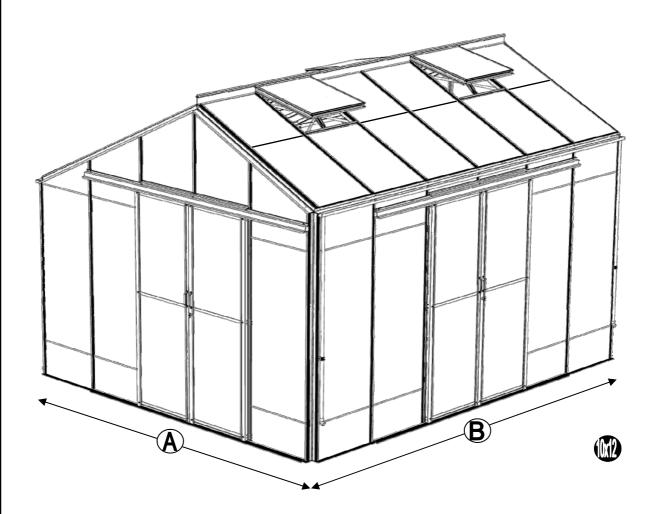


Redoubtable Assembly instructions



NOMINAL SIZE	A (mm)	B (mm)
10 x 6		2012
10 x 8	2022	2632
10 x 10	3233	3252
10 x 12		3872

NOMINAL SIZE	A (mm)	B (mm)
6ft extension		1860
8ft extension		2480
10ft extension	-	3100
12ft extension		3720



Thank you for purchasing your new Robinsons greenhouse. We recommend you familiarise yourself with the instructions and read all safety information before you commence assembly. This instruction manual is also available online at www.robinsonsgreenhouses.co.uk in our technical help section should you need to reprint it. Should you require any additional advice you can always call us on 01782 385409.

These instructions are divided into sections highlighted by a white number/letter on a black background at the bottom corner of most pages (see opposite page for details); part lists, B-base, P-preparation, 1a / 1b-sides, 2-front gable, 3-rear, 4-joining the four sides together, 5-roof, 6-vent, 7-door, 8-glazing, 9-vent attachment, 10-door attachment, 11 anchoring down, 12 optional louvre, 13 optional shelf, 14 optional staging, 15 finishing touches, Double doors in high side. If you need to contact us for assistance please refer to the relevant section/s. If your building is longer than 12', i.e. has an extension then please also refer the separate extension manual.

Safety Warning

- Glass and aluminium can potentially cause injury. Please ensure you wear protective goggles, gloves, headgear and suitable footwear when assembling and glazing the building.
- Please remember that glass is fragile and should be handled with extreme care. Always clear up and dispose of any breakages immediately.
- Do not assemble the greenhouse in high winds.
- For safety reasons and ease of assembly, we recommend that this greenhouse is assembled by a minimum of two people.
- Please clear all lying snow from the greenhouse roof as it can cause the roof to buckle or collapse.

Site Preparation

- When selecting a site for your greenhouse, it is vital that you choose as flat and level an area as possible.
- A concrete or slabbed base will provide the most solid foundation for your greenhouse.
- IMPORTANT: Do not fix your building down until the building is fully assembled, including glazing.
- Avoid placing your greenhouse under trees or in other vulnerable locations.
- To minimise the risk of wind damage, try to select as sheltered a site as possible, e.g. beside a hedgerow or garden fence.

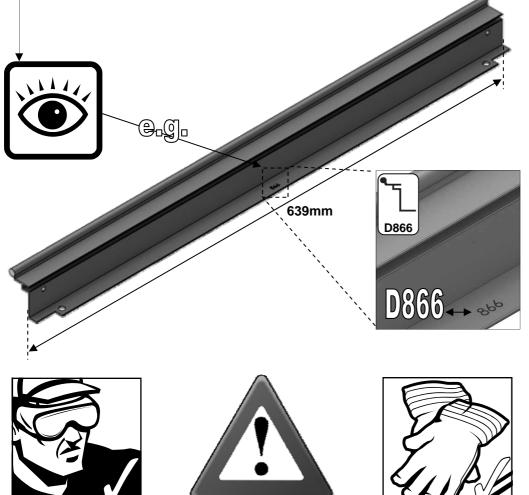
Additional Considerations

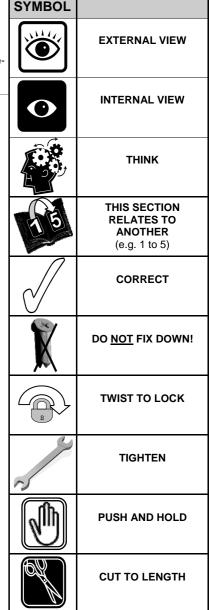
- Please bear in mind that assembling your greenhouse can be time consuming. You may need to spread the construction over two or more
 days. We recommend that you avoid leaving the building partially glazed. If you ever have to leave your greenhouse half assembled and not
 anchored down, weigh it down with slabs or bags of sand to stop the wind moving it.
- You will find it helpful to prepare a large, clean and clear area in which to work in. A garage floor or flat lawn area is ideal.
- If you have arranged for someone to install your greenhouse for you, please check that all components are included. Some parts are numbered and can be identified by a stamped or hand written number (without the 'D'). Alternatively, the components can be identified by their distinctive profiles, lengths and quantities detailed in the parts list (see next page).

 **EXAMPLE OF THE TRANSPORT OF THE PROFILE OF TH
- Anchoring down your greenhouse should be the final stage of construction (including glazing).
- Once installed your greenhouse requires little maintenance, but to maintain the smooth running of your door(s) WD40 or similar can be applied to the door wheels and lower door guides.

Guarantee

 Your new Robinsons greenhouse is guaranteed for 10 years against faulty manufacture of the framework. This does not include glazing, moving parts, accidental damage or wind damage.





SECTION No	TITLE	ASSEMBLY SYNOPSIS: IMPORTANT INFORMATION / CONSIDERATIONS
	PARTS LIST	Most components should have a 'D' code punched into their metal surface. Identify and separate all like for like components prior to assembly. The 'parts list' also separates parts into the various sections 1 - 12 shown below. Parts can also be identified by their profile pictures and stated lengths etc
В	BASE	Base dimensions and recommendations. Ensure that your base is level as this will make assembly of the building, especially the glazing of the roof much more straight forward.
Р	PREPARATION	Tools required. <u>IMPORTANT</u> : Use WD40 or similar in the glazing bar channels and insert the black glazing rubber prior to frame assembly.
1a 1b	LOW AND HIGH SIDES	Take the side glazing bars with the rubber inserted and the diagonal braces and use 10mm bolts to join them to the gutter and 15mm bolts to the cills (note how the head of the bolt slides into each glazing bar during construction). Please notice how one side is taller than the other (1a <1b) and that the taller side has a different profile cill enabling a door to be added.
2	FRONT GABLE	Again ensuring that the gable framework is rubbered-up follow the diagrams to assemble each end of the building. The gable ends of this model can be built so that the roof can be orientated in two different way please choose the appropriate component layouts for your requirements. Make sure that you have
3	REAR GABLE	inserted the extra bolts utilised in sections 4, 5 and 10. On the roof and side corner bars not every rubber channel will require rubber unless it is to be utilised in a partition (see separate manual and section P).
4	JOINING THE FOUR SIDES	Take the low and high sides (1a/1b) and both gables (2 & 3) and join them together on your base. It is a good idea to tie some ladders to the sides to support them if you do not have anyone to hold them.
5	ROOF	Attach the ridge and then the rubbered-up roof bars ensuring that they are fully butted up to the ridge and down onto the gutter. If you have <u>cresting</u> then it is a good idea to fit it before glazing, see section (15). Some tubular braces are supplied to add extra strength, they can be fitted now or later with crop head bolts.
6a	VENT	Once the vent is glazed add silicone to the vent sides and top. Stand the vent/s on their hinge (vent top) and then leave the silicone to set. The slam bar 'D079' can be moved up and down between the roof
6b	VENT SLAM	glazing bars so that it can be butted down onto the pane of glass beneath, the autovent will be attached to it later on (9).
7	DOOR/S	Construct the doors and then leave to one side ready for attachment in section (10).
8	GLAZING	Layout the bar cappings and covers around the building like a sundial checking that all is present and correct. You can also place the roof cappings in the gutters so they are closer to hand. The glass in the sides has to bevel on the black separator strip which is on top of the 305mm high glass base panels. This bevelling action allows the glass to tuck underneath the gutter canopy. Use the capping and the self tapping screws to then hold the glass in place. The covers then enclose the screw heads giving a neat finish. A top tip is to not attach the door post capping (D814/D836) until you have fitted the door runner and threshold (10) to give you more room to manoeuvre. It is a good idea to glaze two roof sections first to ensure the building is square followed by two side sections to ensure the building isn't leaning, On occasion a hacksaw may be required to make minor adjustments to the length of the capping / covers.
9	VENT ATTACHMENT	Take the assembled vent and slide the vent hinge 'D866' into the end of the ridge allowing the vent the pivot open and closed. Vent stops go either side of the vent to stop any lateral movement (so insert stop / vent / stop). Attachment of the Bayliss XL autovents.
10	DOOR ATTACHMENT	Use the bolts inserted in section (2) to attach the upper door track. The lower door runner 'D861' and ramp threshold 'D088' push down and lock together.
11	ANCHORING DOWN	Now that the greenhouse is finished and the door and vent/s are operating without interference then you need to anchor the building down using 2" rawl plugs and screws. Use a 7mm masonry bit in a hammer drill to create the holes.
12	OPTIONAL LOUVRE	They attach to the building during the glazing process (8) like a piece of glass with a black separator above and below them.
13 14	OPTIONAL SHELVING / STAGING	Robinsons integral cantilever staging and shelving attaches to the inside of the greenhouse frame using either square head bolts (insert four into each side glazing bar during construction of the sides (1a or 1b)) or rectangular 'crop head' bolts which can be fitted retrospectively (both sets of bolts accompany the shelving/staging). This system allows the height of either the staging or the shelf to be set at an operator specific height. Commonly the staging brackets are set 900mm from the cills though you can alter this to suit the end user/s. The aluminium shelf / staging slats come in two lengths; (4'):1240mm 'D2002' and (6'):1860mm 'D2003'. These slats can combine to create any length of staging required, i.e. 4'+6' = 10' etc
15	FINISHING TOUCHES	Now that the main body of the structure is complete you can add; ridge caps, downpipe fittings, eave bungs. Images showing cresting and finial attachment, this is often easiest to do after section (5) rather than using the vent apertures later on (i.e. before glazing).

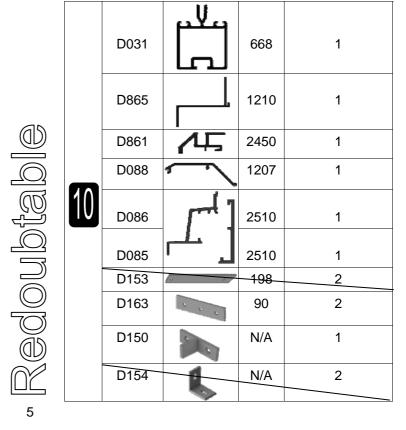
Section Ref	Part No.	Section	Size (mm)	10 6	10 8	10 10	10 12
			1	1	1	ı	
	D043		1894	1			
	D021	I	2514		1		
	D022	 	3134			1	
	D023		3754				1
	D036		1890	1			
	D037	ı.	2510		1		
	D050	<u> </u>	3130			1	
	D040		3750				1
	D042		1897	2			
	D014	٦.	2517		2		
	D015		3137			2	
	D016		3757				2
	D103		1787		2	2	
	D782		2071		2	2	
	D051	ولام	1976	2	3	4	5
	D066		1676	2	3	4	5
	RUBBER	Q	1000 (1m)	15	22	30	37
	D174	6	N/A	4	4	8	8

		ı		
	D050		3130	2
	D048	D048 D780	1676	2
	D780		1976	2
	D051	ملاد	1976	2
2 中 3	D053		2272	4
O	D032	ГСЛ	2568	1
3	D918		3130	1
	D103		1787	2
	D782		2071	2
	D035L		2082	1
	D035R	35R	2082	1
	D852L		1395	1
	D852R	ı	1395	1

Section Ref	Part No.	Section	Size (mm)	10 6	10 8	10 10	10 12	
2	D111		N/A	2				
2井3	RUBBER	Q	1000 (1m)		5	3		
<u>ئ</u>	D174		N/A		9)		
	D044	_	1897	1				
	D001	7	2517	•	1			
	D002	1	3137			1		
	D003	I	3757				1	
	D033	LV4	2082	2	3	4	5	
5	D064	لما	1395	2	3	4	5	
	D126		445	0	2	4	6	
	D128		1015	0	1	2	2	
	RUBBER	Q	1000 (1m)	14	21	28	35	
		1 _		ı	ı	ı		
	D866	•	639	1	2	3	4	
	D863L	5	613	1	2	3	4	
	D863R	<u></u>	613	1	2	3	4	
6	D862		593	1	2	3	4	
	D079 PLUS FLUFF	Ë	590	1	2	3	4	
	D114	0 0	N/A	2	4	6	8	
	D220 PLUS FS6060 SCREW	6	N/A	2	4	6	8	
	D205	-	N/A	2	4	6	8	

Section Ref	Part No.	Section	Size (mm)	10 6	10 8	10 10	10 12
	D090 + D347 lock = D301	<u></u>	1824	1			
	D092 + D156 strike = D303		1824		,	1	
	D093	<u></u>	1824		,	1	
	D094	<u></u>	1824		•	1	
7	D096 + D217 wheel = D307		611		2	2	
	D095		611		2	2	
	D097		611		2	2	
-	D232		905			4	
-	D233	<u> </u>	797			4	
_	P053	5	N/A			2	
	D225	0	610	2			
	D840B		4000		•	1	
Q HITLEN	SEPERATE		10mm	33	39	45	51
MAIN ERAME OLIVALITIES	VENTS / DOORS etc SEPERATE		15mm	49	51	53	55
NAM	VENTS		m6	82	90	98	106

	Section Ref	Part No.	Section	Size (mm)	10 6	10 8	10 10	10 12
		20/0						_
	1	D812		1660	2	3	4	5
	1/2/3	D816		1976	4	5	6	7
	3	D820		2272			2	
	5	D870	4 4	601	2	3	4	5
	2	D881	_	373			2	
	3	D882		2568			1	
	2	D883		662		,	1	
	5	D887		1490	2	3	4	5
	5	D896		1405	2	3	4	5
		_						
	1/2/3	D781		1976			1	
	2/3	D813		1675	2			
	2	D814	1	1883	2			
$ \mathcal{S} $	2/3	D834	~ ~	1660		2	2	
	5	D871		601		2	2	
	5	D888		1490		2	2	
	5	D897		1405		2	2	
	5	D810		1405	4	5	6	7
	1	D825		1660	4	5	6	7
	2/3	D826		1677		2	2	Į.
	1/2/3	D828		1978	8	9	10	11
	3	D830		2274		2	2	
	2	D836		1883		2	2	
	5	D880		2092	4	5	6	7
	3	D884		2570		,	1	
	2	D885		664		1		
	2	D886		375		2	2	



THE DIMENSIONS BELOW ARE THE EXACT EXTERNAL BASE DIMENSIONS FOR THE ROBINSONS RANGE.

