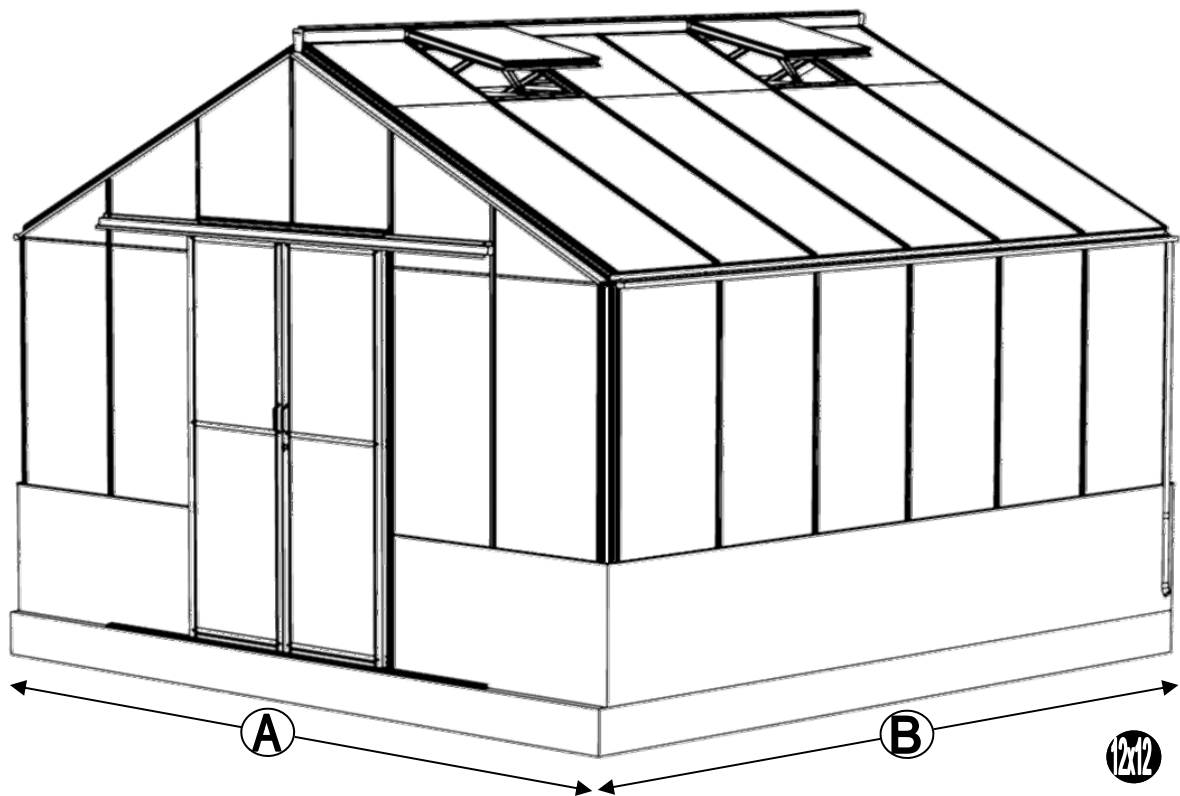




Regal DWARF Assembly Instructions



NOMINAL SIZE	A (mm)	B (mm)
12 x 8	3820	2610
12 x 10		3230
12 x 12		3850

NOMINAL SIZE	A (mm)	B (mm)
6ft extension	-	1860



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, **1**-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. 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. The components can be identified by their distinctive profiles, lengths and quantities detailed in the parts list (see next page).
- 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 frame-work. This does not include glazing, moving parts, accidental damage or wind damage.

UPDATE: Robinsons plastic / aluminium cover strips -

On a Robinsons building the glazing capping is in two parts. The lower plastic capping screws into the glazing bars pressing the glass down onto its rubber beading. The upper plastic / aluminium covers then need to be applied to cover the heads of the self-tapping screws. If you are struggling to press on the cover strips then we recommend the use of a rubber mallet or perhaps a wooden block and hammer, a short sharp tap onto the cover at one end is all that is needed to stretch the cover around the lower capping protrusions locking it into place. You can then either continue to use the mallet along the length of the cover or continue just using the palm of your hand. Once in the building and the edges are protected Robinsons 4mm thick toughened safety glass is very strong and can cope with the vibrations caused by hitting the covers though we would not recommend that you hit the glass directly. Some of the aluminium cover caps have a hole in them at one end which is sometimes used to hang the parts for powder coating. You can if you wish use the hole to stop the covers from sliding in the roof using a glazing screw, note you will have to use a countersunk screw under the vents to avoid interference with the vent bottom.

KEY SYMBOL	KEY DESCRIPTION
	EXTERNAL VIEW
	INTERNAL VIEW
	THINK
	THIS SECTION RELATES TO ANOTHER (e.g. 1 to 5)
	CORRECT
	DO NOT FIX DOWN!
	TWIST TO LOCK
	TIGHTEN
	PUSH AND HOLD
	CUT TO LENGTH



SECTION No	TITLE	ASSEMBLY SYNOPSIS: IMPORTANT INFORMATION / CONSIDERATIONS
B P 1 2 3 4 5 6a 6b 7 8 9 10 11 12 13 14 15	PARTS LIST	Identify and separate all like for like components prior to assembly. The 'parts list' also separates parts into the various sections shown below. Parts can also be identified by their profile pictures and stated lengths etc..
	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.
	PREPARATION	Tools required. IMPORTANT: Use WD40 or similar in the glazing bar channels and insert the black glazing rubber prior to frame assembly.
	SIDES	Take the side glazing bars 'D609' with the rubber inserted and the diagonal braces 'D604', use 10mm bolts to join them to the gutter and 15mm bolts to the cills (note how the head of the bolts slide into each glazing bar during construction).
	FRONT	Again ensuring that the gable framework is rubbered-up follow the diagrams to assemble each end of the building. Make sure that you have 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).
	REAR	
	JOINING THE FOUR SIDES	Take the two sides (1) 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 for you.
	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.
	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.
	VENT SLAM	The slam bar 'D079' can be moved up and down between the roof 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).
	DOOR	Construct the door using the diagrams and then leave to one side ready for attachment in section (10).
	GLAZING	Layout the bar capping and covers around the building like a sundial checking that all is present and correct. You can also place the roof capping in the gutters so they are closer to hand. The glass in the ends has to bevel on the black separator strip, this bevelling action allows the glass to tuck underneath the roof corner 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,
	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.
	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.
	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 13 14	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.
	OPTIONAL SHELIVING	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 'D609' during construction of the sides (1)) 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...
	OPTIONAL STAGING	
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)	12 8	12 10	12 12
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1	D021		2514	2		
	D022		3134		2	
	D023		3754			2
	D014		2517	2		
	D015		3137		2	
	D016		3757			2
	D604		1316	4		
	D609		1160	6	8	10
	RUBBER		1000 (1m)	14	19	24
	D174		N/A	4	8	8

2 + 3	D030		3836	1		
	D600		1270	1		
	D677(L)		1309	1		
	D676(R)		1309	1		
	D608		1160	4		
	D601		1460	4		
	D603		1756	2		
	D629		2356	2		
	D679		2052	1		
	D034		3750	1		
	D653		1270	1		
	D604		1316	4		
	D111		N/A	2		

Regal DWARF

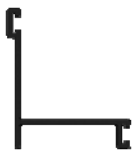


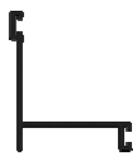








Section Ref	Part No.	Section	Size (mm)	12 8	12 10	12 12
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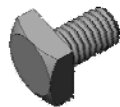
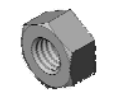
2 + 3	D035L		2082	2		
	D035R			2		
	RUBBER		1000 (1m)	51		
	D174		N/A	12		

5	D001		2517	1		
	D002		3137		1	
	D003		3757			1
	D033		2082	6	8	10
	RUBBER		1000 (1m)	25	34	42




6	D866		639	2	3	4
	D863L		613	2	3	4
	D863R		613	2	3	4
	D862		593	2	3	4
	D079 PLUS FLUFF		590	2	3	4
	D114		N/A	4	6	8
	D220 PLUS FS6060 SCREW		N/A	4	6	8
	D205		N/A	4	6	8






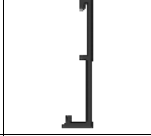




Section Ref	Part No.	Section	Size (mm)	12 8	12 10	12 12
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7	D090 + D347 lock = D301		1824	1
	D092 + D156 strike = D303		1824	1
	D093		1824	1
	D094		1824	1
	D096 + D217 wheel = D307		611	2
	D095		611	2
	D097		611	2
	D232		905	4
	D233		797	4
	P053		N/A	2
	D225		610	2
	D840B		4000	1

MAIN FRAME QUANTITIES VENTS / DOORS etc SEPERATE		10mm	37	43	49
		15mm	46	48	50
		m6	83	91	99

Section Ref	Part No.	Section	Size (mm)	12 8	12 10	12 12
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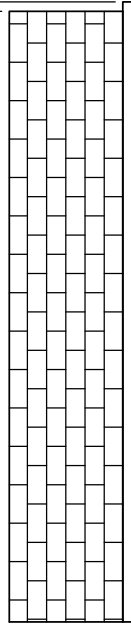
8	2/3	D611		1460	4
	3	D612		1756	2
	1	D618		1144	6 8 10
	2	D680		457	2
	3	D681		2052	1
	2	D682		746	1
	5	D870		601	6 8 10
	5	D887		1490	6 8 10
	2/3	D610		1160	4
	1	D620		1144	4
	2	D814		1883	2
	5	D871		601	4
	5	D888		1490	4
	2/3	D614		1162	4
	2/3	D615		1462	4
	3	D616		1758	2
	1	D619		1144	10 12 14
	3	D683		2054	1
	2	D684		748	1
	2	D685		459	2
	2	D836		1883	2
	5	D880		2092	10 12 14

10	D678		756	1
	D865		1210	1
	D861		2450	1
	D088		1207	1
	D086		2510	1
	D085		2510	1
	D627		114	2
	D163		90	2
	D150		N/A	1
	D154		N/A	2

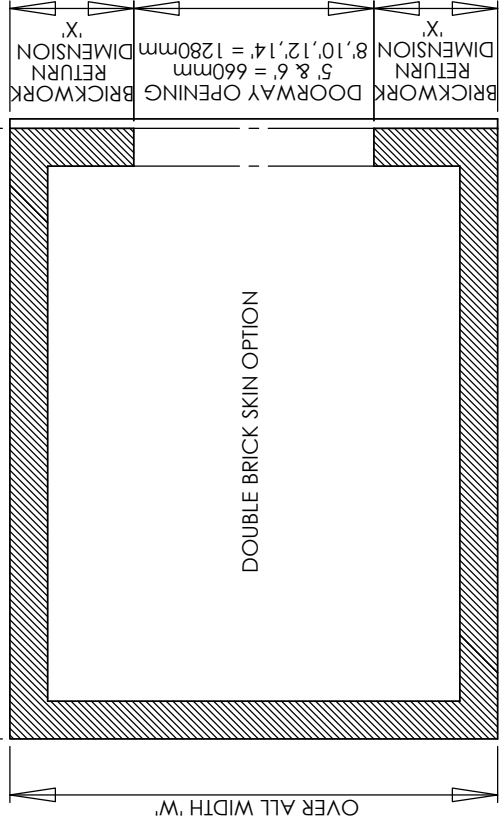
Regal DWARF

THIS PLAN APPLIES TO GREENHOUSES WITH DOORS AT ONE END ONLY.

50mm MINIMUM



OVER ALL LENGTH 'L'



GREENHOUSE TYPE	OVER ALL WIDTH "W"	BRICKWORK RETURN DIMENSION "X"
REGATTA (5 WIDTH)	1654mm	497mm
REGENT (6 WIDTH)	1960mm	650mm
ROYALE (8 WIDTH)	2580mm	650mm
ROSETTE (10 WIDTH)	3210mm	965mm
REGAL (12 WIDTH)	3820mm	1270mm
RENOWN (14 WIDTH)	4450mm	1585mm

OVER ALL LENGTH 'L' = BASIC GREENHOUSE LENGTH + EXTENSION IF REQUIRED		
BASIC GREENHOUSE	LENGTH	EXTENSION
4 LONG	1370mm	6ft EXT LONG
6 LONG	1990mm	8ft EXT LONG
8 LONG	2610mm	
10 LONG	3230mm	
12 LONG	3850mm	

OVER ALL LENGTH 'L' = BASIC GREENHOUSE LENGTH + EXTENSION IF REQUIRED		
BASIC GREENHOUSE	LENGTH	EXTENSION
4 LONG	1370mm	6ft EXT LONG
6 LONG	1990mm	8ft EXT LONG
8 LONG	2610mm	
10 LONG	3230mm	
12 LONG	3850mm	

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10 LONG	3230mm	
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BASIC GREENHOUSE	LENGTH	EXTENSION
4 LONG	1370mm	6ft EXT LONG
6 LONG	1990mm	8ft EXT LONG
8 LONG	2610mm	
10 LONG	3230mm	
12 LONG	3850mm	

GUIDANCE NOTE FOR ROBINSONS DWARF WALL GREENHOUSES. FOOTINGS
CONCRETE STRIP FOOTINGS SHOULD BE A MINIMUM OF 400mm WIDE X 200mm DEEP. IF THE SITE IS ON MADE UP GROUND IT IS IMPORTANT THAT THE FOOTINGS ARE CUT INTO THE COMPACTED GROUND BELOW.

WHERE THE GROUND IS LIABLE TO MOVEMENT SUCH AS HEAVY CLAY OR LOOSE SANDY SOIL REINFORCING SHOULD BE ADDED TO THE CONCRETE FOOTINGS.

WALLS
IT IS MOST IMPORTANT THAT THE BRICKWORK IS IN ACCORDANCE WITH THE DIMENSIONS PROVIDED AND IS SQUARE, LEVEL AND UPRIGHT, THE DIAGONAL MEASUREMENTS SHOULD BE EQUAL.

WALLS CAN BE EITHER DOUBLE OR SINGLE SKIN.

THE TOP COURSE OF BRICKS SHOULD BE LAID FROG DOWN. IF ENGINEERING BRICKS ARE USED FOR THE TOP COURSE PLEASE ENSURE THEY ARE SOLID NOT CELLULAR (WITH HOLES THROUGH THEM) OR FIXING DOWN OF THE GREENHOUSE WILL BE A PROBLEM. BRICKS SHOULD BE A GOOD QUALITY STOCK BRICK, SAND FACED FLETTON TYPE BRICKS ARE NOT SUITABLE.

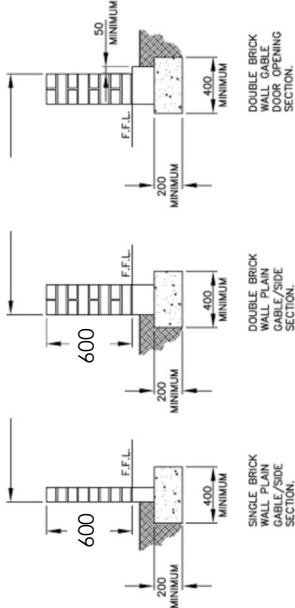
GABLE DOOR OPENING
THE DOOR THRESHOLD REQUIRES BRICK WORK ACROSS THE OPENING WHICH SHOULD BE LEVEL WITH THE FINISHED FLOOR LEVEL (F.F.L) OF THE GREENHOUSE.

THE OPENING FOR THE DOORWAY AND THE HEIGHT TO THE TOP OF THE WALL FROM THE THRESHOLD LEVEL REQUIRE THE HIGHEST ACCURACY AND ARE MOST IMPORTANT SO THAT THE DOOR FITS THE APERTURE CORRECTLY. IT IS ADVISABLE TO MAKE A WOODEN TEMPLATE TO CHECK THE DOOR APERTURE DIMS.

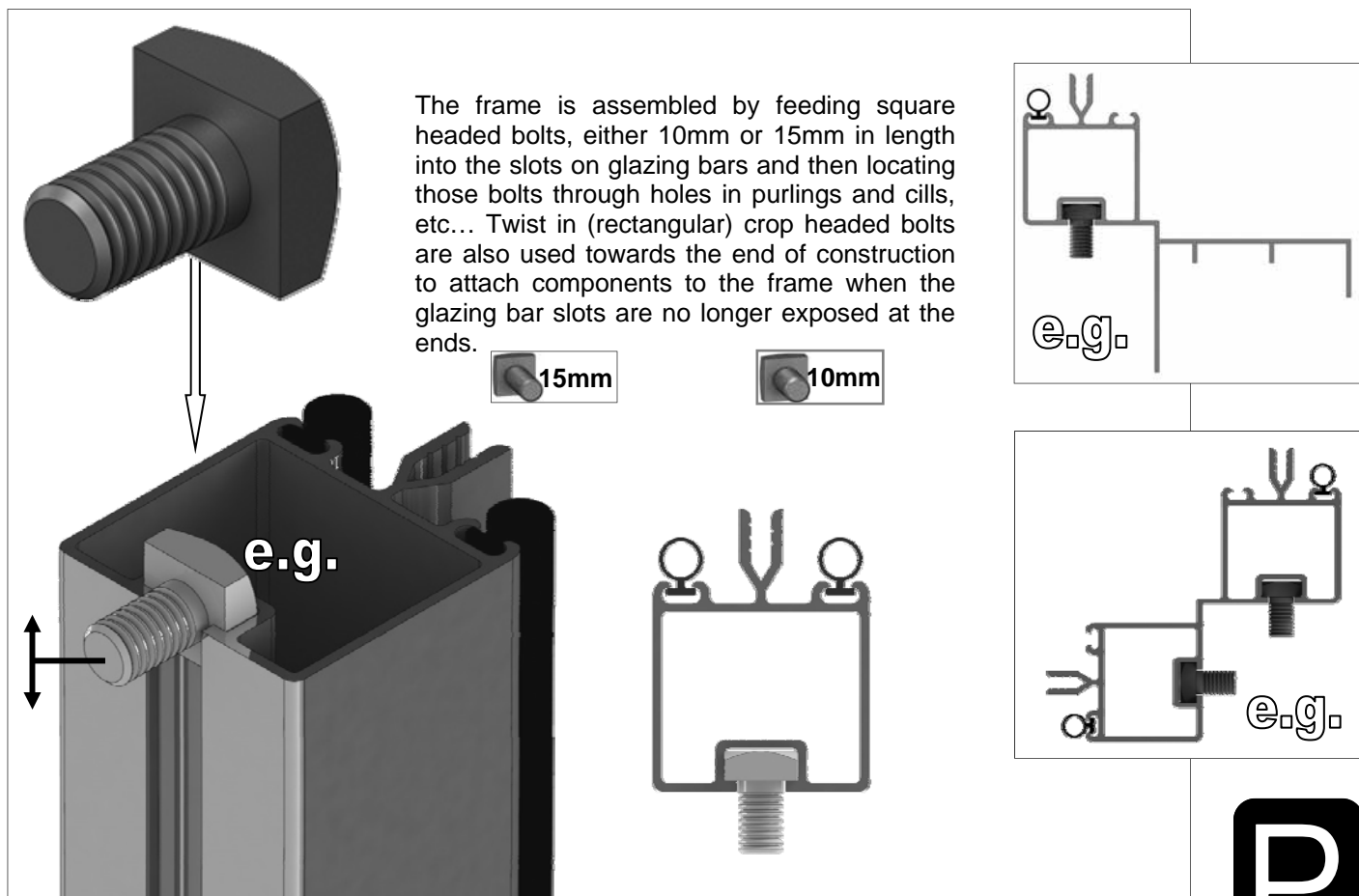
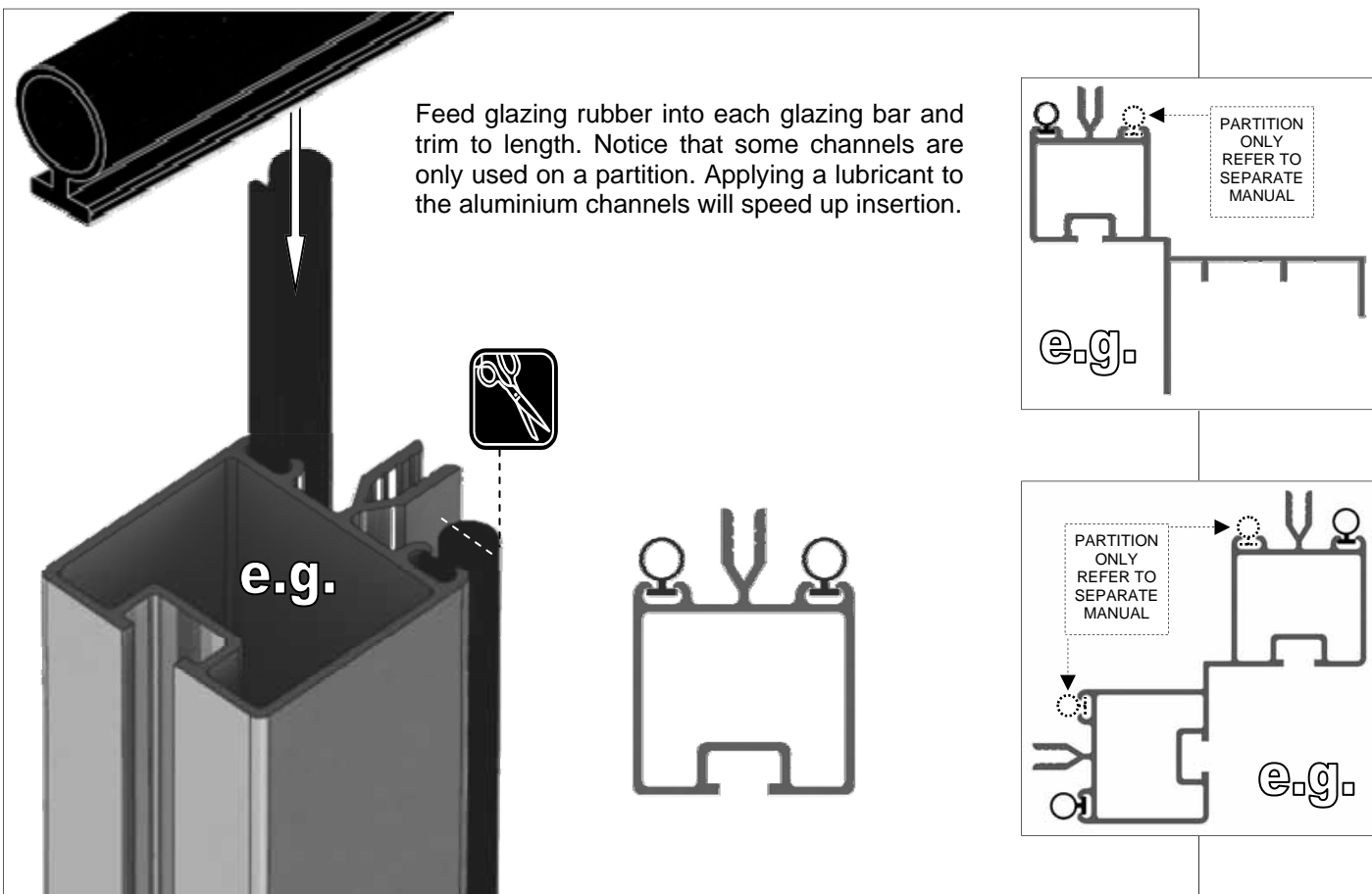
IF SINGLE SKIN WALLS ARE USED THEN PIERS SHOULD BE FORMED AT THE DOOR OPENING.

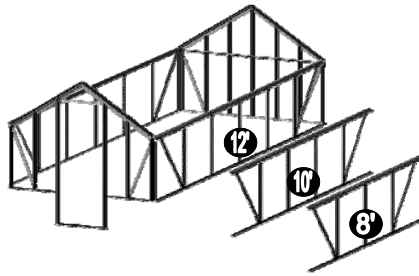
IN ORDER TO SUPPORT THE OUTER EDGE OF THE DOOR THRESHOLD THERE MUST BE A PROJECTION OF BRICKWORK / CONCRETE INFRONT OF THE DOOR END WALL WITH A MINIMUM WIDTH OF 50mm. THIS NEEDS TO BE LEVEL WITH THE DOOR THRESHOLD OPENING.

Property of 'Robinsons Greenhouses' © 2019

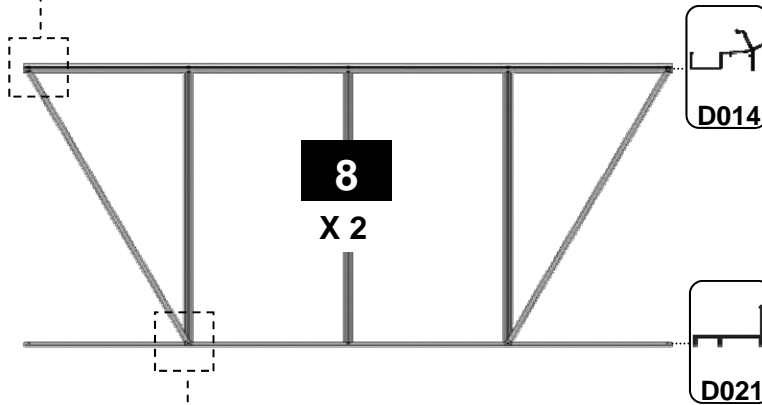


TITLE: GREENHOUSE DWARF WALL PLAN



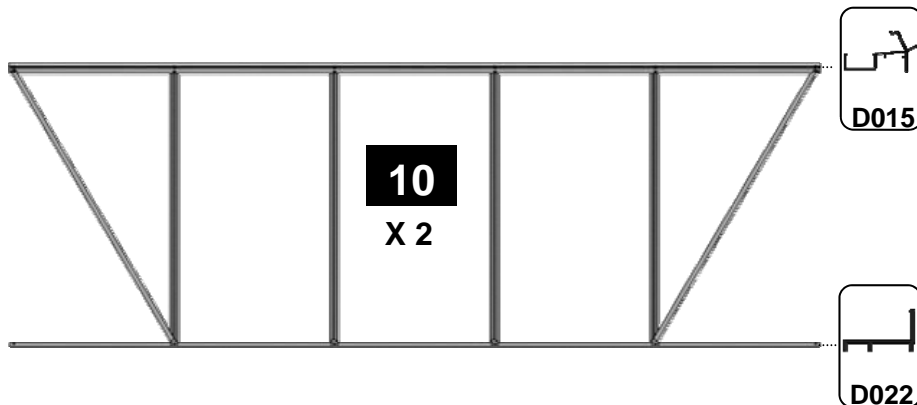


e.g. ①

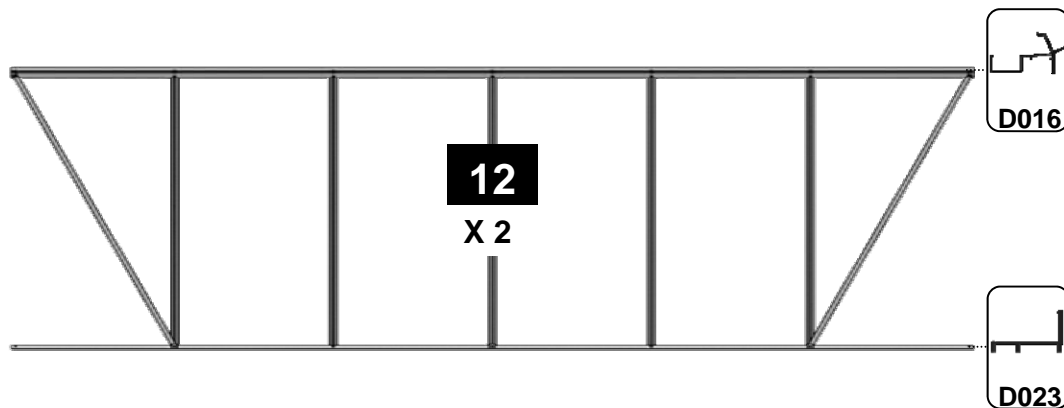


8 X 2 DWARF		
Part No	mm	Quantity
D014	2517	2
D021	2514	2
D609	1160	6
D604	1316	4
D174		4
M6-10mm		6
M6-15mm		10
M6-NUT		16
Rubber	1000	14

