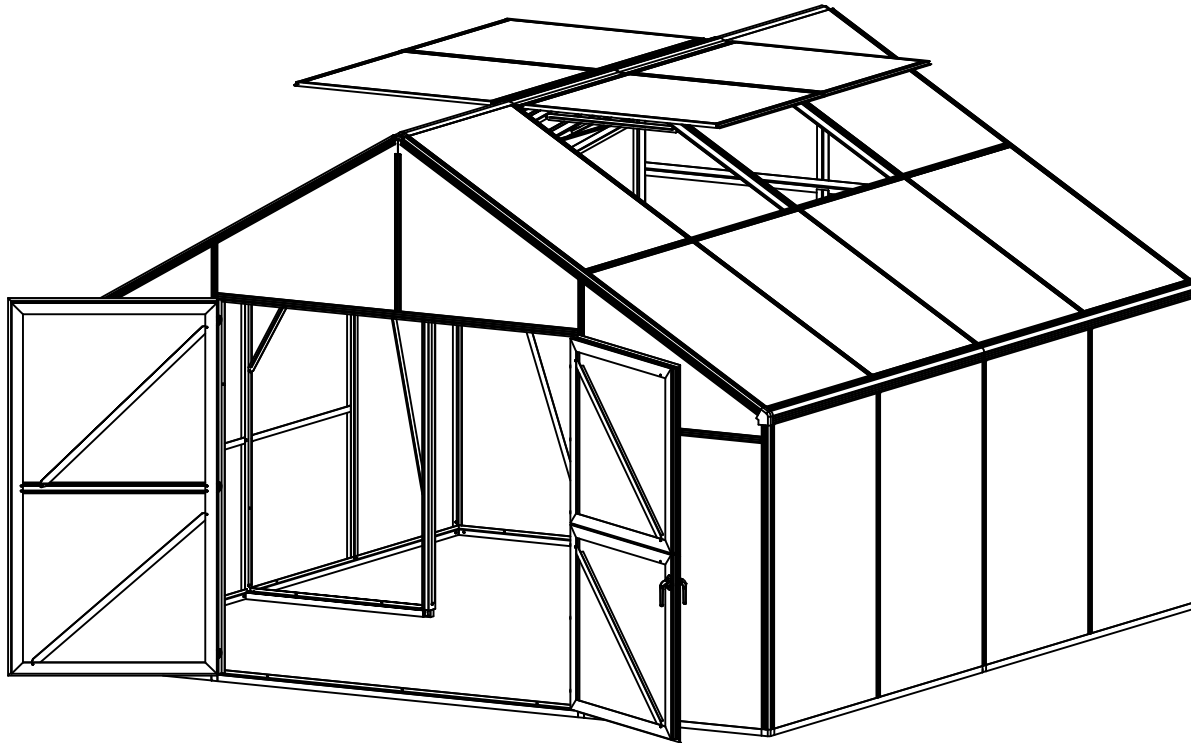


GROW MORE Greenhouses

Assembly Instructions



MODEL: GM13

GREENHOUSE SIZE: 13' 3 7/8"L x 13' 3 7/8"W x 8' 11 1/2"H
406cm L x 406cm W x 273cm H

EXTENSION SIZE: 6' 6 3/4"L x 13' 3 7/8"W x 8' 11 1/2"H
200cm L x 406cm W x 273cm H

PLEASE READ INSTRUCTIONS CAREFULLY BEFORE ASSEMBLY

Item No.	Model No.	Packing List				
		AL No.1	AL No.2	AL No.3	PC No.1	PC No.2
2553200	GM13	1CTN <input type="checkbox"/>	1CTN <input type="checkbox"/>	1CTN <input type="checkbox"/>	1CTN <input type="checkbox"/>	2CTNS <input type="checkbox"/>
2553250	GM13 ext			1CTN <input type="checkbox"/>		1CTN <input type="checkbox"/>



Customer Support

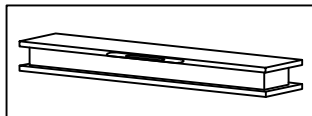
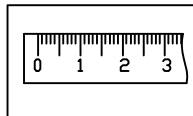
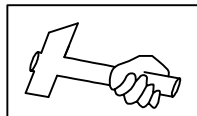
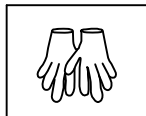
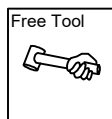
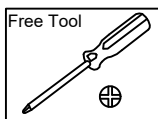
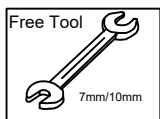
Support@ACFgreenhouses.com
1-888-888-9050

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7. Framework & Panel Assembly	Page 19-36

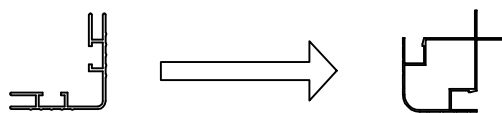
Assembly and Maintenance Advice

1. For safety purposes, we strongly recommend that this product is assembled by at least two people.
2. Some components have sharp metal edges. Please be careful when handling metal components. Please wear gloves, shoes and safety goggles during assembly.
3. Lay all of the components on a soft carpet or blanket to avoid any scratches or damages.
4. DO NOT climb or stand on the roof. Heavy articles should not be leaned against the greenhouse.
5. Keep the roof and gutter clear of snow, dirt & leaves. Allowing snow to build up on the roof may damage the product.
6. Unlike steel, if the paint finish is scratched this will not harm the aluminium underneath.
7. When your product needs cleaning, use a mild detergent solution and rinse with cold clean water. Do not use acetone, abrasive cleaners or strong detergents to clean the panels.

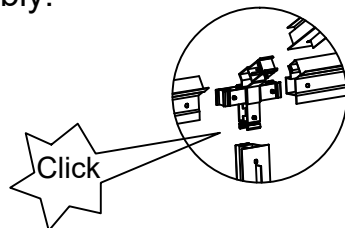


Functions and Features:

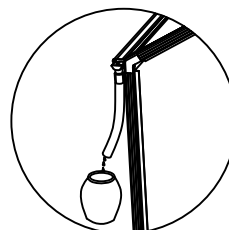
1. Compared with traditional greenhouses this exciting product features many significant improvements. The hollow box profile aluminium framing is much stronger than other greenhouses and it can withstand much greater pressure.



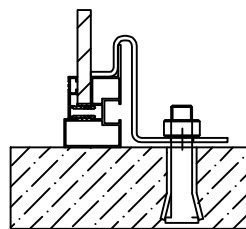
2. Easy and fast assembly.



3. The strong two part eaves beam includes an integral gutter. Downpipes are also included as standard so you can collect rainwater.

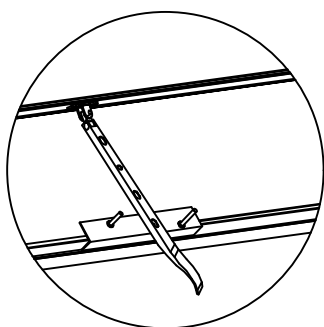


5. A steel base is not required as the aluminium base frame is fixed to the necessary concrete footings with the expansion bolts provided, alternatively you can easily secure it to a timber base with timber screws(not provided).

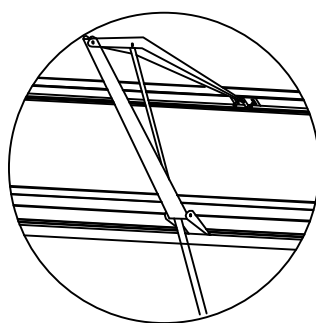


Expansion screw / Concrete ground

6. The Grange Series greenhouses come standard with Manual opening arms. Automatic openers can be purchased seperately and fitted to any window vent. We recommend two automatic vent openers be fitted to each vent in the same positions the standard manual vent arms.

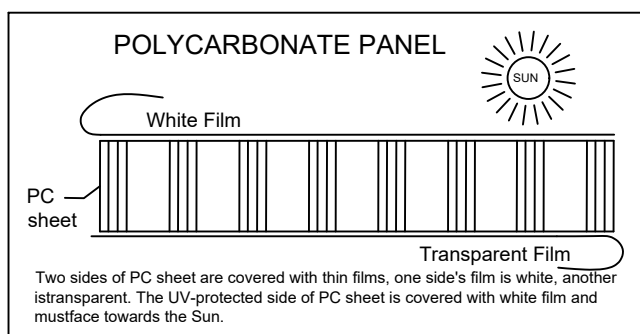


Manual opener

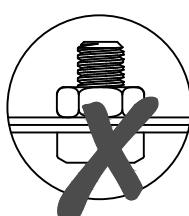
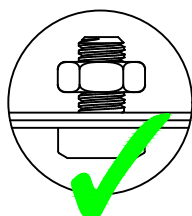


Automatic opener

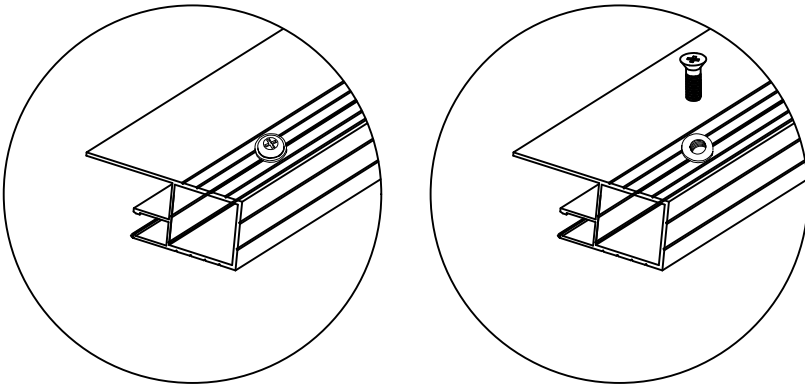
7. Please ensure the roof vents are not installed into the end roof bays of the greenhouse as this is where you need the bracing.
8. Each Polycarbonate Panel comes with UV protected properties. Please ensure the clear film with the text faces out, toward the sun Remove both films before installation of the panels.



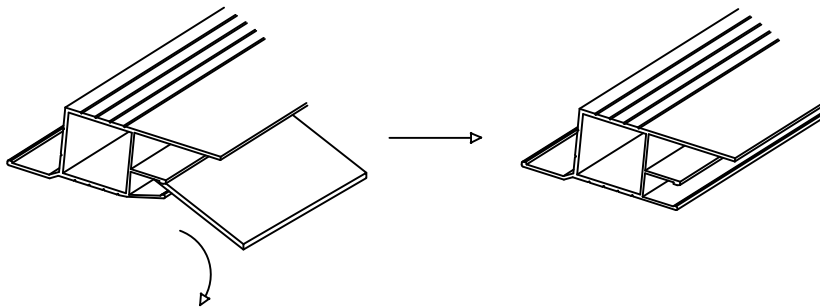
9. Nuts not to be tightened before the end of assembly! Unless otherwise stated, do not tighten the bolts/nuts/screws until the shed is finally erected!
































10. S26 and S27 are mostly installed on the profiles. Please remove S26 and S27 before installation.



























11. If the polycarbonate slot is deformed during transport, use a flat wooden or plastic block to straighten it (Avoid sharp objects to prevent damage to the aluminum).

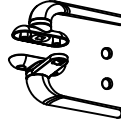




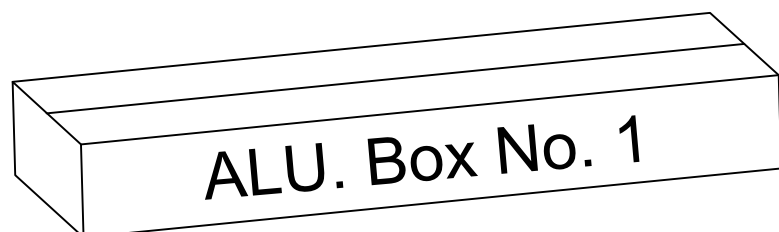
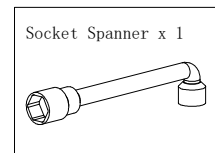
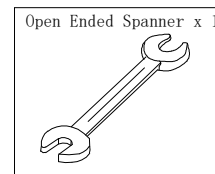
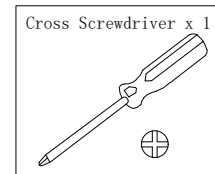
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		L01E	1
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		L01C	2
3		L02E	1
4		L03C	2
		L03D	2
5		L02F	2
6		L04B	4
		L04E	2
7		L04C	2
8		L05A	4
		L05G	4
9		L08A	4
10		L08B	2
11		L16A	1
		L16B	1
		L16C	1
		L16D	1
12		L16E	1
		L16F	1
		L16G	1
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13		L17	1
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15		L30	4





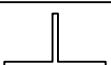



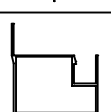





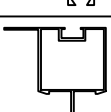

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	A10	2
	A11	2
	A89-1	2
	A89-2	2
	D07	6
	D77	12
	D17	2
	H63	9
	S05	73
	M6X12	
	M03	73
	M6	
	Z02	12
	Ø4X16D	
	Z17	18
	M5X12	
	S08	6
	M8X60	
	Z08	48
	M4.2X16	












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	J02	2
	J06R/L	2 / 2
	J92	4
	J93	4

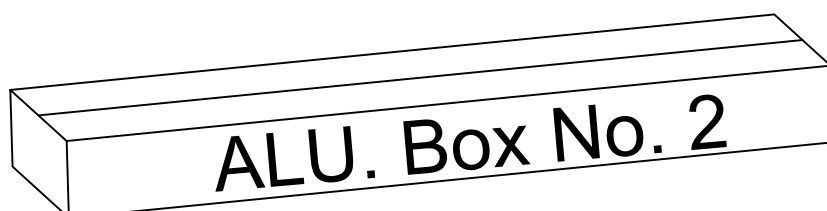
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







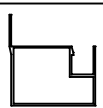



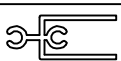
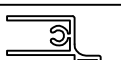
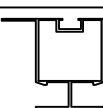
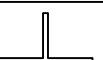






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




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12		L22	3









PART	NO.	QTY.
	A01	4
	A69	2
	A70	2
	S05	42
	M6X12	
	S11	4
	M6X20	
	M03	46
	M6	
	Z02	12
	Ø4X16D	
	Z10	8
	Ø5X30	
	Z04	8
	Ø4X8	
	D07	4
	S08	4
	M8X60	

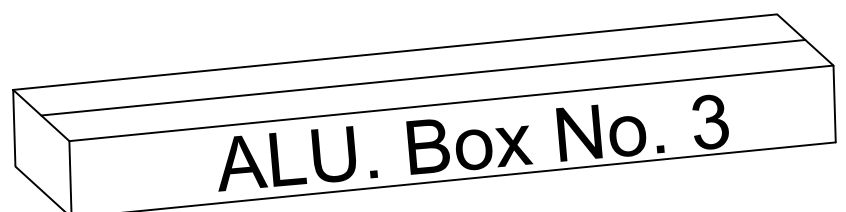


ALU. Box No.3

	PART	NO.	QTY.
1		L02A	2
2		L02B	2
3		L04B	2
4		L05B	2
		L05C	2
		L05D	2
5		L06	1
6		L07	2
7		L08B	2
8		L09	2
9		L15A	2
10		L19	4
		L20	2
		L21	2
11		L04E	2
12		L22	3
13		L03A	2
14		L03B	2
15		L03K	2
16		L08A	2
17		L05E	2
		L05F	4



PART	NO.	QTY.
	A01	4
	A69	2
	A70	2
	S05	56
	M6X12	
	S11	4
	M6X20	
	M03	60
	M6	
	Z02	12
	Ø4X16D	
	Z10	8
	Ø5X30	
	Z04	8
	Ø4X8	
	D07	4
	S08	4
	M8X60	

PART	NO.	QTY.
	D17	2
	A12	2
	A13	1
	A15	2
	A16	2
	J03	2
	J04	1
	J07	2








PC Box No. 1







Door Assembly

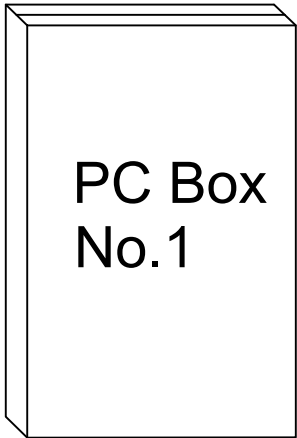
PART	NO.	QTY.
	Y12	2
	Y11	2

Front Assembly

PART	NO.	QTY.
	Y1	1
	Y2	2
	Y4	1
	Y5	1
	Y13	1

Back Assembly

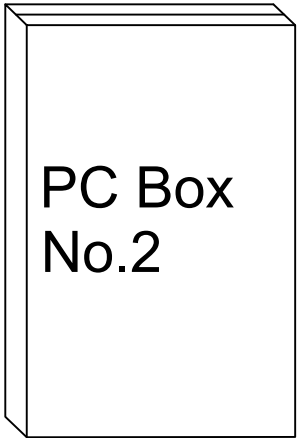
PART	NO.	QTY.
	Y1	1
	Y2	2
	Y3	4
	Y4	1
	Y5	1
	Y13	1

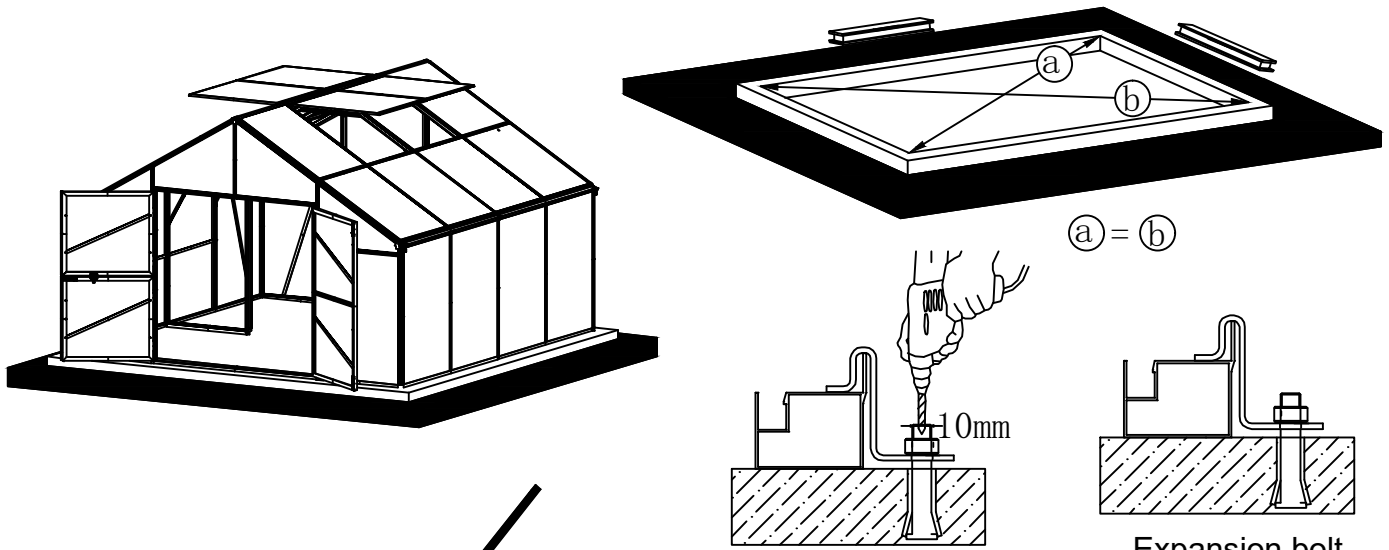


PC Box No. 2

2 Sections Assembly

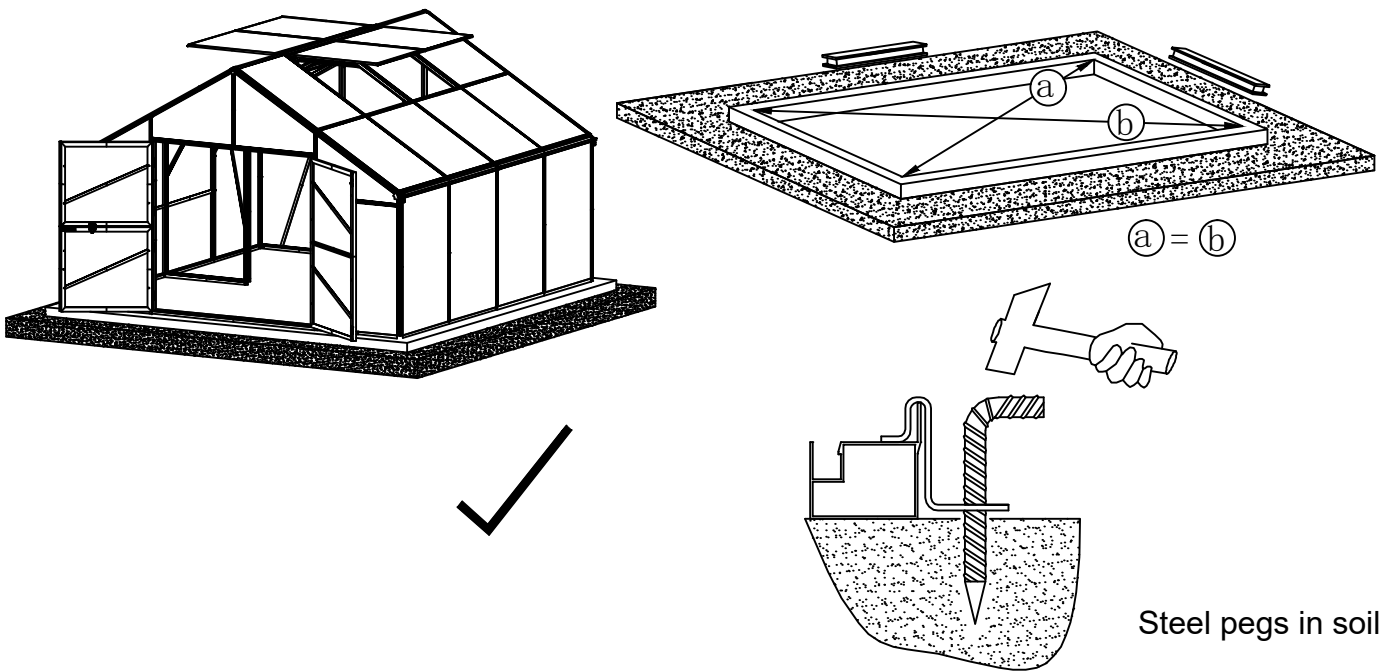
PART	NO.	QTY.
	Y6	4
	Y7	6
	Y10	2



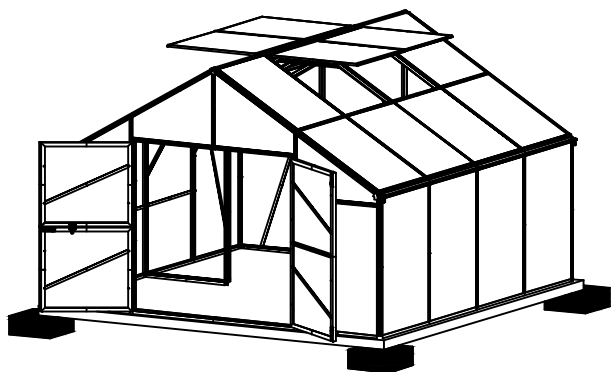


It is essential the dimensions $a + b$ are the same to ensure the base is square.

