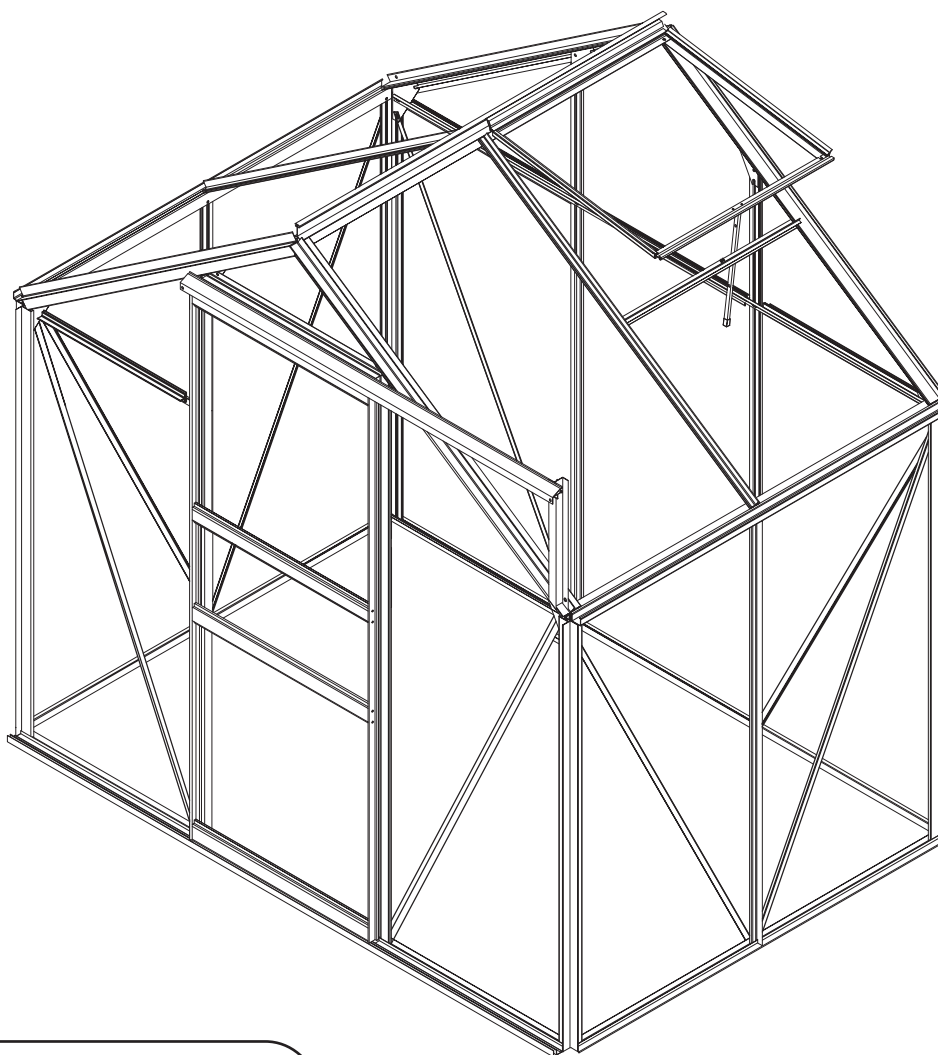




OGAL-466A

GREENHOUSE ASSEMBLY

INSTRUCTIONS



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TO PREVENT INJURY, READ AND UNDERSTAND THE GREENHOUSE ASSEMBLY INSTRUCTIONS BEFORE USE.

Notes:

1. It takes about 2-3 hours to assemble the greenhouse by 2-3 persons.
2. The UV-protected side of the sheet is covered with opal white film and must face towards the sun.
3. Remove approximately 2 inches of film from all sheet edges before installing. Removing all film immediately after the construction is completed
4. Make sure the greenhouse is located on a flat, level surface.

GENERAL SAFETY, WARNINGS AND PRECAUTIONS

KEEP WORK AREA CLEAN AND DRY.

Cluttered, damp or wet work areas invite injuries.

STAY ALERT. Watch what you are doing at all times. Use common sense. Do not use the greenhouse when you are tired or distracted from the job at hand. It is recommended to use gloves for assembling the greenhouse.

MAINTAIN THIS PRODUCT WITH CARE.

Keep the greenhouse clean and dry for better performance: maintenance should be performed regularly.

USE THE RIGHT PRODUCT FOR THE JOB.

Do not attempt to force a small product to do the work of a larger industrial product. There are certain applications for which the greenhouse was designed. It will do the job better and more safely in the manner for which it was intended. Do not modify the greenhouse and do not use the greenhouse for a purpose for which it was not intended.

MAINTAIN A SAFE WORKING ENVIRONMENT.

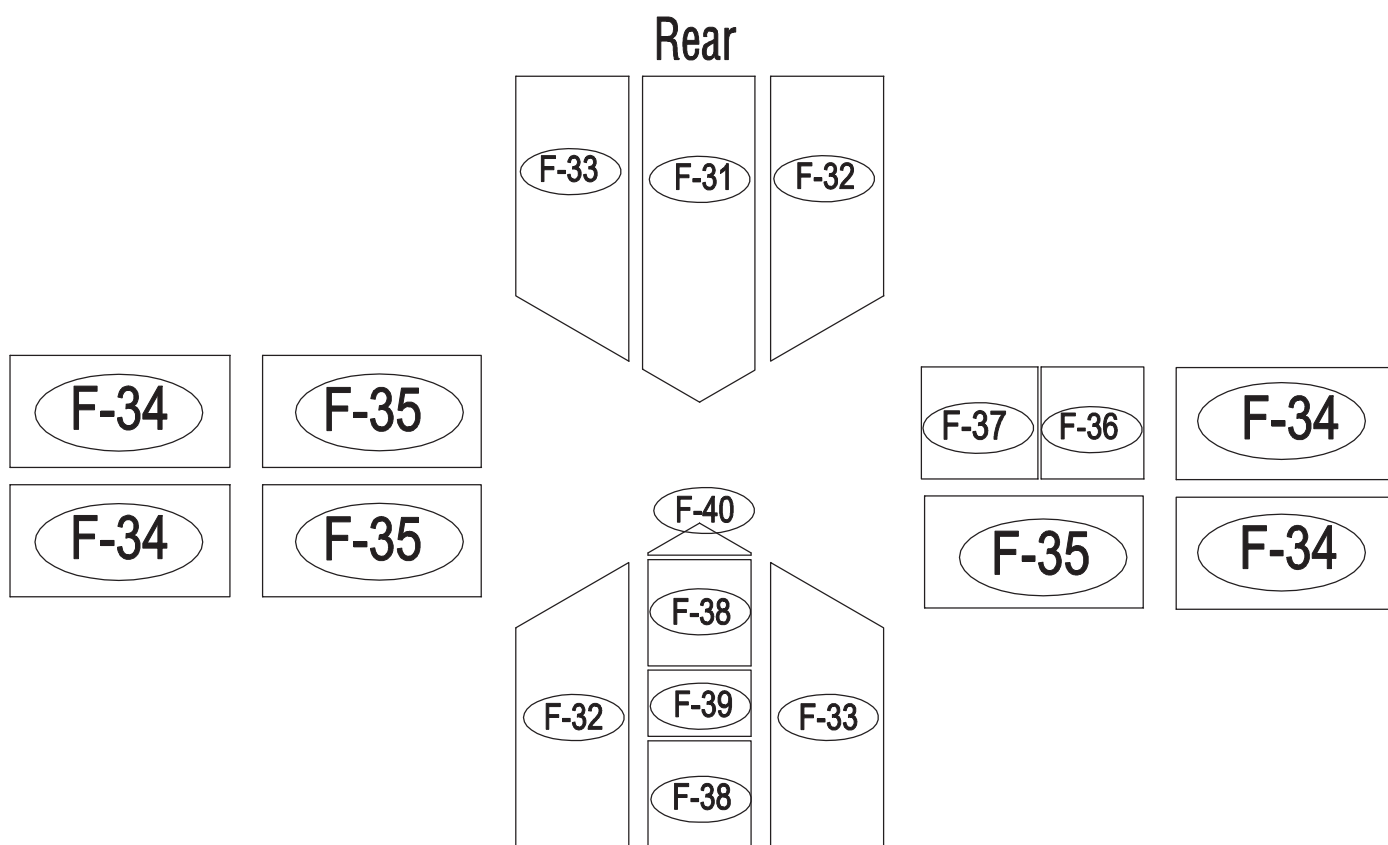
Keep the work area tidy. Make sure there is adequate surrounding workspace. Avoid high traffic areas. Always keep the work area free of obstructions, grease, oil, trash and other debris.

PROPER GREENHOUSE LOCATION.

Make sure the greenhouse is located on a flat, level surface.

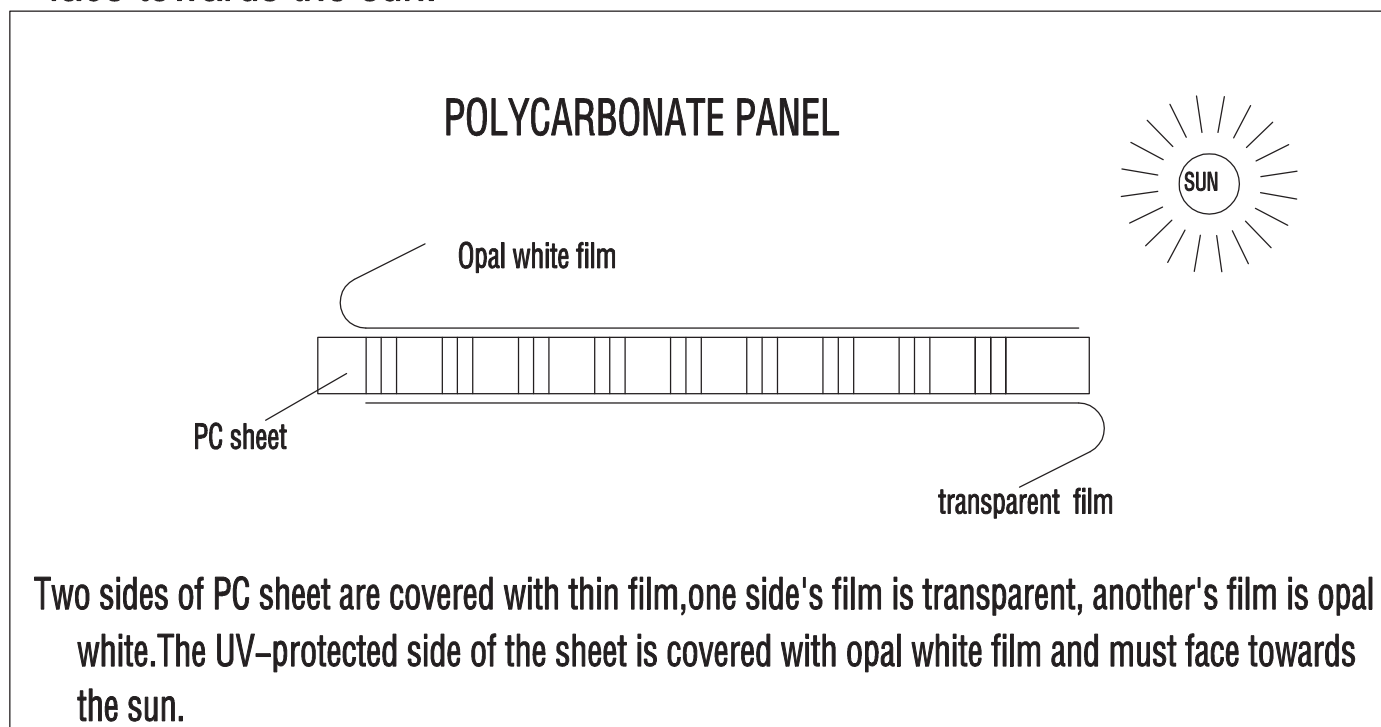
This diagram shows an exploded perspective view of a building frame assembly. The components are labeled as follows:

- Roof Structure:** Includes rafters (F-07, F-19, F-19b, F-24, F-25, F-26, F-27, F-28), ridge beam (F-A07), and roof joists (F-06, F-12, F-17, F-18, F-19b, F-20, F-21, F-23, F-29, F-30).
- Wall Structure:** Includes vertical studs (F-05, F-10, F-11, F-14b, F-15, F-16b, F-29, F-30), horizontal joists (F-04, F-08, F-13, F-14b, F-15, F-16b, F-21, F-23, F-29, F-30), and girders (F-A02, F-A05, F-A06).
- Foundation and Floor:** Includes foundation beams (F-03b, F-04, F-05, F-10, F-14b, F-16b, F-23, F-29, F-30) and floor joists (F-04, F-08, F-13, F-14b, F-15, F-16b, F-21, F-23, F-29, F-30).
- Connectors:** Includes gusset plates (G-P1, G-P2, G-P3L, G-P3R) and other fasteners (F-07, F-19, F-19b, F-24, F-25, F-26, F-27, F-28, F-29, F-30).











































Notes:

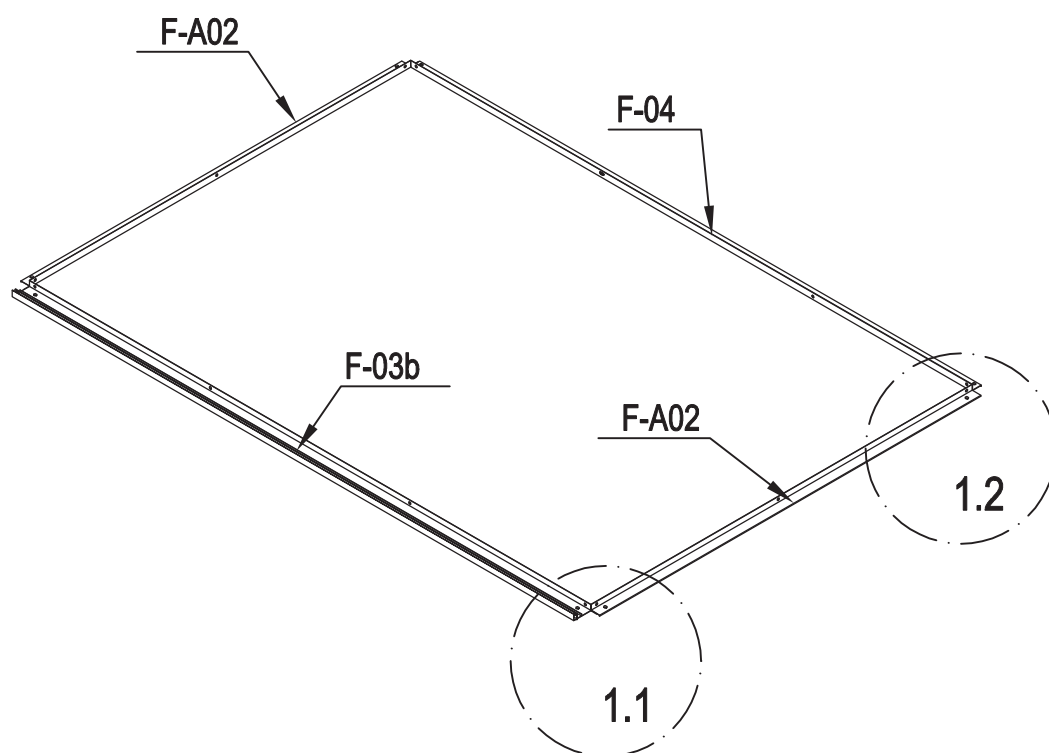
1. Remove approximately 2 inches of film from all sheet edges before installing. remove all film immediately after the constructions completed.
2. The UV-protected side of the sheet is covered with opal white film and must face towards the sun.



