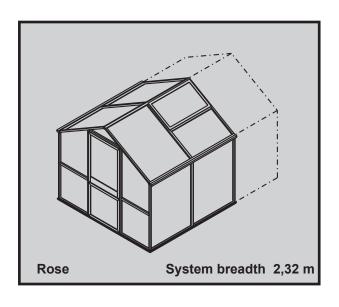


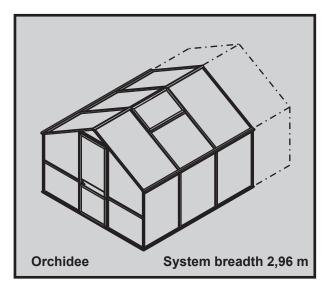
Rose / Orchidee

Technical changes reserved.

Mounting instruction Basic kit

As at 02/2005





Dear garden friend,

Congratulations for the purchase of an aluminum greenhouse from



The erection is simple. First read the mounting instruction and follow this step by step.

Parts and piece list

Start with the basic kit (please do not open all the boxes at the same time) and do not confuse about the numerous single parts. Before you start with the assembly please check with the piece list, if all the parts are there. Every box is checked by a quality control before closing it and consequently missing parts can nearly be excluded. Should there be any lacking parts, please state the mistake in position.

Location

Please choose, as far as possible, a sunny place for your greenhouse. Avoid the shadow of buildings and trees. For vegetables like tomatoes, cucumbers and melons you have to place your greenhouse in the Northern-Southern direction. For flowers and pot plants it is the Eastern-Western direction.

Attention:

If possible, the greenhouse should be set up at a wind-protected place and not in stormy weather. It is dangerous to have stand a partly assembled house.

An assembly according to the rules lets resist this greenhouse heavy wind. The manufacture is not responsible for any damages being arisen by improper assembly or acts of God!

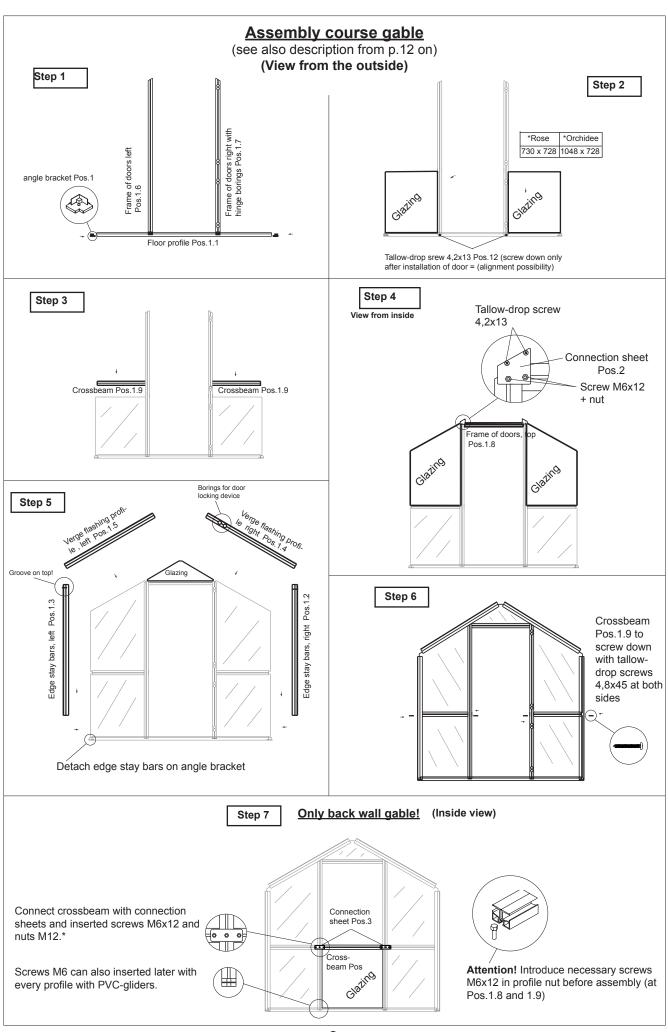
The assembly must be executed by at least two persons!

