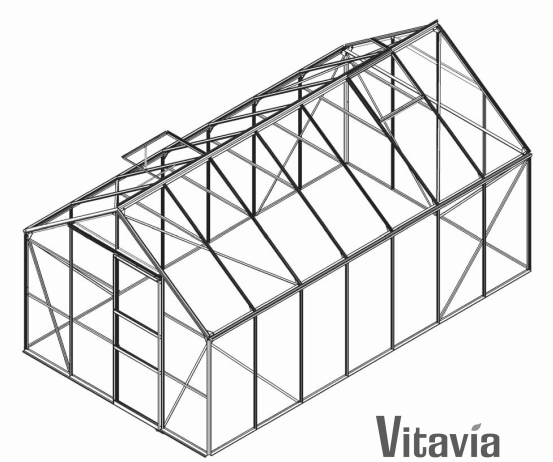
Greenhouse Stores

ASSEMBLY GUIDE

Neptune 11500

Vitavia greenhouse



8
steps, base first

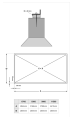
2
people needed

4410 mm × 2544 mm
base size (A × B)

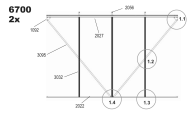
Toughened glass version

Online version with every size: www.greenhousestores.co.uk/instructions/vitavia-neptune/

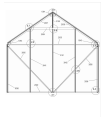
The build at a glance



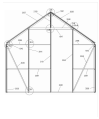
0
Prepare your base



1
Build both side frames



2
Build the back gable



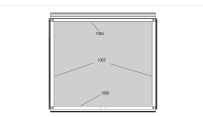
3
Build the door gable



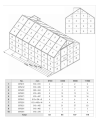
4
Join and stand the frame



5
Build and hang the door



6
Fit both roof vents



7
Fit the glass

Drawings: Vitavia (Vitavia manual 002.03.0905 (Neptune, printed as Merkur)). Words and layout: Greenhouse Stores, greenhousestores.co.uk. Keep this guide with your greenhouse.

READ THIS FIRST

Before you start

Six golden rules

1. Build frames loose; tighten only when the whole greenhouse stands square on its base.
2. Measure both diagonals; they must be equal.
3. Never overtighten nuts 1002: maximum 3 Nm. Overtightening strips aluminium and cracks glass.
4. Fit extra bolts when instructed; you cannot add them after bar ends are capped.
5. Build with two people.
6. Always anchor your greenhouse. An unanchored greenhouse can blow away.

Get ready

- [ ] Read the whole guide once before you start.
- [ ] Gather flat/PH2 screwdrivers, 10 mm socket spanner/wrench, 10 mm combination spanner, knife, tape measure, spirit level. Set cordless drill adjustable torque low.
- [ ] Wear gloves, safety glasses, sturdy shoes and a hat. Aluminium edges are sharp. Clear up broken glass straight away.
- [ ] Open one bundle at a time and keep opened bundles apart. Mixed bundles are the main cause of lost-part searches.
- [ ] Check every part against the parts check pages. Contact Greenhouse Stores before you begin if anything is missing.
- [ ] Read single-frame drawings as views from inside the greenhouse. Read double-frame drawings as views from outside.
- [ ] Choose a sunny spot with as much shelter from wind as possible.

Read next: 10 common greenhouse installation mistakes (and how to avoid them)

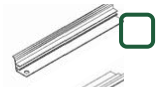
 Single frame: inside view  Double frame: outside view

BEFORE STEP 1

Parts check

Open one bundle at a time. Tick each part as you find it. The number in green is how many your Neptune 11500 should have.

Bars and profiles

- ☐  **2025** — 4350 mm — ×2
- ☐  **2030** — 4350 mm — ×2
- ☐  **3032** — Vertical bar — 1350 mm — ×12
- ☐  **2055** — Roof glazing bar — 1511 mm — ×12
- ☐  **2100** — 425 mm — ×2
- ☐  **3095** — Cross brace — 1778 mm — ×6
- ☐  **3049** — 1427 mm — ×2
- ☐  **2096** — 619 mm — ×1
- ☐  **2097** — 619 mm — ×1
- ☐  **3096** — 1241 mm — ×1
- ☐  **3097** — 1241 mm — ×1
- ☐  **2033** — Cross brace — 1898 mm — ×4
- ☐  **2022** — 2484 mm — ×1
- ☐  **2035** — 2476 mm — ×1
- ☐  **2046** — 2484 mm — ×1
- ☐  **3036** — 1350 mm — ×4
- ☐  **2037** — 1535 mm — ×2
- ☐  **2038** — 1535 mm — ×2
- ☐  **1047** — Door runner bar — 1257 mm — ×1
- ☐  **3041** — Vertical bar — 1802 mm — ×2
- ☐  **3042** — Vertical bar — 1802 mm — ×2
- ☐  **3101** — Vertical bar — 1802 mm — ×2
- ☐  **2054** — 1318 mm — ×1
- ☐  **1043** — 170 mm — ×4
- ☐  **2048** — Horizontal bar — 1318 mm — ×1
- ☐  **2056** — Corner brace — 255 mm — ×12
- ☐  **3057** — Roof brace — 841 mm — ×6
- ☐  **2053** — Ridge bar — 4350 mm — ×1
- ☐  **3058** — Door side bar — 1760 mm — ×2
- ☐  **3021** — Door seal — 1800 mm — ×2
- ☐  **1059** — Upper bar — 621 mm — ×1
- ☐  **1060** — Door bar — 621 mm — ×1
- ☐  **1061** — 621 mm — ×2
- ☐  **1062** — Door bar — 613 mm — ×1
- ☐  **1063** — Window sill — 635 mm — ×2
- ☐  **1064** — Vent top bar — 602 mm — ×2
- ☐  **1065** — Vent side bar — 522 mm — ×4
- ☐  **1066** — Vent bottom bar — 602 mm — ×2
- ☐  **1067** — Window opener — 295 mm — ×2
- ☐  **1091** — 175 mm — ×2
- ☐ **1092** — Corner plate — 120 mm — ×12
- ☐ **1020** — Glazing seal (reel) — 125000 mm — ×1

Fixings and small parts



1001
Bolt
M6 × 12 **×247**



1002
Nut
M6 **×247**



1017
End protector
– **×4**



1018
End protector
– **×8**



1019
Plastic cap
15 **×2**



1013
Clip
20 **×2**



1016
Window fixer
40 **×4**



1004
Bolt
M4 × 16 **×2**



1007
Nut
M4 **×2**



1009
Washer
M4 **×2**



1014
Door glider
25 **×2**



1015
Door roller
22 **×2**



1003
Screw
3.5×16 **×16**



1006
Screw
3.5×6 **×12**



1111
Door fixer
22 **×1**



1011
Glazing spring clip
70 **×492**



1012
Glass retaining clip
11 **×174**



5001
40 **×1**

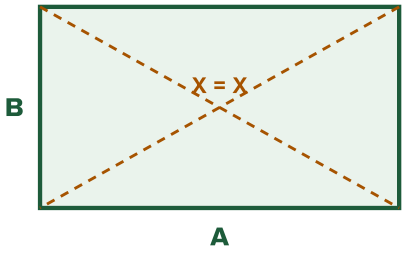


5002
40 **×1**

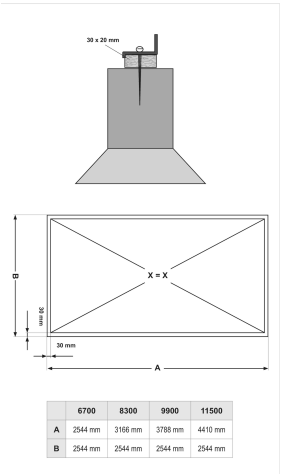
STEP 0

0 Prepare your base

Start with an exactly square, level base.