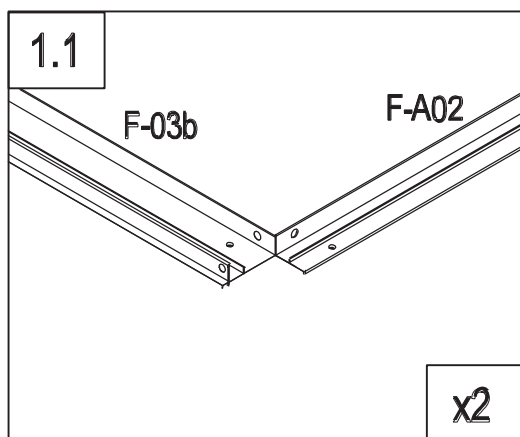
PARTS LIST

BASE					WINDOW				
IMAGE	NO.	L.	QTY	SKU #	IMAGE	NO.	L.	QTY	SKU #
	F-03b	1833	1	OGRPT-F-03b		F-20	360	1	OGRPT-F-20
	F-04	1833	1	OGRPT-F-04		F-25	580	1	OGRPT-F-25
	F-A02	1233	2	OGRPT-F-A02		F-26	550	2	OGRPT-F-26
WALL AND ROOF						F-27	580	1	OGRPT-F-27
IMAGE	NO.	L.	QTY	SKU #		F-28	620	1	OGRPT-F-28
	F-05	1240	4	OGRPT-F-05		F-37	577x583	1	OGRPT-F-37
	F-06	1105	2	OGRPT-F-06	DOOR				
	F-07	1105	2	OGRPT-F-07	IMAGE	NO.	L.	QTY	SKU #
	F-08	1650	1	OGRPT-F-08		F-12	572.5	1	OGRPT-F-12
	F-09	1650	1	OGRPT-F-09		F-13	1240	1	OGRPT-F-13
	F-23	1240	2	OGRPT-F-23		F-14b	600	2	OGRPT-F-14b
	F-24	1100	2	OGRPT-F-24		F-15	600	2	OGRPT-F-15
	F-10	1644	1	OGRPT-F-10		F-16b	1615	2	OGRPT-F-16b
	F-11	1644	1	OGRPT-F-11		F-21	376	1	OGRPT-F-21
	F-A05	1236	2	OGRPT-F-A05		F-22b		4	OGRPT-F-22b
	F-A06	1233	2	OGRPT-F-A06		F-38	590x598	2	OGRPT-F-38
	F-17	618	2	OGRPT-F-17		F-39	251x598	1	OGRPT-F-39
	F-18	1815	1	OGRPT-F-18	SCREW				
	F-41	1216	2	OGRPT-F-41	IMAGE	NO.	L.	QTY	SKU #
	F-29	1360	4	OGRPT-F-29		F-A14		96	OGRPT-F-A14
	F-30	1328	4	OGRPT-F-30		F-A15a		12	OGRPT-F-A15a
	F-A07	1233	1	OGRPT-F-A07		F-A16		6	OGRPT-F-A16
	F-31	1850.3x585	1	OGRPT-F-31					
	F-32	1644x585	2	OGRPT-F-32					
	F-33	1644x585	2	OGRPT-F-33					
	F-34	1238x585	4	OGRPT-F-34					
	F-35	1110x585	3	OGRPT-F-35					
	F-36	540x585	1	OGRPT-F-36					
	F-40		1	OGRPT-F-40					
	F-19		4	OGRPT-F-19					
	F-19b		4	OGRPT-F-19b					
PLASTIC									
IMAGE	NO.	L.	QTY	SKU #					
	G-P1		4	OGRPT-G-P1					
	G-P2		2	OGRPT-G-P2					
	G-P3L		1	OGRPT-G-P3L					
	G-P3R		1	OGRPT-G-P3R					

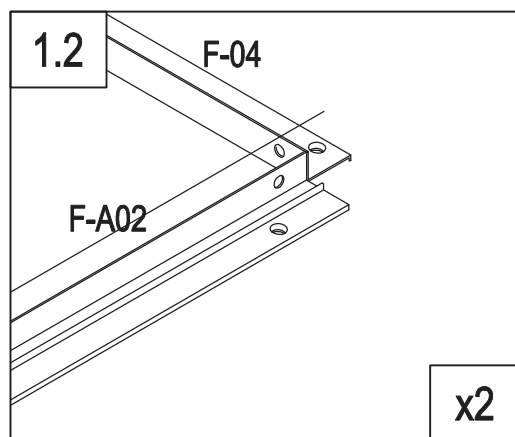
1 | OGAL-466A ASSEMBLY INSTRUCTIONS






1.1 Place parts F-03b & F-04 at a right angle; make sure that the grooves on both sections face the outside.

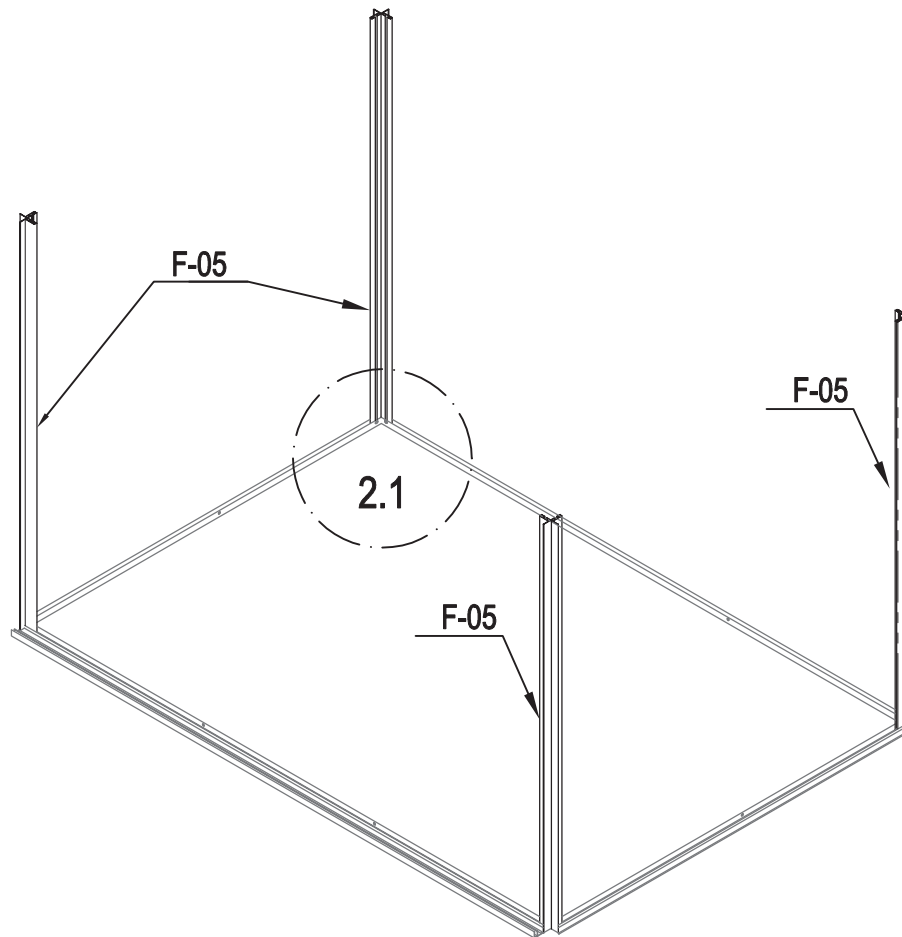


1.2 Lay two pieces F-04 to a right-angle, make sure the grooves of two pieces F-04 is in the outside.

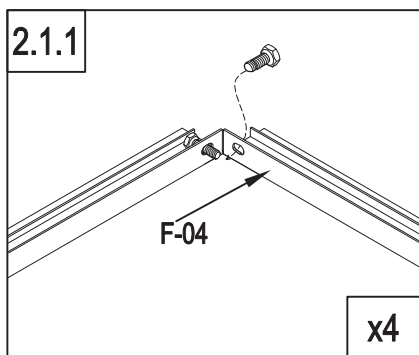


Parts used in this section.

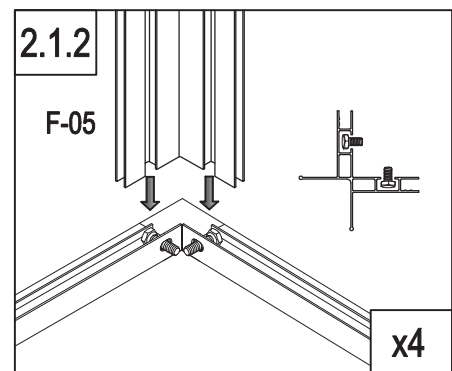
Image	Item#	Quantity
	F-A02	2
	F-04	1
	F-03b	1



2.1.1 Insert the bolts (F-B14) into the holes.

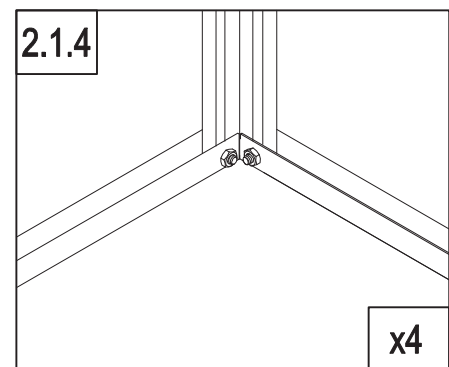
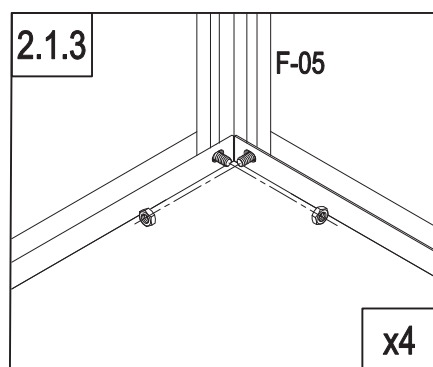


2.1.2 Insert F-05 into the bolts.



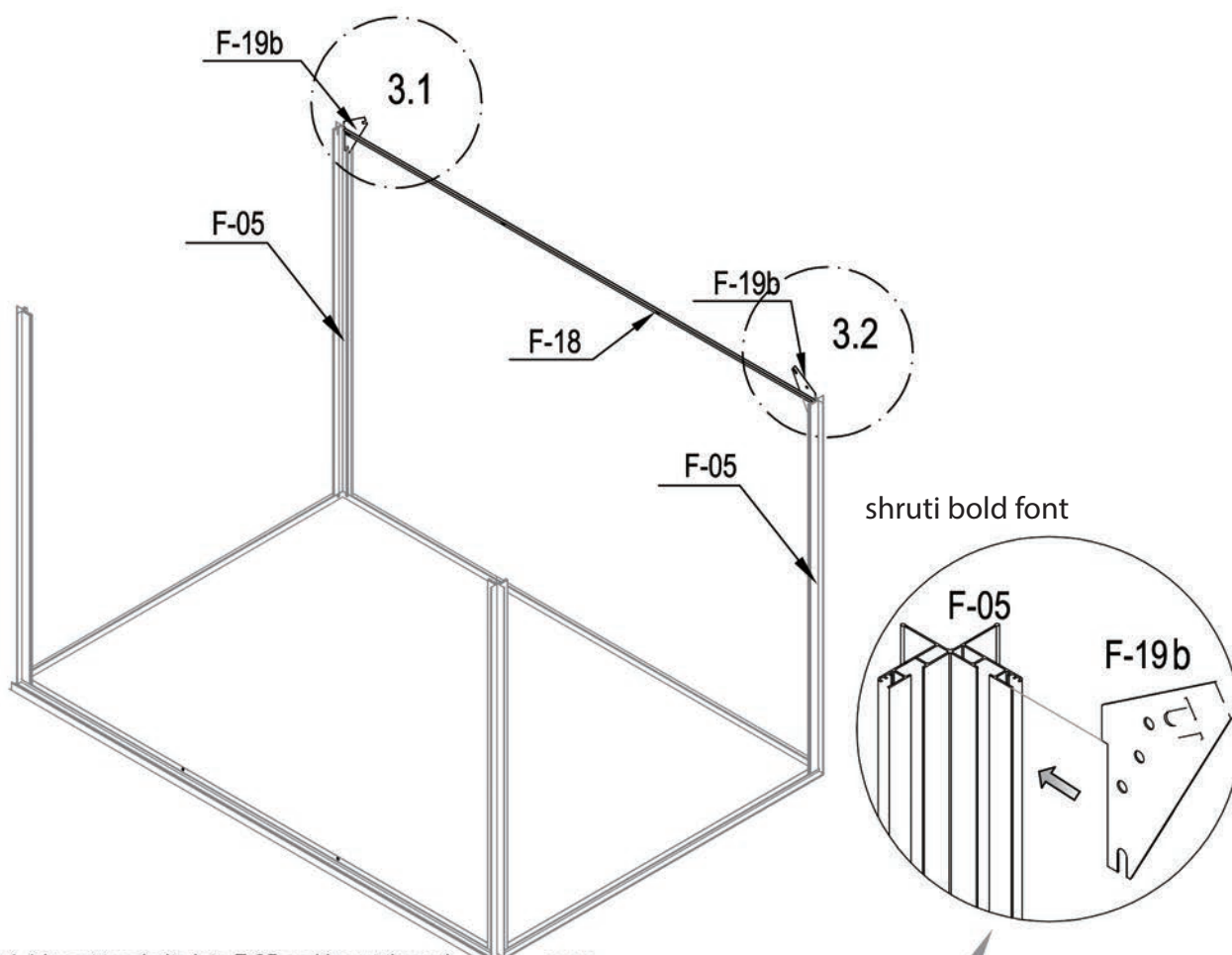
Parts used in this section.

Image	Item#	Quantity
	F-05	4
	F-A14	8

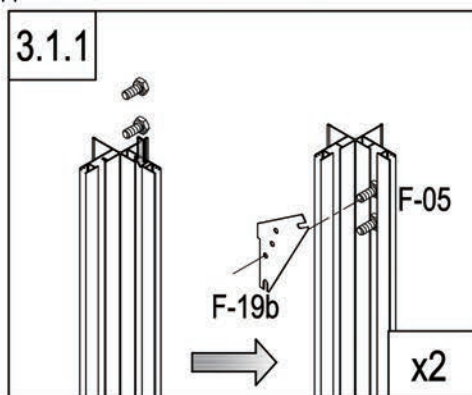


2.1.3 & 2.1.4 Screw and tighten with nuts.

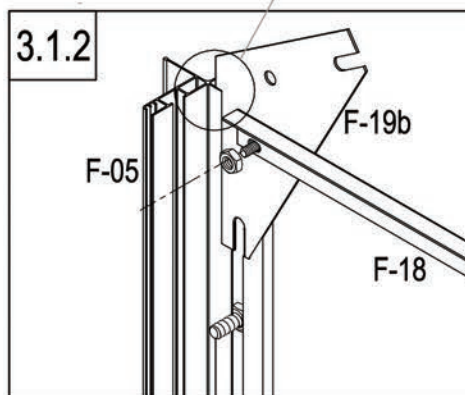
3 | OGAL-466A ASSEMBLY INSTRUCTIONS



3.1.1 Insert two bolts into F-05 and insert through the upper bolt to bottom hole in F-19b.

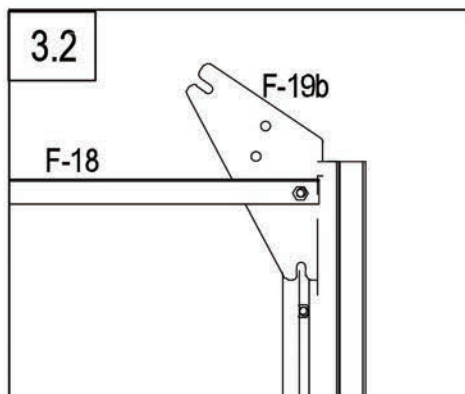


3.1.2 Connect F-05, F-19b, F-18 by the upper bolt. Once the notch on F-19b is aligned with the top of F-05, you can screw the nut tight on the bolt.

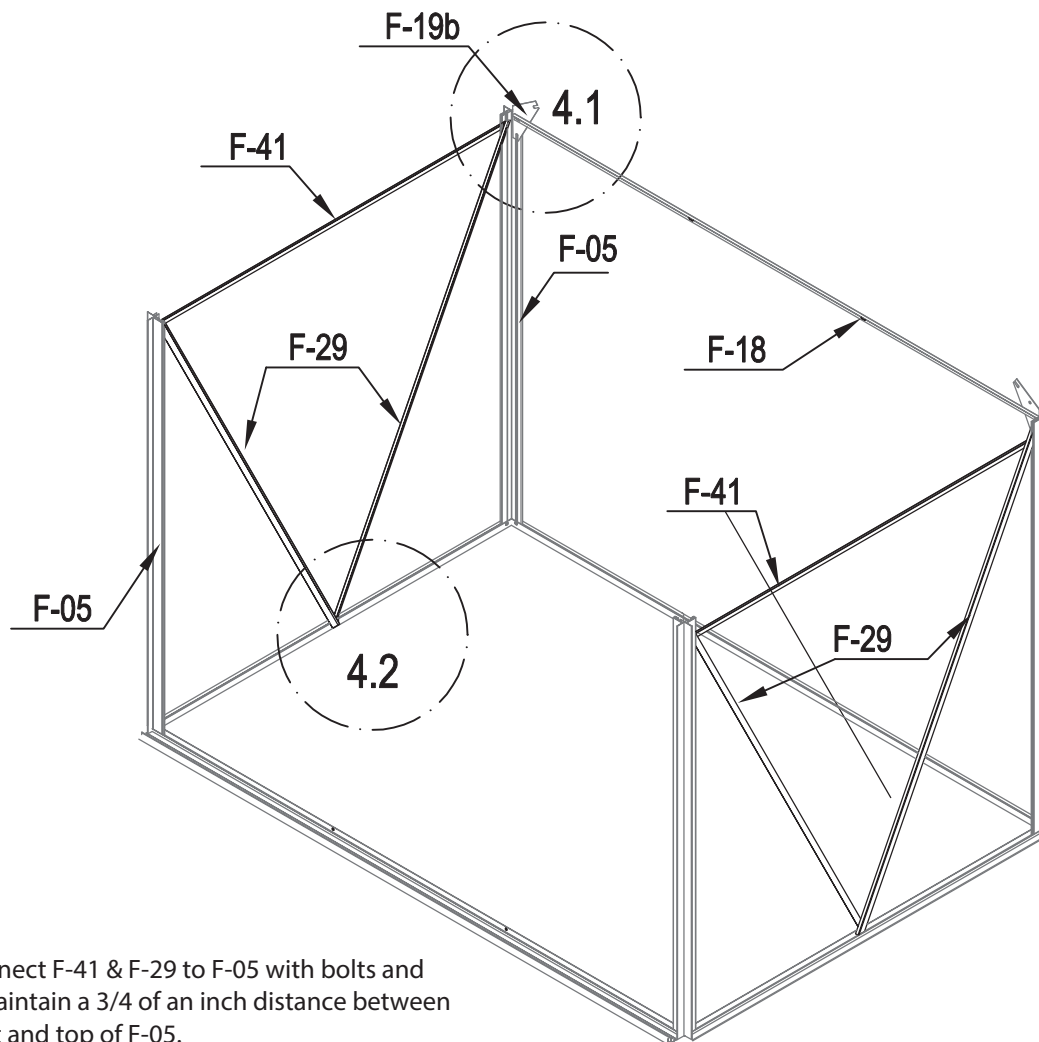


Parts used in this section.

