

Subject to technical changes!

system width 2,32 m

Current as of 02/2012

Basic kit assembly instructions







Dear garden friend,

congratulations on the purchase of an aluminium greenhouse made by



The construction is simple. First read the assembly instructions and follow them step by step.

Parts and parts list

Please complete all boxes stored dry and protected from direct sunlight!

number of cartons

	basic construction (gable/eaves)	curved center profiles	windows/ doors	glazing
Riga S/II/III/IV	1	1	1	1
Riga III/IV/V	1	1	1	1

Start with the basic kit. Please do not open all the boxes at the same time. Let's not get confused by the variety of items.

Before you begin assembly, check on the parts lists, if all parts are present. Each box goes through a quality check before it is closed, thus missing parts are almost excluded. Should any parts are missing, please give us the wrong position.

Customer Service: 877-760-8500 or 512-407-8500 sales@Exaco.com Exaco Trading 10203 Metropolitan Dr. Austin, TX 78758

Location

Choose, if possible, a sunny place for your greenhouse. Avoid the shadow of buildings and trees. For vegeteables, like tomatoes, cucumbers and melons, make your greenhouse as possible in north-south-direction. For flowers and potted plants in east-west-direction.

Warning:

The greenhouse should preferably be placed in a sheltered spot and not in stormy weather. It is dangerous to leave a partly assembled house!

With the correct assembly resists this greenhouse and strong winds. The manufacturer assumes no responsibility for any damage by improper installation or acts of God.

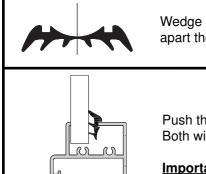
The constructions of the greenhouse must be conducted by at least two people. Work with secure, craft-oriented tools. Be careful when assembling on a secure stand of the ladder (risk of accident!).

In principle, only with gloves on (risk of injury, average risk!).

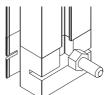
For the configuration you need the following tools:

- 1 pc. Phillips screwdriver size 2
- 1 pc. foot-end wrench10 mm
- 1 pc. screwdriver
- 1 pc. allen key 3 mm (in the accessoires bag of the roof window)
- 1 pc. level
- 1 pc. stepladder
- 1 pc. file to remove any burrs on the profiles
- 1 pc. rubber hammer
- 1 pc. tape measure

You should be careful:



Wedge seals (V23) pull apart the center!



Hexagonal screws can also be inserted later in the plastic slider!

Plastic slider in the bottom door frame, side and roof bars

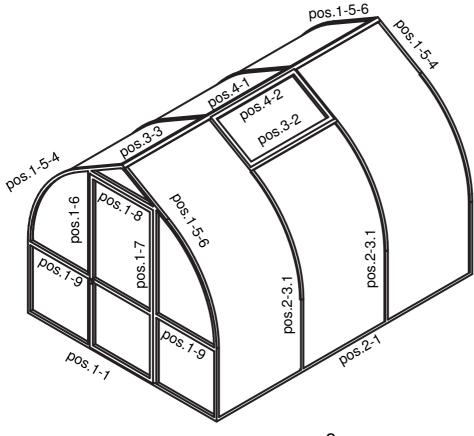
Push the seal 3 - 5 mm between the soil profile and the glazing. Both within the greenhouse!

Important: This compress the seals because they contract in cold weather!

numbers of wedge seals

	3 - 5 mm	3 - 5 mm	6 - 8 mm
length model	712 mm	768 mm	1030 mm
Riga S II	4	1	7
Riga S III	4	1	11

	3 - 5 mm	3 - 5 mm	6 - 8 mm
length model	768 mm	1030 mm	1030 mm
Riga III	1	4	11
Riga IV	1	4	14
Riga V	1	4	16



!!!Note: Important information for glazing!!!

The ISO-Cellular sheets, speak glazing, always install the UV coated side out. The plates have on the protective film has a hint.

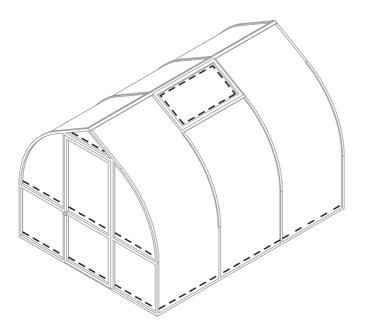
The protective film, first loosen the edges and only after the complete assembly pull it off immediately. After several days of sunlight can burn the film firmly on the plates and can be solved only with difficulty.

Do not pull the box right after the film, otherwise you could not tell which side has the UV protection!

<u>Question:</u> Do I have a greenhouse and the greenhouse glazing and "seal"? In principle: **No**.

But we recommend the horizontal transitions of the glazing to the profile (see sketch --> dashed line ----) sealed with neutral cure, silicone transparent, so that as little water and can therefore get a little dirt in the glas shots.

<u>Advantage:</u> The greenhouse looks to length of optically better. The tendency to formation of algae just takes considerably in these areas.



Moisture/water can also occur within the glass/hollow chambers depending on the wheather, since the plastic plates are not "water-vapor-permeable solid", ie moisture occurs in the form of water vapor into the plate. This is possible a purely optical disadvantage, however, can not be avoided. The plates can thus take no damage, even at freezing temperatures.

Warning: Use only neutral cure silicone, otherwise it may lead to stress cracks in plastic deglazing. This is the most common silicone sealant. It is in any hardware store or at HOKLAR-Therm for about 4 - 6 € available/ cartridge.

Cleaning and care:

The greenhouse with plenty of water such as car washing brush. In addition, using a little detergent.

!!!Warning: Use only according to instructions under foundation. See below!!!

This is the easiest, safest and also foundation of a greenhouse.