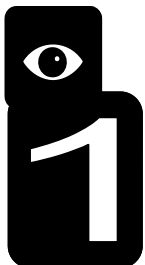
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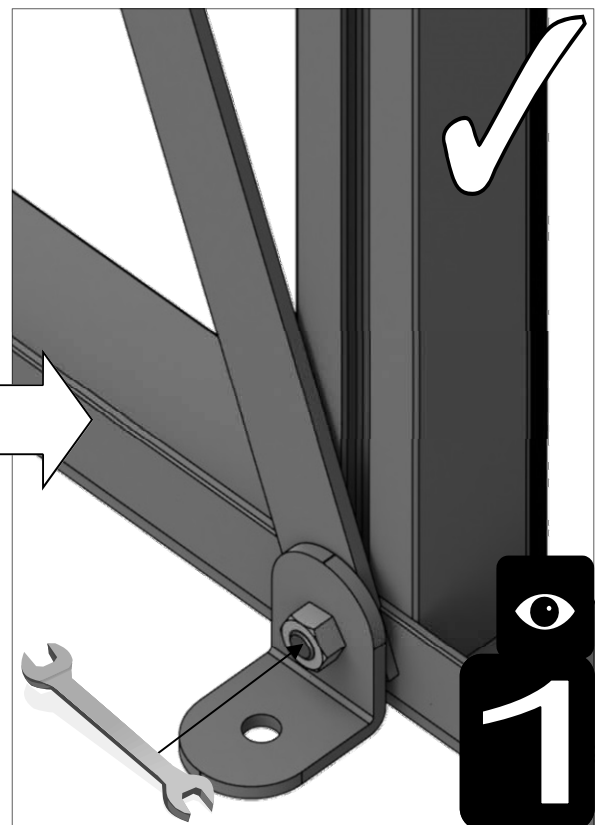
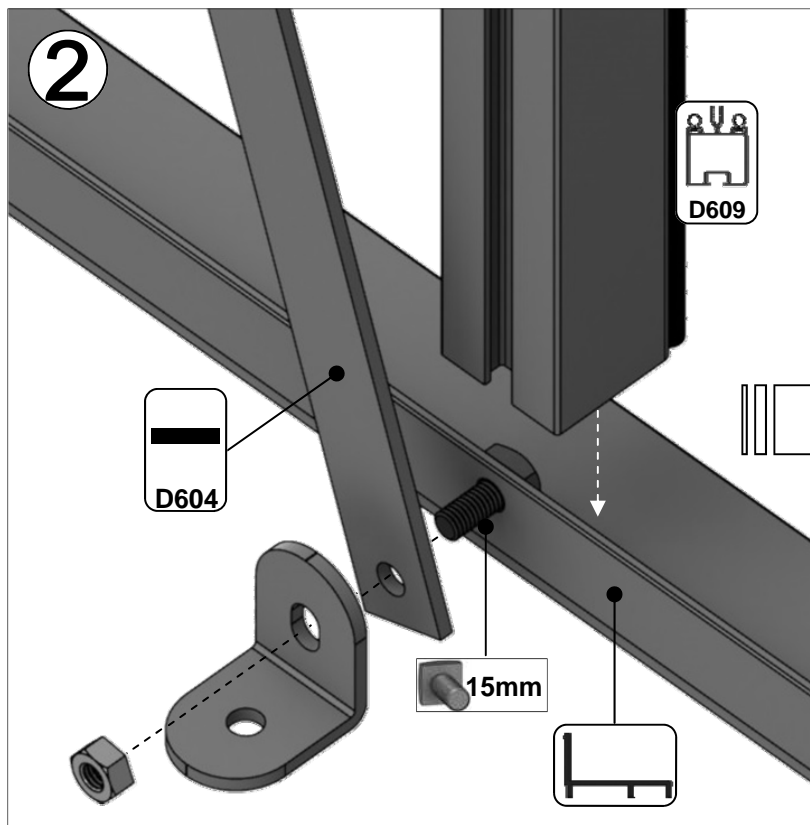
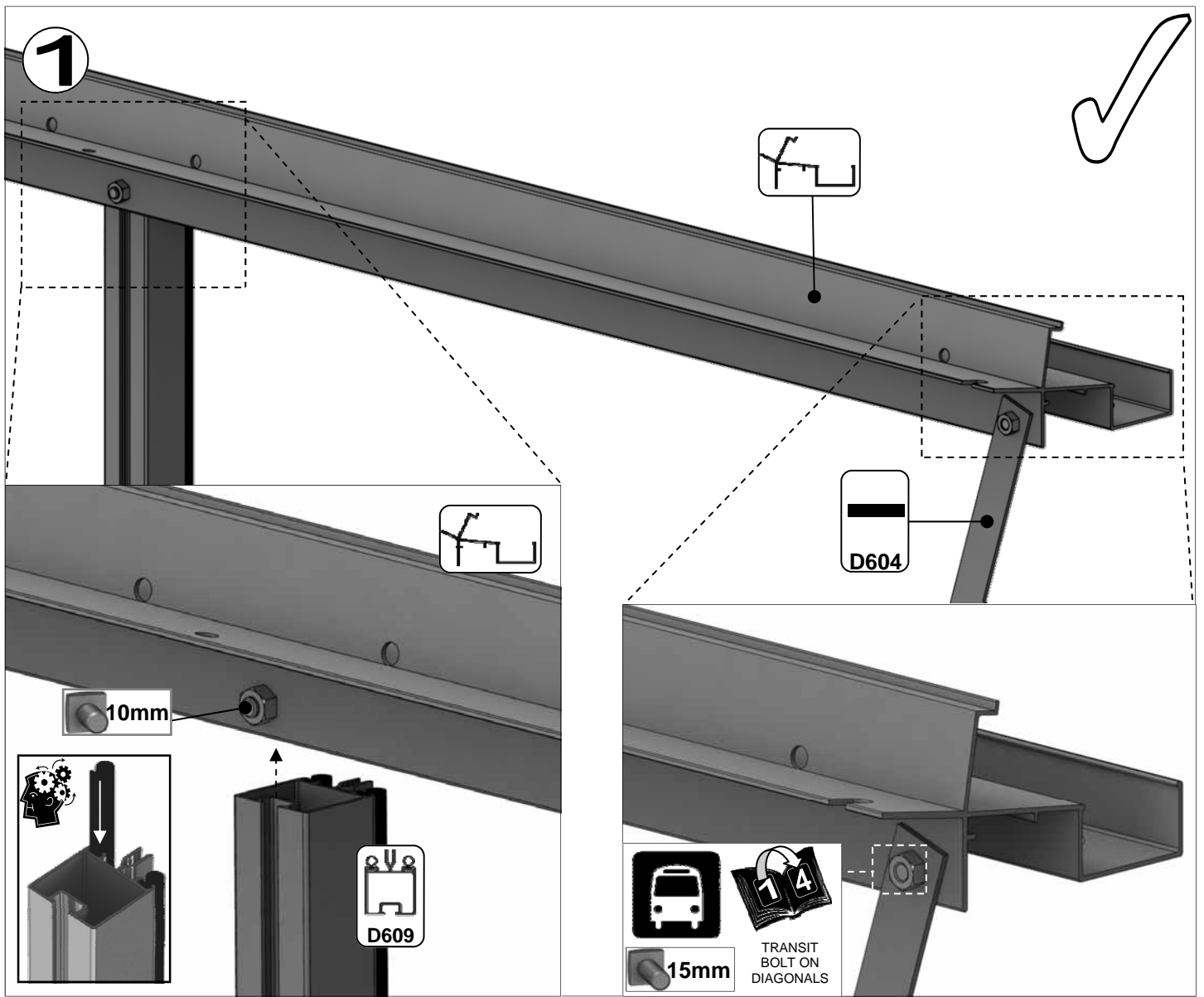


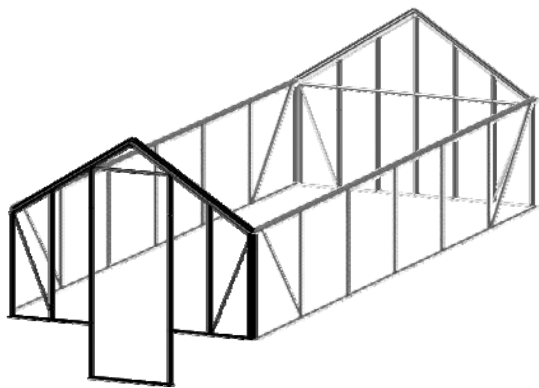
10 X 2 DWARF		
Part No	mm	Quantity
D015	3137	2
D022	3134	2
D609	1160	8
D604	1316	4
D174		8
M6-10mm		8
M6-15mm		12
M6-NUT		20
Rubber	1000	19








12 X 2 DWARF		
Part No	mm	Quantity
D016	3757	2
D023	3754	2
D609	1160	10
D604	1316	4
D174		8
M6-10mm		10
M6-15mm		14
M6-NUT		24
Rubber	1000	24

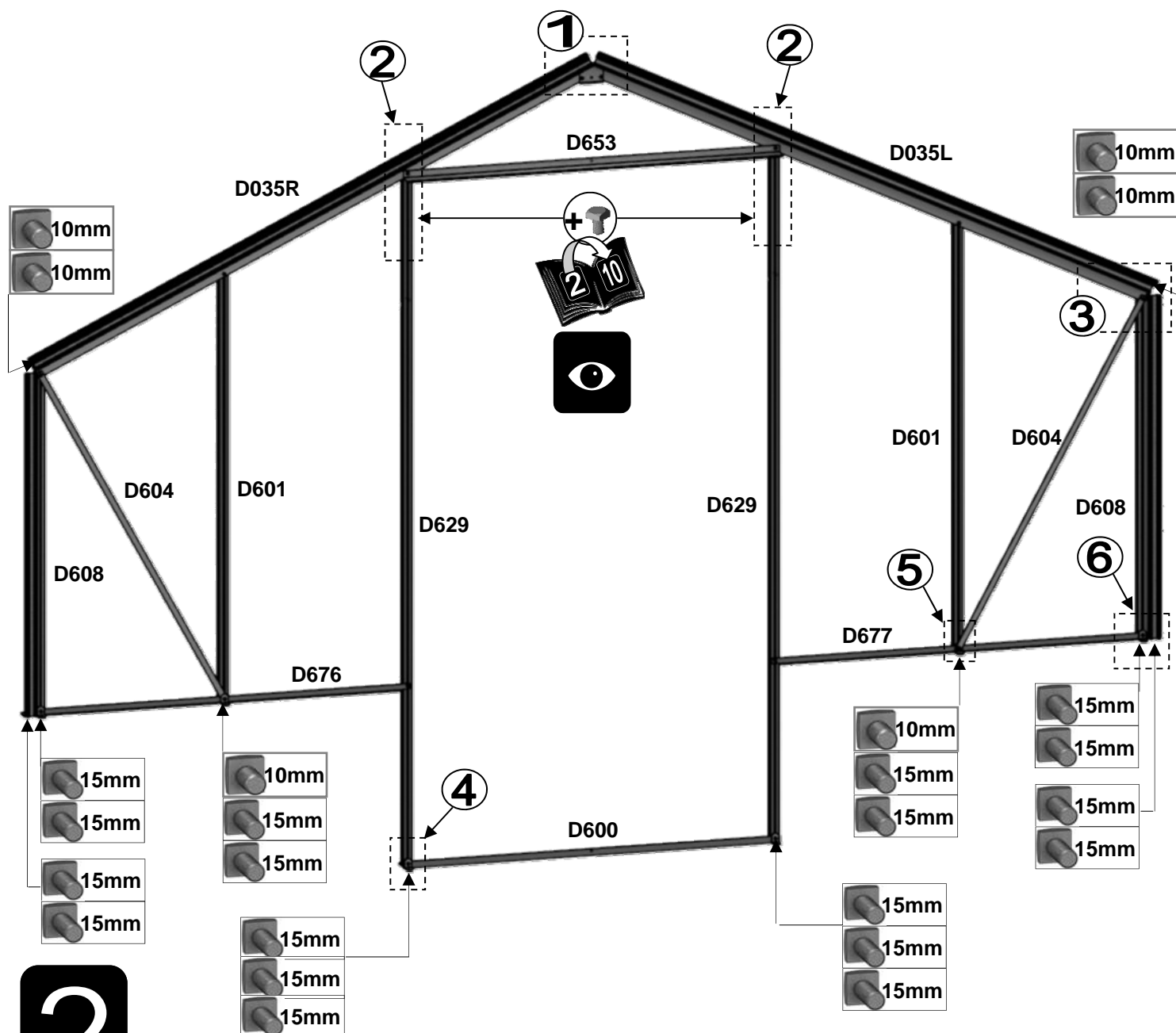


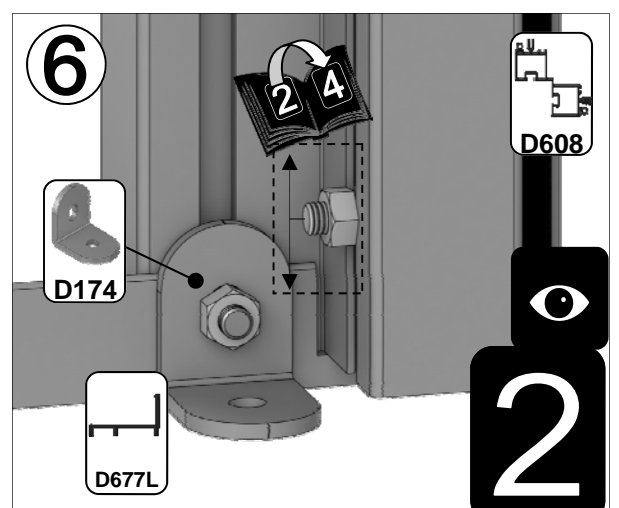
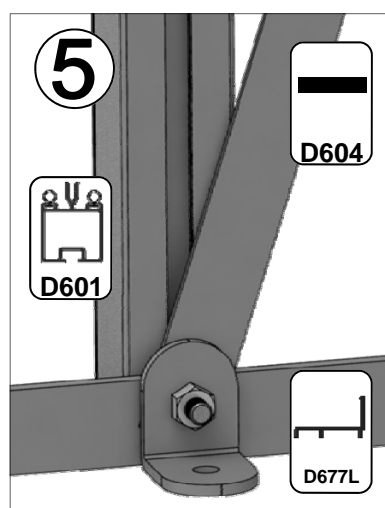
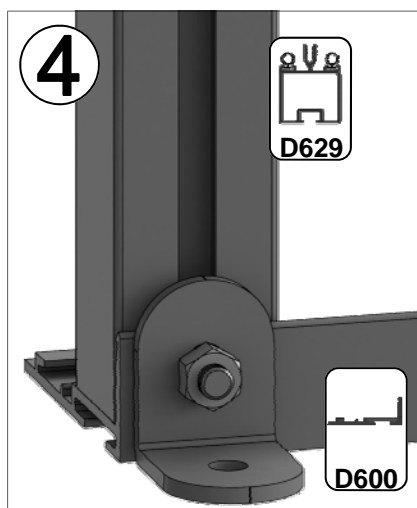
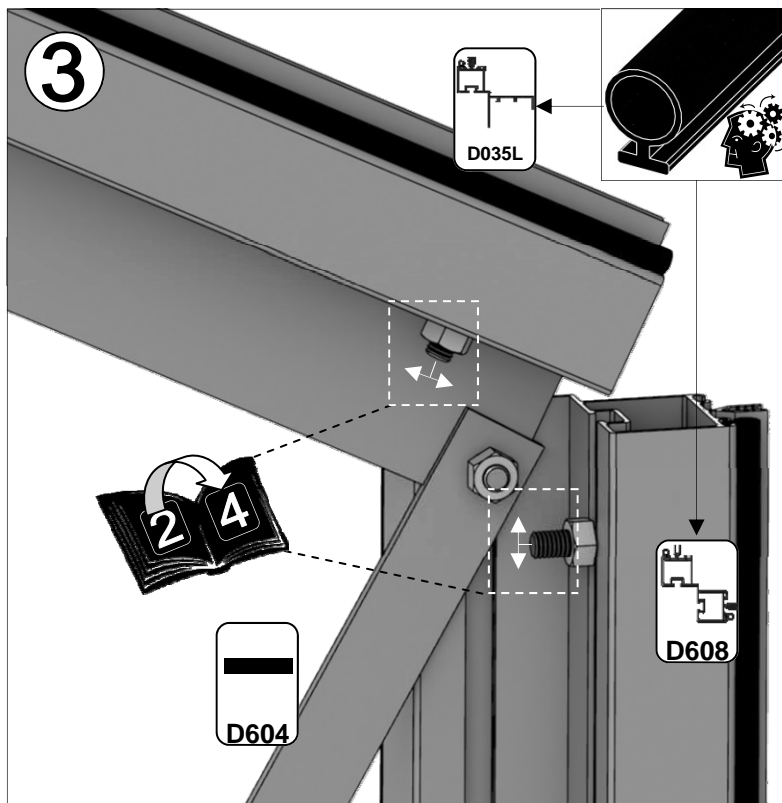
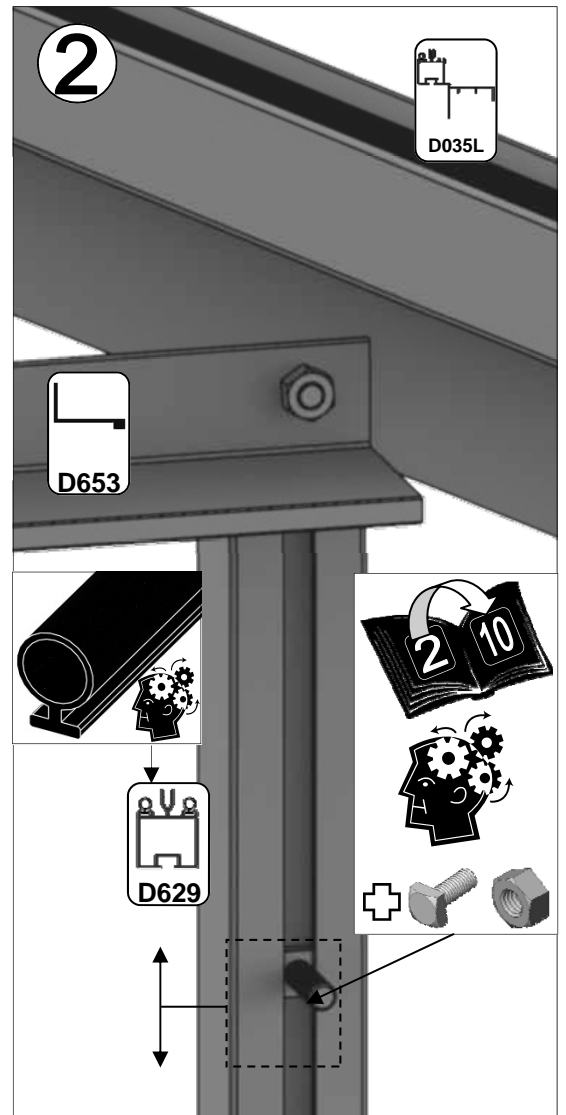
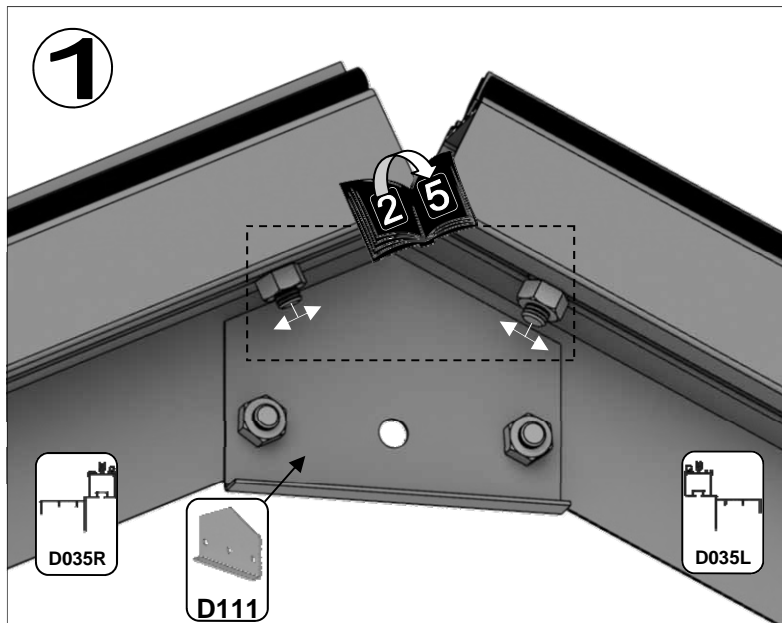


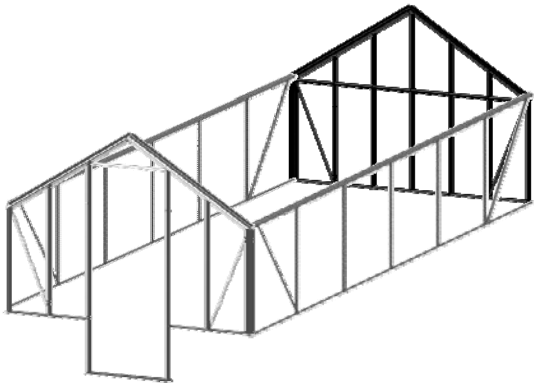


Part No	mm	Quantity
D035L	2082	1
D035R	2082	1
D600	1270	1
D601	1460	2
D604	1316	2
D608	1160	2
D629	2356	2
D653	1270	1
D677	1309	1
D676	1309	1



Part No	mm	Quantity
D111		1
D174		6
D227		25m
M6X10		8
M6X15		18
M6NUT		26

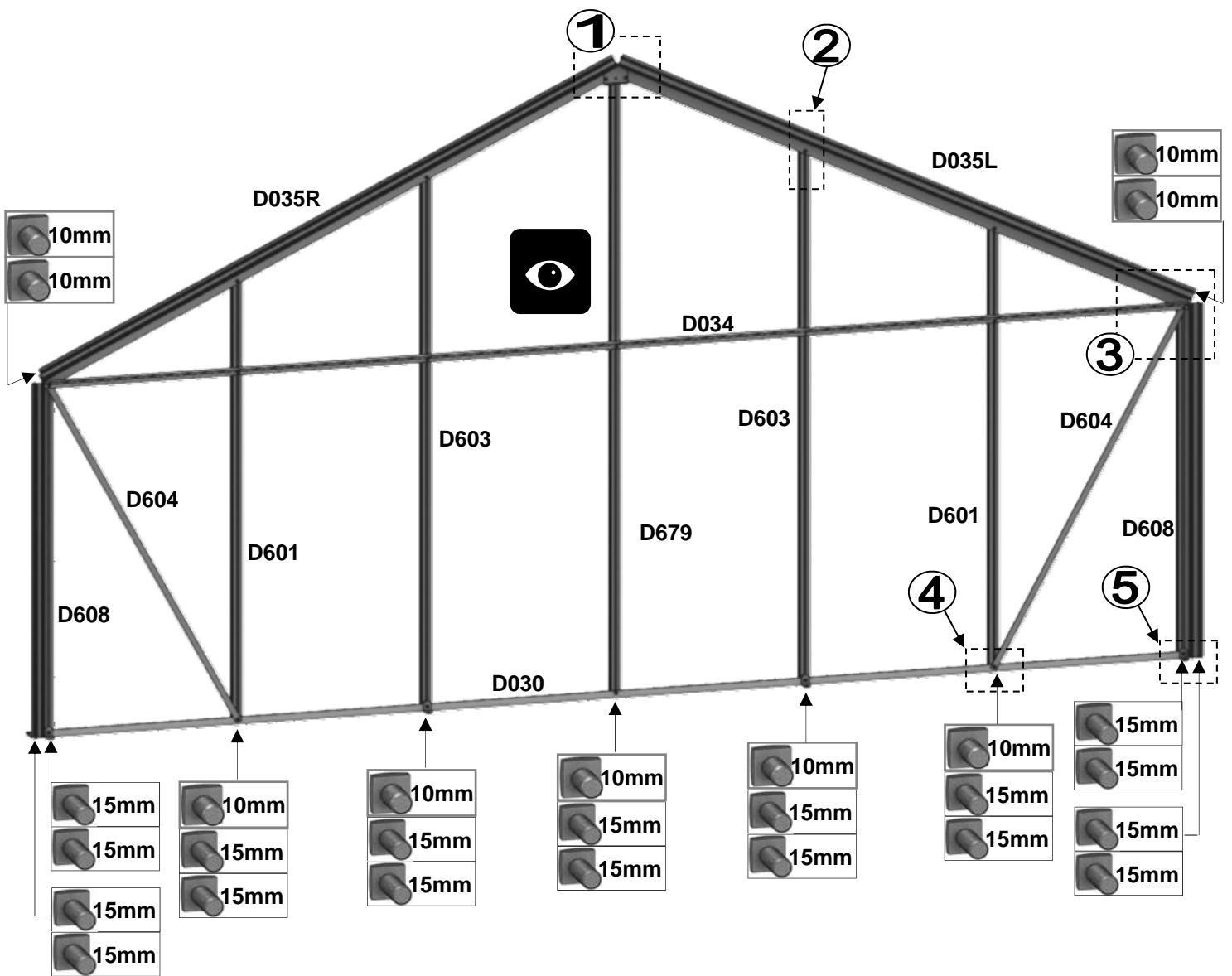




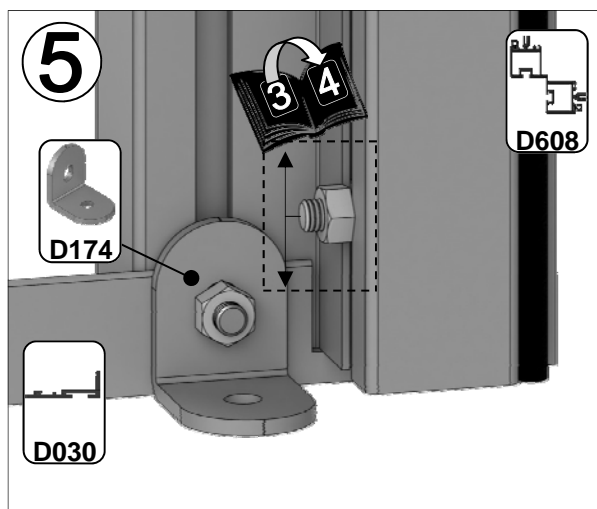
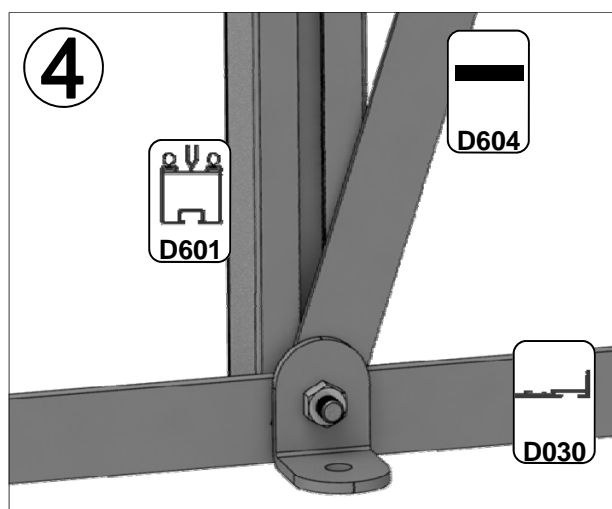
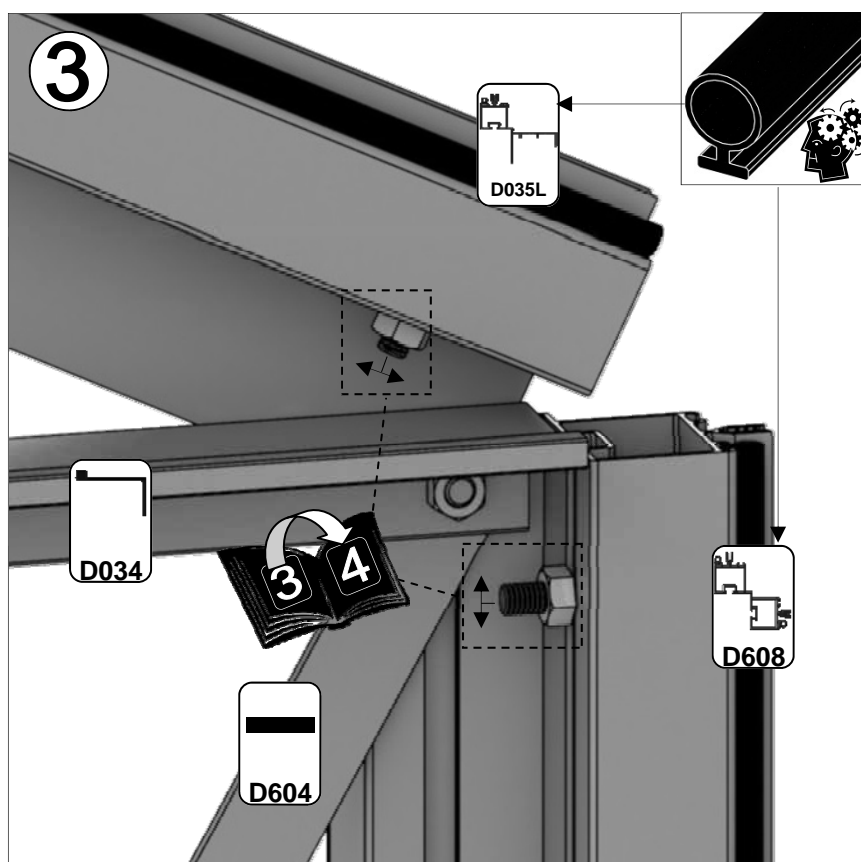
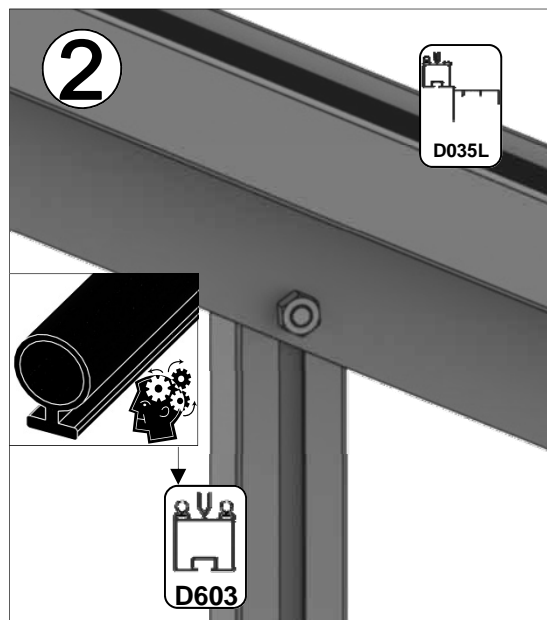
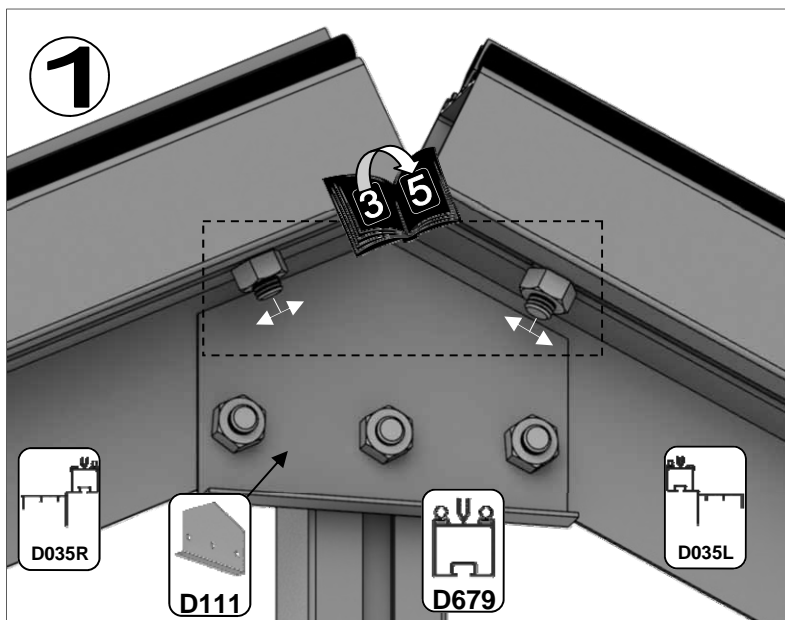


