

EOS ROYAL - Ground Mounted



Version 2020_1

ASSEMBLY MANUAL



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Need help?

Call 877-760-8500

PRODUCT INFORMATION

Dear customer

Thank you for buying a high-quality aluminium greenhouse.

REMARKS

In all drawings you find the mounting-instructions for all basic standard-models. However this manual should be a sufficient guidance for all special-case greenhouses. This greenhouse is designed for cultivation of plants/flowers. Therefore leakage, water drops and condensation inside the building are allowed. The building may only be entered by competent persons during cultivation or maintenance. Aluminium profiles that are not painted may show black stains, these stains are not a production error: they can be easily removed with a aluminium cleaner available at every good drugstore. The rubber strips have been treated with oil/silicone on the interior to facilitate the assembly. The building should be mounted on a solid concrete foundation deep enough to get a solid and frost-free ground. Anchoring of the foundation should be made by the owner or operator and should be checked periodically. During winter the roof has to be cleared of snow or supported in a suitable way. The greenhouse should be built in a location protected from strong winds. Protective gear (such as protective gloves) should be used during mounting in order to avoid injuries. One should at all times pay attention to the local building regulations.

ASSEMBLY ORDER

The assembly procedure is the same for all our greenhouses.

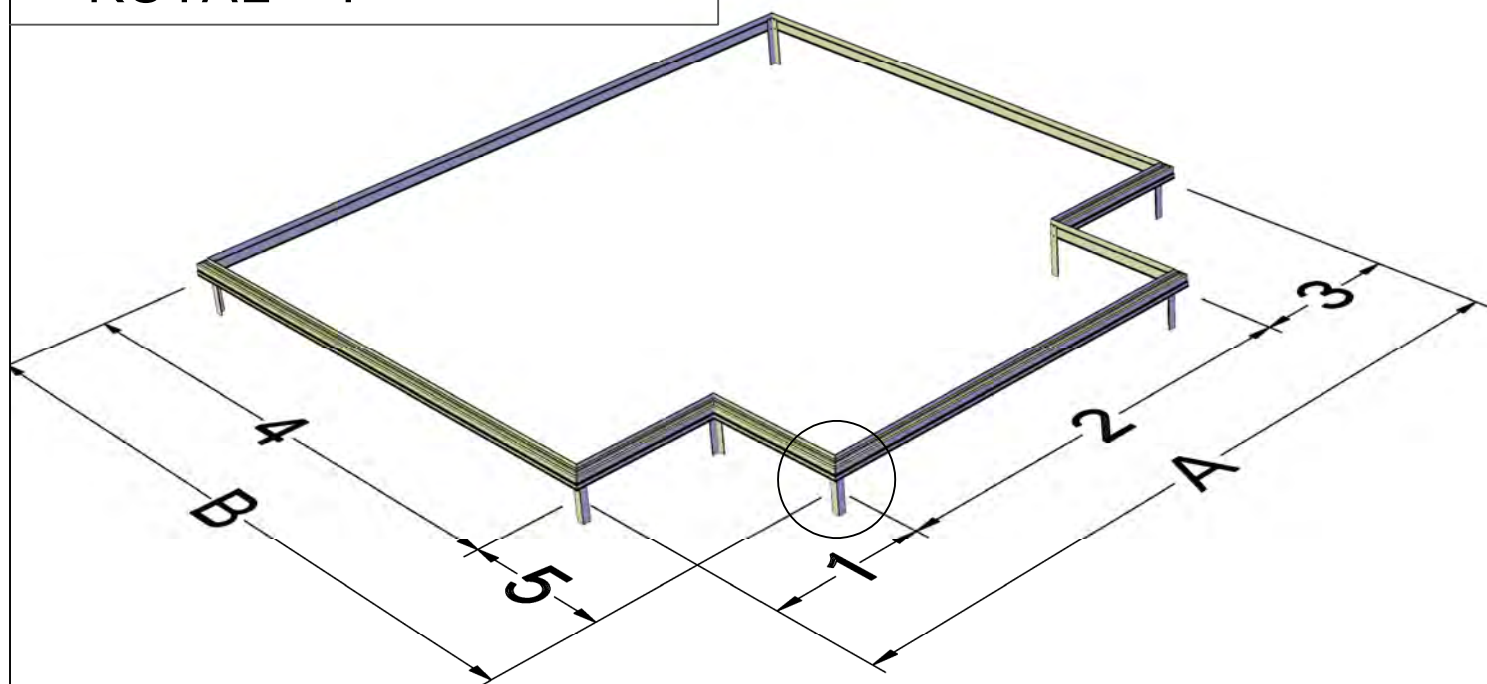
- Sorting of the profiles according the model.
- Mounting of the complete aluminium construction.
- Leveling of the construction using a waterlevel.
- Securing the building to the ground
- Glazing.

REQUIRED TOOLS

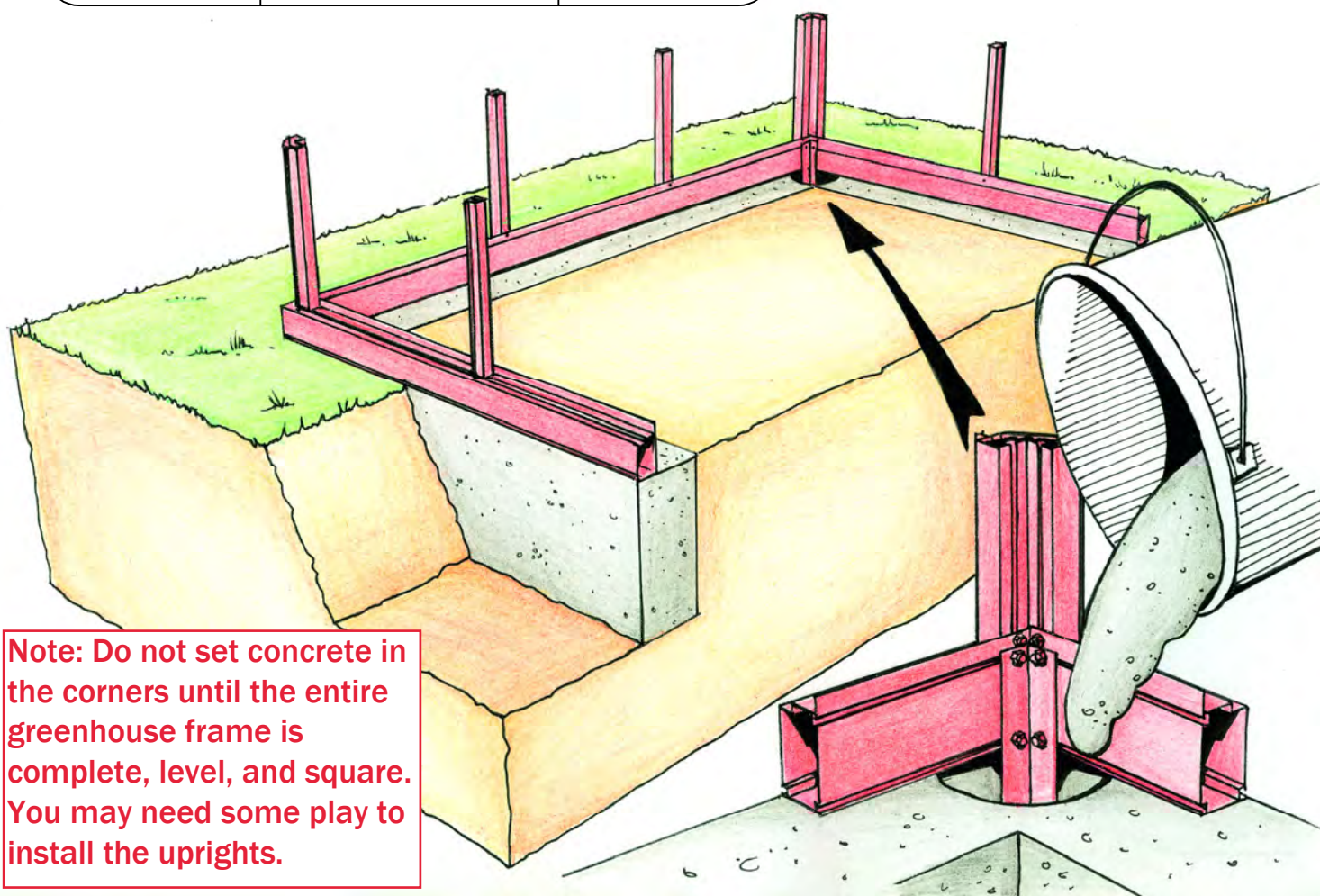
10 mm Socket Wrench
10 mm Open End Wrench
Level
Phillips Screw Driver
Power Drill
5/32 Drill Bit
Scissors (to cut rubber gasket)
Utility Knife
Ladder - 6 Foot Minimum

We reserve the right to change the construction without prior notice!

" ROYAL - T"



A $= 1+2+3$	1	829mm	A $= 4018$
	2	2360mm	
	3	829mm	
B $= 4+5$	4	3098mm	B $= 3927$
	5	829mm	

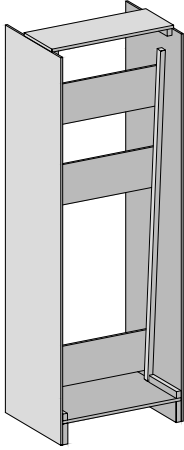


Note: Do not set concrete in the corners until the entire greenhouse frame is complete, level, and square. You may need some play to install the uprights.

PALLET 1 ROYAL T

WEIGHT: 342 KG

DIMENSIONS:
800 x 900 x 2200 MM



POSITION	GLAS DIMENSIONS	PC
ROOF	450 X 1850 MM	2 PC
ROOF	361 X 1850 MM	4 PC
ROOF	361 X 1450 MM	4 PC
ROOF	361 X 1020 MM	8 PC
ROOF	730 X 825 MM	4 PC
MODEL RT8	361 X 1391 X 1850 MM (*32 MM)	2 PC
MODEL RT7	361 X 890 X 1392 MM	2 PC
MODEL RT6	361 X 1065 X 1450 MM (*35 MM)	2 PC
MODEL RT5	361 X 640 X 1066 MM	2 PC
MODEL RT2	432 X 287 X 882 MM	2 PC
TRIANGLE RT1	625 X 545 MM	2 PC
MODEL E11	361 X 888 X 1090 MM (*75 MM)	4 PC
MODEL E10	361 X 620 X 882 MM	4 PC
MODEL E9	361 X 351 X 614 MM	4 PC
MODEL E8	361 X 83 X 348 MM	4 PC
MODEL R3	361 X 490 X 710 MM (*70 MM)	2 PC
MODEL R2	361 X 186 X 480 MM	2 PC
MODEL E6	361 X 85 X 379 MM	2 PC

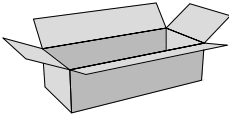
ITEM	PC
 ROOFWINDOW	4 PC
 BAG_SILICONE	1 PC
 DOUBLE TURNING DOOR	1 PC
 SPANDREL	10 PC
 RIDGE DECORATION (Box)	2 + 1 PC
 LOUVRE VENT	2 PC
 BAG_GLASS SPACERS (80 pcs)	2 PC

ITEM	PC
 PRO6120 FOUNDATION PROFILE	459 MM L 1 PC
 PRO6120 FOUNDATION PROFILE	459 MM R 1 PC
 PRO20229 HORIZONTAL GABLE PROF	401 MM 2 PC
 PRO1456 GLAZING BAR	1005MM 4 PC
 PRO1456 GLAZING BAR	603 MM 2 PC
 PRO1456 GLAZING BAR	203 MM 2 PC
 PRO1456 GLAZING BAR	472 MM L 1 PC
 PRO1456 GLAZING BAR	472 MM R 1 PC
 PRO1456 GLAZING BAR	645 MM L 1 PC
 PRO1456 GLAZING BAR	645 MM R 1 PC
 PRO1456 GLAZING BAR	1075 MM L 1 PC
 PRO1456 GLAZING BAR	1075 MM R 1 PC
 PRO1456 GLAZING BAR	900 MM L 1 PC
 PRO1456 GLAZING BAR	900 MM R 1 PC
 PRO1456 GLAZING BAR	1408 MM L 1 PC
 PRO1456 GLAZING BAR	1408 MM R 1 PC

COLLI 2 ROYAL T

WEIGHT: 19 KG

DIMENSIONS:
240 x 200 x 2600 MM

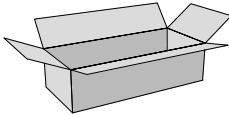


ITEM	PC
 PRO6120 FOUNDATION PROFILE	2009 MM L 1 PC
 PRO6120 FOUNDATION PROFILE	2009 MM R 1 PC
 PRO6120 FOUNDATION PROFILE	829 MM L 2 PC
 PRO6120 FOUNDATION PROFILE	829 MM R 2 PC
 PRO20779 GUTTER PROFILE	2009 MM L 1 PC
 PRO20779 GUTTER PROFILE	2009 MM R 1 PC

COLLI 4 ROYAL T

WEIGHT: 17 KG

DIMENSIONS:
300 x 120 x 2600 MM

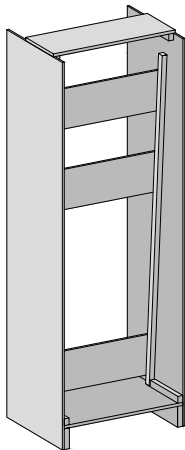


ITEM	PC
 PRO40091 RIDGE PROFILE	2009 MM 2 PC
 RIDGE ROYAL-T	1 PC
 SPANDREL	1 PC
 U 30X30X30	1500 MM 1 PC
 K 30X30	1500 MM 1 PC

PALLET 2 ROYAL T

WEIGHT: 375 kg

DIMENSIONS:
800 x 900 x 2200 MM



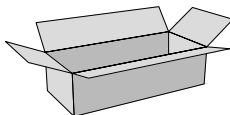
ITEM	PC
 PRO6578 CORNER PROFILE	1630 MM 6 PC
 PRO40633 INNER CORNER PROFILE	1630 MM 2 PC
 PRO6918 ENDBAR ROOF	1830 MM 4 PC
 PRO1456 GLAZING BAR	1830 MM 9 PC
 PRO1456 GLAZING BAR	1630 MM 25 PC
 PRO6918 ENDBAR ROOF	1430 MM 2 PC
 PRO1456 GLAZING BAR	1430 MM 4 PC
 PRO10980 ROUND TUBE Ø40	1700 MM 4 PC
 TRE WIND BRACINGS SIDES	1975 MM 2 PC
 TRE WIND BRACINGS SIDES	1795 MM 10 PC
 TRE WIND BRACINGS SIDES	1673 MM 2 PC
 TRE WIND BRACINGS SIDES	1611 MM 2 PC
 PRO1748 RUBBER	12,5 M/ROL 14 PC

POSITION	GLAS DIMENSIONS	PC
GABLE	557 X 1748 MM	2 PC
GABLE	361 X 1650 MM	30 PC
GABLE	450 X 1650 MM	2 PC
GABLE	361 X 625 MM	4 PC

COLLI 1 ROYAL T

WEIGHT: 26 kg

DIMENSIONS:
240 x 170 x 2600 MM

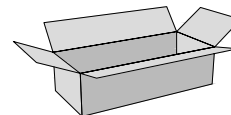


ITEM	PC
 PRO6120 FOUNDATION PROFILE	3098 MM 2 PC
 PRO20229 HORIZONTAL GABLE PROF	2982 MM 2 PC
 PRO1456 GLAZING BAR	1090 MM 2 PC
 PRO1456 GLAZING BAR	871 MM L 2 PC
 PRO1456 GLAZING BAR	871 MM R 2 PC
 PRO1456 GLAZING BAR	602 MM L 2 PC
 PRO1456 GLAZING BAR	602 MM R 2 PC
 PRO1456 GLAZING BAR	334 MM L 2 PC
 PRO1456 GLAZING BAR	334 MM R 2 PC
 PRO21214 WIND BRACING GABLE	Ø 19 MM 2 PC
 TRE WIND BRACINGS SIDES	2365 MM 2 PC
 SAPAK_EOS	1 PC
 L 40x40 GATFUND	400 MM 4 PC
 E400330 GLAZING RUBBER	20 M/ROL 1 PC

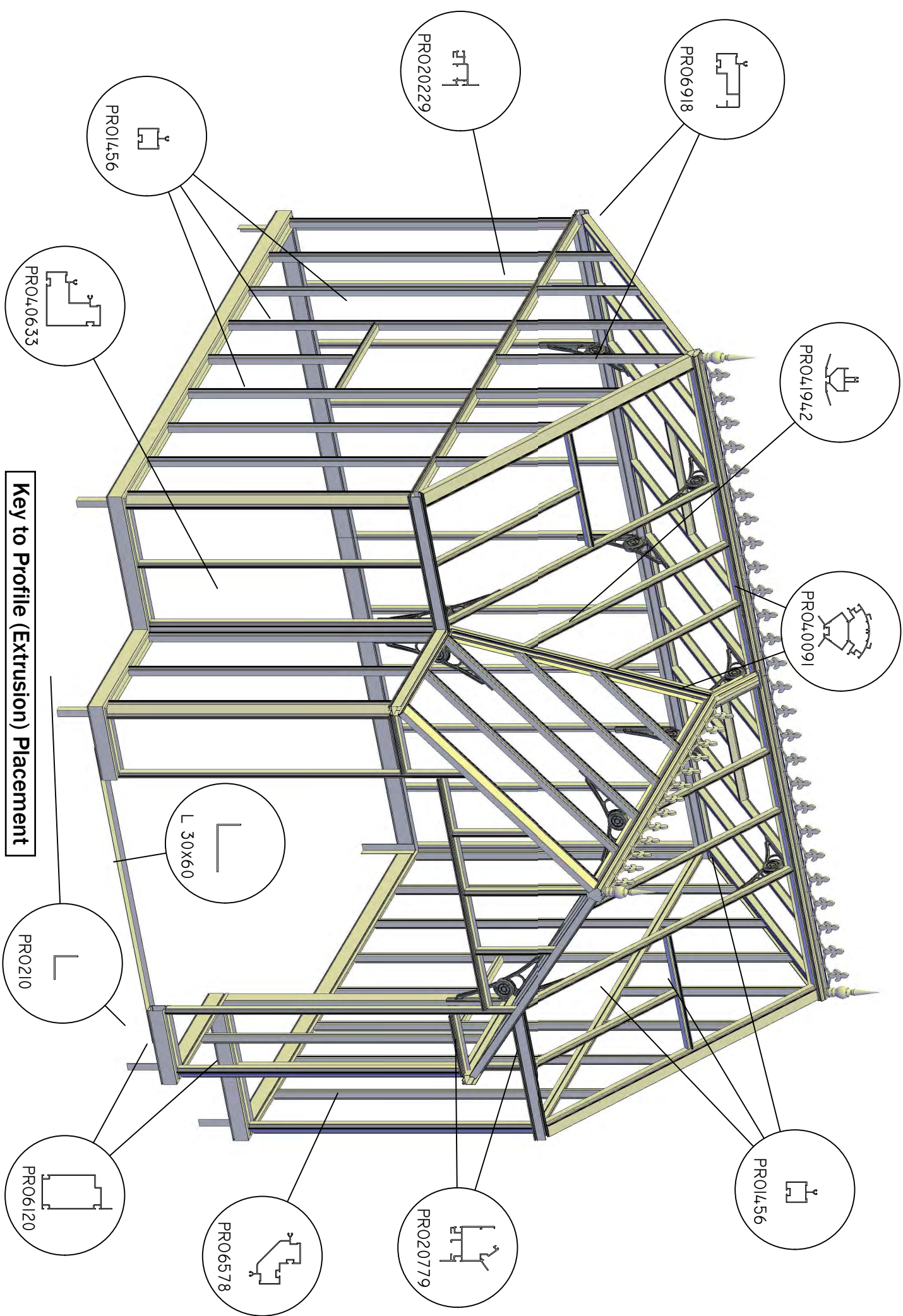
COLLI 3 ROYAL T

WEIGHT: 25 kg

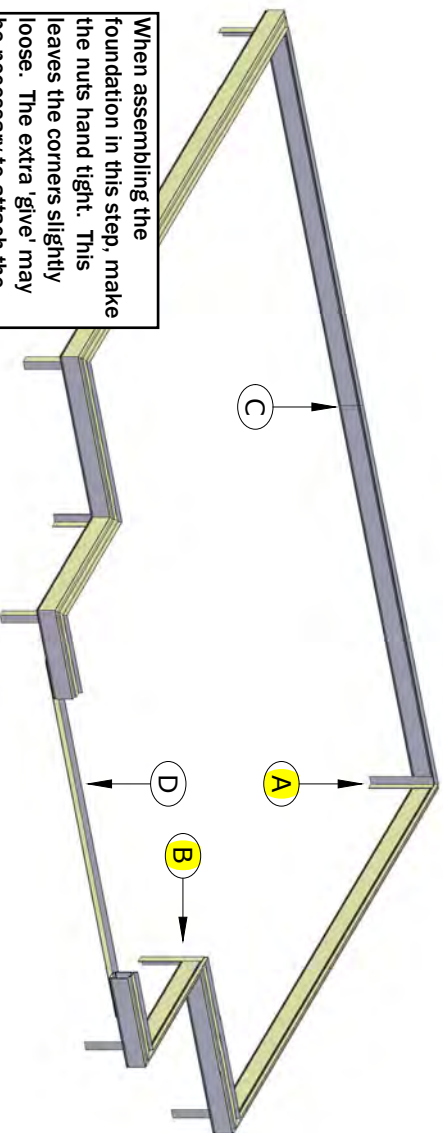
DIMENSIONS:
240 x 200 x 2600 MM



ITEM	PC
 L 30 x 60	1930 MM 1 PC
 PRO20229 HORIZONTAL GABLE PROF	1511 MM 1 PC
 PRO1456 GLAZING BAR	2026 MM L 1 PC
 PRO1456 GLAZING BAR	2026 MM R 1 PC
 PRO1456 GLAZING BAR	718 MM 1 PC
 PRO41942 VALLEY ROOFBEEM	1942 MM 2 PC
 PRO20779 GUTTER PROFILE	829 MM L 2 PC
 PRO20779 GUTTER PROFILE	829 MM R 2 PC
 L 40x40 GATFUND	400 MM 4 PC
 PRO2290 HEAVY RUBBER	2500 MM 2 PC
 ZAK T-MODEL	1 PC
 SAPAK ROYAL-T 236	1 PC
 BAG BOLTS_NUTS	7 PC



When assembling the foundation in this step, make the nuts hand tight. This leaves the corners slightly loose. The extra 'give' may be necessary to attach the corner uprights.



A

C

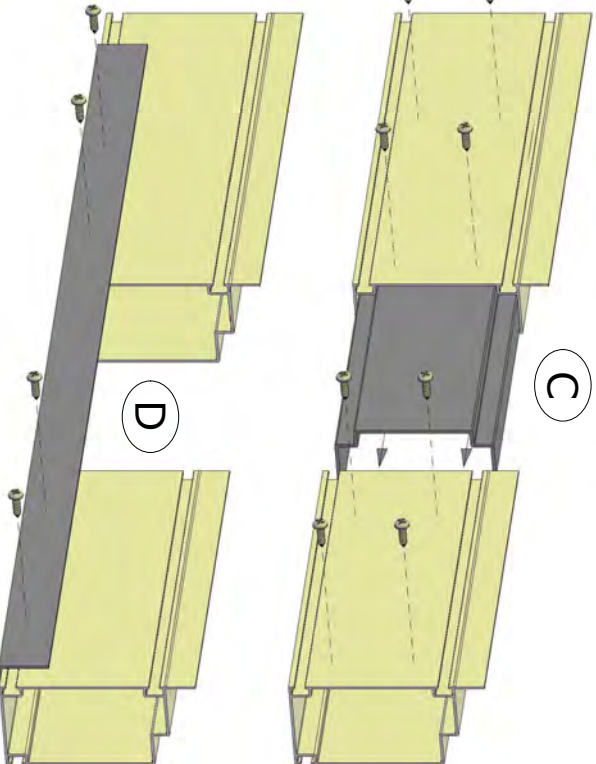
B

D



C

D



A

B



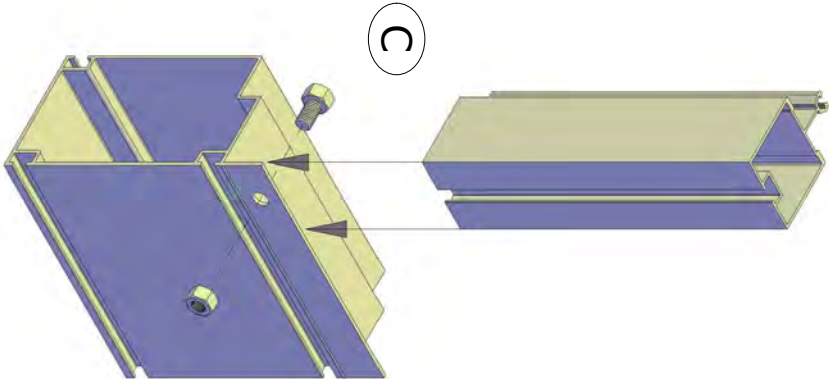
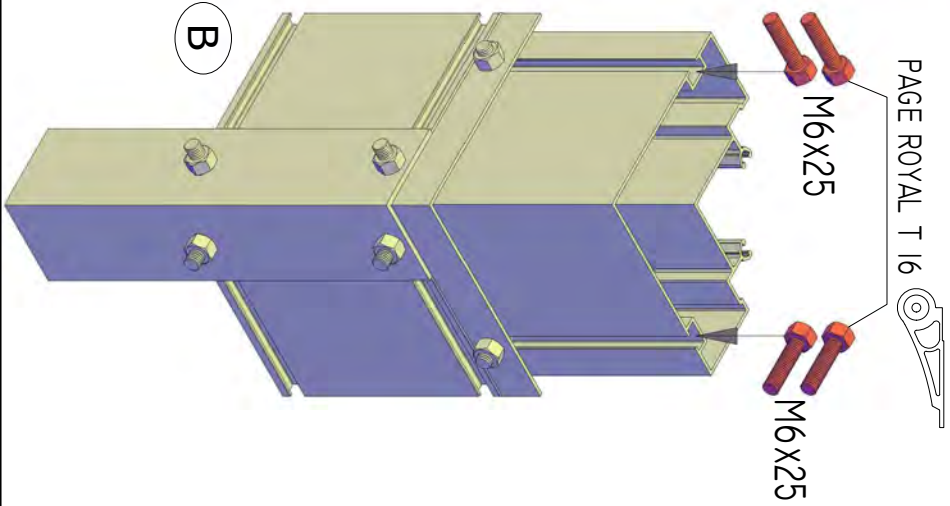
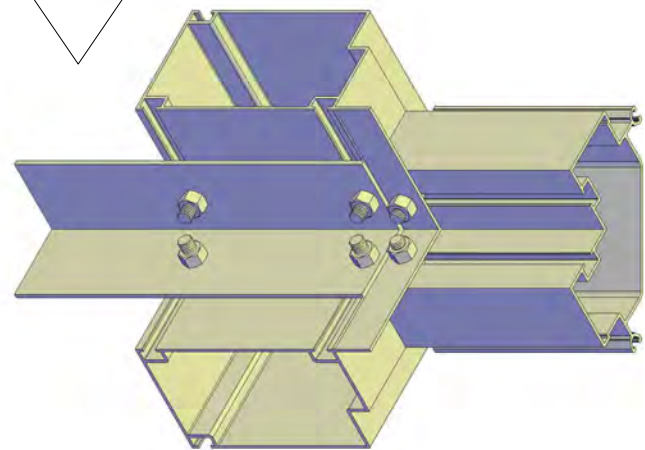
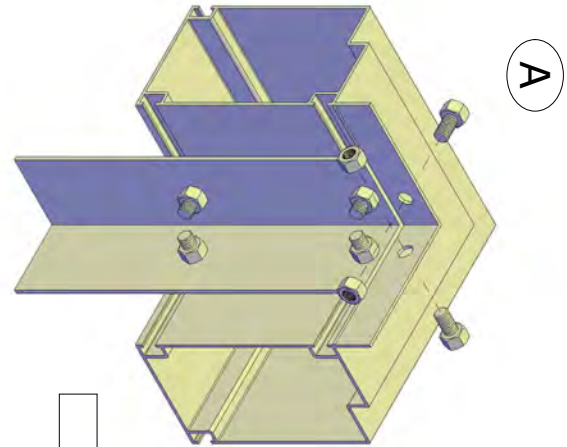
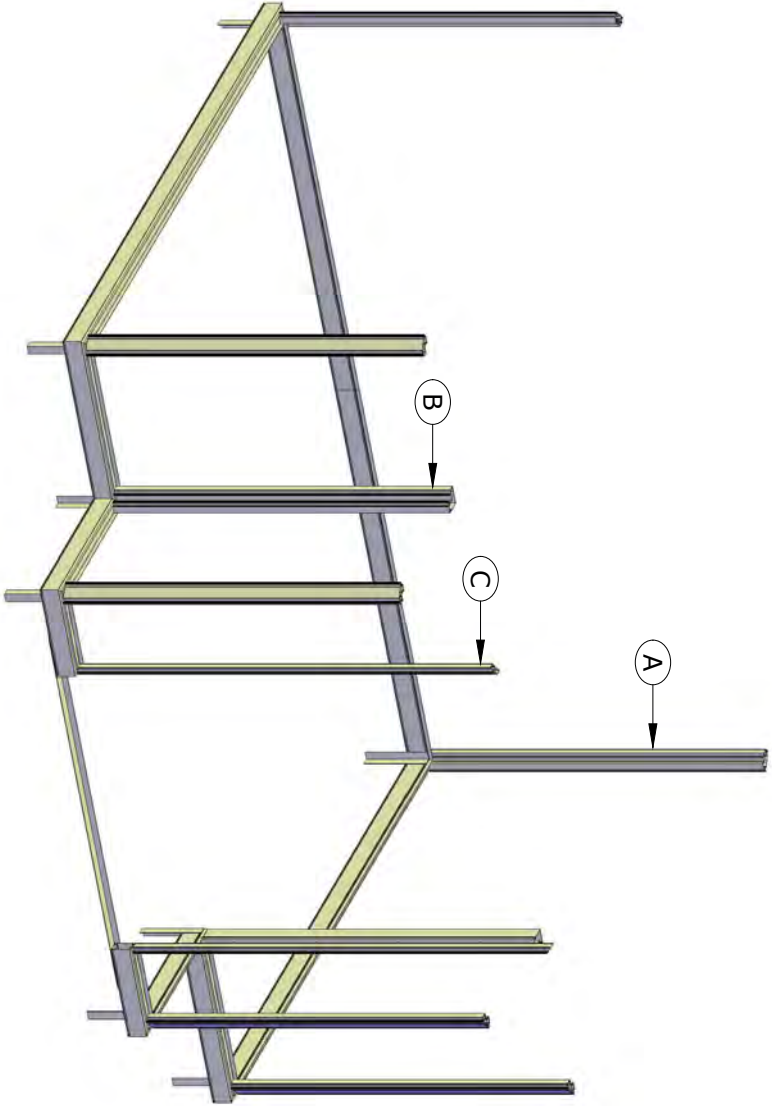
Note: If installing on a concrete slab, cut PRO210 flush with the bottom of PRO6120. To anchor, use the cut off PRO210 pieces as L-brackets to secure the PRO6120 to the concrete foundation. Please see YouTube animated assembly video for more information.

