

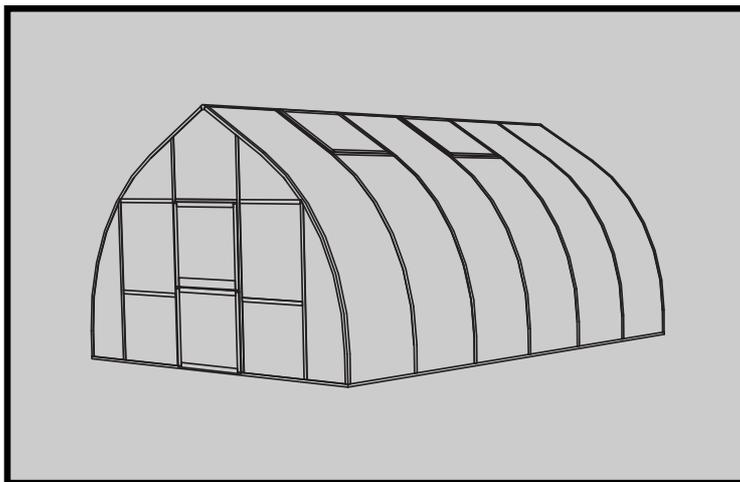


ALUMINIUM
Greenhouse

Riga XL Factory Manual

Version 2.2021

Assembly Instructions



Riga XL 5, 6, 7, 8, 9



www.exaco.com
877-760-8500
customerservice@exaco.com



Assembly Animation Video
is available on our YouTube page,
find the link at www.exaco.com or
scan the QR code above.

Dear Gardening Friend,

Thank you for buying a Riga XL greenhouse from Exaco! Please read these Assembly Instructions and helpful suggestions carefully. Our animated YouTube assembly video will be extremely helpful during assembly - find a link to our YouTube page on our website at www.exaco.com. If you have questions or run into any difficulty, please give us a call! Good Luck!

What to do First:

Check all the boxes you have received for damage and make sure you have the correct quantity. The driver will have a delivery receipt called a Bill of lading, this will have the quantity of boxes you should be receiving.

If you are missing a box or if any of the boxes are damaged - write this on the Bill of Lading before the driver leaves. Notify Exaco as soon as possible if any of the boxes are damaged or missing.

Note:

Please do not refuse any of the boxes or the whole shipment, because of any damage. We will gladly replace any damaged items. Sending replacement parts is a simple and easy process.

In the case of damage:

Contact Exaco Customer Service at 877-760-8500 or email us at customerservice@exaco.com. Photos will help us see if there are packaging deficiencies and change them in the future. This will also help identify parts.

Storage:

Please keep all the boxes in a dry place and protected against sunlight (see note below). If stored outdoors, protect securely with tarps.

Placing your greenhouse:

Place your greenhouse in a location with as much sun as possible. We do not recommend putting it directly under trees since branches might damage the glazing. If you intend to primarily grow vegetables: north-south orientation is recommended if possible; for flowers: east-west.

Protection from heavy winds:

If your area is subject to very strong wind gusts we strongly recommend against putting your greenhouse up without some kind of protection: a row of small trees, large shrubs or a wooden fence. Please contact Exaco Trading customer service to discuss additional anchoring options and window bracing kits for high wind.

Warning:

Do not attempt assembly of this greenhouse in windy conditions. Your glazing panels might blow away and become damaged. Damages during assembly process, due to bad weather, are not covered by our warranty.

Important note regarding polycarbonate glazing during assembly:

The ISO-cellular sheets (polycarbonate glazing) must be placed with the UV-coated side to the outside. On the protective film, there will be a corresponding note indicating "UV" or "2UV", most panels should be coated on both sides, but if you are unsure, please give us a call.

Loosen the protection film only at the edge and the complete rest of the foil only after the panel is securely in place. HOWEVER, do not leave the film on more than 1 day in the sun as the film can burn tight to the polycarbonate and will be extremely difficult to remove.

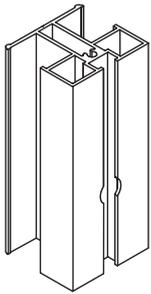
Do not strip it completely off when unpacking the goods because then you cannot see the side with the UV-protection. The film will also protect the polycarbonate from scratches during assembly.

Unlike most greenhouses, the mounting of the aluminium profiles is done together with the glazing. This results in an absolutely secure glazing and the best possible stability of the greenhouse.

Assembly:

Some of the assembly can be by one person, but it is most helpful to have a second pair of hands available. Assembling the windows, doors and gables ahead of time will make you familiar with the process and will make the main assembly go quicker and more smoothly.

Once the roof beam is attached to your gable, it is necessary to have an additional person to hold/steady the roof beam or use stable support such as: stay bars, ladders, straps or other equipment. A third person is extremely helpful when installing the curved side walls.



Special Note: Much of the greenhouse is assembled with series of bolts that are inserted into the channels on the aluminum profiles/extrusions. If you miss inserted a bolt where needed, there are insertion points in many of the vertical and curved profiles/extrusions. You may also create your own insertion point with a 1/2" drill bit. This will not compromise the integrity of the structure

What you will need:

- Patience - do not rush - Make it a fun build
- 2 people (3 will make it easier - especially when inserting the glazing panels)
- Gloves - the ends of the aluminium profiles can be sharp
- Measuring tape - a combination metric/inch tape measure is preferred
- 2 A-frame step ladders (10' and 8' preferable)
- 2 Rubber mallets
- Adjustable wrench
- 10 mm socket wrench
- 10 mm wrench
- Philips head screwdriver (Drill or impact drill can be used with caution) - Level
- Lithium Grease - helpful to slide profiles along floor/roof profiles and windows along roof beam
- Permanent Marker (to mark glazing panels)

Recommended Support Structure for Riga XL Assembly (7,8,9)

When assembling greenhouses of this length, we recommend constructing supports from 2x4s to support the ridge profile while you are working. Here are some examples.



Packaging Counts and Contents:

Depending on the size greenhouse you have, your box count will vary.

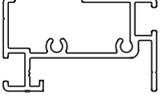
Quantity			Content table
1x	Basic constructions	Gables	Page 6
1x	Basic constructions	Long parts (with floor profile - gable)	Page 6
1x	Roof window/door	You may have additional smaller boxes of roof windows depending on model size	Page 8 und 9
1x	Accessories	Seals, automatic window opener, etc.	Page 7
2x bundles	Curved center profiles	May vary by size of model	Page 6
4x	Glazing	May vary by size of model	Page 28
2x	Foundation frame	(special accessories)	Page 13

You may have boxes for optional accessories as well such as shelving, ventilation, heating and other accessories.

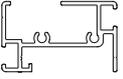
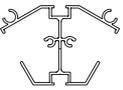
Contents of main box - basic construction components.

Note: Some of this inventory section does not include XL 7, 8, 9. Please refer to the XL 7, 8, 9 parts list that you have been sent.

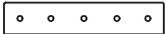
Profiles for both gables:

Profile design	Pos.	Description	Quantity	Length [mm]
	1	Front/Back floor profiles	2	4145
	2	Edge stay bar - curved - right side	2	
	3	Edge stay bar - curved - left side	2	
	4	Vertical profile - middle - left - with 50° angle at top	2	1929
	5	Vertical profile - middle - right - with 50° angle at top	2	1929
	6	Vertical door profile - left - with 30° angle at top	2	2641
	7	Vertical door profile - right - with 30° angle at top	2	2641
	8	Crossbar	10	952

Profiles for side walls:

Profile design	Pos. Type			Description	Quantity/Length [mm]		
	IV	V	VI		Type IV	Type V	Type VI
	16	17	18	Floor profile - side	2 3914	2 4909	2 5903
	19			Curved center profiles	6	8	10
	20	21	22	Lateral supports (wind braces)	4 3970	4 4965	4 5960
	25			Cross bar - under window	2 952	4 952	4 952
	26	27	28	Roof beam	1 4013	1 5008	1 6002
	29	30	31	Re-enforcement bar - roof beam	1 3971	1 4966	1 5960

Accessories bag basic construction

Part design	Pos.	Description	Quantity
	100	Plastic corner connector	4
	101	Straight connector plate for cross bars above doors	4
	102	T-connector slanted for door upright and edge clamp	4
	103	T-connector door profiles to cross bars	8
	104	T-connector slanted vertical profile middle/cross bar/ edge clamp	4
	105	Floor profile connectors inside lower corner	4
	107	Hexagon head screw M6 x 16 + nuts M6 Bolts for assembly	160*
	108	Washers (f. pos. 8) to be used with the lateral supports	28
	110	Insulation seal 6 - 8 thick used on the inside	See table below.
	111	Phillips head screws 4,2 x 13 for cross bar/roof beam- end cap/ cover plate	12
	142	Phillips head screws 4,2 x 50 for cross bars in front and back walls	4
	113	Phillips head screws 4,8 x 16 for floor profile corner connectors	16
	114	Roof beam - end cap/cover plate	2
	115	Connector plate for cross bars under windows	4/8/8 <small>depends on model</small>
	116	Floor profile corner con- nector covers	4
	117	Self drilling screws 3,5 x 13 t-connector 102 + 104	32

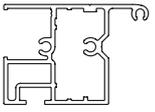
*plus substitute screws

Heavy insulation seal 6- 8 mm in pre cut section

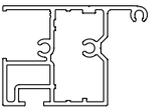
Type \ Length	952 mm	571 mm
Riga XL 4	12 pc	4 pc
Riga XL 5	14 pc	4 pc
Riga XL 6	16 pc	4 pc

Type \ Length	952 mm	571 mm
Riga XL 7	18 pc	4 pc
Riga XL 8	20 pc	4 pc
Riga XL 9	22 pc	4 pc

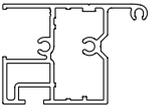
Profiles for each roof window

Profile design	Pos.	Description	Quantity	Length [mm]
	34	Window profile - roof	2	865
	35	Window profile - roof	2	993

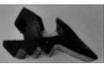
Profiles for each divided revolving door - at the bottom

Profile design	Pos.	Description	Quantity	Length [mm]
	44	Door profile - left with borings for Sash lock	1	887
	45	Door profile - right with hinge borings	1	887
	46	Door profile - top	1	864
	48	Door profile - bottom	1	864
	47	Rectangular tube with cross holes	1	933

Profiles for each divided revolving door - top

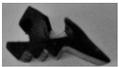
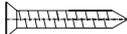
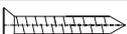
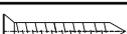
Profile design	Pos.	Description	Quantity	Length [mm]
	41	Door profile - left	1	949
	42	Door profile - right with hinge borings	1	949
	48	Door profile - top	1	864
	43	Door profile - bottom with large hole for door handle	1	864

Accessories and hardware for each roof window

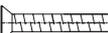
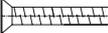
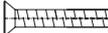
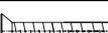
Part design	Pos.	Description	Quantity	Length [mm]
 *	126	T-seal	1 2	974 1027
	127	Plastic corner connector	2x left 2x right	
	112	Phillips head screws 4,2 x 60	8	
	107	Hexagon head screws M6 x 16 + nut M6	3	
	143	Glazing block 30 x 16 x 4	2	

* **Note:** The rubber seal is in one bundle for all doors and windows. Cut accordingly please.