We cannot emphasis how important it is to have a proper base for your Robinsons Greenhouse to be erected upon.

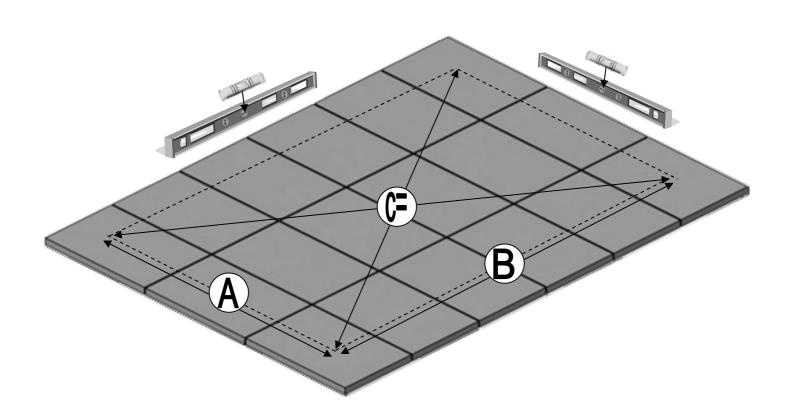
It is essential that the **BASE IS FLAT, LEVEL AND SQUARE AS WELL AS BEING SUBSTANTIAL** enough to take the weight of the greenhouse including its 4mm glass.

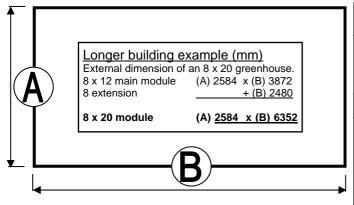
Give yourself enough room around your base to allow for fitting the glass and any on-going maintenance / cleaning. A slab base which is larger than the greenhouse is the ideal solution and is our preferred foundation.

A brick perimeter base is equally suitable providing there is a concrete foundation beneath it. We suggest using a solid brick with no frogs or holes (quality stock bricks or semi-engineering bricks).

IMPORTANT: Do not anchor your greenhouse down until it is fully assembled including glazing unless you are 100% sure your base is square and level. If not your glass will not fit properly.

IMPORTANT: If you have anything overhanging the ridge on a lean-to building then please make sure it does not interfere with the motion of the roof vents.



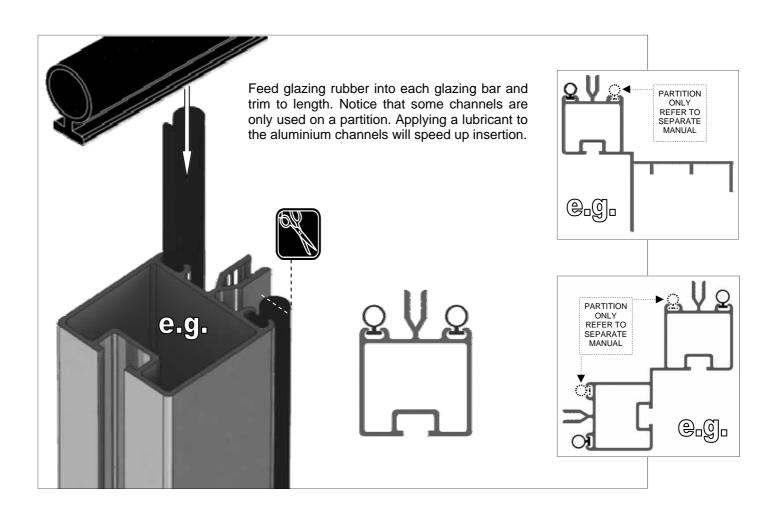


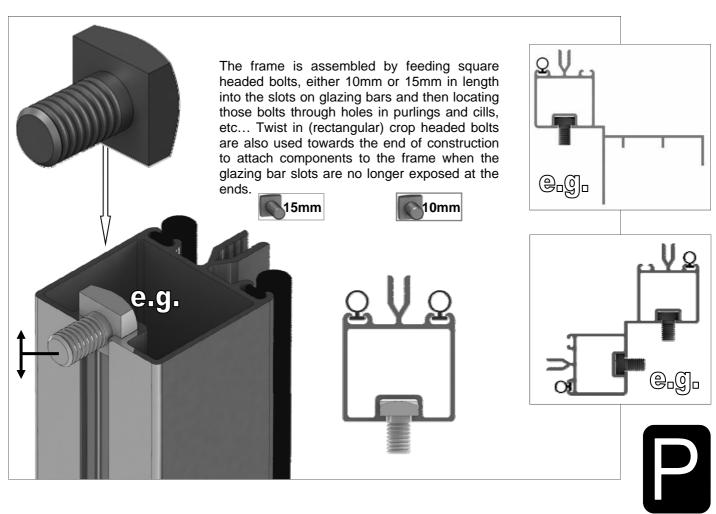
EXTERNAL DIMENSIONS (mm)

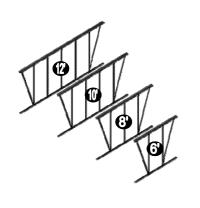
Model sizes listed are **nominal**, use 'mm' measurements.

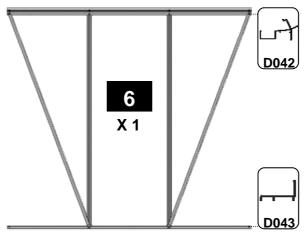
MODEL		A (mm) WIDTH	B (mm) LENGTH	C (mm) DIAGONAL
	10 x 6		2012	3787
DEDOUBTABLE	10 x 8	3233	2632	4150
REDOUBTABLE	10 x 10	3_33	3252	4568
	10 x 12		3872	5028
	6ft ext.	-	1860	-
	8ft ext.	-	2480	-
EXTENSIONS	10ft ext.	-	3100	-
	12ft ext.	-	3720	-



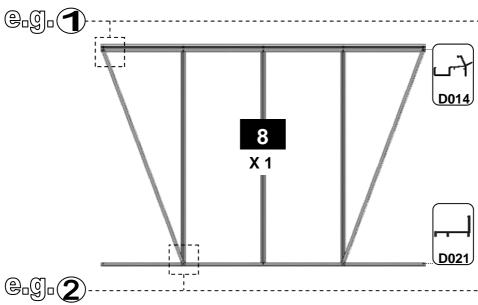




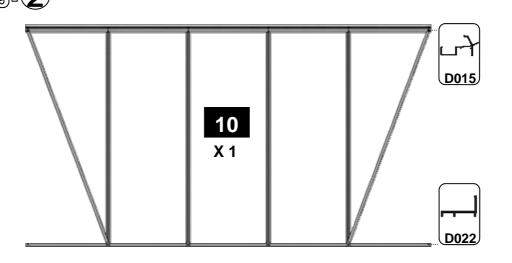




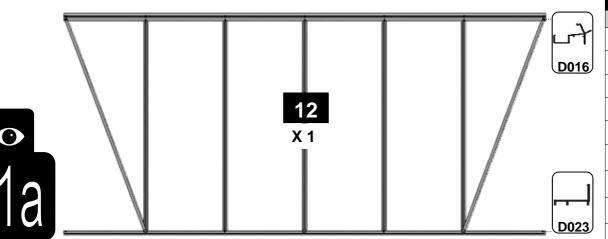
LOW SIDE 6 X 1						
Part No	mm	Quantity				
D042	1897	1				
D043	1894	1				
D066	1676	2				
D103	1787	2				
D174	4	2				
M6- 10mm	3	2				
M6- 15mm		4				
M6- NUT		6				
Rubber	1000	7				



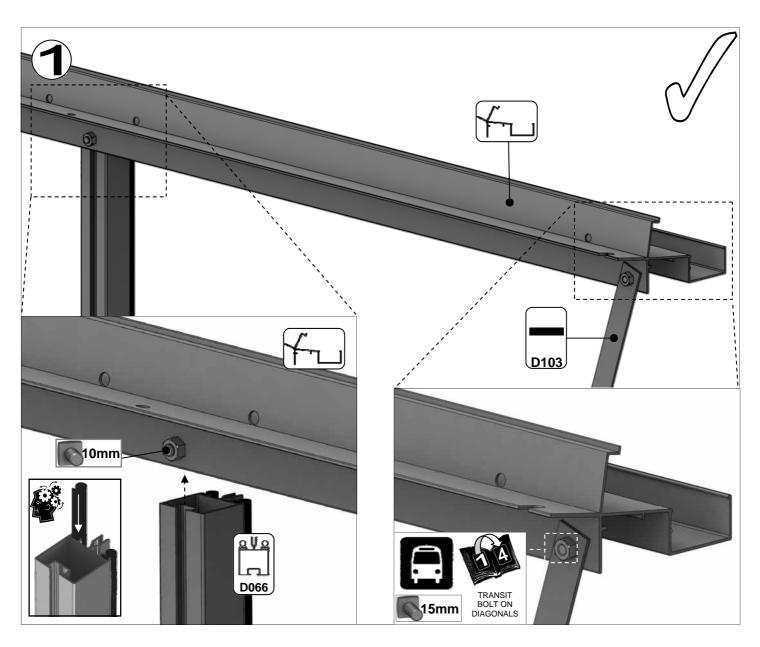
V SIDE	8 X 1
mm	Quantity
2517	1
2514	1
1676	3
1787	2
6	2
Can.	3
P	5
0	8
1000	11
	2517 2514 1676 1787

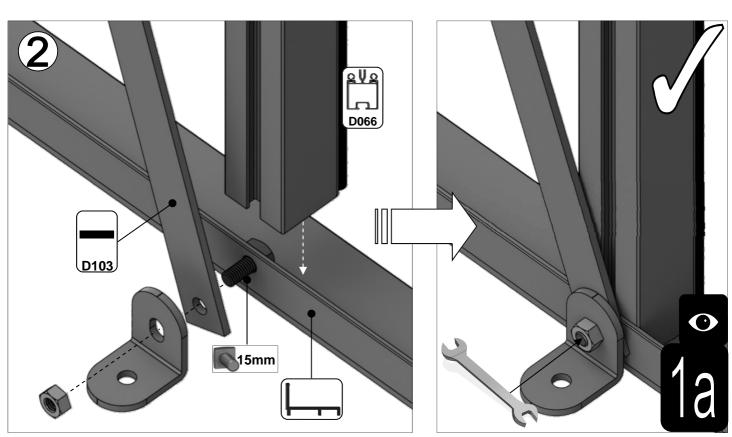


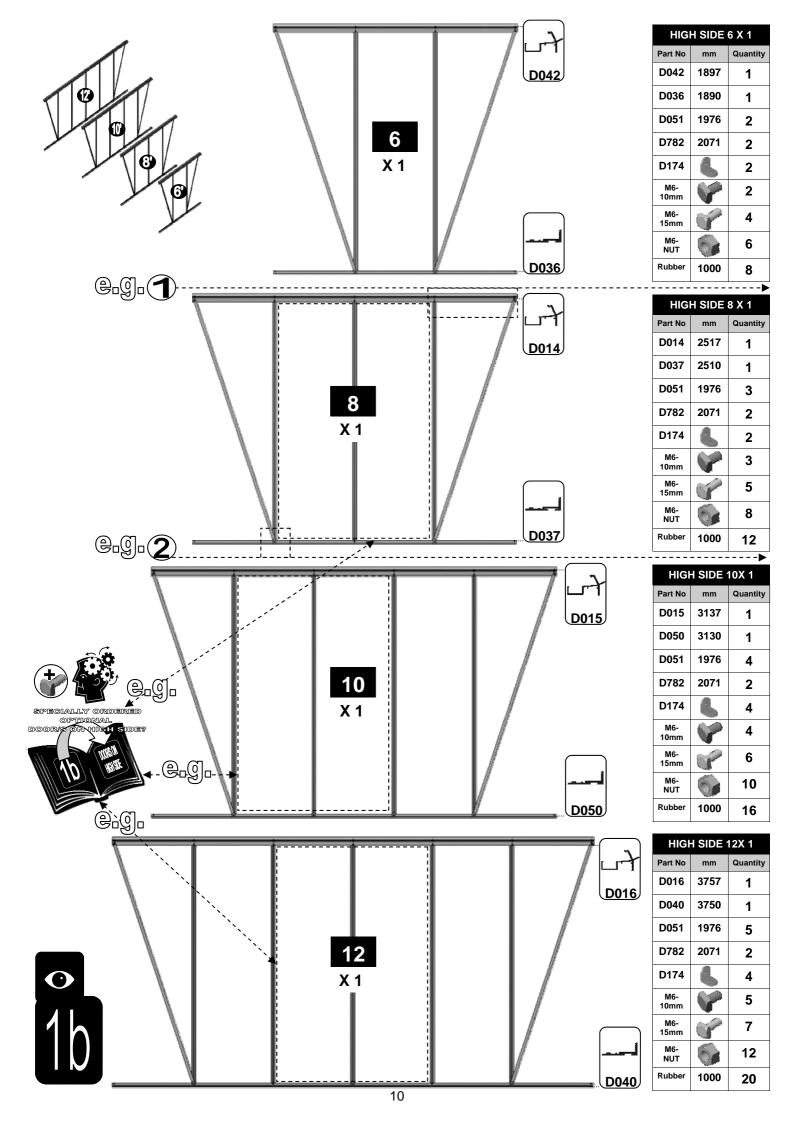
LOW	SIDE 1	0 X 1				
Part No	mm	Quantity				
D015	3137	1				
D022	3134	1				
D066	1676	4				
D103	1787	2				
D174	d)	4				
M6- 10mm		4				
M6- 15mm	4	6				
M6- NUT		10				
Rubber	1000	14				