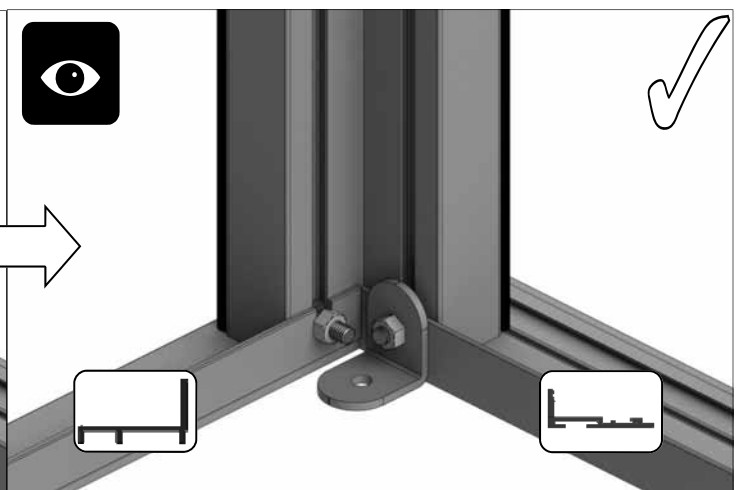
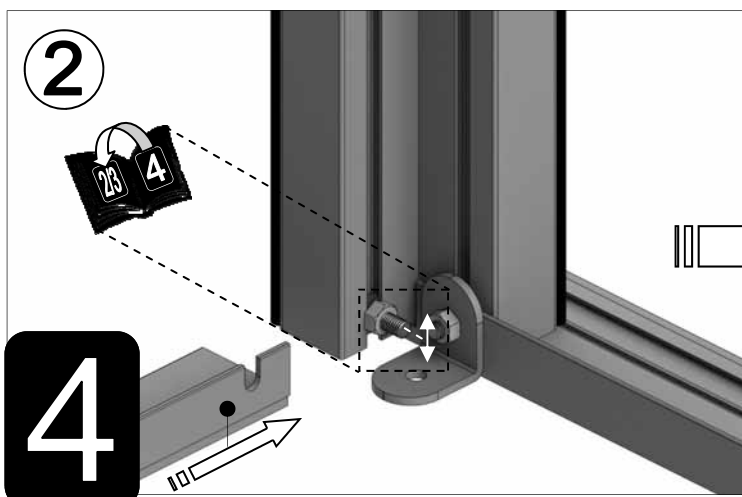
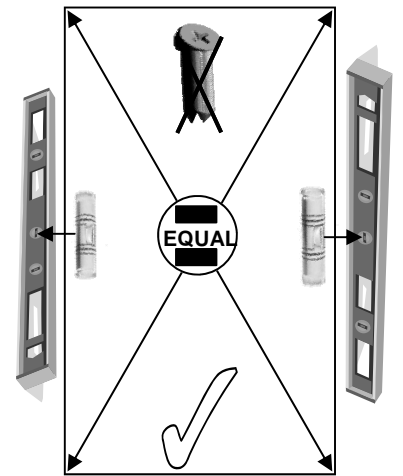
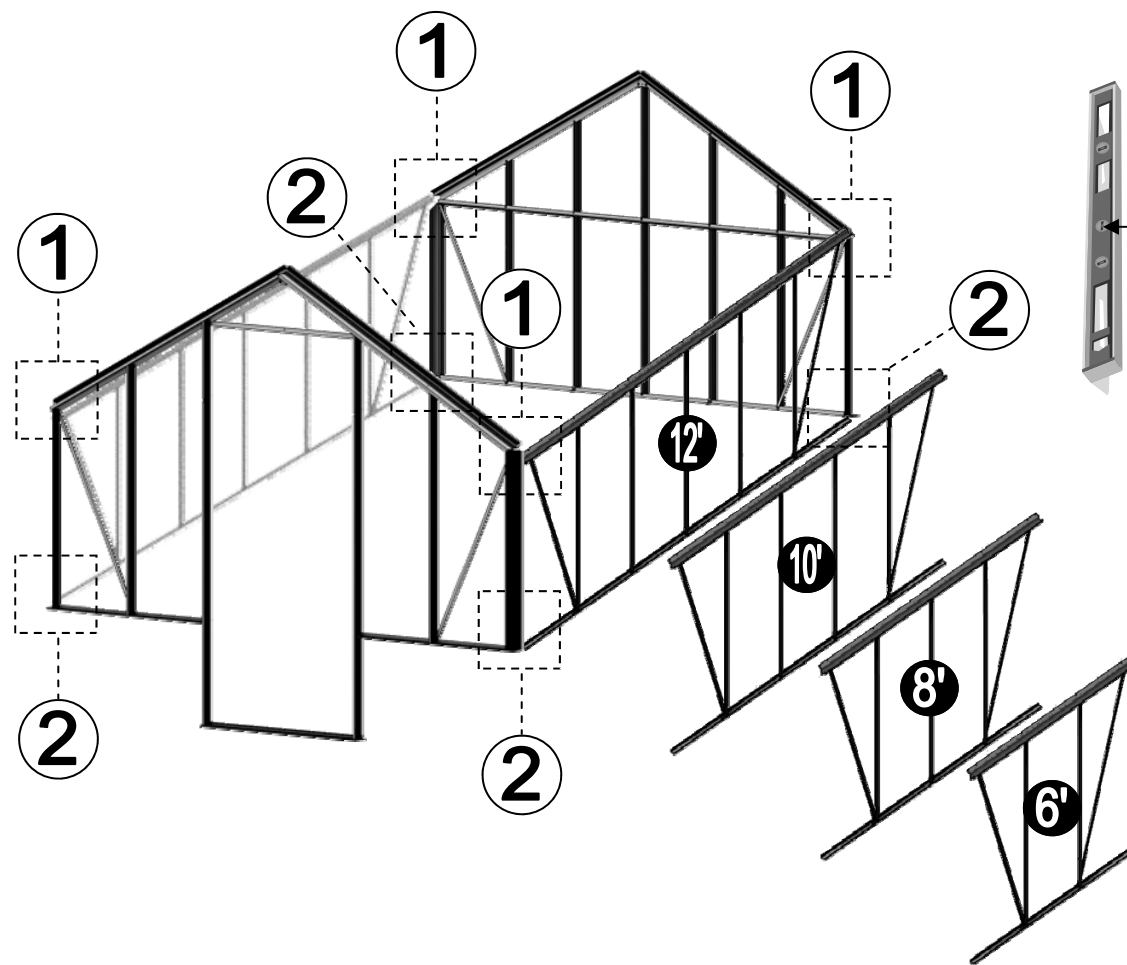
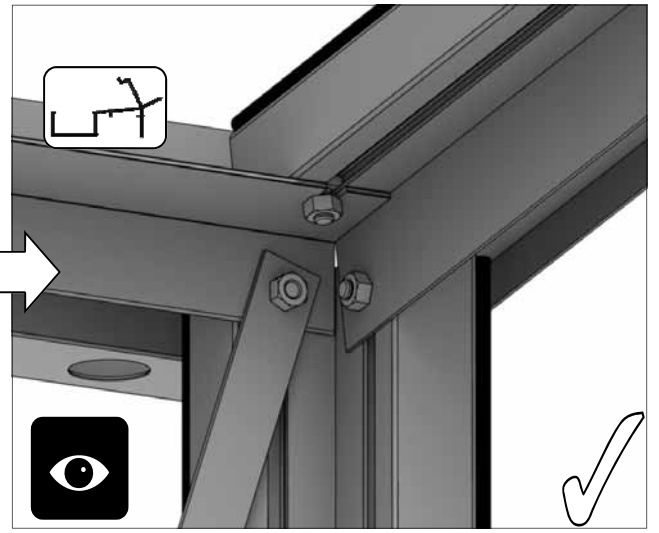
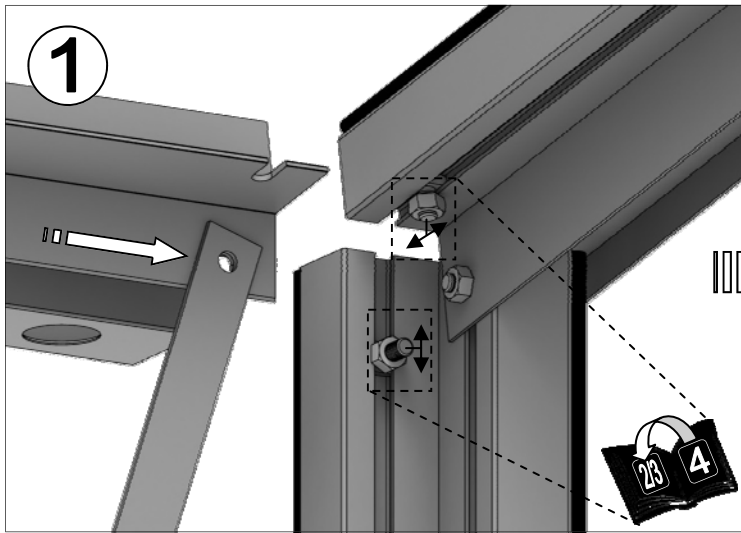
Part No	mm	Quantity
D030	3836	1
D034	3750	1
D601	1460	2
D603	1756	2
D604	1316	2
D608	1160	2
D679	2052	1
D035L	2082	1
D035R	2082	1

Part No	mm	Quantity
D111		1
D174		6
D227		26m
M6X10		11
M6X15		18
M6NUT		29



3

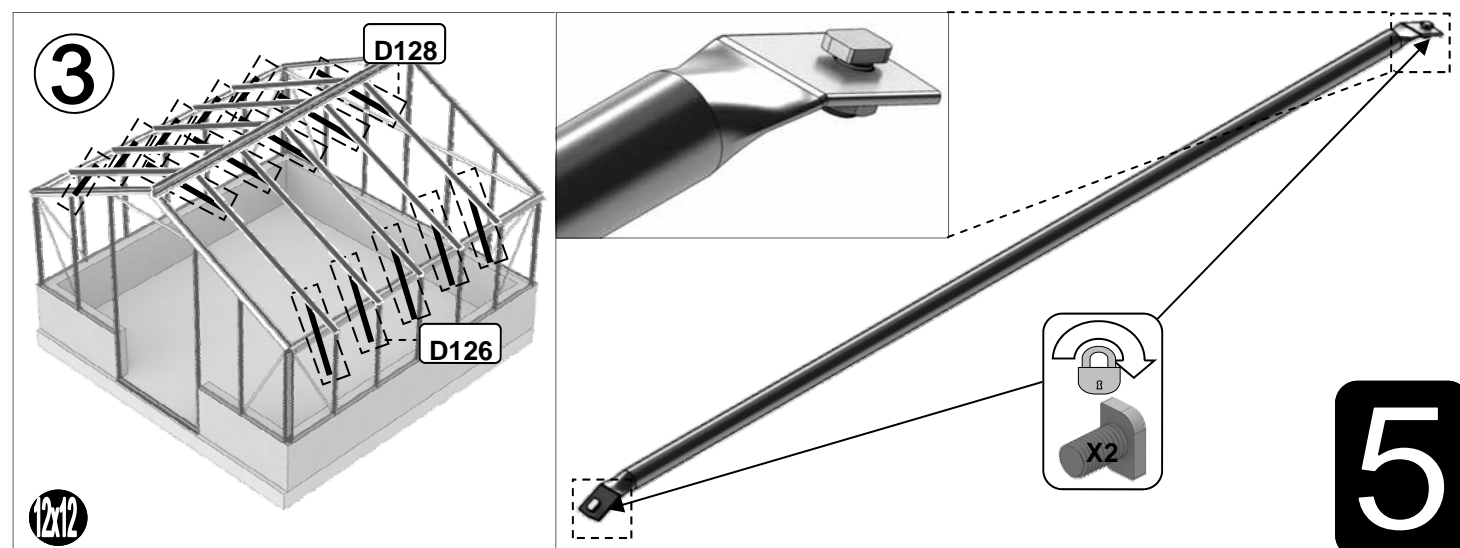
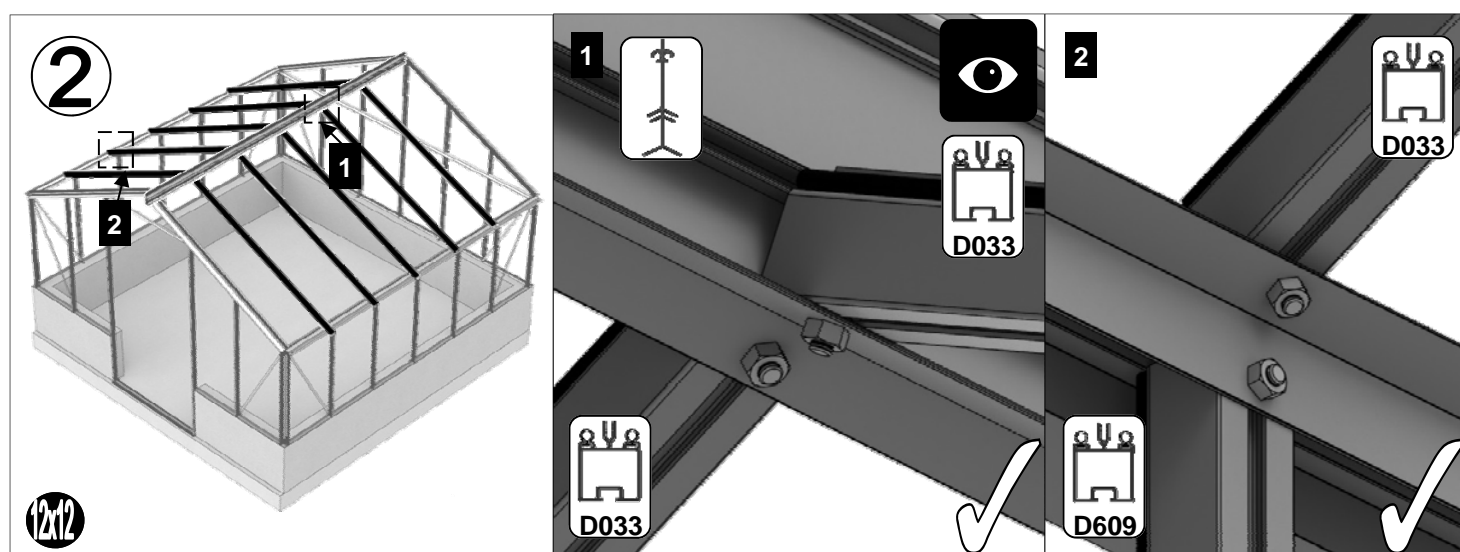


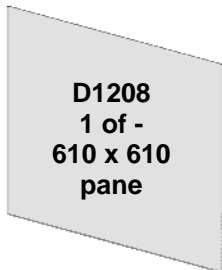


10'   16		
Part No	mm	Quantity
D002	3137	1
D033	2082	8
D126	445	8
D128	1015	4
RUBBER	1000	34

1

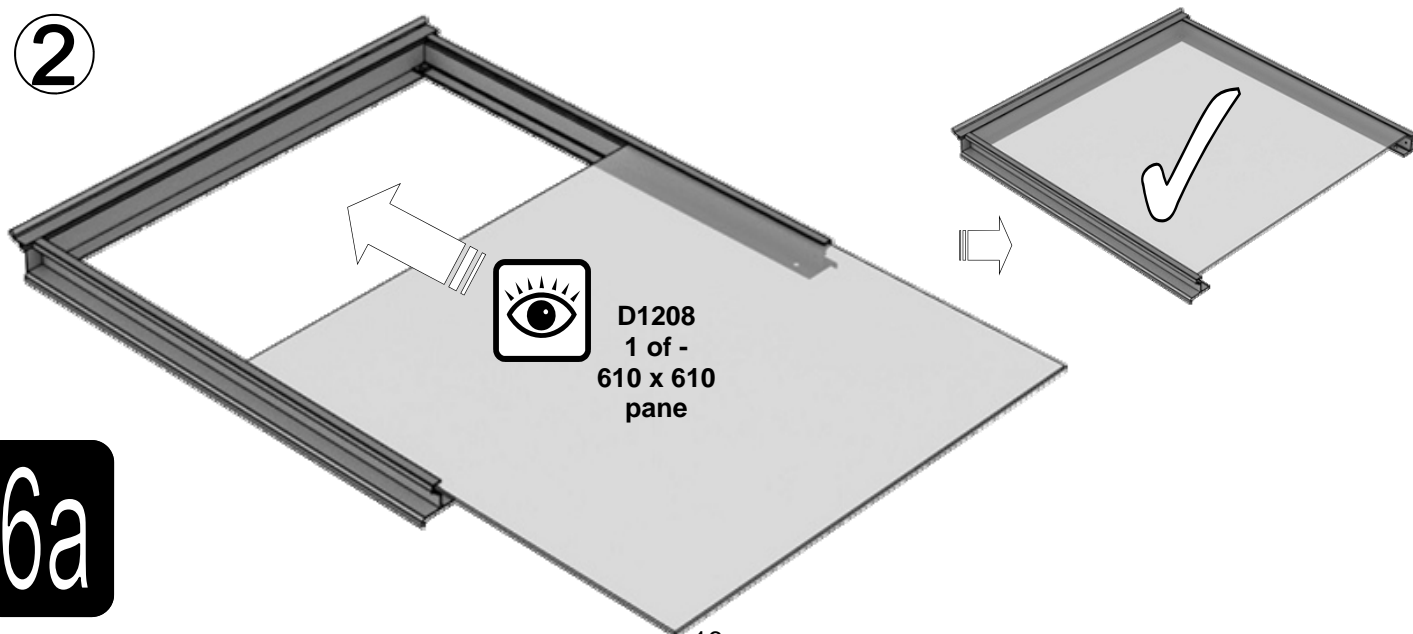
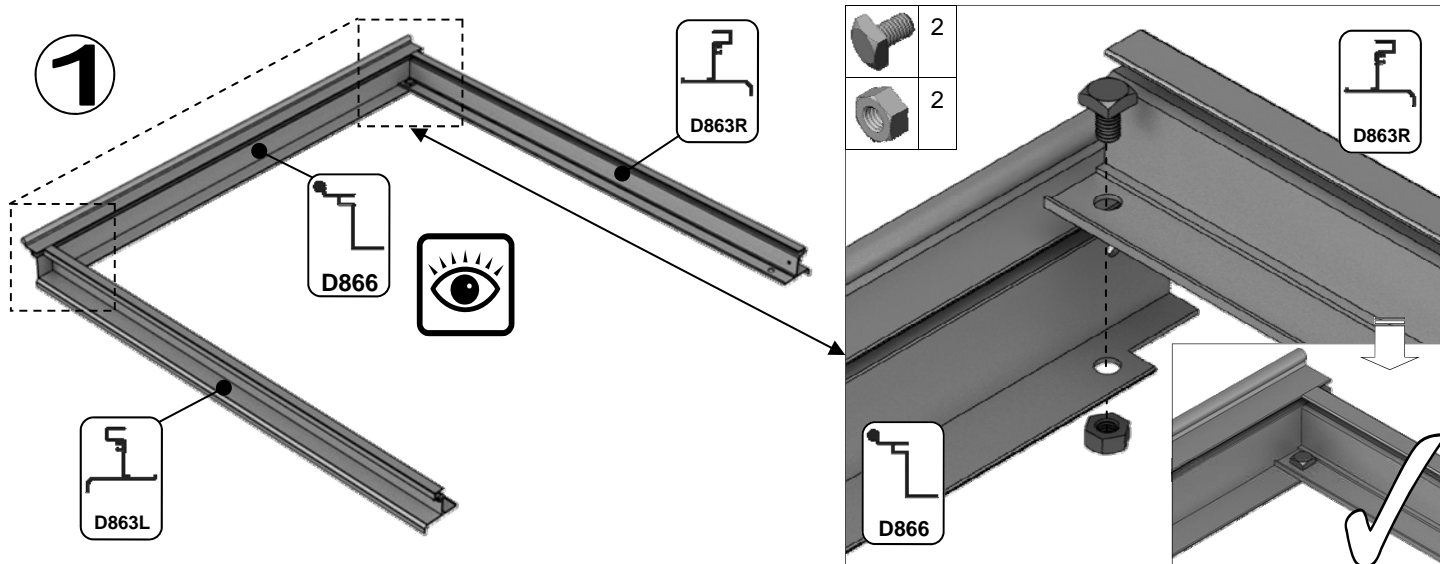
12x12






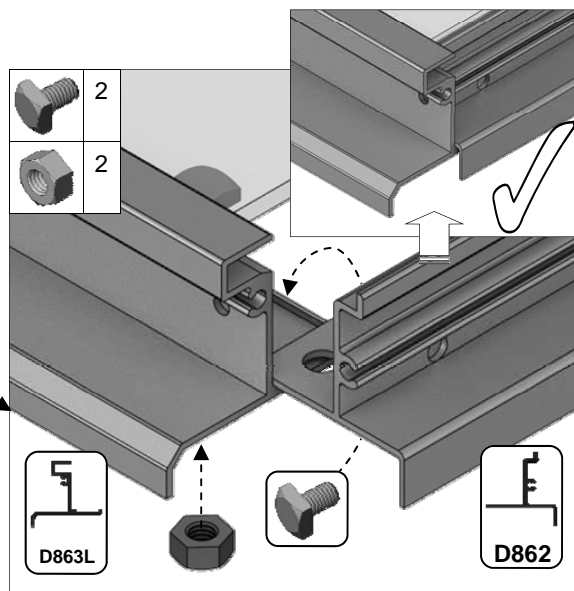
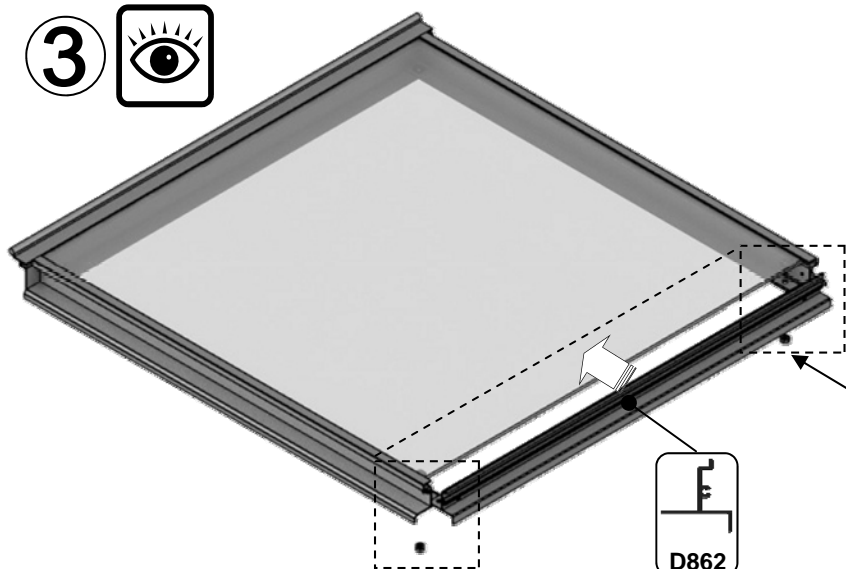
Part No		mm	Quantity
D866		639	1
D863L		613	1
D863R		613	1
D862		593	1

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

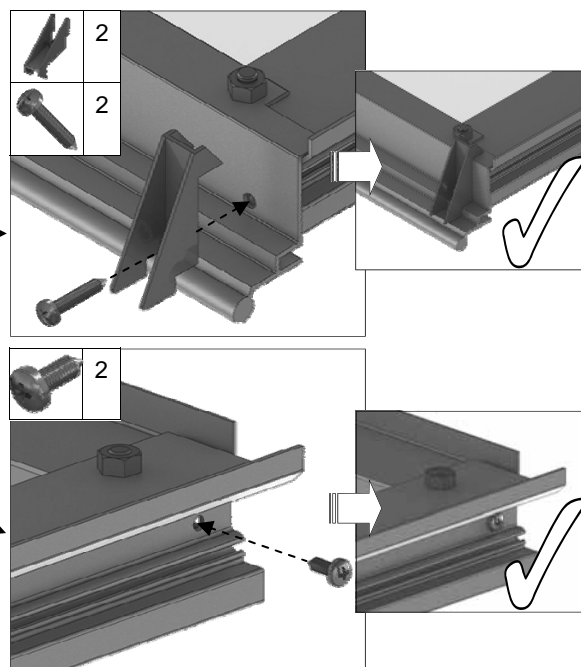
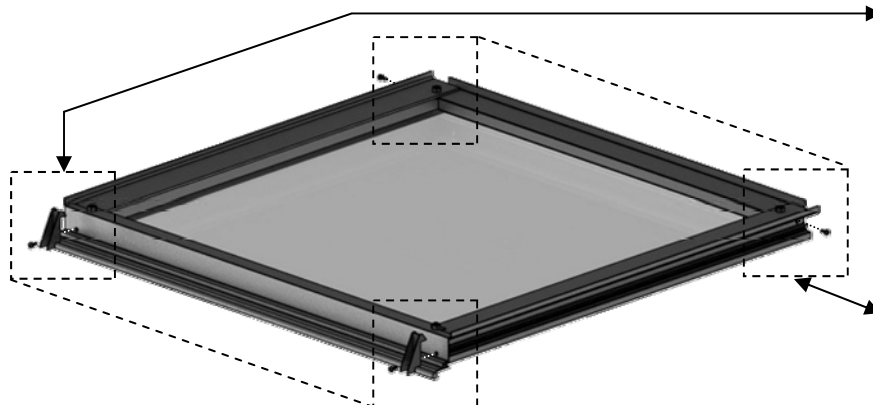
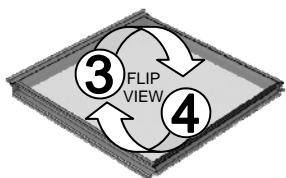


