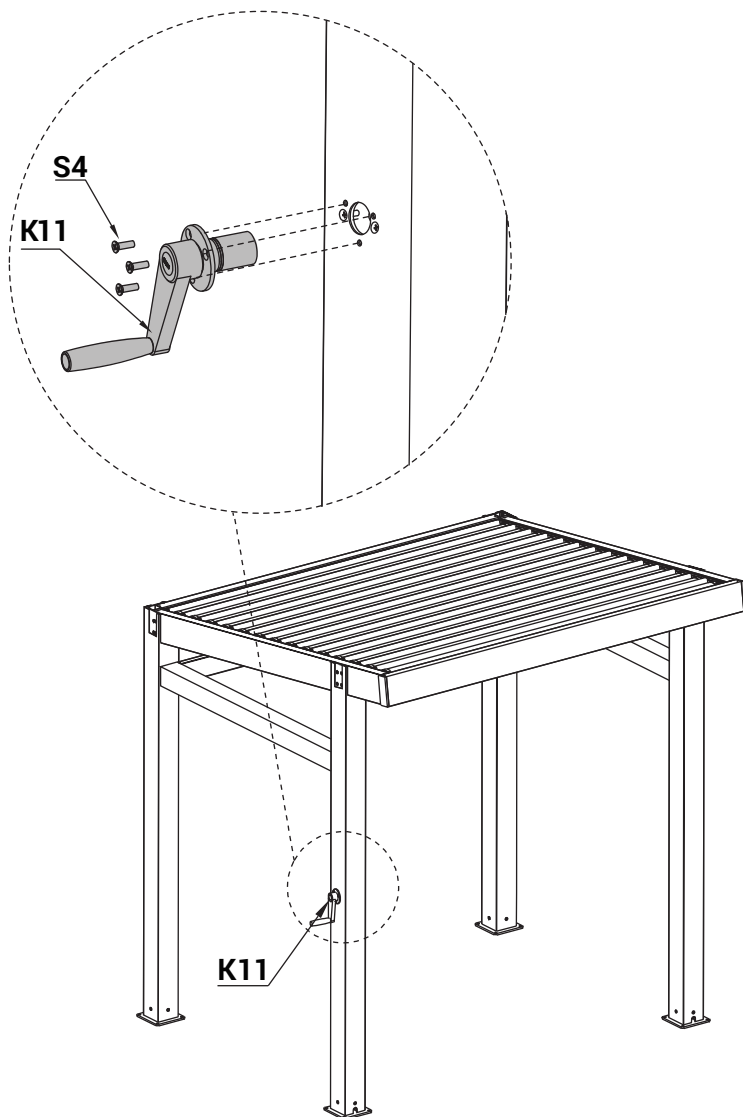
**COVER PLATE 2**






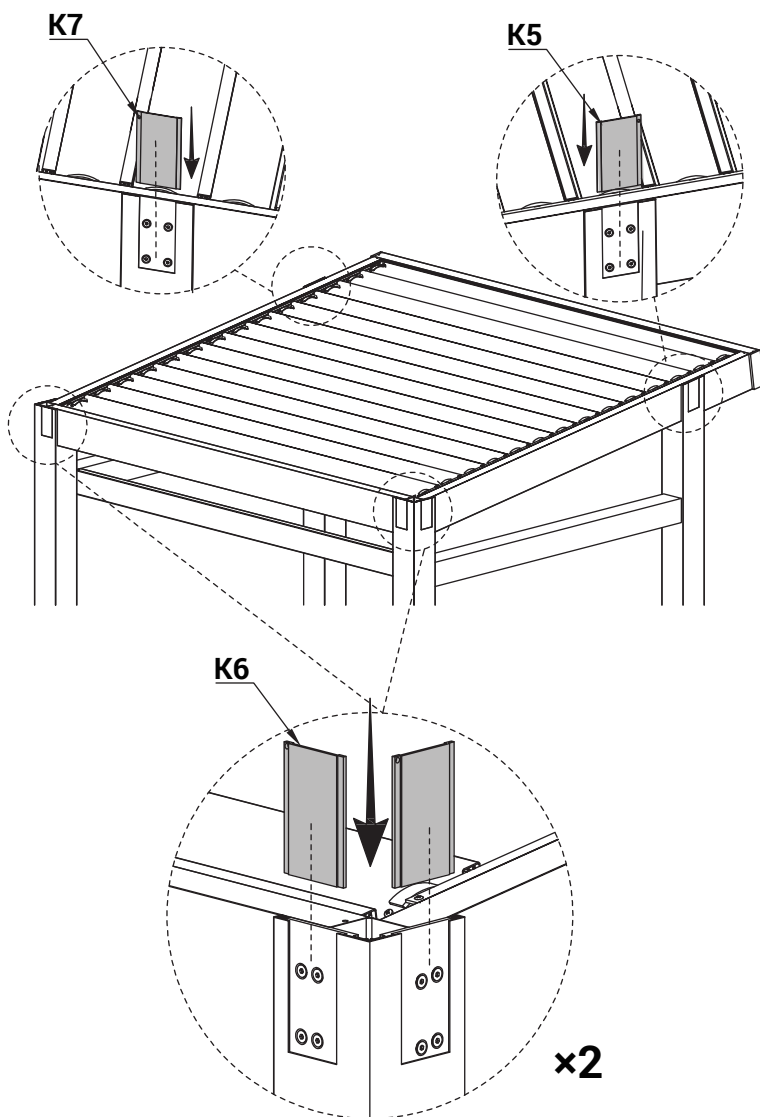
# 20




K11	 ×1	S4	 ×3
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