

Lean-to Greenhouse Assembly Instructions

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**For
6ft x 4ft (1.93m x 1.27m)
Lean-to model**











Frames

























Profile	Description	Qty	Code
	Side - Lower Horizontals (6ft)	1	A1-6
	Side - Upper Horizontals (6ft) (Gutter Bar)	1	A2-6
	Side Glazing Uprights	2	A3
	Side and End Long Diagonal Brace	4	G1
	Roof and Non-Door End Polycarb-Dividing Horizontal Braces	3	D4
	Door and Back End Glazing Door Vertical (Left)	1	B3-1
	Door and Back End Glazing Door Vertical (Right)	1	B3-2
	Corner Verticals	2	H1
	Door and Back End Lower Horizontal (Left)	1	C1-1
	Door Runner Support (Left End)	1	C2-1
	Door Runner Support (Right End)	1	C2-2
	Door Upright - Wall End (Left)	1	C3-3
	Door Upright - Wall End (Right)	1	C3-4
	Roof Edge Beam (Left)	1	C4-3
	Roof Edge Beam (Right)	1	C4-4
	Door Runner	1	C5-1
	Front and Back End Short Horizontal Braces	2	G1-1
	Ridge Beam	1	D2
	Roof Glazing Bar	2	D3-1
	Door Upright	2	E1
	Door - Upper Horizontal	1	E2



Frames (continued)

Profile	Description	Qty	Code
	Door - Lower Horizontal	1	E3
	Door - Mid Horizontals	2	E4
	Door Runner Mount	1	E5
	Door Runner End Support	1	E6
	Vent Horizontal Mount	1	F1
	Vent Back Bar	1	F2
	Vent Front Bar	1	F3
	Vent Side Bars	2	F4

Components

Profile	Description	Size (mm)	Qty	Code
	Corner Plates		2	G2
	Door Runner Support Brackets	15	2	E9
	Profile End Caps		4	G3
	Door Screws	No 6 x 19	14	619
	Door Bottom Runner Screws	No 6 x 19 (4mm)	2	619W
	Door Runner Wheel Bolts	M4 x 16	2	M416
	Nut For M416	M4	2	M4-1
	Washer For M416	M4	2	M4-2
	Door Spacer Bolt	M6 x 40	1	M640
	Nut For M640	M640	1	M6-1
	Door Seal	1610	2	E10
	Door Base Sliders		2	E11
	Door Runner Wheels		2	E12
	Door Gear Spacer		1	E13
	Door Handle		1	E14
	Vent Stay		1	F10
	Vent Catch		2	F12
	Vent Catch Screws	No 6 x 6	8	66
	Glazing Clips		112	G4
	Rubber Glazing Seal	3000	1	G5
	Gutter End Caps		2	A20
	Bolts	M6 x 10	70	M610
	Nuts For M6	M6	70	M6-1
	Spanner		1	M10



Introduction

Safety

Precautions when assembling a greenhouse:

The wearing of protective gloves and stout footwear is essential when handling glass and recommended even for Polycarbonate which does not shatter but has sharp edges.

Protective goggles are recommended whilst handling glass and the glazing spring clips.

Assembly of the greenhouse frame is much easier with two people and essential for glazing with glass.

Site selection:

Choose a site in maximum light, ideally with no direct shade.

Avoid overhanging trees as much as possible as leaves will make regular cleaning necessary and broken branches are a potential hazard.

Small trees, bushes or fences nearby can be helpful, acting as a wind break.

A position close to the house will make access easier for watering and tending plants and also make it easier to supply power cables or automatic watering systems if required.

Site selection & preparation:

The site must be prepared so that the base of the greenhouse is level all round and checking with a spirit level is required.

Base options & construction:

The use of our purpose-made, galvanised steel base is recommended. They are made to fit these greenhouses.

It is easier to maintain a level and square foundation.

They are easy to install, requiring little expertise: full instructions are included in the pack.