Tip: Exaco recommends that you use a tape measure to distinguish between similar looking pieces of different lengths. Your greenhouse was manufactured in Europe, all measurements will be listed in **millimeters**. To convert millimeters to inches divide by 25.4.

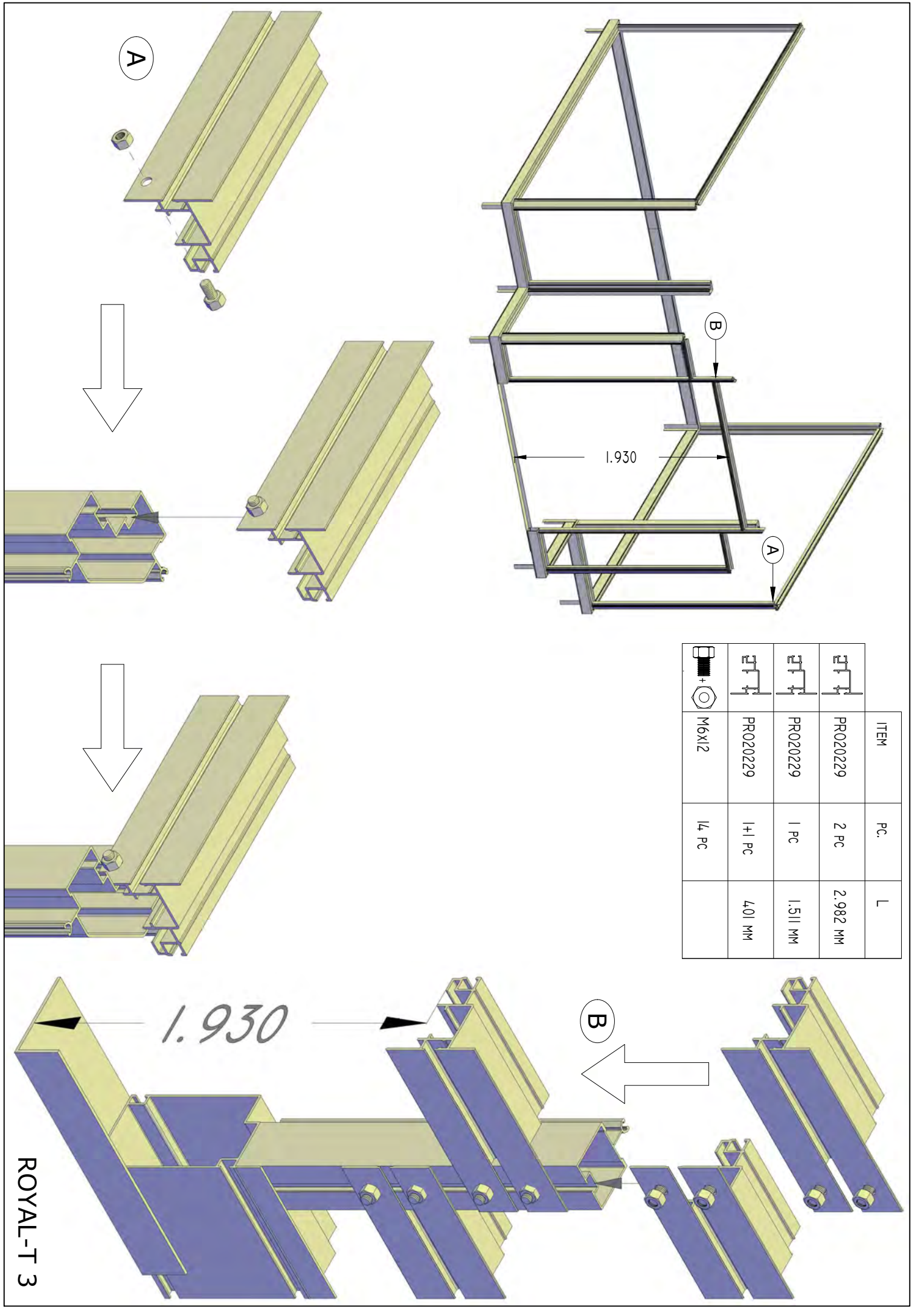
ITEM	P.C.	L
L	8 PC	400 MM
L 30X60	1 PC	1.930 MM
PRO6120	1+1 PC	2.010 MM
PRO6120	1+1 PC	459 MM
PRO6120	2 PC	3.098 MM
PRO6120	2+2 PC	829 MM
M6X12	32 PC	
M6X50	32 PC	
L	1 PC	600 MM
L	12 PC	

ROYAL-T 1

ITEM	PC.	L
	PR06578	6 PC
	M6x12	18 PC
	M6x25	8 PC
	PR0406335	2 PC
	PR01456	1+1 PC
		2.026 MM

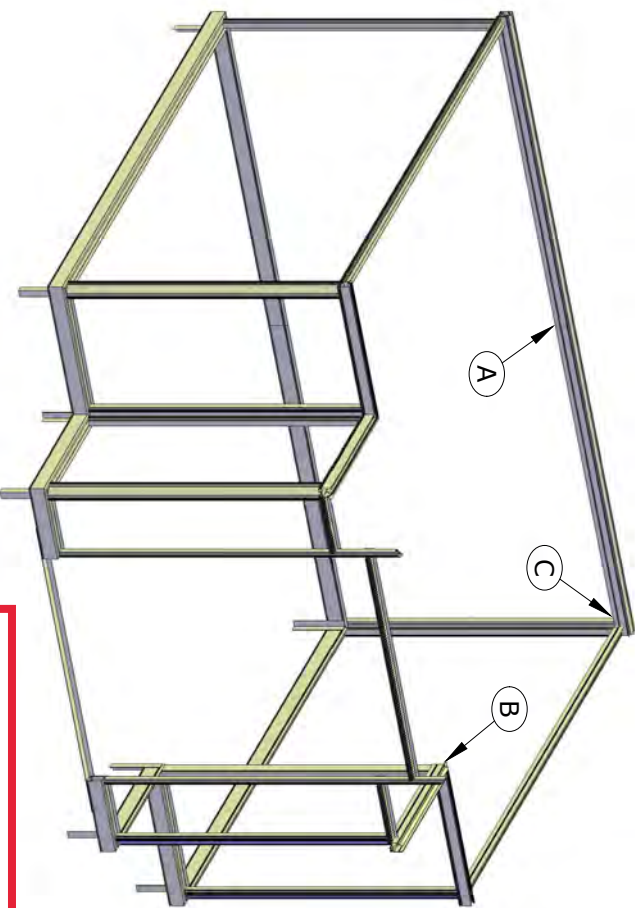


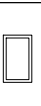
ROYAL-T 2

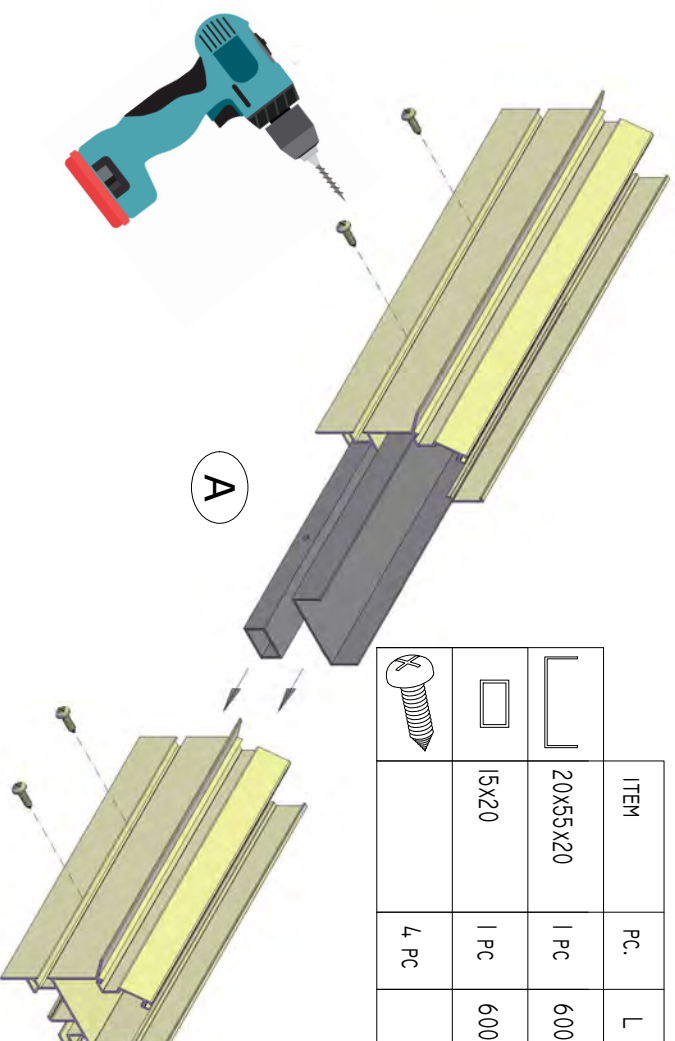


ITEM	PC.	L
PR020229	2 PC	2.982 MM
PR020229	1 PC	1.511 MM
PR020229	1+1 PC	4.01 MM
M6x12	1/4 PC	

ROYAL-T 3

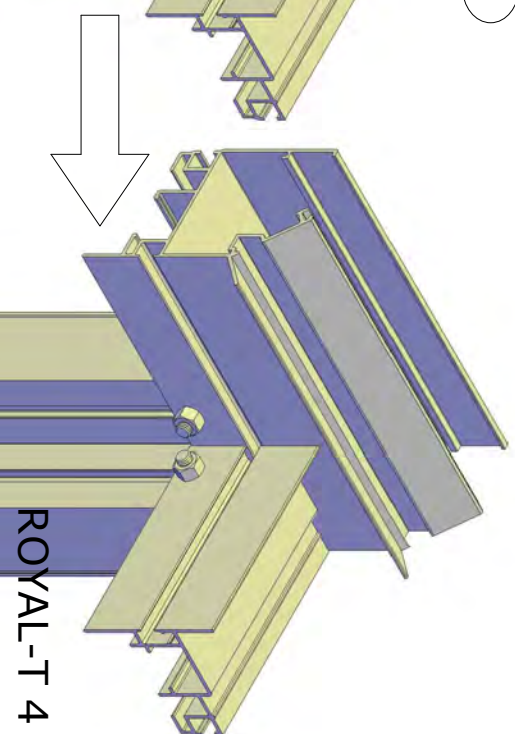
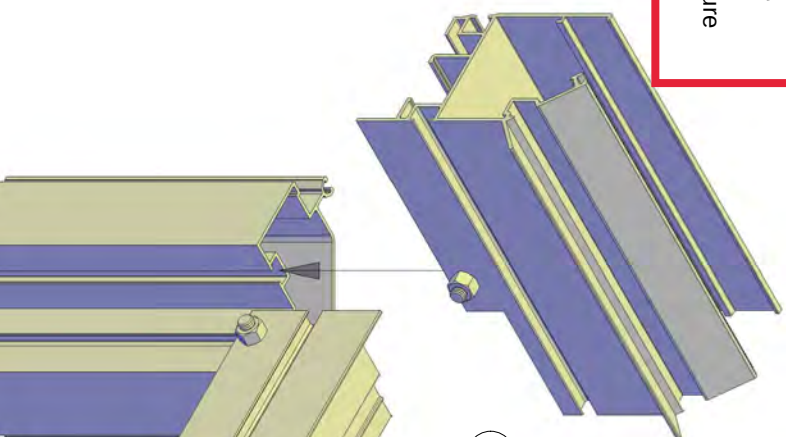
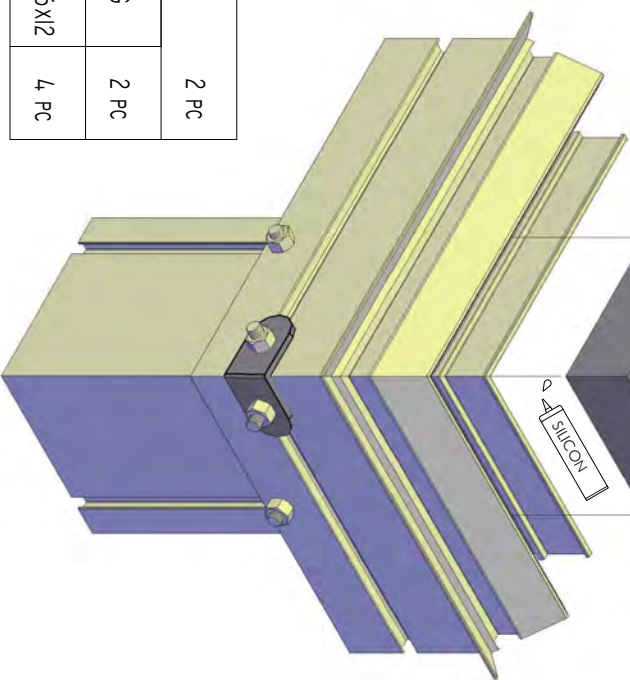


ITEM	PC.	L
	20X35X20	1 PC 600 MM
	15X20	1 PC 600 MM
		4 PC



Silicon all edges where this piece meets the frame. This will prevent future water leakage.

	2 PC
	2 PC
	4 PC



ITEM	PC.	L
	PRO20779	1+1 PC 2.010 MM
	PRO20779	2+2 PC 829 MM
	M6X12	10 PC

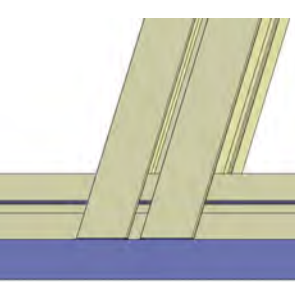
ROYAL-T 4

ITEM	P.C.	L
	PRO1456	25 PC
	M6X12	50+8+2 PC
	M6X25	6 PC

PAGE ROYAL T 13

A

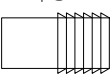
M6X12



Louvre Window - Install in locations along the back wall outlined in green. May install in locations outlined in red only if a seed tray is not present.

Seed Tray - Install in either of the locations outlined in red. Do not install a Louvre window in the same location.

PAGE ROYAL T 6

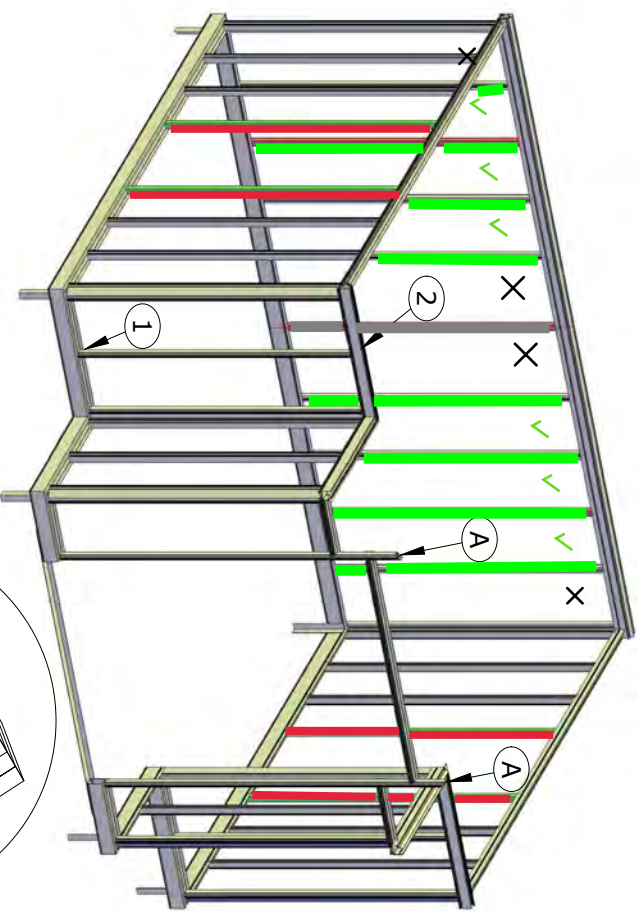


M6X12

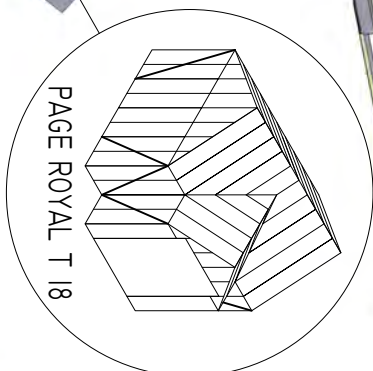
PAGE ROYAL T 16



M6X25

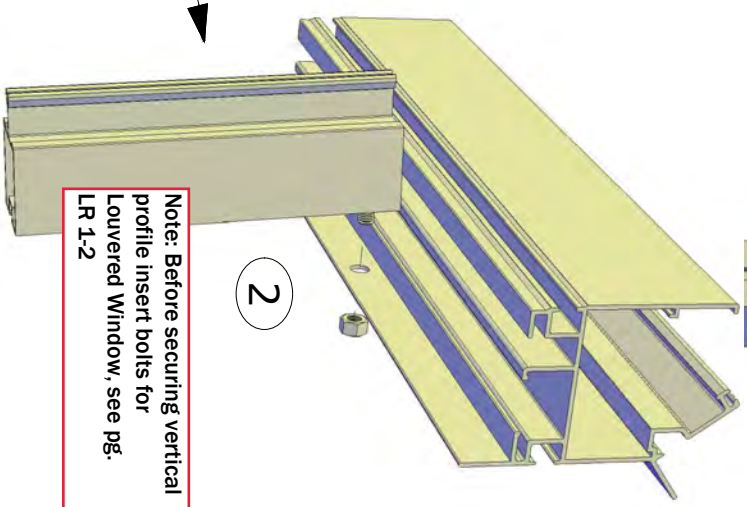


1



PAGE ROYAL T 18

2

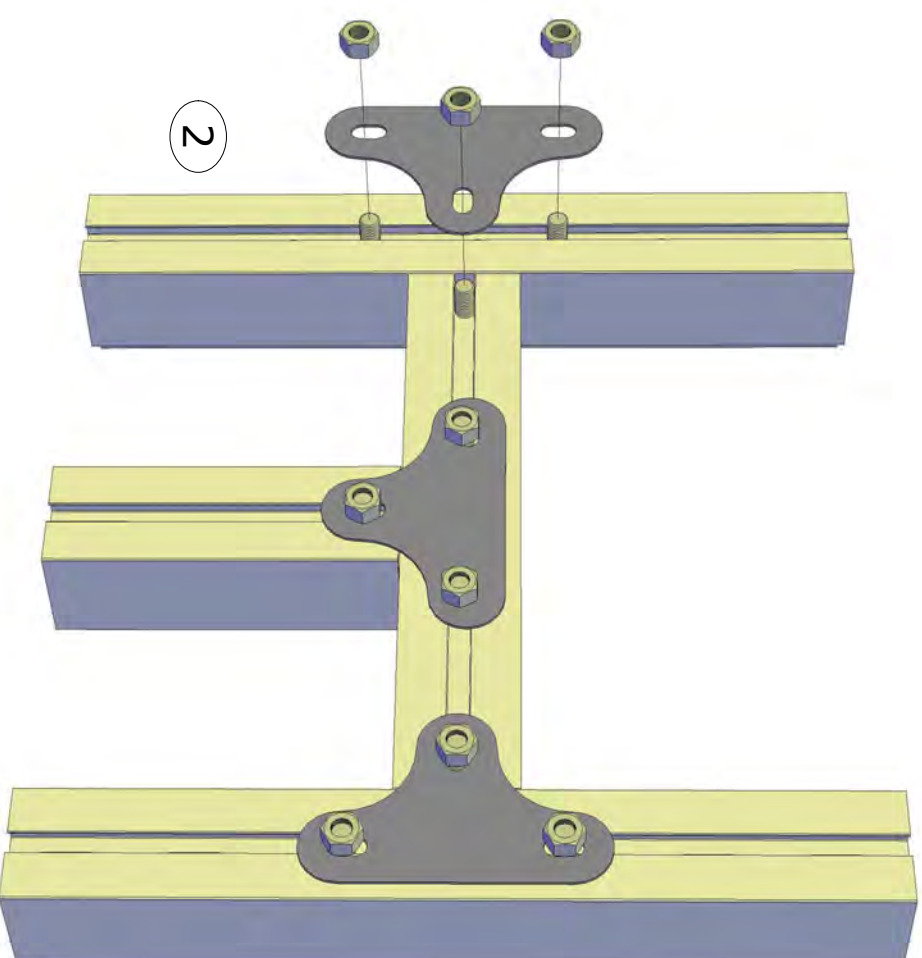
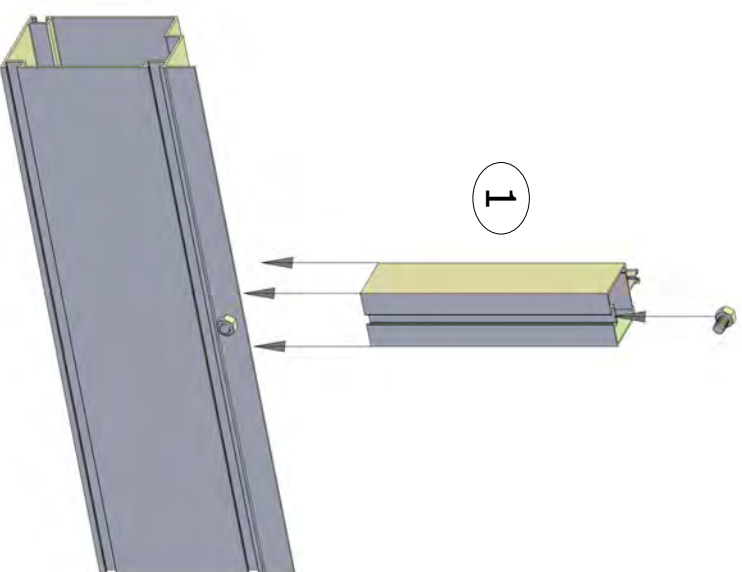
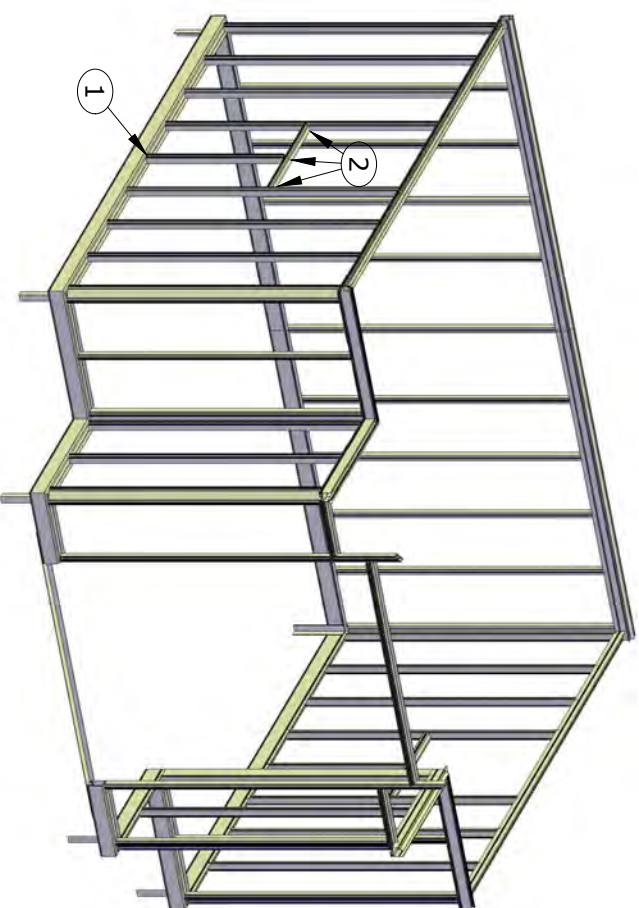


Note: Before securing vertical profile insert bolts for Louvered Window, see pg. LR 1-2

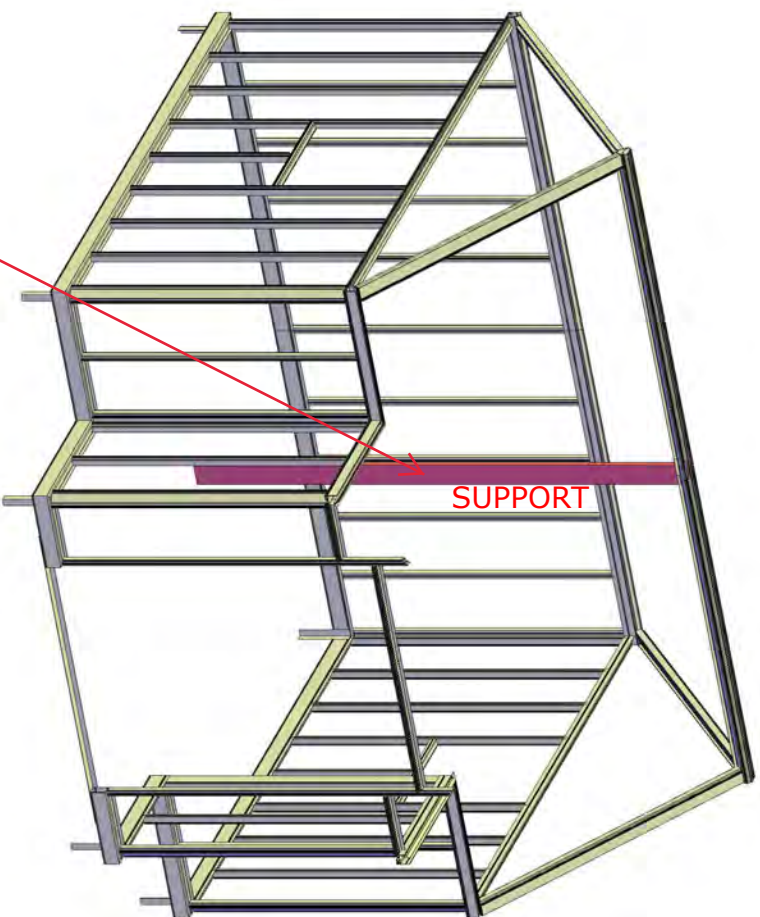


ROYAL-T 5

ITEM	P.C.	L
	2 PC	603 MM
	2 PC	703 MM
	12 PC	

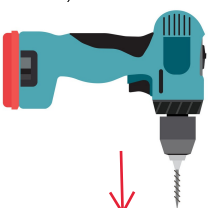
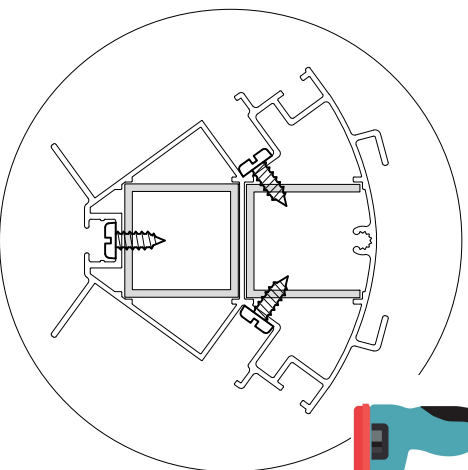


ROYAL-T 6

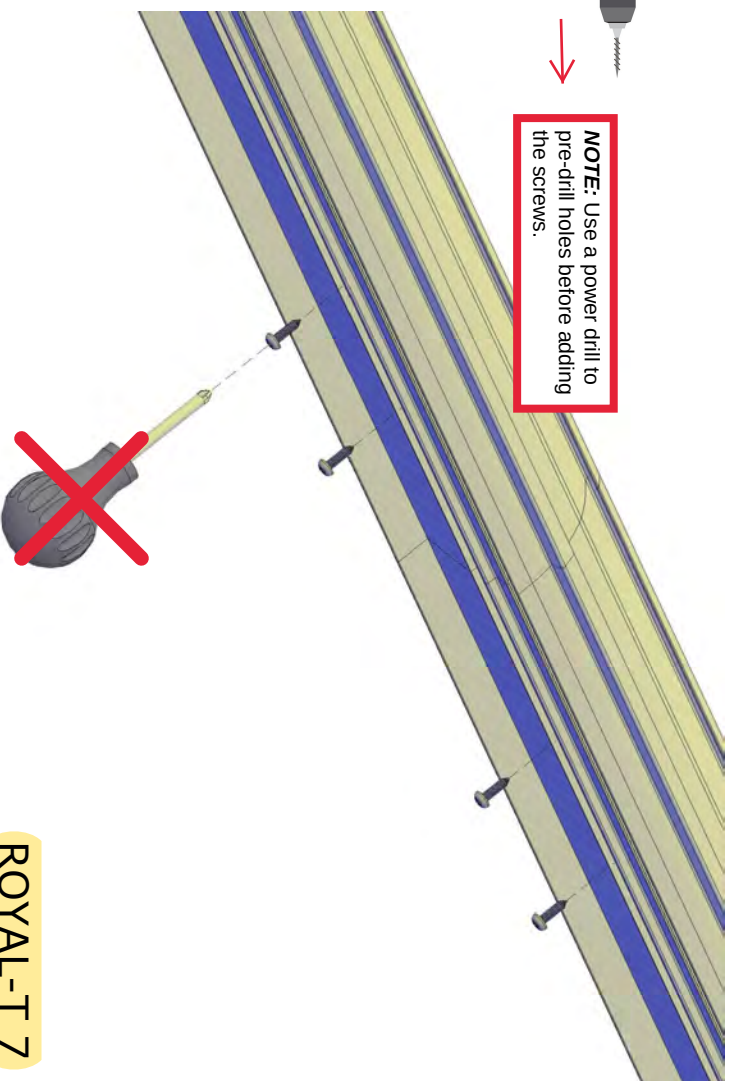
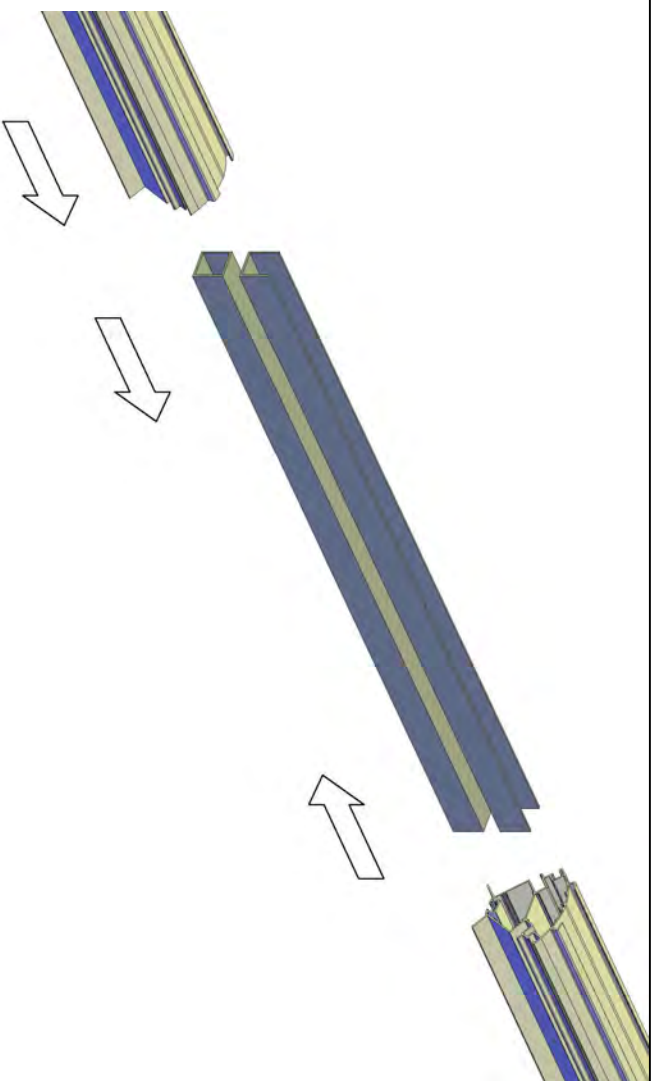