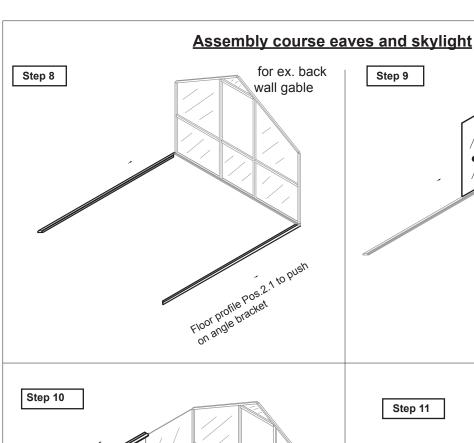
Work with safe, proper tools and be careful for a secure standing of the ladder during the assembly (danger of accident).

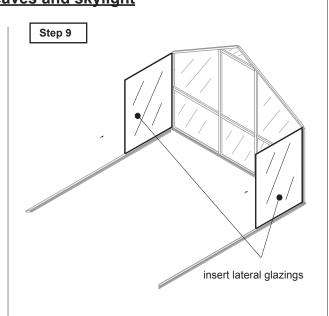
Do only work with gloves (danger of injury, danger of cutting)!

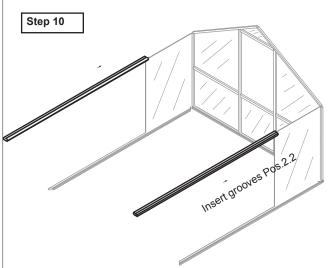
For the assembly you need the following tools:

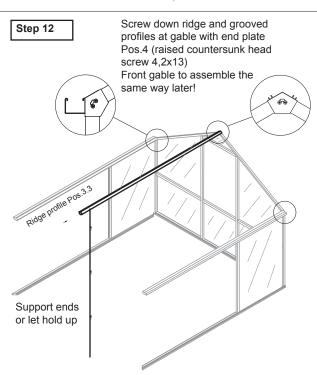
- 1 pc screwdriver for recessed-head screws, size 2
- 1 pc open-jawed wrench 10 mm
- 1 pc screwdriver for slotted screws
- 1 pc Allan key 3 mm (in the bag of accessories for skylight)
- 1 pc water level
- 1 pc ladder
- 1 pc file to remove possible burs at the profiles
- 1 pc rubber hammer
- 1 pc measuring tape

