

Keder greenhouse Installation Instructions



keder
greenhouse



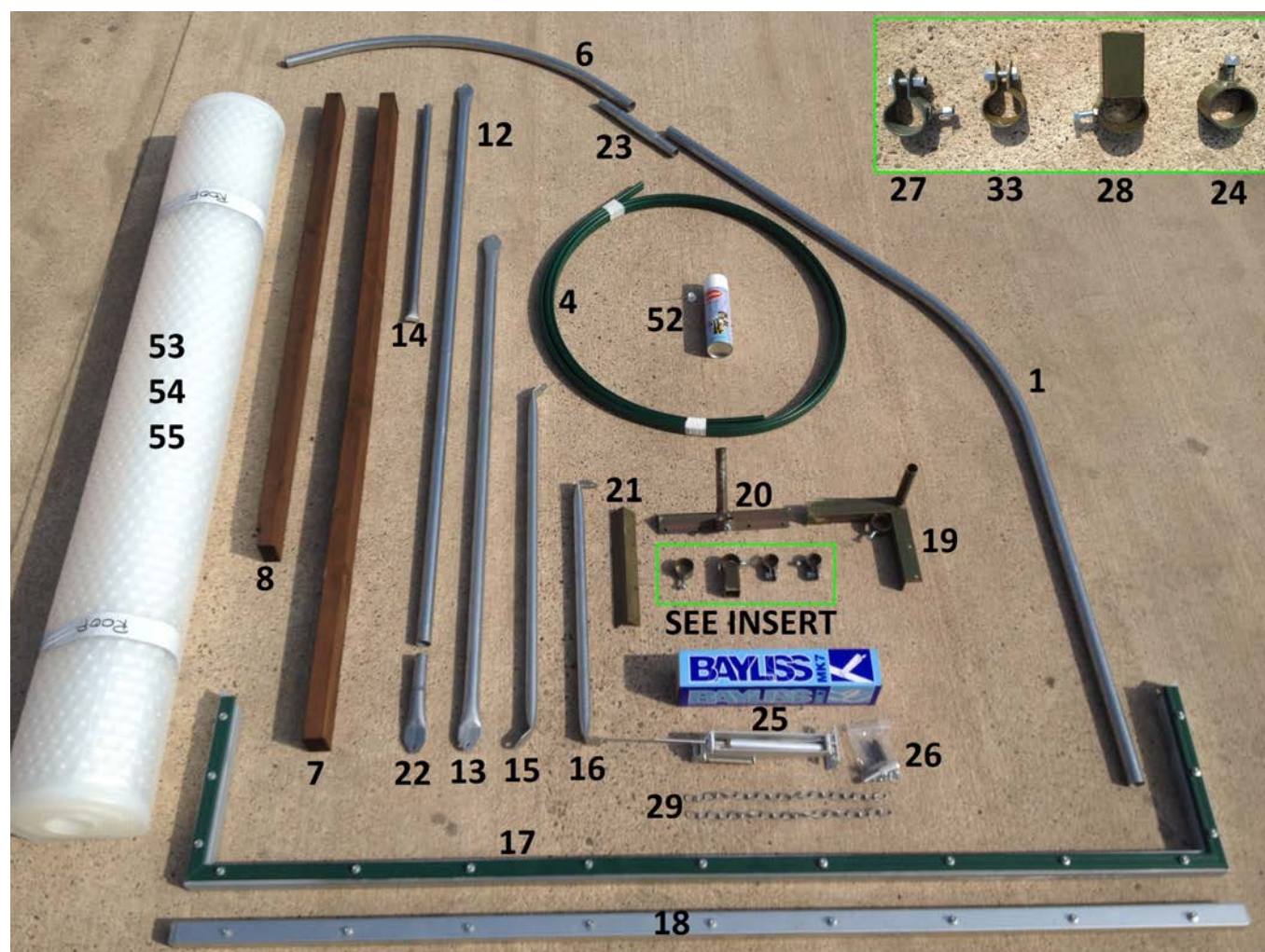
These instructions are written for any length version of a 3 metre wide Keder greenhouse (including 3m x 2m). They include details on all additional extras that are sold with our Keder greenhouse kits (Roof Vents, Side Staging, Extreme Bracing kits etc). These sections will be clearly marked, if you have not ordered these additional extras, please ignore them and move onto the next section. Standard sections will be written in black, Roof Vent sections in blue, Bracing kit sections in red and Side Staging sections written in green.

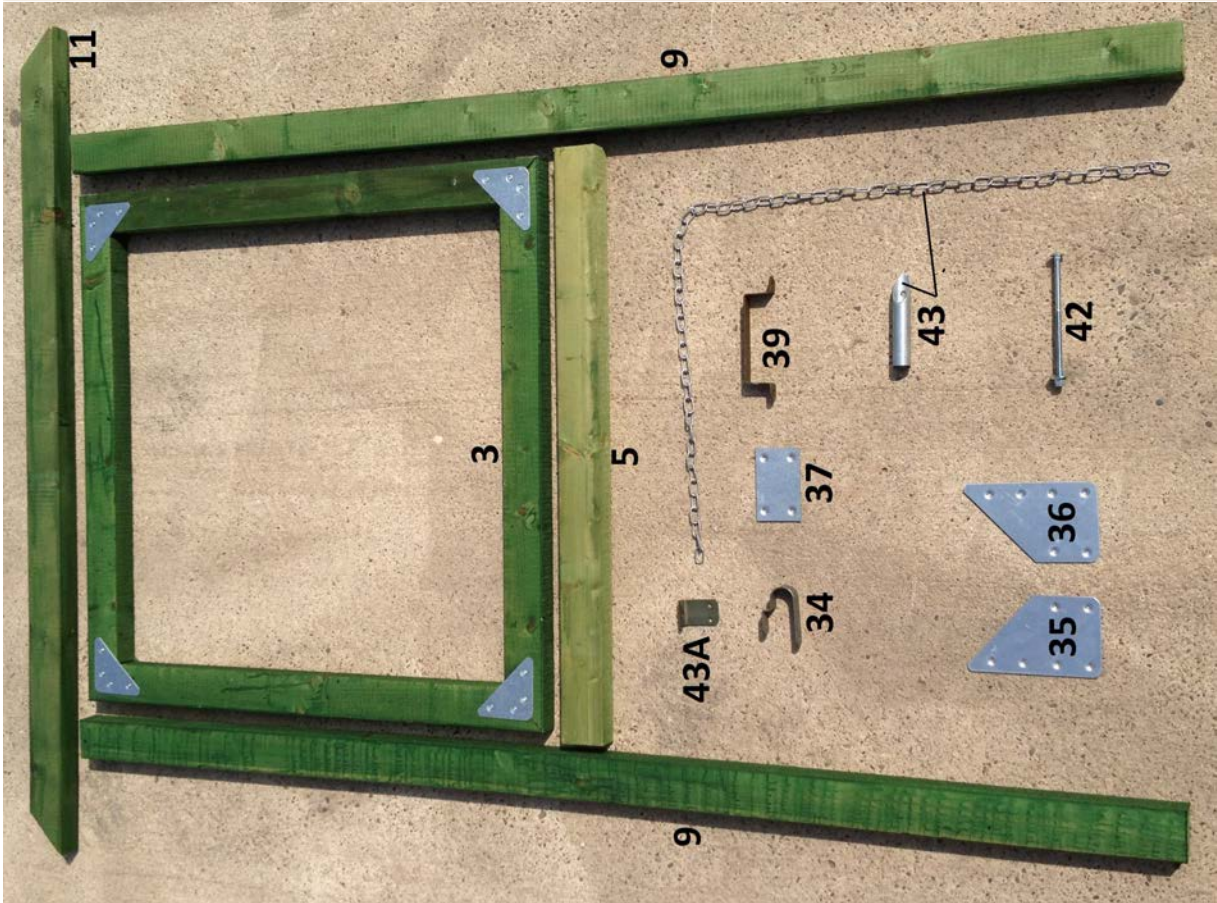
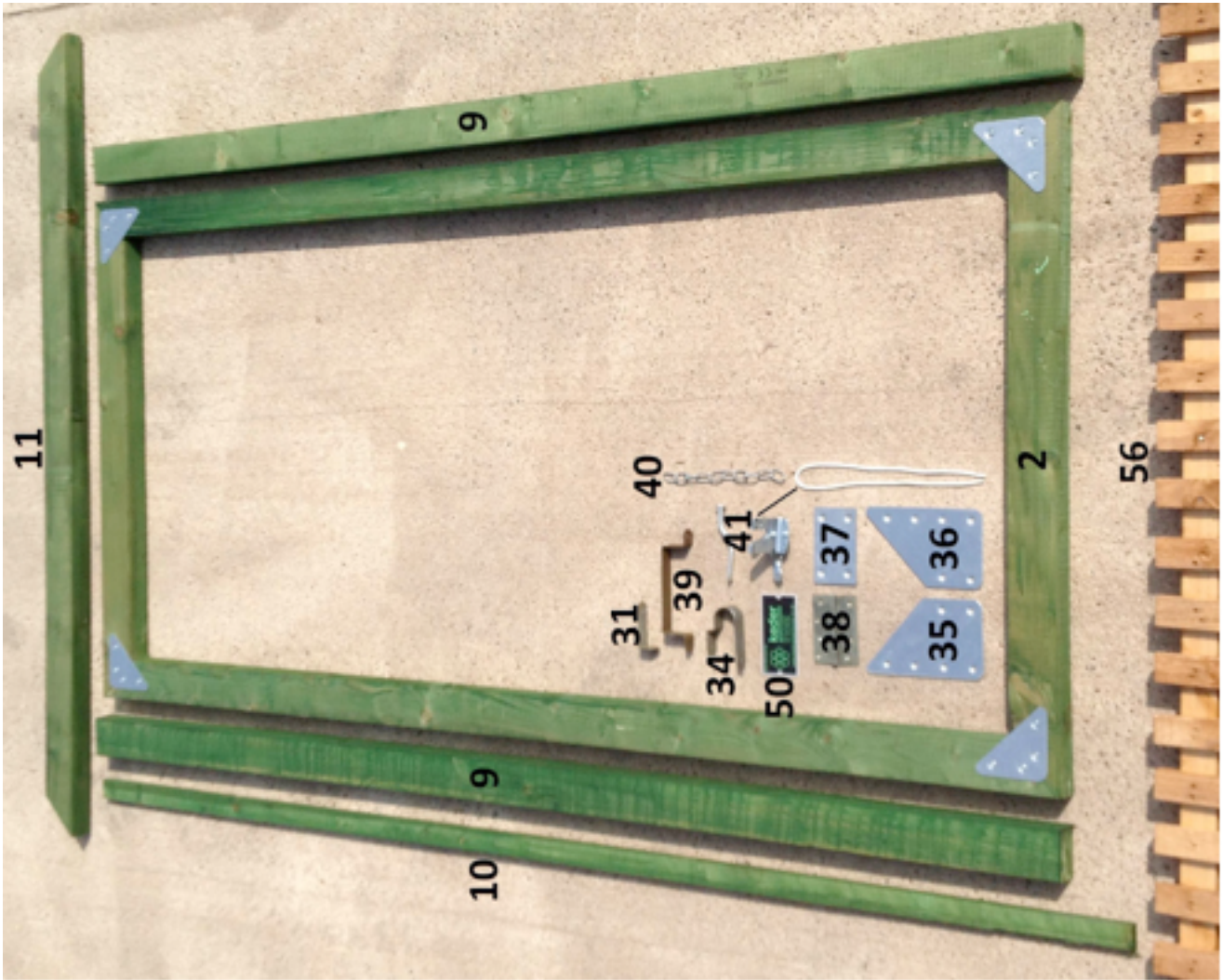
Watching the DVD provided will give a good understanding of the overall process and is designed to be a visual aid to help you through the process of building your greenhouse. Some aspects of the DVD are different to these instructions, please follow these instructions step-by-step to ensure the correct installation.

