



GRANDIO[®]
G R E E N H O U S E S

ASSEMBLY MANUAL 2

SUMMIT GREENHOUSE ASSEMBLY INSTRUCTIONS

- **PREPARING FOR ASSEMBLY & WARNINGS**
- **DETAILED GREENHOUSE ASSEMBLY INSTRUCTION
MANUAL FOR ALL GRANDIO SUMMIT GREENHOUSE
SIZES**

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Summit Greenhouse Assembly Manual 2

GRANDIO SUMMIT GREENHOUSE ASSEMBLY & INSTALLATION INSTRUCTIONS GUIDE

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Dear Valued Customer,
We would like to congratulate you on your new Grandio Greenhouse purchase. We are confident that you have made the right decision in choosing Grandio. Our greenhouses are made with high quality aluminum and polycarbonate that will last for many garden seasons to come.

Please take the time to carefully read this instruction manual ahead of your build for an easier and more enjoyable assembly experience.

Cheers!

Grandio Greenhouses

Save this owner's manual for future reference and if you need our help.

CONTACT OUR CUSTOMER SERVICE
DEPARTMENT at:
1-866-448-8231

Hours: 8:30a.m.-5:00p.m. Monday through
Friday (Mountain Time)

Grandio Greenhouses
88 N Touchmark Way Ste. 150
Meridian, ID 83642
www.grandiogreenhouses.com

IMPORTANT! PLEASE READ BEFORE BEGINNING ASSEMBLY

Before you begin complete this check list:

- ☐ Take inventory of all parts using the parts list in **MANUAL 3**.
- ☐ Be cautious where you place the polycarbonate panels as they will burn grass or plants if left on top of them in direct sunlight. Note that clear film side of panels should always face the sun and white film side faces inside greenhouse. Panels may scratch easily so please use care when handling and cleaning.
- ☐ Plan out when and where you are going to place the greenhouse, we recommend that you place it in an area that will receive direct sunlight and will be protected from the wind as much as possible.
- ☐ It will take at least (2) people to put the greenhouse together, if assembling any greenhouse longer than 12x16 you will need at least (3) people.
- ☐ Before you build, make sure you are allowed to build it! Consult all building codes, as well as city or municipality ordinances and HOAs, as you may need approval before you build.
- ☐ Contact your insurance company to make sure your Grandio Greenhouse will be covered on your policy.
- ☐ Call 811 before digging.
- ☐ Do not attempt to begin construction on a windy day. Damage caused by incomplete assembly is not covered by warranty.
- ☐ Your greenhouse should be built on a flat, level surface. Consider all variables including drainage, wind impact, sunlight, etc.
- ☐ Read all 3 Manuals to get familiar with all pieces and parts prior to beginning assembly. **Follow the steps outlined in the order presented.**



IMPORTANT! SAFETY INSTRUCTIONS



FAILURE TO FOLLOW THESE WARNINGS MAY RESULT IN SERIOUS INJURY OR PROPERTY DAMAGE AND WILL VOID WARRANTY.

To ensure safety, do not attempt to assemble this product without following the instructions carefully. Check entire box and inside all packing material for parts and/or additional instruction materials. Before beginning assembly, locate and read the instruction **Manuals 1, 2, and 3**. Complete assembly and proper usage are essential to reduce the risk of accident or injury when using your Grandio Greenhouse.

CAUTION: Do not leave polycarbonate panels laying on grass, in direct sun light, or extreme heat. Keep in a cool dry place until they are to be installed!! (May cause burning to plants or grass if left directly on top of them, also may damage panels due to the protective film adhering to panels.) Panels may scratch easily.

*** DO NOT USE SOLVENT BASED CLEANERS ON POLYCARBONATE PANELS.**

- Each of the polycarbonate panels have a clear film side that should always face the sun, and a white film side which faces inside. The clear side has a UV coating and we recommend marking a small "x" on a corner of each panel to determine which side has the UV Coating as you cannot visually determine otherwise in the case of future disassembly.
- Due to shipping, the grooves of some of the aluminum profiles may be too small to insert into the polycarbonate sheet, you may carefully use a screwdriver to pry the framework open so the polycarbonate sheet can be inserted smoothly.
- Do not use or store hot objects such as grills, blow torches, welding equipment, etc. in or near your greenhouse.
- Do not allow children or pets to play in greenhouse or in the set up area until assembly is complete.
- If using a ladder during assembly, use extreme caution.
- A clean level surface is essential to maintaining the solid integrity of the structure. Install the base correctly as described in manual 1 for your surface. The greenhouse must be anchored down to a firm and level base. If not properly installed warranty will be void.

NEEDED FOR ASSEMBLY

- | | | |
|---------------------|--------------------------------|-------------------------|
| • Tape Measure | • 2-4 Ladders For Larger Sizes | • Safety Glasses |
| • Level | • Work Gloves | • Drill |
| • Carpenter Square | • Permanent Marker | • Folding Utility Table |
| • At Least 2 Adults | • Masking Tape | |



When you see this icon pay special attention to the helpful tips we have provided that will make installation more efficient.

SUMMIT BOX CONFIGURATION LAYOUT

We recommend laying all of your boxes out as shown on the graphic below for an organized assembly.

Locate your greenhouse size and situate your boxes near your assembly site as shown in the order listed below.

Inventory the parts and lay out on a tarp as to not lose items in the grass or dirt near your building site, a folding table is very helpful as well.

*See the reference diagrams for each greenhouse size in the chapters in this **MANUAL 1**. For more information about how the parts will go together and what makes up each section for the assembly see **MANUAL 2**. See **MANUAL 3** for detailed parts lists. See videos on our website at www.GrandioGreenhouses.com.

*If adding a Back Door Transformation Kit you will follow the instructions in this manual, the parts will be in box **GRA-SUM-BD-A** and **GRA-SUM-BD-P**.

MODEL 12'X8' SUMMIT GREENHOUSE KIT & OPTIONAL STEEL BASE KIT	SUMMIT GREENHOUSE 4' EXTENSION KIT & OPTIONAL 4' STEEL BASE EXTENSION KIT	SUMMIT GREENHOUSE 8' EXTENSION KIT & OPTIONAL 8' STEEL BASE EXTENSION KIT
Summit 12x8 1	0	0
Summit 12x12 1	1	0
Summit 12x16 1	0	1
Summit 12x20 1	1	1
Summit 12x24 1	0	2
Summit 12x28 1	1	2
Summit 12x32 1	0	3
GRANDIO SUMMIT 12X8	GRANDIO SUMMIT 4' X	GRANDIO SUMMIT 8' X
<div>GRA-SUM-12A-1 Aluminum Extrusions Box 1</div> <div>GRA-SUM-12A-2 Aluminum Extrusions Box 2</div> <div>GRA-SUM-12P-1 Polycarbonate Panels Box 1</div> <div>GRA-SUM-12P-2 Polycarbonate Panels Box 2</div>	<div>GRA-SUM-4X</div> <div>4' Extension Aluminum Extrusions</div> <div>4' Extension Polycarbonate Panels</div>	<div>GRA-SUM-8XA 8' Extension Aluminum Extrusions</div> <div>GRA-SUM-8XP</div> <div>8' Extension Polycarbonate Panels</div>
GRANDIO STEEL BASE KIT 12X8	GRANDIO STEEL BASE KIT 4' X	GRANDIO STEEL BASE KIT 8' X
<div>GRA-BASE-S128 12x8 Steel Base Kit</div>	<div>GRA-BASE-S4X 4' Steel Base Kit Extension</div>	<div>GRA-BASE-S8X 8' Steel Base Kit Extension</div>