The foundation frame is hooked force-fit into the soil profile of the greenhouse screwed into the corners with a corner angle (V26). (See page 6).

The foundation frame is assemble to coincide with the greenhouse together.

Setting up the foundation frame

A small ditch, sod (about 10 - 12 cm deep), dug into the dimensions of the foundation frame. Use in the corners as a paving stone according to the other horizontally.

These are then the safe circulation and avoid "bagging" a possibly of the greenhouse. The greenhouse and the foundation frame in this "gab" and set them with earth fill.

Expedient is also the creation of garden slaps or stone pavement, so the greenhouse at eg heavy rain is not covered by mud splashes is.

In addition, the work made easier around the greenhouse, such as mowing the lawn.

Profiles and accessoires for foundation frame Riga S: # - See next pagel

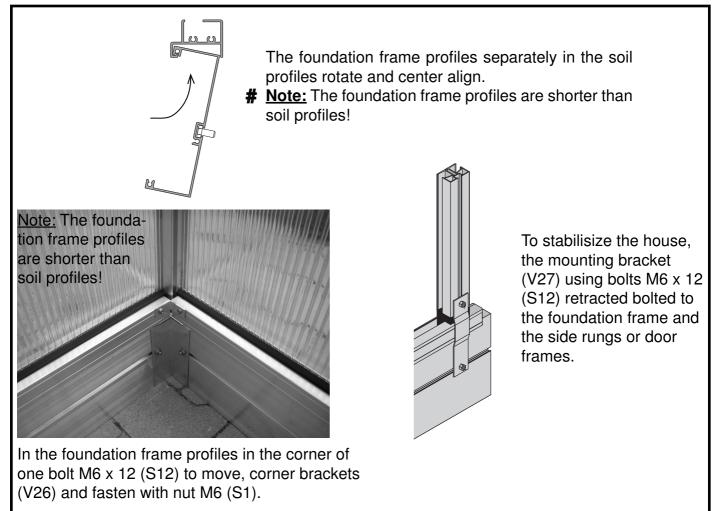
overview	000	pos. description		number/length in mm			
Overview	pos.	description	type II	type III	type IV		
	6.1	foundation frame profile/ #	2 2199	2 2199	2 2199		
E 2	6.2	foundation frame profile/ #	2 2033	2 3091	2 4149		
	V26	foundation frame corner bracket 40/40/2 x 105 item no 9999 0078	4 105	4 105	4 105		
e la	V27	mounting bracket (rung/foundation frame) item no 9999 0267	10 135	10 135	10 135		
	S12 S1	hexagonal screw M6 x 12 + nut M6 item no 9999 0124 + 9999 0128	20	20	20		

Profiles and accessoires for foundation frame Riga: (V26/V27/S12/S1 as above)

overview	pos. description		number/length in mm			
overview			type III	type IV	type V	
	6.1	foundation frame profile/ gable	2 2835	2 2835	2 2835	
2	6.2	floundation frame profile/ eaves	2 3091	2 4149	2 5207	

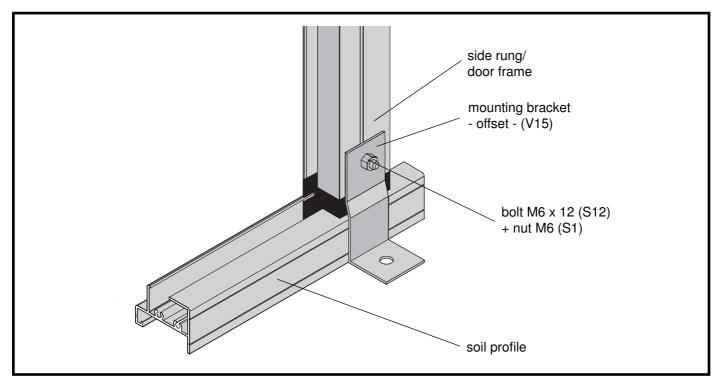


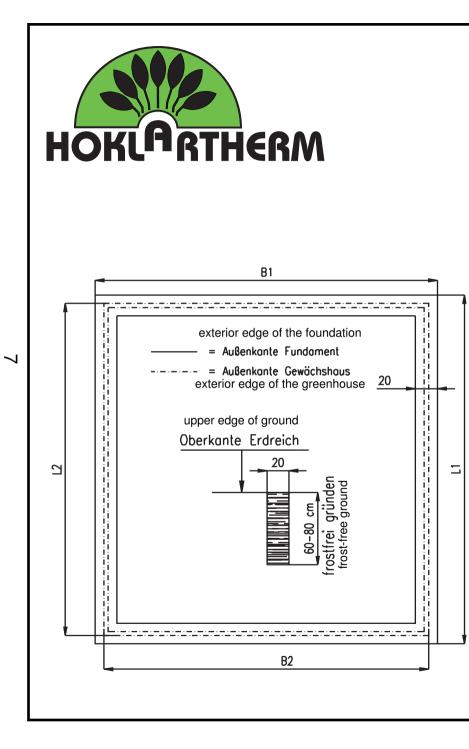
Assembly foundation frame



Foundation of the greenhouse

We recommend that you use for the bolt in place anchor bolts. These are not included!





Foundation plan Riga S/Riga all dimensions in [cm]

Foundation of your greenhouse with a strip foundation

If you have not bought a foundation frame, the secure foundation by means fo strip foundation. Then please create such a foundation in accordance with the specified dimensions below.

You have set up your possibility to the greenhouse on low cur stones such as, $50 \times 25 \times 8$ cm or better $50 \times 30 \times 10$ cm.

Please note that the foundation is made evenly horizontally.