Expansion bolt
in concrete



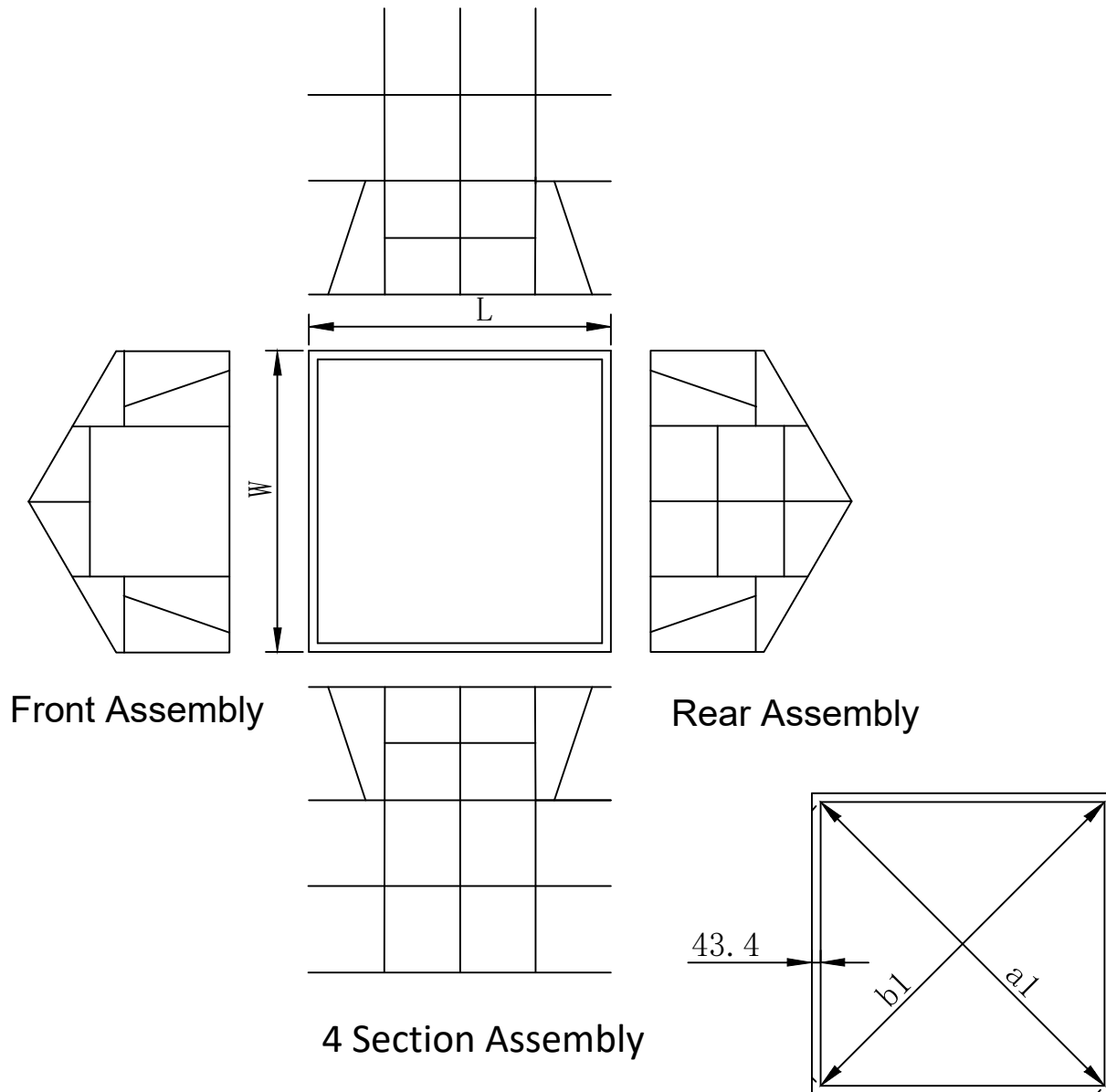
Steel pegs in soil



Support at the corners only is inadequate.



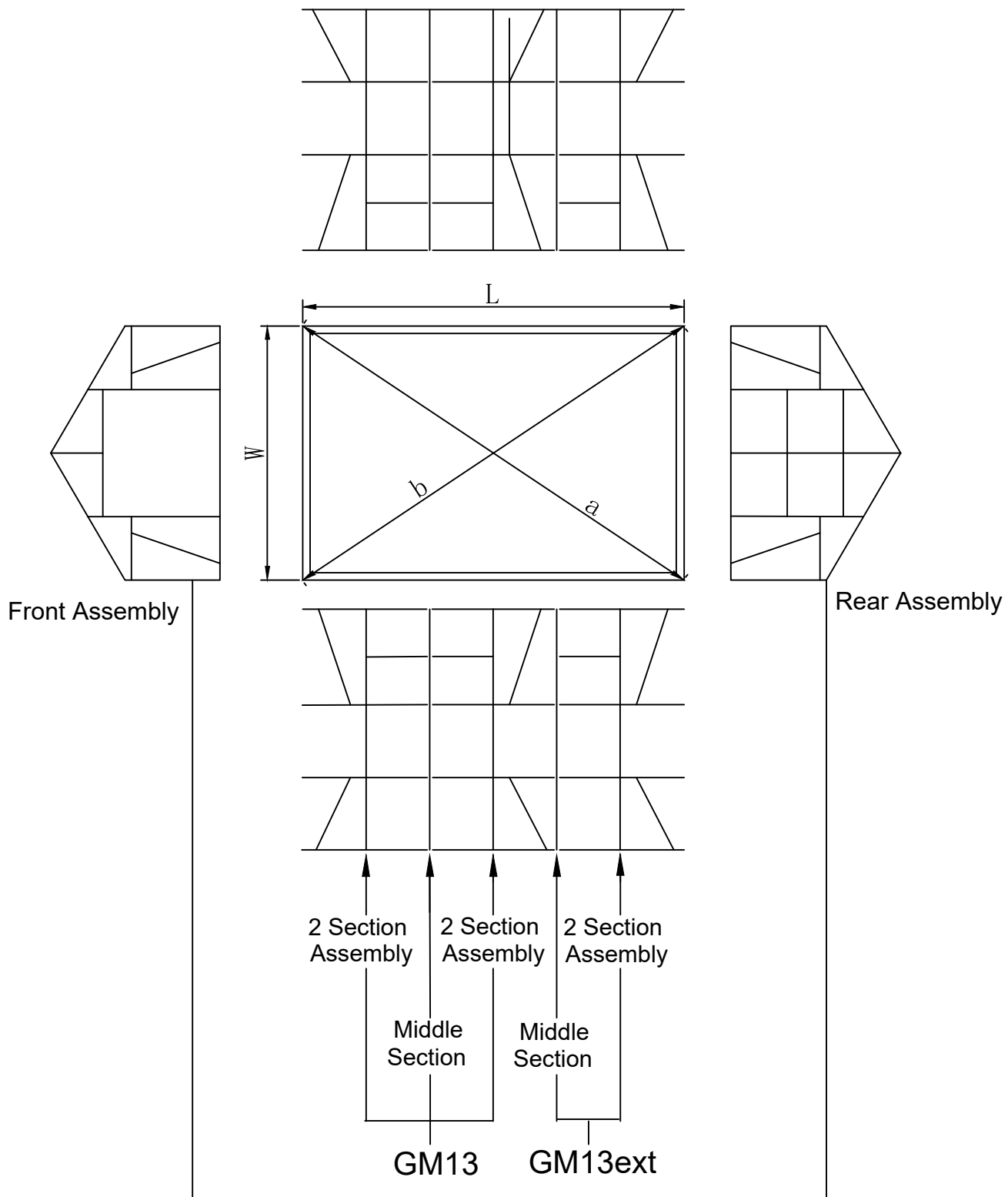
GM13





Dim/Model	GM13	GM13+Ext(1)	GM13+Ext(2)	GM13+Ext(3)	GM13+Ext(4)	GM13+Ext(5)	etc.
W(mm)	4059.4	4059.4	4059.4	4059.4	4059.4	4059.4	
L (mm)	4059.4	6061.6	8063.8	10066	12068.2	14070.4	
a=b(mm)	5740.9	7295.3	9027.9	10853.7	12732.7	14644.3	
a1=b1(mm)	5615.3	7172.3	8909	10738.5	12620.6	14534.8	



- * W= Outer Width of Base Profiles
- * L= Outer Length of Base Profiles
- * a=b= Outer Diagonal of Base Profiles
- * a1=b1= Inner Diagonal of Base Profiles

GM13+Ext(1)



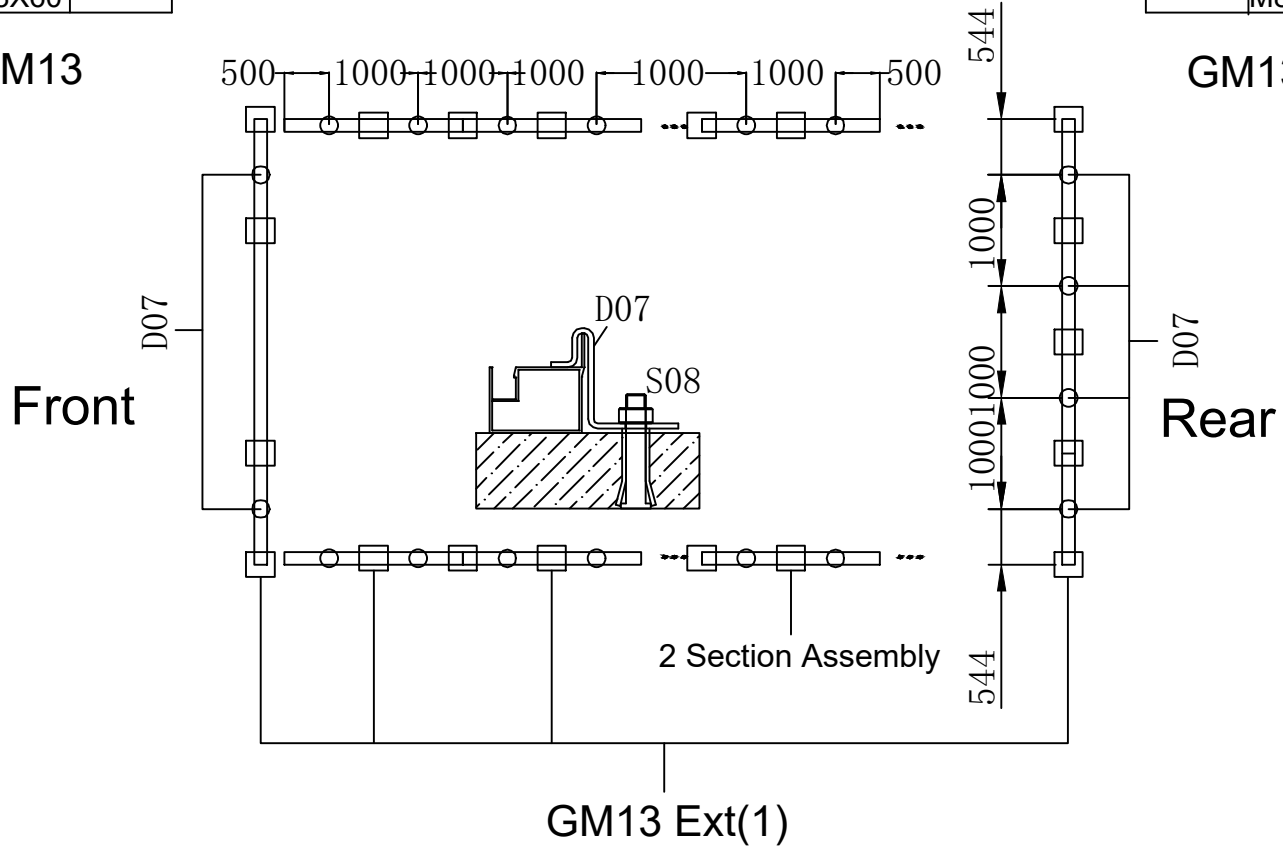
* The basic model, GM13, can be easily extended by adding a '2 Section Assembly' each time for a longer size

PART	NO	QTY
	D07	14
	S08 M8X60	14

PART	NO	QTY
	D07	4
	S08 M8X60	4

GM13

GM13 2EXT



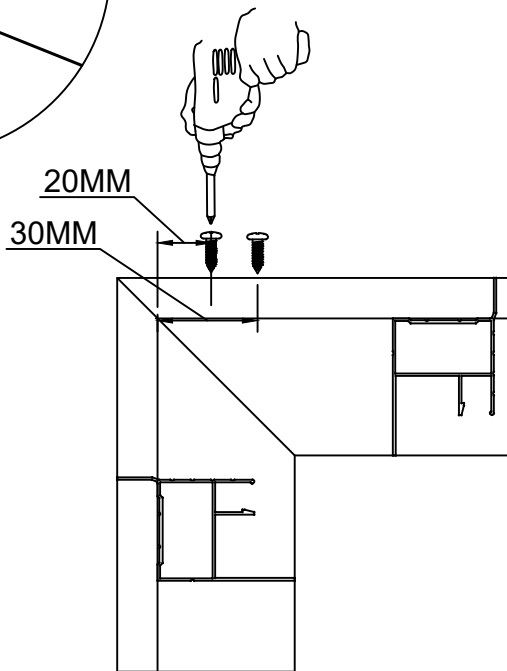
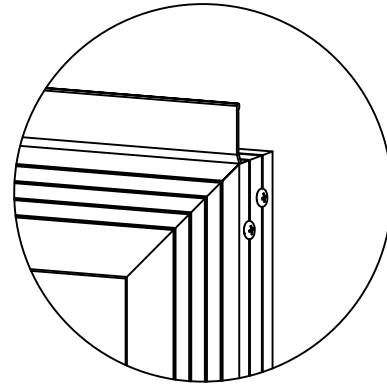
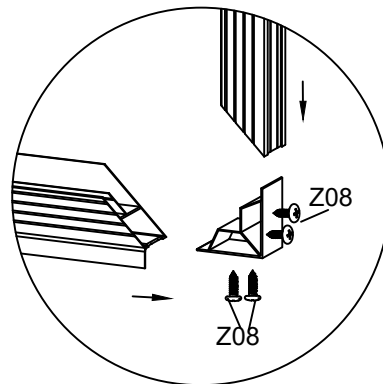
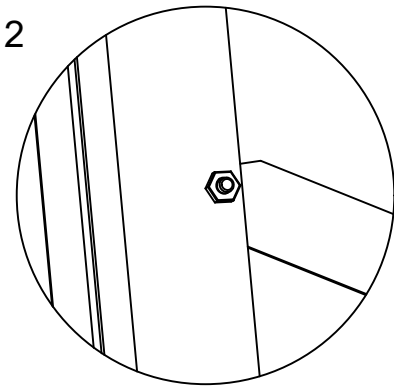
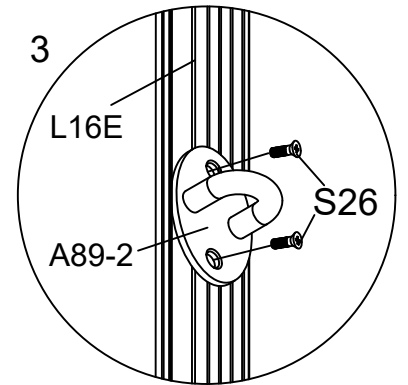
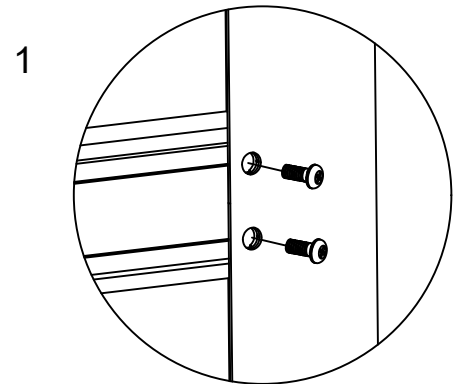
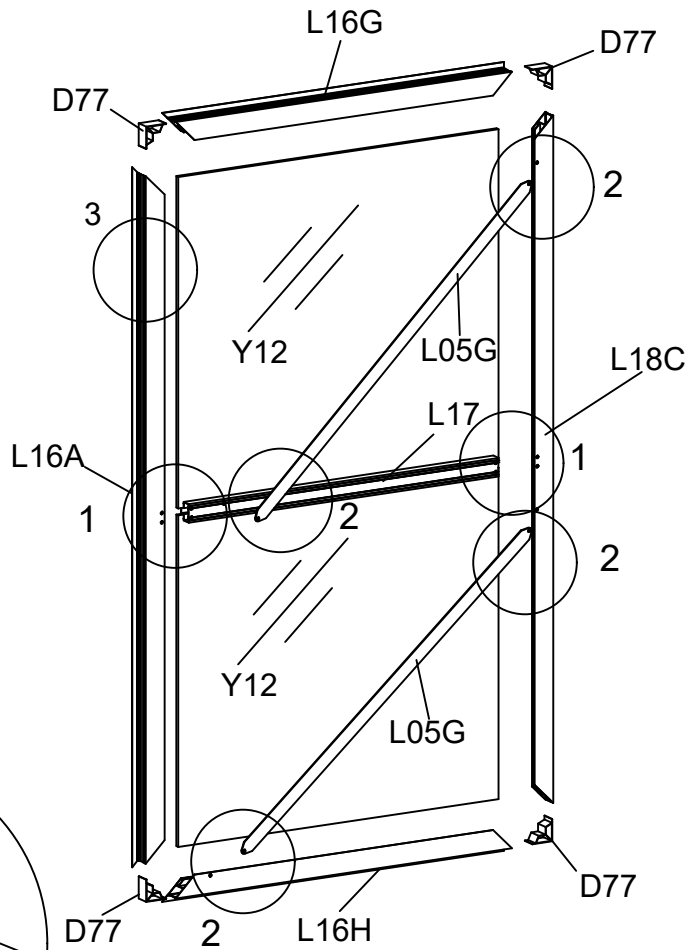
* This shows a layout for W05's positions where it is placed in the middle of PC panel for each section.

* All measurements in above diagram are in mm.

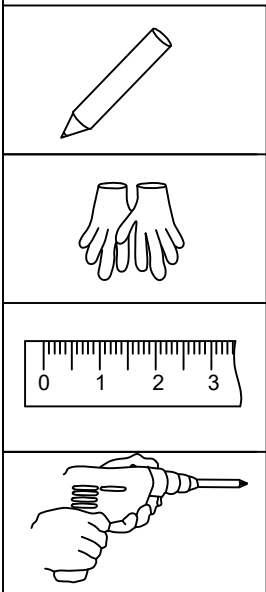
PART	NO	QTY
	L18C	1
	L17	1
	L16A	1
	L16G	1
	L16H	1
	L05G	2
	D77	4
	A89-2	1
	S26A M5X12	5
	S26 M3X12	2
	S05 M6X12	3
	M03 M6	3
	Z08 M4.2X16	16
	Y12	2

Door-L Assembly

Insert Connector D77 into each end of the profiles L16A & L16G & L16H & L18C.



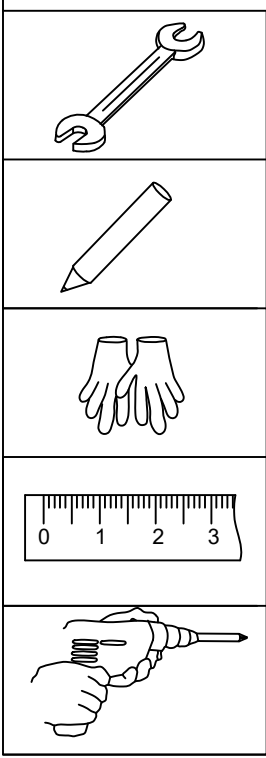
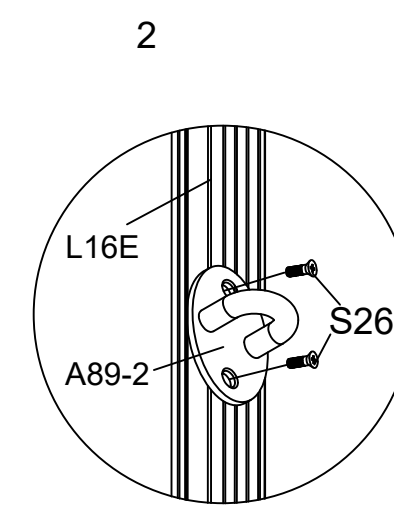
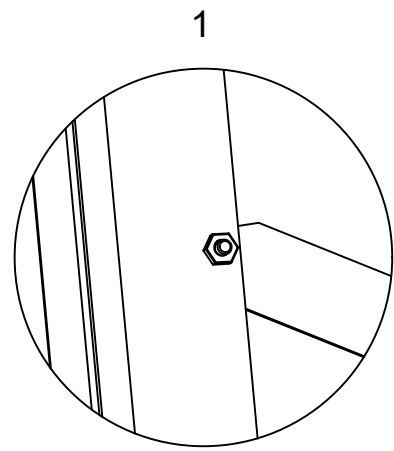
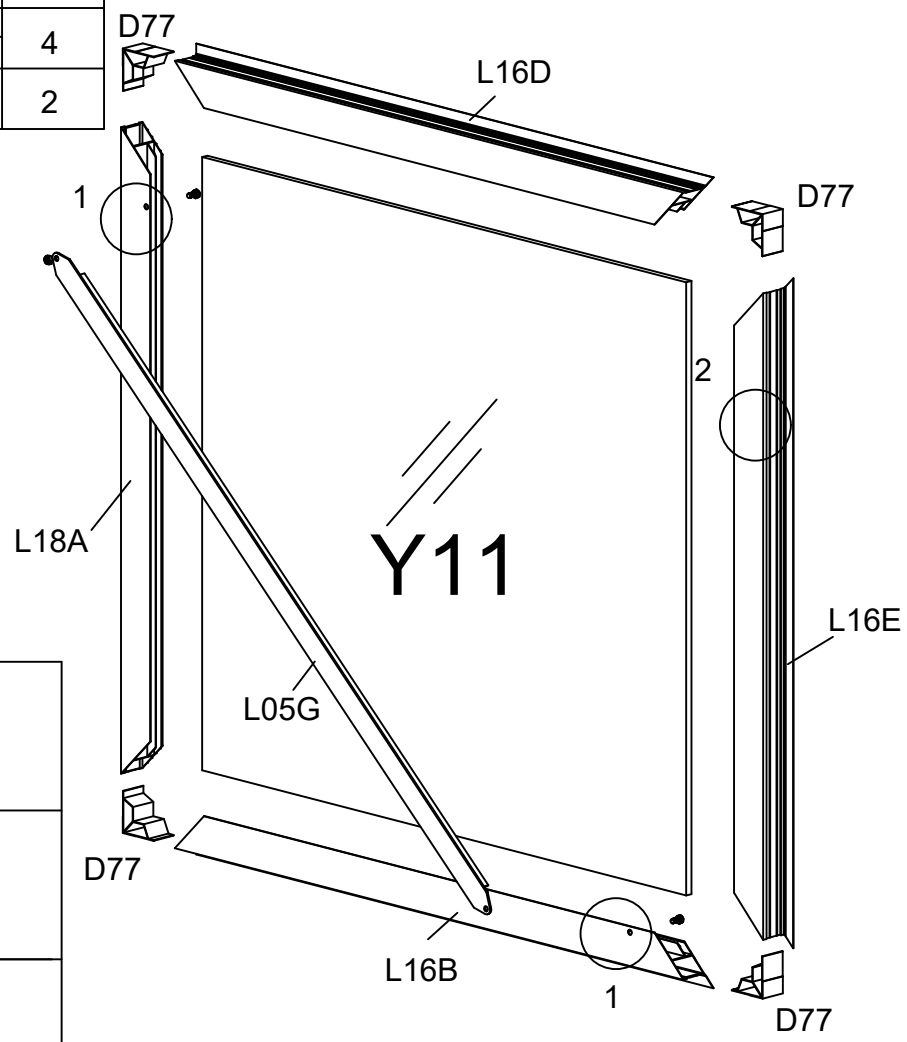
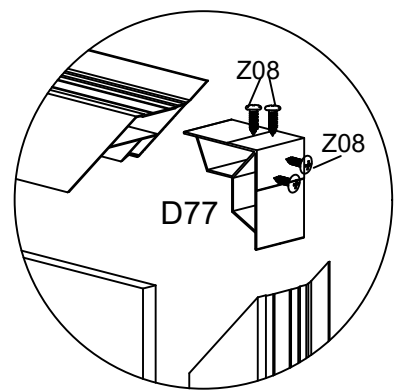
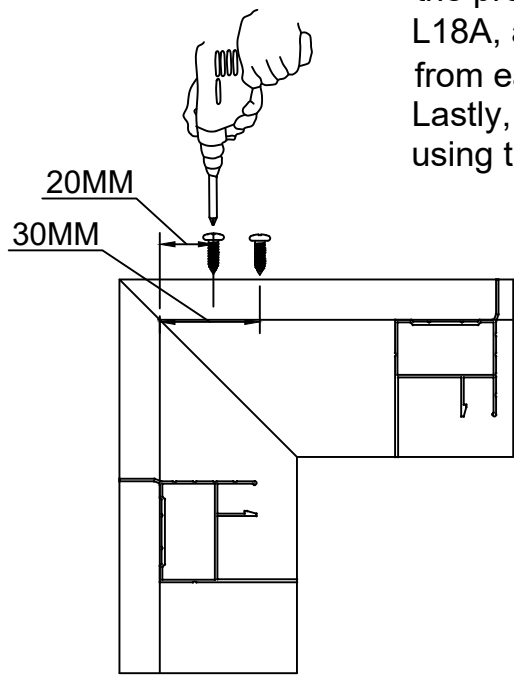
Then mark the distance from each end about 20/30MM. Lastly, secure them with screws Z08 using the powered screw-driver.