*Steel base kits are intended for earth installation

PREPARE FOR GREENHOUSE ASSEMBLY



IMPORTANT: POLYCARBONATE PANELS

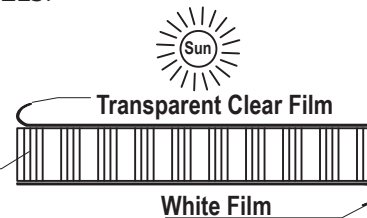


The UV-Protected side is covered with clear film with printed warnings listed on the panel and must face toward the sun. The side covered in white film will always face the interior of the greenhouse. We suggest you peel all film off completely prior to assembly and use a permanent marker to place a small "X" on the lower right corner of each panel on the clear side that faces the sun, each panel has a sticker labeling the panel number and this side always faces the sun or outward as well.

DO NOT REMOVE LABELS UNTIL YOU INSTALL PANELS.

The "X" is suggested in case you dis-assemble your greenhouse in the future so you may identify which side has the UV coating. Always use gloves when handling the polycarbonate panels as the edges can be very sharp.

Polycarbonate
Panels



SNOW WARNING



If your greenhouse has snow accumulation of about 1 foot, go brush it off. If it's wet, heavy snow brush it off sooner.



IMPORTANT: BASE KIT ASSEMBLY & GREENHOUSE PLACEMENT



Before assembling your new greenhouse, a proper foundation must be prepared. A number of anchoring options are acceptable, based on wind and ground conditions in your area.

See **MANUAL 1** for base kit installation methods.



MOISTURE CONTROL KIT



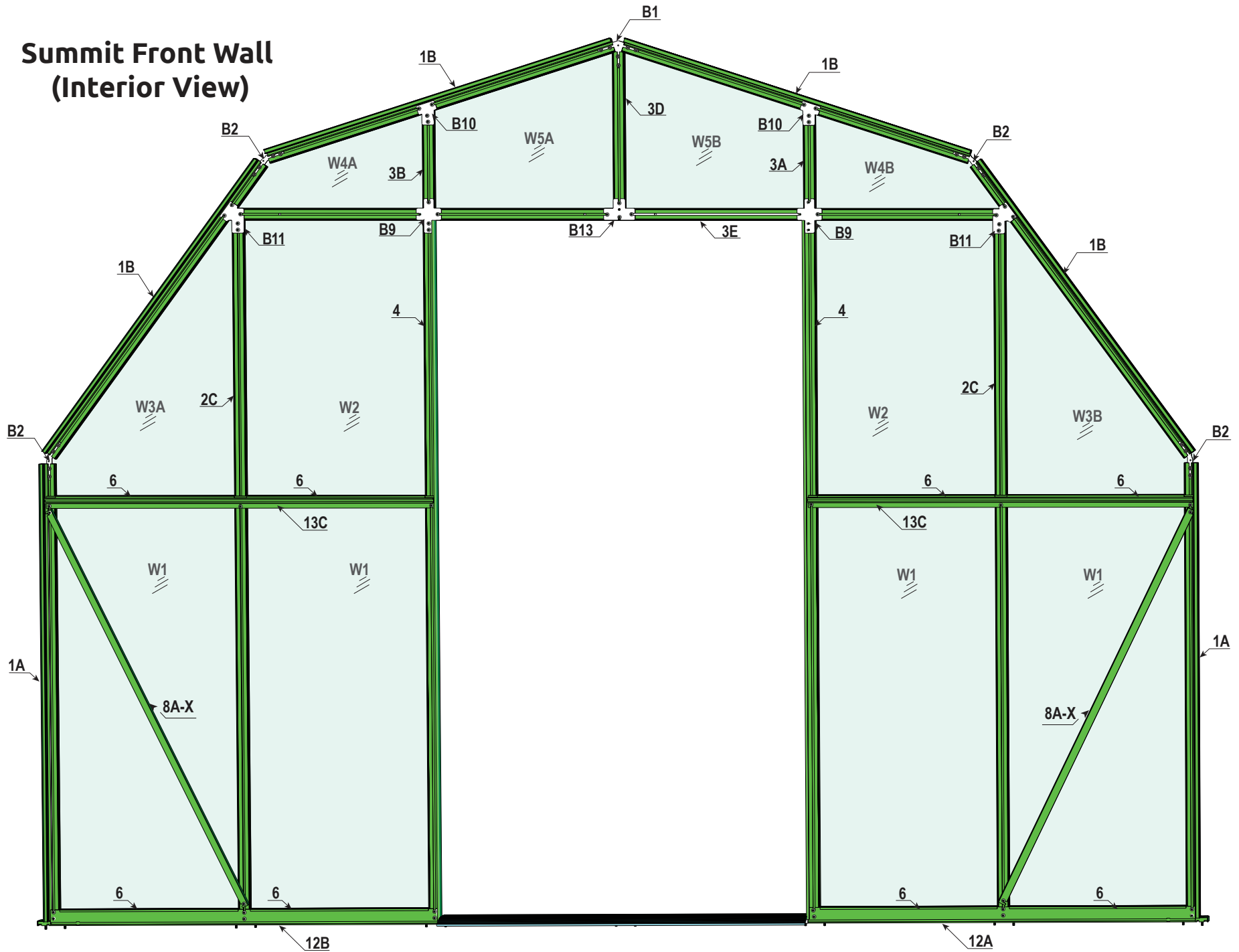
If you purchased the Moisture Control Kit make sure you apply the anti-dust tape to the top and bottom of each panel before you begin assembling your greenhouse.

If you'd like to purchase the Moisture Control Kit visit www.grandiogreenhouses.com for more info.