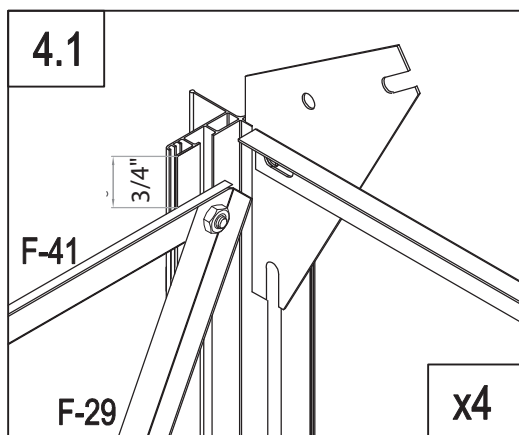
Image	Item#	Quantity
	F-18	1
	F-19b	2
	F-A14	4



3.2 The same process as 3.1.



4.1 Connect F-41 & F-29 to F-05 with bolts and nuts. Maintain a 3/4 of an inch distance between the bolt and top of F-05.



4.2 Connect F-29 to F-A02 with F-A14 bolt, do not tighten the nut yet.

NOTICE: DON'T TIGHTEN NUTS.

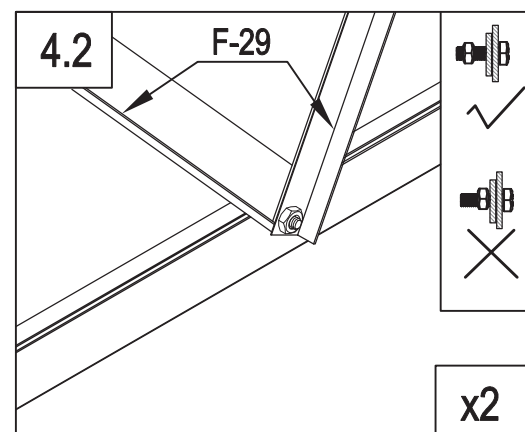
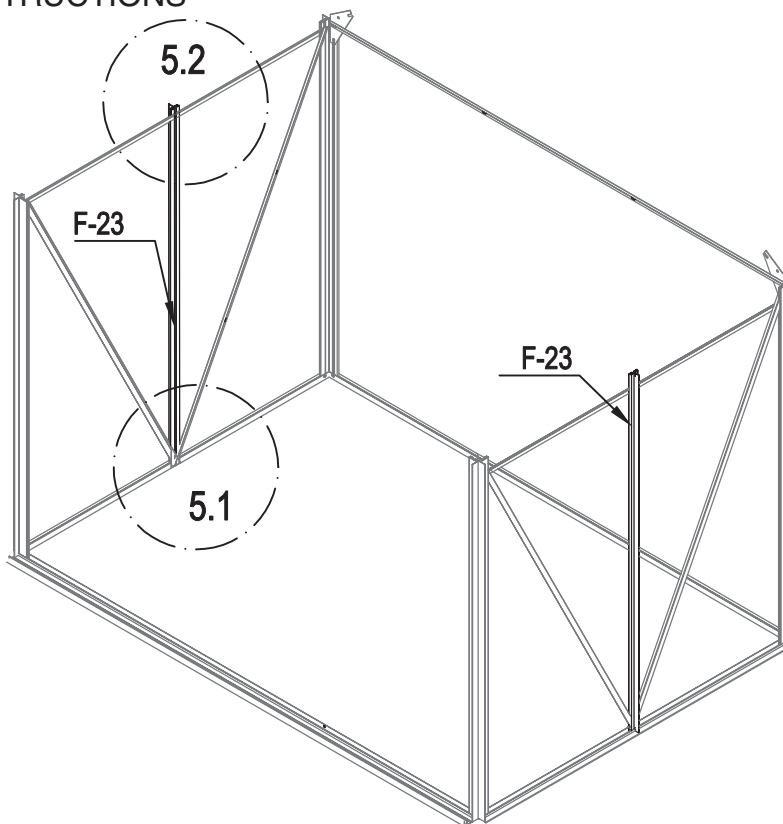
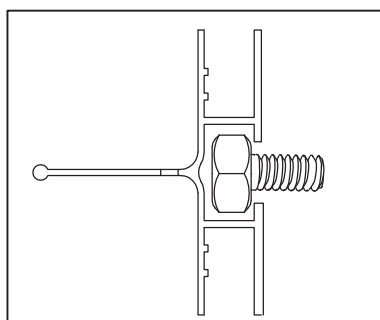
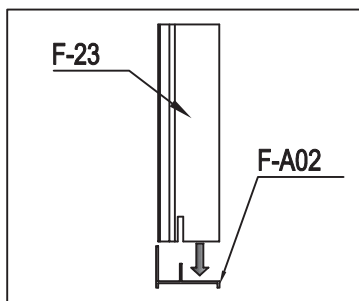


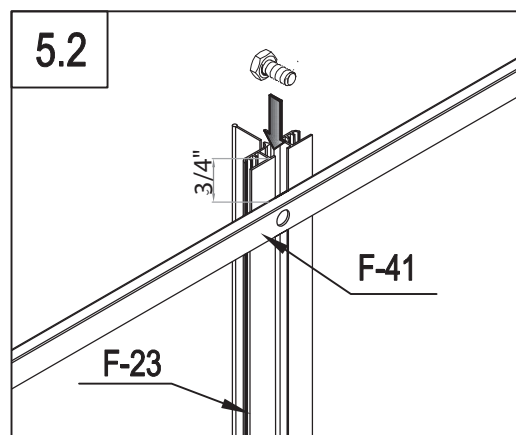
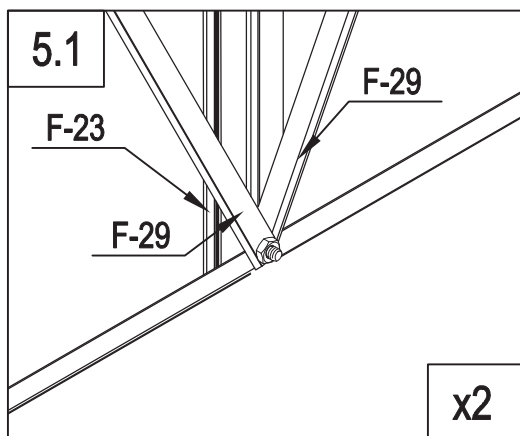
Image	Item#	Quantity
	F-29	4
	F-41	2
	F-A14	6

Parts used in this section.

5 | OGAL-466A ASSEMBLY INSTRUCTIONS



5.1 Insert F-23 into the bolt to connect to F-04 and tighten the nuts.

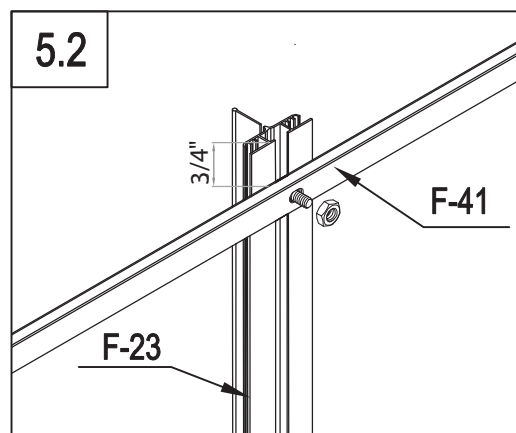


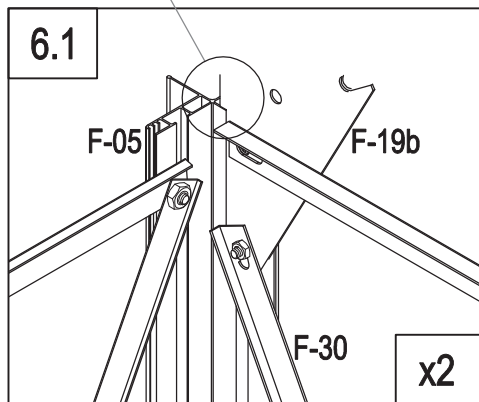
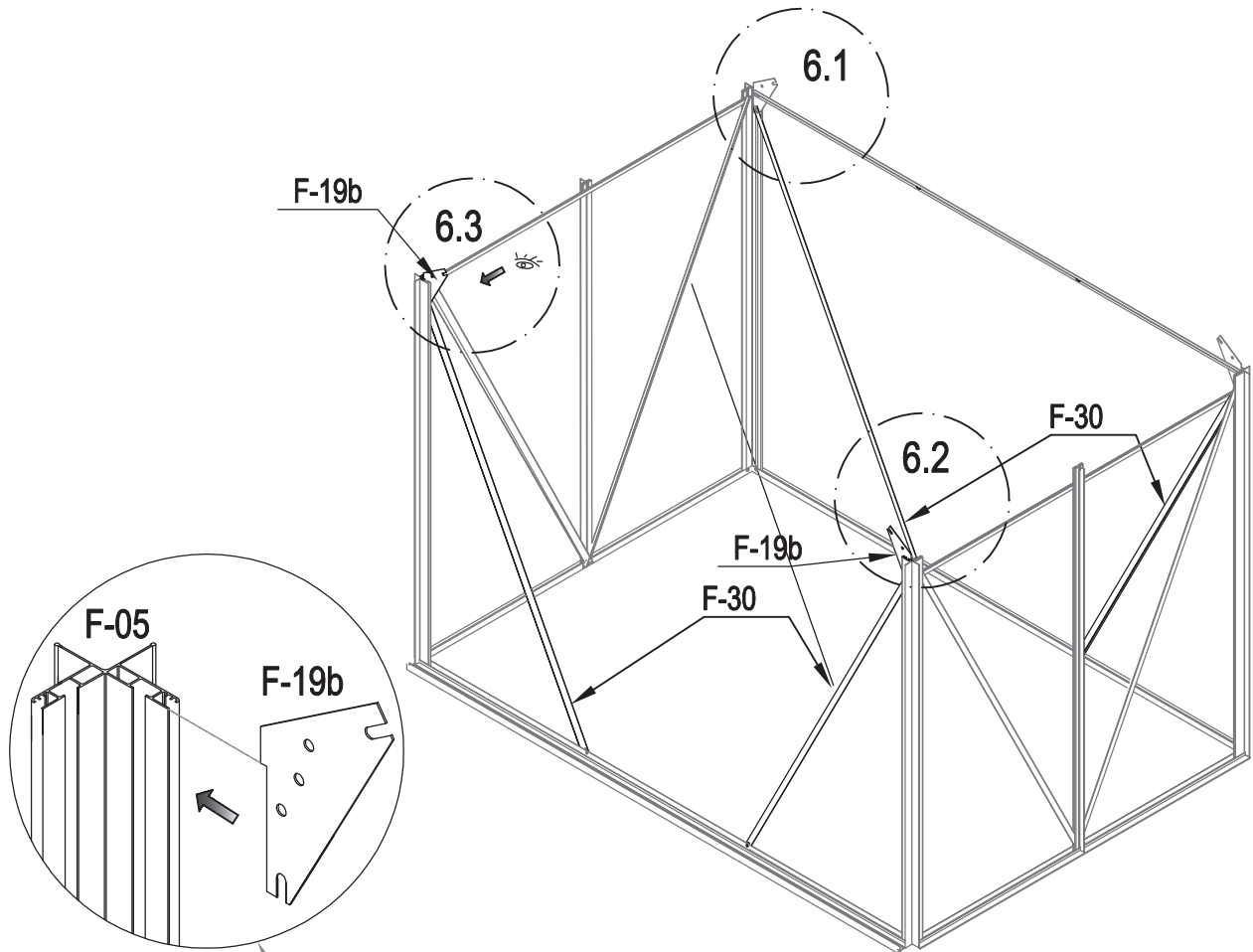
5.2 Insert one bolt into F-23. Then perpendicularly attach F-41, and tighten the nut. Maintain a 3/4 of an inch from top of F-23 to bolt.

NOTICE: Make sure 20mm from F-41 to the top of F-23.

Parts used in this section.

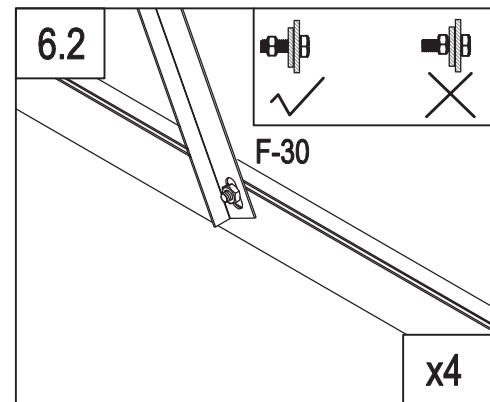
Image	Item#	Quantity
	F-23	2
	F-A14	2





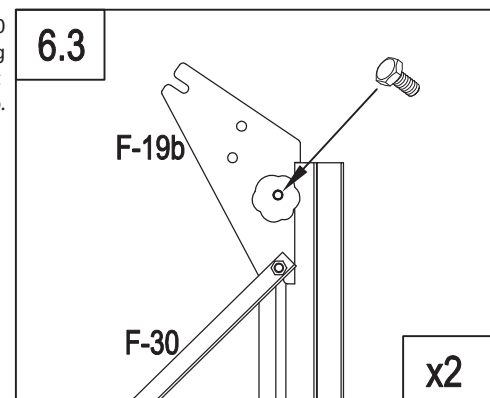
6.1 Connect F-30 and F-05 to the lowest notch of F-19b with bolts and nuts.

NOTICE: The notch of F-19b MUST be aligned with the top of F-05.



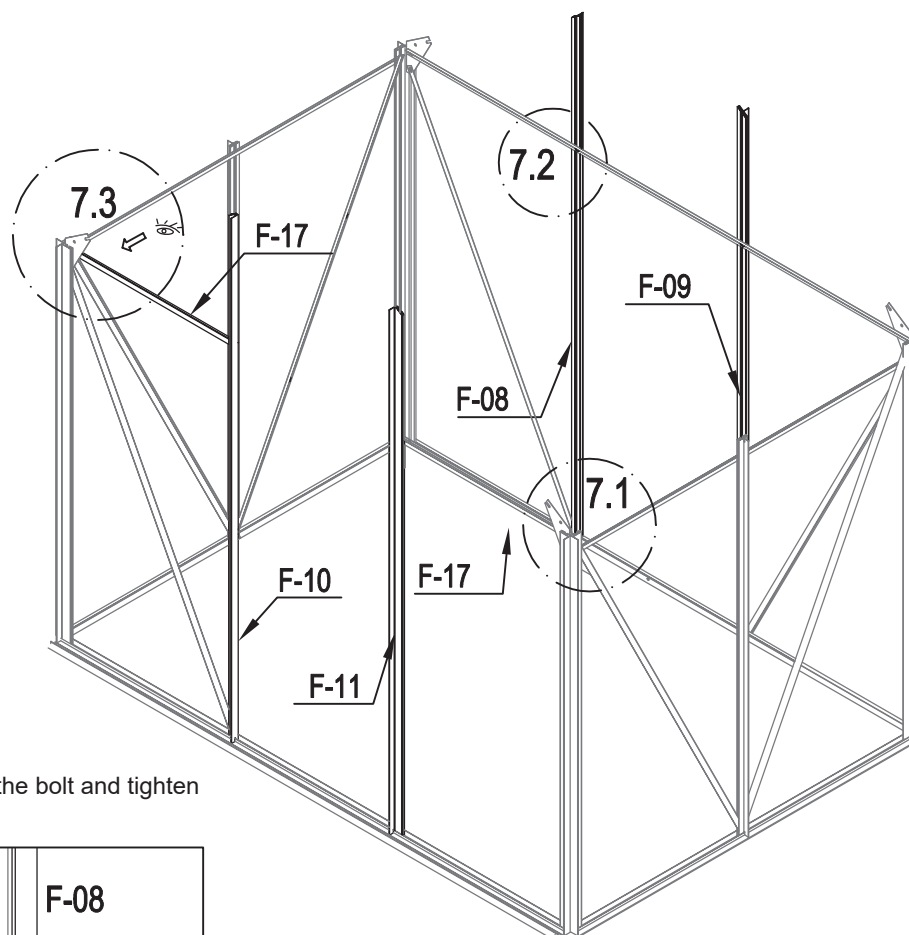
6.2 Connect F-30 and F-04 with bolts and nuts.
NOTICE: DON'T TIGHTEN NUTS.

6.3 Place two bolts into F-05, connect F-30 and F-05 to the lowest notch of F-19b using the lowest bolt and nut. Insert the top bolt through the lower hole of F-19b.

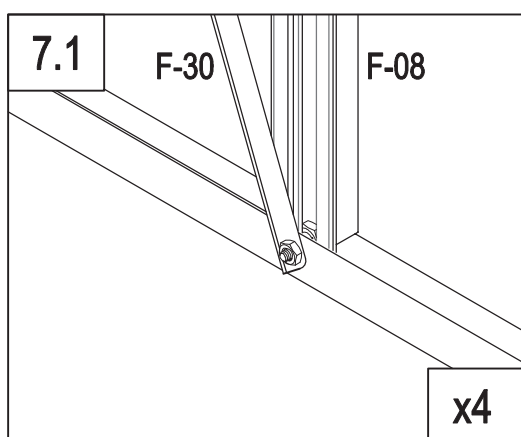


Parts used in this section.

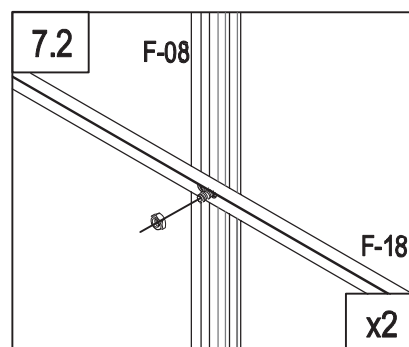
Image	Item#	Quantity
	F-30	4
	F-19b	2
	F-A14	8



7.1 Insert F-08/09/10/11 into the bolt and tighten the nuts.



7.2 Insert one bolt into F-08/09, connect F-18 and F-08/09 with the bolt & nut and tighten.



7.3 Insert bolt into F-10/11, connect F-17 and F10/11 with bolt & nut, connect F-17 to F-05 by the hole of the bolt & nut in step 6.3.