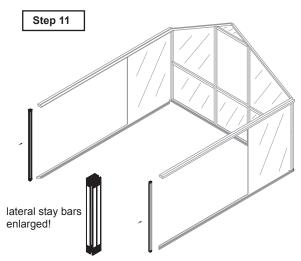




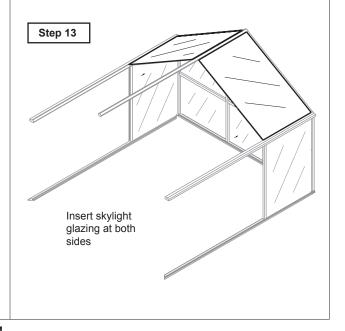


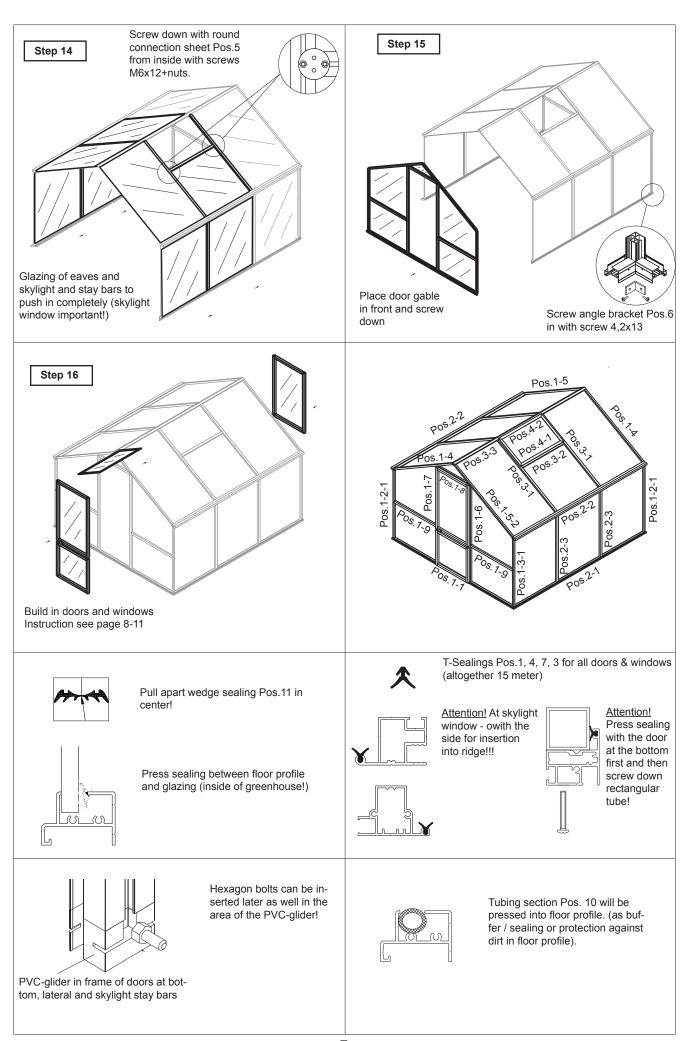






Insert lateral stay bars Pos.2.3 at top into grooved profile and at bottom into the floor profile. Push straight on up to glazing and "thread" pane.





<u>Please check according to tables if the components are complete</u> <u>Contents of main box - basic construction-</u>

Profiles for both gables

					Length mn	
Detail	Pos.	Designation	Ros		Orchid	lee
			II	III	III	IV
	1.1	Floor profile -gable-	2 2238	2 2238	2 2874	2 2874
	1.2.1	Edge stay bar left	2 1453	2 1453	2 1453	2 1453
	1.3.1	Edge stay bar right	2 1453	2 1453	2 1453	2 1453
	1.4	Verge flashing profile left	2 1283	2 1283	2 1650	2 1650
	1.5	Verge flashing profile right	2 1283	2 1283	2 1650	2 1650
	1.5.2	Verge flashing profile right with Borings	2 1283	2 1283	2 1650	2 1650
	1.6	Frame of doors left Profile with slope	2 1854	2 1854	2 2037	2 2037
	1.7	Frame of doors right Profile w. slope a. boring	2 1854	2 1854	2 2037	2 2037
	1.8	Frame of doors top	2 758	2 758	2 758	2 758
	1.8	Crossbeam in the side without door	1 758	1 758	1 758	1 758
	1.9	Crossbeam right + left	4 702	4 702	4 1020	4 1020

Profile for eaves and roof

Detail	Pos.	Designation	Ros		Length mn Orchide	
2 0 (0.11)		2 00.9.10.001	II	III	III	IV
	2.1	Floor profile -side-	2 2072	2 3130	2 3130	2 4188
	2.2	Grooved profile	2 2137	2 3195	2 3195	2 4253
	2.3	Lateral stay bar	2 1445	4 1445	4 1445	6 1445
	3.1	Trellis for glass roofs	2 1283	4 1283	4 1650	6 1650
	3.2	Crossrail/skylight	1 1018	1 1018	1 1018	1 1018
	3.3	Ridge profile	1 2137	1 3195	1 3195	1 4253

Accessories bag basic construction

Detail	Position	Designation	Amount
	1	Angle bracket / floor profile	4
. •	2	Connection sheet Verge flashing profile/frame of doors	4
0 0 0	3	Connection sheet35x90 Fixing crossbeam-back wall	2
00	4	Ridge / grooved end plate	6
(°°)	5	Connection sheet, round for skylight crossbeam	2
	6	Angle/floor profile 30x30x20 screwing down of corners from inside	4
	7	Cover Edge stay bar - boring crossbeam	4
	8	Gutter piece	2
	9	Gutter stopping	2
	10	Tubing section 760 lg Sealing of door sill	1
74	11	Wedge sealing 3-5 mm Sealing of inside floor profile	see table below
{ammmo}	12	Tallow-drop screw 4,2x13 Frame of do./floor prof./cover sheet/angle Pos.6	35*
{	13	Tallow-drop screw4,8x45 Gable	6
	14	Hexagon bolt M6x12 + nut screws for insertion	30*
*	15	Fastening angles 74/30 x 33 -bent at right angles- for fixing of the greenhouse on foundation by customers (inapplicable with foundation frame!)	10

^{*} We recommend to use hexagon head cap wood screws and pegs included for pegging. These are not within the scope of delivery!