Accessories bag for divided revolving door - at the bottom

Part Design	Pos.	Description	Quantity	Length [mm]
	135	Hinge	2	
	136	Sash lock	1	
	137	End cap for rectangular tube	2	
 *	138	T-seal	2 2	936 973
	139	Phillips head screw 4,8 x 25 (for hinges)	4	
	140	Phillips head screw 4,8 x 16 (for hinges)	4	
	112	Phillips head screw 4,2 x 60 (for doors)	8	
	141	Phillips head screw 3,5 x 22 (sash lock)	2	
	142	Phillips head screw 4,2 x 50 (to attach square tube)	2	
	143	Glazing block 30 x 16 x 4	2	
	127	Plastic corner connector	2x left 2x right	

Accessories bag for divided revolving door - top

Part design	Pos.	Description	Quantity	Length inches
see page 19/20	150	Door sets, 8-piece (Assembly see page 18.)	1	
	112	Phillips head screws 4,2 x 60 (door)	8	
	143	Glazing block 30 x 16 x 4	2	
 *	153	T-seal	2 2	966 973
	135	Hinge	2	
	139	Phillips head screws 4,8 x 25 (hinges)	4	
	140	Phillips head screws 4,8 x 16 (hinges)	4	
	136	Sash Lock	1	
	141	Phillips head screws 3,5 x 22 (Sash Lock)	2	
	158	Door holder - black - 2 parts	1	
	159	Phillips head screws 3,5 x 16 (door holder)	4	
	127	Plastic corner connectors	1x left 1x right	

* **Note:** The rubber seal is bundled in one bundle for all doors and windows. Cut accordingly please.

Connecting Long Profiles

NOTE: Connectors are now shorter with 4 set screws (not 6)

Ridge Beam shown below. Floor profile and foundation profile (if using) will also be connected using connectors with 4 set screws.

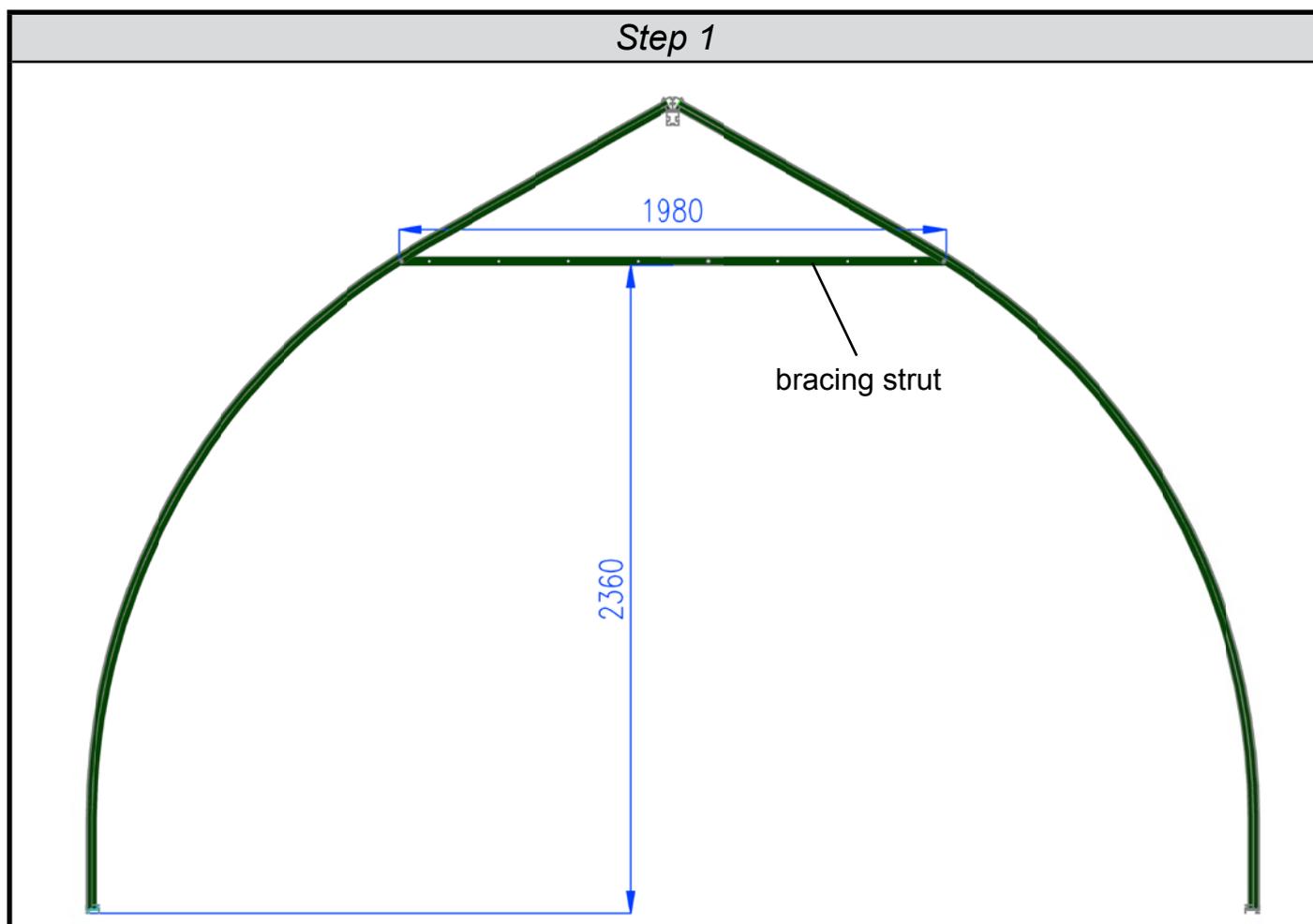


Extra Bracing for Riga XL 7/8/9 ONLY

Assembly of the bracing

Pos.	Profile/part design	Description	Length [mm]	Quantity	Dimensions [mm]
		Bracing strut	1980	1 (XL7) 2 (XL8) 3 (XL9)	30x4
SM11		Hexagon head screw M6 x 55		2 per bracing strut	
SM30		Nut M6		2 per bracing strut	

Remember during assembly! Place the pair of curves with the notches for the braces in the center of greenhouse. Then assemble as directed. Bracing struts and the corresponding curves should be near the middle. The XL7 comes with one strut, the XL 8 with 2, and the XL9 with 3.

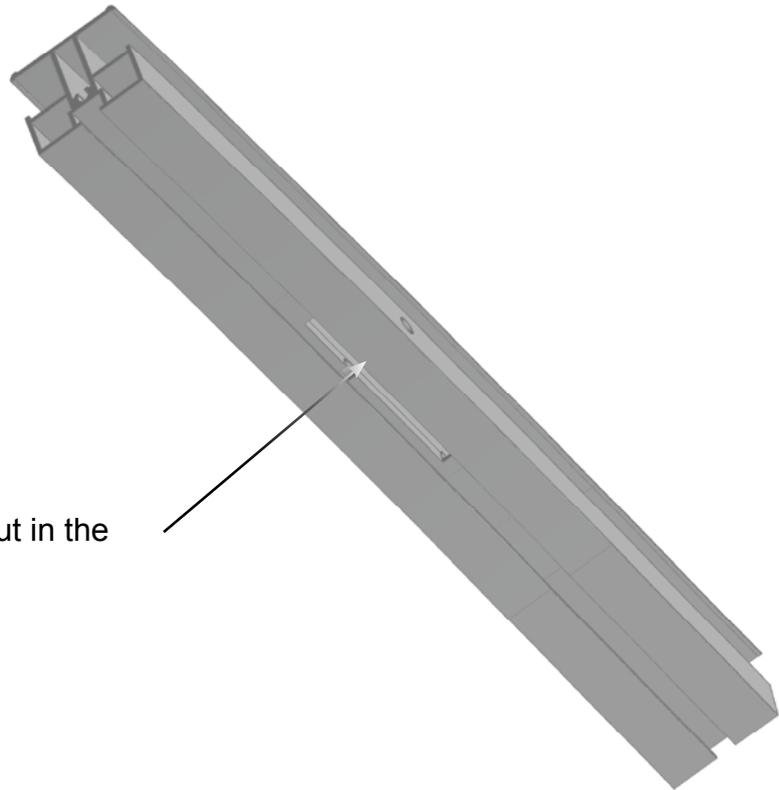


Extra Bracing for Riga XL 7/8/9 ONLY

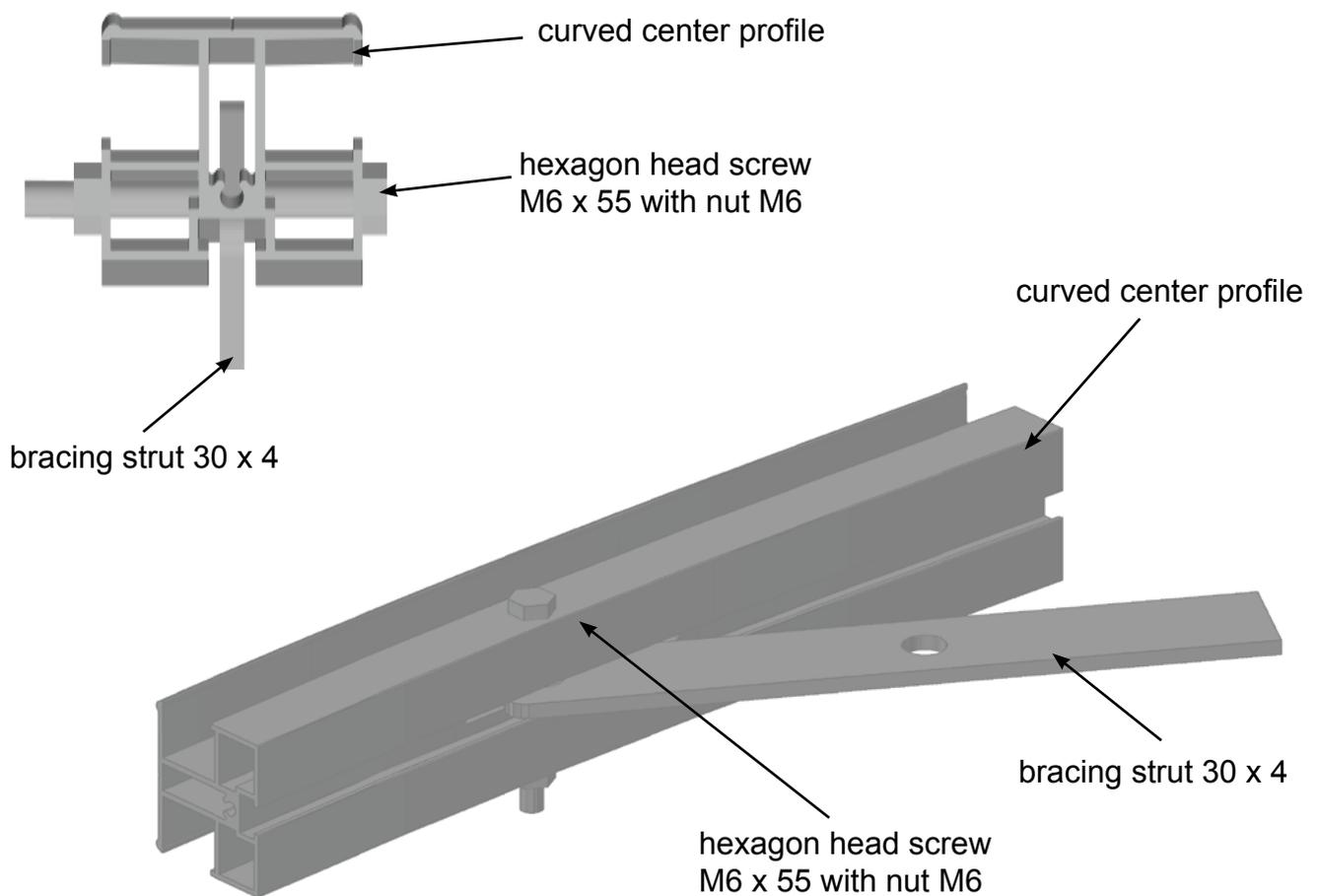
Assembly of the bracing strut

Step 2

Slot for the bracing strut in the curved center profiles



Step 3



Attaching the foundation frame (optional accessory)