	NEPTUNE 11500
A	4410 mm
B	2544 mm



Vitavia drawing 0. The circled numbers match the pictures below.

INSTALLER TIP

Use ground spikes or anchor legs only on soil. On concrete or paving, bolt the base down with suitable fixings; use one method, not both.

WATCH OUT

Check the base is square and level, or everything above it will be out. Glass will not fit an out-of-square frame.

0.1

Make your base exactly square and level; measure both diagonals and check they match (X = X). Consider the zinc-coated steel base accessory, sold for all Vitavia greenhouses.

0.2

For stone/concrete foundations, follow page sizes A and B. Fit treated timber, minimum 18 mm high, maximum 32 mm wide, between foundation and aluminium frame. Bolt to foundation with 50 mm bolts (not supplied).

0.3

Only on very windy, exposed sites, drill through both the greenhouse bottom profile and steel base. Bolt them together with nuts and bolts.

STEP 1

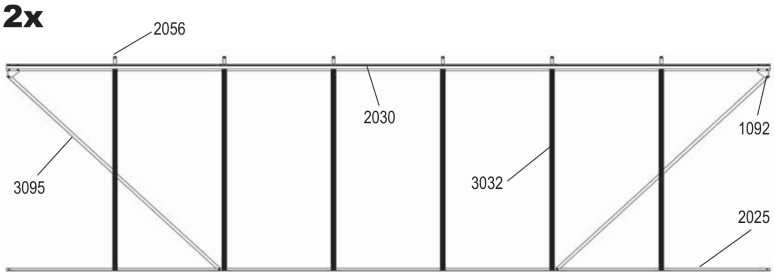
1 Build both side frames

Build two identical sides flat on the ground, with every bolt loose.

YOU NEED

1001 ×56	**1002** ×56
1092 ×4	**2056** ×12
3032 ×12	**3095** ×4
2025 ×2	**2030** ×2

11500
2x



Vitavia drawing 1B. The circled numbers match the pictures below.

INSTALLER TIP

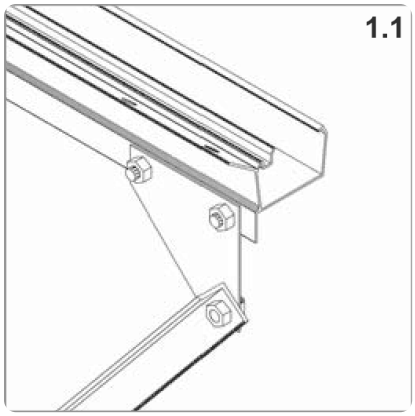
Lay the parts on a blanket or lawn to protect the finish. Leave every nut loose so the frames can flex when you join them in step 4.

WATCH OUT

Insert all extra bolts now. You cannot add them once the bar ends are closed.

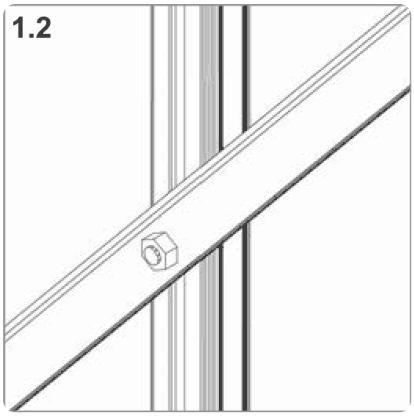
Watch: Build the sides

Scan with your phone camera. Vitavia video.



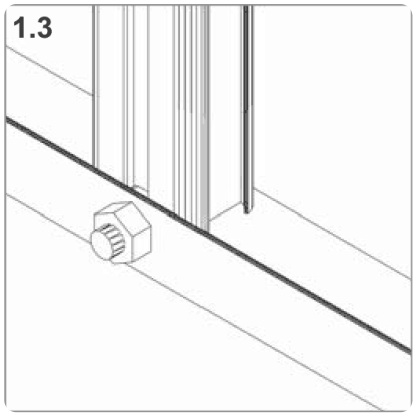
1.1

Loosely fit corner plate 1092 where your eave bar (2027, 2028, 2029 or 2030) meets cross brace 3095. Leave its bolts loose for the gable connections in step 4.



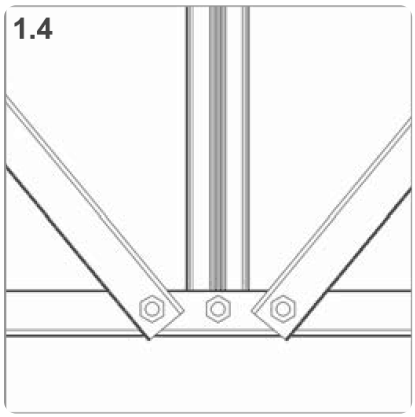
1.2

Insert one extra bolt into each outer vertical bar 3032 for cross brace 3095, as shown.



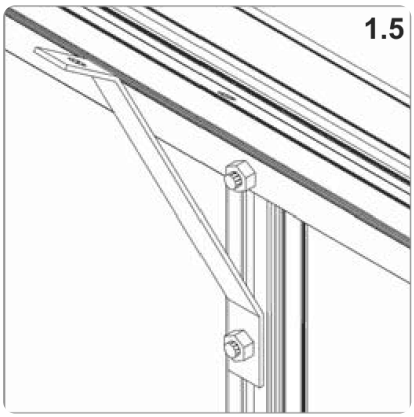
1.3

Bolt the bottom of each vertical bar 3032 to your sill bar (2022, 2023, 2024 or 2025).



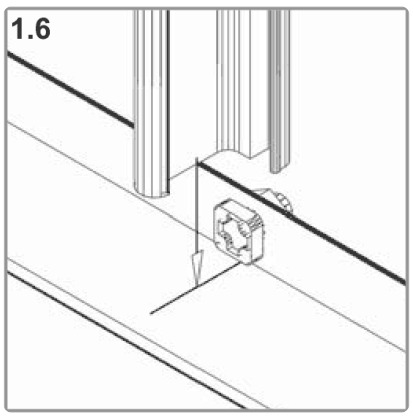
1.4

Bolt the lower ends of cross braces 3095 to the sill bar beside vertical bar 3032, as shown.



1.5

Insert an extra bolt into each vertical bar 3032 now. Use it for corner brace 2056, which runs between the eave bar and vertical bar.



1.6 OUTSIDE VIEW

Insert the bolt into the sill bar channel at the foot of vertical bar 3032. Follow the arrow in this outside view.

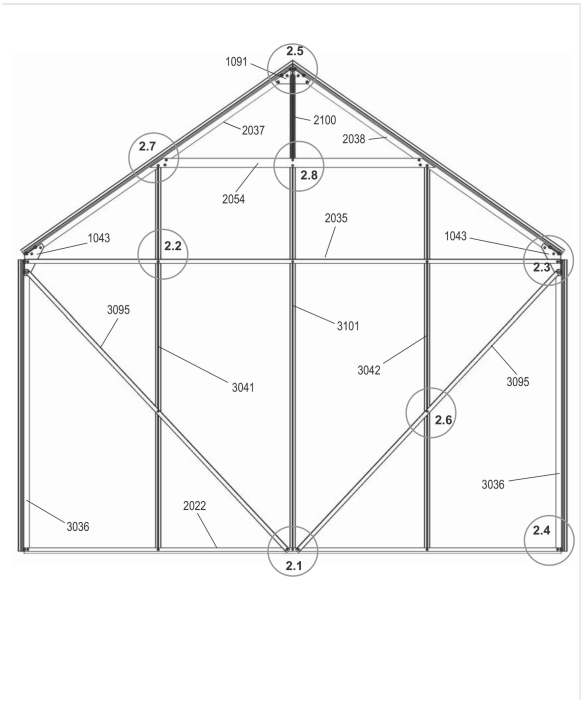
STEP 2

2 Build the back gable

Build the plain back gable flat on the ground, with every bolt loose.

