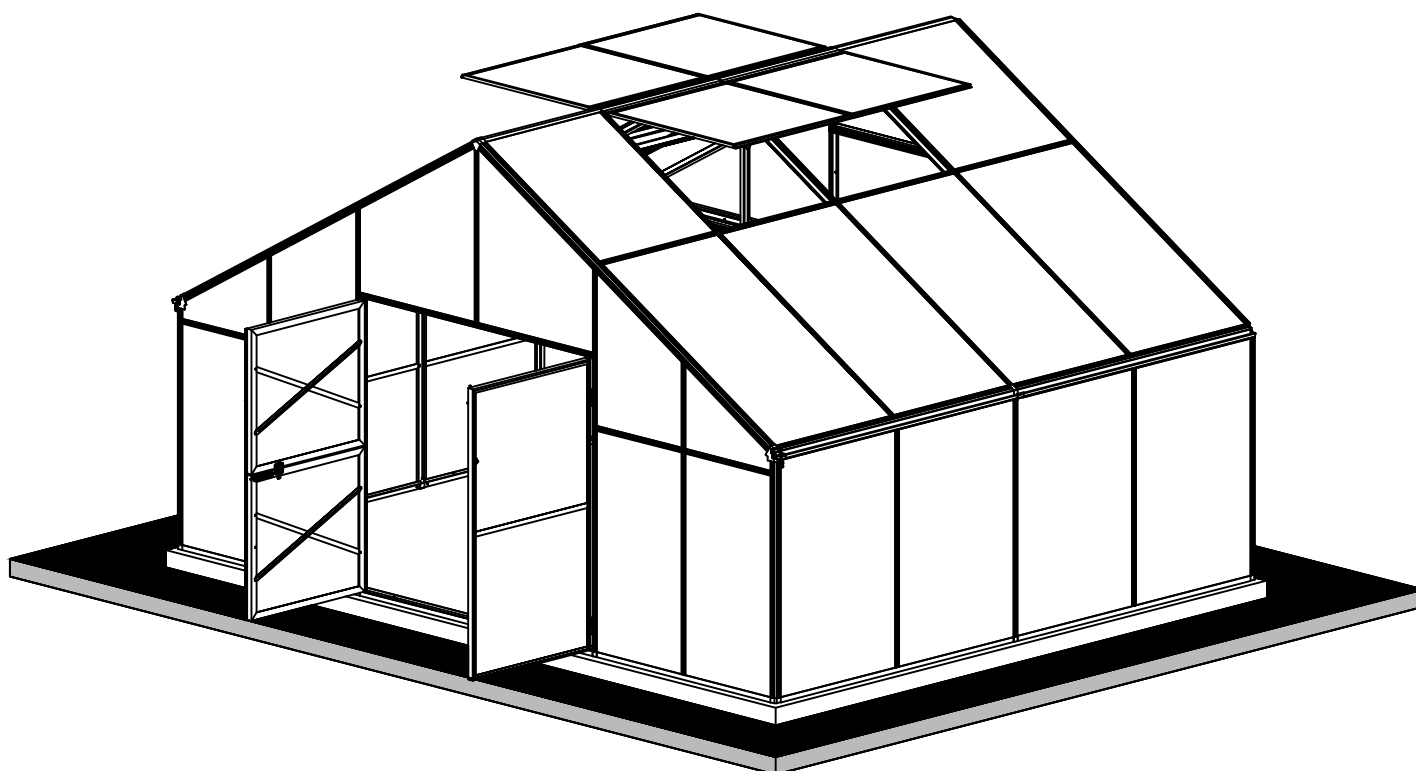


GROW MORE Greenhouses

Assembly Instructions



MODEL: GM16

GREENHOUSE SIZE: 13' 3 7/8"L x 16' 7 3/16"W x 9'11"H
406cm L x 506cm W x 302cm H

EXTENSION SIZE: 6'6 3/4"L x 16' 7 3/16"W x 9'11"H
200cm L x 506cm W x 302cm H

PLEASE READ INSTRUCTIONS CAREFULLY BEFORE ASSEMBLY

Item No.	Model No.	Packing List					
		AL No.1	AL No.2	AL No.3	AL No.4	PC No.1	PC No.2
2553300	GM16	1CTN ☐	1CTN ☐	1CTN ☐	1CTN ☐	1CTN ☐	2CTNS ☐
2553350	GM16 ext				1CTN ☐		1CTN ☐


ACF Greenhouses.com

Customer Support

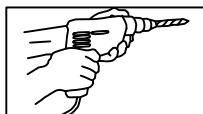
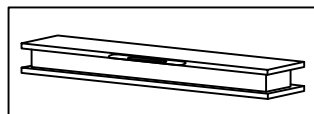
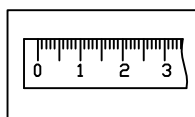
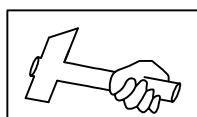
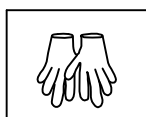
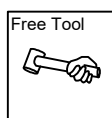
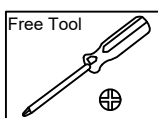
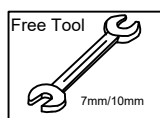
Support@ACFgreenhouses.com
1-888-888-9050

CONTENTS

1. Assembly Advice	Page 1
2. Product Features	Page 1 - 5
3. Parts List	Page 6 - 9
4. Base Assembly	Page 10 - 13
5. Door Assembly	Page 14 - 17
6. Roof Vent Assembly	Page 18
7. Framework & Panel Assembly	Page 19-44

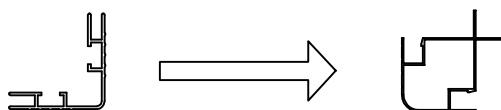
Assembly and Maintenance Advice

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.

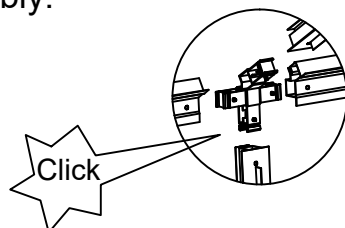


Functions and Features:

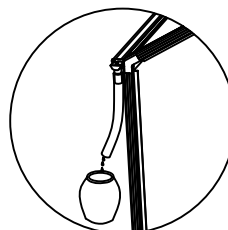
1. Compared with traditional greenhouses this exciting product features many significant improvements. The hollow box profile aluminium framing is much stronger than other greenhouses and it can withstand much greater pressure.



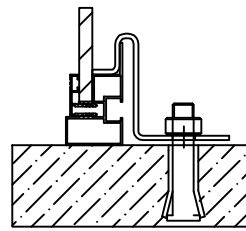
2. Easy and fast assembly.



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

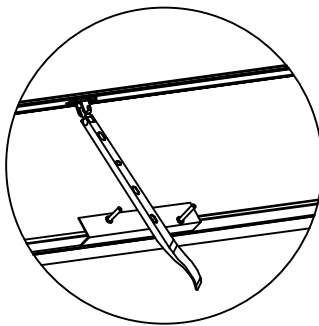


5. A steel base is not required as the aluminium base frame is fixed to the necessary concrete footings with the expansion bolts provided, alternatively you can easily secure it to a timber base with timber screws(not provided).

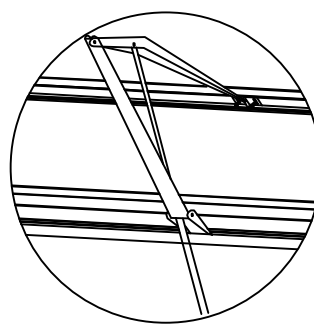


Expansion screw
/ Concrete ground

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.

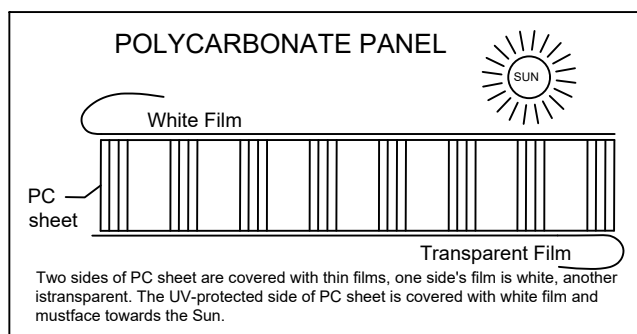


Manual opener

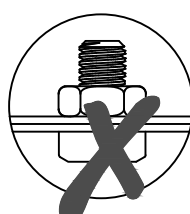
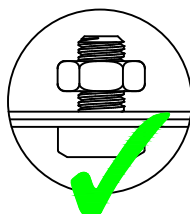


Automatic opener

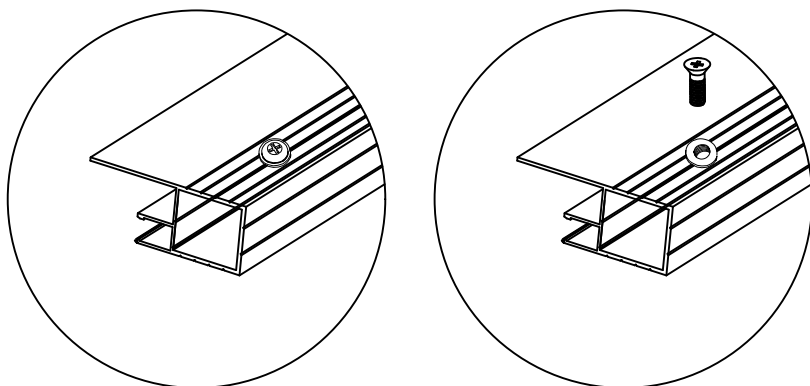
7. Please ensure the roof vents are not installed into the end roof bays of the greenhouse as this is where you need the bracing.
8. Each Polycarbonate Panel comes with UV protected properties. Please ensure the clear film with the text faces out, toward the sun Remove both films before installation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



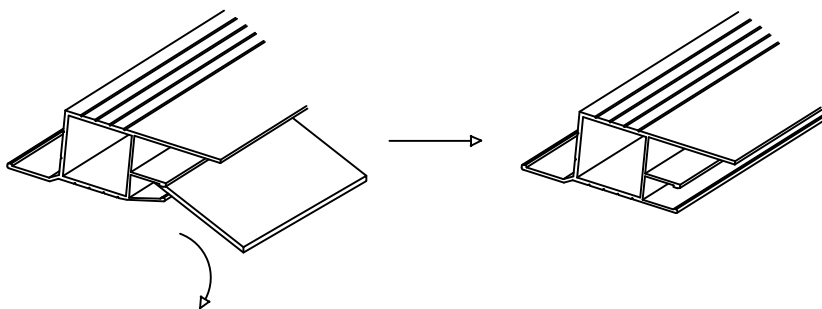
9. Nuts not to be tightened before the end of assembly! Unless otherwise stated, do not tighten the bolts/nuts/screws until the shed is finally erected!



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



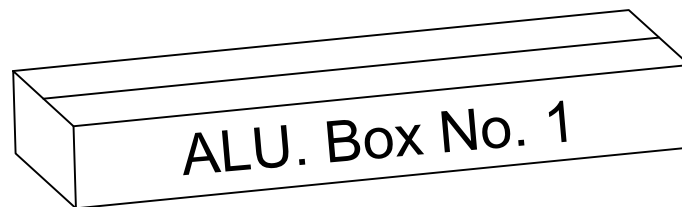
11.If the polycarbonate slot is deformed during transport, use a flat wooden or plastic block to straighten it (Avoid sharp objects to prevent damage to the aluminum).



ALU. Box No.1

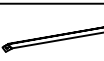
	PART	NO.	QTY.
1		L01A	4
2		L02C	2
3		L02D	2
4		L02F	4
5		L02G	4
6		L03C	2
		L03D	2
7		L04C	2

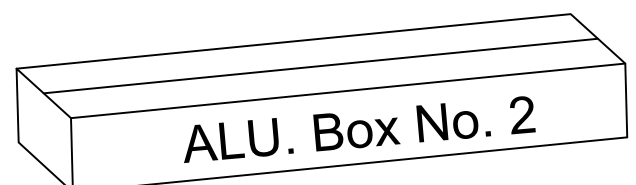
	PART	NO.	QTY.
9		L04D	6
		L04F	1
		L04G	1
10		L04E	2
11		L05A	4
12		L08A	4
13		L08B	2



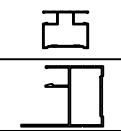
ALU. Box No.2

	PART	NO.	QTY.
1		L01B	2
		L01C	2
2		L02A	2
3		L02B	2
4		L02E	1
		L02F	2
5		L04B	2
6		L05B	2
		L05C	2
		L05D	2

	PART	NO.	QTY.
7		L06	1
8		L07	2
9		L08B	2
10		L09	2
11		L15A	2
12		L19	4
		L20	2
		L21	2
13		L04E	2
14		L22	3

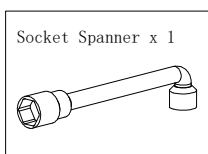
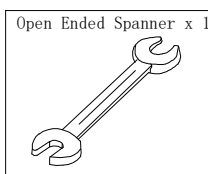
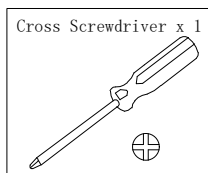


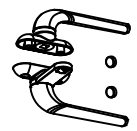
ALU. Box No.3

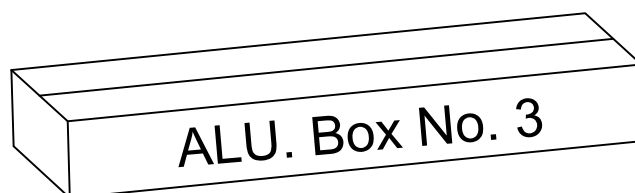
	PART	NO.	QTY.
1		L16A	1
		L16B	1
		L16C	1
		L16D	1
2		L16E	1
		L16F	1
		L16G	1
		L16H	1
3		L17	1
		L18A	2
4		L18B	1
		L18C	1
5		L05G	4
6		L30	4

PART	NO.	QTY.
	S05	175
	M6X12	
	S11	4
	M6X20	
	M03	179
	M6	
	Z02	24
	Ø4X16D	
	Z10	8
	Ø5X30	
	Z04	12
	Ø4X8	
	Z17	18
	M5X12	
	S08	14
	M8X60	
	Z08	48
	M4.2X16	

PART	NO.	QTY.
	A52	2
	A53	2
	A54	4
	A09	2
	A10	2
	A11	2
	D77	12
	D17	2
	A01	4
	A69	2
	A70	2
	D07	14
	A92-1	2
	A92-2	2
	H63	9
	J01	4
	J03	4
	J02	2
	J06R/L	2/2
	J92	4
	J93	4



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



ALU. Box No.4 (2 Section Assembly)

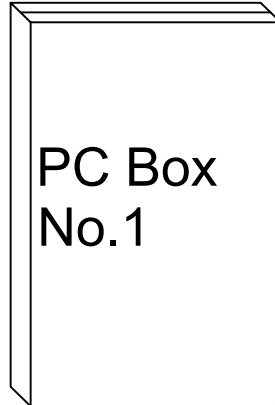
	PART	NO.	QTY.
1		L02A	2
2		L02B	2
3		L02F	2
4		L02H	2
5		L02K	1
6		L03A	2
7		L03B	2
8		L04B	2
9		L05B	2
		L05C	2
		L05D	2
10		L06	1
11		L07	2
12		L08B	2
13		L09	2
14		L15A	2
15		L19	4
		L20	2
		L21	2
16		L04E	2
17		L22	3

PART	NO.	QTY.
	A12	2
	A13	1
	A54	2
	D18	2
	D19	2
	D20	2
	A01	4
	A69	2
	A70	2
	J03	2
	J04	1
	J07	2
	S05	86
	M5X25	
	S11	4
	M6X20	
	M03	90
	M6	
	Z02	12
	Ø4X16D	
	Z10	8
	Ø5X30	
	Z04	8
	Ø4X8	
	S08	4
	M8X60	
	D07	4



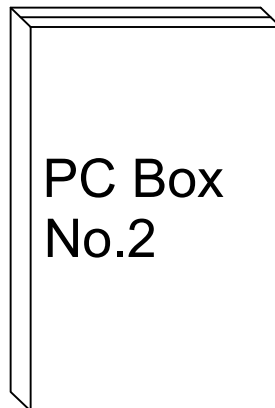
PC Box No.1

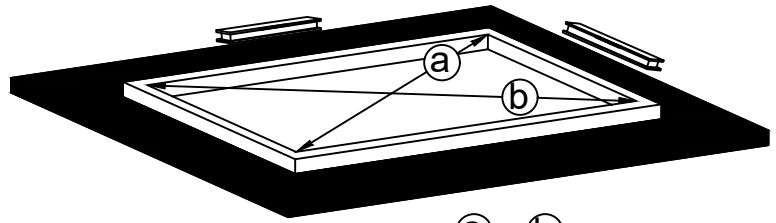
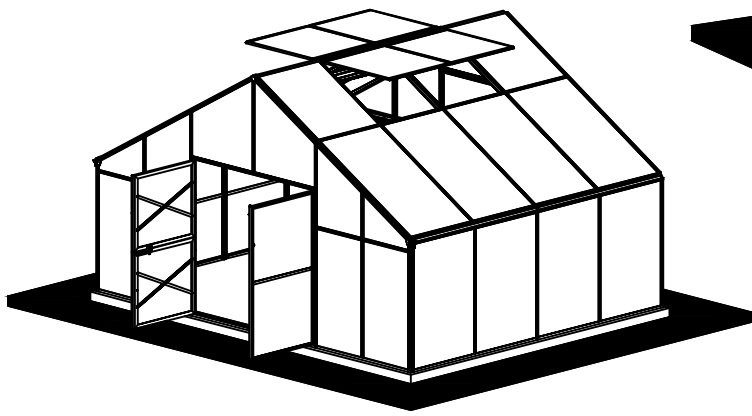
PART	NO.	QTY.
	Y1	2
	Y3	4
	Y4	2
	Y5	2
	Y11	2
	Y12	2
	Y13	2
	Y14	8
	Y15	2
	Y16	2



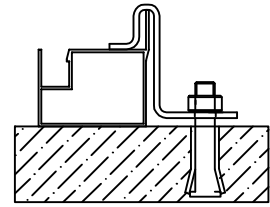
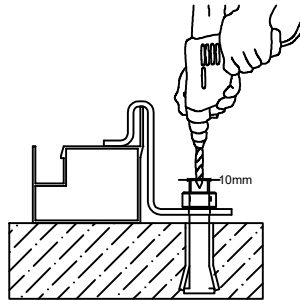
PC Box No.2 x 2PCS (2 Section Assembly)

PART	NO.	QTY.
	Y6	4
	Y7	2
	Y9	4
	Y10	2



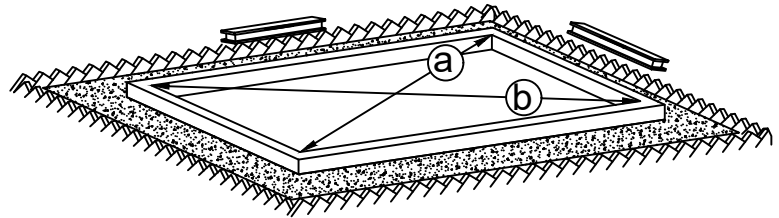
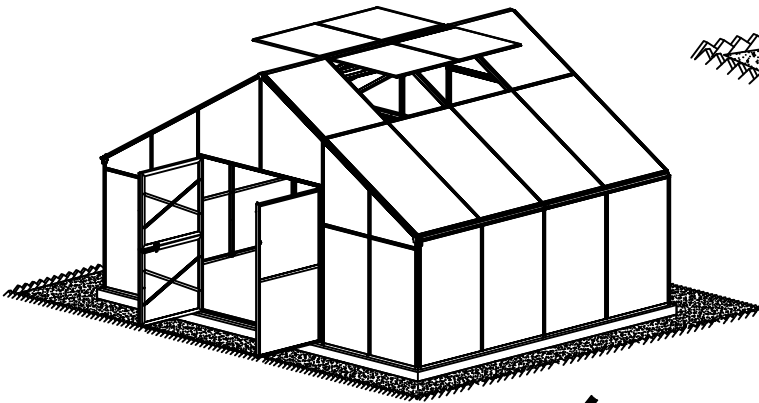


$a = b$

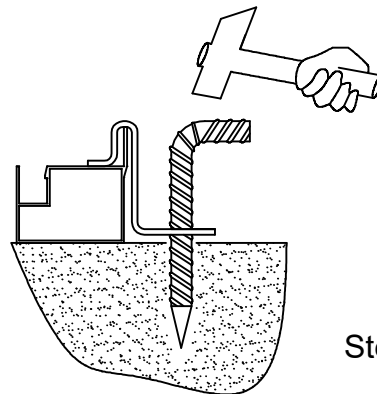


Expansion bolt
in concrete

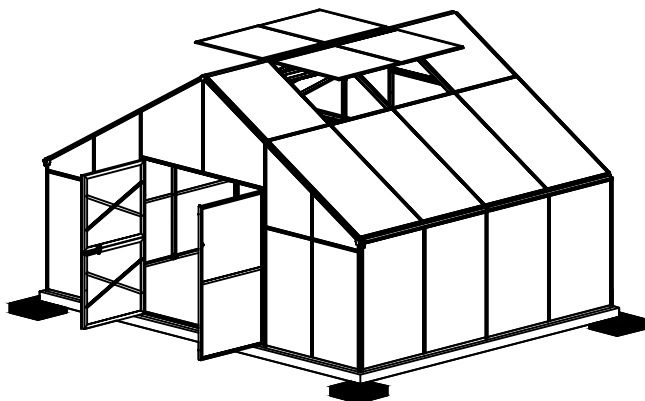
It is essential the dimensions $a + b$ are the same to ensure the base is square.



$a = b$



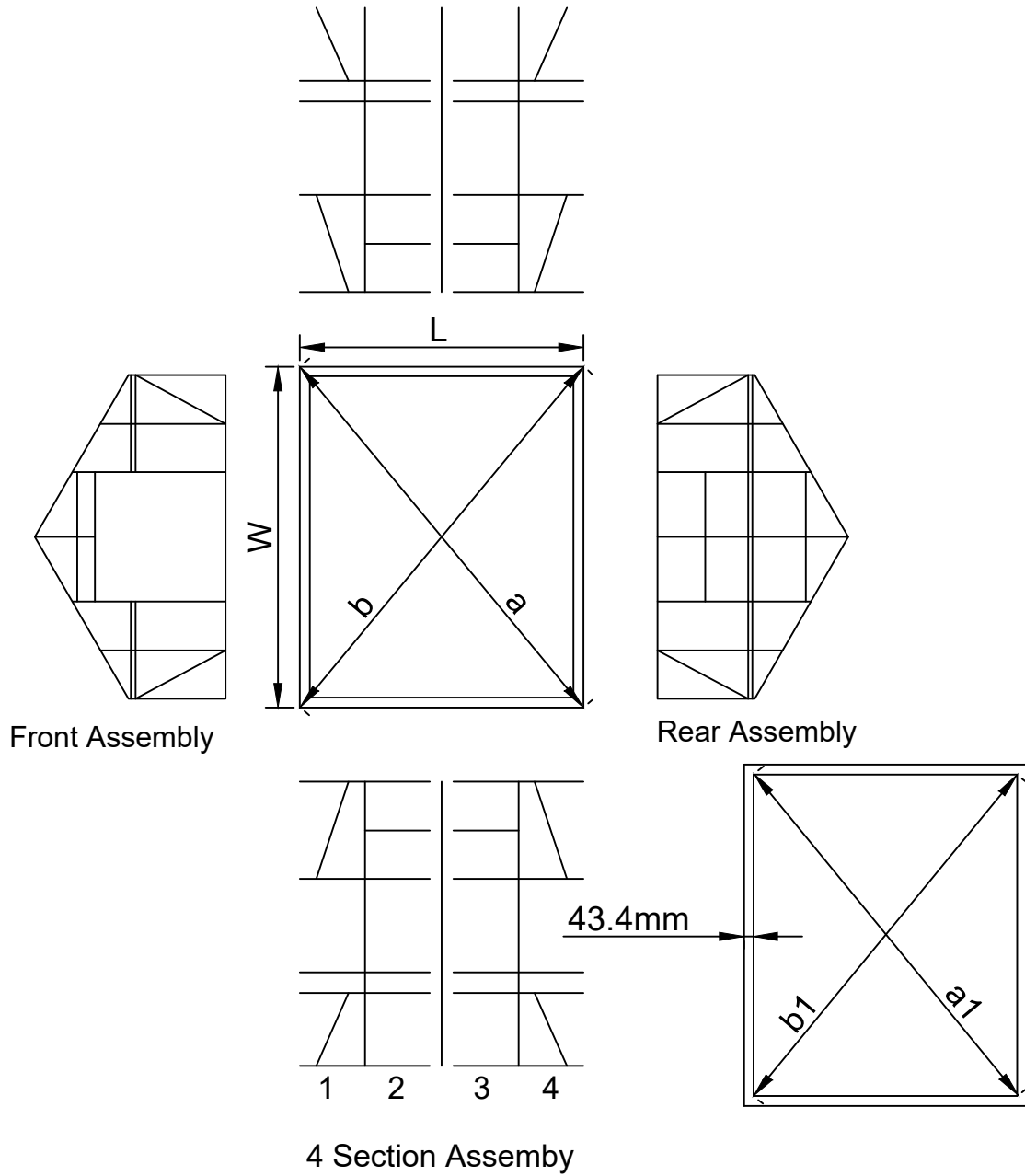
Steel pegs in soil



Support at the corners only is inadequate.