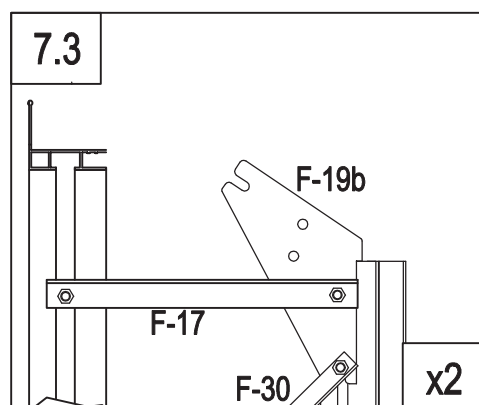
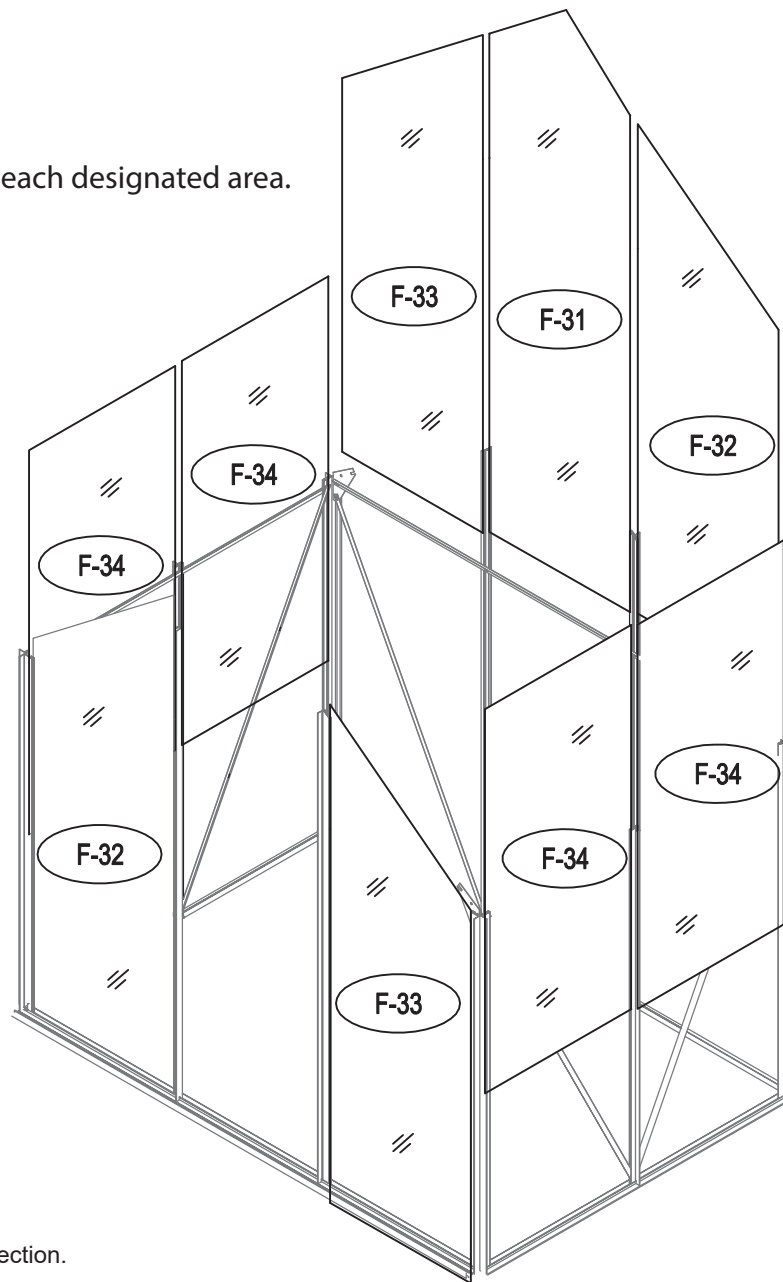


Image	Item#	Quantity
	F-08	1
	F-09	1
	F-10	1
	F-11	1
	F-17	2
	F-A14	4

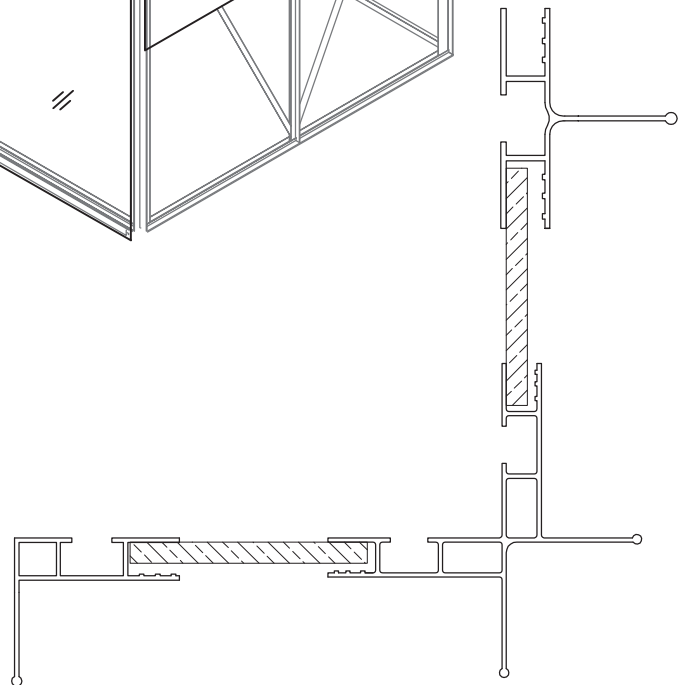
Parts used in this section.

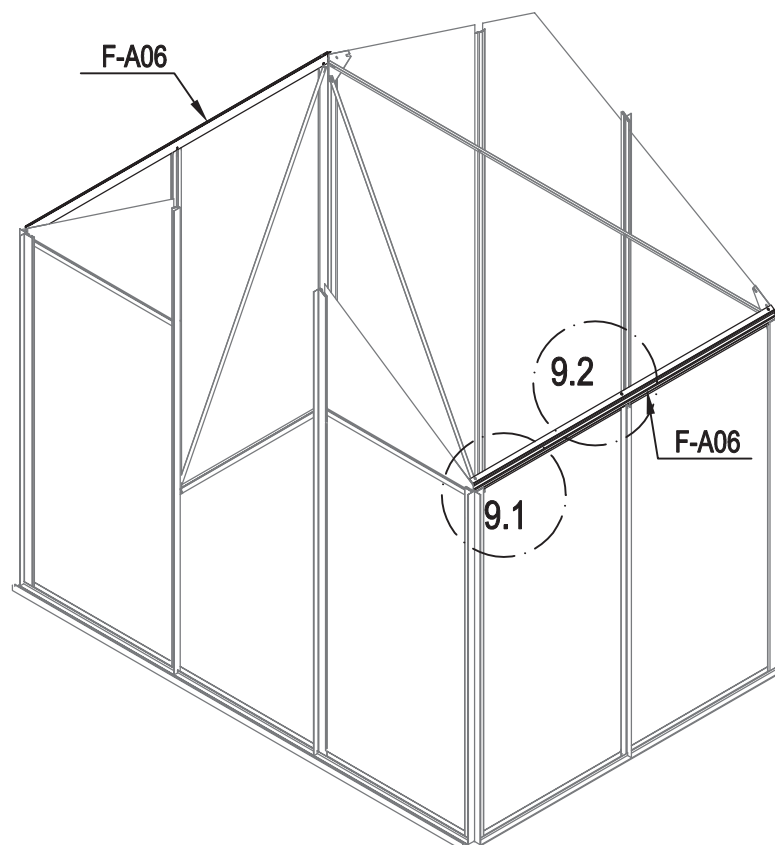
Insert the panels into each designated area.



Parts used in this section.

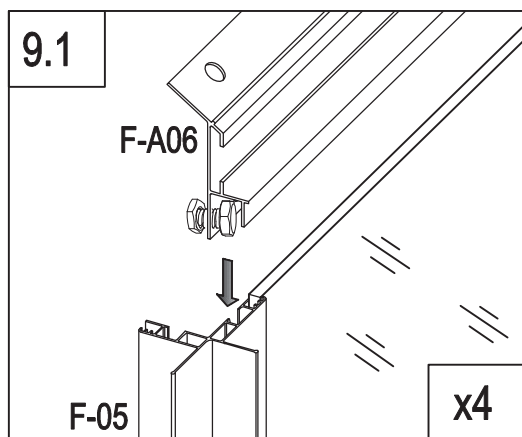
Image	Item#	Quantity
	F-31	1
	F-32	2
	F-33	2
	F-34	4



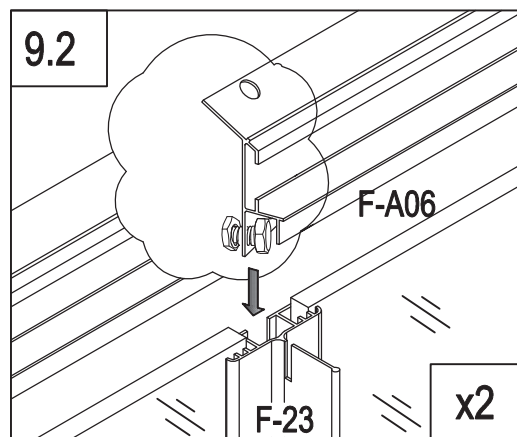


9.1 Insert the bolts and nuts into each hole of F-A06, but don't tighten the nuts yet.

Slide the bolts into the grooves of F-05.

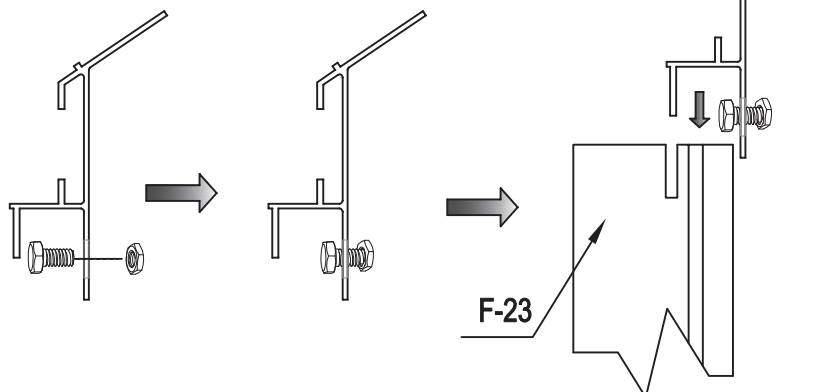


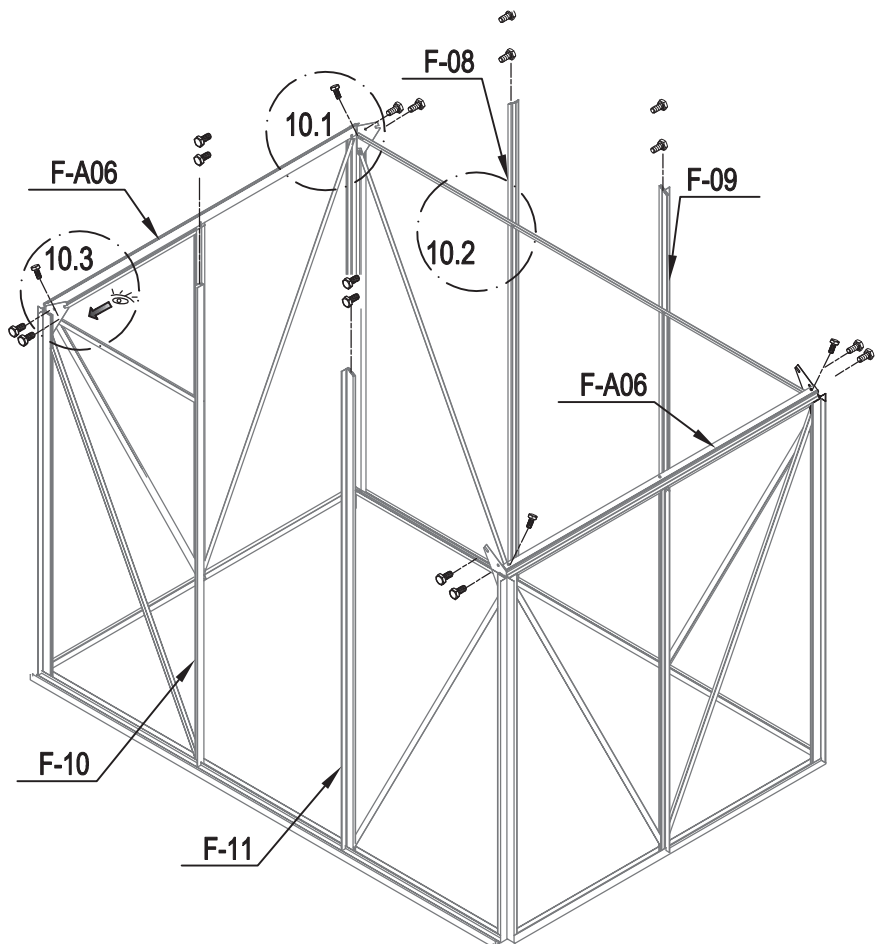
9.2 Slide the bolts into the grooves of F-23.



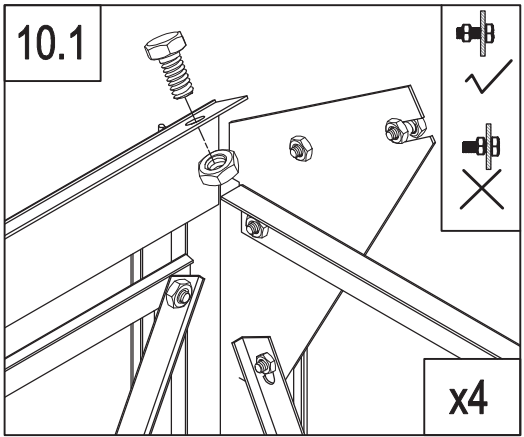
Parts used in this section.

Image	Item#	Quantity
	F-A06	2
	F-A14	6

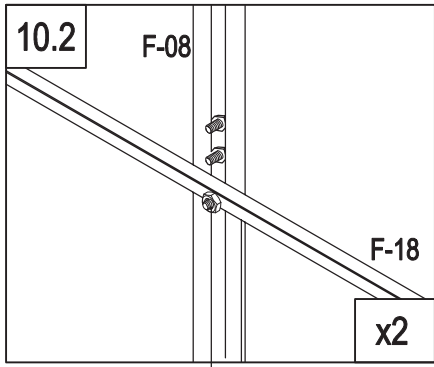




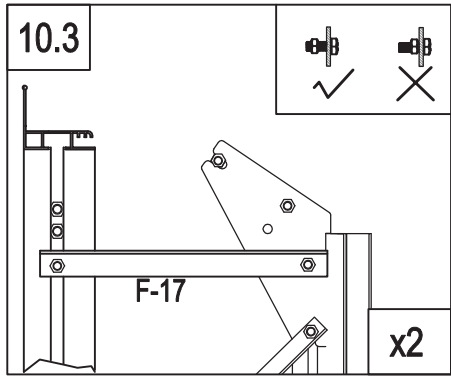
10.1 Insert the bolts and nuts into each hole of F-A06, but don't tighten the nuts yet.




10.2 Insert two bolts into F-08/09/10/11.



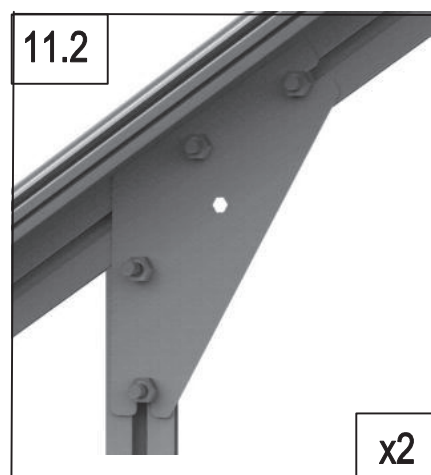
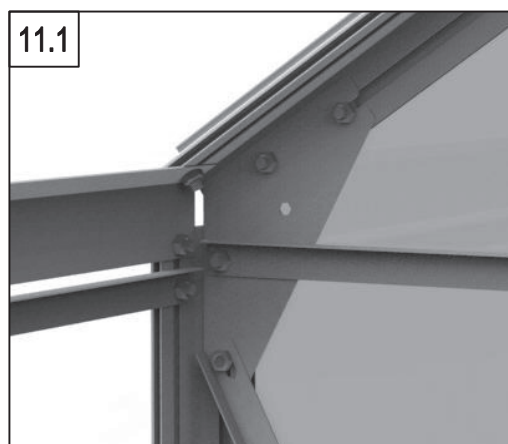
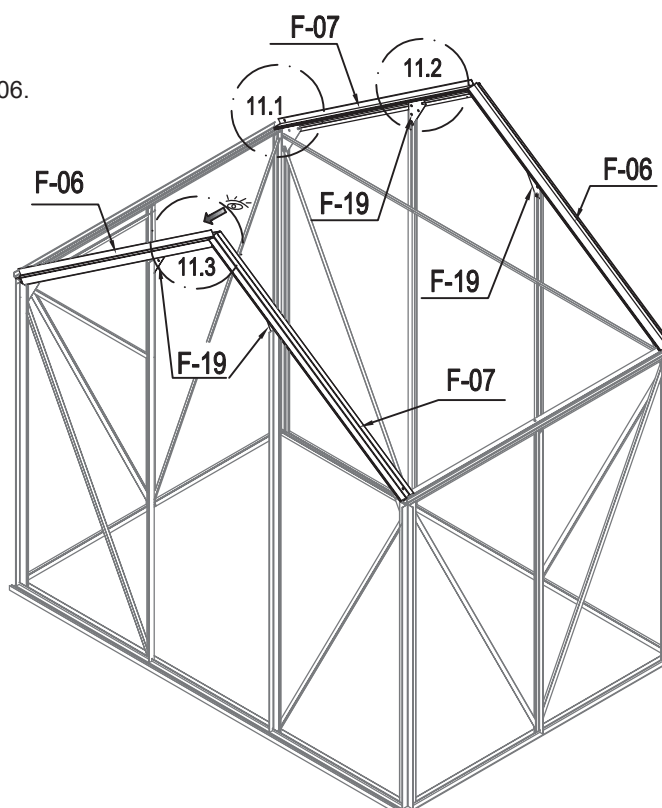
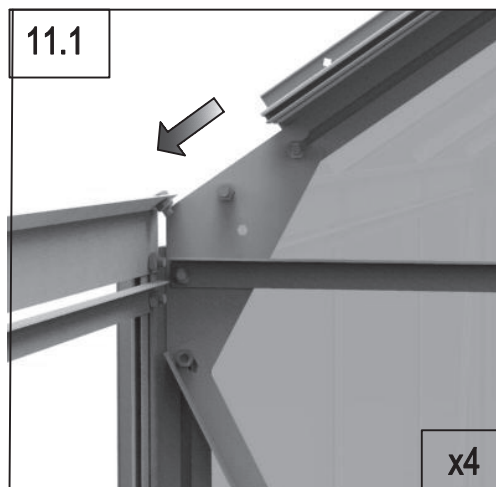
10.3 Insert bolts and nuts into the hole of F-19b as shown.