YOU NEED

1001 ×32	**1002** ×32
1043 ×2	**1091** ×1
2022 ×1	**2035** ×1
2037 ×1	**2038** ×1
2054 ×1	**2100** ×1
3036 ×2	**3041** ×1
3042 ×1	**3095** ×2
3101 ×1	



Vitavia drawing 2. The circled numbers match the pictures below.

INSTALLER TIP

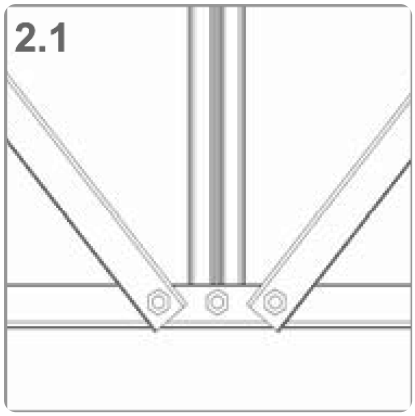
Build upwards from the bottom. Slide each extra bolt into its channel before you fit the bar above it.

WATCH OUT

Insert the extra bolts now. Without them, you must take the gable apart to fit the cross braces in step 4.

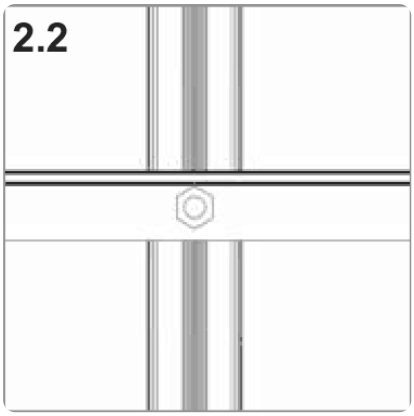
Watch: Rear gable end

Scan with your phone camera. Vitavia video.



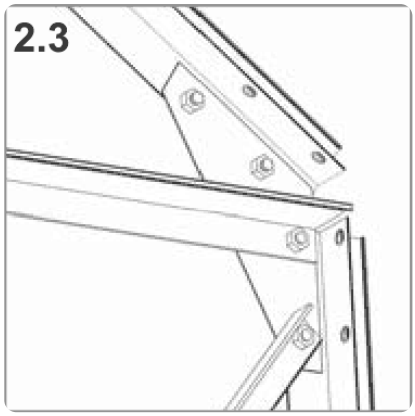
2.1

At the bottom centre, bolt vertical bar 3101 and the lower ends of both cross braces 3095 to sill bar 2022.



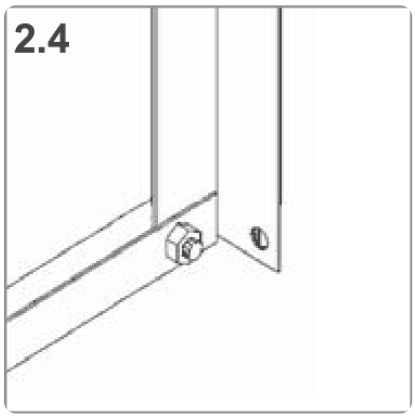
2.2

Bolt cross brace 2035 across vertical bar 3041. Insert two extra bolts into each vertical bar 3041 and 3042 for cross braces, and one into vertical bar 3101.



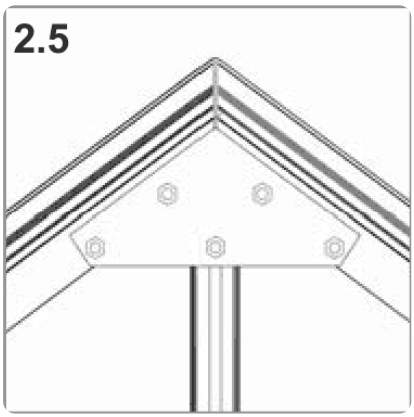
2.3

At each top corner, join your roof bar (2037 or 2038), cross brace 2035 and corner bar 3036. Include cross brace 3095 and use corner plate 1043, as shown.



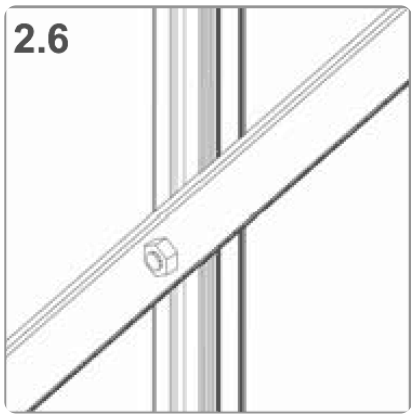
2.4

At each bottom corner, bolt corner bar 3036 to sill bar 2022.



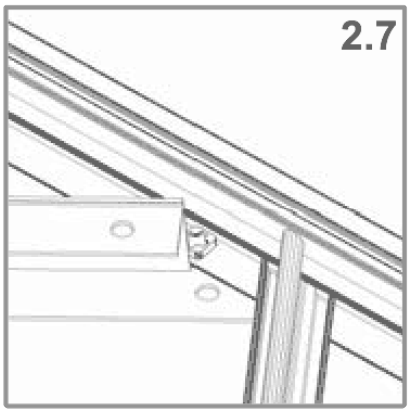
2.5

At the peak, join roof bars 2037 and 2038 to the top of upright 2100 with apex plate 1091.



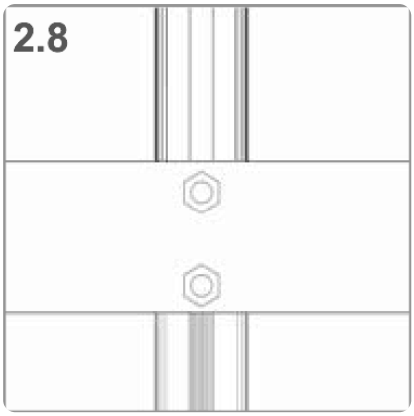
2.6

Bolt cross brace 3095 across vertical bar 3042.



2.7 OUTSIDE VIEW

Join horizontal bar 2054 and vertical bar 3041 to roof bar 2037, as shown in this outside view.



2.8

Join upright 2100 and vertical bar 3101 to horizontal bar 2054 with two bolts.

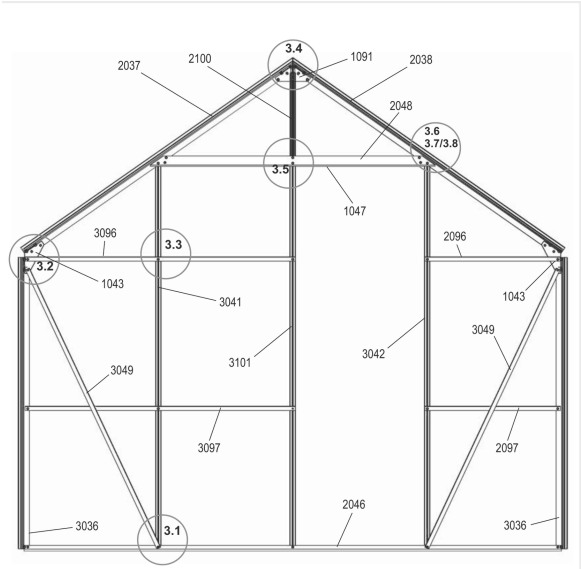
STEP 3

3 Build the door gable

Build flat with every bolt loose; position your single sliding door left or right of the middle bar.