X

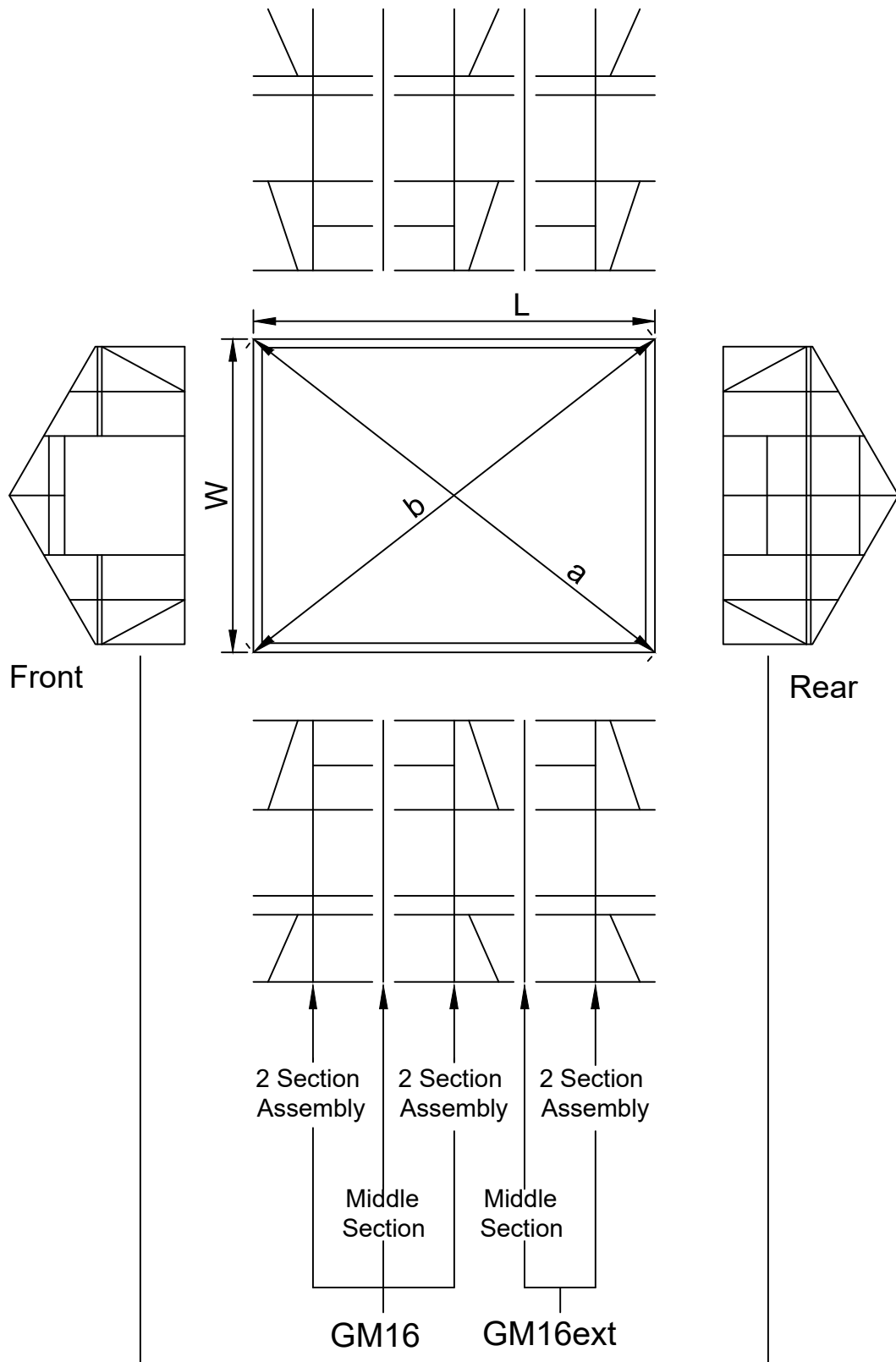
GM16



Dim/Model	GM16	GM16+Ext(1)	GM16+Ext(2)	GM16+Ext(3)	GM16+Ext(4)	GM16+Ext(5)	etc.
W(mm)	5061.8	5061.8	5061.8	5061.8	5061.8	5061.8	
L (mm)	4059.8	6061.8	8063.8	10065.8	12067.8	14069.8	
a=b(mm)	6488.7	7897.3	9520.8	11266.9	13086.4	14952.6	
a1=b1(mm)	6366.7	7775	9401.2	11150.4	12972.9	14841.7	

- * 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

GM16+Ext(1)



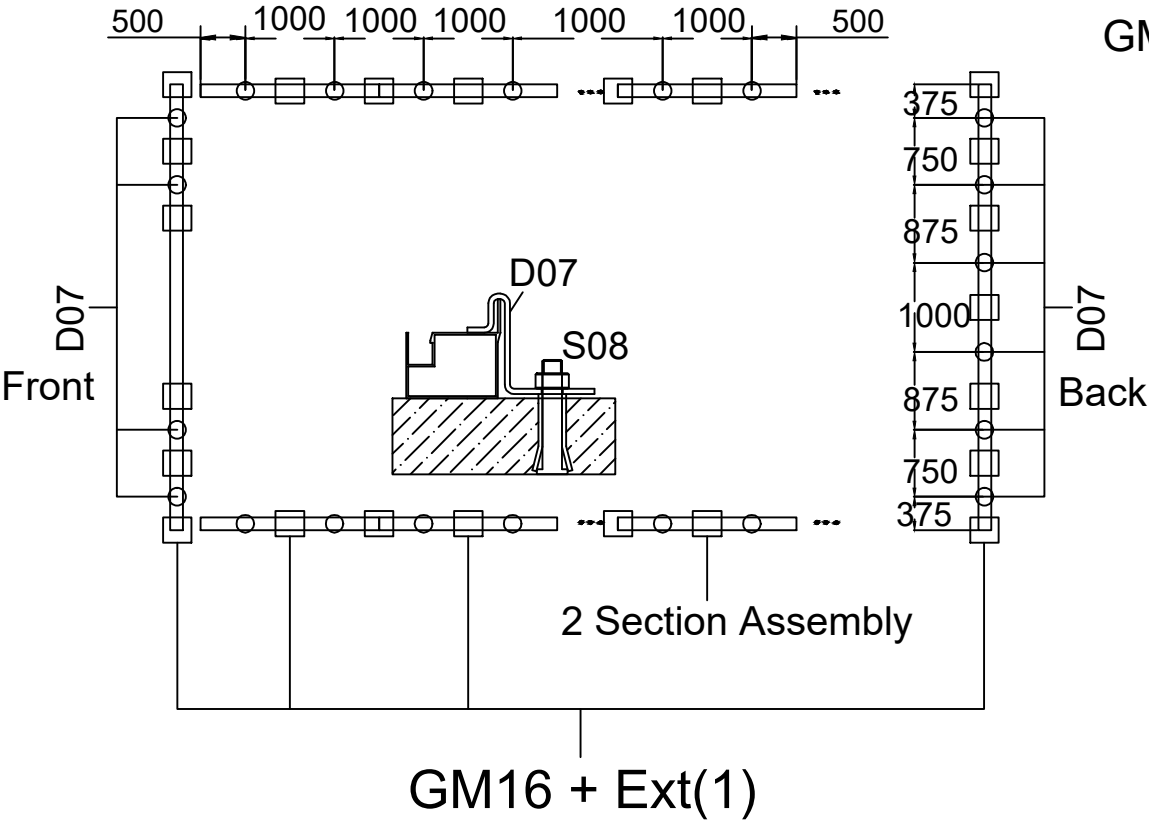
* The basic model, GM16, can be easily extended by adding a '2 Section Assembly' each time for a longer size.

PART	NO	QTY
	D07	18
	S08 M8X60	18

PART	NO	QTY
	D07	4
	S08 M8X60	4

GM16

GM16 2EXT



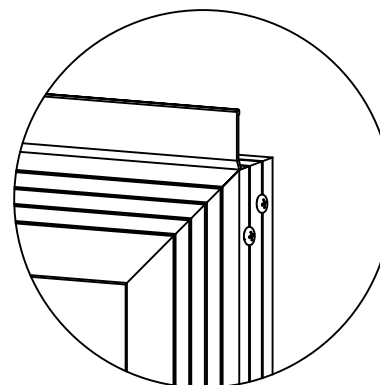
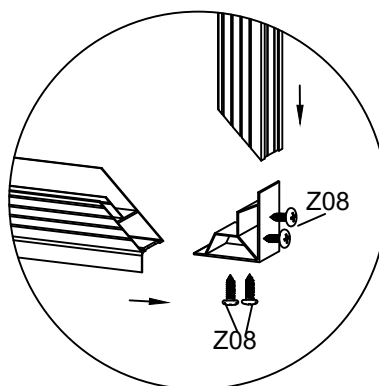
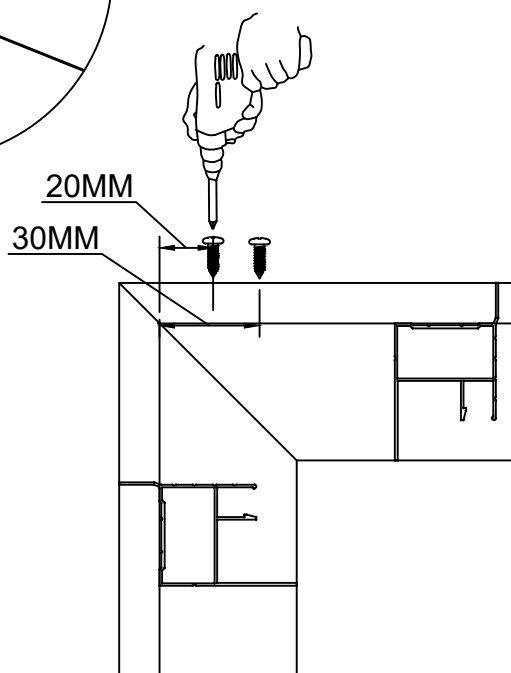
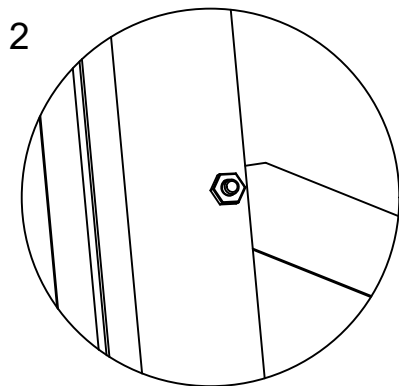
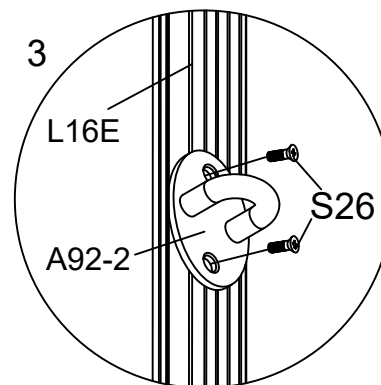
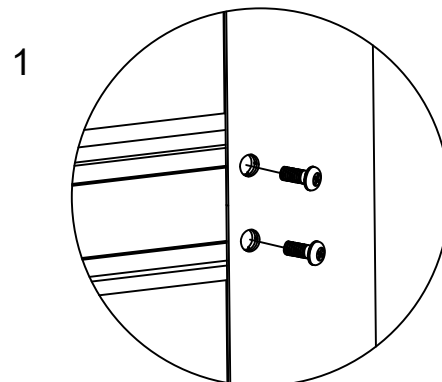
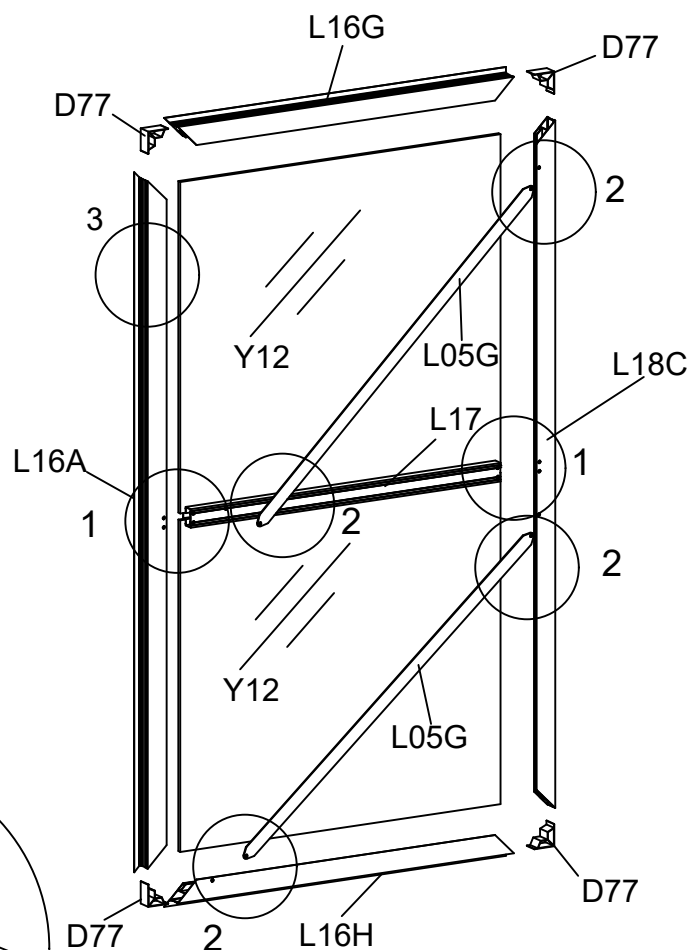
* This shows a layout for W05's positions where it is placed in the middle of PC panel for each section.

* 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
	A92-2	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.

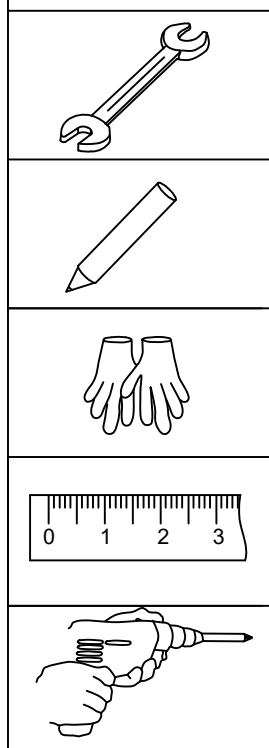
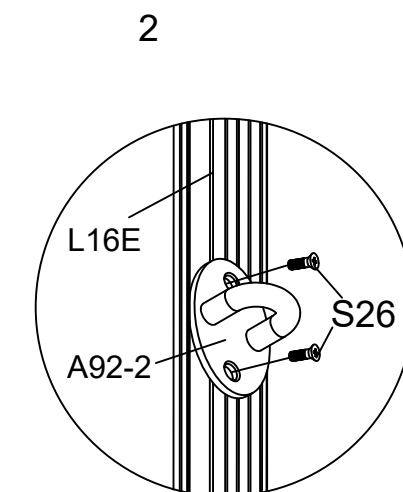
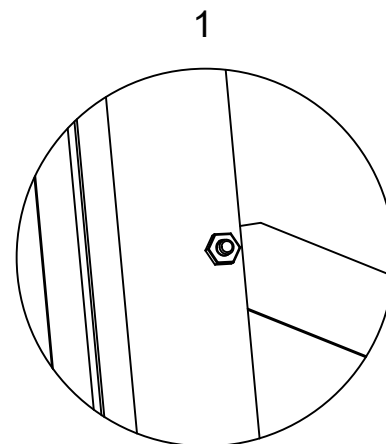
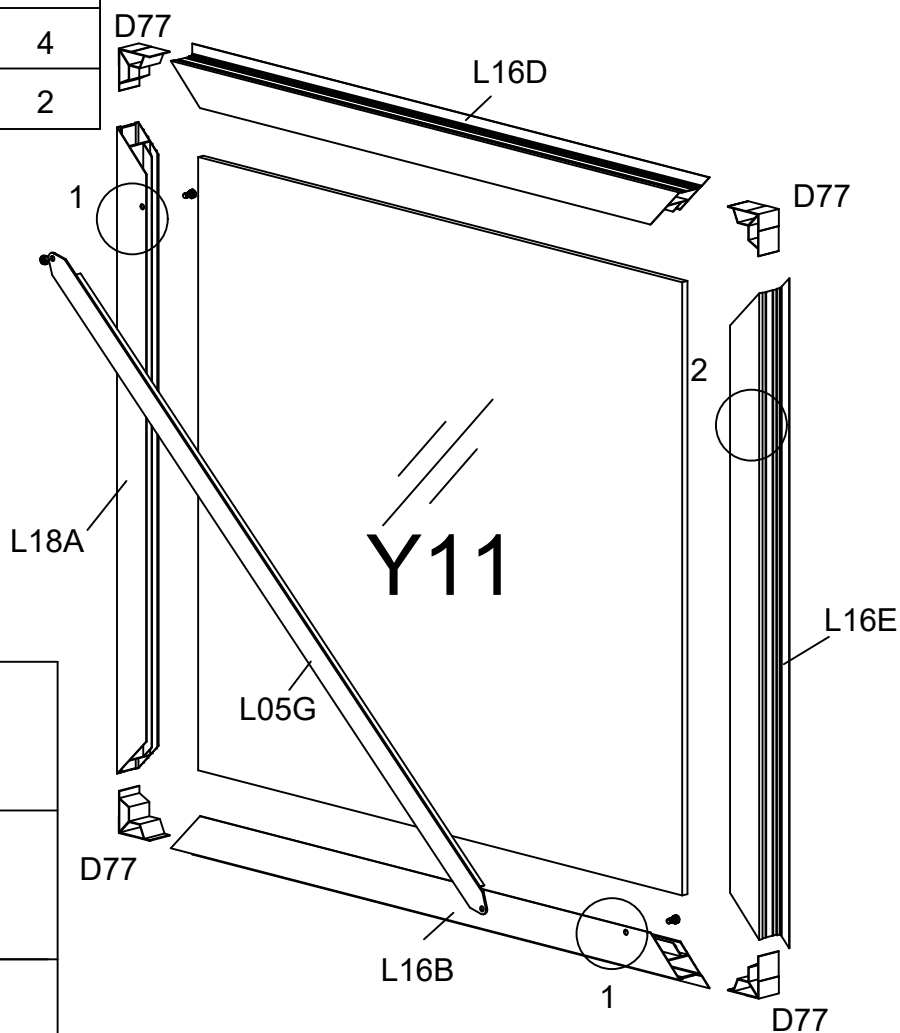
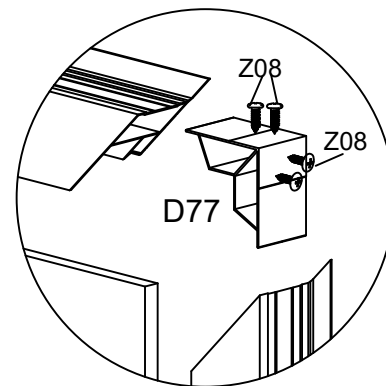
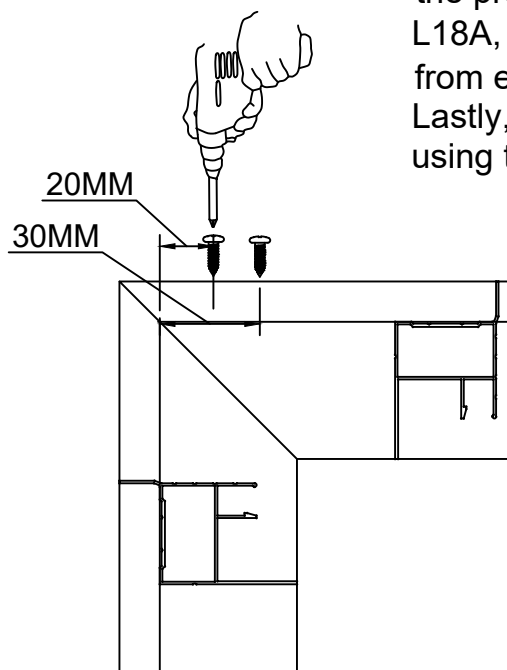


Then mark the distance from each end about 20/30MM.
Lastly, secure them with screws Z08 using the powered screw-driver.

PART	NO	QTY
	L18A	2
	L18B	1
	L16B	1
	L16C	1
	L16D	1
	L16E	1
	L16F	1
	L05G	2
	D77	8
	A92-2	1
	S26 M3X12	2
	Z08 M4.2X16	32
	S05 M6X12	4
	M03 M6	4
	Y11	2

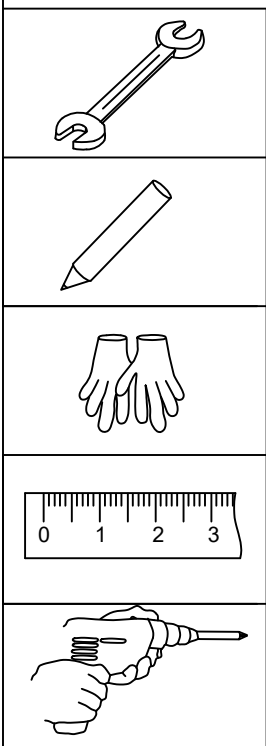
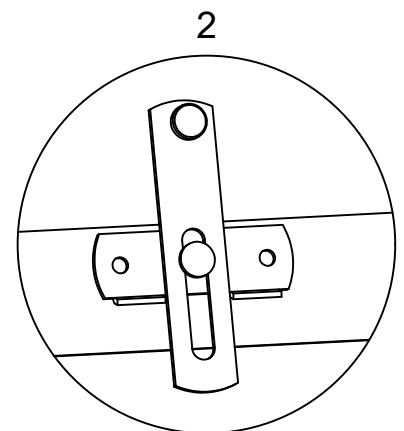
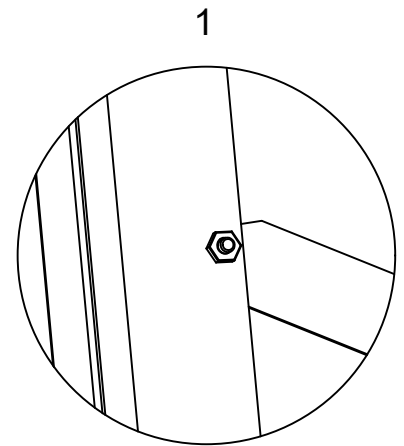
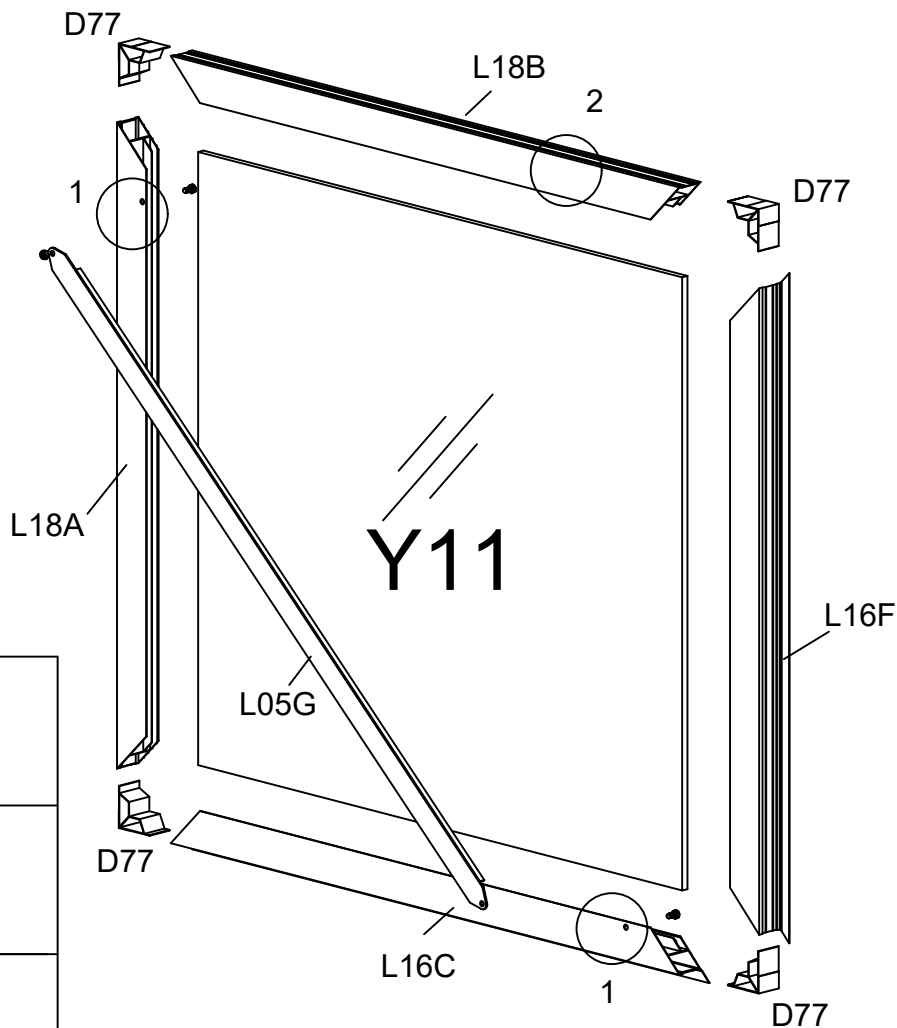
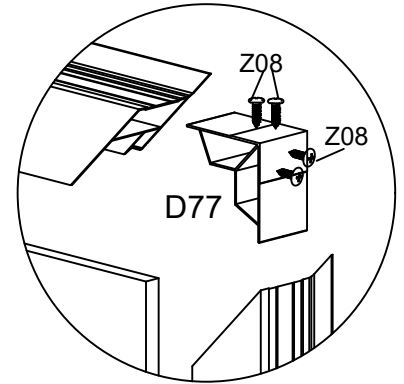
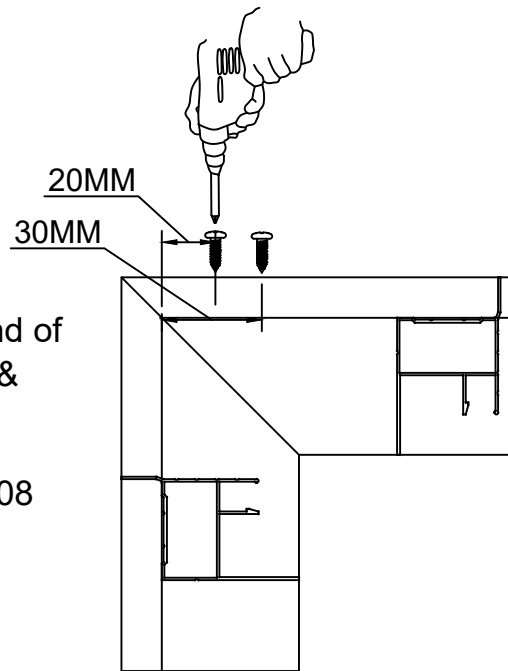
Door-R1 Assembly

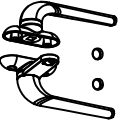
Insert Connector D77 into each end of the profiles L16B & L16D & L16E & L18A, and then mark the distance from each end about 20/30MM. Lastly, secure them with screws Z08 using the powered screw-driver.

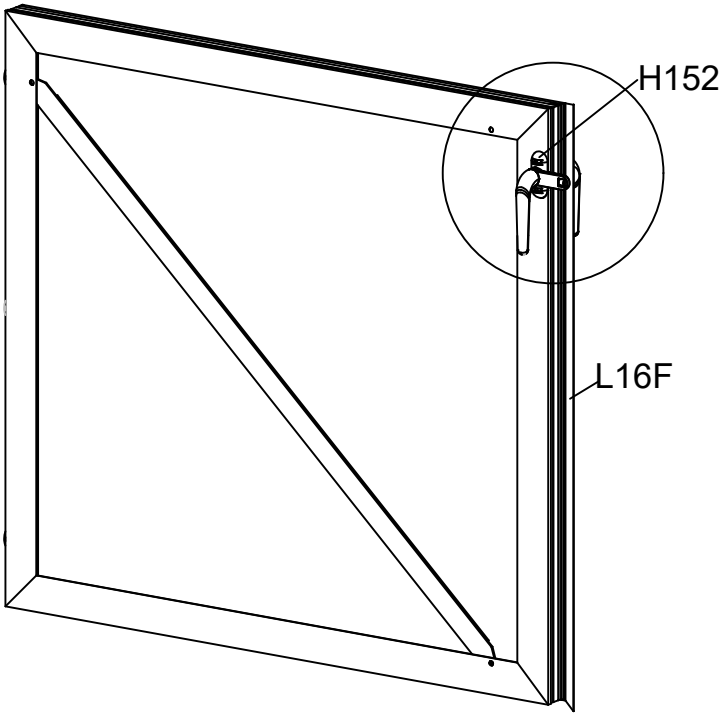


Door-R2 Assembly

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

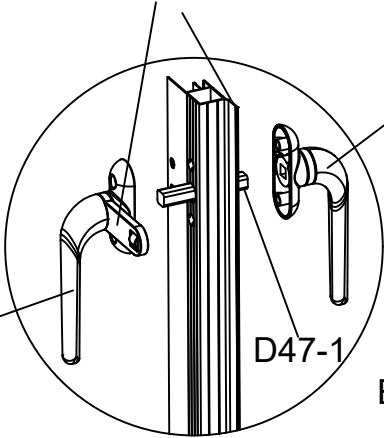


After installing the door, attach handle H152.
 First, insert D47 into the door hole, then install H152.
 When installing, ensure that the long tongue of H152-1
 faces towards the edge of the door, and align the
 square hole of H152-1/2 with D47 before inserting it.
 attach the decorative cover.

