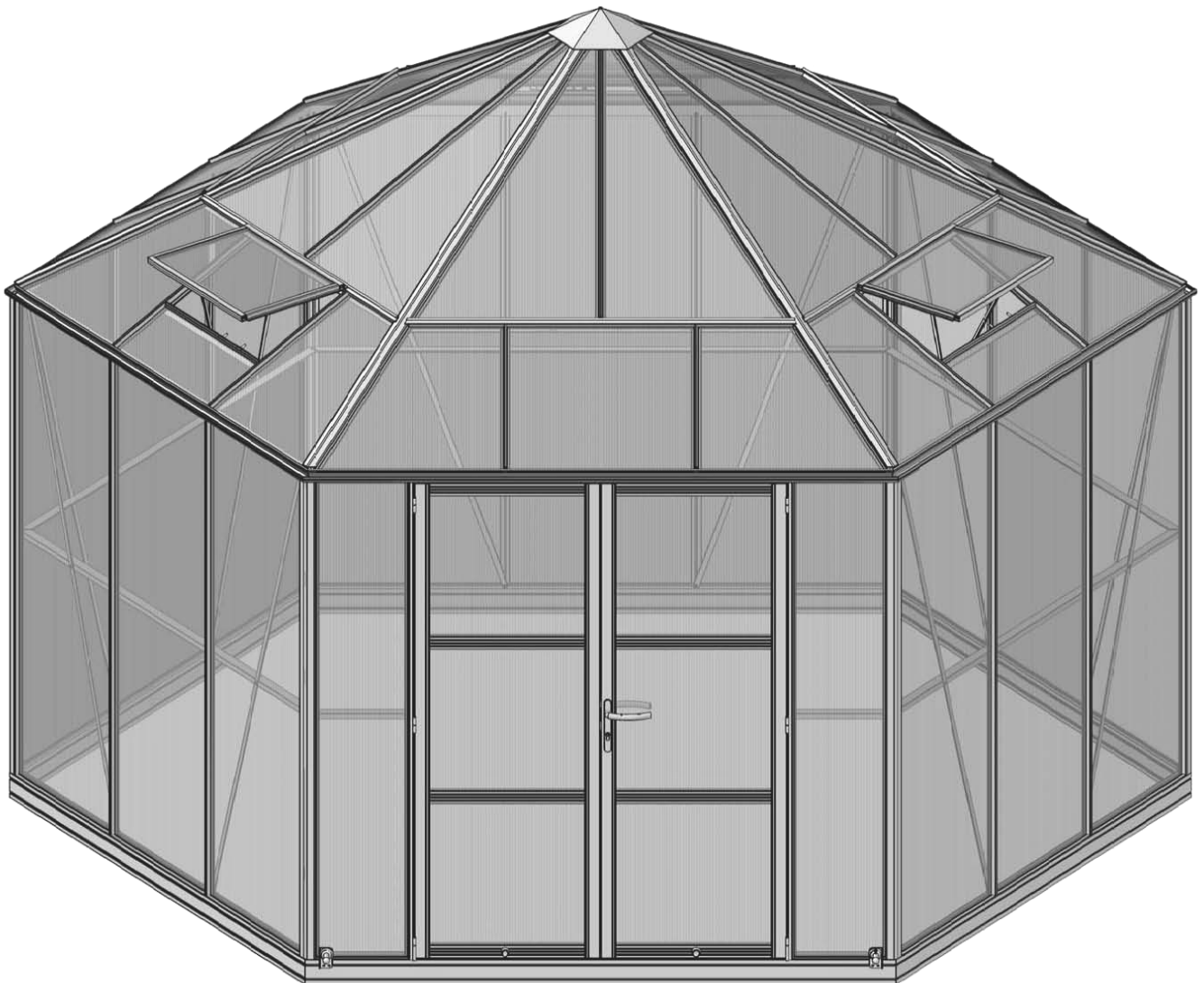


Monstera Växthus

Assembly Instructions

— For Double Hinged Door



Walk-in Greenhouse

Thank you for purchasing your new greenhouse. We recommend you familiarize yourself with the instructions and read all safety information before you commence assembly.

These instructions are divided into sections: Base, Part lists, Preparation, Side wall, Rear wall, Front wall, Roof, Vent, Door, PVC capping bar, Polycarbonate or Glass, Down pipes, Optional Turbine Vent, Anchoring greenhouse to slab or base etc.

Shelving and Staging inside greenhouse are optional also, not including in this instructions.

Package 1(x2) mainly for side wall parts, Package 2 for front and rear gable parts and side wall sill bottom bars parts, Package 3 for roof frames and parts, Package 4 for vent parts, Package 5 for door parts, Package 6 for PVC bars and fixing clips parts, Package 7 for down pipes parts, and etc.

Safety Warning

1. Aluminum profiles, polycarbonate and glass can potentially cause injury. Please ensure you wear protective goggles, gloves, headgear and suitable footwear when assembling and glazing the building.
2. Please remember that glass is fragile and should be handled with extreme care. Always clear up and dispose of any breakages immediately.
3. Do not assemble the greenhouse in high winds.
4. For safety reasons and ease of assembly, we recommend that this greenhouse is assembled by a minimum of two people.
5. The product you have purchased is intended only for the growing of plants and should only be used for this purpose. When used for other purposes we will take no responsibility.
6. When using a step ladder one person should steady it at all times whilst the other works.
7. Should you encounter difficulties constructing this house, or in positioning the glass or polycarbonate sheets, please contact your retailer– do not use force!
8. The greenhouse must always be anchored.
9. Please clear all lying snow from the greenhouse roof as it can cause the roof to buckle or collapse.

Site Preparation

1. When selecting a site for your greenhouse, Always try to select a sunny location, it is vital that you choose as flat and level an area as possible.
2. Supplier's original chamber box section Alu. base or a concrete or slab base will provide the most solid foundation for your greenhouse.
3. Do **not** fix your building down until the building is fully assembled, including glazing.
4. Avoid placing your greenhouse under trees or in other vulnerable locations.
5. To minimize the risk of wind damage, try to select as sheltered a site as possible, e.g. beside a hedgerow or garden fence.

Important

Before assembling your new greenhouse, please check that all parts in the provided list are included. Please take each bundle out of the packaging in order to identify the parts better. Most parts are numbered and can be identified by a stamped number or removable label. Alternatively, the components can be identified by lengths detailed in the packing list (see diagram below). Please also note that **NOT** all parts for a specific area will be packed together, i.e. door related components are packed together and some are used in main frame construction. and some side wall bottom sill bars parts were packed in front & rear wall parts package No.2.

It is important that the opened bundles do not get mixed with one another. If something is missing please contact your retailer.

Additional Considerations

1. Please bear in mind that assembling your greenhouse can be time consuming. You may need to spread the construction over two or more days. We recommend that you avoid leaving the building partially glazed. If you ever have to leave your greenhouse half assembled and not anchored down, weigh it down with slabs or bags of sand to stop the wind moving it.
2. You will find it helpful to prepare a large, clean and clear area in which to work in. A garage floor or flat lawn area is ideal.
3. Anchoring down your greenhouse should be the final stage of construction just after glazing.

Necessary Tools

Screw drivers (Normal and Crosshead PH2), 10 mm socket spanner or wrench, 10 mm combination spanner, knife, measuring stick, spirit level, Accu-drill with adjustable torque, Step ladder.

Maintenance

The greenhouse should be thoroughly washed with a gentle detergent occasionally. Please check that the detergent used does not react aggressively with aluminium or plastic.

Ensure that the door tracks are cleaned regularly to avoid a buildup of debris, If hinged door, the hinge should be lubricated usually.

Guarantee

Your new greenhouse is guaranteed for 10 years against faulty manufacture of the framework. This does not include glazing, moving parts, accidental damage or wind damage etc.

Base

We cannot emphasize how important it is to have a proper base for your Greenhouse to be erected upon.

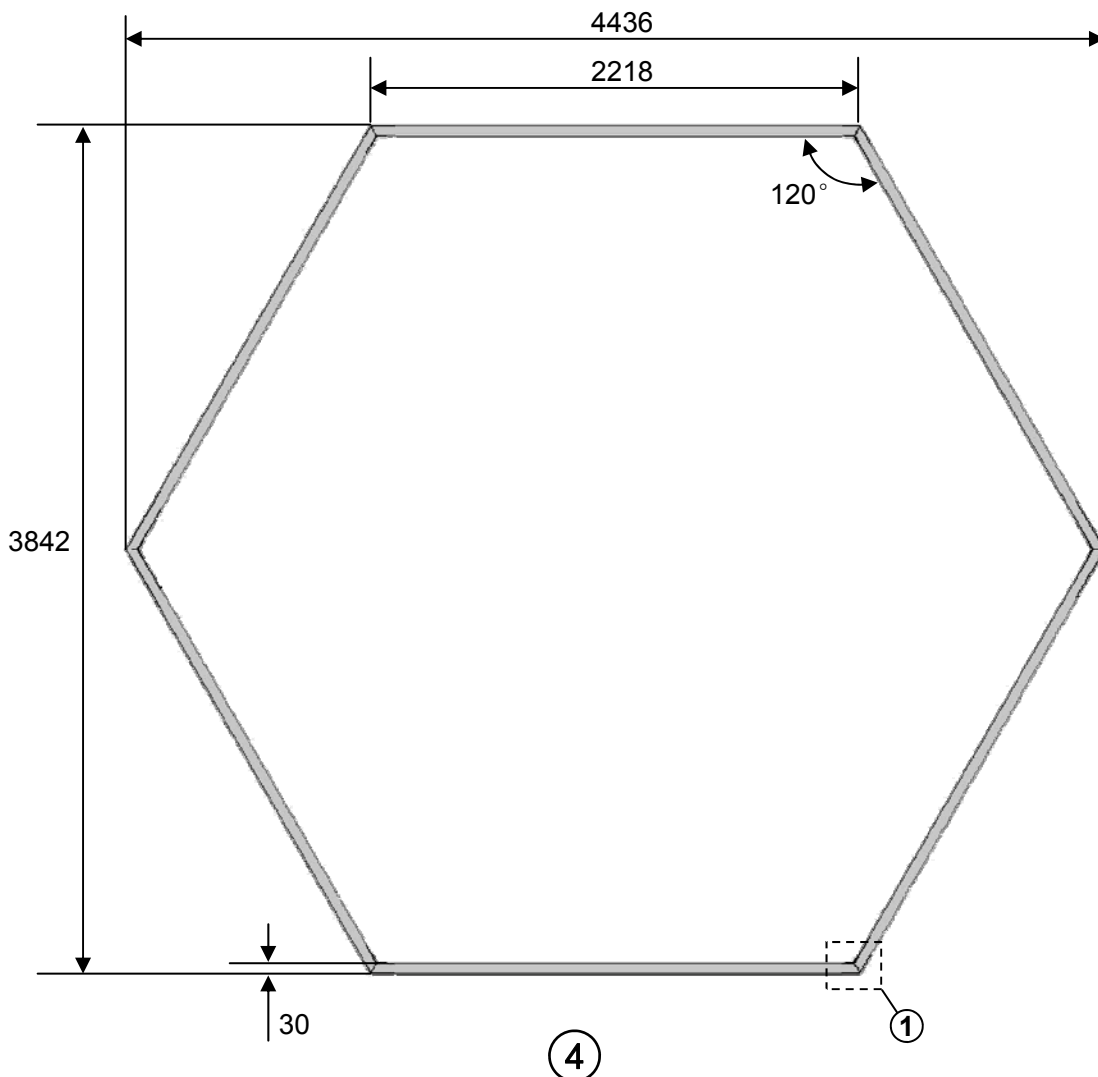
It is essential that the **BASE IS FLAT, LEVEL AND SUBSTANTIAL** enough to take the weight of the greenhouse including its polycarbonate panels or heavy glass.

Give yourself enough room around your base to allow for fitting the polycarbonate panel or glass and any ongoing maintenance / cleaning. A slab base which is larger than the greenhouse is the ideal solution and is our preferred foundation. If you use supplier's original chamber box section alu. base, also recommended.

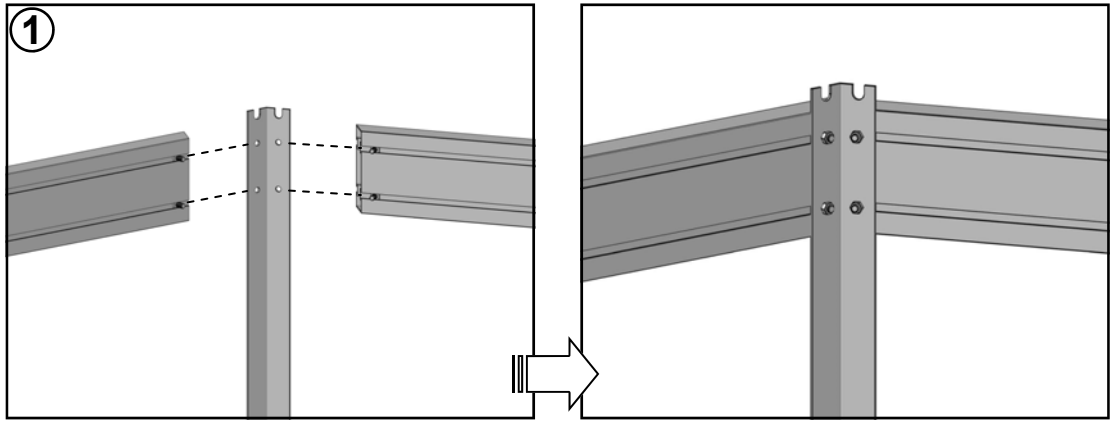
A brick perimeter base is equally suitable providing there is a concrete foundation beneath it. We suggest using a solid brick with no frogs or holes (quality stock bricks or semi-engineering bricks).

IMPORTANT: Do not anchor your greenhouse down until it is fully assembled including glazing unless you are 100% sure your base is square and level. If not your polycarbonate panels or glass will not fit properly.

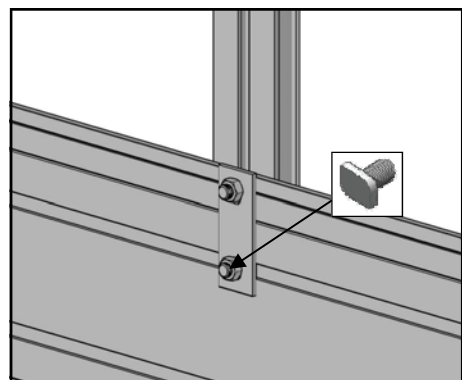
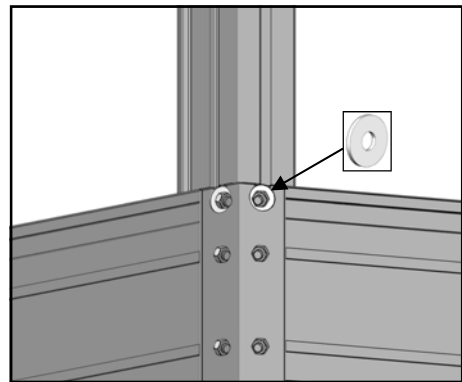
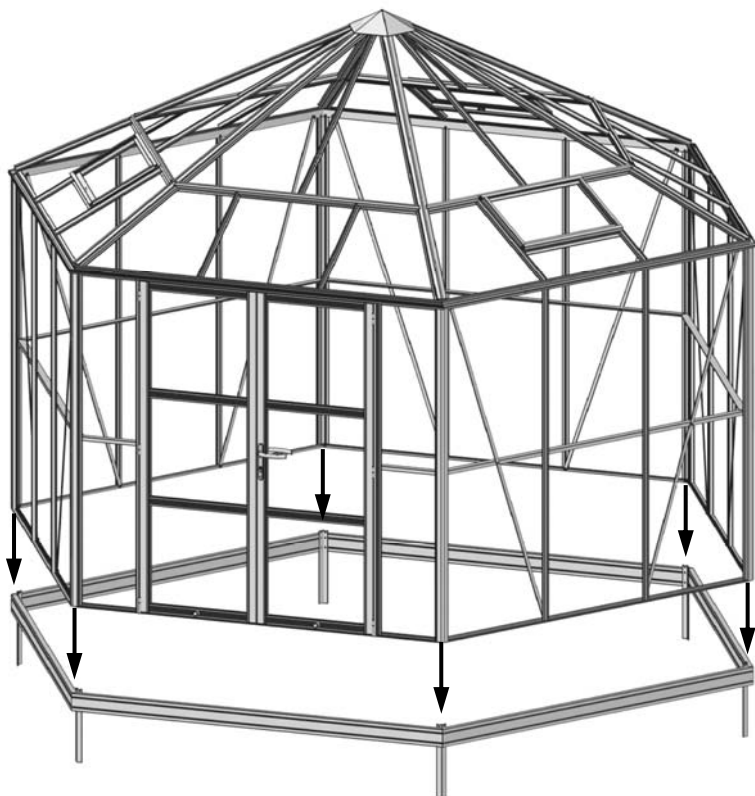
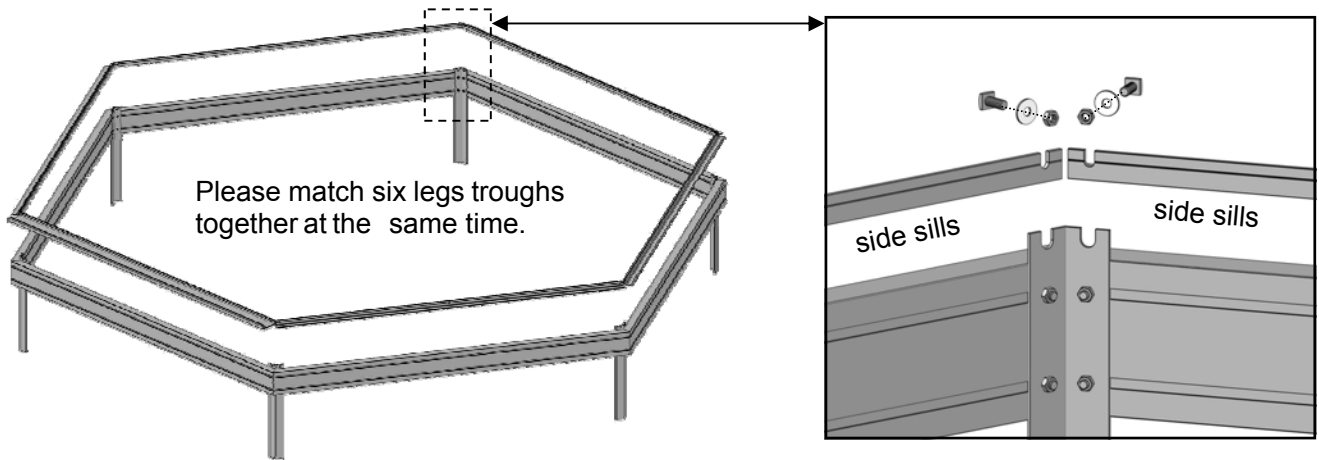
						
Sidor	Hörn Beslag	Förankrings Beslag	M6x10	M6	M6x10 Avlång	Brickor
6x2218	6	12	24	36	12	12



Base



IMPORTANT Before assembling aluminium base, the end trough centers of seven legs should match both end trough centers of side sills and front & rear sills at the same time.