6a

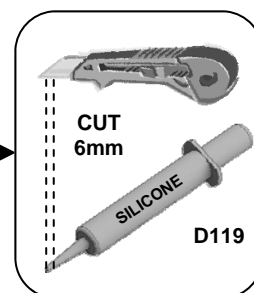
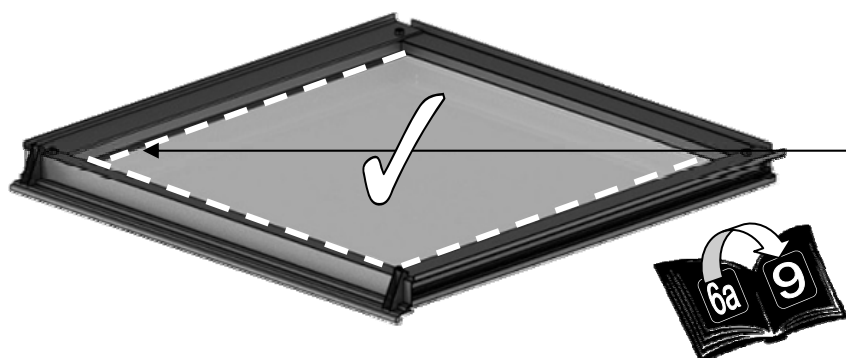
3 



4 









5 



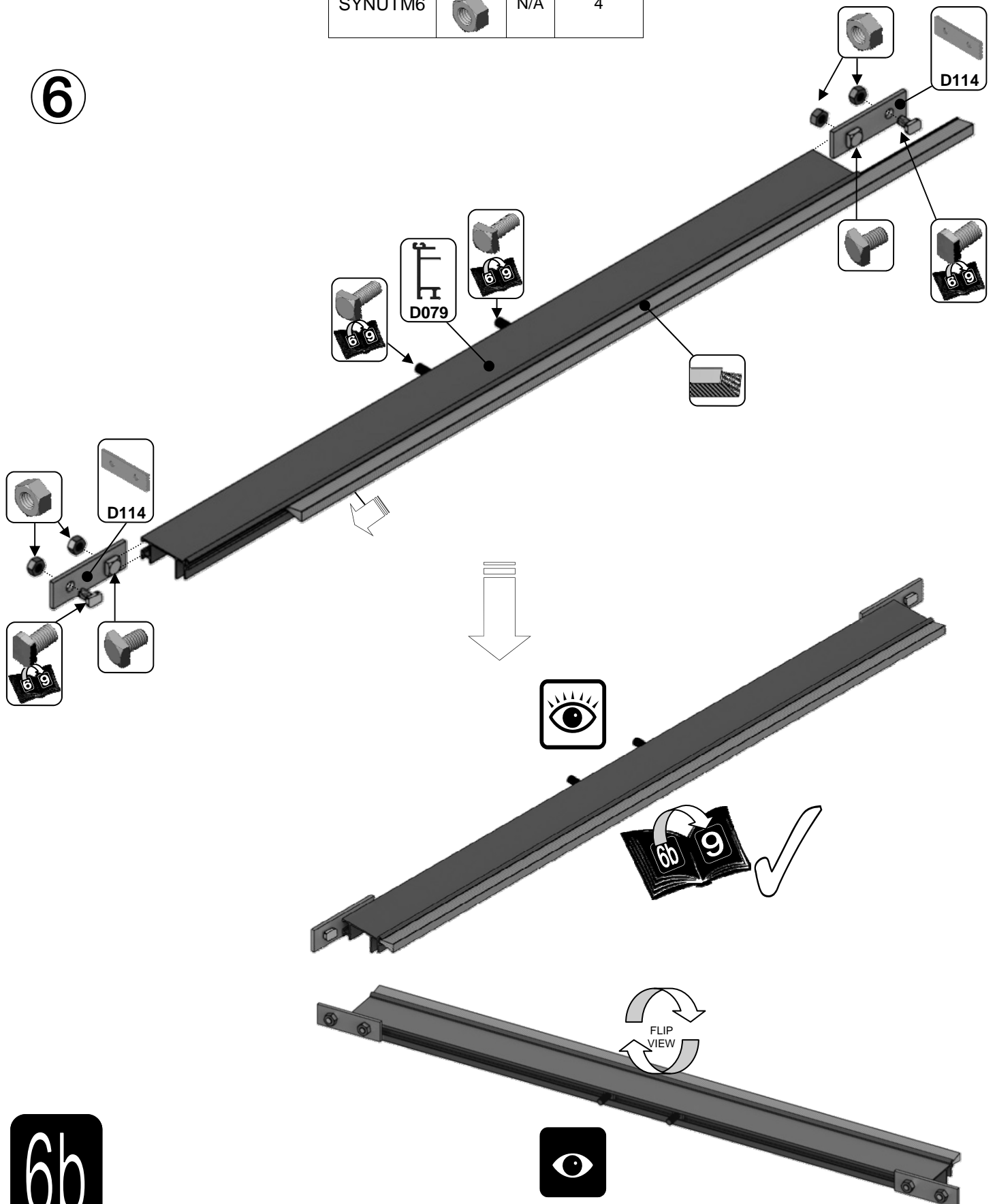
6a

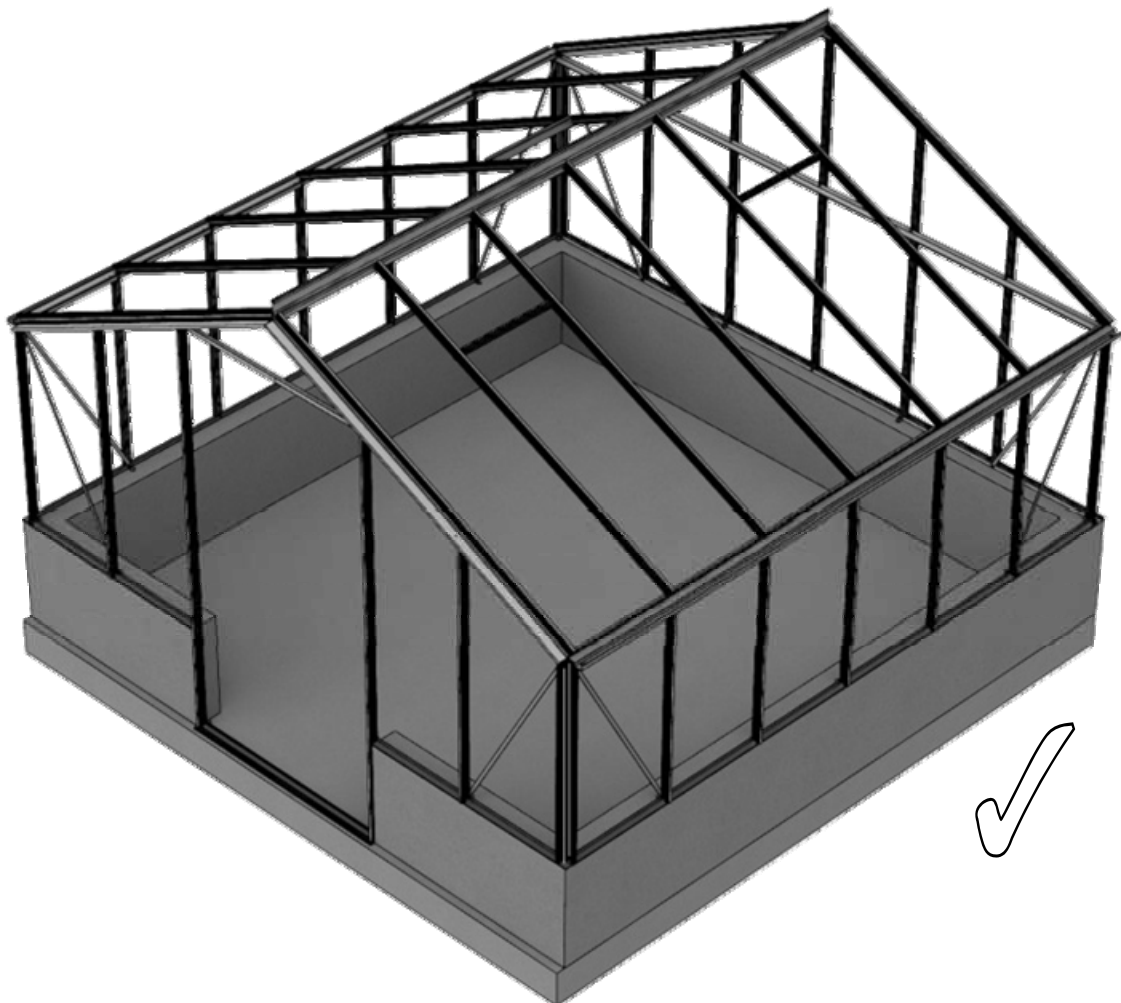
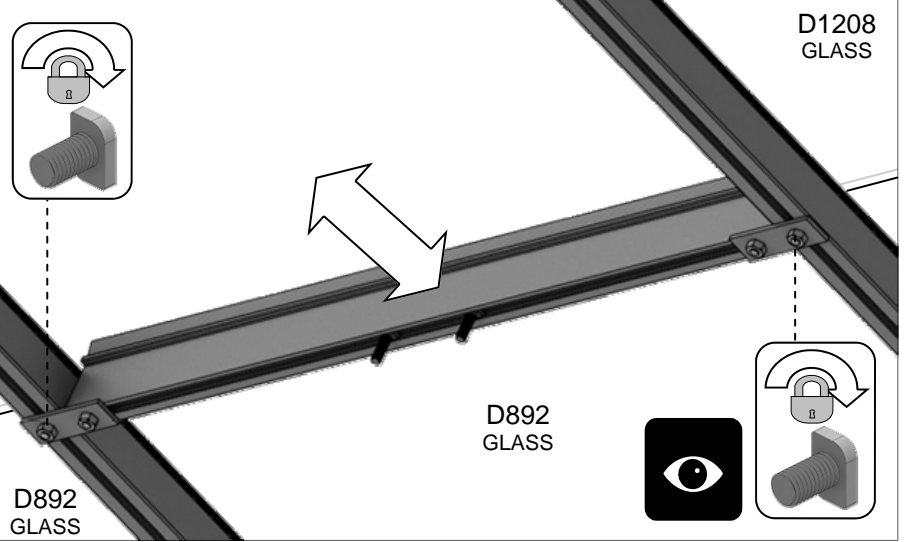
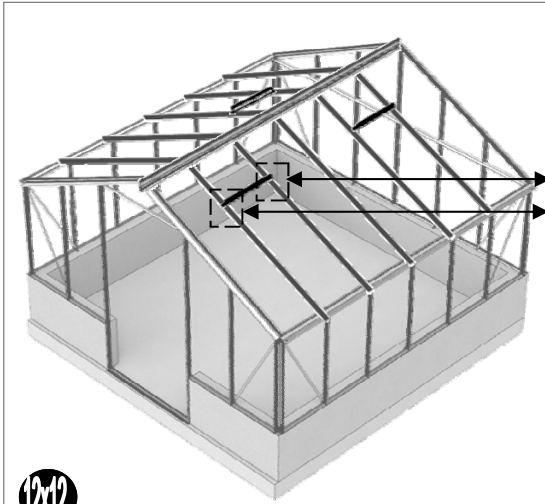
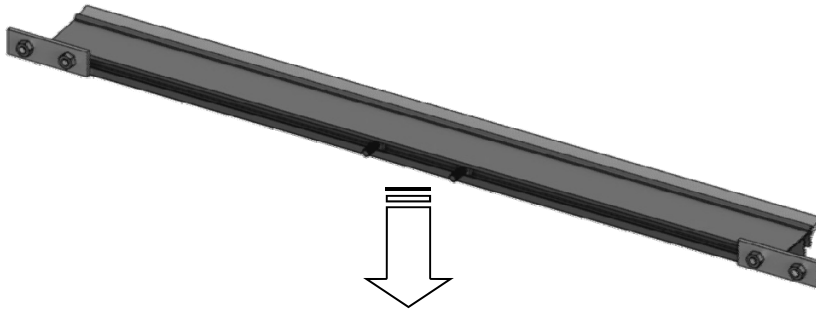
1 vent
slam bar = {

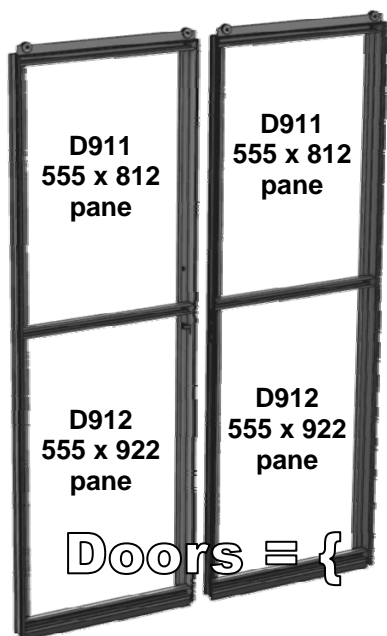
Part No		mm	Quantity
SY-BOLM6X11		10	2
SY-BOLM6X15		15	2
SYBOLM6 X11CROP		10	2
SYNUTM6		N/A	4

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

6

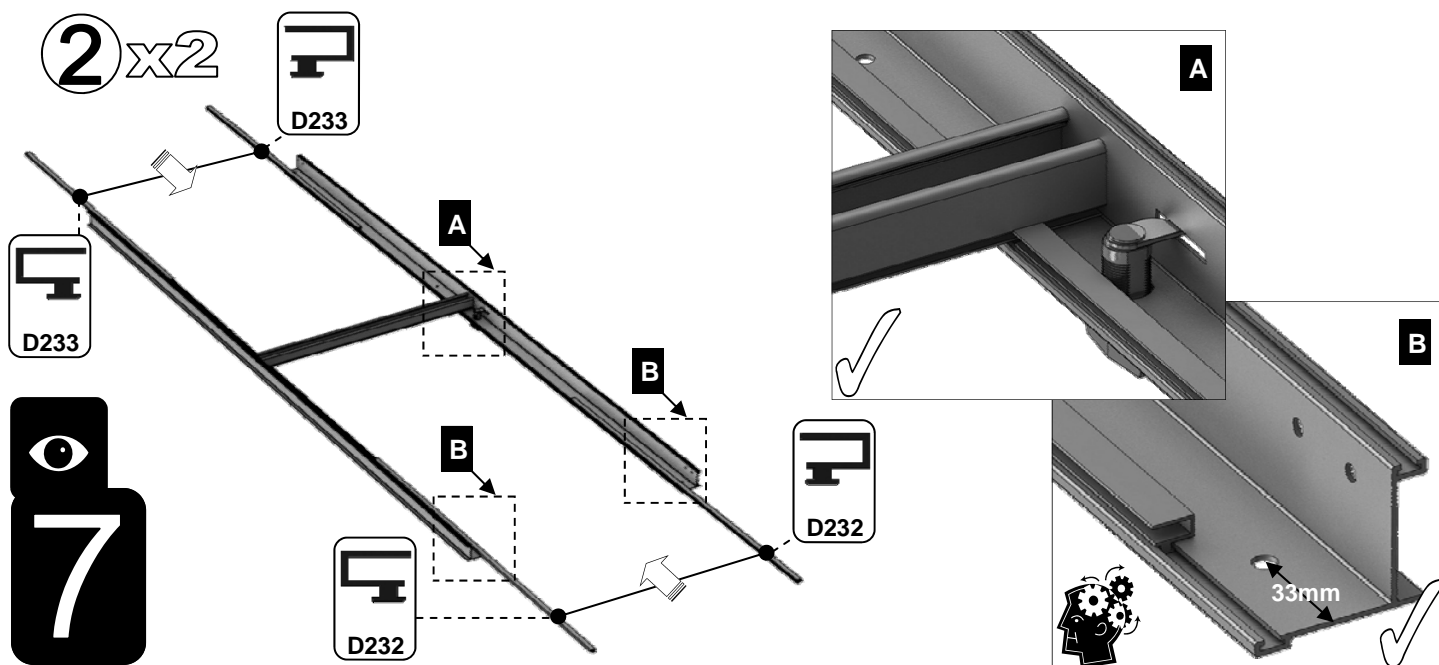
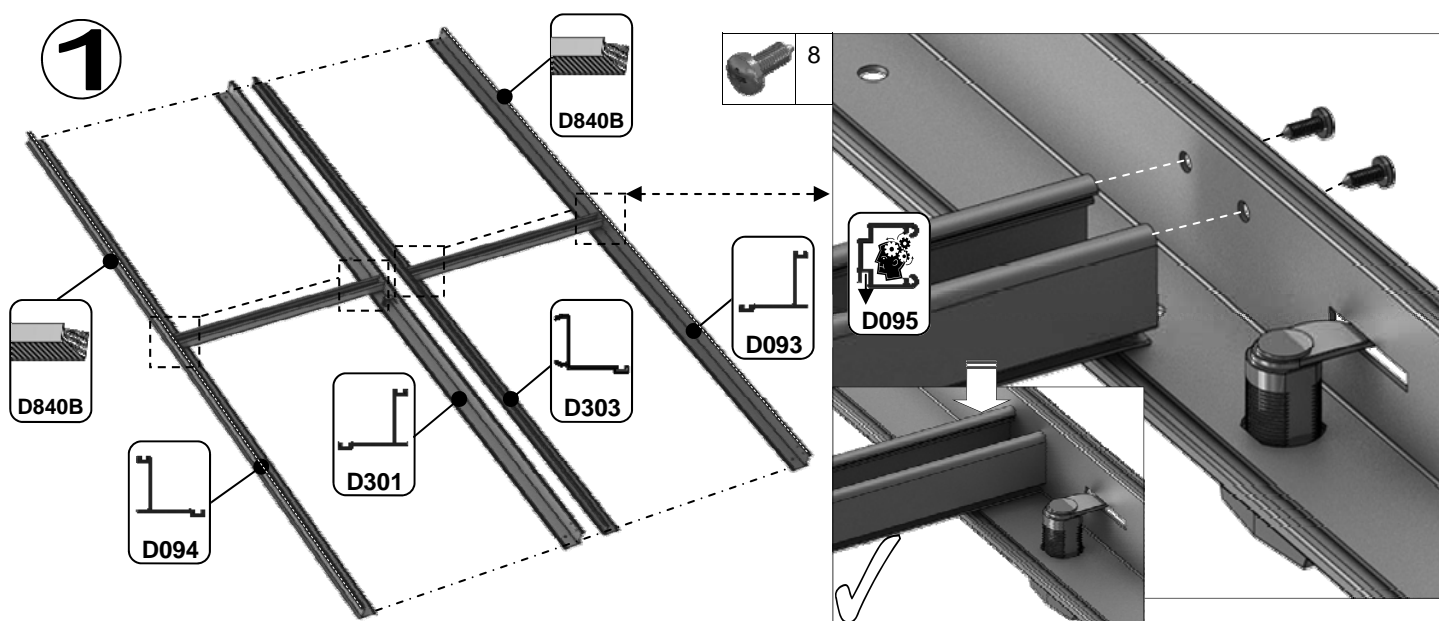


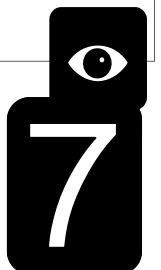
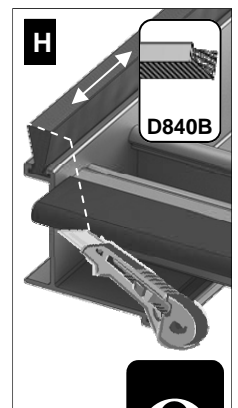
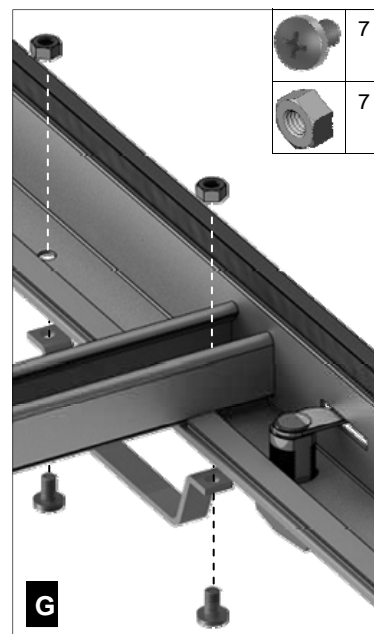
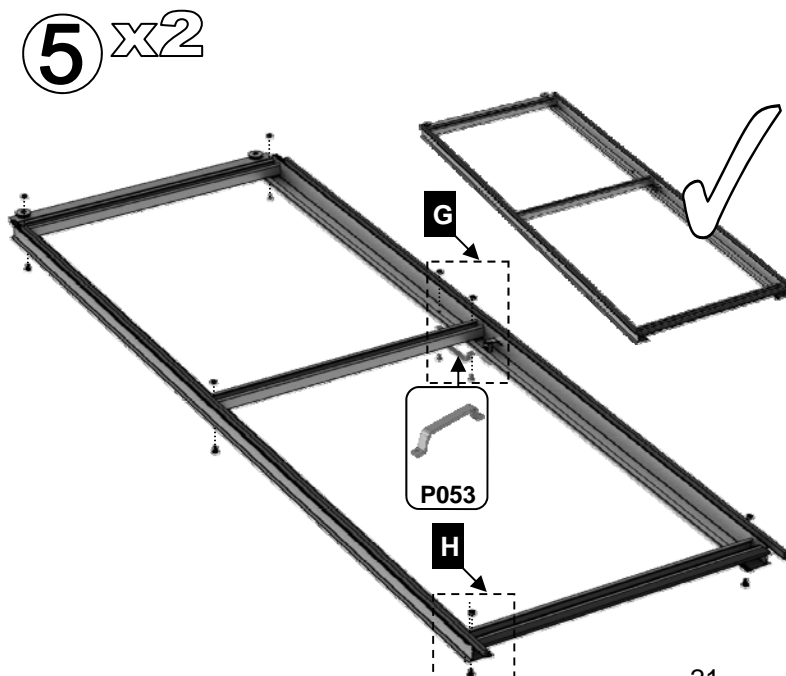
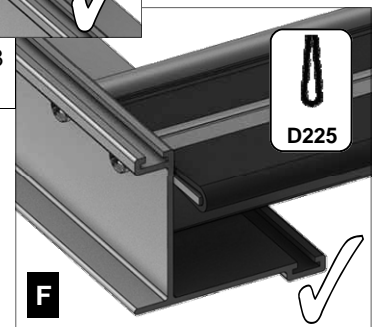
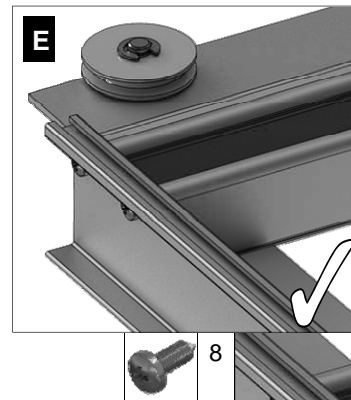
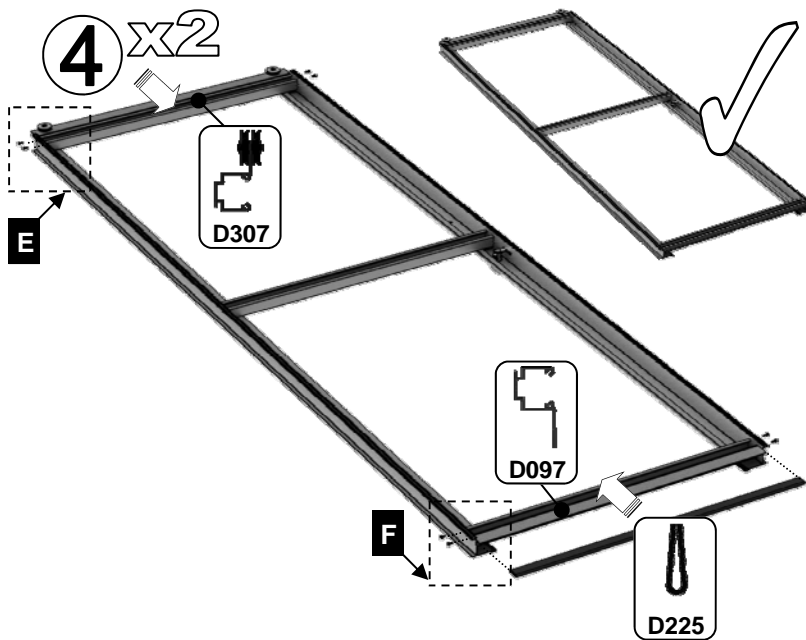
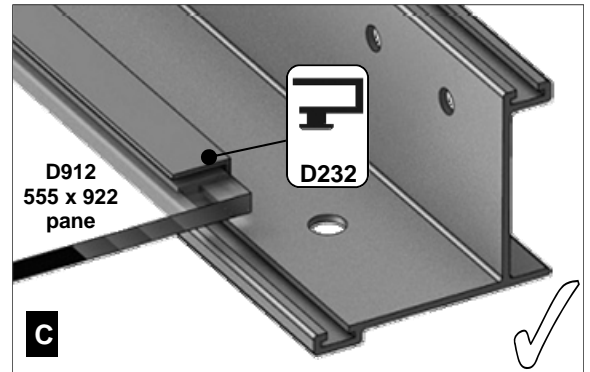
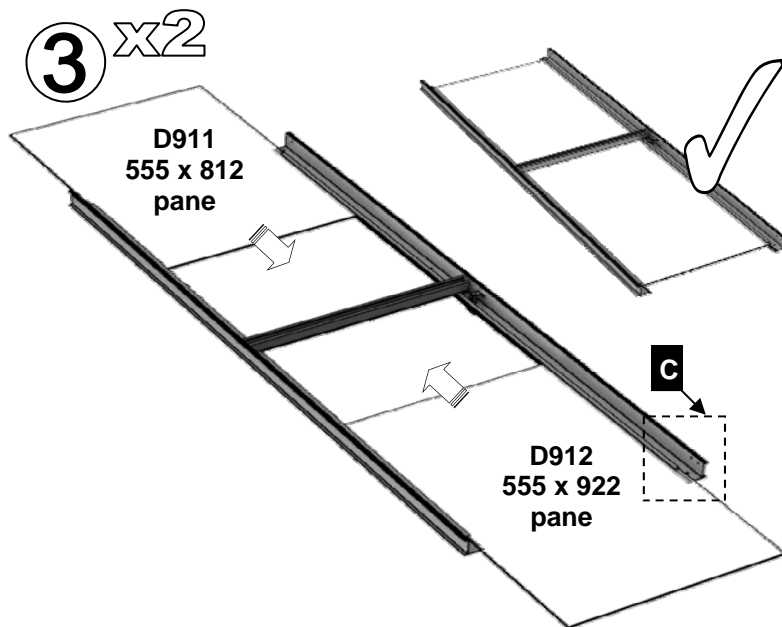