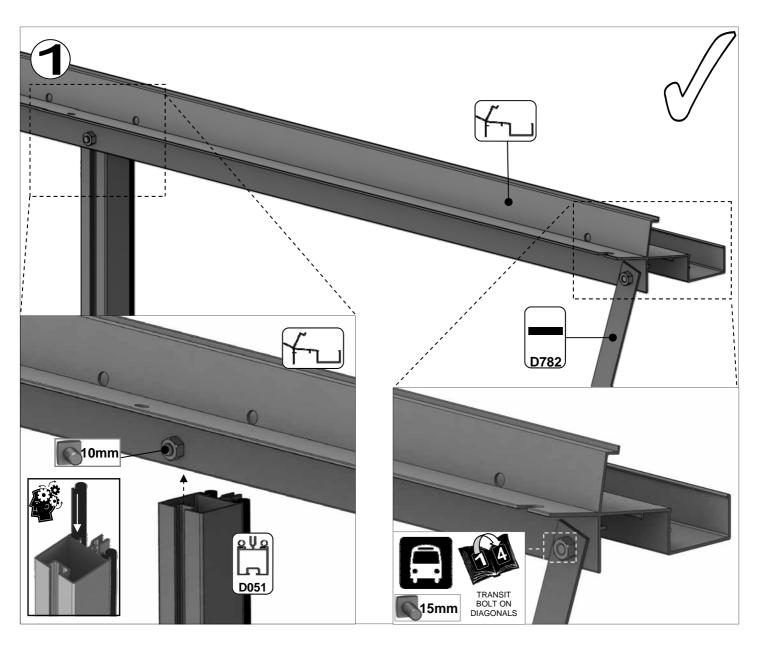


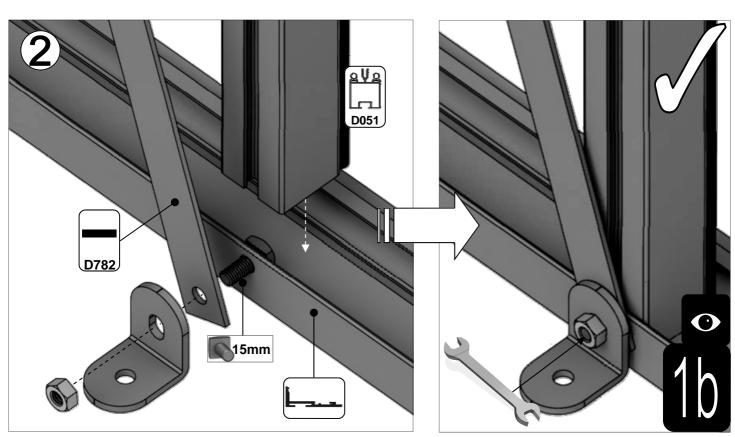
LOW	SIDE 1	2 X 1
Part No	mm	Quantity
D016	3757	1
D023	3754	1
D066	1676	5
D103	1787	2
D174	9	4
M6- 10mm		5
M6- 15mm	Con Con	7
M6- NUT		12
Rubber	1000	17





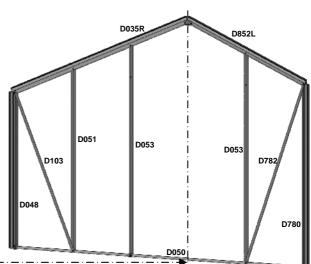


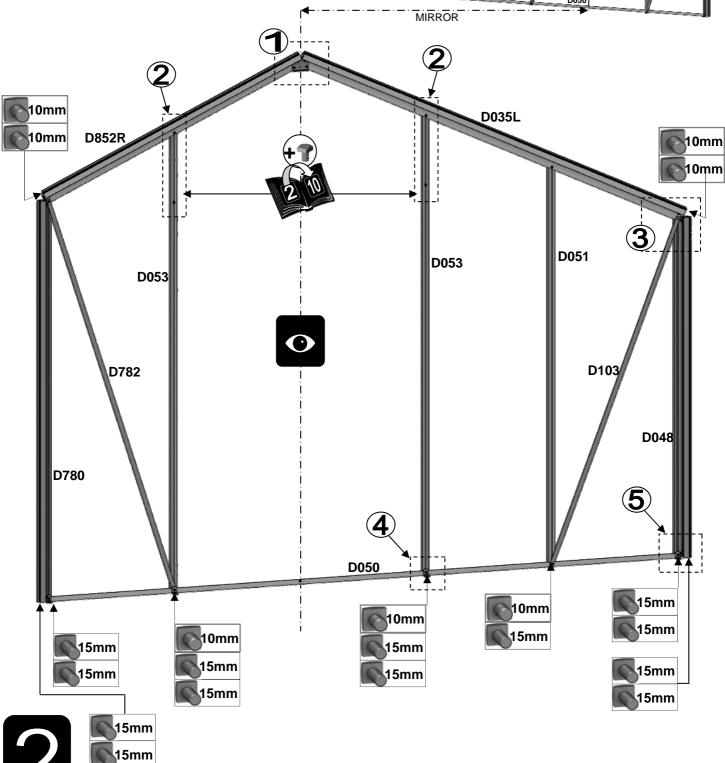


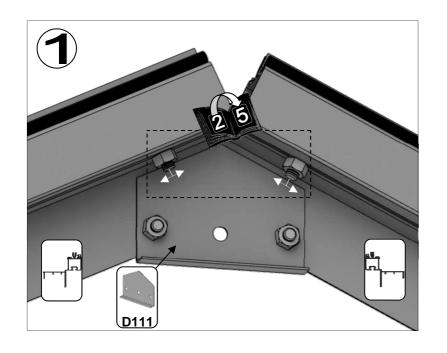


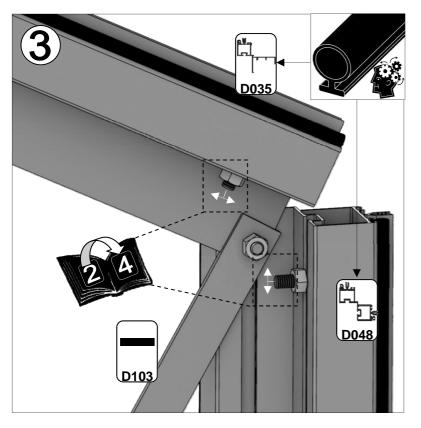
Part No	mm	Quantity
D048	1676	1
D050	3130	1
D051	1976	1
D053	2272	2
D103	1787	1
D780	1976	1
D782	2071	1
D035L/R	2082	1
D852L/R	1395	1

Part No	mm	Quantity
D111		1
D174	0	4
D227	Ъ	24m
M6X10		9
M6X15	Contract of the contract of th	13
M6NUT		22