The greenhouse then please anchoring with the included mounting brackets (V15) with the dowels (minimum)

Screws and ancors are not included.

found	lation	greenhouse		
B1	L1	B2	L2	
249	232	233	216	
249	338	233	322	
249	443	233	427	
312	338	296	322	
312	443	296	427	
312	533	296	533	
	B1 249 249 249 312 312	249232249338249443312338312443	B1 L1 B2 249 232 233 249 338 233 249 443 233 312 338 296 312 443 296	

Content main box - basic kit Riga S/Riga

Please check in the tables list the completeness of the components.

Profiles for both gables:

				nu	mber/ler	ngth in n	nm	
overview	pos.	description		Riga S		Riga		
		$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	IV	V				
	1.1	soil profile/gable					2 2874	2 2874
	1.5.4	rand rung left - curved	2	2	2	2	2	2
1.5.6	rand rung right - curved	2	2	2	2	2	2	
	1.6				_		2 2059	2 2059
	1.7						2 2059	2 2059
	1.8	door frame above					2 758	2 758
1.8	1.8		1 758		1 758	1 758	1 758	1 758
	1.9	crossbar left and right	4 702	4 702	4 702	4 1020	4 1020	4 1020

Profiles for eaves:

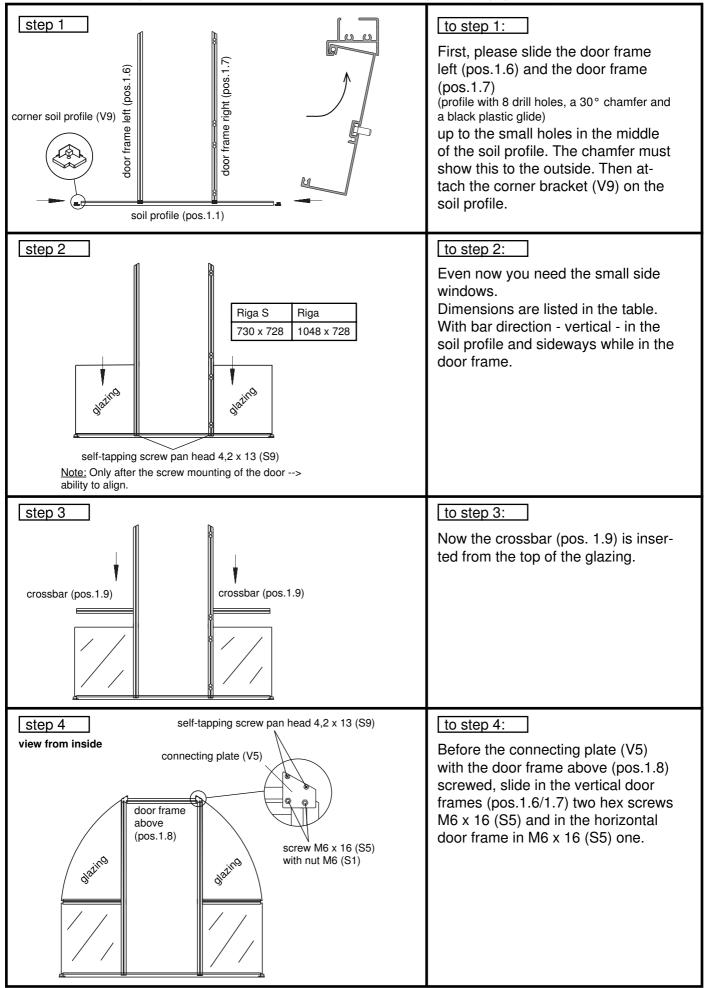
				number/length in mm						
overview	pos.	description		Riga S			Riga			
			- 11		IV		IV	V		
	2.1	soil profile/eaves	2 2072	2 3130	2 4188	2 3130	2 4188	2 5246		
	2.3	side rung - curved	2	4	6	4	6	8		
	3.2	cross bar/roof window	1 1020	1 1020	2 1020	1 1020	2 1020	4 1020		
	3.3	ridge profile	1 2137	1 3195	1 4253	1 3195	1 4253	1 5311		
ſ	3.4	angle stabilization	4 2104	4 3162	4 4220	4 3162	4 4220	4 5278		

Accessories bag basic kit Riga S/Riga

overview	pos.	description/ item number		num- ber RigaS	num- ber Riga
44	V9	corner soil profile item no 9999 0003		4	4
	V5	connecting plate item no 9999 0028	Ortgangprofil/Türzarge	4	4
•••	V10	connecting plate 90 x 35 mm item no 9999 0030	mounting crossbar/rear	2	2
-	V11	endplate ridge/gutter item no 9999 0075		2	2
• •	V4	connecting plate item no 9999 0031	for crossbar/roof window	II = 2 III = 2 IV= 4	III = 2 IV = 4 V = 8
	V12	corner 30/30/2/15 mm _{item no 9999 0072}	soil profile screw the corner from inside	4	4
-	S21	blind plug Ø10 mm item no 9999 0097	rand rung -drilling crossbar	4	4
	V14	hose section 760 mm lg. item no 9999 0181	door threshold seal	1	1
	V23	wedge seal 3 - 5 mm item no 9999 0119	sealing the soil profile inside	See table below !	See table below!
Durantit	S9	self-tapping screw pan head 4,2 x 13 item no 9999 0144	door frame-soil profile/ cover plate/corner (V12)	38*	38*
Quantum	S13	self-tapping screw pan head 4,8 x 45 item no 9999 0150	gable	6	6
	S5/ S1	hexagnal screw M6 x 16 + nut item no 9999 0183 + 9999 0128	screws for pulling	$ = 40^*$ $ = 40^*$ $ V = 44^*$	
•	V15	mounting bracket - offset 74 x 30 x 33 mm item no 9999 0207	for the attachement of the greenhouse on foundation by customer (not with foundation frame)	10	10
0	S32	washer A6,4 item no 9999 0173	door frames, roof and side rungs	20	20 V = 24
	V1	mounting corner bracket inside item no 9999 00074		je 2x lks. 2x rts.	je 2x lks. 2x rts.