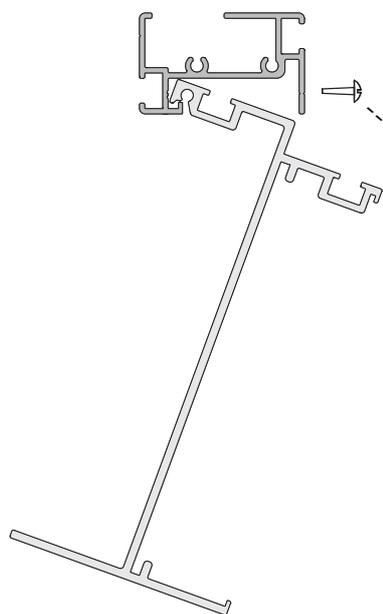
Profiles and hardware for foundation frame:

Profile/part design	Pos.	Description	Quantity/Length in mm		
			Typ IV	Typ V	Typ VI
	6.1	Foundation frame profile for gable	2 4085	2 4085	2 4085
	6.2	Foundation frame profile for the sides	2 3864	2 4859	2 5853

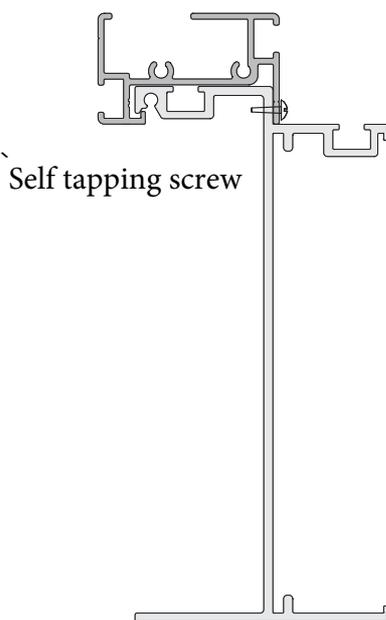
Assembly of foundation frame

Note: Foundation frame profiles are shorter than the floor profiles!

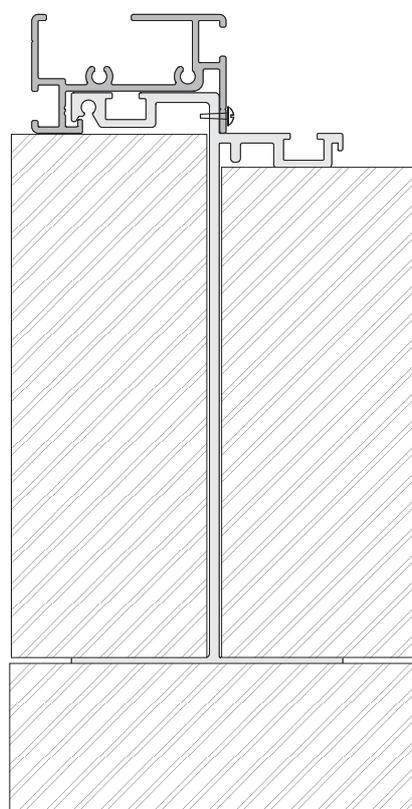
1.



2.



3.



1. First hook the foundation frame into the soil profile, then rotate it into position.
Note: Make sure the foundation frame pieces are centered in the soil profile. The foundation frame will be shorter in length than the soil profiles.
2. Once in position use self tapping screws to secure the foundation frame to the soil profile. This is shown above.
3. When the greenhouse has been fully assembled backfill both sides of the foundation frame with soil, or your media of choice.



Anchoring the greenhouse to your own foundation

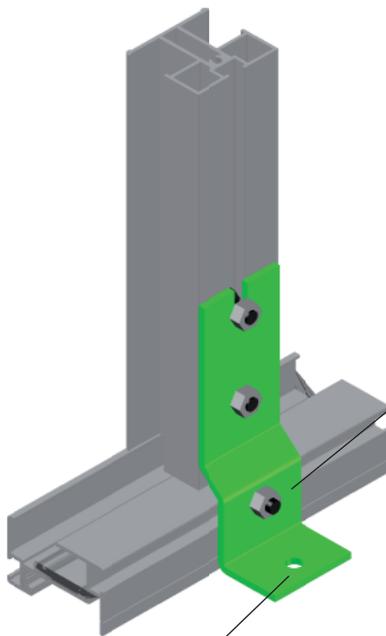
Mounting brackets to attach base/floor profile to existing foundation.

Part design	Pos.	Description	Quantity/Length in mm		
			Typ IV	Typ V	Typ VI
	6.7	Mounting brackets XL	14	16	18
	117	Hexagon head screw M6 x 12 + nut M6	56	64	72

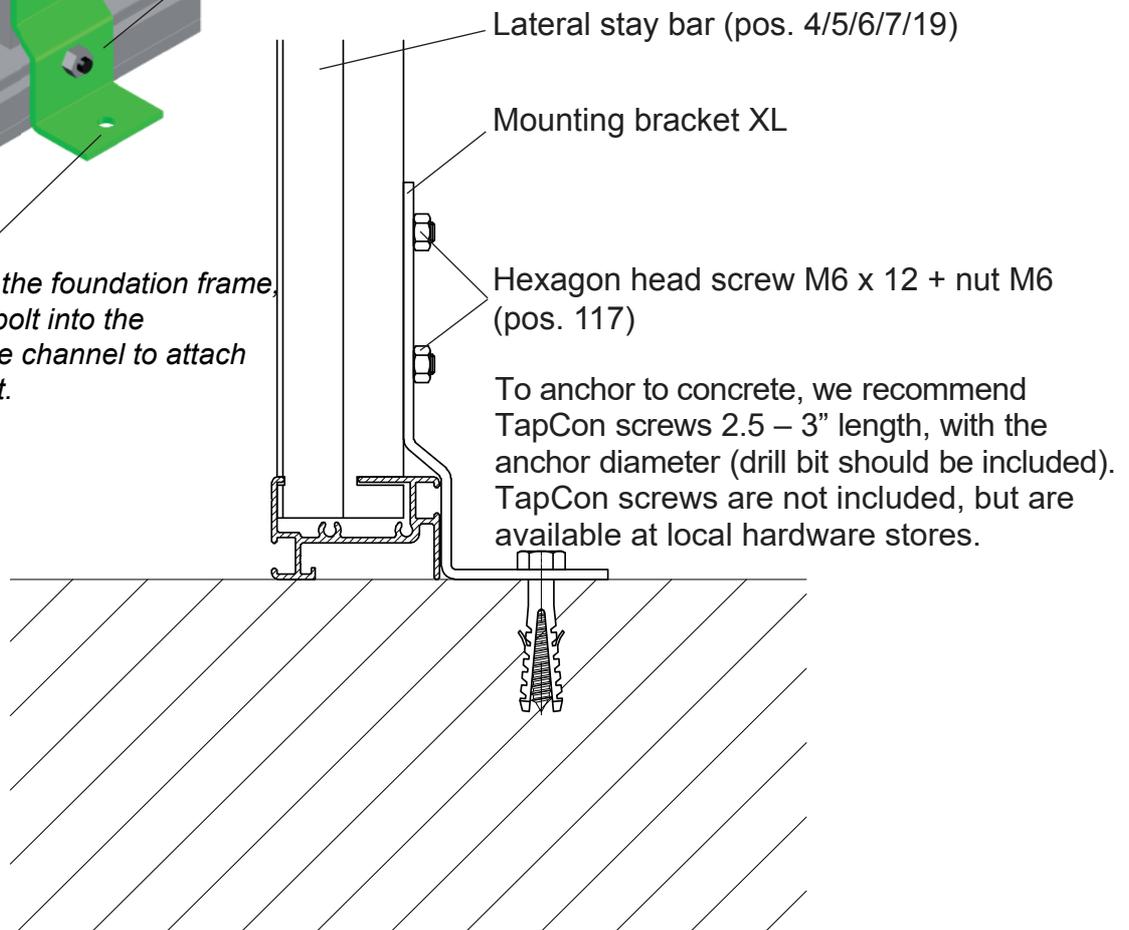
Note:

You will need to insert 2 bolts (M6 x 12) in each vertical profile (gable ends and curved profiles) to attach mounting brackets.

Optional: If desired, you may add an extra hole for an additional bolt to attach the mounting bracket to the soil profile.



If you are using the foundation frame, please insert a bolt into the foundation frame channel to attach bracket with bolt.