Amount wedge sealings 3-5 mm

Length Model	712	768	1030
Rose II	4	1	4
Rose III	4	1	6
Orchidee III	-	1	10
Orchidee IV	-	1	12

^{*} plus substitute screws

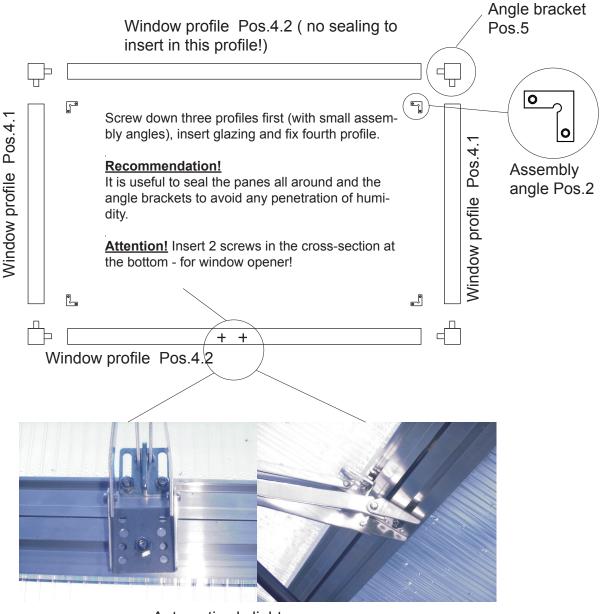
Profiles for skylights

Detail	Pos.	Designation	Amo	ount/Length
	4.1	Window profile roof	2	541
	4.2	Window profile roof	2	953

Contents accessories bag skylight

Detail	Pos.	Designation	Amount/Length	
*	1	T-sealing	2 1	641 1052
0	2	Assembly angle w. setscrew	4	
	3	Allan key	1	
⊨	4	Hexagon bolt M6x12 + nut	3	
<u></u>	5	Angle bracket / skylight	4	

^{*} Annotation: sealing is bunched in one hank for all the doors and windows, cut to size please.



Automatic skylight opener

Profiles for divided revolving door -at the bottom-

Detail	Pos.	Designation		Amour	nt / Length
	5.3.1	Door profile	at the bottom	1	700
	5.6	Door profile with borings for sash lock	left	1	734
وت ت	5.7	Door profile with hinge borings	right	1	734
	5.9	Door profile w. cross holes	top	1	700
	5.8	Rectangular tube w. cross	holes	1	740

Accessories bag Geteilte Tür -unten-

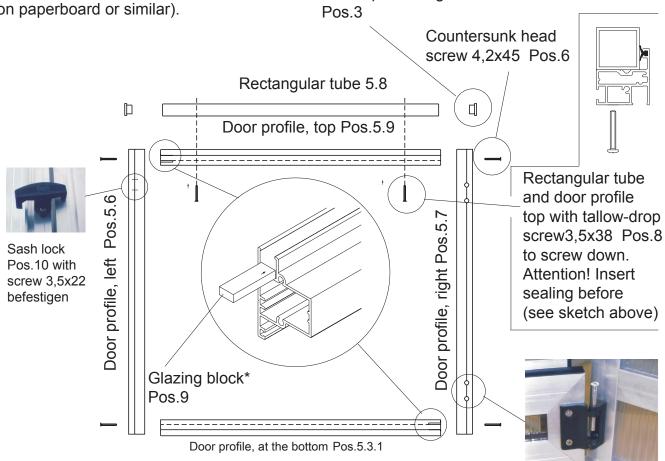
Detail	Pos.	Designation	Amount / Length
Ũ	1	Hinge	2
(h	2	Sash lock	1
Д	3	End cap for rectangular tube	2
★ *	4	T-sealing	2 710 2 744
Junion 1997	5	Countersunk head screw 4,8x25 / Hingee	8
Manana -	6	Countersunk head screw 4,2x45 / Türen	4
 	7	Countersunk head screw 3,5x22 / Sash lock	2
(seconors>	8	Tallow-drop screw3,5x38 / Rectangular tube	2
	9	Glazing block 30x10x4	2

View from outside

Lay out the profiles according to illustration on an even surface (possibly on paperboard or similar).

Annotation: Sealing is bunched in one hank for all the doors and windows, cut to size, please.