The instructions are written in such a way as to describe how to build end sections and centre sections (if you have a 3m x 2m you will have no centre sections). If you have a 3m x 4m greenhouse complete the centre section instructions, for larger greenhouses, repeat the instructions for each centre section you have.

1.0 Check items

Included with your instructions is a copy of the picking list that was used to create your order, please use this, and the pictures of the items provided below to check you have everything you need to build your Keder greenhouse. The item numbers denoted in these pictures will be referenced throughout the instructions.







2.0 Site Selection

Select your site with care. It should be level (no more than 0.25m over 12.5m across the length and width). The site should be clear of buildings, hedges, fences etc. by at least 1 metre, all round, for access during construction.

- 2.1 Decide which end of your greenhouse will house the door and which end will house the rear vent. If you ordered a through door, you will not need to choose.
- 2.2 Ideally the greenhouse should be situated so that one of the sides faces the prevailing wind. In the UK the prevailing wind direction depends on the time of year, however on average over the entire year the prevailing direction is from the southwest at an approximate direction of 245 degrees.

3.0 Required Tools

Tape measure
Wood saw
Stanley Knife
Spirit level
1 x Allen key (5mm)
Sledge hammer
Hammer

2 x 13mm spanners
8mm Hexagonal Socket (Provided with kit)
A sturdy, lightweight stepladder
A noggin (length of wood 8" x 3" x 2")
Heavy duty staple gun (with staples)
Battery powered drill with torque control
8mm Drill bit

4.0 The Base – Woodwork

4.1 Form the base

Place roughly in position to form a rectangle the **Base Frame-Side Sections (Brown) (2m) (ITEM 7)** for the sides and the **Base Frame-End Sections-rebated (Brown) (1.5m) (ITEM 8)** for the ends. Note: The rebated ends of the short 1.5m lengths must fit squarely with the ends of the 2m long lengths.



4.2 The Base – Metal Work

4.3 Place the following items in position ready to secure them to the wooden base frame:
Base Frame- End Bracket (No Stub) Angle Joiner (ITEM 21) – Place between the two 1.5m End Sections at either end of the Greenhouse

Base Frame- Corner Brackets (ITEM 19) – Place in the 4 corners of the Greenhouse.

Base Frame- Side Bracket (With Stub) (ITEM 20) – Place between any multiple of the 2m Side sections. *If you have a 3m x 2m Greenhouse, you will have no Side Brackets (ITEM 20).*

4.4 The Base – Metal Work – Fitting the brackets

4.4.1 For this section use the **Battery powered drill, 8mm Hexagonal Socket (drill bit) (ITEM 51)** and **Wood Screws (ITEM 45)**

4.5 Connect the **Base Frame-End Sections-rebated (Brown) (1.5m) (ITEM 8)** together (at both ends) using one **Base Frame- End Bracket (No Stub) Angle Joiner (ITEM 21)** at each end. Ensure that ITEM 21 is on the inside under edge of the wood, so that the rebated sides face the greenhouse.

4.6 Using one **Base Frame- Corner Brackets (ITEM 19)** in each corner, connect the **Base Frame-Side Sections (Brown) (2m) (ITEM 7)** to the rebated section of the **Base Frame-End Sections-rebated (Brown) (1.5m) (ITEM 8)**.

- 4.7** Connect together the remaining **Base Frame-Side Sections (Brown) (2m) (ITEM 7)** using the **Frame- Side Bracket (With Stub) (ITEM 20)**. Ensure that the ends of the **ITEM 7** abut. The Side Bracket should be positioned so that the O-Ring connected to the bracket will be located on the inside of the greenhouse.
If you have a 3m x 2m greenhouse, you will have no Side Brackets (ITEM 20).

5.0 Position the base

The base is now assembled. Manoeuvre the base into its final position.

- 5.1** Using the **Sledgehammer**, drive one **Ground Anchor (ITEM 14)** through each O-Ring connected the **Corner Brackets (ITEM 19)** and **Side Bracket (With Stub) (ITEM 20)**. Check/ensure that the ring bolts on the O-Rings are undone sufficiently to allow the Ground Anchors to pass through the O-Rings easily.
Drive the Ground Anchors into the ground (at an angle of approximately 22° until no more than 3 inches of the tube is visible above the O-Ring (Ground condition permitting). If you are erecting your greenhouse in extreme weather locations or on unstable ground, you may wish to excavate around the Ground Anchors (approximately 35cm square and 40cm deep) and fill the hole with Postcrete or concrete.

6.0 Erection of the Steel Framework

- 6.1** Background information – To aid understanding of the hoop assembly

The greenhouse frame is made up of a series of hoop sections, a door end hoop, centre hoops (on 3m x 4m or larger) and a rear vent end hoop. All hoops are set 2 metres apart.

Each hoop is made of 5 parts, **2 x Side Tubes (ITEM 1)**, **1 x Top Tube (ITEM 6)** and **2 x Tube Joiners (ITEM 23)**. The **Side Tubes** are fitted to the stubs on the base, and the **Top Tubes** are connected to both **Side Tubes** with a **Tube Joiner**.

Each hoop should have **5 O-ring Brackets (ITEM 24)** as standard.