PART	NO	QTY
	L18A	2
	L18B	1
	L16B	1
	L16C	1
	L16D	1
	L16E	1
	L16F	1
	L05G	2
	D77	8
	A89-2	1
	S26	2
	M3X12	
	Z08	32
	M4.2X16	
	S05	4
	M6X12	
	M03	4
	M6	
	Y11	2

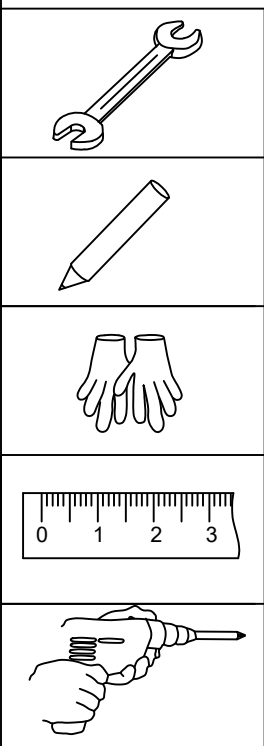
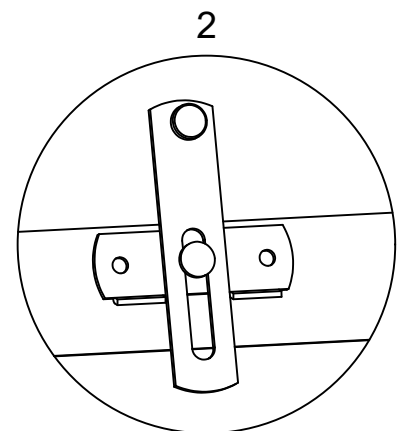
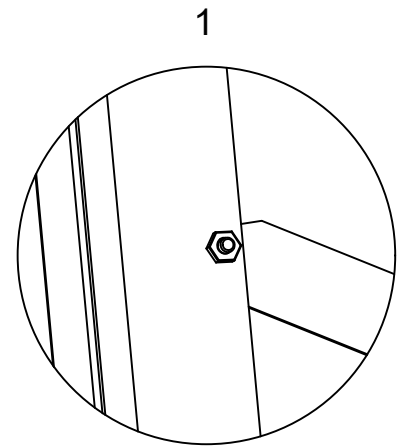
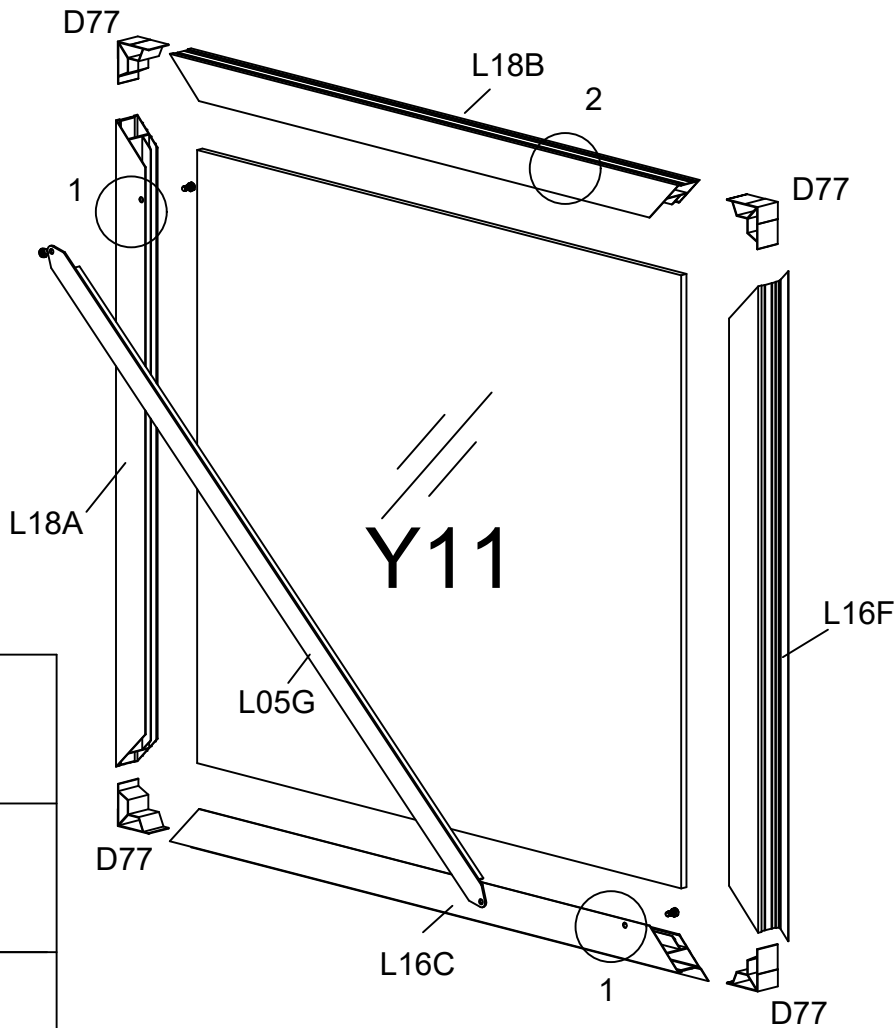
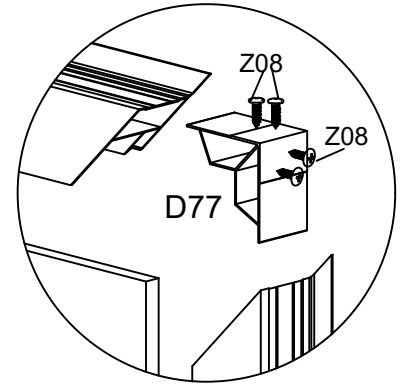
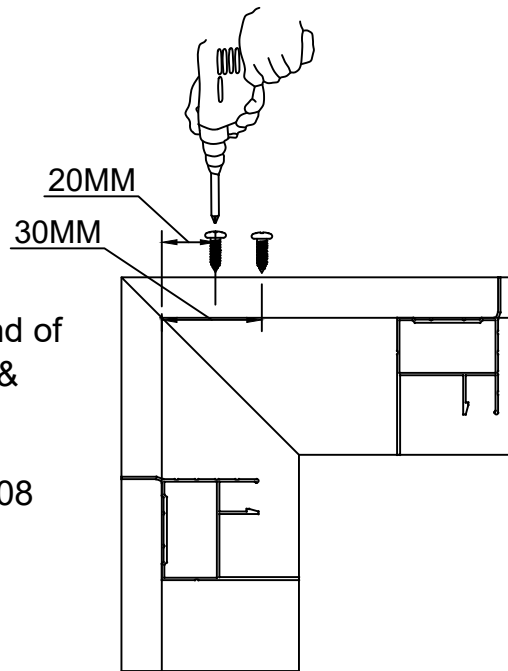
Door-R1 Assembly

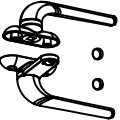


Insert Connector D77 into each end of the profiles L16B & L16D & L16E & L18A, and then mark the distance from each end about 20/30MM. Lastly, secure them with screws Z08 using the powered screw-driver.

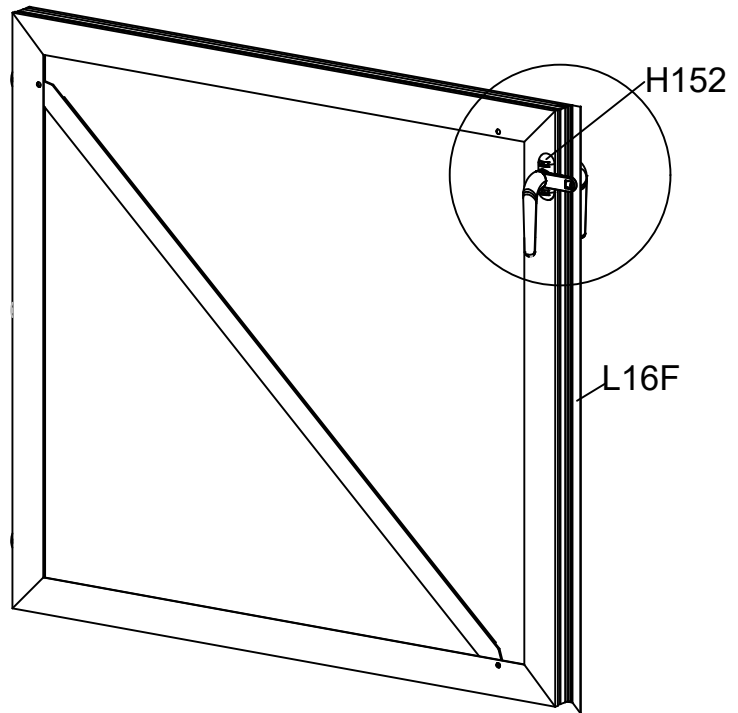


Door-R2 Assembly

Insert Connector D77 into each end of the profiles L16C & L16F & L18A & L18B, and then mark the distance from each end about 20/30MM. Lastly, secure them with screws Z08 using the powered screw-driver.

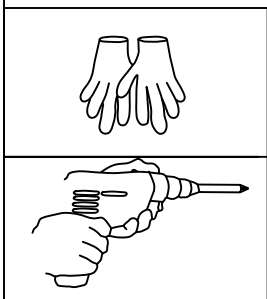
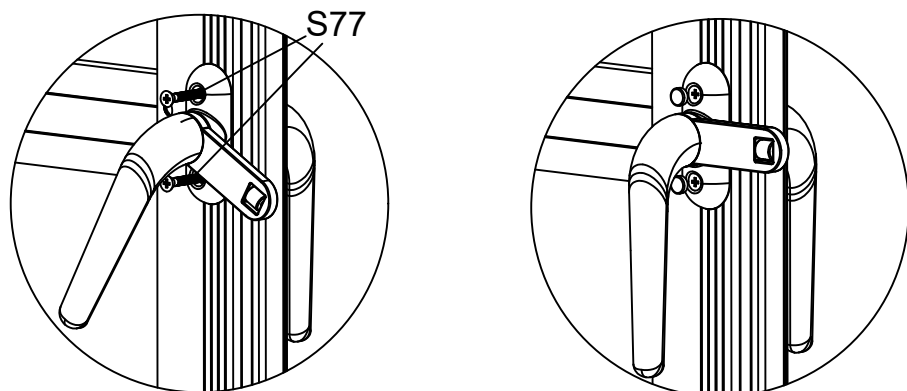
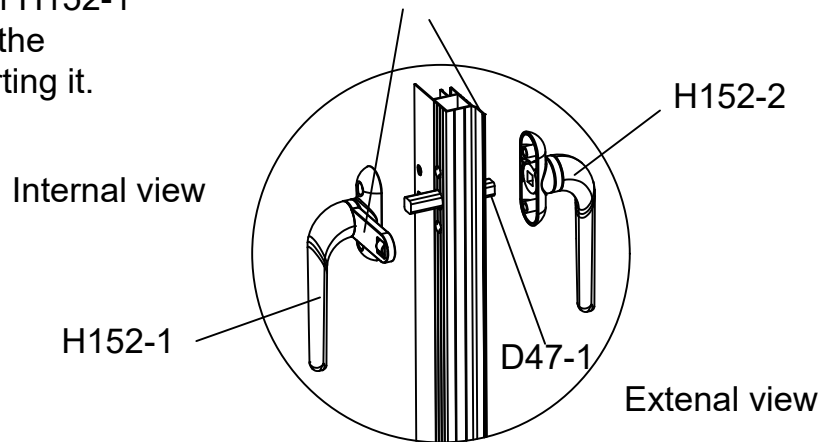










PART	NO	QTY
	H152	1
	D47-1	1
	S77 M4X50	2



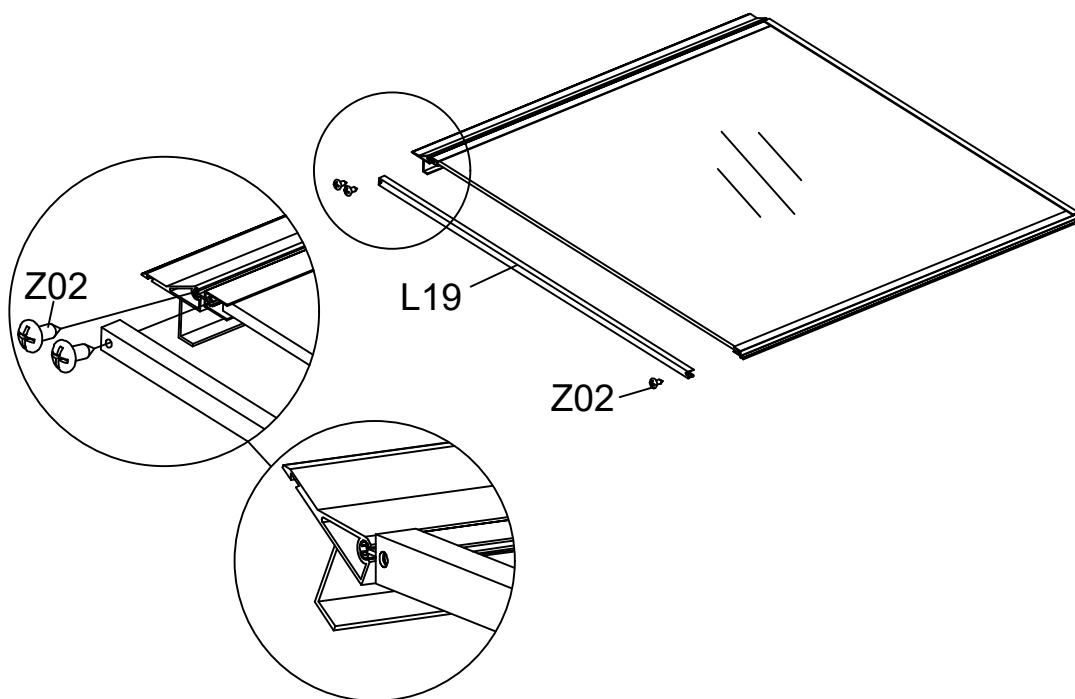
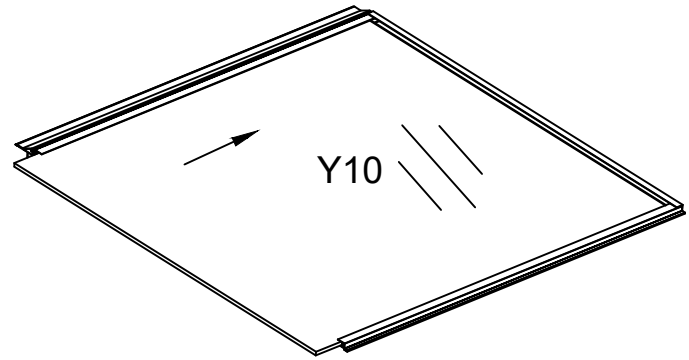
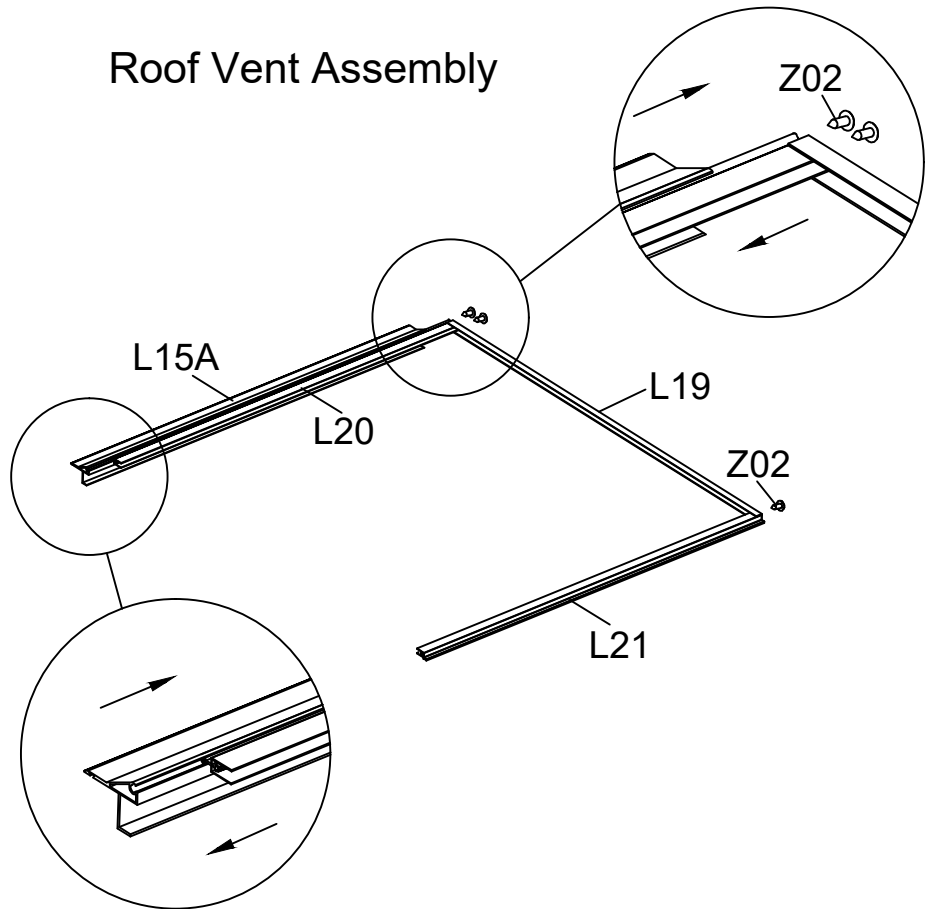
After installing the door, attach handle H152.
 First, insert D47 into the door hole, then install H152.
 When installing, ensure that the long tongue of H152-1
 faces towards the edge of the door, and align the
 square hole of H152-1/2 with D47 before inserting it.
 attach the decorative cover.