Parts List

Package 1

#	7901	7607	7908	7909	7910	7912	a1	a2	a3	a20
Size	1922	1922	2237	2237	2033	2167	M6x10	M6	M6x15	-
QTY	3	4	1	1	4	2	24	32	8	32

Package 2

#	7023	7903	7907	7909	7607	7530	7910	7912	7913	a1	a2	a3
Size	2179	2179	2237	2237	1922	1922	2033	2167	375	M6x10	M6	M6x15
QTY	5	1	1	1	2	2	2	1	2	20	40	8

#	a19	a20	h1	h3	Rubber
Size	M6x8	-	30	62	-
QTY	12	28	4	2	4M

Package 3

#	7915	7919	7920	7922	7991	7992	7993	7994	m3	p10	a1	a2
Size	2335	1348	686	1472	81	-	-	-	-	-	M6x10	M6
QTY	6	6	12	6	1	1	1	1	18	6	90	90












#	a24	a25	a20
Size	M6x110	M6-L	-
QTY	1	1	90











Package 4

#	7053	7923	7055	7924	7057	7067	a1	a2	a4	a7	a10	p3	a20	p11
Size	739	718	701	400	300	-	M6x10	M6	Φ3.9x8	M4x8	M4	-	-	-
QTY	1	1	1	2	1	2	8	8	2	6	6	2	8	4







Parts List

Package 5

											
#	7523	7524	7525	7526	7527	7961	7529	a9	a2	a5	a11
Size	687	687	687	1909	1909	1909	569	M6x10	M6	Φ3.5x19	M6x25
QTY	2	2	4	1	2	1	12	4	39	32	4

											
#	a17	a19	h1	h2	m12	S1/S2	S3	LOCK	Rubber	Fluff	
Size	Φ3.5x13	M6x8	30	-	-	-	-	-	-	-	
QTY	4	33	6	6	2	2 SETS	2	1 SET	2M	1.4M	

Package 7

						
#	P11	P12	P13	P14	P15	a18
Size			1400	200		Φ3.5x13
QTY	2	2	2	2	2	2

ASSEMBLY SYNOPSIS: IMPORTANT INFORMATION / CONSIDERATIONS

BASE

Base dimensions and recommendations. Ensure that your base is level as this will make assembly of the building, especially the glazing of the roof much more straight forward.

PARTS LIST Most components should have a code punched into their metal surface. Identify and separate all like for like components prior to assembly. The parts lists also separates parts into the various sections Package 1 - Package 7 shown above. Parts can also be identified by their profile pictures and stated lengths etc..

PREPARATION The frame is assembled by feeding square headed bolts, either 10mm or 15mm in length into the slots on glazing bars and then locating those bolts through holes in purlings and cills, etc... Twist in (rectangular) crop headed bolts are also used towards the end of construction to attach components to the frame when the glazing bar slots are no longer exposed at the ends. On the door frame posts #7530 and door horizontals #7523 & #7524 & #7525, nuts are slid into the channel rather than bolts to ensure minimum protrusion. Tools required / recommended.

SIDE WALL

Use 10mm and 15mm bolts to join the components (note how the head of the bolt slides into each glazing bar during construction). The correct choice of bolt is highlighted with a number #a1/#a3 in each of the diagrams.

Do the same for Rear wall & Front wall later.

JOINING TWO SIDE WALL SECTIONS TOGETHER 1

-----REAR WALL

Use the gutter #7909 and sill #7023 and side horizontal bracing bar # 7912 to join two side wall together on rear wall, It is a good idea to tie some step ladders to the sides to support them if you do not have anyone to hold them for you.

JOINING TWO SIDE WALL SECTIONS TOGETHER 2

----- FRONT WALL

Use the gutter #7907 and sill #7903 to joining two side wall together on front wall.

IMPORTANT: The front wall contain two door posts #7530, Please also ensure that the door rubbers are inserted into door frame posts # 7530.

#7530 houses the door hinges #h1 /#h3 which are fitted in a similar way to the strike using the low protrusion #a19 round headed bolts.

The hinge components are packed with the other door components Package 5. Ensure that the strike is in the correct orientation with the catch hole uppermost. The height the hinges are set at is not important at this stage, they will be set in section of door assembly later.

ROOF

Assemble 6 roof corner bars #7915 on hexagonal roof bracket #7992 . Please note #7915 overlap bracket by distance of **42** mm. tighten all bolts.

Then lift the assembly onto the roof, Herein you should use step ladders. Loosely Connect the roof corner bars to the eaves at all 6 corners.

Please note: You need to insert an extra bolt into each roof corner bar either side of vent hinge beam #7922.

Connect 3 roof vent hinge beam #7922 to roof corner bar with joining plate #m3.

Join 6 roof glazing bars #7919 between the hexagonal roof bracket #7992 and the center of vent hinge beam #7922. Please note: #7919 overlap bracket by distance of **24** mm at the one end, and connected vent hinge beam by joining plate #m3 at the another end.

Join 12 short roof glazing bar #7920 between vent hinge beam #7922 and eave. At this stage you need to decide where your roof vent are positioned so that you could insert an extra bolt into #7920 glazing bar either side of a vent opening.

Assemble the outer hexagonal ridge cone #7994 over the assembled profiles on hexagonal bracket, using long bolt #a24, spacer #7991, open-close disc #7993 and locknut #a25.

DOOR IMPORTANT:

Ensure that you get the three door horizontals#7523 & #7524 & #7525 in the correct orientation. Each horizontal needs two NUTS slid into it which need to line up with the corresponding holes in the door stiles.

TIP: Once you have checked that the handle assembly (L5 / L6 / L7) fits properly you may wish to remove them until the end of the door construction so that the door lies flat on your workbench.

DOOR ATTACHMENT

Though it is possible to build the rest of the greenhouse single-handed, fitting the door is much easier with an extra pair of hands to support the door in its open position when you are moving the h1/h3 into their preferred positions. The height of the door hinges will need to be adjusted by sliding them up and down, h3 sitting down towards the cill at the bottom. Getting the door to swing perfectly without dropping or rubbing on the cill may require some small but vital adjustments. You may also need to insert a packer underneath the door aperture cill #7903 towards the door hinges to avoid interference.

IMPORTANT: Please do NOT let the door slam open or closed as it is likely to cause damage to the door and the frame. Please twist the handle to open and close. Please also be aware that your door KEYS (3 provided) are unique to the building so they should not be stored together.

GLAZING

For roof glazing, when glazing panels under hexagonal ridge cone (assembled already), PVC capping could be started to push in from middle upper area, then slid to the top area of panels.

Also for #XE & #XF roof panels, **We should push pre-cut 712mm length PVC capping bars in place firstly, the PVC tilted & trimmed end touch the edge of roof corner bar. let them no gap to avoid water leaking.** and then push another two 1348mm and 1508mm length PVC capping bars on both sides, slid from middle upper area to top area also.

For glass glazing, on the side walls, the single sided adhesive foam goes longitudinally over the greenhouse frame, the glass just sits directly onto the aluminium cills. Two glass fixing clip holding the glass on top in order not to let glass fall down. Remove the white paper on the foam before it gets wet as it is difficult to remove, i.e. it comes off in small pieces.

Layout the bar capping around the building like a sundial checking that all is present and correct. You can also place the roof capping in the gutters so they are closer to hand. It is a good idea to glaze two roof sections first to ensure the building is square followed by two side sections to ensure the building isn't leaning. Make sure the building is square and level before you undertake the glazing and make sure that you do not leave the building part glazed to prevent wind damage.

FINISHING TOUCHES












Now that the main body of the structure is complete you can add: downpipe fittings and roof corner bar end cover #p10. Use the silicone to seal between the gutter sections. The downpipe bracket #p15 are attached by carefully using #a18 self-drilling tapping screws which will bore into aluminium or plastic. The water outlet jointer #p11 edge should be trimmed firstly to match the gutter hole better.

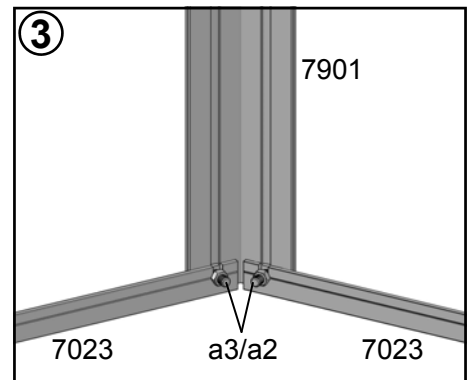
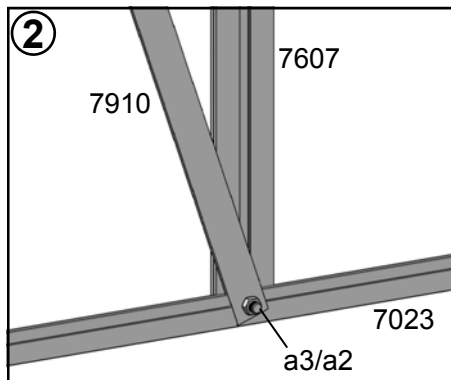
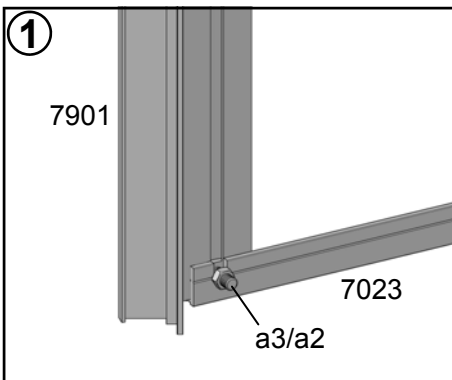
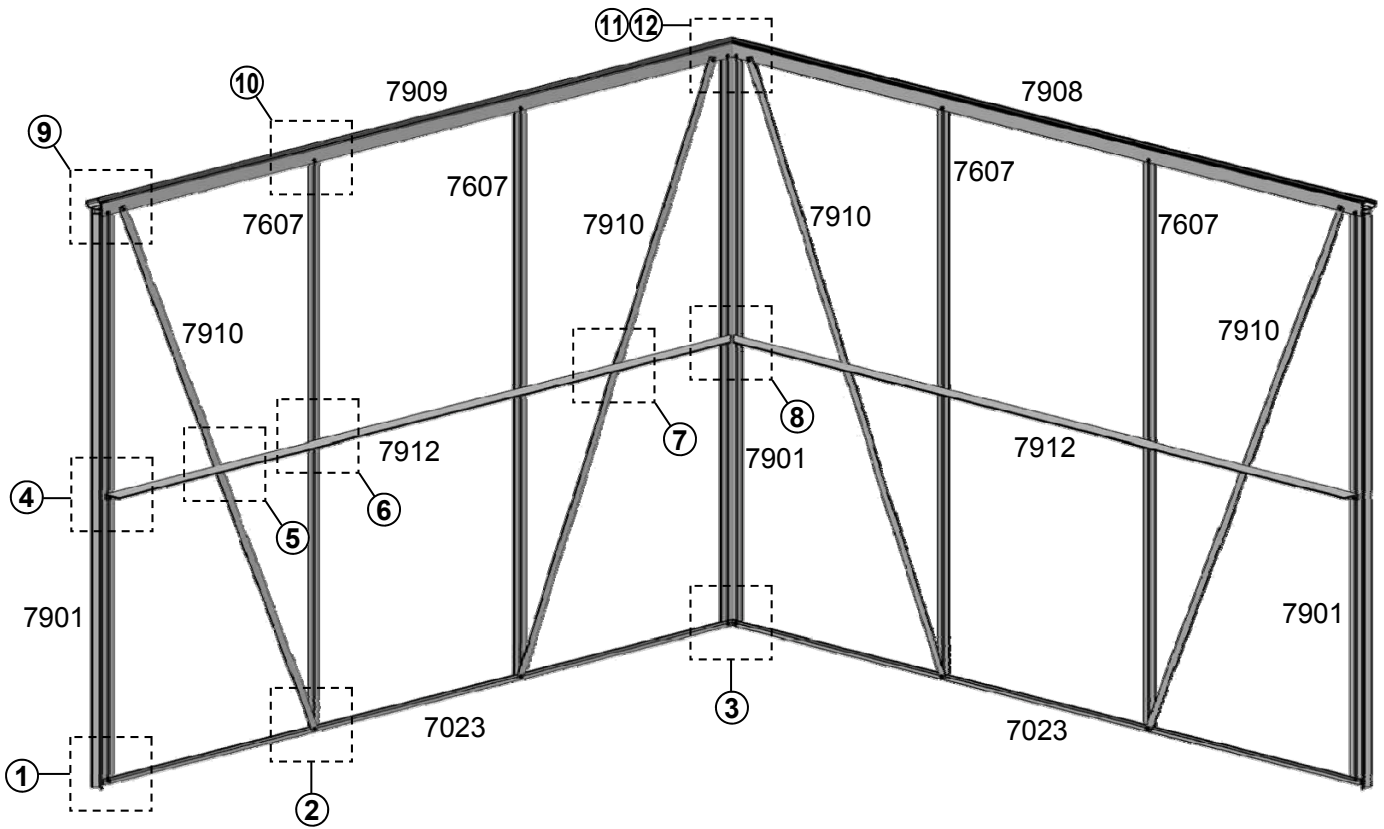
ANCHORING DOWN

Now that the greenhouse is finished and the door is operating without interference you need to anchor the building down using 2" rawl plugs and screws. Use a 8mm masonry bit in a hammer drill to create the holes through the M5 base brackets.

Side wall

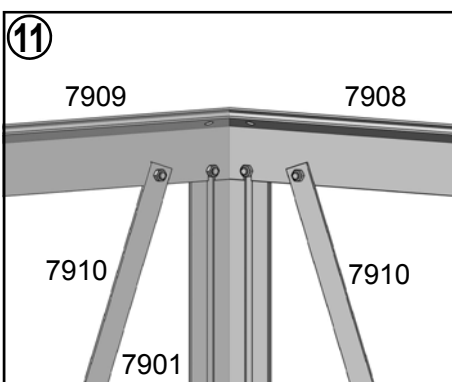
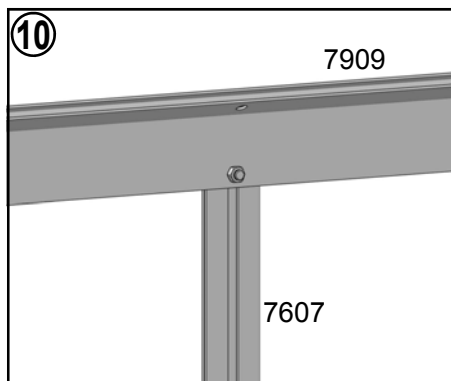
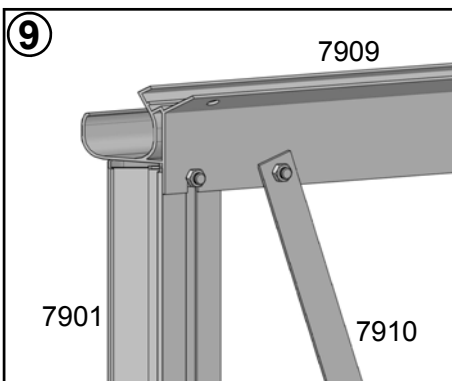
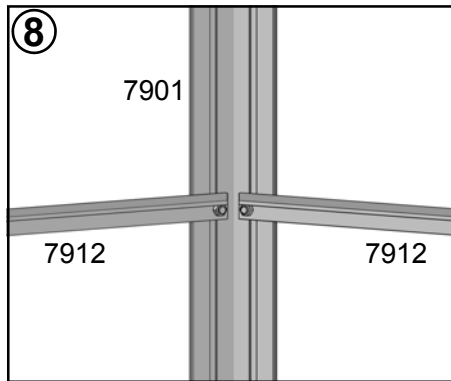
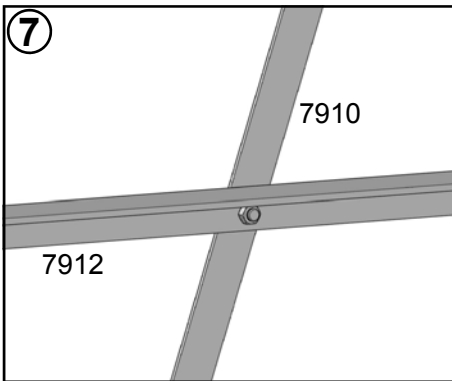
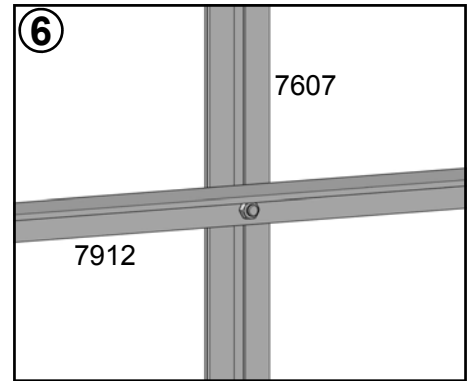
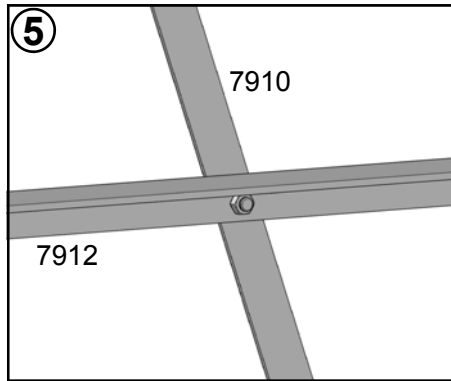
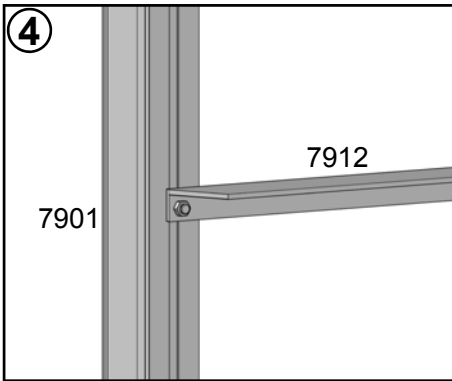
In Package 1 & Package 2

											
#	7901	7607	7023	7908	7909	7910	7912	a1	a2	a3	a20
Size	1922	1922	2179	2237	2237	2033	2167	M6x10	M6	M6x15	-
QTY	3	4	2	1	1	4	2	24	32	8	32
Package 1	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
Package 2			✓								