INSURANCE

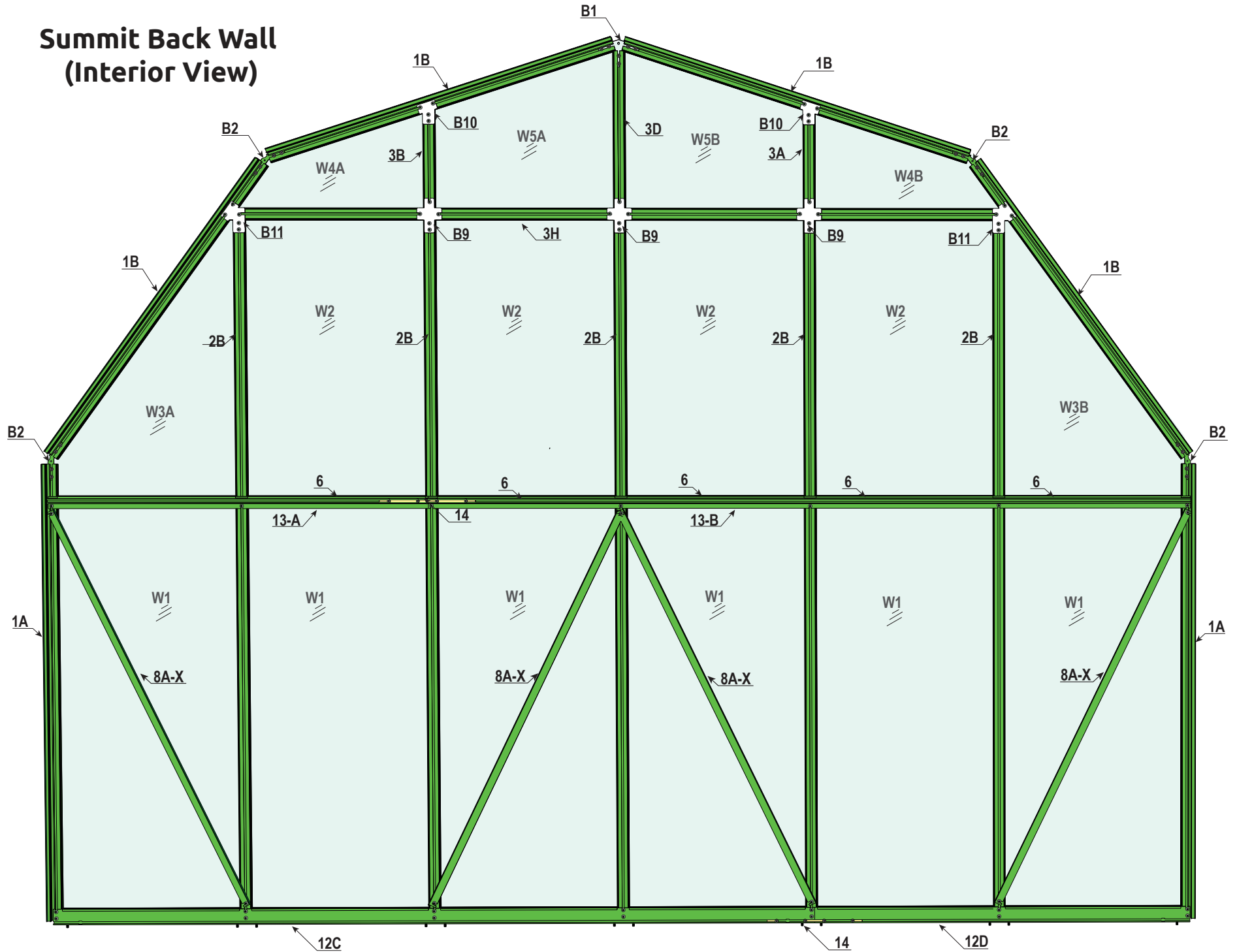
We recommend that you contact your insurance company to add your Grandio Greenhouse to your homeowners insurance policy prior to building. An insured greenhouse is essential in the event of weather-related damage.

Summit Front Wall (Interior View)

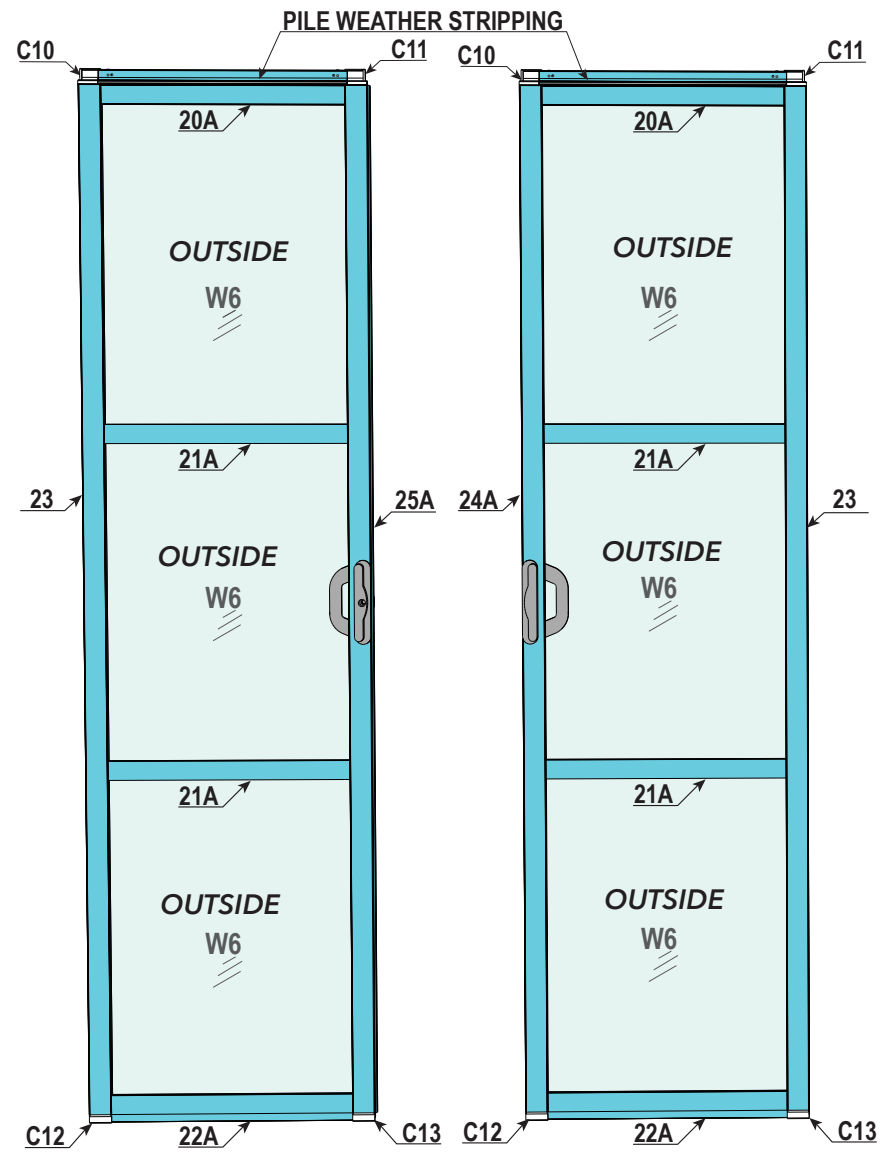


FRONT WALL DIAGRAM

Summit Back Wall (Interior View)



Summit Doors (Exterior View)



FRONT WALL FRAME ASSEMBLY INSTRUCTIONS

ALWAYS ASSEMBLE FRONT WALL LAYING FLAT

This picture shows the *inside* view of front wall section fully assembled.