YOU NEED

1001 ×37	**1002** ×37
1013 ×2	**1043** ×2
1047 ×1	**1091** ×1
2037 ×1	**2038** ×1
2046 ×1	**2048** ×1
2096 ×1	**2097** ×1
2100 ×1	**3036** ×2
3041 ×1	**3042** ×1
3049 ×2	**3096** ×1
3097 ×1	**3101** ×1
5001 ×1	**5002** ×1



Vitavia drawing 3. The circled numbers match the pictures below.

INSTALLER TIP

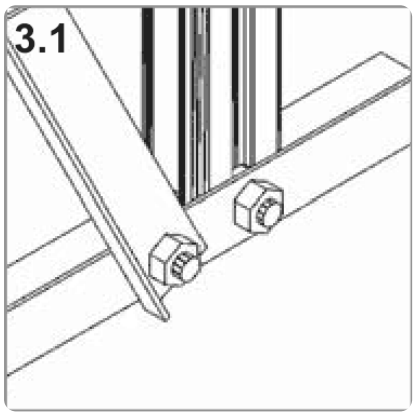
Choose the door side now; we recommend the open door faces your path, away from the prevailing wind. Changing sides later means taking the gable apart.

WATCH OUT

If parts will not line up, check for upside-down or back-to-front bars before you force anything.

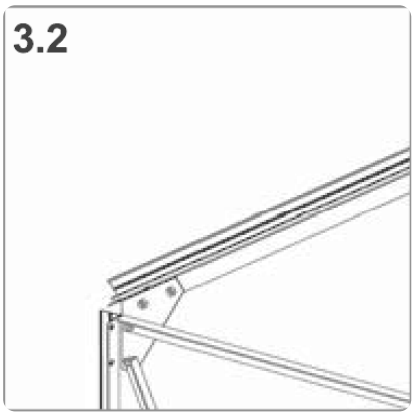
Watch: Door frame (front gable)

Scan with your phone camera. Vitavia video.



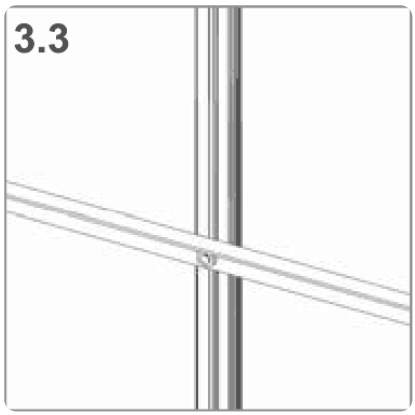
3.1

At the foot of vertical bar 3041, bolt cross brace 3049 and the vertical bar to bottom bar 2046.



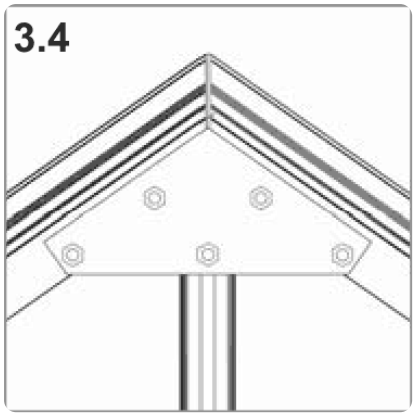
3.2

Use corner plate 1043 to join your roof bar (2037 or 2038), horizontal bar (3096 or 2096) and corner bar 3036. Position cross brace 3049 below, as shown.



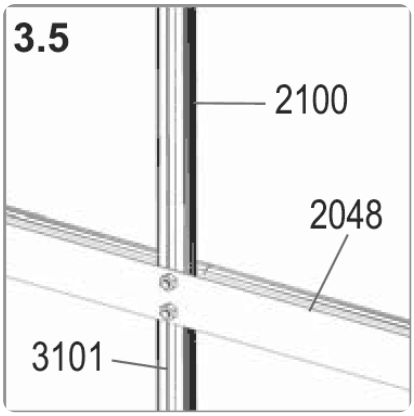
3.3

Bolt horizontal bar 3096 to vertical bar 3041. Insert two extra bolts into each vertical bar 3041, 3042 and 3101.



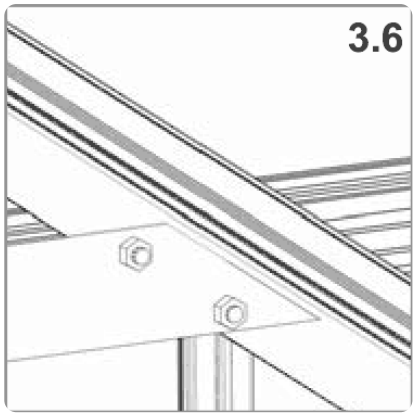
3.4

At the peak, join roof bars 2037 and 2038 to the top of upright 2100 with apex plate 1091.



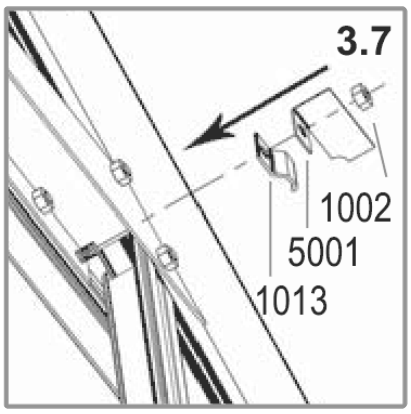
3.5

Join upright 2100 and vertical bar 3101 to horizontal bar 2048, as shown.



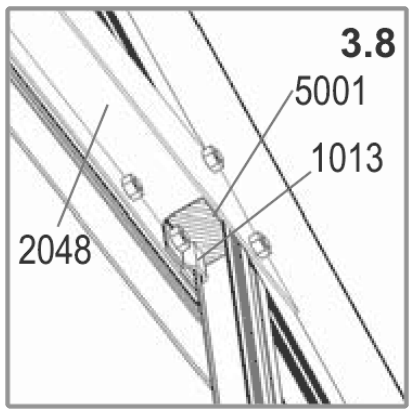
3.6

Join horizontal bar 2048 to roof bar 2038 and vertical bar 3042, as shown.



3.7 OUTSIDE VIEW

Connect two clips 1013, one to part 5001 and the other to part 5002. Use a bolt and nut 1002 for each, as the arrow shows. The clips strengthen the gable.



3.8 OUTSIDE VIEW

Check that the edge of clip 1013 overlaps and holds your vertical bar (3041 or 3042), as shown.

DO THIS NOW

Loosely connect door runner bar 1047 to horizontal bar 2048 from outside with two nuts and bolts. Fit it on your chosen door side.

STEP 4

4 Join and stand the frame

Work with two people to join the frames and stand the greenhouse up.

YOU NEED

 **1001** ×100	 **1002** ×100	 **1092** ×8	 **2053** ×1	 **1017** ×4
 **1018** ×8	 **2033** ×4	 **2055** ×12	**3057** ×6	

INSTALLER TIP

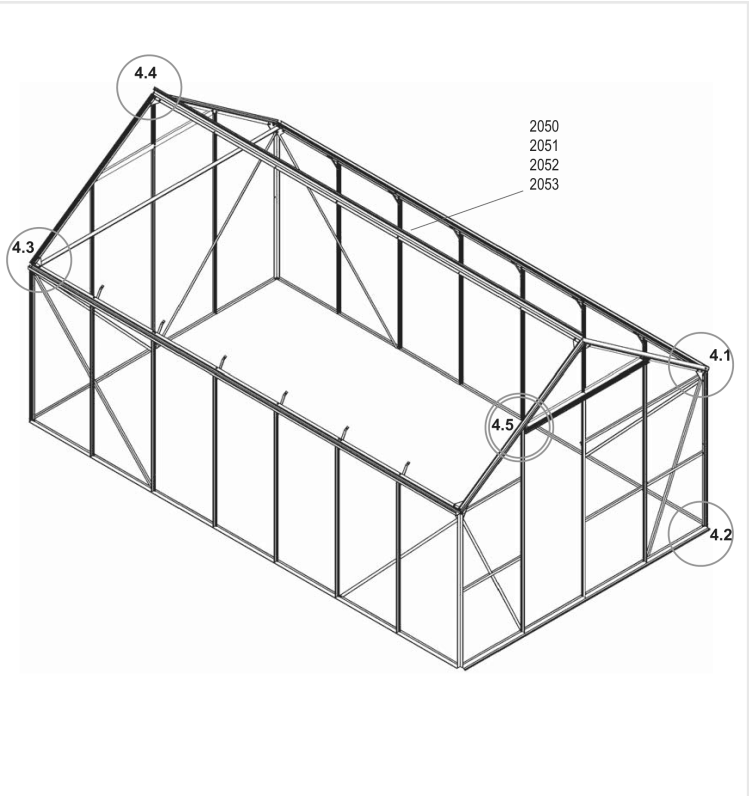
Count the circled extra bolts on every roof bar before you fit any end protector. The number depends on your greenhouse size.