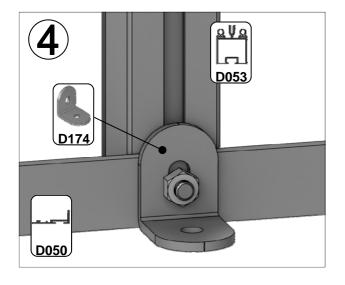


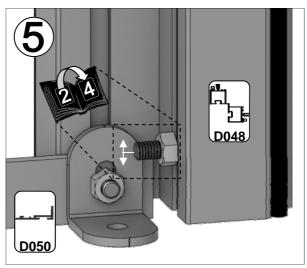


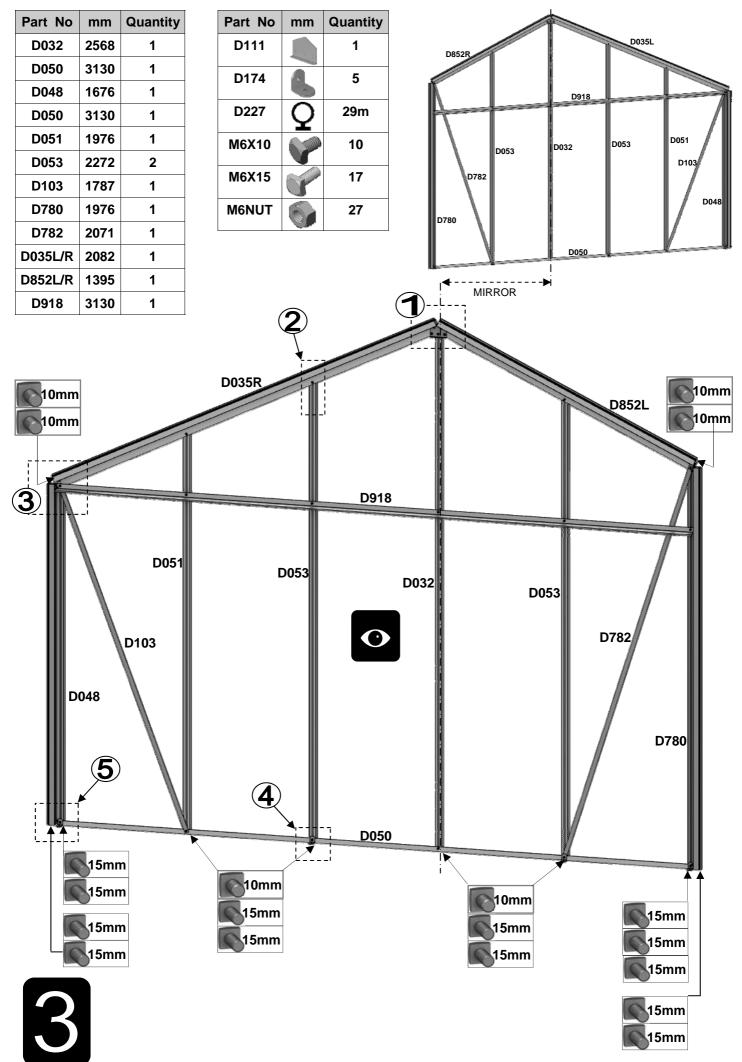


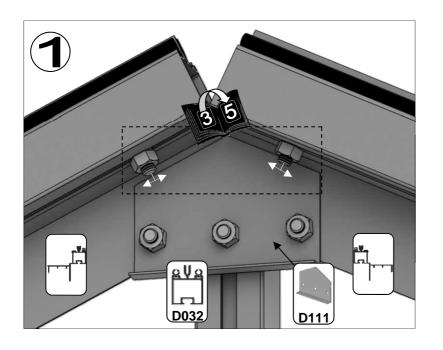




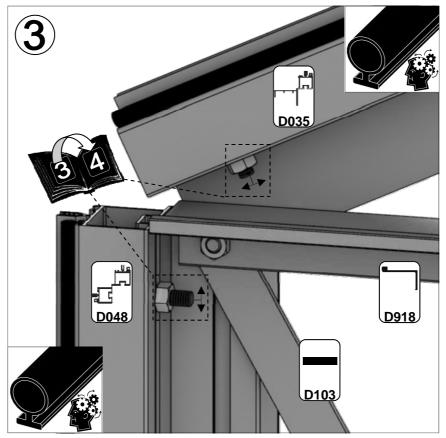


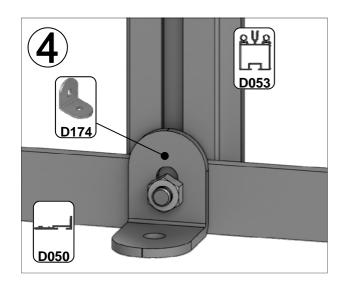


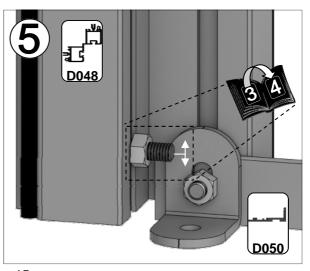




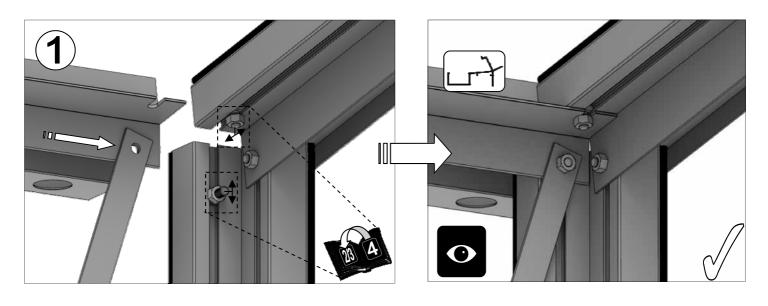


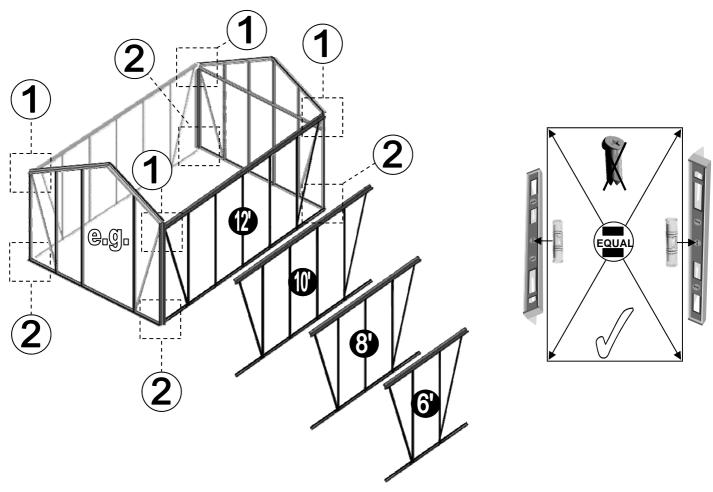


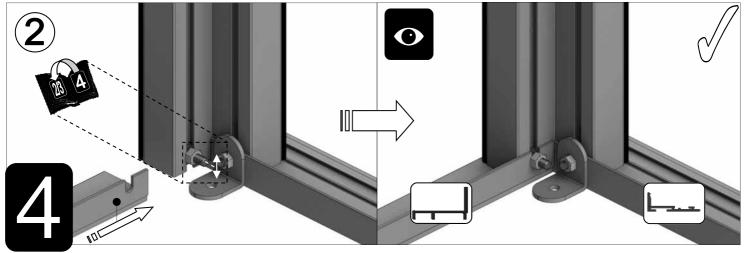


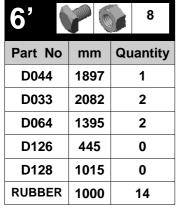








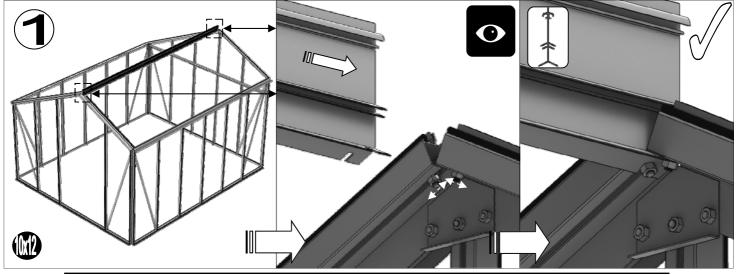


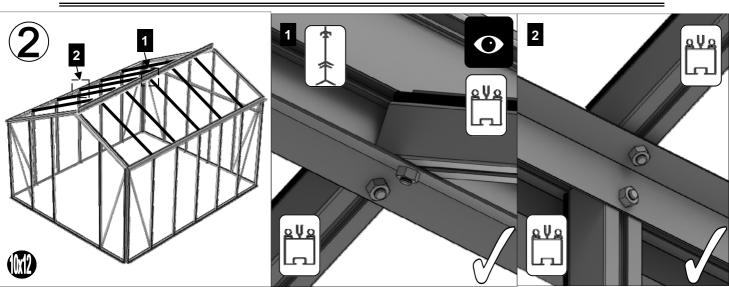


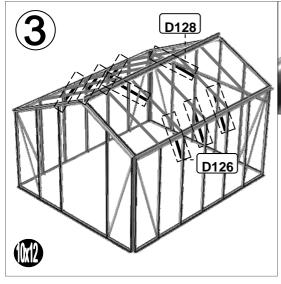
8'		12		
Part No	mm	Quantity		
D001	2517	1		
D033	2082	3		
D064	1395	3		
D126	445	2		
D128	1015	1		
RUBBER	1000	21		

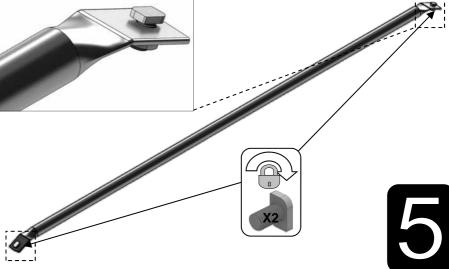
10'		16
Part No	mm	Quantity
D002	3137	1
D033	2082	4
D064	1395	4
D126	445	4
D128	1015	2
RUBBER	1000	28
<u> </u>		

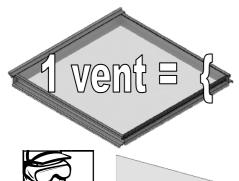
12'		20
Part No	mm	Quantity
D003	3757	1
D033	2082	5
D064	1395	5
D126	445	6
D128	1015	2
RUBBER	1000	35







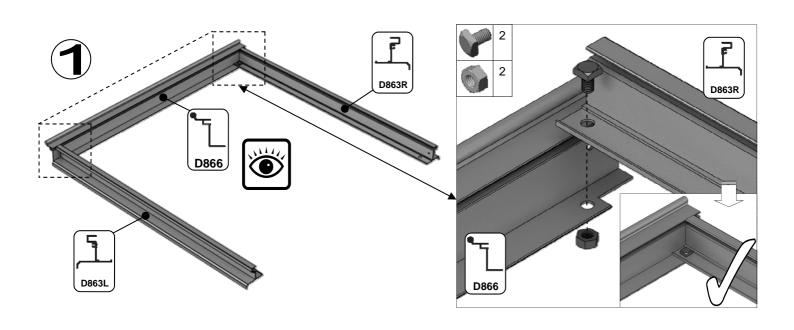


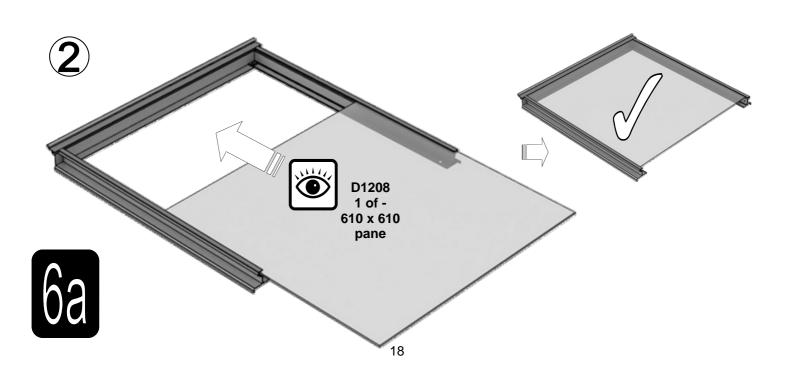


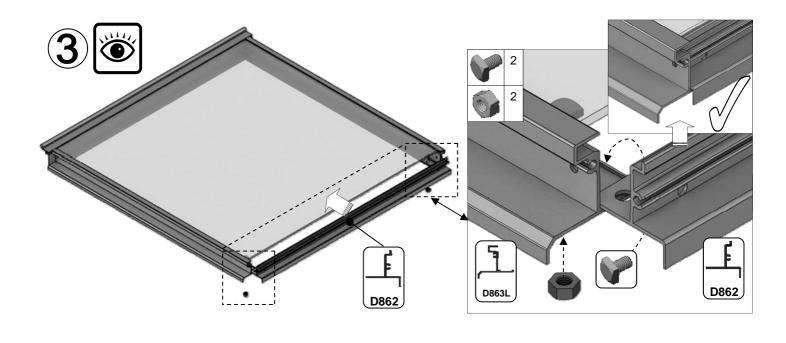
	September 1
	D1208 1 of -
	610 x 610
ł	pane

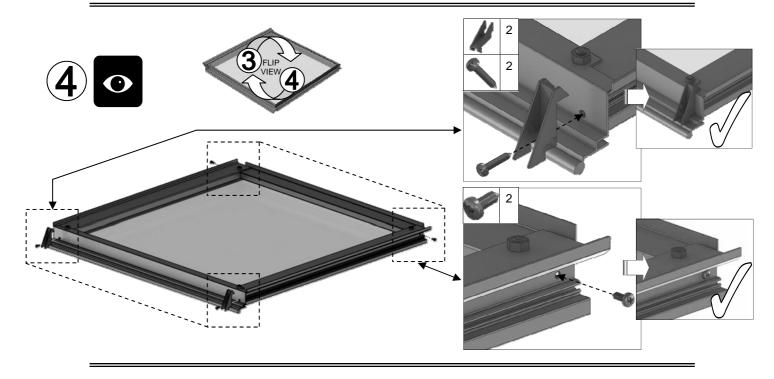
Part No		mm	Quantity
D866	ہا_	639	1
D863L		613	1
D863R	上	613	1
D862	<u>_</u>	593	1

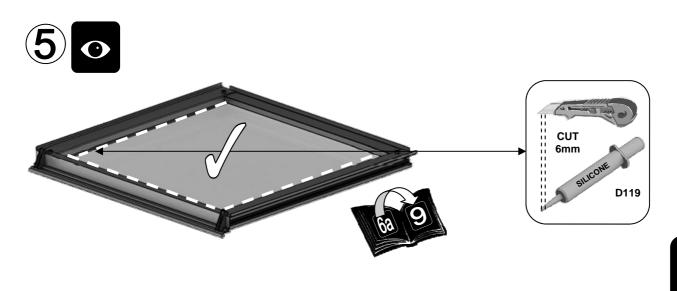
Part No		mm	Quantity
D220 PLUS FS6060 SCREW	6	N/A	2
D205	-	N/A	2
SY- BOLM6X11		10	4
SYNUTM6		M6	4
8 X 12 S/T FS6017	6	10	2
8 x 19 S/T FS6018		19	2









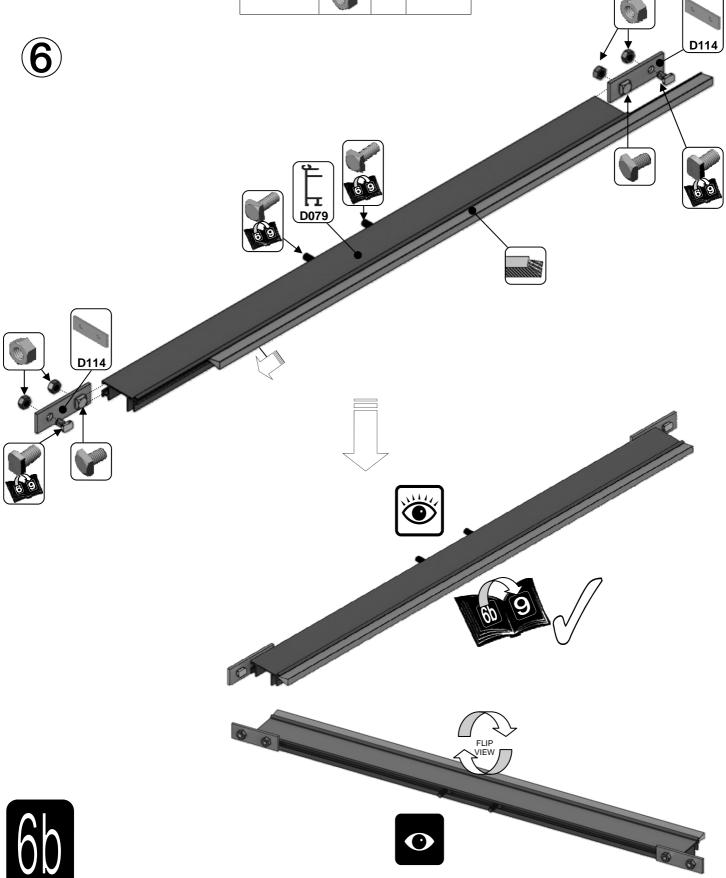


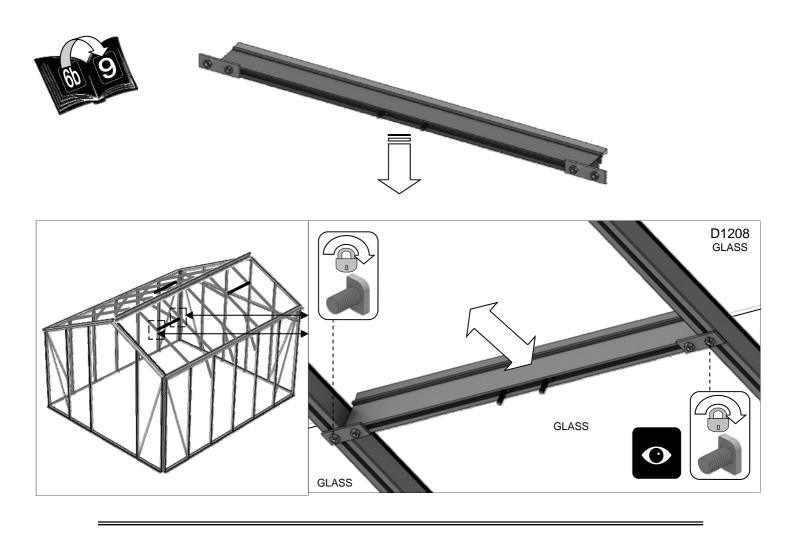


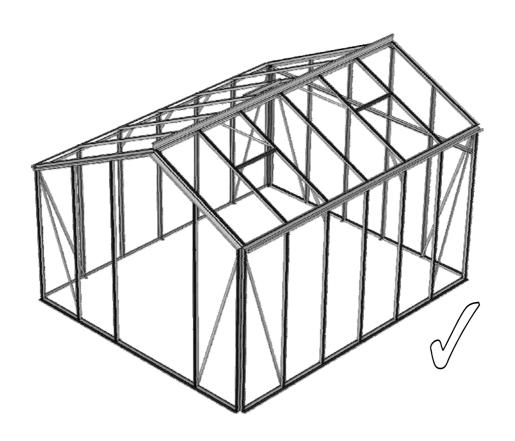


Part No		mm	Quantity
SY- BOLM6X11		10	2
SY- BOLM6X15	GPP	15	2
SYBOLM6 X11CROP		10	2
SYNUTM6		N/A	4

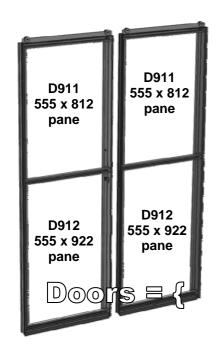
Part No		mm	Quantity
D079 PLUS FLUFF	ПŢ	590	1
D114	6	N/A	2





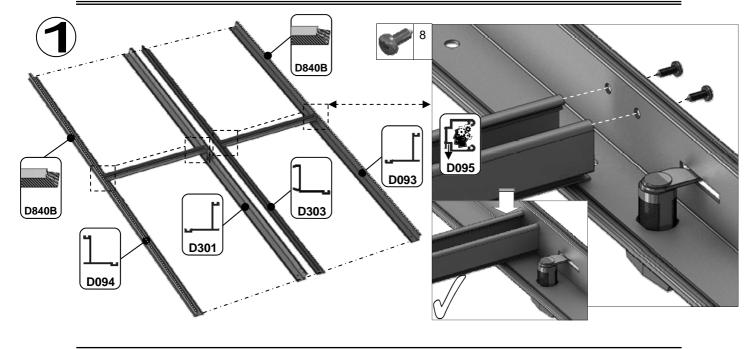


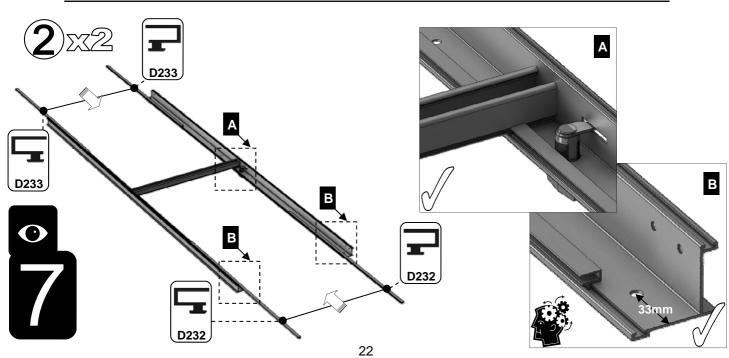


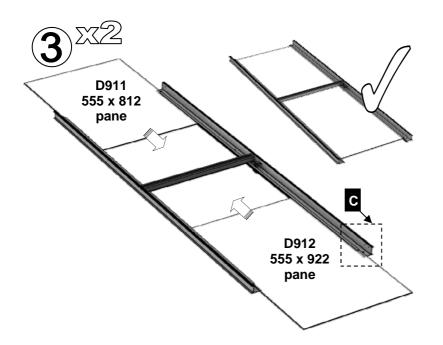


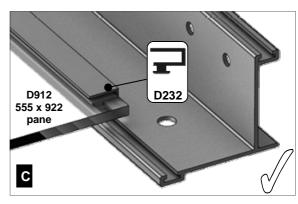
Part No		mm	Q
D094		1824	1
D090 + D347 lock = D301		1824	1
D092 + D156 strike = D303	$ \downarrow $	1824	1
D093		1824	1
D096 + D217 wheel = D307	ال]	611	2
D095	لِـاً	611	2
D097	۲	611	2