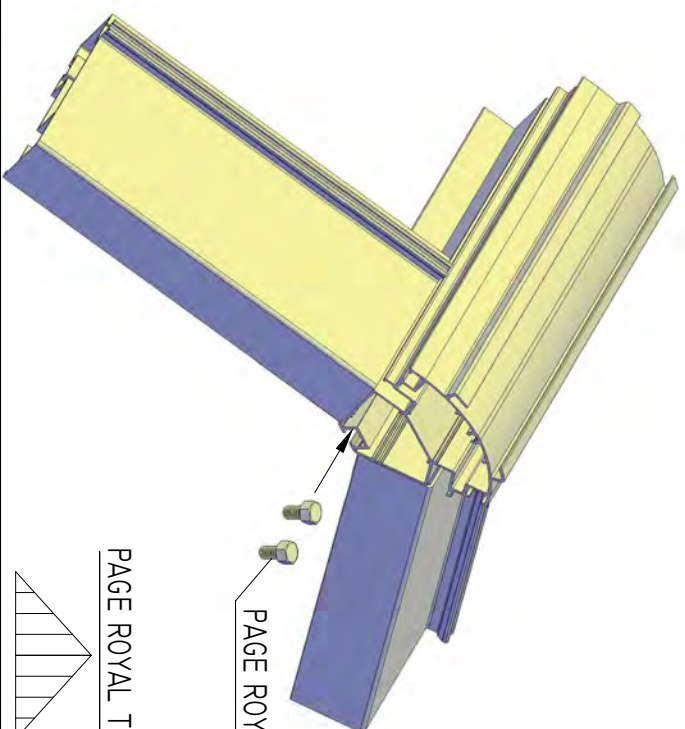
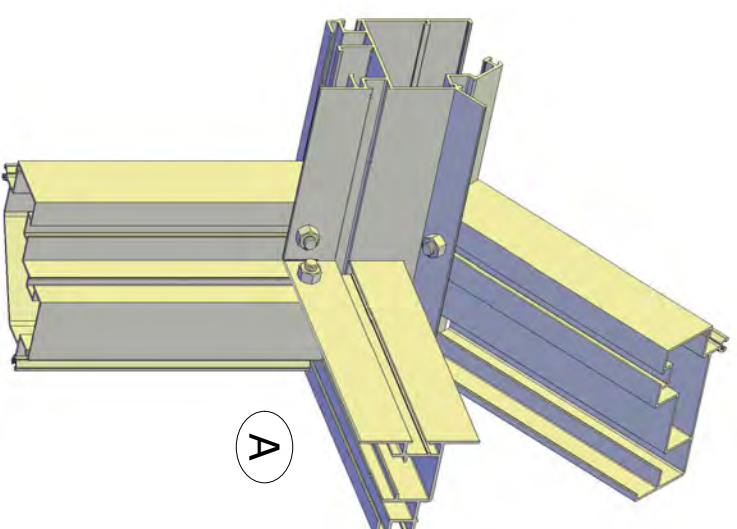
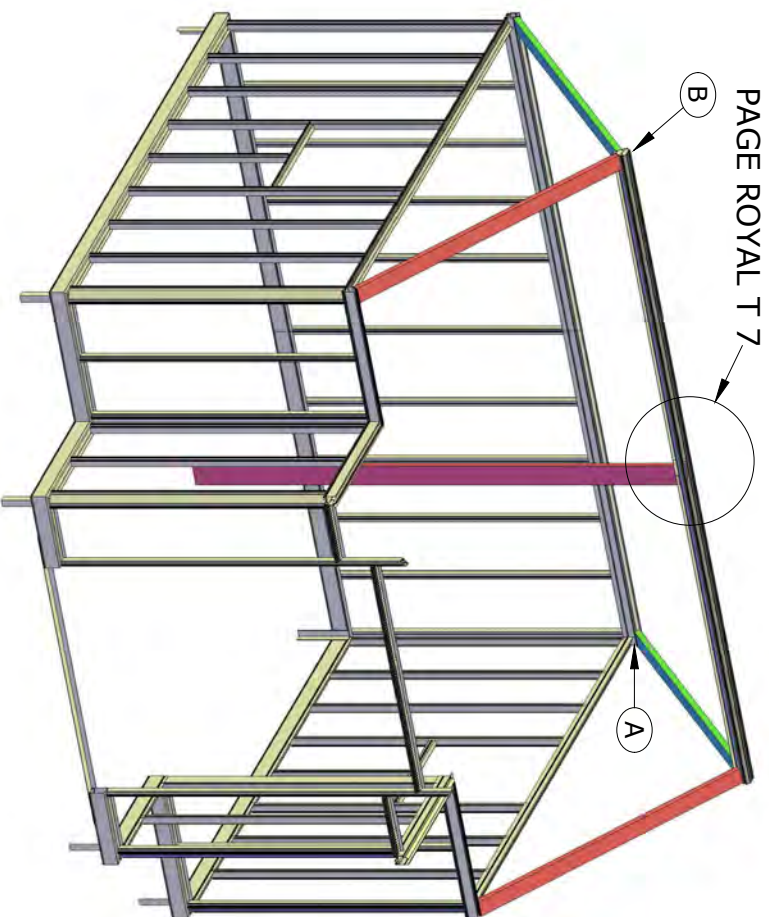
Optional: Use a piece of wood to provide extra support.
Buy 10ft 2x4 and cut to fit.

ITEM	PC.	L
K 30 X 30	1 PC	1.500 MM
U 30 X 30	1 PC	1.500 MM
PRO40091	1+1 PC	2.010 MM
	12 PC	



NOTE: Use a power drill to pre-drill holes before adding the screws.





PAGE ROYAL T 9

PAGE ROYAL T 17

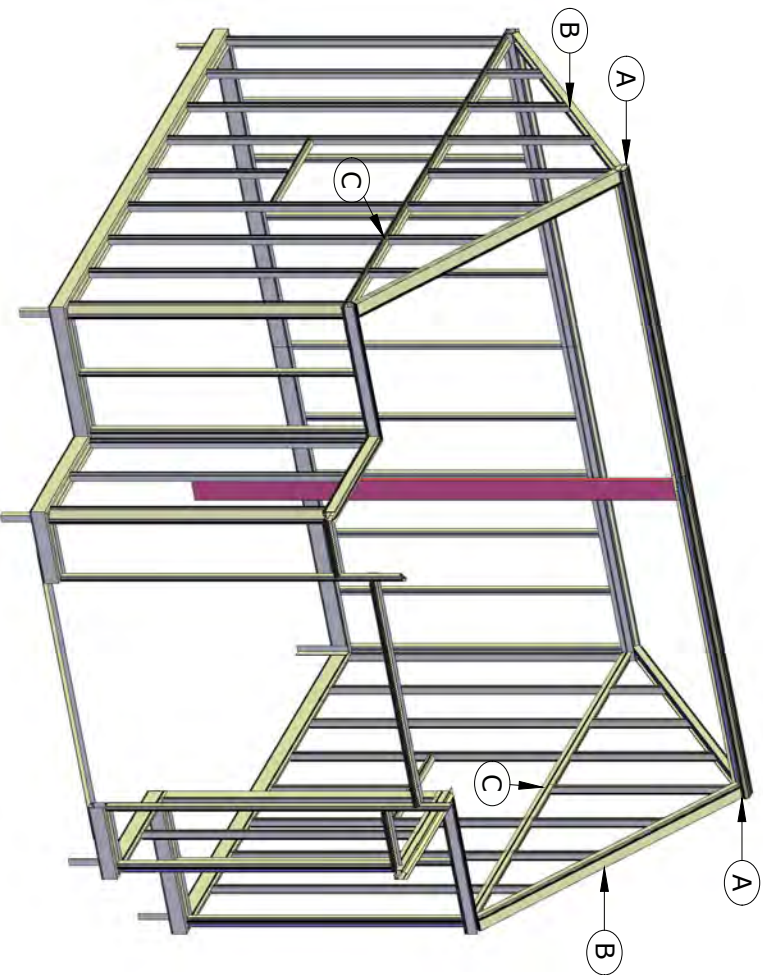
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PAGE ROYAL T 9 + 11

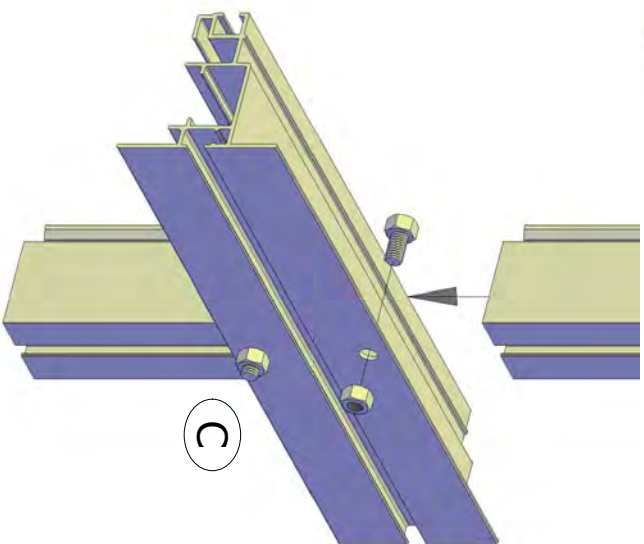
A

ITEM	P.C.	L
PR06918	4 p.c.	1.830 mm
M6x12	8+4+16 p.c.	

ROYAL-T 8

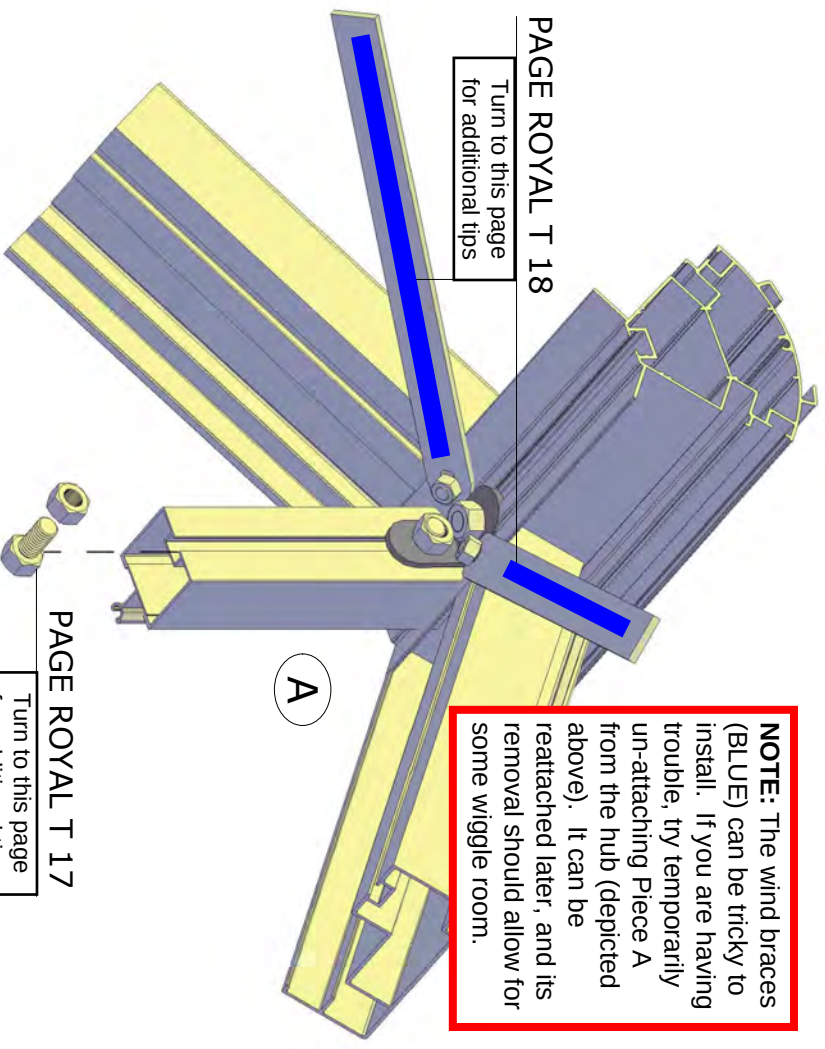


ITEM	P.C.	L
	2 P.C.	1.090 MM
	4 P.C.	334 MM
	4 P.C.	602 MM
	4 P.C.	871 MM
	28+2 P.C.	
	1/4 P.C.	



PAGE ROYAL T 18

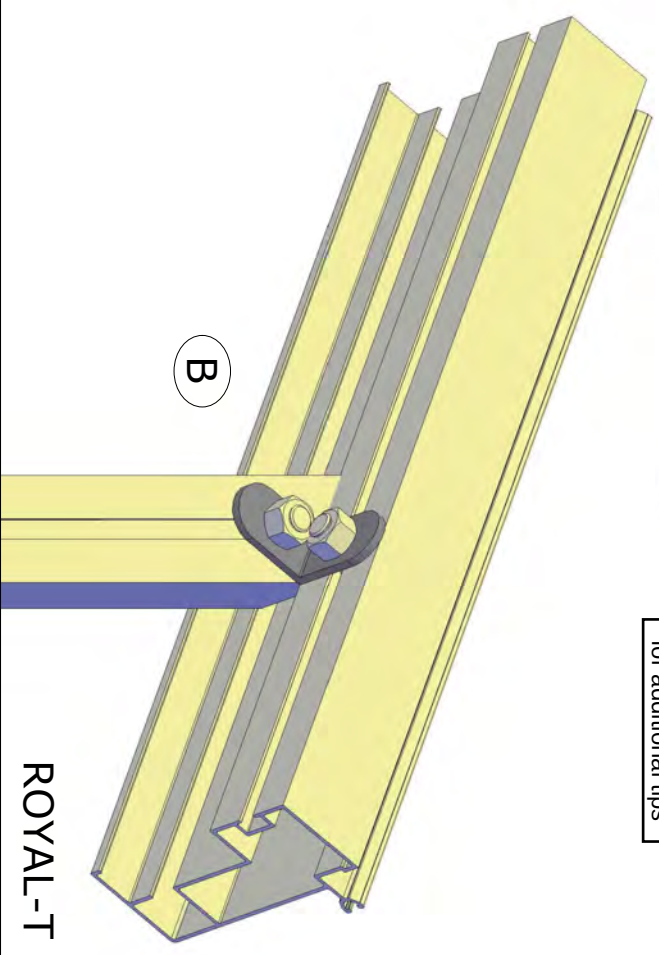
Turn to this page for additional tips



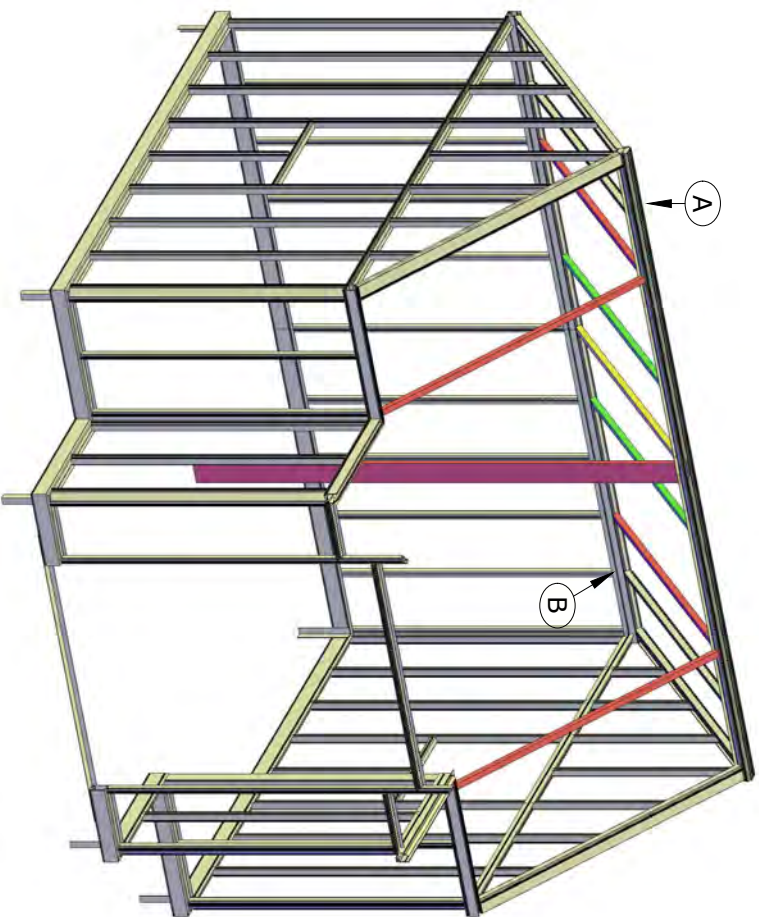
PAGE ROYAL T 17

Turn to this page for additional tips

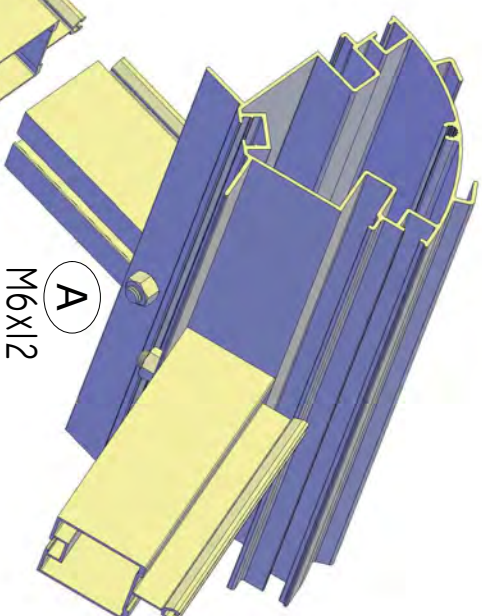
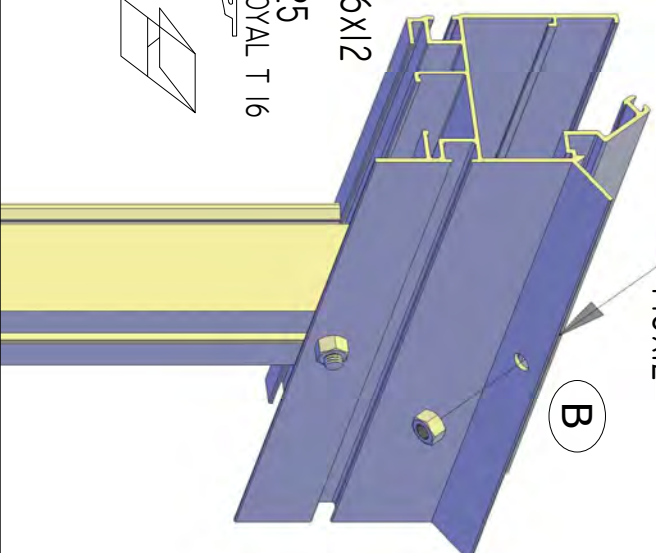
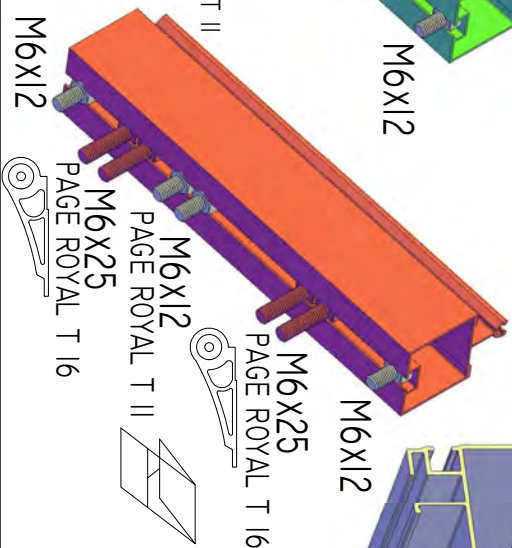
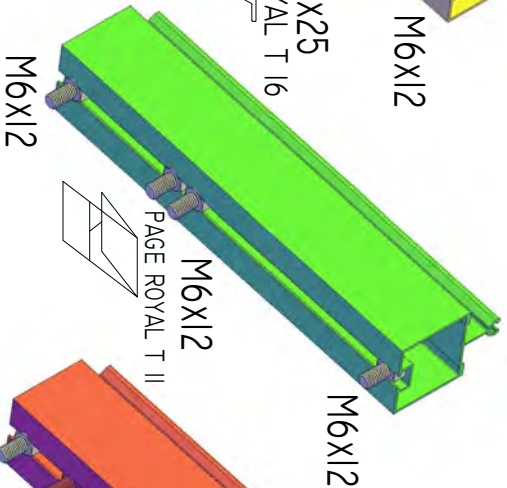
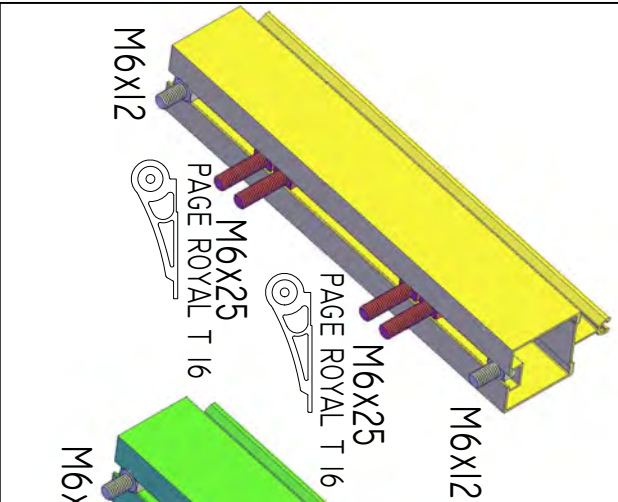
NOTE: The wind braces (BLUE) can be tricky to install. If you are having trouble, try temporarily un-attaching Piece A from the hub (depicted above). It can be reattached later, and its removal should allow for some wiggle room.



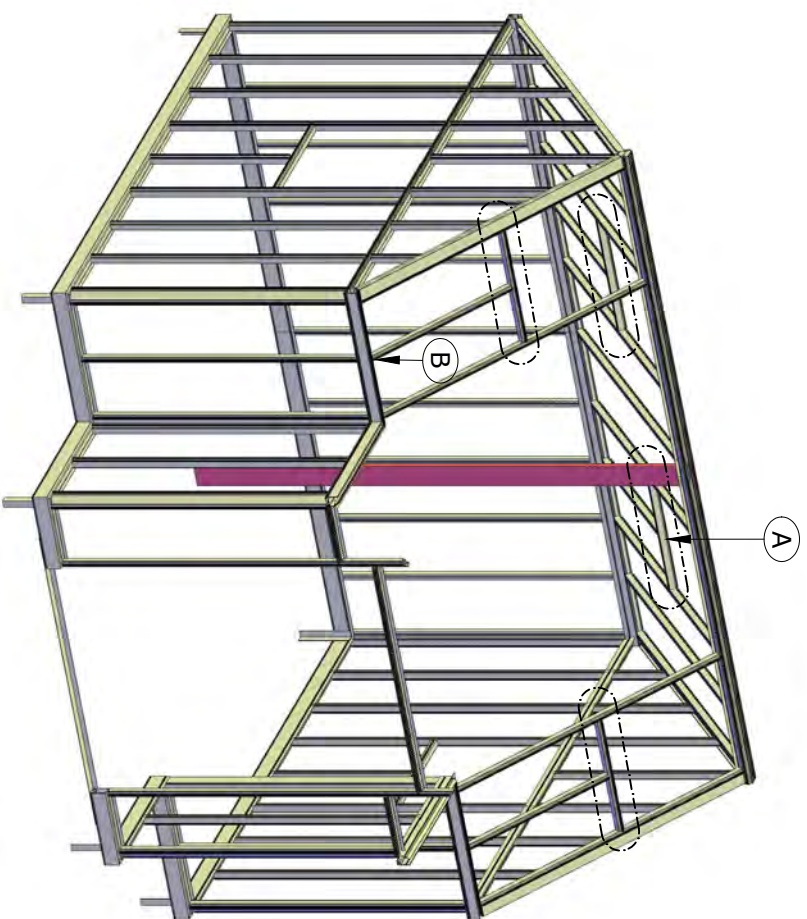
ROYAL-T 9



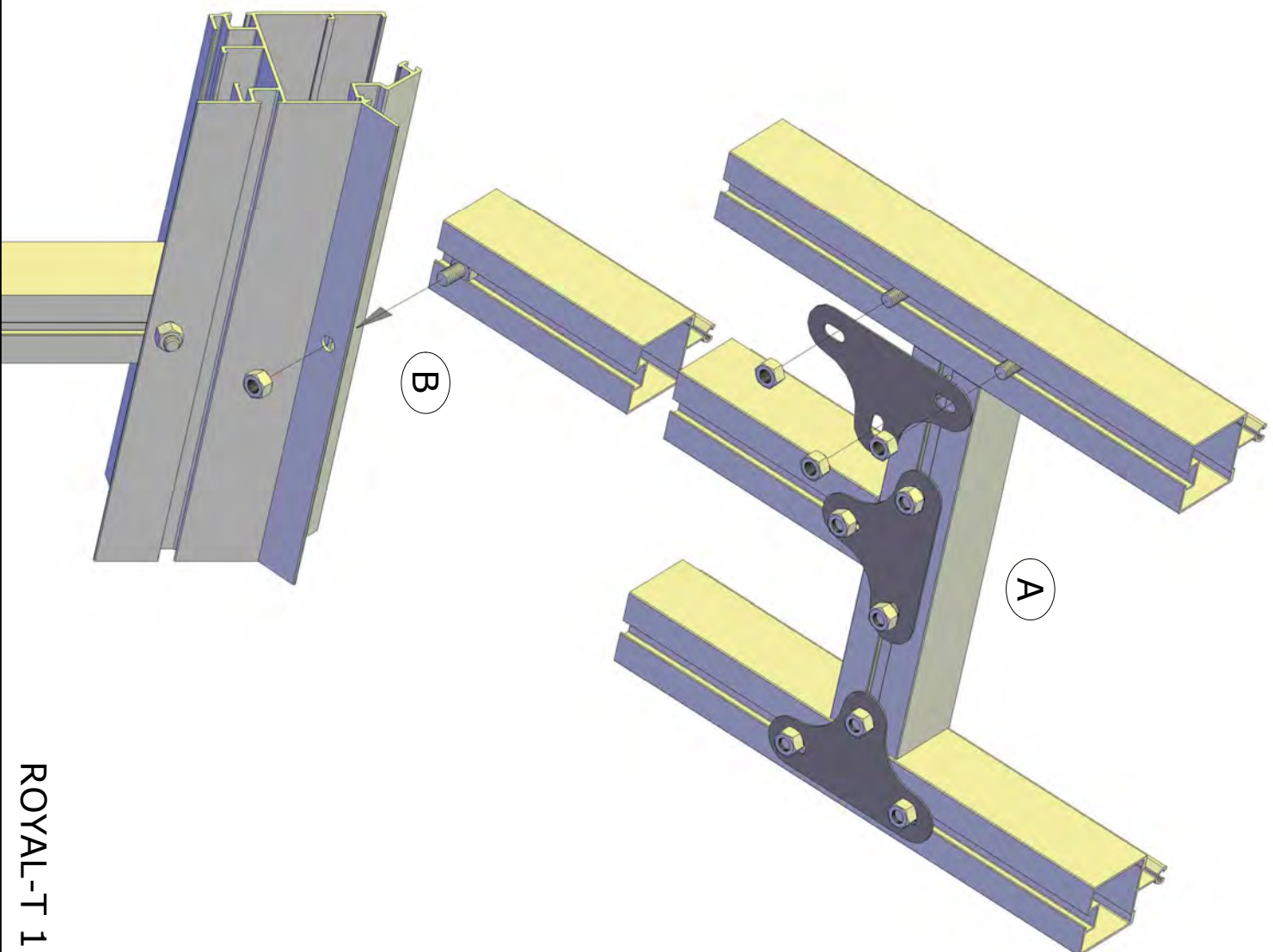
ITEM	P.C.	L
	PR01456	9 P.C. 1.830 mm
	M6x12	18+12 pc.
	M6x25	20 P.C.