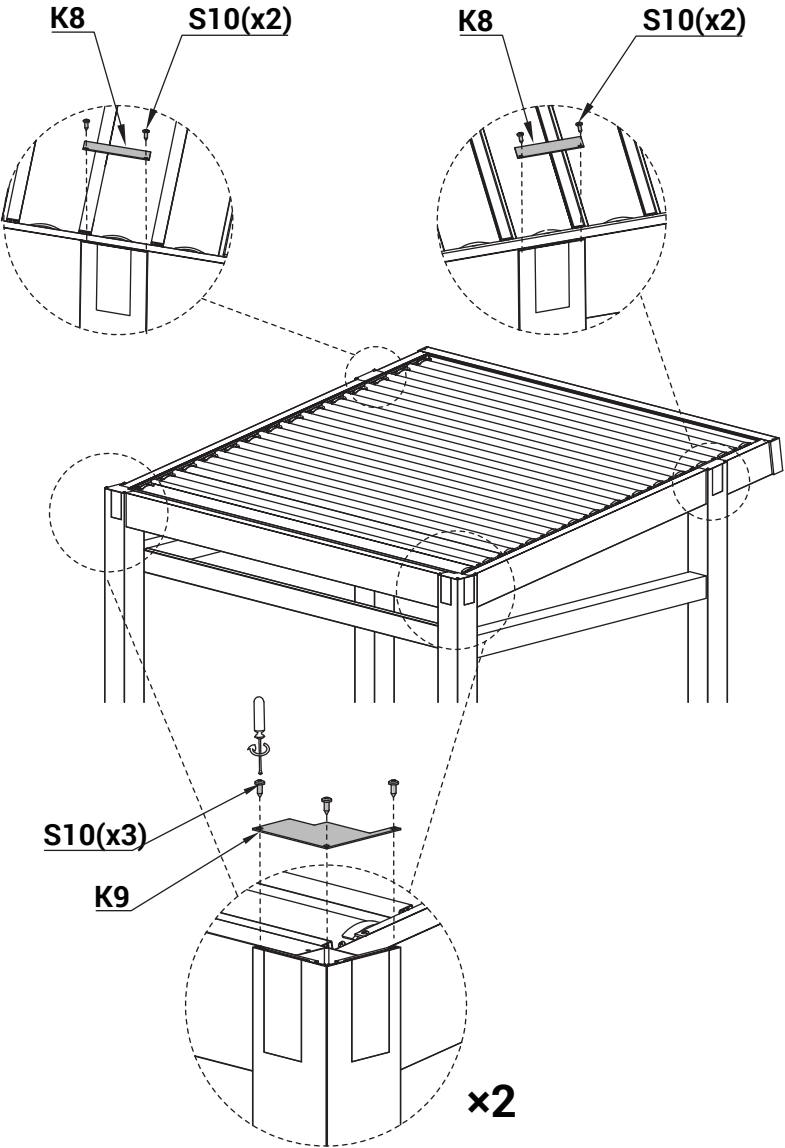
 **DO NOT USE EXCESSIVE FORCE, THERE IS A LIMIT TO THE ANGLE OF ROTATION OF THE CRANK HANDLE.**