10

Side wall

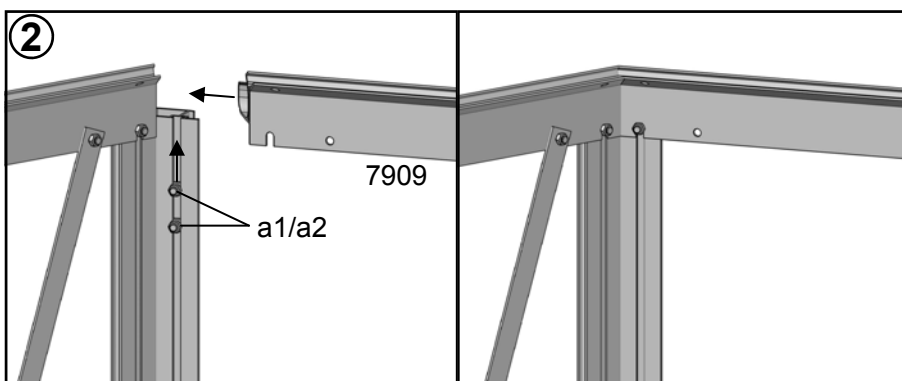
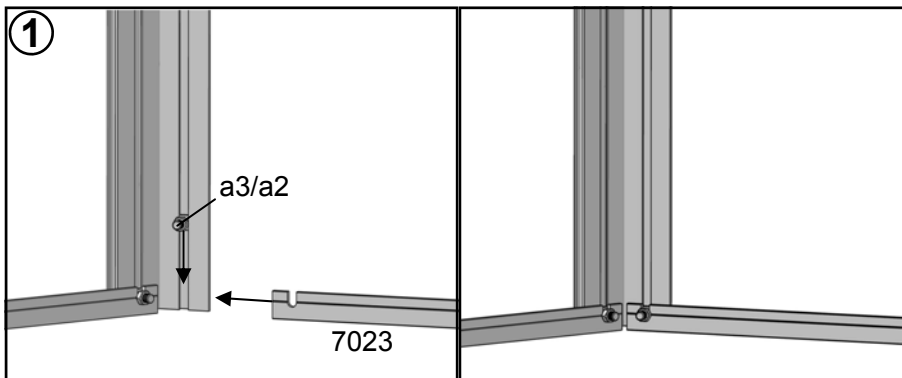
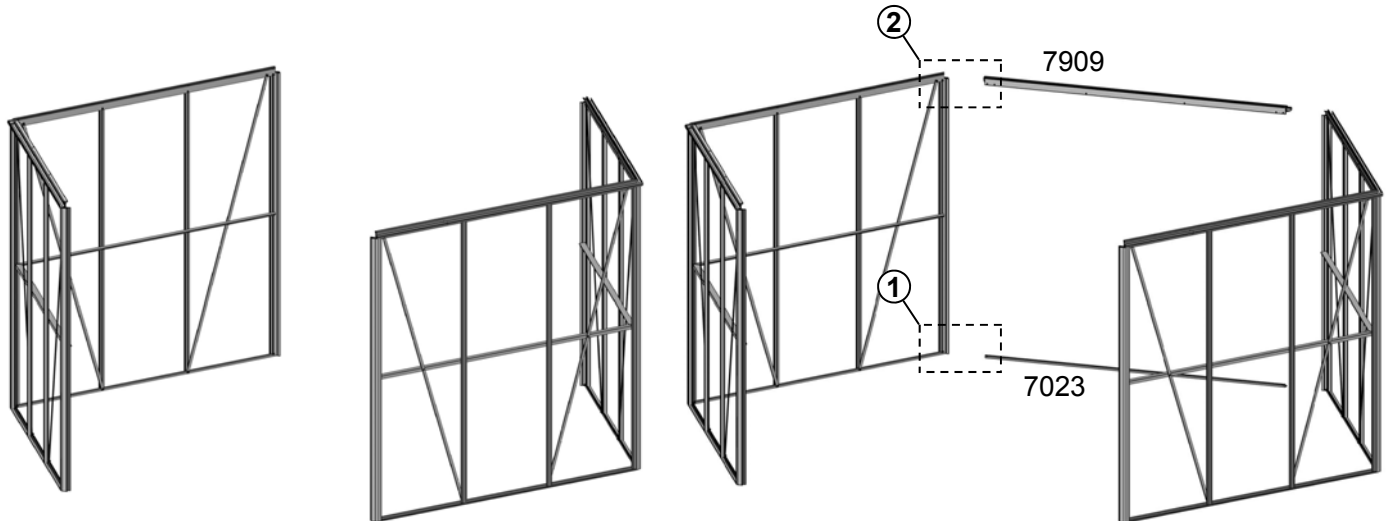


Rear wall

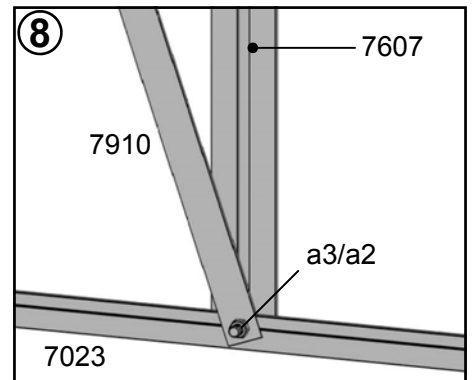
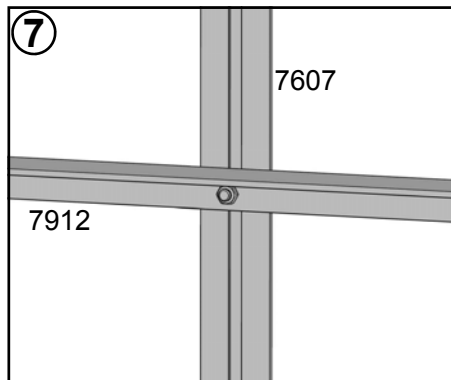
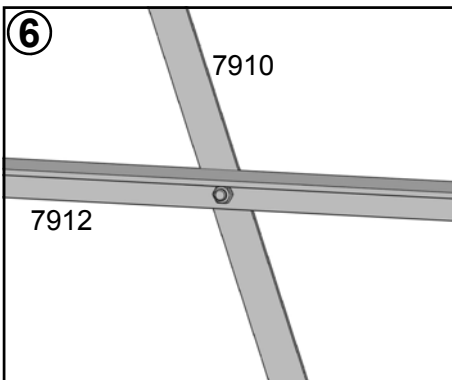
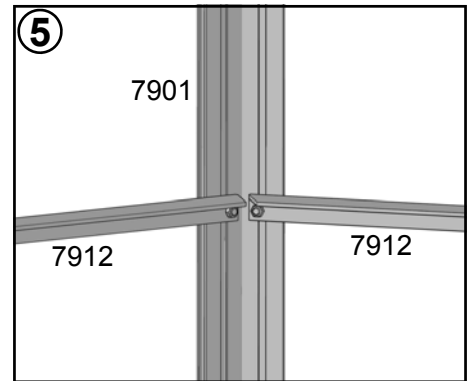
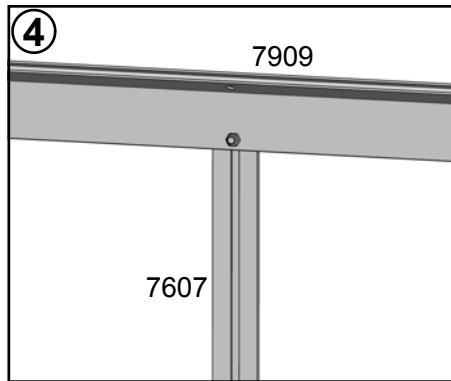
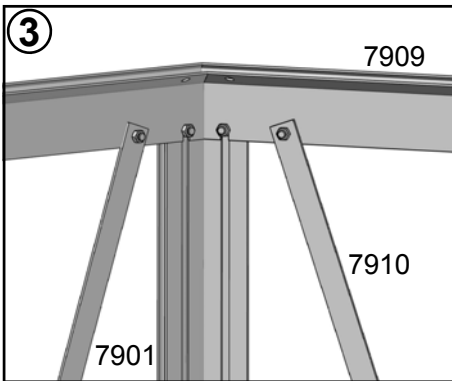
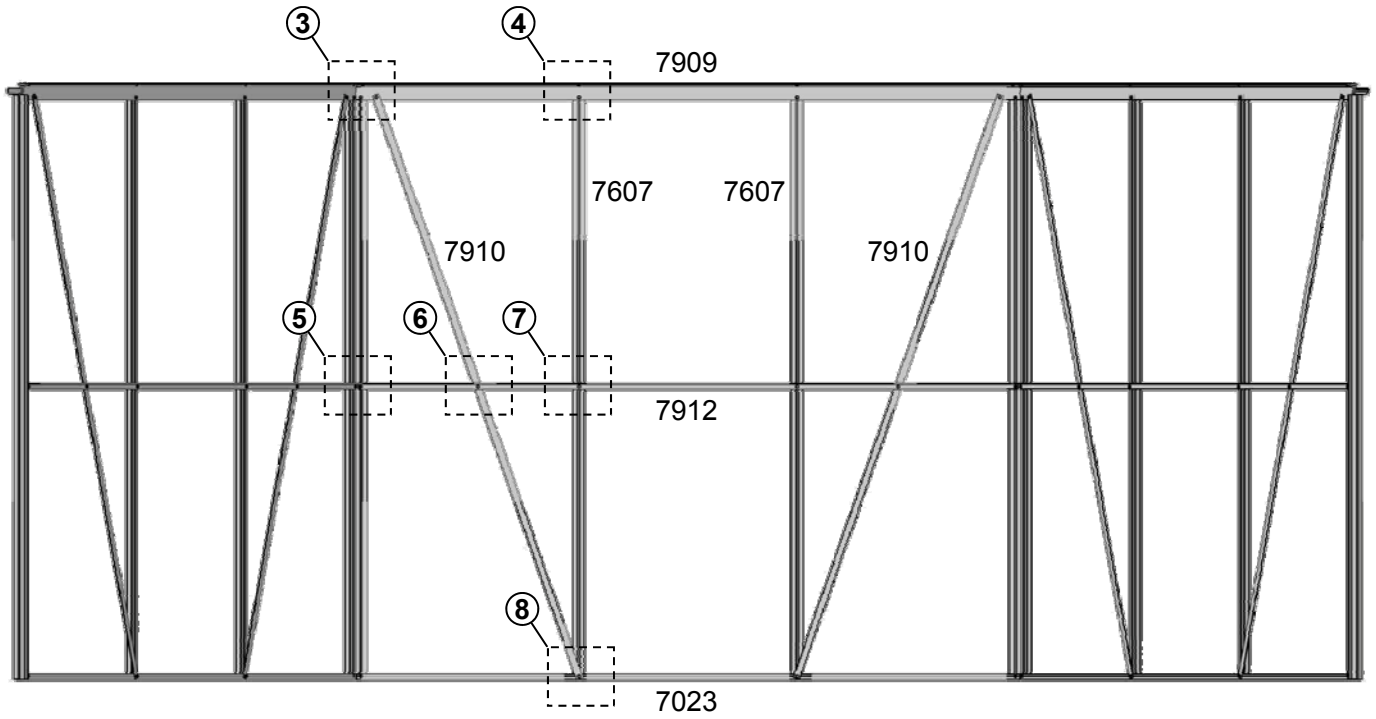
— Join **Side wall** together

In Package 2

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Size	2179	2237	1922	2033	2167	M6x10	M6	M6x15	-
QTY	1	1	2	2	1	12	16	4	16



Rear wall

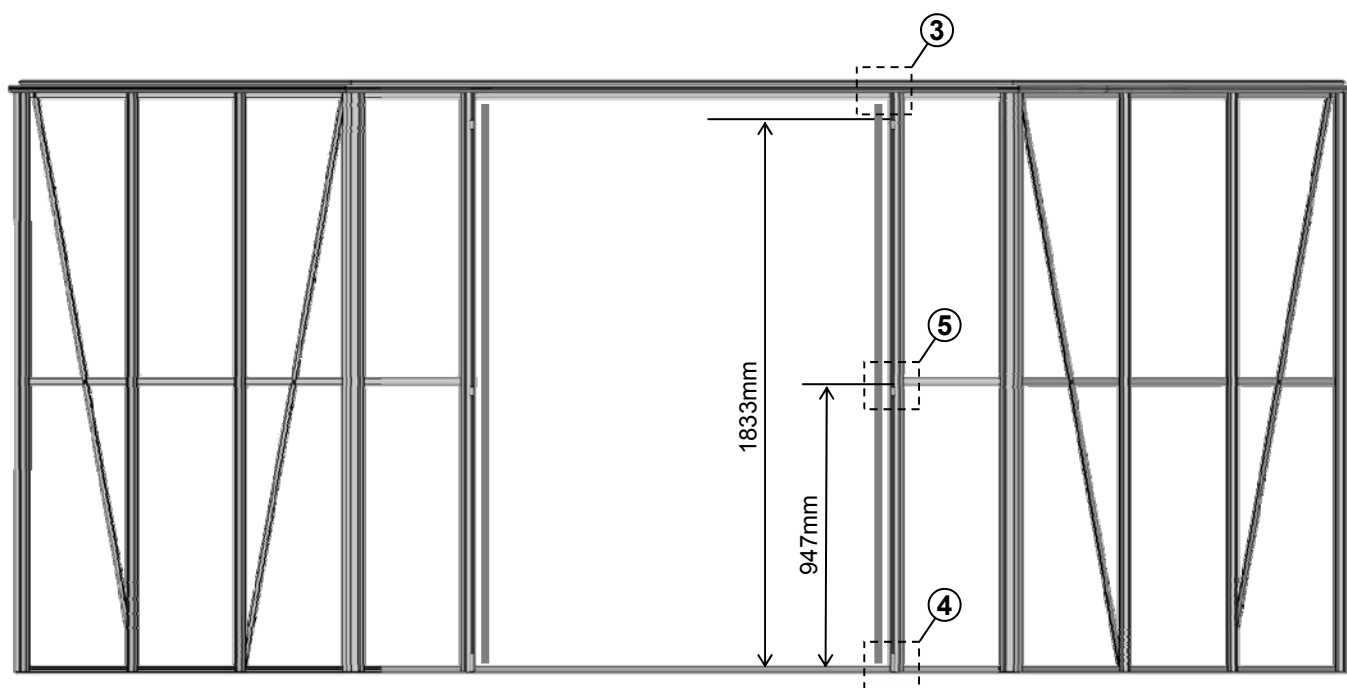
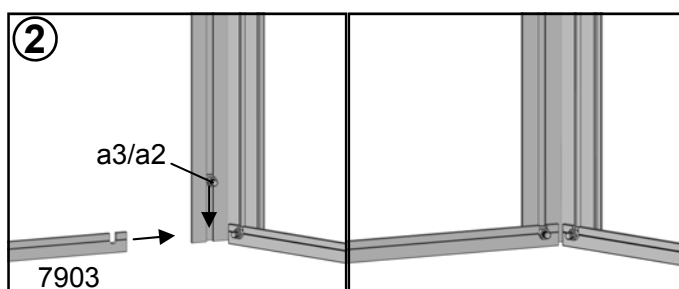
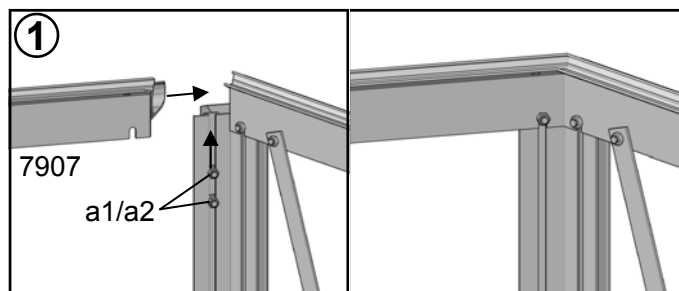
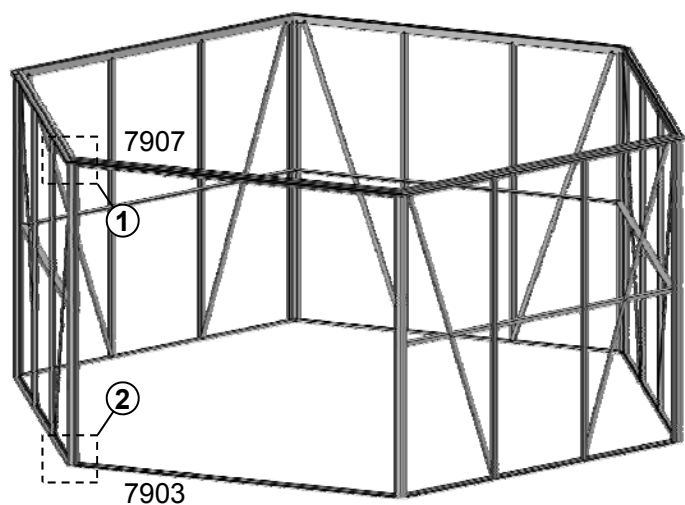