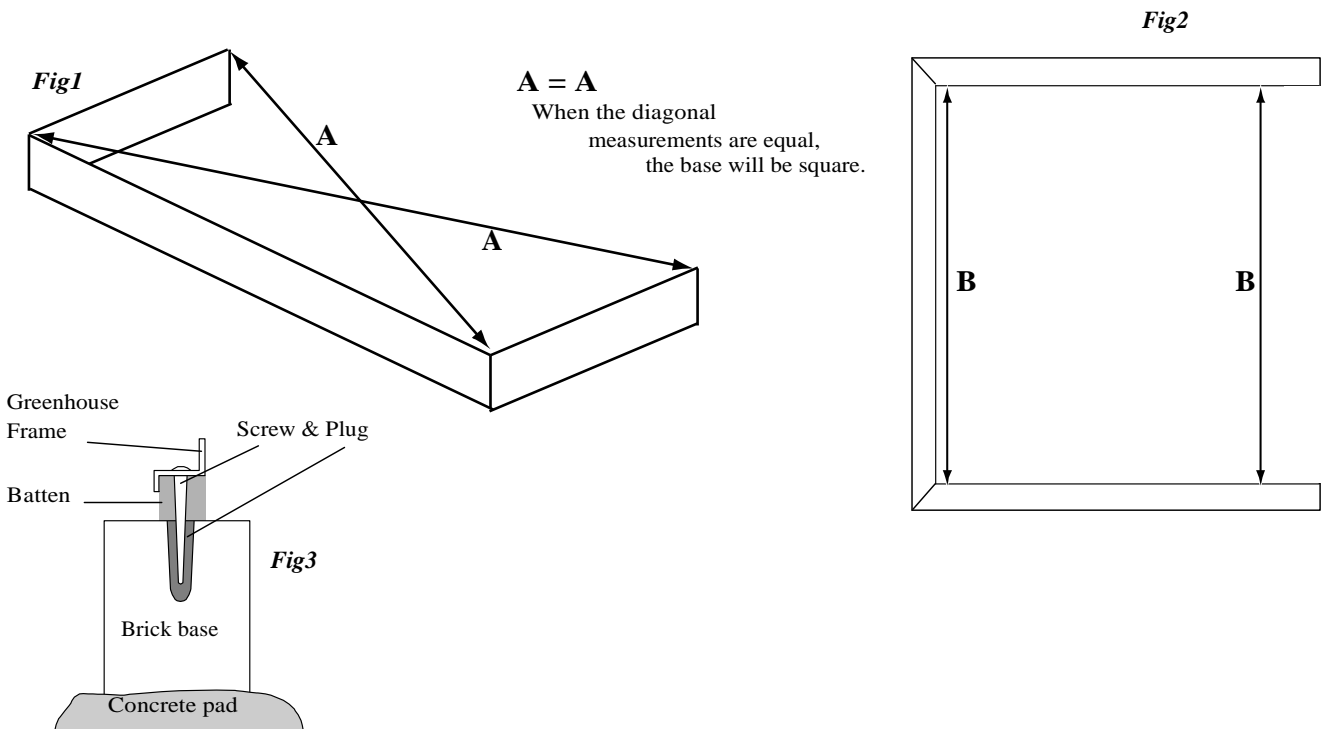
Bases can also be constructed from bricks, blocks, or mounted on a concrete pad.

The bricks or blocks should be cemented onto firm and level concrete footings and the greenhouse frame drilled and screwed to the base. **Fig3.**

If a concrete pad is made, it is important that this slopes away from buildings and walls to prevent water damage. Time must be allowed for any concrete or cement to dry before mounting the greenhouse.

The base must be square or the greenhouse will be distorted. **A=A Fig1 & B=B Fig2.**

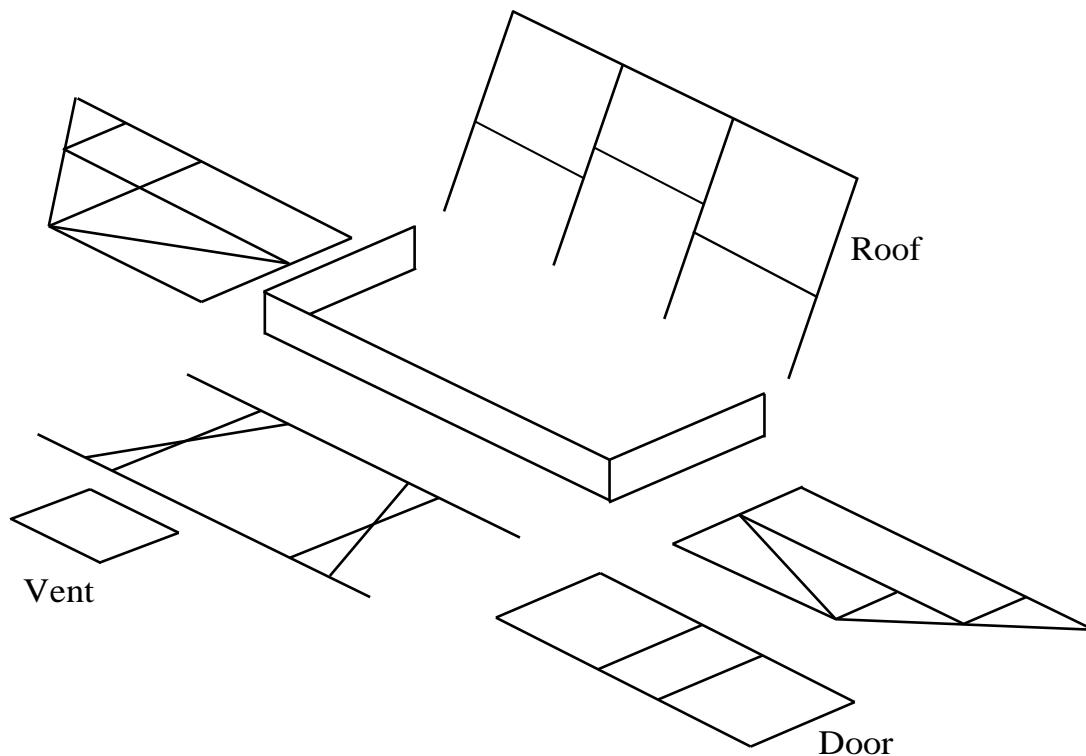
The greenhouse must be firmly fixed to the ground and to the wall: the base should be constructed and installed before the greenhouse assembly is undertaken.