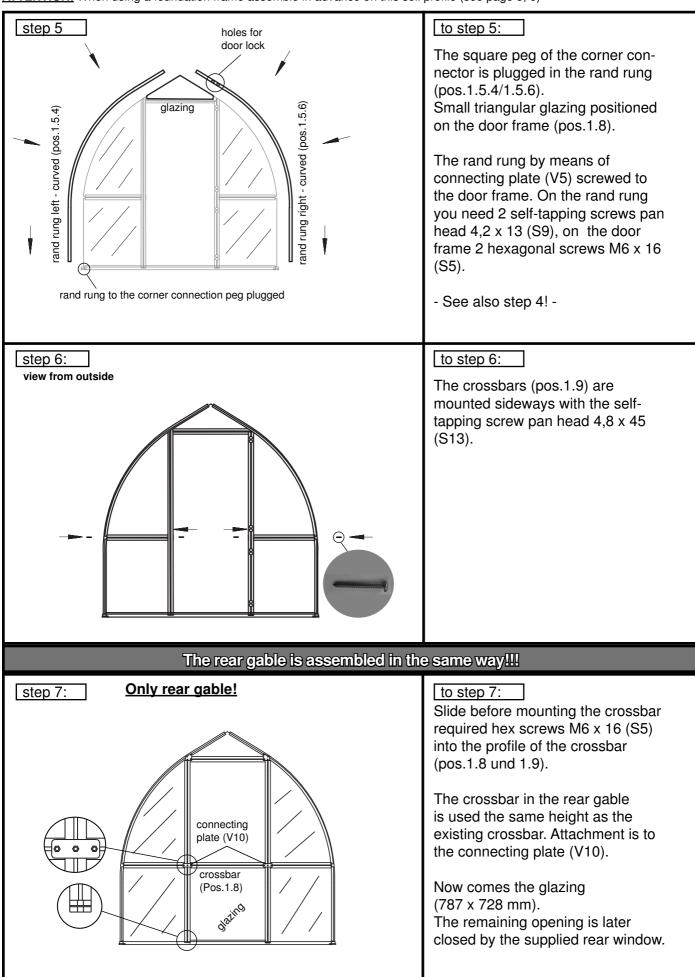
Assembly procedure gable

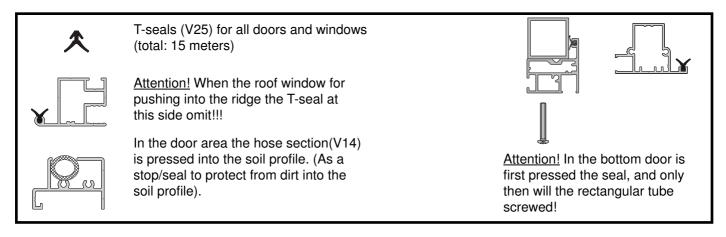
<u>ATTENTION!</u> When using a foundation frame assemble in advance on this soil profile (see page S. 5, 6)



Assembly procedure gable

ATTENTION! When using a foundation frame assemble in advance on this soil profile (see page 5, 6)





Profiles for roof windows (per roof window)

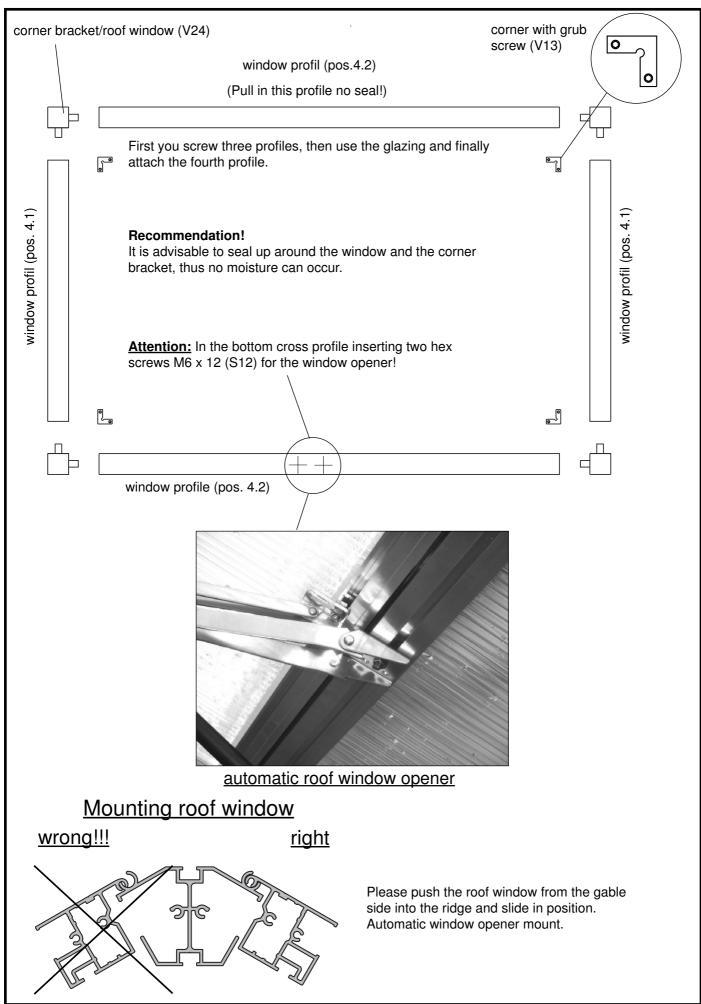
overview	pos.	description	num- ber	length in mm
	4.1	roof window profile	2	541
	4.2	roof window profile	2	953