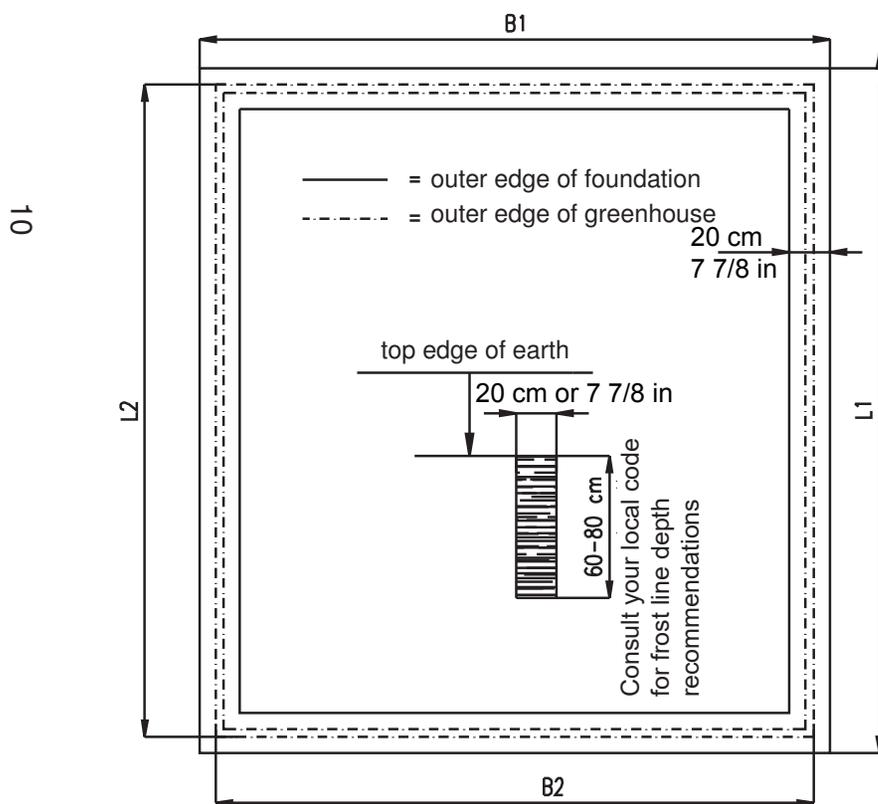


Foundation plan Riga XL

Construction of your greenhouse with a concrete perimeter or strip foundation

If you did not buy a foundation frame, the greenhouse has to be erected safely by means of a perimeter/strip foundation. Please build this according to the dimensions in the chart below. You may also attach the greenhouse to a full concrete slab if desired - consider texture and drainage. The foundation must be even and level.

Fasten the constructed greenhouse with the supplied angle brackets and TapCon (or similar) screws. We recommend 2.5 to 3" length with anchor diameter of 1/4". TapCon screws are not included and may be found at your local hardware with correct drill bit included.



Door Extension Kit: If you are placing your greenhouse on a stem wall, you will need a door extension kit and your wall must be 20" high. The XL greenhouses have a front and back door, which is centered on the gable wall. The rough opening for the door needs to be: 40 7/8" - better to make it 41" .

When building your stem wall, use the exterior dimensions of the greenhouse for the exterior dimensions of your wall - this will ensure your doors will open fully and connect with the door catch. Please be sure that the thickness of your wall allows for secure anchoring and meets local building standards.

	foundation		greenhouse	
	B1	L1	B2	L2
Riga XL/5	442 cm 174 in	519 cm 204 ^{5/16} in	425 cm 167 ^{3/4} in	501 cm 197 ^{1/4} in
Riga XL/6	442 cm 174 in	618 cm 243 ^{5/16} in	425 cm 167 ^{3/4} in	601 cm 236 ^{5/8} in
Riga XL/7	442 cm 174 in	718 cm 282 ^{11/16} in	425 cm 167 ^{3/4} in	701 cm 276 in
Riga XL/8	442 cm 174 in	818 cm 322 ^{1/16} in	425 cm 167 ^{3/4} in	801 cm 315 ^{3/8} in
Riga XL/9	442 cm 174 in	918 cm 361 ^{7/16} in	425 cm 167 ^{3/4} in	901 cm 354 ^{3/4} in

Gable Assembly - Start with the assembly of the gables - front and rear gables are identical.

Warning: If you are using the foundation frame, it has to be attached to the base profiles **FIRST!** (Page 8)

Step 1

Important: Look for the circle and note of 1x, 2x, etc. for insertion of bolts. during assembly!

Ensure top angles of vertical profiles are correct!

Attention: Before assembly, insert required M6 x 16 (pos. 107) in floor profile channel. Insert 2 bolts M6 x 12 (pos. 117) into vertical profiles for mounting brackets (pos. 6.7).

Align vertical profile channels with holes in floor profile

Step 2

Push glazing into floor profile first, then slide into vertical profile.

Phillip head screw 4,2 x 13 (pos. 111)

Step 3

Crossbar (pos. 8)

Step 4

View from inside

Attention: Insert noted quantity of bolts M6 x 16 (pos. 107) in profile groove before assembly.

Attach the T-connector (pos.103) with inserted bolt m6 x 16 and nut M6.

Step 5

View from inside

Attention: Insert noted quantity of bolts M6 x 16 (pos. 107) in profile groove before assembly.

Note angles at the top of vertical profiles when attaching!

Attach plastic corner connectors (pos. 100) to floor profile ends

Step 6

View from inside

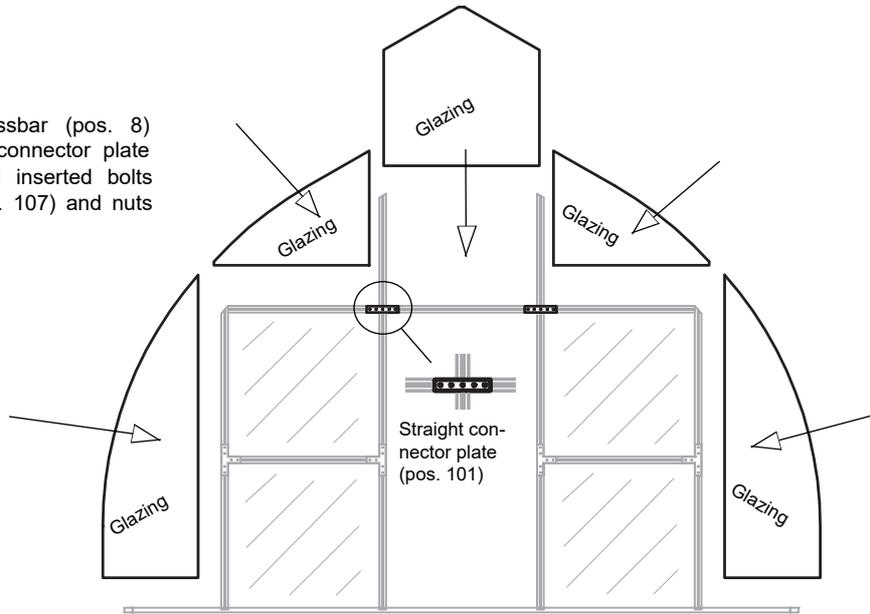
Attention: Insert noted quantity of bolt M6 x 16 (pos. 107) in profile channel before assembly

Connect Crossbar using T-connector (pos. 103) and inserted bolt M6 x 16 and nut M6 (pos. 107).

Step 7

View from inside

Connect Crossbar (pos. 8) with straight connector plate (pos. 101) and inserted bolts M6 x 16 (pos. 107) and nuts M6.



Step 8

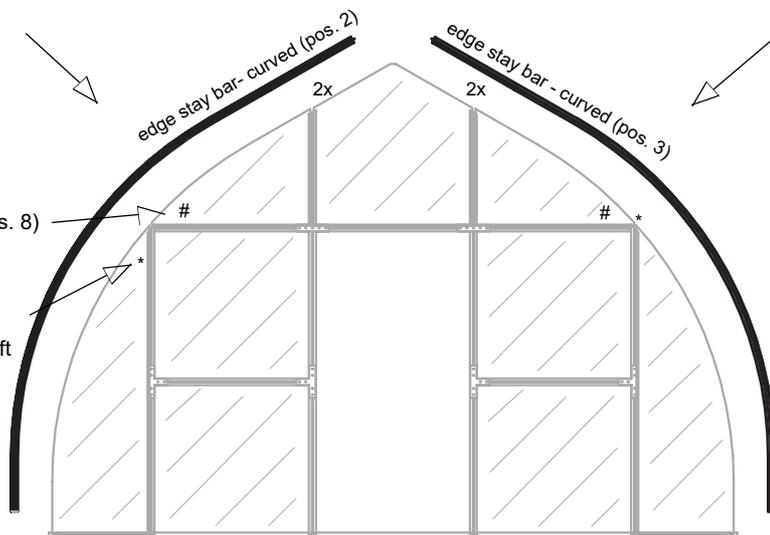
View from inside

Attention:
Insert noted bolts M6 x 16 (pos. 107) in profile groove before assembly.



2x in crossbar (pos. 8) on left AND right

* 2x in vertical profile middle (pos. 4+5) - on left AND right



Step 9

View from inside

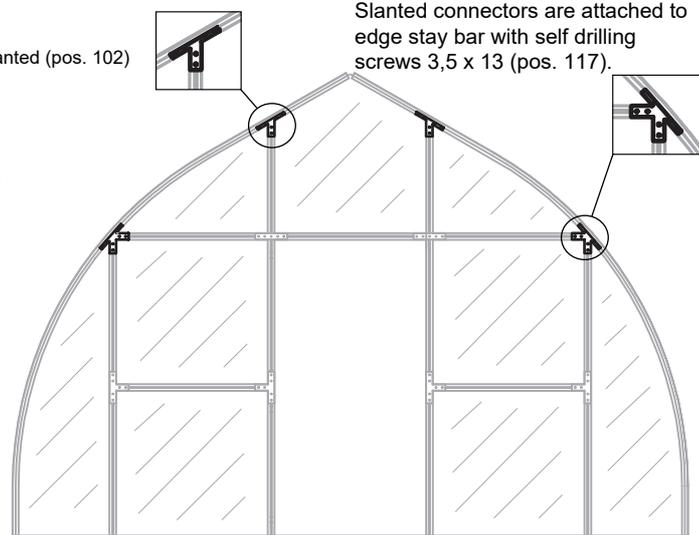
T-connector - slanted (pos. 102)

Slanted connectors are attached to edge stay bar with self drilling screws 3,5 x 13 (pos. 117).

t-connector - slanted (pos. 104)

Edge stay bar (pos. 2 + 3) with t-connectors - slanted (pos. 102 and pos. 104) are connected with inserted bolts M6 x 16 and nut M6 (pos. 107) on the crossbar and vertical profile.

The t-connectors are connected with self drilling screws (pos. 117) on the edge stay bar.



Side Wall Assembly

Warning: If you are using the foundation frame, it has to be attached to the base profiles **FIRST!** (Page 8)

Step 10

Attention: Insert bolts M6 x 16 (pos. 107) in profile groove before assembly.

Insert 2 bolts (pos. 107) into each middle vertical profile for the mounting brackets (pos. 6.7).

Step 11

Attach roof beam to back gable with endcap/cover plate (pos. 114) with Philips head screws 4,2 x 13 (pos. 111). The roof beam end will slide into slot on edge curves until flush with back of greenhouse.

IMPORTANT! End of roof beam must be supported

Front gable will assemble the same way later!

Step 12

Insert the glazing panel on each side - they will bend. Insert first into the floor profile, then into roof beam. Usually, this will take 3 people.

Step 13

Recommendation: Begin attaching lateral supports at this time (pos. 20/21/22). This will help stabilize the structure and assist with proper spacing. (see step 18)

Curved center profiles (pos. 19) enlarged!

Insert curved center profile (pos. 19) top into roof beam and below into floor profile. Push straight on up to glazing and „thread“ pane.

Step 14

Slide in subsequent glazing and curved center profiles. Consider Roof window position during this time.

Apply silicone between window crossbar and the curves to prevent water leakage.