Pay attention to the installation direction

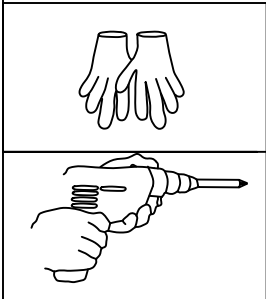
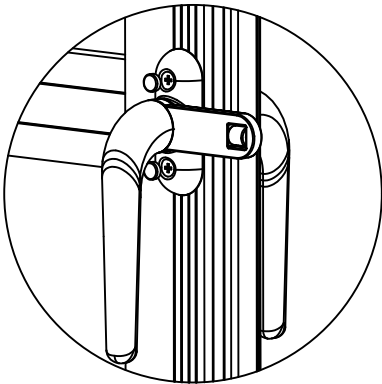
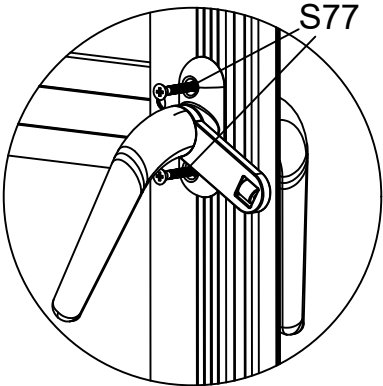
Internal view

H152-1



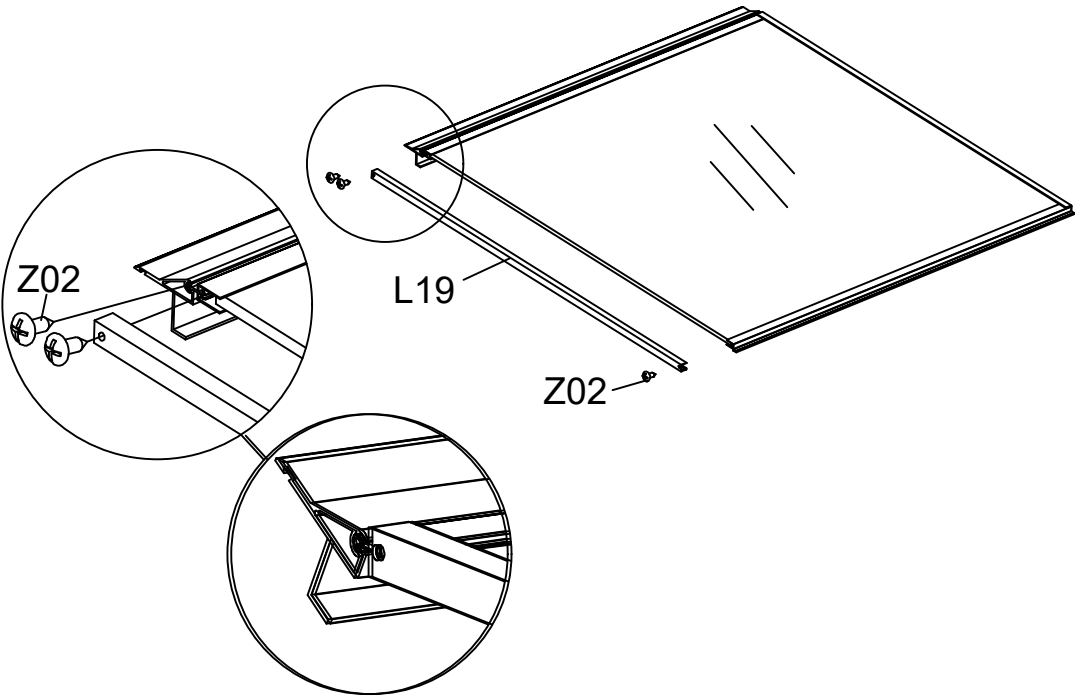
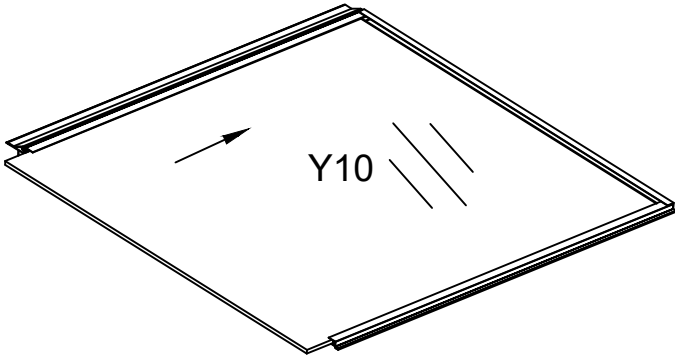
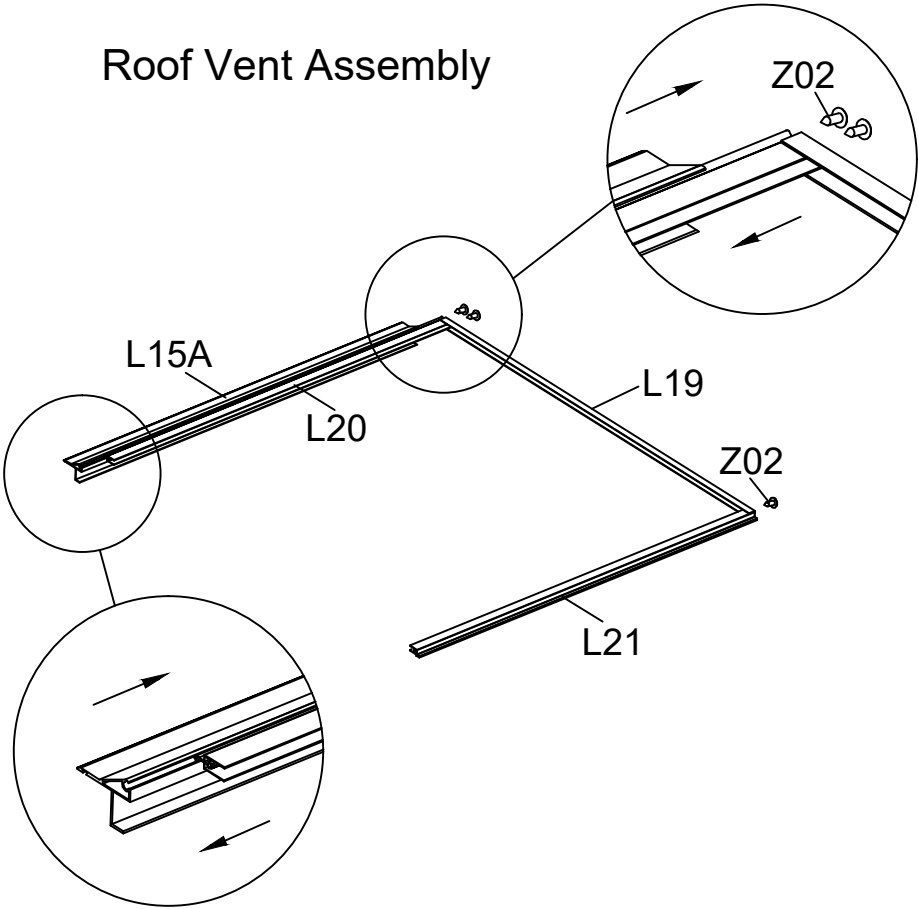
H152-2

External view

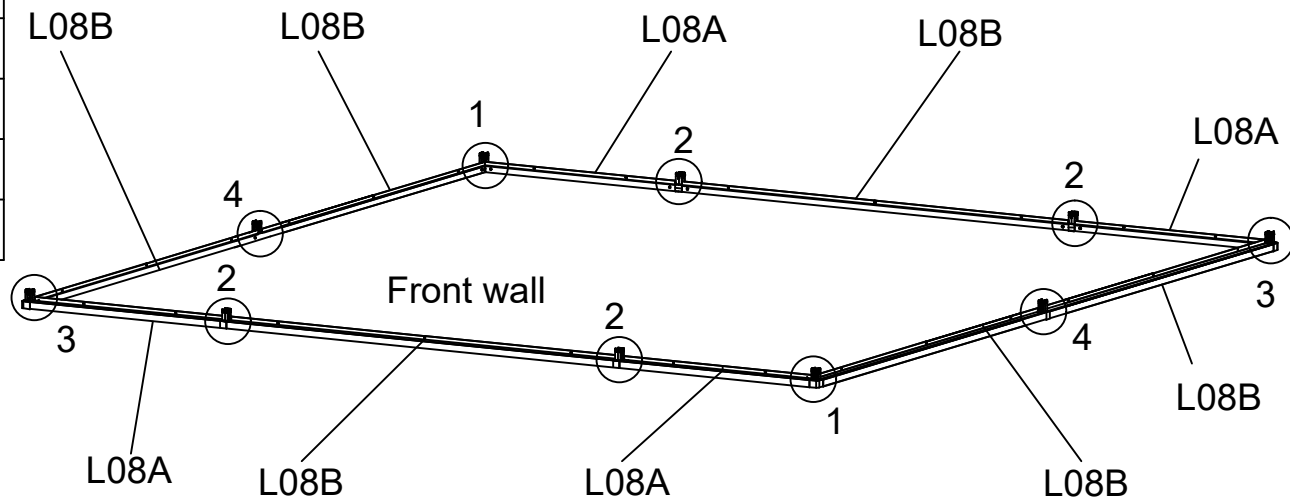


PART	NO.	QTY.
	L15A	1
	L19	2
	L20	1
	L21	1
	Z02 Ø4X16D	6
	Y10	1

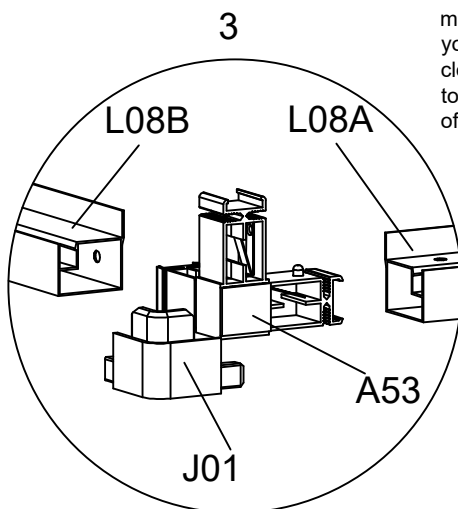
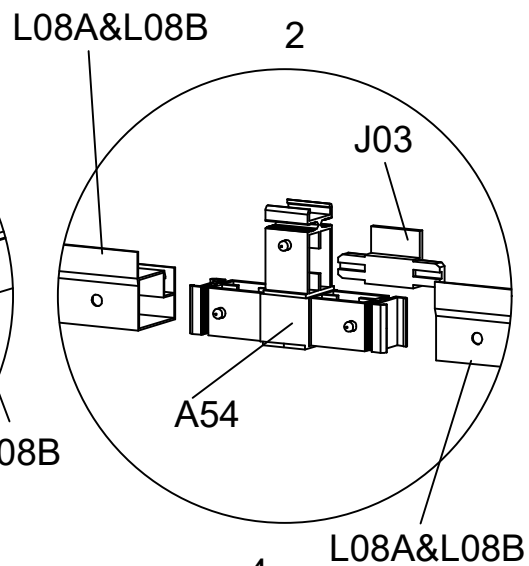
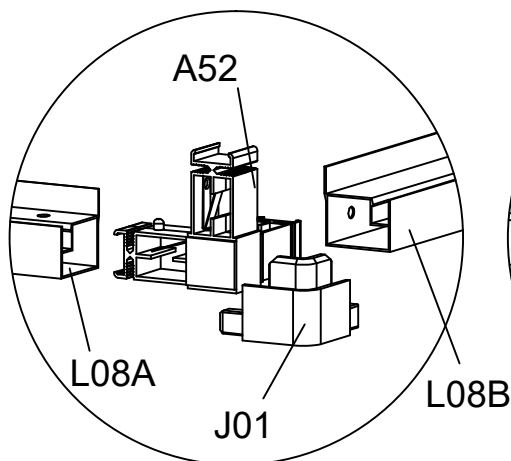
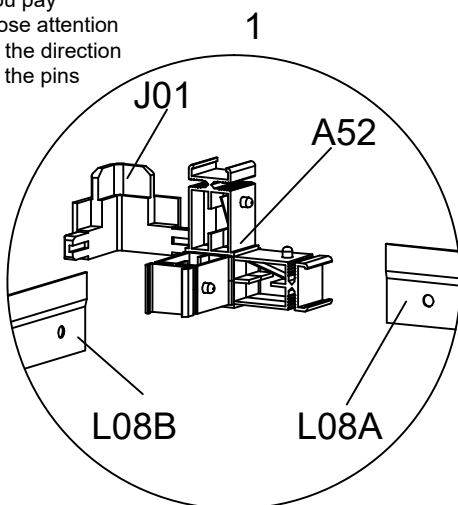
Roof Vent Assembly



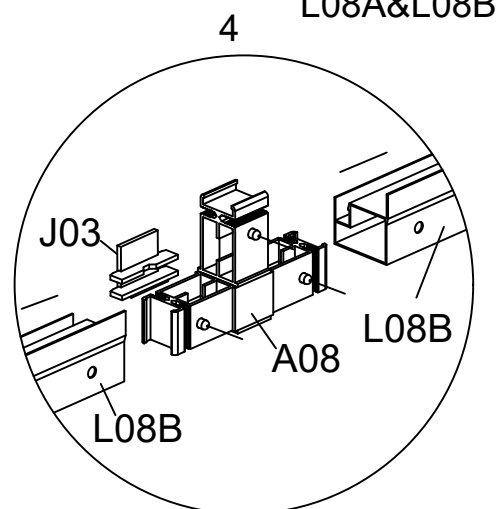
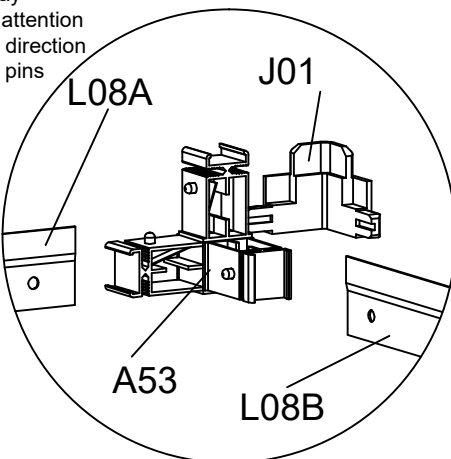
PART	NO.	QTY.
	L08A	4
	L08B	6
	A52	2
	A53	2
	A54	6
	J01	4
	J03	6



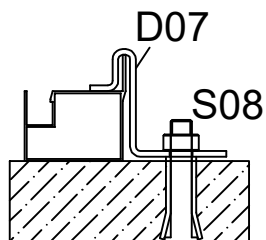
make sure
you pay
close attention
to the direction
of the pins



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

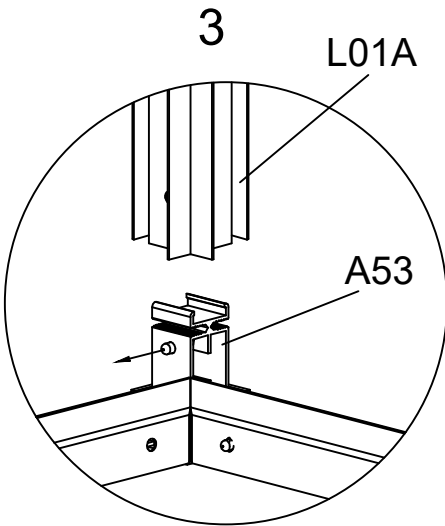
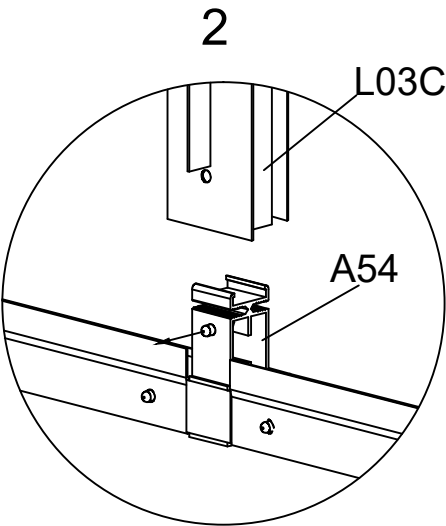
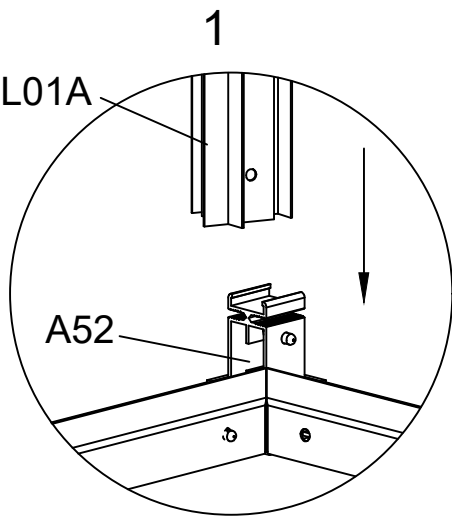
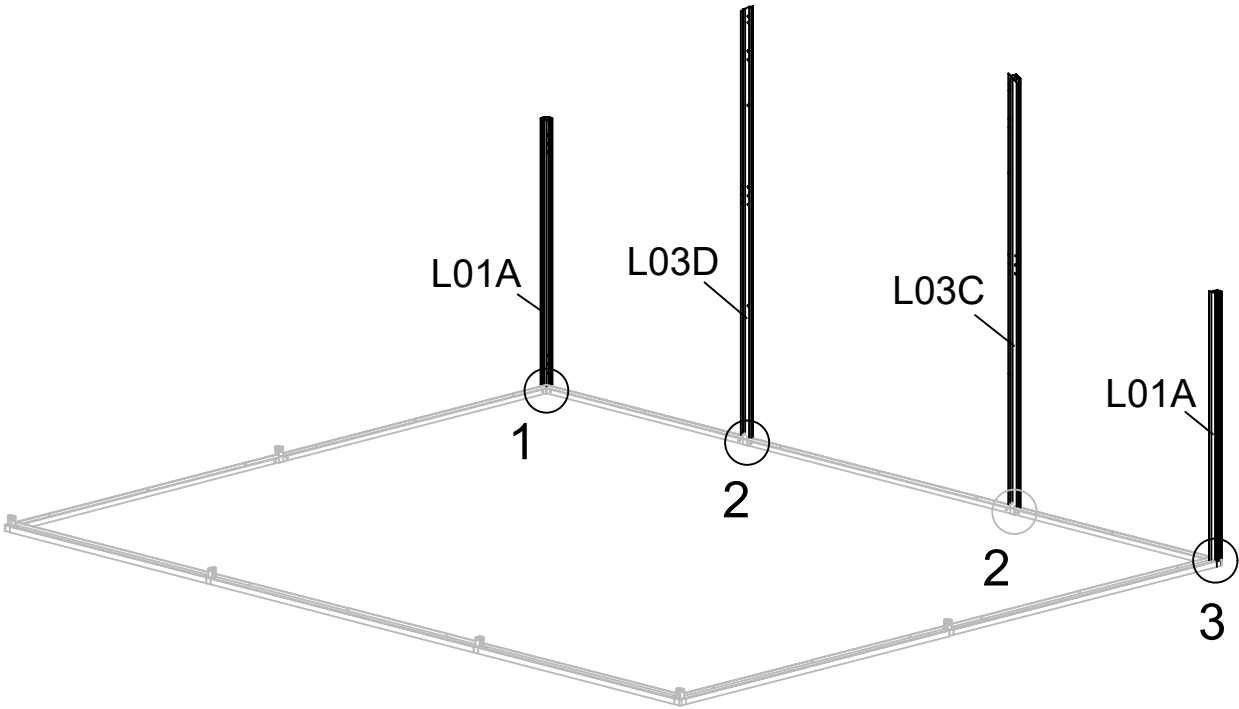


Assemble all D07 followed by previous Page 11 after each base profile is connected.

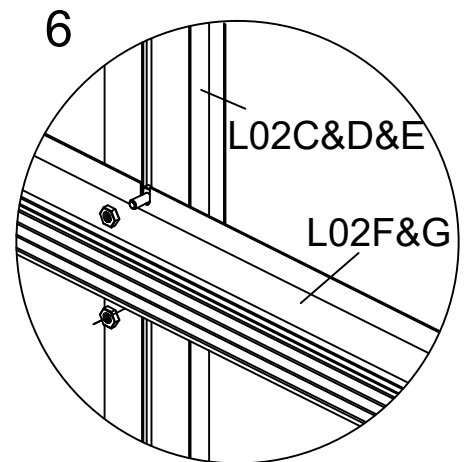
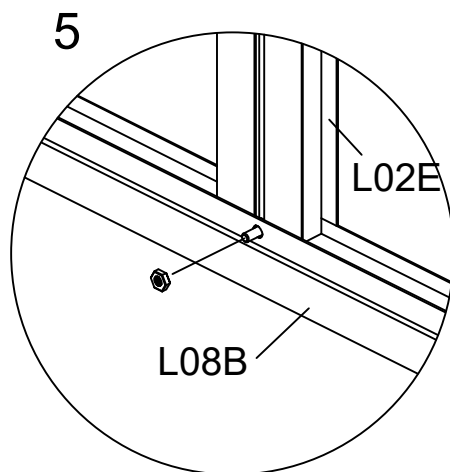
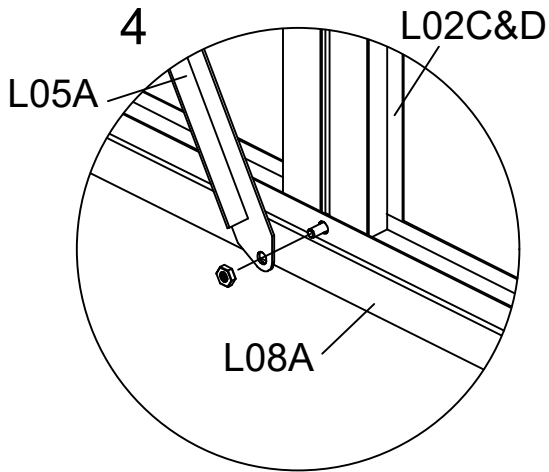
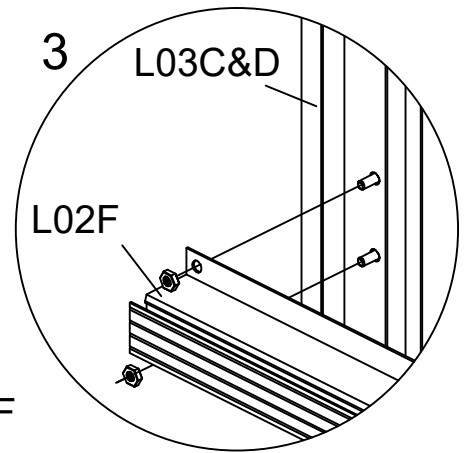
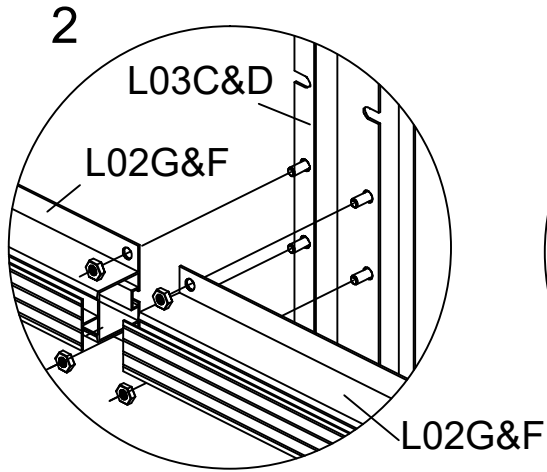
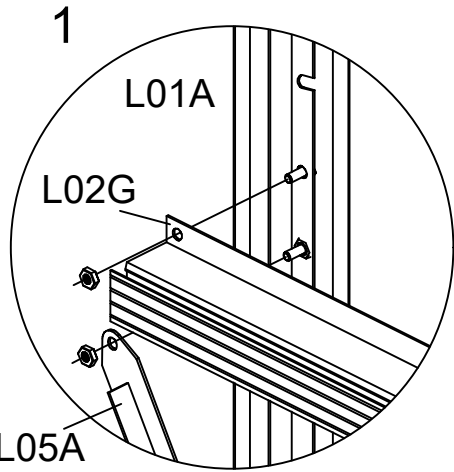
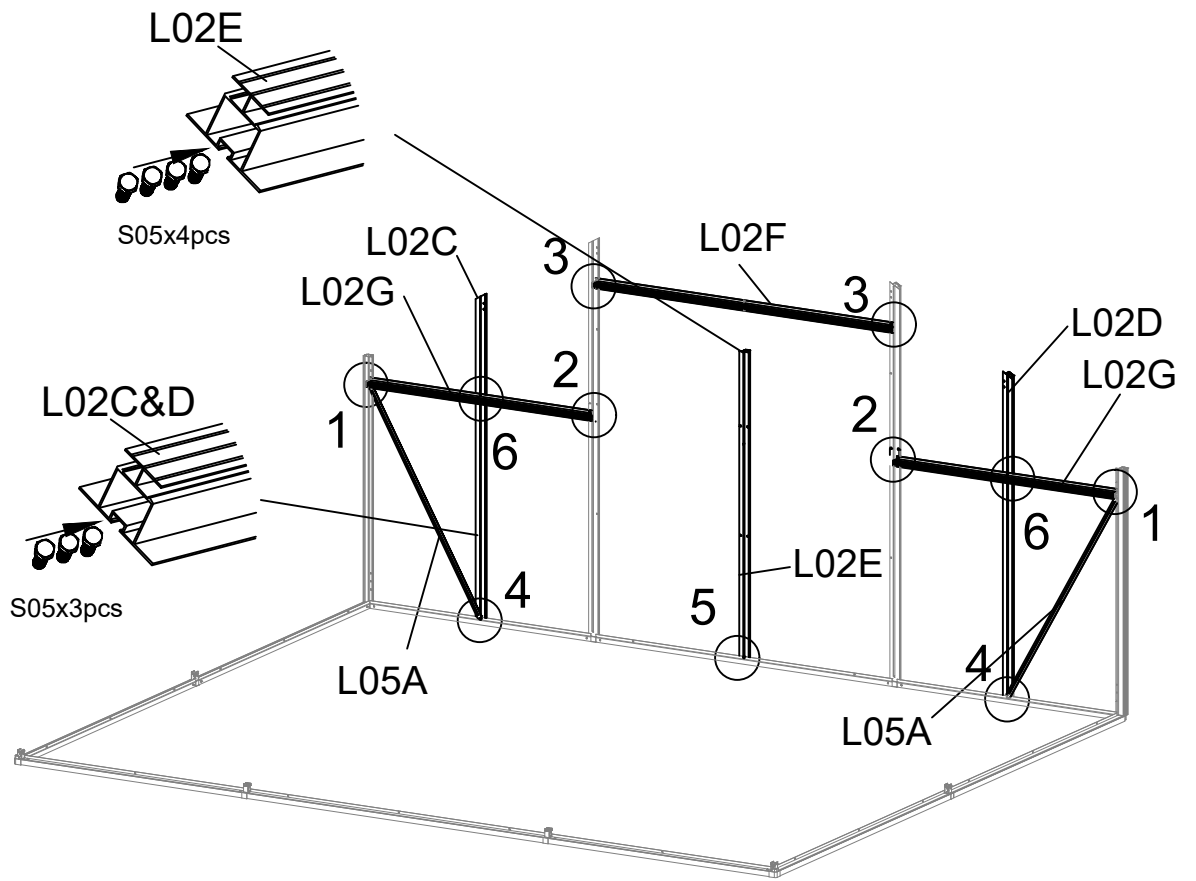