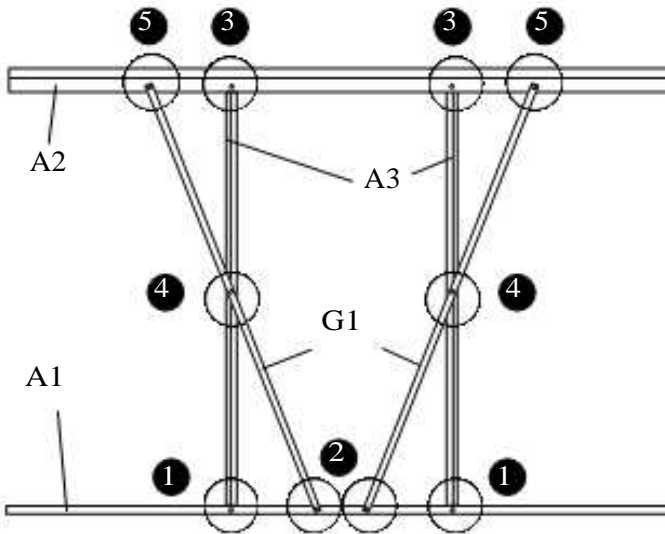
Before you start:

IMPORTANT: Read the instructions completely before starting assembly.

- Construct the base first so that the greenhouse can be securely mounted when completed.
- Find someone to help you: it is much easier with someone to hold parts, pass tools etc. This is not very heavy work so would suit most able-bodied people.
- Allow plenty of time: rushing often causes errors and the re-doing of incorrect assemblies. If you have never built a greenhouse before, it can take most of a day to carefully complete the construction.
- Have the right tools to hand:
 - Cross head and flat head screwdrivers and a 10mm Spanner: a ratchet socket set is ideal.
 - An electric drill or screwdriver with appropriate attachments is also very suitable.
- Lay out the parts by greenhouse section, ideally around the base as shown, and check that all are present before commencing construction. Lay on cloths or plastic sheets if there is any risk of scratching the parts.
- Follow the construction sequence.
 - Side section
 - Door and Back ends
 - Door Support Gear
 - Frame assembly and roof
 - Door
 - Vent
 - Glazing
- All illustrations are based on viewing the parts from the inside of the greenhouse, except where stated.
- Assemble the greenhouse loosely where possible and tighten when all in place so that minor adjustments can be made. Note that some nuts will need to be tightened to keep them in place.
- Tighten all nuts carefully, being sure not to miss any: NOTE: These are aluminium so should not be over-tightened. Check the frame is square and using a spirit level to check that it is upright.



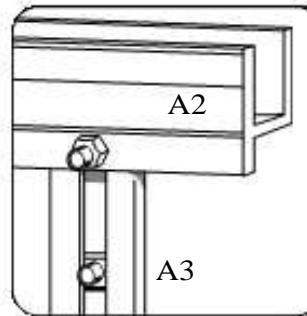
A Greenhouse Side



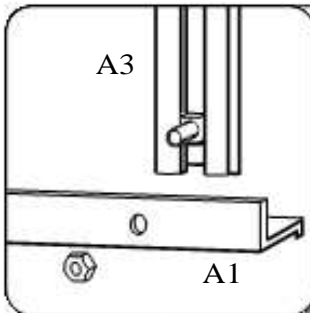
Profile	Code	Qty
	A1-6	1
	A2-6	1
	A3	2
	G1	2
	M610	Used for all sections so quantity not listed in this or other parts lists.

Introduction

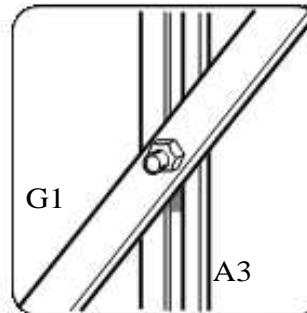
Lay parts on the ground, as pictured at the top of this page. Assemble loosely with the nuts to the inside of the structure.



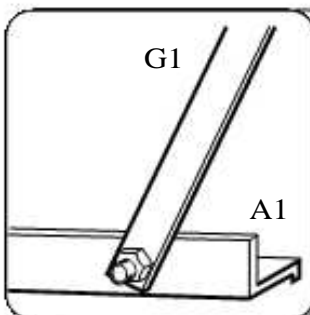
Step 3
Before bolting the glazing uprights to the outside of the top gutter bar, insert bolts into the channels for fixing the diagonal braces.