Content accessories bag roof window (per roof window)

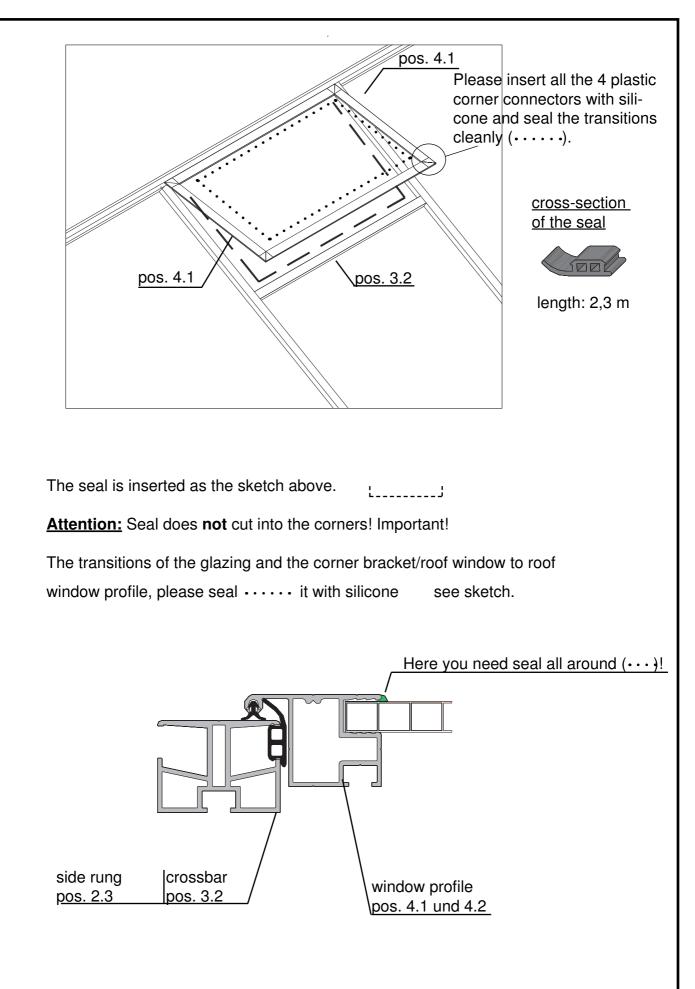
overview	pos.	description/item number	num- ber	length in mm
*	V25	T-seal item no 9999 0032	2 1	641 1052
	V13	corner with grub screw, internal hex and flat point item no 9999 0070		
	V21	allen key item no 9999 0056	1	
0	S12/ S1	hexagonal screw M6 x 12 item no 9999 0124 nut M6 item no 9999 0128	3	
	V24	corner bracket/roof window item no 9999 0005	4	

* **Note:** The seal is bundled in one strand for all doors and windows, please cut accordingly.

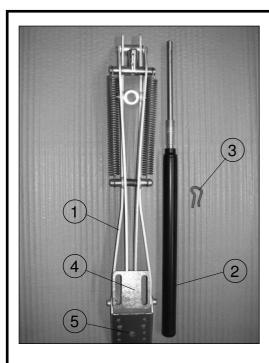
Assembly roof window



Insertion of the seal in the roof window area



Parts window opener



1 window opene	er
----------------	----

- 2 pressure cylinder
- 3 cotter pin
- 4 mounting plate window profile
- 5 mounting plate crossbar



User guide - window opener -

Assembly instructions:

- 1. Check whether the greenhouse window can open and close freely and unhinderedly. Please remove from other manufacturers in advance the existing hand openers.
- 2. First install the window opener with the mounting plate (4) to the roof window profile (pos. 4.2).
- 3. Choose from the mounting plate (5) the middle hole and attach it to the cross rung (pos.3.2) below the roof window.
- 4. The pressure cylinder at the upper end of threaded device secure with the cotter pin in the t-coupling (upper hole).

Ajustment:

The window opener needed after the assembly about 3 - 4 hours to adjust the temperature in the greenhouse. The more you screw the pressure cylinder into the threaded device, the earlier and more highly opens the window. Do you want earlier/higher opening, turn the pressure cylinder clockwise. In a later/lower opening counter-clockwise, with one turn is about 0,5 °C. Please keep in mind that can vary the temperature in your greenhouse and several window openers have small tolerances.

Winter-storage:

If the greenhouse is not "frost-free" hold, we recommend you to remove the entire window opener or only the pressure cylinder. Please keep the window opener in a dry or frost-free place. Before reassembly in the spring especially the cylinder rod and the cylinder threads are greased to check if it is. The cylinder rod check for ease of movement, please.