Front wall

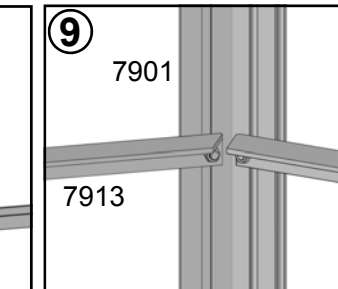
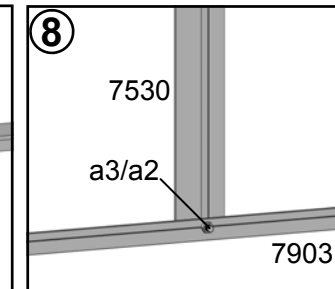
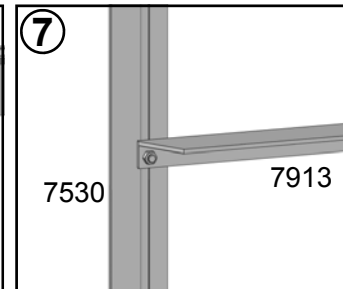
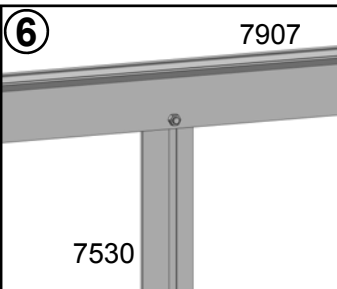
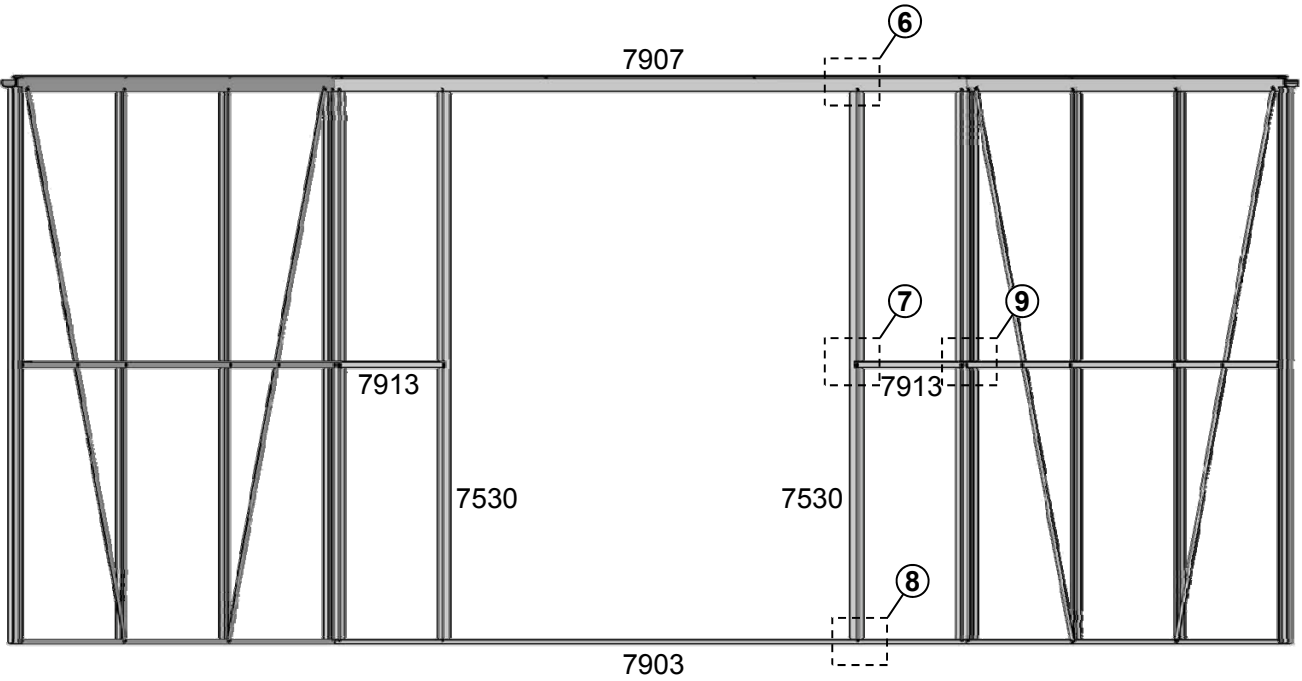
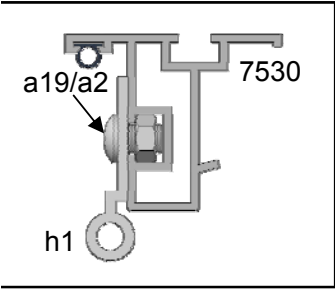
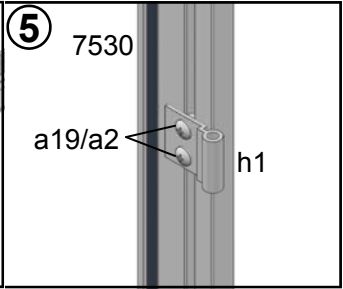
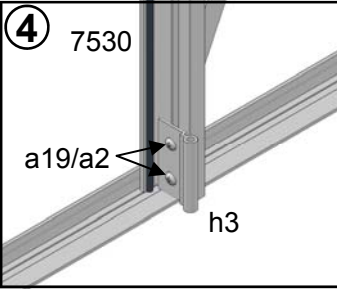
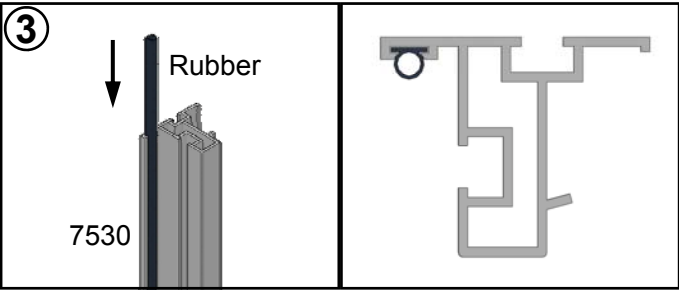
Join **Side wall** together

In Package 2

#	7907	7903	7530	7913	a1	a2	a3	a19	a20	h1	h3	Rubber
Size	2237	2179	1922	375	M6x10	M6	M6x15	M6x8	-	30	62	-
QTY	1	1	2	2	8	24	4	12	12	4	2	4M



Front wall

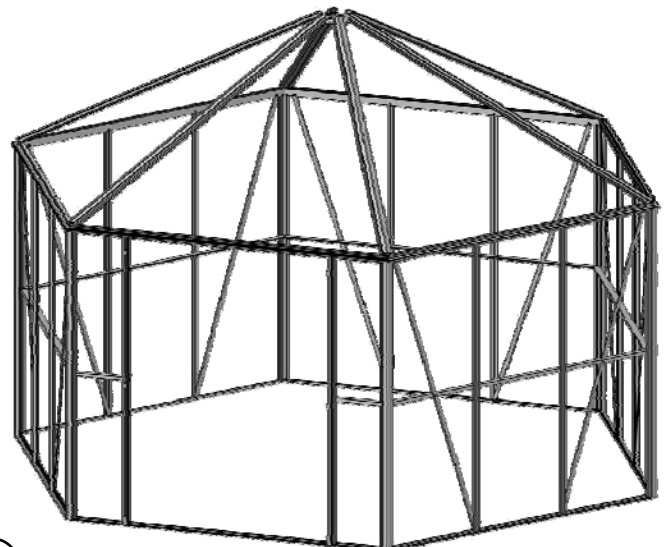
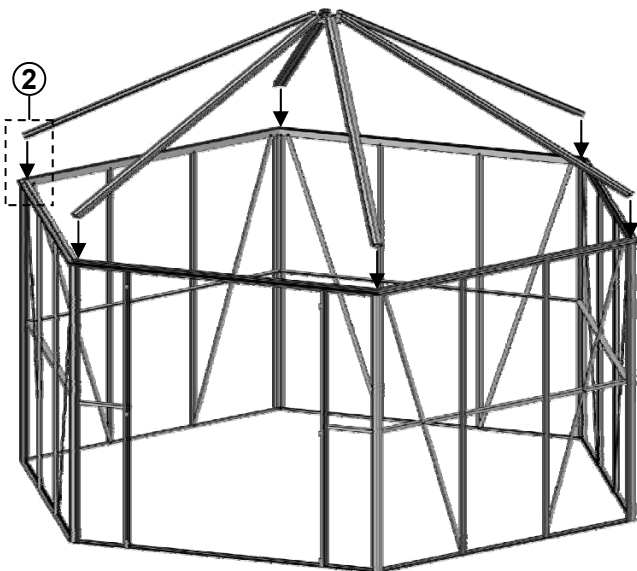
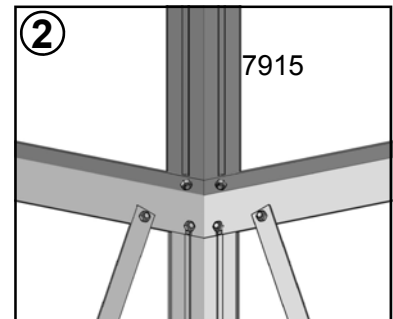
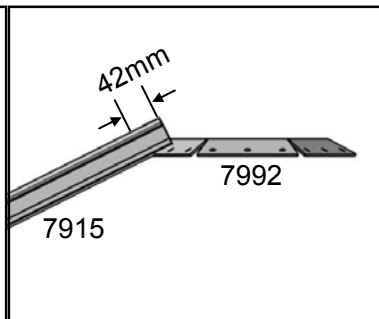
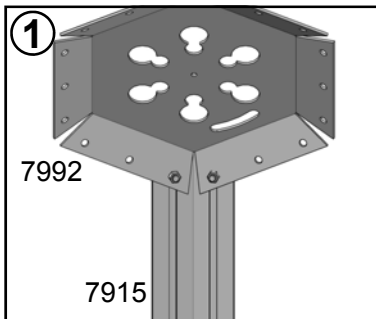
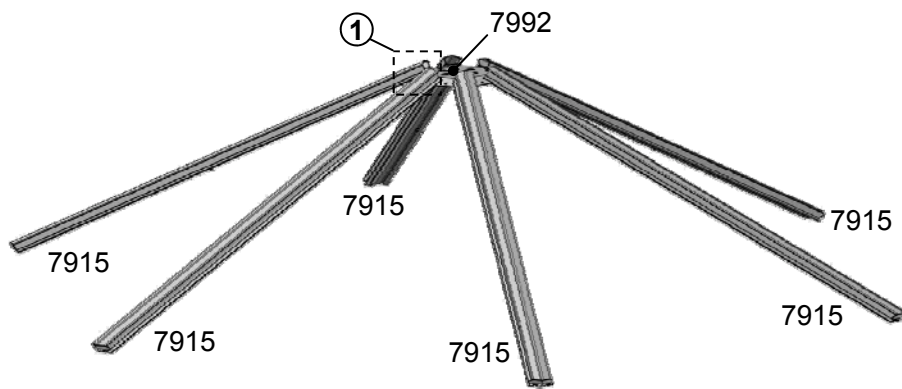


Roof

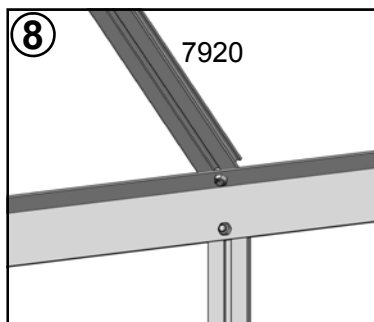
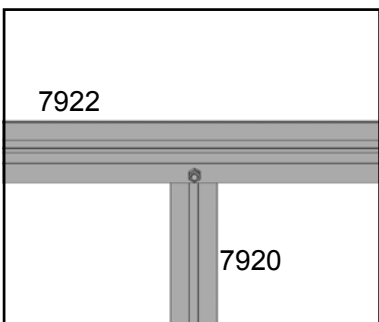
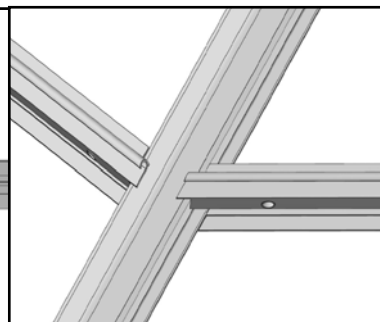
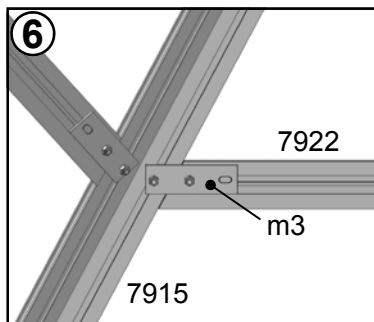
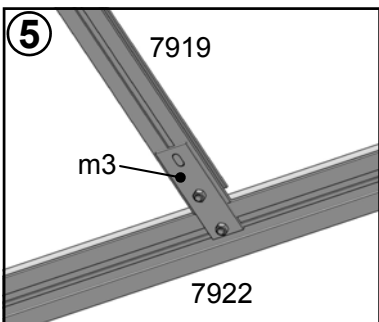
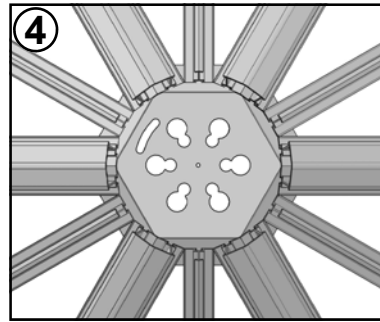
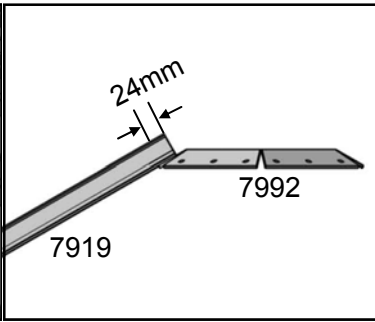
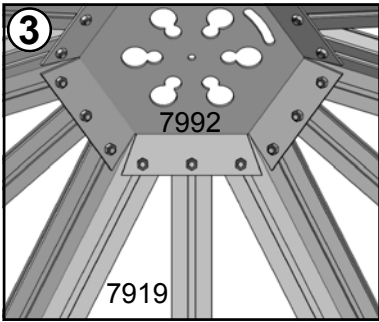
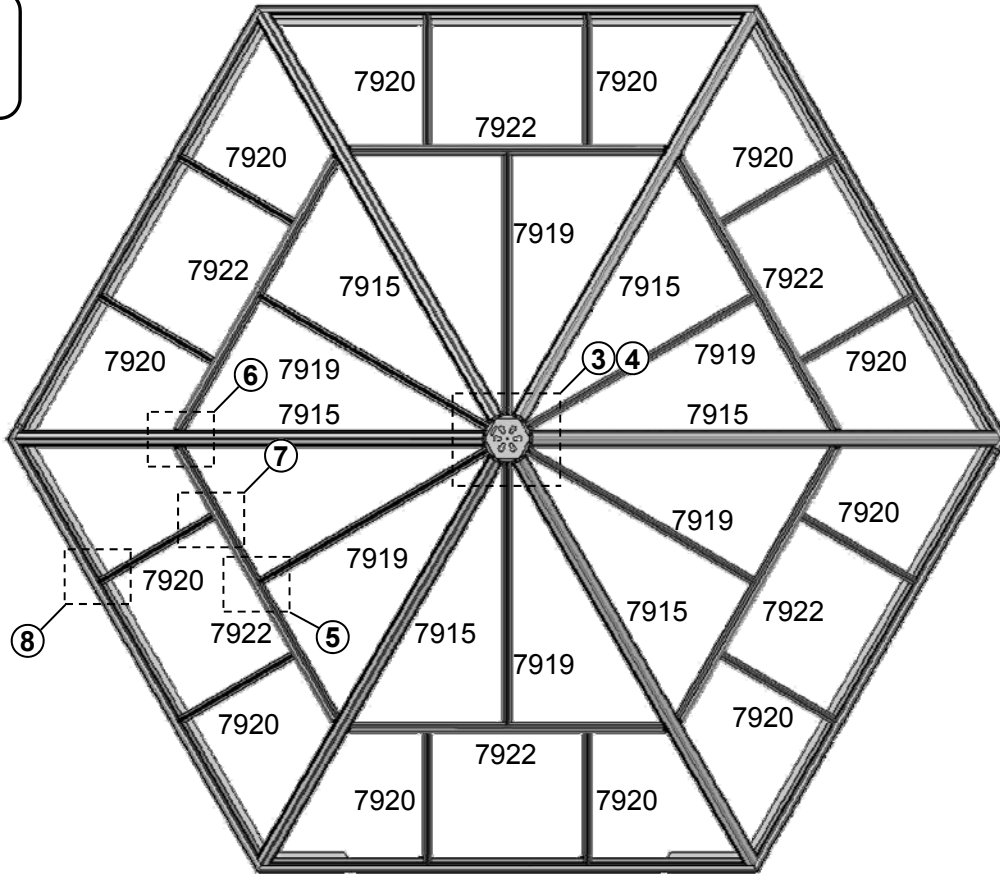
In Package 3

#	7915	7919	7920	7922	7991	7992	7993	7994	m3	p10	a1
Size	2335	1348	686	1472	81	-	-	-	-	-	M6x10
QTY	6	6	12	6	1	1	1	1	18	6	90

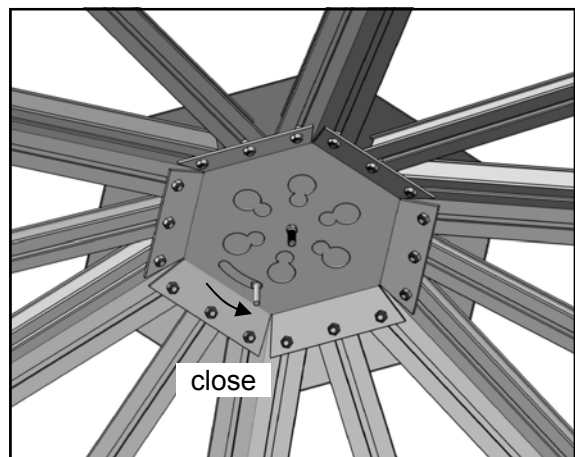
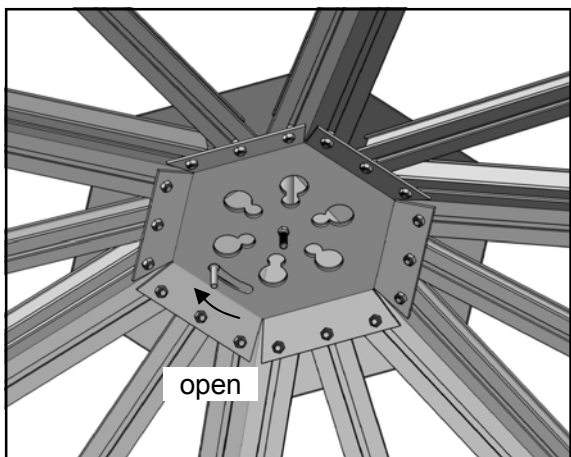
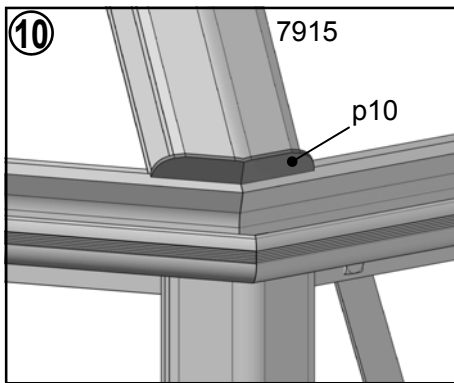
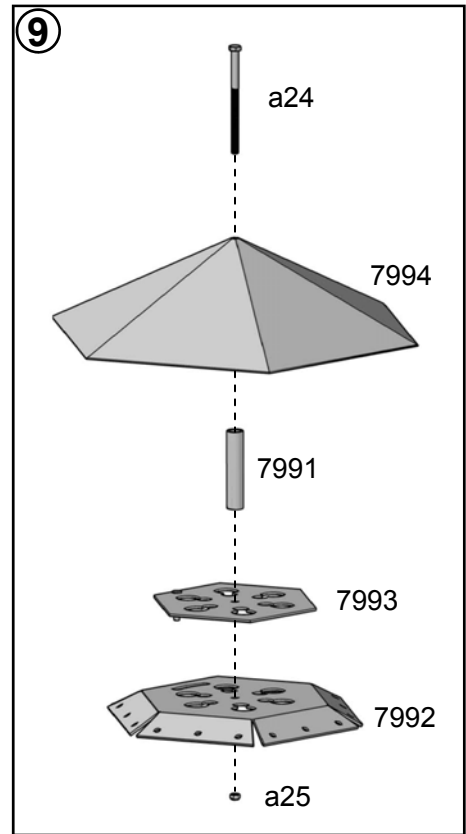
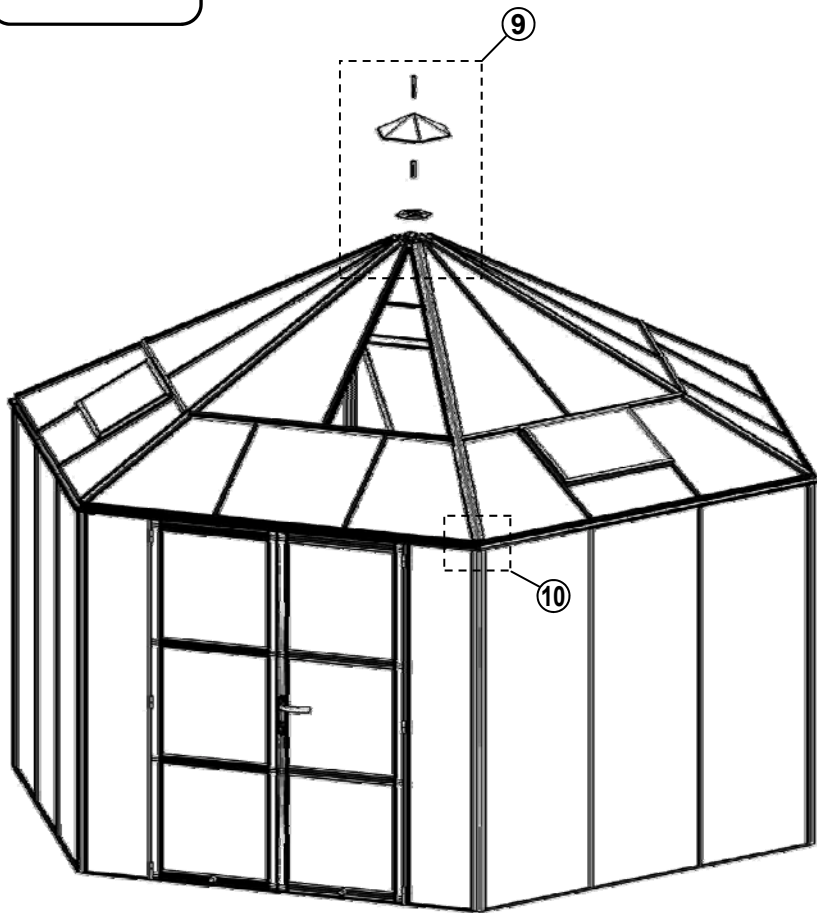
#	a2	a24	a25	a20
Size	M6	M6x110	M6-L	-
QTY	90	1	1	90