Step 1
Insert bolt into the channel in the upright (A3). Bolt glazing uprights to the outside of the bottom bar.

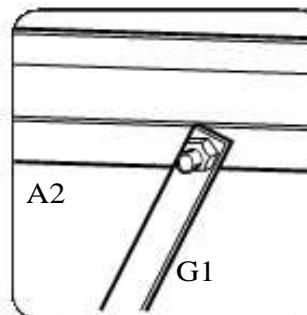


Step 4
Use the inserted bolts (see 3) to secure the diagonal braces to the uprights. Do not tighten yet.



Step 2
Bolt diagonal braces to inside of bottom bar.

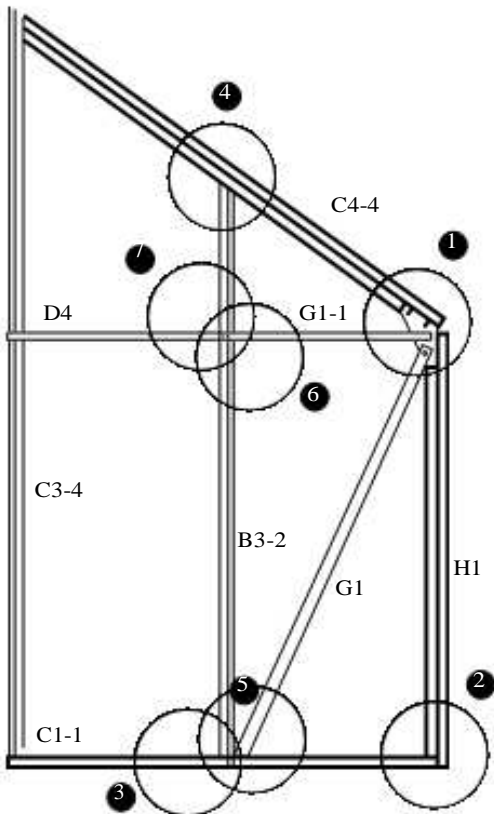
Note: the flat side of the bottom bar faces inwards.



Step 5
Bolt the diagonal brace to the inside of the top gutter bar. Repeat for the other side of the Greenhouse.

Pictures viewed from inside the Greenhouse except where stated

B Greenhouse Ends



This is the right end viewed from inside. Reverse for left end.

Profile	Code	Qty
	C3-3/C3-4	2
	D4-1	1
	C4-3/C4-4	2
	G1	2
	G1-1	2
	B3-1/B3-2	2
	H1	2
	C1-1	2
	G2	2
	M610	Used for all sections so quantity not listed in this or other parts lists.

This section is the same for both ends until the door fitments are added. See section C.

Lay the parts on the ground as pictured and assemble loosely. Check that the corner verticals, glazing uprights and the roof bars are in the correct positions (left and right sides are different).

Step 4
Before bolting the glazing uprights to the outside of the roof bars, insert bolt into the channel for fixing the horizontal brace.

Step 1
Corner joint assembly: bolt the corner plates (G2) to the inside of the roof and vertical bars. Bolt the horizontal and diagonal braces inside the corner plates.

Step 5
Bolt the diagonal braces to the inside of the bottom bars.

Step 2
Bolt bottom bars to corner and glazing verticals.

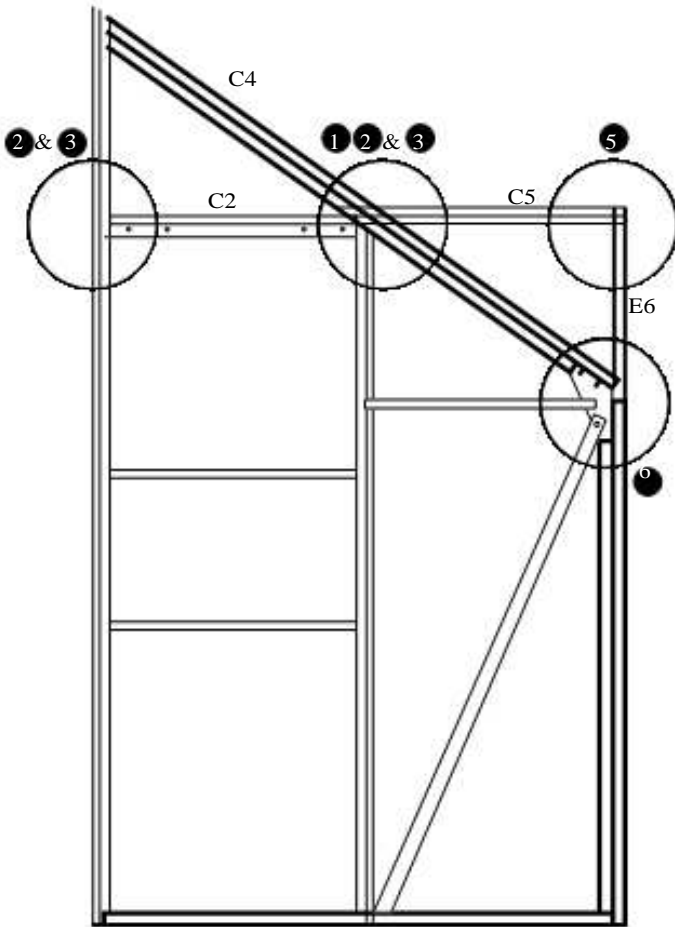
Note: the flat side of the bottom bar faces inwards.