One O-Ring is for the Top Ridge Brace ***fitted in the centre of the Top Hoops (bolt facing down)***

Two O-Rings are for the Standard Side Braces ***fitted 32" above the base on either side.***

Two O-Rings are for the Side Staging, if you have not ordered staging, they are still required, this is in case staging is required at a later date, and these O-Rings are ***fitted 6" above the base on either side.*** Centre Hoops sections have cross braces and Cross Brace Brackets that are ***fitted 3" from the top of the side tubes.***

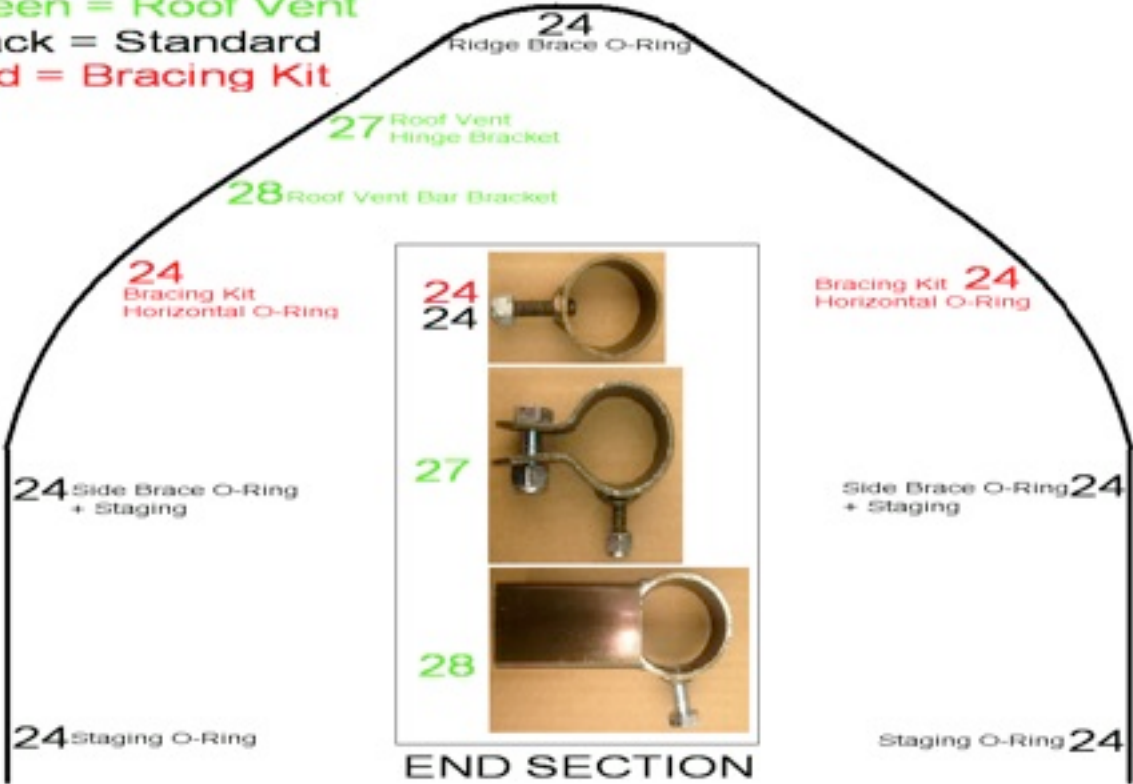
STAGING If you have ordered staging, the O-Rings will allow you to initially fit your staging and potentially change the location of your staging within the greenhouse at a later date. ***Staging O-Rings are fitted 6" above the base.***

BRACING KIT If you have order a bracing kit 2 additional O-Rings are required to be added to each End Hoop ***fitted 64" above the base on either side*** and 4 additional O-Rings are required to be added to each Centre Hoop ***fitted 3" & 64" above the base, 2 on either side.***

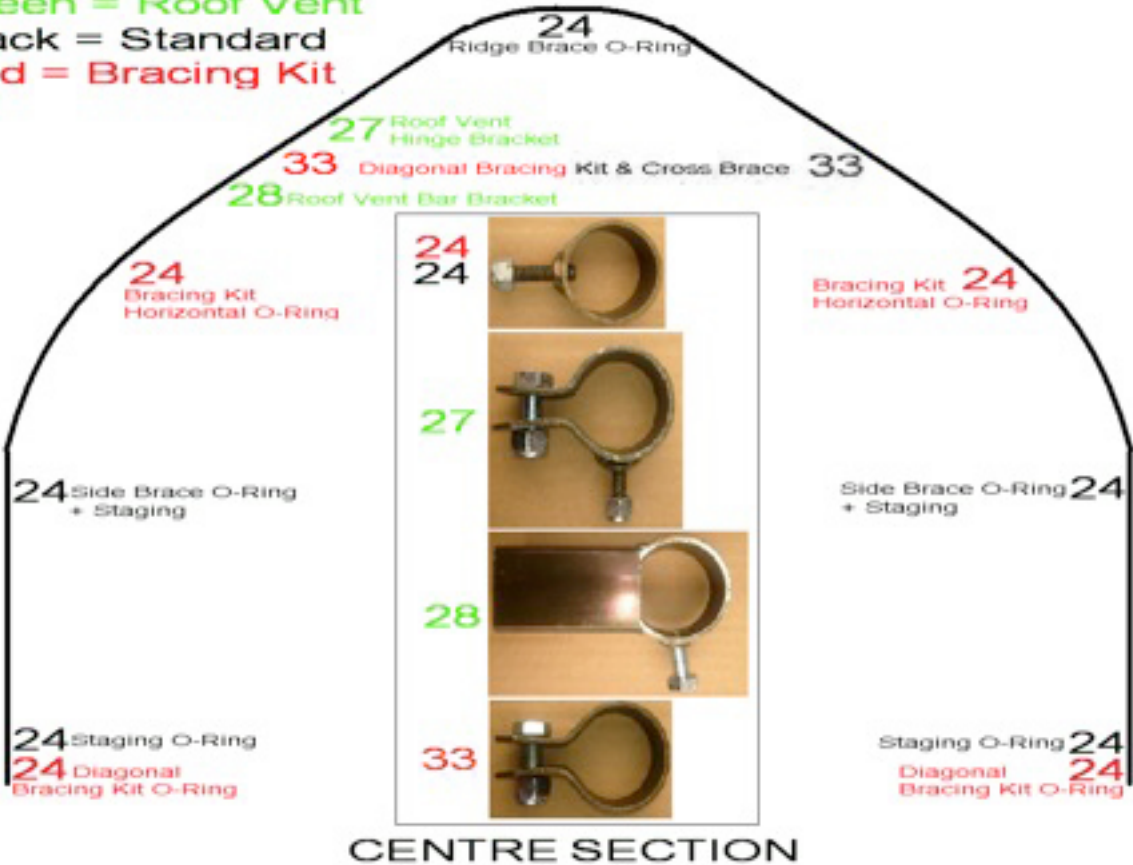
ROOF VENT If you have ordered a roof vent, additional brackets are required to be fitted to one side of specific hoops (depending on the desired location of your roof vent). It is therefore important at this stage to determine where you would like to install your automatic roof vent(s). The roof vent is fitted between 2 hoops (2m apart), the brackets must be positioned in such a way that they face each other with the nuts and bolts facing toward the inside of the greenhouse. We advise to position the roof vent facing away from strong prevailing winds.
Roof Vent bar brackets are fitted 6 inches from the top of the side tubes

Roof vent hinges are fitted on the very ends of the Top Hoops

Green = Roof Vent
Black = Standard
Red = Bracing Kit



Green = Roof Vent
Black = Standard
Red = Bracing Kit



6.2 This is a crucial part of the building process, and as such, we recommend that you follow the below process, step-by-step.

6.3 Firstly, place one **Side Tubes (ITEM 1)** over each Base Frame Stub.

6.4 Place two **O-Ring Brackets + 13mm Nut (ITEM 24)** over each Side Tube and slide down to the base. These are required for every Specification of Greenhouse.

6.5 Lightly secure one **O-Ring Bracket + 13mm Nut (ITEM 24)** to the middle of every **Top Tube (ITEM 6)**. Secure the O-Ring so that the nut is facing downwards (toward the concave side of the Top Tube).

6.6 Read the below options and follow the instructions as necessary: (Note: if you have Side Staging, the process for erecting the framework will be described in later sections (9 & 10)

6.6.1 If you have a standard greenhouse with no accessories go to section **6.7**

6.6.2 If you have ordered a greenhouse with an **Extreme Bracing Kit** and no other extras go to section **6.8**

6.6.3 If you have ordered a greenhouse with an **Automatic Roof Vent** and no other extras go to section **6.9**

6.6.4 If you have ordered a greenhouse with an **Extreme Bracing Kit** and an **Automatic Roof Vent** go to section **6.10**

6.7 Standard greenhouse with no accessories

6.7.1 On all Hoop Section side tubes:

6.7.2 Take the top O-Ring loosely attach it to the side hoop 32 inches above the base of the side tube.

6.7.3 Take the second O-Ring and loosely attach it to the side hoop 6 inches above the base of the side tube.

6.7.4 On Centre Hoop Sections ONLY:

6.7.5 Slide one **Cross Brace Bracket- 1 ¼" Clamp With 8mm Nut and Bolt (ITEM 33)** over each centre section side tube and loosely tighten at approximately 3 inches from the top/end.

6.7.6 On all Hoop Section side tubes:

6.7.7 Place one **Hoops Sections Tube Joiners (ITEM 23)** in the tops of all Side Tubes.

6.7.8 Take one **Hoop Sections- Top Tubes (ITEM 6)** with O-Ring attached from earlier and connect this **Top Tube (ITEM 6)** to the Tube Joiners to complete the Hoops.

6.7.9 All of your Hoop Sections should now be complete.

6.7.10 Now go to section 7.0

6.8 Greenhouse with an Extreme Bracing Kit

6.8.1 Place one O-Ring over each End Hoop Side Tube and slide to the base.

6.8.2 Place two O-Rings over each Centre Hoop Side Tube and slide to the base.

6.8.3 You will now have 3 O-Rings over each end hoop section side tube and 4 O-Rings over each Centre Hoop Section Side Tube.

6.8.4 On the End Hoop sections:

6.8.5 Take the O-Rings and loosely attach to the side tube:

One 23 inches from the top of the side tube.

One 32 inches above the base of the side tube.

One 6 inches above the base of the side tube.