Roof



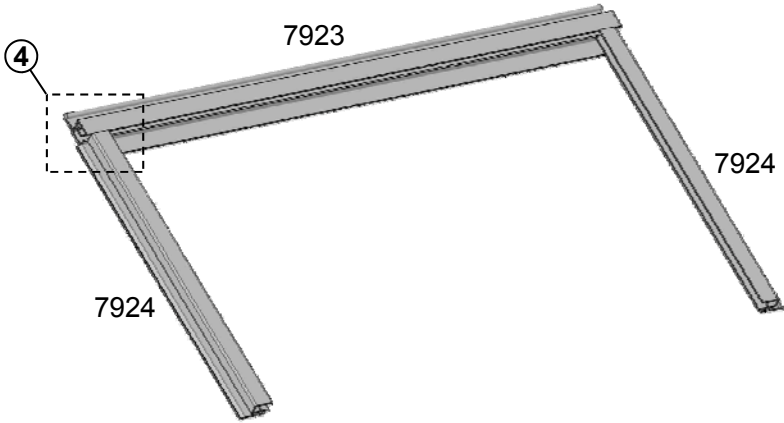
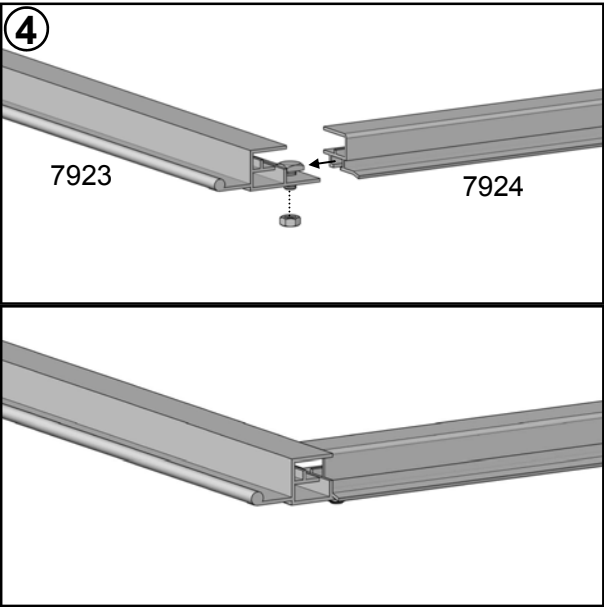
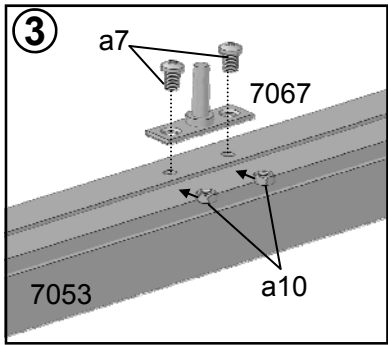
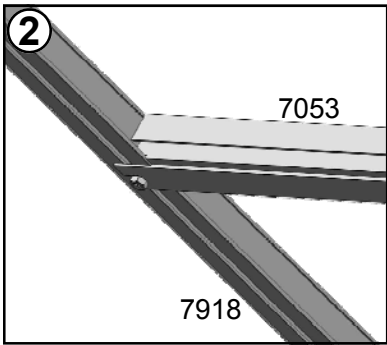
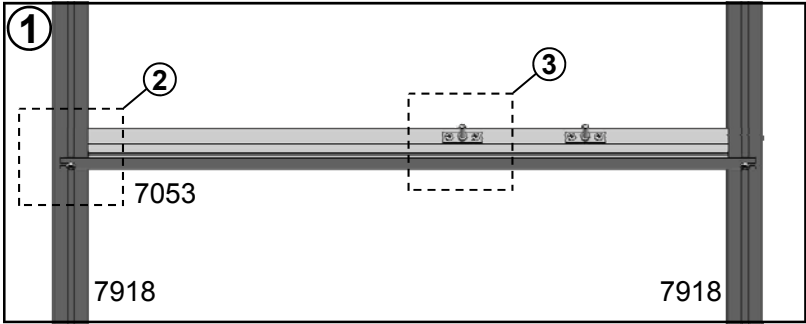
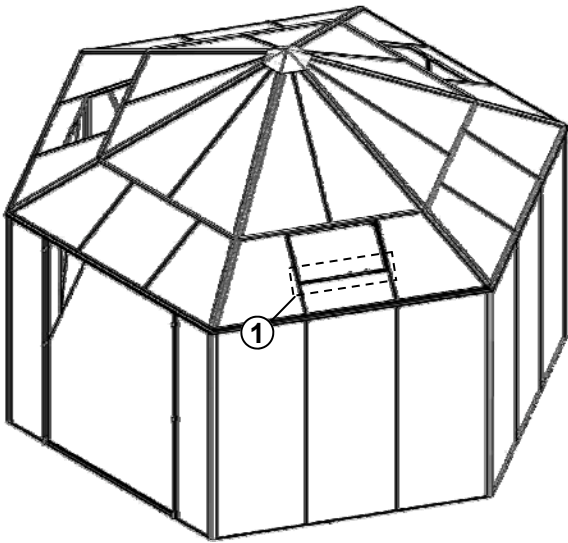
Roof



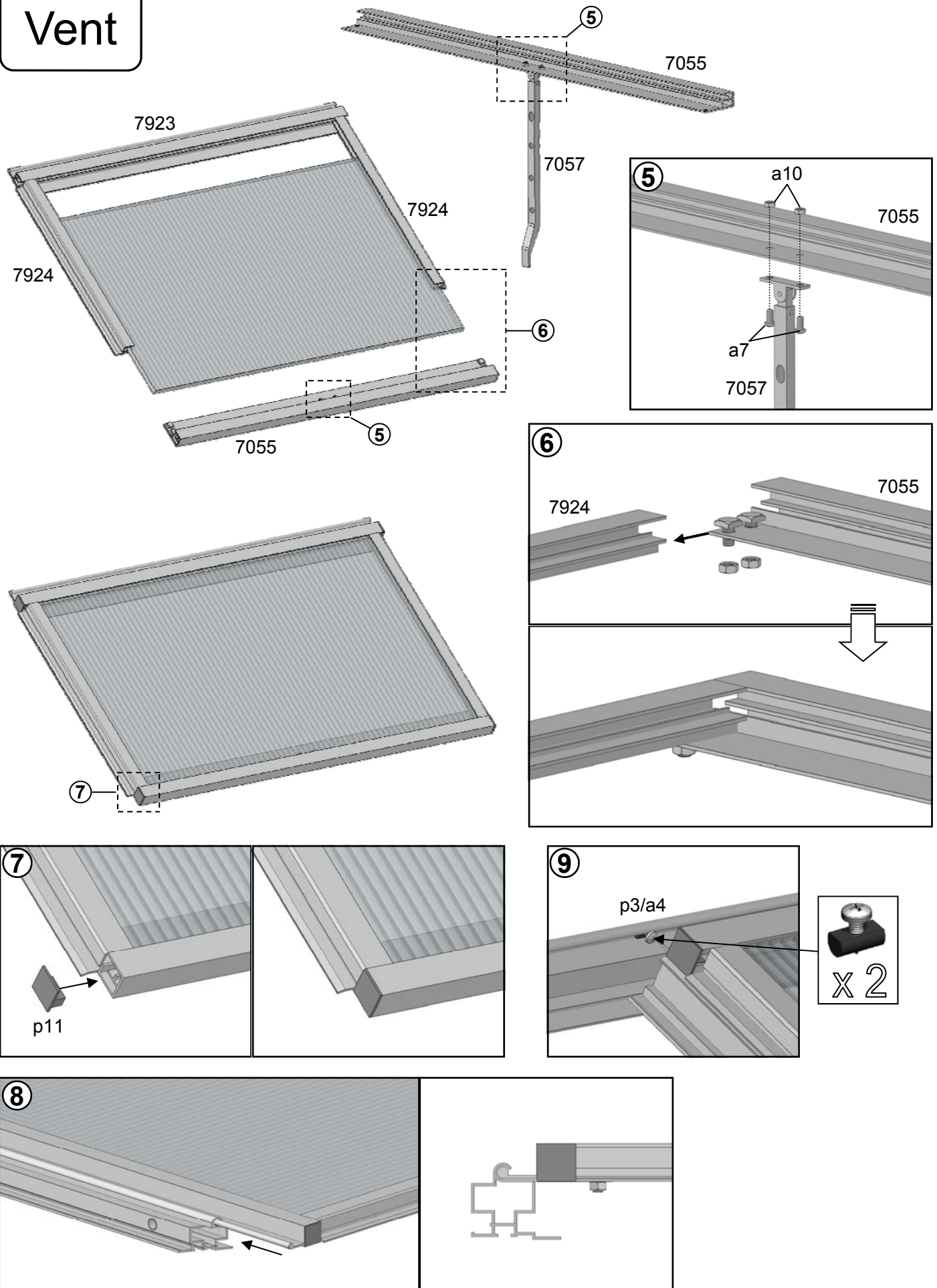
Vent

In Package 4

#	7053	7923	7055	7924	7057	7067	a1	a2	a4	a7	a10	p3	a20	p11
Size	739	718	701	400	300	-	M6x10	M6	Φ3.9x8	M4x8	M4	-	-	-
QTY	1	1	1	2	1	2	8	8	2	6	6	2	8	4
