End cap Rectangular tube

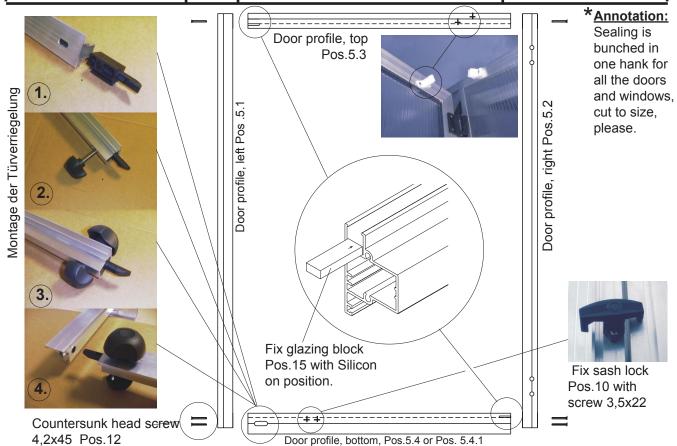


Profiles for divided revolving door -top-

Detail	Pos.	Designation		Amoun	t / Length
	5.1	Door profile	left	1 x 1102 Rose	e / 1 x 1285 Orch.
	5.2	Door profile with Hinge borings	right	1 x 1102 Ros	e / 1 x 1285 Orch.
	5.3	Door profiles	top	1	700
	5.4	Door profile w. long hole at the bo for bar & boring for sash lock	ttom	1	700
Special accessories -can be delivered for an extra charge-	5.4.1	Door profile with boring at the bott for lockable door handle	om	1	700

Accessories bag divided door -top-

Detail	Pos.	Designation	Amount / Length
	1	Locking thorn	1
©	2	Knurled nut -small-	1
	3	Threaded rod -M10-	1
Ö	4	Knurled nut -big-	1
	5	Countersunk head screw 4,2x45 / Tür	8
	6	Glazing block	2
*	7	T-sealing	2 x 710 2 x 1112 Rose/ 2 x 1295 Orch.
	8	Hinge	2
	9	Countersunk head screw 4,8x25 / Hinges	8
(h	10	Sash lock	1
	11	Countersunk head screw 3,5x22 / Sash lock	2
[5<]	12	Door locking device	1
{\ammu>	13	Tallow-drop screw3,5x13/door locking device	4

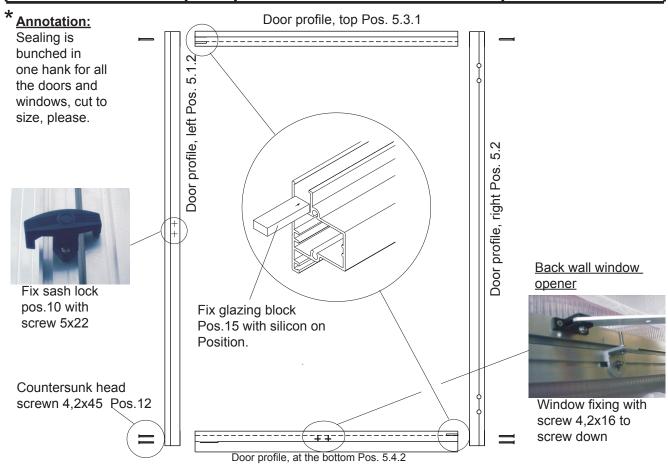


Profiles for back wall window

Detail	Pos.	Designation		Amoun	t / Length
	5.1.2	Door profile w. borings for sash lock	left	1 x 1102 Rose	/ 1 x 1285 Orch.
	5.2	Door profile	right	1 x 1102 Rose	e / 1 x 1285 Orch.
	5.3.1	with hinge borings Door profile	top	1	700
	5.4.2	Door profile w. borings for window opener	at the bottom	1	700

Accessories bag back wall window

Detail	Pos.	Designation	Amount / Length
	1	Countersunk head screw 4,2x45 / window	6
	2	Glazing block	2
★ *	3	T-sealing	2 x 710 2 x 1112 Rose/ 2 x 1295 Orch
	4	Hinge	2
	5	Countersunk head screw 4,8x25 / Hingee	8
(ja	6	Sash lock	1
Ammun	7	Countersunk head screw 3,5x22 / Sash lock	2
0 0 0 0 0	8	Window fixing	1
	9	Angle / window fixing	1
	10	Holder / window fixing	1
	11	Countersunk head screw 4,2x16 / Holder Pos.10	2
	12	Hexagon bolt M6x30 + Nut	1
	13	Countersunk screw M6x20+ lock nut	1
()	14	Knurled nut -white-	1