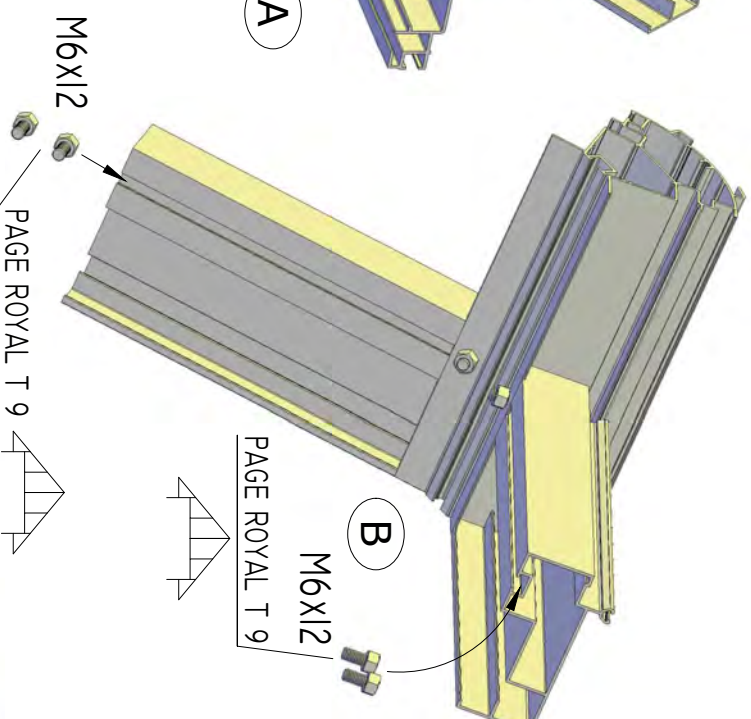
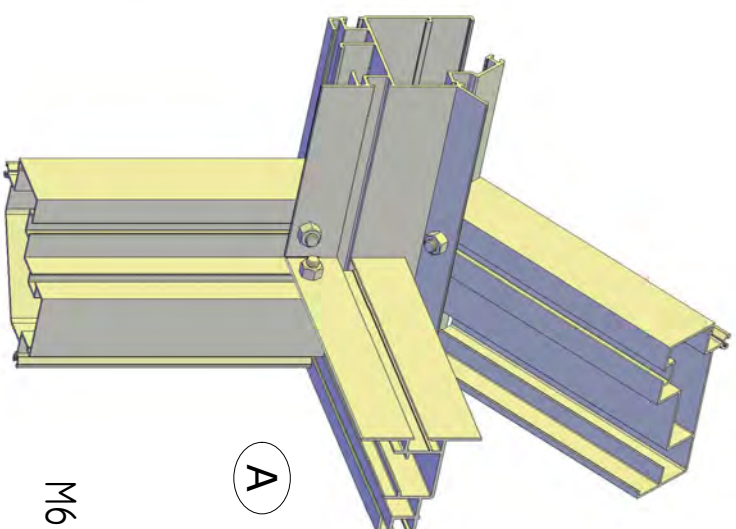
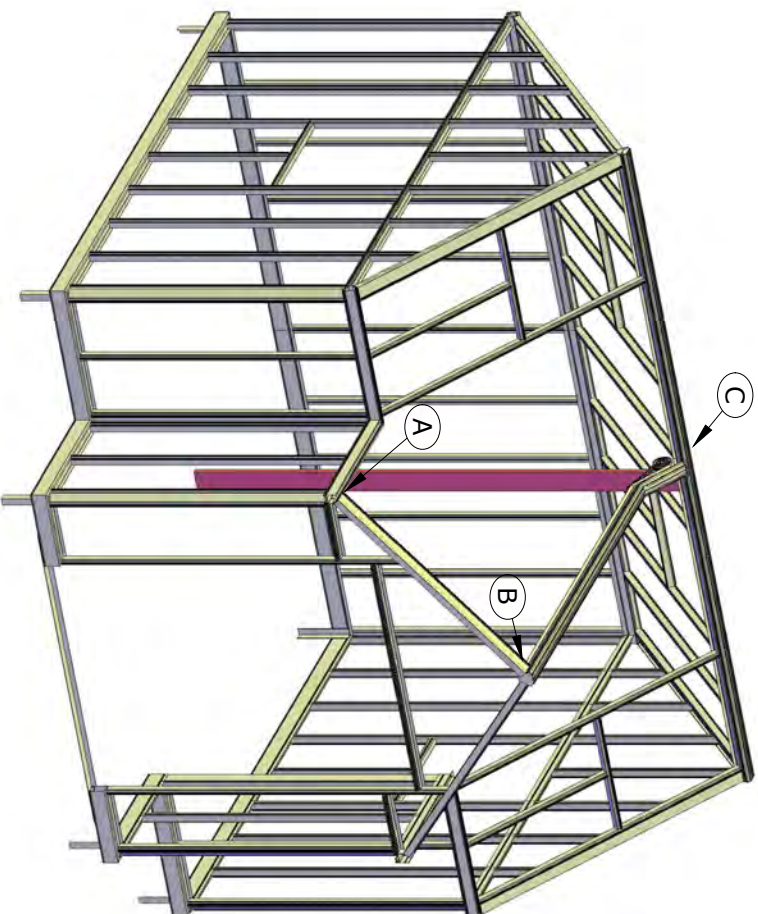


ROYAL-T 10



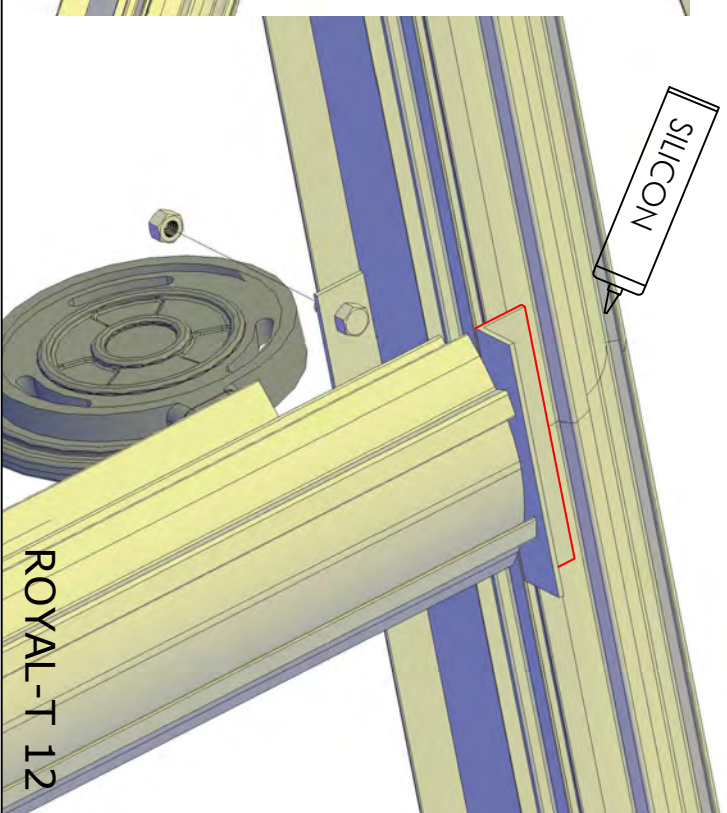
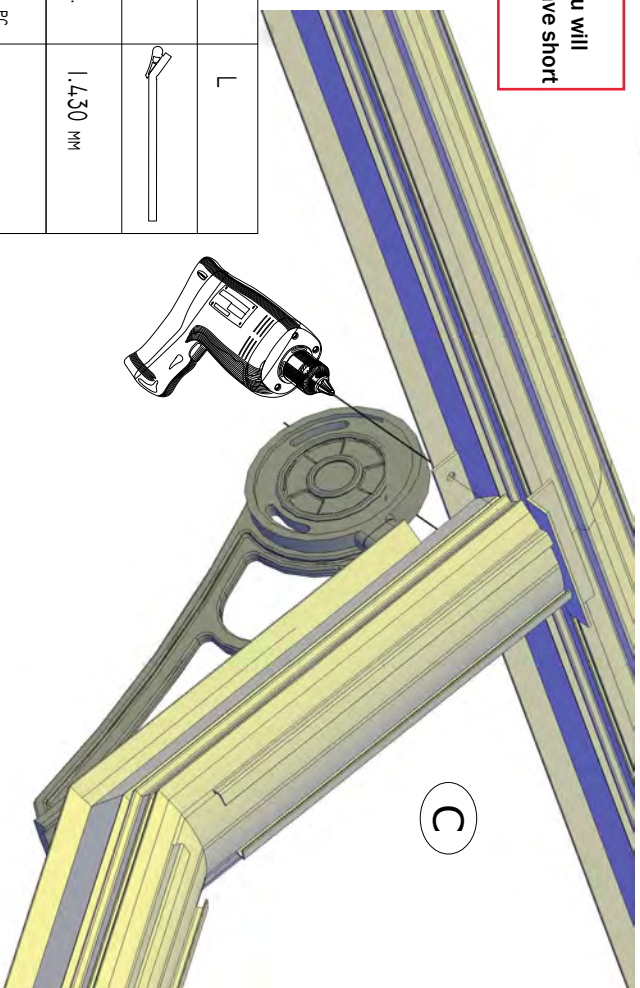
ITEM	P.C.	L
PR01456	4 P.C.	1.005 MM
PR01456	4 P.C.	703 MM
M6X12	24 P.C.	

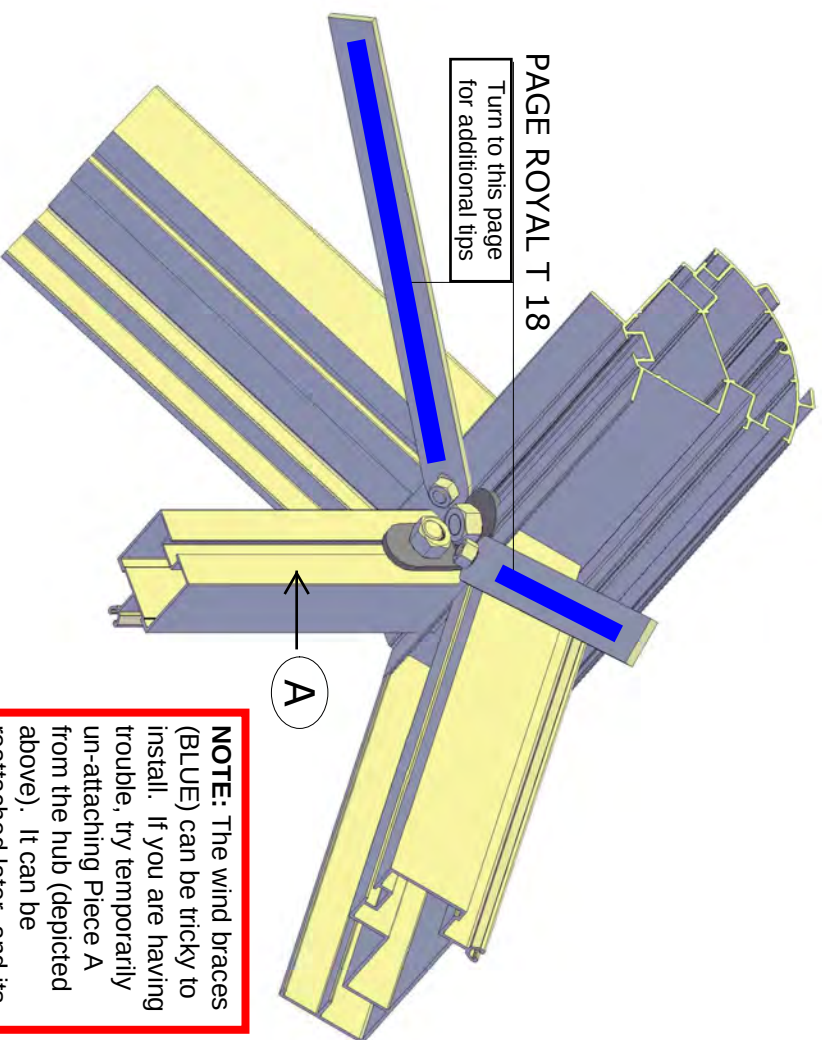
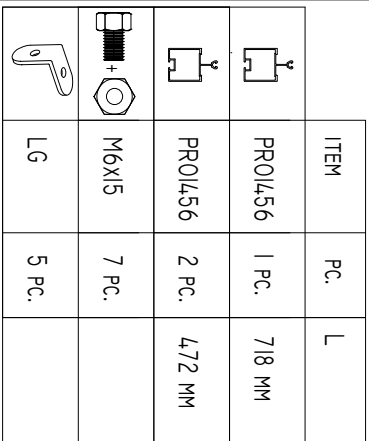




Insert bolts to connect short uprights to the PR06918. You will need as many bolts as you have short uprights.

ITEM	P.C.	L
 PR040091*	1 P.C.	
 PR06918	2 P.C.	1,430 MM
 M6X12	6+4 P.C.	



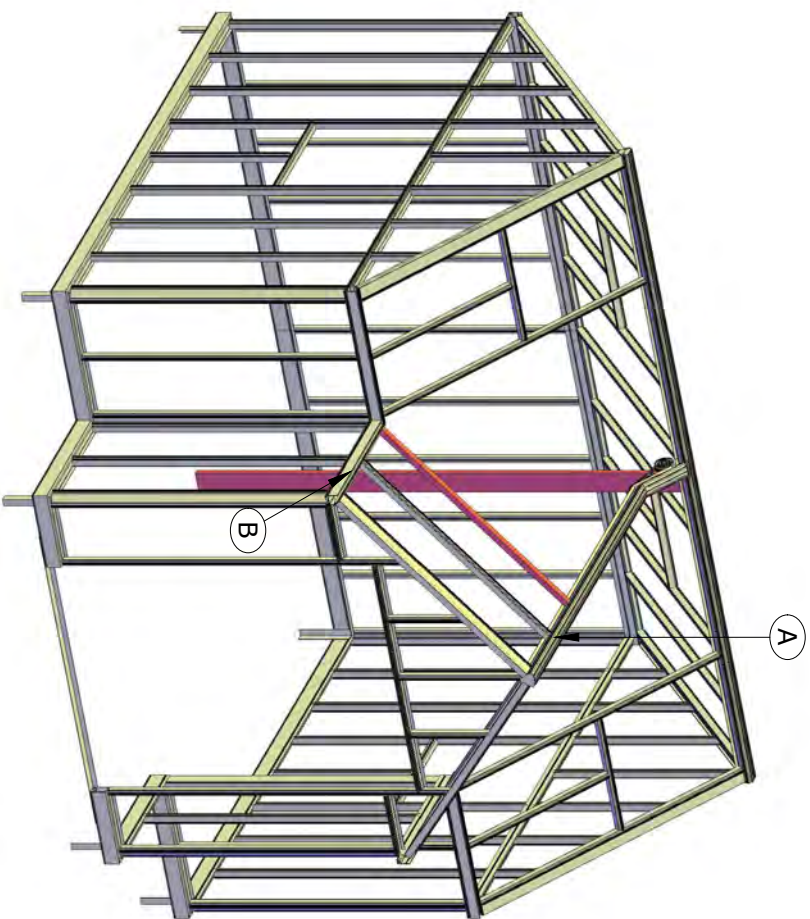


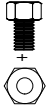
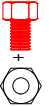
PAGE ROYAL T 18

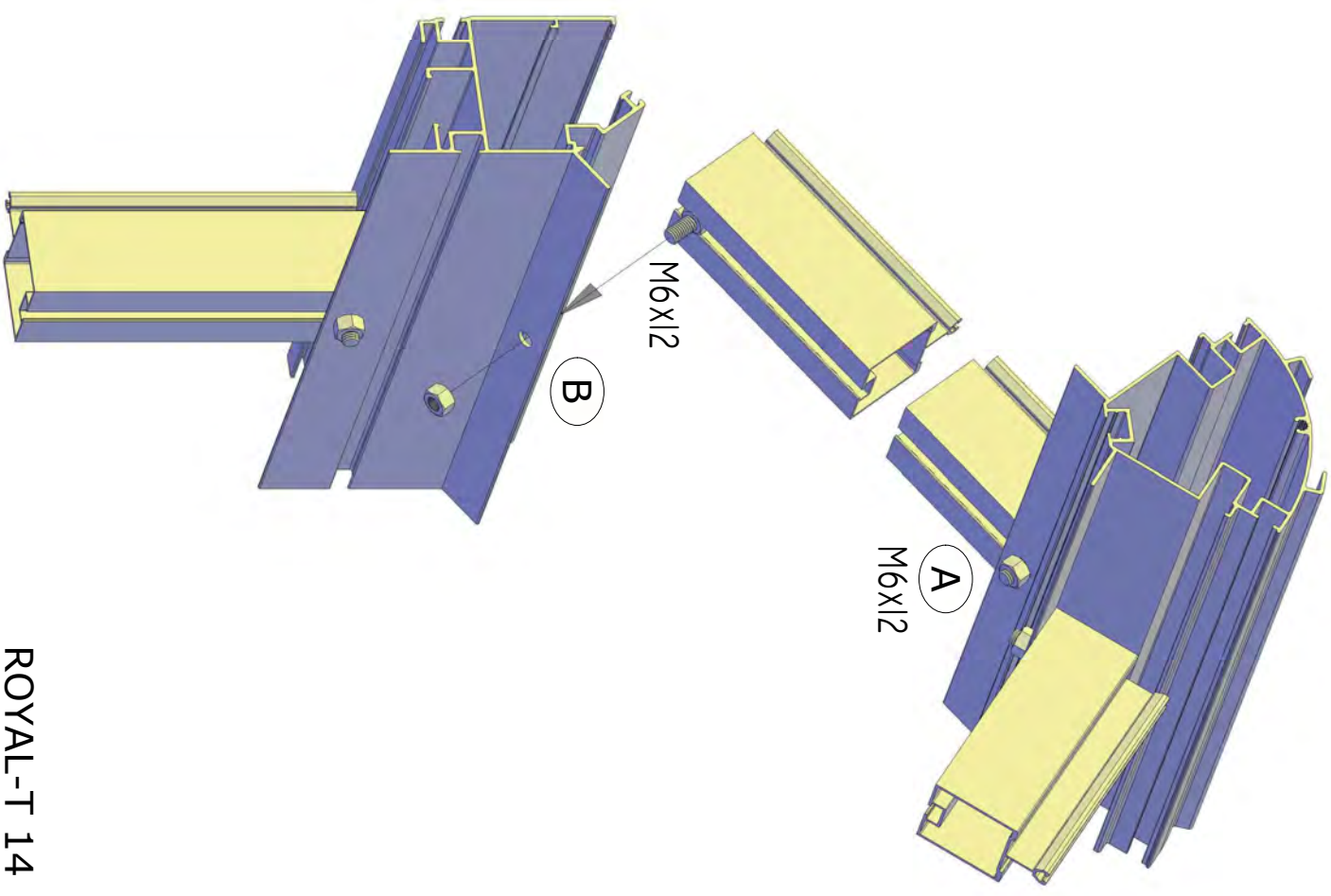
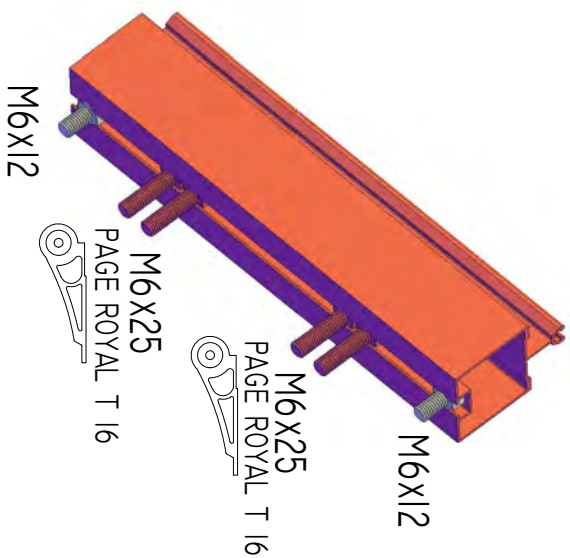
Turn to this page
for additional tips

NOTE: The wind braces (BLUE) can be tricky to install. If you are having trouble, try temporarily un-attaching Piece A from the hub (depicted above). It can be reattached later, and its removal should allow for some wiggle room.

ROYAL-T 13



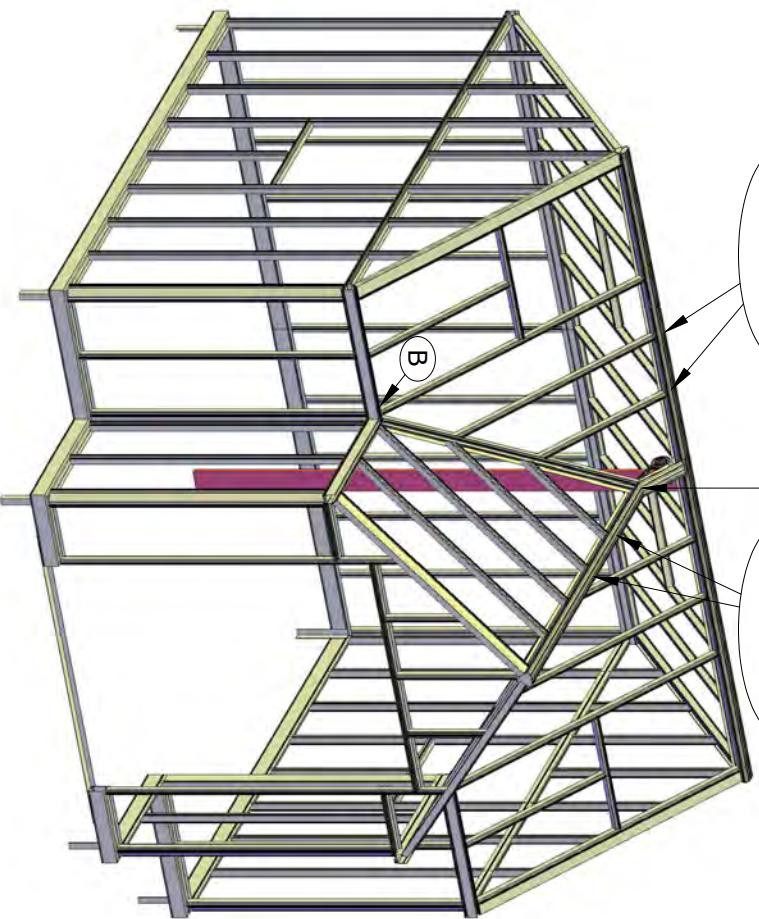
ITEM	P.C.	L
 PR01456	4 P.C.	1.430 MM
 M6x12	8 P.C.	
 M6x25	8 P.C.	



ROYAL-T 14

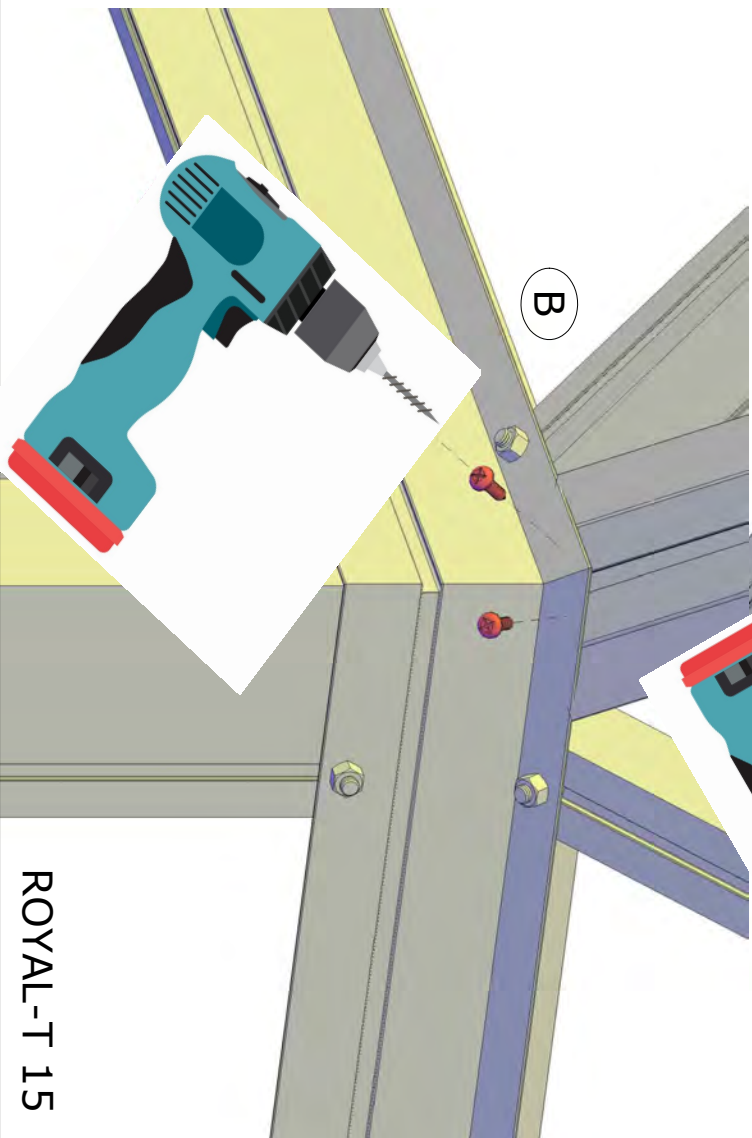
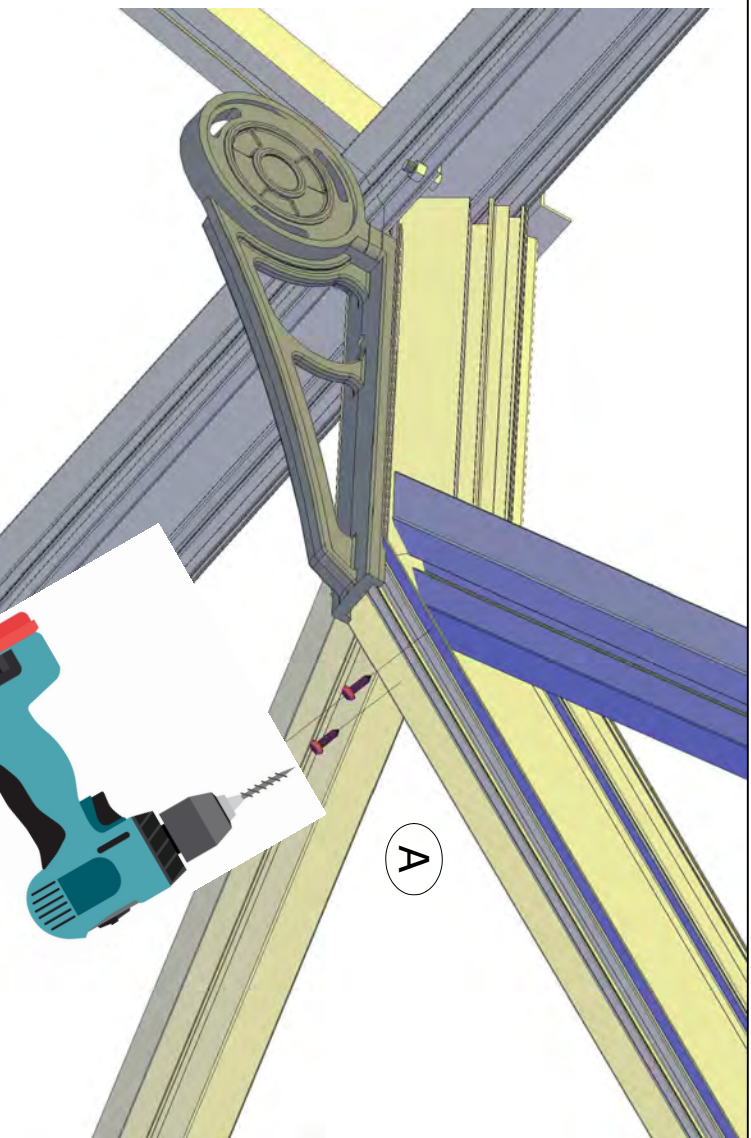
= PAGE
ROYAL T 10

= PAGE
ROYAL T 14

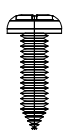


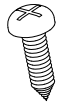
ITEM	P.C.	L
 PR041942	2 P.C.	1.942 MM
 PR01456	2 P.C.	1.408 MM
 PR01456	2 P.C.	1.075 MM
 PR01456	2 P.C.	900 MM
 PR01456	2 P.C.	645 MM
 M6X12	16 P.C.	
	4 P.C.	