Attach window crossbar connector plate (pos. 115) on inside with bolt M6 x 12 and nuts.

Attention: For roof window installation, insert one bolt M6 x 16 (pos. 107) in each curve adjacent to window before assembly. In cross bar under window (pos. 25), insert 3x M6 x 16.

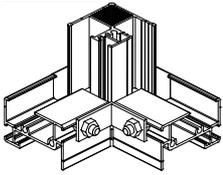
Step 15

Attention: Insert bolts M6 x 16 (pos. 107) in profile groove before assembly.

Push glazing and curved center profiles together completely. Roof window position important!

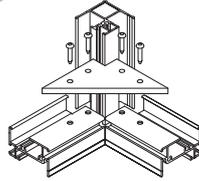
Step 16

floor profile connector (pos. 105)
+ bolt M6 x 16
+ nut M6 (pos. 107)



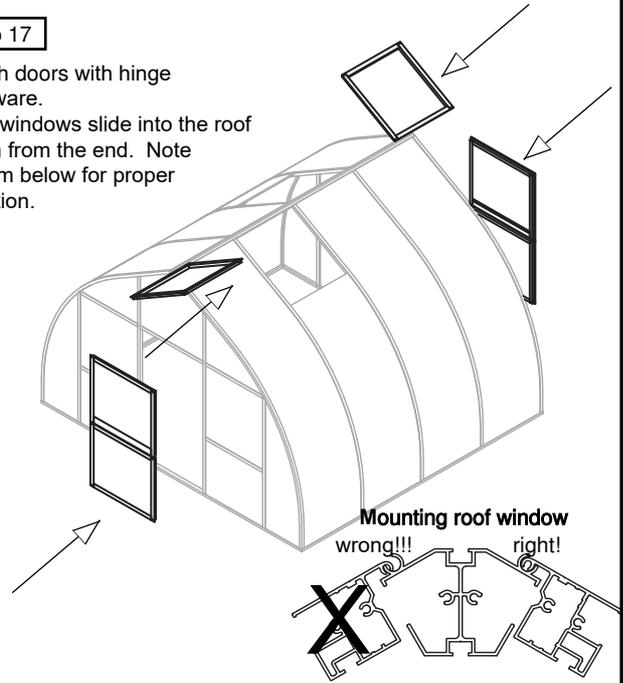
Attach assembled front gable in same manner as rear gable.

Attach floor profile corner connector (pos. 116) with screw 4,8 x 16 (pos. 113).

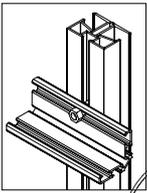


Step 17

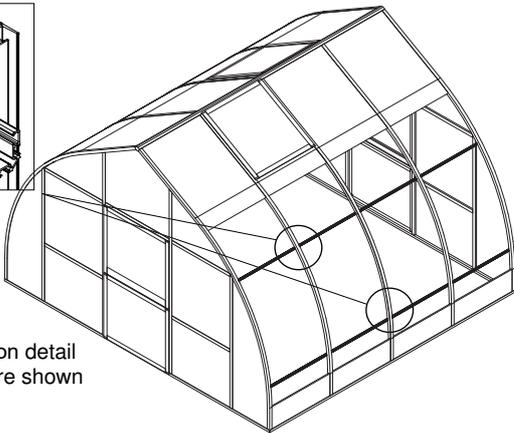
Attach doors with hinge hardware.
Roof windows slide into the roof beam from the end. Note diagram below for proper insertion.



Step 18



For illustration detail the panes are shown cutaway.



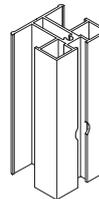
The lateral supports (pos.20/21/22) are attached to all the curves on the inside of the greenhouse with bolts M6 x 16 and nuts M6 (pos.107) and washer (pos.108). The lateral supports are also back profiles for the optional tables and shelves. (See separate assembly instructions!)

Then you should look for:



Press Insulation seal 6 - 8 mm in between the floor profile and glazing on all 4 walls on the inside of greenhouse.

Attention: Please compress the seals, because it contracts in cold weather.

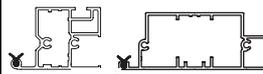


IMPORTANT!

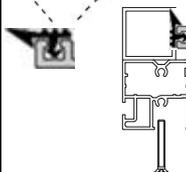
Hexagon bolts can be inserted later into most of profiles through a special „hole“ in the channel. If there is no hole you can drill one yourself.



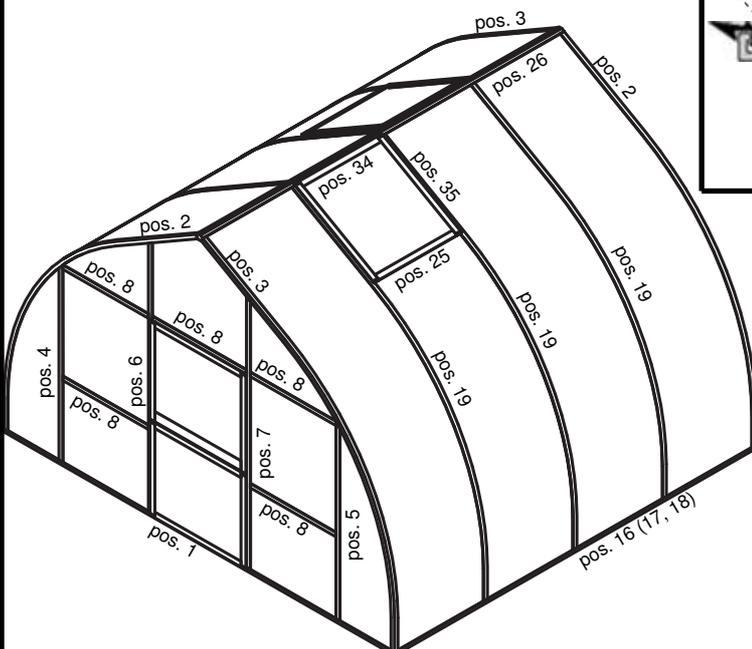
T-sealings (pos. 126, 138, 153) for all doors and windows (altogether ca. 26 m).



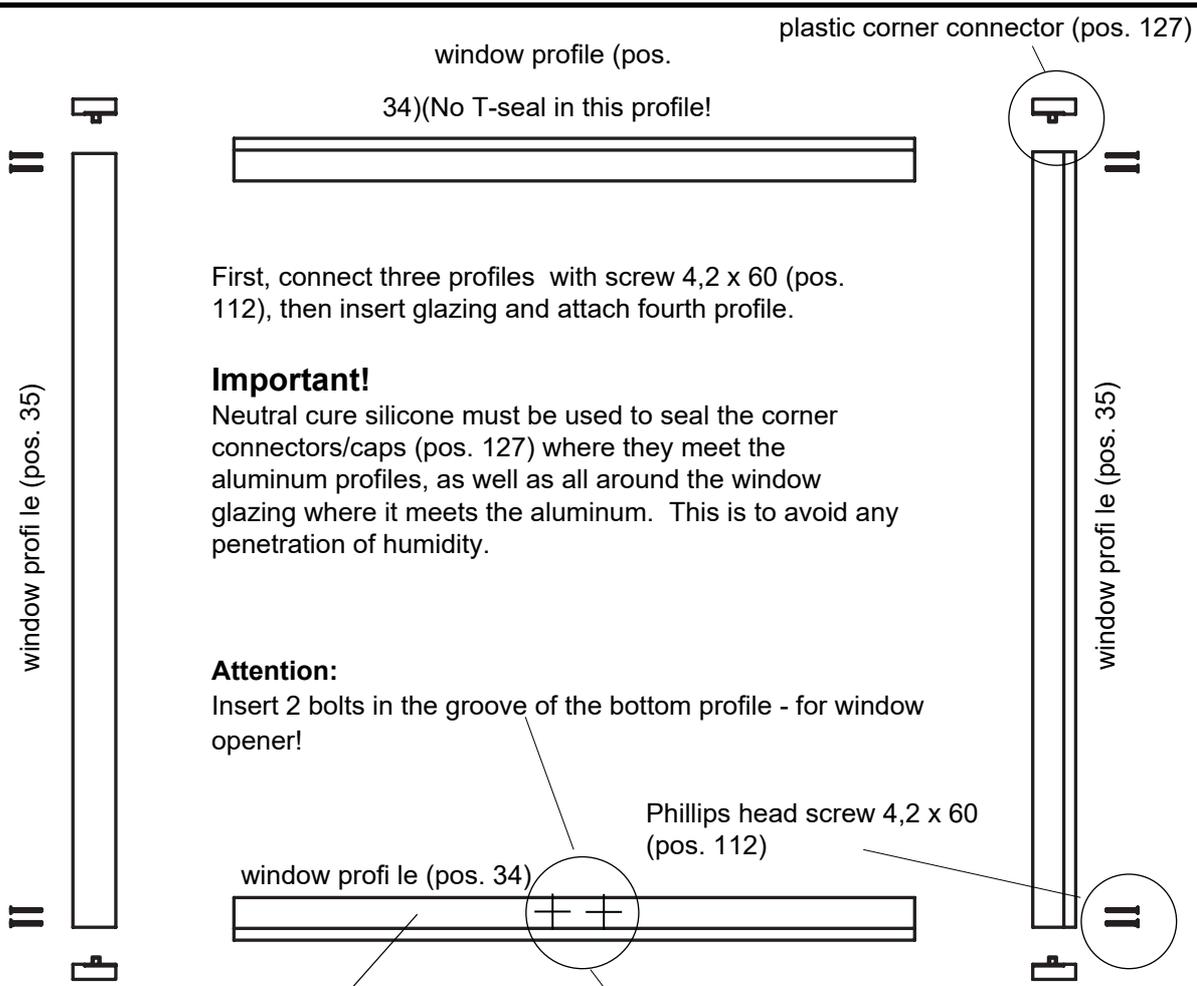
Attention: The t-seal goes only on 3 sides of the roof window - not the top bar profile.



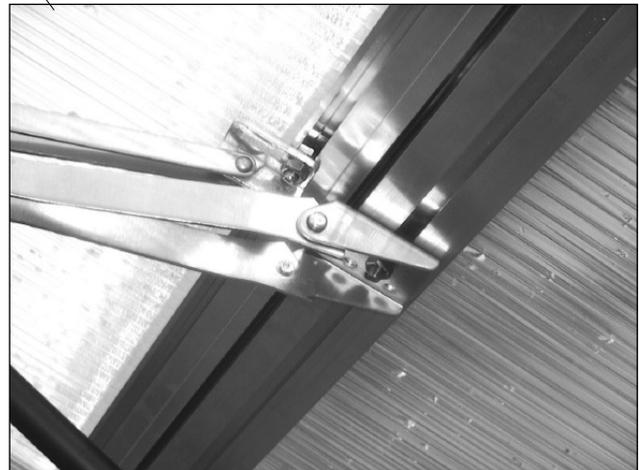
Attention: The t-seal must be inserted first in the top profile of the bottom door before assemble the rectangular tube.