Parts used in this section.

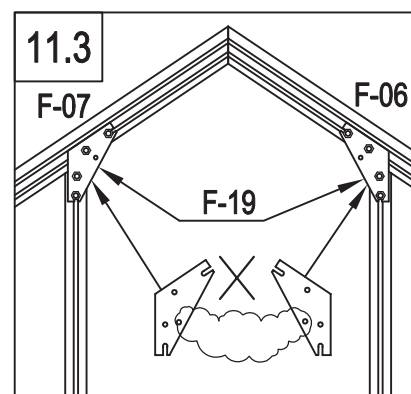
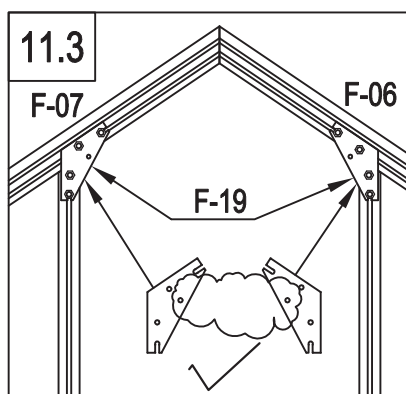
Image	Item#	Quantity
	F-A14	20

11.1 Insert F-06/07 through the bolts in F-19b and F-A06.
Tighten the nuts.

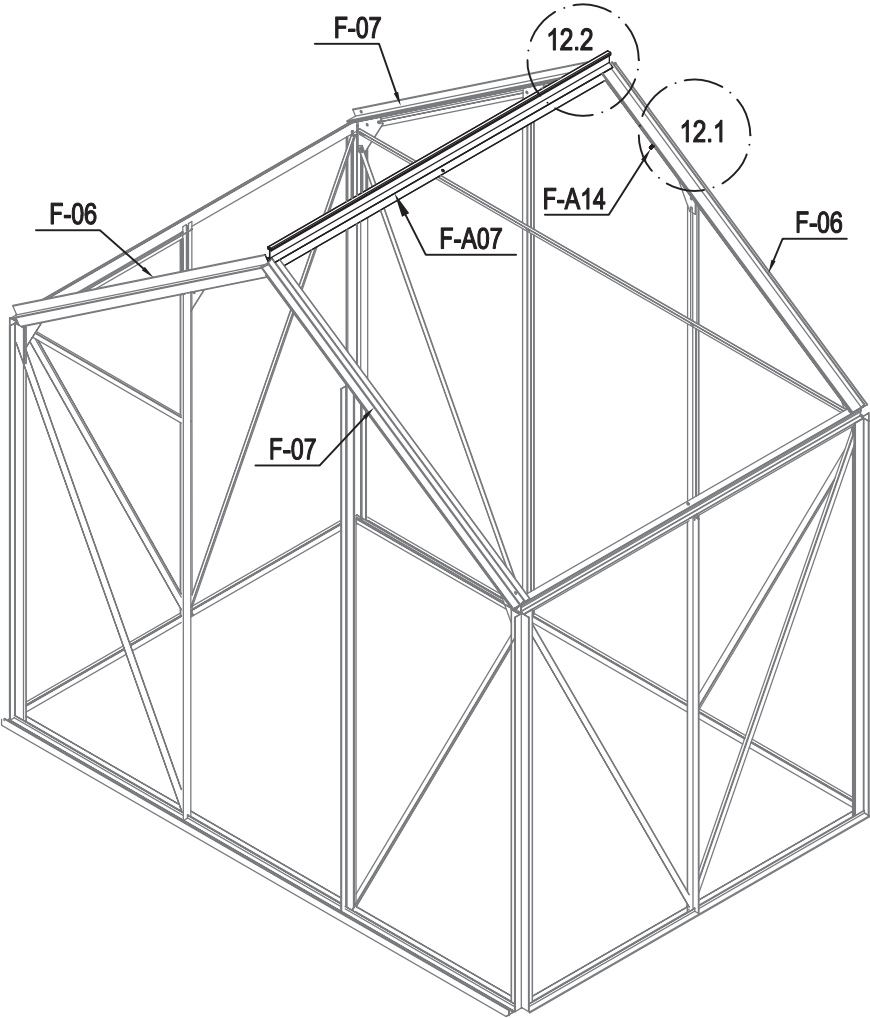


Parts used in this section.

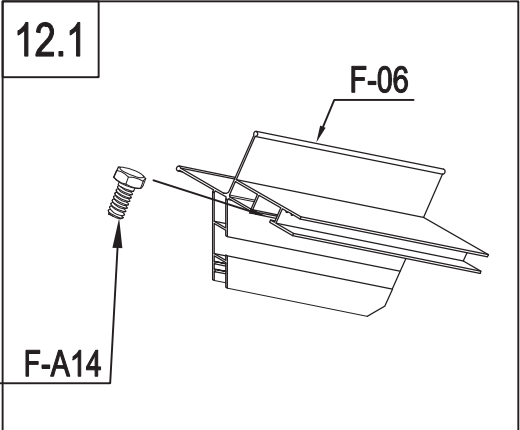
Image	Item#	Quantity
	F-06	2
	F-07	2
	F-19	4
	F-A14	8



11.2+11.3 Insert two bolts into the grooves of F06 and F07. Then attach F-19 perpendicularly through the hole. Affix the bolts inserted in F-08 and F-09 through F-19's holes as shown. The side which has three holes should face upward.



12.1 Secure one bolt into F-06 and F-07 through the hole in F-A7.



12.2 Insert one bolt into F-06.

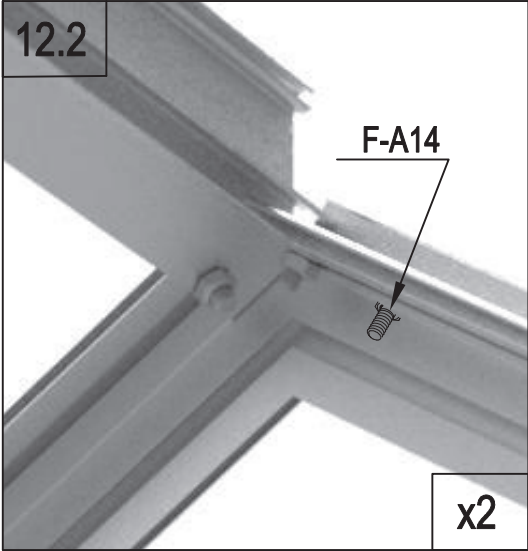
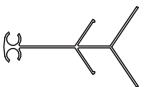
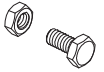
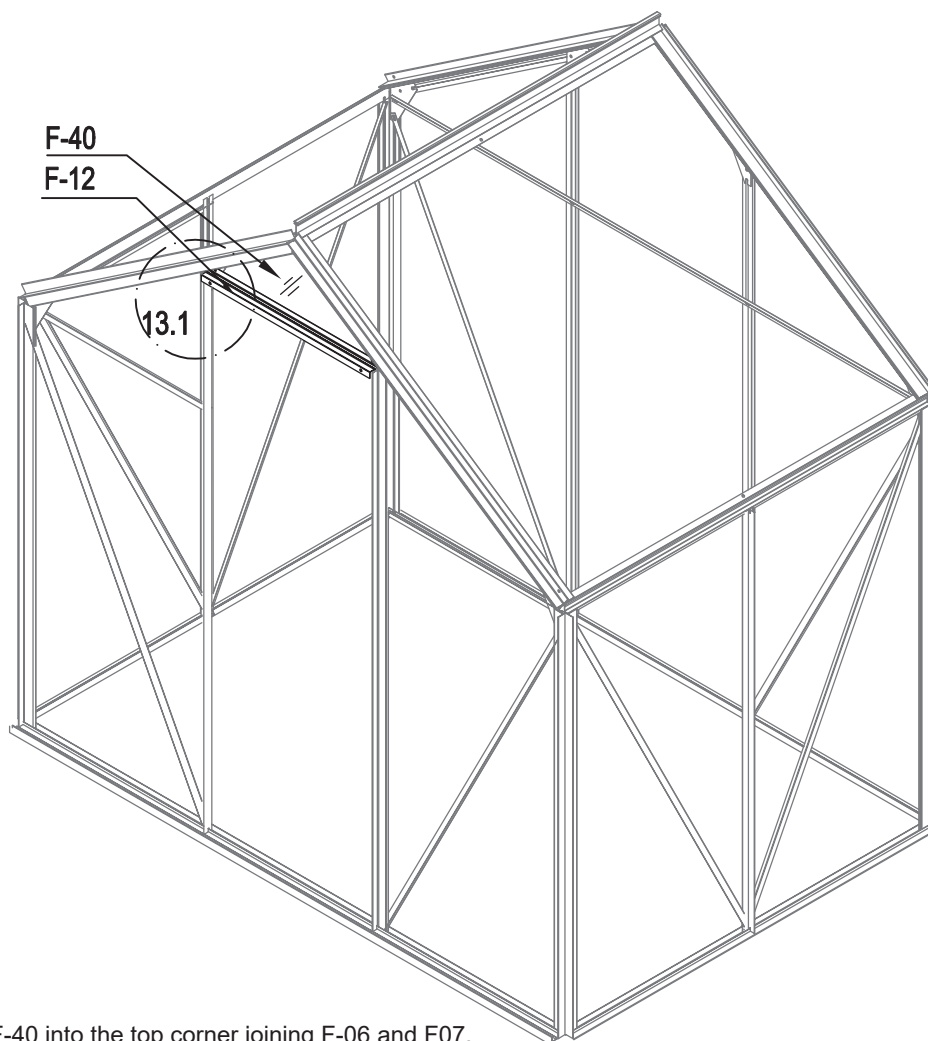


Image	Item#	Quantity
	F-A07	1
	F-A14	5

Parts used in this section.



13.1 Insert F-40 into the top corner joining F-06 and F07.
Connect F-12 and F-19 by bolt & nut.

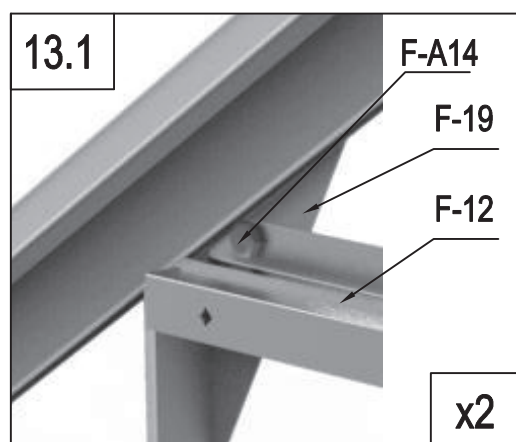
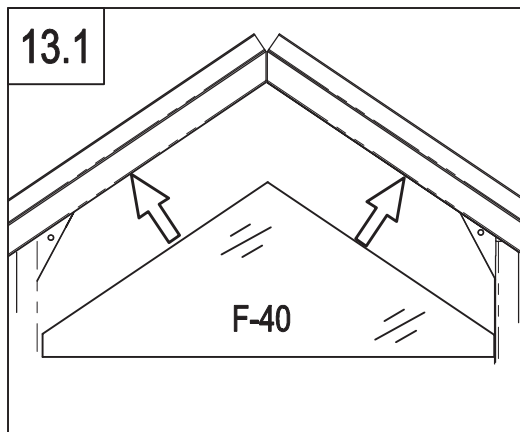
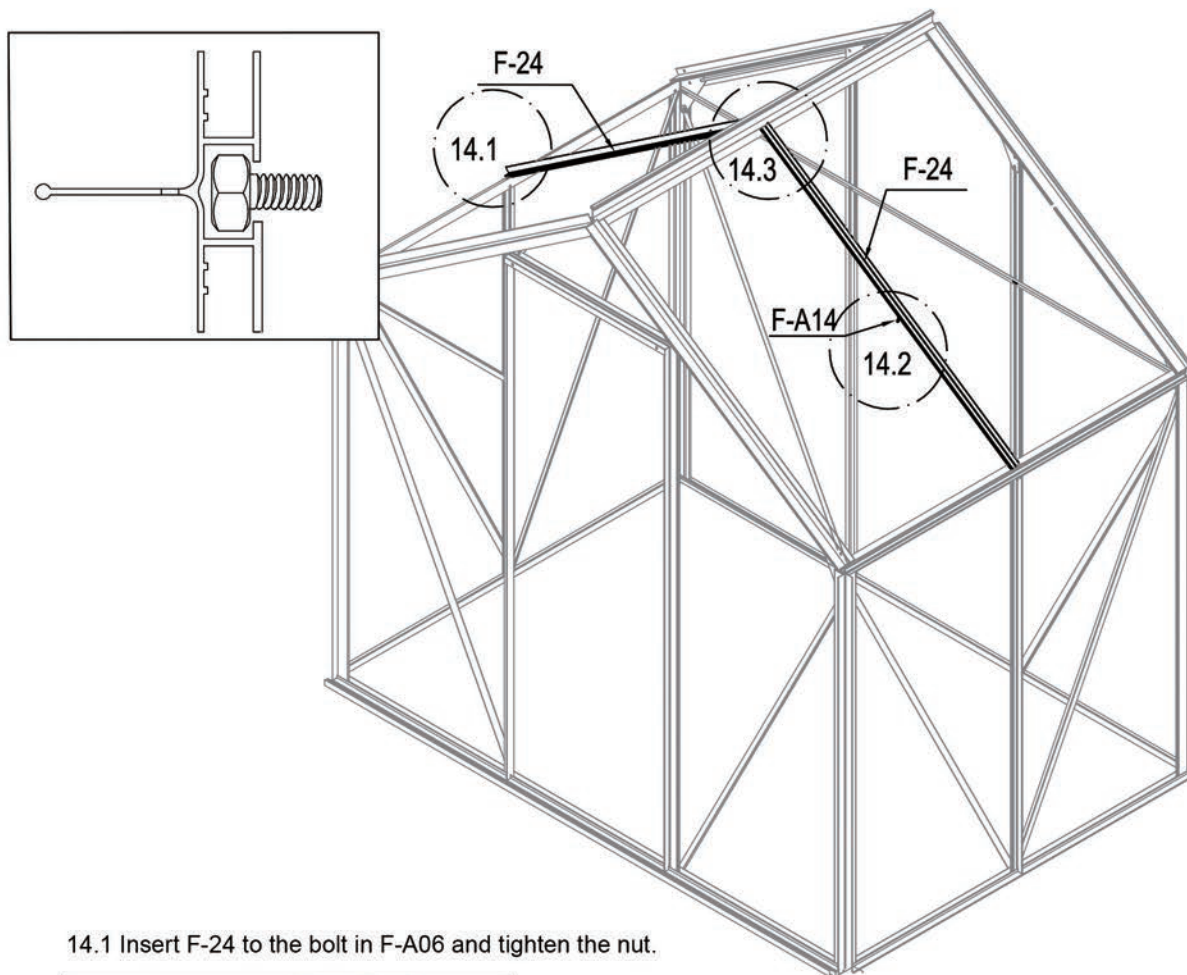
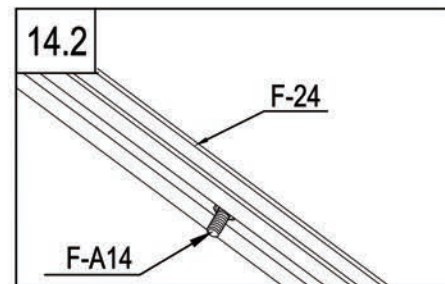
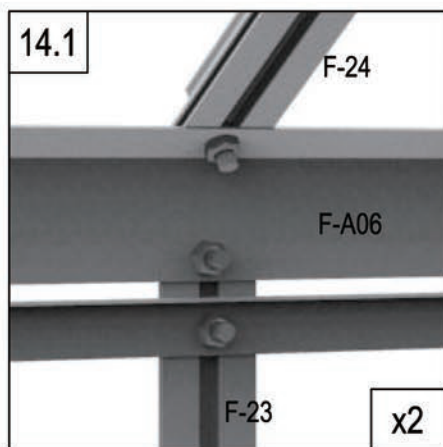


Image	Item#	Quantity
	F-12	1
	F-40	1
	F-A14	2

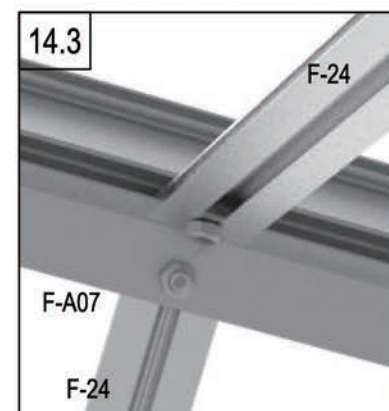
Parts used in this section.