WATCH OUT

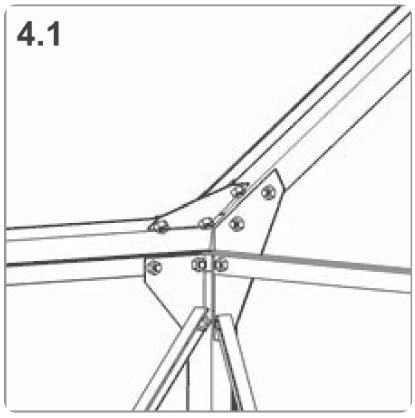
Leave everything loose until the greenhouse is on its base and square. You cannot adjust it once the glass is fitted.

Watch: Front and roof bars

Scan with your phone camera. Vitavia video.

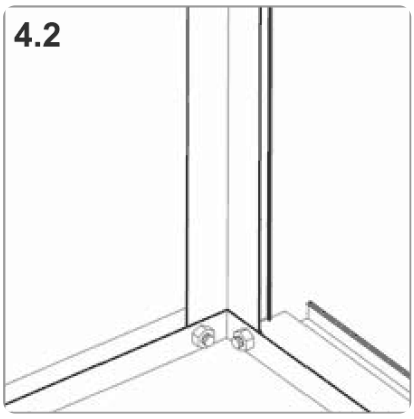


Vitavia drawing 4A. The circled numbers match the pictures below.



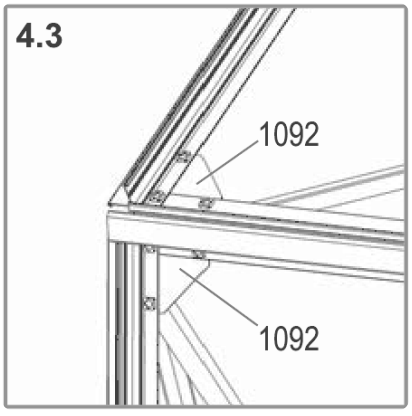
4.1

Follow drawing 4A and bolt the side frames to the gable ends at the top corners.



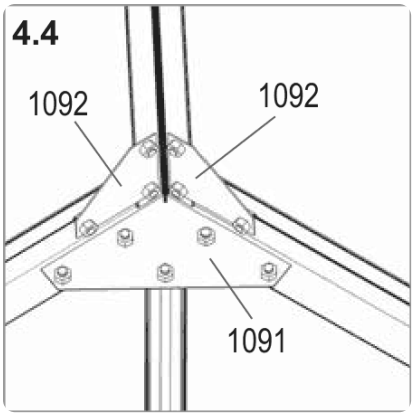
4.2

Bolt the side frames to the gable ends at the bottom corners.



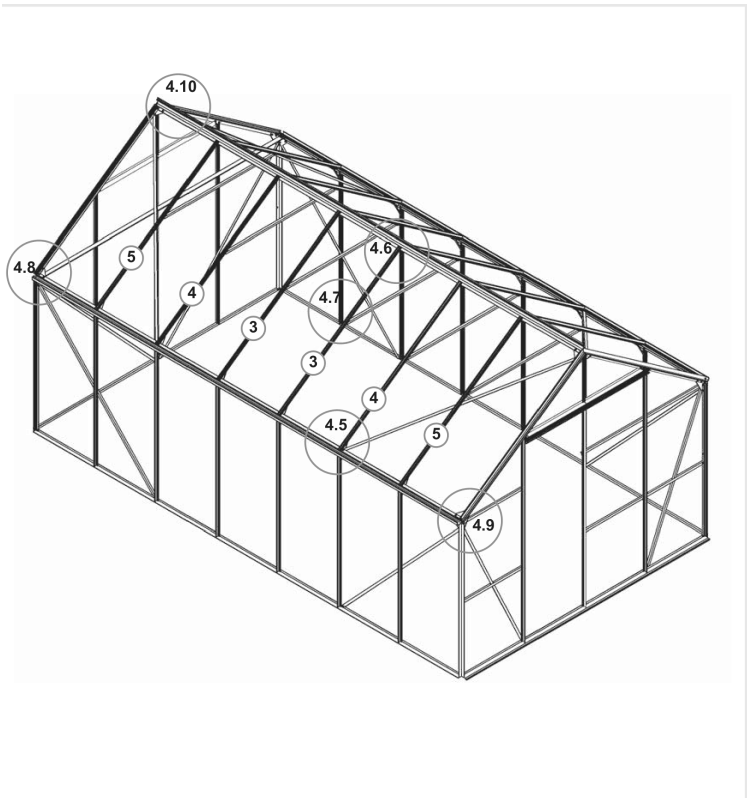
4.3 OUTSIDE VIEW

Loosely connect corner plates 1092 above the eaves, as shown in this outside view.

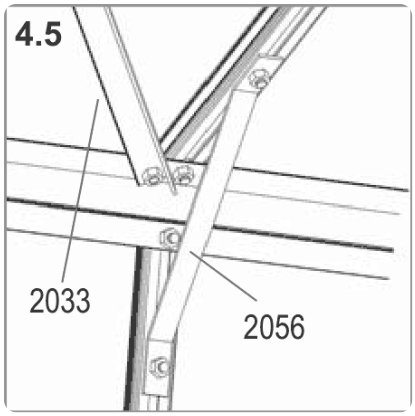


4.4

Fit your ridge bar (2050, 2051, 2052 or 2053). Fix corner plates 1092 to the gable ends at the peak beside apex plate 1091.

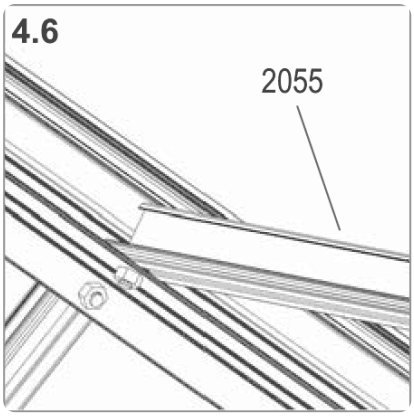


Vitavia drawing 4B. The circled numbers match the pictures below.



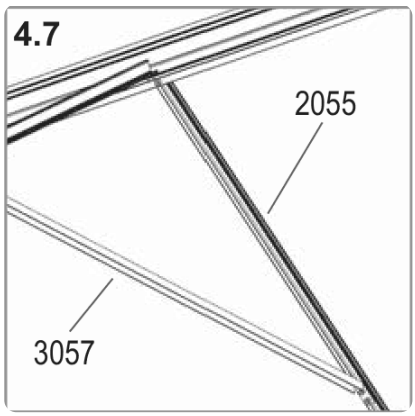
4.5

Follow drawing 4B and bolt the lower end of each roof glazing bar 2055 at the eaves. Connect corner brace 2056 and cross brace 2033 here, as shown.