K6		x4	K7		x1	K5		x1
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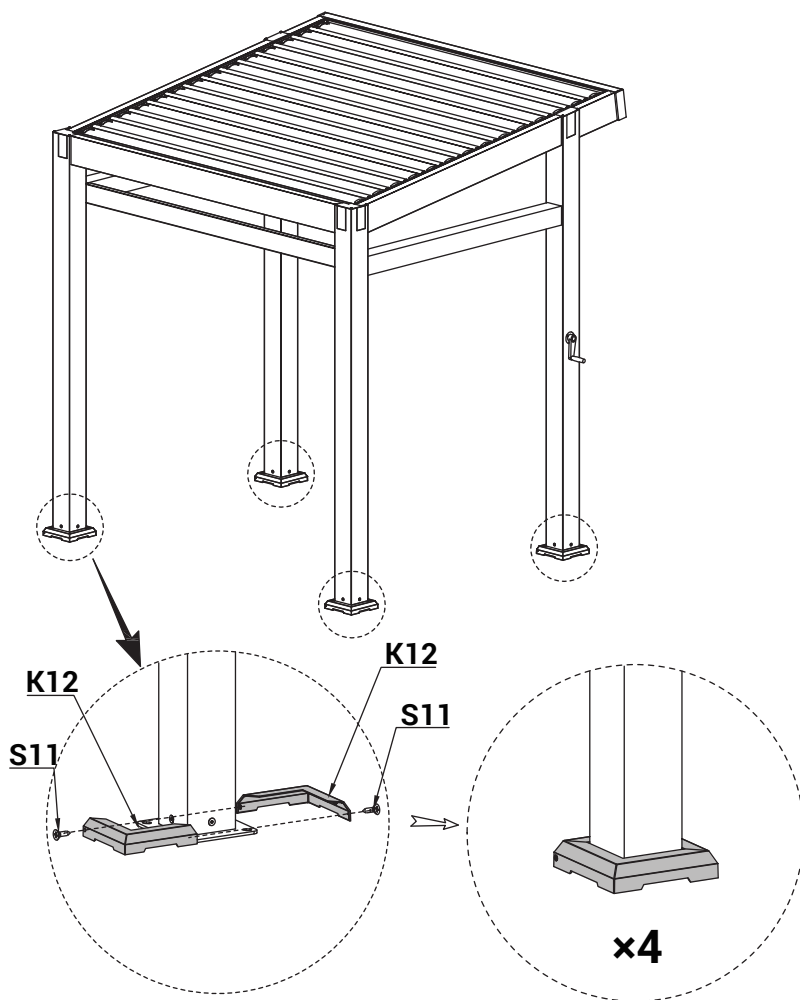