must connect all plastic parts (J03 and J01 R/L) before completing this step

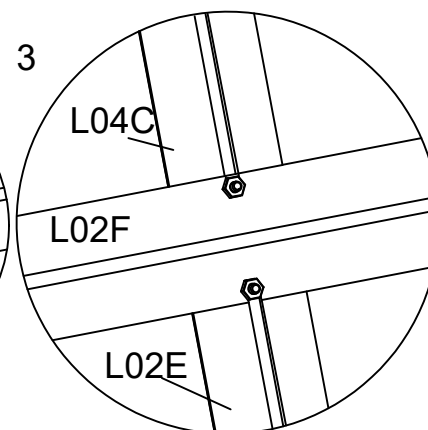
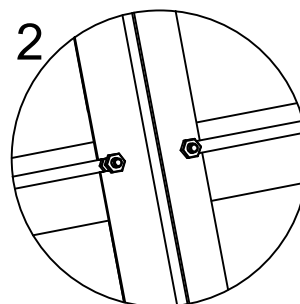
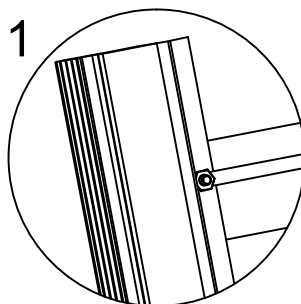
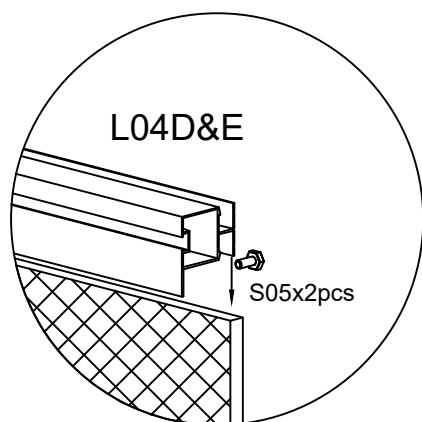
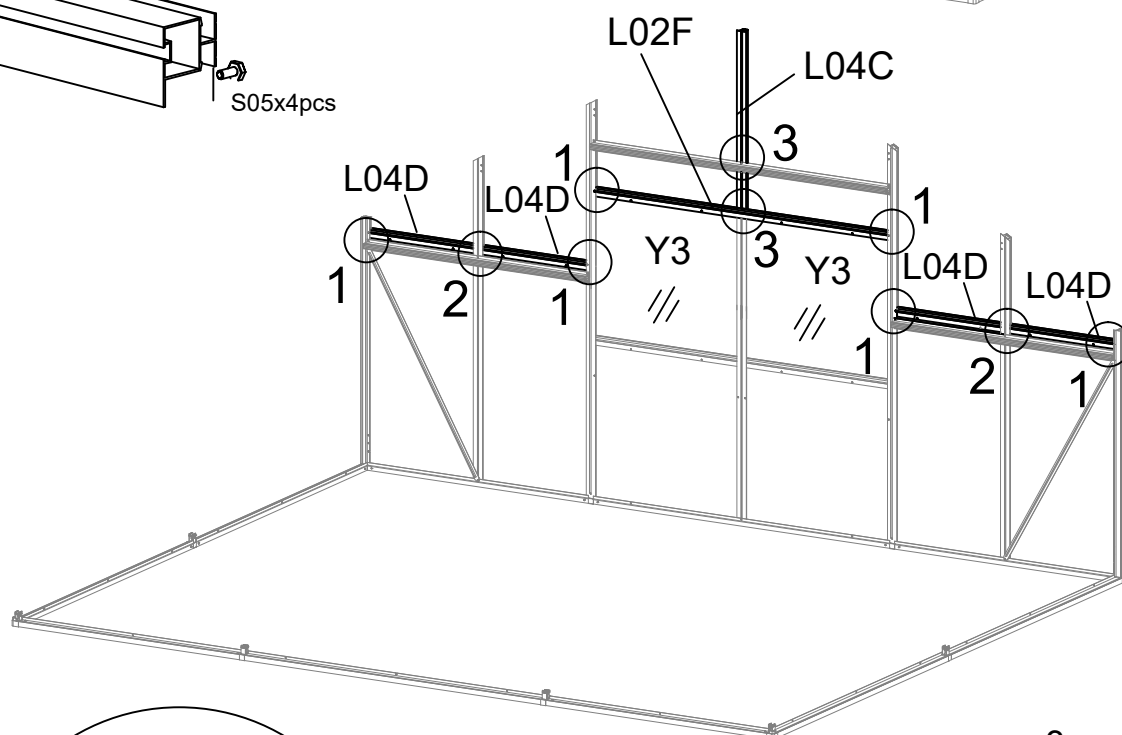
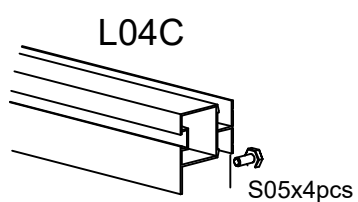
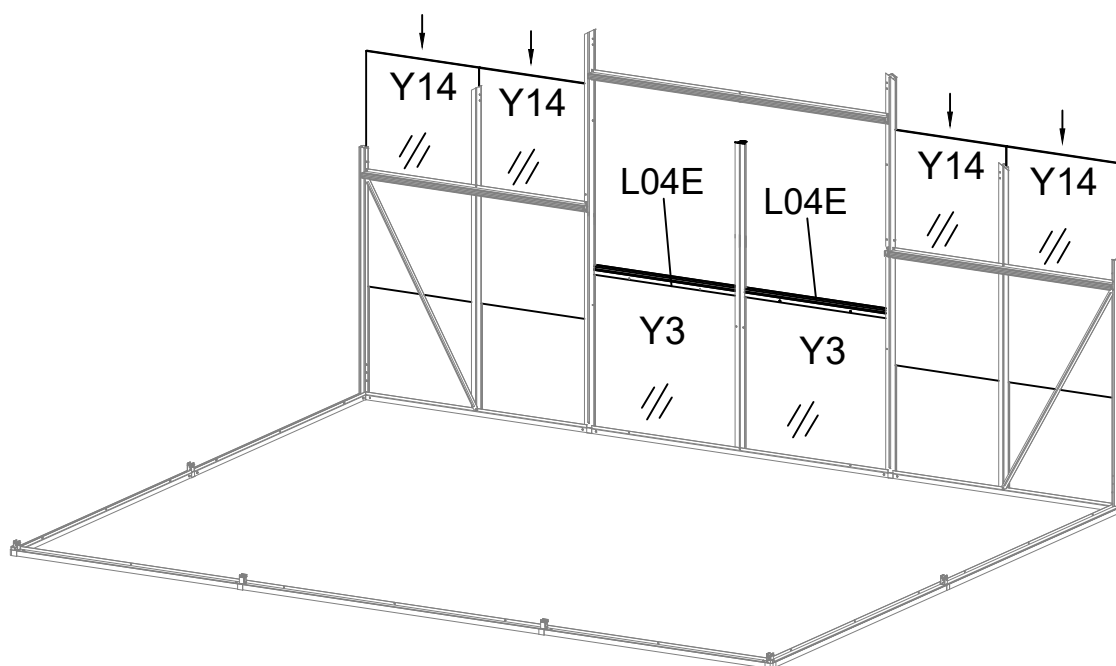
PART	NO.	QTY.
	L01A	2
	L03C	1
	L03D	1



PART	NO.	QTY.
	L02C	1
	L02D	1
	L02E	1
	L02F	1
	L02G	2
	L05A	2
	S05	28
	M6X12	
	M03	28
	M6	

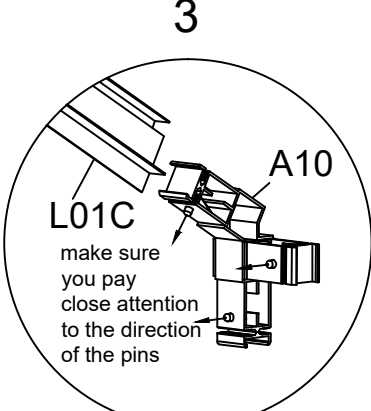
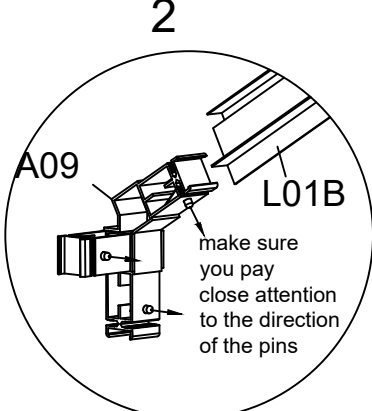
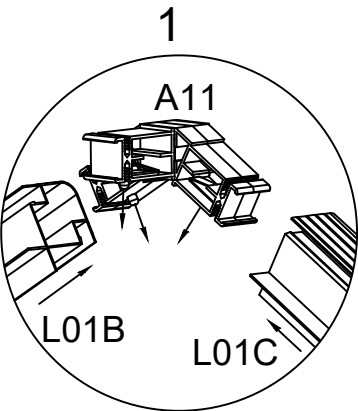
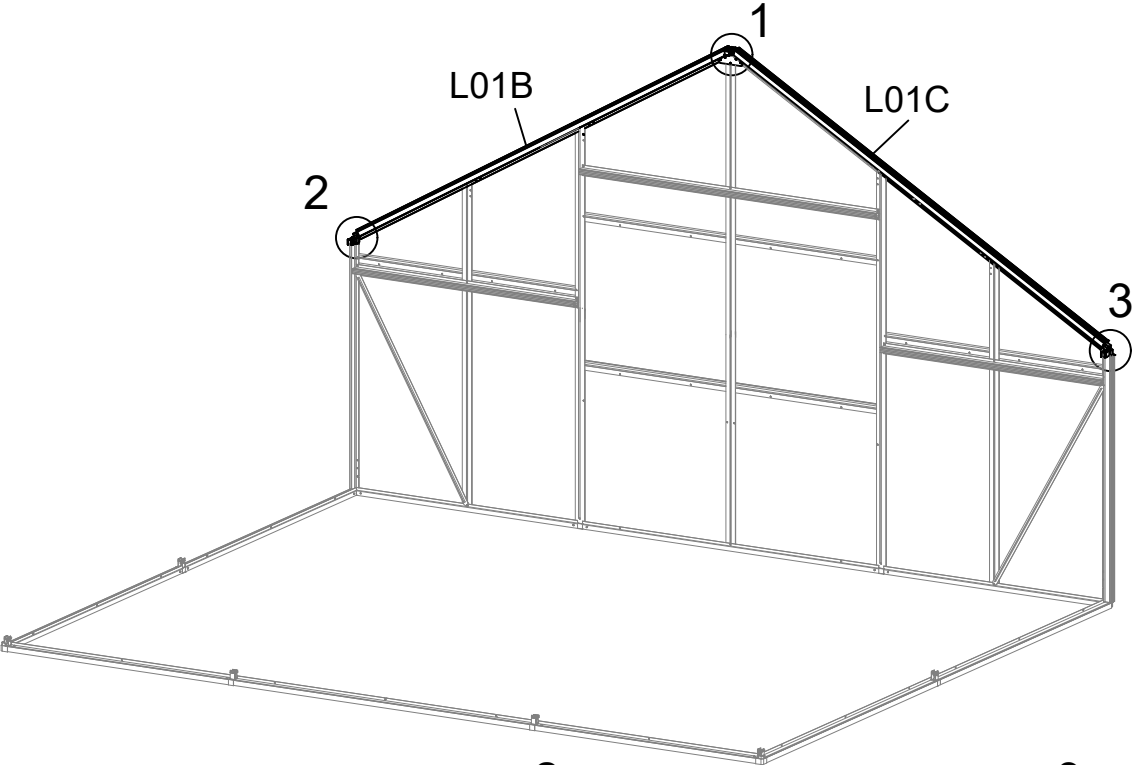
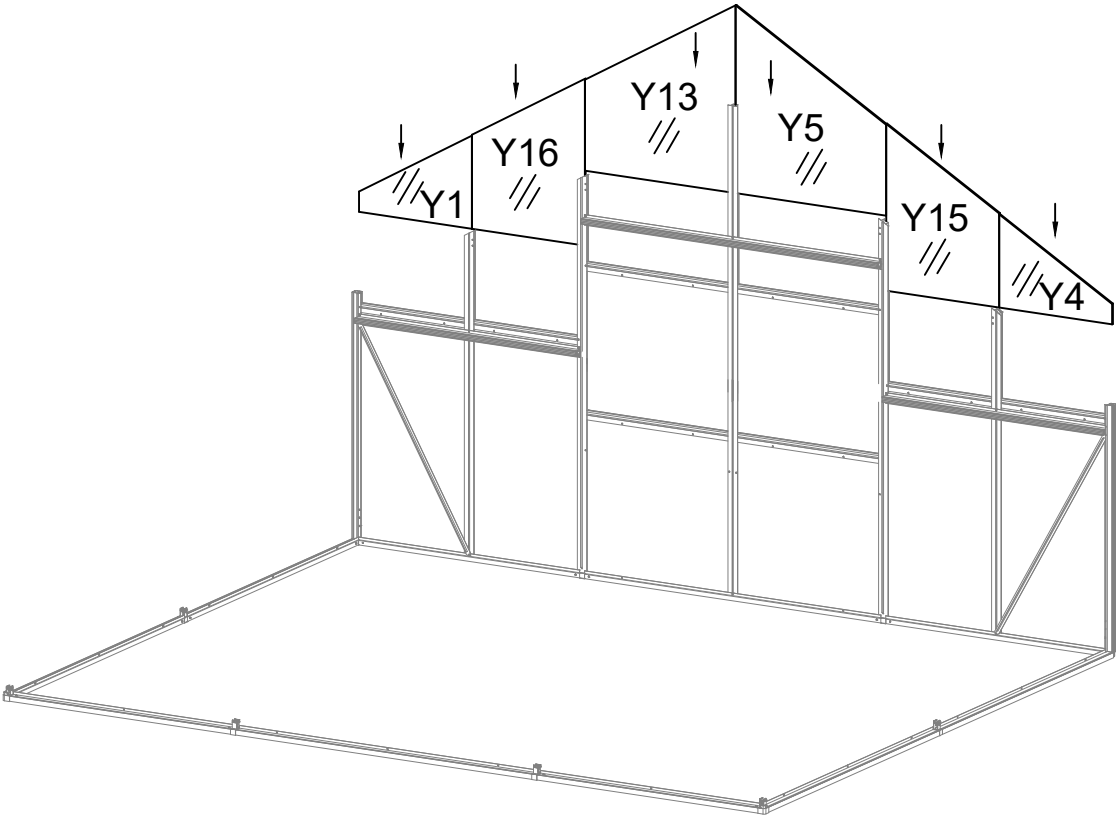


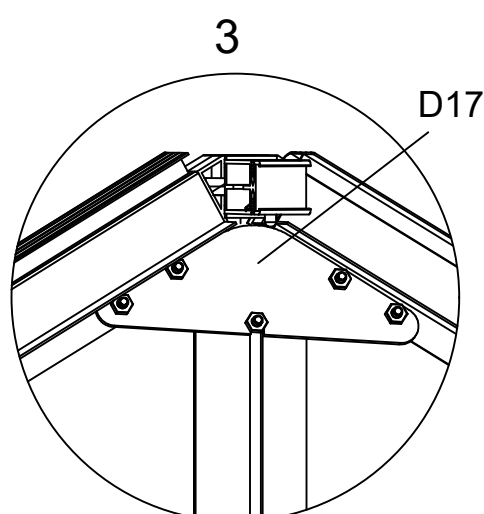
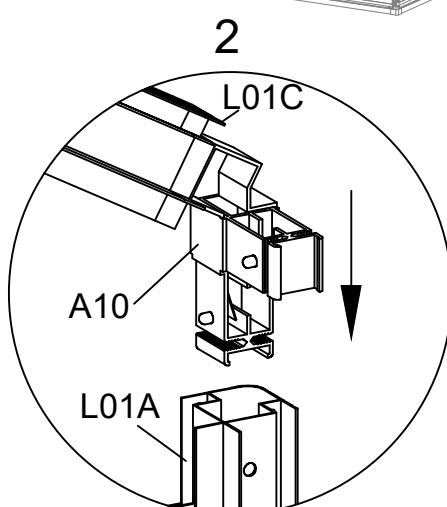
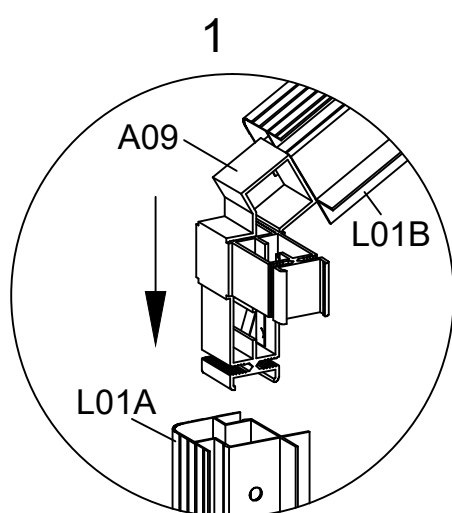
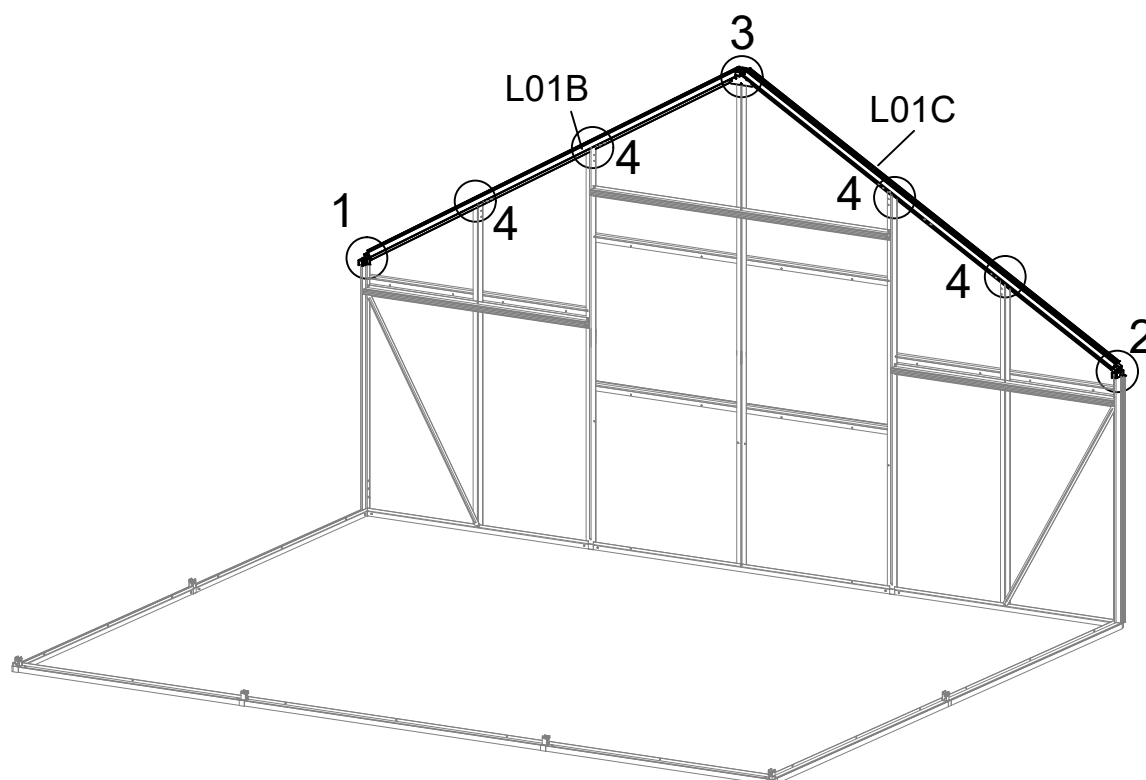
PART	NO.	QTY.
	L02F	1
	L04C	1
	L04D	4
	L04E	2
	Y3	4
	Y14	4
	S05	22
	M6X12	
	M03	22
	M6	



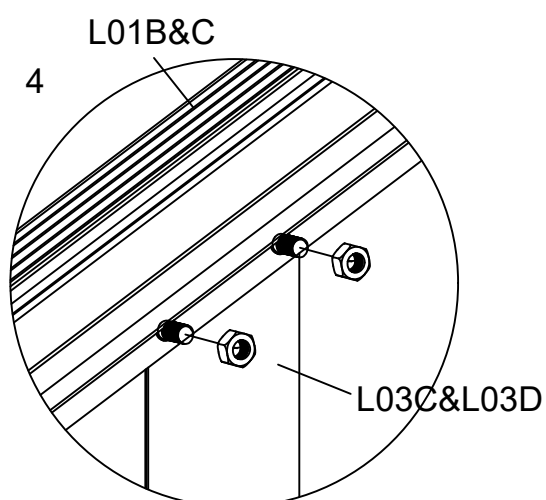
Slide 2 x S05 into each L04D & E, and put each profile onto the edge of each PC panel, then tighten all profiles at each end with S05.

PART	NO.	QTY.
	L01B	1
	L01C	1
	A09	1
	A10	1
	A11	1
	D17	1
	Y1	1
	Y4	1
	Y5	1
	Y13	1
	Y15	1
	Y16	1
	S05	12
	M6X12	
	M03	12
	M6	

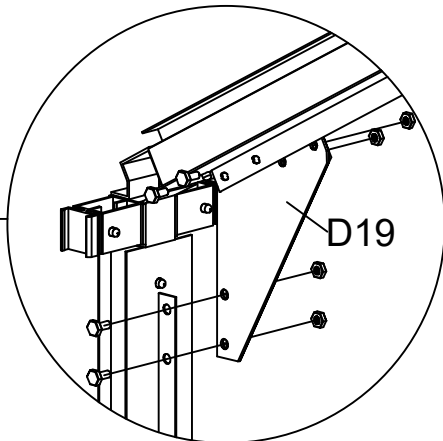
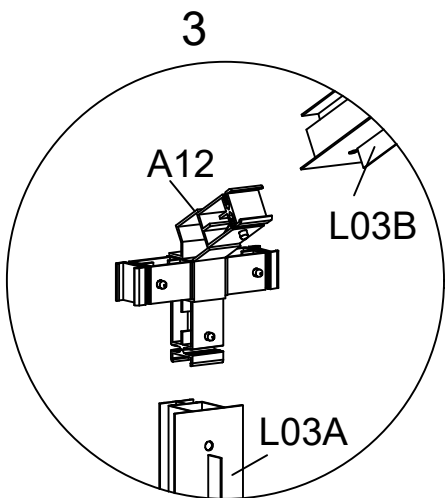
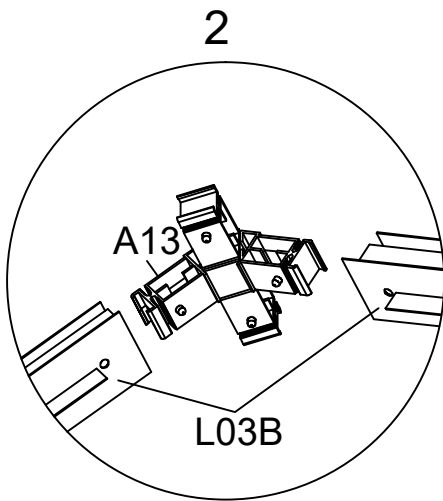
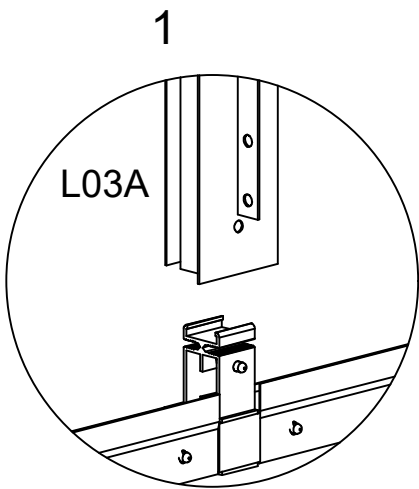
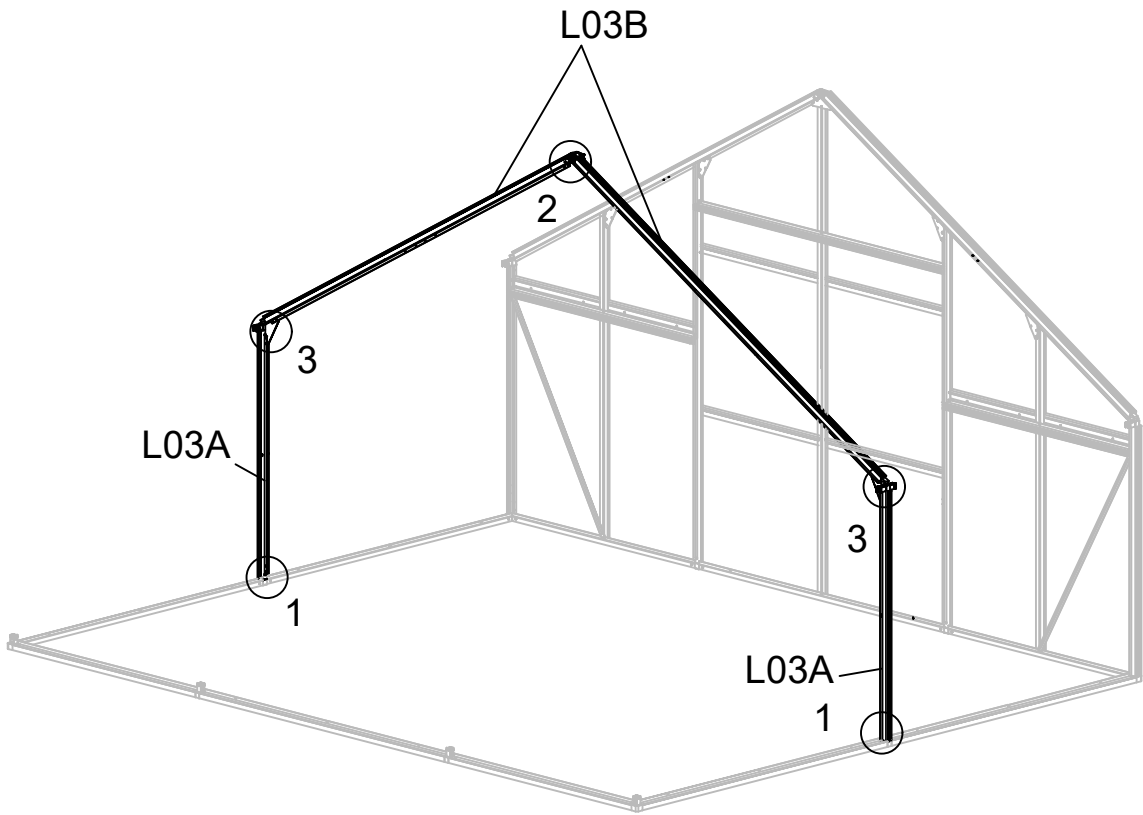