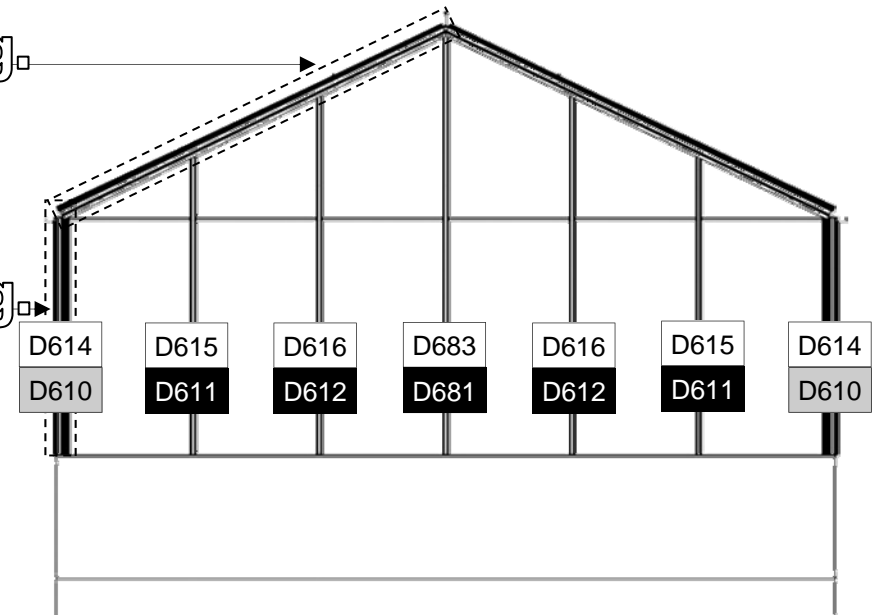
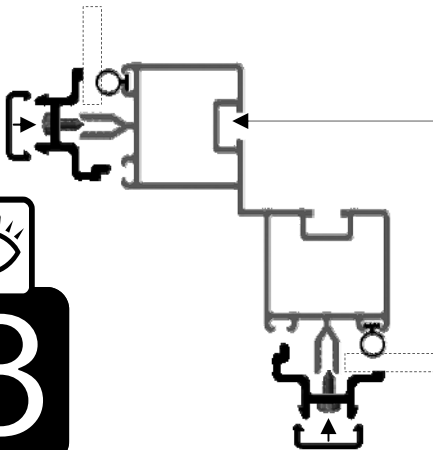
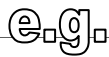
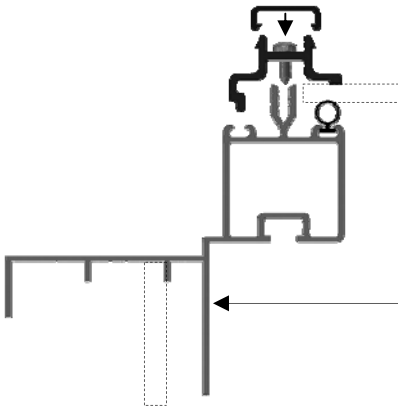
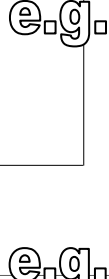
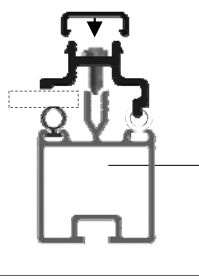
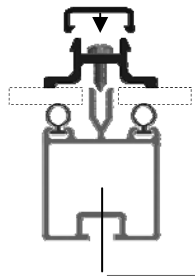
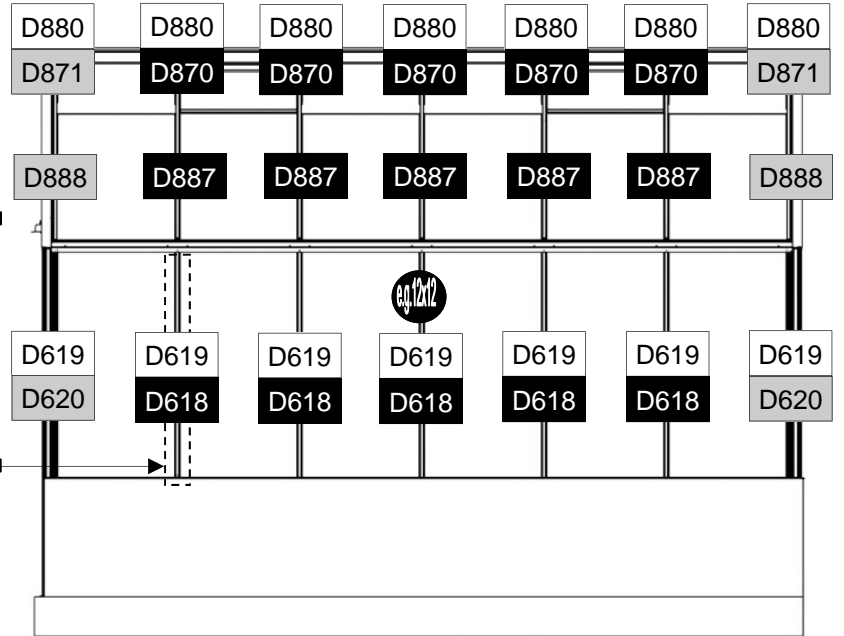
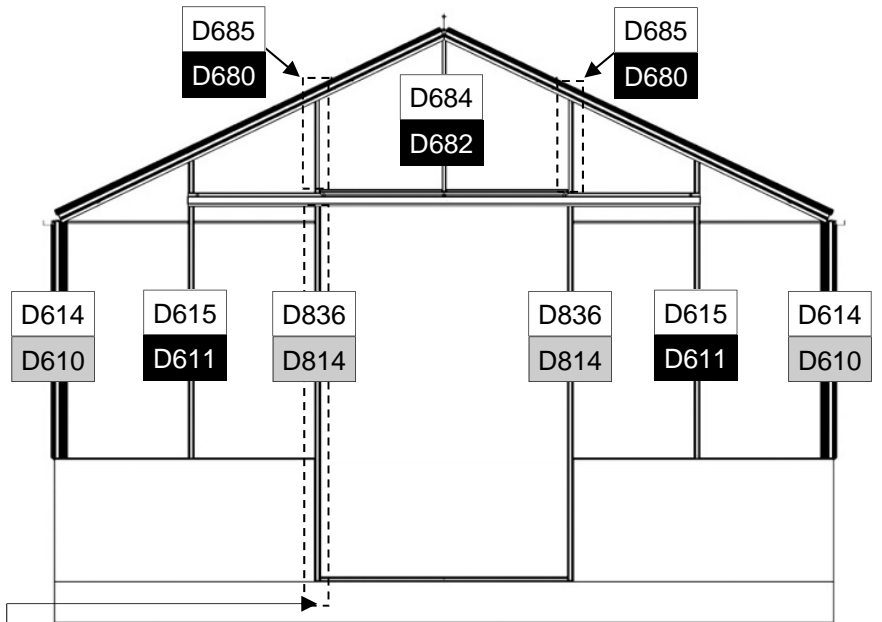
Part No		mm	Q
D094		1824	1
D090 + D347 lock = D301		1824	1
D092 + D156 strike = D303		1824	1
D093		1824	1
D096 + D217 wheel = D307		611	2
D095		611	2
D097		611	2

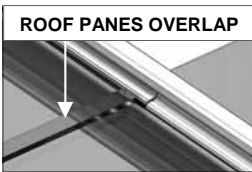
Part No		mm	Q
D232		905	4
D233		797	4
P053		N/A	2
D225		610	2
D840B		4000	1
D263 PACK x 2		N/A	14
		N/A	14
D261 PACK		N/A	24





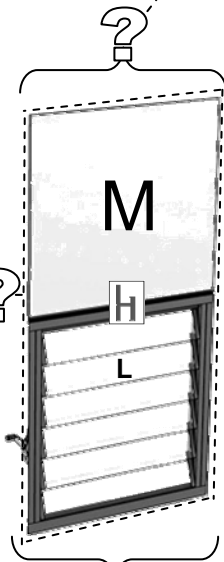
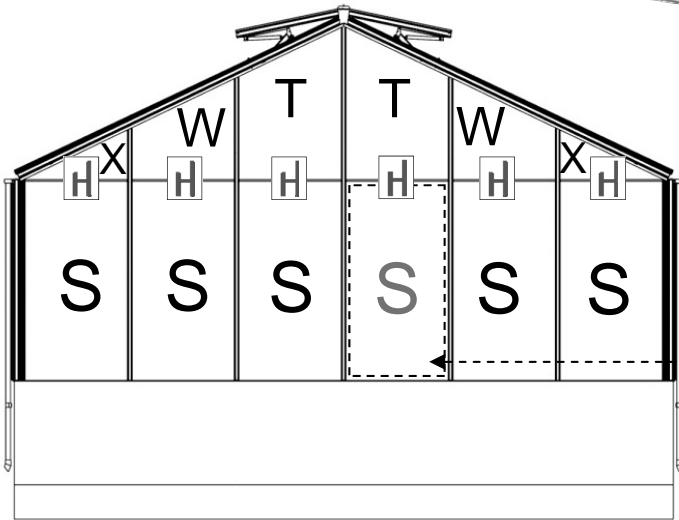
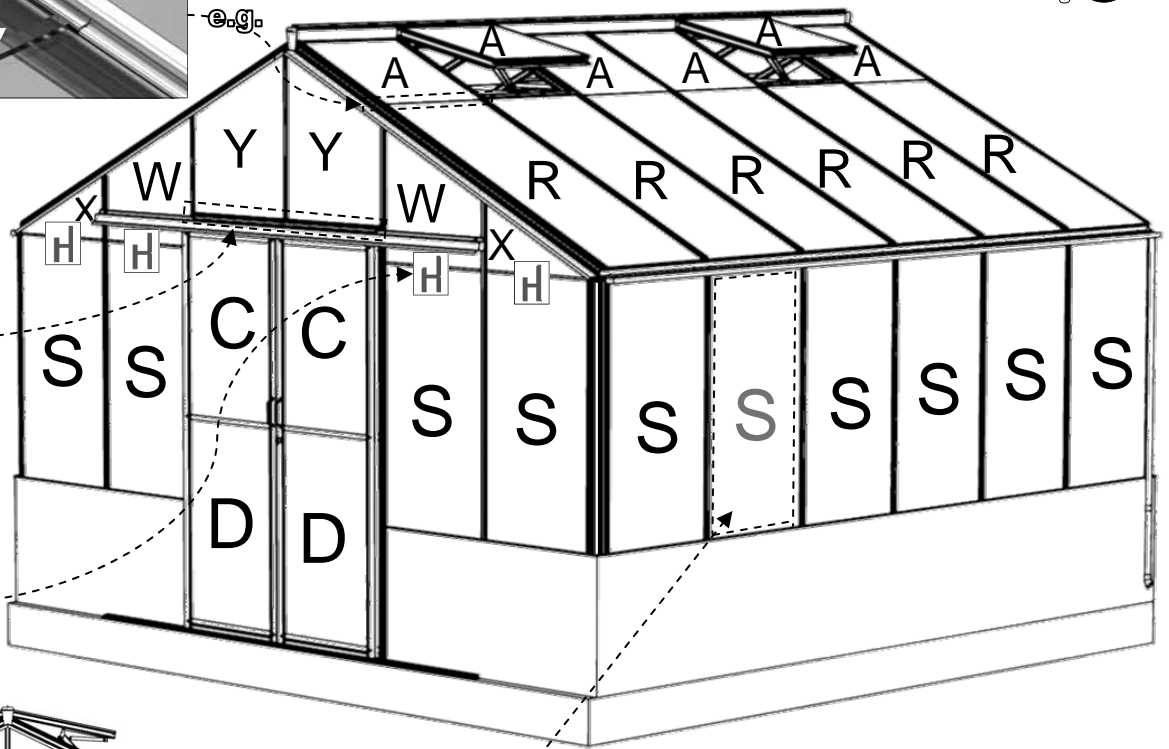
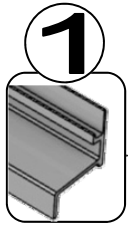
PART No	Section	Size (mm)
D611		1460
D612		1756
D618		1144
D680		457
D681		2052
D682		746
D870		601
D887		1490
D610		1160
D620		1144
D814		1883
D871		601
D888		1490
D614		1162
D615		1462
D616		1758
D619		1144
D683		2054
D684		748
D685		459
D836		1883
D880		2092



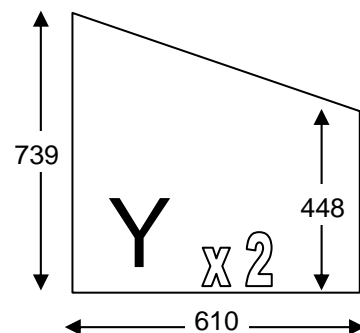
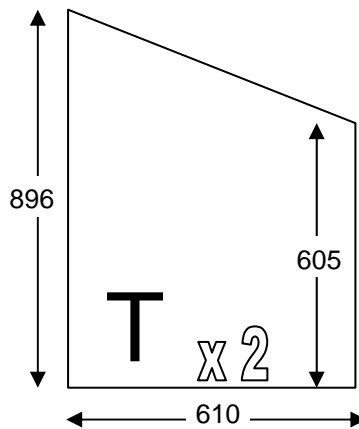
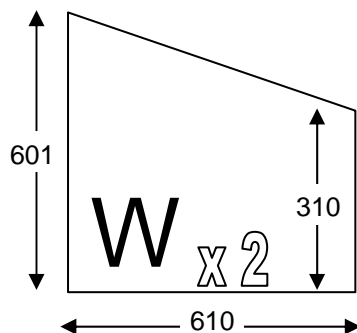
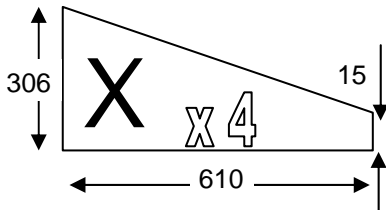


REGAL DWARF TOUGHENED GLASS

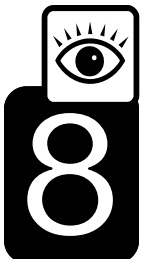
E.g. 12x12

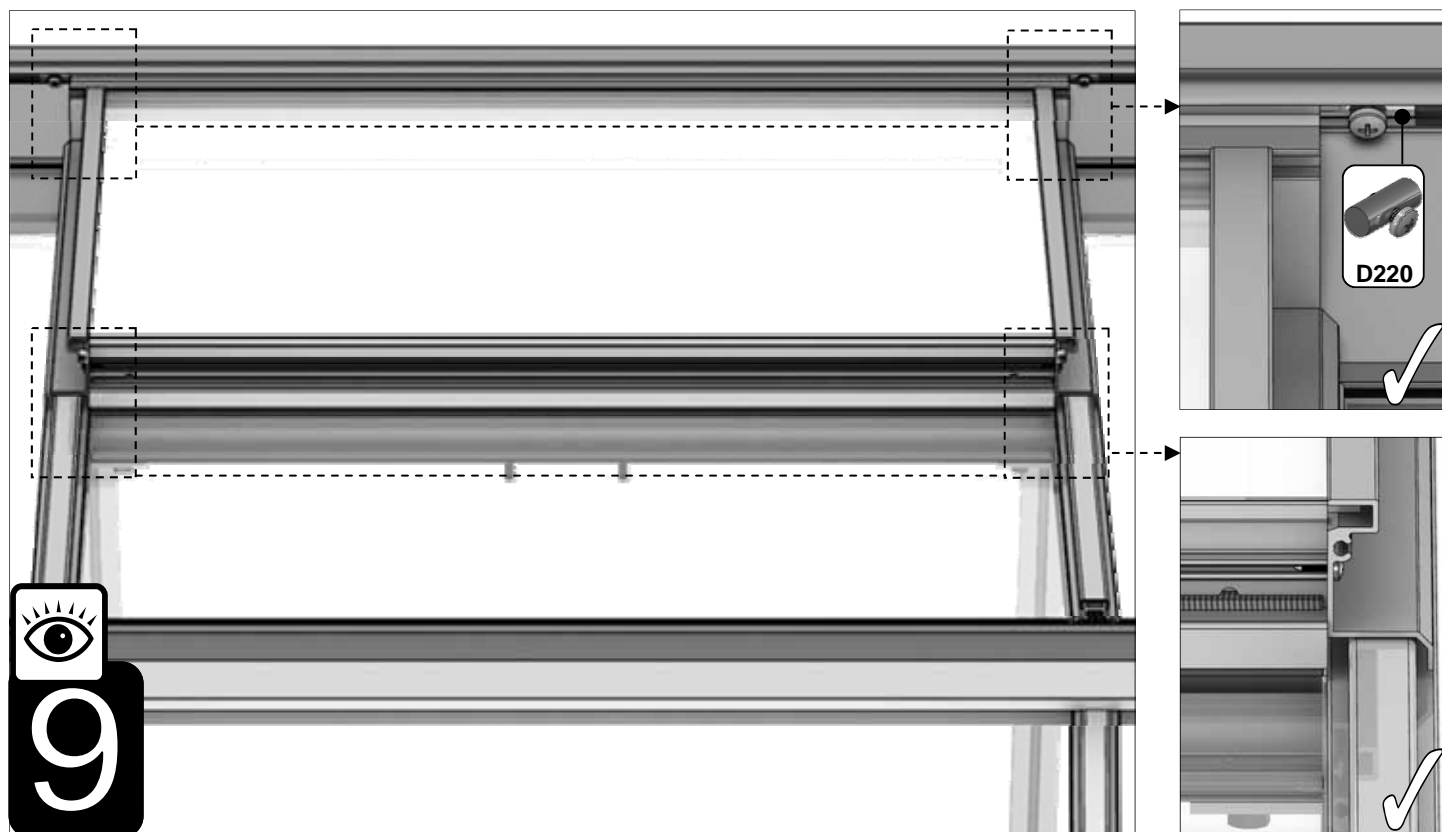
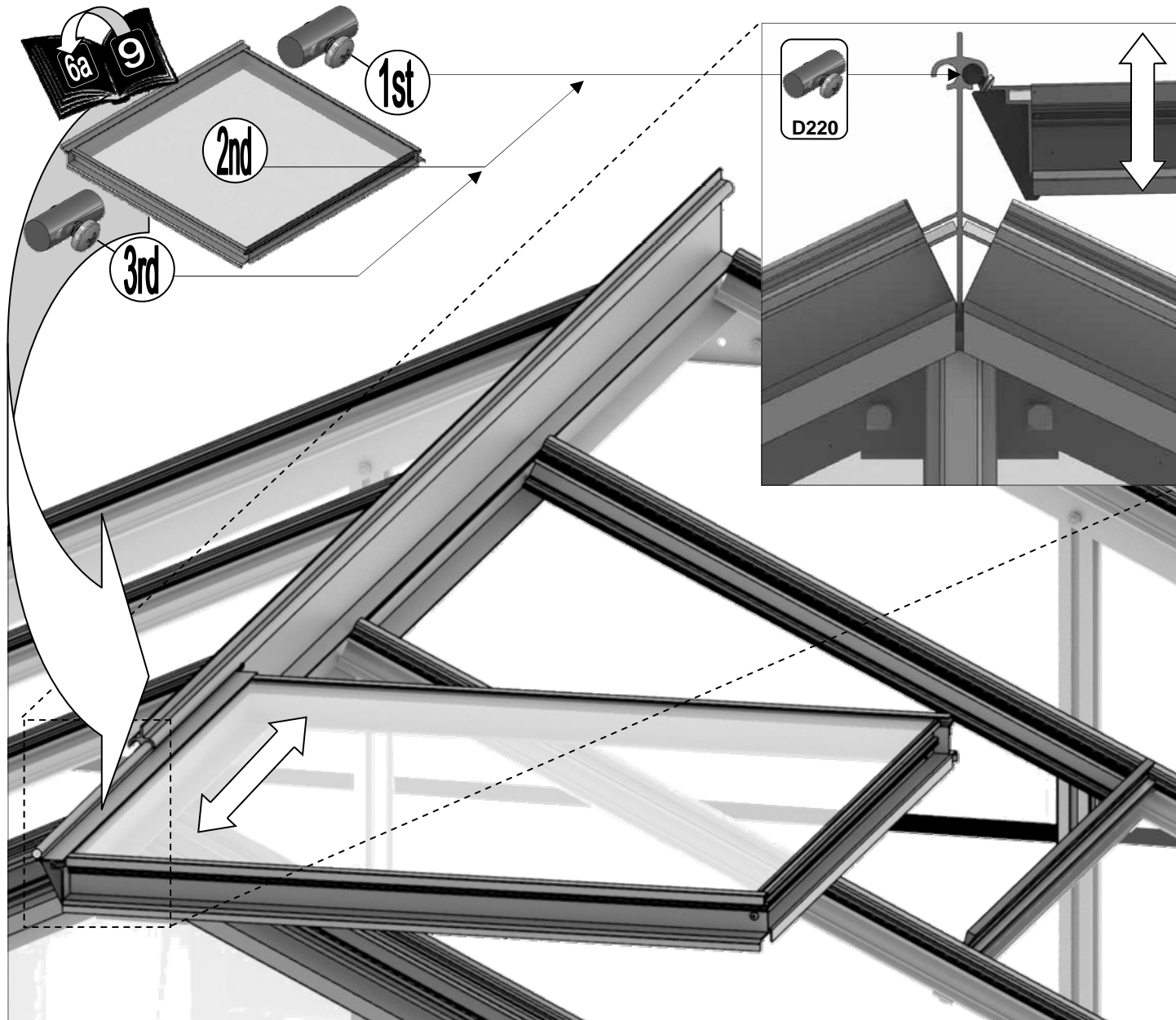


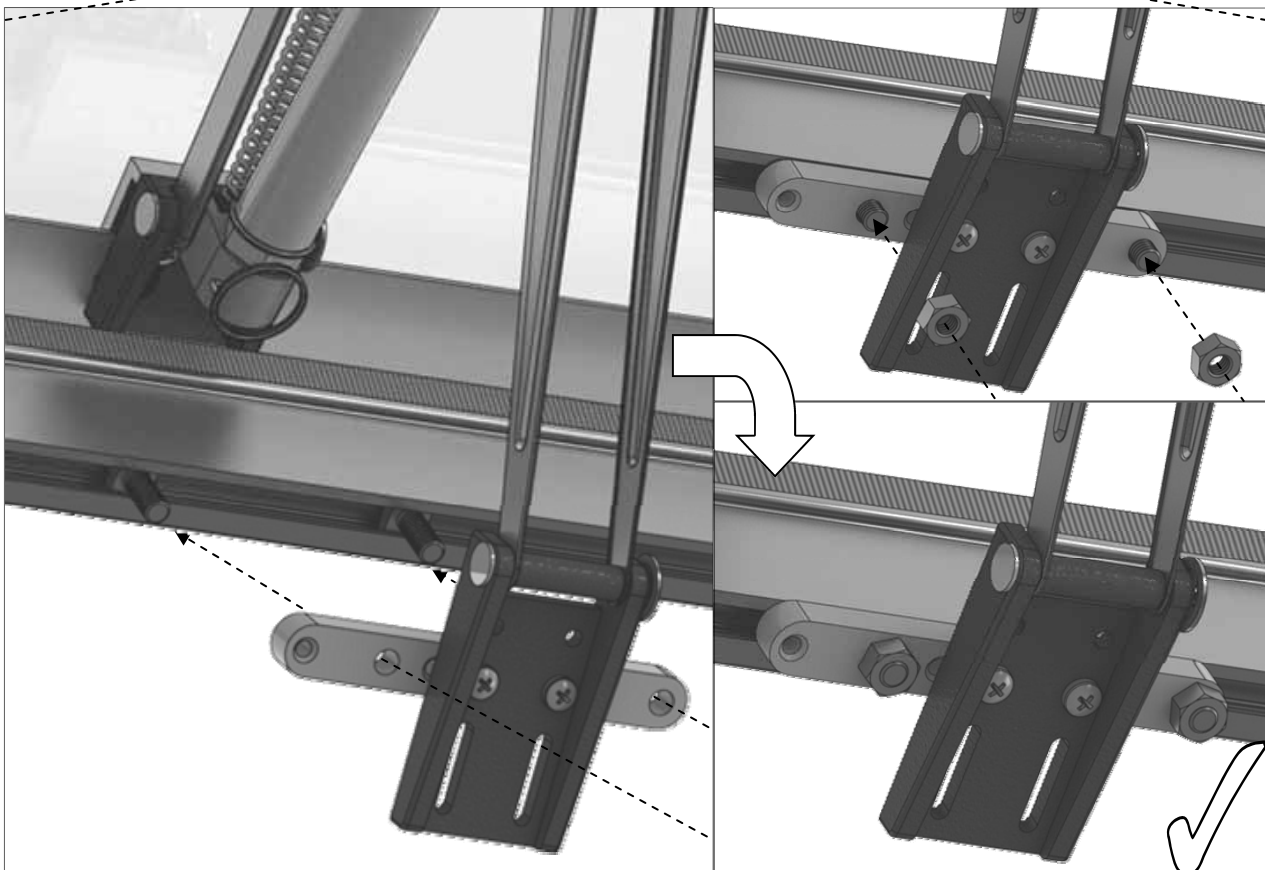
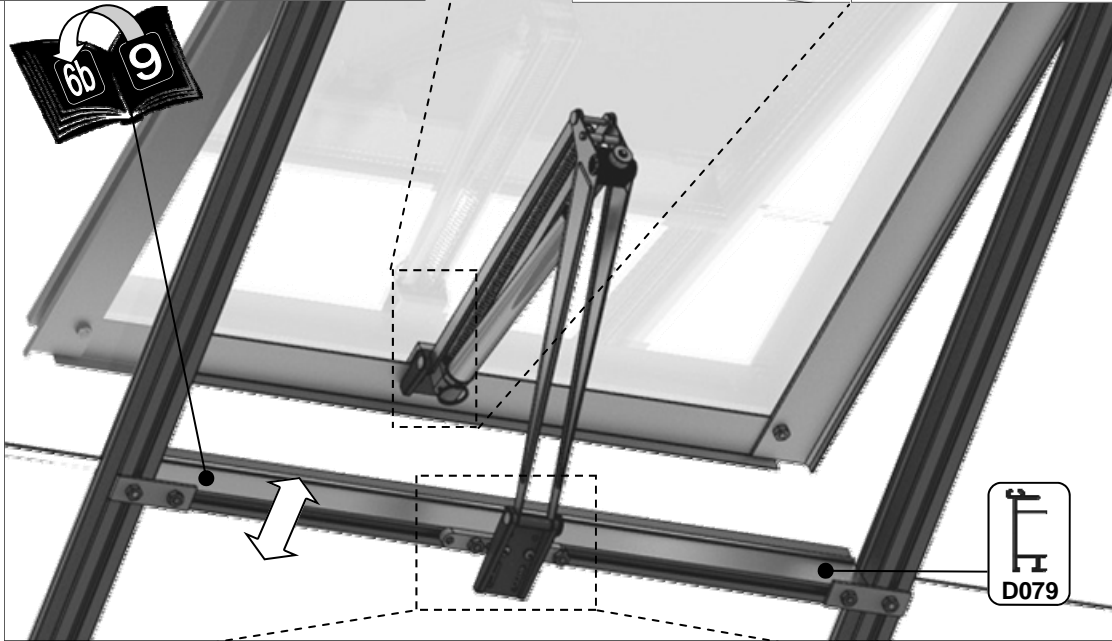
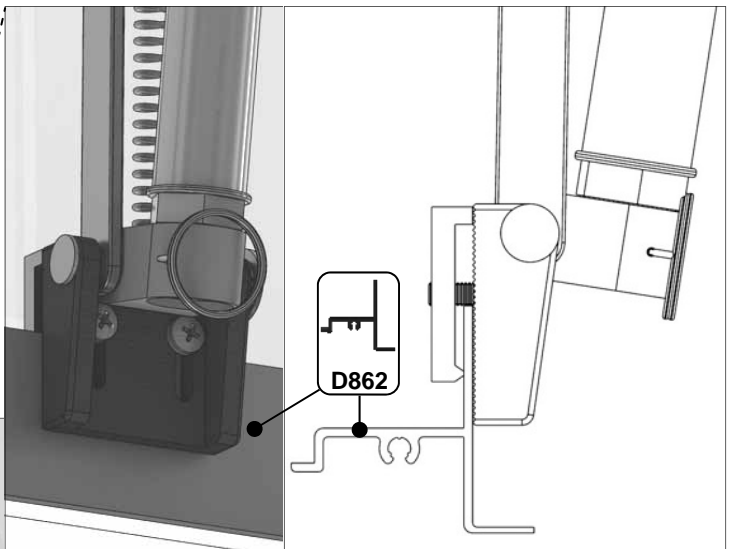
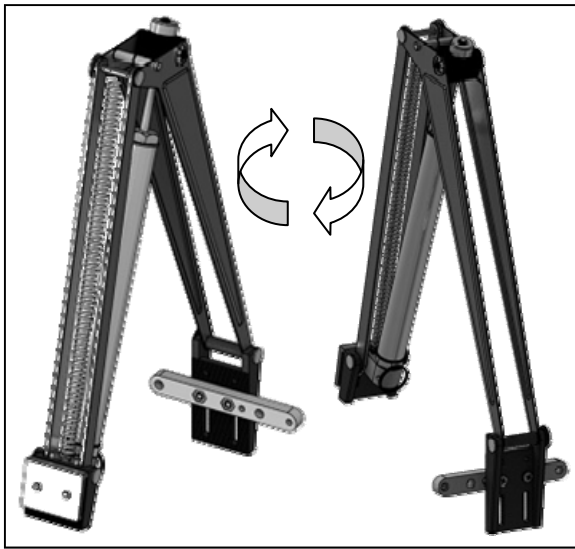
PART No		Size (mm)	8'	10'	12'
D1216	S	610 X 1162	16	18	20
D892	R	610 X 1500	8	10	12
D1208	A	610 X 610	8	10	12
D911	C	555 X 812	2		
D912	D	555 X 922	2		
D900	X	ANGLE	4		
D908	W	ANGLE	4		
D623	Y	ANGLE	2		
D890	T	ANGLE	2		
D223/B		1210	1		
D101 / ROSEPS	H	610 long	10		