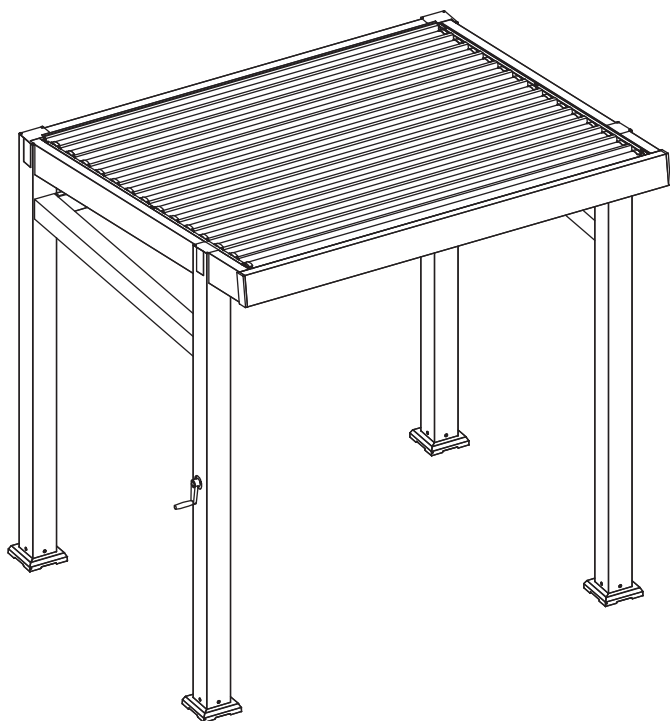
K9		x2	K8		x2	S10		x10
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# 23

K12  ×8	S11  ×8
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**ASSEMBLY COMPLETE**  
**CONGRATULATIONS!** 🎉



**CHECK ALL THE FITTINGS ARE TIGHTENED SECURELY.**  
**CHECK AND TEST THE OPERATION OF THE LOUVER MECHANISM.**

## MAINTENANCE & CARE

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- ⚠ Immediately after installation, clean all LuxPatio powder-coated surfaces with a solution of warm water and a non-abrasive, pH-neutral detergent. Thoroughly rinse all surfaces to remove any residue, using a soft cloth or sponge for best results.
- ⚠ Remove construction materials (e.g., concrete, plaster, and paint splashes) promptly —before they dry—as they can damage powder-coated finishes.
- ⚠ Do not allow metal shavings or chips to fall into pools, hot tubs, or any body of water while assembling . This can cause staining.
- ⚠ Clean regularly. Frequency depends on both the appearance standard you desire and the need to remove deposits that may damage the coating over time. LuxPatio recommends cleaning every 3 to 4 months.
- ⚠ Debris can collect in gutters. Clean the Pergola gutters regularly to ensure proper rain water drainage through the Pergola system.
- ⚠ Never place items on top of the louvers.
- ⚠ During heavy winds or snowfall, open the louvers to the vertical position to prevent damage.
- ⚠ Do not operate the roof mechanism during icy or frosty conditions.
- ⚠ Conduct seasonal inspections to keep the Pergola in optimal working condition. Check that:
  - The Pergola is securely fixed to the ground.
  - The louver mechanism operates normally.
  - Electrical features (if any) are functional and safe.
- ⚠ Retain this instruction manual for future reference.
- ⚠ If you require service or maintenance for your LuxPatio product, please contact [support@luxpatio.com](mailto:support@luxpatio.com)

**MAINTENANCE LOG**

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DATE	DESCRIPTION	OTHER

## **WARRANTY**

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We regret to inform you that warranty claims cannot be accepted without valid proof of purchase.

Warranties are valid from the date of delivery and apply only to the original purchaser.

To help us process your claim efficiently, please ensure that all warranty terms have been followed.

Full warranty terms are available at:

<https://www.luxpatio.com/pages/warranty>

This warranty applies only to residential use within the United States. It does not cover:

- Commercial use
- Misuse or improper handling
- Accidental damage
- Normal wear and tear

We reserve the right to repair or replace parts at our discretion rather than replacing the complete unit.

## **DISASSEMBLY**

The serious injury and product damage could be caused by incorrect disassembly of this Pergola. For the product disassembly, it should be assigned to the qualified personnel with the full-time training on the occupational health and safety and the product knowledge.

**MADE IN CHINA**



**WARNING:** This product can expose you to chemicals including DBP and DEHP, which is known to the State of California to cause cancer or birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov/furniture](http://www.P65Warnings.ca.gov/furniture).

# Spaces for What Matters



[www.luxpatio.com](http://www.luxpatio.com) | Email: [support@luxpatio.com](mailto:support@luxpatio.com)