Vent

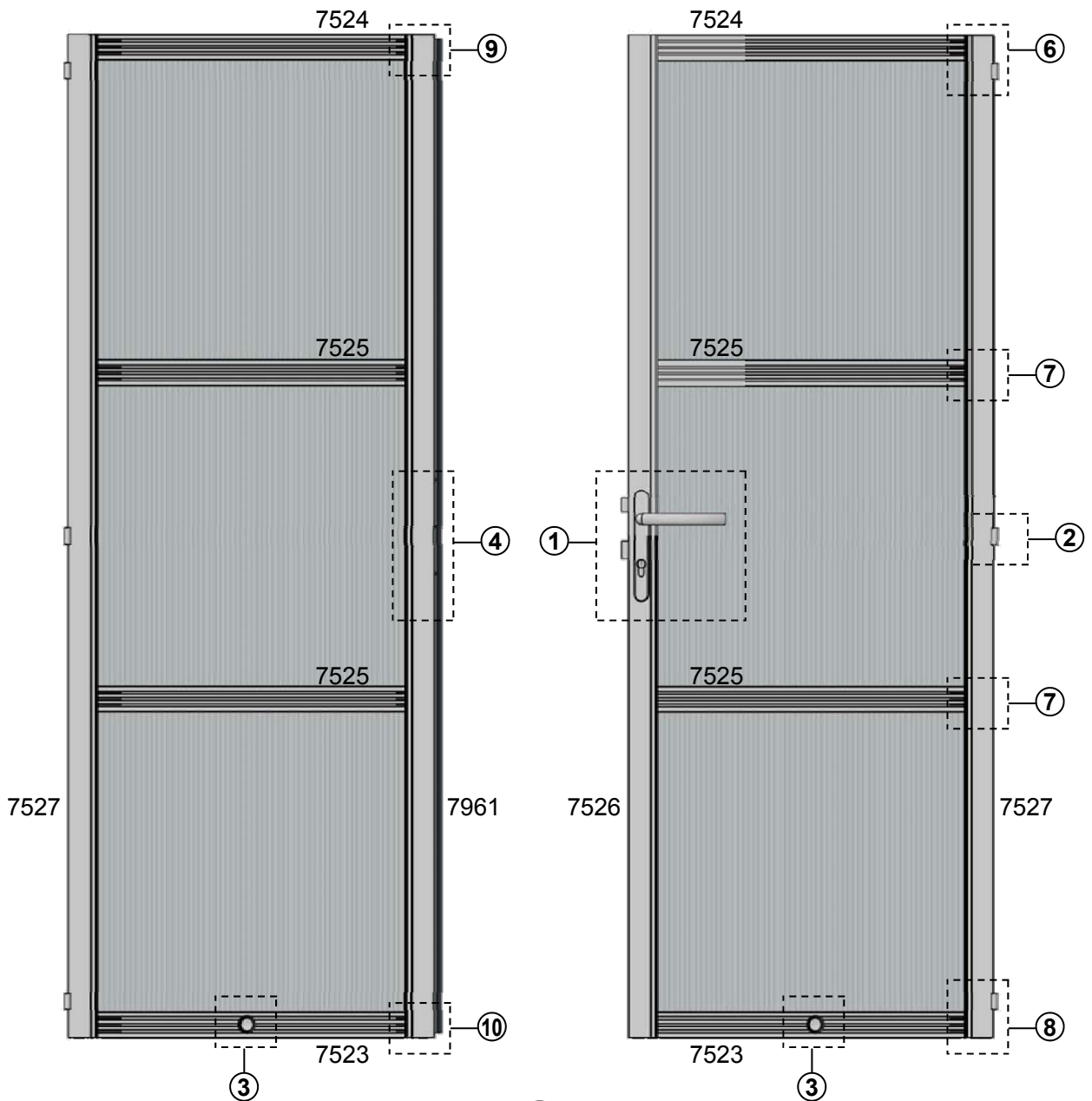


Door

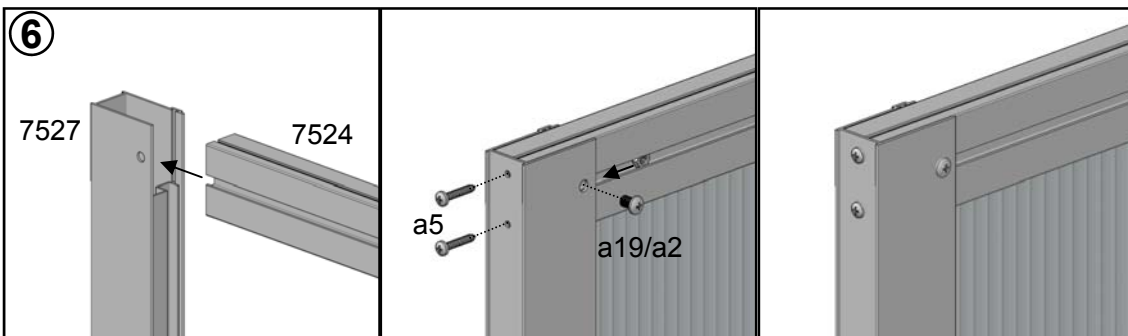
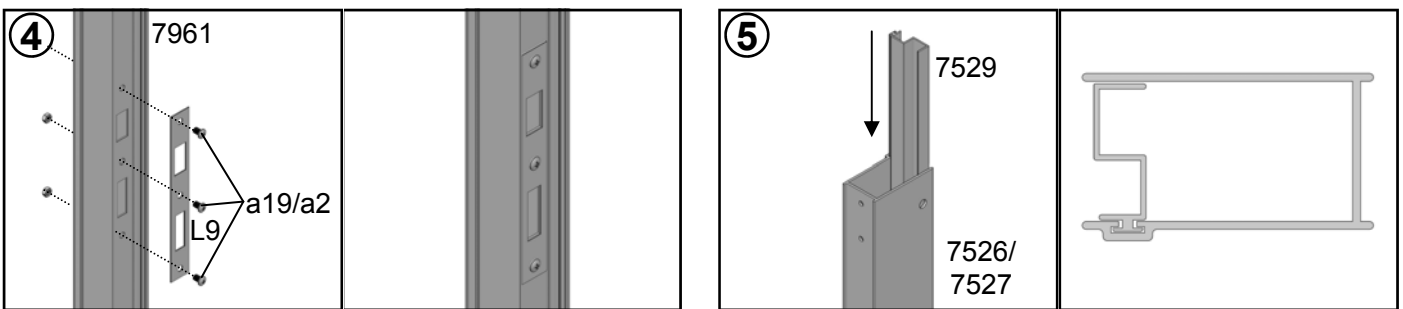
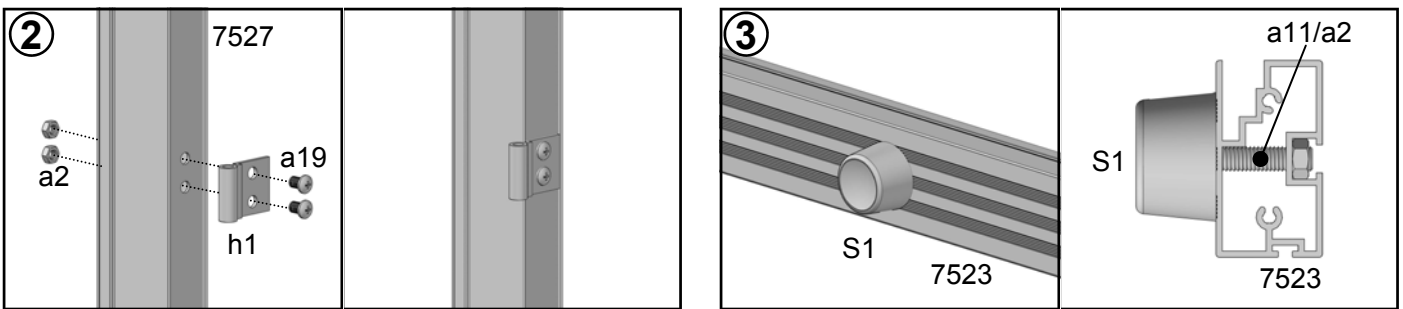
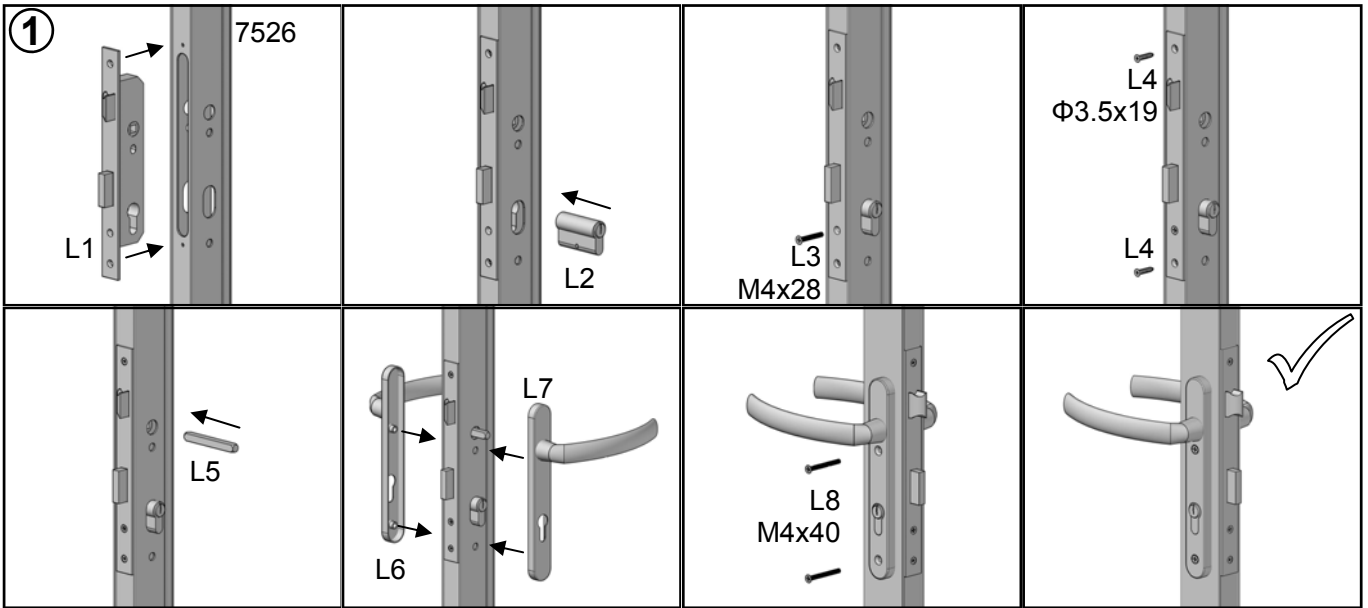
In Package 5

											
#	7523	7524	7525	7526	7527	7961	7529	a9	a2	a5	a11
Size	687	687	687	1909	1909	1909	569	M6x10	M6	Φ3.5x19	M6x25
QTY	2	2	4	1	2	1	12	4	39	32	4

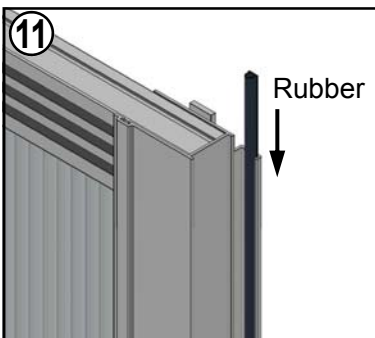
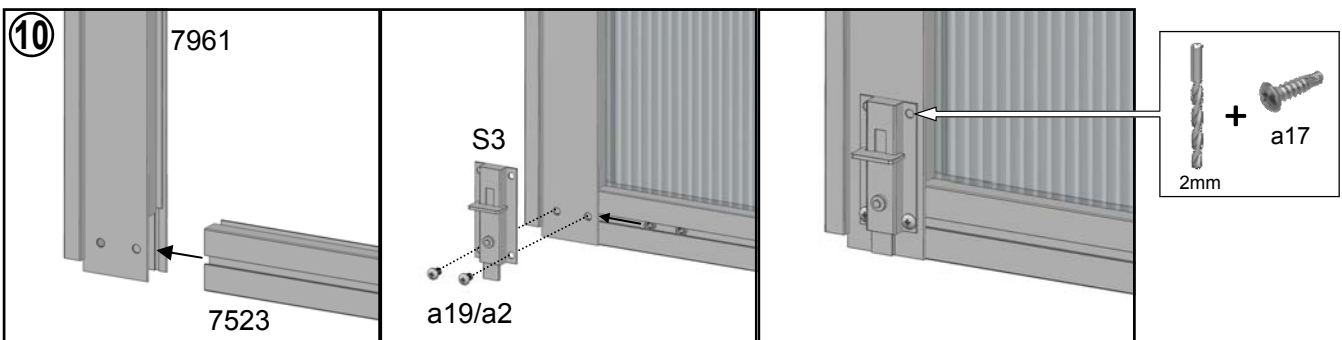
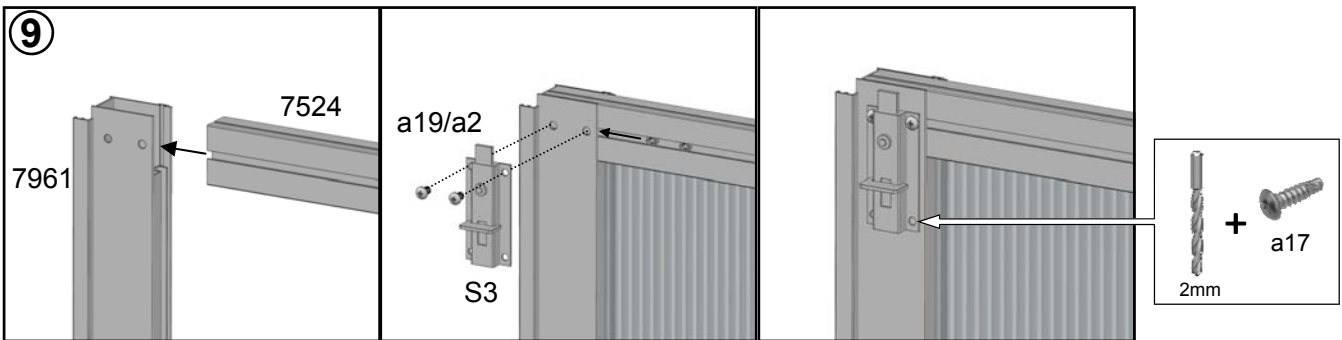
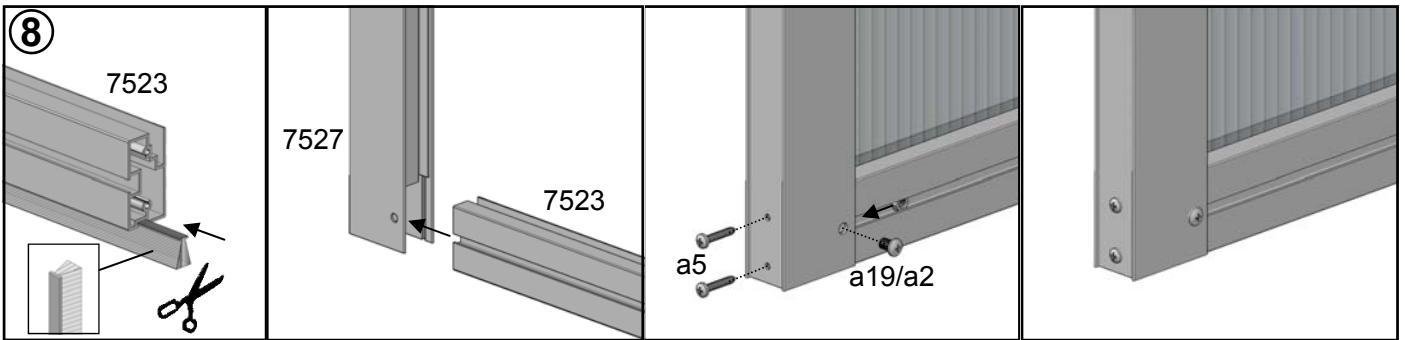
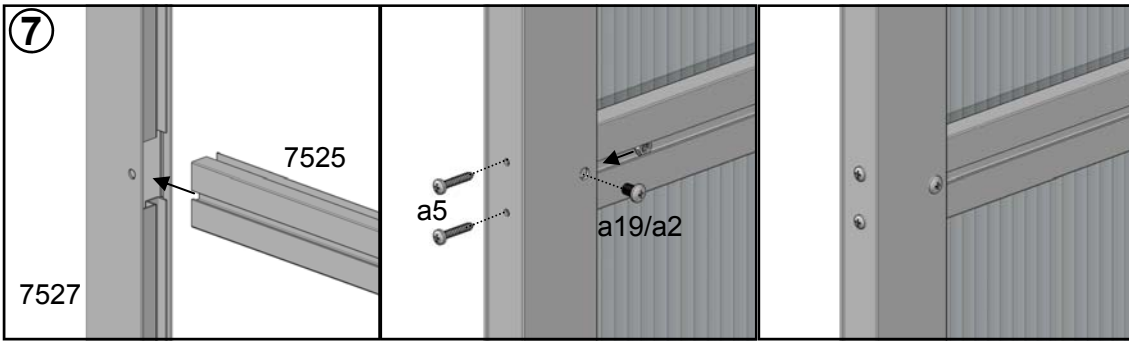
											
#	a17	a19	h1	h7	m12	S1/S2	S3	LOCK	Rubber	Fluff	
Size	Φ3.5x13	M6x8	30	-	-	-	-	-	-	-	
QTY	4	33	6	6	2	2 SETS	2	1 SET	2M	1.4M	



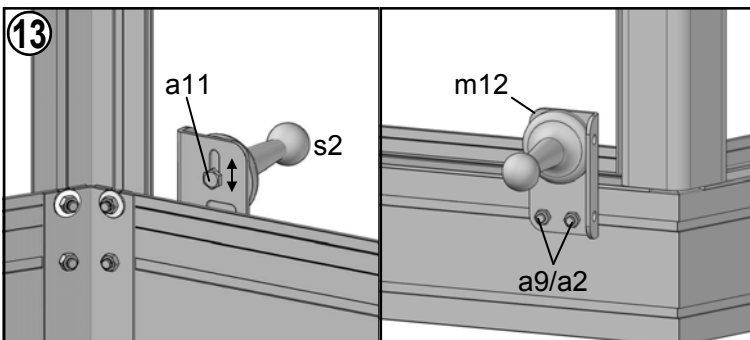
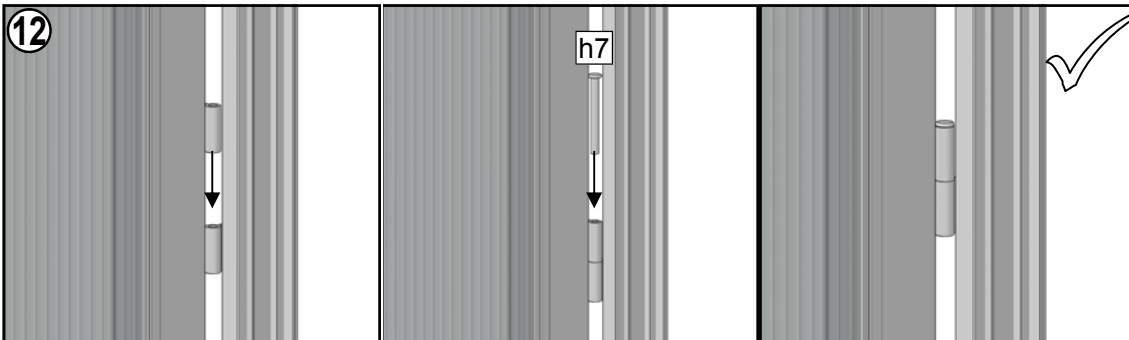
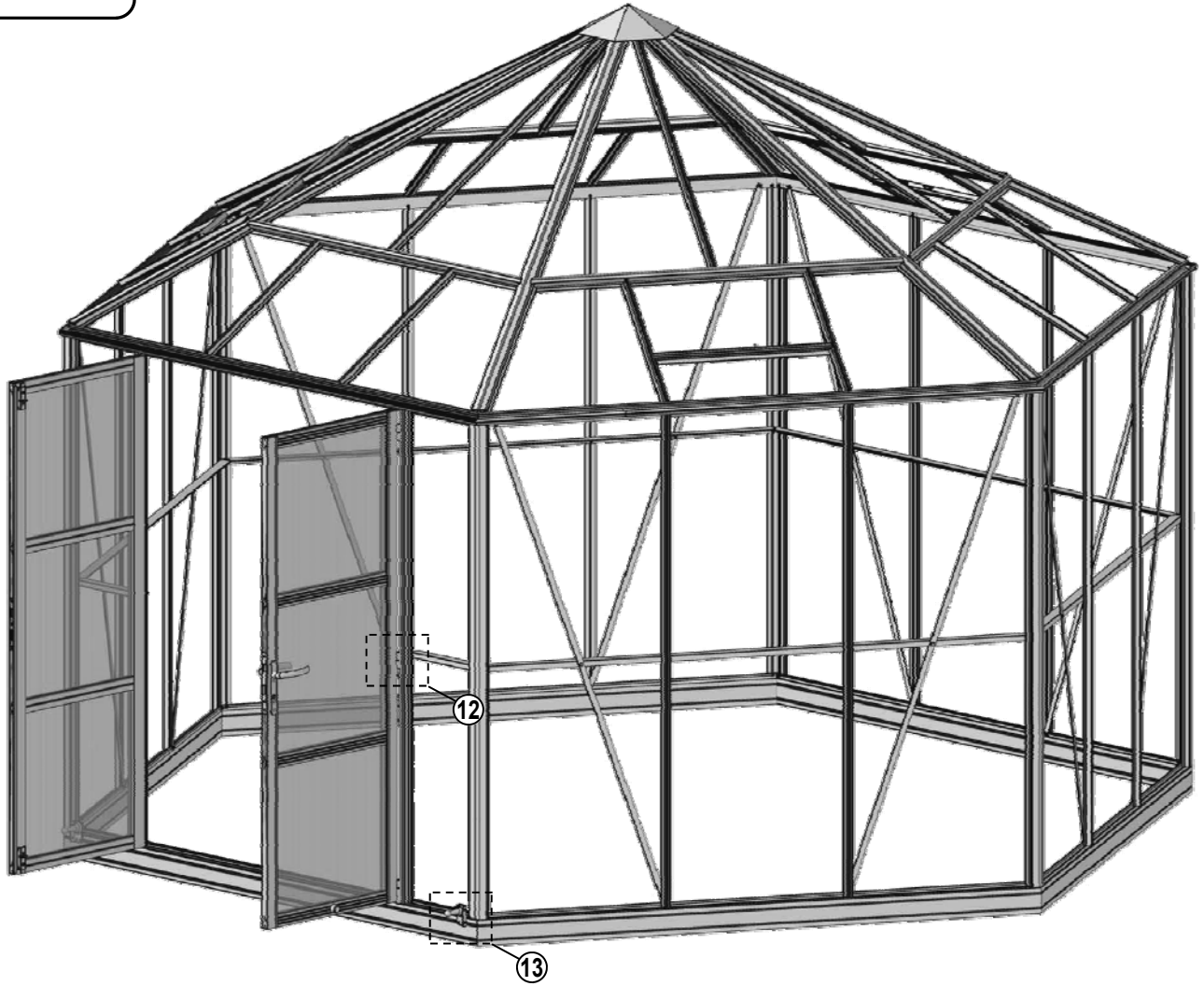
Door