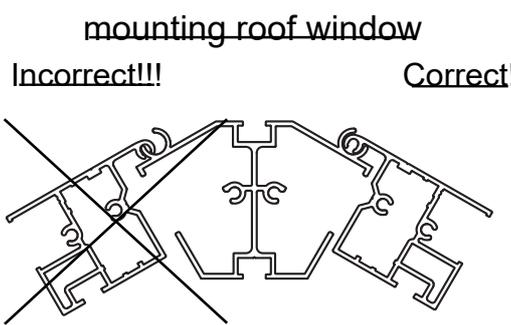
Assembly roof window



Attach the Sash Lock (pos. 136) with Philips head screw 3,5 x 22 (pos. 141).



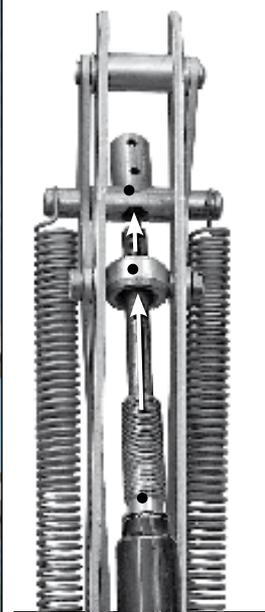
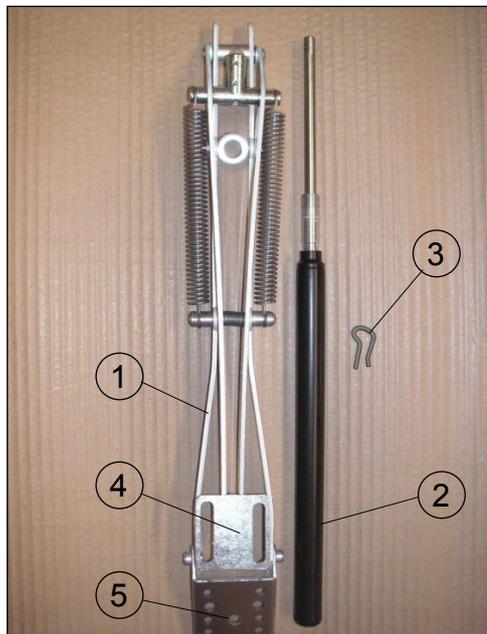
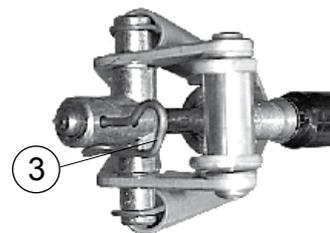
Automatic window opener



The roof window is installed by sliding it on from the end of the roof beam as shown to the left (like a ball and socket).

Automatic Window Opener

1	opener frame
2	pressure cylinder
3	cotter pin
4	mounting plate window profile
5	mounting plate cross bar



Auto Opener Installation

1. Check whether the greenhouse window can open and close freely and unhindered.
2. Install the opener with the mounting plate (4) in the center of the lower roof window profile (pos 4.2)
3. Secure the cylinder by lining up the hole in the piston with the upper hole in the T-coupling, then insert the cotter pin.
4. Install the mounting plate (5) in the center of the cross bar(pos 3.2) using the middle hole in the mounting plate(5)
5. Attach the opener frame (1) to the mounting plate (5). Open the roof window until the threads of the piston (2) engage the threads of the opener frame (1). Thread the piston (2) half way into the threads in the opener frame (1).

Adjustment:

Let the opener acclimate to the greenhouse for 3-4 hours before you make adjustments. For earlier engagement and a larger opening, turn the cylinder clockwise. For a delayed engagement and a smaller opening turn the cylinder counter clockwise. Make sure you don't back it out too far. For opening engagement advance/delay one full turn is about 1 degree Fahrenheit. Please keep in mind that greenhouse temperatures can vary and windows can have different opening tolerances.

Winter-usage:

When the temperature decreases and the window is no longer to be opened, or when a source of heat is used in the greenhouse:

1. Unscrew the cylinder from the cylinder housing. The cylinder is now hanging from the cotter pin and cannot open the window. The cylinder can be left hanging in this position over the winter.
2. Use a sash lock to lock the window shut for the winter so it cannot blow open.

Required Maintenance:

Every year, check to make sure the piston shaft and cylinder threads are greased and move freely. A dab of light oil such as WD40 or olive oil on the piston shaft and the cylinder threads will be sufficient. Failure to do so could render your opener inoperable.

Riga Greenhouse Window Auto Opener Correct Installation



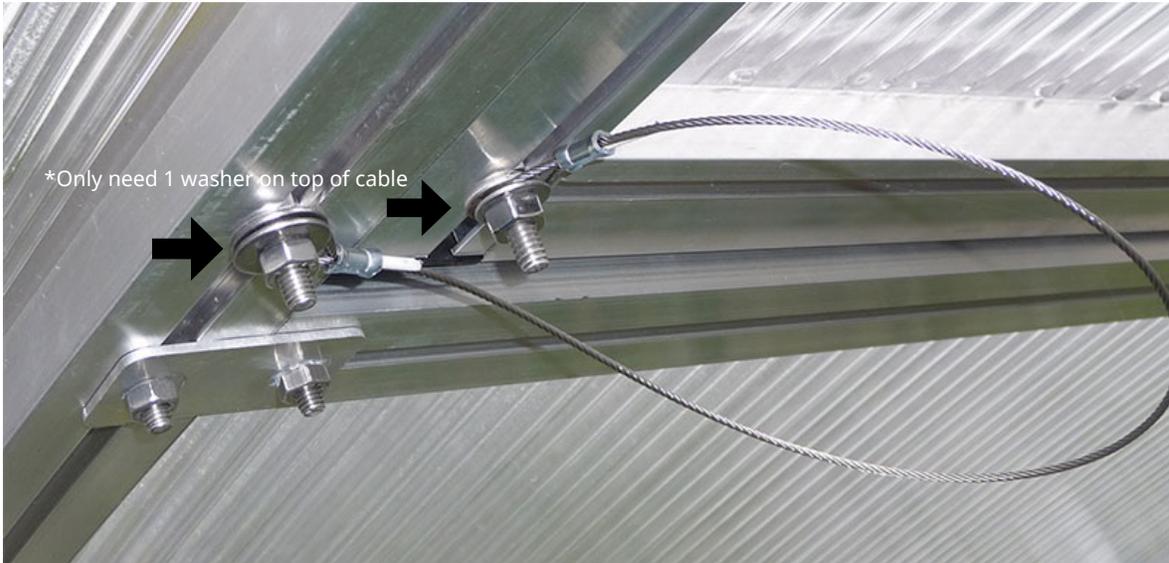
In the correct position, the opener is sitting parallel to the window, which means that it will not demand a lot of pressure from the cylinder when the opening starts. Before fitting a new cylinder to the openers, you must check that the window can open freely right from the start. If not you must change the position of the aluminum profiles.



Roof Vent Recommendation for High Wind Areas

If you get strong wind gusts, we recommend protecting your roof vents and openers with restraint cables. Roof vent restraints can be purchased from Exaco Trading (US distributor of Rigas) or can be made. They are not a standard part from the Riga manufacturer.

Two restraints are used for each window; one on each side of the window. Install each loop between two flat washers on screws inserted into the channel. Position the restraint as illustrated and adjust as needed to avoid interference from the crossbar as the window is raised and lowered.



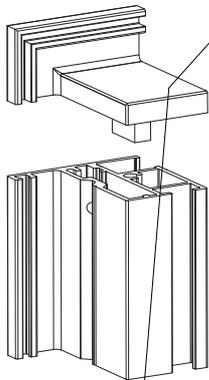
You can make your own restraints from $\frac{1}{16}$ " stainless wire rope, stranded 7x19 for maximum flexibility. Overall length should be about 16". When installed near the crossbar, they will limit the window opening to less than the safe extents of the hinge and window opener, but greater than the maximum thermal extent of the opener. More important than the exact length of the restraint is a close length match for each window's pair. If you are not equipped to swage the binding sleeves you can use wire rope clamps.



Mounting divided revolving door - at the bottom

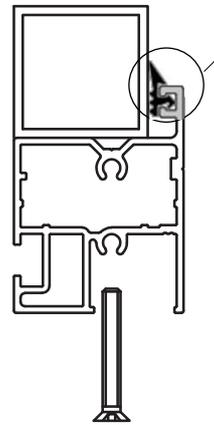
View from outside

Place the profiles on a flat surface according to the diagram below (a cardboard surface works well).



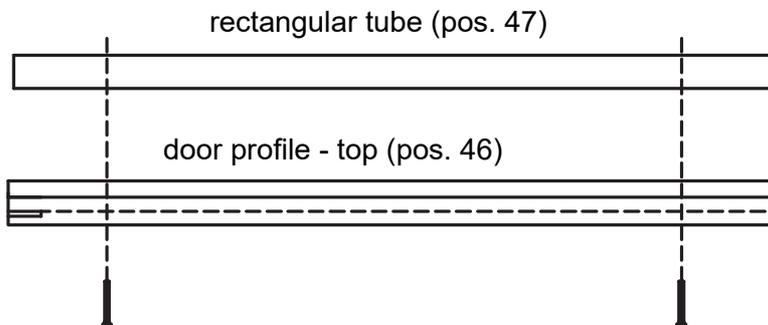
plastic corner connector (pos. 127)

Important!
Silicone should be used to seal the corner connectors/caps (pos. 127) where they meet the aluminum profiles, as well as all around the window glazing where it meets the aluminum.



rectangular tube and door-profile - attached with 4,2 x 50 (pos. 142)

end cap for rectangular tube (pos. 137)

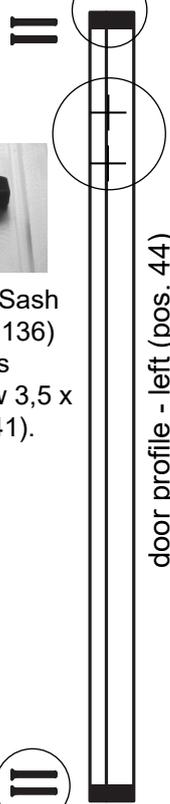


rectangular tube (pos. 47)

door profile - top (pos. 46)



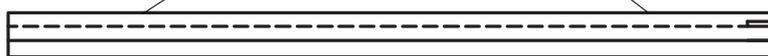
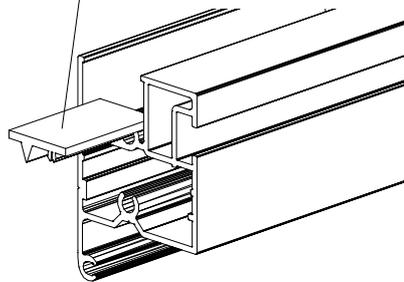
Attach the Sash Lock (pos. 136) with Phillips head screw 3,5 x 22 (pos. 141).