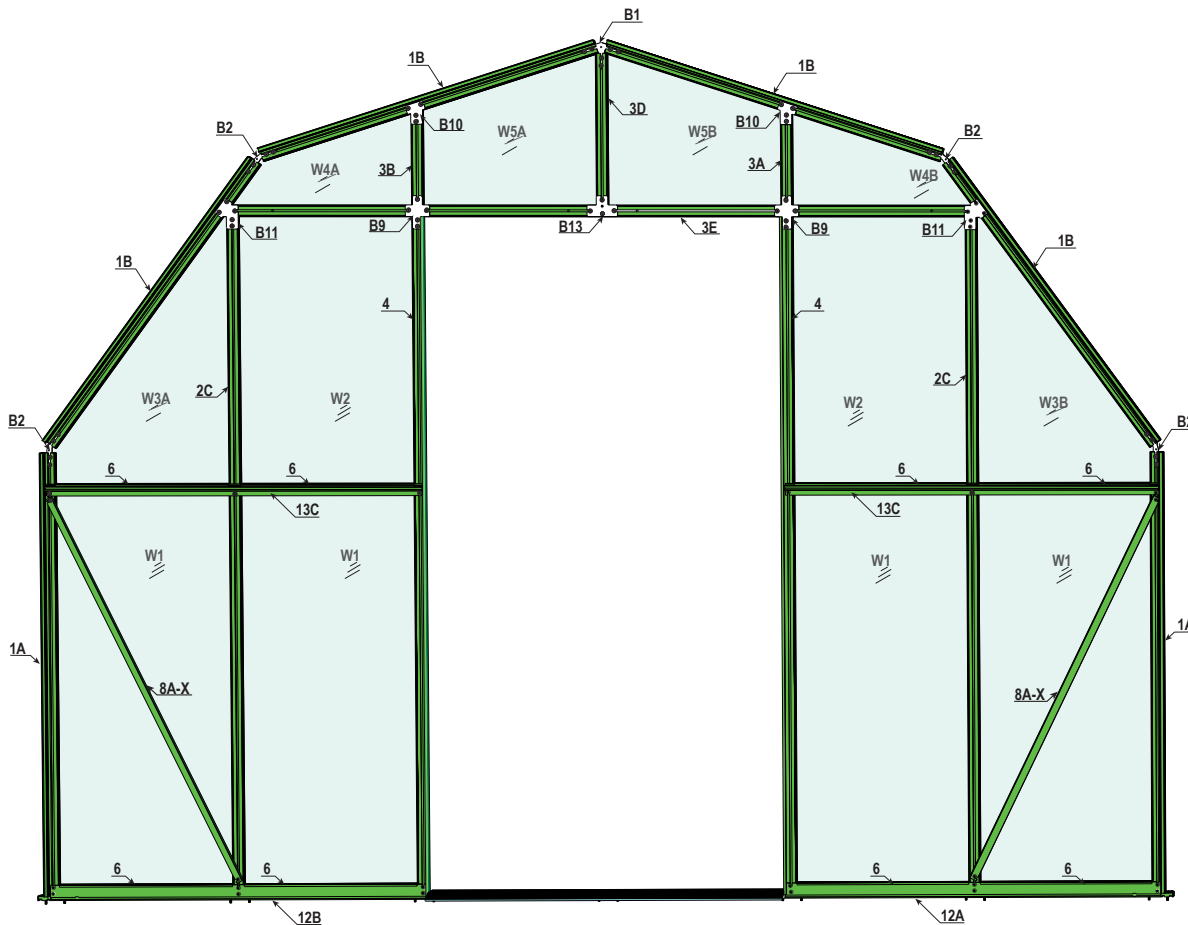
All parts for front wall assembly will be found in boxes;

GRA-SUM-12A-1, GRA-SUM-12A-2, GRA-SUM-12P-1 and GRA-SUM-12P-2.

We recommend that you assemble the front wall on a tarp or solid surface.

* If you are installing the Back Door Transformation Kit you will repeat the steps in this section, pages 11-15.

If you want to purchase the Back Door Transformation kit call 1-866-448-8231.



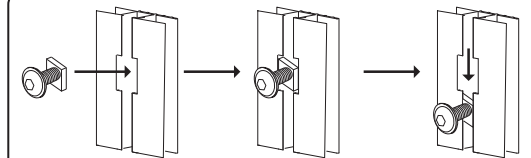
We recommend watching our how to assembly videos with tricks and tips for easier assembly and installation of your Grandio Greenhouse at: www.grandiogreenhouses.com



Lay flat on ground to assemble the front frame of your greenhouse. If possible try to find a shady area protected from the wind. Panels can burn grass and plants if in direct light.



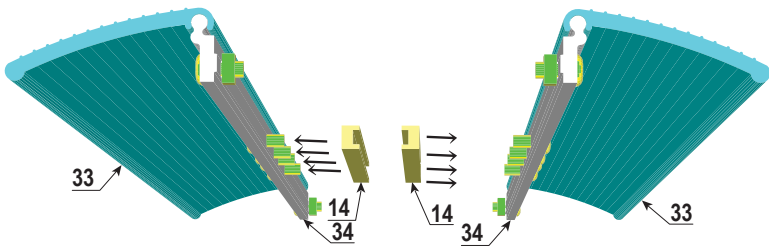
BOLT INSTALLATION TIP: See diagram below for proper installation of nuts and bolts. The nut will go in the channels of the aluminum and NOT the screw head.



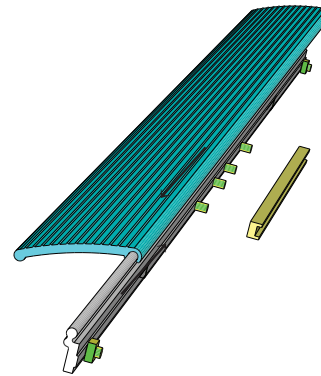
FRONT WALL FRAME THRESHOLD ASSEMBLY

- 1.1** Use ABS-612 screws to attach the 14 to the 34. See **A** and **B** . *If holes aren't lining up, you can make the holes in 34 a little bigger.
- 1.2** Slide the 33 onto the track of the 34. See **A** and **B** .
- 1.3** Loosely attach the SQ-NUT-6 to the 14 then slide into the track of the 12A and 12B. See **C** .
- 1.4** Align the threshold to the center gap on the 12A and 12B, see **D** . Tighten the SQ-NUT-6 nuts.

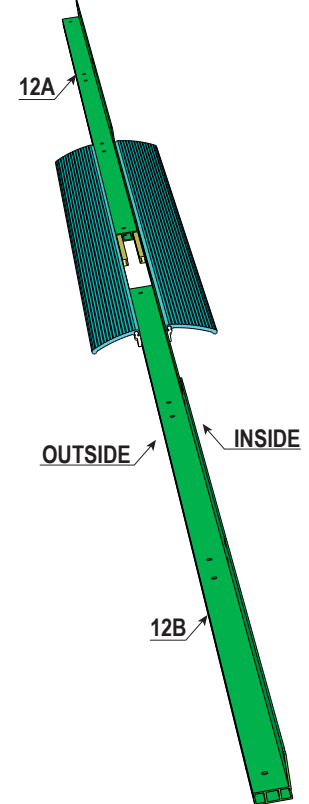
A Threshold Profile



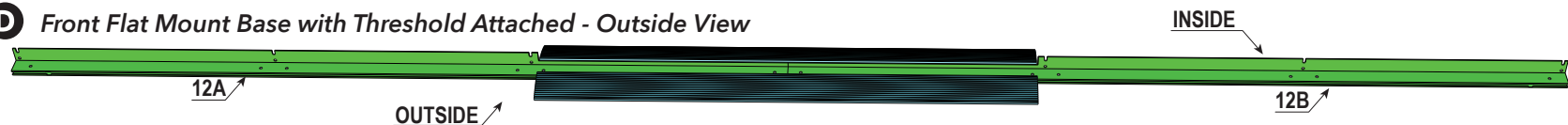
B Under Side of Threshold View



C Front Flat Mount Base Profile View



D Front Flat Mount Base with Threshold Attached - Outside View



FRONT WALL FRAME UPPER ROOF ASSEMBLY

ALWAYS ASSEMBLE FRONT WALL LAYING FLAT

1.5 Use AFS-68 screws to pre thread into the B1's and B2's see **A**.

1.6 Slide the B1 into the 1B's and the B2's into the 1B pieces as shown in diagram **B**. Tighten the allen heads using the W17 or W18 allen driver.