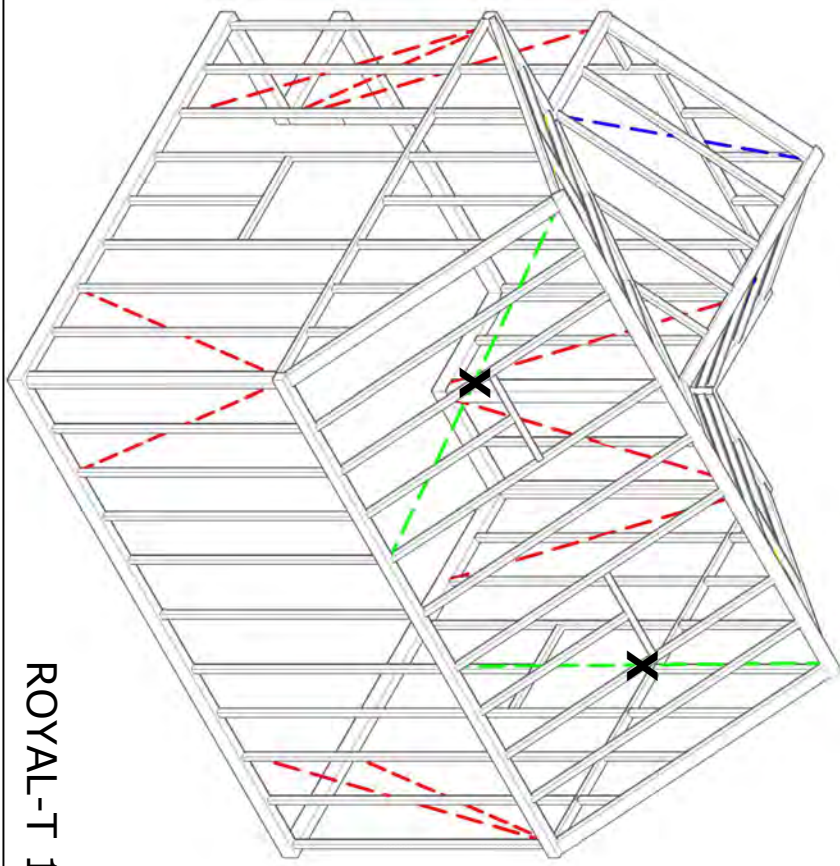
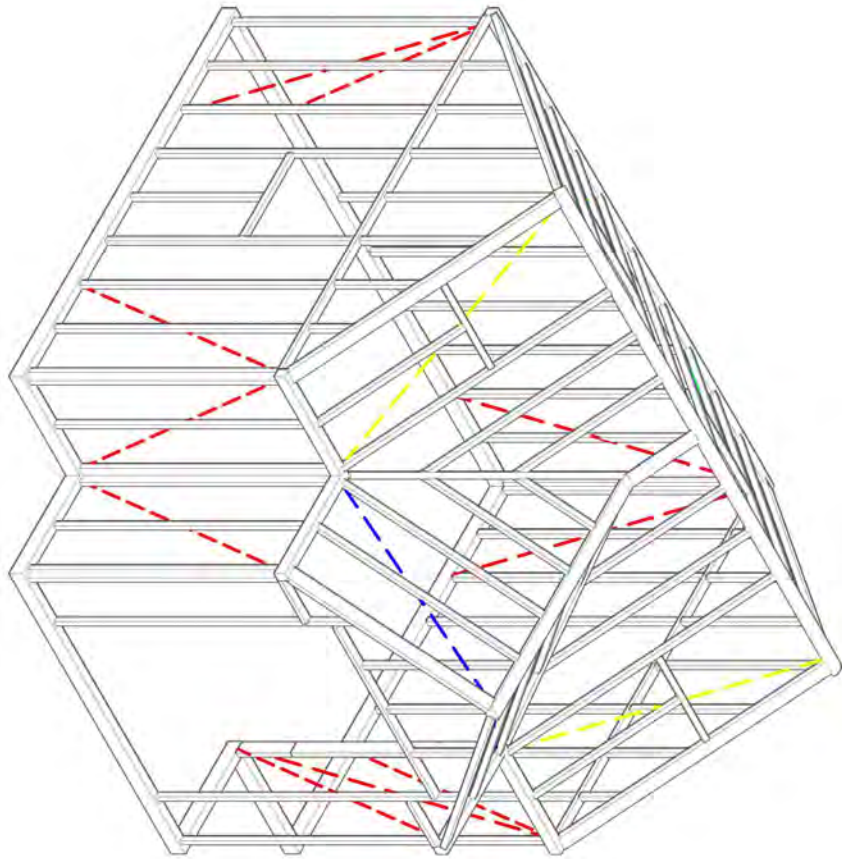
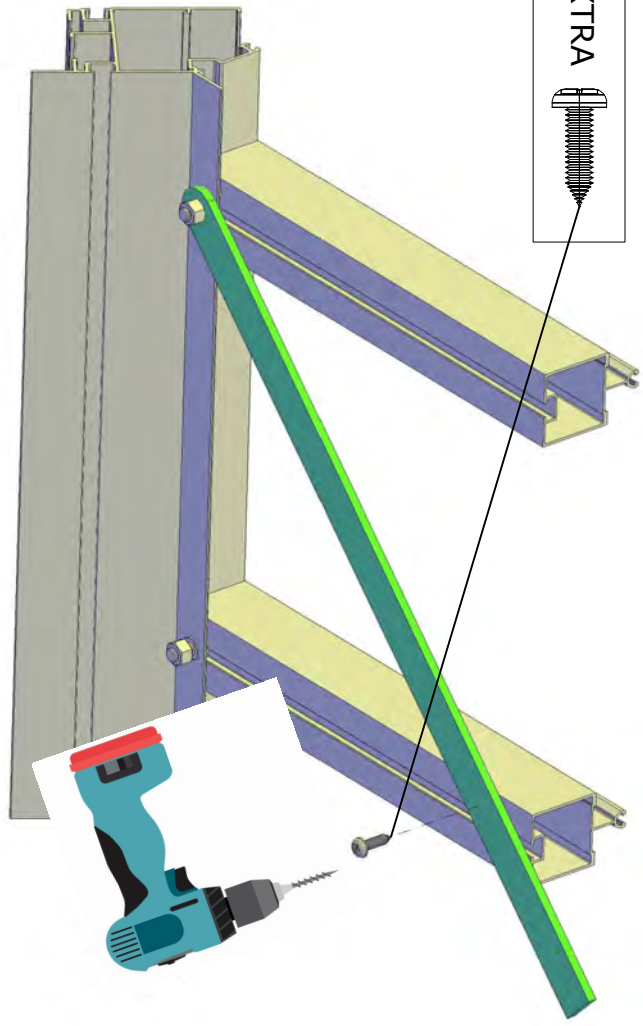
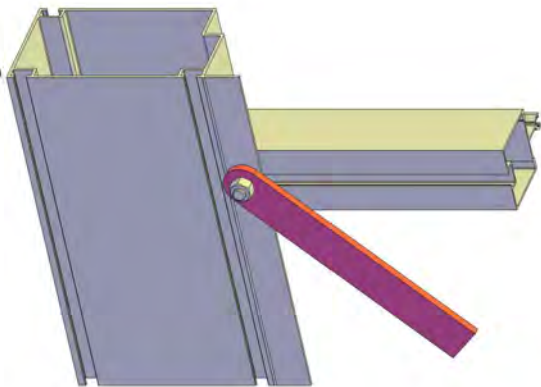
Installing Triangular Glass:
Start from the top and add
framing as you work
towards the lower most
piece.
Leave hardware loose until
all triangular glass is in.



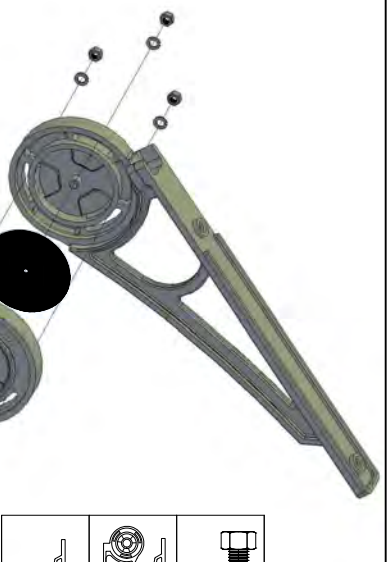
X = EXTRA FIXING / EXTRA BEFESTIGUNG / ATTACH EXTRA

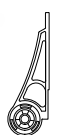
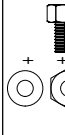
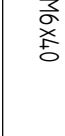


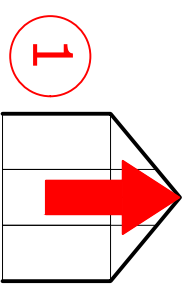
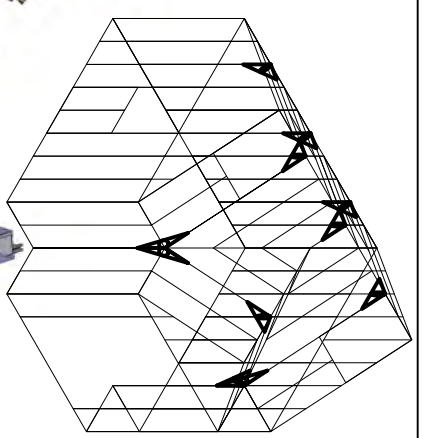
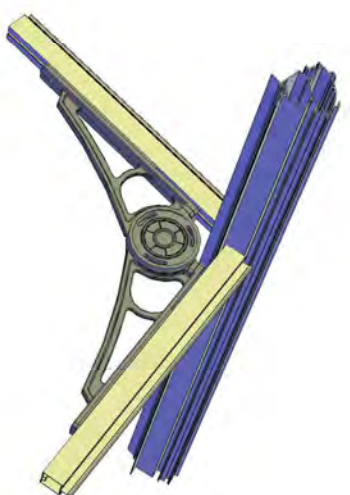
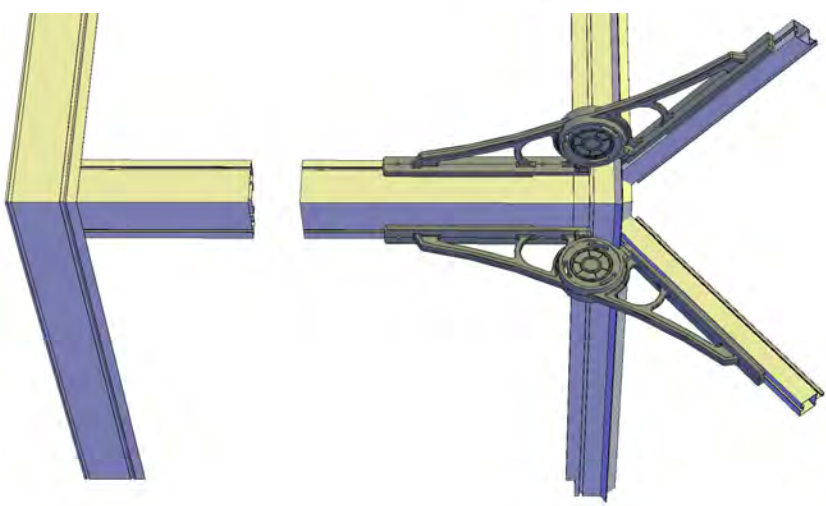
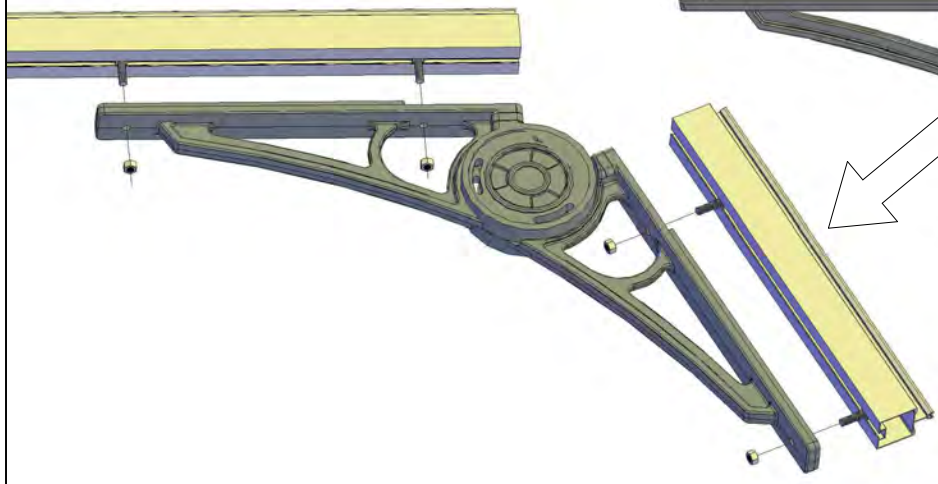
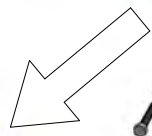
ITEM	P.C.	L
TRE	10 P.C.	1.795 MM
TRE	2 P.C.	1.611 MM
TRE	2 P.C.	2.356 MM
TRE	2 P.C.	1.975 MM
	2 P.C.	



ROYAL-T 18



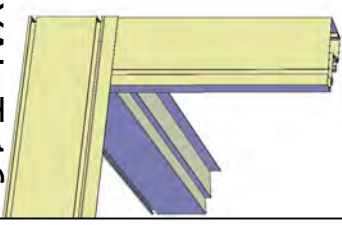
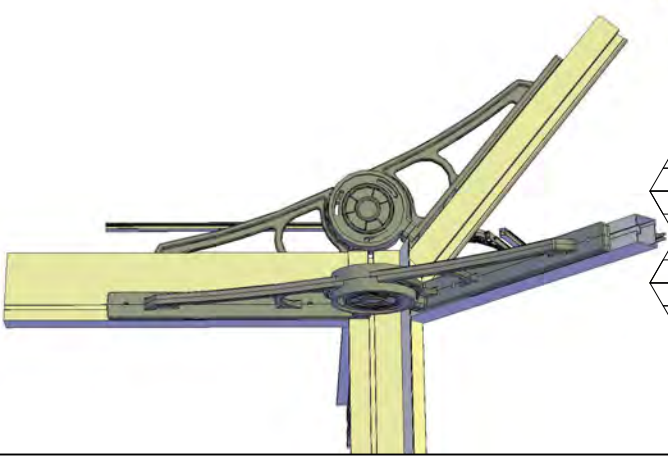
ITEM	PC.
   M6x40	33 PC.
   10 SETS	1 PC.

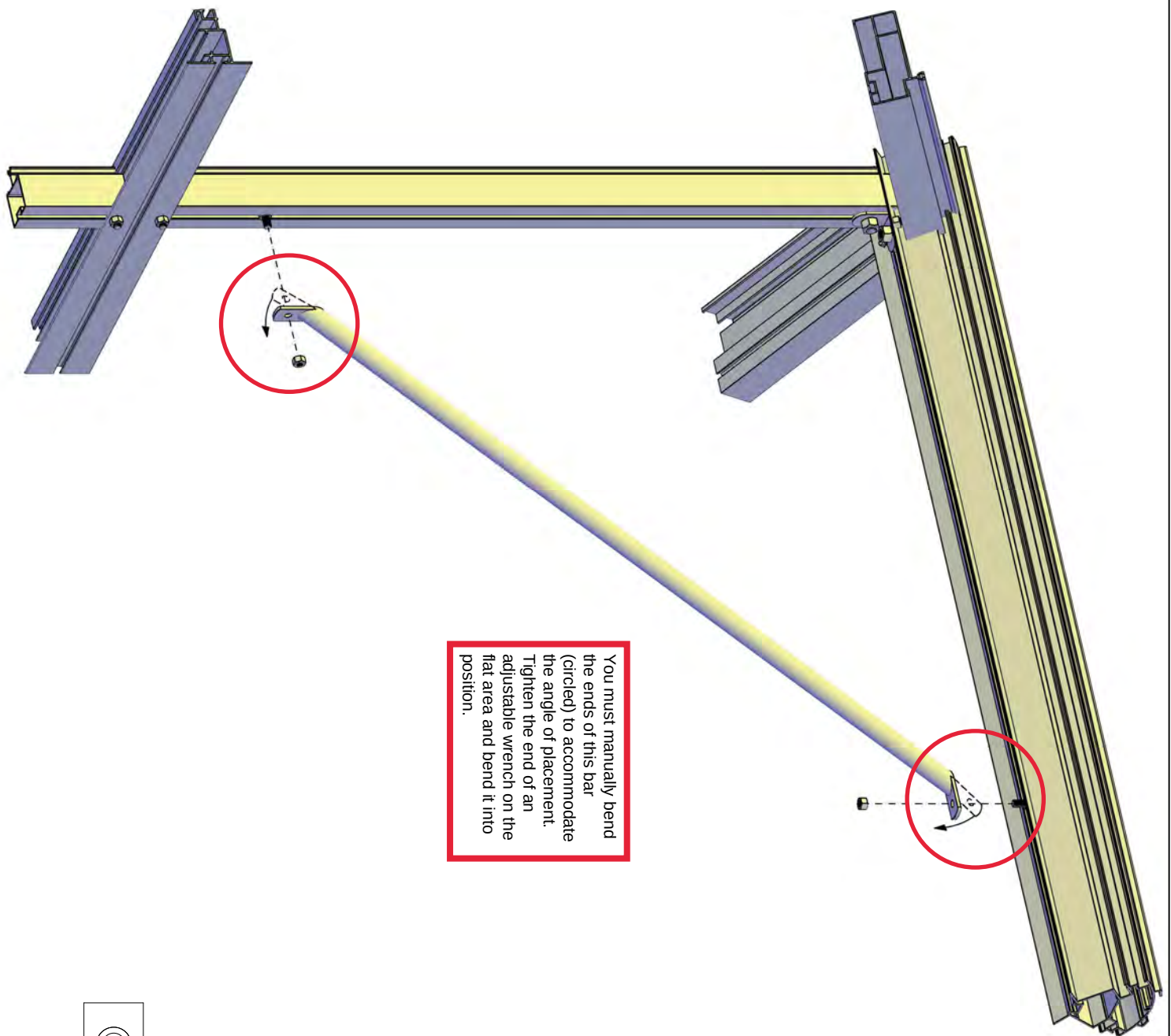
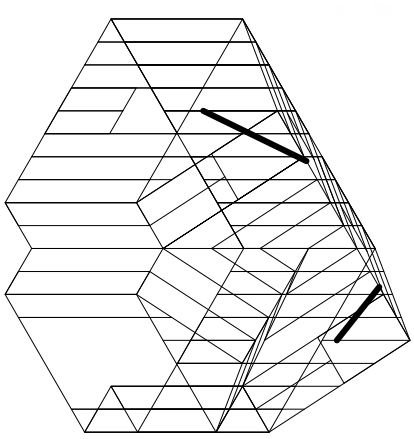


**PUSH
10MM**



2 FIX

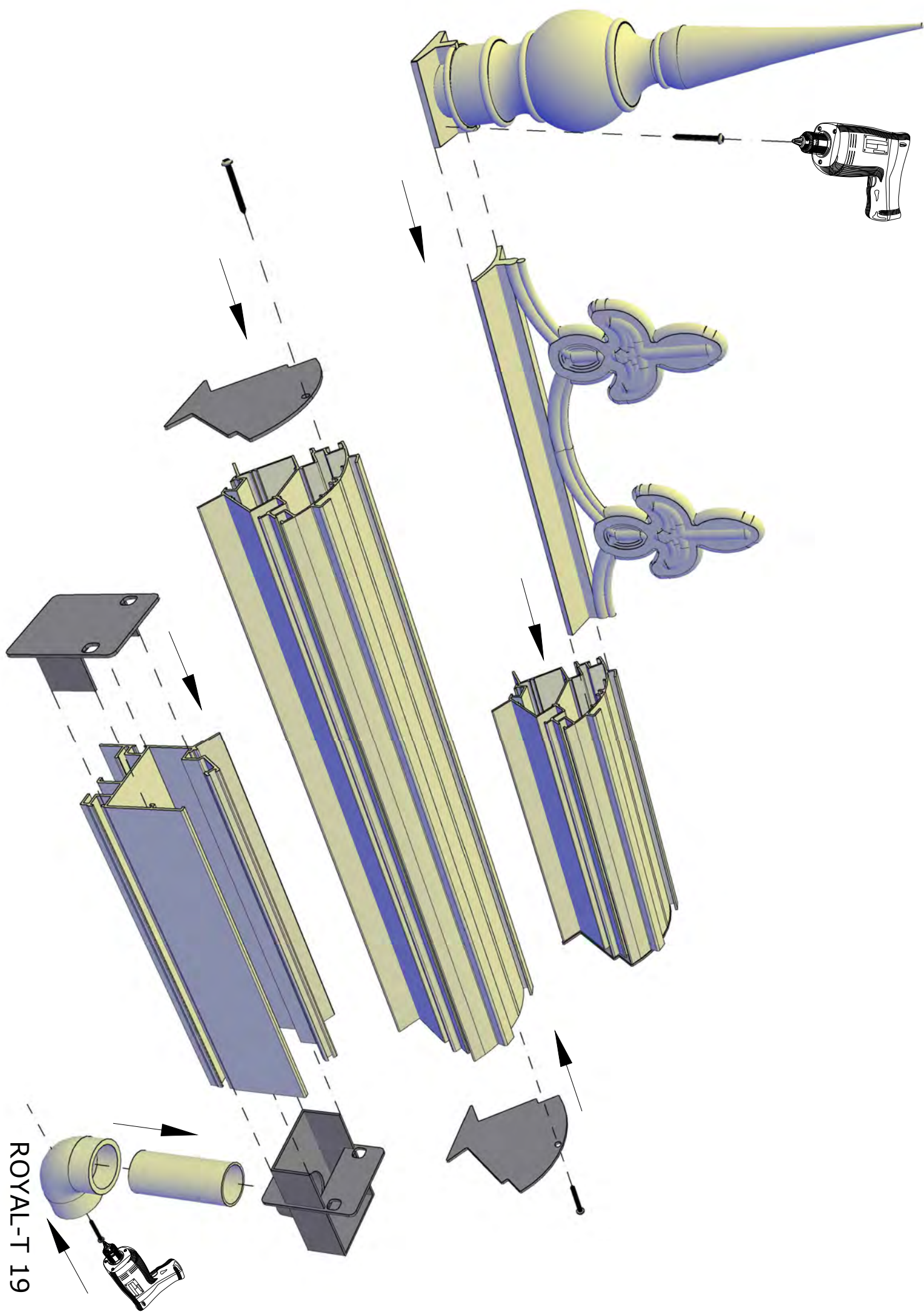


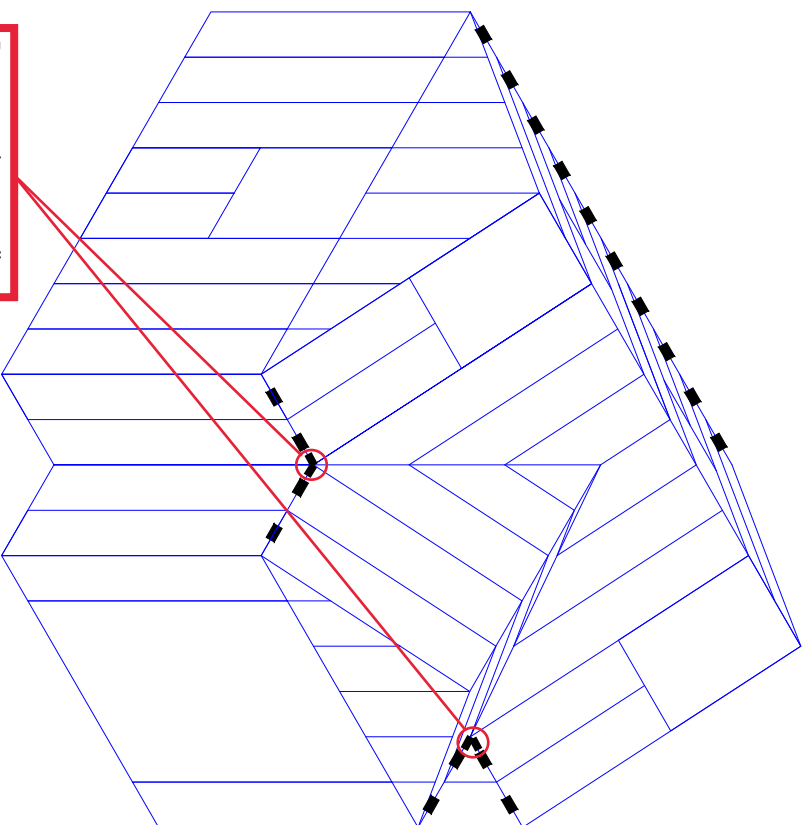


You must manually bend the ends of this bar (circled) to accommodate the angle of placement. Tighten the end of an adjustable wrench on the flat area and bend it into position.

ITEM	P.C.	L
	2 P.C.	1.030 MM

ROYAL-T 17

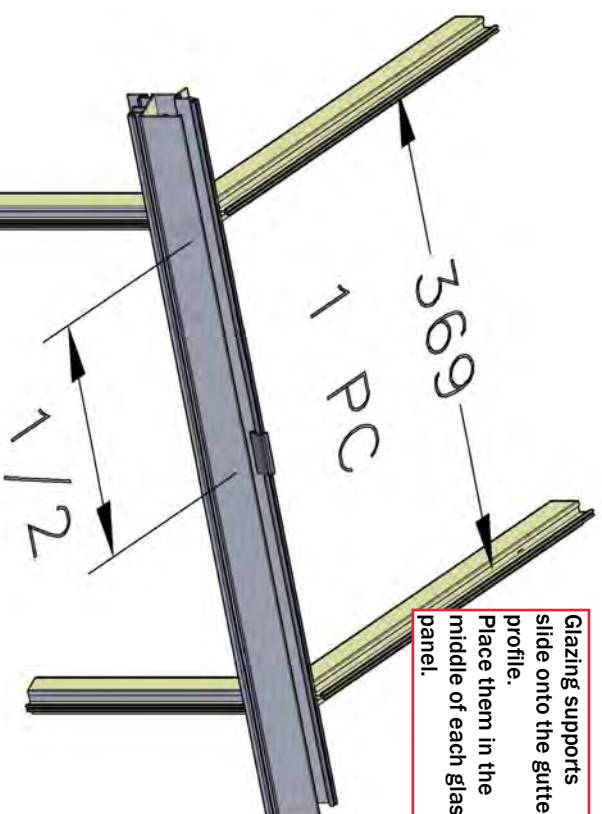
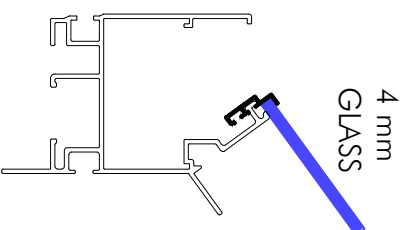
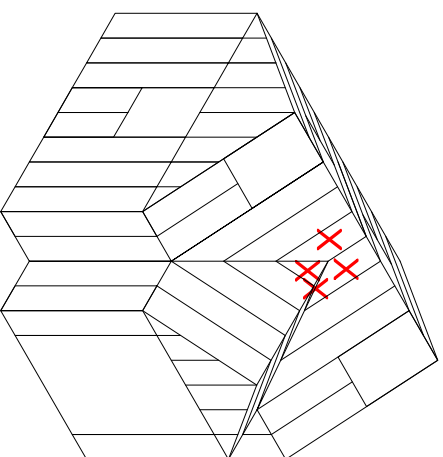




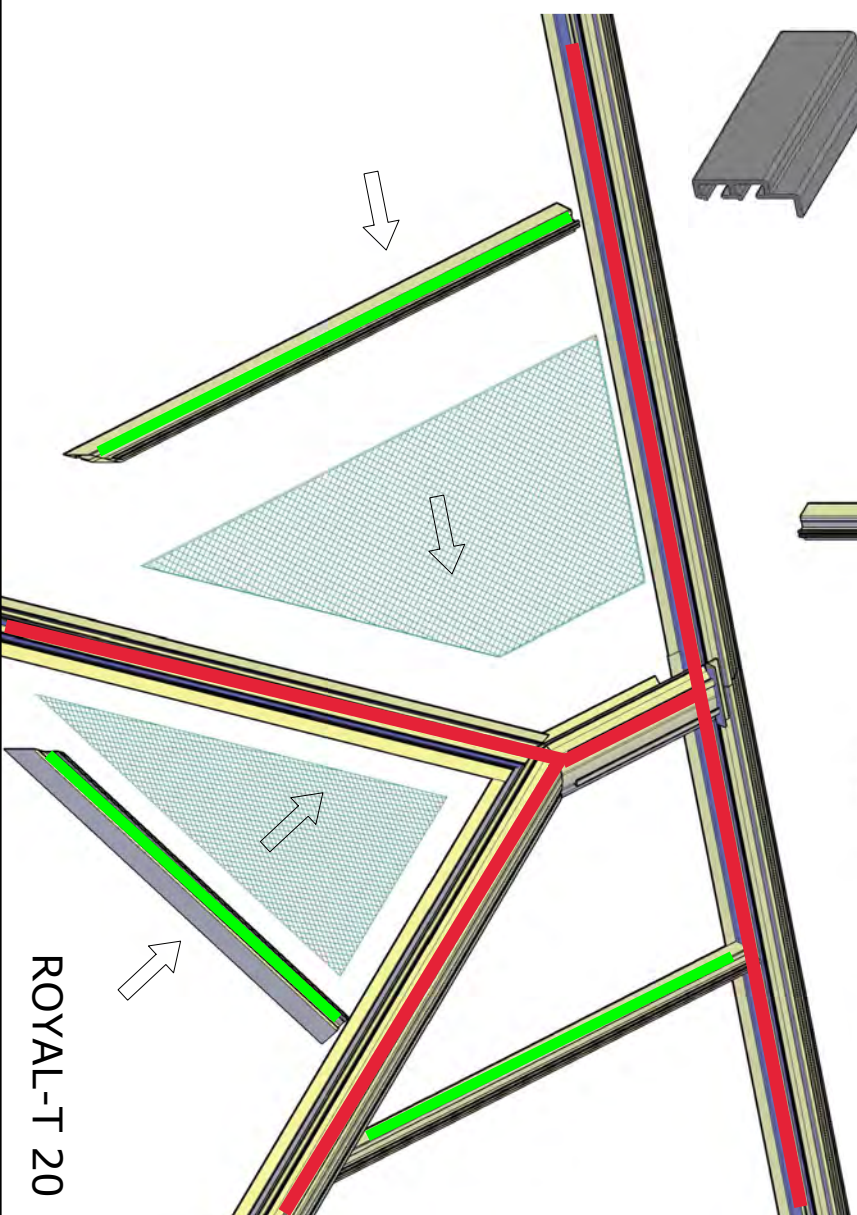
Be sure to place two clips to reinforce each of the interior corners and prevent glass from sliding

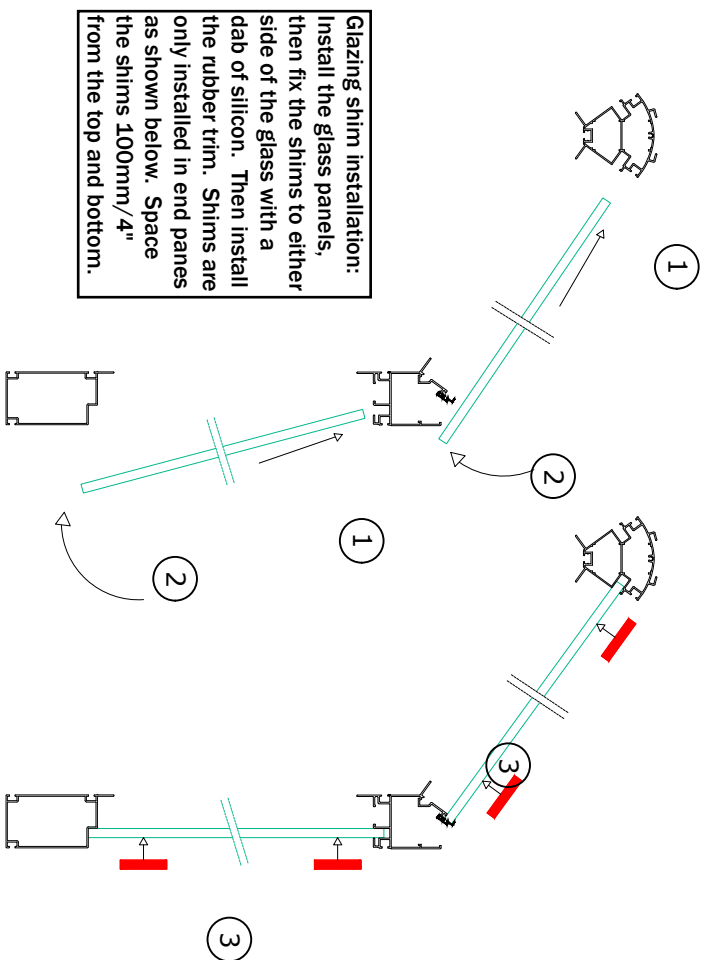
These illustrations outline the steps for installing certain roof glass pieces (marked by red X's in the diagram to the right).