Step 6
Bolt the horizontal braces to the inside of the glazing uprights using the bolts inserted. See step 4.

Step 7
Bolt the brace (D4) to the chosen non-door end using the same bolts. Bolt to (C3) upright also.

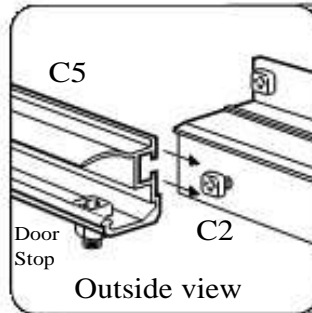
Pictures viewed from inside the Greenhouse except where stated

C Adding the Door Running Gear

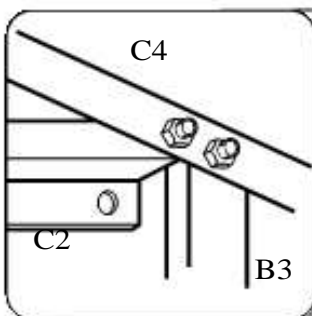


Note: Door can be fitted at either end

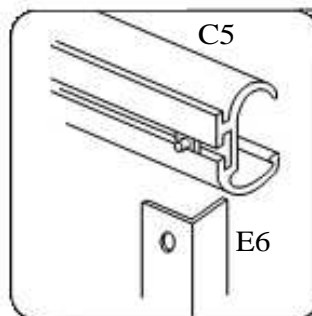
Profile	Code	Qty
	C2-1 / C2-2	2
	C5	1
	E6	1
	E9	2
	E13	1
	M640	1
	M6-1	1
	M610	Used for all sections so quantity not listed in this or other parts lists.



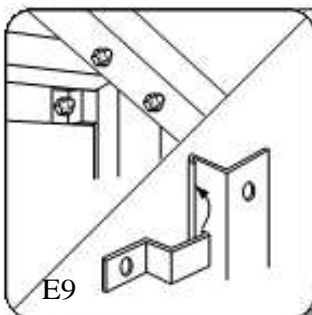
Step 5 Slide the door runner bar over the bolt heads and into position with the edge flush with the door frame. Tighten nuts.
 Step 6 Insert nut and bolt into the end hole of the door runner bar to act as a door stop.



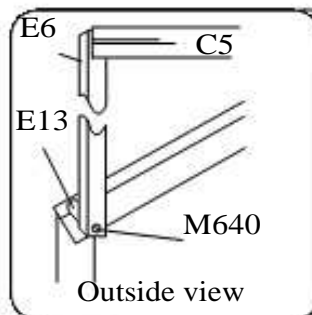
Step 1 Bolt the door frame top bars (C2) to the outside of the roof bars on both ends of the greenhouse



Step 5 Fit the support arm (E6) as shown. Using a bolt inserted into (C5) at the top.



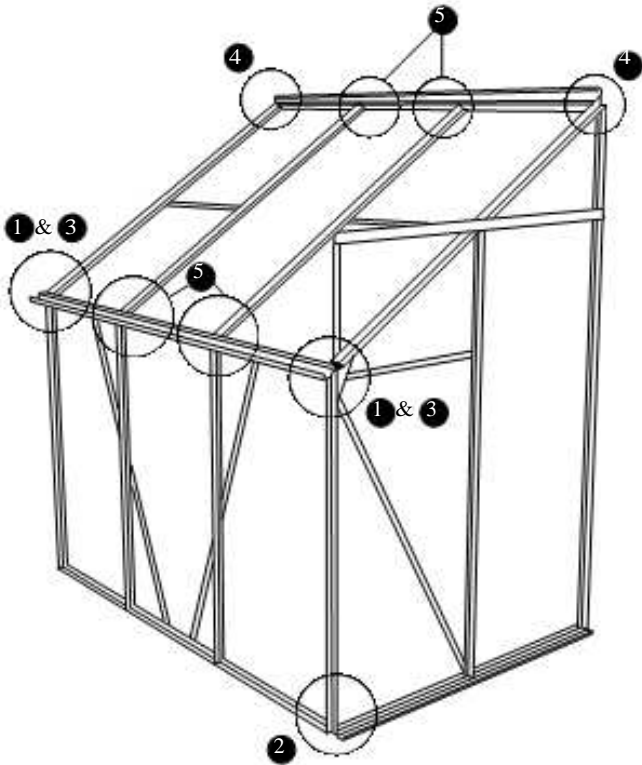
Step 2 Insert bolts from the outside through the door frame top bar and through the support clips (E9) and attach nut loosely. Hook support clips into groove in the door uprights.