1.7 Attach the B11's, B9's and B13 to the 3E using the AFS-612 screws with SQ-NUT-6 nuts, as shown in diagram **B**.

1.8 Attach the 3B and 3A to the B9's and the 3D to the B13 that are on 3E.

1.9 Attach one B10 to the 3B and one B10 to the 3A using the AFS-612 screws with SQ-NUT-6 nuts, as shown in diagram **B**.

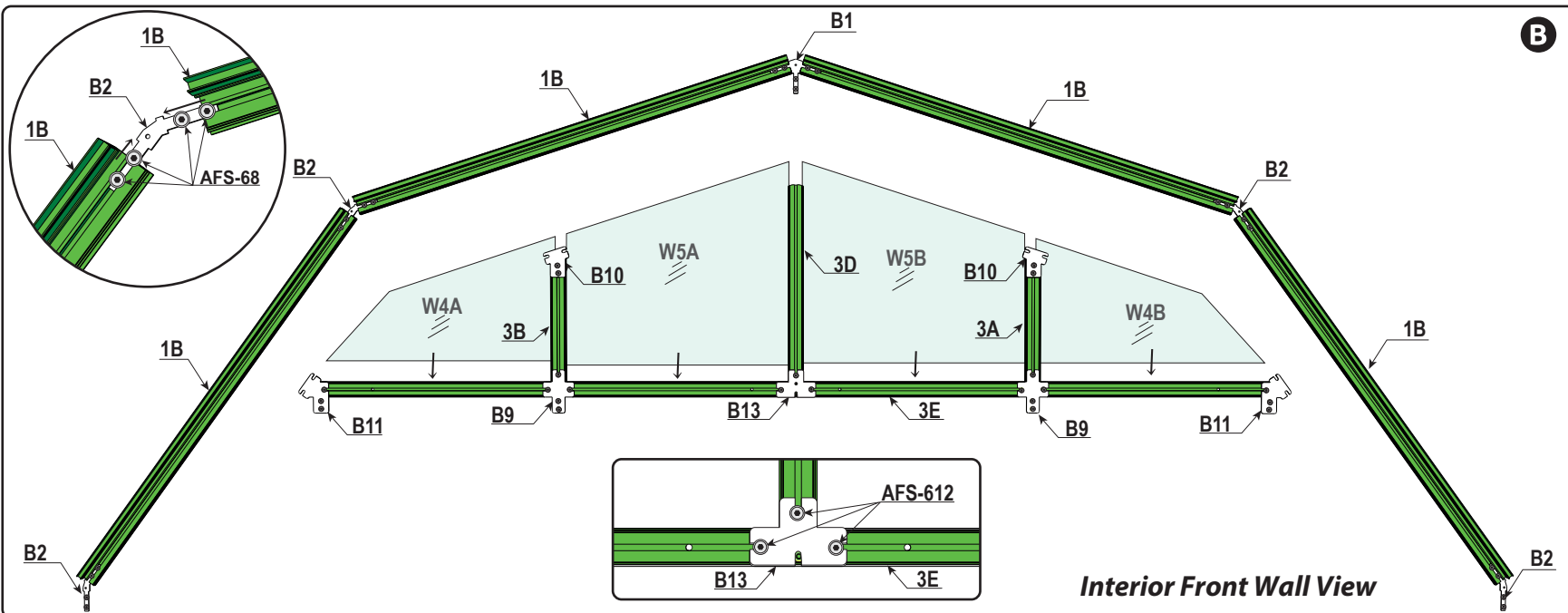
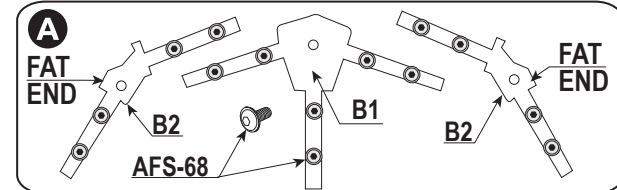
1.10 Slide the W4A, W5A, W5B and W4B window panels into the profiles as shown in diagram **B**. Be sure the correct side of the panels face downward.

1.11 Attach the B11's and B10's to the 1B's. Attach the B1 to the 3D.



PRETHREAD SCREWS TIP:

Locate the (2) **B1's** and (8) **B2's**, AFS-68 screws, pre thread these to make installation easier. Note that the fat end on the B2 will always face downward.



FRONT WALL FRAME ASSEMBLY CONTINUED

1.12 Slide the PILE weather strip into both of the 4 extrusions, see **A**. Attach the 1A, 2C and 4 extrusions to the 12A flat mount base using AFS-612 and SQ-NUT-6 combos. **The PILE will face the outside of the greenhouse.*