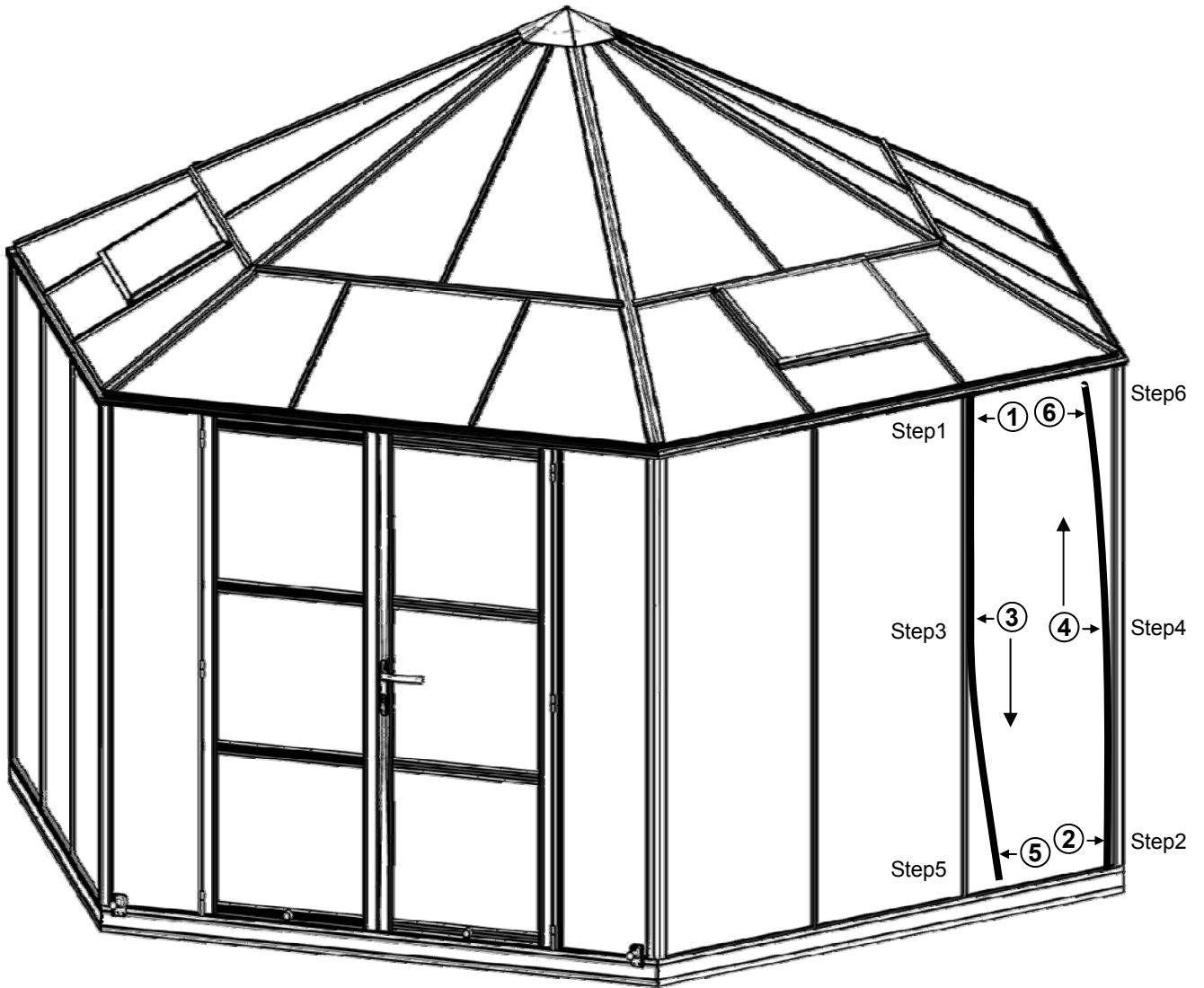
Door



Door



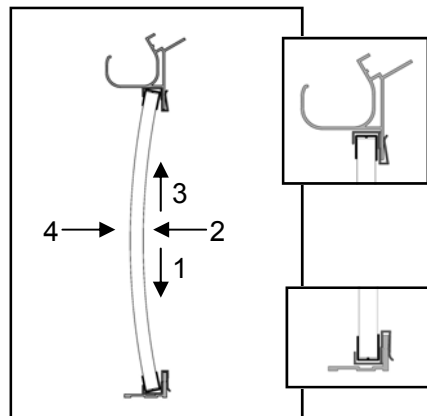
PVC Capping Bar



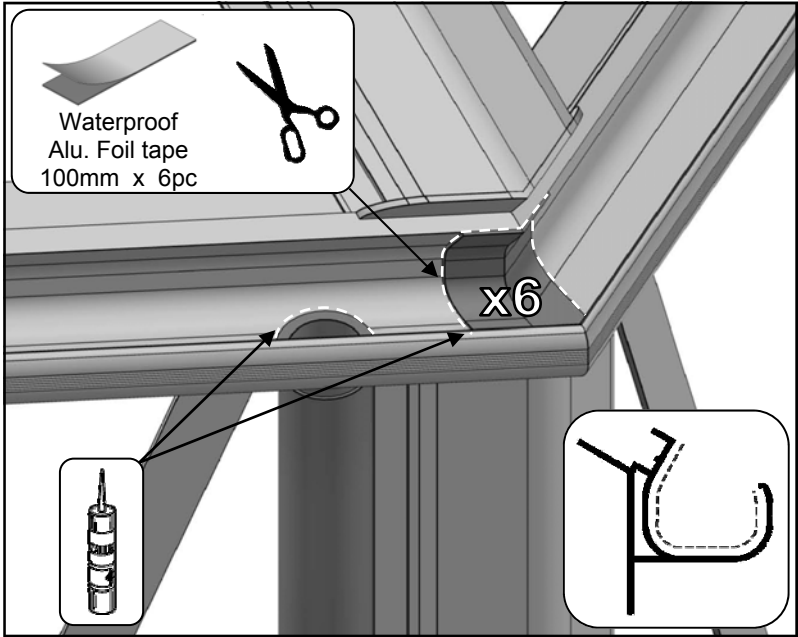
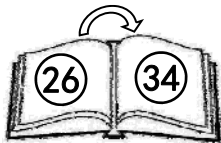
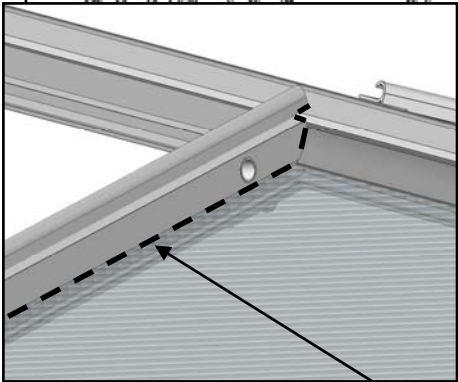
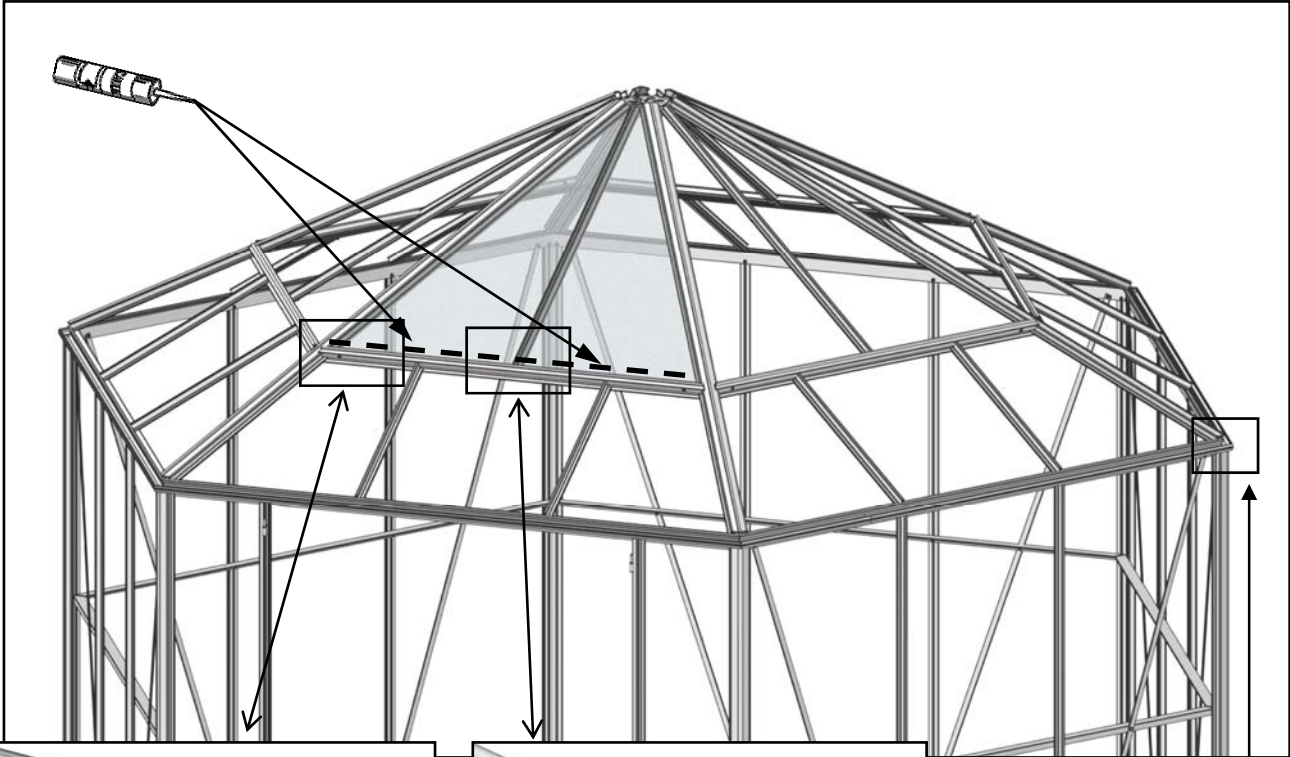
Note:

PVC capping bars were pushed in place from both top and bottom in diagonal direction together.


If you assemble it from one side by one side, you will feel space is too tight to assemble another PVC capping bar.







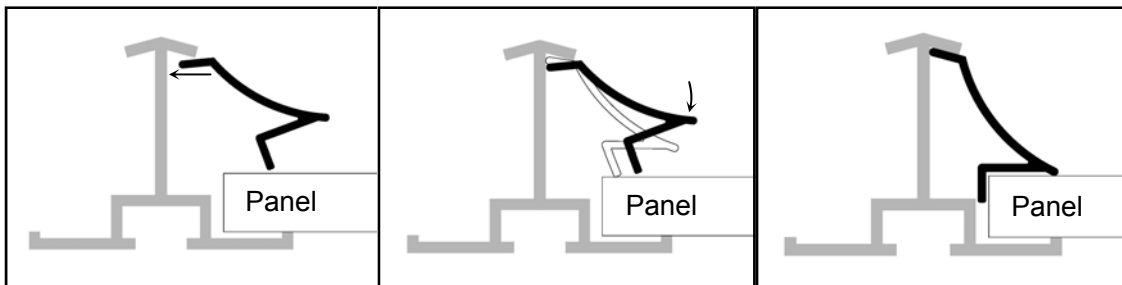
Silicone



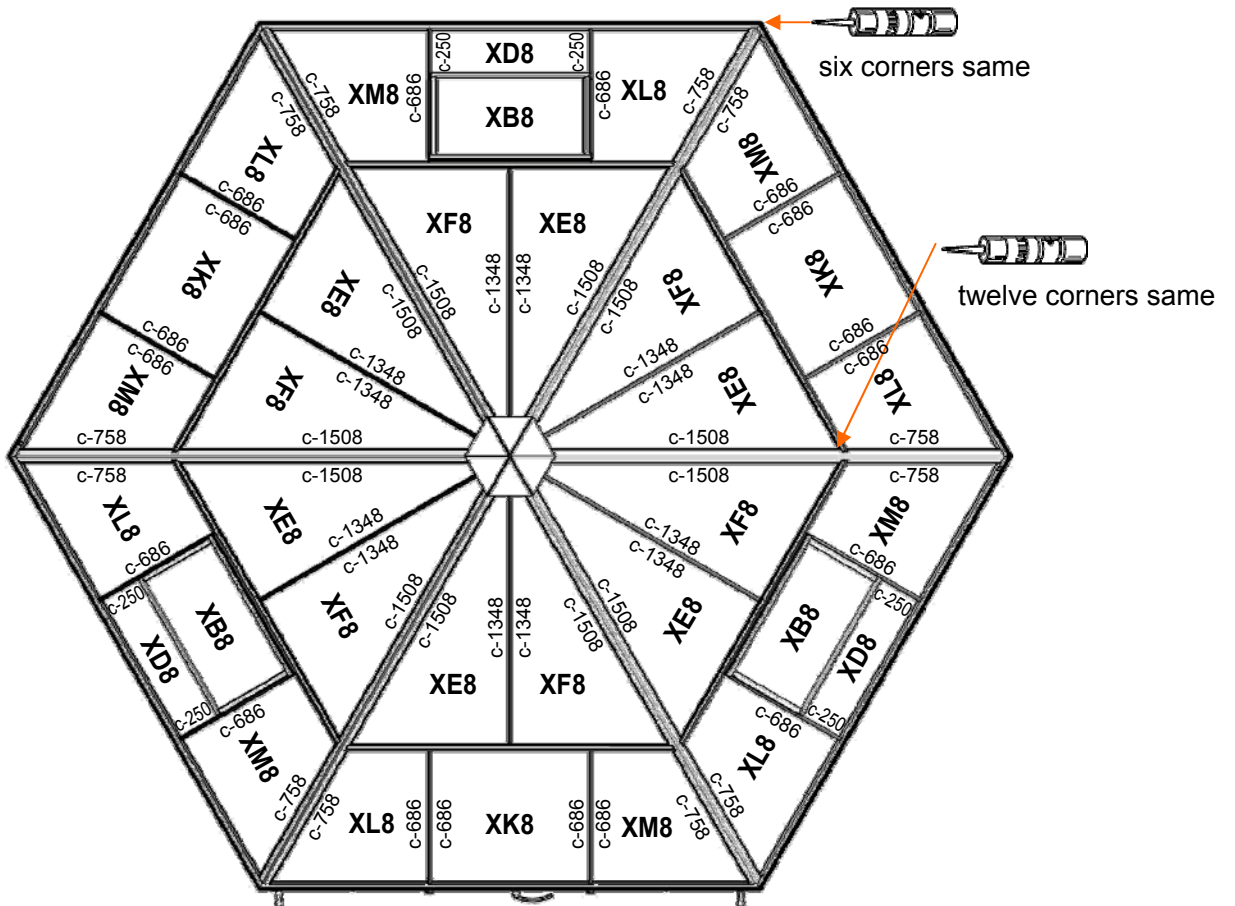
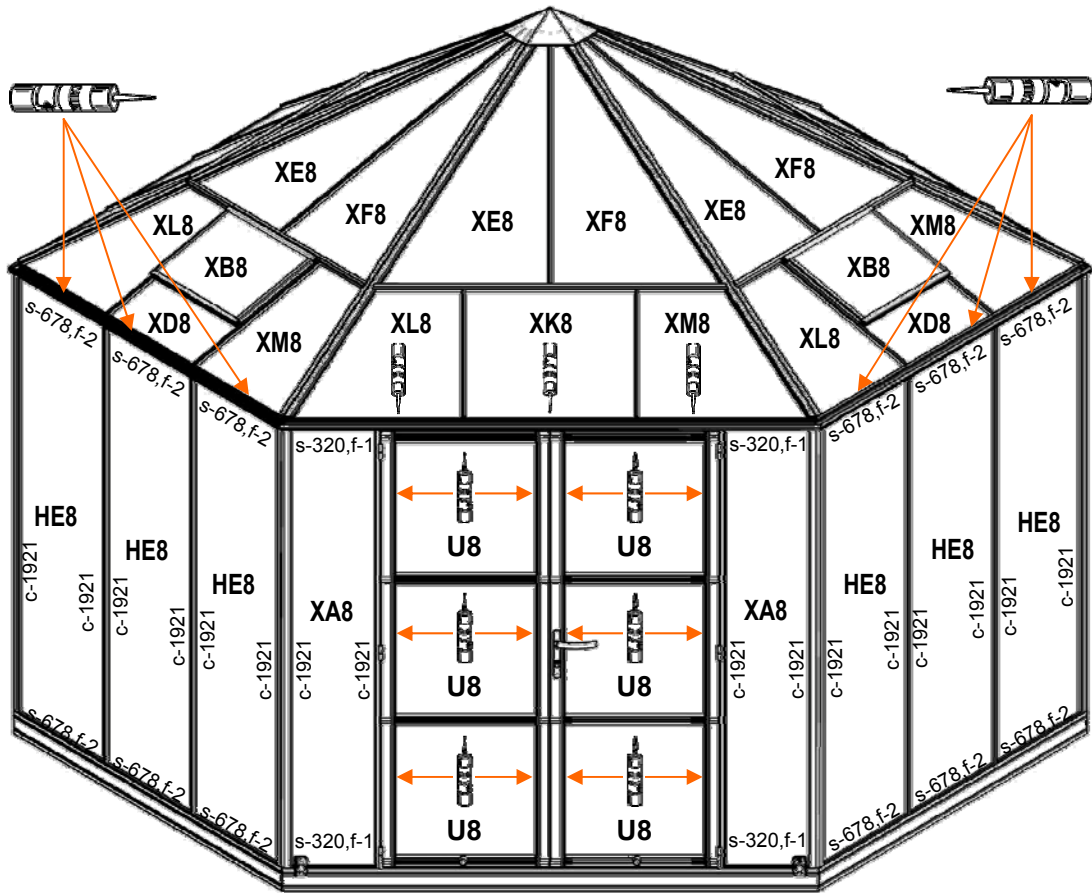
10mm Polycarbonate sheet

#	Size	HEX15
HE	700 x 1915	15
U	603 x 583	6
XA	341 x 1915	2
XB	680 x 413	3
XD	700 x 258	3
XE	700 x 0 / 1397	6
XF	700 x 0 / 1397	6
XK	700 x 698	3
XL	700 (350) x 698	6
XM	700 (350) x 698	6
	Silicone 	1


		DWG	Length	HEX15
Side Wall	c		1921	34
	s		678	30
			320	4
	f		16	64
Roof	c		1508	12
			1348	12
			758	12
			686	18
			250	6