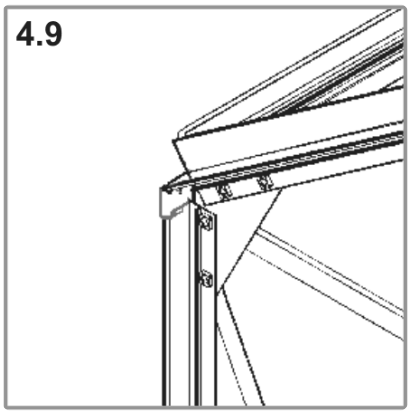
4.6

Bolt each roof glazing bar 2055 to the ridge bar and insert its extra bolts as you go. Read the circled bolt counts from both ends of each bar in the drawing.



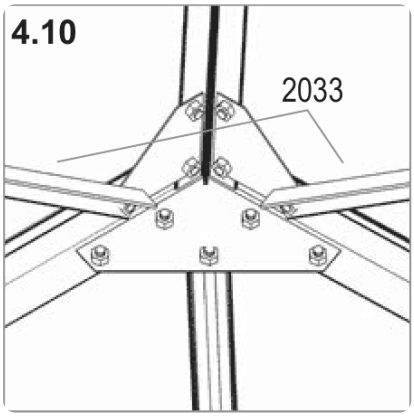
4.7

Connect roof braces 3057 to roof glazing bars 2055.



4.9 OUTSIDE VIEW

Check your corner where the eaves meet the gable end matches this outside view before you continue.

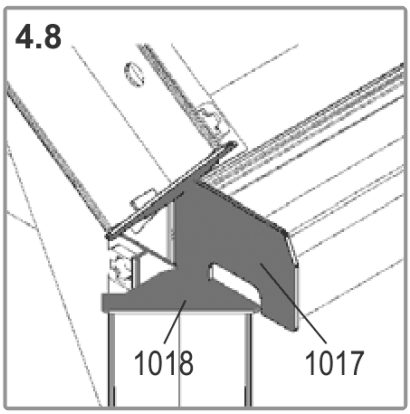


4.10

Connect cross braces 2033 at the gable peak, as shown.

DO THIS NOW

Place the greenhouse on your prepared base and connect it loosely. Adjust until completely square, then tighten all bolts without overtightening.



4.8 OUTSIDE VIEW

Press end protectors 1017 and 1018 onto the open profile ends.

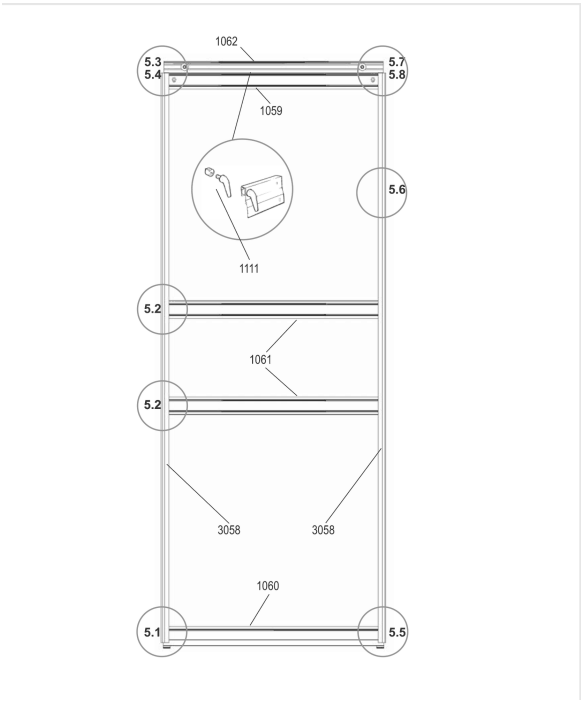
STEP 5

5 Build and hang the door

Assemble your sliding door, then fit it into the runner and bottom track.

YOU NEED

1001 ×4	**1002** ×4
1003 ×16	**1004** ×2
1007 ×2	**1009** ×2
1014 ×2	**1015** ×2
1059 ×1	**1060** ×1
1061 ×2	**1062** ×1
1111 ×1	**3021** ×2
3058 ×2	



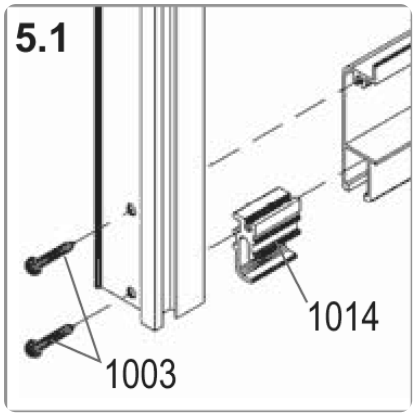
Vitavia drawing 5. The circled numbers match the pictures below.

INSTALLER TIP

If the door binds or jumps the track, the frame is almost certainly not square. Check the frame before you force the door.

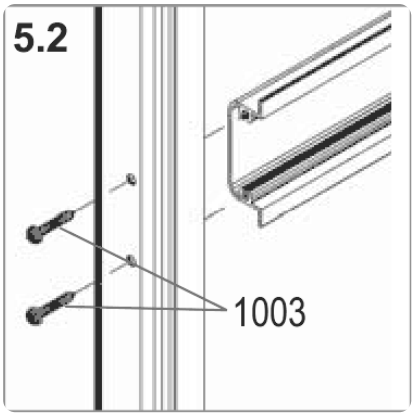
WATCH OUT

Never stand the assembled door on its gliders 1014. This damages them.



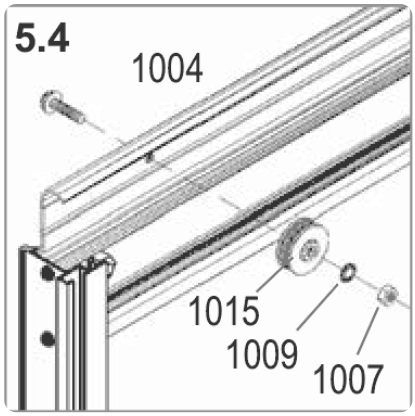
5.1

Push a door glider 1014 onto each end of door bar 1060. Screw side bars 3058 to door bar 1060 with screws 1003.



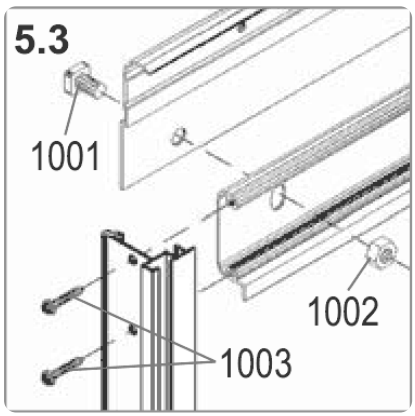
5.2

Screw middle bars 1061 to side bars 3058 with screws 1003.



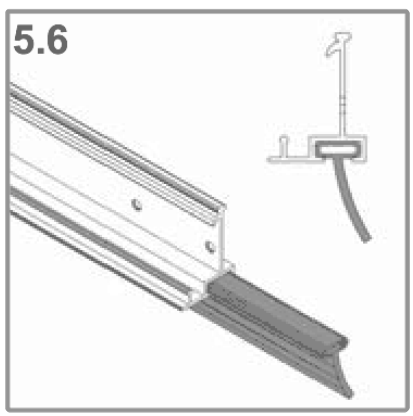
5.4

Fix the two door rollers 1015 to door bar 1062 with bolt 1004, washer 1009 and nut 1007.