- 1) Locate the portion of the frame indicated in the diagram (RED lines)
- 2) Carefully slide the glass pieces into place
- 3) Fit the frame pieces (GREEN lines) so that each glass pane is held in place from all sides

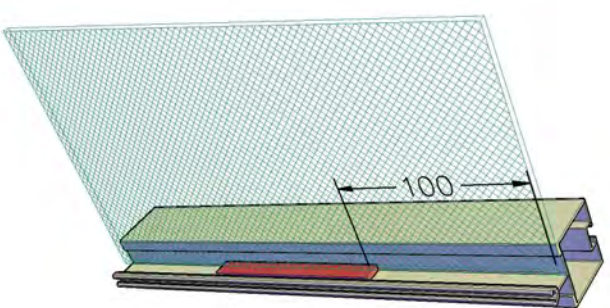


Glazing supports slide onto the gutter profile. Place them in the middle of each glass panel.





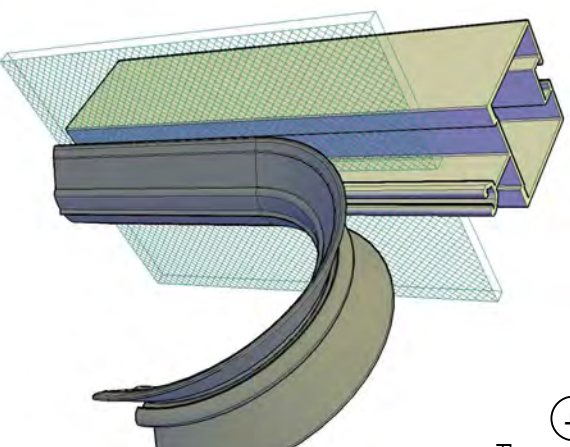
Glazing shim installation:
Install the glass panels, then fix the shims to either side of the glass with a dab of silicon. Then install the rubber trim. Shims are only installed in end panes as shown below. Space the shims 100mm/4" from the top and bottom.



3

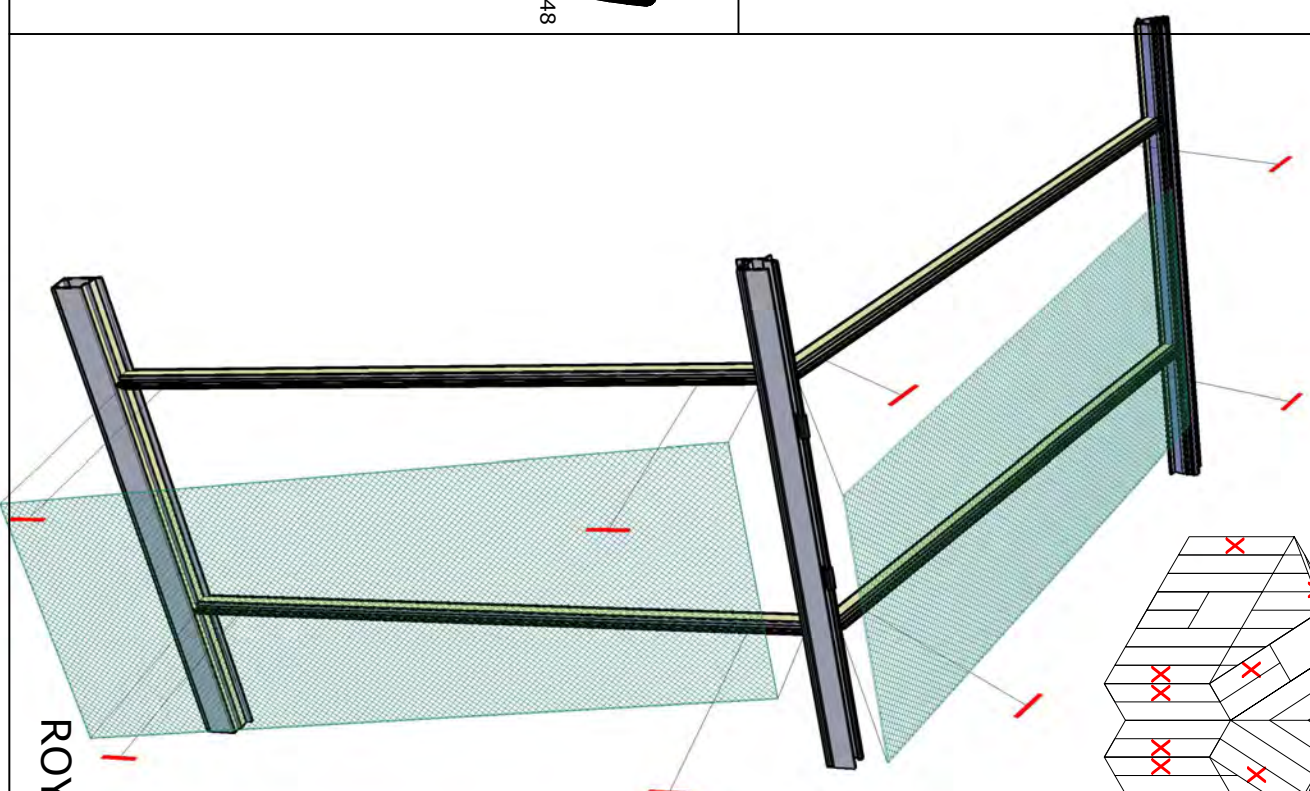
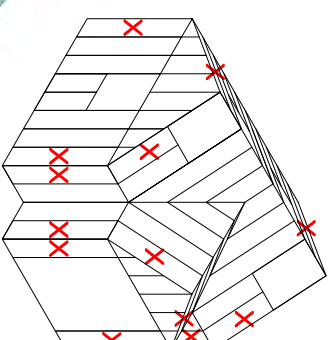


To install gasket, roll it back on itself as shown. The inner rib is pushed into the channel. If cold place rubber in the sun. It will be easier to insert when warm and pliable.



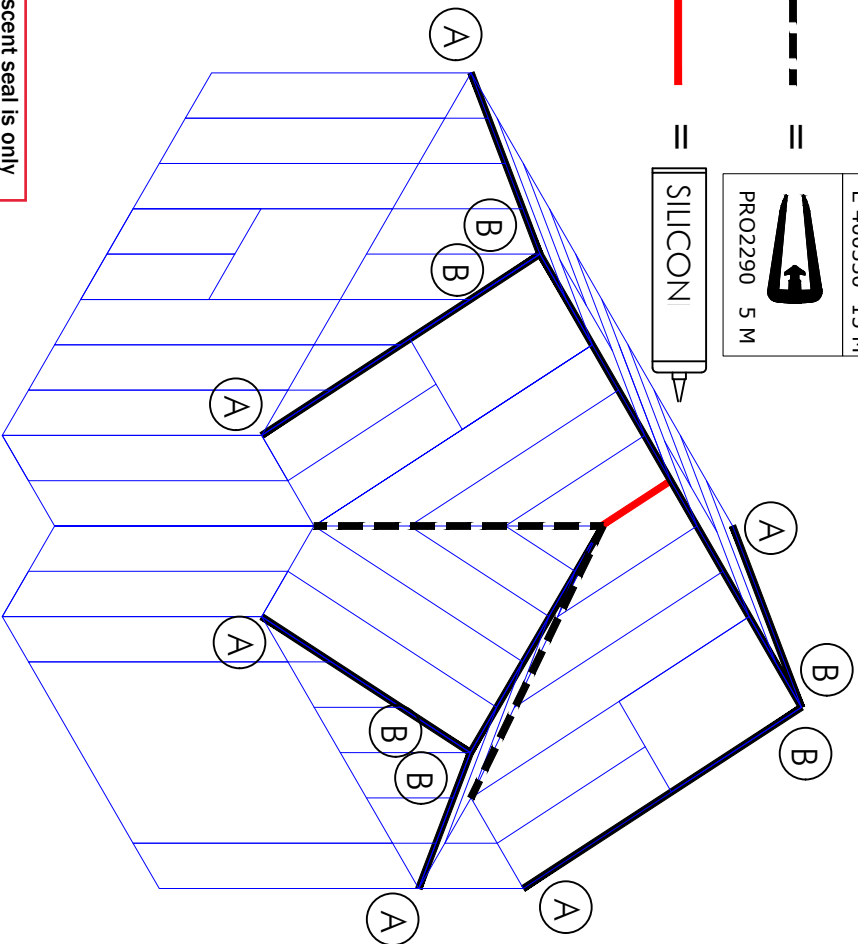
4

Pro 1748

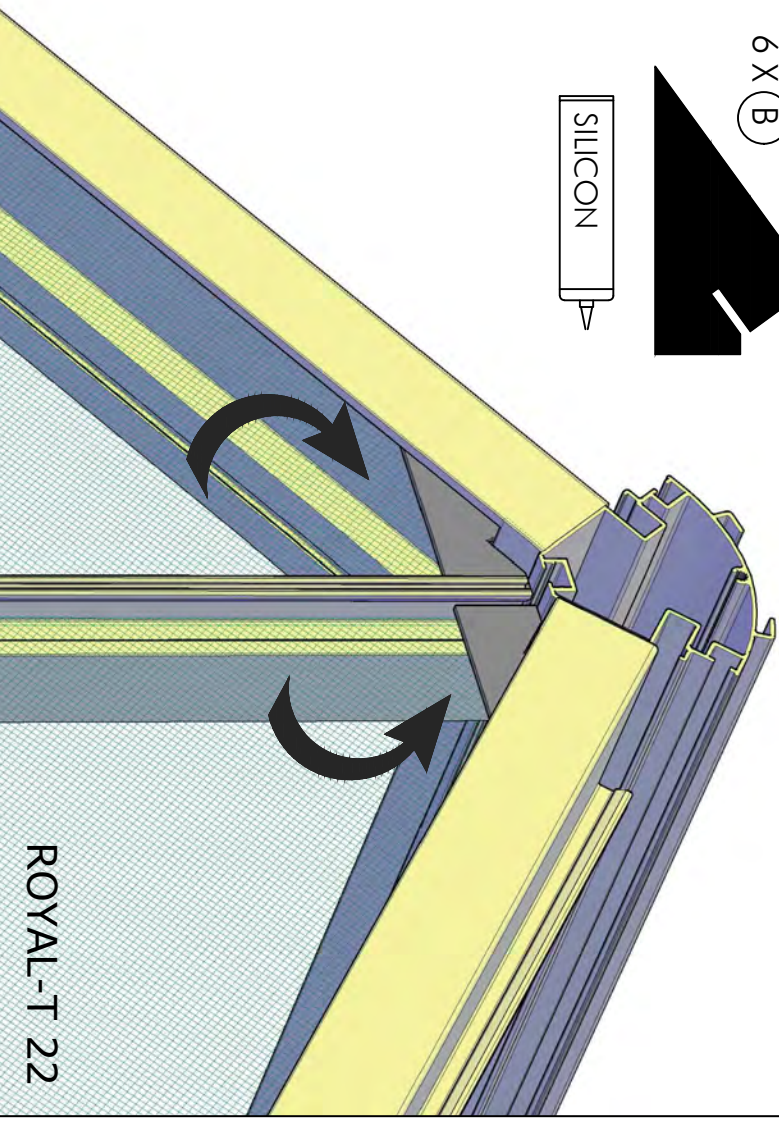
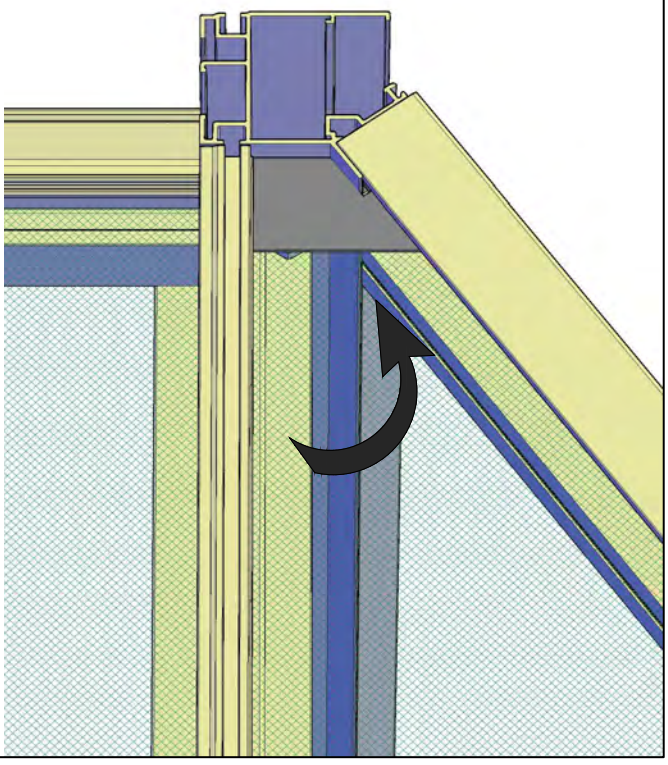
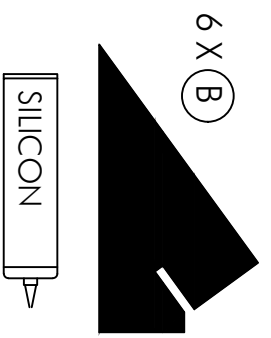
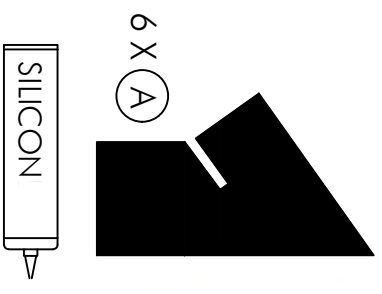
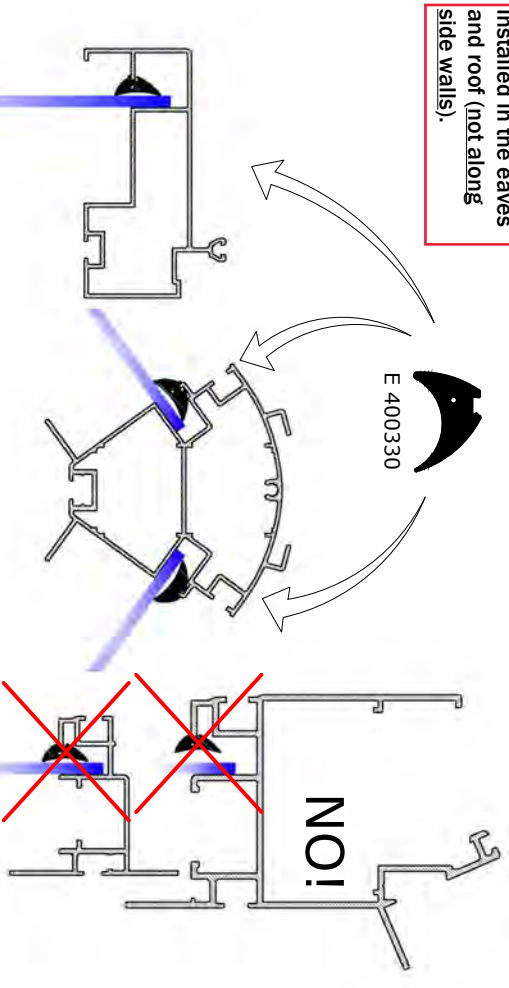


ROYAL-T 21

	=		E 400330 15 M
	=		PRO2290 5 M
	=		SILICON



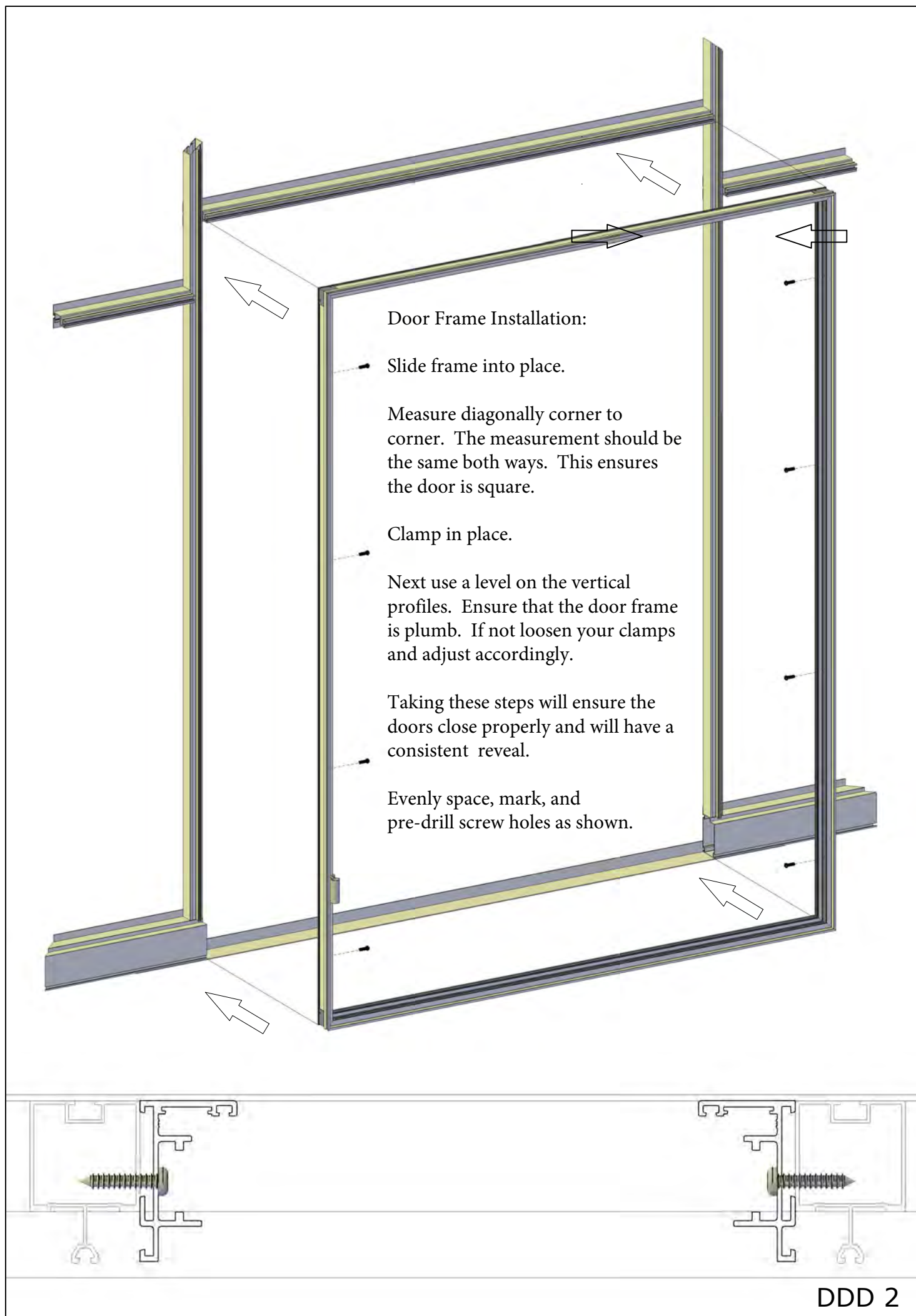
Crescent seal is only installed in the eaves and roof (not along side walls).

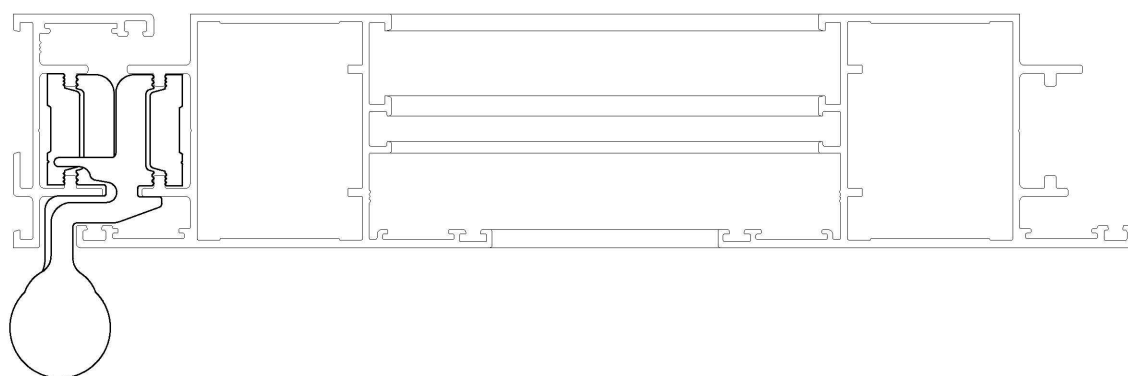
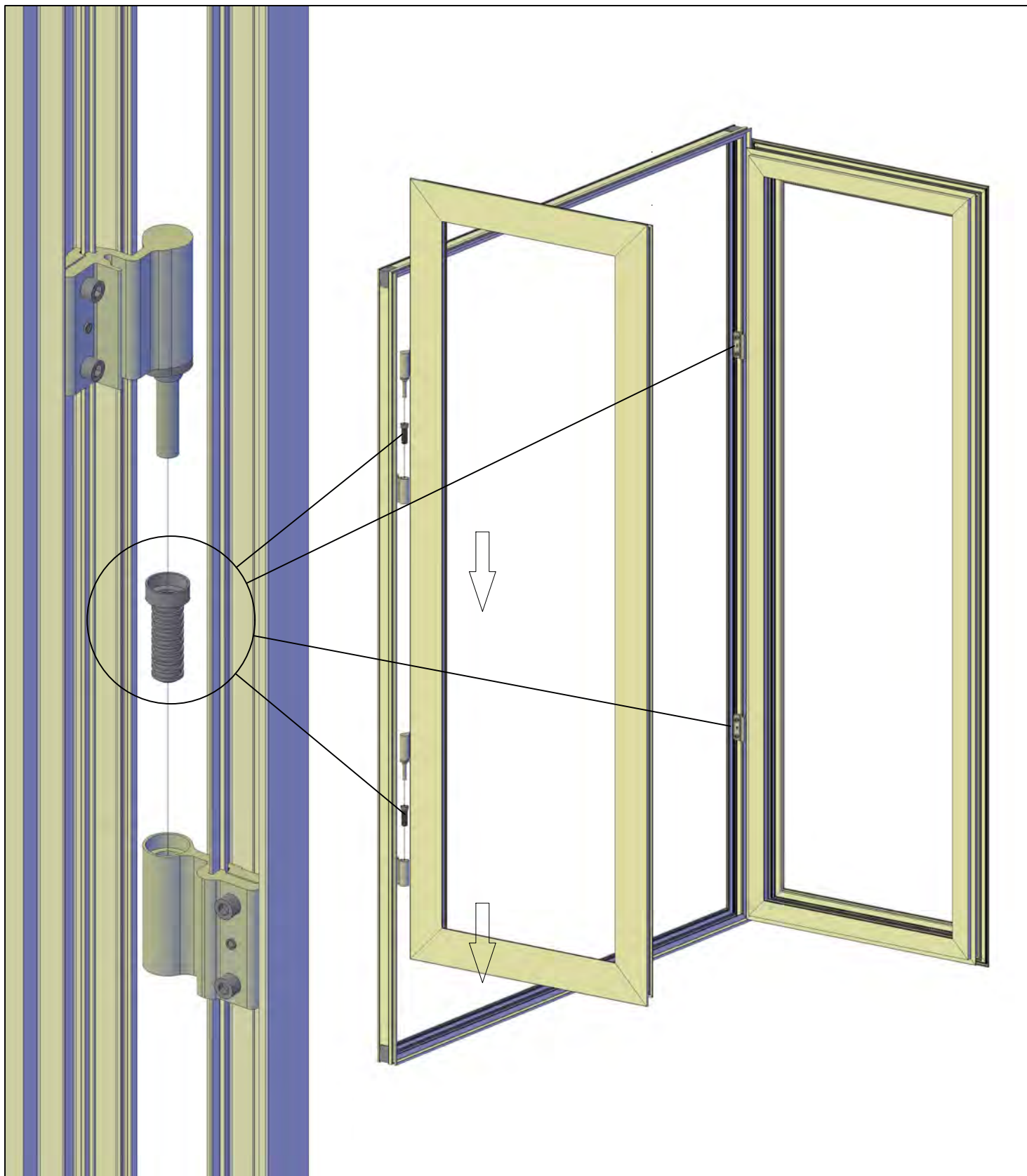


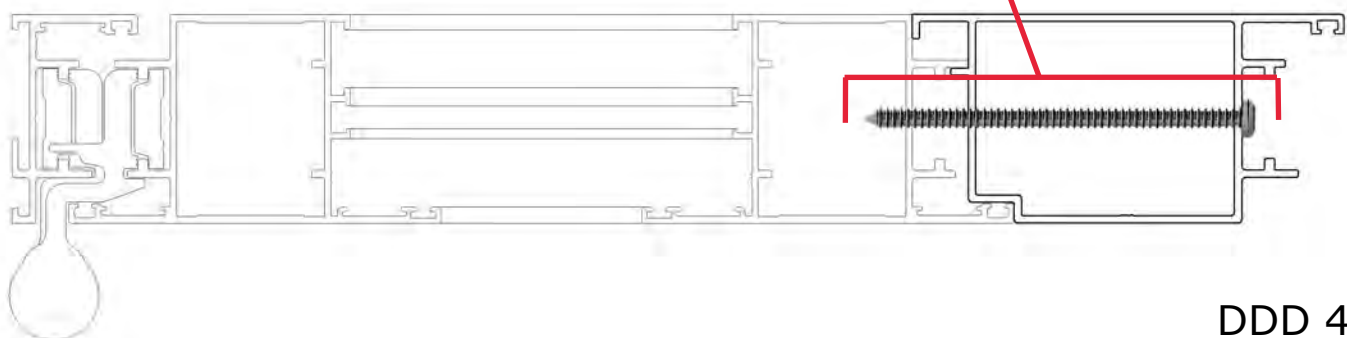
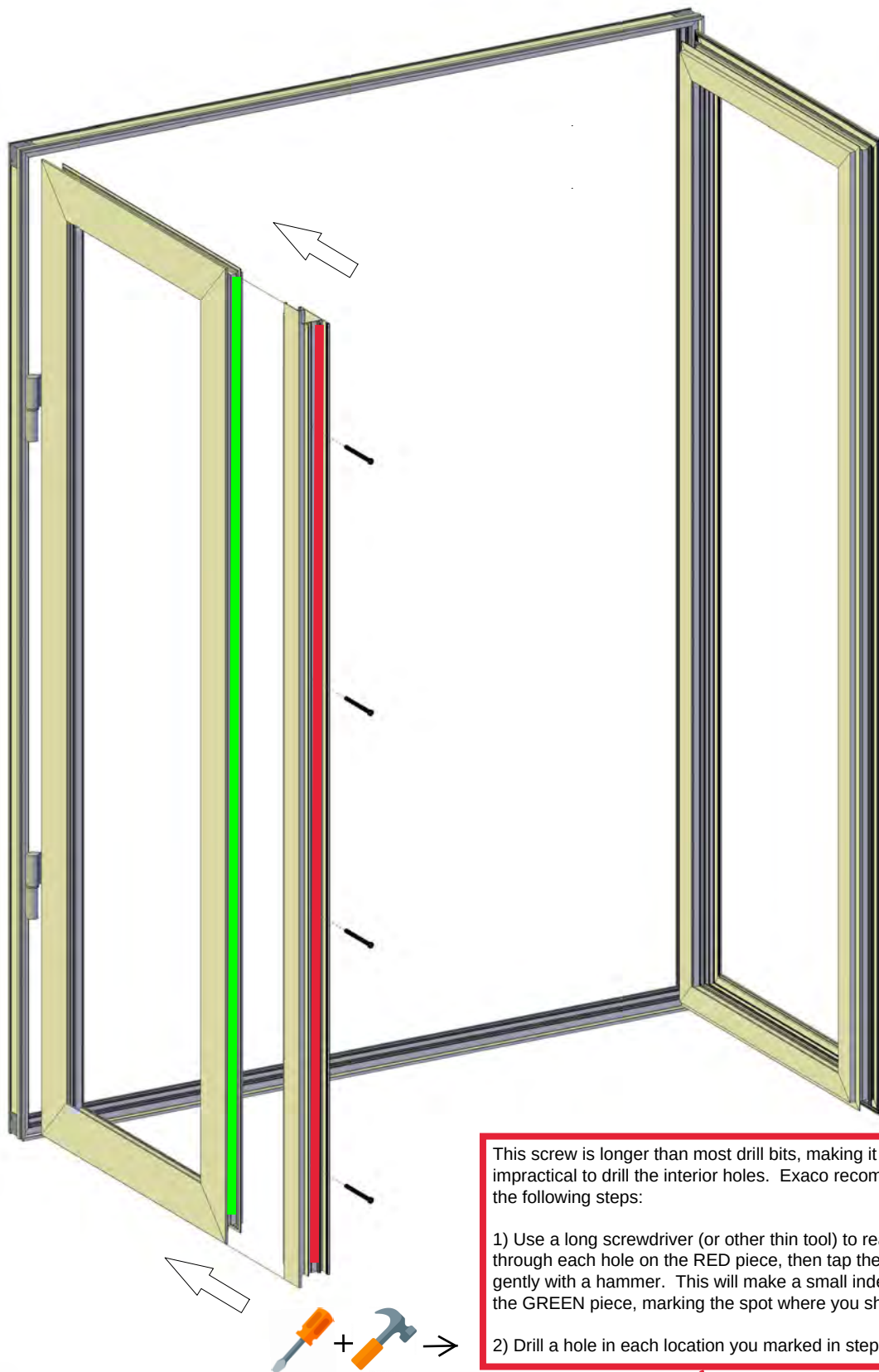