6.8.6 On the Centre sections:

6.8.7 Take the O-Rings and loosely attach to the side tube:

One 23 inches from the top of the side tube.

One 32 inches above the base of the side tube.

One 6 inches above the base of the side tube.

- One 1 inch above the base of the side tube.
- 6.8.8 On Centre Hoop Sections ONLY:
- 6.8.9 Slide one **Cross Brace Bracket- 1 ¼" Clamp With 8mm Nut and Bolt (ITEM 33)** over each centre section side tube and loosely tighten at approximately 3 inches from the top/end.
- 6.8.10 Place one **Hoops Sections Tube Joiners (ITEM 23)** in the tops of all Side Tubes.
- 6.8.11 Take one **Hoop Sections- Top Tubes (ITEM 6)** with O-Ring attached from earlier and connect this Top Tube (ITEM 6) to the Tube Joiners to complete the Hoops.
- 6.8.12 All of your Hoop Sections should now be complete.
- 6.8.13 Now go to section 7.0

6.9 Greenhouse with an Automatic Roof Vent

- 6.9.1 On all Hoop Section side tubes;
Take the O-Rings and loosely attach to the side tube:
One 32 inches above the base of the side tube.
One 6 inches above the base of the side tube.
- 6.9.2 On the 2 Side tubes that will support your Automatic Roof Vent;
- 6.9.3 Slide one **Roof Vent Bar Bracket (ITEM 28)** over the relevant Side tube and loosely attach it 6 inches from the top of the Side Tube (Ensure the box section is pointing at the adjacent side tube (that will support the other end of the Vent) with the bolt facing inside the Greenhouse).
- 6.9.4 On Centre Hoop Sections ONLY:
- 6.9.5 Slide one **Cross Brace Bracket- 1 ¼" Clamp With 8mm Nut and Bolt (ITEM 33)** over each centre section side tube and loosely tighten at approximately 3 inches from the top/end.
- 6.9.6 Place one **Hoops Sections Tube Joiners (ITEM 23)** in the tops of all Side Tubes.
- 6.9.7 Take one **Hoop Sections- Top Tubes (ITEM 6)** with O-Ring attached from earlier and connect both ends to the Tube Joiners to complete the Hoops.
NOTE: On the Top Tubes that will be connected to Side tubes with a Roof Vent Bar Bracket already attached, ensure to loosely attach a **Roof Vent Hinge (with M8 Bolt and Nut) (ITEM 27)** to the end of the Top Tube that will connect with the side tube with the Roof Vent bar bracket attached. Ensure that that M8 bolt and nut on the Roof Vent hinge is facing toward to adjacent hoop that will support the other side of the roof vent. And that the open part of the clamp is pointing toward the inside of the Greenhouse.
- 6.9.8 All of your Hoop Sections should now be complete.
- 6.9.9 **Fitting of the Roof Vent**
- 6.9.10 Take the **Roof Vent Frame (ITEM 17)** and remove the three Green Profile Strips attached to the metal frame using the **Driver bit (ITEM 51)**
- 6.9.11 Take the **Roof Vent Bar (ITEM 18)** and remove the length of metal angle again using the **Driver bit (ITEM 51)**
Note: the profile and the length of metal angle you removed will be used later when cladding the roof vent section.
- 6.9.12 During the next steps - ensure that the brackets do not slip down the side tube.
- 6.9.13 Fit the **Roof Vent Bar** between the 2 **Roof Vent Bar Brackets** (ensuring again that the bolts on the brackets are facing toward the inside of the greenhouse)
- 6.9.14 Fit the roof vent frame to the **Roof Vent Hinge Brackets**
- 6.9.15 Ensure that the bottom of the **Roof Vent Frame** is flush with the **Roof Vent Bar** and tighten the screws that hold the brackets in place (from experience, at this point you may wish to tape the frame to the bar to avoid banging your head)
- 6.9.16 Now go to section 7.0

6.10 Greenhouse with an **Extreme Bracing Kit** and an **Automatic Roof Vent**

- 6.10.1 Place one O-Ring over each End Hoop Side Tube and slide to the base.
- 6.10.2 Place two O-Rings over each Centre Hoop Side Tube and slide to the base.
- 6.10.3 You will now have 3 O-Rings over each end hoop section side tube and 4 O-Rings over each Centre Hoop Section Side Tube.
- 6.10.4 On the End Hoop sections:
- 6.10.5 Take the O-Rings and loosely attach to the side tube:
 - One 23 inches from the top of the side tube.
 - One 32 inches above the base of the side tube.
 - One 6 inches above the base of the side tube.
- 6.10.6 On the Centre sections:
- 6.10.7 Take the O-Rings and loosely attach to the side tube:
 - One 23 inches from the top of the side tube.
 - One 32 inches above the base of the side tube.
 - One 6 inches above the base of the side tube.
 - One 1 inch above the base of the side tube.
- 6.10.8 Slide one **Roof Vent Bar Bracket (ITEM 28)** over the relevant Side tube and loosely attach it 6 inches from the top of the Side Tube (Ensure the box section is pointing at the adjacent side tube (that will support the other end of the Vent) with the bolt facing inside the Greenhouse).
- 6.10.9 On Centre Hoop Sections ONLY: (If you have a 3m x 2m skip to section 6.10.11)
- 6.10.10 Slide one **Cross Brace Bracket- 1 1/4" Clamp With 8mm Nut and Bolt (ITEM 33)** over each centre section side tube and loosely tighten at approximately 3 inches from the top/end.
- 6.10.11 Place one **Hoops Sections Tube Joiners (ITEM 23)** in the tops of all Side Tubes.
- 6.10.12 Take one **Hoop Sections- Top Tubes (ITEM 6)** with O-Ring attached from earlier and connect this **Top Tube (ITEM 6)** to the Tube Joiners to complete the Hoops.
NOTE: On the Top Tubes that will be connected to Side tubes with a **Roof Vent Bar Bracket** already attached, ensure to loosely attach a **Roof Vent Hinge (with M8 Bolt and Nut) (ITEM 27)** to the end of the Top Tube that will connect with the side tube with the Roof Vent bar bracket attached.
- 6.10.13 Ensure that that M8 bolt and nut on the Roof Vent hinge is facing toward to adjacent hoop that will support the other side of the roof vent. And that the open part of the clamp is pointing toward the inside of the Greenhouse.
- 6.10.14 All of your Hoop Sections should now be complete.
- 6.10.15 **Fitting of the Roof Vent**
- 6.10.16 Take the **Roof Vent Frame (ITEM 17)** and remove the three Green Profile Strips attached to the metal frame using the **Driver bit (ITEM 51)**
- 6.10.17 Take the **Roof Vent Bar (ITEM 18)** and remove the length of metal angle again using the **Driver bit (ITEM 51)**
Note: the profile and the length of metal angle you removed will be used later when cladding the roof vent section.
- 6.10.18 During the next steps - ensure that the brackets do not slip down the side tube.
- 6.10.19 Fit the **Roof Vent Bar** between the 2 **Roof Vent Bar Brackets** (ensuring again that the bolts on the brackets are facing toward the inside of the greenhouse)
- 6.10.20 Fit the roof vent frame to the **Roof Vent Hinge Brackets**
- 6.10.21 Ensure that the bottom of the **Roof Vent Frame** is flush with the **Roof Vent Bar** and tighten the screws that hold the brackets in place (from experience, at this point you may wish to tape the frame to the bar to avoid banging your head)
- 6.10.22 Now go to section 7.0

7.0 Side ridges and Top ridges

- 7.1 Using the O-Rings that are loosely attached to the hoops at Approximately 32 inches above the base, connect the hoops together using **Ridge Braces (ITEM 12)** and **Ridge brace tensioners (ITEM 22)**. At this point, you only need to slide the tensioner into the brace, they will be fixed together later when tensioning the Keder Cladding.
- 7.2 Complete the same for the Top Ridge braces using the O-Rings that were lightly secured to the centres of the Top Hoops.
- 7.3 If you have a bracing kit, complete the same action for the O-Rings that were lightly secured to 23 inches from the top of the side tube.
- 7.4 If you have a 3m x 2m please skip to section 9.0. If you have a 3m x 4m please continue to section 8.

8.0 Cross braces

- 8.1 Install the Cross Brace (Centre Hoops only between the 2 cross brace brackets that were lightly secured to 3 inches from the end of the side tubes earlier.
- 8.2 Use a spirit level to ensure that the cross brace is level.
- 8.3 **BRACING KIT ONLY** - If you do not have a Bracing kit - skip to section 9.0. This Cross Brace Bracket is also to be used to secure the top end of the Diagonal bracing kit braces (required on centre hoop sections only). Firstly loosely connect 1 x Ridge brace tensioner (ITEM 22) to each Cross Brace bracket. Insert the Ridge Brace into the Ridge brace Tensioner and connect the end of the Ridge Brace to the O-Ring that is loosely connected to the Side Tube 1 inch above the base (on the same side as the cross brace bracket).

9.0 STAGING

- 9.1 For those who have staging complete section 10.
- 9.2 For those who have not ordered staging go to section 11.