Profiles for divided revolving door - bottom -

overview	pos.	description			length in mm
	5.3.1	door profile bottom		1	700
	5.6	door profile left	with hole for sash lock	1	692
	5.7	door profile right	with hinge hole	1	692
	5.9	door profile top	with transverse hole	1	700
	5.8	square tube	with transverse hole	1	740

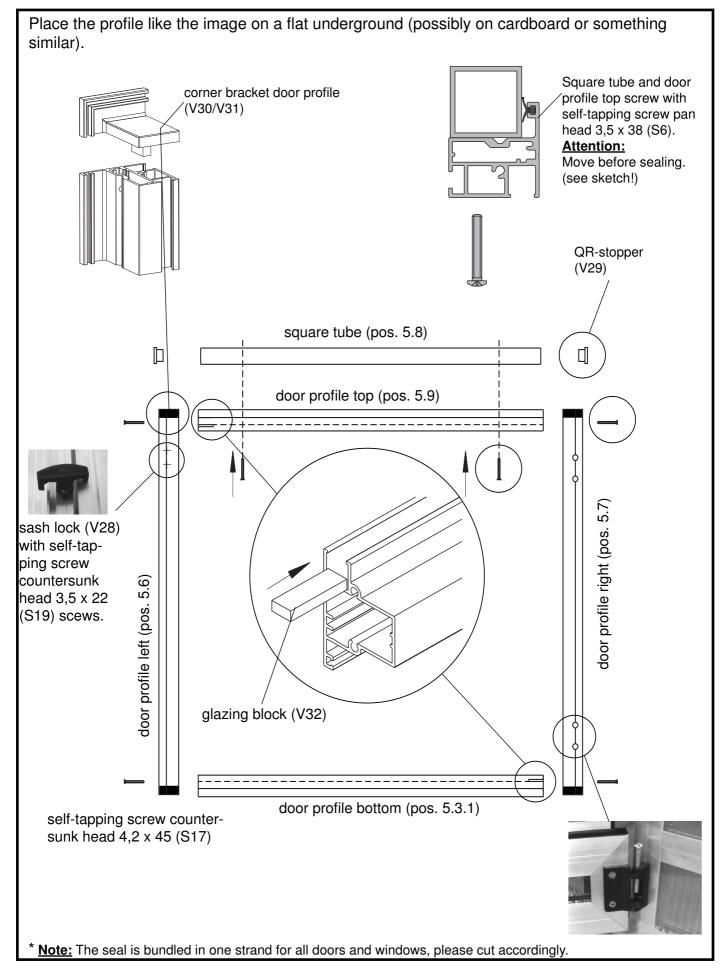
Content accessories bag divided revolving door - bottom -

overview	pos.	description	num- ber	length in mm
	V51	metal hinge, black item no 9999 0358	2	
1º	V28	sash lock item no 9999 0023	1	
	V29	QR-stopper 30 x 30 x 1,5-2 item no 9999 0099	2	
*	V25	T-seal item no 9999 0032	2 2	710 744
	S18	self-tapping screw countersunk head 4,8 x 25 (hinges) item no 9999 0163	8	
	S17	self-tapping screw countersunk head 4,2 x 45 (doors) item no 9999 0160	4	
	S19	self-tapping screw countersunk head 3,5 x 22 (sash lock) item no 9999 0152	2	
()++++++++++++++++++++++++++++++++++++	S6	self-tapping screw pan head 3,5 x 38 (square tube) item no 9999 0138	2	
	V32	glazing block 30 x 10 x 4	2	
	V30/ V31	corner bracket door profile left - item no 9999 0009 right - item no 9999 0011	4	

* Note: The seal is bundled in one strand for all doors and windows, please cut accordingly.

Assembly - divided revolving door - bottom -

view from outside



Profiles for divided revolving door - top -

overview	000	description		number/length in mm		
Overview	pos.	description	Riga S	Riga		
	5.1	door profile left		1 1081	1 1264	
	5.2	door profile right	with hinge hole	1 1081	1 1264	
	5.3	door profile top		1 700	1 700	
	5.4.1	crossbar	with hole for lockable door handle	1 700	1 700	

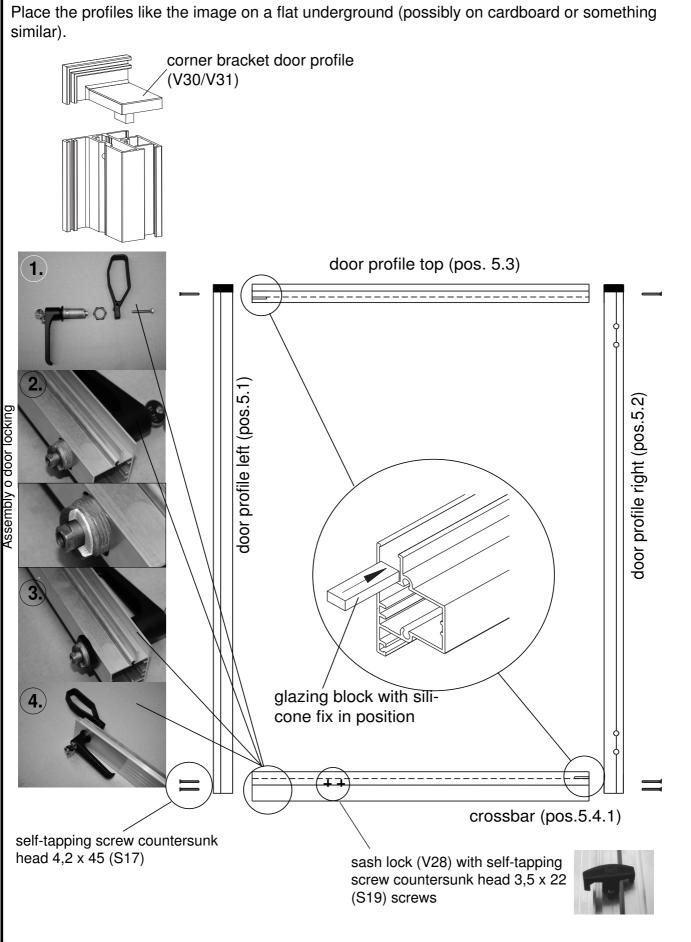
Content accessories bag - divided revolving door - top