Pay attention to the installation direction

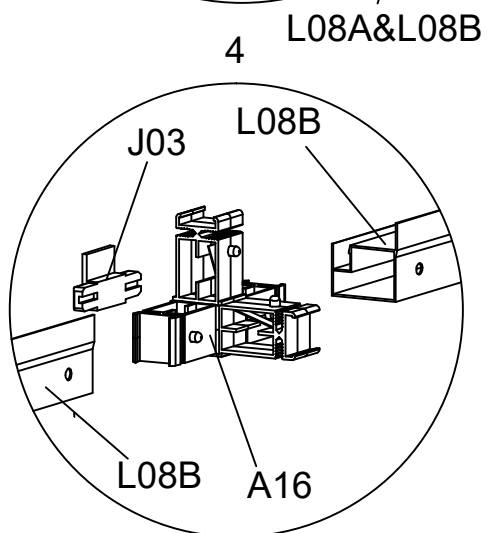
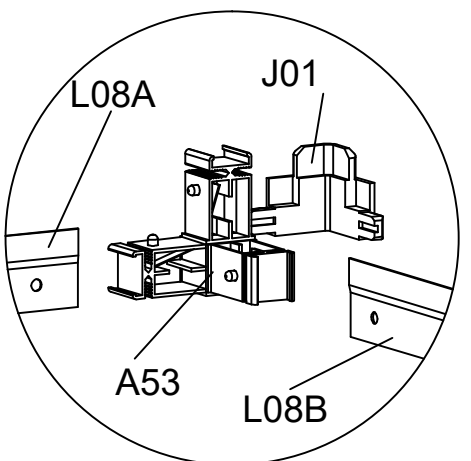
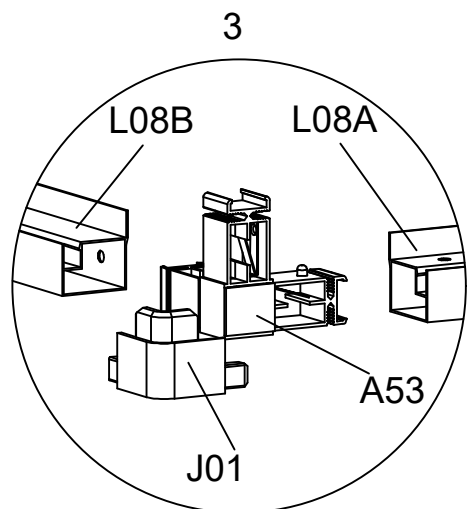
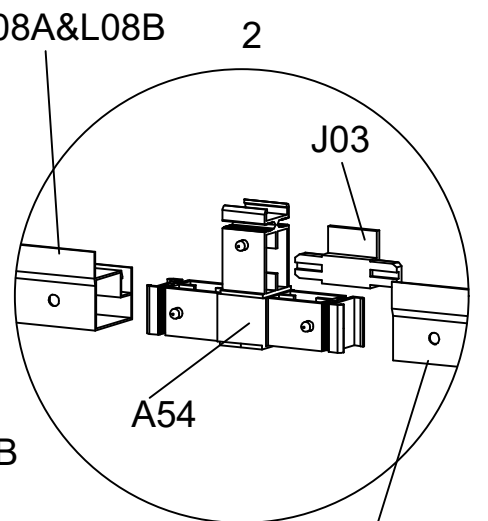
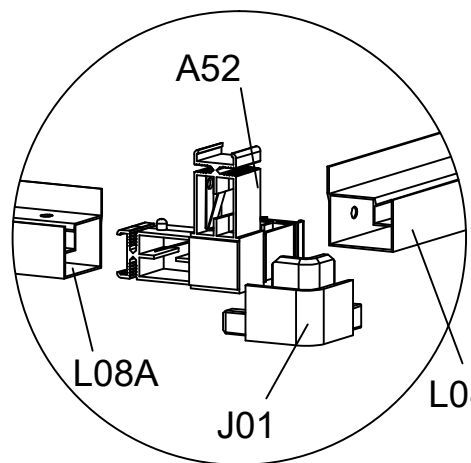
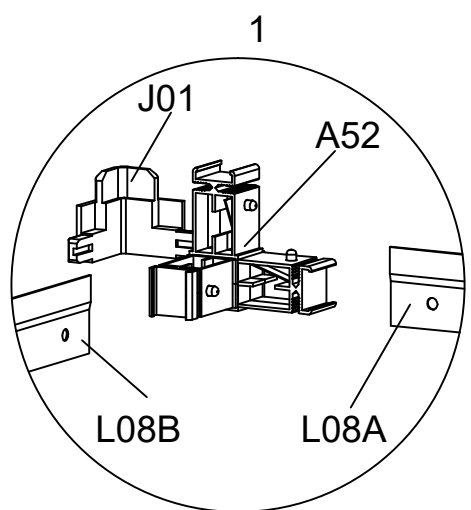
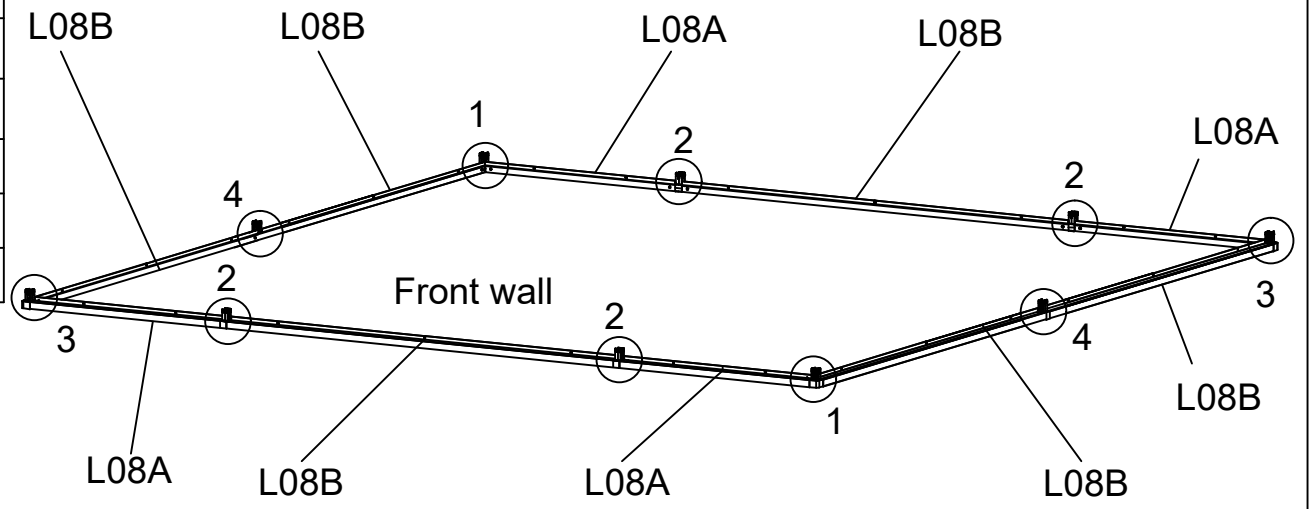


PART	NO.	QTY.
	L15A	1
	L19	2
	L20	1
	L21	1
	A01	2
	Z02 Ø4X16D	6
	Z04 Ø4X8	4
	Y10	1

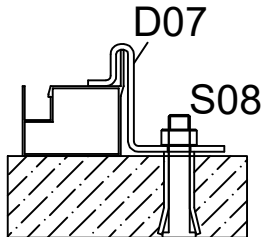
Roof Vent Assembly









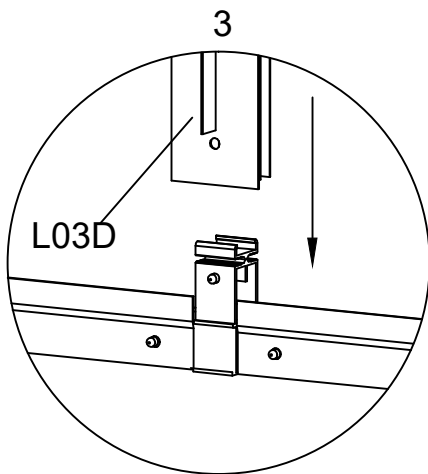
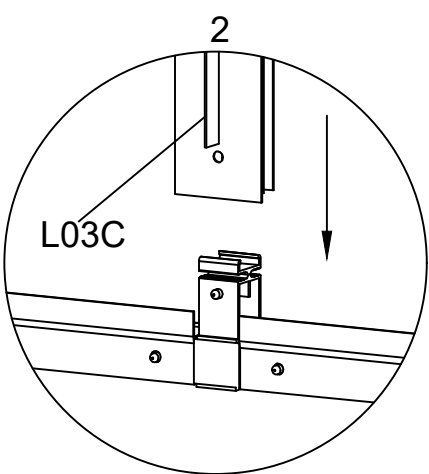
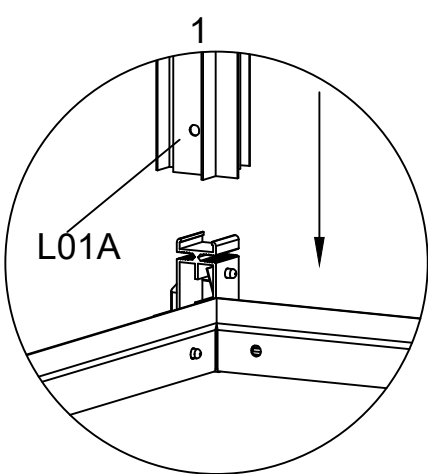
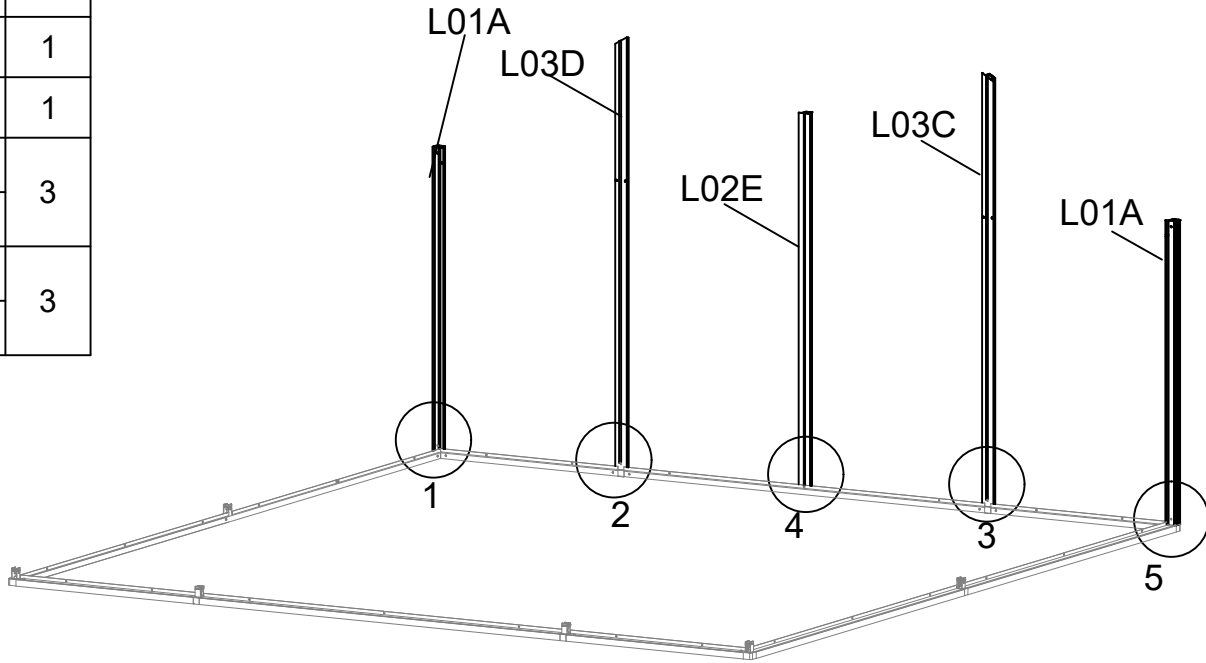
PART	NO.	QTY.
	L08A	4
	L08B	6
	A52	2
	A53	2
	A54	4
	A16	2
	J01	4
	J03	6



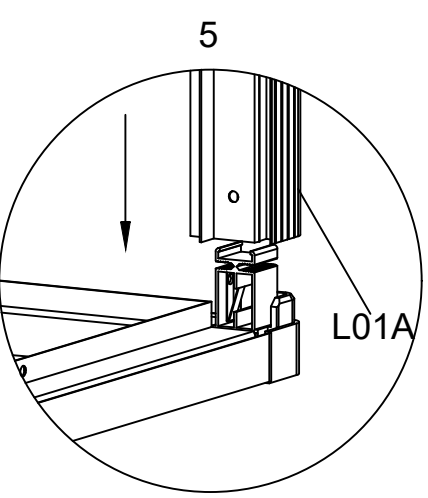
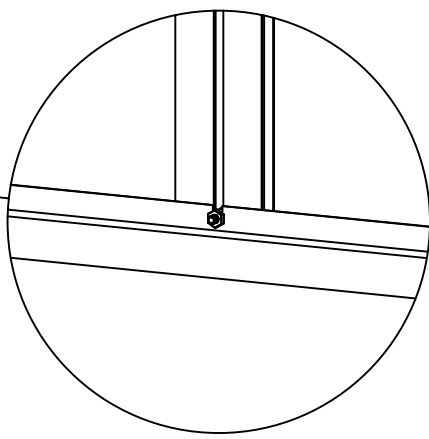
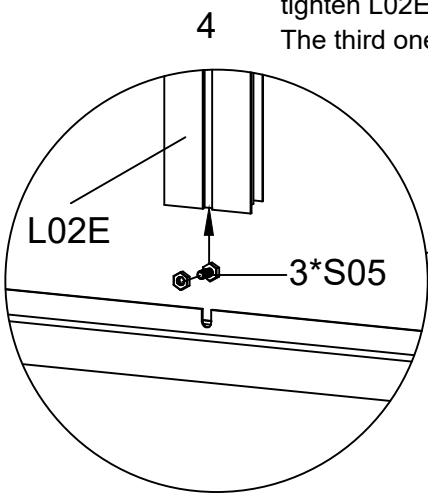
Assemble all D07 followed by previous Page 15 after each base profile is connected.



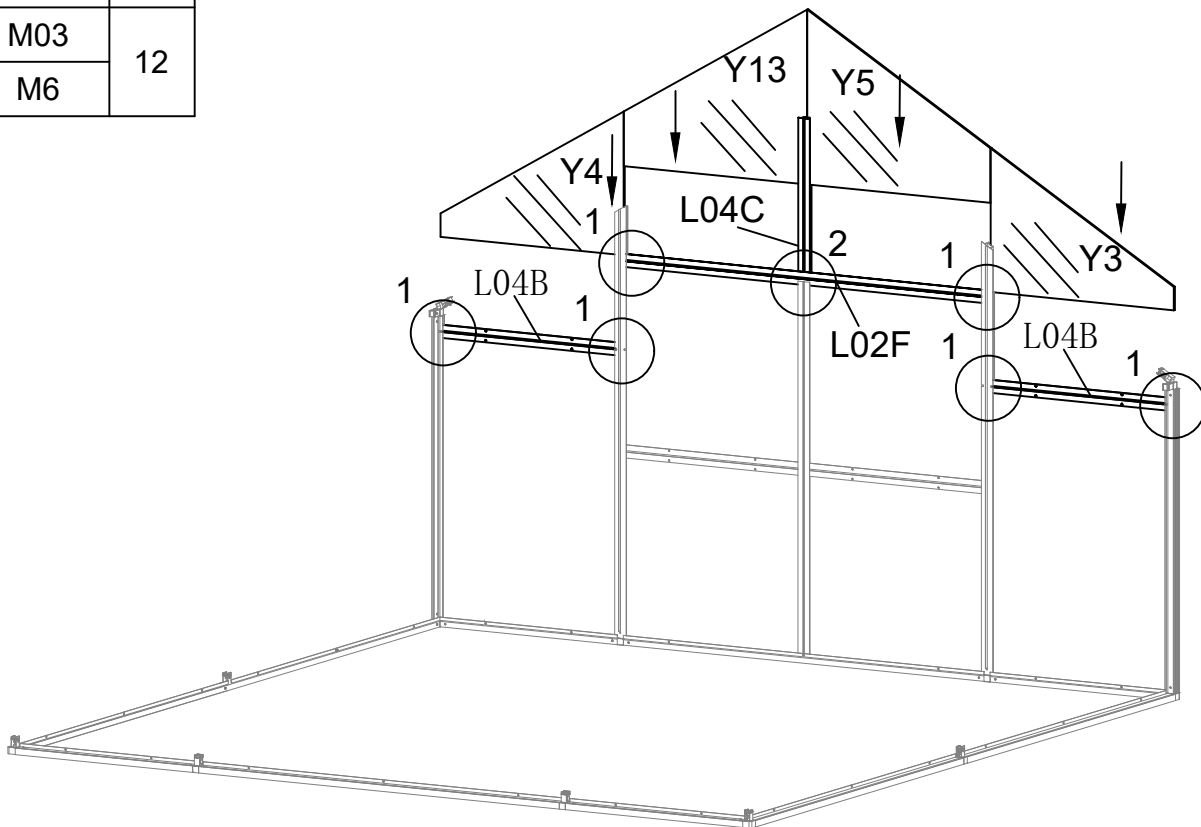
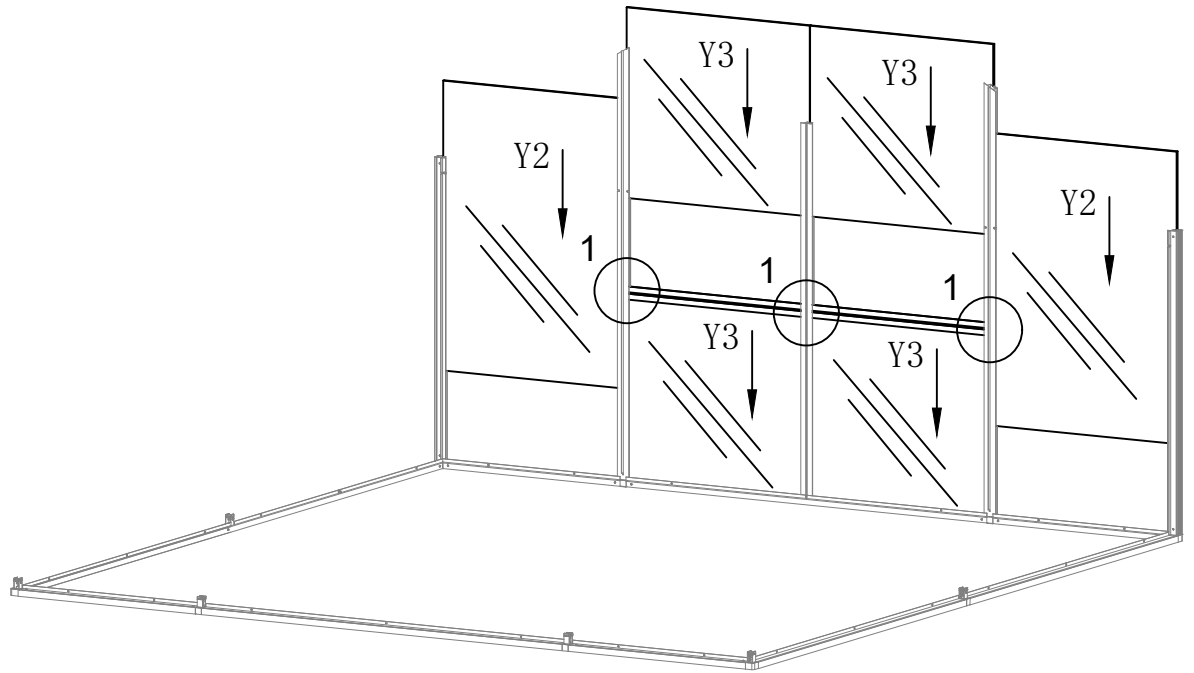
PART	NO.	QTY.
	L01A	2
	L02E	1
	L03C	1
	L03D	1
	S05	3
	M6X12	
	M03	3
	M6	



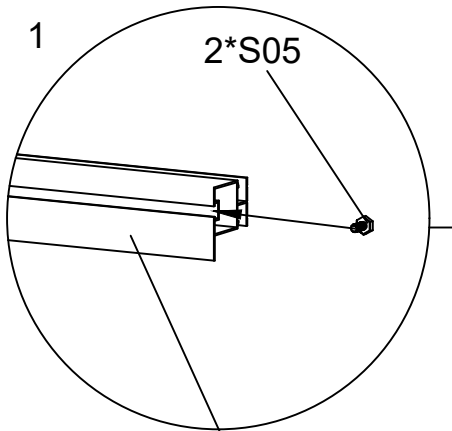
Slide 3*S05 into L02E, and tighten L02E at each end. The third one is for later use.



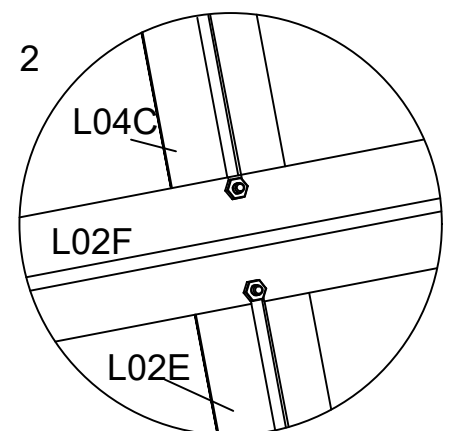
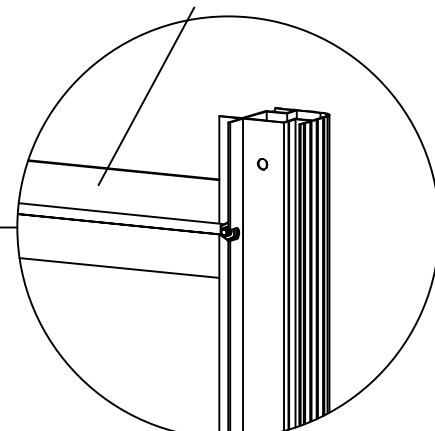
PART	NO.	QTY.
	L02F	1
	L04B	2
	L04C	1
	L04E	2
	Y2	2
	Y3	4
	Y1	1
	Y5	1
	Y4	1
	Y13	1
	S05	12
	M6X12	
	M03	12
	M6	