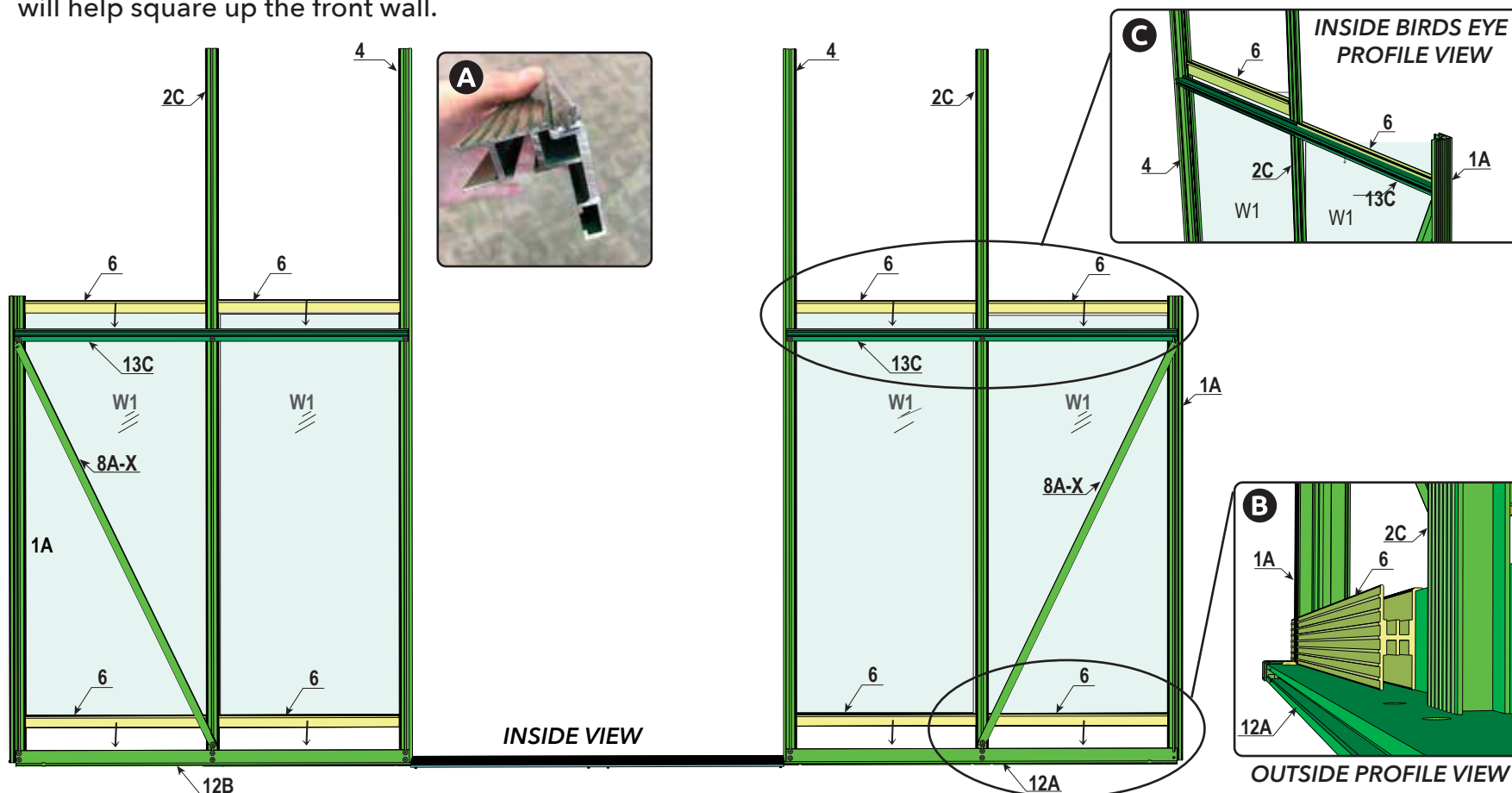
1.13 Attach the 1A, 2C and 4 extrusions to the 12B flat mount base using AFS-612 and SQ-NUT-6 combos.

1.14 Attach the (4) 6's to the 12A and 12B. They will slide on to the extrusion and lock into place holding the polycarbonate panel into place, see **B**. *Raised ridges will always face the outside of the greenhouse.*

1.15 Slide the (4) W1 panels into place locking into the (4) 6's at the base. Place (4) 6's atop the W1 panels, see **C**

1.16 Slide the 13C's under the lip of the 6's that are on top of the W1 panels on both sides of the door frame. Use AFS-612 and SQ-NUT-6 combos to lock the 13's into place, be sure the panels are pushed down firmly in the 6's.

1.17 Attach the 8A-X cross supports to the 1A and 2C on both sides using AFS-612 and SQ-NUT-6 combos, this will help square up the front wall.