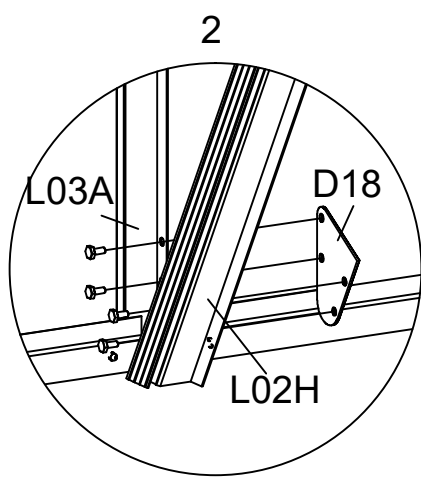
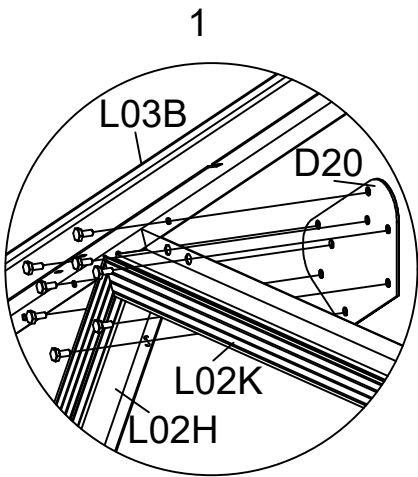
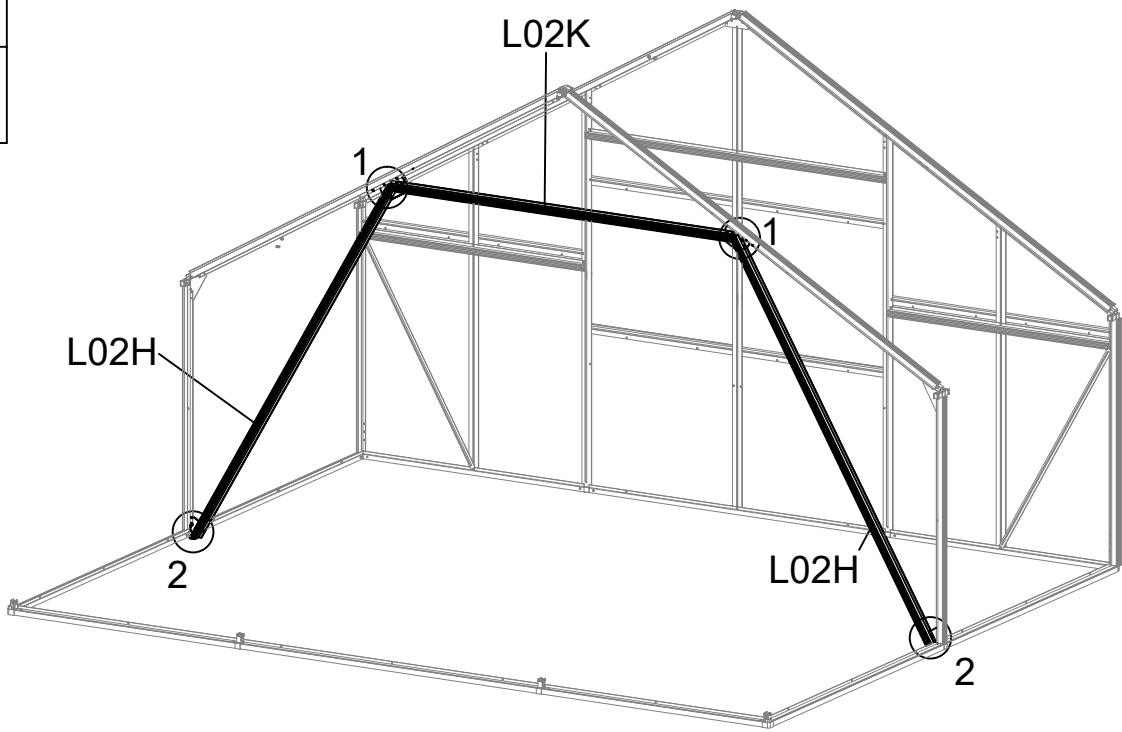
Note: please insert upper roof supports but, do not lock in place until you have aligned the poly-carbonate inserts.



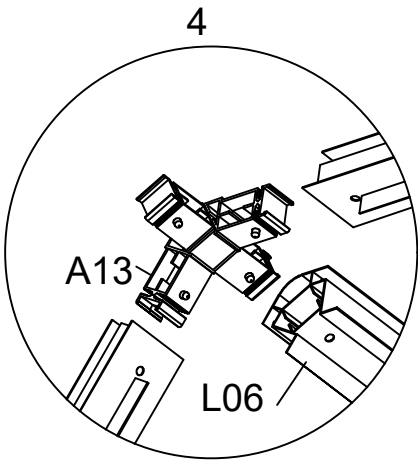
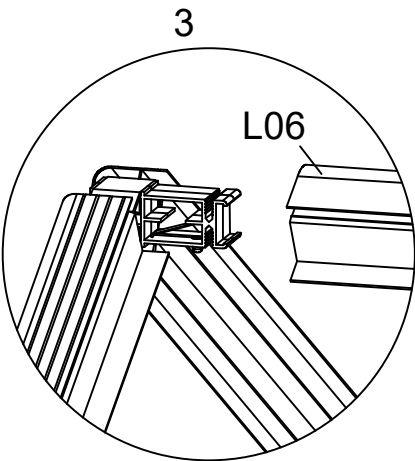
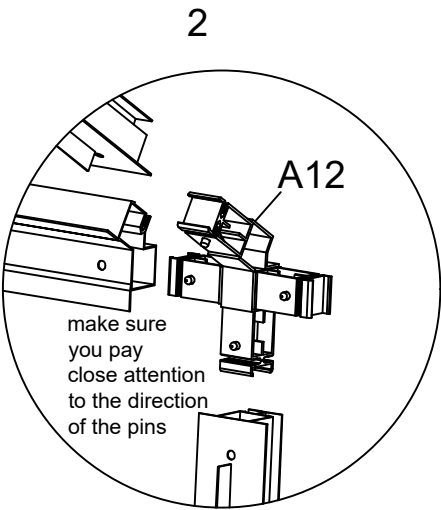
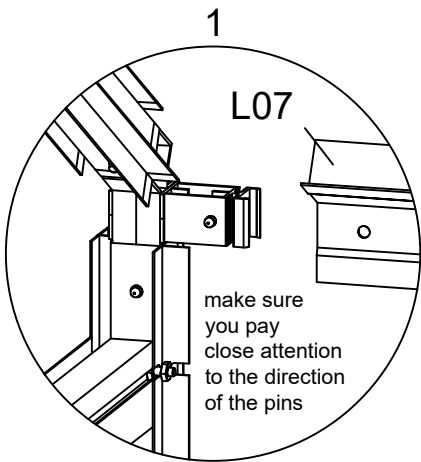
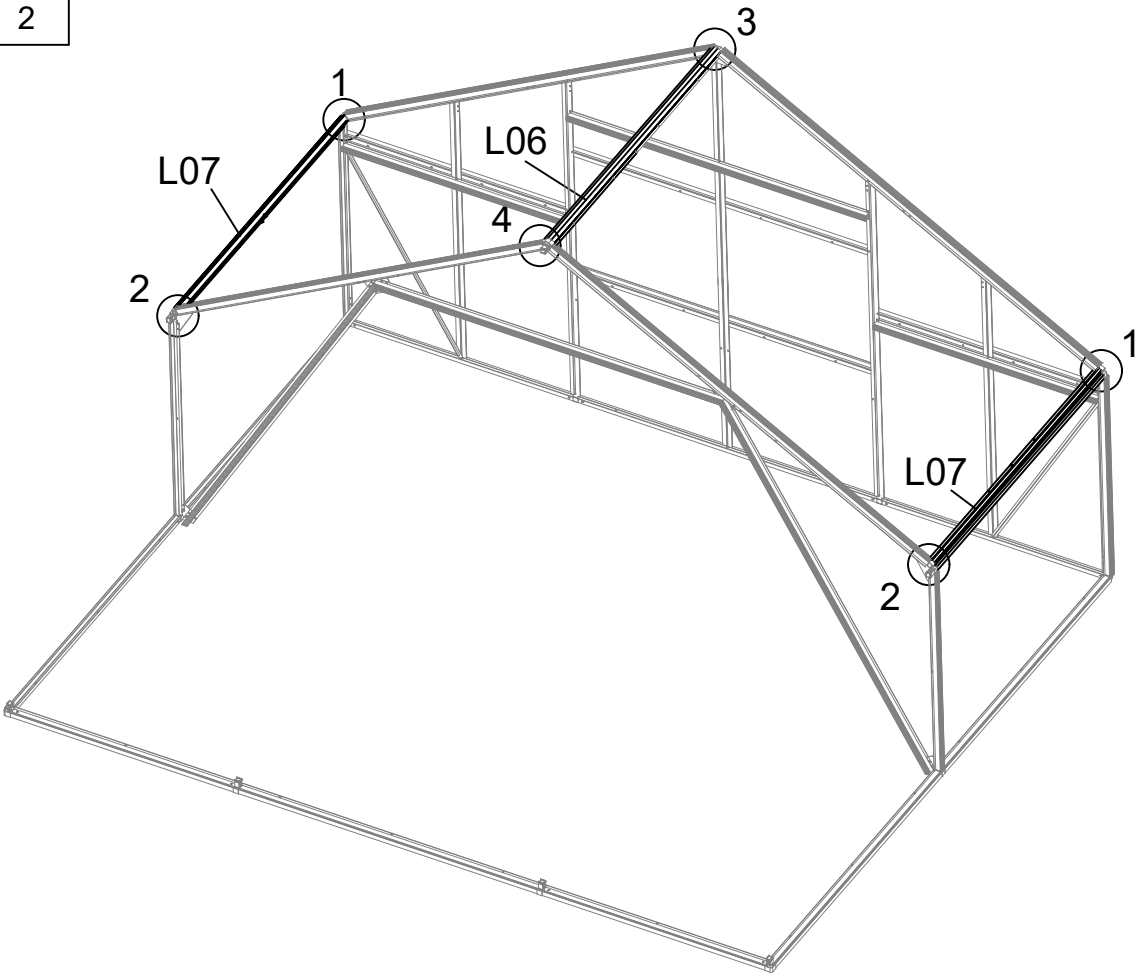
PART	NO.	QTY.
	L03A	2
	L03B	2
	A12	2
	A13	1
	D19	2
	S05	8
	M6X12	
	M03	8
	M6	



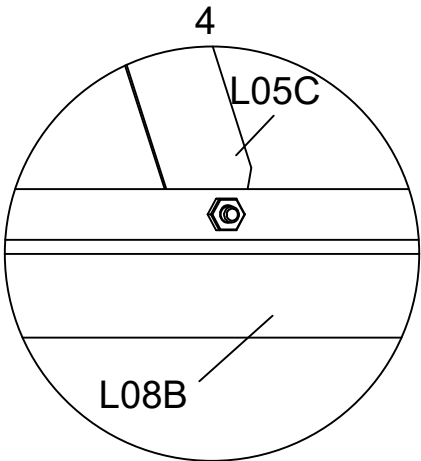
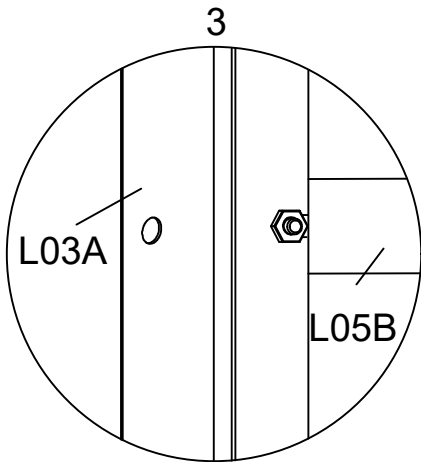
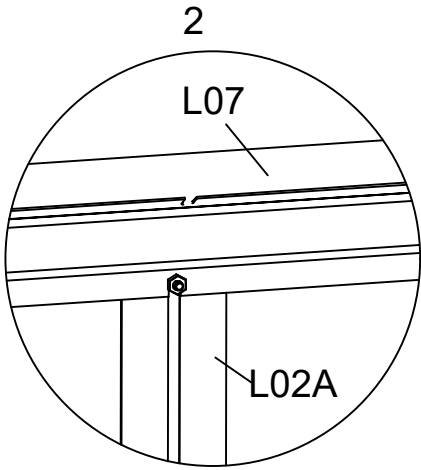
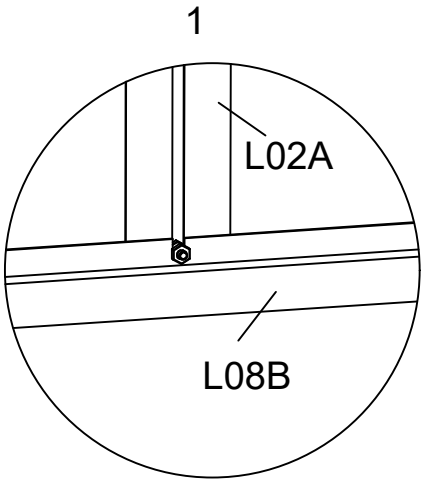
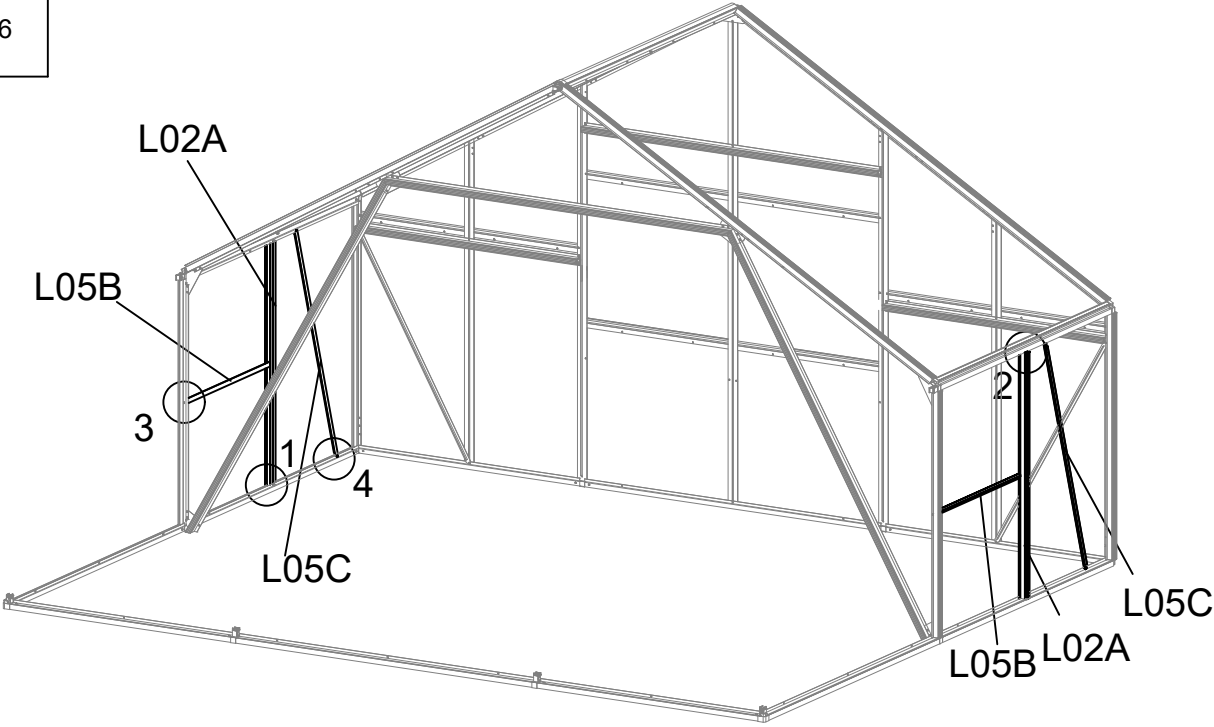
PART	NO.	QTY.
	L02H	2
	L02K	1
	D18	2
	D20	2
	S05	24
	M6X12	
	M03	24
	M6	



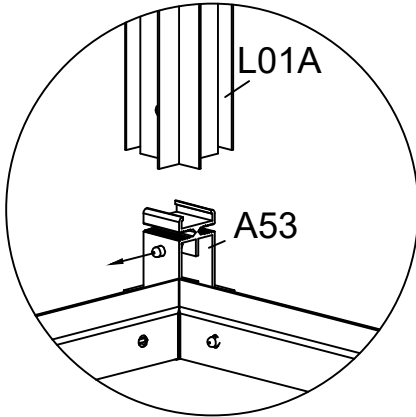
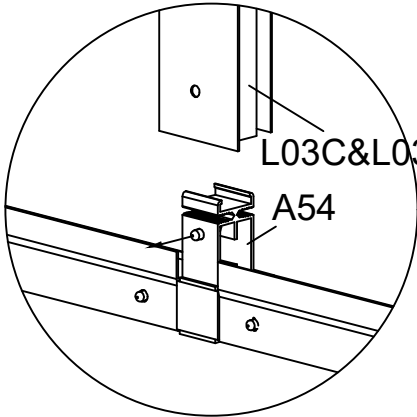
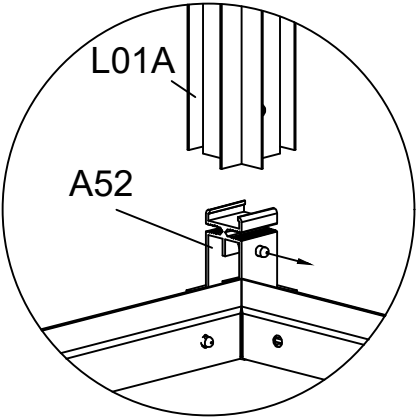
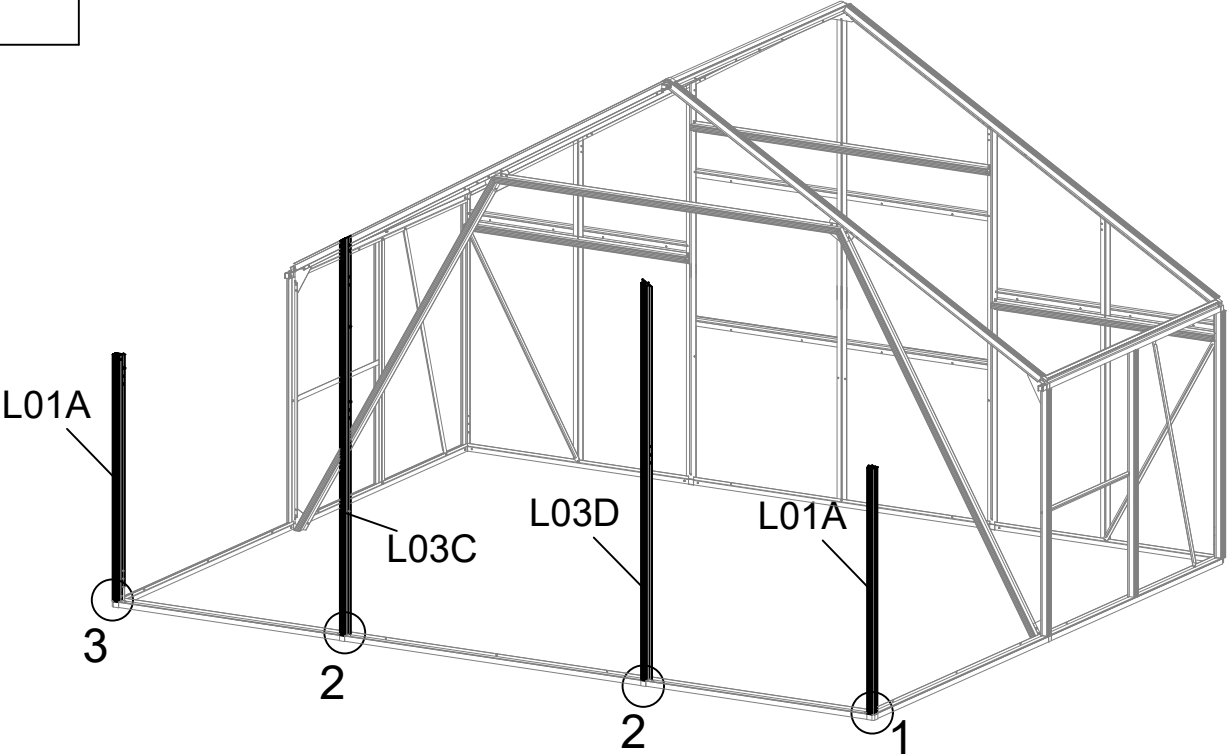
PART	NO.	QTY.
	L06	1
	L07	2



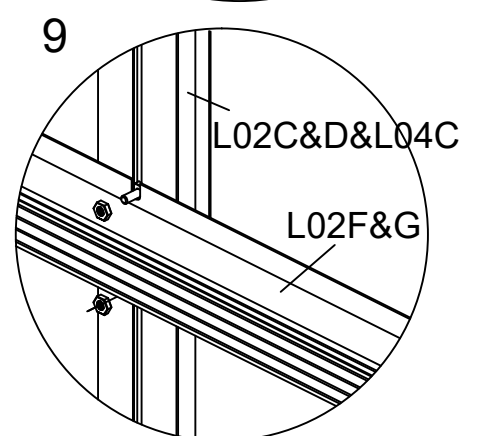
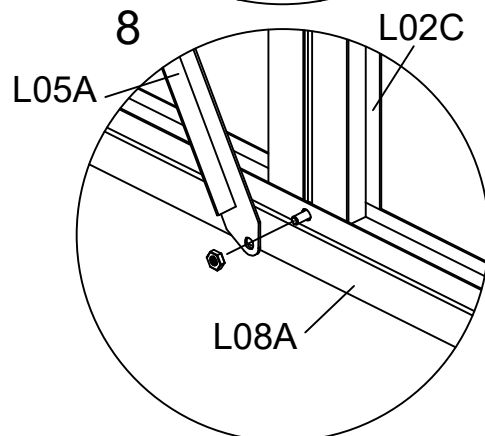
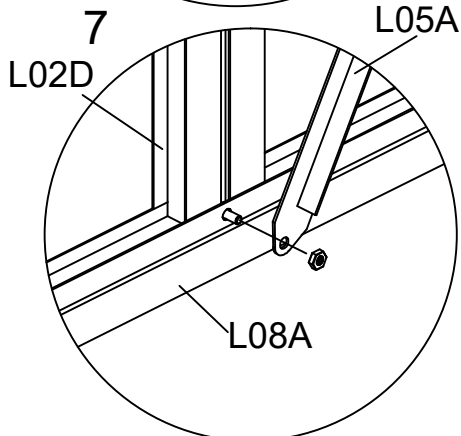
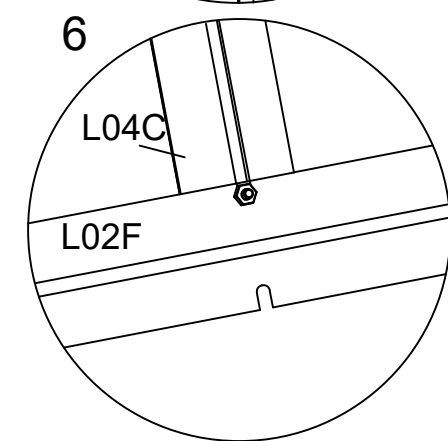
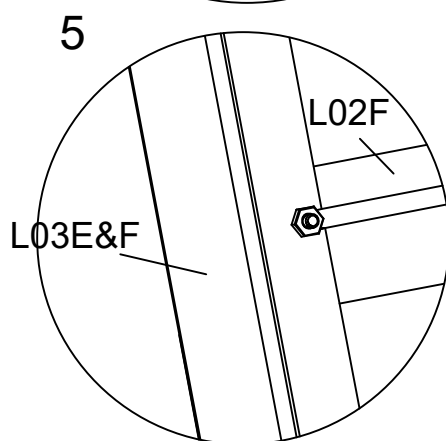
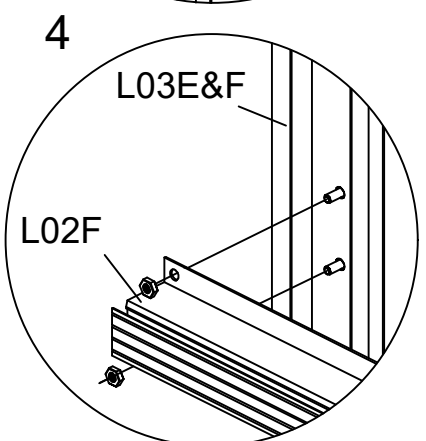
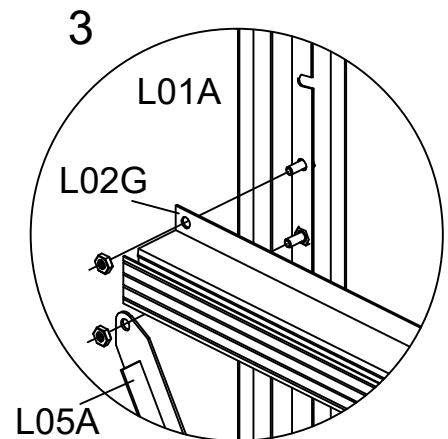
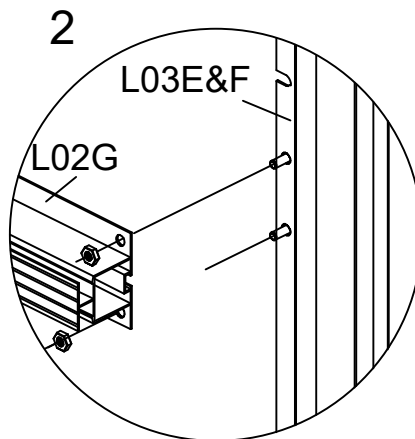
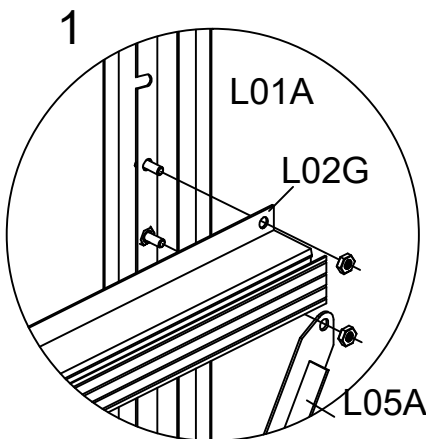
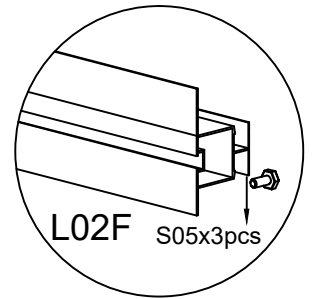
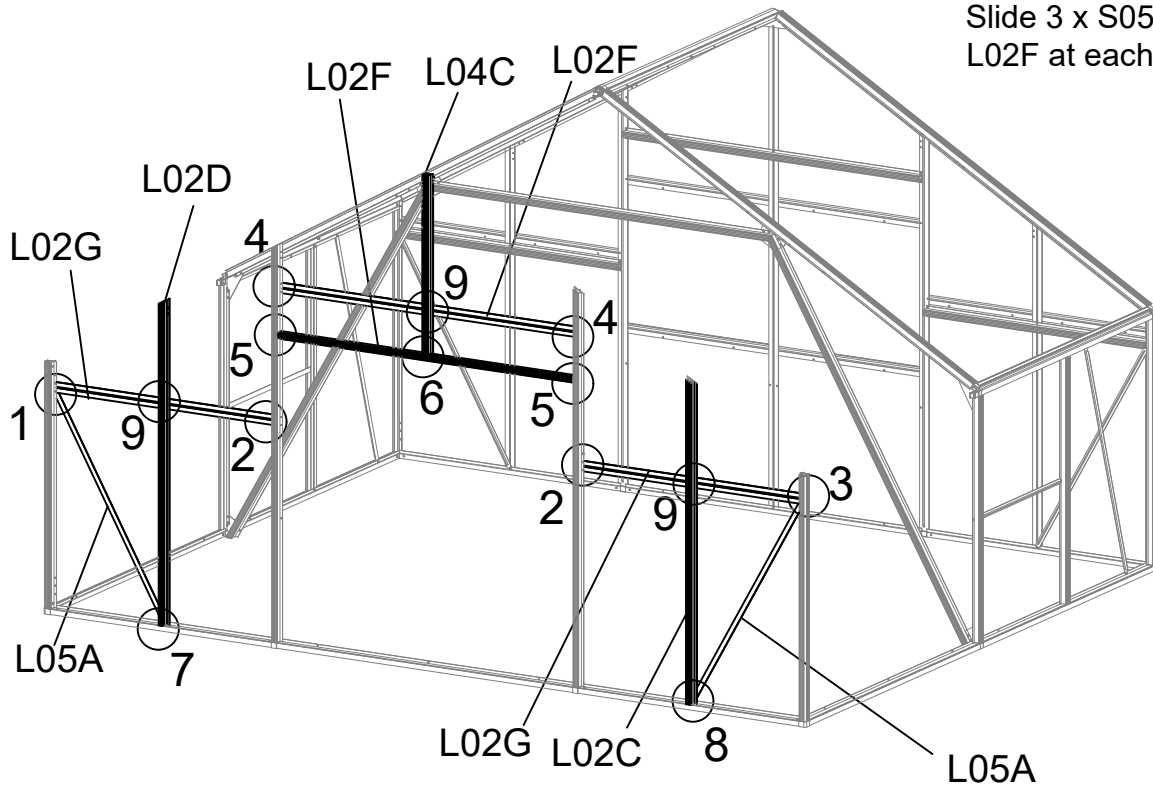
PART	NO.	QTY.
	L02A	2
	L05B	2
	L05C	2
	S05	6
	M6X12	
	M03	6
	M6	