14.1 Insert F-24 to the bolt in F-A06 and tighten the nut.



14.2 Slide two bolts into F-24 which is in the right side and one bolt into F-24 in the left side.



14.3 Insert the upper bolt in right F-24 and the bolt in left F-24 through the holes of F-A07 and tighten.

Parts used in this section.

Image	Item#	Quantity
	F-24	2
	F-A14	5

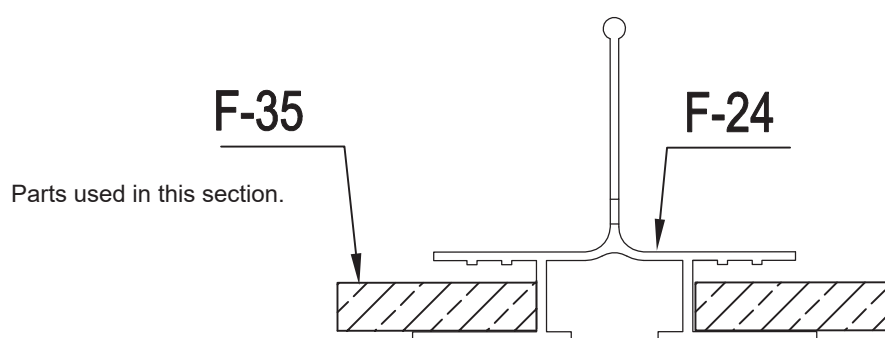
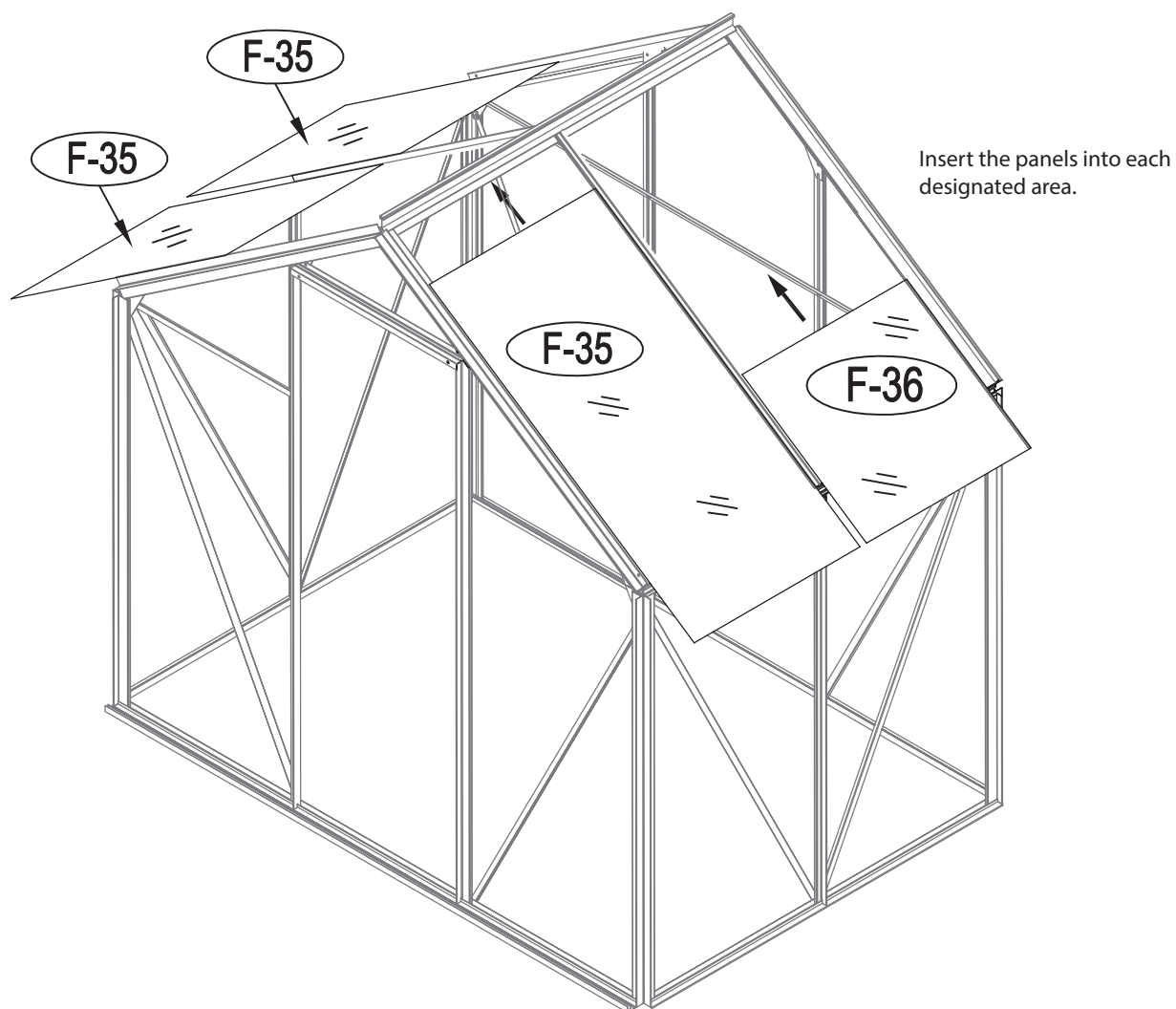
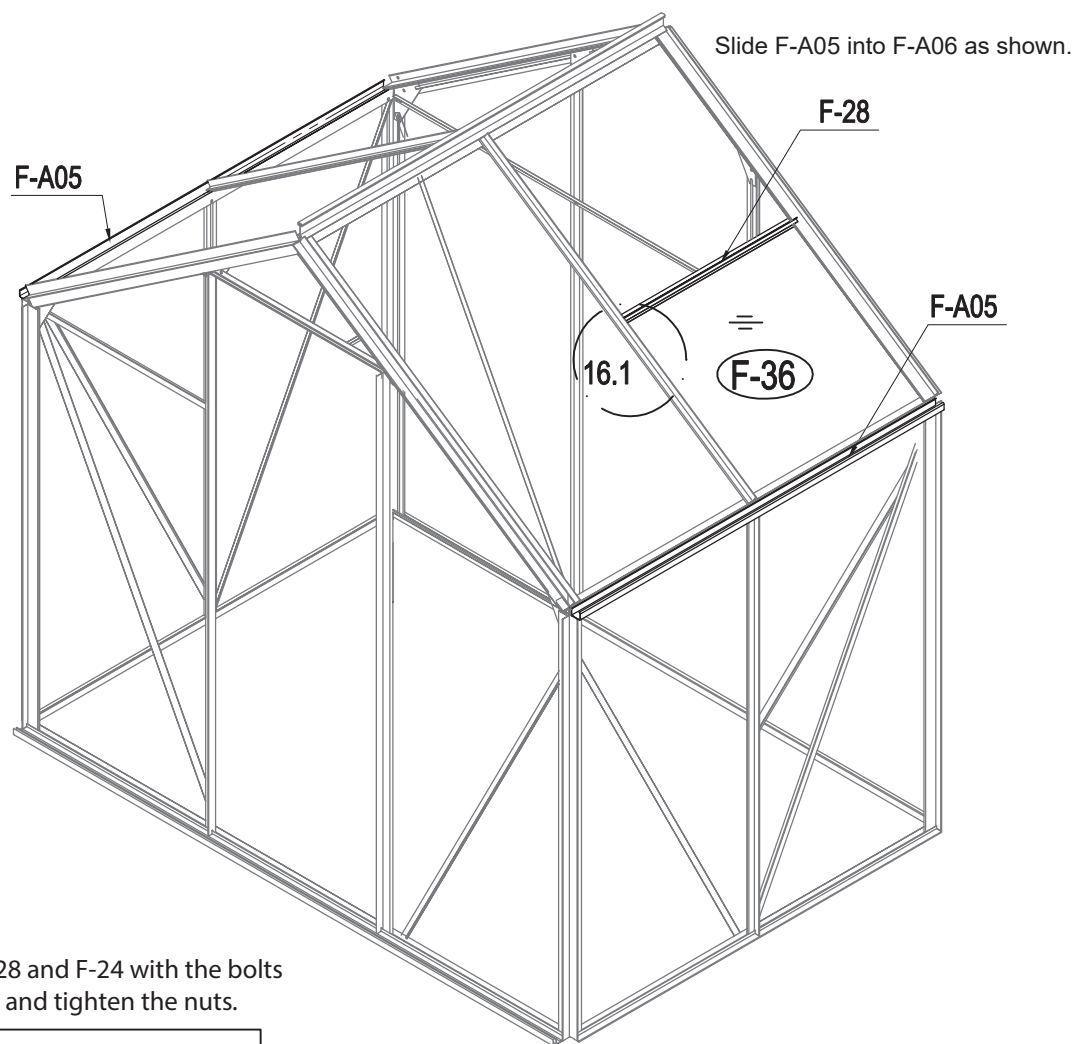
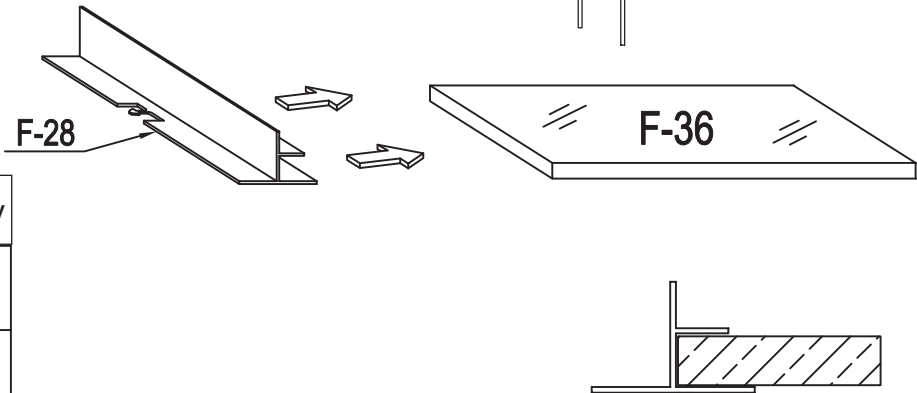
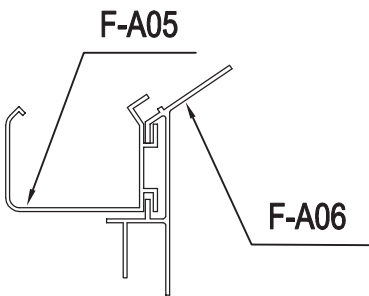
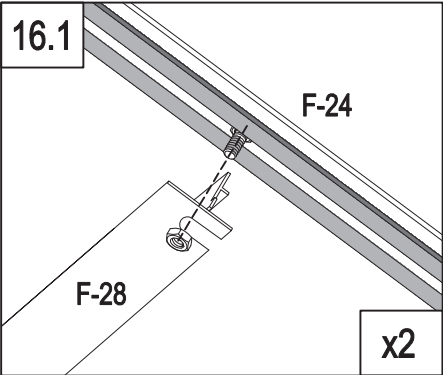


Image	Item#	Quantity
	F-36	1
	F-35	3

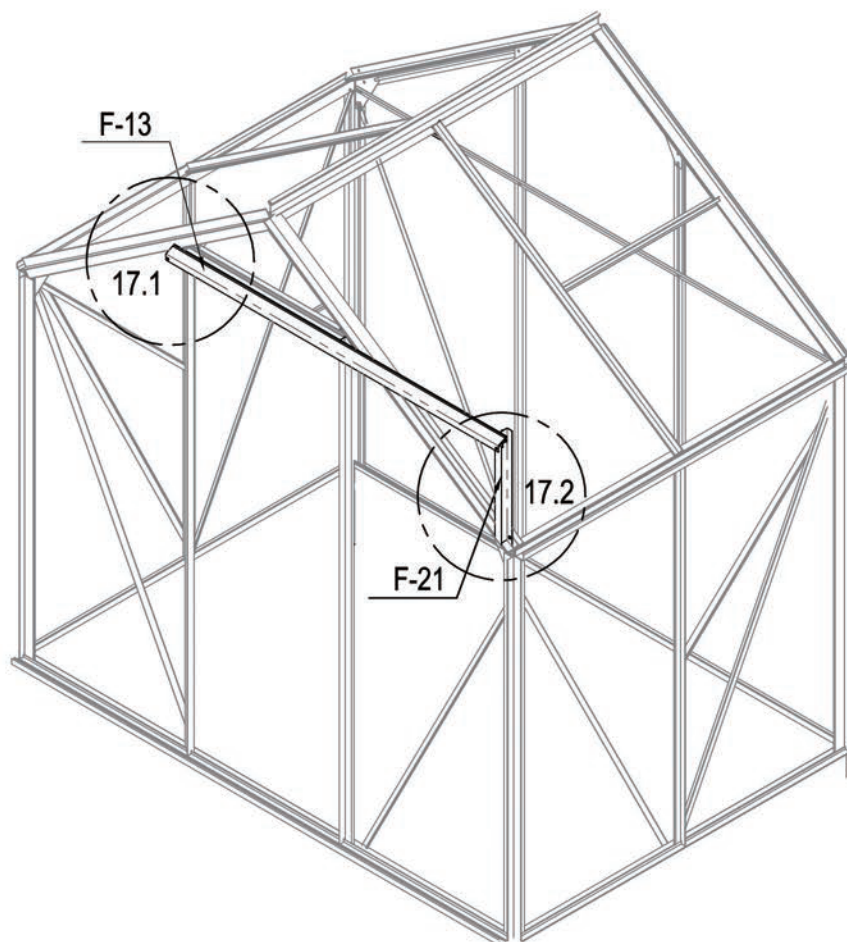


16.1 Connect F-28 and F-24 with the bolts placed into F-24 and tighten the nuts.

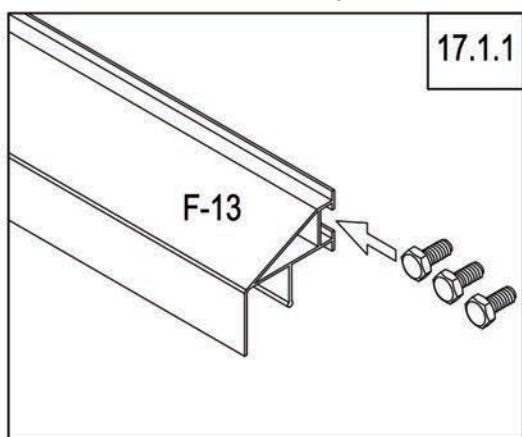


Parts used in this section.

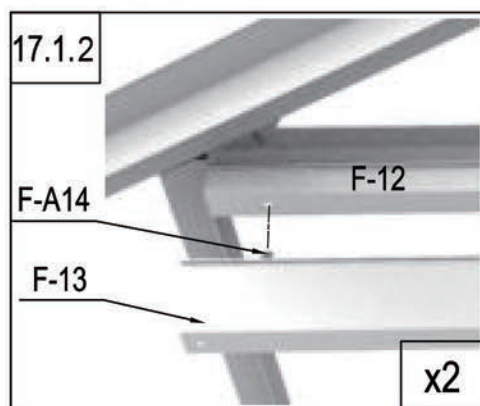
Image	Item#	Quantity
	F-A05	2
	F-28	1



17.1.1 Insert three bolts into the grooves of F-13.

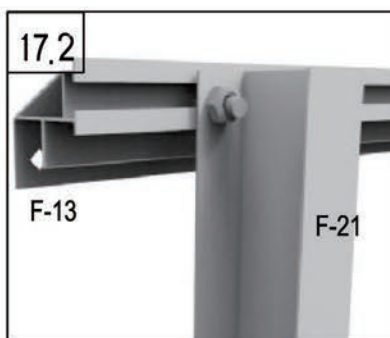


17.1.2 Insert each bolt into the holes of F-12 and tighten the nuts.

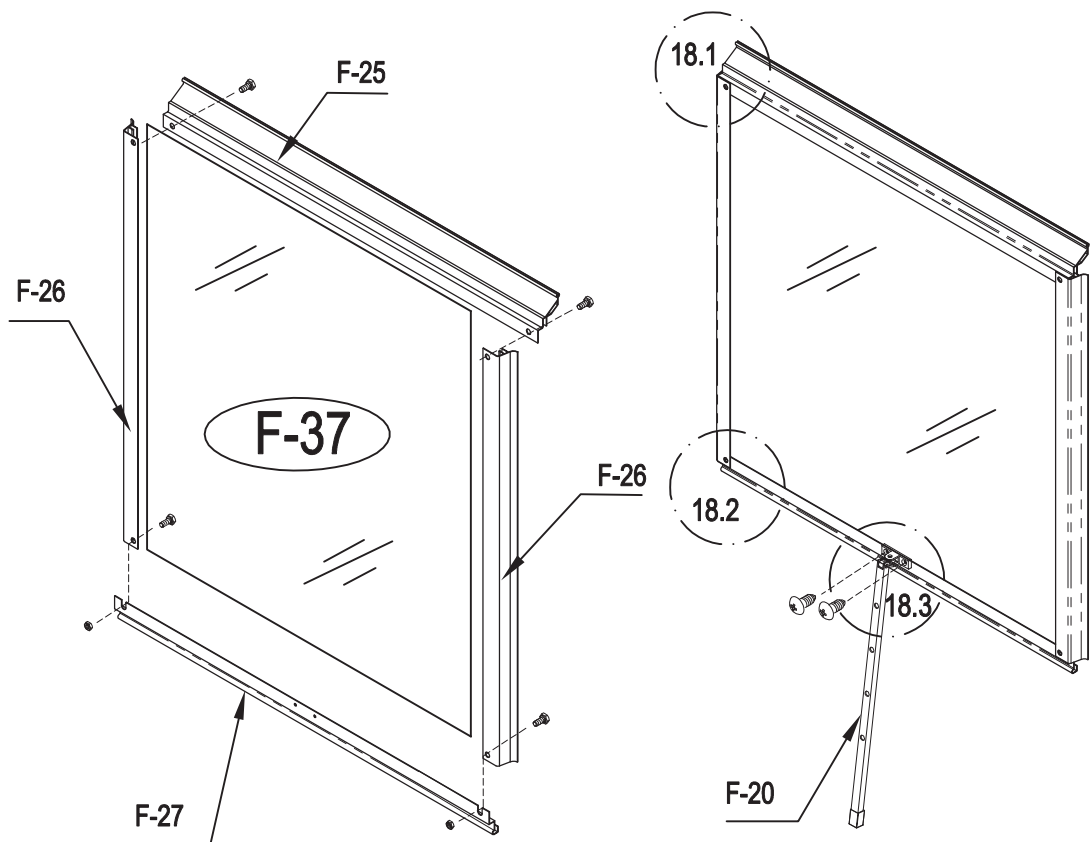


Parts used in this section.