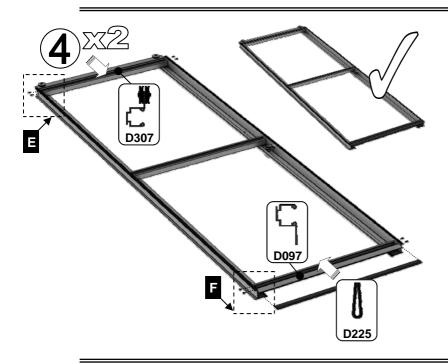
Part No		mm	Q
D232		905	4
D233	1	797	4
P053		N/A	2
D225	0	610	2
D840B		4000	1
D263		N/A	14
PACK x 2		N/A	14
D261 PACK	Carrie	N/A	24

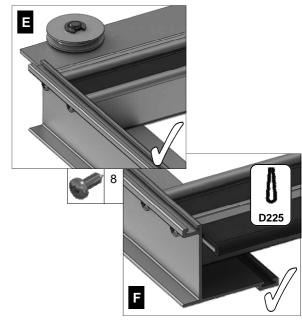


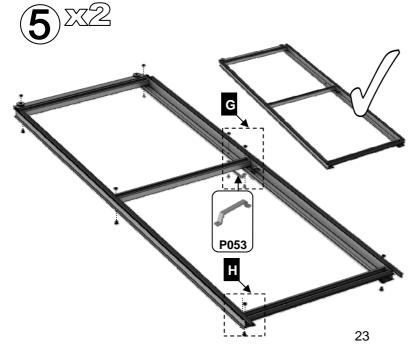


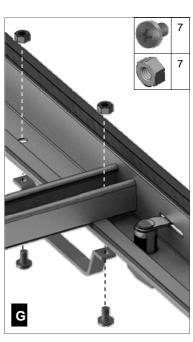




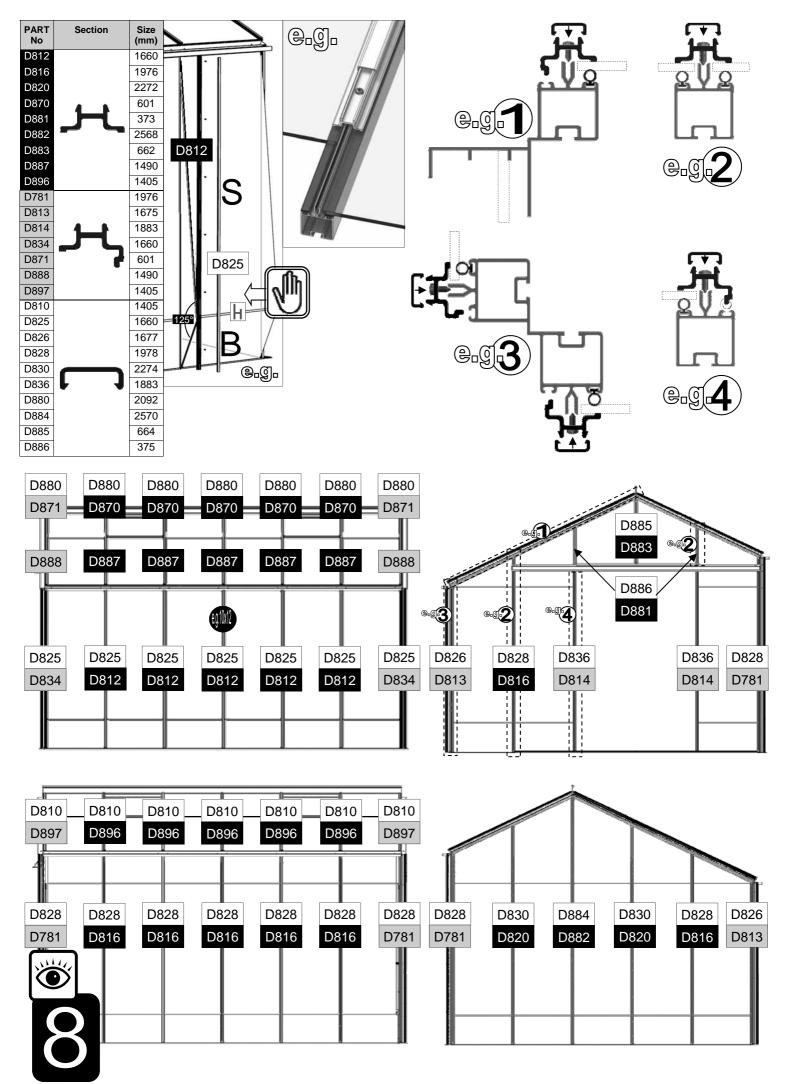


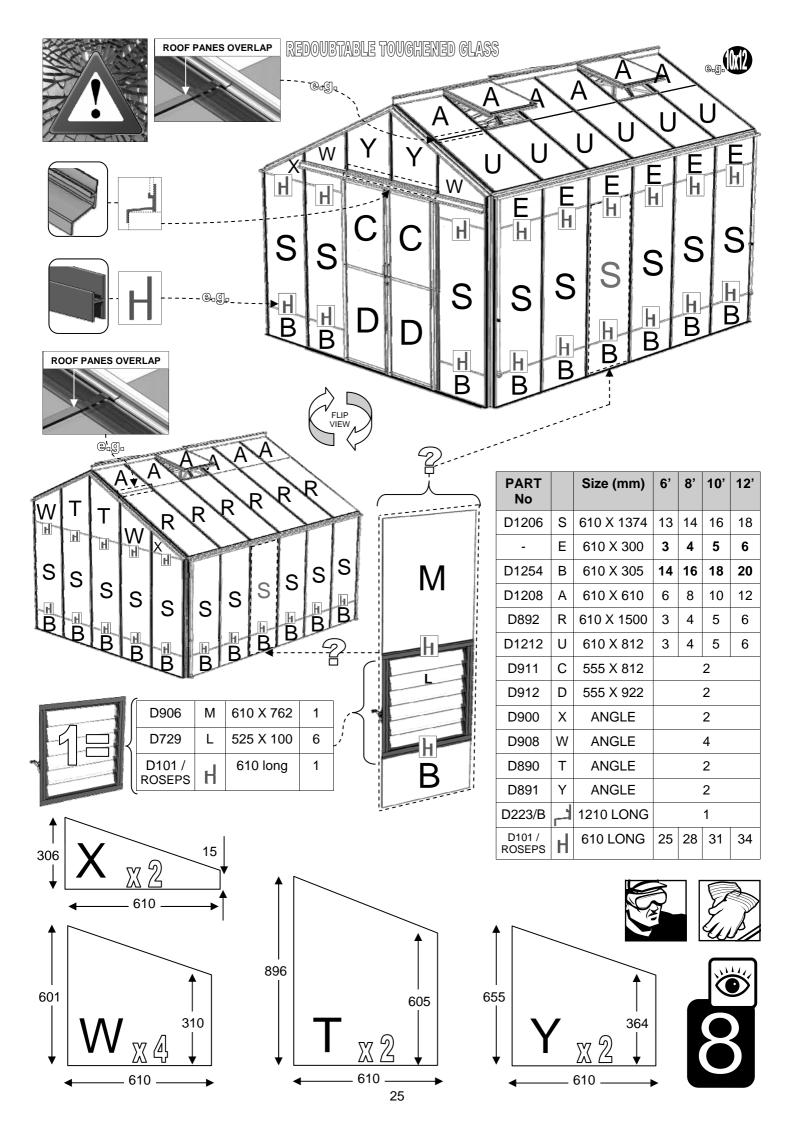


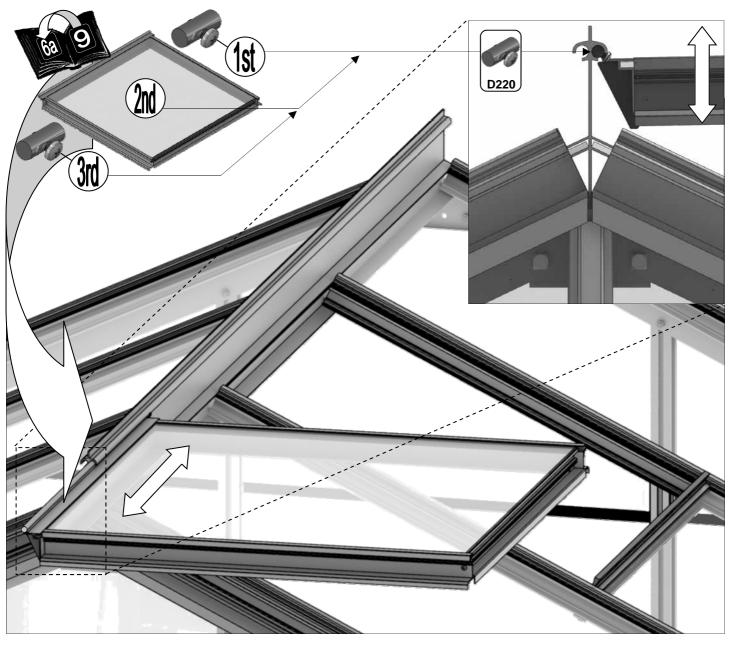


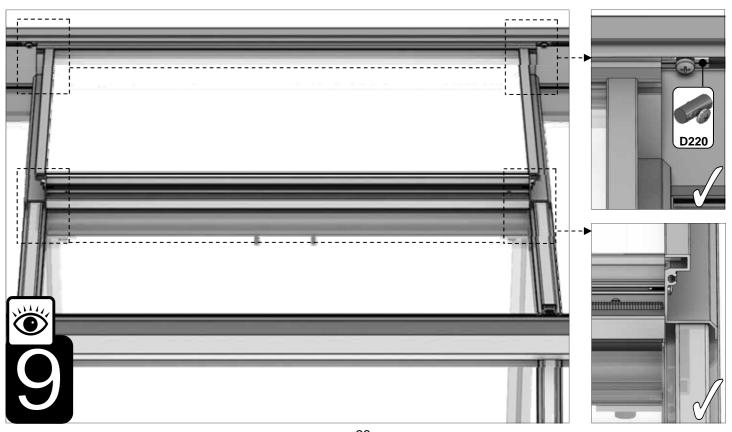


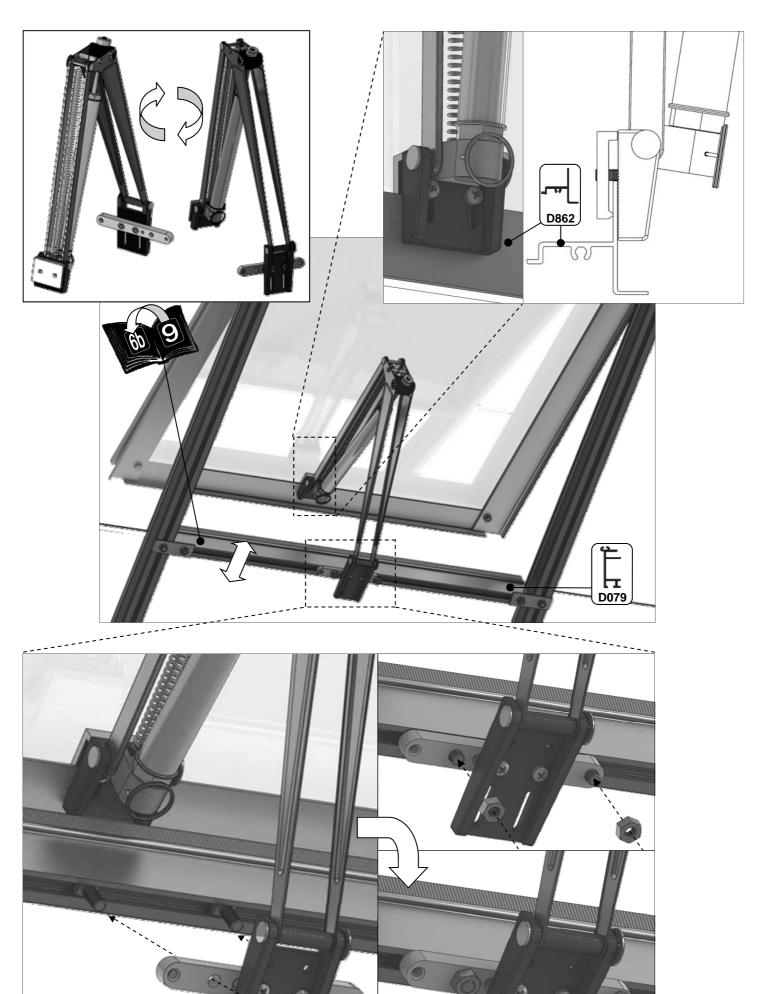






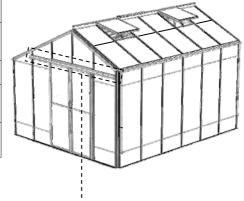


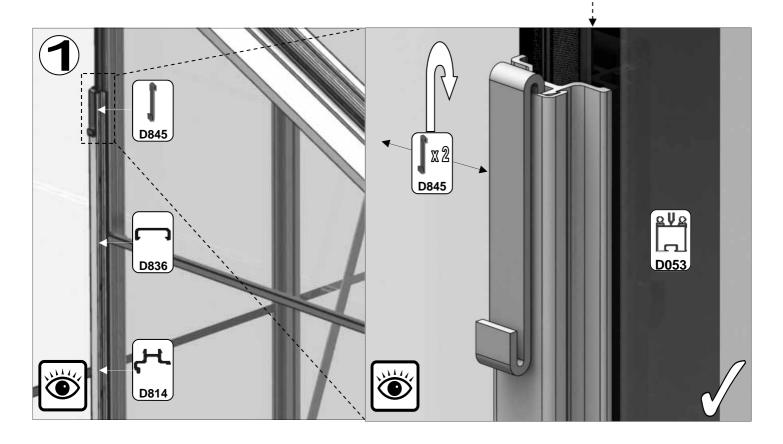


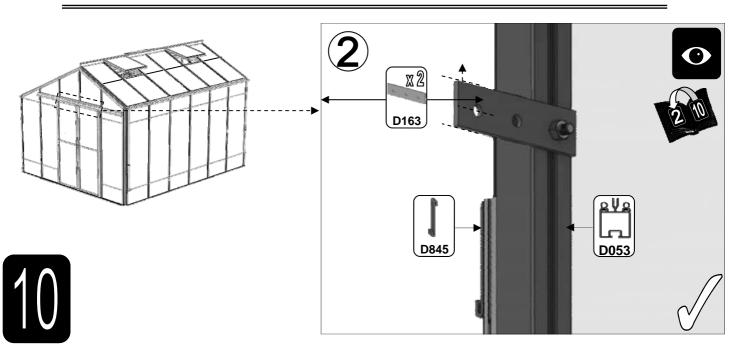


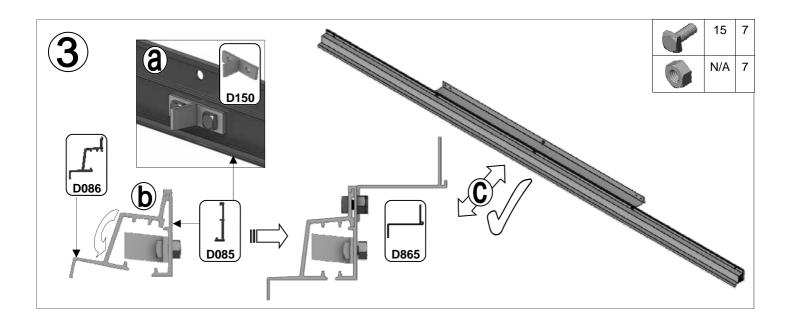
Part No		mm	Q
D865		1210	1
D086	Ϋ́	2510	1
D085		2510	1

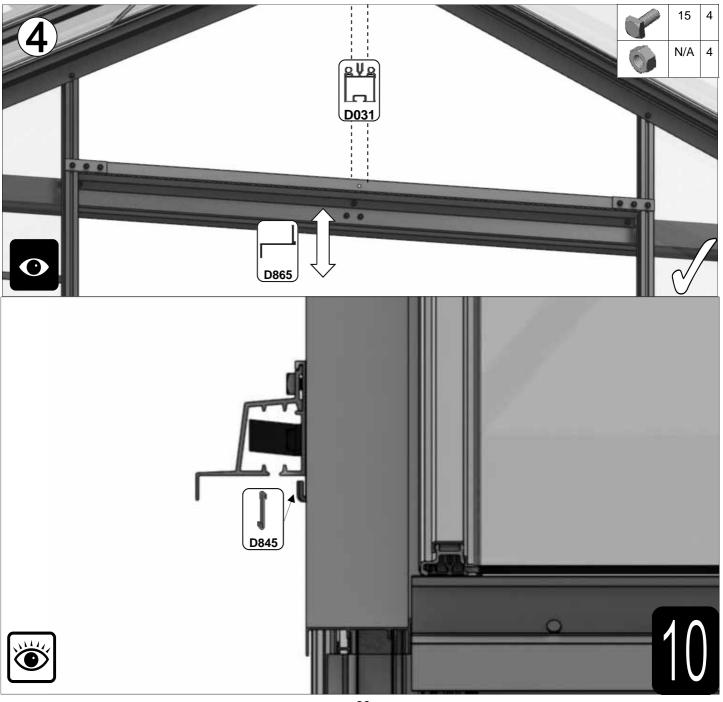
Part No	mm		Q
D163	6	90	2
D150	00	1	1
D845			2
SY- BOLM6X15			11
SYNUTM6			11