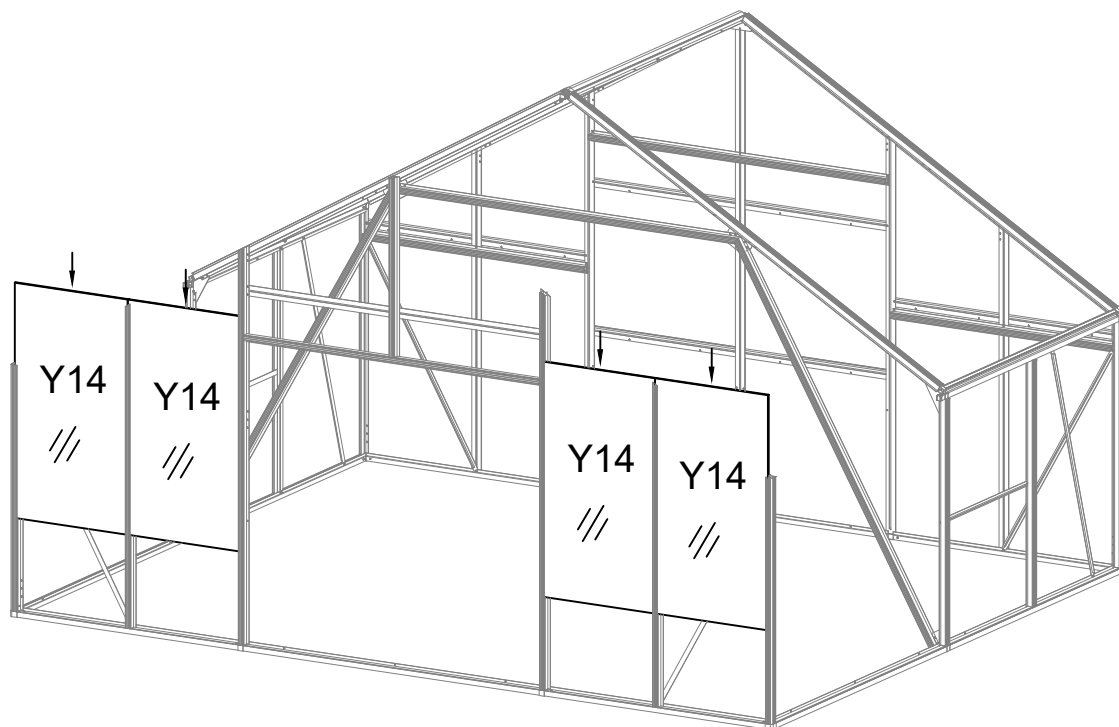
PART	NO.	QTY.
	L01A	2
	L03C	1
	L03D	1
	L02C	1
	L02D	1
	L02G	2
	L02F	2
	L04C	1
	L05A	2
	S05	22
	M6X12	
	M03	22
	M6	



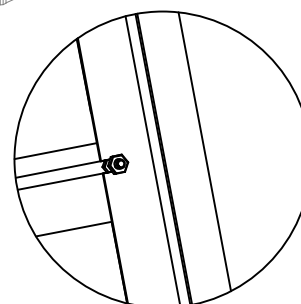
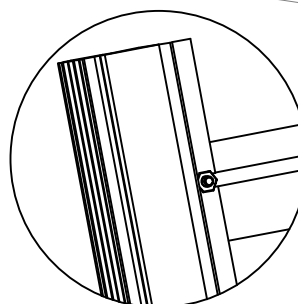
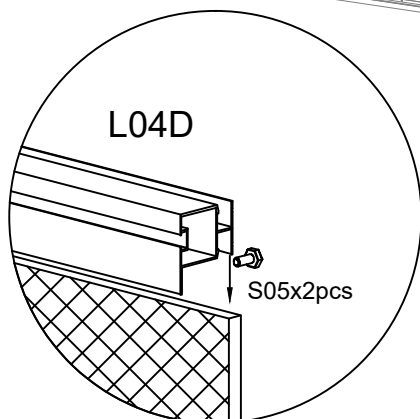
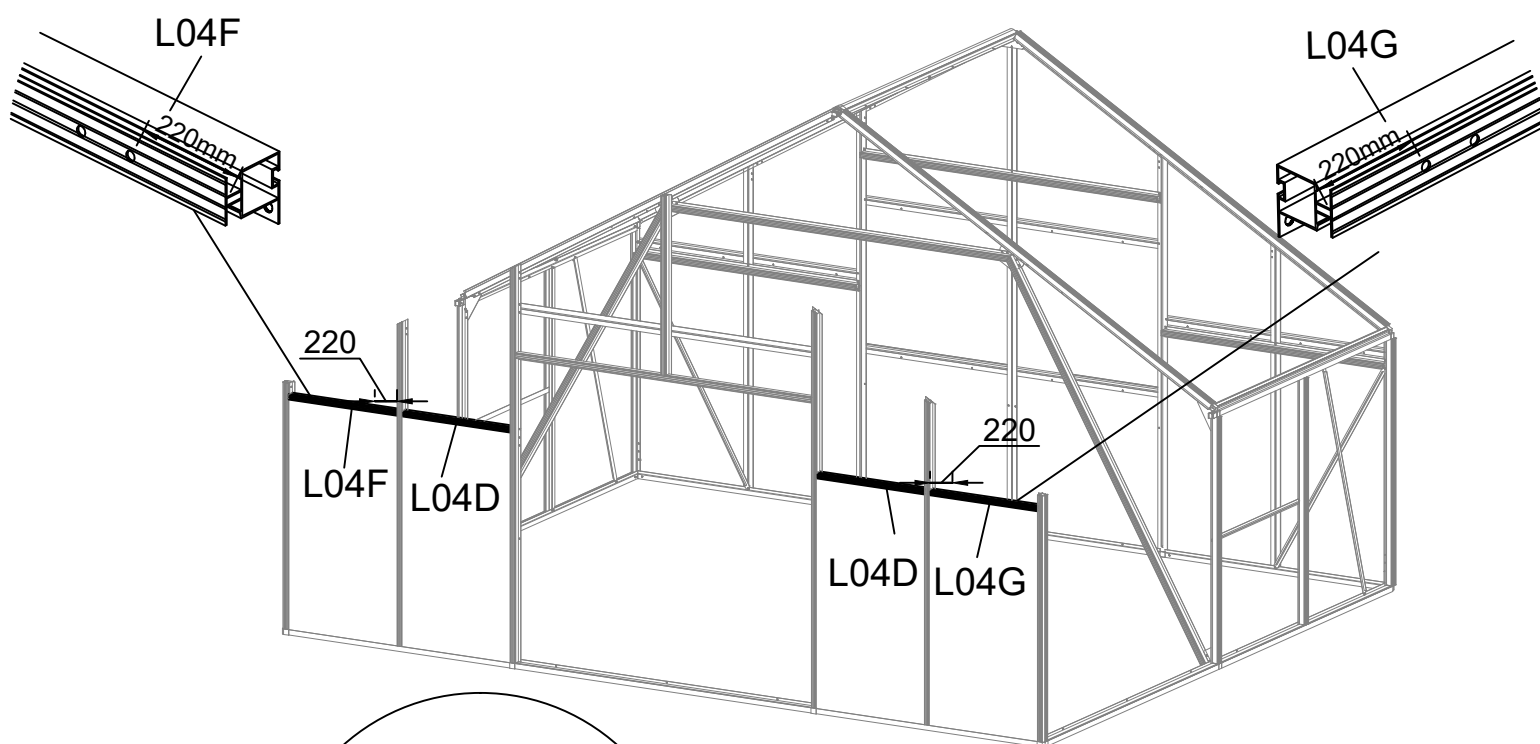
Slide 3 x S05 into L02F, and tighten L02F at each end with S05.



PART	NO.	QTY.
	Y14	4
	L04D	2
	L04F	1
	L04G	1
	S05	8
	M6X12	
	M03	8
	M6	

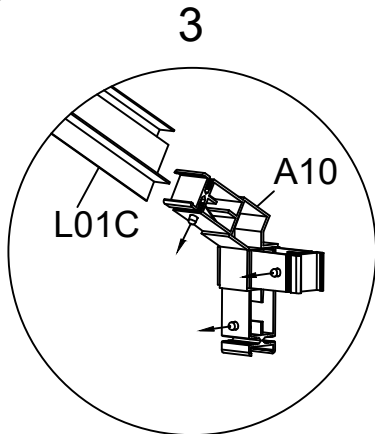
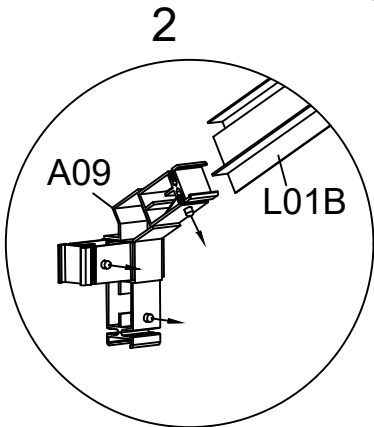
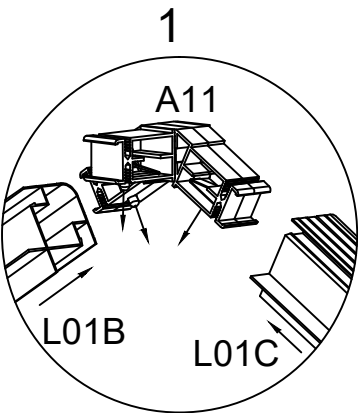
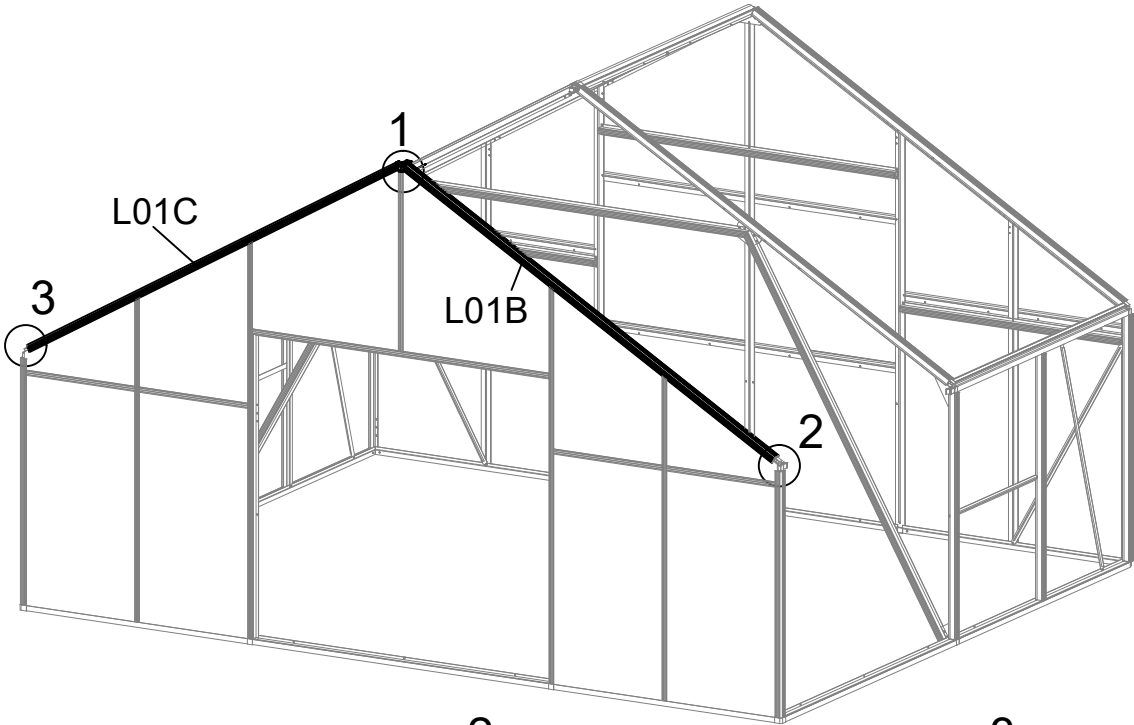
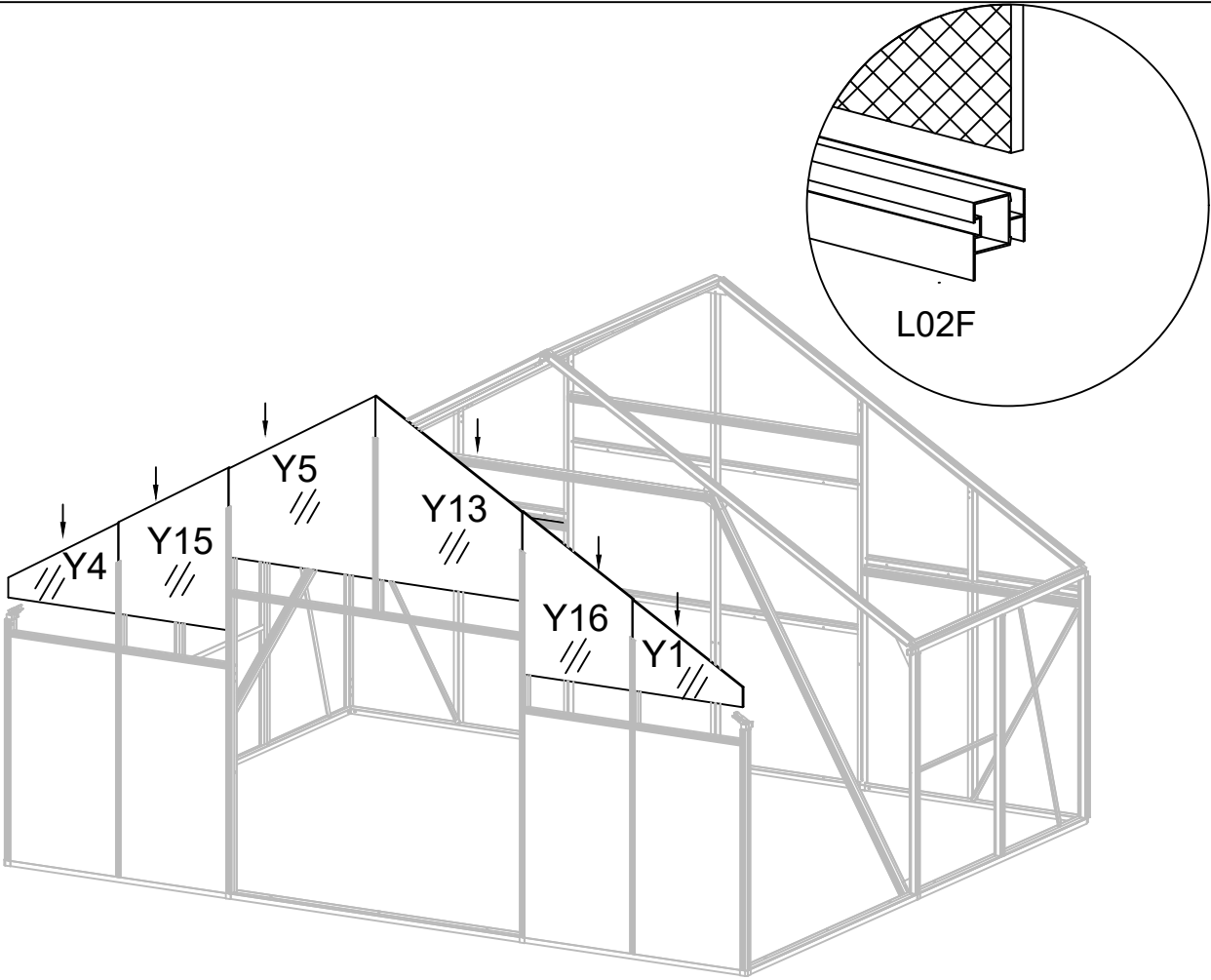


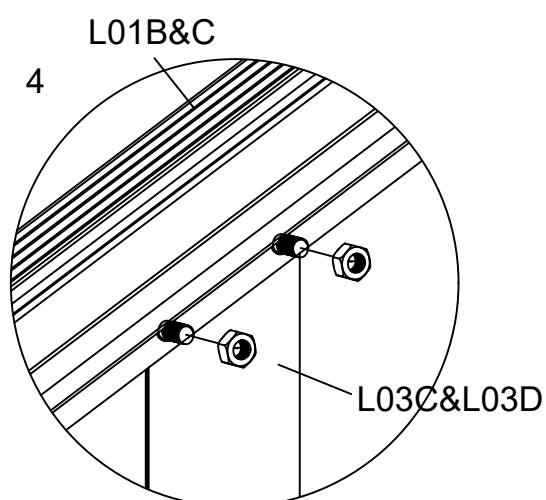
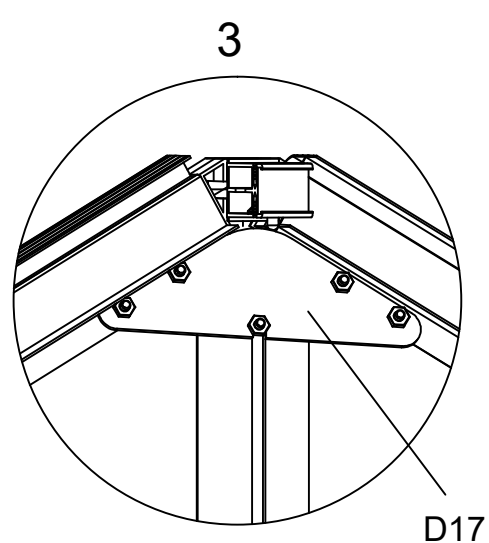
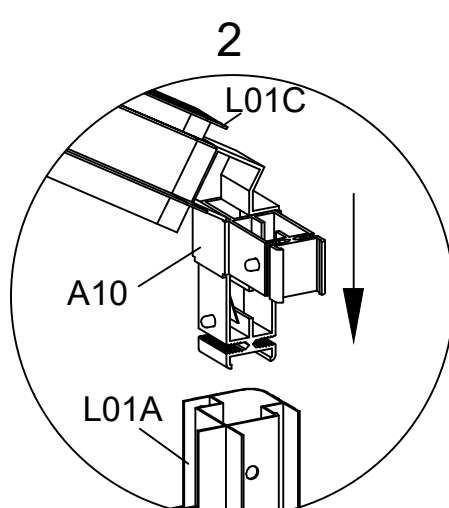
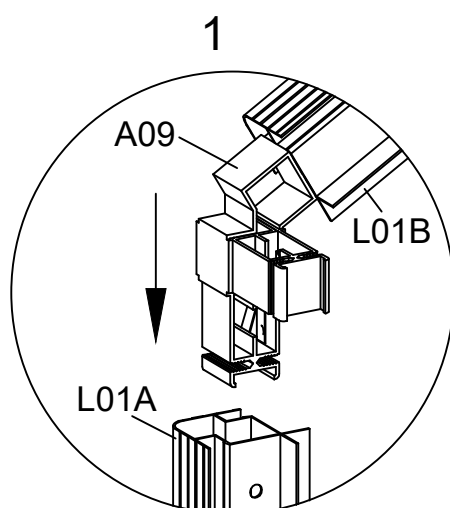
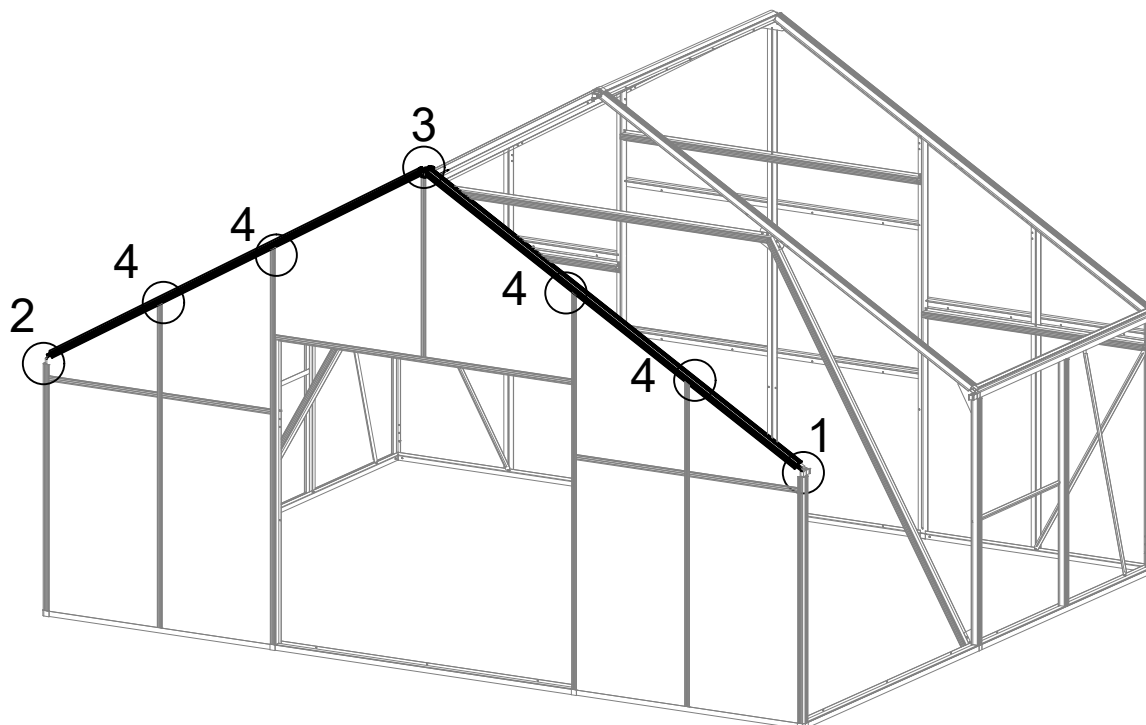
Slide 2 x S05 into each L04D and put each L04D onto the edge of
Note the installation direction of L04F & L04G