5.3

Bolt door bar 1062 to upper bar 1059 with bolt 1001 and nut 1002. Screw the side bars to it with screws 1003.

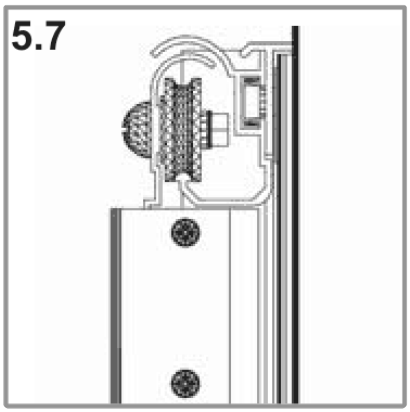


5.6 OUTSIDE VIEW

Slide door seals 3021 into side bars 3058.

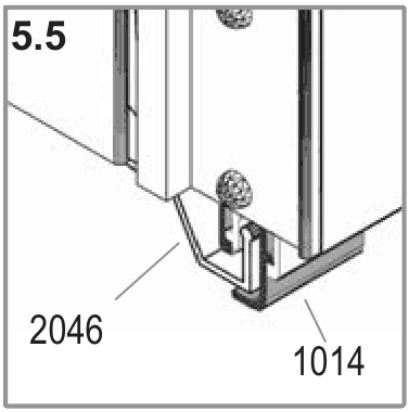
DO THIS NOW

Connect door fixer 1111 as shown in the circle on the main door drawing.



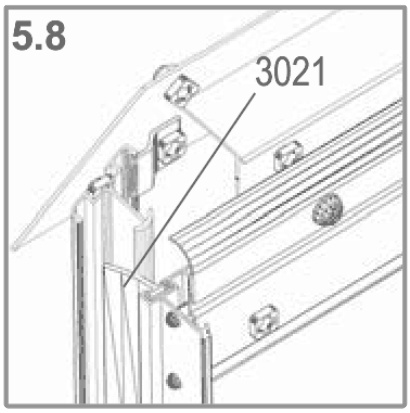
5.7 OUTSIDE VIEW

Lift the door and slide door rollers 1015 into door runner bar 1047.



5.5 OUTSIDE VIEW

Check that door gliders 1014 also run on bottom track bar 2046.



5.8 OUTSIDE VIEW

Check door seal 3021 sits along the door edge, as shown in this outside view.

DO THIS NOW

Once the door is fitted, put a nut and bolt into both ends of runner bar 1047 as door stops. Adjust the door until it slides freely.

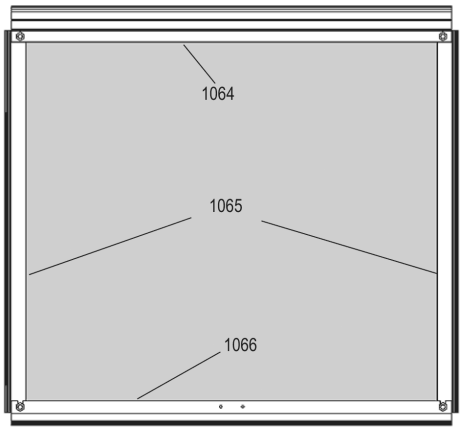
STEP 6

6 Fit both roof vents

Build and fit two roof vents for your Neptune, whichever size you have.

YOU NEED

 **1001** ×8	 **1002** ×8
 **1006** ×12	 **1016** ×4
 **1019** ×2	 **1063** ×2
 **1064** ×2	 **1065** ×4
 **1066** ×2	 **1067** ×2



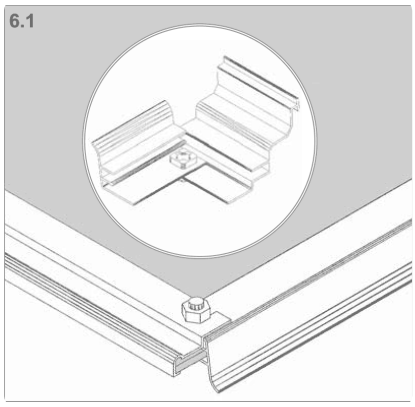
Vitavia drawing 6. The circled numbers match the pictures below.

INSTALLER TIP

Fit the slam bar (window sill 1063) flat edge up, with its grooved lip down towards the pane below. Recheck it if that pane will not sit snugly.

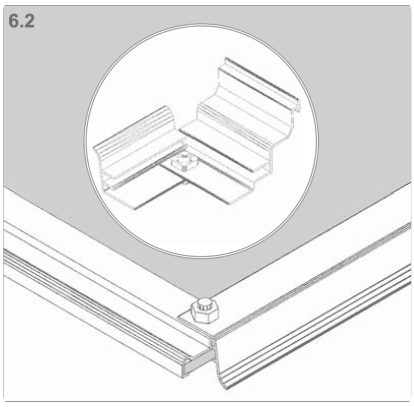
Watch: Build and fit the window

Scan with your phone camera. Vitavia video.



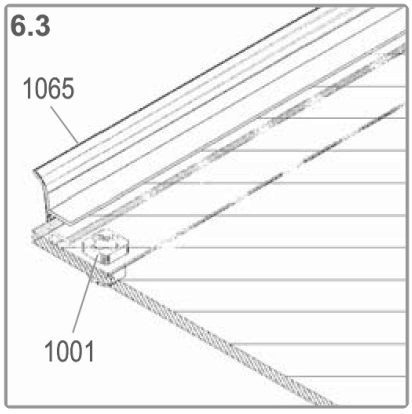
6.1

For glass up to 4 mm thick, join vent side bars 1065 and top bar 1064 as shown here.



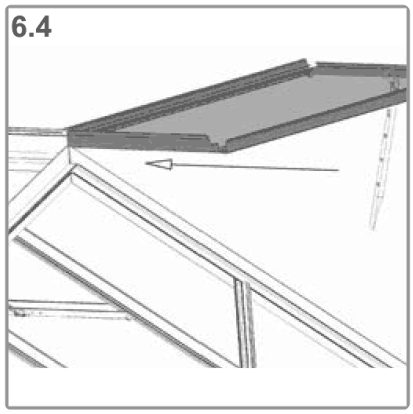
6.2

For glass 4 mm or thicker, join vent side bars 1065 and top bar 1064 as shown here instead.



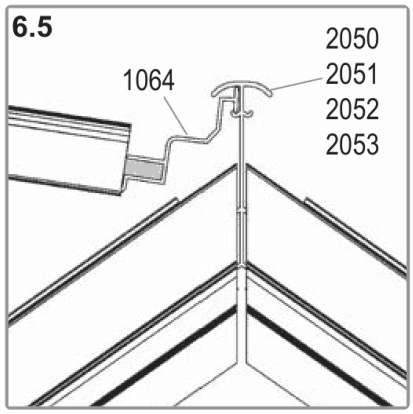
6.3 OUTSIDE VIEW

Insert bottom bar 1066 bolts into prepared holes and slide the glass into side bar 1065 tracks. Fit bottom bar 1066; check the vent is completely square before you tighten.



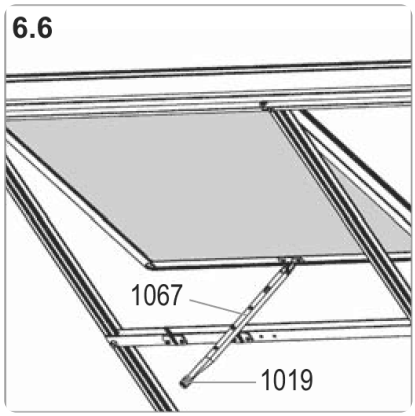
6.4 OUTSIDE VIEW

Hook the vent into the ridge bar from one end of the greenhouse.