D624	M	610 X 550	1
D729	L	525X 100	6
D101 / ROSEPS	H	610 long	1

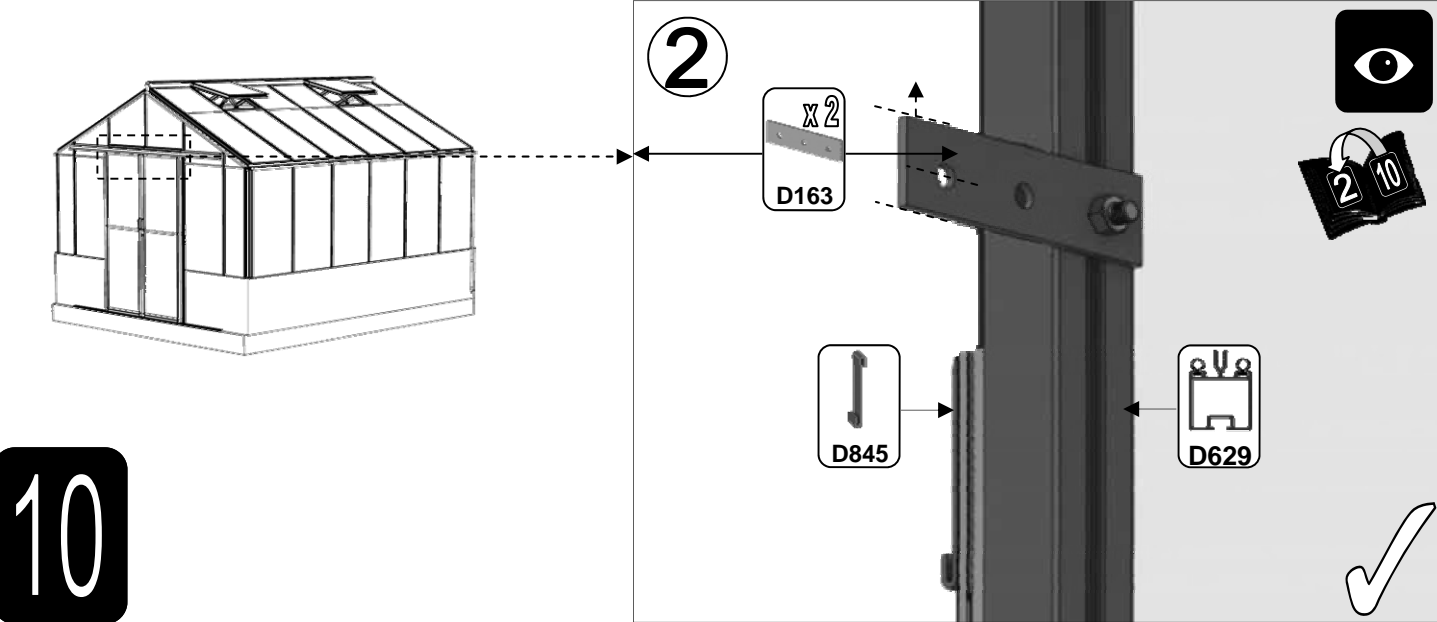
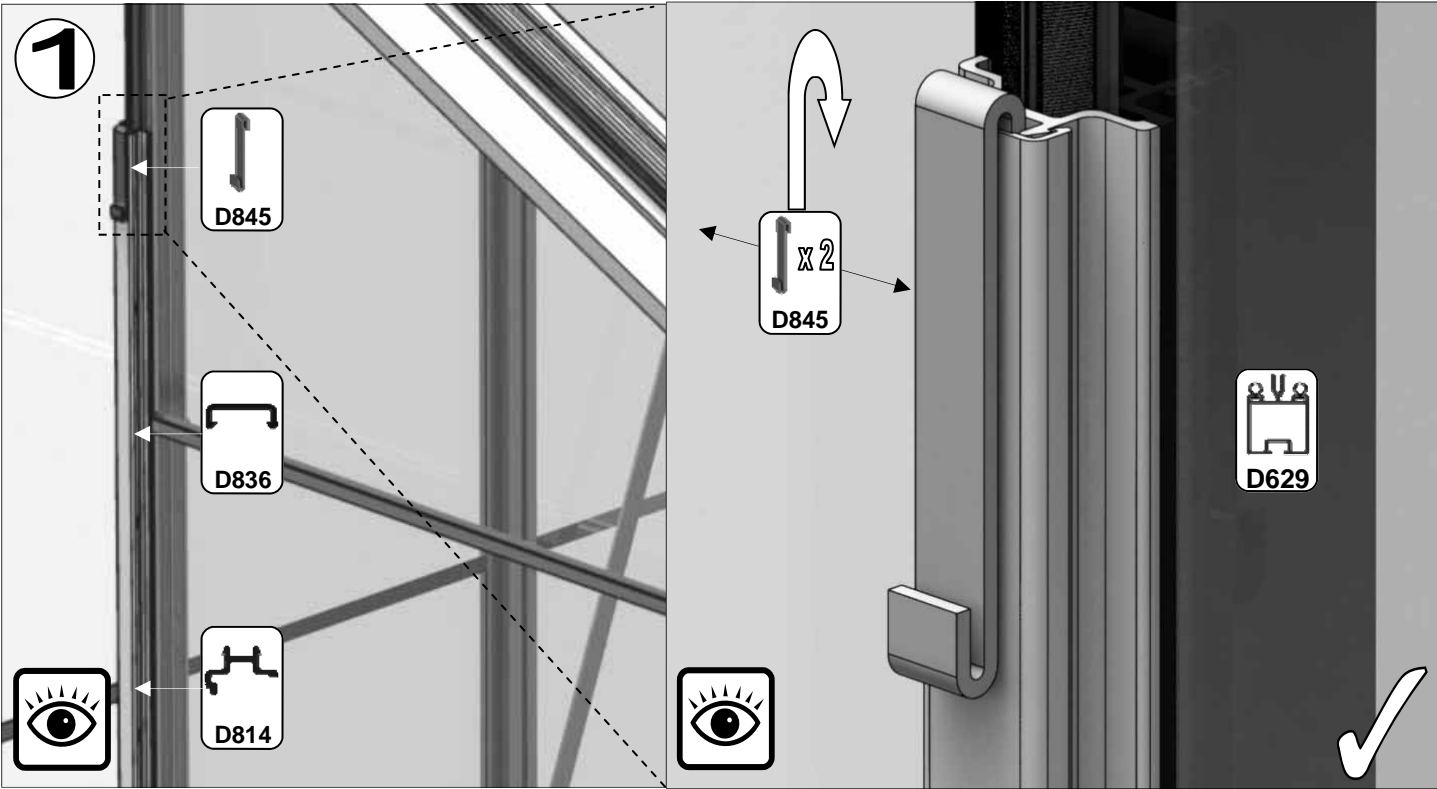
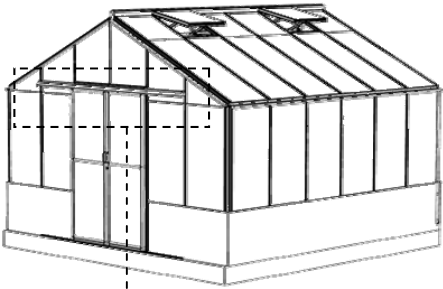


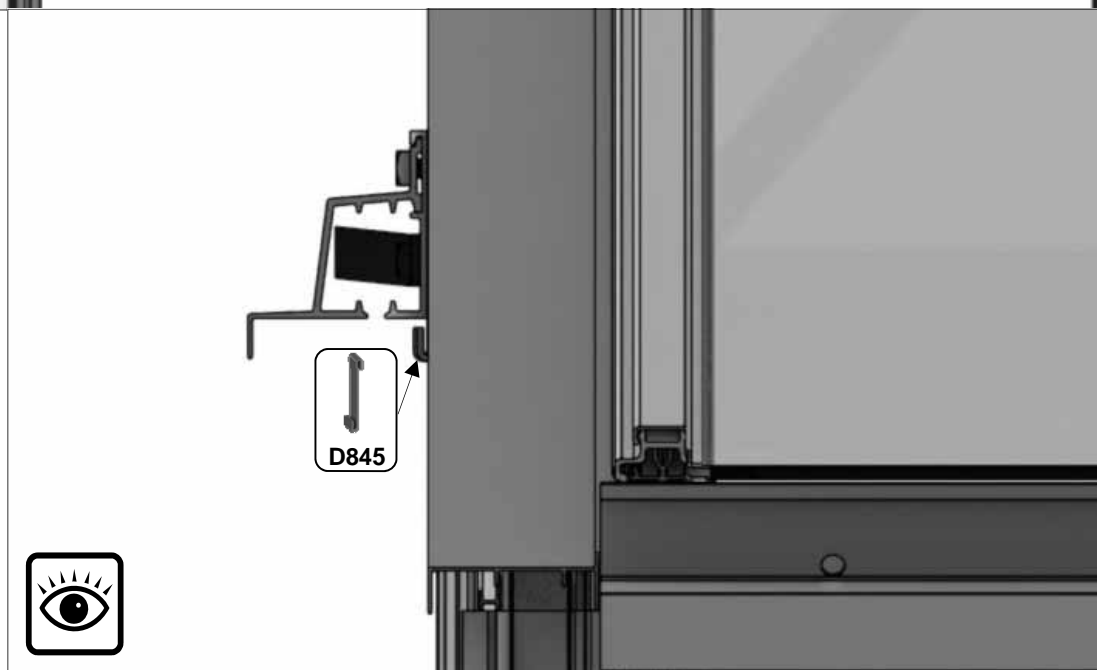
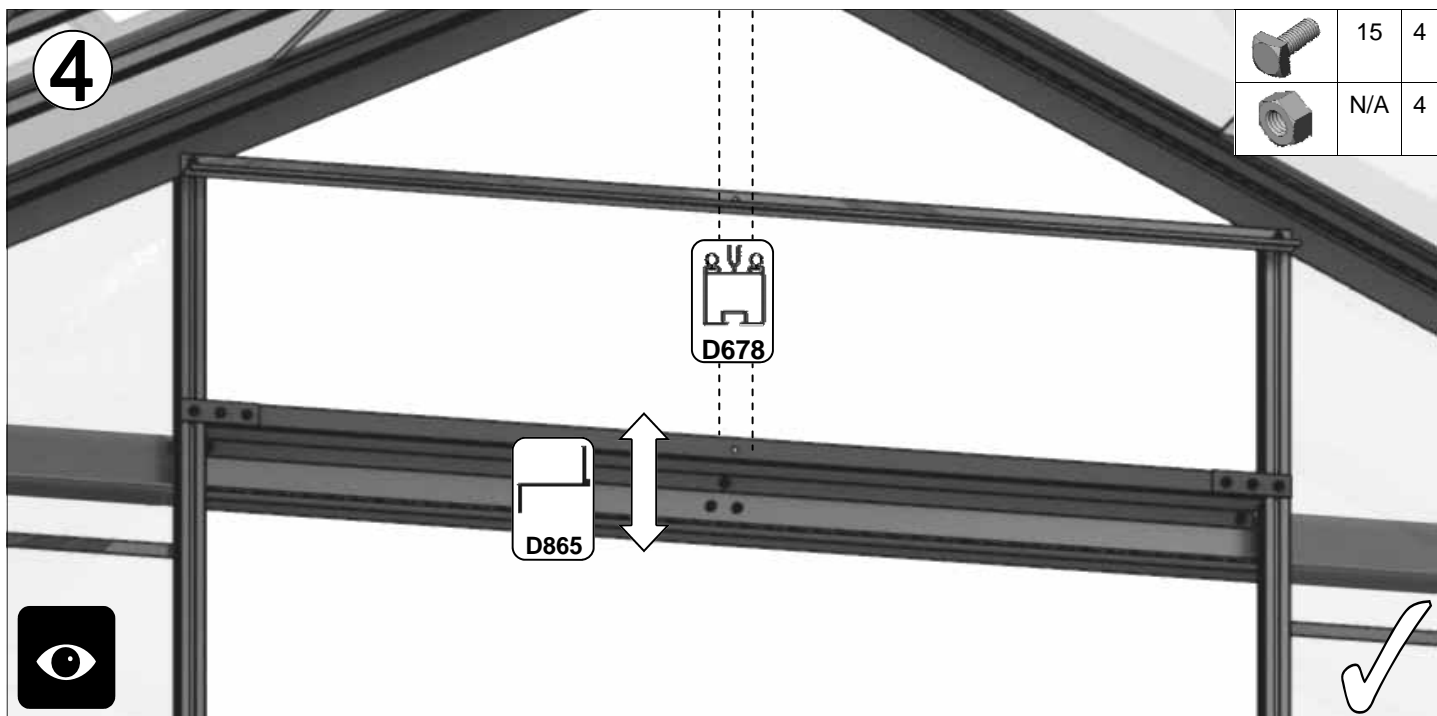
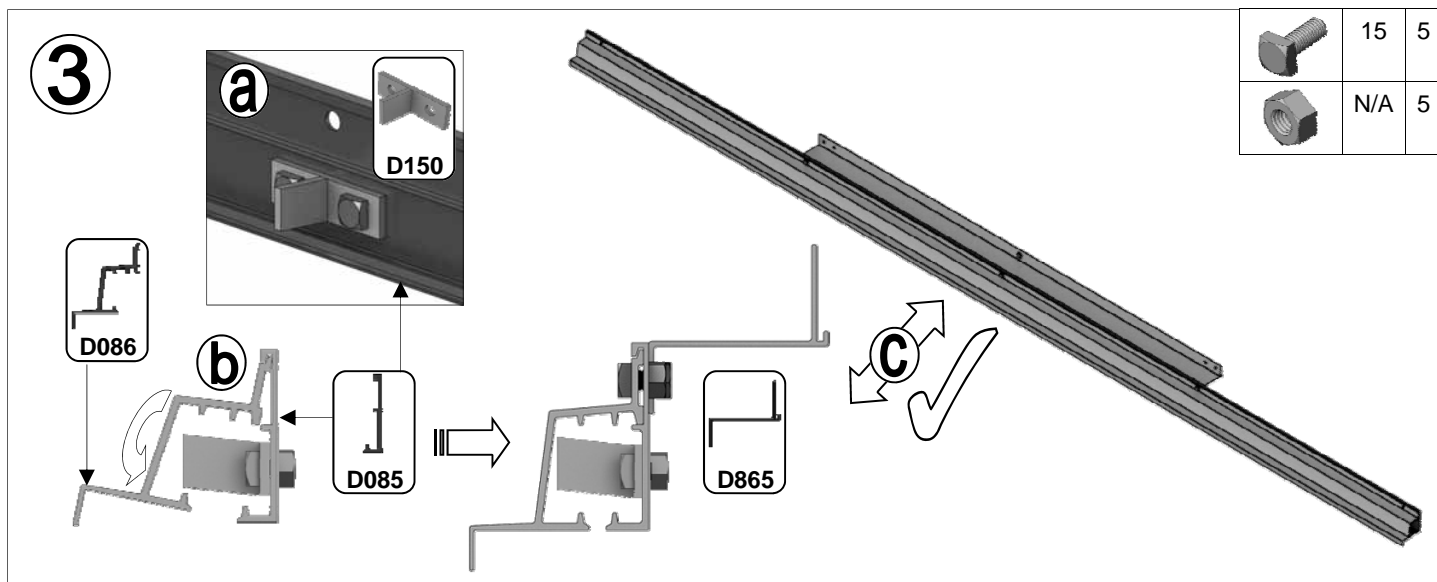






Part No		mm	Q
D865		1210	1
D086		2510	1
D085		2510	1

Part No		mm	Q
D163		90	2
D150			1
D845			2
SY-BOLM6X15			15
SYNUTM6			15

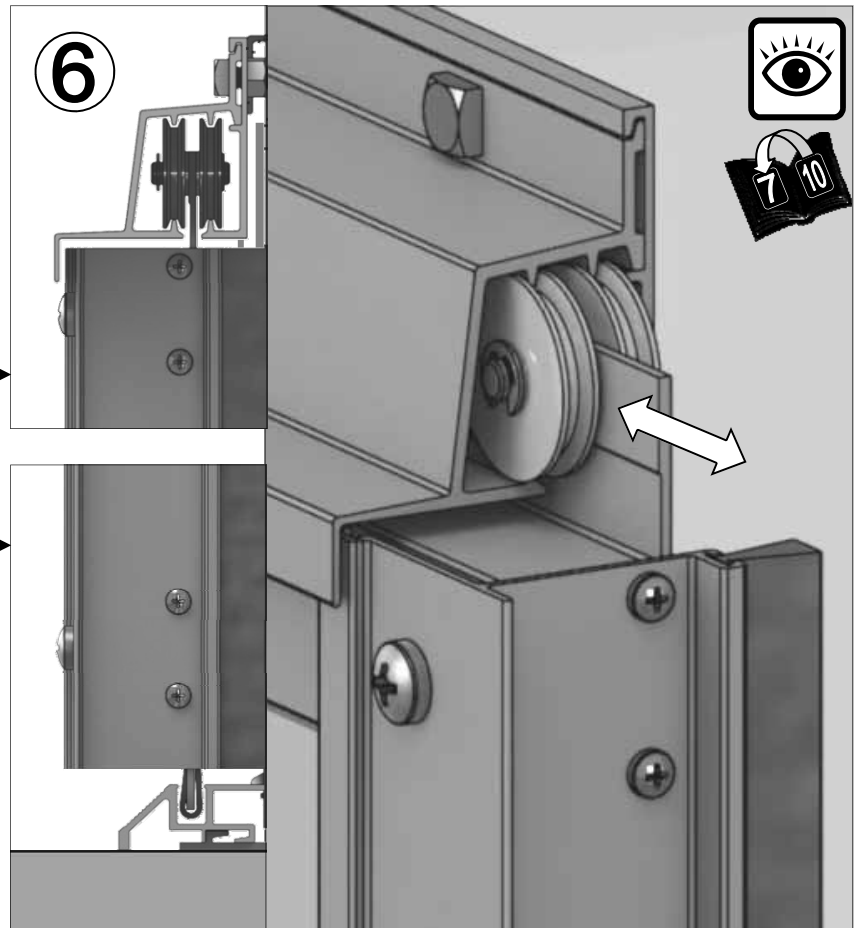
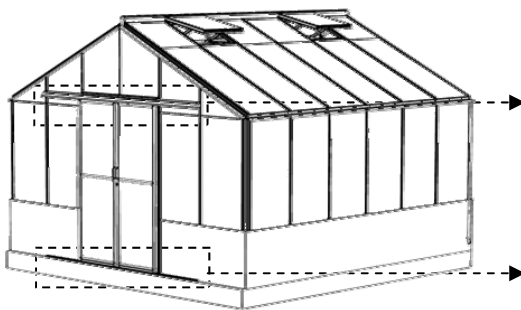
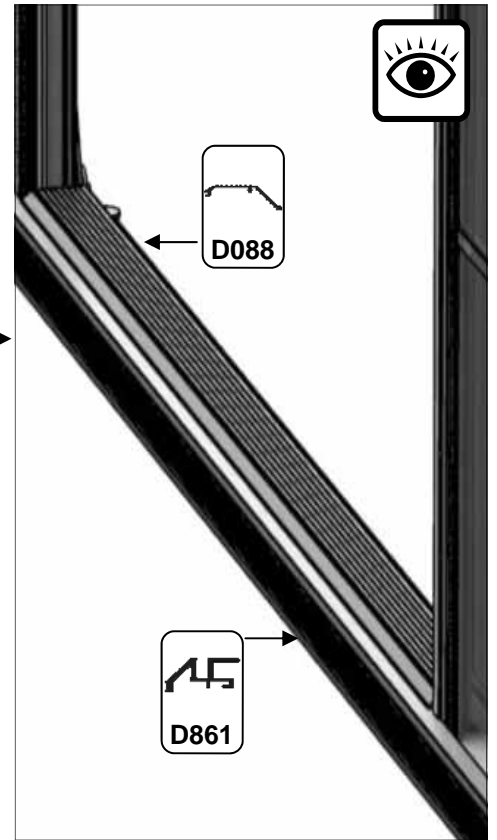
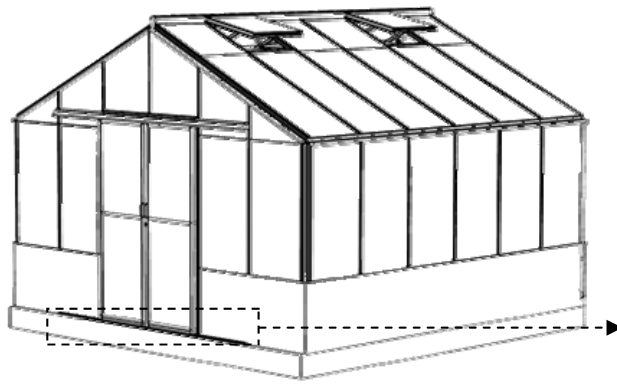
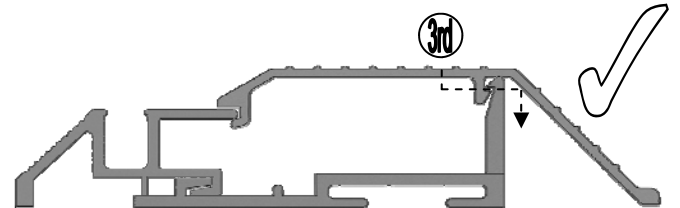
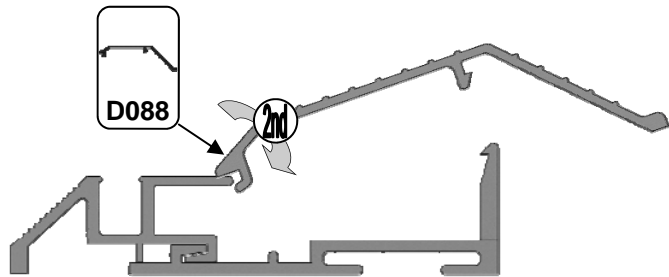
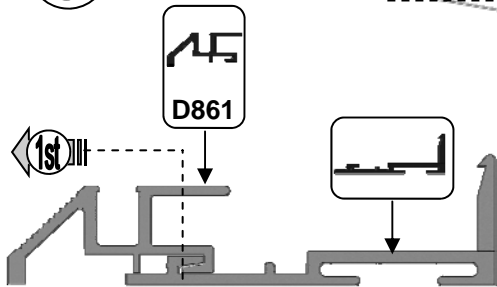




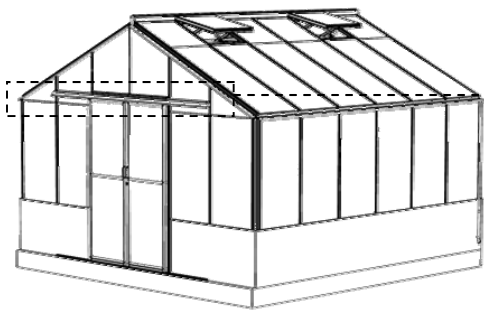
10

Part No		Q
D861		1
D088		1

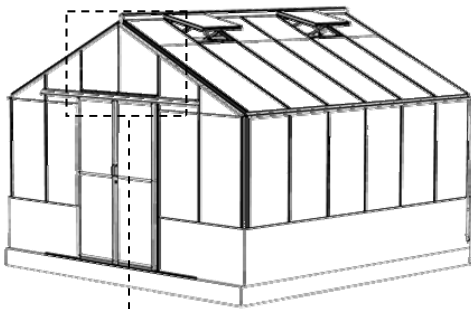
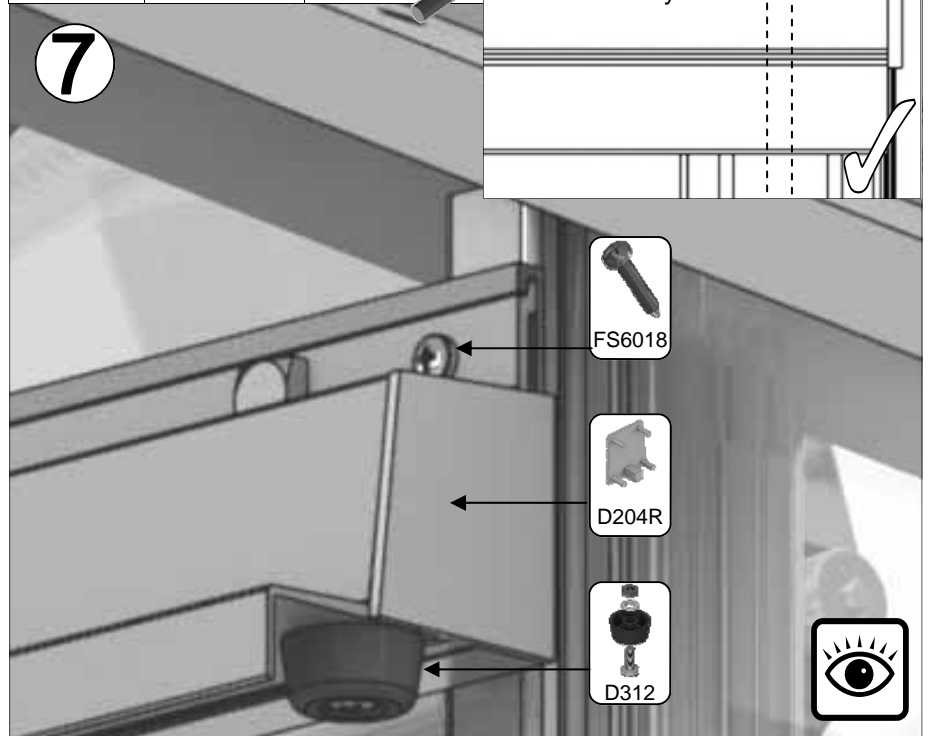
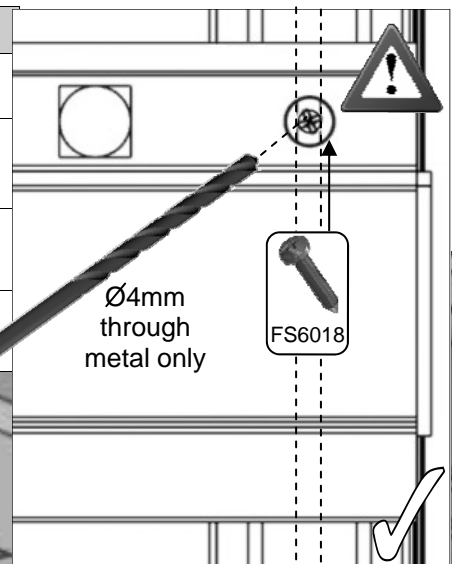
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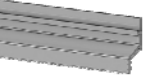






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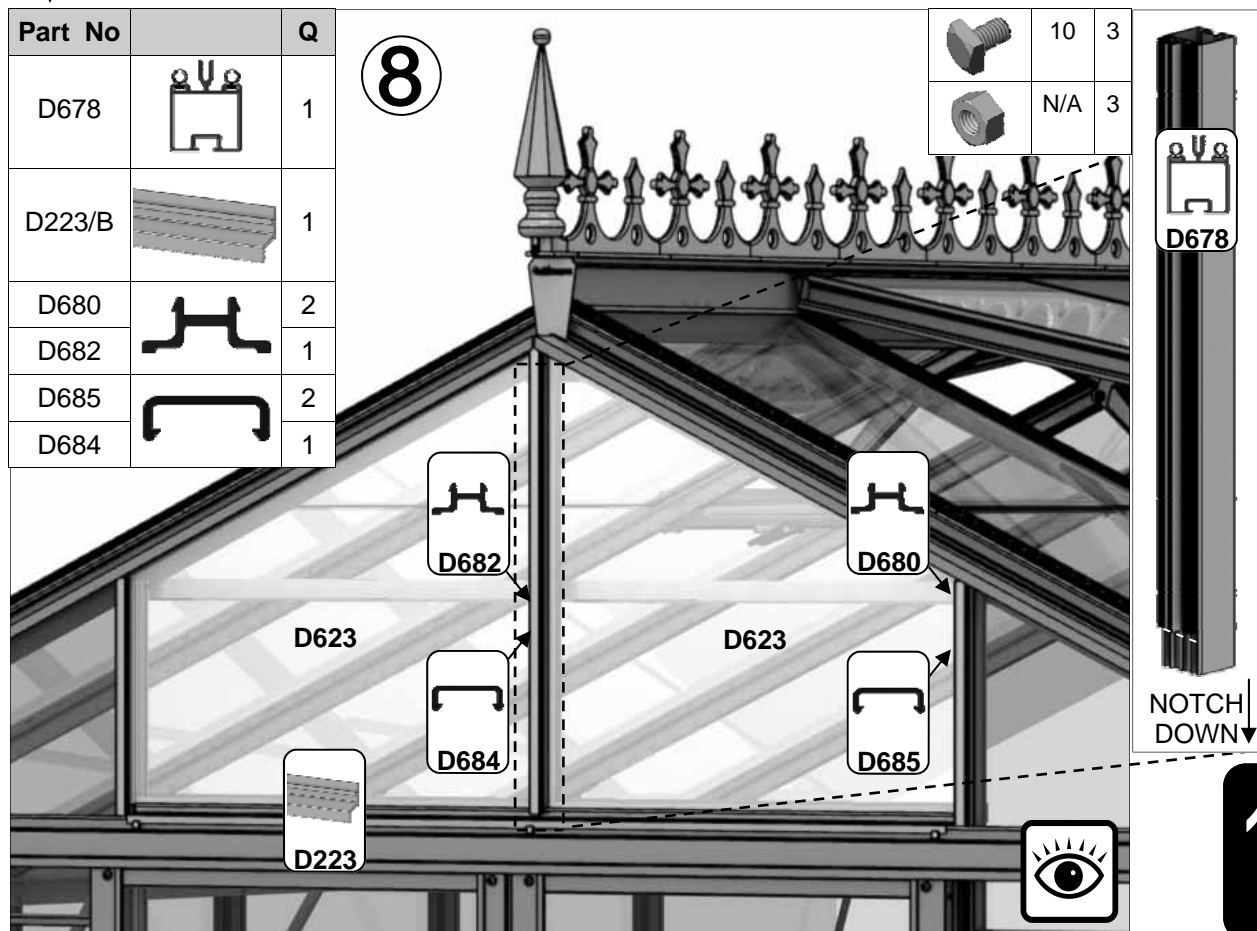