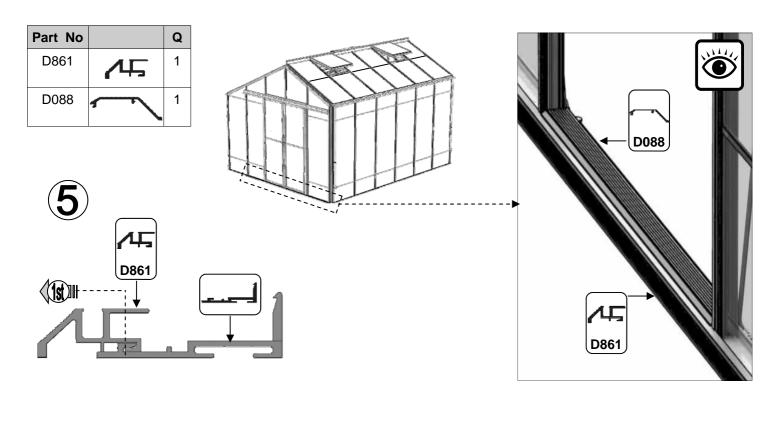


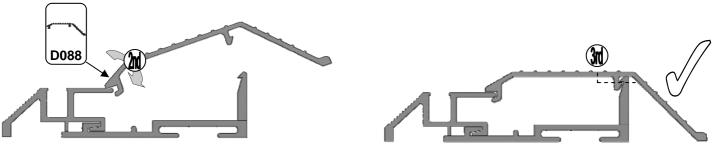


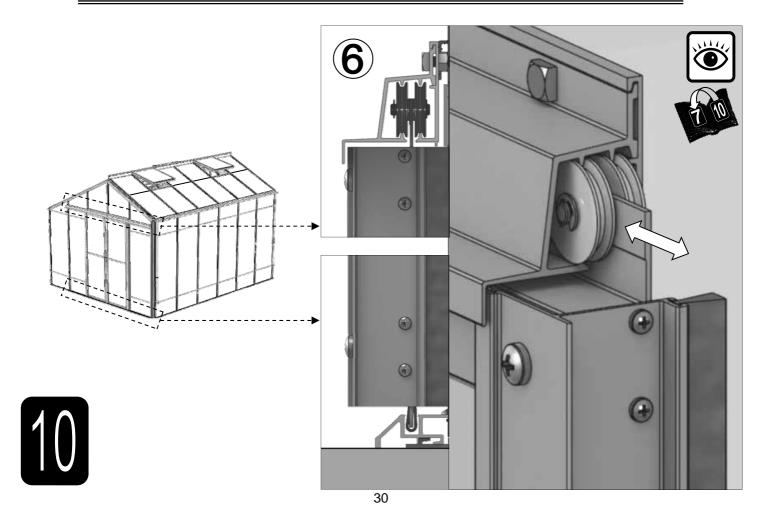


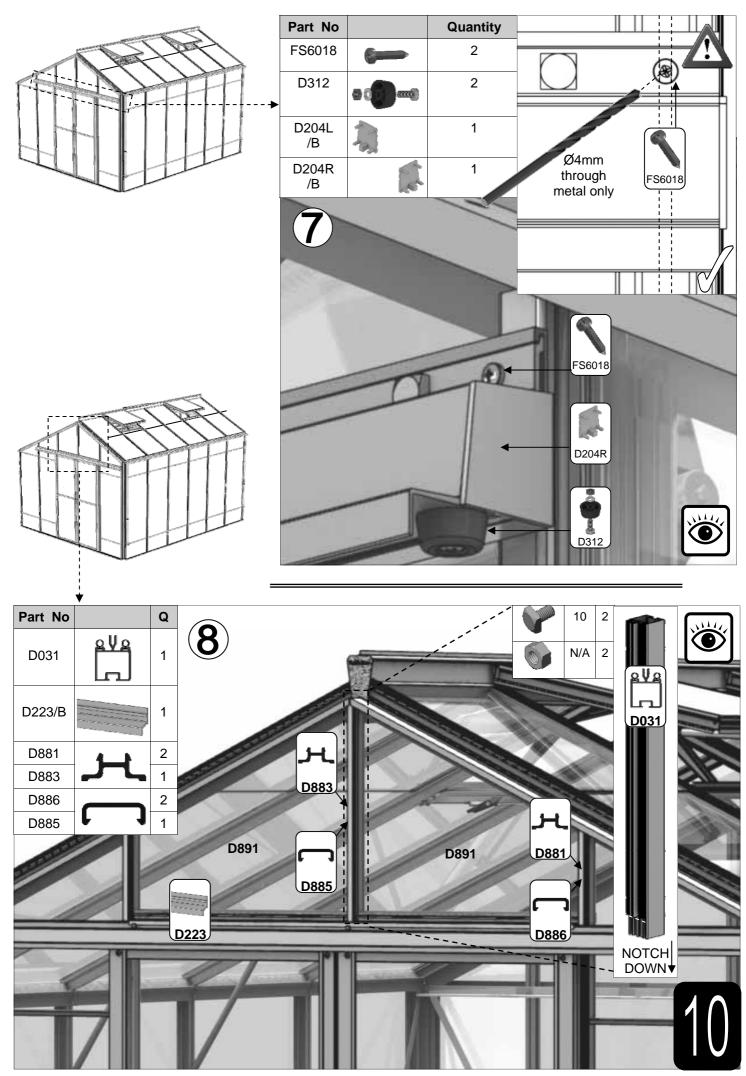




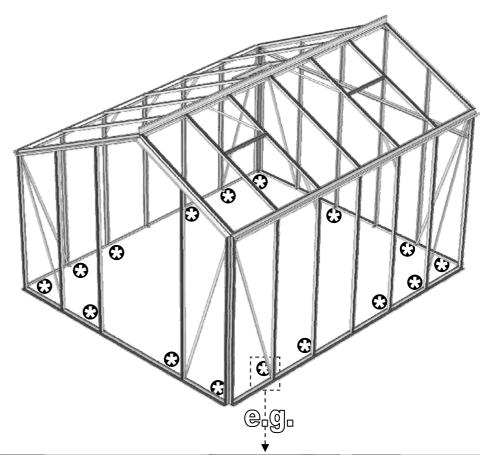


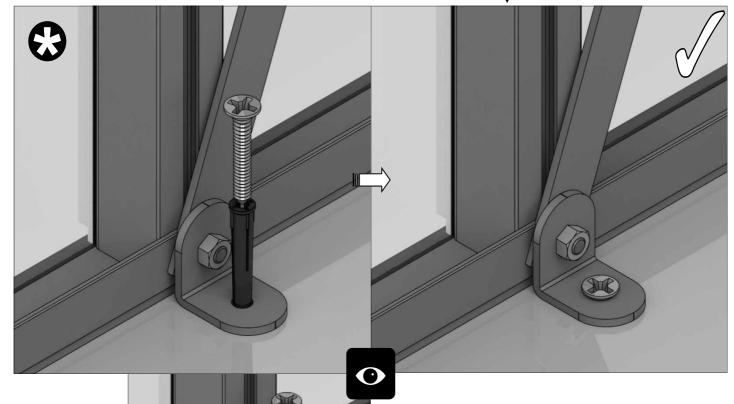






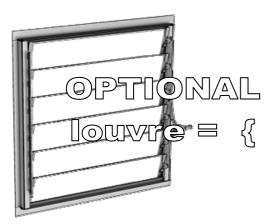






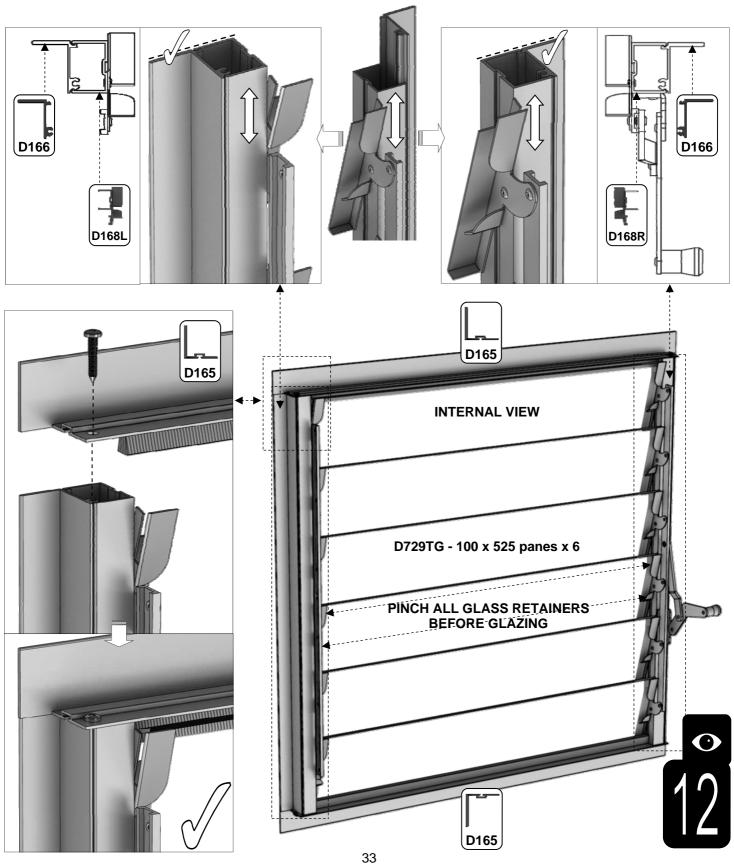


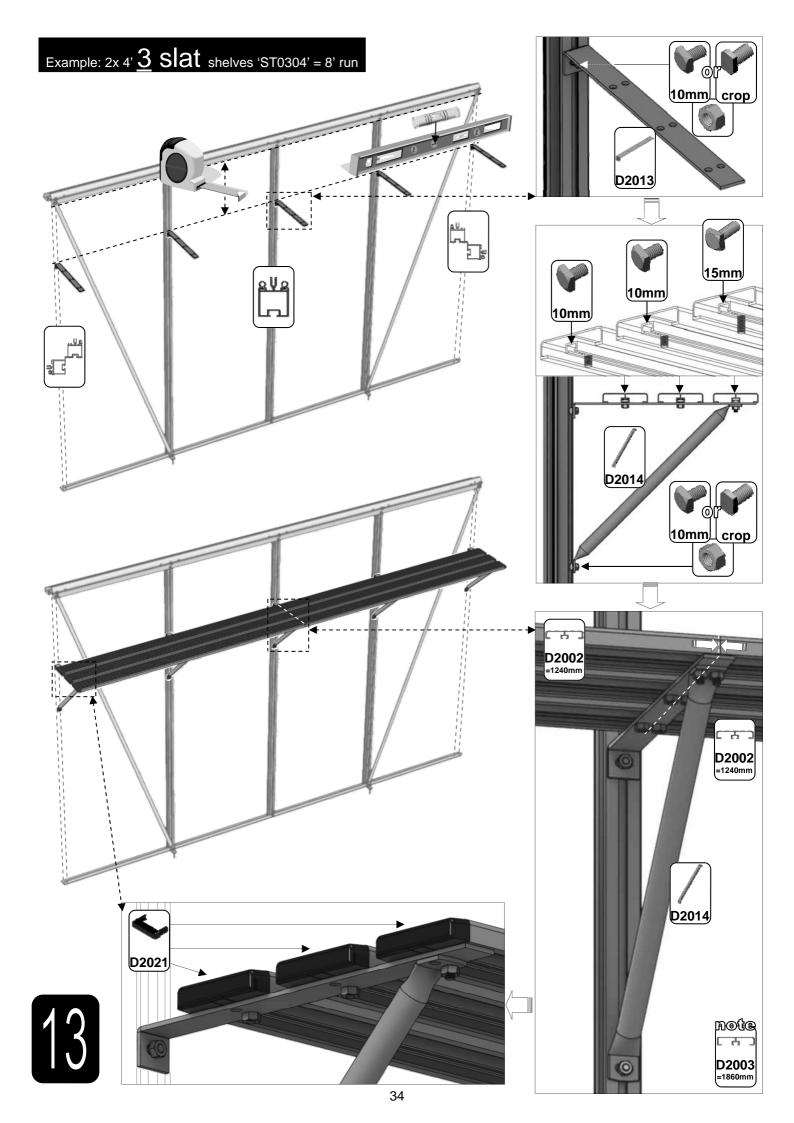


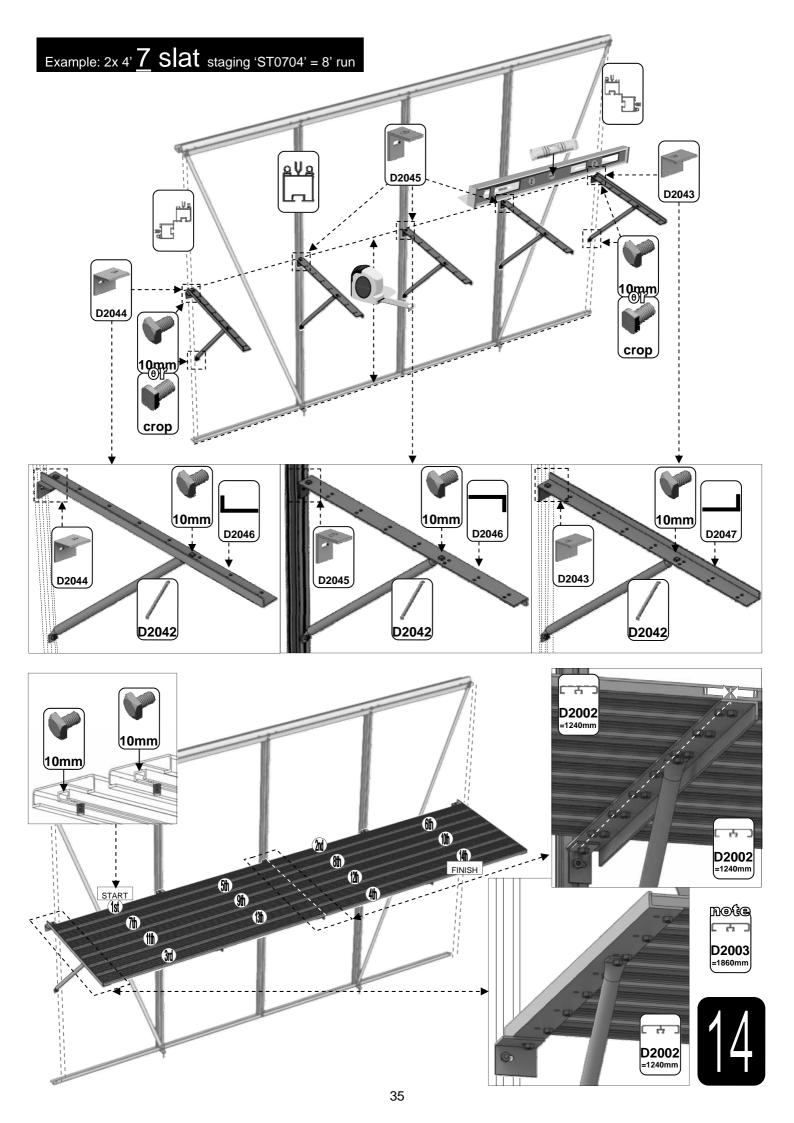


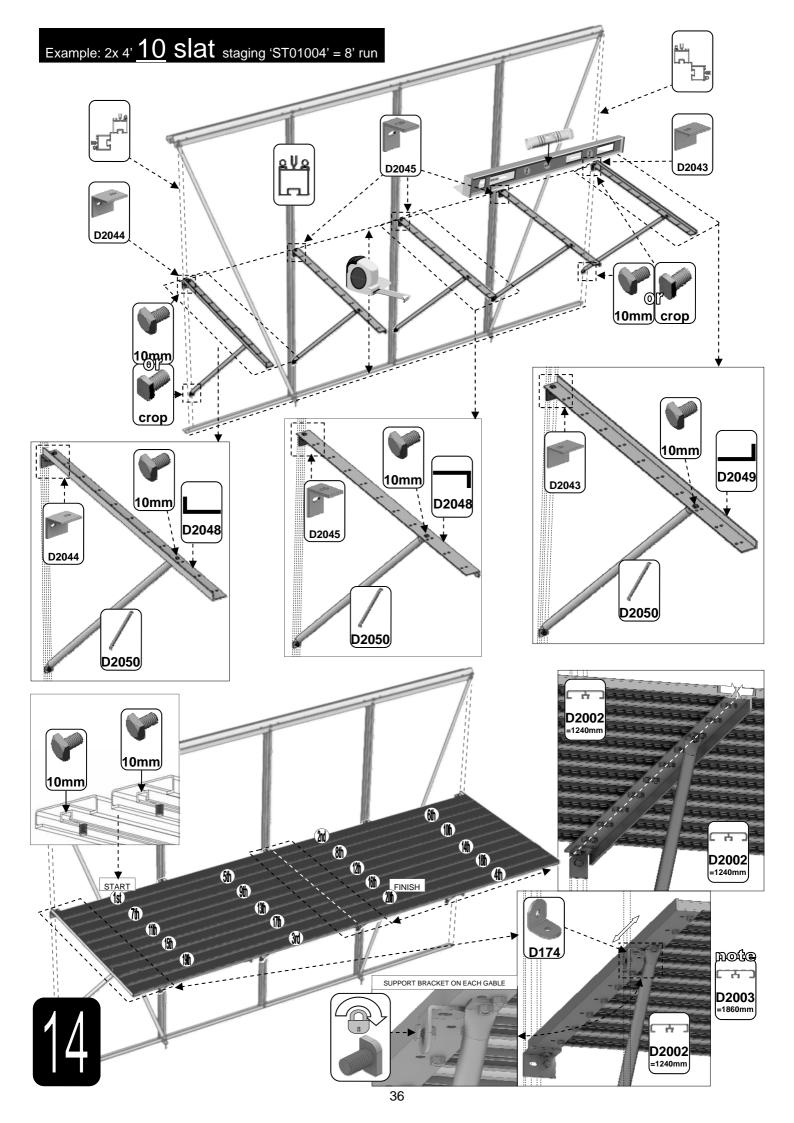
Part No		mm	Quantity
D168L	7	552	1
D168R (handle)	事事	552	1
D165		612	2
D166		552	2