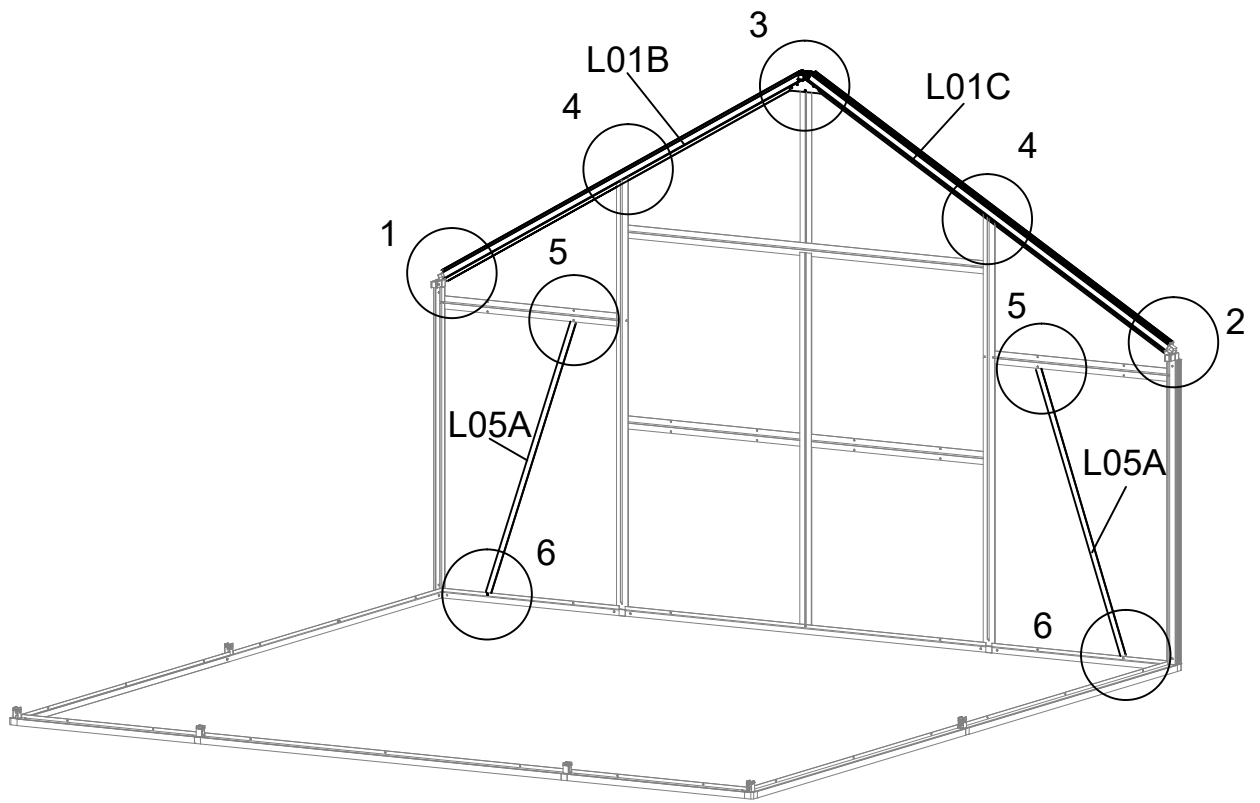
L02F&L04B&L04C&L04E



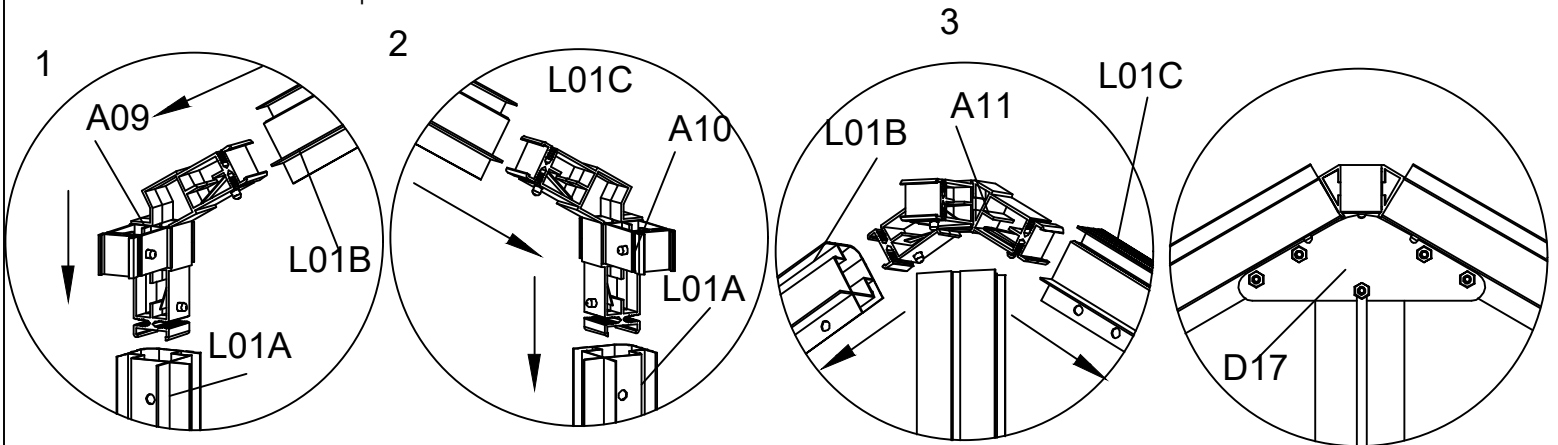
L02F&L04B&L04C&L04E



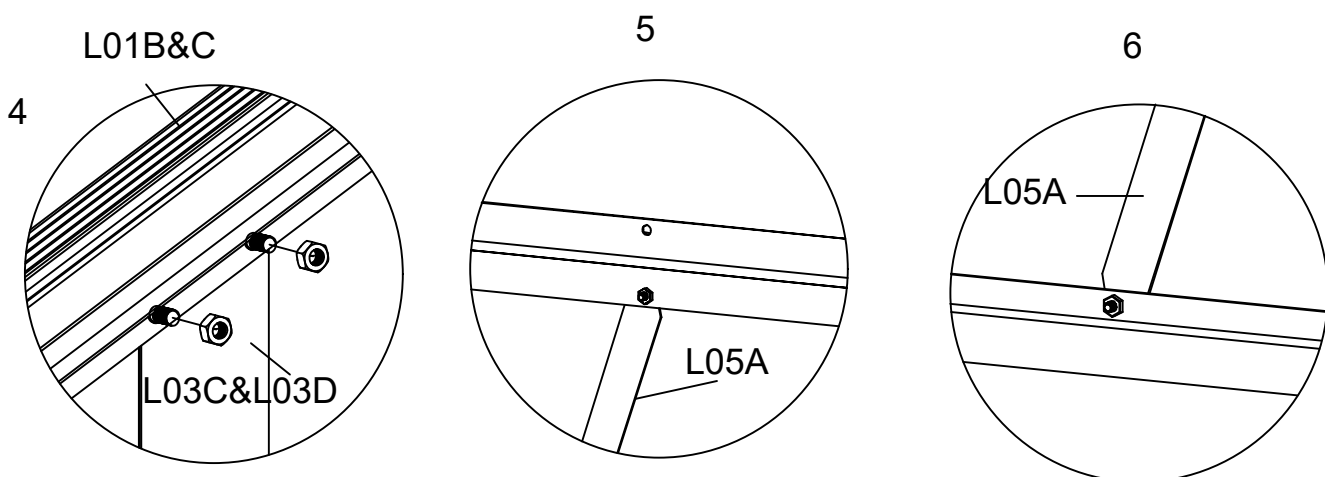
PART	NO.	QTY.
	L01B	1
	L01C	1
	L05A	2
	A09	1
	A10	1
	A11	1
	D17	1
	S05	12
	M6X12	
	M03	12
	M6	











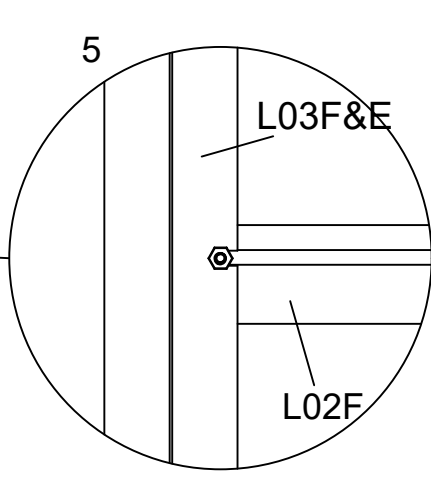
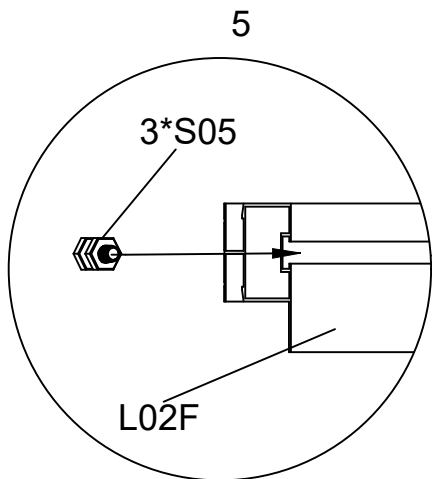
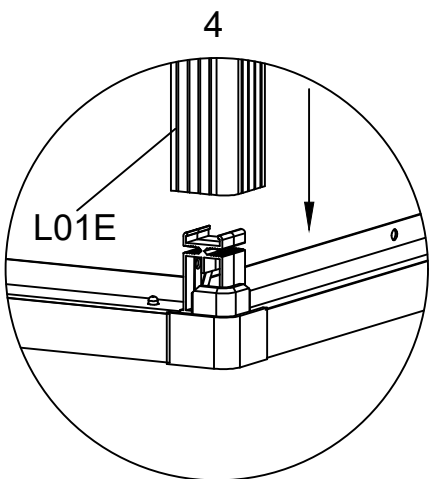
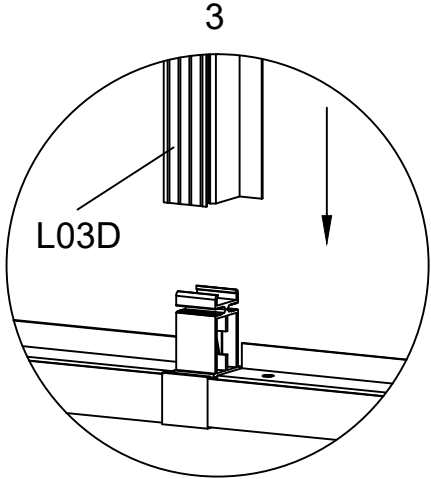
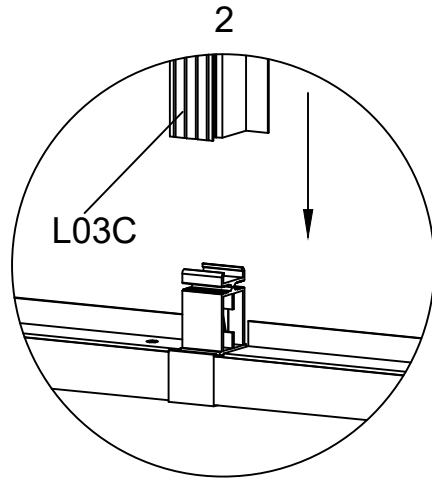
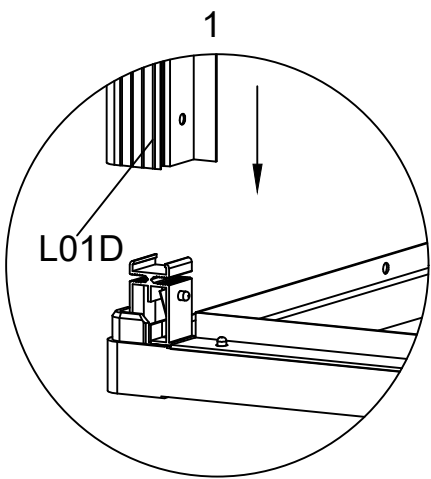
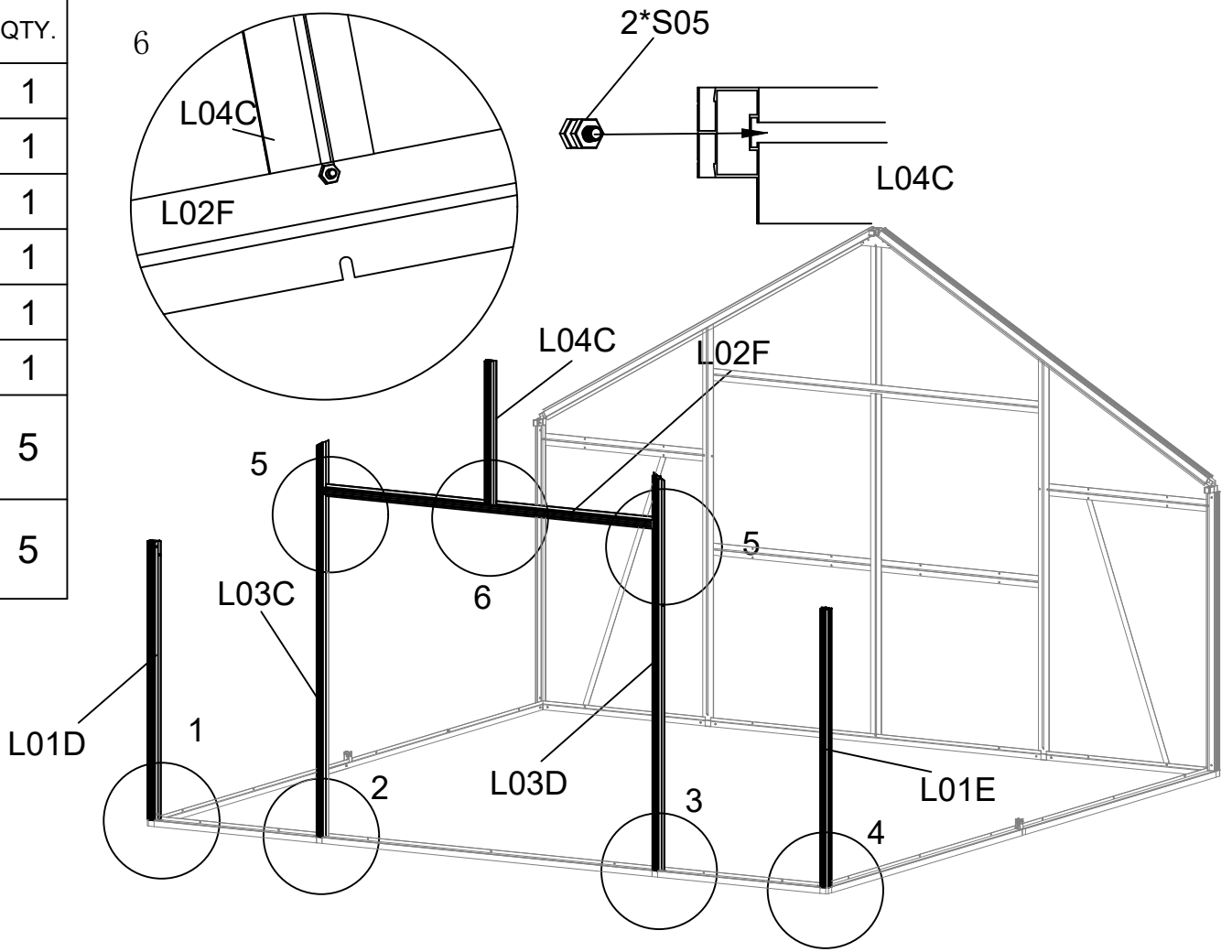
make sure
you pay
close attention
to the direction
of the pins











Note: please insert upper roof supports but, do not lock in place until you have aligned the poly-carbonate inserts.

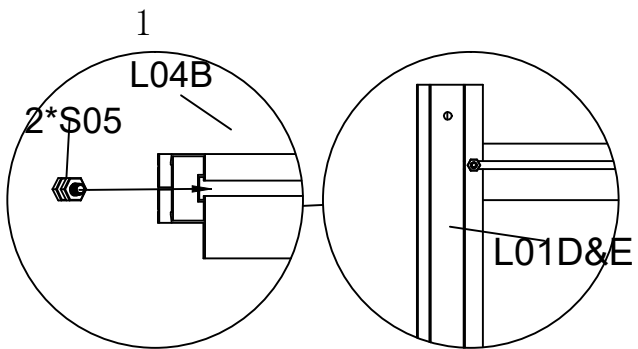
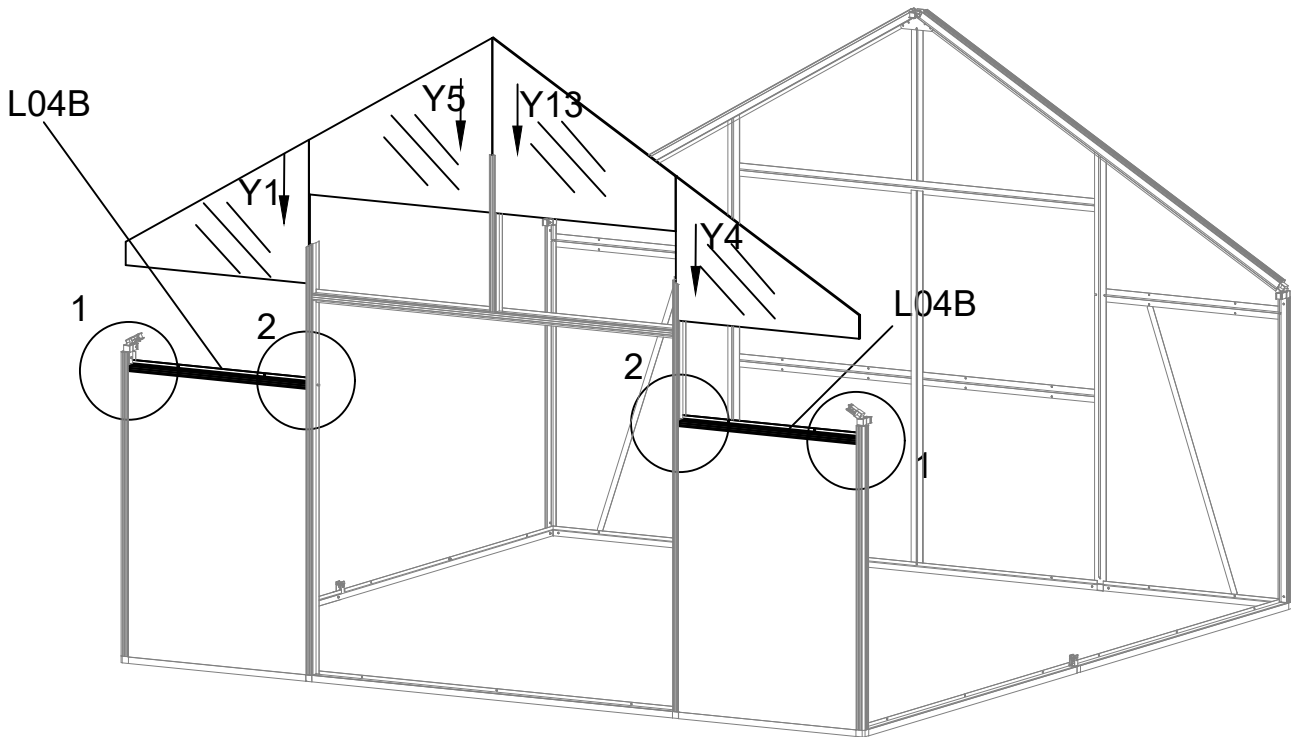
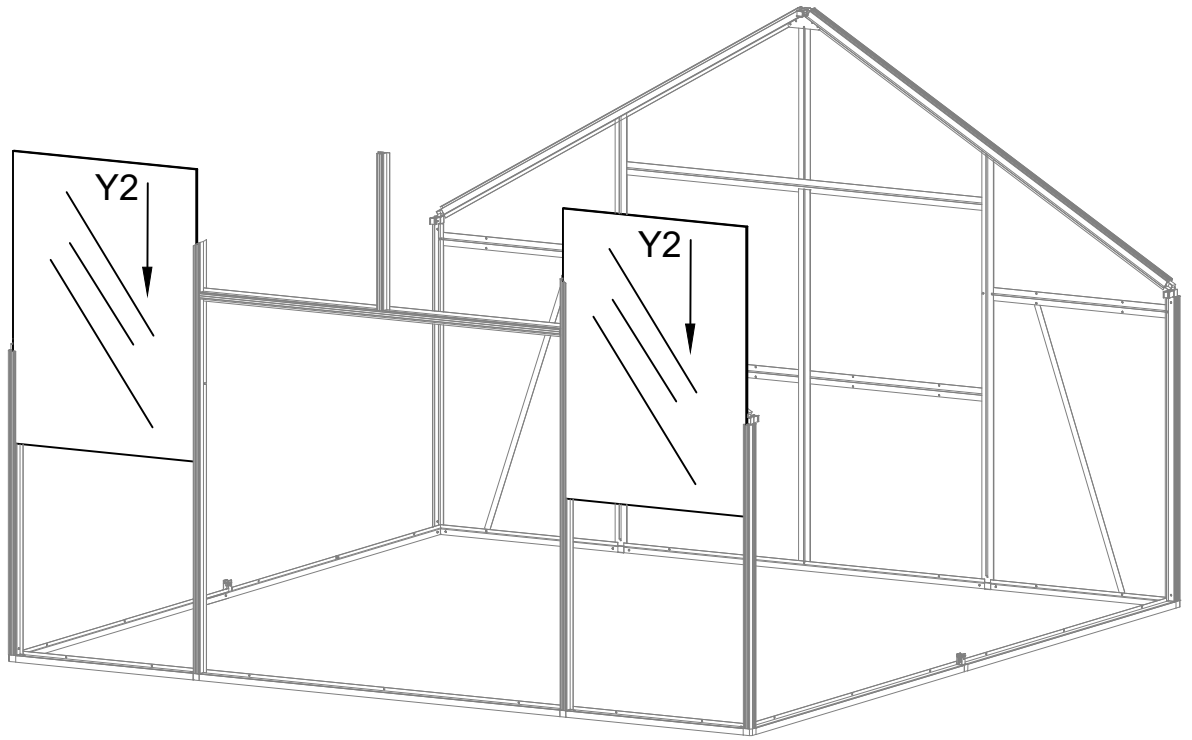


PART	NO.	QTY.
	L01D	1
	L01E	1
	L03C	1
	L03D	1
	L02F	1
	L04C	1
	S05	5
	M6X12	
	M03	5
	M6	

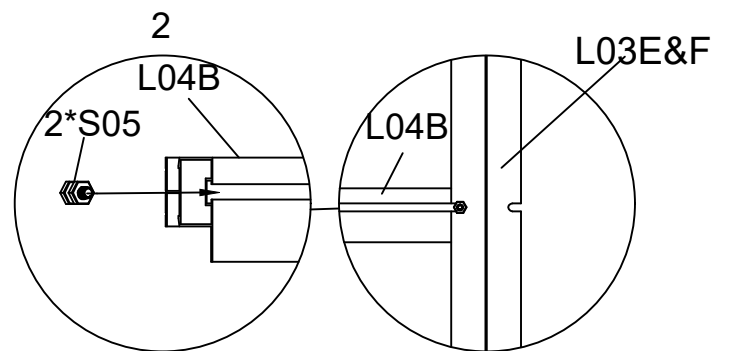


Slide 3*S05 into L02F, and tighten L02F at each end with S05










PART	NO.	QTY.
	L04B	2
	Y2	2
	Y1	1
	Y4	1
	Y5	1
	Y13	1
	S05	4
	M6X12	
	M03	4
	M6	



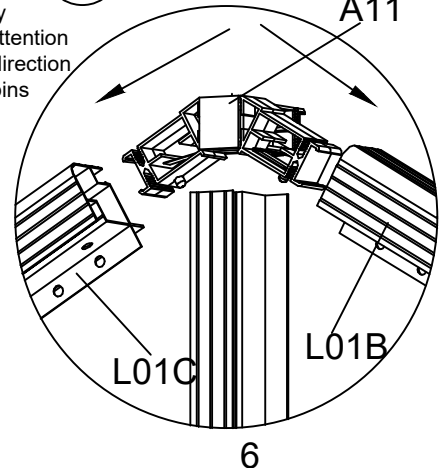
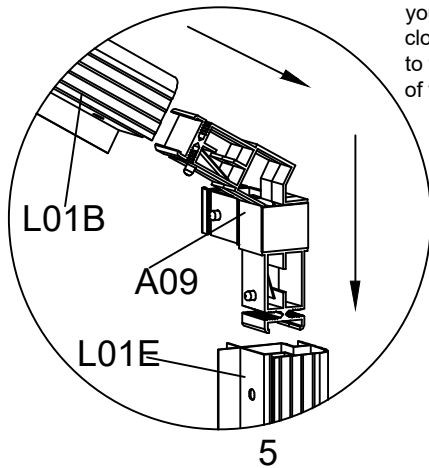
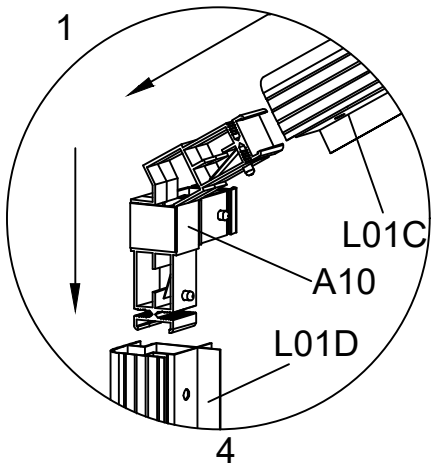
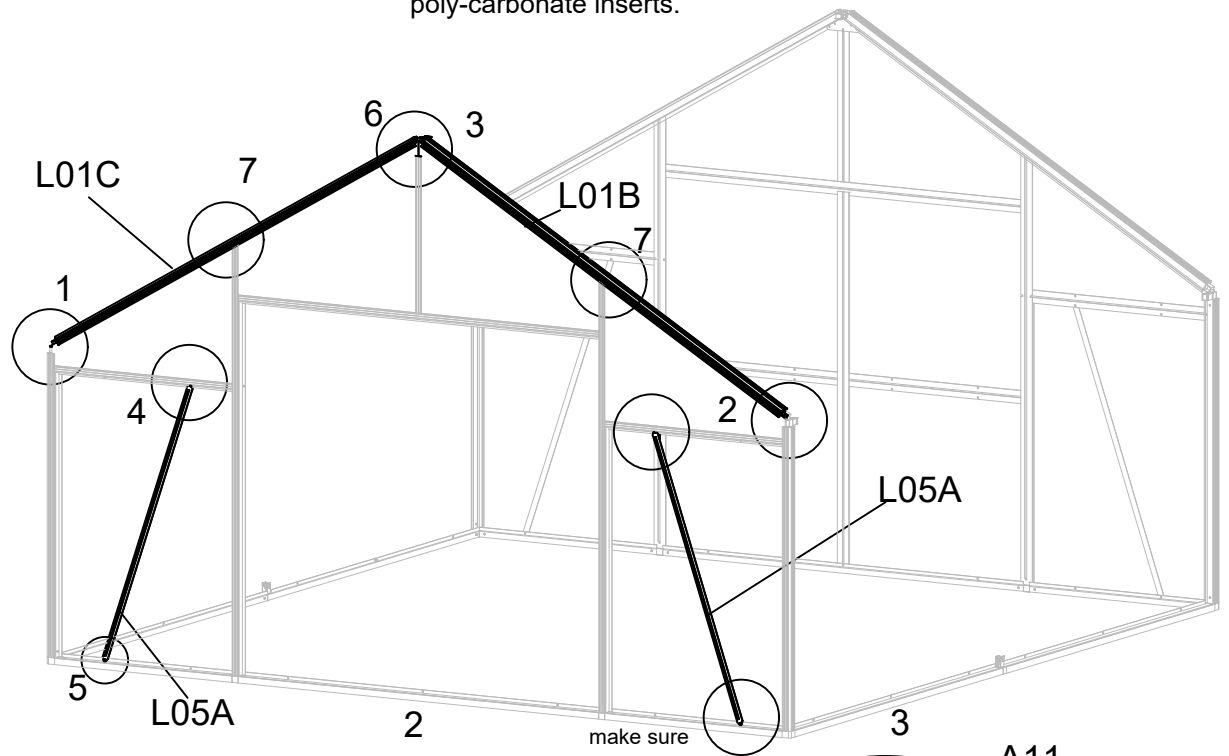
Slide 2*S05 into L04B, and tighten L04B at each end with S05