Glasplan

unterhalb Dachfenster	9	Anzahl Größe (a,b)	1 1048 × 643	1 1048 × 643	1 1048 × 1011	1 1048 × 1011
Dachfenster	q	Anzahl Größe (a,b)	1 974 × 565	1 974 × 565	1 974 × 565	1 974 × 565
Dachscheibe	q	Anzahl Größe (a,b)	3 1048 × 1310	5 1048 × 1310	5 1048 × 1677	7 1048 × 1677
Seitenscheibe	q	Anzahl Größe (a,b)	4 1048 × 1457	6 1048 × 1457	6 1048 × 1457	8 1048 x 1457
Rückwand- unterhalb	q	Anzahl Größe (a,b)	1 787 × 728	1 787 × 728	1 787 × 728	1 787 × 728
geteilte Tür unterhalb	_ q 	Anzahl Größe (a,b)	1 724 × 676	1 724 × 676	1 724 × 676	1 724 × 676
Tür/Fenster	q	Anzahl Größe (a,b)	2 724 × 1031	2 724 × 1031	2 724 × 1215	2 724 × 1215
Giebel- dreieck	Q O	Anzahl Größe (a,b)	2 779 x 239	2 779 x 239	2 779 × 239	2 779 × 239
Giebel unterhalb	q	Anzahl Größe (a,b)	4 730 × 728	4 730 × 728	4 1048 × 728	4 1048 × 728
Giebel oberhalb	q	Anzahl Größe (a,b)	4 730 × 1135	4 730 × 1135	1048 × 1319 1048 × 728	4 1048 × 1319
Haustyp			Rose II	Rose III	Orchidee III	Orchidee IV

Foundation frame (extra accessories)

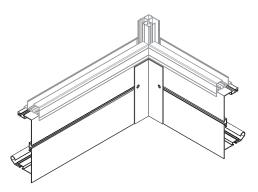
Profiles for foundation frame

Detail	Pos.	os. Designation		Amount/Length mm			
Detail	1 03.			Rose		Orchidee	
			II	III	III	IV	
	6.1	Foundation frame profile	2	2	2	2	
		·	2199	2199	2835	2835	
	6.2	Foundation frame profile	2	2	2	2	
		·	2033	3091	3091	4149	
Cr							
	6.3	Angle bracket/foundation	4	4	4	4	
		frame 40/40 x 135	135	135	135	135	
	6.4	Fixing plate (stay bar	10	10	10	10	
9	0.4	- foundation frame)	135	135	135	135	

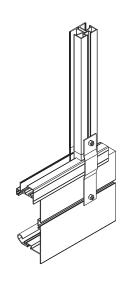
Assembly of foundation frame



Each foundation frame is to turn into the floor profiles. Pos.6.1 is intended for the gable side and Pos.6.2 for the side with the eaves.



Insert one screw M6x12 into each of the corners of the foundation frame profiles, detach angles and screw down with nut M6.



For stabilization purposes of the house some plates (Pos. 6.4) will be screwed on the foundation frame and lateral stay bars or frame of doors by means of pulled in screws M6.

Good advice for a quick and perfect assembly of the greenhouse from KGT

Most of the assembly can be done by you alone. The assembly for gable and lateral walls takes 2-4 hours according to your skills. It is best if you have further two persons being able to hold it for approx. half an hour when putting the greenhouse upright.

If you want to go on mounting it alone you have to look for a secure, suitable mounting course by means of stay bars, ladder or other fixings.

Unlike the most usual greenhouses, the mounting of the aluminum profiles is done together with the glazing. This results into an absolutely secure glazing and the biggest possible stability of the greenhouse.

You obtained 3 to 5 boxes depending on the greenhouse.

- 1 x basic kit \rightarrow contents see p. 6 + 7
- 1 x windows and doors \rightarrow contents see p. 8 11
- 1 x glazing (for bigger houses 2 boxes)

Please stay all the boxes in a dry place and protected against sunlight (see note below).

Please first open and unpack only the main box with the basic kit to avoid a mixing of the many different parts.

Please start with the assembly of the greenhouse gables. Door wall gable and back wall gable are nearly the same.

Push the profile of the frame of doors pos. 1.6 –right- and pos. 1.7 –left- (profile with 8 borings with a slope of 30° as well as a black PVC-glider) up to the smaller borings in the centre of the floor profile. The slopes there have to point to the outside direction. Then detach the angle brackets pos. 1 (see step 1).