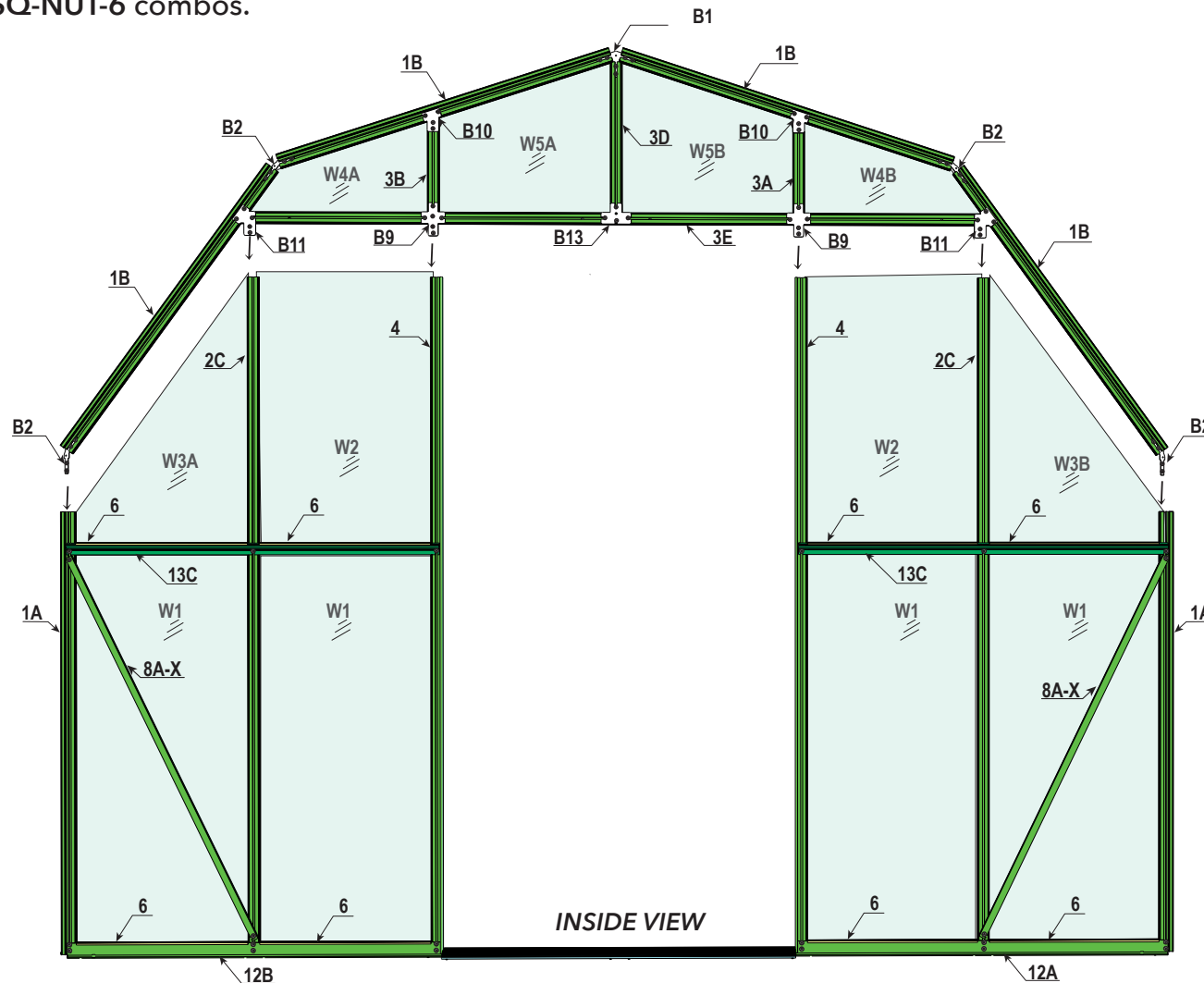


1.18 Slide the W3A, (2) W2's and W3B panels into place, be sure the panels are pushed firmly into the 6's.

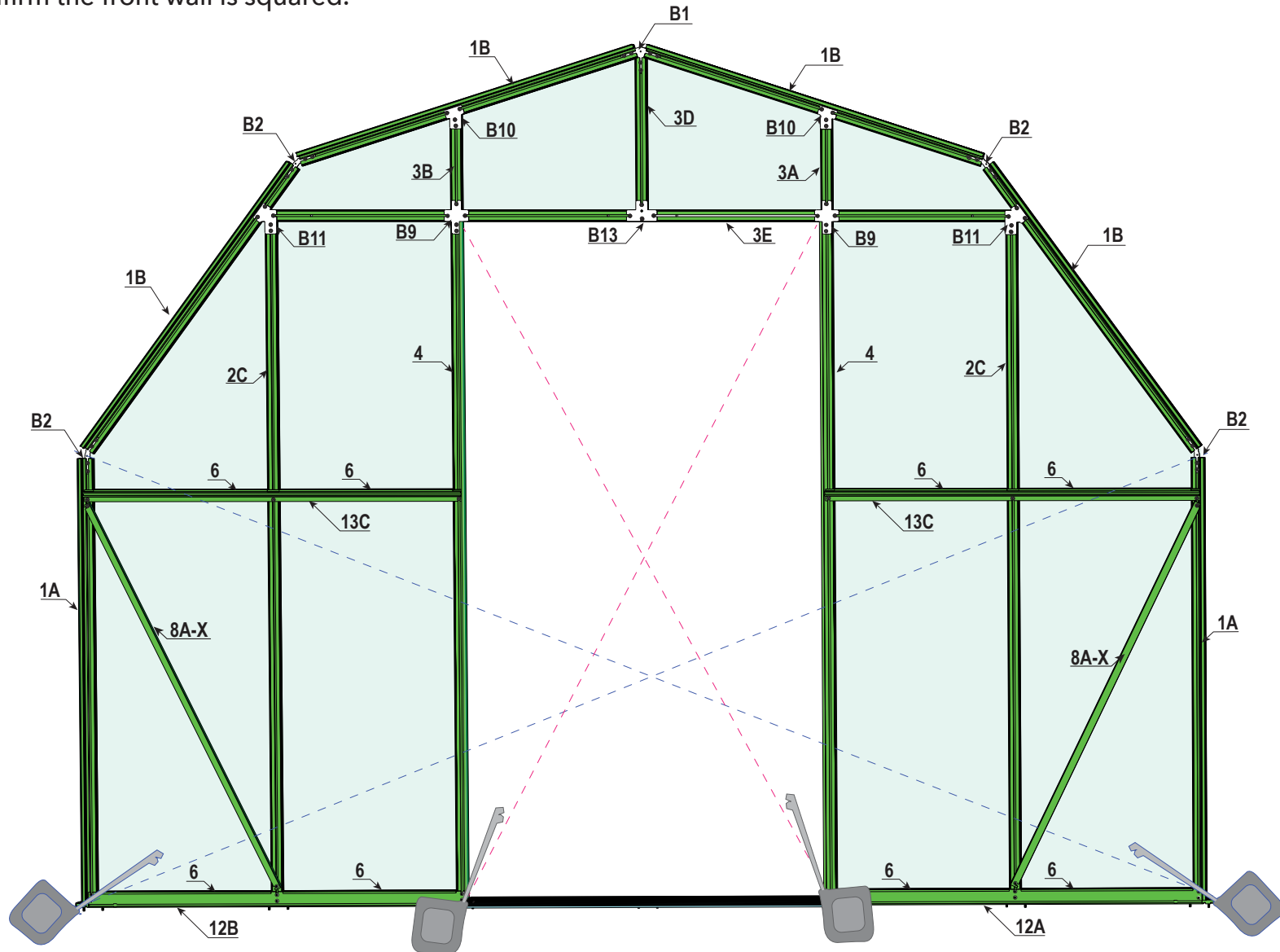
1.19 You will need a helper to slide the upper front wall roof section down to attach to the lower front wall section. Carefully slide the top section downward, and align the B2's with the 1A's, align the B11's with the 2C's and align the B9's with the 4's as shown in diagram.

1.20 The pre threaded AFS-612/SQ-NUT-6 combos on the B9's and B11's will slide into the extrusion 4's and 2C's.

1.21 The B2's will slide into the 1A extrusions. Once every piece is aligned and into the corresponding extrusion and the panels are pushed tight and all the way into their corresponding extrusions begin tightening all the AFS-68 and AFS-612/SQ-NUT-6 combos.



1.22 Measure corner to corner inside the door frame, and also from outer corner to corner on the front wall frame as shown below to confirm square. You may need to loosen various combos, adjust, then re tighten to confirm the front wall is squared.



* If you are installing the Back Door Transformation Kit you will repeat the steps in this section, pages 11-15. Once both Front Wall sections are complete, you will skip ahead to page 22 to assemble the doors.

BACK WALL FRAME ASSEMBLY INSTRUCTIONS

ALWAYS ASSEMBLE BACK WALL LAYING FLAT

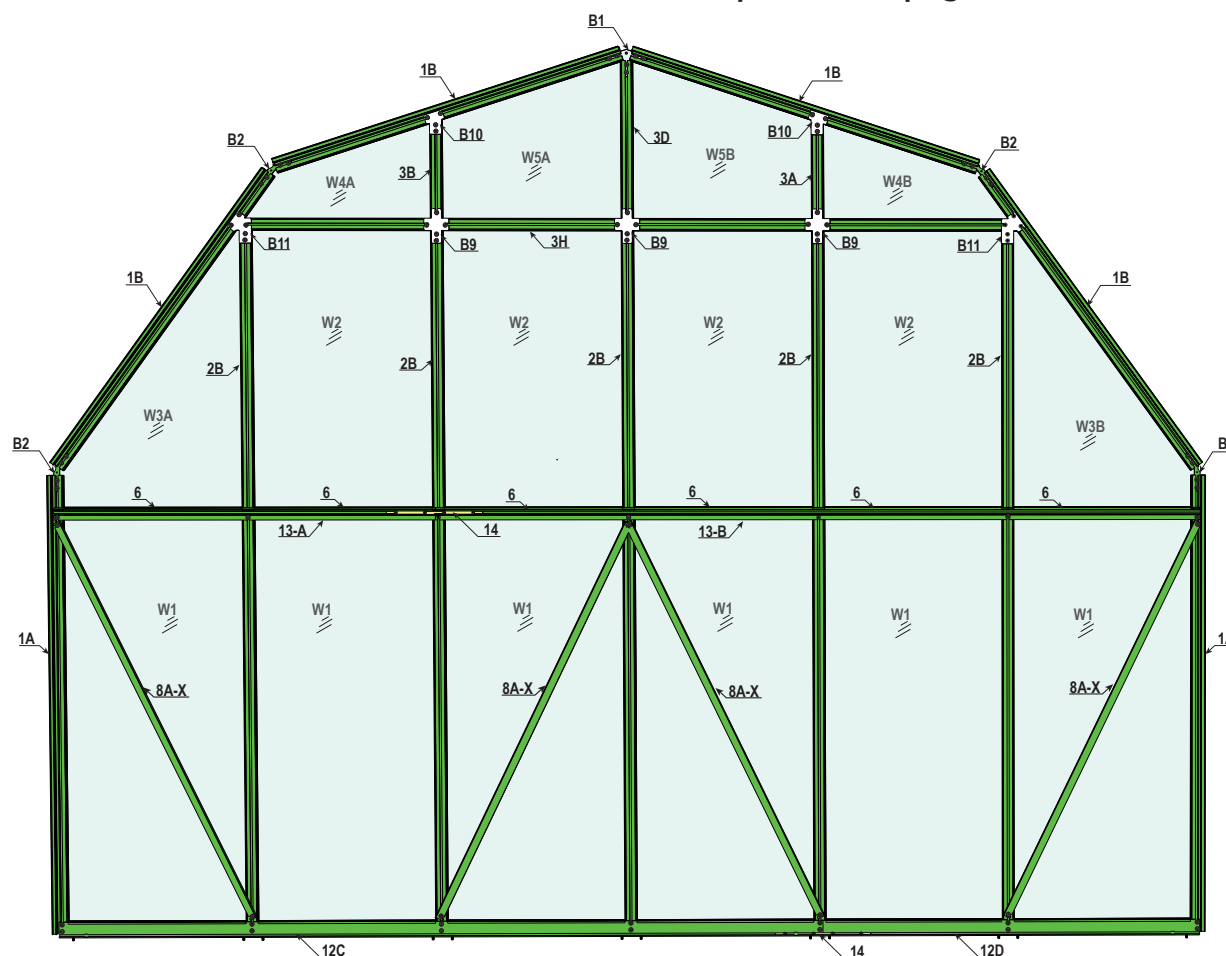
This picture shows the inside view of back wall section fully assembled.