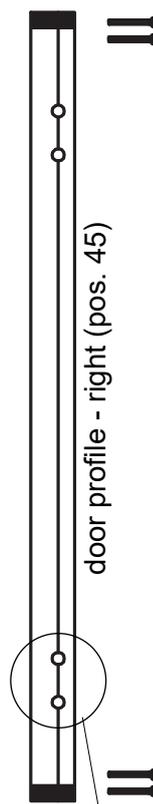
door profile - left (pos. 44)

Phillips head screw 4,2 x 60 (pos. 112)

glazing block (pos. 143)



door profile - bottom (Pos. 48)



door profile - right (pos. 45)

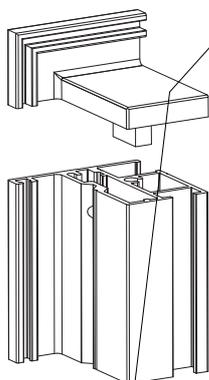


* **Note:** The rubber seal is in one bundle for all doors and windows. Cut accordingly please.

Mounting revolving divided door - top

View from outside

Place the profiles on a flat surface according to the diagram below (a cardboard surface works well).

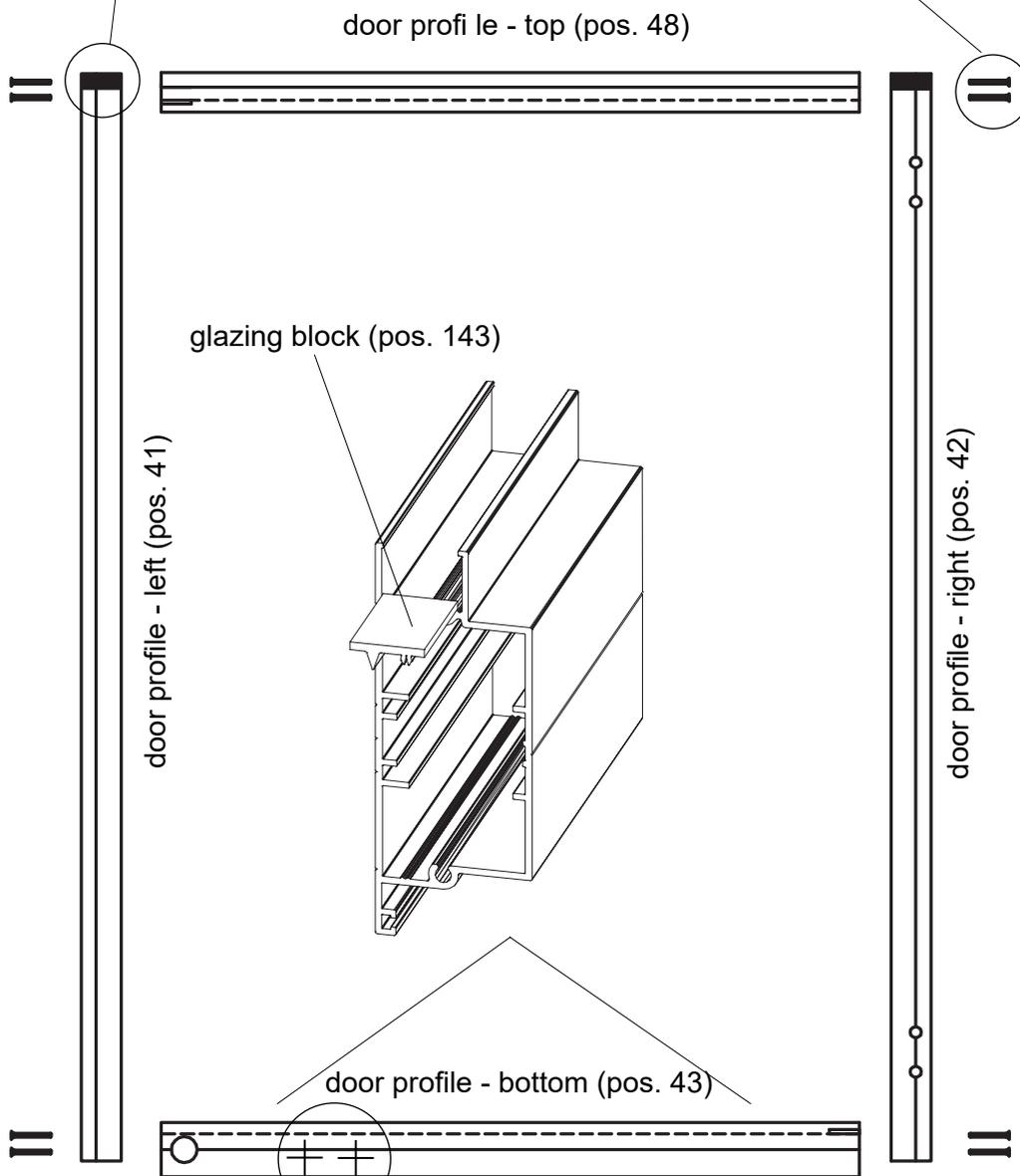


plastic corner connector (pos. 127)

Important!

Silicone should be used to seal the corner connectors/caps (pos. 127) where they meet the aluminum profiles, as well as all around the window glazing where it meets the aluminum.

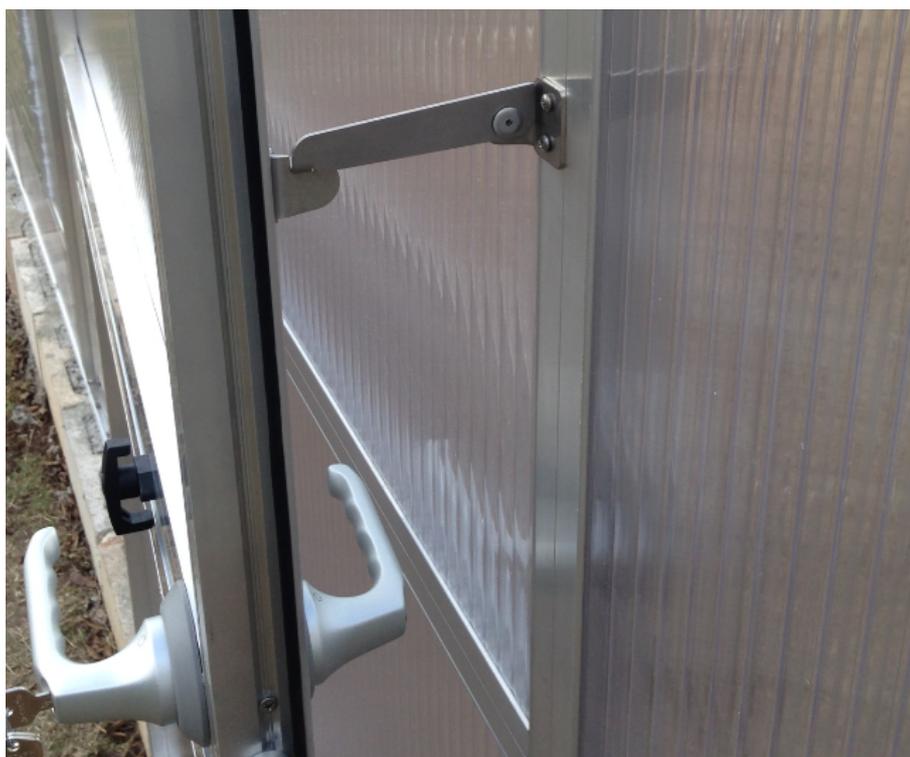
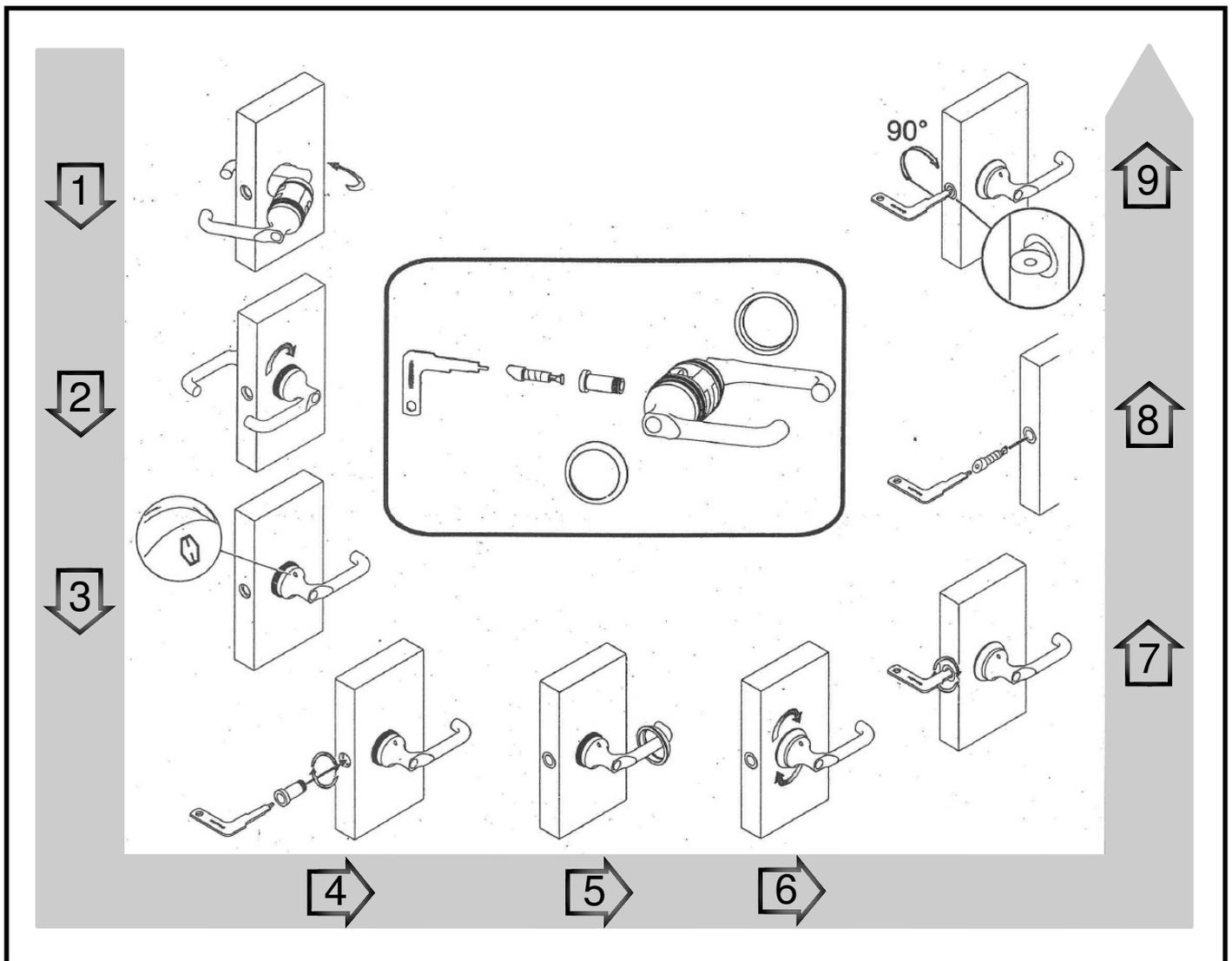
phillips head screw 4,2 x 60 (pos. 112)



Attach the Sash Lock (pos. 136) with Phillips head screw 3,5 x 22 (pos. 141).