overview	200	departmention	number/ler	ngth in mm
Overview	pos.	description	Riga S	Riga
	V52	door handle, lockable outside - item no 9999 0035 inside - item no 9999 0244	1	1
	S17	self-tapping screw countersunk head 4,2 x 45 (door) item no 9999 0160	6	6
	V32	glazing block 30 x 10 x 4	2	2
*	V25	T-seal	2 710	2 710
	V23	item no 9999 0032	2 1112	2 1295
	V51	metal hinge, black item no 9999 0358	2	2
	S18	self-tapping screw countersunk head 4,8 x 25 (hinge) item no 9999 0163	8	8
R	V28	sash lock, small item no 9999 0023	1	1
	S19	self-tapping screw countersunk head 3,5 x 22 (sash lock) item no 9999 0152	2	2
	V33	door locking device item no 9999 0230	1	1
S)	S22	wing-type self drill, screw counters head 3,5 x 13 (door stop) item no 9999 0189	1	1
	V30/ V31	corner bracket door profile left - item no 9999 0009 right - item no 9999 0011	2	2

* Note: The seal is bundled in one strand or all doors and windows, please cut accordingly.

Assembly - divided revolving door - top -

view from outside



Note: The seal is bundled in one strand for all doors and windows, please cut accordingly.

Profiles for rear window

overview	000	description		number/length in mm		
overview	pos.			Riga S	Riga	
	5.1.2	door profile left	with hole for sash lock	1 1081	1 1264	
	5.2	door profile right	with hinge hole	1 1081	1 1264	
	5.3.1	door profile top		1 700	1 700	
	5.4.2	door profile bottom	with hole for window opener	1 700	1 700	

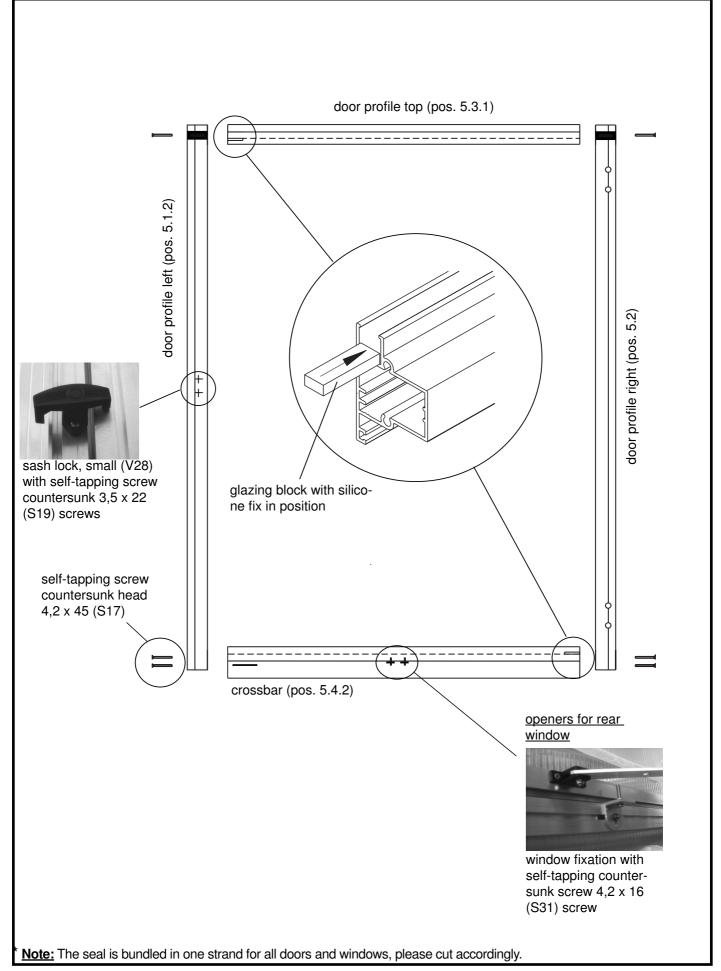
Content accessories bag - rear window -

overview	pos.	description	number/length in mm		
overview	pos.	description	Riga S	Riga	
	S17	self-tapping screw countersunk head 4,2 x 45 (window) item no 9999 0160	6	6	
	V32	glazing block 30 x 10 x 4	2	2	
★ *	V25	T-seal item no 9999 0032	2 710 2 1112	2 710 2 1295	
	V51	metal hinge, black	2	2	
	S18	self-tapping screw countersunk head 4,8 x 25 (hinges) item no 9999 0163	10	10	
	V28	sash lock, small item no 9999 0023	1	1	
	S19	self-tapping screw countersunk head 3,5 x 22 (sash lock) item no 9999 0152	2	2	
	V53	fixation of window item no 9999 0079	1	1	
T	V34	CORNER (fixation of window) item no 9999 0094	1	1	
-	V35	holder (fixation of window) item no 9999 0002	1	1	
	S31	self-tapping screw countersunk head 4,2 x 16 (f. holder V35) item no 9999 0157	2	2	
•	S2/ S1	hexagonal screw M6 x 30 + nut item no 9999 0126 + 9999 0128	1	1	
9	S3/ S4	screw countersunk M6 x 20 + hex nut - self locking item no 9999 0170 + 9999 0151	1	1	
	S20	knurled nut - white item no 9999 0025	1	1	
	V30/ V31	corner bracket door profile left - item no 9999 0009 right - item no 9999 0011	2	2	

* Note: The seal is bundled in one strand for all doors and windows, please cut accordingly.