10.0 Staging frame

- 10.1 Use **M8 Nuts and Bolts (ITEM 32)** for this section.
- 10.2 Go to the section where you want to install the Staging, undo the nut holding the side ridge(s) to the hoop and loosely fit 1 x **Staging Cross Supports (ITEM 16)** with the flanges pointing upwards. Complete this for each hoop that is to support the staging.
- 10.3 Take 1 x **Staging Diagonal (ITEM 15)** and loosely fit to the O-Rings that are loosely attached to the side tubes at 6 inches above the base on the hoops that you have just fit the Staging Cross Supports to.
- 10.4 Take the remaining **Ridge Braces (ITEM 12)** and **Ridge brace tensioners (ITEM 22)** and connect together the Cross Supports with the diagonals at either end (Use M8 Nuts and Bolts (ITEM 32). There is no need to ensure that the staging supports are level at this point, this will be completed later.
- 10.5 Go to section 11.

- 11.0 All of your Greenhouse frame should now be erected, with all of the brackets (ITEMS 24, 27, 28 & 33) being used. Please see below picture as a guide. (Note: If you have an Automatic roof vent, you will still have the profile and length of metal angle that you removed from the Roof Vent Frame and Roof Vent Bar earlier.) Please also note the Door and Rear Vent frame for the next section of instructions.



12.0 Rear Vent (If you ordered a Through Door with your Greenhouse, skip to section 13)

12.1 The rear vent frame should be assembled on the floor before being fitted to the vent end hoop. As per the photo the Rear Vent frame consists of:

- 1 x Lintel (ITEM 11)
- 2 x Lintel Brackets (ITEM 34)
- 2 x Posts (Door & Rear Vent) (ITEM 9)
- 12 x Joiner plates (ITEM 37)
- 1 x Stop plate- Door and rear vent (Shaped) LEFT HANDED (ITEM 35)
- 1 x Stop plate- Door and rear vent (Shaped) RIGHT HANDED (ITEM 36)
- 1 x Rear Vent Sill (ITEM 5)
- 1 x Rear Vent Frame (ITEM 3)
- 2 x Rear vent hinge bolts
- 1 x Rear vent chain catch (ITEM 43A)
- 1 x Rear Vent Catch and chain

12.2 The rear vent is assembled as per the photo. For all the following fixtures use Screws 1 ½ x No 8 (ITEM 48).

12.3 Firstly lay the 1 x Rear Vent Frame (ITEM 3) on the floor with the side you wish to the **BACK of the vent (inside the greenhouse)** facing upwards. The other side (downwards facing) will be the outer side and clad with Keder and will not be seen once the Greenhouse is erected.

- 12.4 Then lay 1 x Lintel (ITEM 11) at the top edge of the Door Frame, leaving a ¼" gap between the Lintel and the Vent Frame.
- 12.5 Then lay 2 x Posts (ITEM 9) either side of the Vent Frame, leaving a ¼" gap between the Post and the Vent frame on both sides.
- 12.6 Lay the Rear Vent Sill (ITEM 5) under the Vent Frame (leaving a gap of ¼ inch) and between the Door Posts (so that both ends touch either Post).
- 12.7 Secure the posts to the Lintel using 2 x Joiner plates (ITEM 37).
- 12.8 Secure the Sill to the left post using 1 x Stop plate- Door and rear vent (Shaped) LEFT HANDED (ITEM 35).
- 12.9 Secure the Sill to the right post using 1 x Stop plate- Door and rear vent (Shaped) RIGHT HANDED (ITEM 36). (The 4 holes on the longer side of the bracket should be used to secure the plate to the post)
- 12.10 Secure the Vent Frame to the Lintel and the Sill using 2 x Joiner plates (ITEM 37).
These plates are temporary, and are to be removed when the door is fitted to the end frame and the cladding is in place.
- 12.11 Secure 1 Joiner plate (ITEM 37) to the base of both posts (so that half of the plate is protruding over the edge).
- 12.12 Now carefully turn the whole unit over.
- 12.13 Secure the posts to the lintel using Joiner plates (ITEM 37)
- 12.14 Secure the posts to the Sill using Joiner plates (ITEM 37)
- 12.15 Secure 1 Joiner plate (ITEM 37) to the base of both posts (so that half of the plate is protruding over the edge).
- 12.16 Now take 2 Lintel Brackets (ITEM 34) and manoeuvre the whole assembled vent frame into position at the rear vent end of the Greenhouse. Ensuring that the vent is facing the correct way, slide the plates at the base of the posts over the base frame. Place the Lintel Brackets (Straight edge inside the greenhouse, kinked edge on the outside of the Greenhouse) over the hoop where the lintel meets the hoop. Secure using Screws 1 ½ x No 8 (ITEM 48). Complete the same on the other side of the lintel.
- 12.17 On the side of the door post, use a spirit level to ensure that the posts are vertical (assuming the ground is level), and secure the joiner plates at the base of the posts to the base frame.
- 12.18 On the inside of the vent, secure the joiner plates and the base of the posts to the base frame.
- 12.19 The vent frame structure is now installed and ready for cladding later.
- 13.0 **Door** (Complete this section twice if you have ordered a through door)
 - 13.1 The Door should be assembled on the floor before being fitted to the door end Hoop. As per the photo the door unit consists of:
 - 1 x Lintel (ITEM 11)
 - 2 x Lintel Brackets (ITEM 34)

2 x Posts (Door & Rear Vent) (ITEM 9)
 9 x Joiner plates (ITEM 37)
 1 x Fully assembled (but unclad) door frame (ITEM 2)
 2 x Hinges (ITEM 38)
 1 x Door catch and cord (ITEM 41)
 2 x Door Handle (ITEM 39)
 1 x Door Chain (ITEM 40)
 1 x Stop plate- Door and rear vent (Shaped) LEFT HANDED
 1 x Stop plate- Door and rear vent (Shaped) RIGHT HANDED

- 13.2 Doors are assembled as per the photo. Note: The hinges will be places on the front of the door, to enable the door to open outwards, the stop plates are used to stop the door from swinging inwards. For all the following fixtures use Screws 1 ½ x No 8 (ITEM 48).
- 13.3 Firstly lay the door frame (ITEM 2) on the floor with the side you wish to the **BACK of the door (inside the greenhouse)** facing upwards. The other side (downwards facing) will be the outer side and clad with Keder and will not be seen once the Greenhouse is erected.
- 13.4 Then lay 1 x Lintel (ITEM 11) at the top edge of the Door Frame, so that it touches the door frame. Ensure that the door frame is located in the centre of the lintel.
- 13.5 Decide which way you would like your door to open. And therefore which side the hinges will need to go on (bearing in mind you are currently looking at the back of the door).
- 13.6 Then lay 1 x Posts (ITEM 9) on the hinge side of the door frame, so that it touches the door frame.
- 13.7 Lay the other post on the other side of the Door frame, leaving a ¼" gap between the Post and the Door frame.
- 13.8 Secure one doorpost to the lintel using 1 x Joiner plates (ITEM 37) on the hinge side.
- 13.9 Secure the other door post with either 1 x Stop plate- Door and rear vent (Shaped) LEFT HANDED (ITEM 35) if your hinge side is on the right hand side as you look down at it on the floor.

OR

- 13.10 1 x Stop plate- Door and rear vent (Shaped) RIGHT HANDED (ITEM 36) if your hinge side is on the left hand side as you look down at it on the floor.

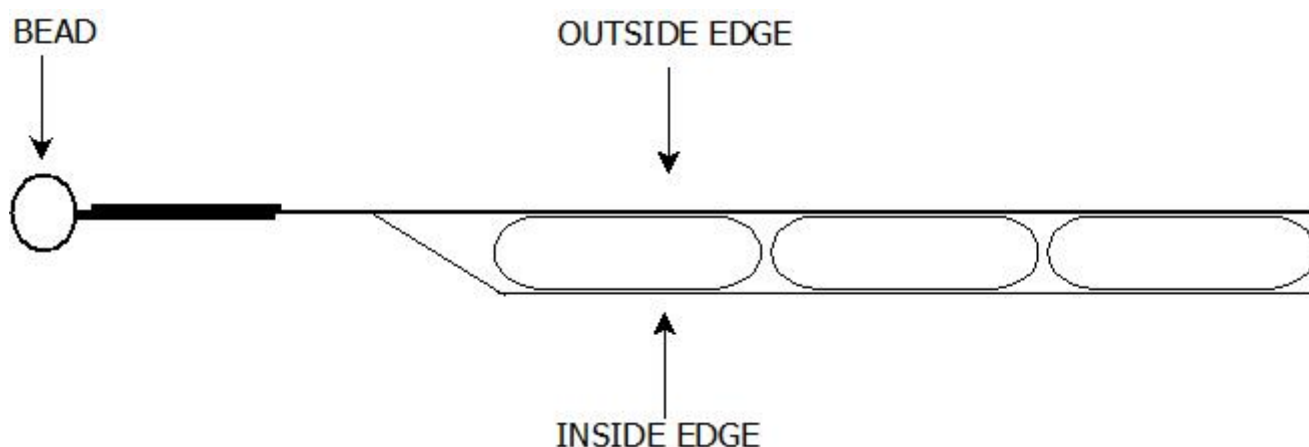
(Note: the side with 4 holes should be secured to the lintel with the smooth face facing outwards, and the side with 2 holes should be secured to the post. The slanted edge should protrude over the door frame, so that it prevents the door from moving past the plate.