Image	Item#	Quantity
	F-13	1
	F-21	1
	F-A14	4



17.2 Connect F-21 to F-13 and F-07 by bolts and nuts.

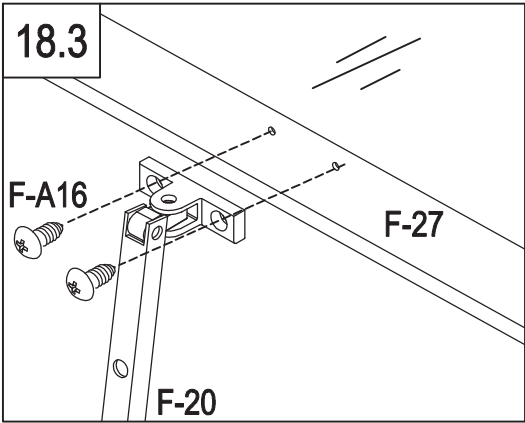


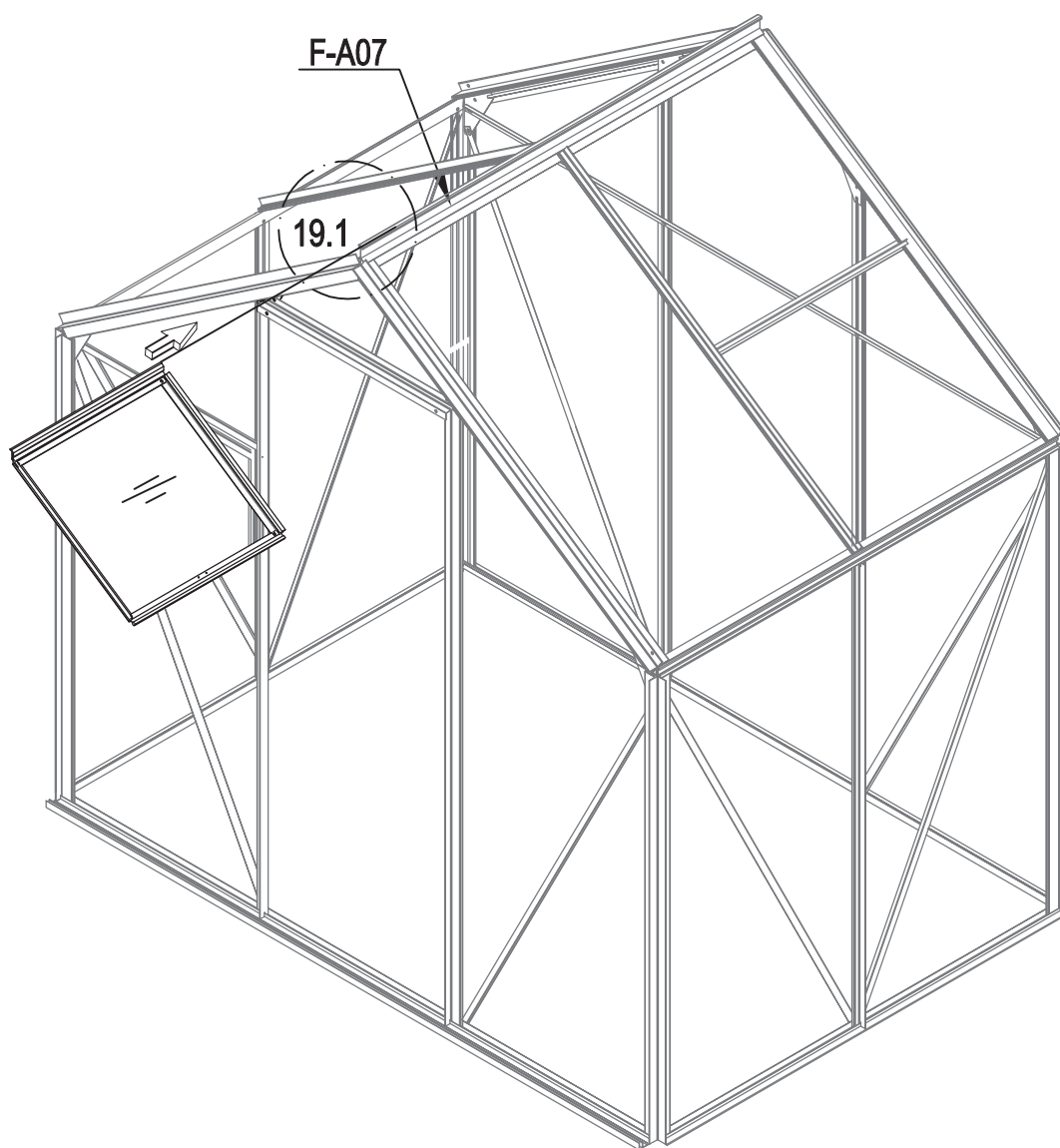
Parts used in this section.

Image	Item#	Quantity
	F-25	1
	F-26	2
	F-27	1
	F-20	1
	F-37	1
	F-A16	2
	F-A14	4

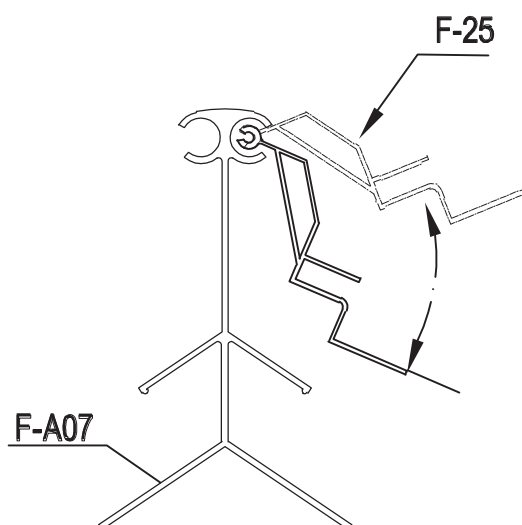
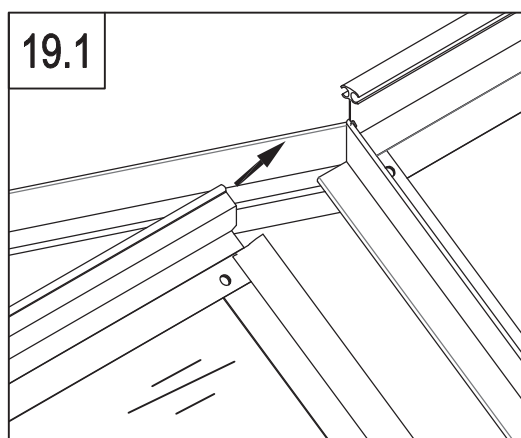
18.1 Slide two units F-26 over the sides of the F-37 window panel.
18.2 Slide F-27 over the bottom of the F-37 window panel.
Slide F-25 over the top edge of the window panel.
Secure with F-C14 nuts and bolts at all four corners.

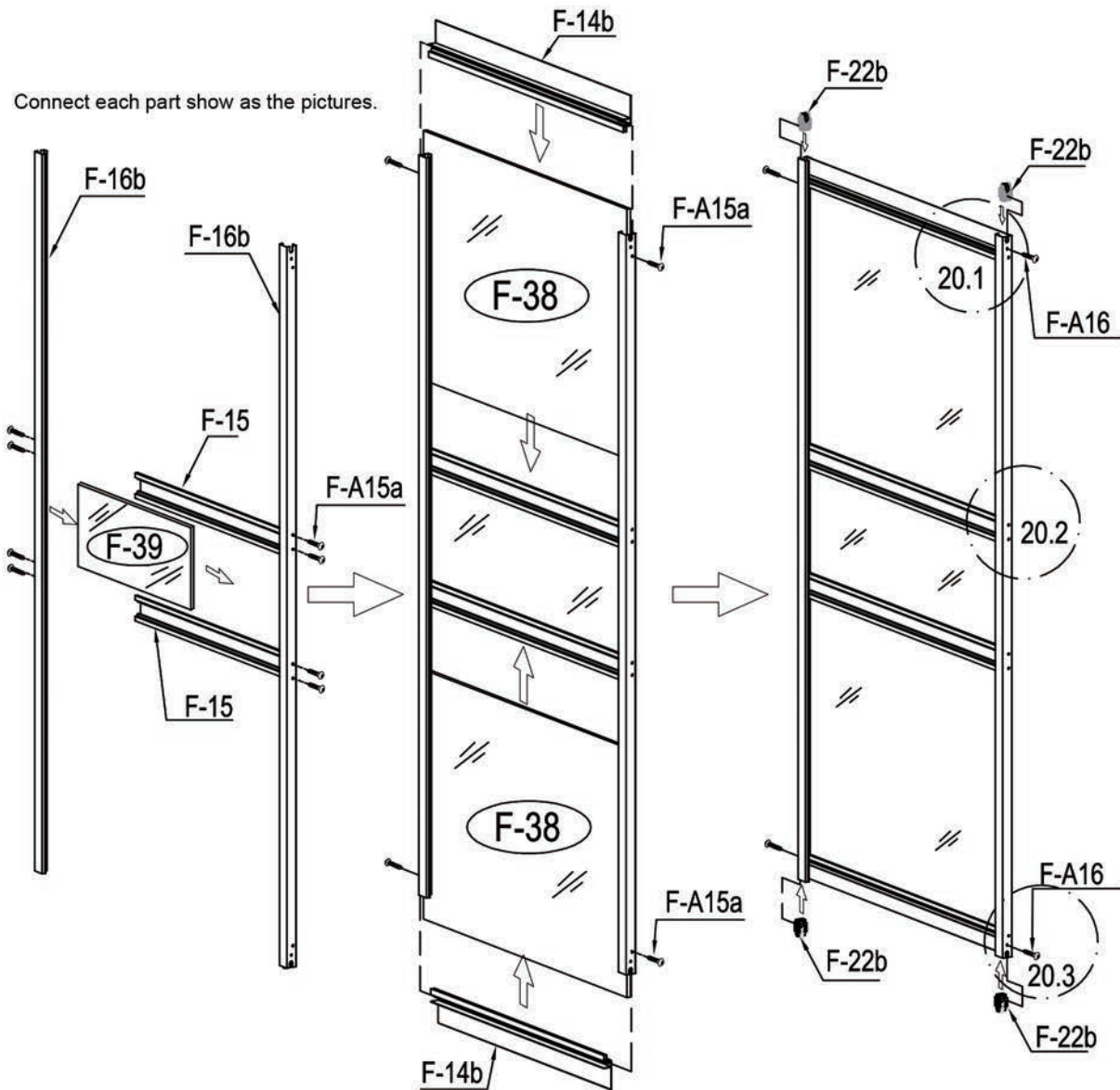
18.3 Attach F-20 to F-27 using two F-C16 screws.





19.1 Slide the window into F-A07 according to the diagram.





Parts used in this section.

Image	Item#	Quantity
	F-38	2
	F-39	1
	F-16b	2
	F-14b	2
	F-15	2
	F-22b	4
	F-A15a	12
	F-A16	4

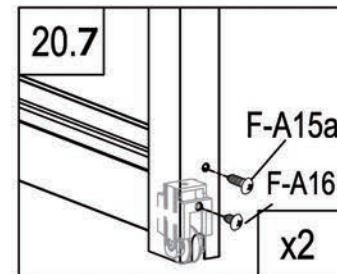
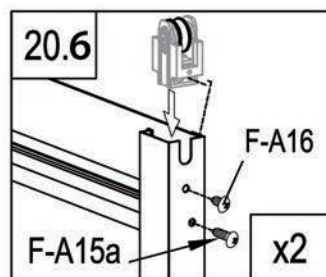
20.1 Insert the two F-15 frames to align with the middle holes in each of the two F-16b door frames. Secure with F-A15a screws to one side only for now.

20.2 Slide F-39 panel in the middle slots.

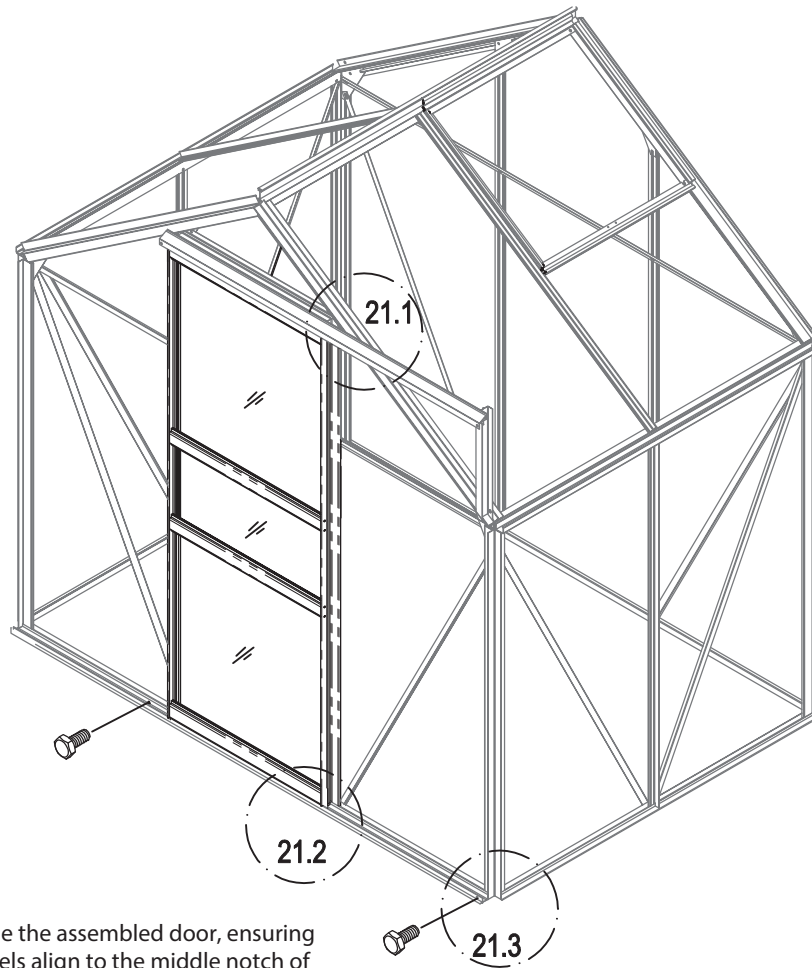
20.3 Slide F-38 panels in the top and bottom slots.

20.4 Secure the remaining F-16b using four F-C15a screws into the two F-15s.

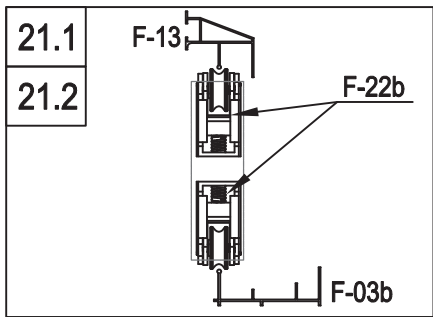
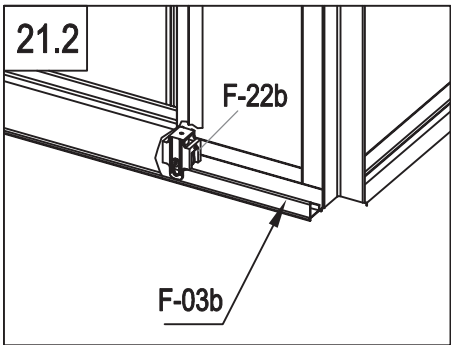
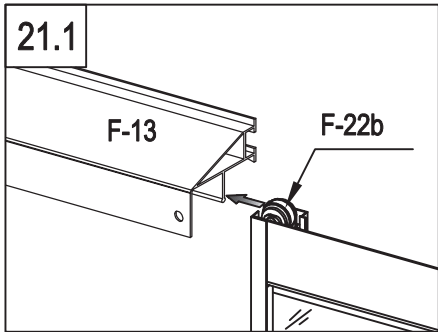
20.5 Cap off the top and bottom of the door with two F-14b frames.



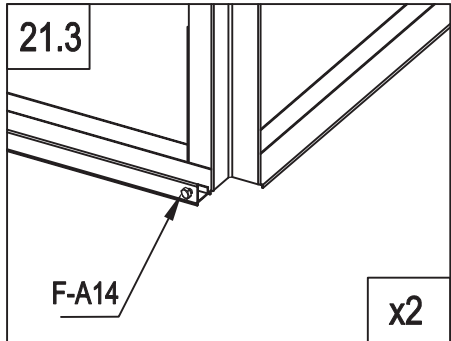
20.6 & 20.7 Insert the four F-22b pulley wheels into the tops and bottoms of the two F-16b frames. Secure closest holes to each of the pulley wheels with F-C16 screws, and furthest with F-C15a screws.




21.1 & 21.2 Slide the assembled door, ensuring the pulley wheels align to the middle notch of F-13 on top and F-03b on the bottom.