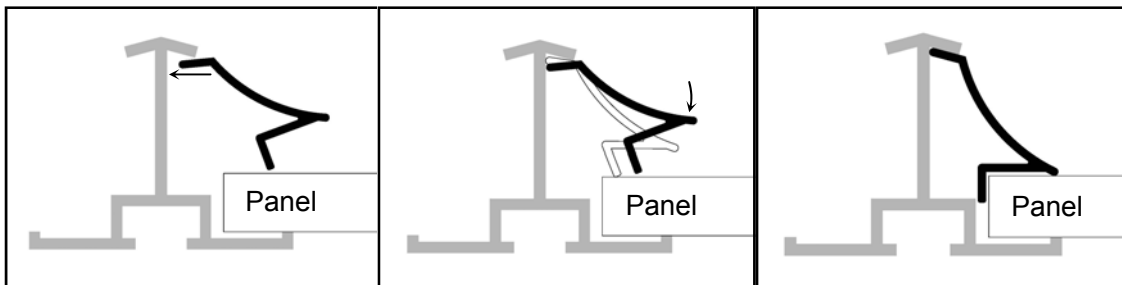
8mm Polycarbonate sheet



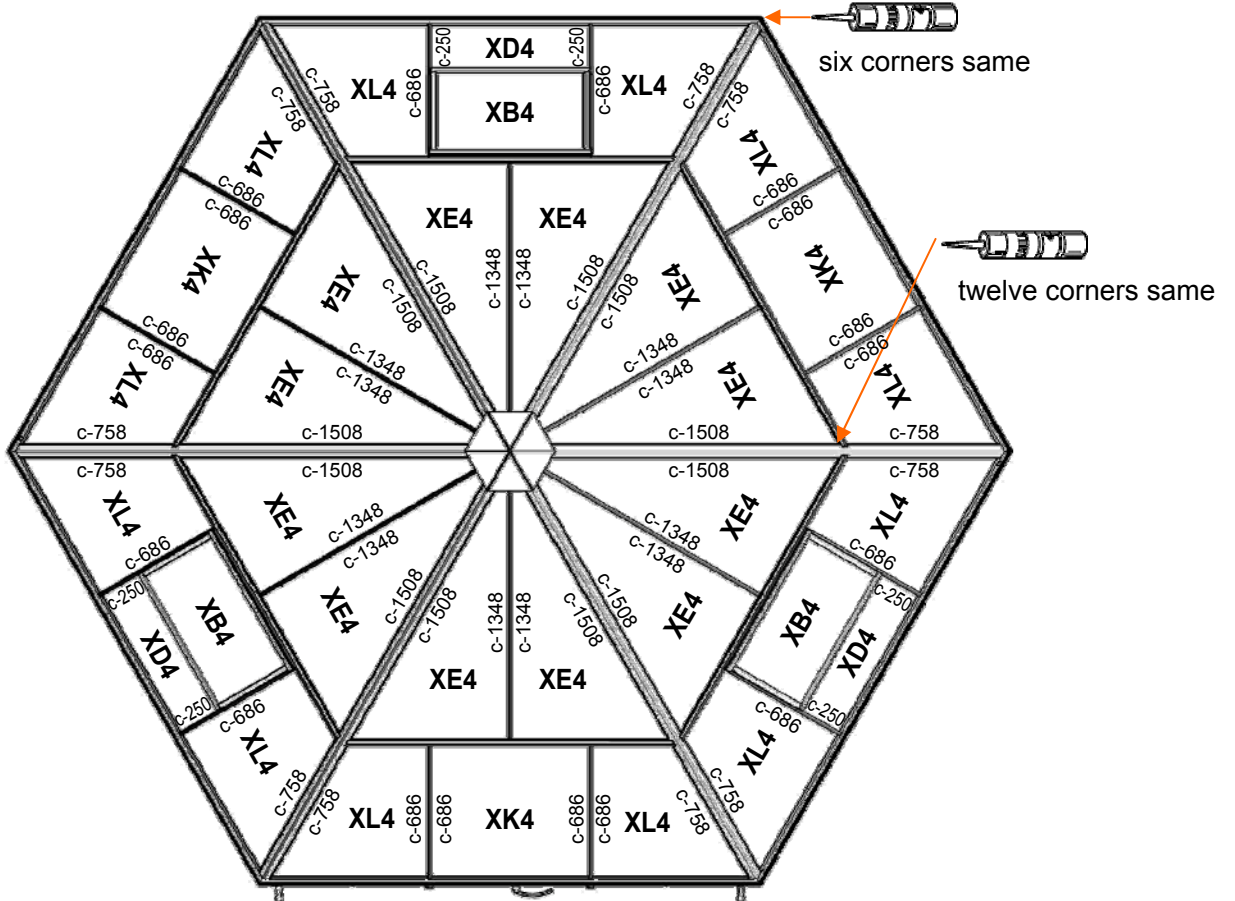
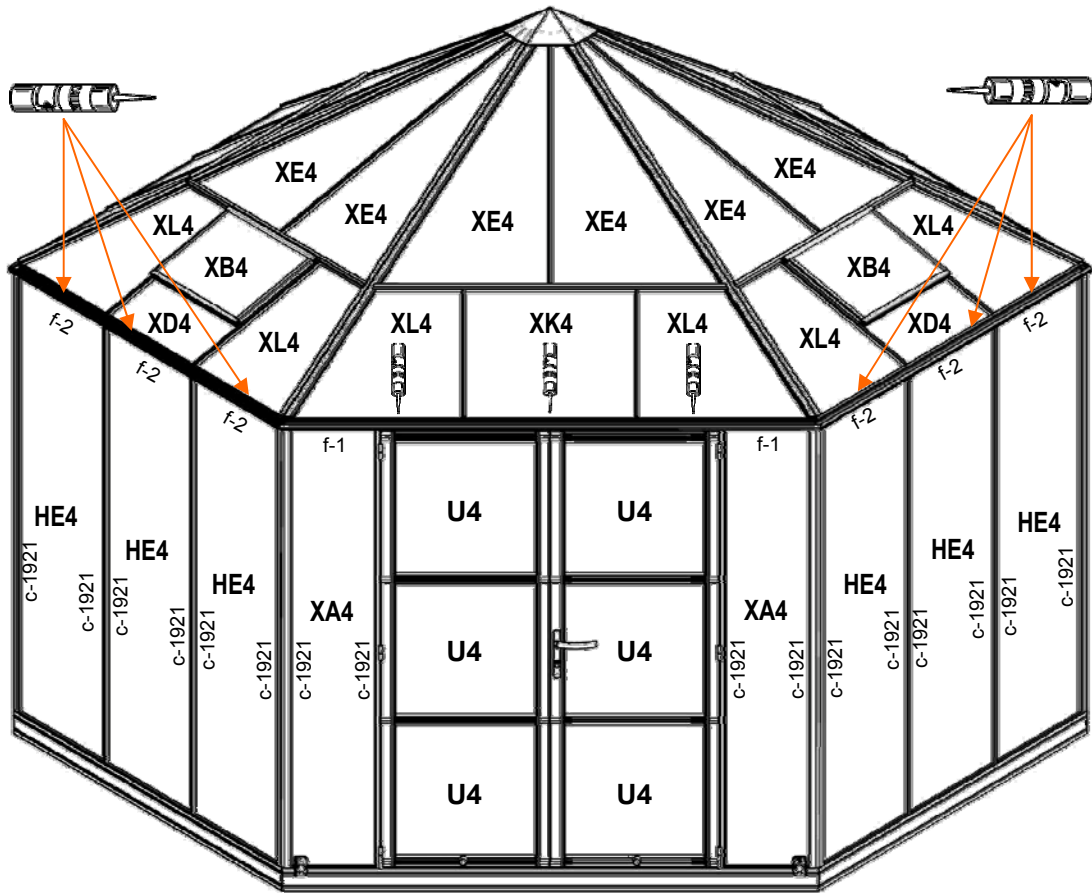
8mm Polycarbonate sheet

#	Size	HEX15
HE8	702 x 1915	15
U8	603 x 597	6
XA8	343 x 1915	2
XB8	702 x 427	3
XD8	702 x 258	3
XE8	702 x 0 / 1400	6
XF8	702 x 0 / 1400	6
XK8	702 x 698	3
XL8	702 (352) x 698	6
XM8	702 (352) x 698	6
	Silicone 	2



		DWG	Length	HEX15
Side Wall	c		1921	34
	s		678	30
			320	4
	f		16	64
Roof	c		1508	12
			1348	12
			758	12
			686	18
			250	6






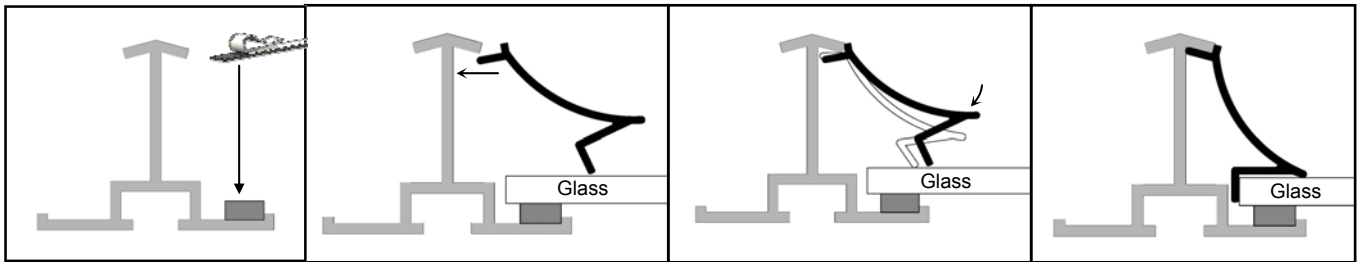
4mm Glass



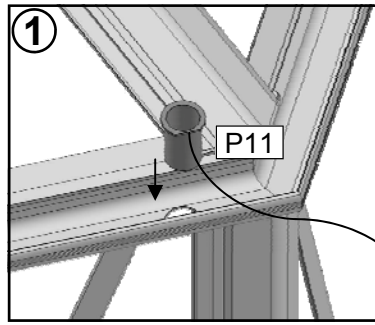
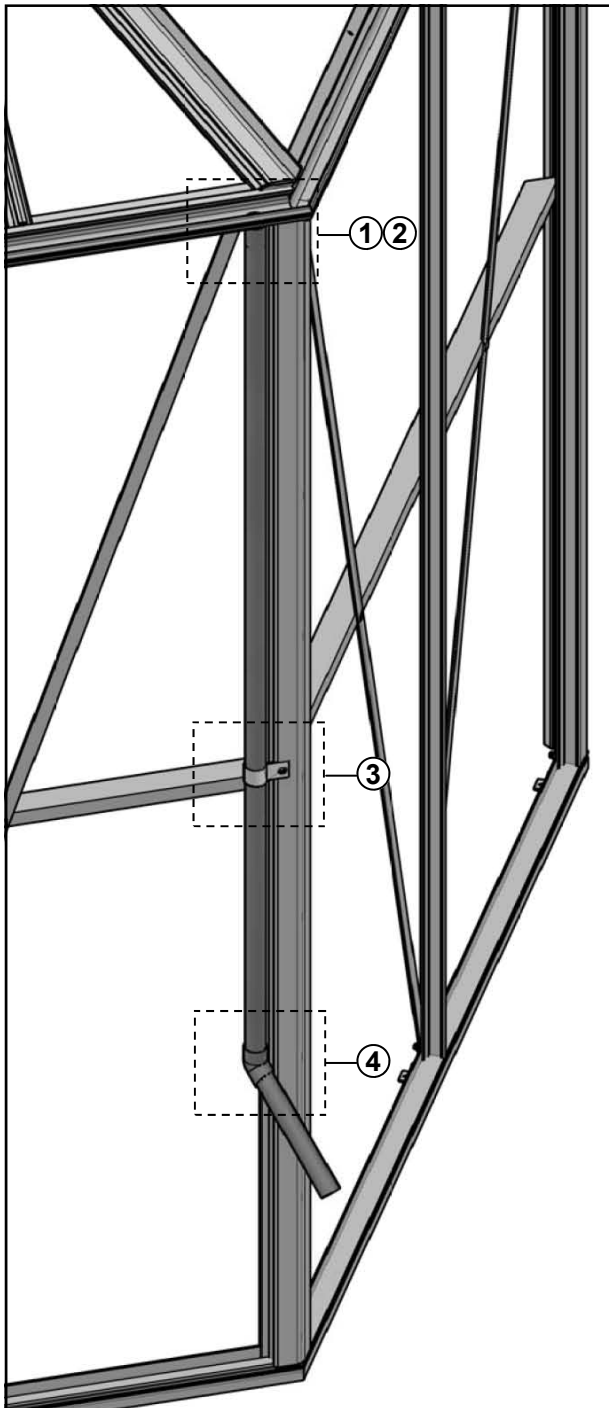
4mm Glass

#	Size	HEX15
HE4	700 x 1919	15
U4	603 x 609	6
XA4	341 x 1919	2
XB4	700 x 439	3
XD4	700 x 258	3
XE4	700 x 0 / 1397	12
XK4	700 x 698	3
XL4	700 (350) x 698	12
	5 meter	30 roll
	Silicone 	2

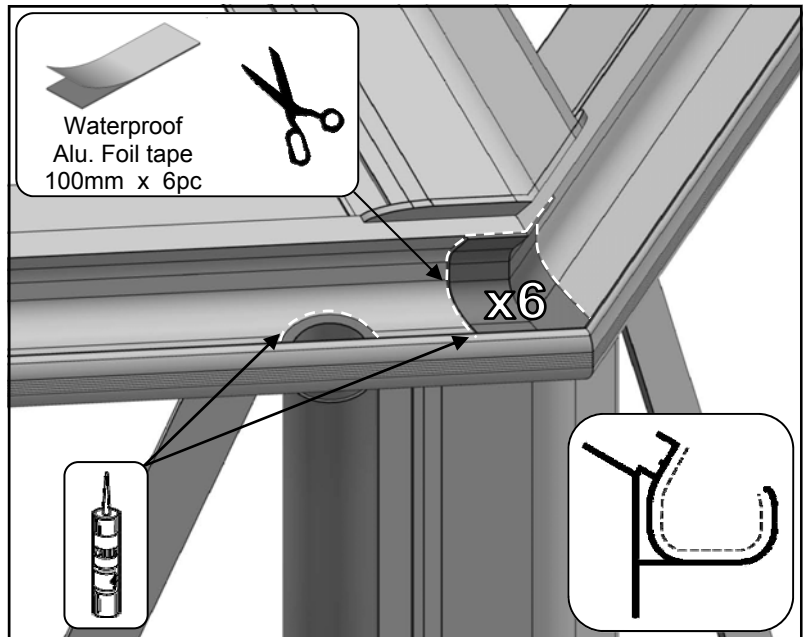
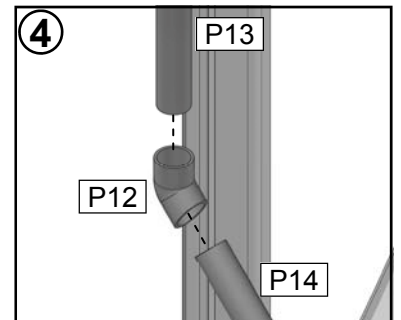
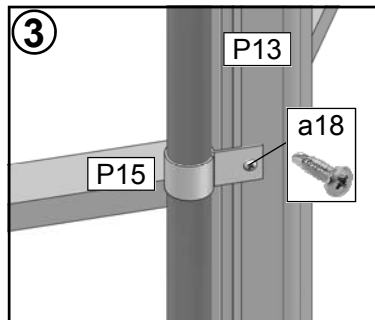
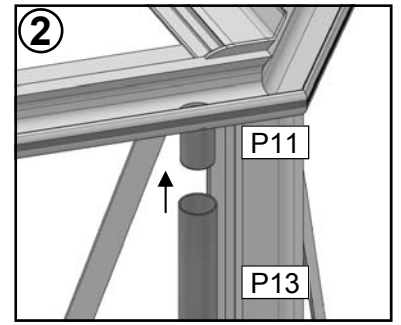
		DWG	Length	HEX15
Side Wall	c		1921	34
	f		16	32
Roof	c		1508	12
			1348	12
			758	12
			686	18
			250	6



Downpipe



Half edge trimmed firstly

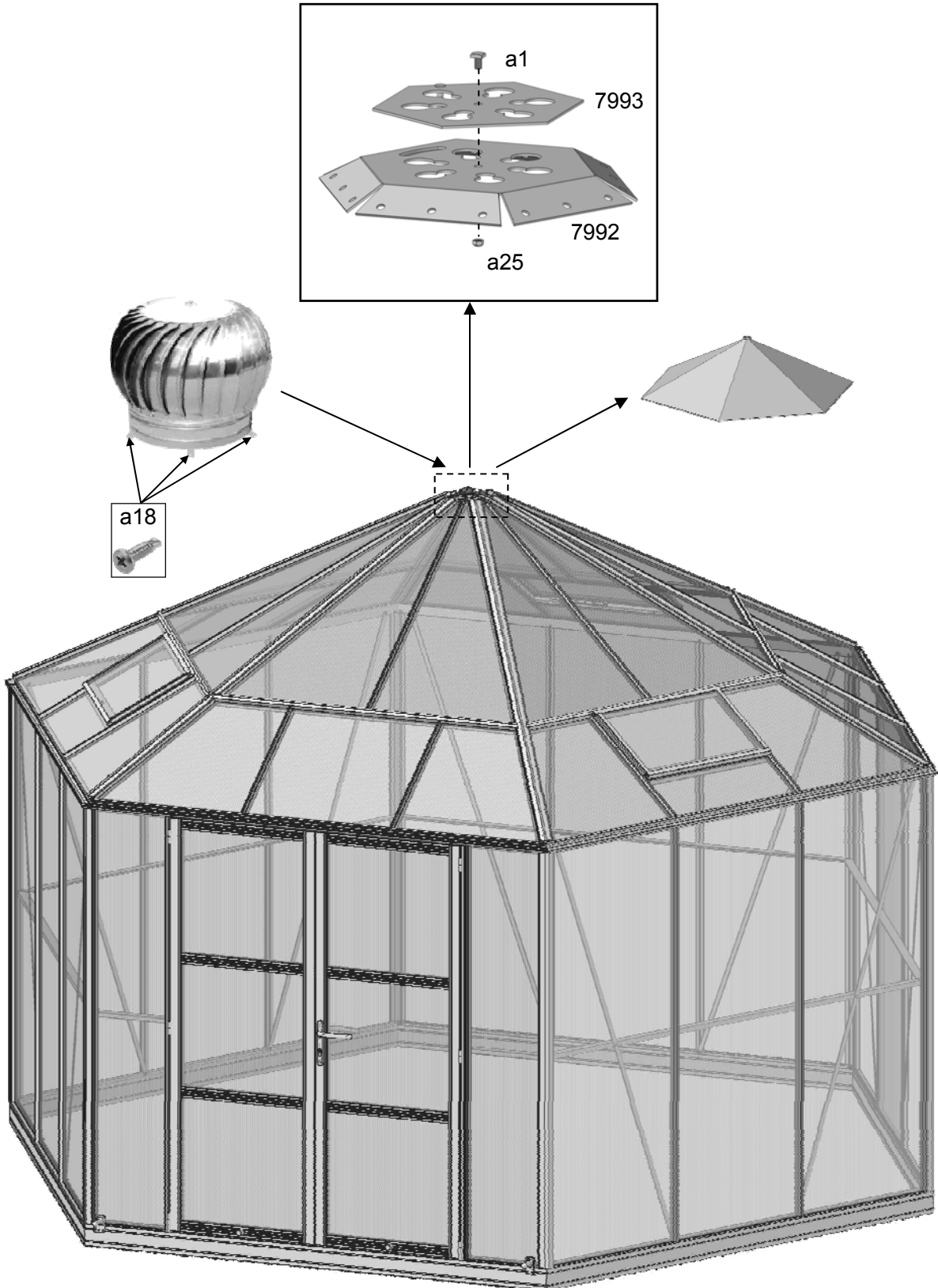


#	P11	P12	P13	P14	P15	a18	-
mm			1400	200		Φ3.5x13	100
QTY	2	2	2	2	2	2	6

Optional

Turbine vent is optional

- * Remove hexagonal ridge cone firstly.
- * Assemble open-close disc #7993 on hexagonal bracket by using short M6 bolt #a1 instead of long #a24.
- * Attach turbine vent on roof corner bars by carefully using self-drilling tapping screws #a18 which will bore into aluminium or plastic.
- * Adjust open-close disc #7993 to make it work or not.



The list of parts

	Description	HEX15
1	Side wall	2
2	Rear & Front wall	1
3	Roof	1
4	Vent	3
5	Door	1
6	PVC capping bar	1
7	Downpipe	1
8	Polycarbonate panels	1
9	Tools	1
10	Assembly Instruction	1