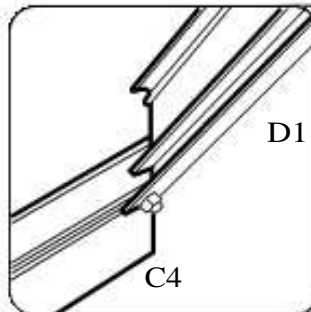
Step 6 Bolt (M640) and spacer (E13) at the bottom.

Pictures viewed from inside the Greenhouse except where stated

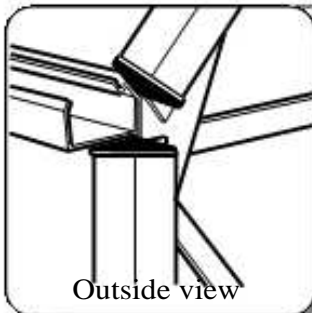
D Greenhouse Assembly & Roof Section



Profile	Code	Qty
	C4-3/C4-4	1
	D2	1
	D3-1	2
	D4	2
	G3	4
	M610	Used for all sections so quantity not listed in this or other parts lists.



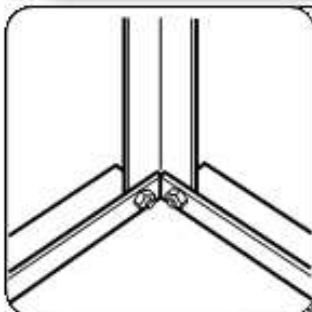
Step 4
Bolt the ridge bar to the underside of the end roof edge bars (C4) as shown.



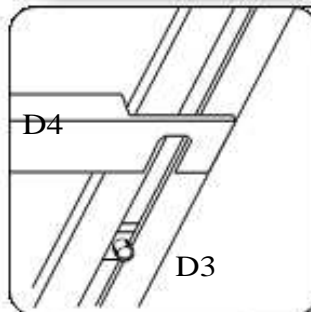
Step 1
In this section, the three greenhouse walls are joined together and the roof added. This phase is best undertaken by two people. Fit the profile end caps to the roof and upright bars before assembly.



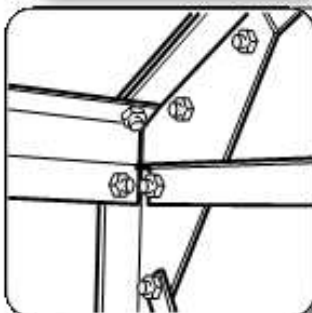
Step 5
Bolt the roof glazing bars to the ridge and gutter bars, remembering to insert two bolts into each channel for the vent and braces to be fitted.



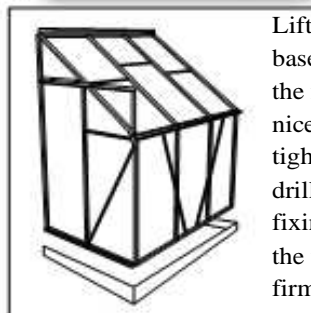
Step 2
Bolt the bottom side and front bars to the inside of the corner post.



Add braces (D4) to the mid points of the roof bars using the bolts already inserted and holes in the roof edge beams.



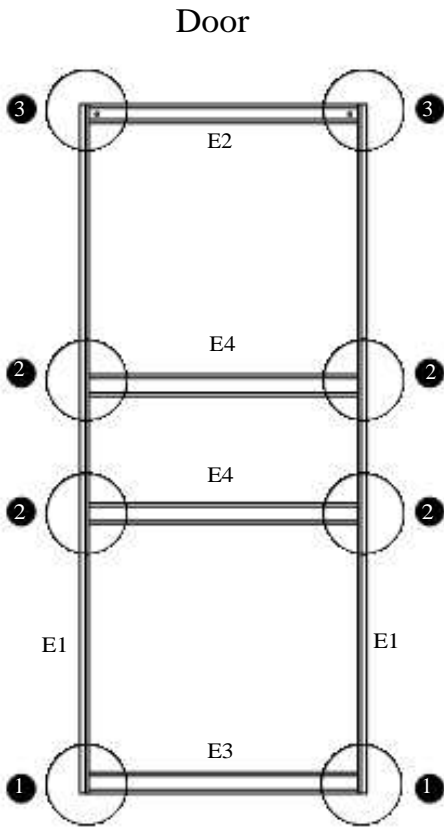
Step 3
Bolt the gutter side bar to the inside of the corner sections.



Lift the frame onto the prepared base and fix loosely. Check that the frame is square and sits nicely on the base before tightening all nuts. Mark and drill wall holes in line with the fixing holes in the ridge bar and the wall uprights. Plug and screw firmly into place.