Already now you need the small lateral glazing (measurements see table*). Push it with the web direction – vertical – into the floor profile and push laterally into the profile of the frame of doors (see step 2).

*Rose	*Orchidee
730 x 728	1048 x 728

Important note:

The ISO-cellular sheets, that is the glazing, are always to build in with the UV-coated side to the outside. On the protection foil you find a corresponding note or a blue foil. Loosen the protection foils only at the edge and the complete rest of the foil only after the finished assembly. With some days of insolation the foil can burn "tight" on the plates and is to stripe off with difficulty.

Do not stripe it completely off when unpacking the goods because then you cannot see the side with the UV-protection.

Now detach the crossbeam pos. 1.9 from the top onto the glazing (see step 3). Then the beveled glazing is to put in the same way. Joint the frame of doors with the connection plate pos. 2 (see step 4).

Attention!

In advance 2 screws have to be screwed in both vertical frames of doors and 2 screws into the horizontal frame of doors.

On the square head of the angle bracket you detach the edge stay bars pos. 1.2 + pos. 1.3 (length 1447 mm). Take care that the groove is on the top! Do not position any triangular glazing onto the frame of doors.

The verge flashing profiles in pos. 1.4 and 1.5 must be detached onto the slopes and be joined together with the profile of the frame of doors by means of a trapezoid clamping plate. At the verge flashing profile with two sheet metal screws 4.2×13 , at the profile of the frame of doors with M6 x 12 (see step 4 + 5).

Screw down the crossbeam by means of sheet metal screws 4,8 x 45 (see step 6).

- Note 1: If the profiles have any PVC-gliders you can still later push in the required screws through the opening of the PVC-glider!
- <u>Note 2:</u> One verge flashing profile has two small openings for the fixing of the door locking device, thus you have to determine now where the door should be mounted.

The back wall gable is to assemble the same way. Please build in one crossbeam in pos. 1.8 (length 758 mm) exactly in the height of the already existing crossbeams. Fix with the rectangular connector 35 x 90 with 3 borings (see step 7).

Attention! Here you put in the glazing 787 x 728 mm before! The above remaining opening will be closed later by the intended standard back wall window.

Assembly of the lateral and skylight segments (see steps 8 - 15)

Now you need some more assistance or corresponding aids!

Set the gable upright, hold it or support it safely (see step 8).

At first the lateral floor profiles (measurement see table*) are to detach on the angle bracket of the gable (see step 8). A lateral glazing is to push into the floor profile and the edge profile. It is best, if at both sides. Thus the gable stands safely (see step 9).

*Rose II	2167 mm
*Rose III	3225 mm
*Orchidee III	3225 mm
*Orchidee IV	4284 mm

Now push the grooved profiles onto the glazing and joint together with the end plate pos. 4 and screw 4,2 x 13 (see step 10).

The ridge profile is now to introduce into the existing nuts / slots of the gable that the profile is flush in the front. Now screw together with the ridge / grooved end plate by means of sheet metal screws $4,2 \times 13$ (see step 12).

The next is to push in a pane of the skylight glazing into the grooved profile and into the verge flashing profile. Introduce roof stay bars into the grooved profile and eaves profile and push up until the glazing (thread-up glazing). The remaining panes are to complete.

Please determine the position of the window in time!

Here put in the short pane of the skylight glazing and close with the window crossbeam pos. 3.2. The round connection plates have to be used to screw (see step 14).

Now the second gable in the foot is to connect with the floor lengthwise profile in the same way already known. Push the grooved profile and ridge profile into the nuts / slots of the gable profiles. Screw down as well with the grooved and ridge end plates.

Now a small angle $30/30/20 \times 2$ can be screwed in by means of sheet metal screws 4,2 x 16 to secure the floor profiles (see step 15). If you use a foundation frame this angle not urgently necessary, as the foundation frame has an L-connection (see p. 13).

Now the skeletal structure is finished – topping-out ceremony is the order of the day!

Please open now the accessories box. Here you find:

1 pc skylight including automatic window opener contents see p. 8
1 pc divided revolving door contents see p. 9 + 10
1 pc back wall window contents see p. 11

These parts are to mount according to the instructions (see p. 8 - 11).

Doors and back wall window can be mounted at both gables. Borings for the door hinges / bands exist in every profiles of frames of doors. However, please take care that we have intended the borings for the door locking device at only one verge flashing profile (see step 5). Should you mount the door on the other side, the corresponding borings have to be transferred then.