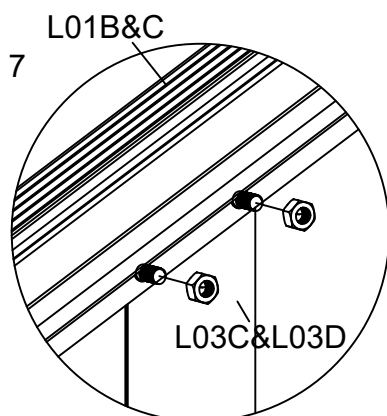
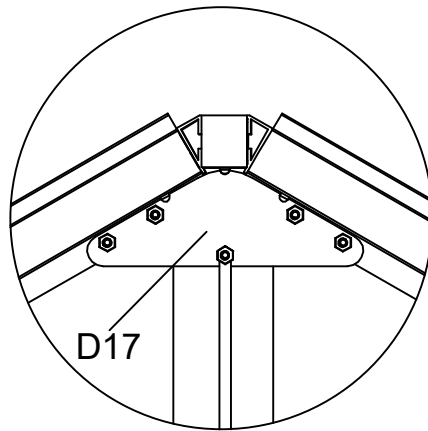
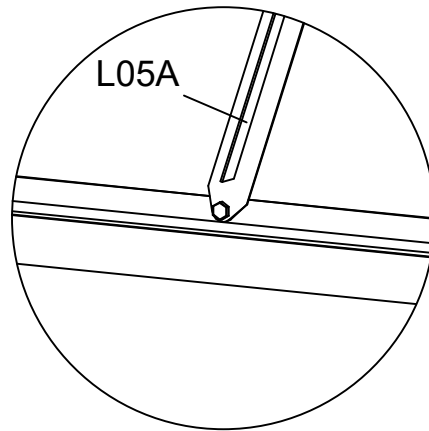
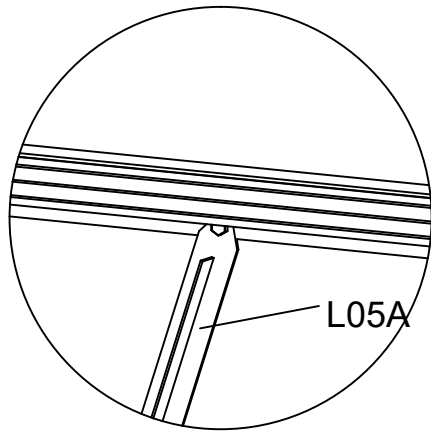
Slide 2*S05 into L04B, and tighten L04B at each end with S05







PART	NO.	QTY.
	L01B	1
	L01C	1
	L05A	2
	A09	1
	A10	1
	A11	1
	D17	1
	S05	12
	M6X12	
	M03	12
	M6	

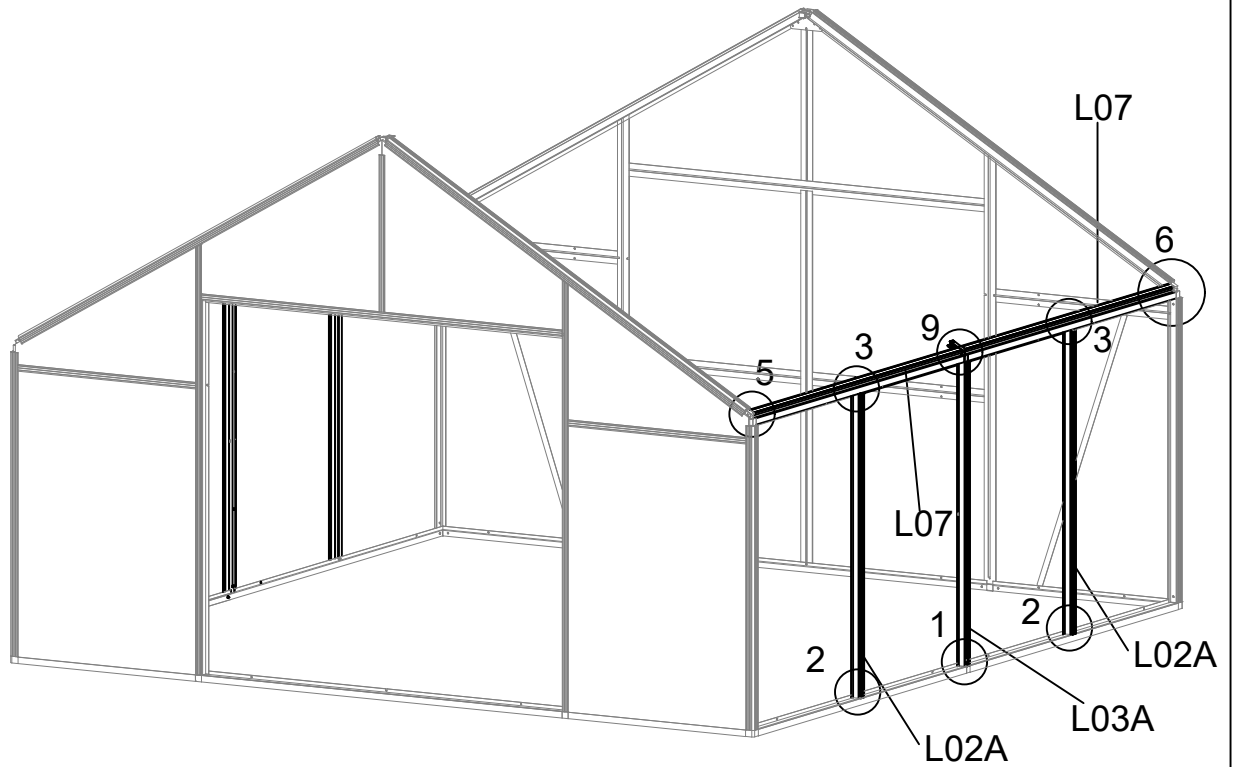
Note: please insert upper roof supports but, do not lock in place until you have aligned the poly-carbonate inserts.



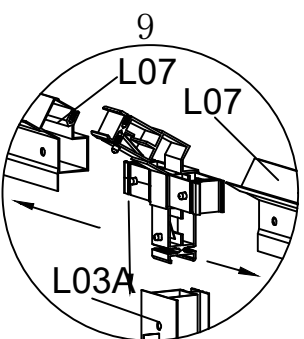
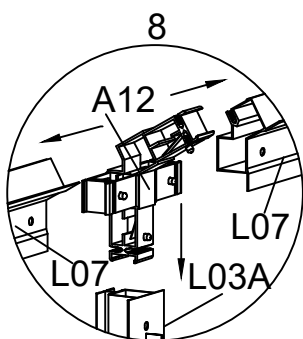
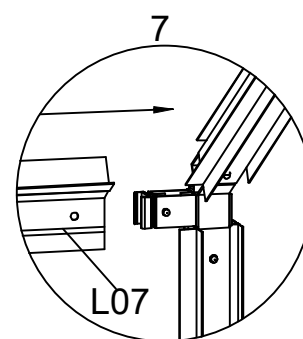
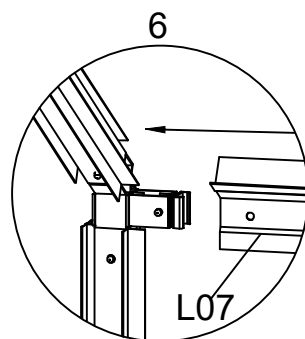
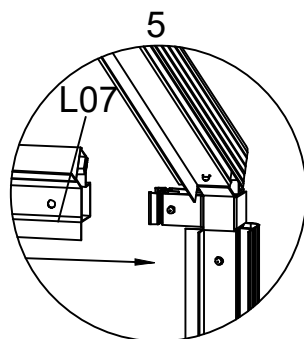
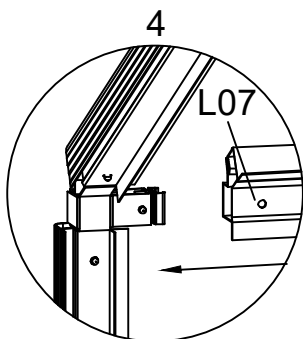
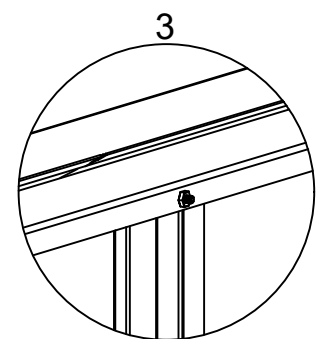
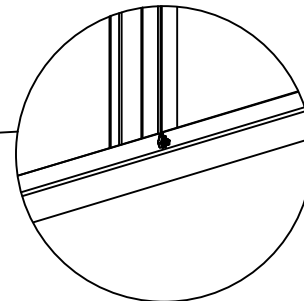
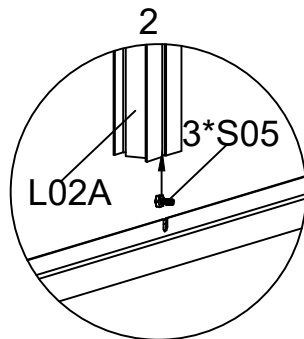
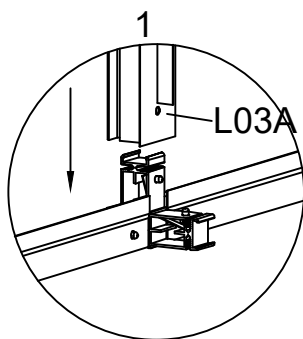
make sure you pay close attention to the direction of the pins







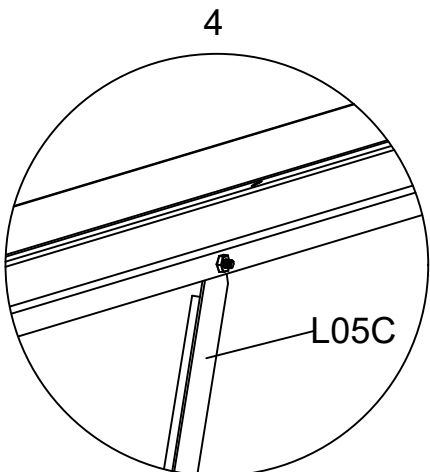
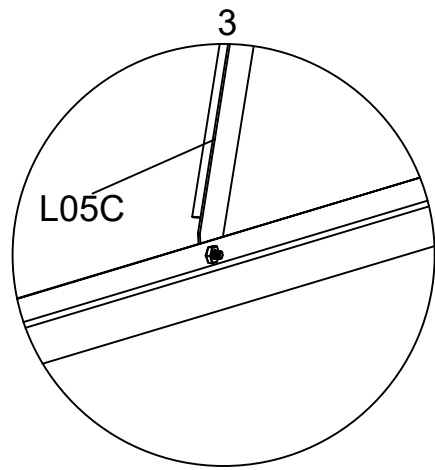
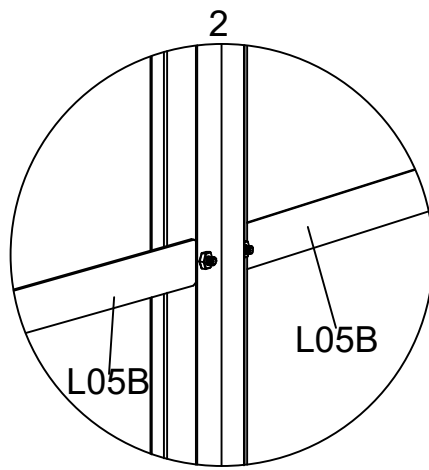
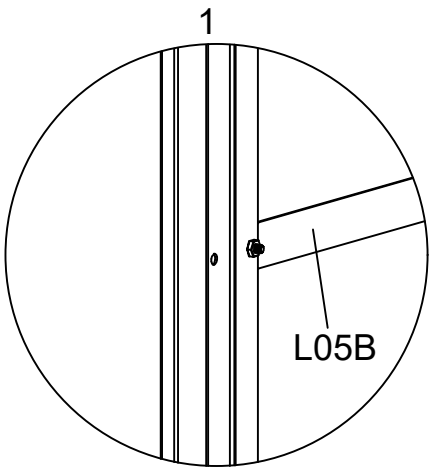
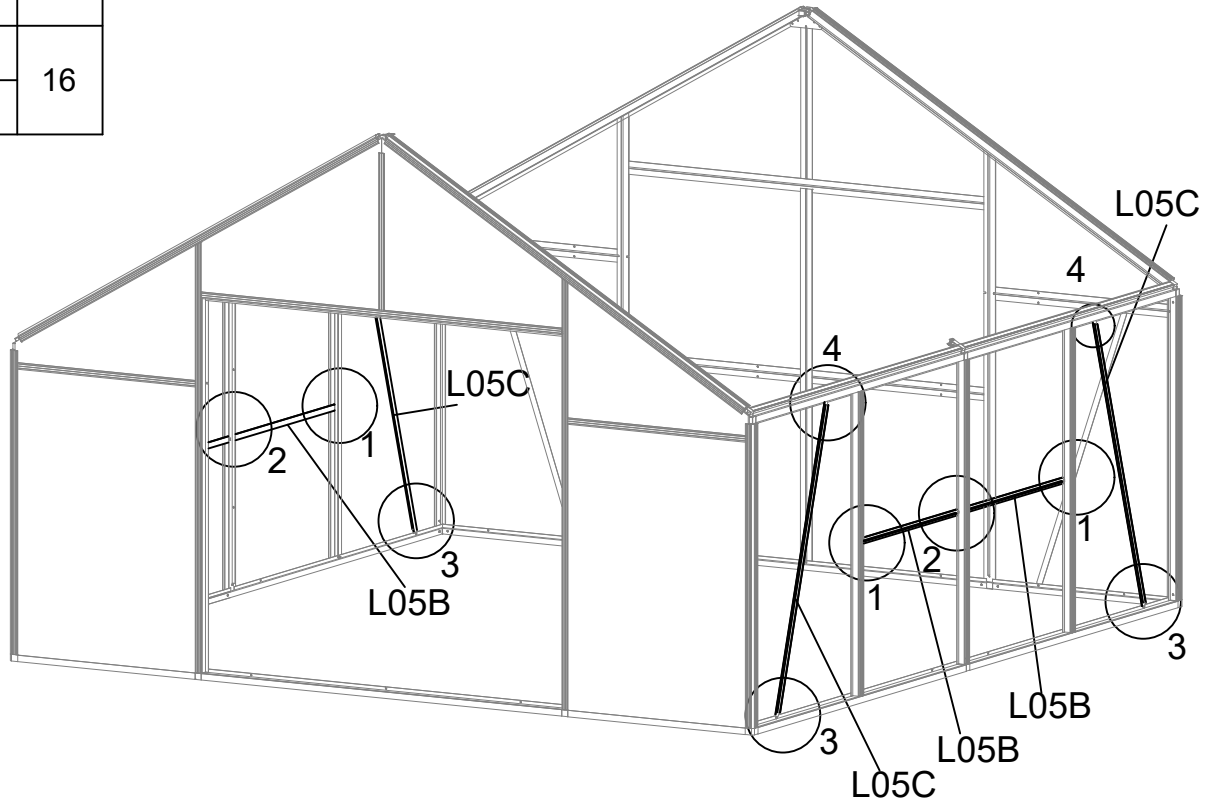
PART	NO.	QTY.
	L02A	4
	L03A	2
	L07	4
	A12	2
	S05	14
	M6X12	
	M03	14
	M6	






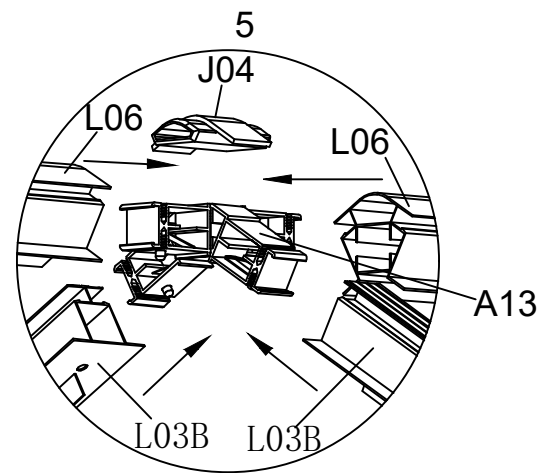
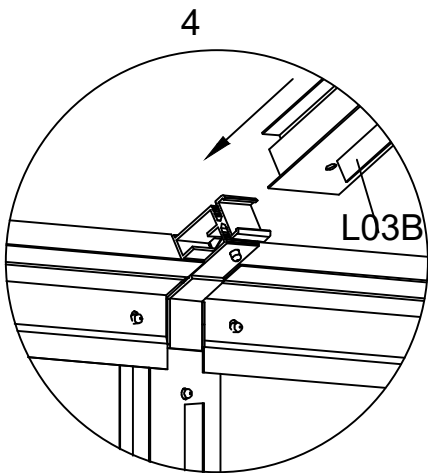
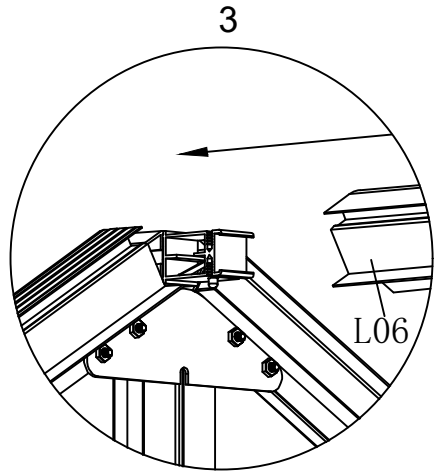
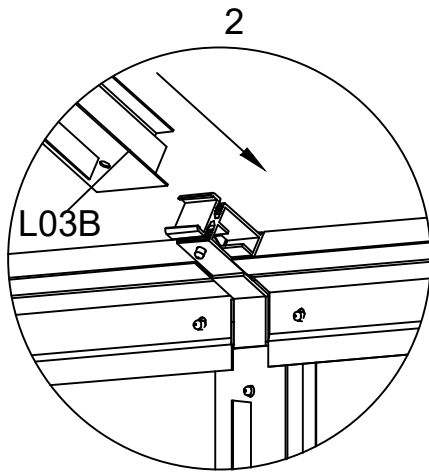
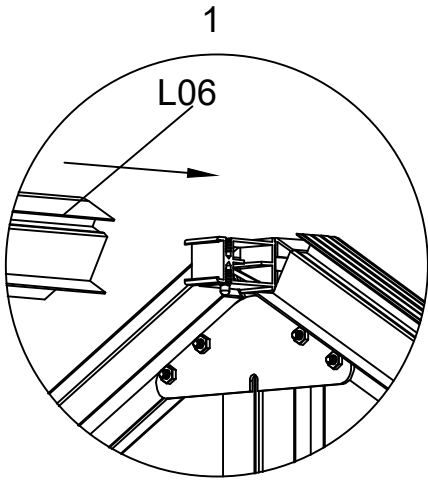
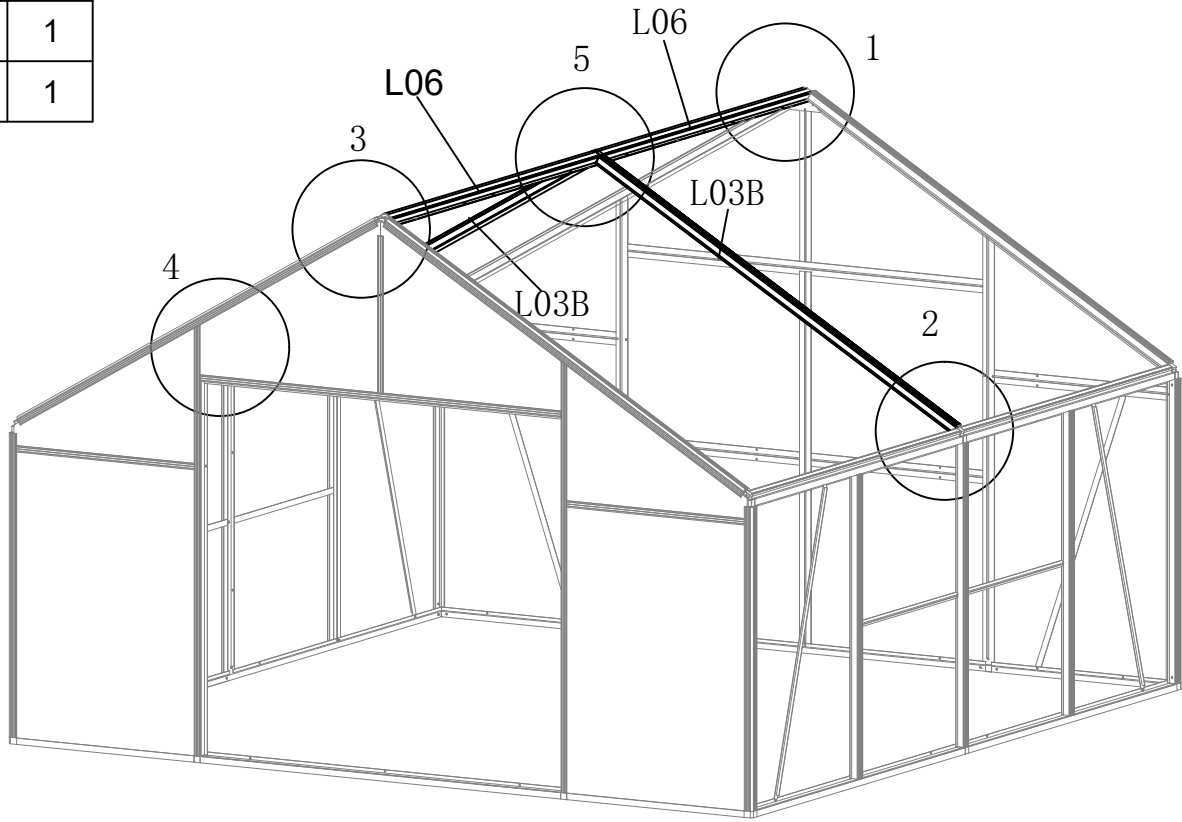
Slide 3*S05 into L02A, and tighten L02A at each end. The third one is for later use.