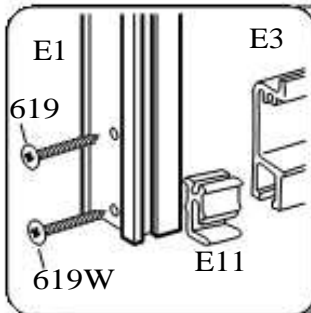
Pictures viewed from inside the Greenhouse except where stated

E Greenhouse Door Assembly

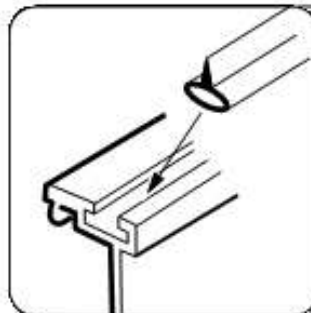


Assembly Parts

Profile	Code	Qty
	E1	2
	E2	1
	E3	1
	E4	2
	E5	2
	619	14
	619W	2
	E12	2
	M416	2
	M4-1	2
	M4-2	2
	E10	2
	E11	2
	M610	Used for all sections so quantity not listed in this or other parts lists.

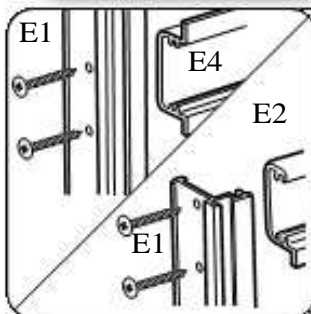


Step 1
Push the plastic door base sliders into the door bottom bar as shown. Screw through the uprights into the bottom bar and the slider.

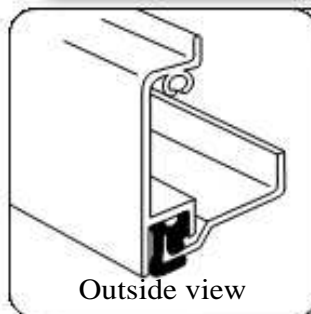


Insert the door seal into the door uprights and trim to length. Lubricate with vaseline or washing up liquid to ease fitting.

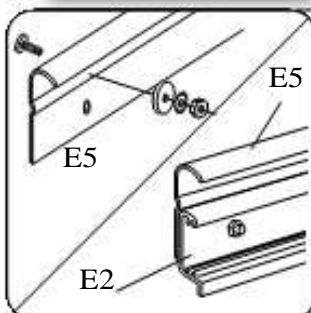
Note: Stretching can occur whilst fitting. Allow a few minutes to shrink back before trimming.



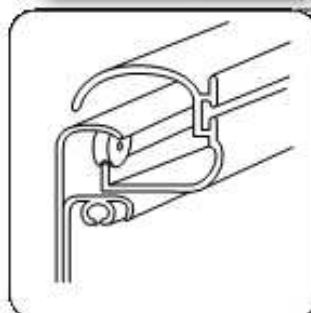
Step 2 & 3
Screw through the uprights into the door middle bars and top bar.



Ease the door into position, gently pushing the base slider onto the bottom track.



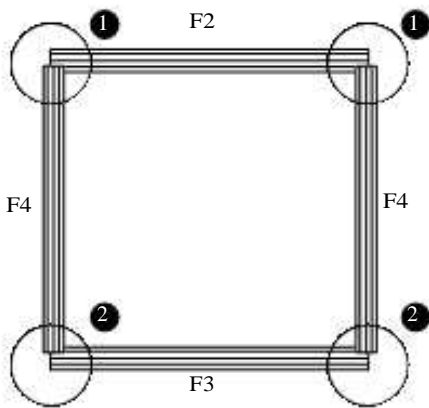
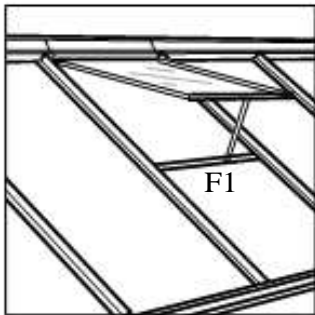
Fix the door running wheels to the runner housing as shown and bolt the housing to the door top rail.



Slide the running wheels onto the top track. Adjust the position of the running wheels in the wheel housing for smooth running of the door.

Pictures viewed from inside the Greenhouse except where stated

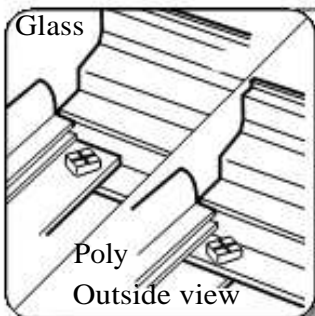
F Greenhouse Vent Assembly & Roof Completion



Profile	Code	Qty
	F1	1
	F2	1
	F3	1
	F4	2
	F10	1
	F12	2
	66	6
	M610	Used for all sections so quantity not listed in this or other parts lists.