The skylight is to push from the lateral into the ridge (see step 16). This system is generally very simple and explains itself.

Further useful notes:

Erection with a foundation frame:

This is the simplest but also the securest erection of a greenhouse. The foundation frame is hooked non-positively into the floor profile of the greenhouse and screwed down in the edges by an angle bracket (see p. 13).

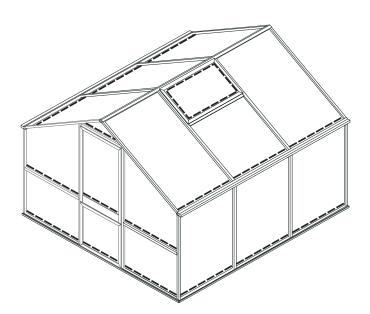
It is best and easiest to assemble the foundation frame together with the greenhouse! But this is also possible later – without any energy. Then you only must lift the greenhouse (it is best to do this at one side) and laterally hook in the foundation frame into the floor profile.

Erection with the foundation frame:

At first you have to dig a small ditch, cut of the spade approx. 10 - 12 cm deep, according to the given measurements of the foundation frame. In each of the four corners you horizontally place a cobblestone as a support for an exact level compensation. This avoids a possible sinking of the greenhouse. Then the greenhouse with the foundation frame is to put in this ditch and the foundation frame is to fill by the excavated material. It is useful to lay down there some garden plates or flagstones in order to avoid any dirty splashes at the greenhouse due to strong rain. Besides, working around the greenhouse is simpler, e.g. mowing the lawn.

Question: Is it necessary to "seal" the greenhouse or greenhouse glazing respectively? Principally: not.

However, we recommend to seal the horizontal transitions from the glazing to the profile (see sketch \rightarrow broken lines ---) with neutrally linking, transparent silicon in order to have the most possible small amount of water and thus little dirt in the glazing reception.



Advantage: In the long term the greenhouse has a better appearance. The tendency to the algae formation just in this area decreases tremendously.

Humidity / water can also appear within the glazing/cellular sheets according to the weather situation because the PVC-sheets are not "steam-diffusion-tight", that means that humidity in the form of steam penetrates into the sheet. This is a purely optical disadvantage which cannot be avoided.

The sheets cannot suffer any damage, even not with frosty days.

Attention: Use only <u>"neutrally linking"</u> silicon due to possible stress cracks in the PVC-glazing. This is the most common silicon sealant being available with any DIY superstore or with your KGT expert dealer priced at $4 - 6 \in /310$ mm cartridge.

Cleansing and maintenance:

Clean the greenhouse with much water only (for ex.: with a car wash-brush or a HP-cleaning apparatus. You can additionally use any purifiers.

We wish all the buyers and users of this KGT-greenhouse much fun with their hobby of gardening and have much success with growth!

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.



Fundamentpläne Rose II + III / Orchidee III

alle Maße in [cm]

Gründung Ihres Gewächshauses mit einem "Streifen-Fundament"

B1

Sollten Sie keinen Fundamentrahmen gekauft haben, muss die sichere Gründung mittels Streifenfundament erfolgen.

Erstellen Sie dann bitte ein solches Fundament gemäß untenstehenden Maßvorgaben.

20

= Außenkante Gewächshaus = Außenkante Fundament

Sie haben auch die Möglichkeit Ihr Gewächshaus auf Tiefbordsteinen zu gründen (z.B. $50 \times 25 \times 8$ cm oder besser $50 \times 30 \times 10$ cm). Beachten Sie bitte, dass das Fundament gleichmäßig waagerecht hergestellt wird.

lΠ

Das Gewächshaus dann bitte mit den mitgelieferten Winkeln mit Dübel 8/10 mm mindestens 2 Stck. pro Seite) sicher im Beton verankern.

Schrauben und Dübel gehören nicht zum Lieferumfang.

nit den m sicher im nicht zum	Fund	B1	249	249
Das Gewächshaus dann bitte mit den m (mindestens 2 Stck. pro Seite) sicher in Schrauben und Dübel gehören nicht zum			Rose II	Rose III
Das Gewäc (mindesten Schrauben		•		
mo 08-08 frostfrei gründen	<u></u>		B2	

		B2	233	233	296	296
	ınt		232	338	338	443
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