Assembly - rear window -

view from outside



Assembly procedure - eaves -

ATTENTION! When using a foundation frame assemble in advance on this soil profile (see page 5, 6)

step 8	to step 8:
corner bracket (V12) screwed with self-tapping screw pan head 4,2 x 13 (S9).	First, the lateral soil profiles on the corner bracket on the gable attach.
step 9	to step 9:
ridge profile (pos. 3.3) at the gable and end plate (V11) screw with self-tapping screw pan head 4,2 x 13 (S9)	Now you need several hands or corresponding aids.
ridge profil (pos. 3.3)	Gable upright, hold and secure support.
	The ridge profile (pos. 3.3) now introduce into the existing grooves/
	slots of the gable, so that the profiles is flush with the front.
ends support or hold up it	Now screw the end plate (V11) with self-tapping screw pan head 4,2 x 13 (S9).
step 10	to step 10:
	Slide the side glazing in the soil pro- fiile and rand rung and threading.
	tip: please solve the foil only at the
	margin!
insert the side glazing and thread	
Ψ	

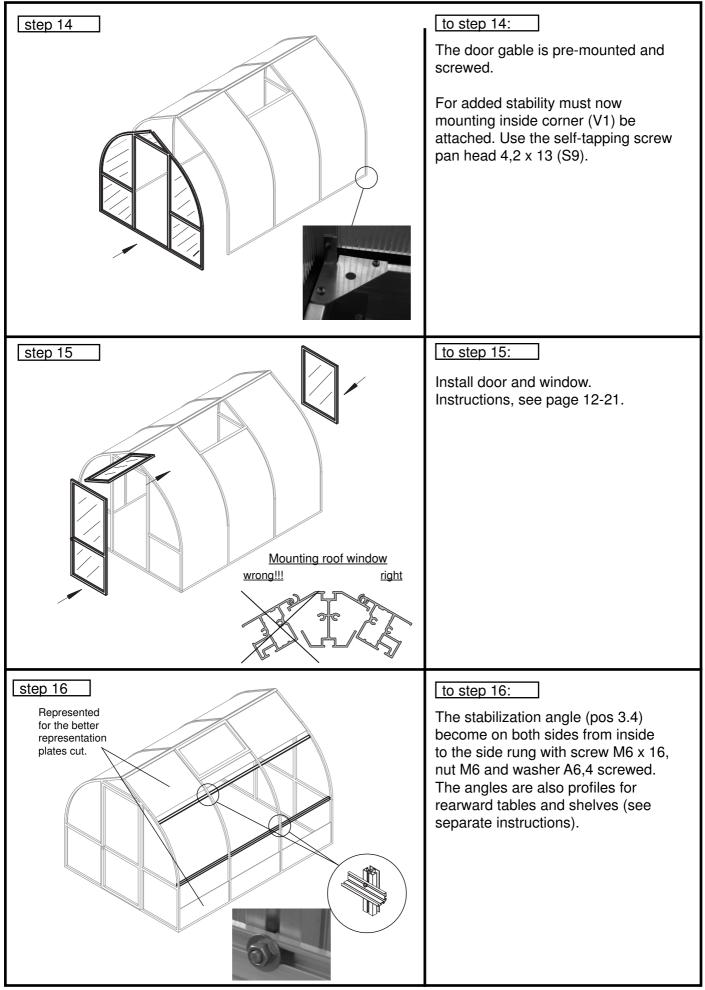
Assembly procedure - eaves -

ATTENTION! When using a foundation frame assemble in advance on this soil profile (see page 5, 6)

step 11 shown enlarged side rung (pos. 2.3)	to step 11: The side rung (pos. 2.3) above into the ridge profile and below into the soil profile to glazing insert it. There, the plate is threading. If neccessary, timber and plastic hammer to get help. <u>Tip:</u> Greasing plastic gliders perhaps a little!
<text></text>	to step 12: Insert further side glazing and rungs. The connecting plate (V4) from inside screwed with screw hex M6 x 16 and nut M6.
	to step 13: Insert the remaining plates and rungs now.

Assembly procedure - eaves -

<u>ATTENTION!</u> When using a foundation frame assemble advance on this soil profile (see page 5, 6)



glas plan with ISO-cellular sheets 10 mm

type of house	gable above	gable below	gable triangular	door/ window	div. revolv. door/bottom	rear gable below	side plate	roof window	below roof window
	Q a	ے a	q	ے a	ے a	م a	۹ a	م a	ے a
	number	number	number	number	number	number	number	number	number
	size (a x b)	size (a x b)	size (a x b)	size (a x b)	size (a x b)	size (a x b)	size (a x b)	size (a x b)	size (a x b)
Riga II S	4	4	2	2	1	1	3	1	1
	730 x 1135	730 x 728	779 x 239	724 x 1031	724 x 676	787 x 728	1048 x 2634	974 x 565	1048 x 1984
Riga III S	4	4	2	2	1	1	5	1	1
	730 x 1135	730 x 728	779 x 239	724 x 1031	724 x 676	787 x 728	1048 x 2634	974 x 565	1048 x 1984
Riga IV S	4	4	2	2	1	1	6	2	2
	730 x 1135	730 x 728	779 x 239	724 x 1031	724 x 676	787 x 728	1048 x 2634	974 x 565	1048 x 1984
Riga III	4	4	2	2	1	1	5	1	1
	1048 x 1319	1048 x 728	779 x 239	724 x 1215	724 x 676	787 x 728	1048 x 3000	974 x 565	1048 x 2345
Riga IV	4	4	2	2	1	1	6	2	2
	1048 x 1319	1048 x 728	779 x 239	724 x 1215	724 x 676	787 x 728	1048 x 3000	974 x 565	1048 x 2345
Riga V	4	4	2	2	1	1	6	4	4
	1048 x 1319	1048 x 728	779 x 239	724 x 1215	724 x 676	787 x 728	1048 x 3000	974 x 565	1048 x 2345