Part No		Quantity
FS6018		2
D312		2
D204L /B		1
D204R /B		1

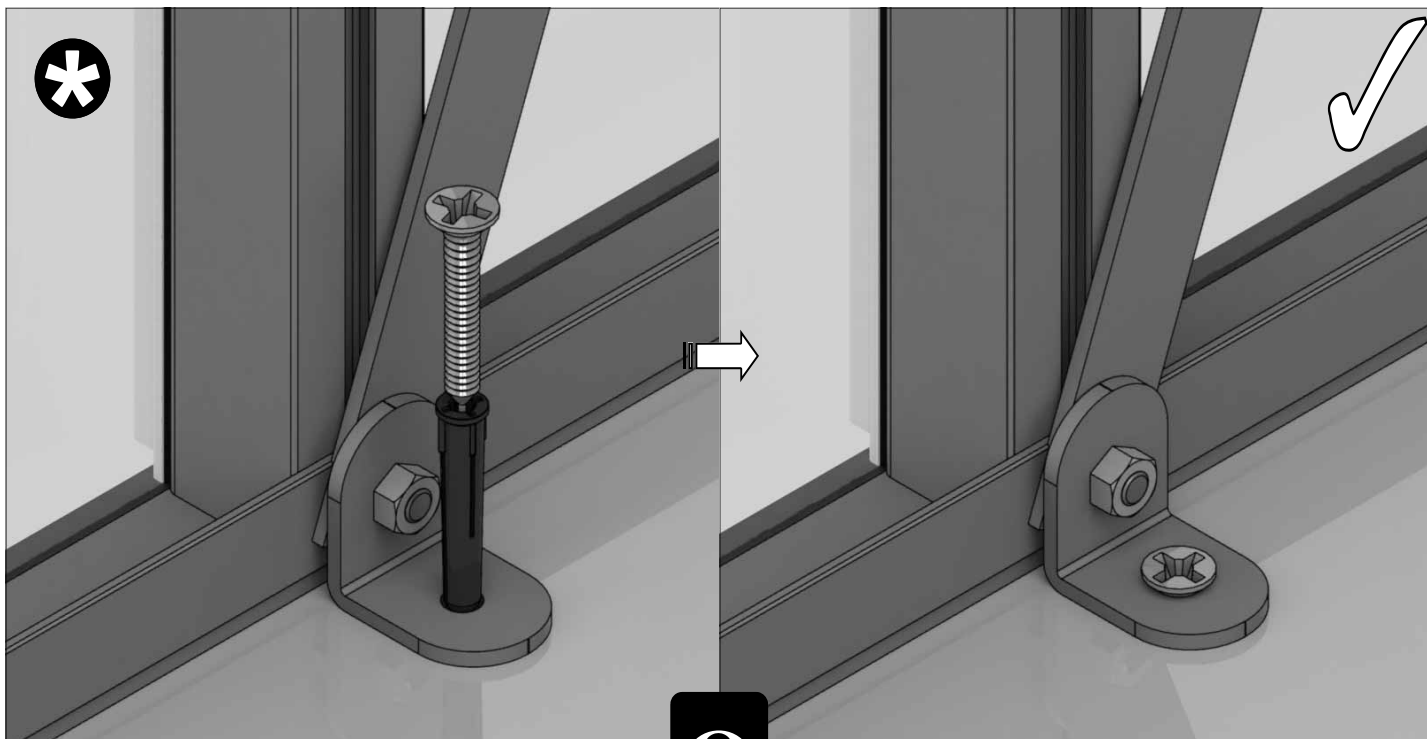
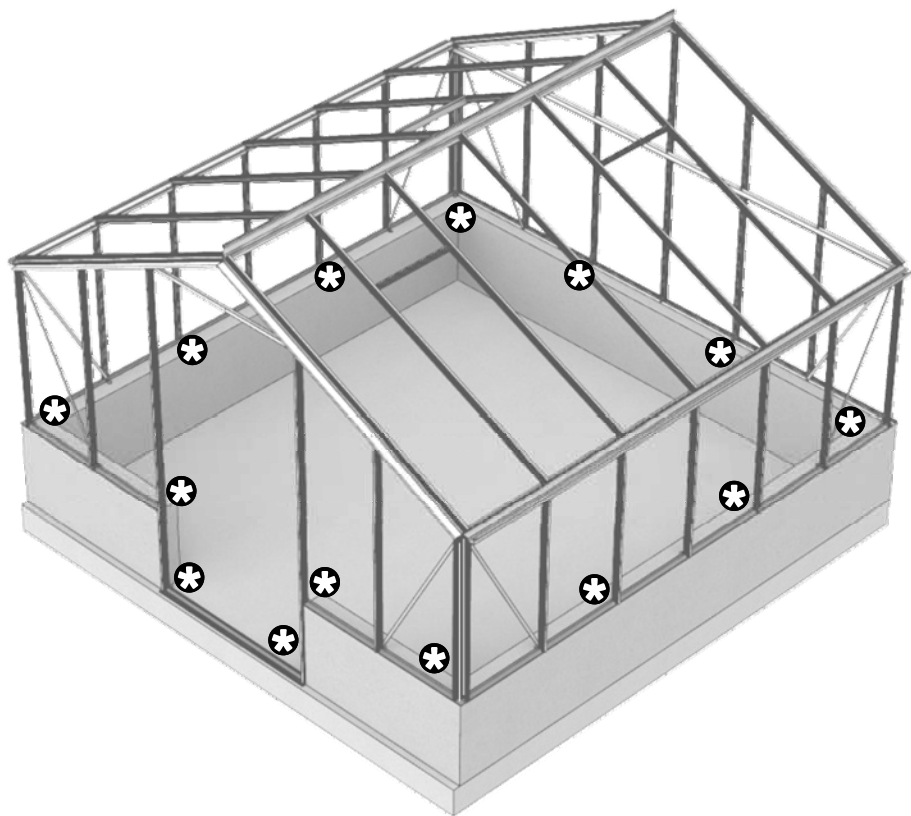
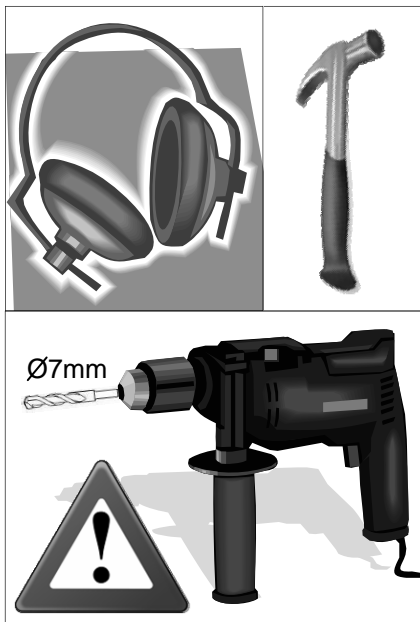


Part No		Q
D678		1
D223/B		1
D680		2
D682		1
D685		2
D684		1

8

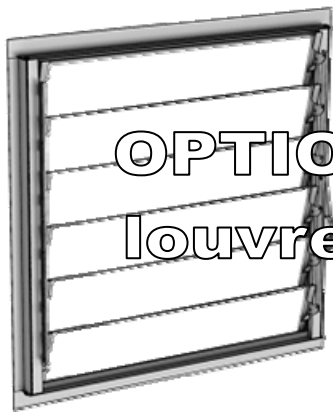


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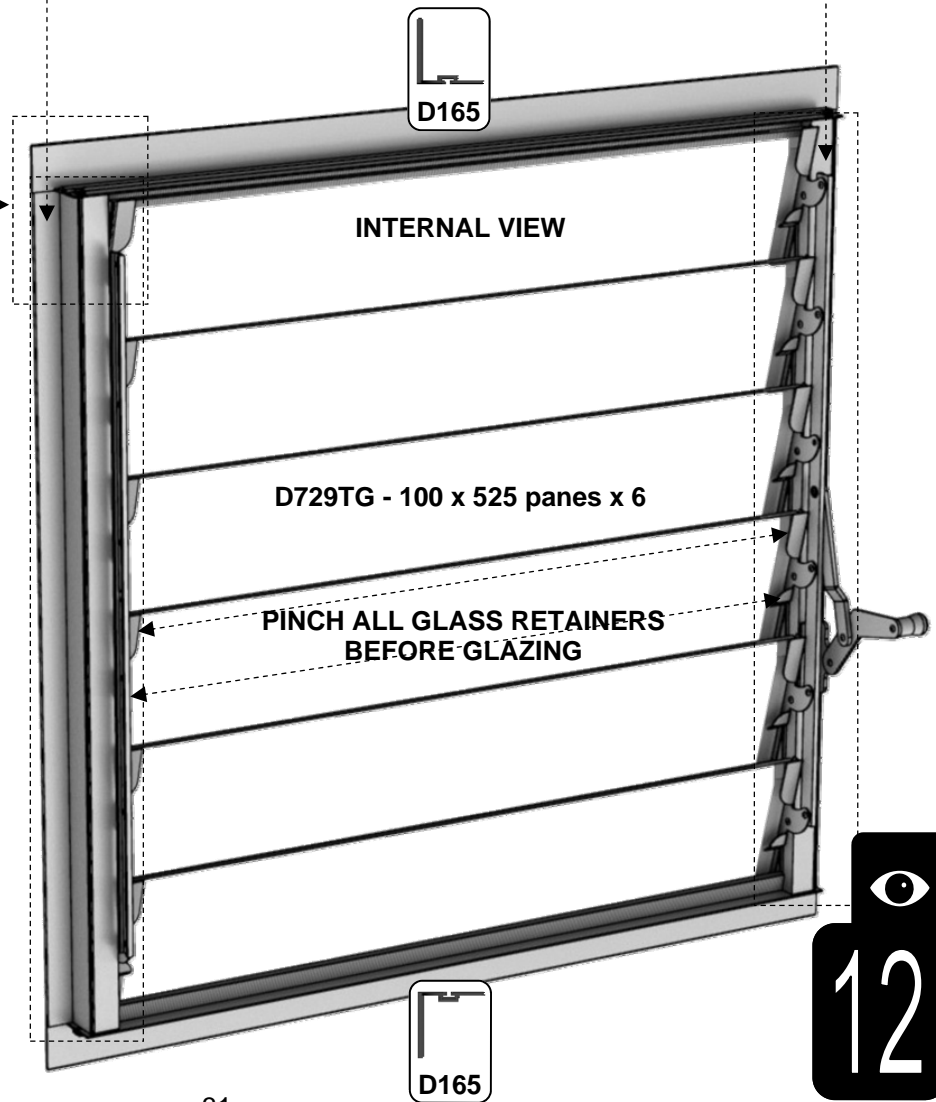
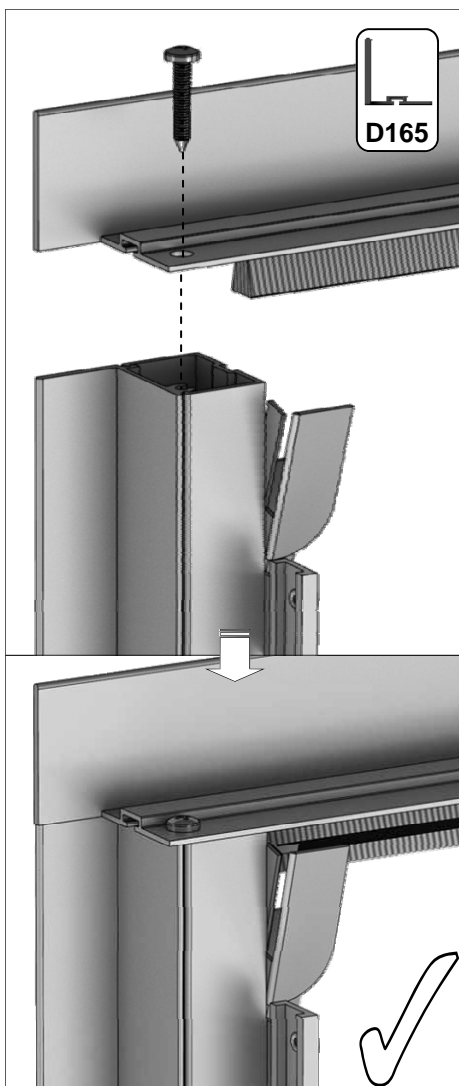
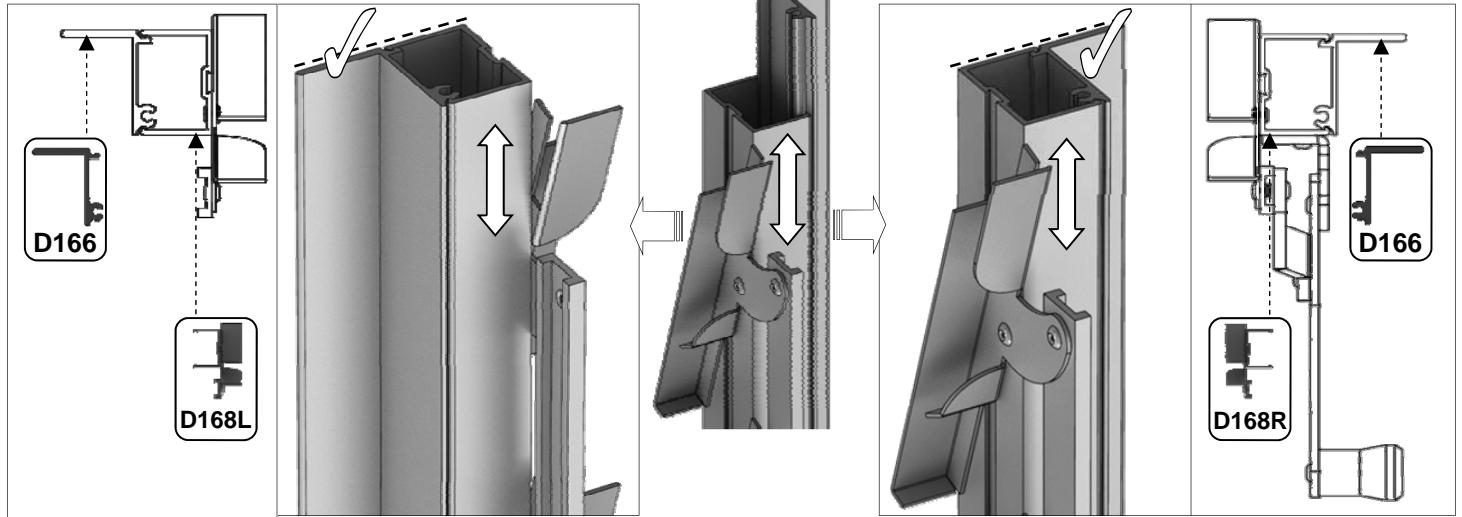
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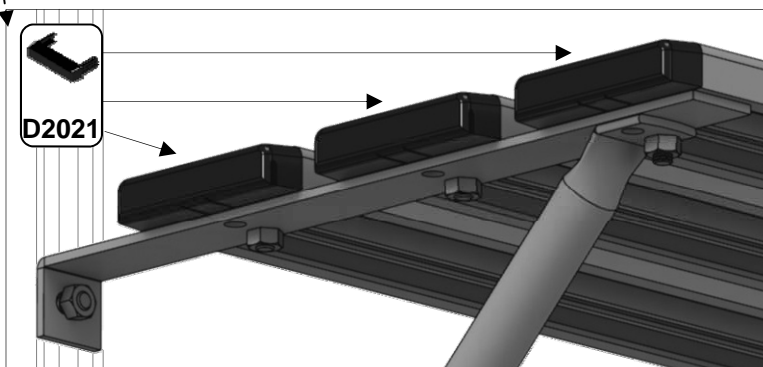
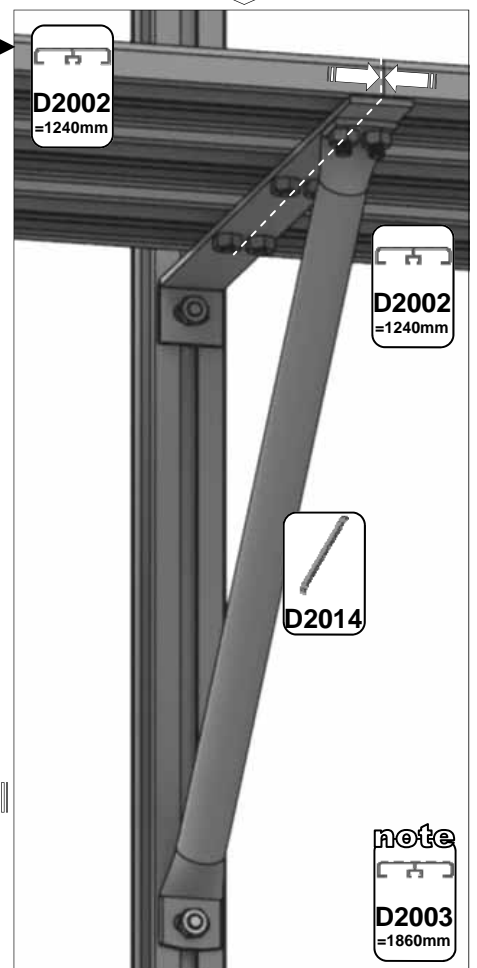
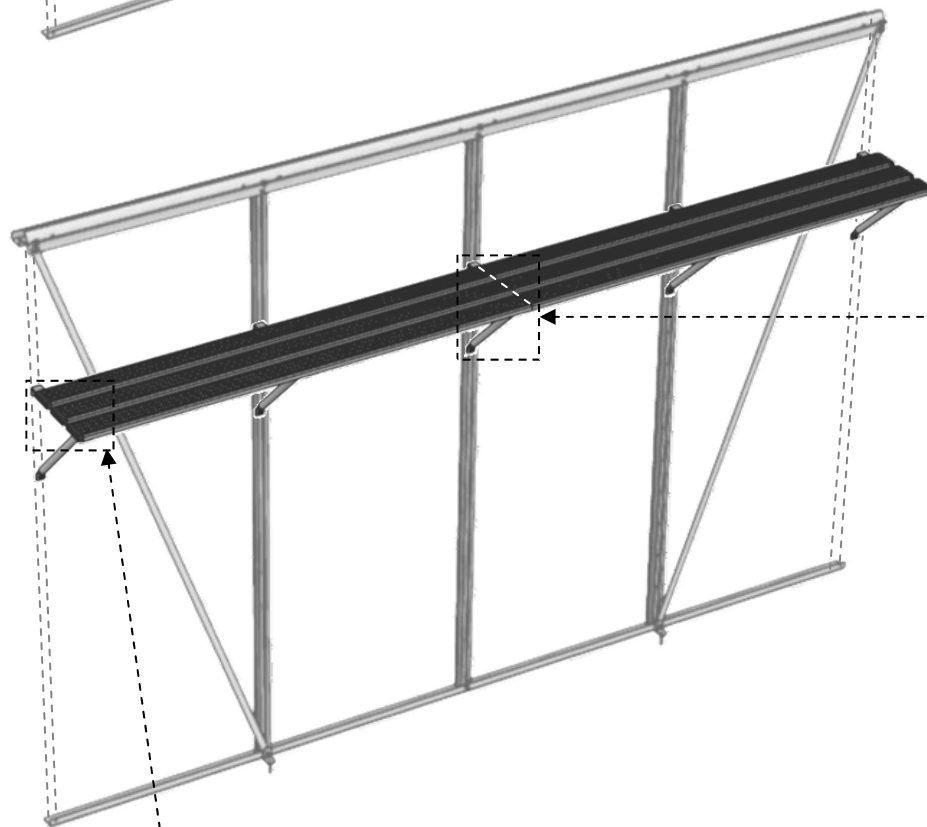
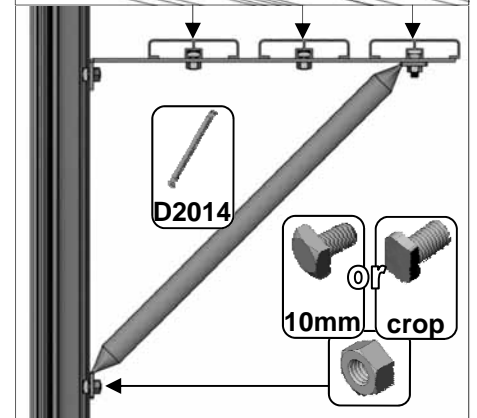
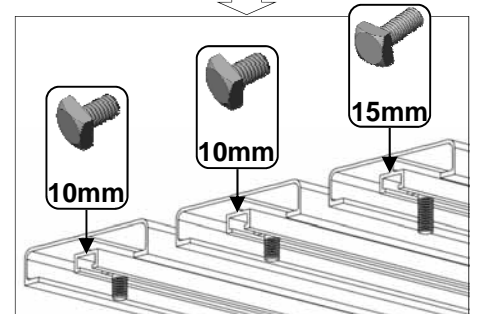
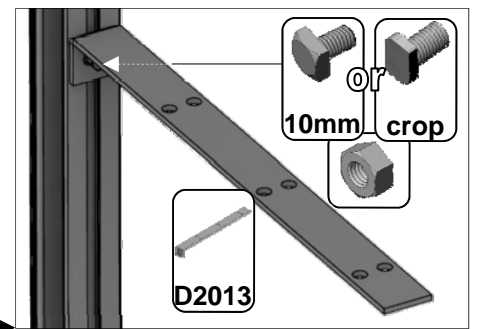
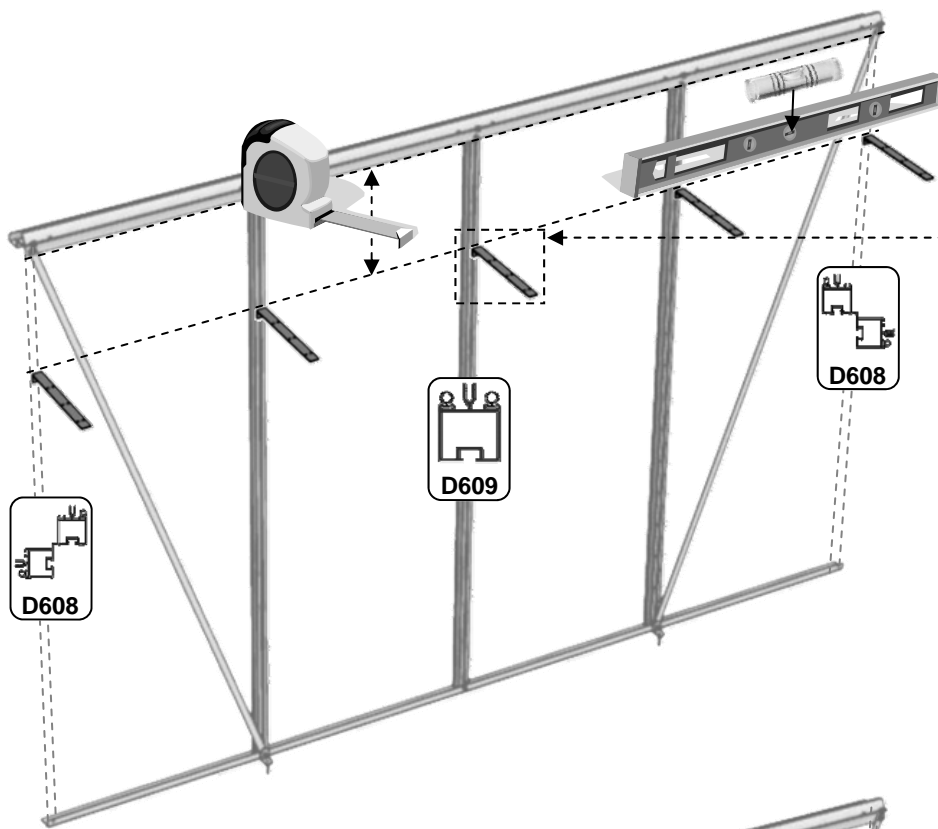


OPTIONAL
louvre = {

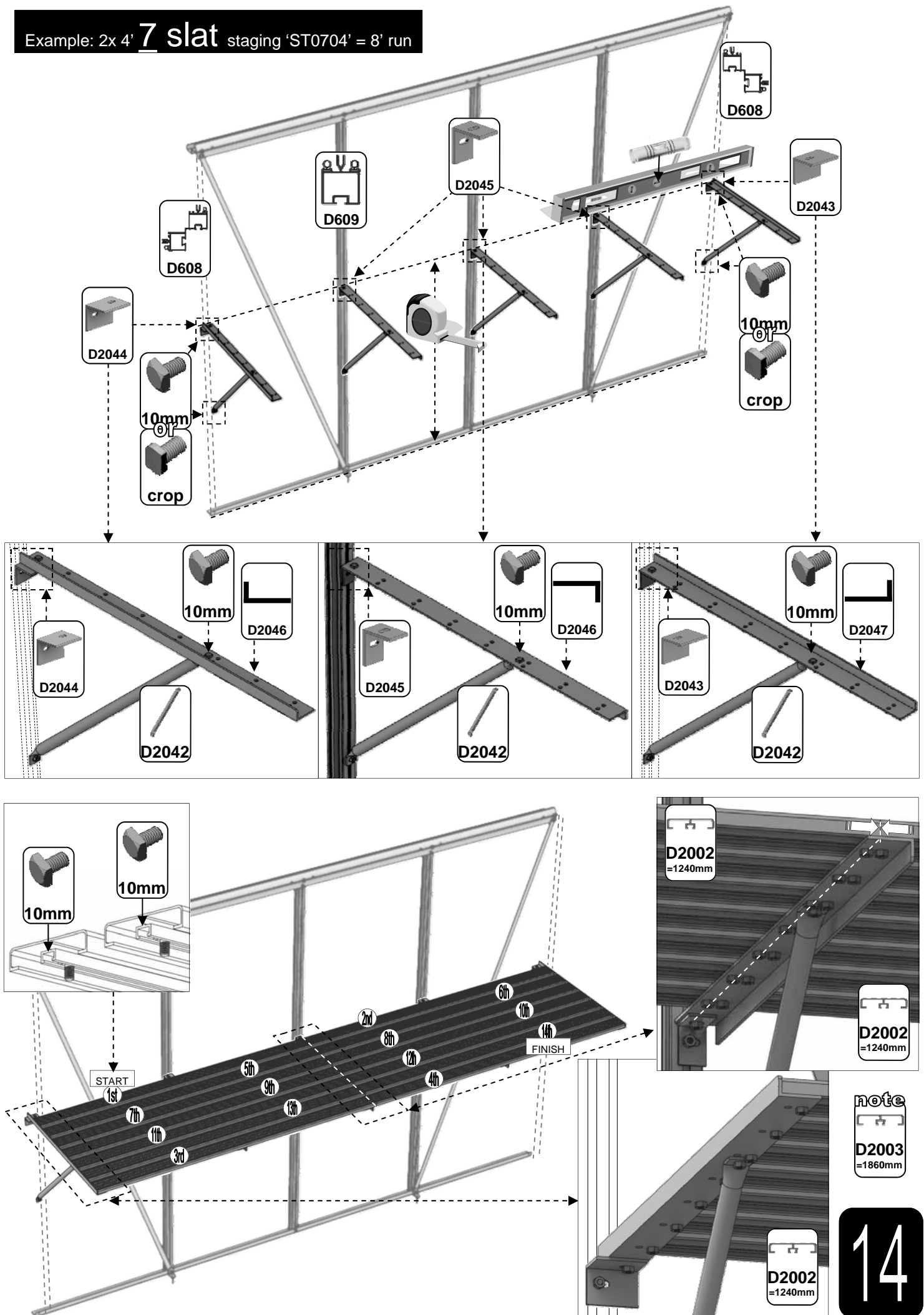
Part No		mm	Quantity
D168L		552	1
D168R (handle)		552	1
D165		612	2
D166		552	2
FS6013		12	4