FS6013	6	12	4

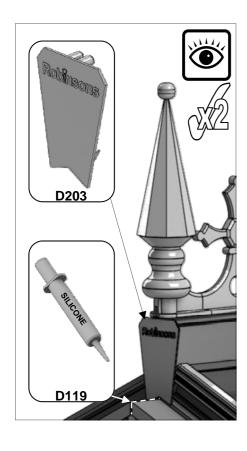




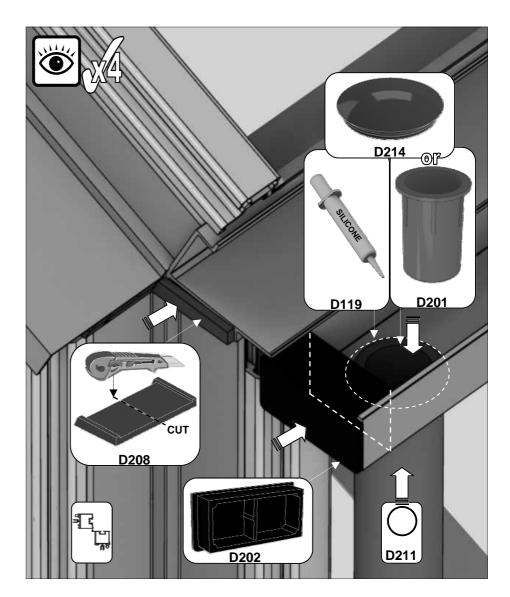


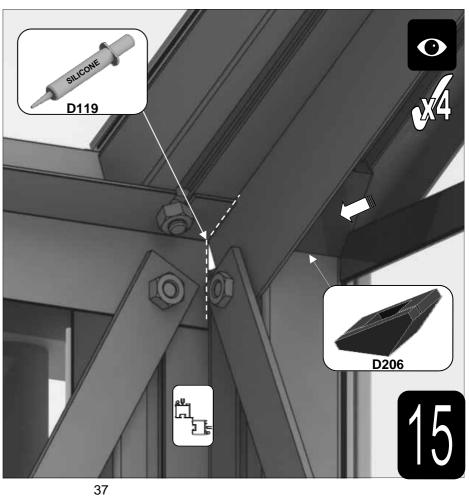






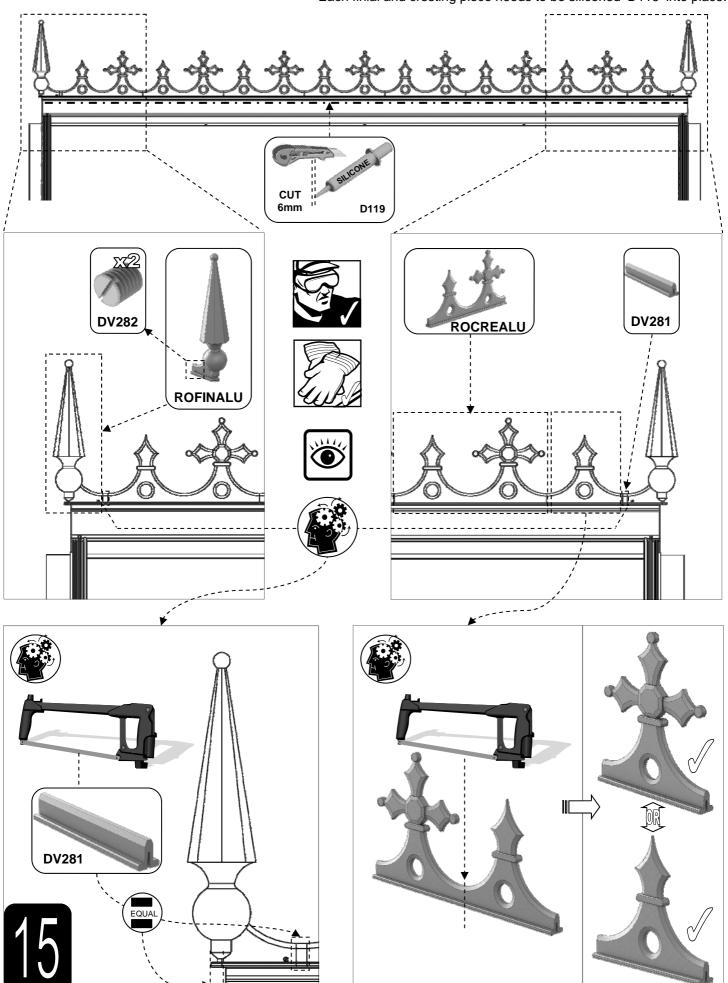






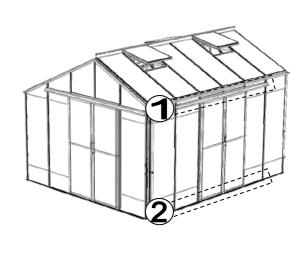
OPTIONAL cresting = {

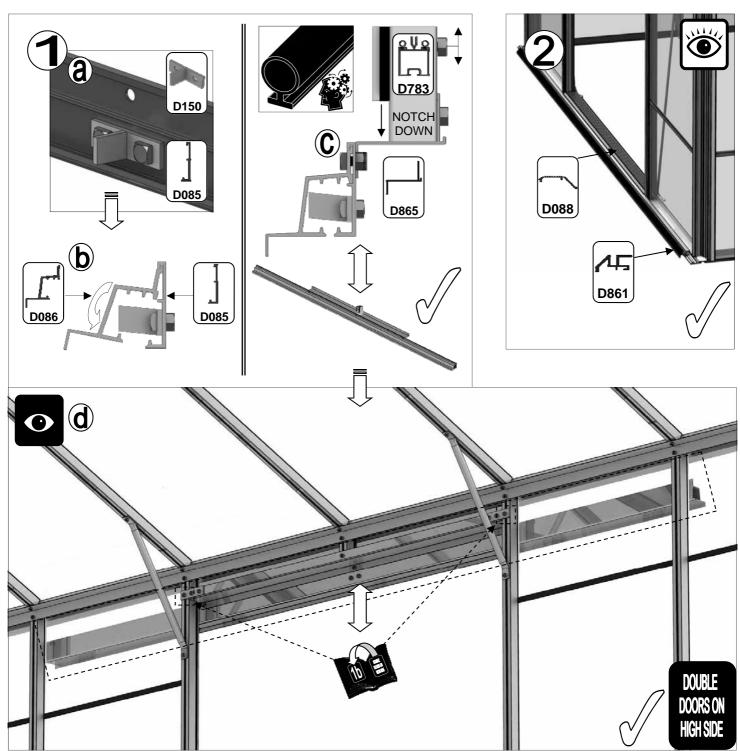
- End finials need to be pinched onto ridge using 'DV282' grub screws.
- Depending on your ridge length a half cresting may need to be cut or/ and some spacer bar 'DV281' cut into two equal sections.
- Each finial and cresting piece needs to be siliconed 'D119' into place.