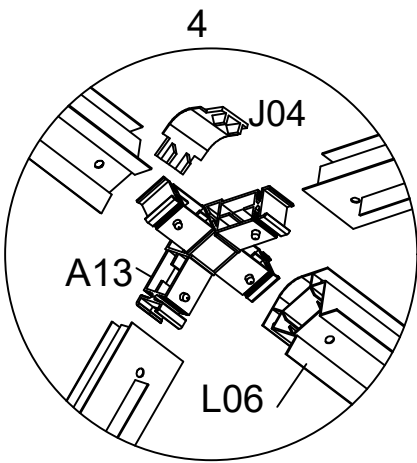
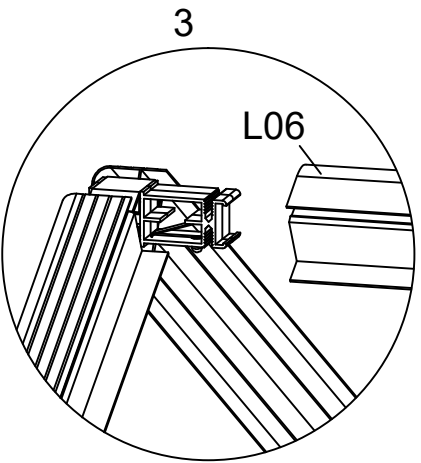
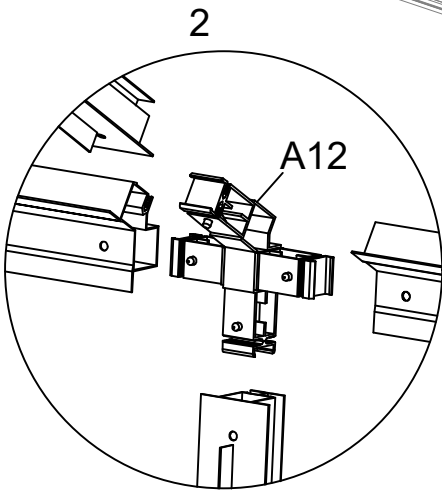
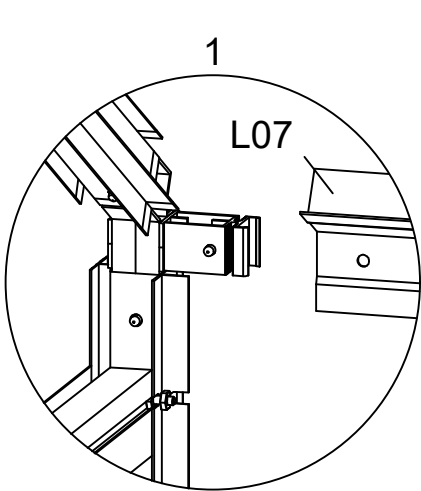
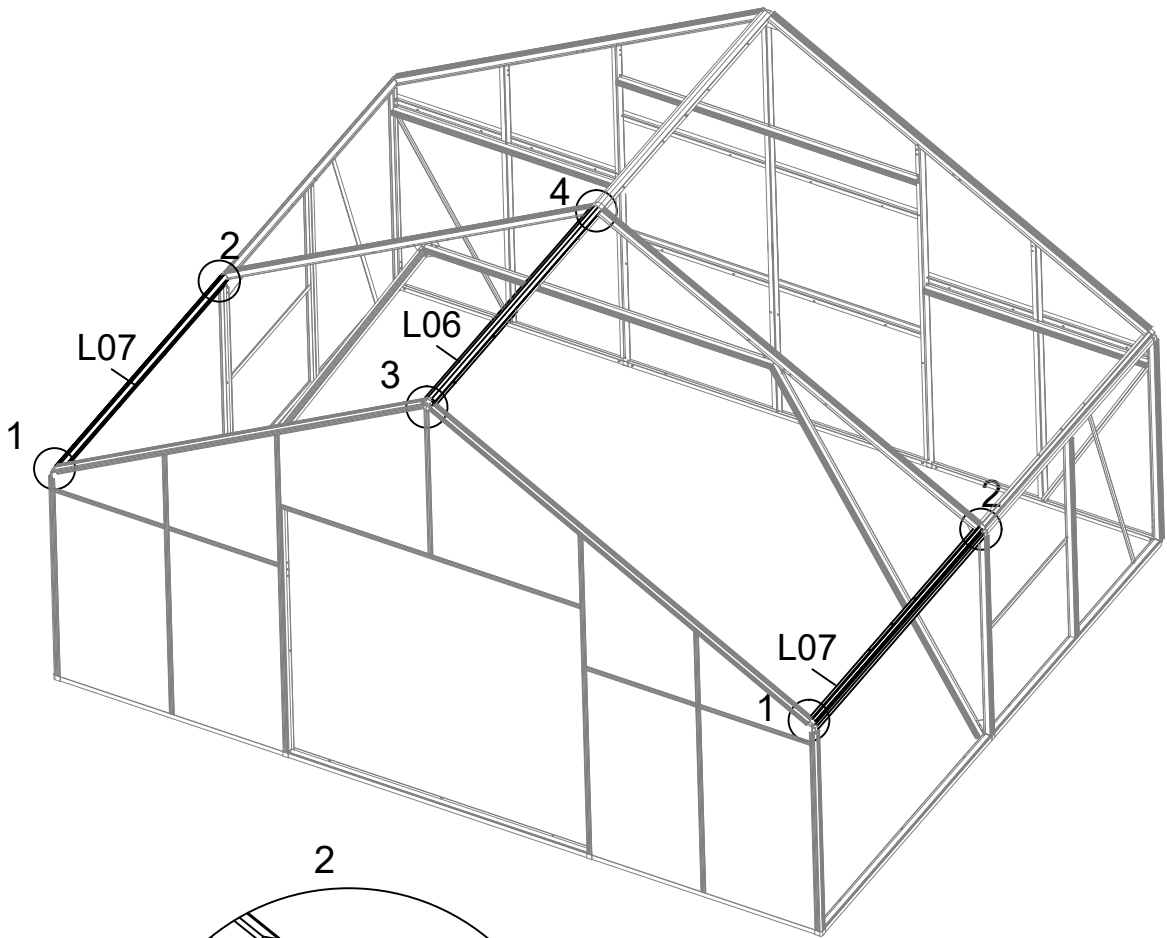
Slide 2 x S05 into each L04D&E&F and put each L04D&E&F onto the edge of
each PC panel, then tighten all profiles at each end with S05.

PART	NO.	QTY.
	Y1	1
	Y4	1
	Y5	1
	Y13	1
	Y15	1
	Y16	1
	L01B	1
	L01C	1
	A09	1
	A10	1
	A11	1
	D17	1
	S05	12
	M6X12	
	M03	12
	M6	

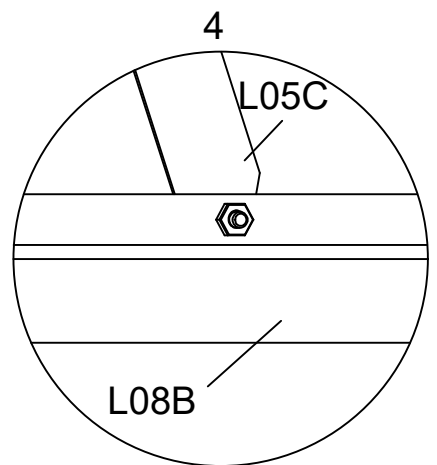
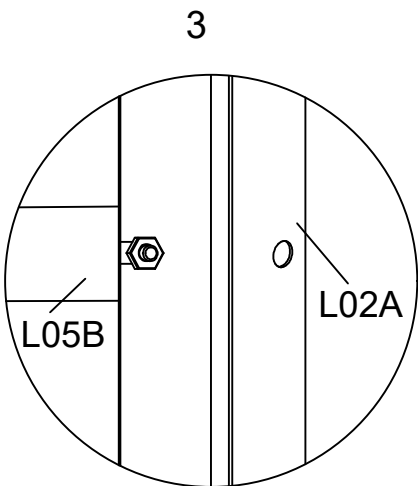
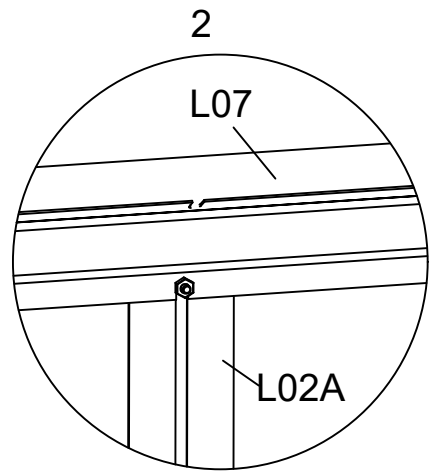
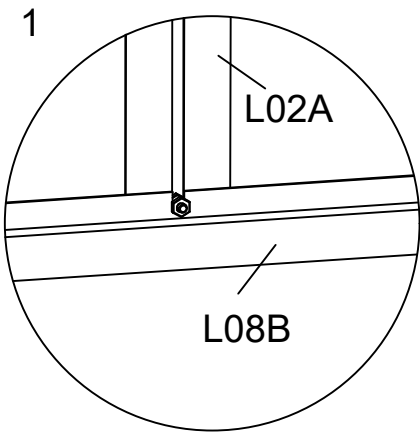
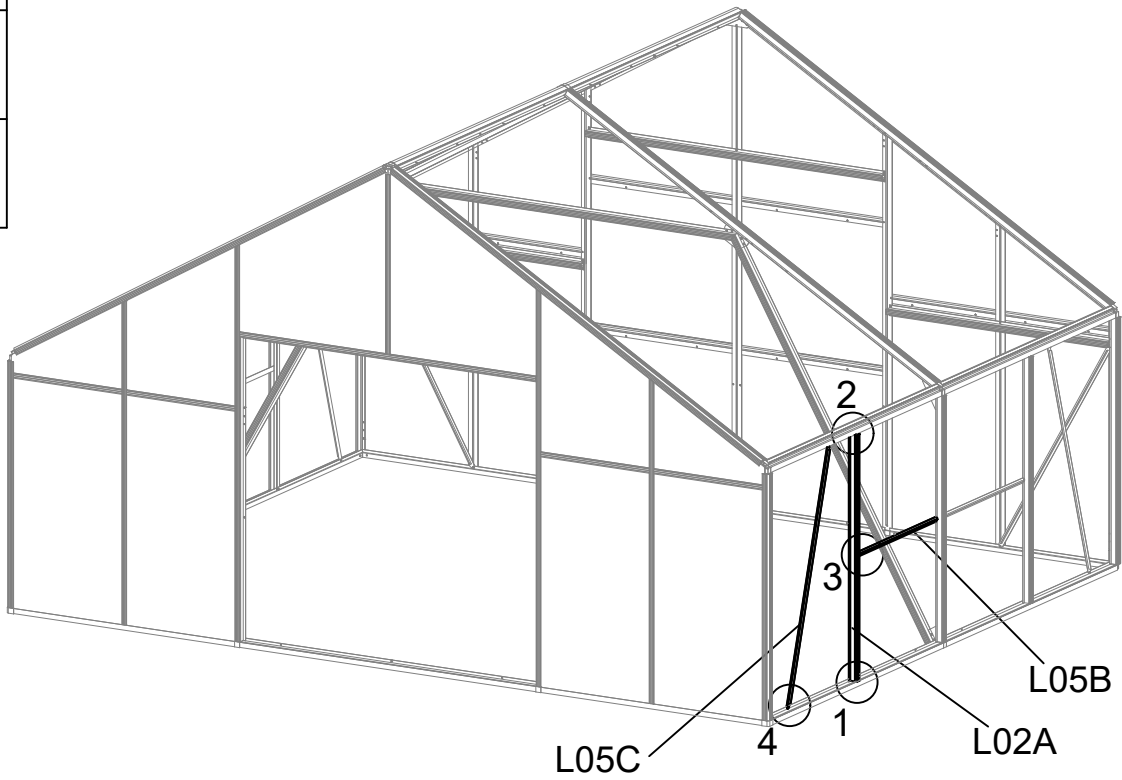




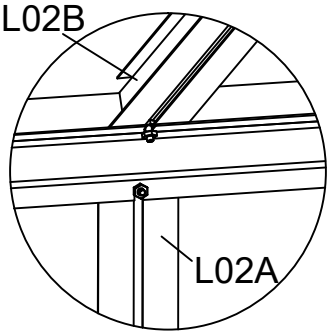
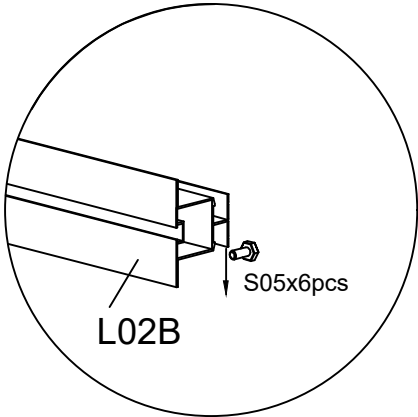
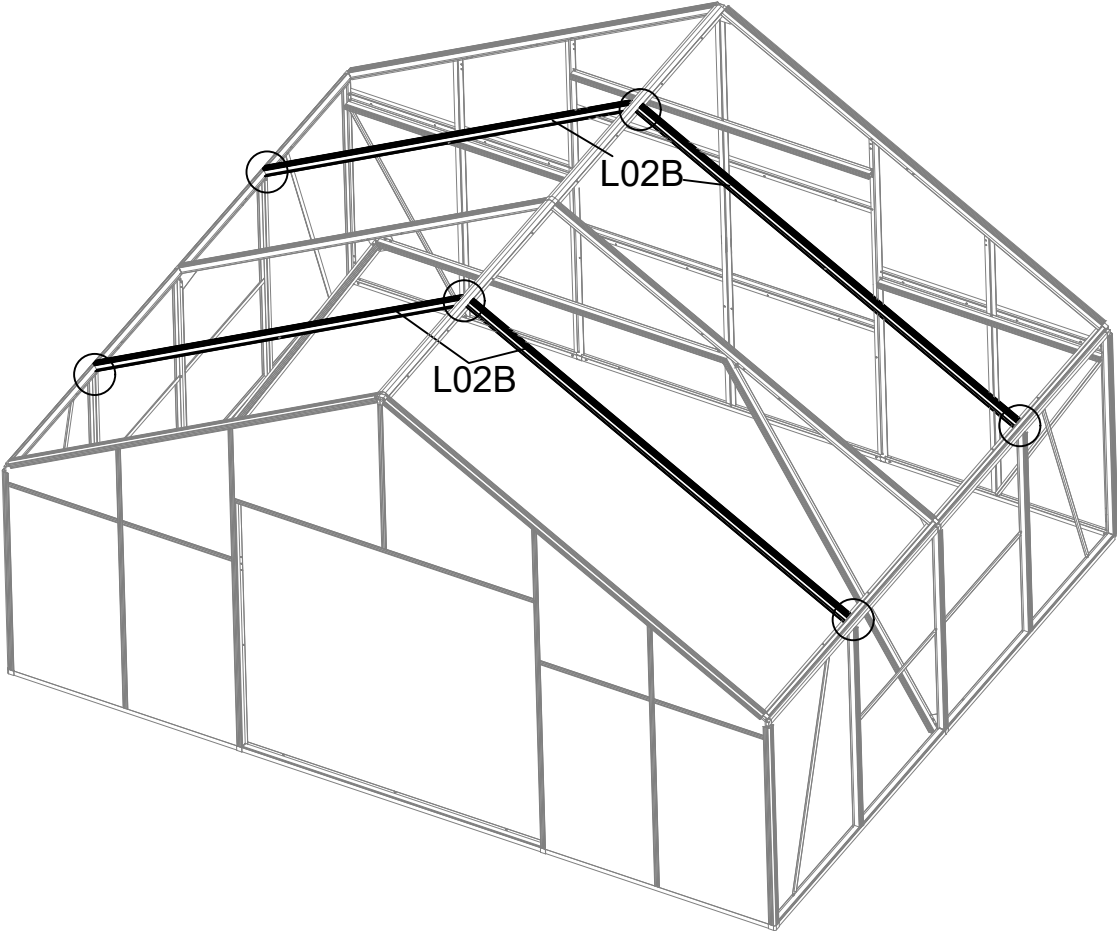
PART	NO.	QTY.
	L06	1
	L07	2
	J04	1



PART	NO.	QTY.
	L02A	2
	L05B	2
	L05C	2
	S05	12
	M6X12	
	M03	12
	M6	

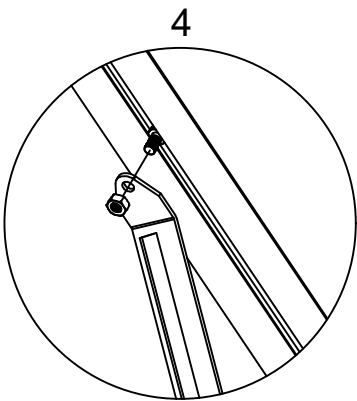
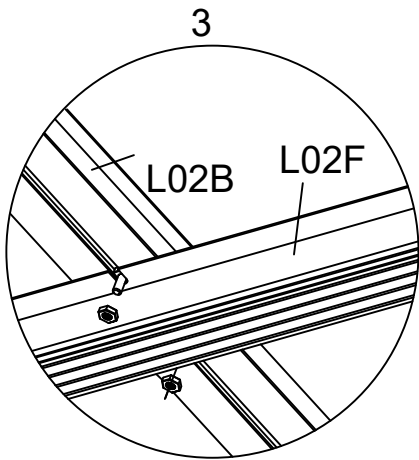
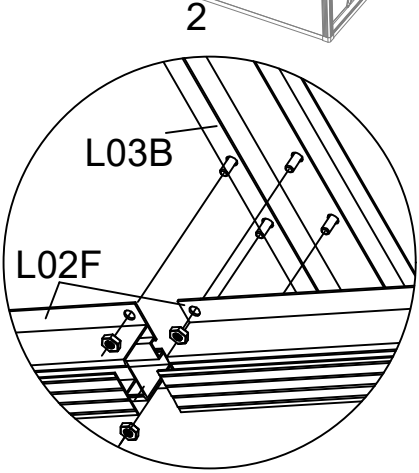
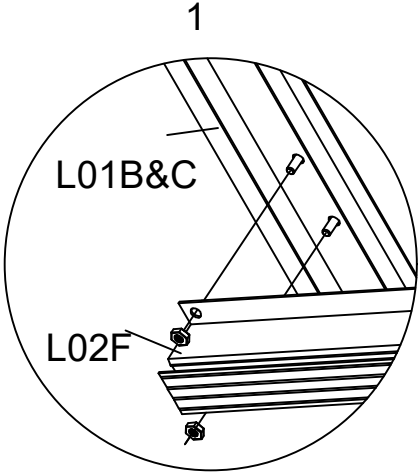
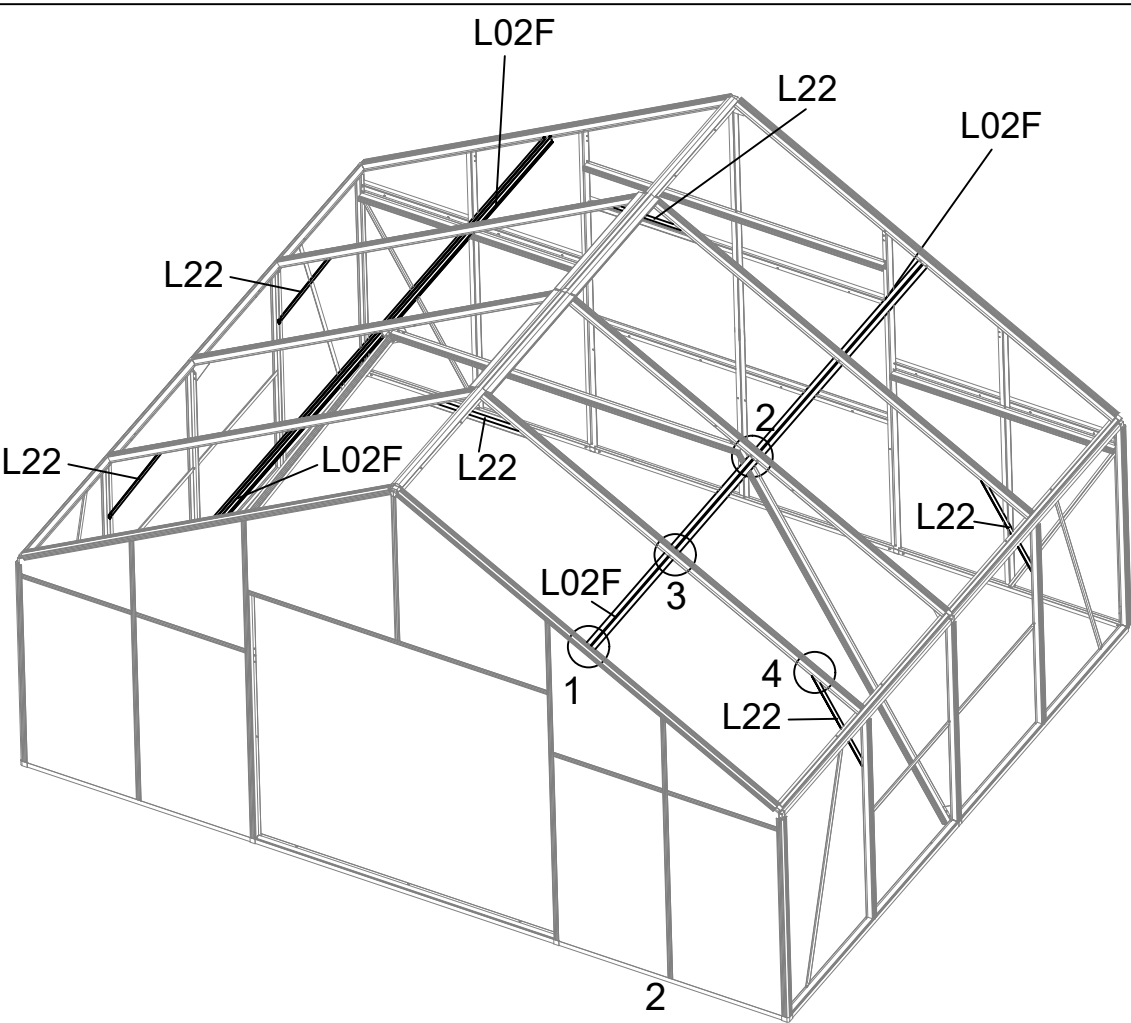


PART	NO.	QTY.
	L02B	4
	S05	24
	M6X12	
	M03	24
	M6	



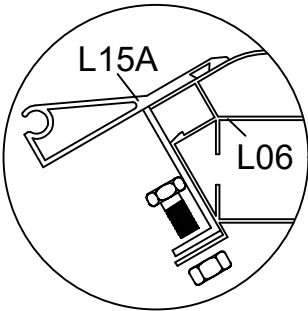
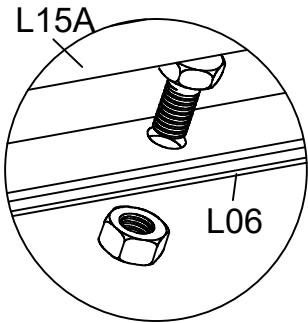
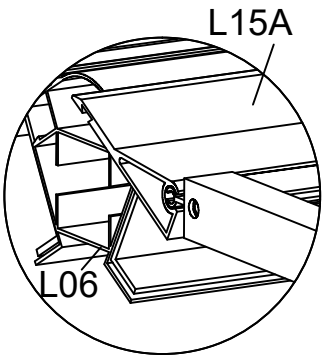
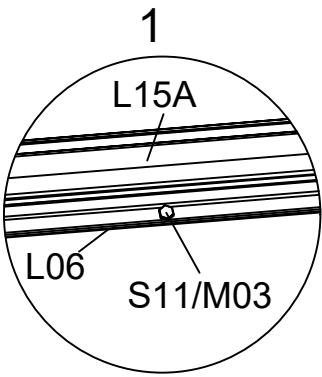
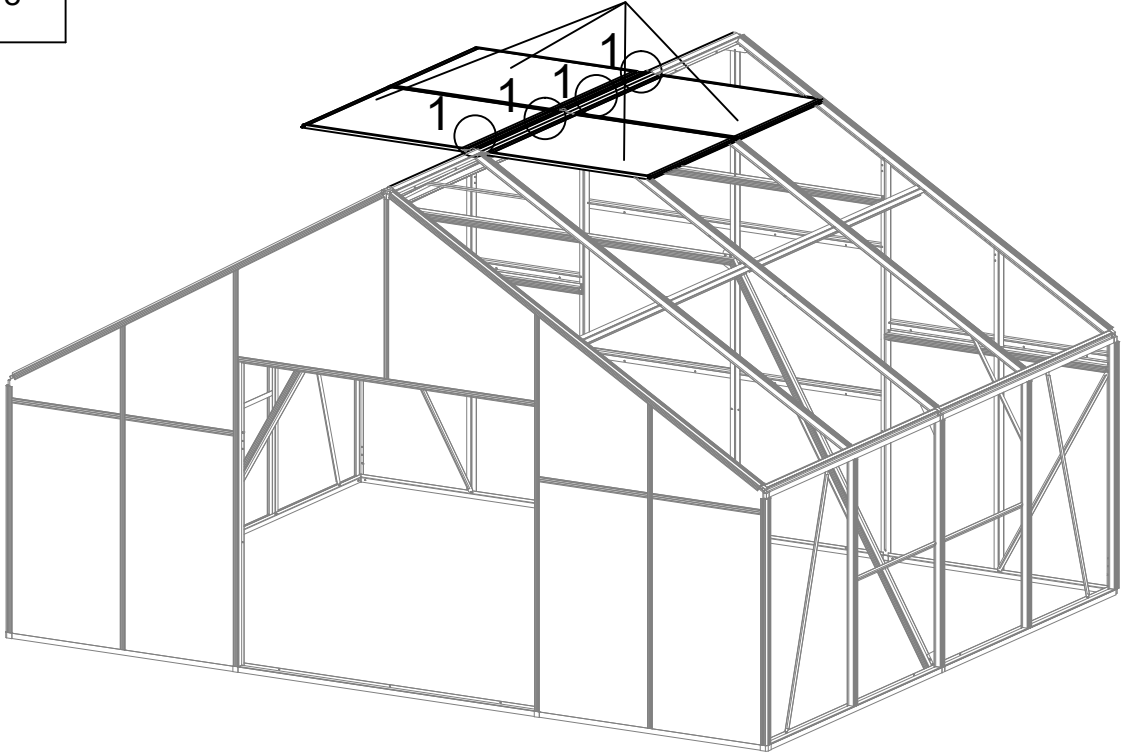
Note: Slide 6xS05 in the channel, which are needed later.