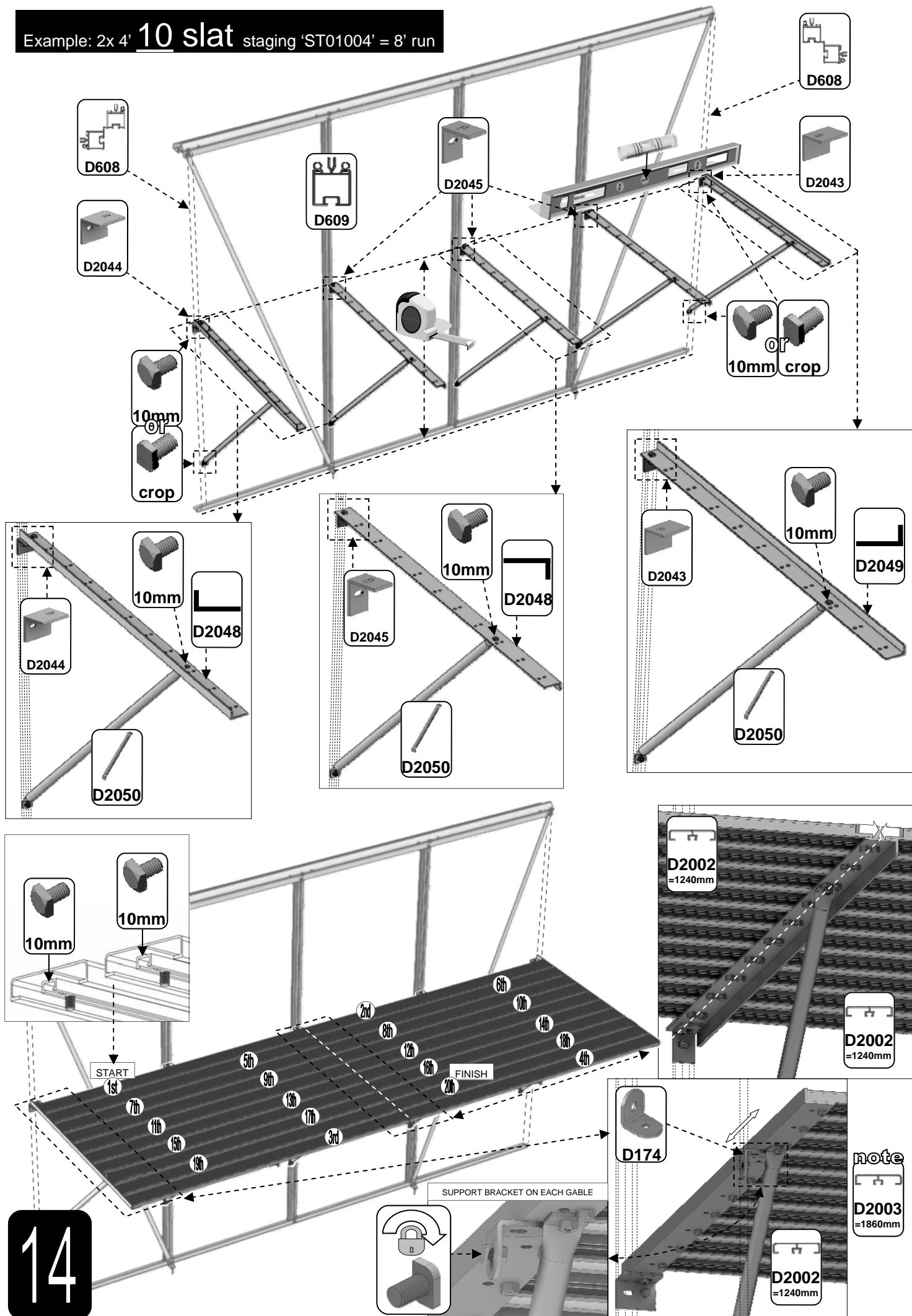
Example: 2x 4' 3 slat shelves 'ST0304' = 8' run

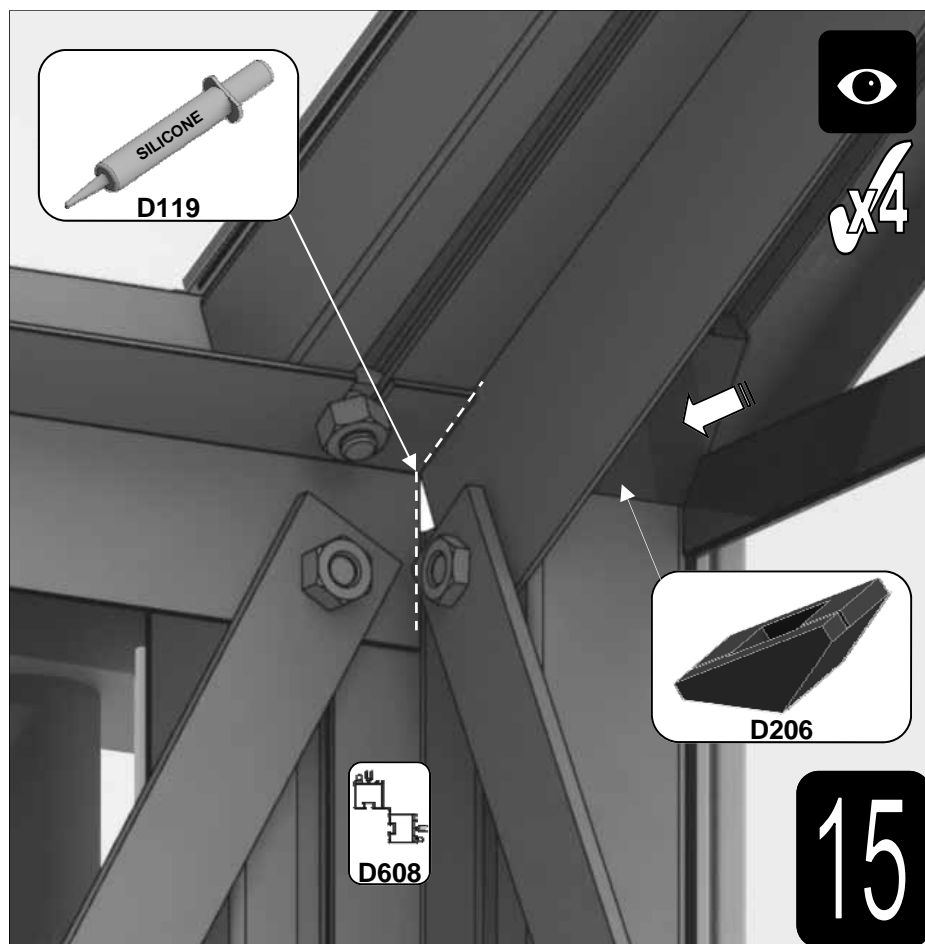
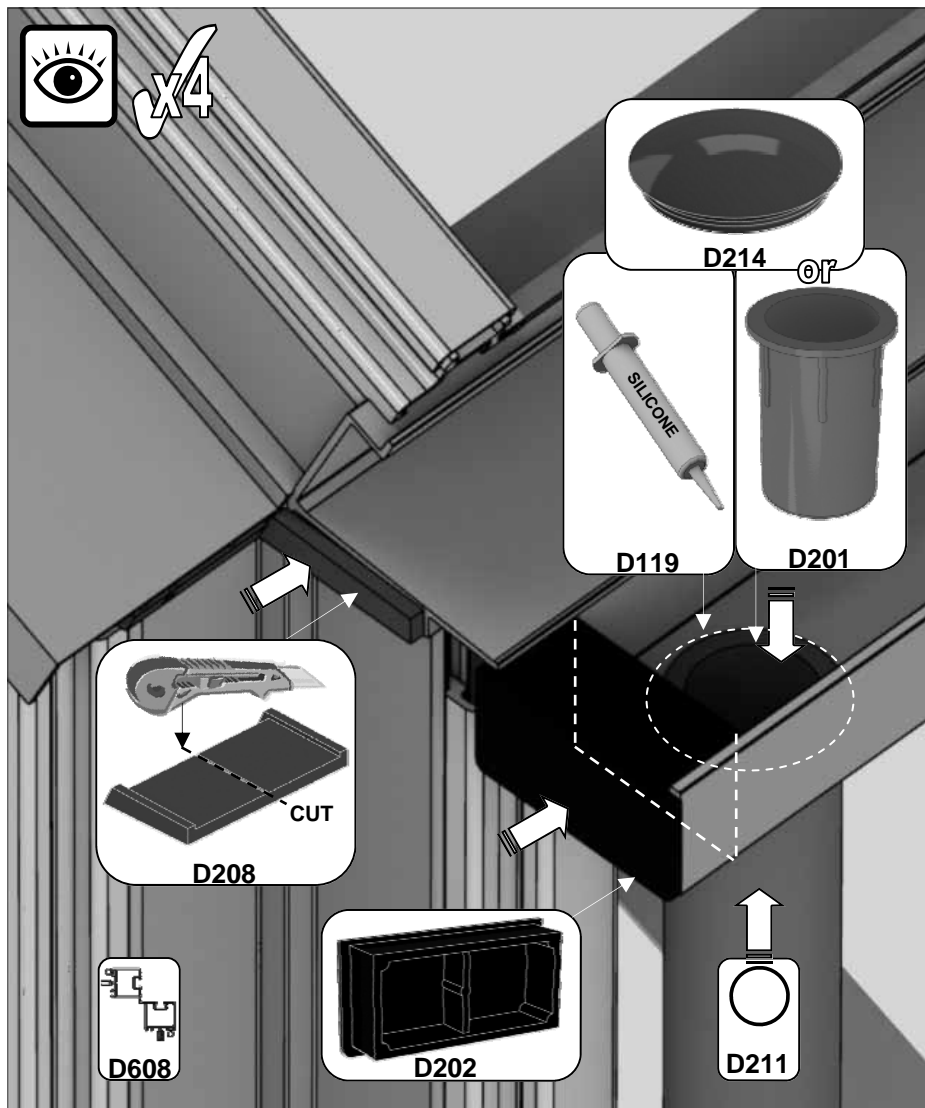
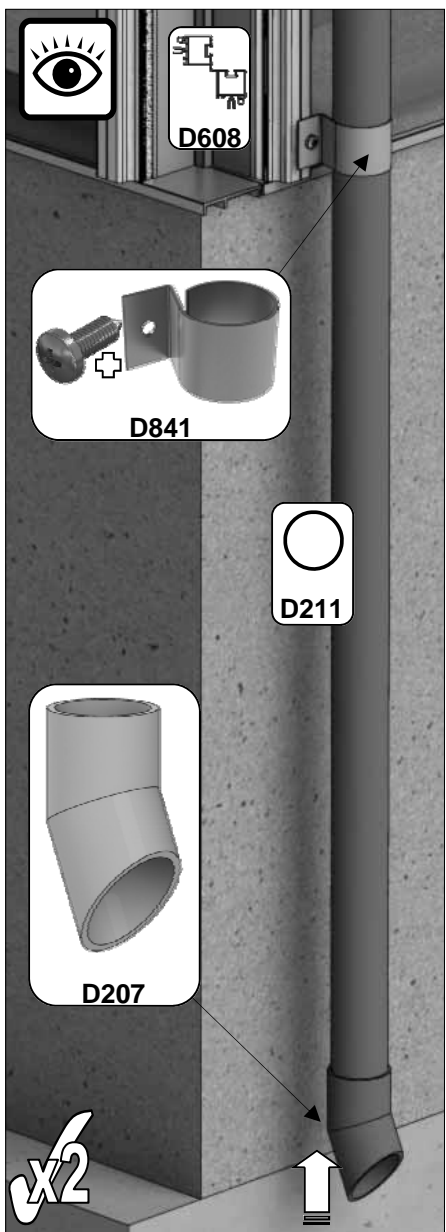
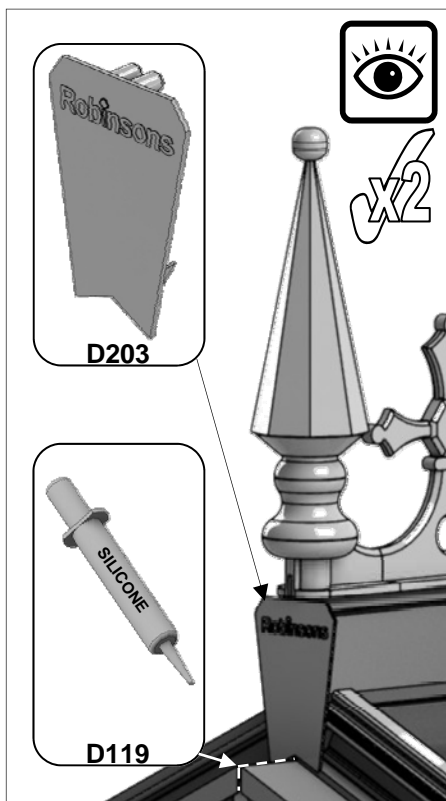


Example: 2x 4' 7 slat staging 'ST0704' = 8' run



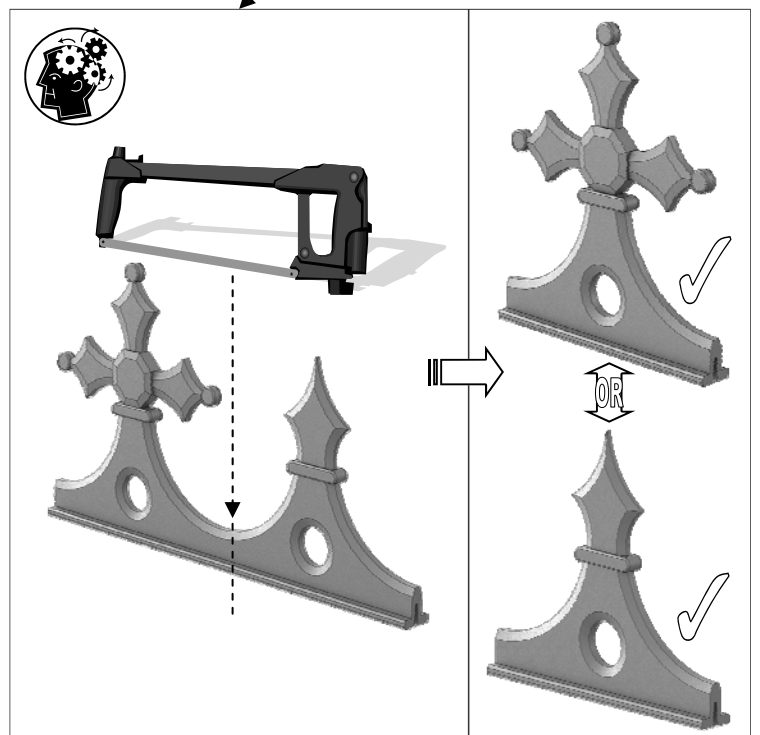
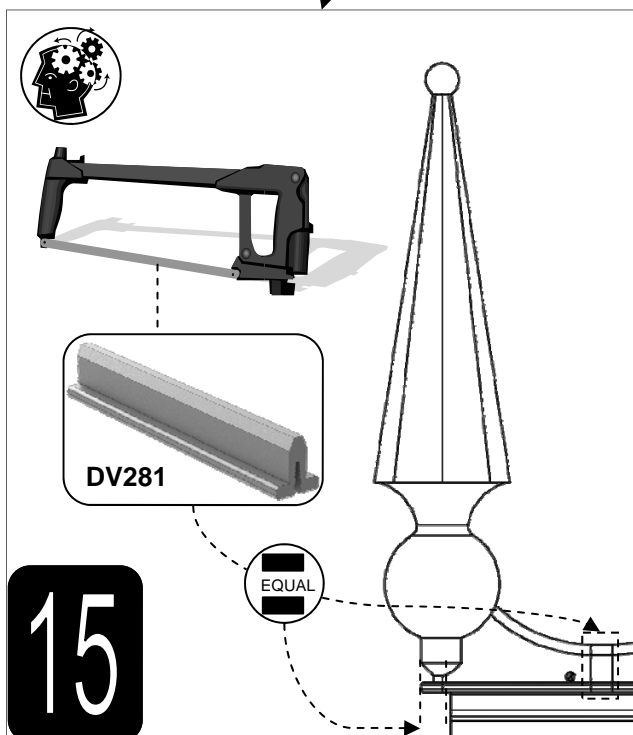
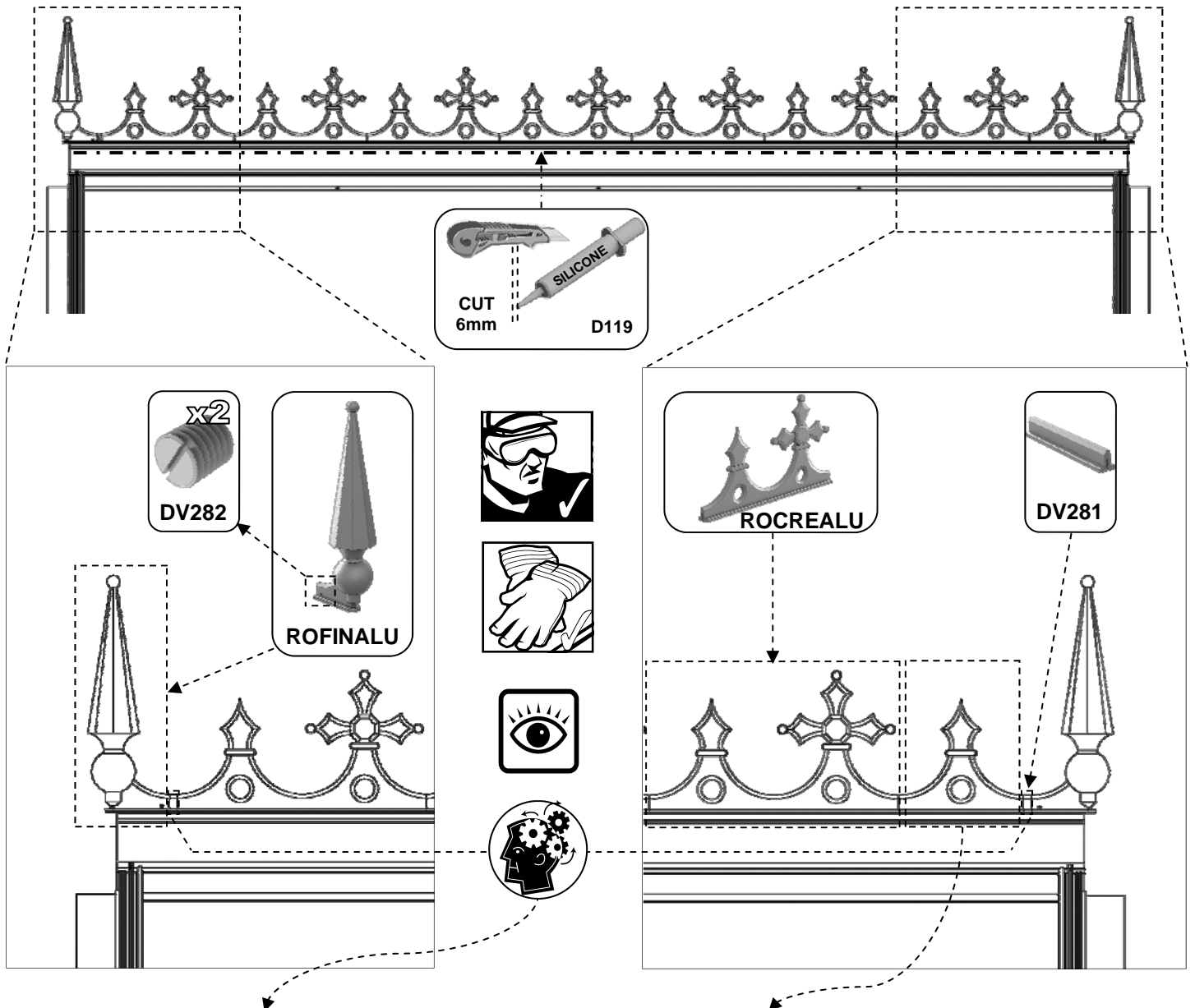
Example: 2x 4' **10** slat staging 'ST01004' = 8' run

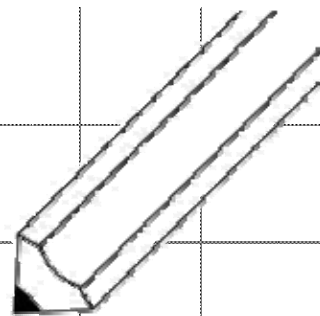




OPTIONAL crestring = {

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







The Dwarf wall model shown throughout this help sheet is a Royale on a 2' (610mm) wall. Some of the other models also have a dwarf wall option. The information shown in the pictures is however, relevant to all models.

USEFUL INFORMATION:

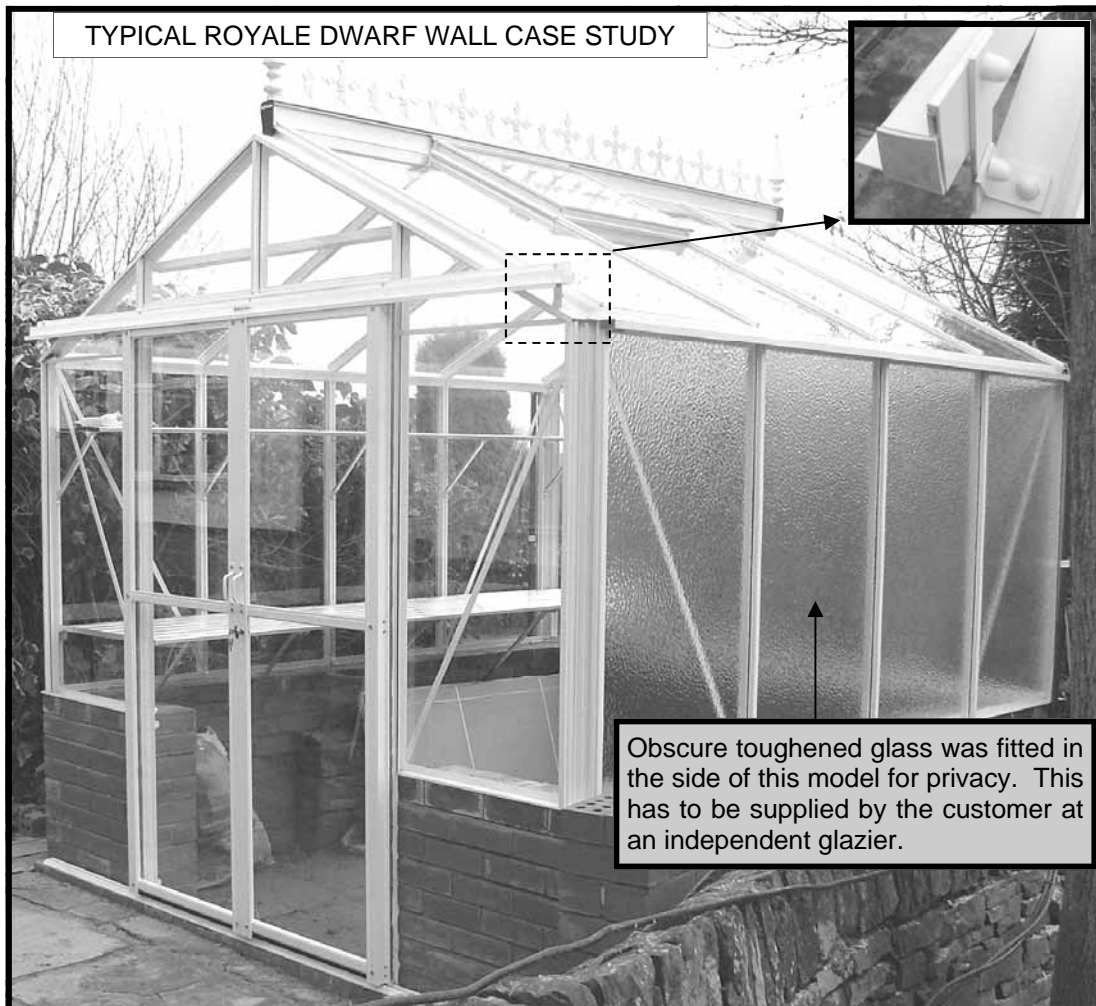
ROBINSONS VENTS are slid into position down the ridge.

AUTOVENTS come as standard on each window allowing automatic climate / airflow in your greenhouse.

ROOF BAR CAPPING:

The bar capping in your roof comes in two sections and is then covered with a longer full length cover cap.

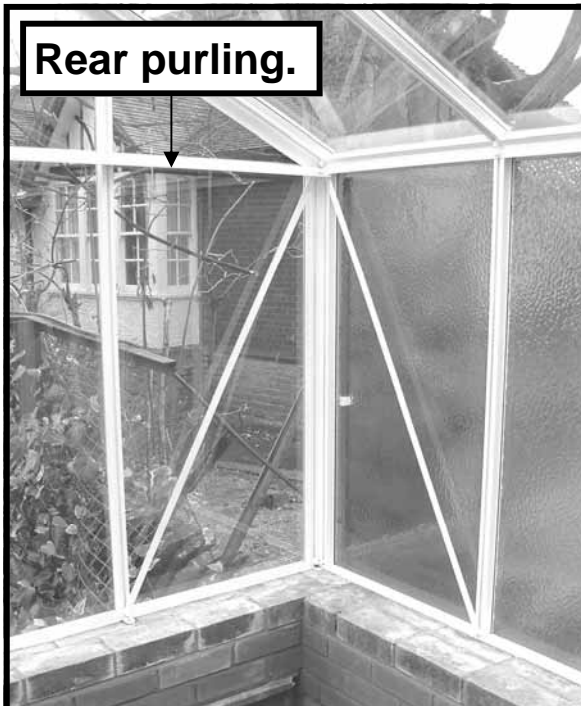
TYPICAL ROYALE DWARF WALL CASE STUDY



4' Front purling.

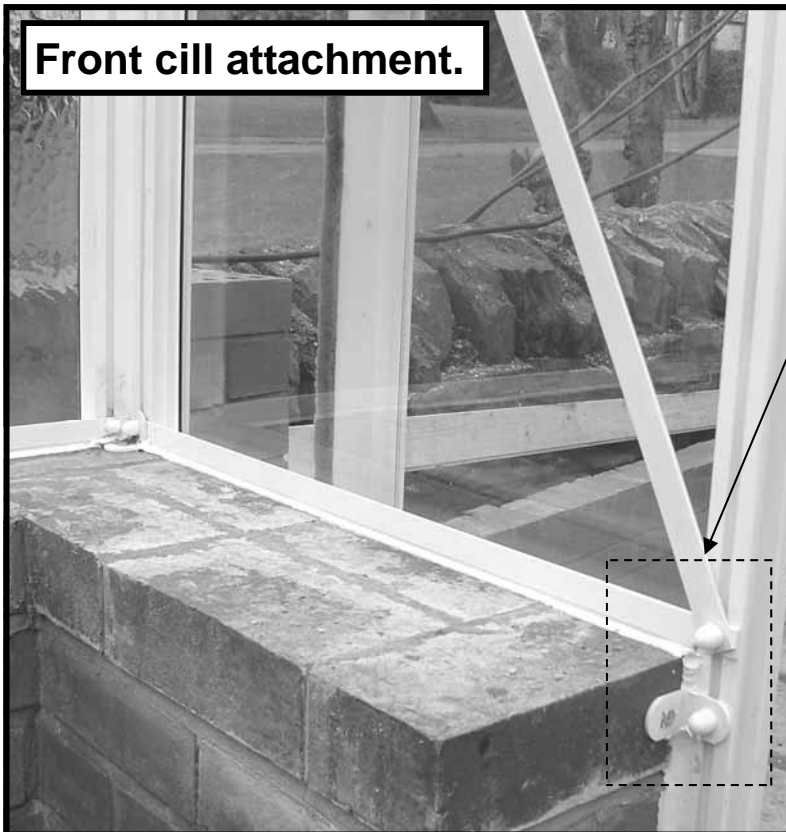
It should be fitted above the door to give extra strength horizontally across from the roof bars. If you are having difficulty getting the holes to line up push upwards on the ridge and its adjoining roof bars.

Rear purling.



Internal view of rear right hand corner. The rear purling is seen on this picture which spans the back of the greenhouse. Extra bolts need to be slid into each vertical glazing channel in the rear to allow the purling to be attached. In this case the purling is fitted at the ends using the same long bolt that joins the roof and side corner bars together. At this height the purling will not interfere with any shelving that you may have. A separate bolt can be used in the corners if you wish.

Front cill attachment.



You can utilise your base brackets to join the frame to your dwarf wall.



Fixing staging in a dwarf wall model.

To fix the staging diagonal tubular bracings you will have to hammer drill into your brickwork and fix with rawl plugs and screws. You should use a spirit level to make sure each horizontal is accurate and then mark and drill. One of the beauties of Robinsons staging is its adaptability. Because of the rock outcrop on the inside wall of this model the tubular bracings has been attached to the underside of the front staging run with 15mm bolts to give a sharper gradient to the bracings avoiding the rock.



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.

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.

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