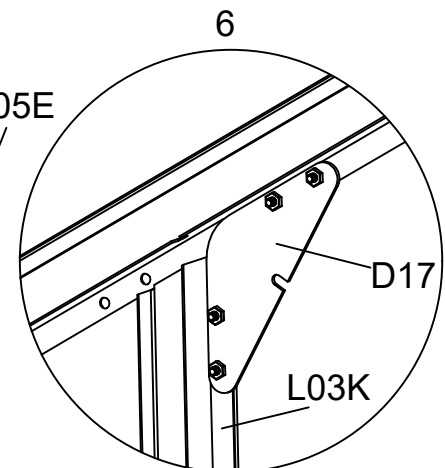
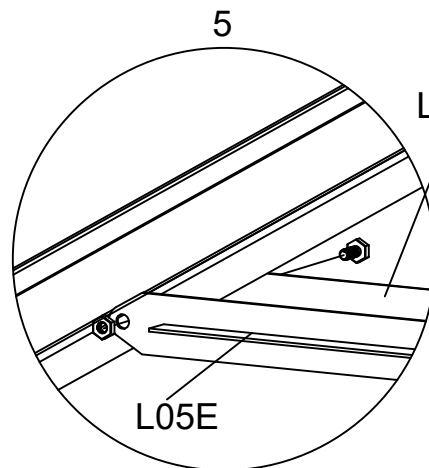
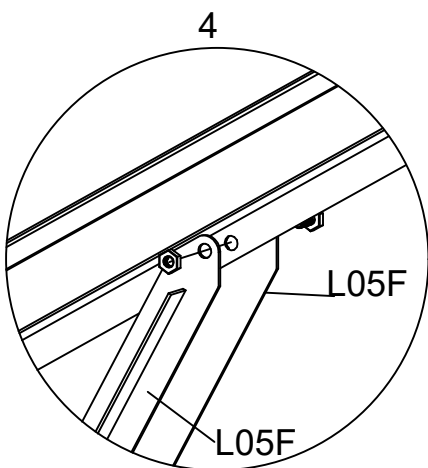
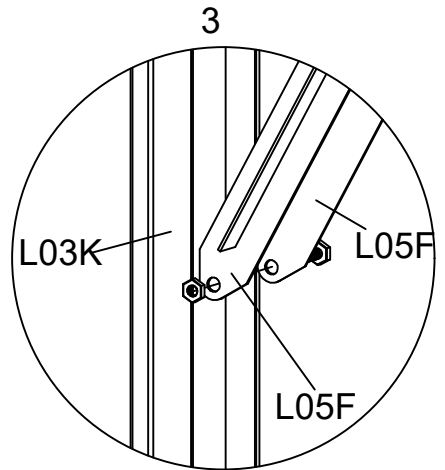
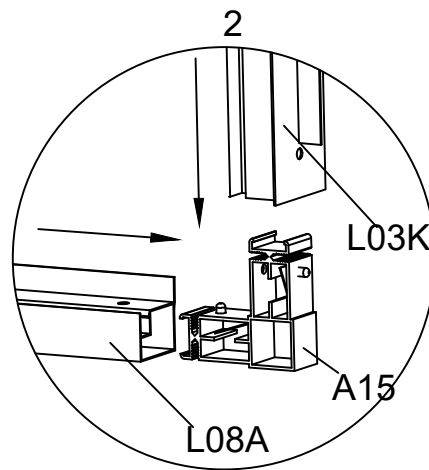
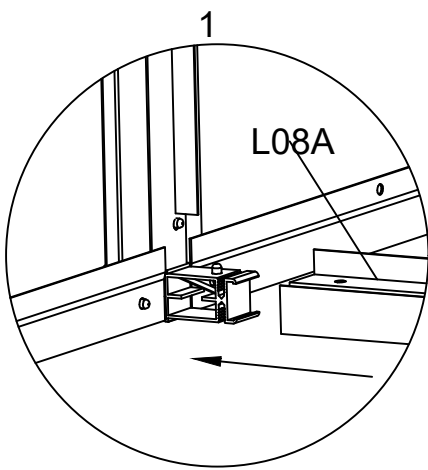
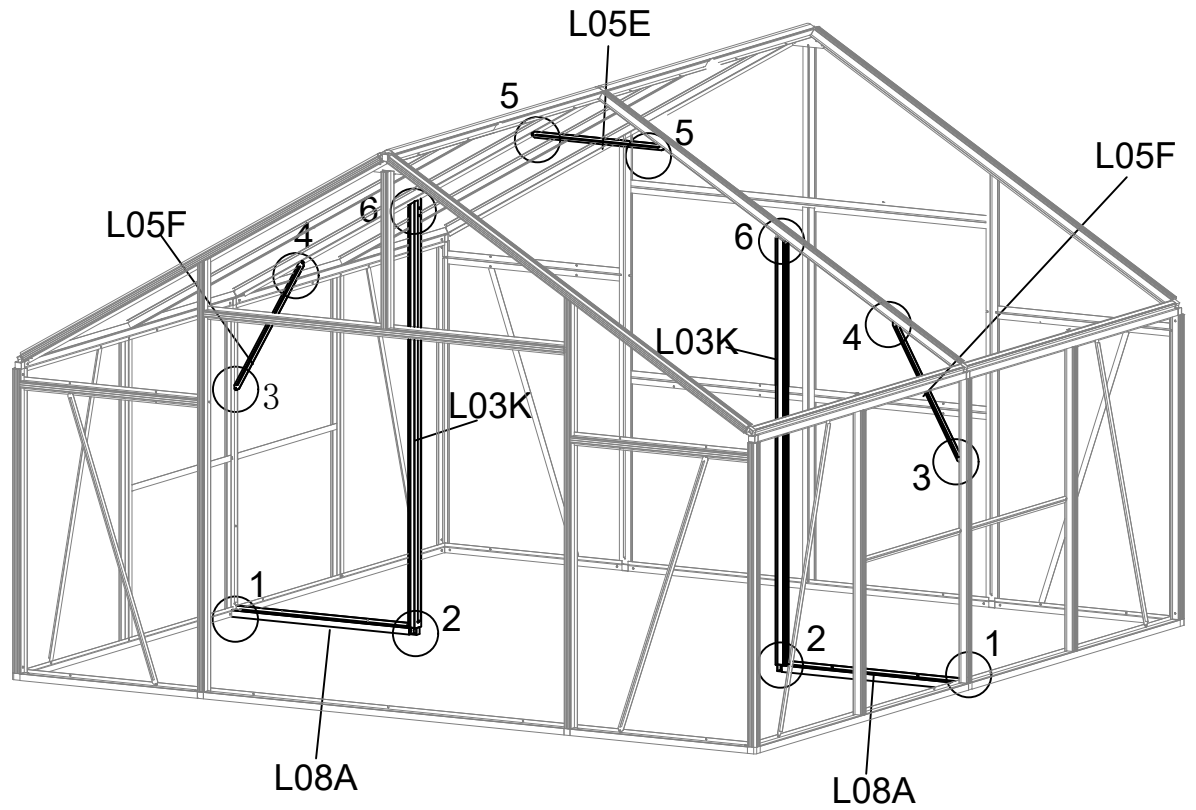
PART	NO.	QTY.
	L05B	4
	L05C	4
	S05	16
	M6X12	
	M03	16
	M6	







PART	NO.	QTY.
	L03B	2
	L06	2
	A13	1
	J04	1

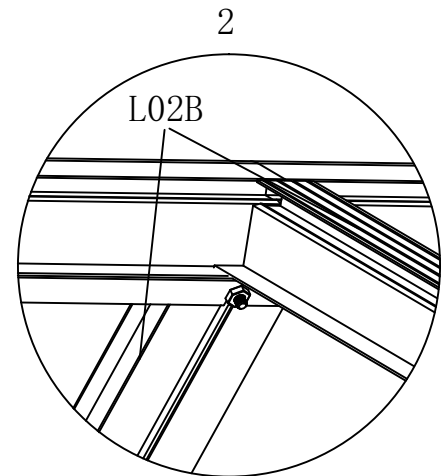
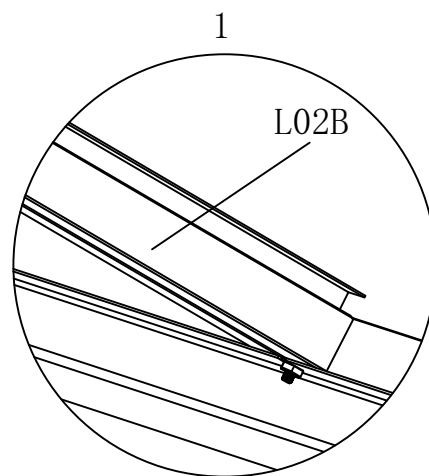
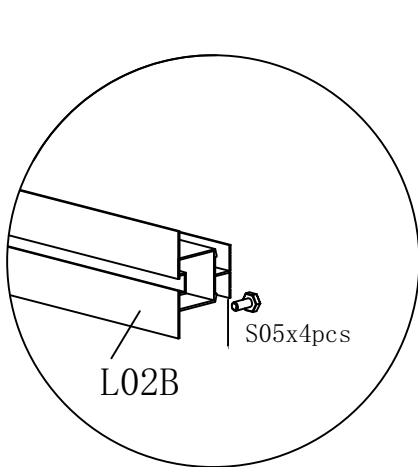
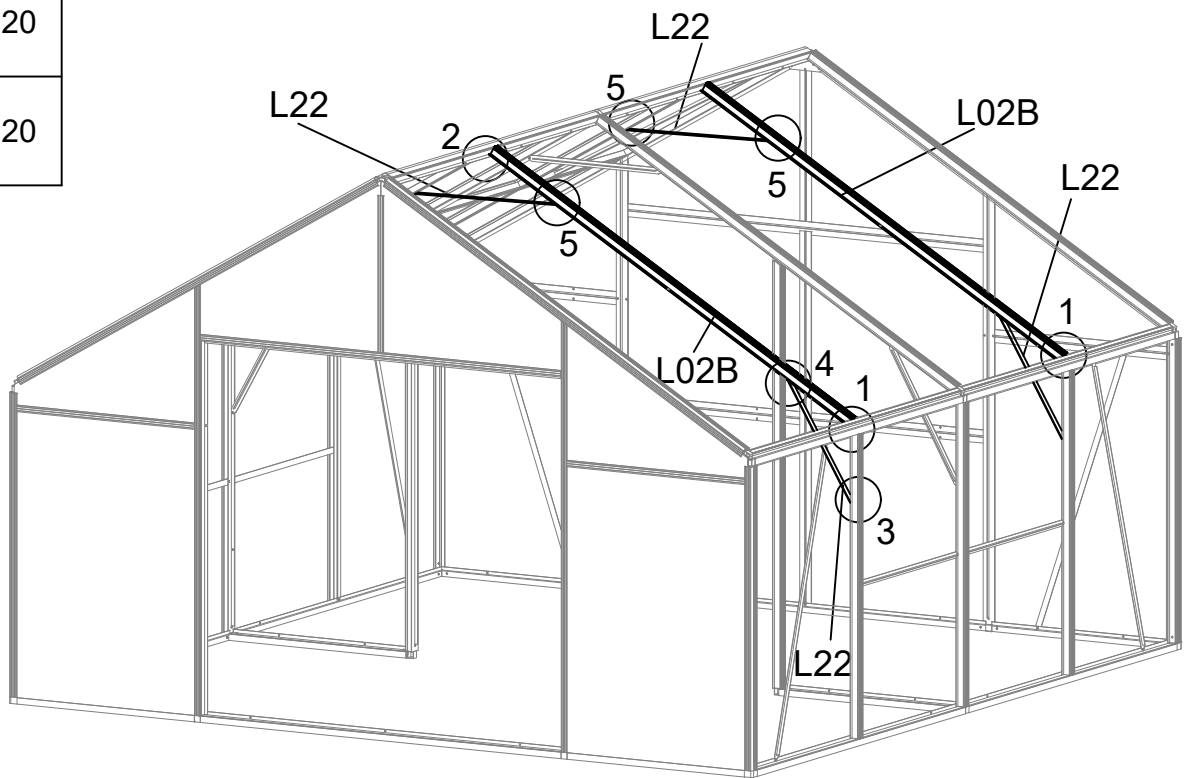


PART	NO.	QTY.
	L03K	2
	L05E	2
	L05F	4
	L08A	2
	A15	2
	D17	2
	S05	20
	M6X12	
	M03	20
	M6	

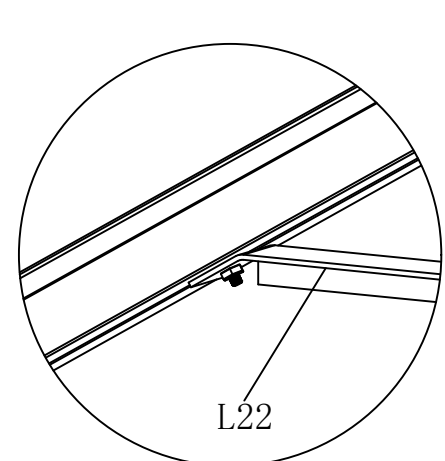
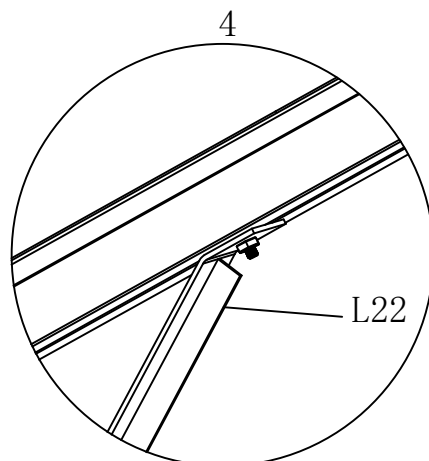
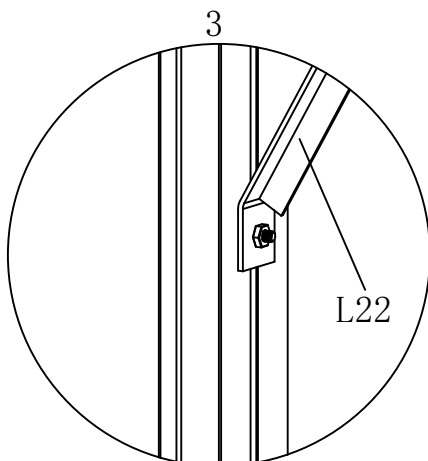


REPEAT the same assembly for the other side.






PART	NO.	QTY.
	L02B	4
	L22	6
	S05	20
	M6X12	
	M03	20
	M6	

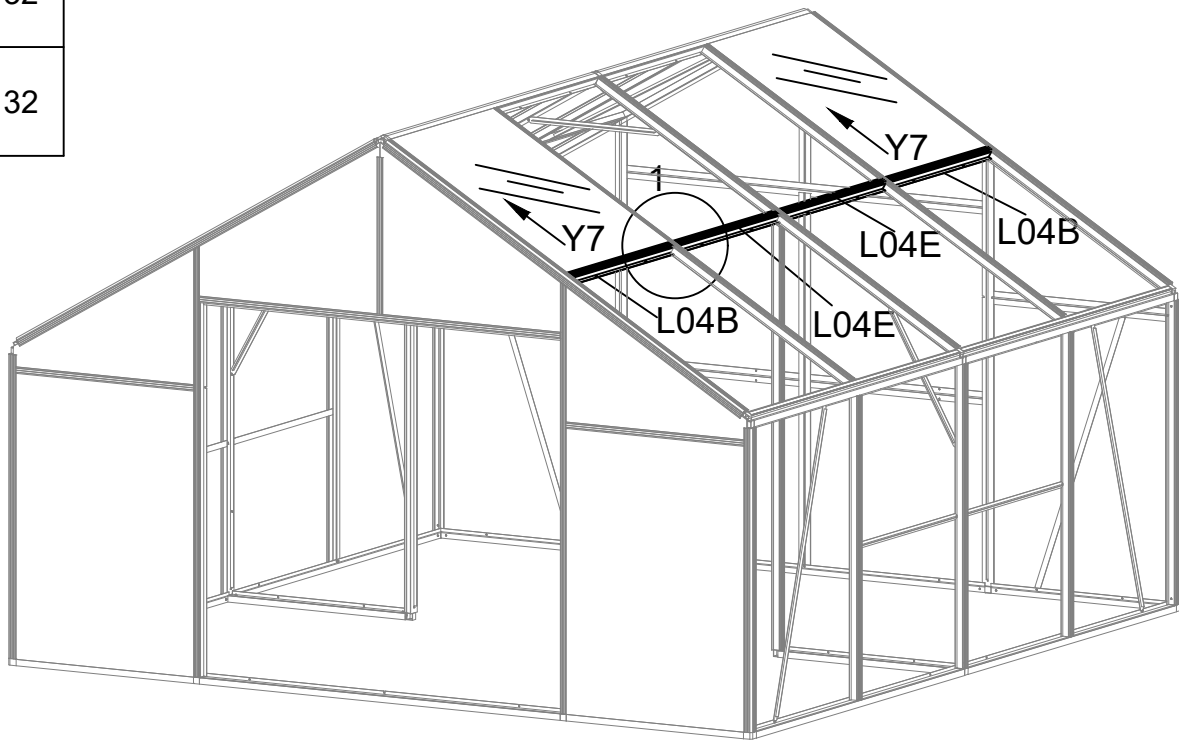


Note: Slide 4xS05 in the channel, which are needed later.

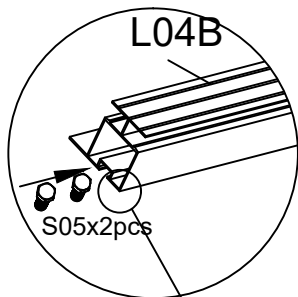


REPEAT the same assembly for the other side.

PART	NO.	QTY.
	L04B	4
	L04E	4
	Y7	4
	S05	32
	M6X12	
	M03	32
	M6	

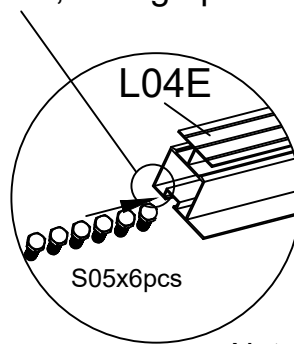


Slide 2*S05 into L04B&E, and tighten L04B&E at each end with S05

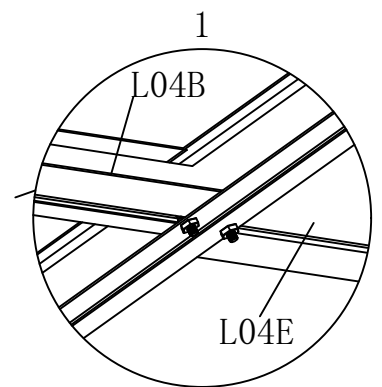









Pay attention to the cut edge of L04B which should be fixed, facing down.

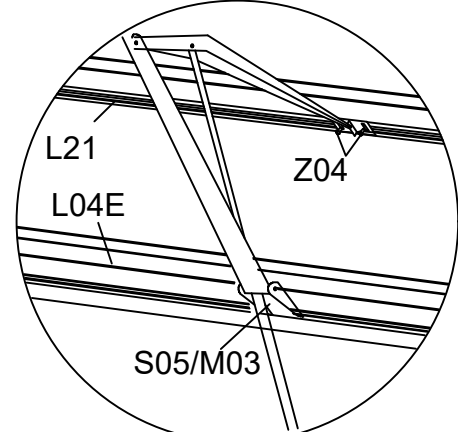
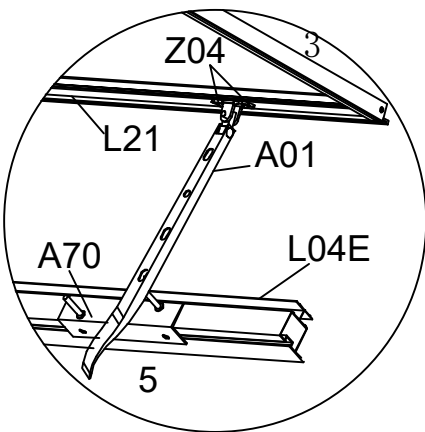
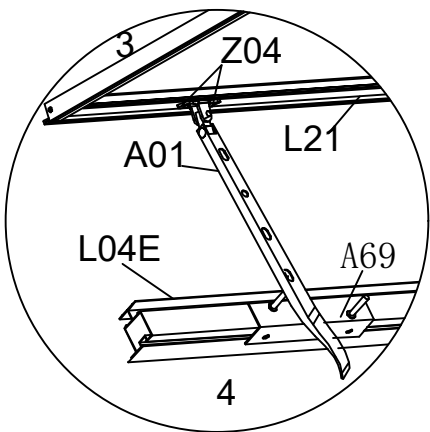
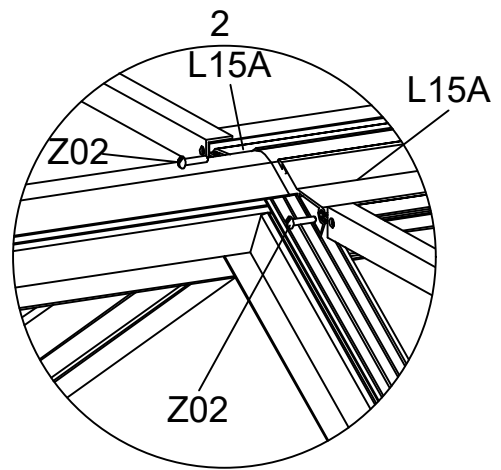
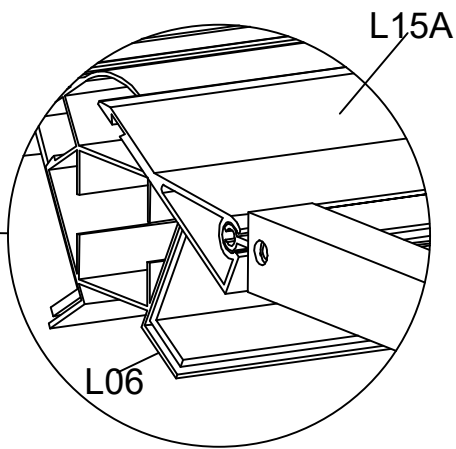
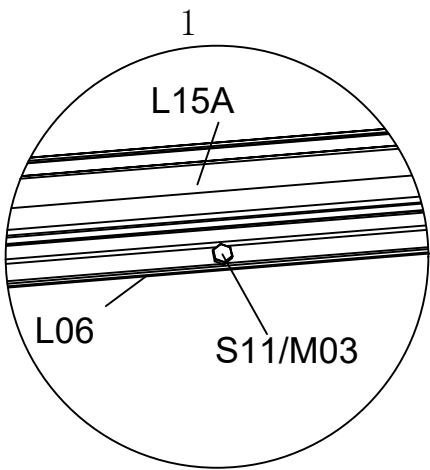
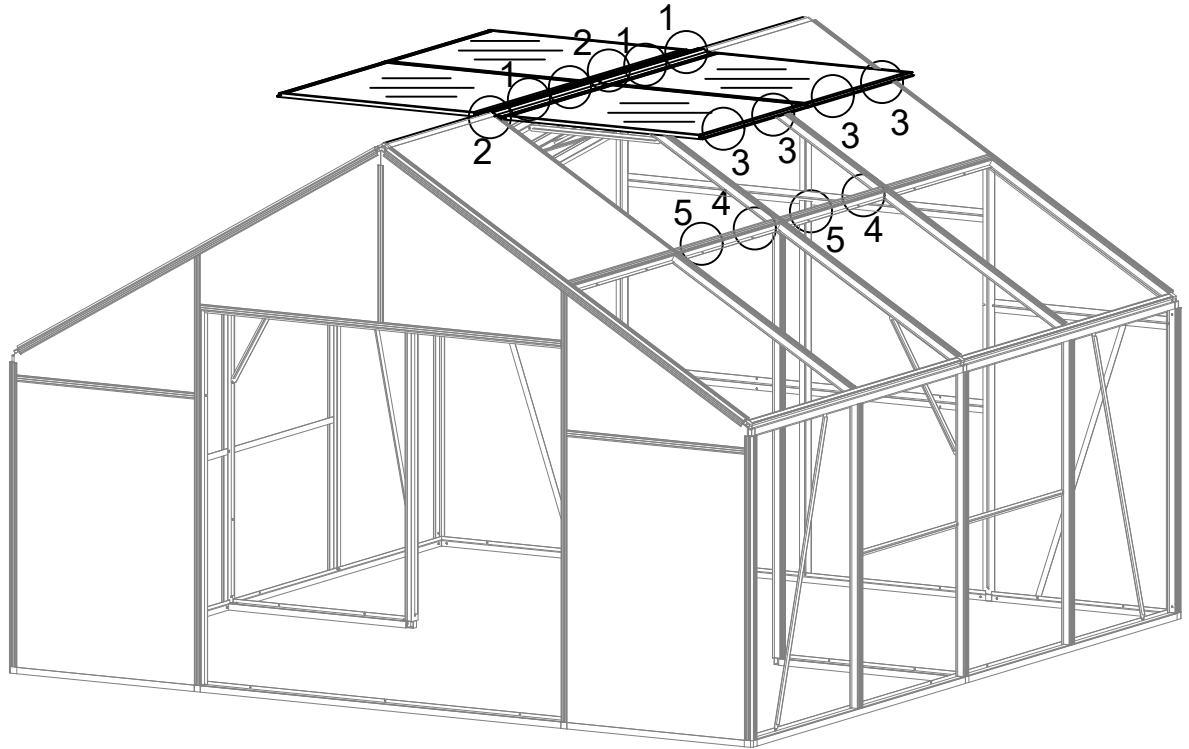
Pay attention to the cut edge of L04E which should be fixed, facing up.