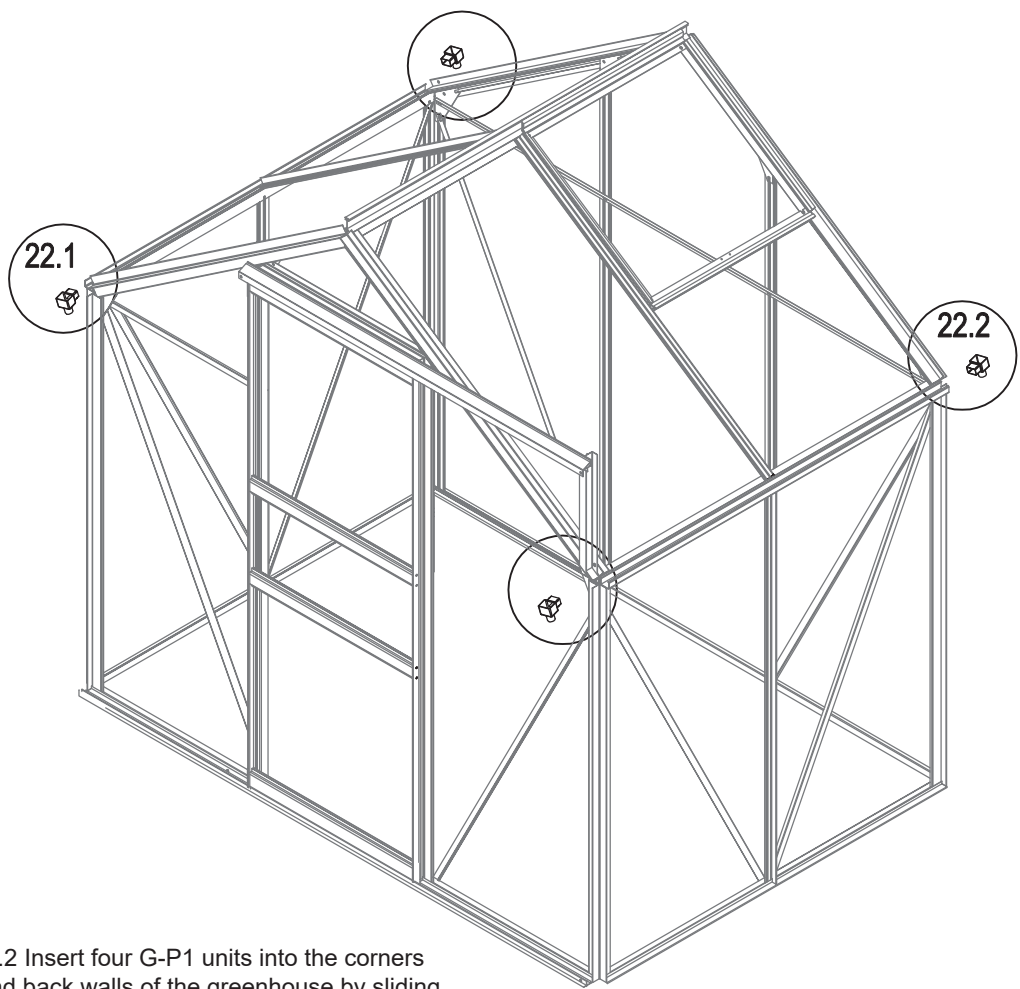


21.3 Secure door frame with nuts and bolts at bottom corners.

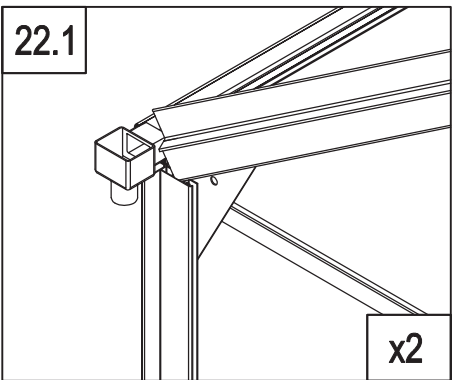
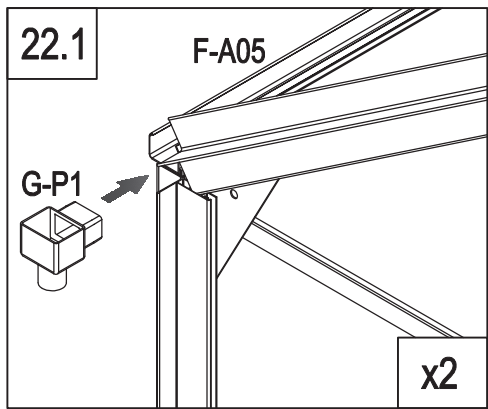


Parts used in this section.


Image	Item#	Quantity
	F-A14	2

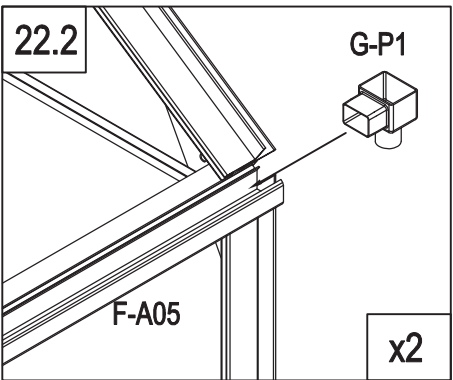


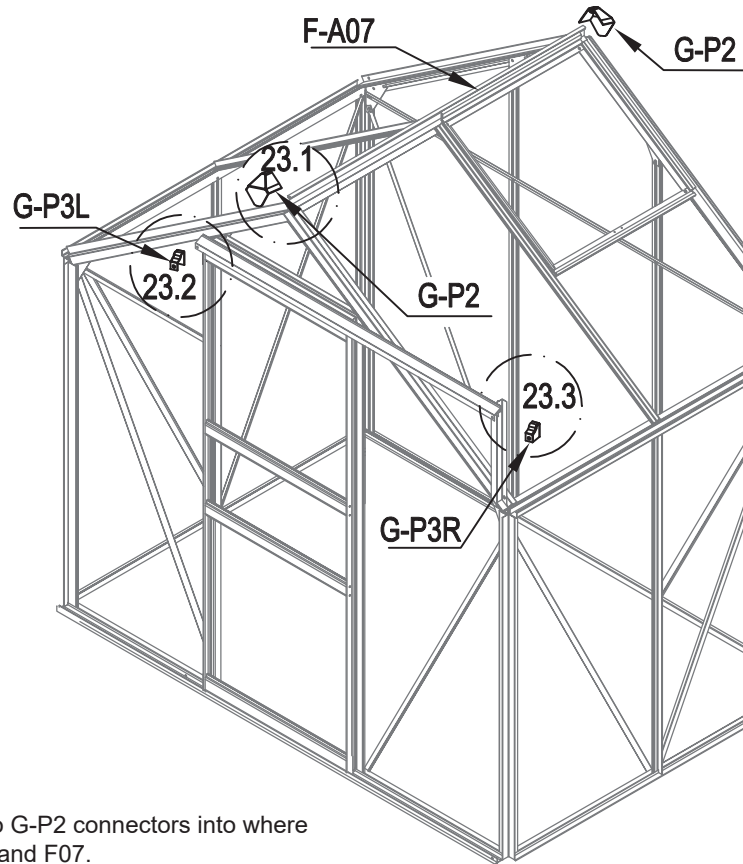
22.1 & 22.2 Insert four G-P1 units into the corners of front and back walls of the greenhouse by sliding the rectangular section into each F-C05a panel.



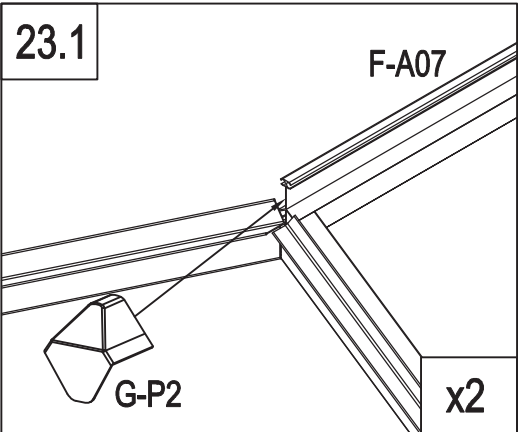
Parts used in this section.

Image	Item#	Quantity
	G-P1	4

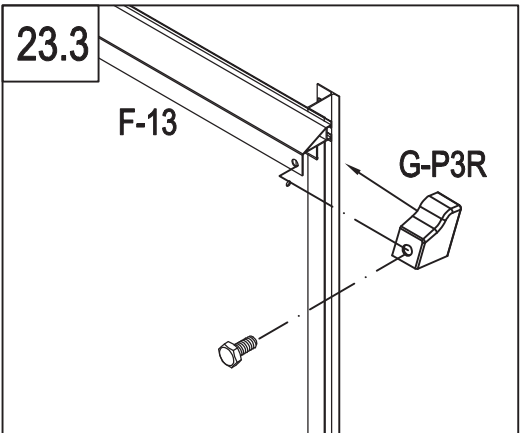
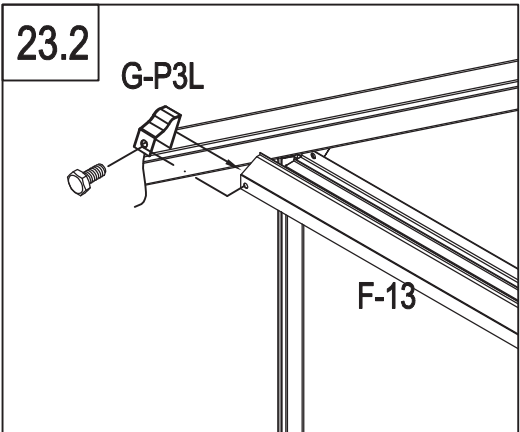




23.1 Slide the two G-P2 connectors into where F-A07 joins F-06 and F-07.

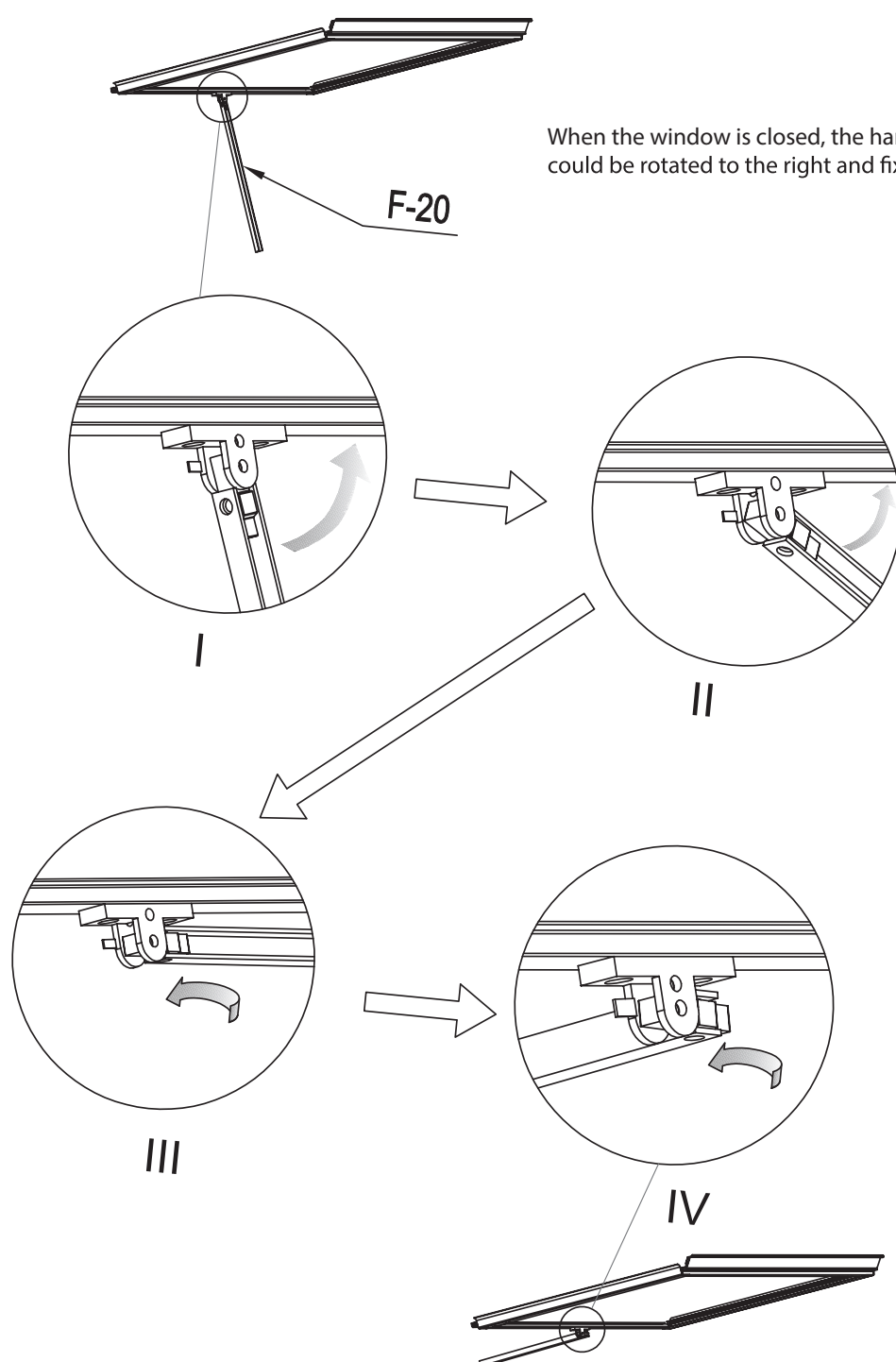


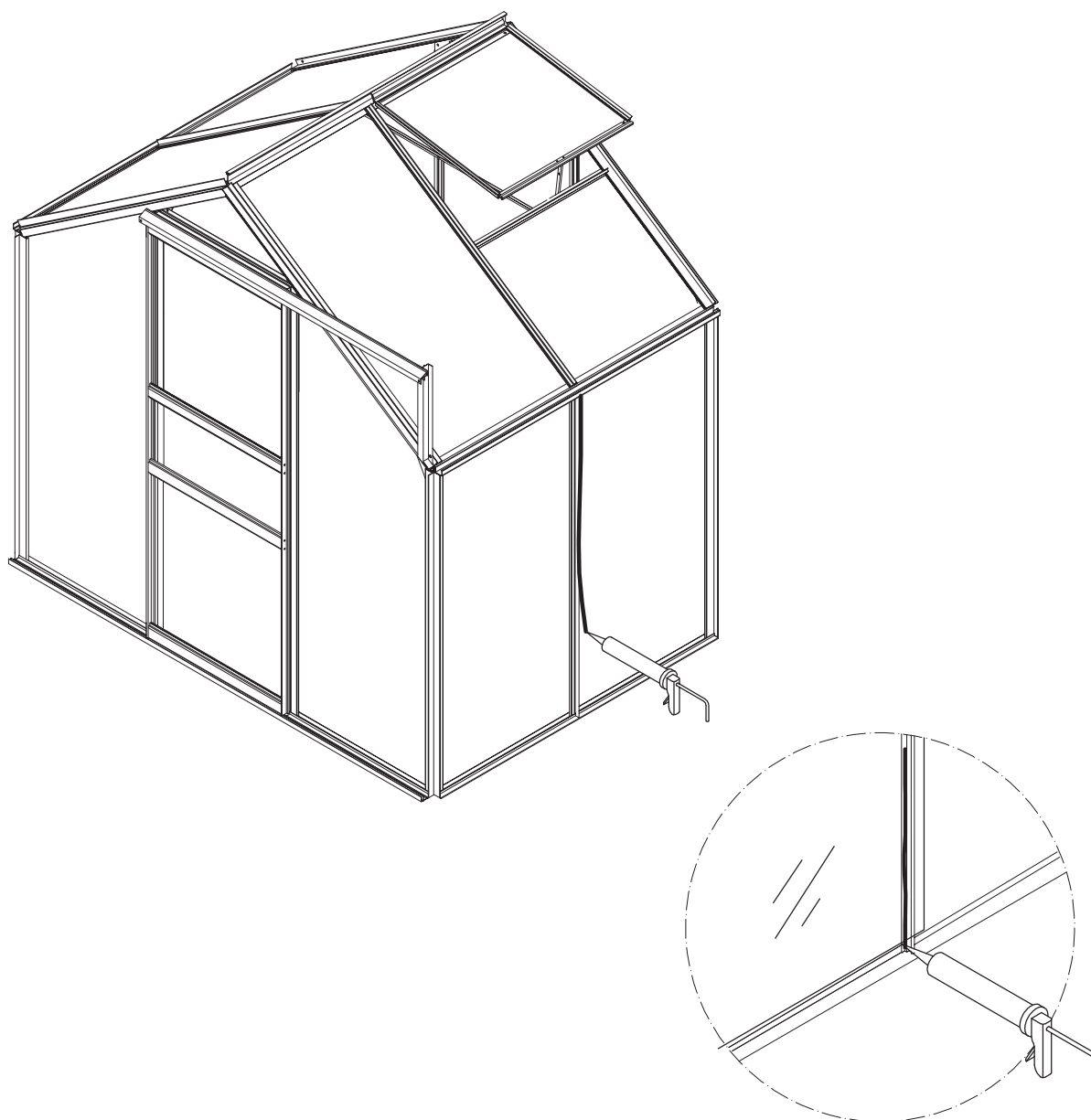
23.2 & 23.3 Cap off F-13 with G-P3L at the left end and G-P3R at the right end. Secure with nuts and bolts.



Parts used in this section.

Image	Item#	Quantity
	G-P2	2
	G-P3L	1
	G-P3R	1
	F-A14	2





Advice

It is not necessary but we would advise:

For additional strength, you can also use some glue or tapes between the polycarbonate panel and the aluminium frame to enhance the stability.

Note: Silicone sealant and glue gun are not included in our tool kit. You can buy them locally.

Only use silicone sealant suitable for aluminium.