- 13.11 Now secure the Opposite handed Stop Plate to the bottom of the non-hinged side door post (only secure it to the post using the 2 holes on the shorter side) (The 4 holes on the longer side will be used later to secure the plate to the base frame)
- 13.12 Secure 1 **Joiner plate (ITEM 37)** to the base of hinge side post (so that half of the plate is protruding over the edge)
- 13.13 Temporarily connect the door frame to the posts and lintel using 3 joiner plates (ITEM 37) (1 for each connection). Position the plates in the middle of the lintel and door posts. ***These plates are temporary, and are to be removed when the door is fitted to the end frame and the cladding is in place.***
- 13.14 Now carefully turn the whole unit over.
- 13.15 Secure the posts to the lintel using Joiner plates (ITEM 37)

- 13.16** Secure 1 Joiner plate (ITEM 37) to the base of both posts (so that half of the plate is protruding over the edge).
- 13.17** Now take 2 Lintel Brackets (ITEM 34) and manoeuvre the whole assembled door frame into position at the door end of the Greenhouse. Ensuring that the door is facing the correct way (temporary plates inside the greenhouse). Slide the plates at the base of the posts over the base frame. Place the Lintel Brackets (Straight edge inside the greenhouse, kinked edge on the outside of the Greenhouse) over the hoop where the lintel meets the hoop. Secure using Screws 1 ½ x No 8 (ITEM 48). Complete the same on the other side of the lintel.
- 13.18** On the side of the door posts, use a spirit level to ensure that the door posts are vertical, and secure the joiner plates on the outside of the door frame at the base of the posts to the base frame.
- 13.19** On the inside of the Door, secure the joiner plate and stop plate at the bottom of the door posts to the base frame.
- 13.20** The door is now installed and ready for cladding in a later section.

14.0 Cladding the ends in Keder

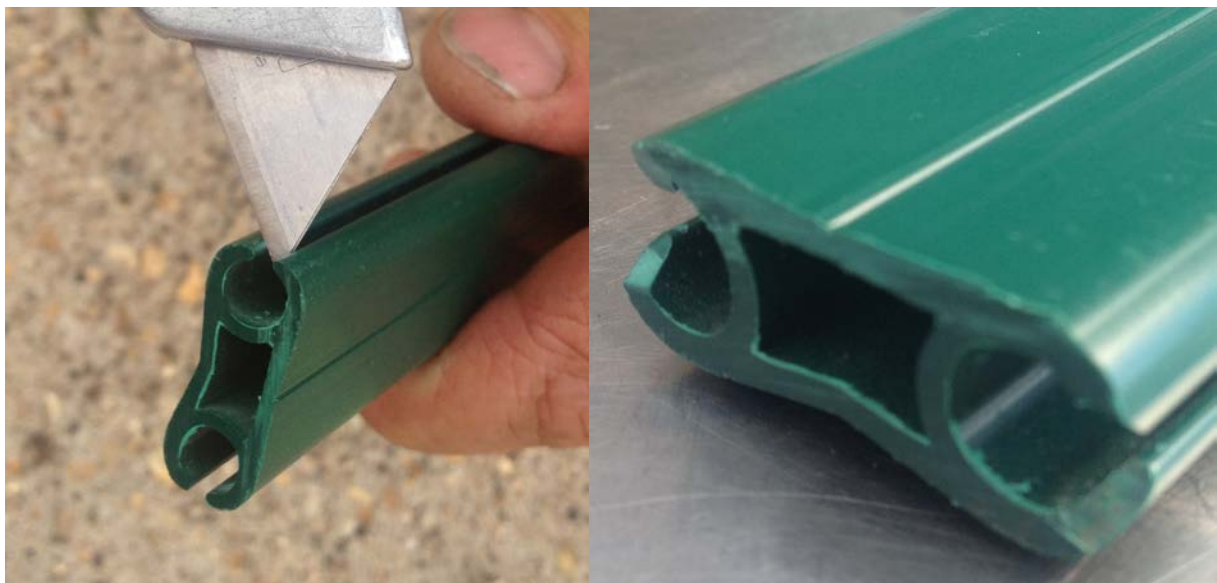
- 14.1** Take the Keder Plastic- 2 Lengths- 2m Wide x 3.4m Long (Rolled Together) (ITEM 54) (Marked as Ends), unroll half of the roll – This roll is pre-cut in half (Except for the Bead). Separate the 2 halves by cutting the bead with a Stanley knife. One length is used to clad the door end, between the base and lintel, the other is used to clad the rear vent end. NOTE: At this point it is important to note that the Keder has two sides, a thicker smoother side and a slightly thinner side. The Keder should fitted to the greenhouse so that the thicker smoother side is on the outside of the greenhouse.



- 14.2** You should have placed your Greenhouse so that ends are facing away from the prevailing wind, it is at this point that if the wind is blowing in a different direction to normal, clad the end which is facing into the wind first (it protects the opposite end and makes it easier to clad).
- 14.3** Place the Keder (lengthways) across the front of one of the ends of the greenhouse (covering the end), with the beads along the length of the lintel (top) and the base rail (bottom). The Keder plastic should extend beyond the base of the end hoop by approximately 25cm on each side.
- 14.4** Using a stepladder and stapler, staple the flat part of the plastic between the Bead and the Bubbles, to the Lintel, making sure the bead is flush with the Top of the Lintel. Staple every 4-5 inches. Start with 5 staples in the corners, starting at the top, then staple all the way across the lintel and the base.



- 14.5** Repeat for the other end of the Greenhouse
- 14.6** Now take the Keder Plastic-60cm Wide X 2m Long (ITEM 55) with the bead on either side of the greenhouse and staple one end of the Keder to one end of the Lintel (Through the Keder Bubbles) so that bottom edge is flush with the bottom of the lintel. Then pull tight across the lintel and staple the Keder across the Lintel (every 4-5 inches). Repeat the process at the other end of the greenhouse on the other Lintel.
- 14.7** Now take the Profile Strips (6.26m) (ITEM 4) and lay them roughly over each hoop section. NOTE: There are 2 sides to the profile, one with a small groove along the length and one with a V shaped recess along the length. It is the side with the small groove that should face outwards away from the Greenhouse.



- 14.8** Using a Stanley knife, cut a small v shaped section out of the all of the ends of profile, to make a V shape (This aids with feeding the Keder Cladding into the profile) Ensure that there are no sharp edges left on the ends of the Profile Strip. The DVD shows the method on how this is completed.
- 14.9** On the door end trim the excess Keder to 15cm all the way round the hoop (except for the bottom 40cm. Where the Keder folds over the hoop so that it fouls the Side Braces, cut the Keder with a Stanley Knife, running from just before the hoop to the edge of the Keder (this is so you can pull the Keder tight).



- 14.10** The Keder plastic is secured around the end hoop by being trapped between a length of 'Profile' and the hoop, and effectively clamped. One person will need to pull the plastic over the frame (using the noggin) keeping it tight, while the other person fits the profile into position using the Profile Screws (Rubber Washer) (ITEM 44). The Profile screws will drill their own holes, no pilot holes are required. The person tasked with keeping the Keder taught should use the 'Noggin'. Wrap the Keder overlap around the noggin (to provide the necessary purchase, then brace the noggin against the hoop to pull the Keder tight. As the person fixing the profile moves along the hoop, keep re-positioning the noggin, to maintain the tension on the Keder.
- 14.11** The person tasked with screwing the profile to the hoop should ensure that the profile overlaps the base timber by 1 inch and should start fixing screws at a height of 90cm from the ground. After putting in the first screw, work your way up and over the top at 30cm intervals, finishing 90cm from the ground on the other side.
- 14.12** Trim the excess Keder from the inside of the greenhouse, about 5cm from the hoop. Do not trim either side below 90, as you will need to pull this tight later.

- 14.13** Repeat the same process for the other end. If you have 3m x 2m greenhouse, skip to section 16.
- 15.0 Fit the profile to the centre hoop sections you have. Following the same principles, overlapping the base by 1 inch, and not securing below 90cm from the base. Fitting profile screws every 30cm. Go to section 16.
- 16.0 If you have a roof vent go to section 17. If you do not have a roof vent go to section 18.
- 17.0 If you have a roof vent you will need to cut a small section of the profile out where the roof vent frame is connected to the hoops via the roof vent hinge. This is so the Keder cladding can be fed along the profile and out along the roof vent frame. It needs to be completed on both sides of the roof vent. See below. Go to section 18.



- 18.0 Before the roof panels are clad, it is important to ensure the door and rear vent are operational, so that you can get in and out of the greenhouse.
- 19.0 Batten door end**
- 19.1** Fit the Door catch (ITEM 41) to the opening side door post at roughly 90-100cm from the base (Use Screws 1 ½" X No 8 (ITEM 48)). Fit the Door catch bar to the Door Frame so that it fits into the Door Catch, again using Screw (ITEM 48).
- 19.2** Drill a hole (8mm) through the post, in-line with the top of the door catch. Tie the door release cord (ITEM 41) to the door catch and thread the other end through the hole in the door post. Knot the end of the cord, creating a loop (the knot stops it slipping back through the door post). Check that pulling the cord from inside the Greenhouse operates the door catch.