PART	NO.	QTY.
	L02F	4
	L22	6
	S05	20
	M6X12	
	M03	20
	M6	

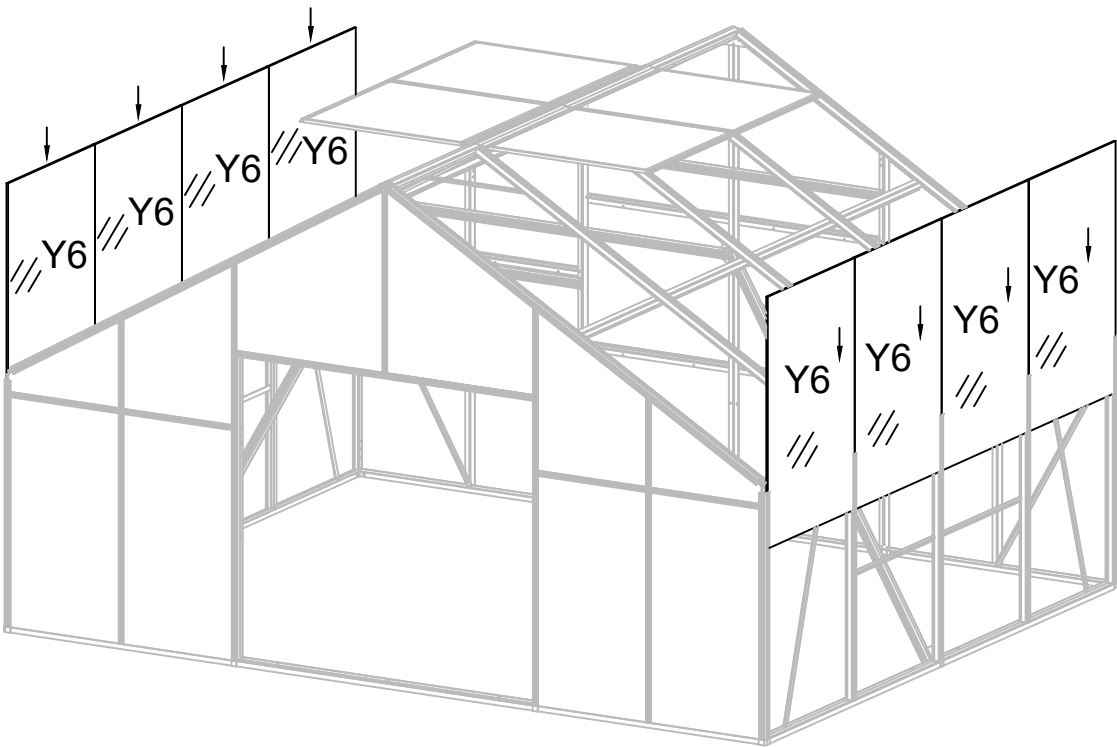


PART	NO.	QTY.
	Roof Vent	4
	S11 M6X20	8
	M03 M6	8

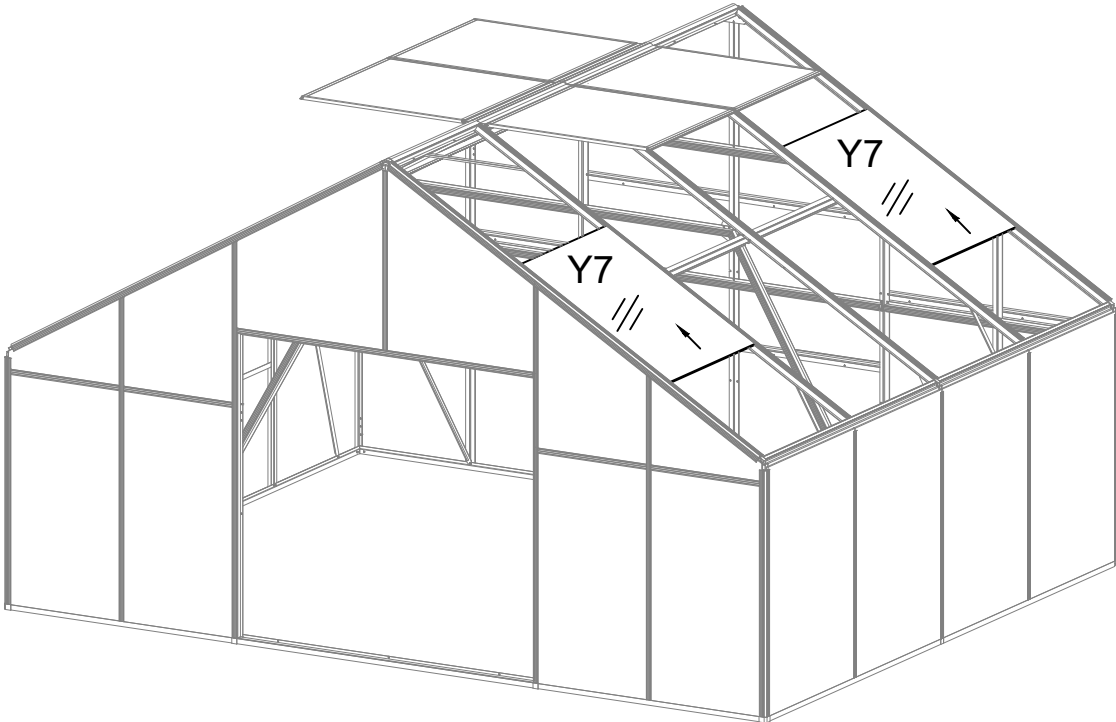
Roof Vent Assembly x 4PCS



PART	NO.	QTY.
	Y6	8
	Y7	4

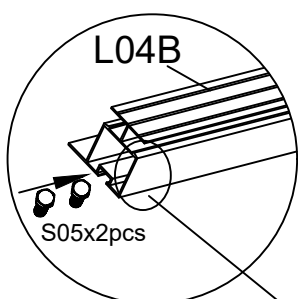
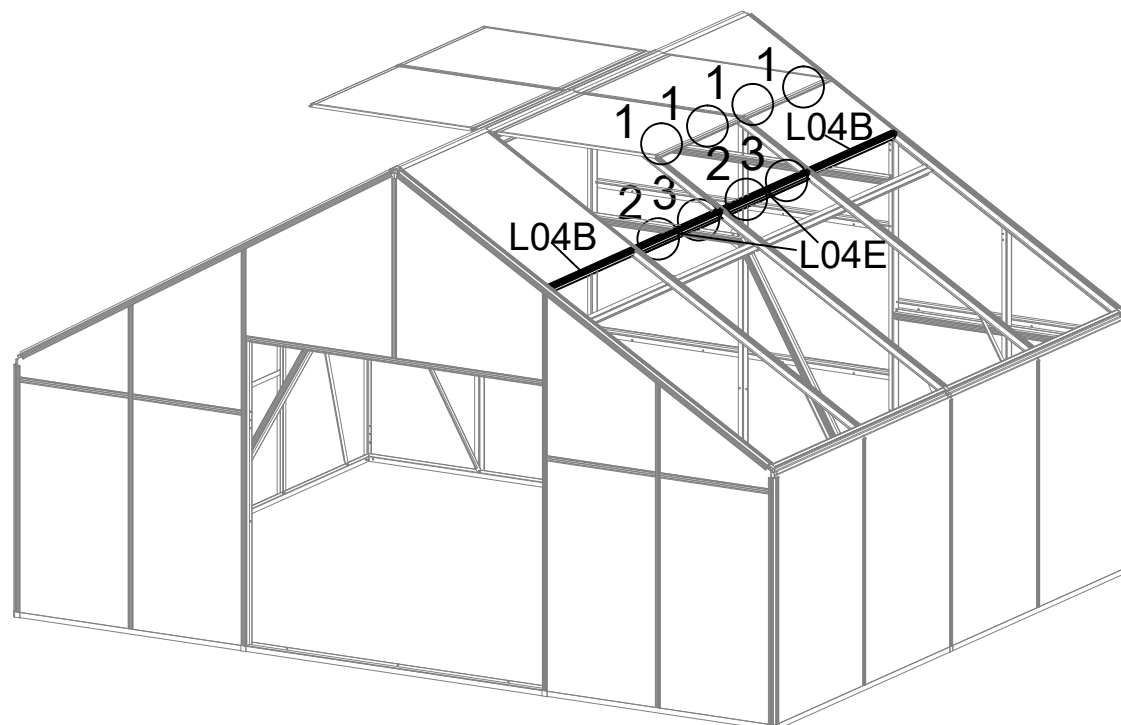


Insert all Y6 into each side of greenhouse.

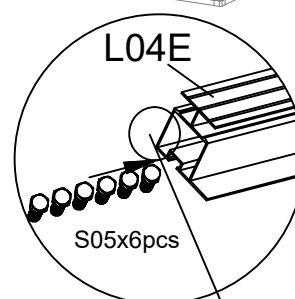


Insert all Y7 into each roof of greenhouse.

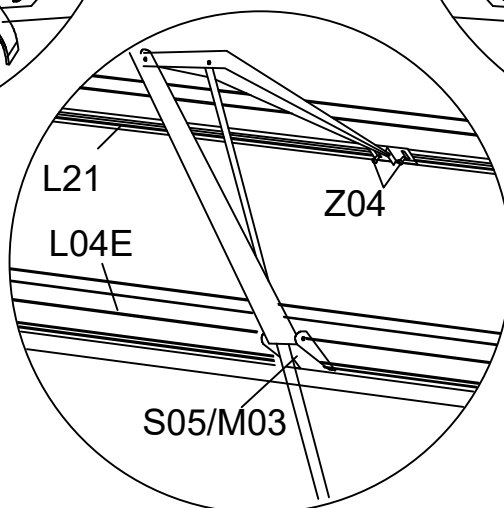
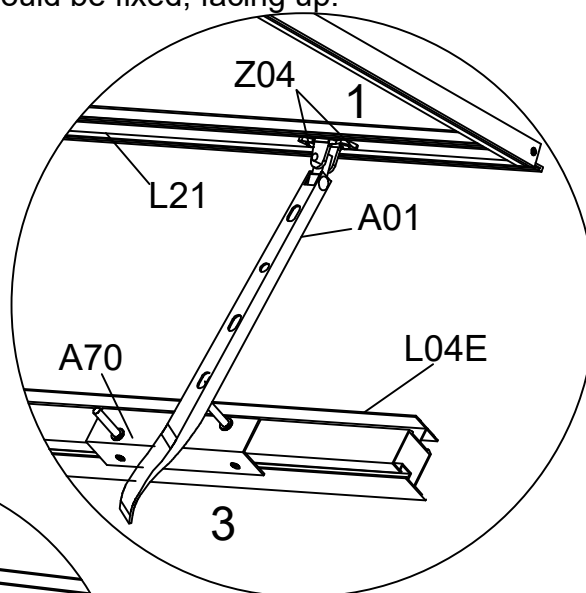
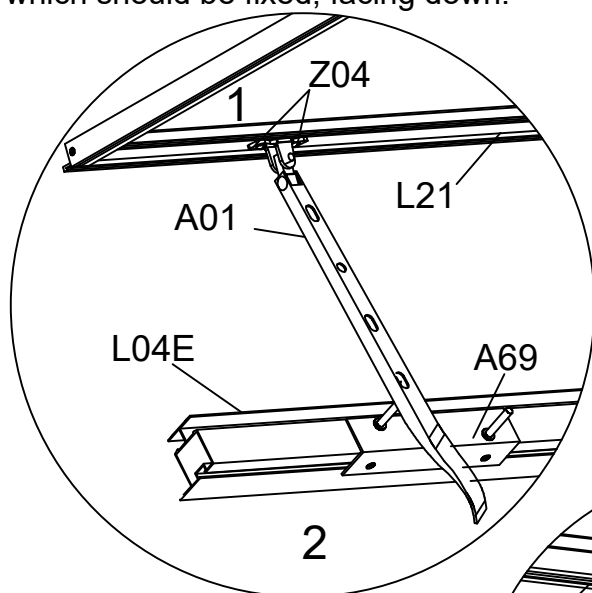
PART	NO.	QTY.
	L04B	4
	L04E	4
	A01	4
	A69	4
	A70	4
	Z04	8
	Ø4X8	
	S05	32
	M6X12	
	M03	32
	M6	



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

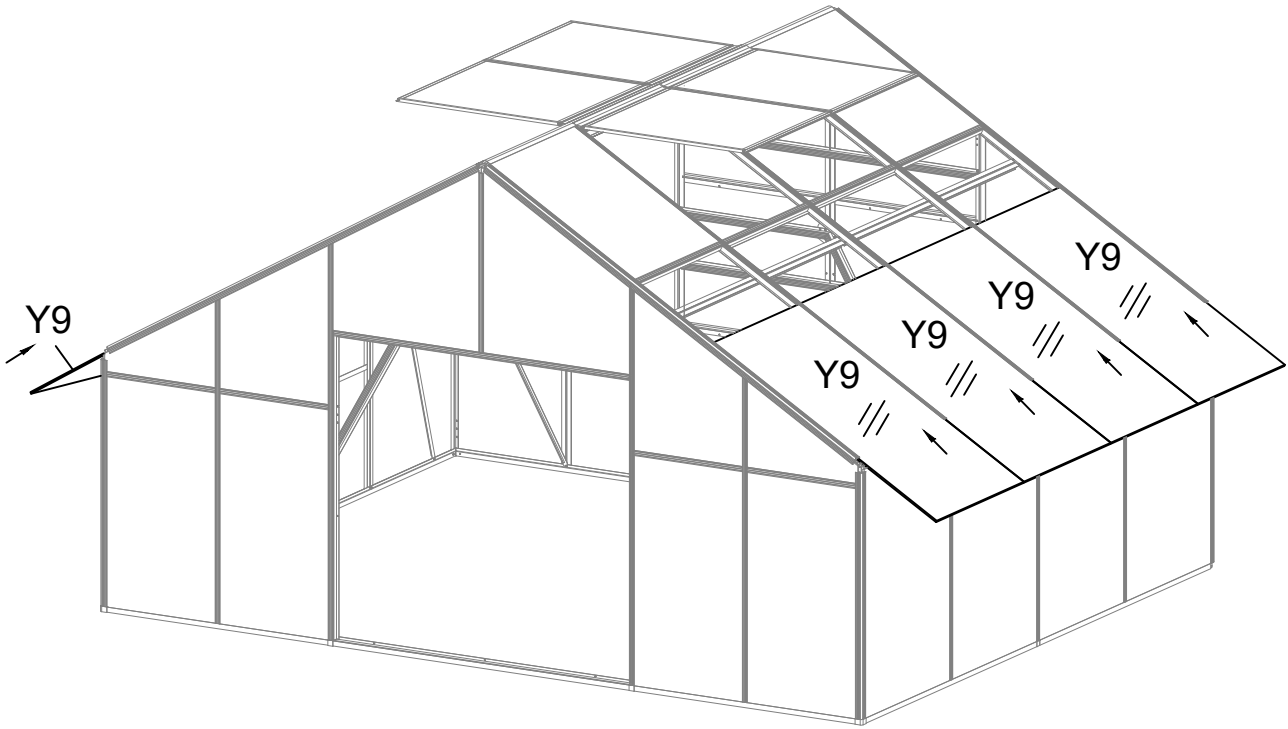


Pay attention to the cut edge of L04E which should be fixed, facing up.



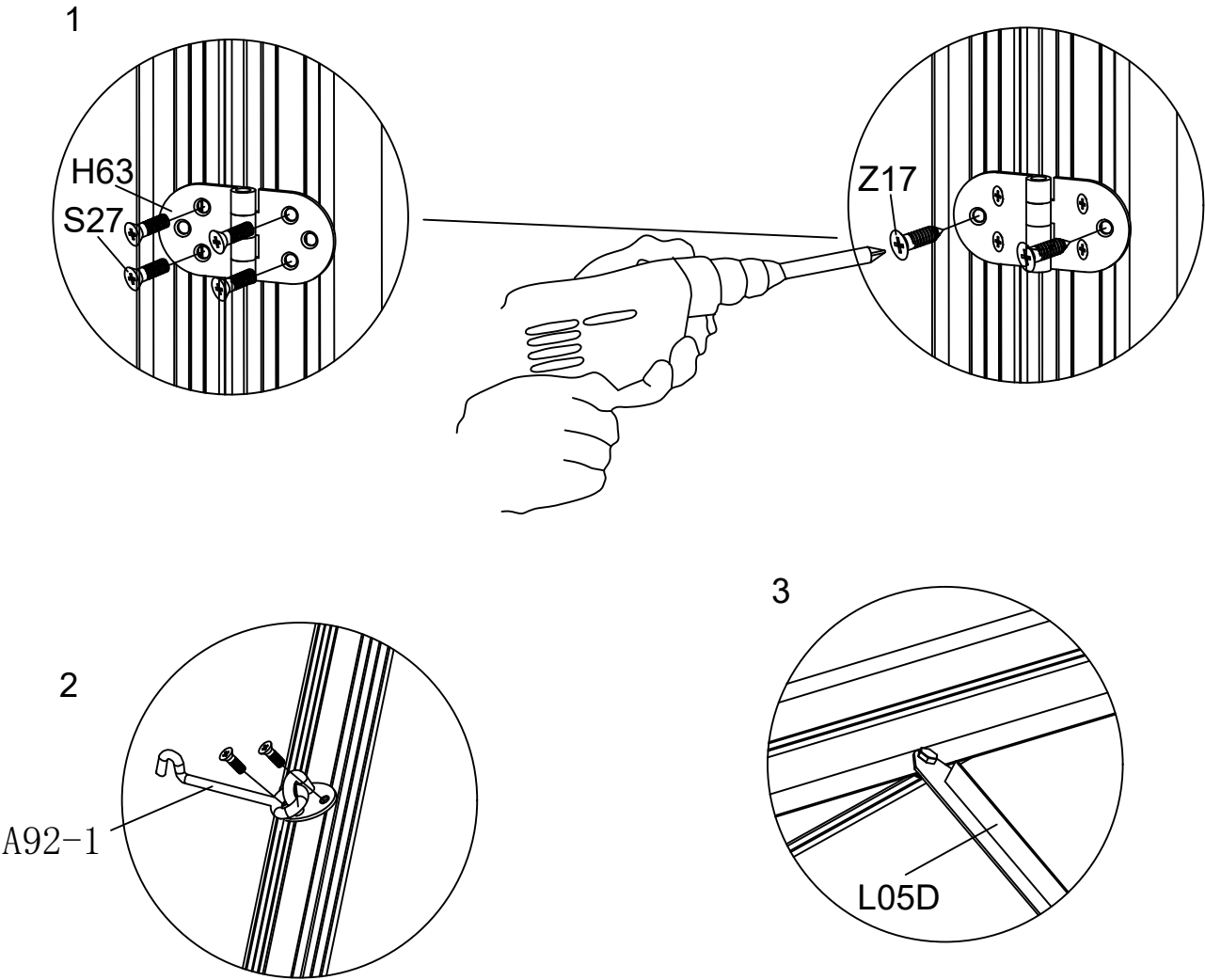
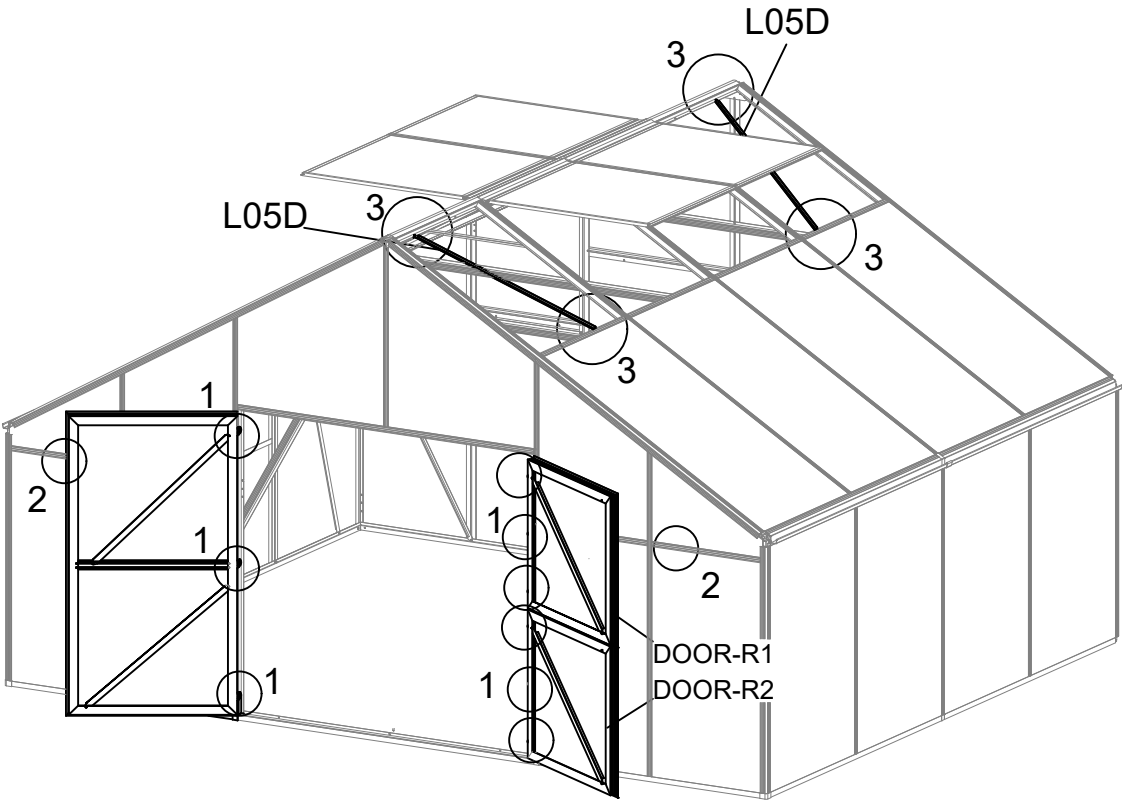
REPEAT the same assembly for another side.

PART	NO.	QTY.
	Y9	8

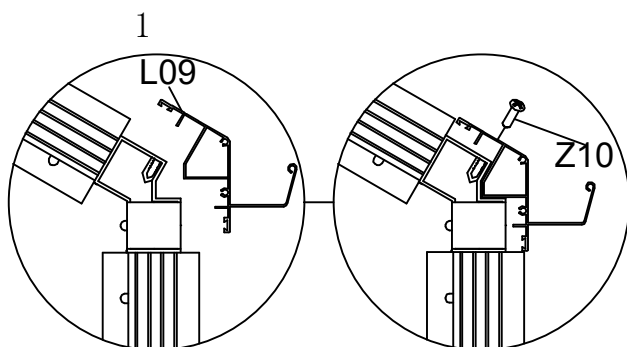
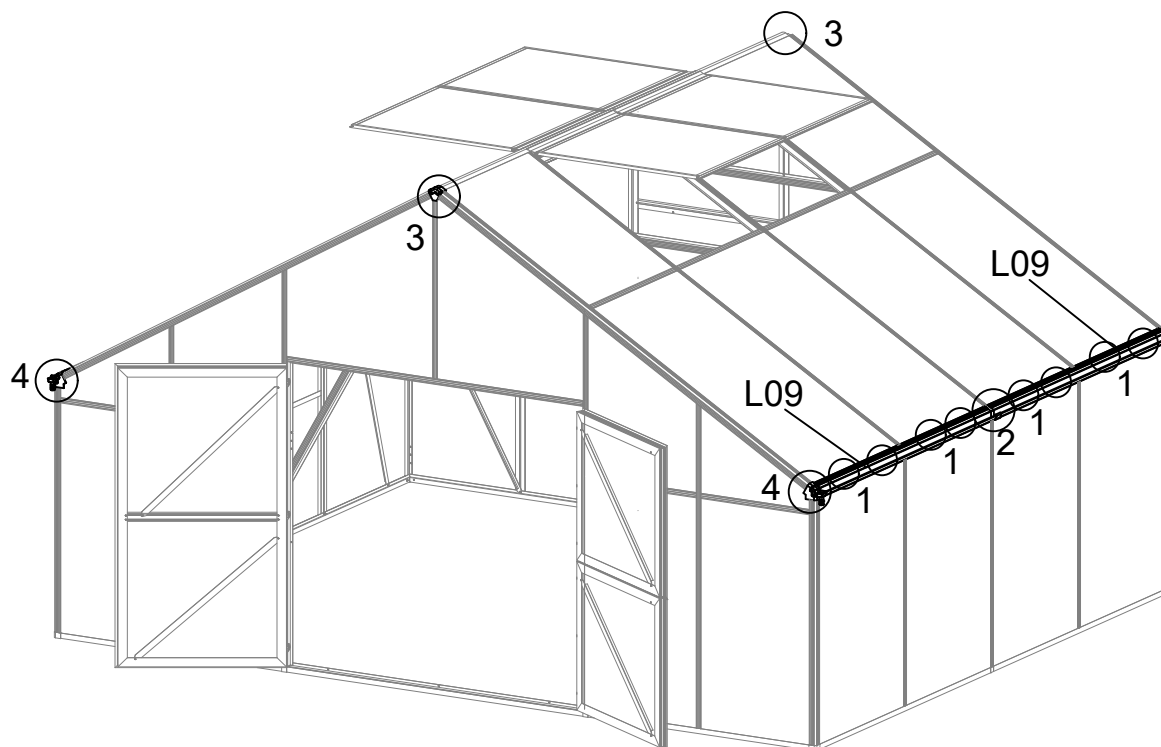


Insert all Y9 into each roof of greenhouse.

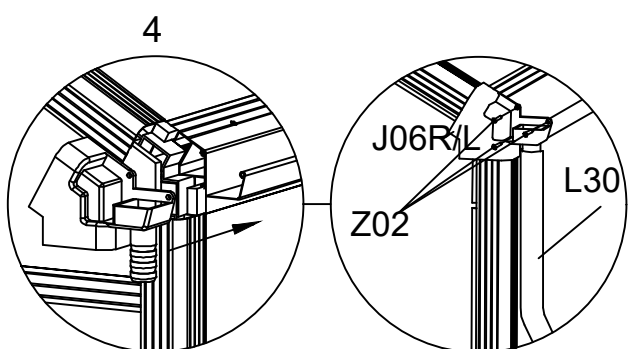
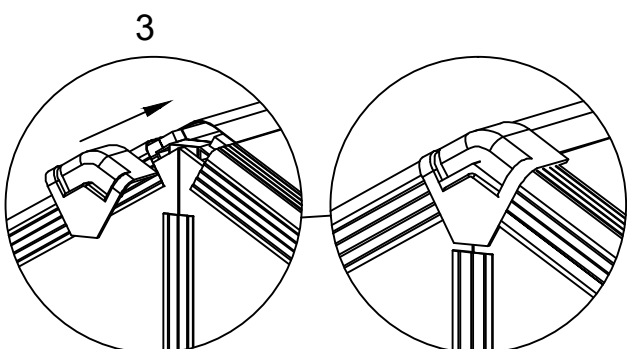
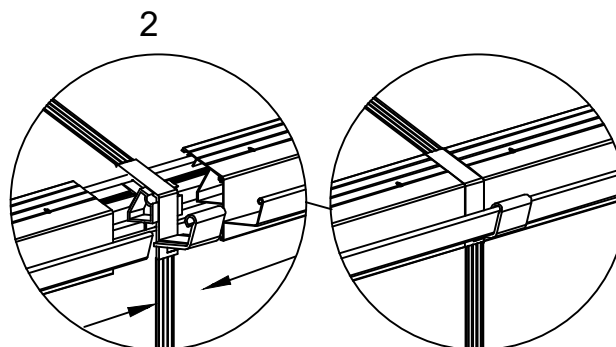
PART	NO	QTY
	H63	9
	L05D	4
	A92-1	2
	Z17	18
	M5X12	
	S27	36
	M5X12	
	S26	4
	M3X12	
	S05	8
	M6X12	
	M03	8
	M6	



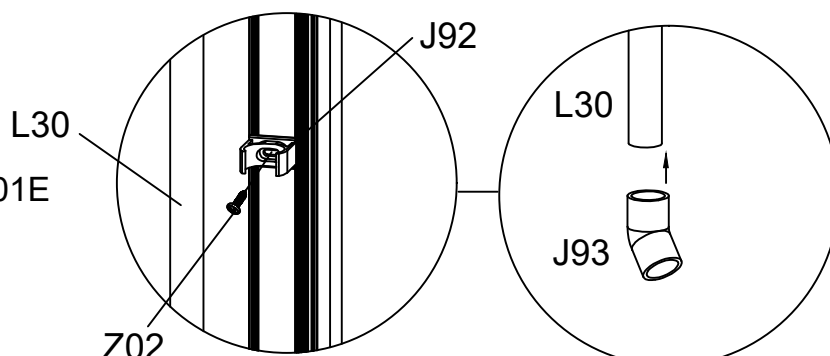
PART	NO.	QTY.
	L09	4
	J07	2
	J02	2
	J06R/L	2/2
	L30	4
	J92	4
	J93	4
	Z10	16
	Ø5X30	
	Z02	12
	Ø4X16D	



Use L09 to cover the edges of all Y9 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.