Part No		mm	Q
D865		1210	1
D086	۲	2510	1
D085		2510	1
D861	/ L	2450	1
D088	~	1207	1

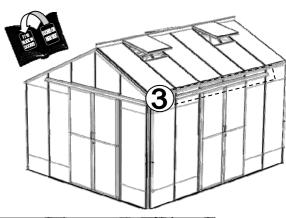
Part No		mm	Q
D783		70	1
D163	0	90	2
D150	0		1
D845	-		2
SYBOL M6X15			9
SYNUT M6			9

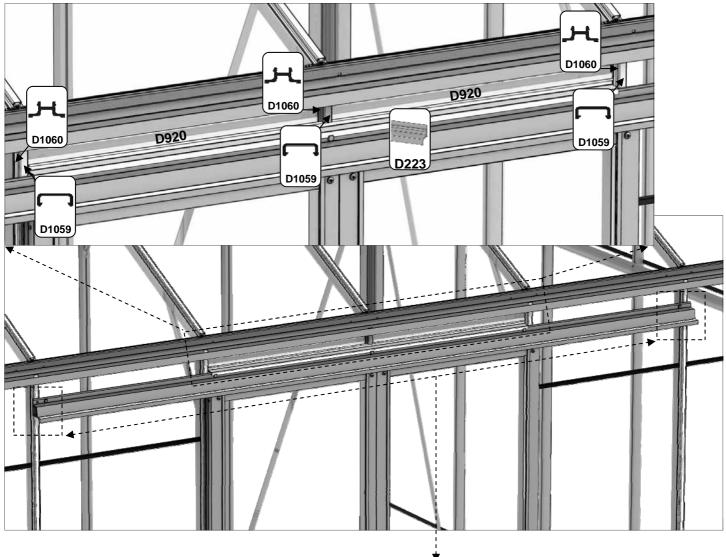


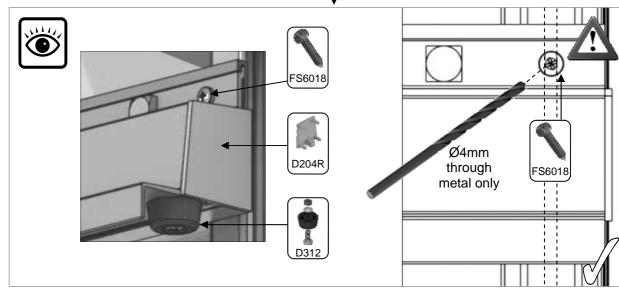


Part No		mm	Q
D223/B		1210	1
D1060	7-	50	3
D1059		50	3
D920	610 X 58mm PANE OF GLASS		2

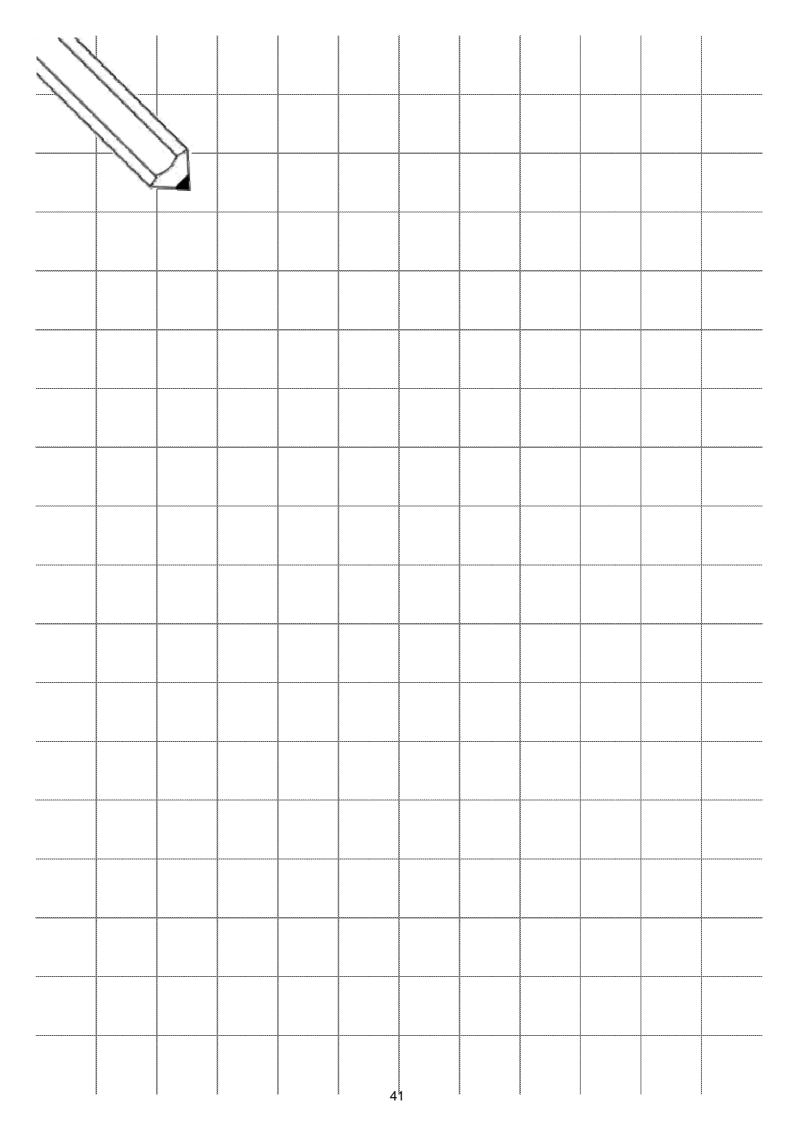
Part No		Quantity
FS6018		2
D312		2
D204L/B		1
D204R/B	THE REPORT OF	1

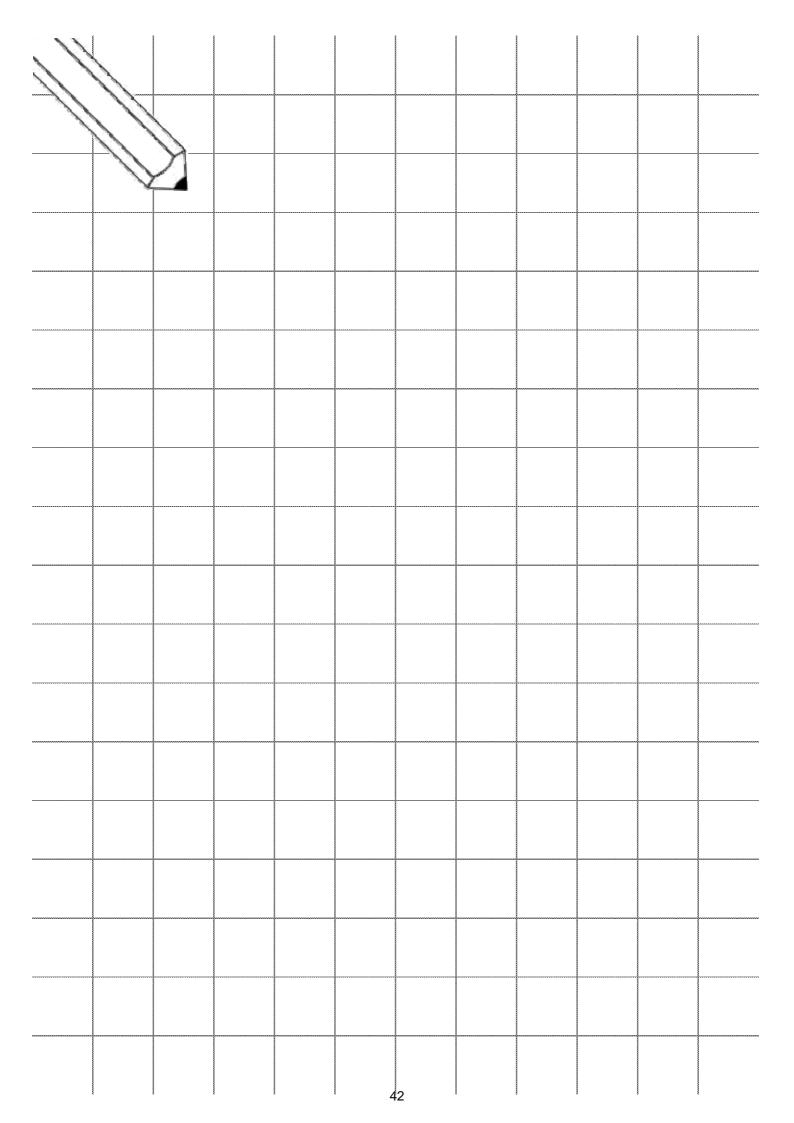


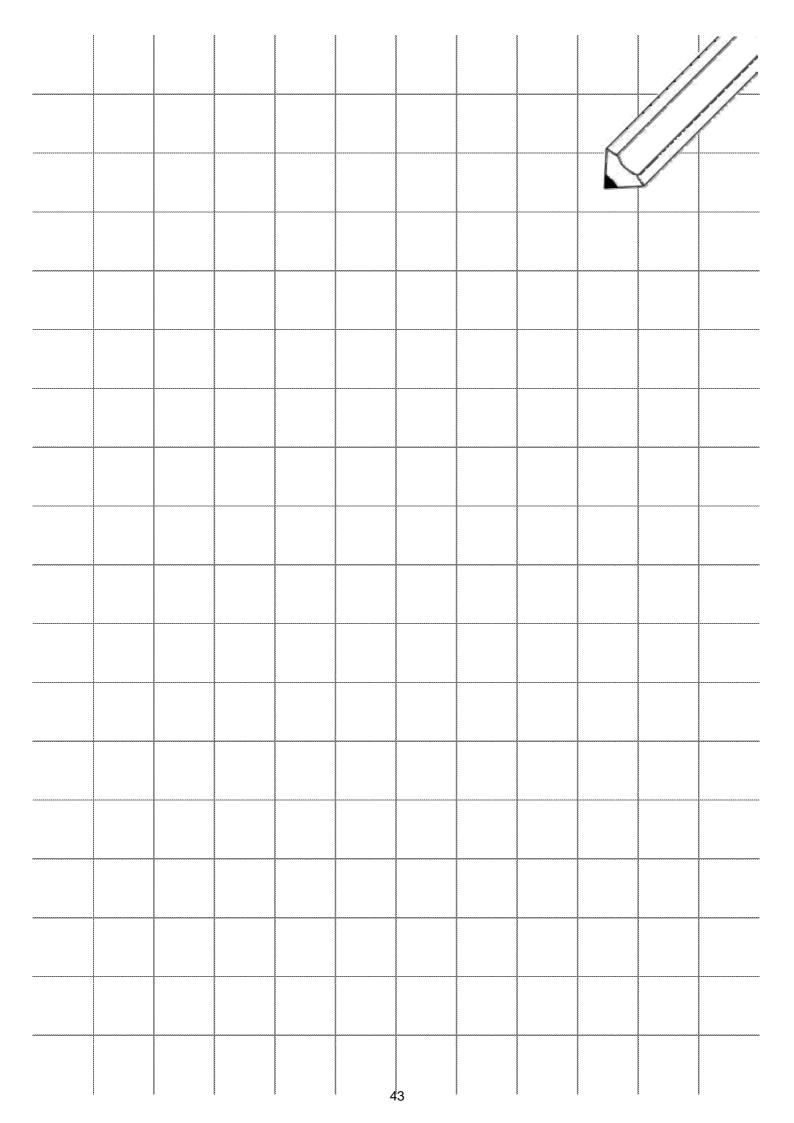












Please be aware that this is a multi-national manual, if you spot any errors or have any constructive comments regarding the manual please email james.spooner@greenhousepeople.co.uk and I will make the necessary amendments. Whilst the information contained in this booklet is accurate at the time of publication, changes in the course of Robinsons policy of improvement through development and design might not be indicated. We point out this fact to avoid any infringements of the Trade Descriptions Act and also to advise that Robinsons Greenhouses reserve the right to change specifications and materials without prior notice.

In addition any photographs of completed buildings would be most appreciated to add to our portfolio.

Here's how you can earn £30 and have your new greenhouse feature in our next brochure....

We are always interested to hear how you went on assembling your greenhouse, and we are particularly interested to see photos of the finished article.

We like to see where you've put it, how you're using it and how it looks in your garden. Often we glean ideas from this which we can pass on to other gardeners as useful tips.

It is always nice if we can include 'real' greenhouse photos in the brochure, so if you send us a photo of your greenhouse to us and it is good enough to get into our next brochure, we will send you a £30 reward.

Please send your photos to: Photo competition Robinsons Greenhouses Blythe Park Cresswell Stoke-on-Trent Staffs ST11 9RD

Or better still, email us on james.durose@greenhousepeople.co.uk

Please write on the reverse of photos your name and address and if you would like them back, please write 'please return' on them too.

We wish you all the best with your new greenhouse, and we look forward to seeing your photos in the near future!

THIS GREENHOUSE BOX WAS PACKED BY:	DATE:



www.robinsonsgreenhouses.co.uk

To contact Robinsons Customer Services email us at sales@robinsonsgreenhouses.co.uk or call us on 01782 385 409.

Our address is Robinsons Greenhouses, Unit 19 Blythe Park, Cresswell, Stoke-on-Trent, Staffordshire, ST11 9RD