- 19.3** Now staple (every 5cm) the Keder Cladding to the parts listed below: (it is important to put the staples in the correct place, as they will need to be covered by the battens in the next section)

Lintel - Staples should be put in the middle of the timber

Hinge Door Post – Staples should be put close to the Door frame side of the post

Opening side door post - Staples should be put in the middle of the post

Door Frame – On the side where the Door frame is almost touching the post, staple close to the door post. For the other three sides of the Door Frame, staple around the middle of the timber.

- 19.4** Batten lengths (ITEM 10) need to be secured so that they cover the staples (using Galvanised Nails (ITEM 47) approximately 30cm apart) Attach battens to the following parts of the end: (Note: Batten lengths will have to be cut to fit and it is useful to pre-drill the holes for the nails.)
- 19.4.1 Base rail
 - 19.4.2 Lintel
 - 19.4.3 Door posts (not including the part of the door posts covered with the door catch, leaving enough room for the catch to open fully). The Batten lengths on the post and door frame on the hinge side of the door need to be almost touching.
 - 19.4.4 The door frame (Top, bottom and both sides) On the hinge side so that it is almost touching the batten on the door post
 - 19.4.5 Then fit the door hinges (ITEM 38) to the battens on the hinge side of the door. 1 hinge approximately 10 inches from the top of the door and one hinge 10 inches from the bottom. You may find it easier to predrill the holes.
 - 19.4.6 On the outside of the door - Now cut the plastic across the top of the door frame (in-between the frame and the lintel) leaving a 3cm flap on the door frame.
 - 19.4.7 Cut down the opening side of the door (between the frame and the post) leaving a large a flap as possible on the door frame (This flap acts as a draft excluder)
 - 19.4.8 Cut around the bottom of the door frame and base rail leaving a large a flap as possible on the door frame (This flap acts as a draft excluder)

- 19.4.9 Fit the Door Handles (ITEM 39) (using wood screws (ITEM 45) to either side of the Door Frame (on the opening side of the door frame).
- 19.4.10 Now on the inside of the door – remove the holding plates that were fitted earlier, push the door open slightly and cut between the frame and the post on the hinged side of the door.
- 19.4.11 Open the door of the greenhouse, and using a profile screw attach the door chain (ITEM 40) to the Profile on the hoop where the door frame meets the hoop. Insert a screw into the inside of the door frame (so that the chain can be placed over the screw). This should be used to secure the door in an open position.



- 20.0 Battens – Rear Vent end
 - 20.1 Inside the greenhouse - Make a mark 8 inches from the top of the inside of the rear vent frame. (On both sides)
 - 20.2 Drill a hole all the way through the rear vent frame so that the drill makes a mark on the post (use an 8mm drill bit)
 - 20.3 Insert the Rear Vent Hinge bolts (ITEM 42) into the drilled holes
 - 20.4 On the outside of the greenhouse - Staple the plastic around the vent frame, posts, lintel and sill. Position the staples in the middle of the timbers.
 - 20.5 Cover the staples with Battens (cut to desired length, use Galvanised nails (ITEM 47) to secure the battens to the timbers (30 cm apart).
 - 20.6 Cut all the way around the rear vent frame top (between frame and lintel), sides (between frame and posts) and bottom (between frame and sill) Cut so that you leave as much flap on the rear vent frame as possible.
 - 20.7 Back inside the greenhouse - Remove the holding plate on the top of the rear vent and hold the vent frame so that it does not fall open. Note: the bottom holding plate should still be in place and prevent the frame from falling out)
 - 20.8 Now, allowing the vent frame to open slightly (revealing the drilled mark on the posts) drill a hole through the posts in-line with the holes in vent frame
 - 20.9 Using a hammer drive the Rear Vent Hinge bolts (ITEM 42) through the drilled hole in the post and affix the washer and nylock nut to the ends of the bolts. Tighten so that nut and washer sit flush with the post – but don't over tighten.
 - 20.10 Remove the bottom holding plate on the Vent Frame. Your rear vent should now swing open freely, hinged where the bolts were inserted.
 - 20.11 With the vent in a closed position fit the rear vent catch (ITEM 43) to the Lintel (Just off Centre), so that it can swing across from the lintel and over the vent frame (so that it can prevent the vent from opening) Use a Wood screw (ITEM 45)
 - 20.12 Using a Wood screw (ITEM 45) into the middle of the Top of the Rear vent frame, secure one end of the Rear vent chain (long chain).

- 20.13** Where the chain now hangs across the sill, fit the rear vent chain catch (ITEM 43a) to the sill (using Wood screws (ITEM 45))
- 20.14** Fit a door handle to the top of the rear vent frame (so that it does not interfere with the vent catch) (using Wood screws (ITEM 45))
- 20.15** Now check the vent swings open and insert the chain into the vent chain catch so that the vent stays open. Although the vent will open more than 90 degrees, the Vent should not be left open 90 degrees or more, if this occurs, rain will fall onto the vent and run down into the greenhouse.
- 20.16** Your rear vent is now operational, please close and lock using the catch for the remainder of the build.



- 21.0** Cladding the intermediate sections
- 21.1** There are two types of centre section, ones with roof vents and ones without. If you have a roof vent, complete section 21.2 and then section 22 for your standard centre sections. If you do not have a roof vent, skip section 21.2 and go to section 22.
- 21.2** Roof Vent section
- 21.3** At this point the Roof Vent Frame should be hanging down from the hinges, take one 'L' Bracket and push the Roof Vent Frame to its closed position (i.e. level with the Roof Vent Bar) and using a small Self-tapper (ITEM 46) fix the 'L' Bracket to the Roof Vent bar so that it stops the vent frame from swinging down. The 'L' bracket should be fitted 2.5cm to the right of centre of the roof vent bar.
- 21.3.1** Take the Keder Plastic- 2m Wide X 6.9m Long, unroll it and roll it back up the opposite way. Place the Rolled up Keder (ensuring the thinner side of the Keder is on the outside of the roll) next to the section you are about to clad (opposite side to the roof vent), with the open end facing towards the greenhouse.
- 21.3.2** Take the Silicone spray + Nozzle (ITEM 52) and spray the insides of the profile of the section you are about to clad. Also spray the beading of the Keder (this aids pulling the Keder through the profile).

- 21.3.3 Feed the Keder bead into the profile on either side of the section you are about to clad. Gently ease the Keder into the profile, ensuring again that when the Keder is in the profile, the thicker side of the Keder is on the outside of the Greenhouse. If you are feeding the Keder into the profile by yourself, we find that putting a fork in the ground, behind the roll of Keder to prevent it from rolling away.
- 21.3.4 Slide the Keder up and over the top of the roof, up to the point where you cut a small section of the profile out. Feed the Keder bead out of the profile and pull down so the edge of the Keder is 3 inches past the bottom of the Roof Vent Frame.
- 21.3.5 Take the long piece of Profile (with screws) that you removed from the roof vent frame earlier and screw the profile screws back into the holes, effectively clamping the Keder between the profile and the roof vent frame. Ensure that the Keder is not loose across the length of the roof vent – pull it tight.
- 21.3.6 Then fit the 2 shorter pieces of profile that you removed earlier, ensuring that the Keder is not loose.
- 21.3.7 Trim any excess Keder that overlaps the Roof Vent bar – trim so that it is flush with the bottom of the roof vent bar. Do not trim the Keder on the side of the Roof Vent. (This will give a slight overhang of Keder approx 1.5” that acts as a waterseal)
- 21.3.8 Go back to the roll of Keder on the floor and cut the Keder leaving approximately 25cm of Keder protruding from the profile.
- 21.3.9 Prop the roof vent open with the noggin.
- 21.3.10 Take the remaining Keder from this roll and feed the cut end into the profile underneath the roof vent. Ensuring that the profile has been sprayed with Silicone Spray.
- 21.3.11 Pull the Keder up the profile so that it passes the Roof Vent bar by 15cm
- 21.3.12 Where the Keder passes the Roof Vent bar, cut the Keder along the edge of the profile (effectively cutting the bead off, on both sides) and fold it over the Roof Vent bar.
- 21.3.13 Take the length of metal angle that you removed from the Roof Vent Bar earlier and reattach it to the roof vent bar, effectively trapping the Keder between it and the roof vent bar.
- 21.3.14 Trim the excess Keder that protrudes over the Roof vent bar. Repeat for all sections that will house a roof vent.

22.0 Standard Sections

- 22.1.1 Take the Keder Plastic- 2m Wide X 6.9m Long, unroll it and roll it back up the opposite way. Place the Rolled up Keder (ensuring the thinner side of the Keder is on the outside of the roll) next to the section you are about to clad, with the open end facing towards the greenhouse.