* **Note:** The rubber seal is in one bundle for all doors and windows. Cut accordingly please.

Assembly instructions for lockable handle



Riga XL Metal Door Holder

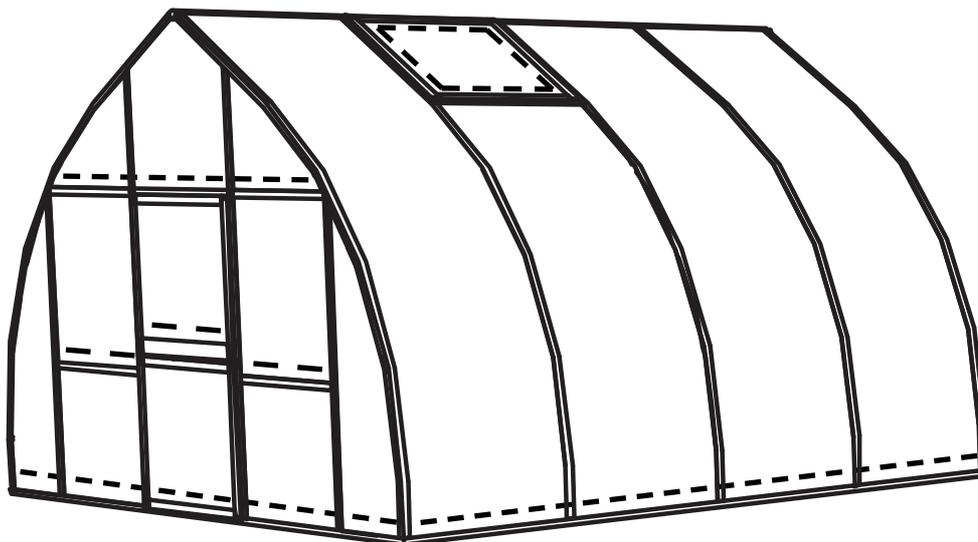
After the door is assembled and installed, you may place the door holder as seen to the left.

You may use self-tapping screws or predrill a small hole.

Question: Is it necessary to seal the greenhouse or greenhouse glazing?

We strongly recommend sealing the exterior horizontal transitions from the glazing to the aluminum profiles with neutrally cure transparent silicone. This will help keep water and dirt from the glazing channels. In the diagram below, the dotted lines show the areas that should be sealed.

In the long term the greenhouse has a better appearance. The tendency for algae formation in this area decreases tremendously.



Humidity/water can still appear within the polycarbonate glazing channels however, due to local weather changes. The polycarbonate glazing is not "steam-diffusion-tight", meaning humidity in vapor form can penetrate into the sheet. This is a purely optical disadvantage which cannot be avoided. The sheets will not suffer any damage from this.

Attention:

Only neutral cure silicone should be used due to possible stress cracks in the polycarbonate glazing. Exaco has Boss 399 Silicone, or GE Advanced Silicone 2 is readily available at most local home improvement stores.

Cleansing and maintenance:

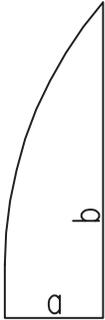
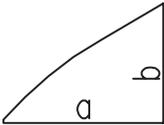
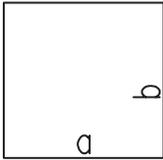
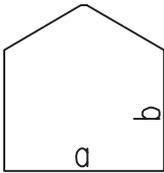
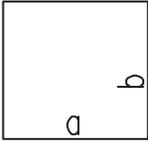
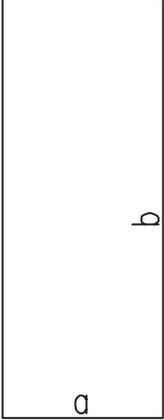
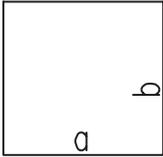
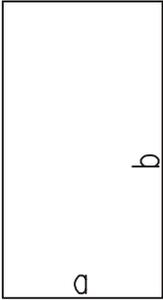
Clean the greenhouse with water and a soft cloth or soft brush (ex. car wash brush) if necessary. If you feel you need soap, we recommend a gentle dishsoap, such as Palmolive.

We wish you happy gardening and enjoyment of your Riga greenhouse! If you need any assistance, please reach out to Exaco at 877-760-8500 or customerservice@exaco.com.

All our statements are based upon many years of experience and are drawn up to the best of our knowledge and belief and they do not cover any legal entitlements in case of any possibly arising events of claim.

Polycarbonate Glazing Panels: 16mm triple wall

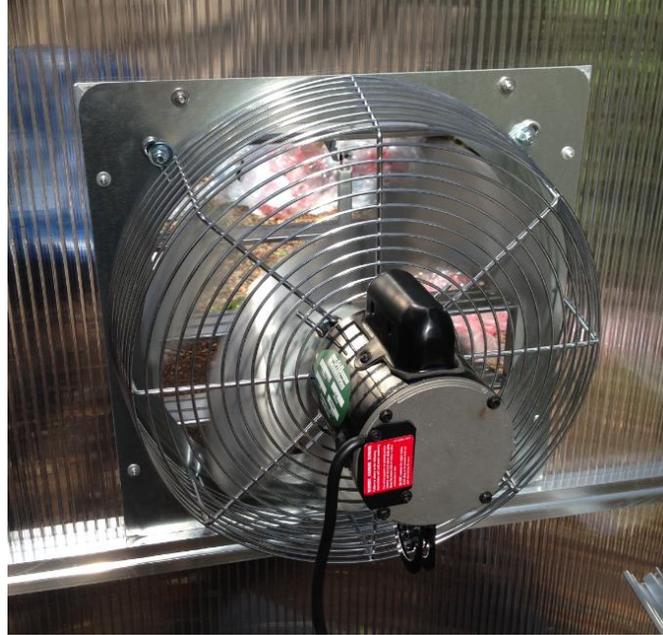
20

RIGA XL Size	Curved Panel for Gables	Curved Panel small f.Gables	Square panel for Gables	5-sided panel for Gables	Door Panels	Side Wall Panels Large	Roof Windows	Side wall panels under Roof Windows
								
	Quantity and Size (a,b)	Quantity and Size (a,b)	Quantity and Size (a,b)	Quantity and Size (a,b)	Quantity and Size (a,b)			
Riga XL/IV	4 602 x 1922	4 980 x 727	8 980 x 944	2 980 x 1008	4 888 x 835	6 980 x 3893	2 888 x 943	2 980 x 2830
Riga XL/V	4 602 x 1922	4 980 x 727	8 980 x 944	2 980 x 1008	4 888 x 835	6 980 x 3893	4 888 x 943	4 980 x 2830
Riga XL/VI	4 602 x 1922	4 980 x 727	8 980 x 944	2 980 x 1008	4 888 x 835	8 980 x 3893	4 888 x 943	4 980 x 2830

OPTIONAL ACCESSORY: Exhaust Fan installation for RIGA XL, RIGA 4 & RIGA 5

If you have both an intake shutter vent and exhaust fan, you will want them to be opposite/diagonal from each other to get the best cross-breeze. Plug the fan into the thermostat (optional) to control when it turns on. If you are using both a shutter vent and an exhaust fan you will need to purchase a plug splitter and plug them both into the thermostat.

For a Riga 4 & 5, we recommend placing the exhaust fan next to rear wall window by placing the unit on top of the cross bar to support the weight, as seen below.



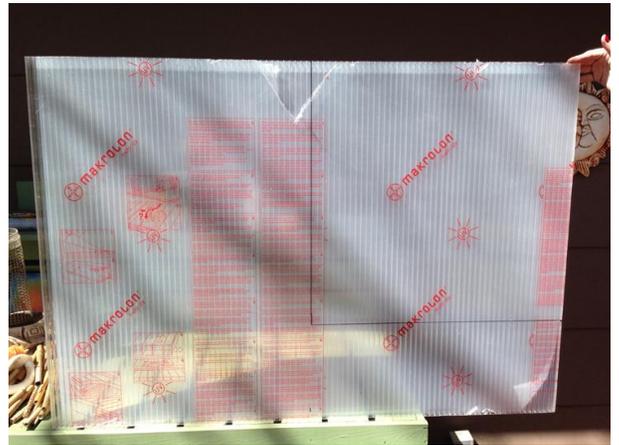
For the Riga XL the best placement is above the rear wall door with the weight on the door frame as seen to the left.

You may cut the hole in the polycarbonate before or after assembly of the greenhouse. Draw the outline of hole to be cut (only the area protruding from the polycarbonate). Drill a hole in each corner of the panel to insert a fine-tooth jigsaw blade and cut along the lines. Insert the fan. Drill holes in polycarbonate through the holes in the flange of the fan and hold in place with bolts – use washers on the outside. Once installed, we recommend caulking on the outside with neutral cure silicone caulk such as Boss 399.

OPTIONAL ACCESSORY: Intake Shutter Vent Installation for RIGA XL, RIGA 4 & 5

You will want your intake shutter vent to be opposite from your exhaust fan (i.e. opposite wall and lower part of the greenhouse) to get the best cross-breeze. They should both be plugged into the thermostat with a plug splitter to engage them simultaneously.

We recommend cutting a hole in the polycarbonate to bolt the intake shutter vent to the horizontal bar next to the front door. Measure the protruding dimensions and cut the appropriate size hole in the polycarbonate. You may cut this hole before installing the polycarbonate (see note to the right). If your greenhouse is assembled, the best way is to drill a hole in each of the corners of the section to be removed, then insert a jigsaw (fine tooth blade) to cut along your marked lines (note: if you use this method, your measurement will be different than the ones to the right).



To cut the hole before installing the polycarbonate, you may use the following measurements as shown above:

- Riga 4: 16.75" w x 16.5" h
- Riga 5: 20.75" w x 20.5" h



Step 2: Bolt the “heavy/thick” L-bracket which comes with the vent to the galvanized steel “T-bracket” supplied by us, screw (self-tapping screws) the T-bracket to the bottom of the vent and cross bar (slightly off center). You may want to drill small pilot holes. Attach the “motor” to the “L-bracket” with the 4 black screws. Then follow the instructions provided with the vent. Attach the spring (only 1 is needed) to pull the vent closed at the top in a small hole drilled in the top flange. We have found that it is best to hook the chain over the top of the center bar to pull the vent open. We recommend sealing with a neutral cure silicone caulk (such as Boss 399) on the outside of the greenhouse.

Notes:



Customer Service or
Assembly Questions?

Give us a call
Toll free: 1-877-760-8500
customerservice@exaco.com
Exaco Trading
www.EXACO.com

*Please watch our animated assembly
video on our Exaco Trading Co
YouTube Channel.
Find the link at www.exaco.com*