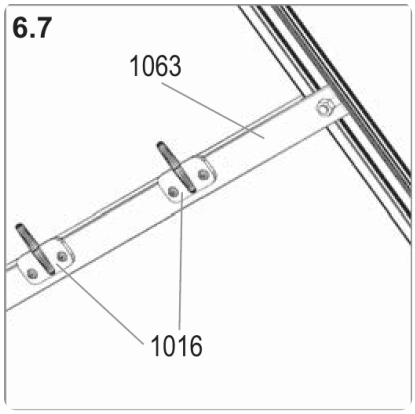
6.5 OUTSIDE VIEW

Hook vent top bar 1064 over your ridge bar (2050, 2051, 2052 or 2053), as shown.



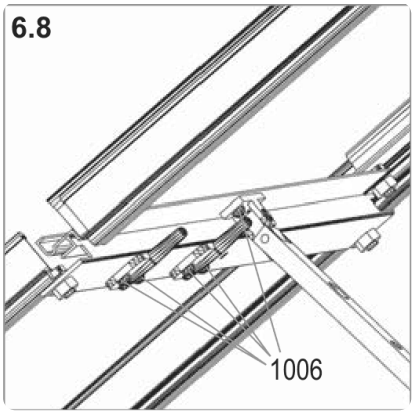
6.6

Slide the vent to your chosen position. Push plastic cap 1019 onto the end of window opener 1067.



6.7

Fix window sill 1063 to the extra bolts in the roof bars. Screw both window fixers 1016 onto window sill 1063 with screws 1006.



6.8

Screw window opener 1067 to vent bottom bar 1066 with screws 1006.

STEP 7

7 Fit the glass

Fit the glazing seal first, then glaze the roof before the sides.

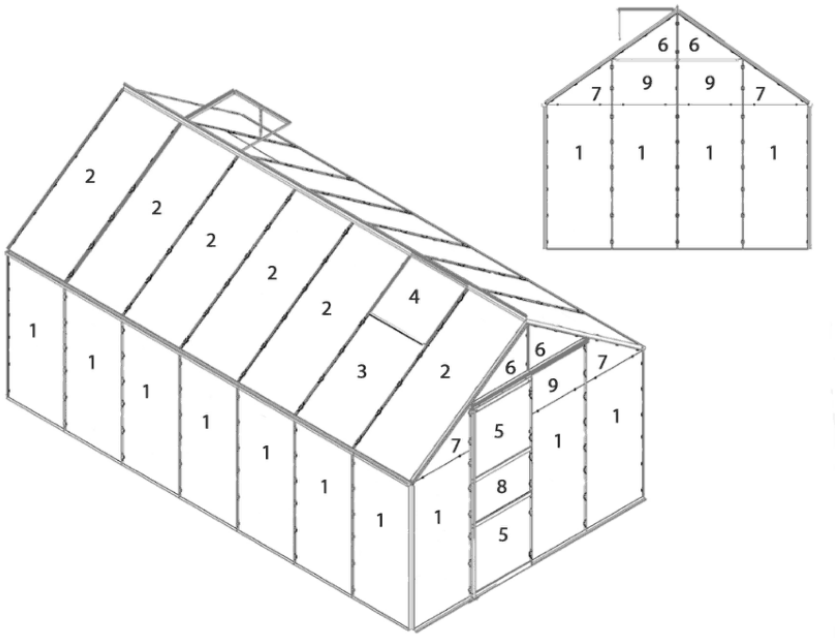
Your toughened glass

Your toughened glass comes as full panes, listed in the table below. Use the plan below for pane positions, not the drawing above. Join your gable glass with plastic H profiles where glass meets glass, replacing glass retaining clips 1012. Fit each H strip with its longest arm inside and uppermost.

PANE	SIZE (MM)	NEPTUNE 11500
1	610 × 1348	21
2	610 × 1524	12
3	610 × 985	2
4	600 × 544	2
5	610 × 610	2
6	600 × 434 × 8	4
7	610 × 451 × 27	4
8	610 × 378	1
9	610 × 447	3
	Total panes	**51**
	Plastic H profiles	7

Neptune : Glass plan for full pane toughened glass

Use plastic 'H' profiles for joining glass in the gables.
NB:**The 'H' profiles replace the Glass Retaining Clips 1012. Please note when fitting the 'H' strip the longest arm of the profile should be located inside and uppermost.**



	Neptune	6700	8300	9900	11500
1	610 x 1348mm	15	17	19	21
2	610 x 1524mm	6	8	10	12
3	610 x 985mm	2	2	2	2
4	600 x 544mm	2	2	2	2
5	610 x 610mm	2	2	2	2
6	600 x 434 x 8mm	4	4	4	4
7	610 x 451 x 27mm	4	4	4	4
8	610 x 378mm	1	1	1	1
9	610 x 447mm	3	3	3	3
	Total	**39**	**43**	**47**	**51**
	Plastic 'H' profiles	7	7	7	7

Revised 22.10.15

Vitavia's toughened glass plan. Pane numbers match the table.

YOU NEED



1011
×492



1020
×1

INSTALLER TIP

Soak the whole glazing seal reel in hot soapy water first; it softens and presses on more easily. Glaze the roof before the walls to avoid leaning over fitted side glass.

WATCH OUT

Never force a pane, as this cracks glass. If it will not seat, square the frame before you continue.

Watch: Fitting the glazing rubber

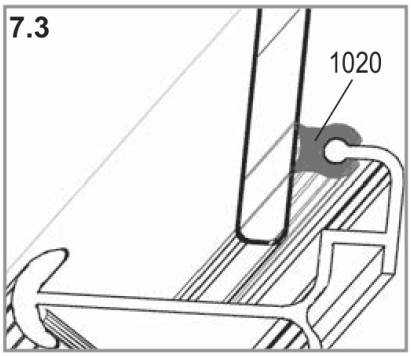
Scan with your phone camera. Vitavia video.

Watch: Glazing the roof with toughened glass

Scan with your phone camera. Vitavia video.

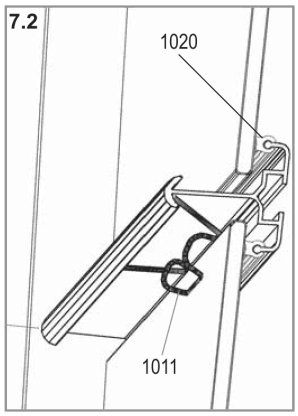
Watch: Bar capping (toughened glass and polycarbonate)

Scan with your phone camera. Vitavia video.



7.3 OUTSIDE VIEW

Press glazing seal 1020 onto the aluminium profiles and cut it to length. Fit it before any glass goes in.



7.2 OUTSIDE VIEW

Start the roof glazing at the ridge. Fix each pane with glazing spring clips 1011.

DO THIS NOW

Glaze the sides from the bottom upwards.

LAST JOBS

Finish and look after it

Finish

- [ ] Anchor your greenhouse. This is not optional.
- [ ] Seal the edges with silicone if you wish; silicone is not supplied.
- [ ] Stick the warning label inside the greenhouse.
- [ ] Stick the model label onto door bar 1062. You will need it to order spare parts.
- [ ] Keep this guide somewhere safe.

Looking after it

- [ ] Shut the door and all vents in high winds.
- [ ] Clear the roof or support it in heavy snow. Heat the greenhouse in winter.
- [ ] Wash your greenhouse occasionally with a mild detergent that does not attack aluminium or the glass fixing clips.
- [ ] Keep the upper and lower door tracks clean so grit does not build up.
- [ ] Add the greenhouse to your home insurance and check local building rules about where it can go.

Drawings reproduced from the Vitavia assembly instructions (Vitavia manual 002.03.0905 (Neptune, printed as Merkur)). Greenhouse Stores, greenhousestores.co.uk.