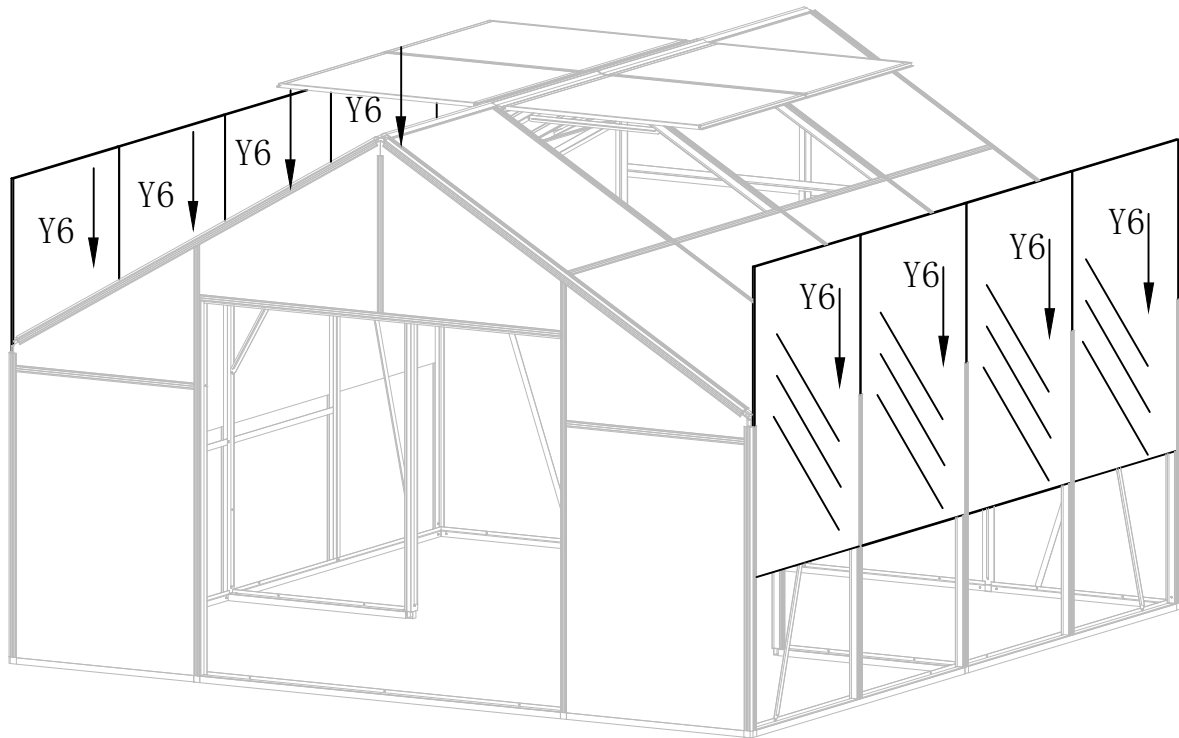
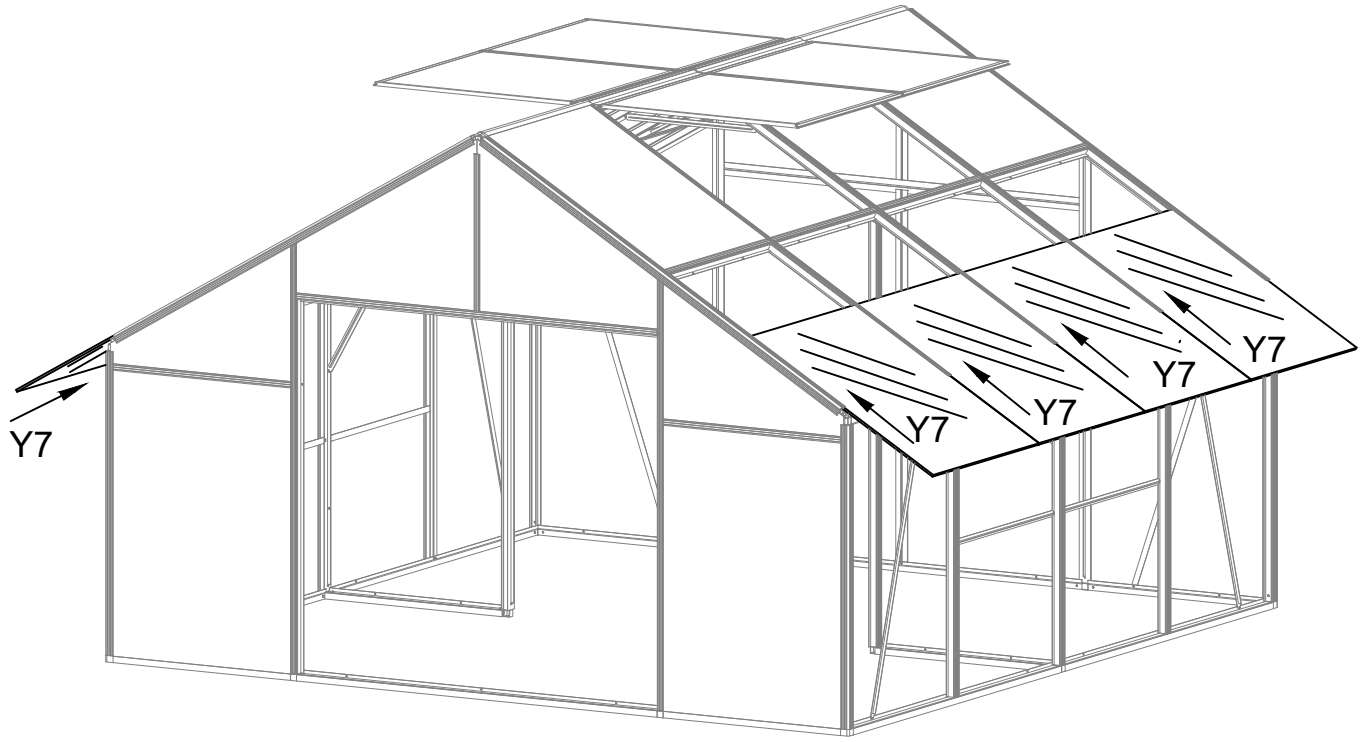
Note: Slide 6xS05 in the channel, which are needed later.















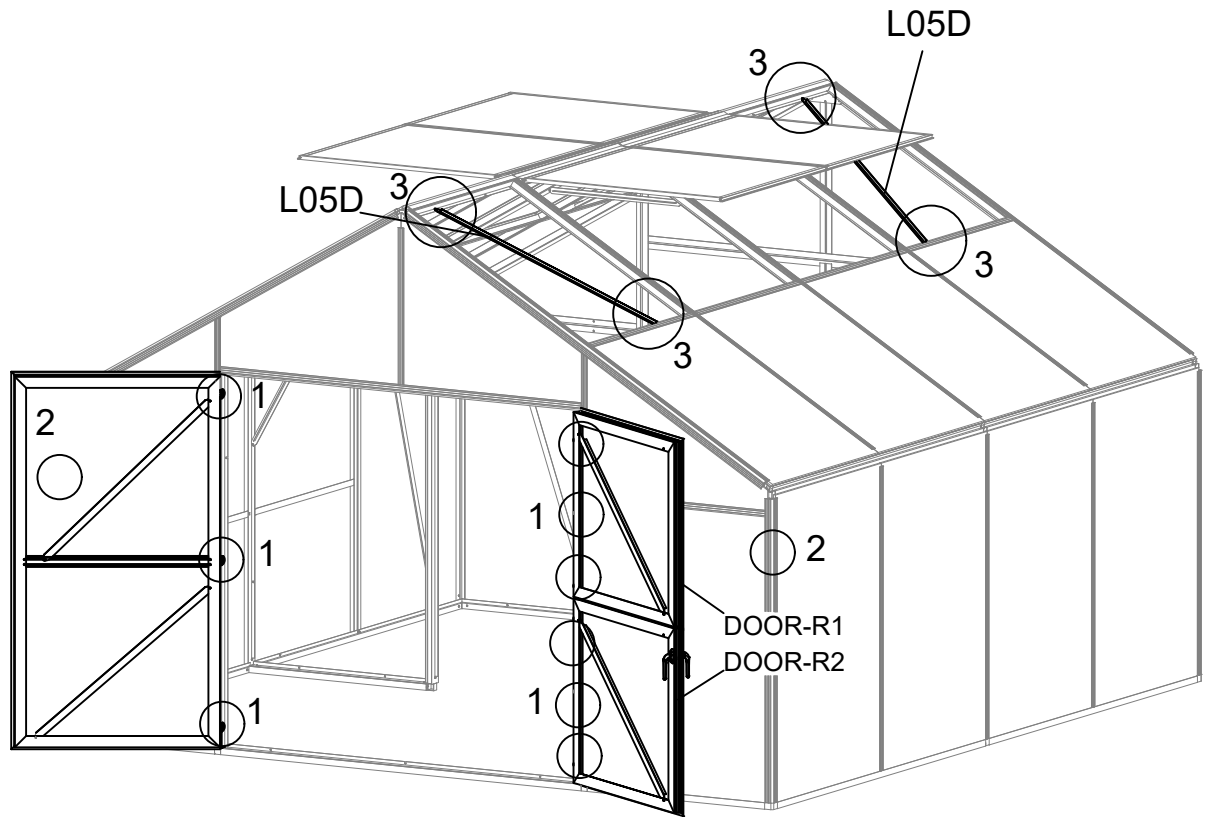
PART	NO.	QTY.
	Roof Vent	4
	A69	4
	A70	4
	A01	8
	Z04	16
	Ø4X8	
	S11	8
	M6X20	
	M03	24
	M6	



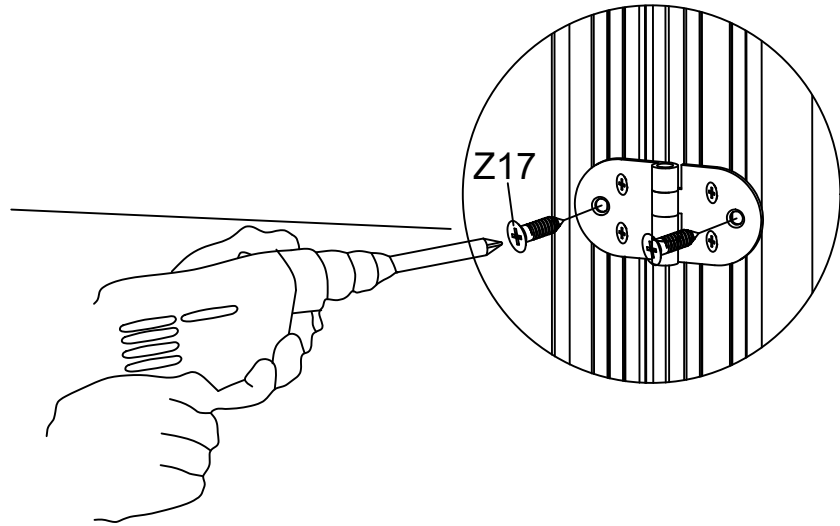
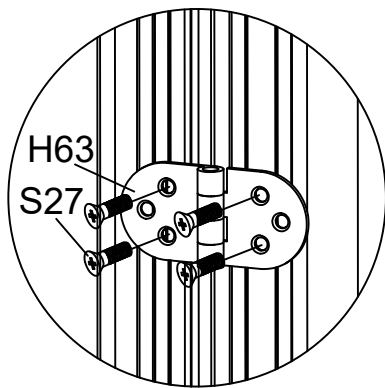
PART	NO.	QTY.
	Y6	8
	Y7	8



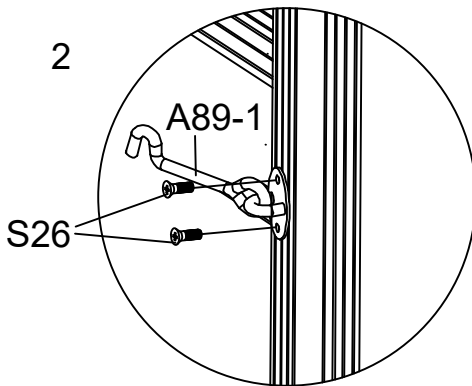
PART	NO	QTY
	H63	9
	L05D	4
	A89-1	2
	Z17	18
	M5X12	
	S27	36
	M5X12	
	S26	4
	M3X12	
	S05	8
	M6X12	
	M03 M6	8



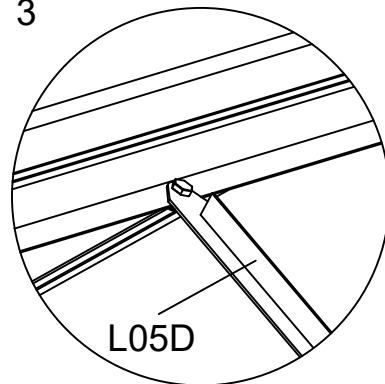
1



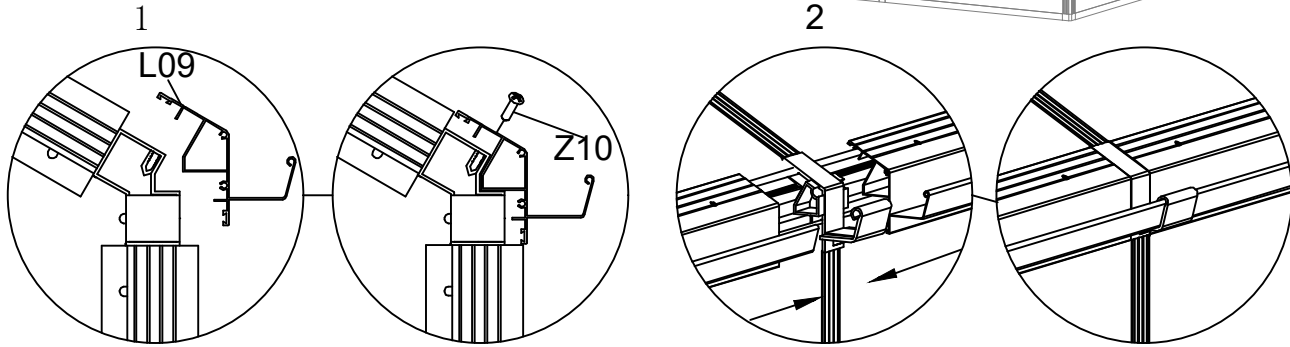
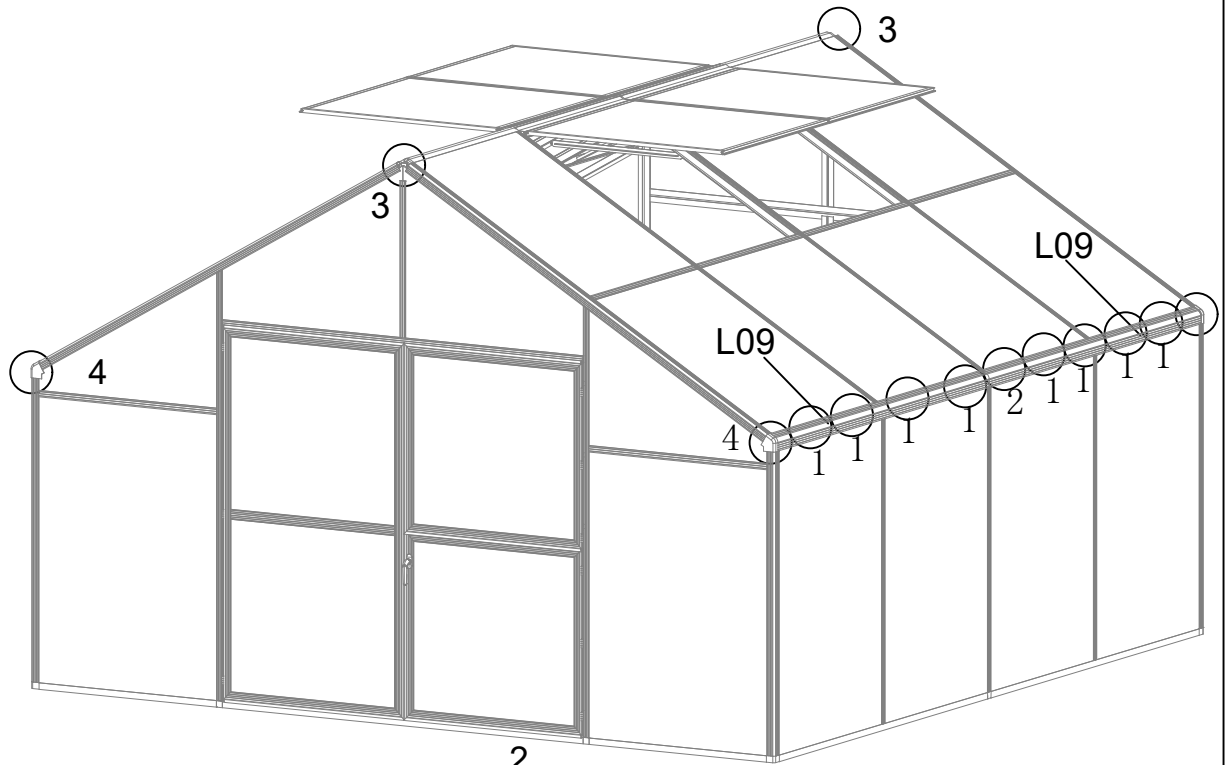
2



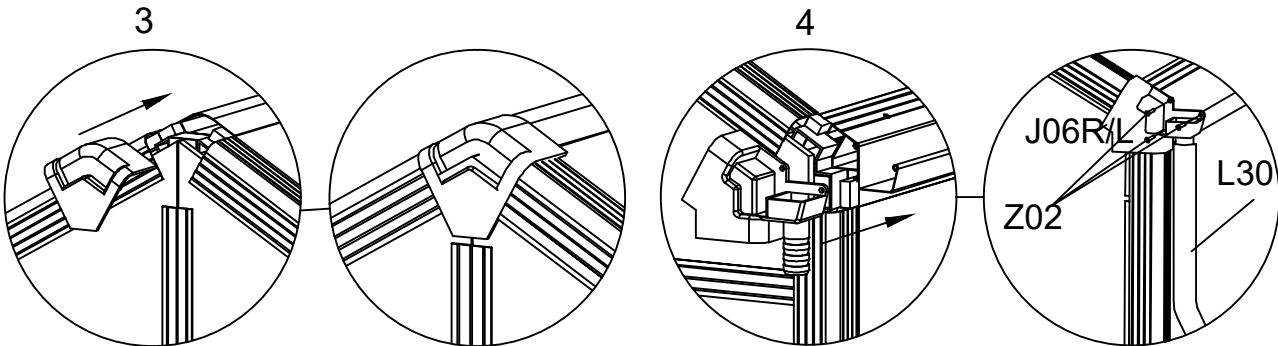
3



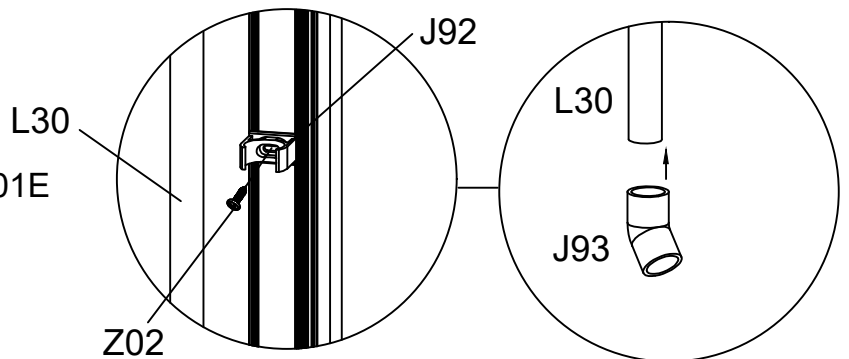
PART	NO.	QTY.
	L09	4
	J07	2
	J02	2
	J06R/L	2/2
	L30	4
	J92	4
	J93	4
	Z10	16
	Ø5X30	
	Z02	12
	Ø4X16D	



Use L09 to cover the edges of all Y12 after all roof PC panels are fixed in place, then tighten them with Z10.



Drill one hole on both L01A & L01D & L01E approx 500mm up from the bottom, Dia. 2.5mm, then tighten J92 with Z02, and push L30 into the channel of J92 (see Fig. above).



To avoid leaking, using silicone on J02R / L, L30 and J93 is an option (see Fig. above).

REPEAT the same assembly for the other side.

To avoid water leakage, we recommend applying silicone sealant to the junctions between the frame and poly panels and any gaps between the frame members (see highlighted areas in diagram below).

Note: Exterior grade clear silicone sealant is recommended and should be available at your local hardware store.