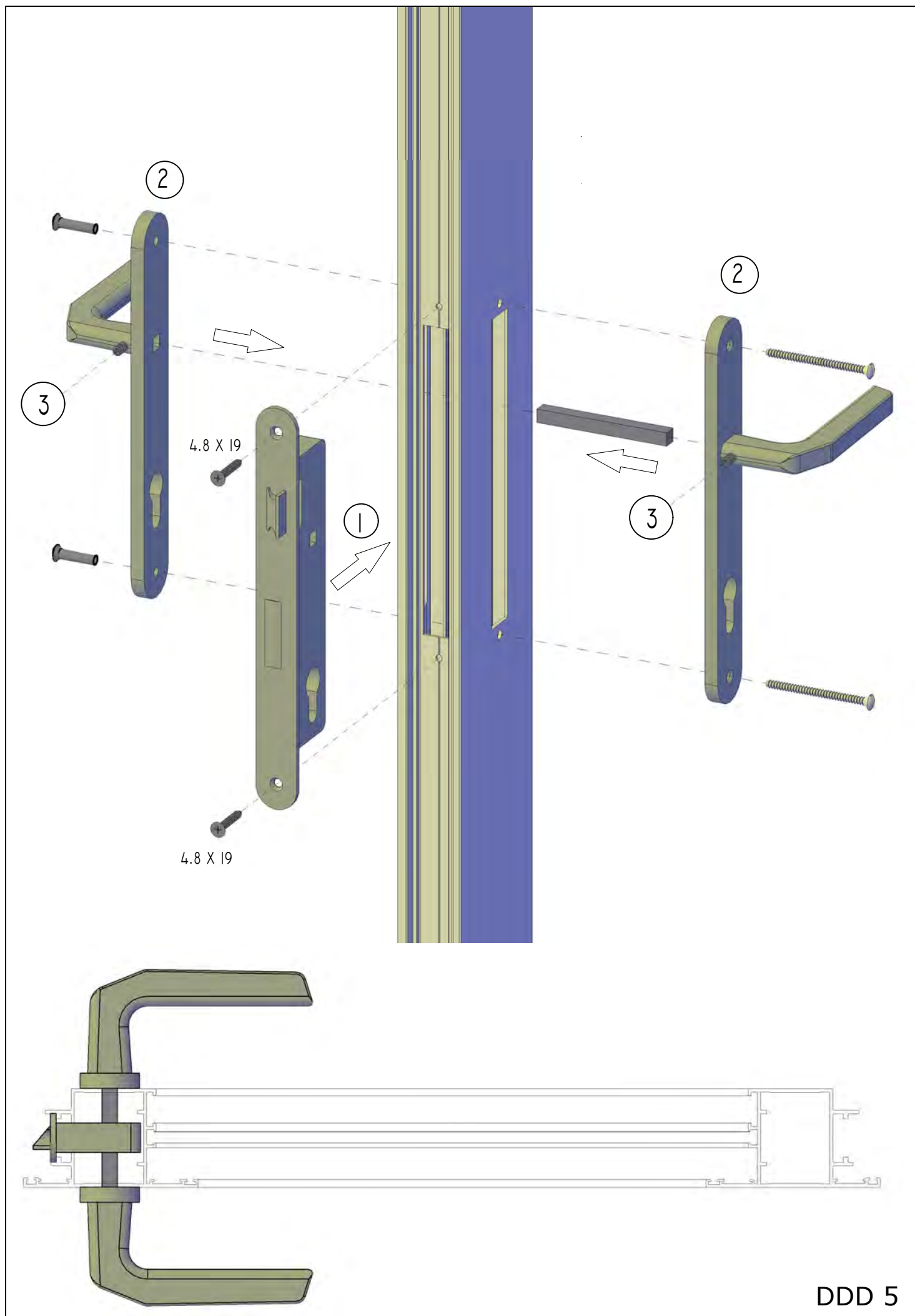
	ITEM	PC.	L
	L 40X40	4 PC	36 MM
	PR06280	2 PC	1.441 MM
	PR06280	2 PC	1.930 MM
		8 PC	

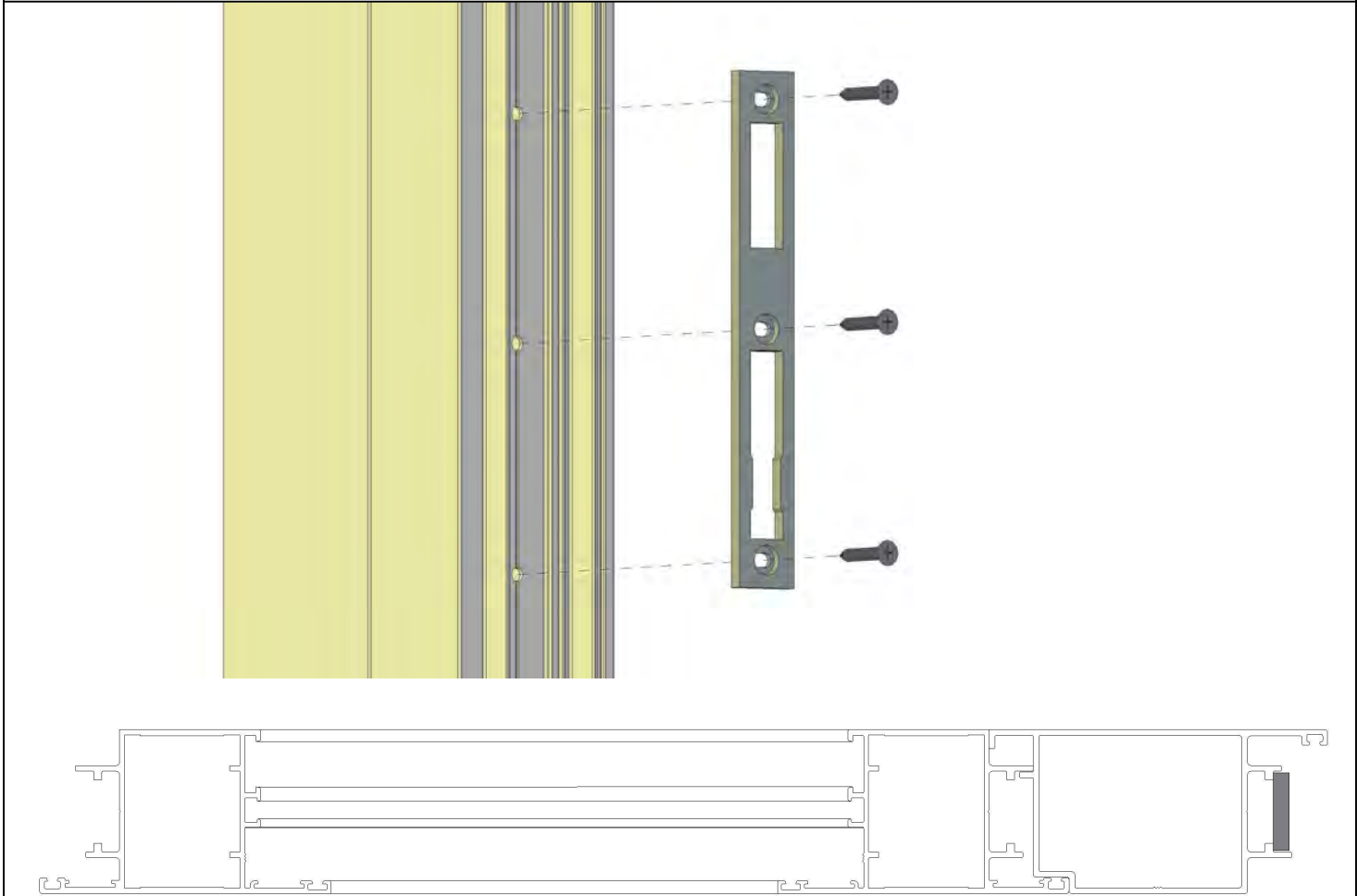
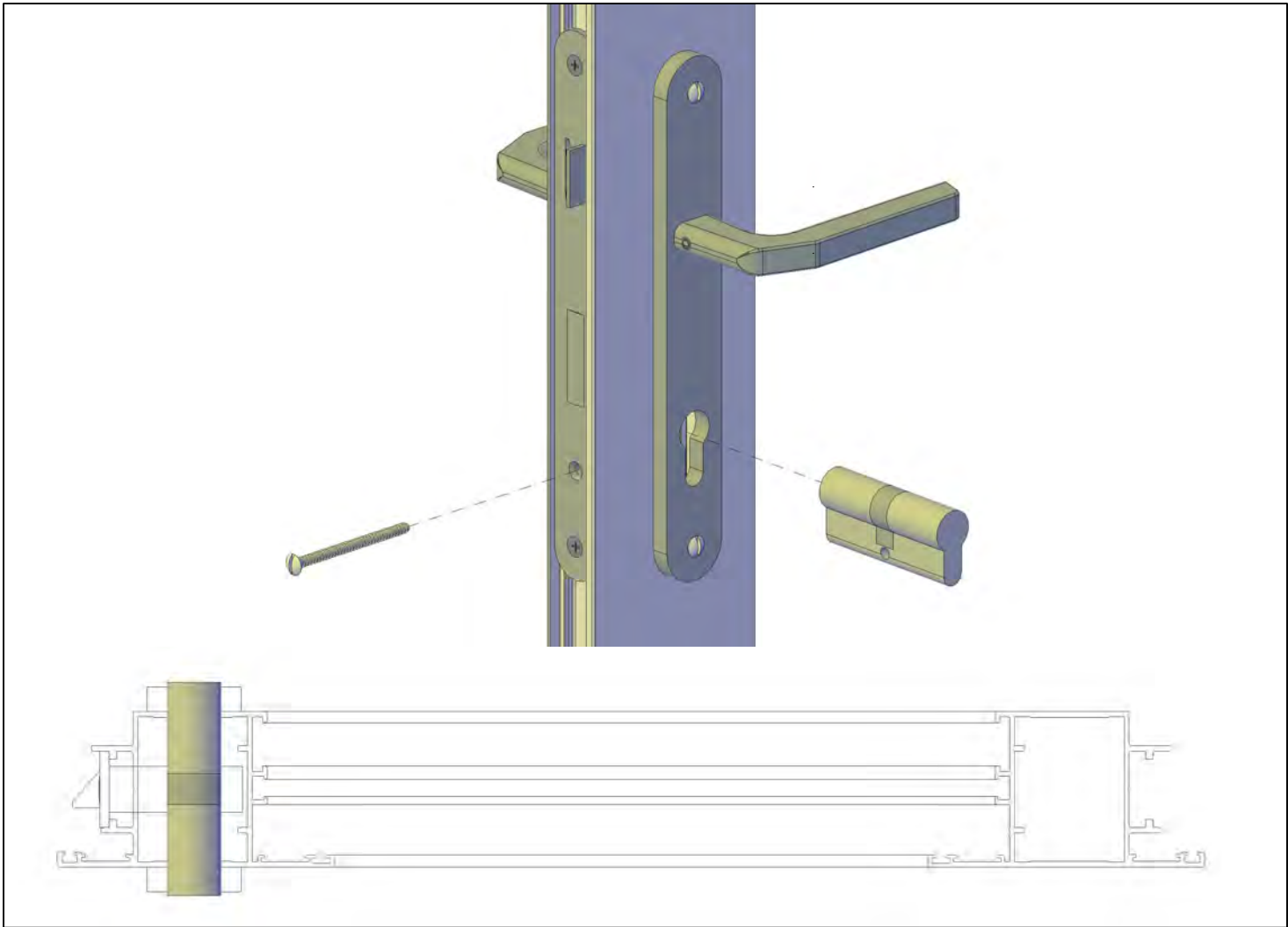
Note: Your greenhouse kit may include more door frame pieces than are necessary for complete assembly.

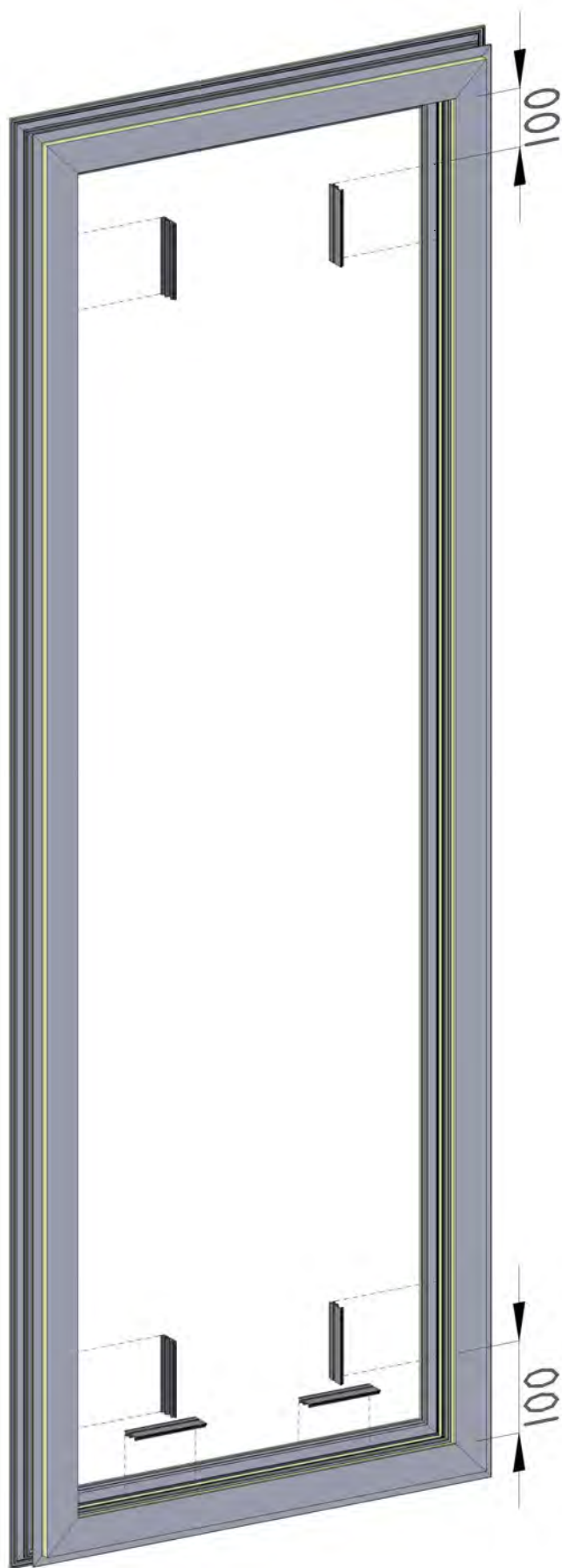


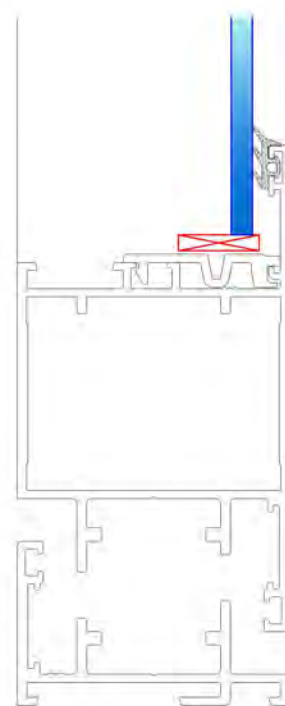
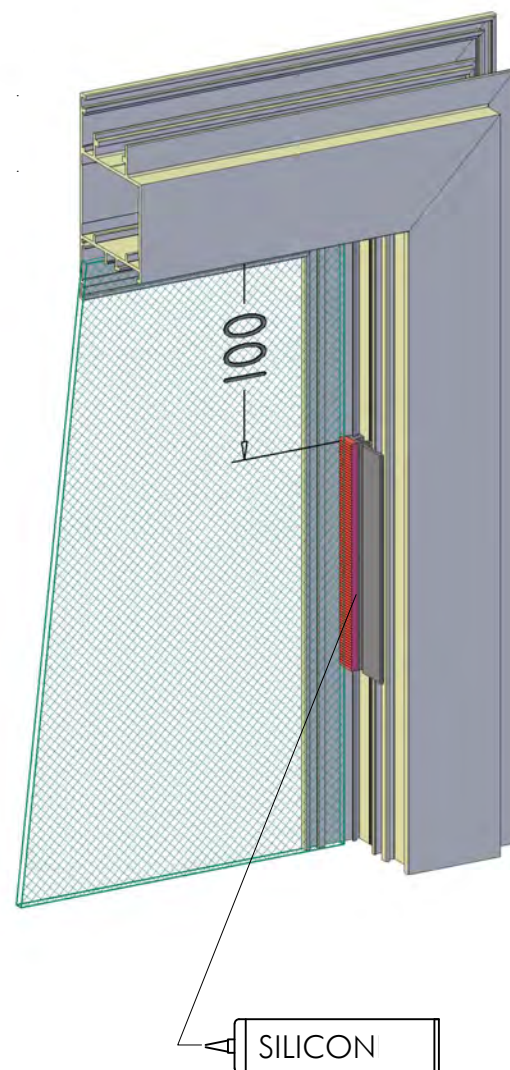
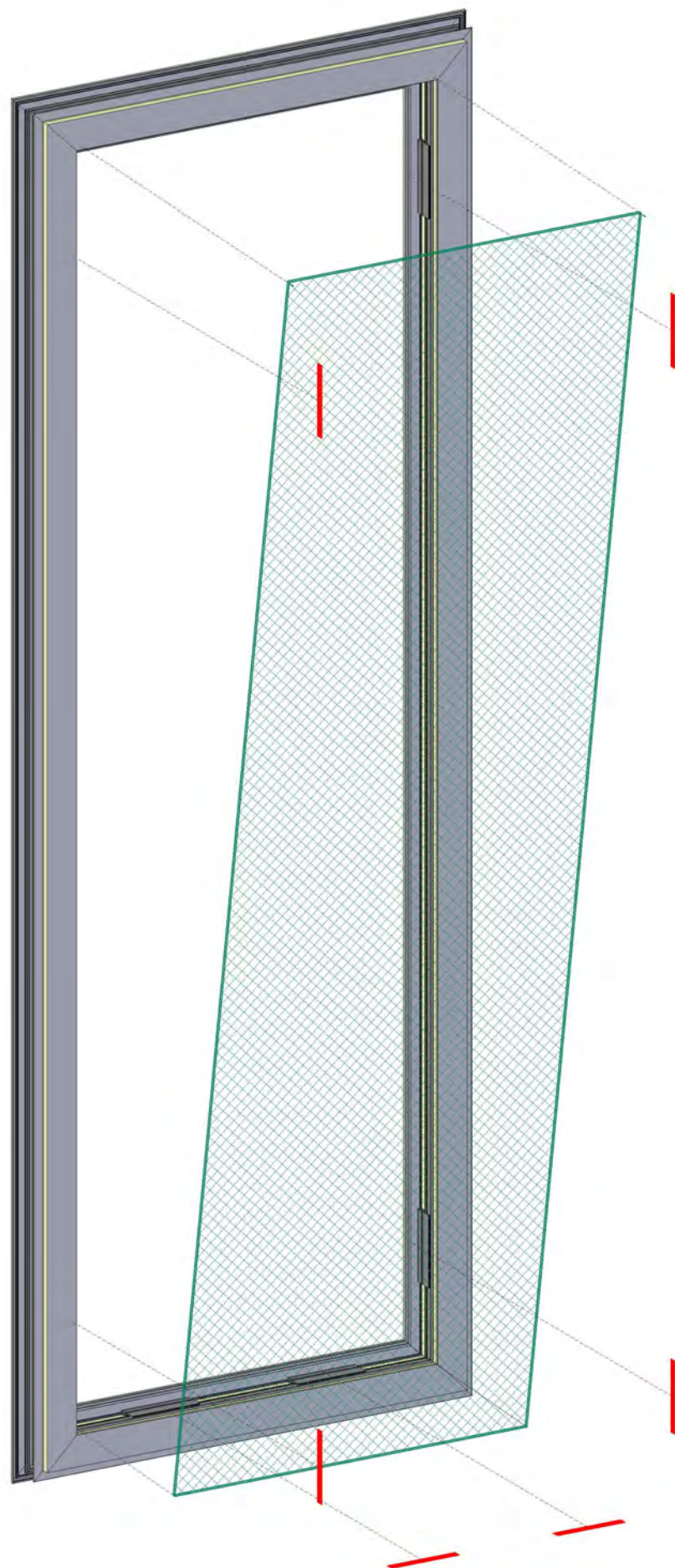


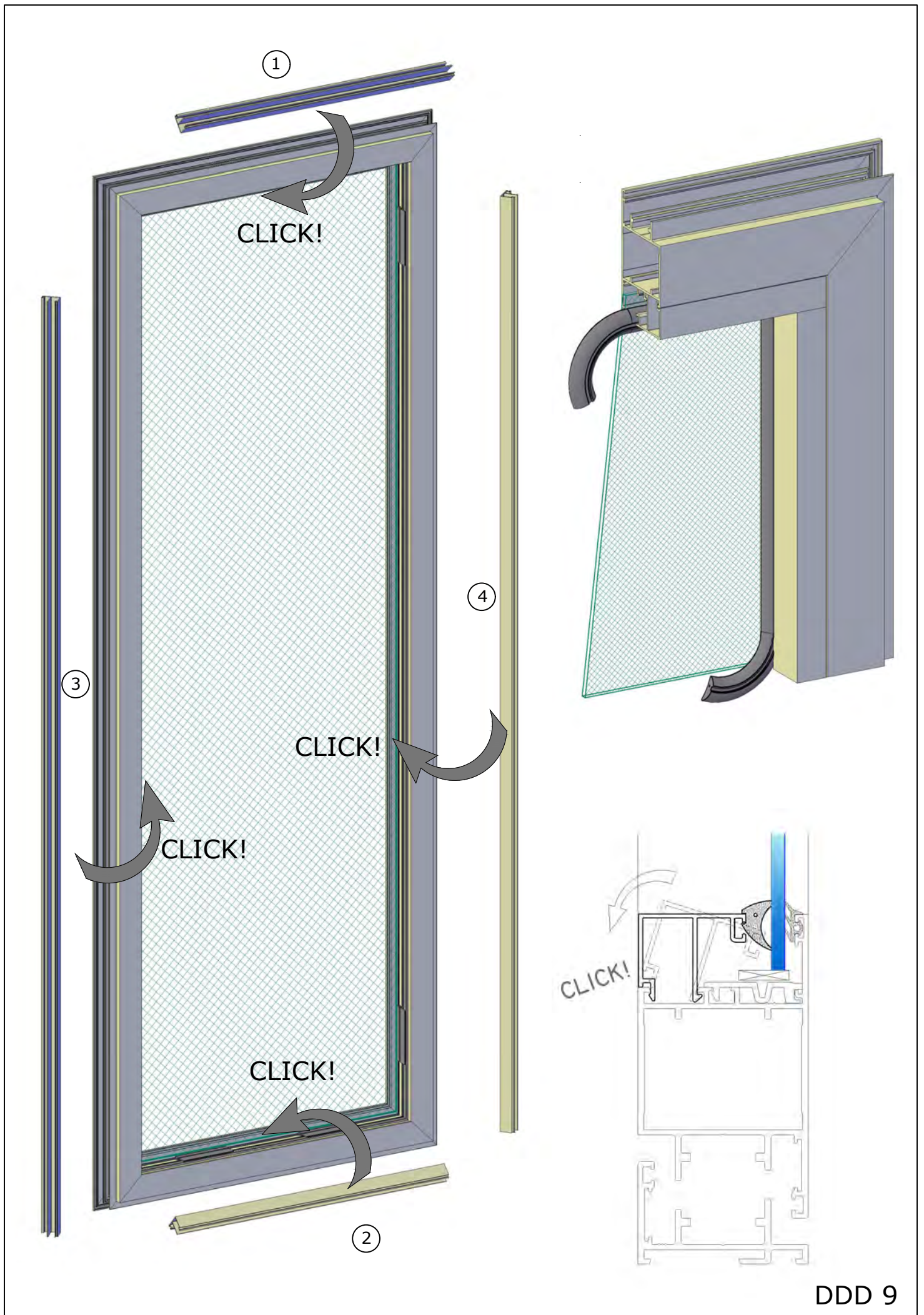


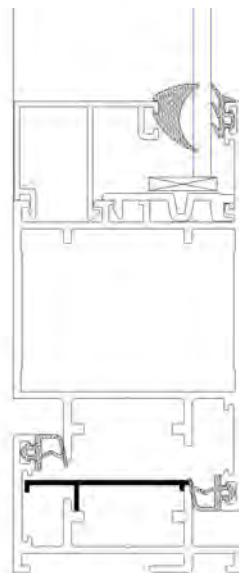
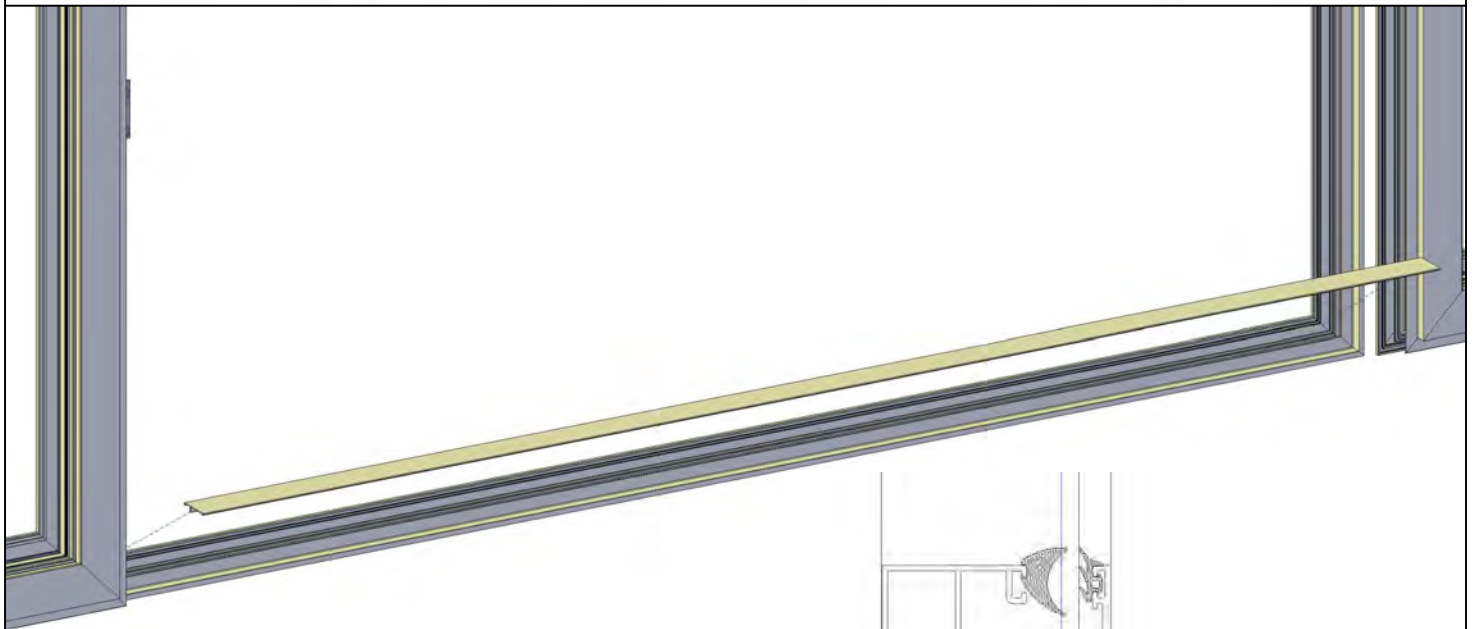
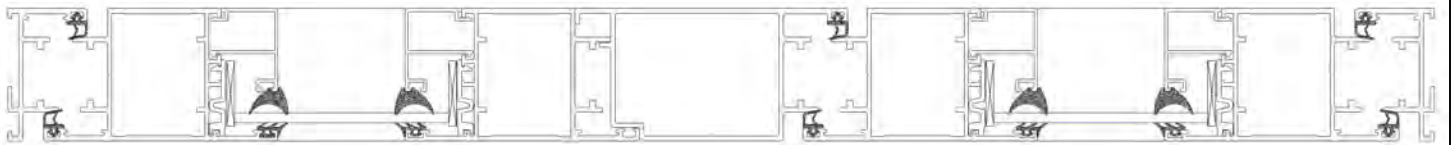