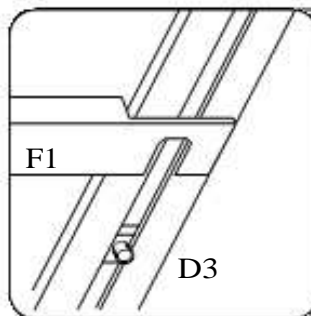
Notes:

- The assembly is slightly different for glass and polycarbonate glazing.
- Glazing sheets are from separate glazing packs.



Step 1
Bolt the vent side bars loosely to the vent top bar as shown.

Note: Assembly is different for polycarbonate and glass - see illustration.

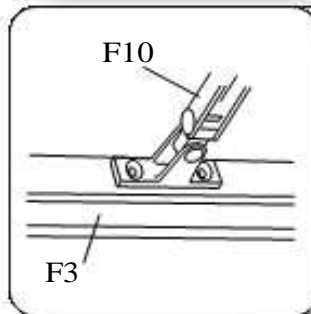


Bolt the vent mounting bar (F1) onto the roof bars using the bolts previously inserted (section D, step 5). Adjust to butt up to the vent and tighten.

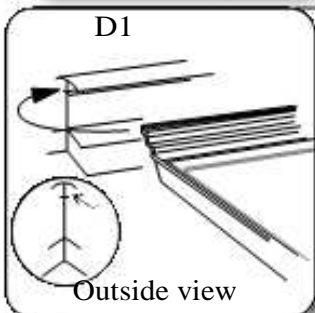


Step 2
Fit nuts and bolts to the bottom ends of the vent sides but do not tighten. Slide the glazing sheet into place.

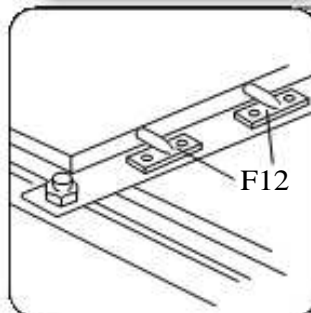
Add the vent bottom bar. Check that the vent is square and tighten all nuts.



Screw vent stay to vent bottom bar using the pre-drilled holes.



Slide completed vent along the ridge bar until in position.








Screw the vent stay catches to the vent mounting bar using the pre-drilled holes.

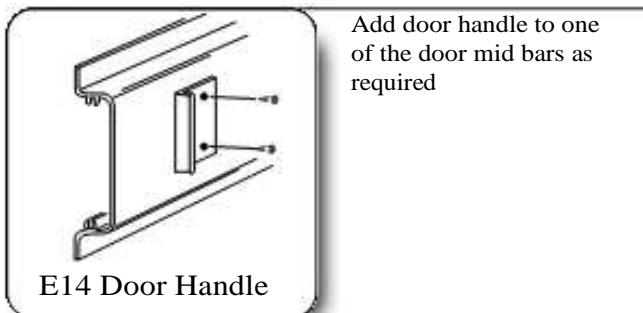
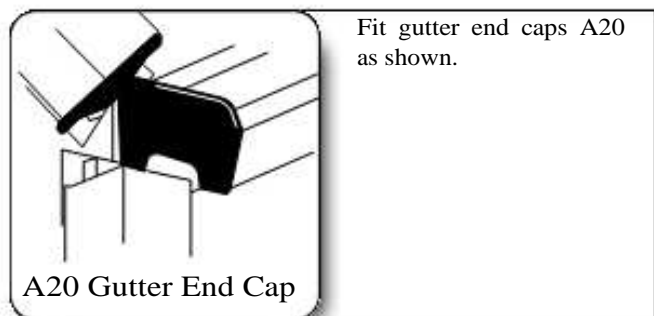
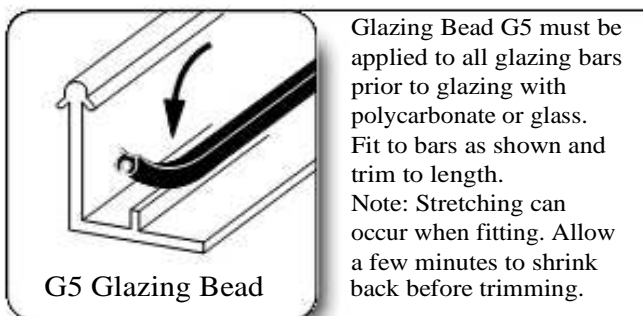
Pictures viewed from inside the Greenhouse except where stated

Glazing & Finishing

NOTE: Glazing instructions are included in the glazing pack.

Profile	Code	Qty
	G5	30m
	A20	2
	G4	112

Profile	Code	Qty
	E14	1
	M10	1



Accessories

You can enhance your greenhouse with a number of accessories including:

- 1 Tier Staging
- 2 Tier Staging
- Fold-away Staging
- Fold-away Shelf
- Auto Vent
- Louvre Vent
- Rainwater Kit
- Ridge Decoration

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