- 22.1.2 Take the Silicone spray + Nozzle (ITEM 52) and spray the insides of the profile of the section you are about to clad. Also spray the beading of the Keder (this aids pulling the Keder through the profile).
- 22.1.3 Feed the Keder bead into the profile on either side of the section you are about to clad. Gently ease the Keder into the profile, ensuring again that when the Keder is in the profile, the thicker side of the Keder is on the outside of the Greenhouse. If you are feeding the Keder into the profile by yourself, we find that putting a fork in the ground, behind the roll of Keder to prevent it rolling away.
- 22.2** Feed the Keder through the profile up and over the top of the green house and down the other side and out past the end of the profile, so that it protrudes from the end of the profile by 25cm (or so that the Keder protrudes from the profile an equal amount on both sides)

23.0 Repeat for all of the standard sections of your greenhouse

24.0 Horizontal Tensioning the Keder Cladding



- 24.1 Take 2 lengths of batten and screw together so that the combined length equals 200cm. This is to be used between the hoops to separate them and tension the Keder Cladding.
- 24.2 Take the 2m batten length you just created and inside the greenhouse, position it at an angle between the hoops, immediately above the side brace.
- 24.3 Force the high end of the wooden battens down towards the side brace, forcing the hoops apart.
- 24.4 Once you are satisfied with the tension on the sheet, using a small self-tapper (ITEM 46) secure the side brace to the tensioner. Insert the screw at a point approximately 2cm from the joint between the tensioner and the side brace.
- 24.5 Repeat for all side braces and top ridge braces
- 24.6 If you have a bracing kit – complete the same for the horizontal braces. Note: if you have centres sections with diagonal bracing kit braces, there is no need to tension these, just put a self-tapping screw through the brace and tensioner.

25.0 Vertical Tensioning

- 25.1 **ROOF VENT ONLY** If you have a roof vent, go to the Keder cladding that is under the roof vent and stand on the flap of Keder at the bottom of the greenhouse so that it pulls the Keder down tight.
- 25.2 Staple the Keder to the Base timber at 5cm intervals. Use batten lengths, with galvanised nails set at 30cm intervals, to cover the staples. The protruding flaps of plastic provide a run-off for rainwater. They can be dug into the ground and covered with gravel, or similar, or act as a base for decorative plant pots etc. Repeat the same on the other side of the roof vent section.
- 25.3 On standard sections, on one side of the greenhouse staple the Keder to the Base at 5cm intervals. Use batten lengths, with galvanised nails set at 30cm intervals, to cover the staples. The protruding flaps of plastic provide a run-off for rainwater. They can be dug into the ground and covered with gravel, or similar, or act as a base for decorative plant pots etc.
- 25.4 Go to the opposite side of the greenhouse and stand on the flap of Keder at the bottom of the greenhouse so that it pulls the Keder down tight. Note: you will need to staple and batten on one side of the greenhouse before standing on the other side, as there will be no resistance provided by a loose Keder Roof Panel. Staple

the Keder to the Base at 5cm intervals. Use batten lengths, with galvanised nails set at 30cm intervals, to cover the staples.

26.0 Staging slats – if you have no staging skip this section

- 26.1** Take the Slats (ITEM 56) and place on top of the staging cross supports. Note: the slats outer edge sits on the side brace which means that the other side hangs over the staging support brace.
- 26.2** Attach the slats to the side brace and the Staging support brace using the Fixing brackets (ITEM 31) One in the centre of the slat at the rear and one in the centre of the slat at the front. Use Small Self Tapper Screws (ITEM 46).
- 26.3** Place a spirit level on the top of the slat (front to rear), loosen the O-Ring at the bottom of the diagonal staging support bar and move up the hoop until the slat is level.
- 26.4** Repeat for each staging support. Tighten all of the staging support nuts and bolts

27.0 Fitting of the Automatic roof vent



- 27.1** Fix the lower bracket of the Roof vent ventilator arm (Boxed) (ITEM 25) (springs on the top side) to the 'L' bracket you propped up the Roof Vent Frame earlier. Fix using the small nuts and screws provided in the Roof Vent Arm Box.
- 27.2** Take the other 'L' bracket (ITEM 26) and fix to the other side of the lower bracket of the Roof Vent arm.
- 27.3** Using a small self-tapper (ITEM 46) fix the 'L' Bracket to the Roof Vent bar
- 27.4** Push the roof vent open slightly and manually open the vent arm so that the upper bracket of the roof vent arm rests on the top side of the roof vent frame. Note: The roof vent arm is spring loaded. Fix the bracket to the roof vent frame using Small Self Tappers (ITEM 46). Let the Roof Vent Frame fall back to the closed position.
- 27.5** Take the 2 roof vent chains and fix 1 end of each chain to 3 cm either side of the 'L' brackets, use Profile Screws (ITEM 44).
- 27.6** Again using Profile Screws (ITEM 44) fix the other ends of the chain to the roof vent frame. Fix to the Roof Vent frame 25cm from the roof vent arm. These

chains prevent the roof vent arm from opening too far and damaging the Roof Vent Arm.

- 27.7** Push open the Roof Vent Frame and screw in the knurled adjuster (with the vent frame still open) Screw in until finger tight. Note: If you have a vent lock – do not put the knurled adjuster back in at this point.

28.0 VENT LOCK

- 28.1** The Roof Vent Lock is only provided with the Extreme Bracing Kit.

- 28.2** We recommend you use the vent lock when forecasts predict 70MPH winds or more.



- 28.3** The parts required to fit a vent lock are provided in a bag containing:

28.3.1 1 'T' Piece (with chain attached)

28.3.2 3 x Half Rounds

28.3.3 6 x Small self-tappers

- 28.4** Ensure that the knurled adjuster from the Roof Vent Arm is not attached (so that the roof vent is in a closed position)

- 28.5** Approximately 10cm from where the Roof Vent chain is connected to the Roof Vent Frame, secure 1 half round to the Roof Vent bar. Use Small Self Tappers.

- 28.6** Insert the T Piece into the Half Round. Directly below the half round, secure another half round onto the Roof Vent Frame (Over the T Piece), so that the 'T' piece is able to slide between the two.

- 28.7** The third half round is to be fixed to the roof vent bar, to one side of the lower half round (away from the roof vent chain), to store the 'T' piece when it is not in use.

- 28.8** NOTE: When using the Roof Vent lock you must remove the knurled adjuster from the back of the roof vent arm, so that the pressure inside the roof vent arm does not build up and damage the seals.

29.0 Final Tensioning

- 29.1** On the end hoop sections (end corners) where you left the bottom 90cm of profile unattached to the hoop, use the noggin and Profile screws (ITEM 44) to finish tensioning the ends. Then trim the excess Keder in the bottom corners, taking care not to cut the Keder under the Side Brace.
- 29.2** Screw profile screws in the bottom 90cm of ALL centre section hoops (both sides) (30 cm intervals) Note: no tensioning is required on this part.
- 29.3** Finally, screw the name plate onto the door lintel using Screws (ITEM 48).

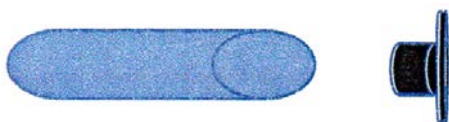
30.0 You should have now completed the build of your Keder Greenhouse.

If you have Crop Rails?

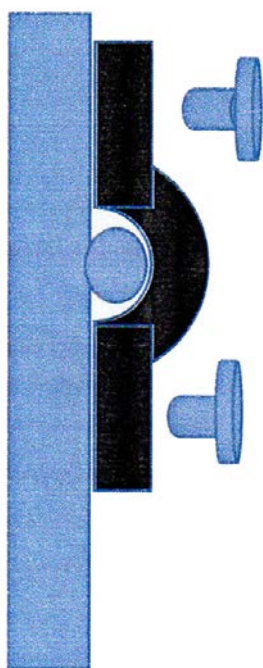
As a 2 man job easiest. Assemble the length of the crop rail. Push the ends of the crop rail tube onto the connectors.



Once the length is assembled push the caps (Black plastic) onto the ends of the pole.



Hold the assembled crop rail in place where you want to position it. Fix using screw number 46 with the ½ round bracket on each upright.



We aim to continually improve our instructions, and should you have any feedback on any part please do not hesitate to contact us with your recommendations.

The extra Hebridian bracing kit

We at Keder appreciate that although all our structures are built to the highest specification there are odd occasions when extreme weather conditions that are out of the normal range can occur. Because of this we have introduced a new additional bracing kit to give you extra peace of mind.

It is very simple to fit to an old or new structure.



These are the extra parts required.

1. Remove cross brace.
2. Add the four additional, two at either end of the cross brace.
3. Carefully remove Allen key locking bolt and nut. Making sure tensioning braces don't fall.
4. Place angled end of additional bracing in the apex of the hoop, lining them up also with the tensioning bars and fix with large bolt provided.



5. Re-attach cross brace with additional clamps attached
6. Attach 45 degree bacing bars to outer most clamp on cross bar as per illustration below



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This instruction booklet has been compiled with the express intention of assisting customers to assemble their pre-welded Keder Greenhouse.

As Keder Greenhouse Ltd supply no tools for the construction of the kit, no responsibility can, or will be taken during the construction of the kit should a customer injure themselves during the construction. Whilst Keder instructions do recommend certain tools are to be used during construction, Keder Greenhouse Ltd cannot be held liable should the customer not be competent to use such tools. Whilst ever effort has been made to ensure these instructions are clear and explicit, Keder Greenhouses Ltd cannot be held responsible for any individual not following them correctly.