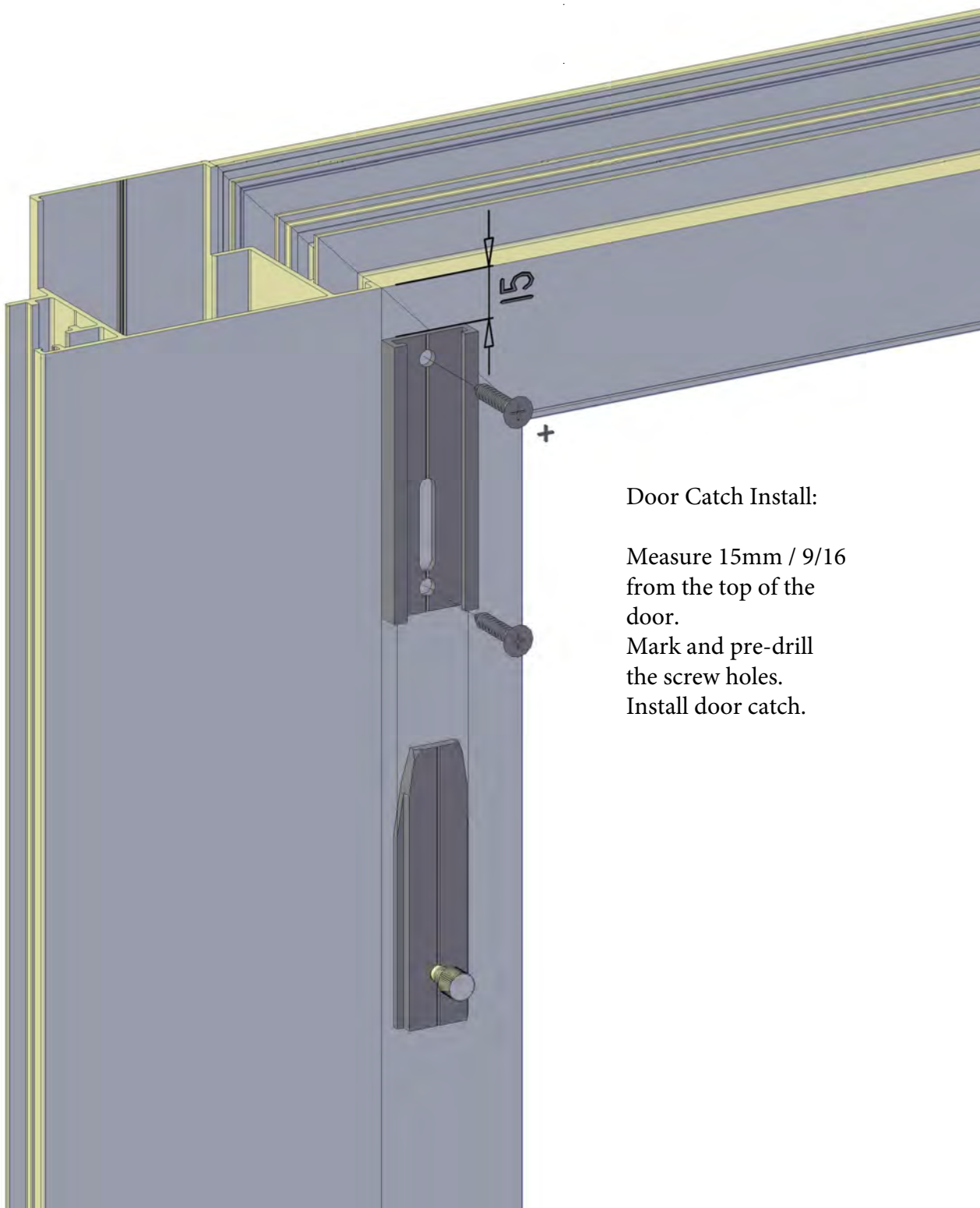










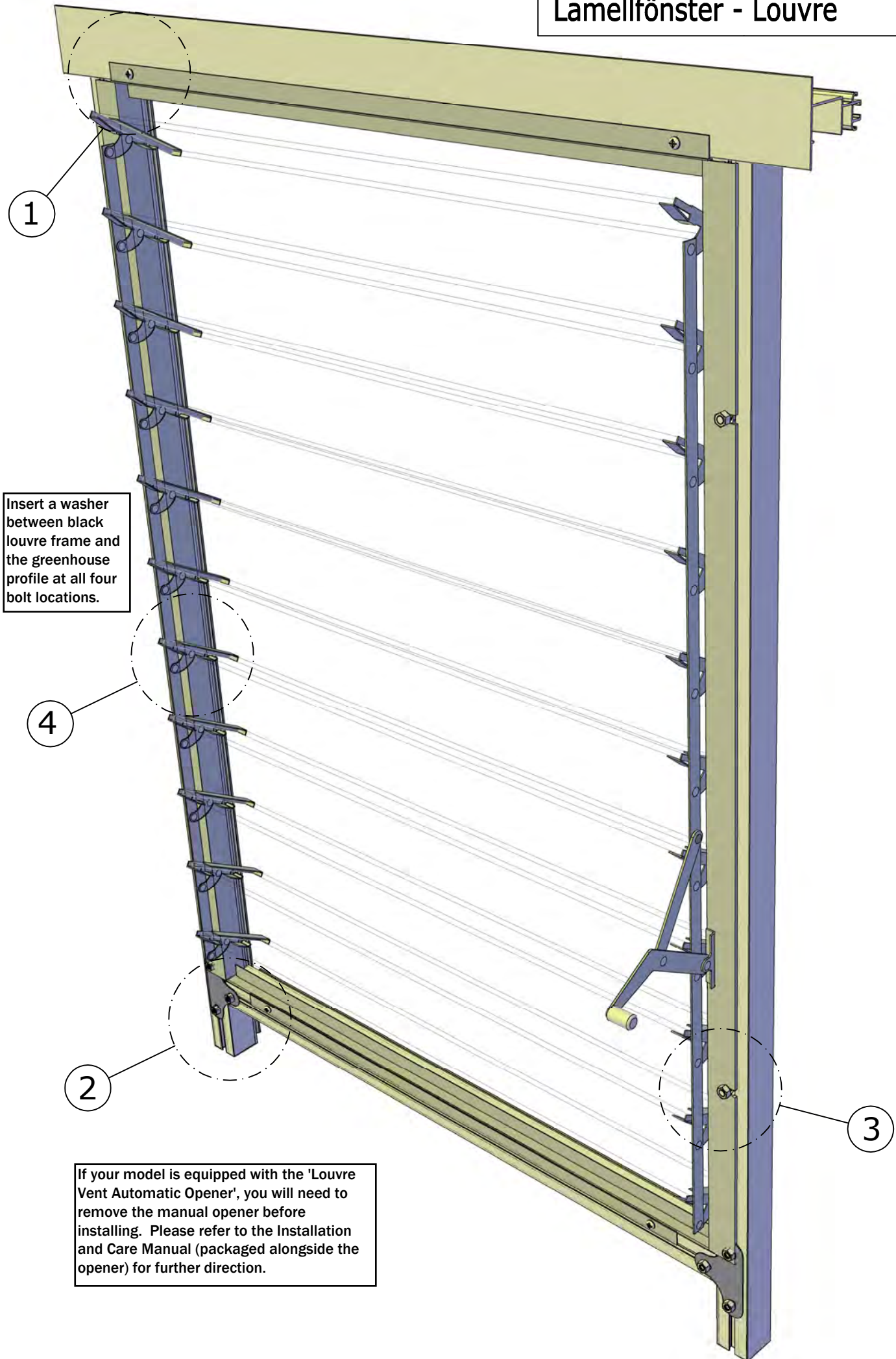


Door Catch Install:

Measure 15mm / 9/16
from the top of the
door.
Mark and pre-drill
the screw holes.
Install door catch.

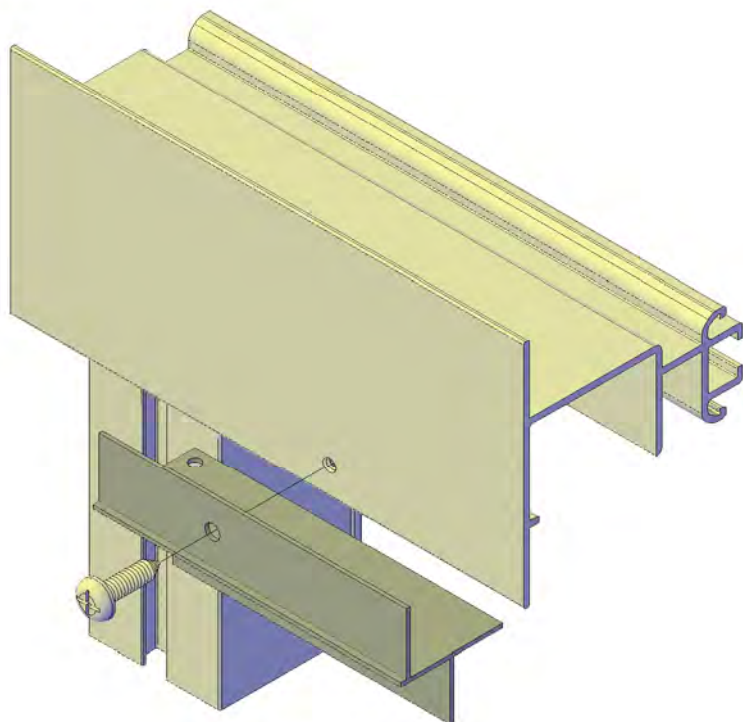


Lammelenraam - Lamellenfenster - Louvre vent Lamellfenster - Louvre

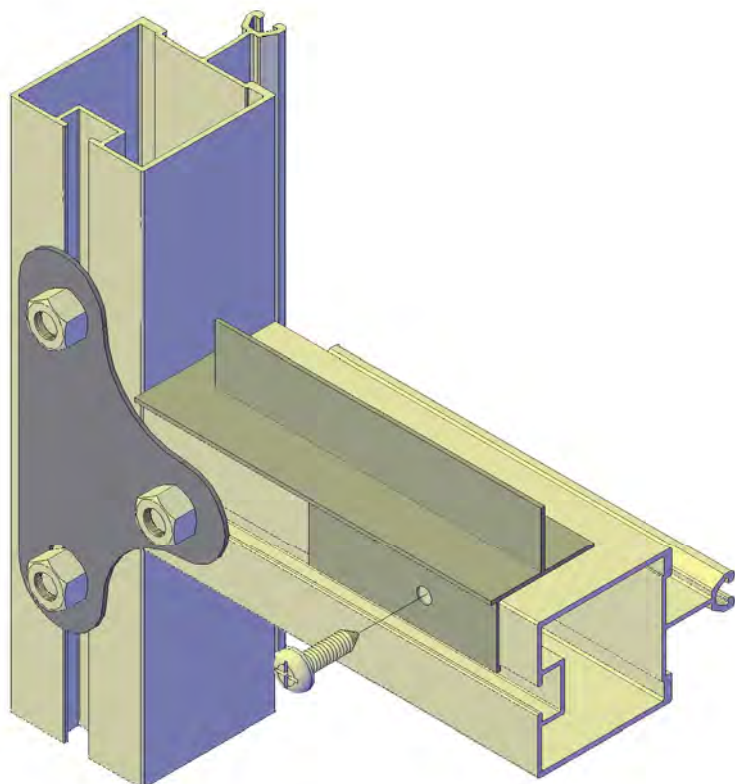


Lammelenraam - Lamellenfenster - Louvre vent - Lamellfönster - Louvre

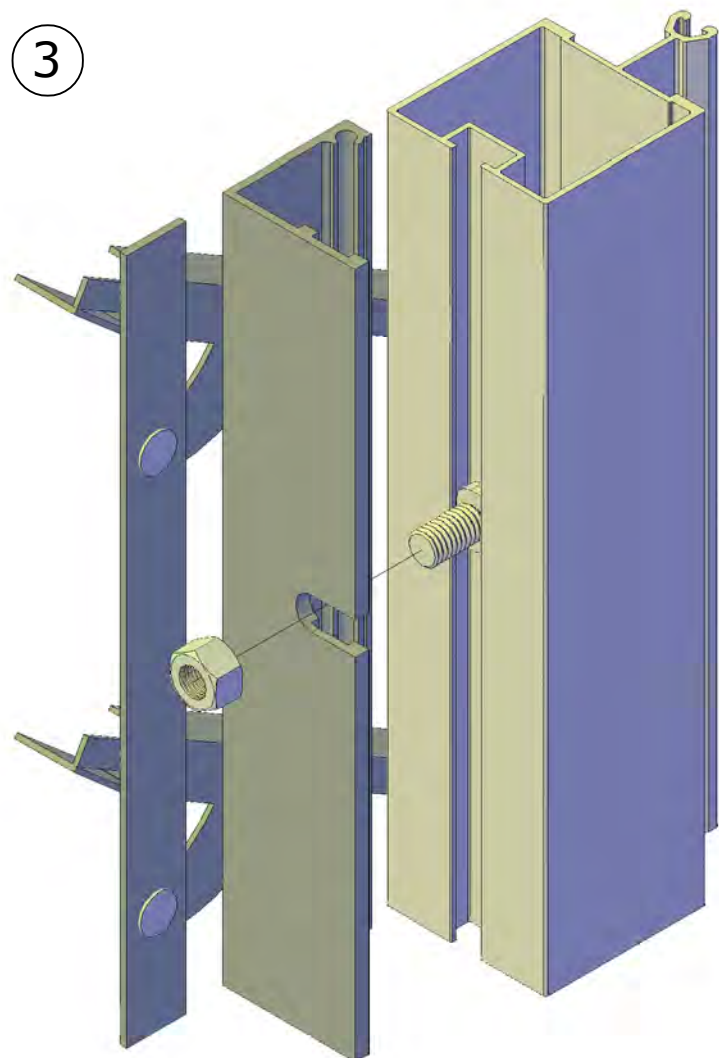
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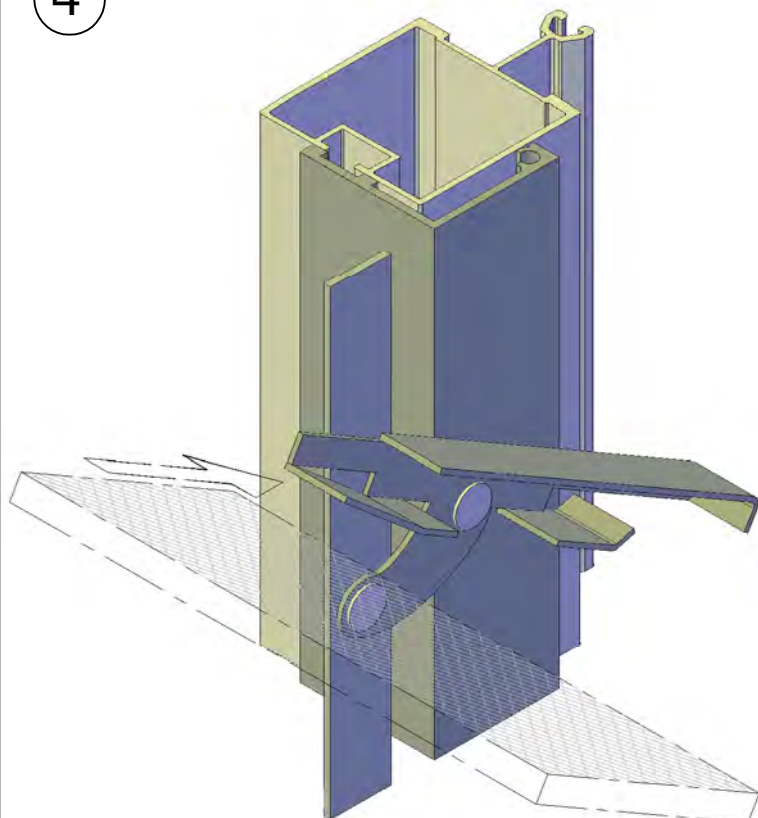
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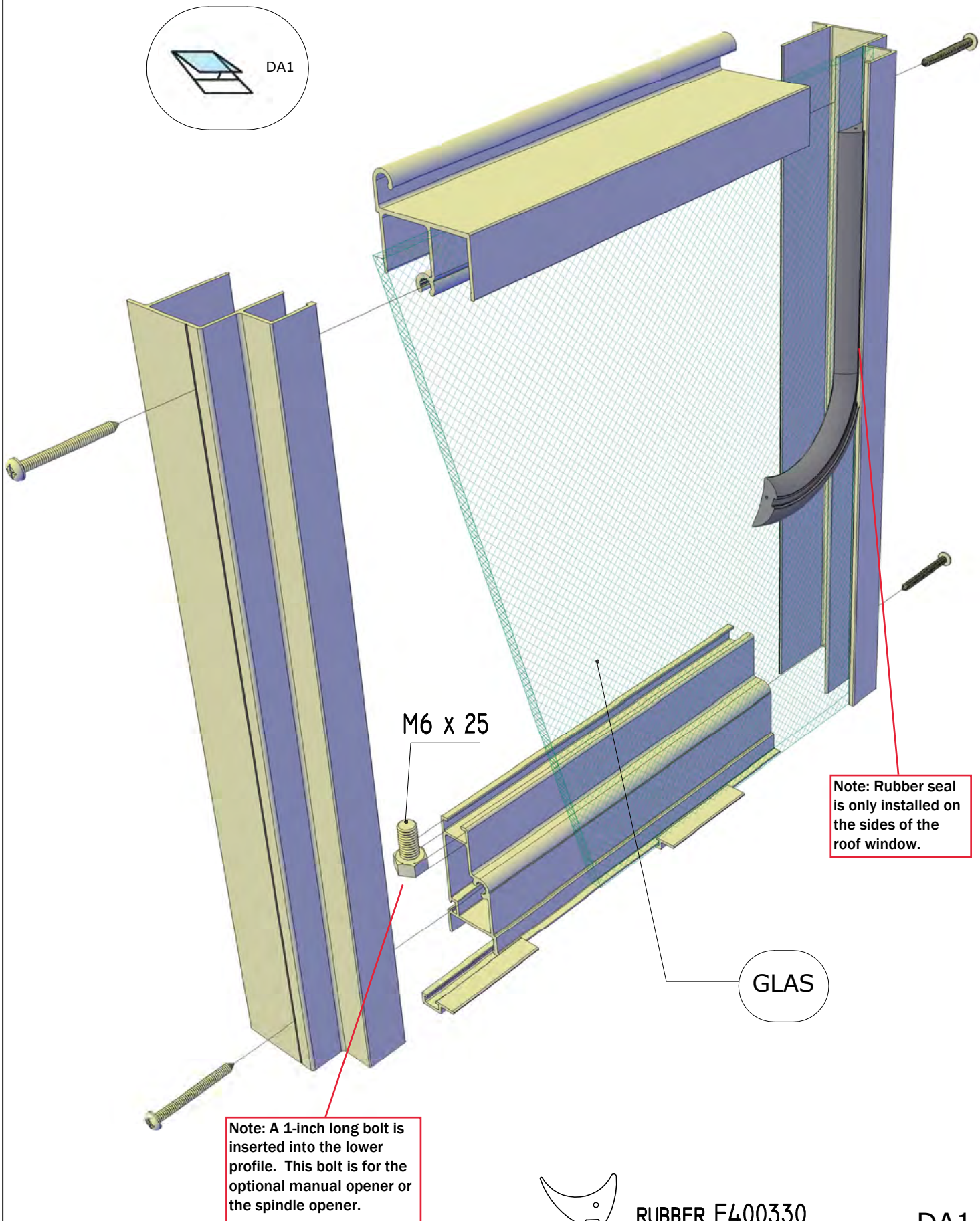
③



④



Dakraam-Lucarne-Dachfenster-Roofwindow-Tagvindue Takluke-Takfönster-Finestra del tetto

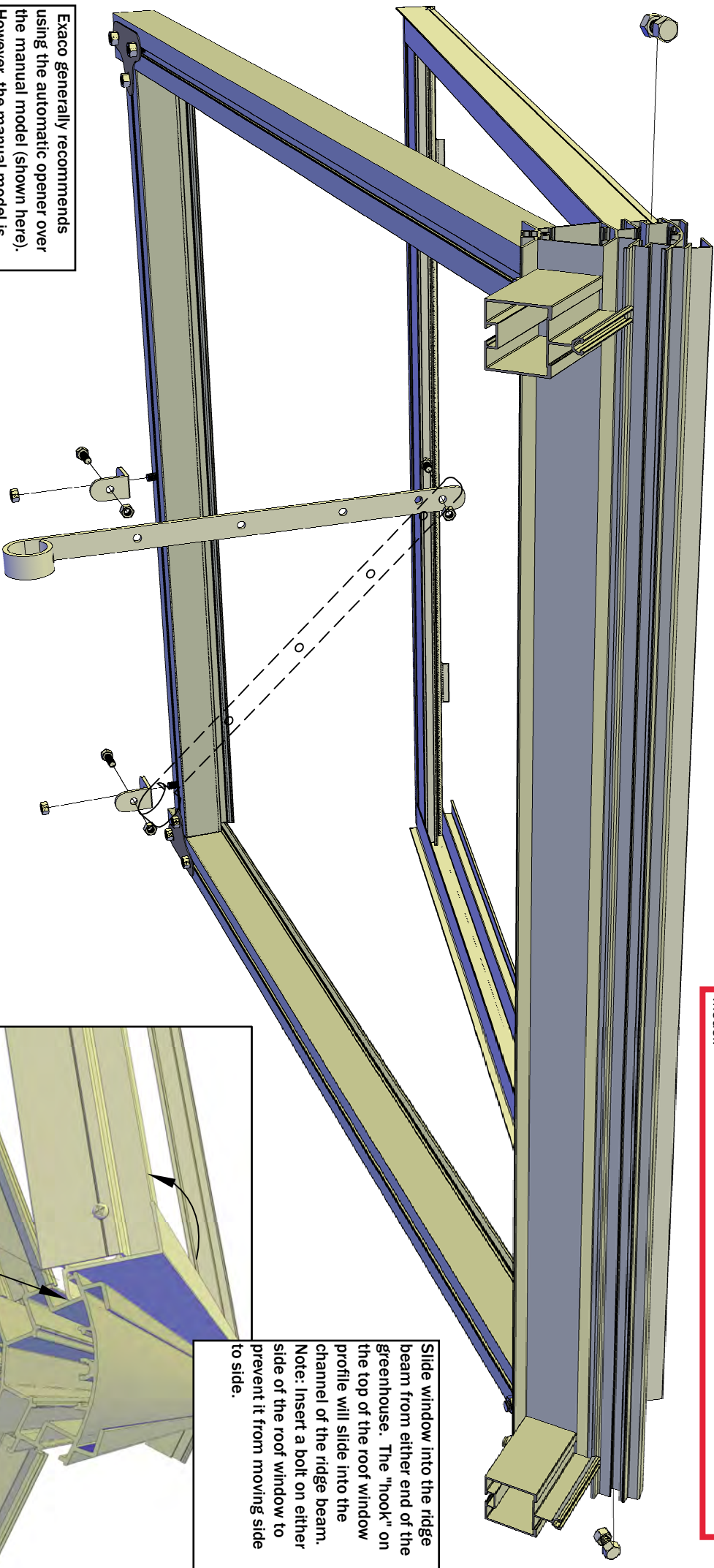


Note: Pages **DA2**, **DA3**, and **DA4** each depict a different variation of a window-opening mechanism. You only need to install ONE model per window.

Pg. DA2 - Basic manual model, comes standard with every greenhouse

Pg. DA3 - Automatic opener, comes standard with every greenhouse. A popular alternative to the basic model.

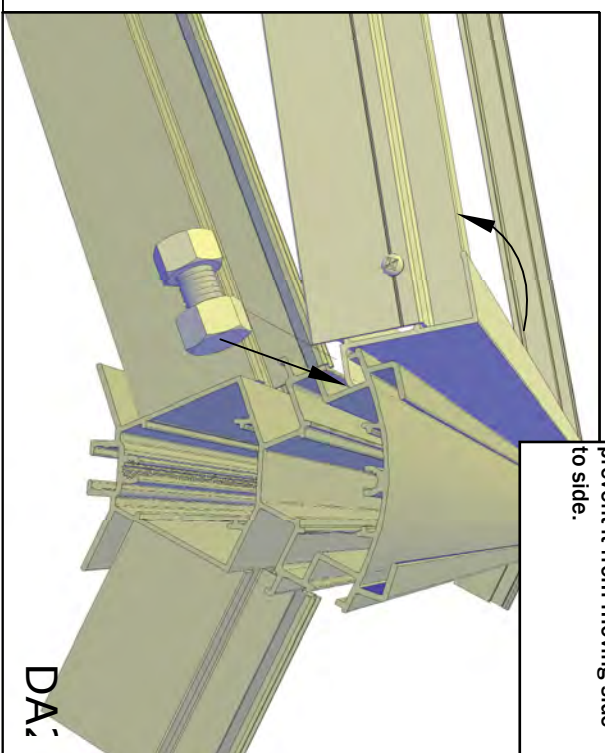
Pg. DA4 - Spindle opener, must be custom ordered. Alternative to the basic model.



Exaco generally recommends using the automatic opener over the manual model (shown here). However, the manual model is useful for securing the window in the 'closed' position. If you do so, be sure to detach the automatic opener first - the manual and automatic openers should never be used together on the same window.

Window Opener - Basic Manual Model

Slide window into the ridge beam from either end of the greenhouse. The "hook" on the top of the roof window profile will slide into the channel of the ridge beam. Note: Insert a bolt on either side of the roof window to prevent it from moving side to side.



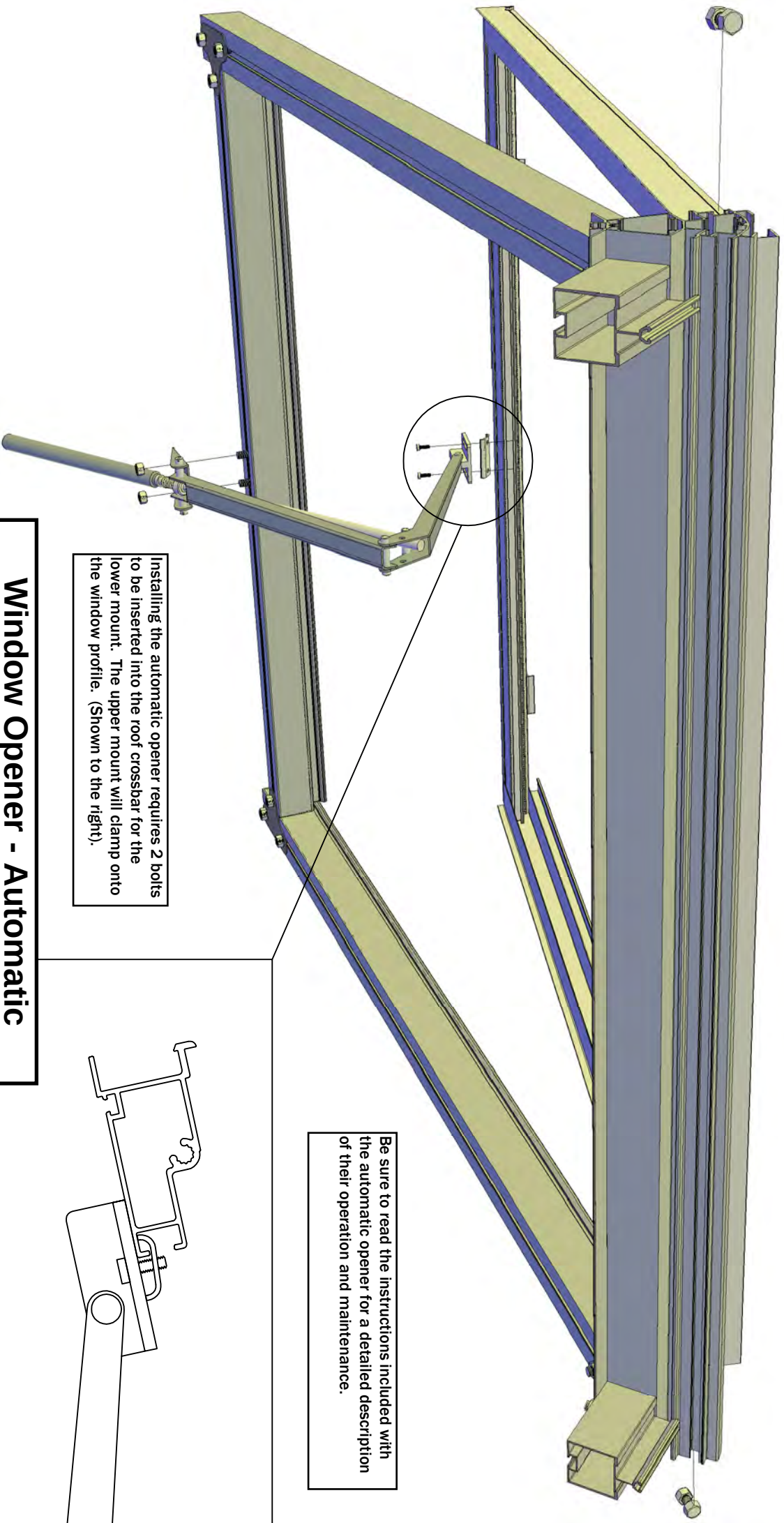
DA2

Note: Pages **DA2**, **DA3**, and **DA4** each depict a different variation of a window-opening mechanism. You only need to install ONE model per window.

Pg. DA2 - Basic manual model, comes standard with every greenhouse

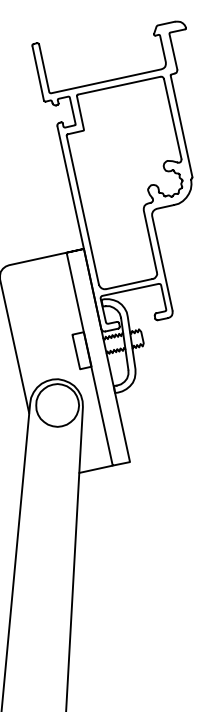
Pg. DA3 - Automatic opener, comes standard with every greenhouse. A popular alternative to the basic model.

Pg. DA4 - Spindle opener, must be custom ordered. Alternative to the basic model.



Installing the automatic opener requires 2 bolts to be inserted into the roof crossbar for the lower mount. The upper mount will clamp onto the window profile. (Shown to the right).

Be sure to read the instructions included with the automatic opener for a detailed description of their operation and maintenance.



Window Opener - Automatic

Note: Pages **DA2**, **DA3**, and **DA4** each depict a different variation of a window-opening mechanism. You only need to install ONE model per window.

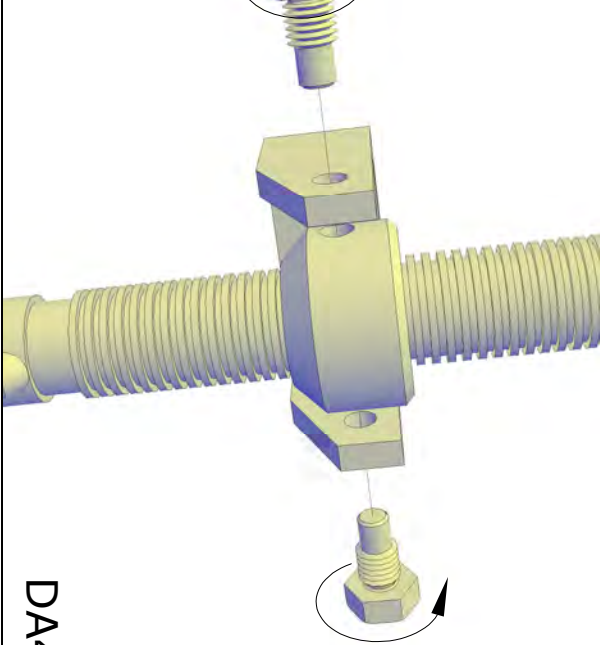
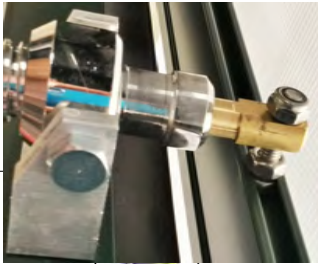
Pg. DA2 - Basic manual model, comes standard with every greenhouse

Pg. DA3 - Automatic opener, comes standard with every greenhouse. A popular alternative to the basic model.

Pg. DA4 - Spindle opener, must be custom ordered. Alternative to the basic model.

Installation Option 2:
Insert a 1-inch bolt into the lower roof window channel. Slide to the center and lock in place with a nut as shown (left). Only use this method if you have previously screwed an extra longbolt into the center of the channel

Regardless of which installation option you choose, the next step is to hold the lower U-shaped crossbar and mark the center of the one hole. Using a 1/8" drill bit, drill the first hole, then screw the bracket on. Check for level, then mark and drill the second hole. Slide the brass part of the opener over the bolt in the window channel. Use the supplied mylock nut to secure the opener on the top mounting bolt. Finally, thread the large side bolts into the U-shaped mount.



Window Opener - Spindle