All parts for back wall assembly will be found in boxes;

GRA-SUM-12A-1, GRA-SUM-12A-2, GRA-SUM-12P-1 and GRA-SUM-12P-2.

We recommend that you assemble the back wall on a tarp.

* If you are installing the Back Door Transformation Kit you will repeat the steps in the previous section, pages 11-15.
You will then skip ahead to page 22 to assemble the doors.



GRANDIO TIP

We recommend watching our how to assembly videos with tricks and tips for easier assembly and installation of your Grandio Greenhouse at: www.grandiogreenhouses.com



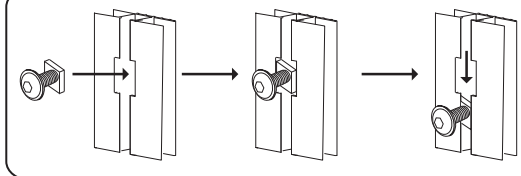
GRANDIO TIP

Lay flat on ground to assemble the back frame of your greenhouse. If possible try to find a shady area protected from the wind. Panels can burn grass and plants if in direct light.



GRANDIO TIP

BOLT INSTALLATION TIP: See diagram below for proper installation of nuts and bolts. The nut will go in the channels of the aluminum and NOT the bolt head.



BACK WALL FRAME UPPER ROOF ASSEMBLY

ALWAYS ASSEMBLE BACK WALL LAYING FLAT

2.1 Use AFS-68 screws to pre thread into the B1 and B2's see **A** .

2.2 Slide the B1 and B2's into the 1B's as shown in diagram **B** . Tighten the allen heads using the W17 or W18 allen driver.

2.3 Attach the B11's and B9's to the 3H using the AFS-612 screws with SQ-NUT-6 nuts, as shown in diagram **B** .

2.4 Attach the 3B, 3D, and 3A to the B9's that are on the 3H.

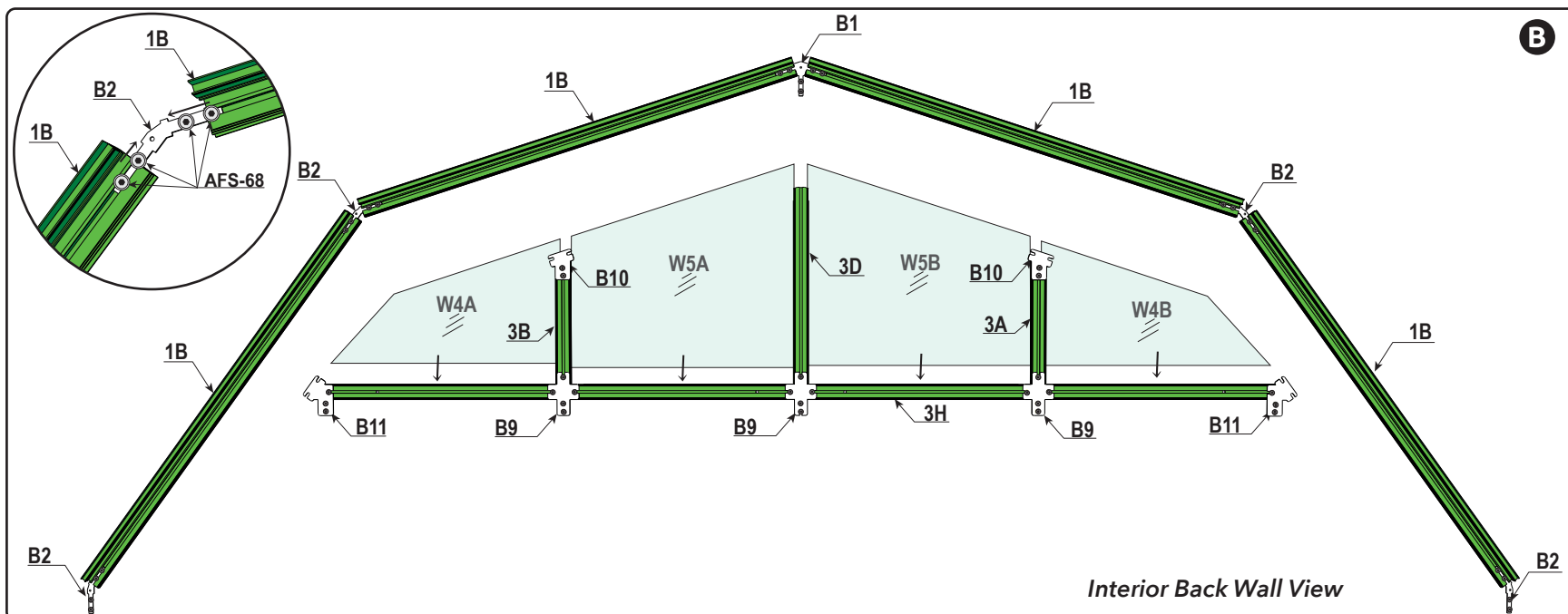
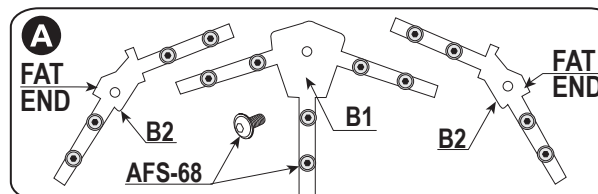
2.5 Attach one B10 to the 3B and one B10 to the 3A using the AFS-612 screws with SQ-NUT-6 nuts, as shown in diagram **B** .

2.6 Slide the W4A, W5A, W5B and W4B window panels into the profiles as shown in diagram **B** . Be sure the correct side of the panels face downward, note you are looking at the inside of the greenhouse if assembling as shown.



PRETHREAD SCREWS TIP:

Loosely pre thread the AFS-68 and SQ-NUT-6 into the B1 and B2's. Note that the fat end on the B2 will always face downward.



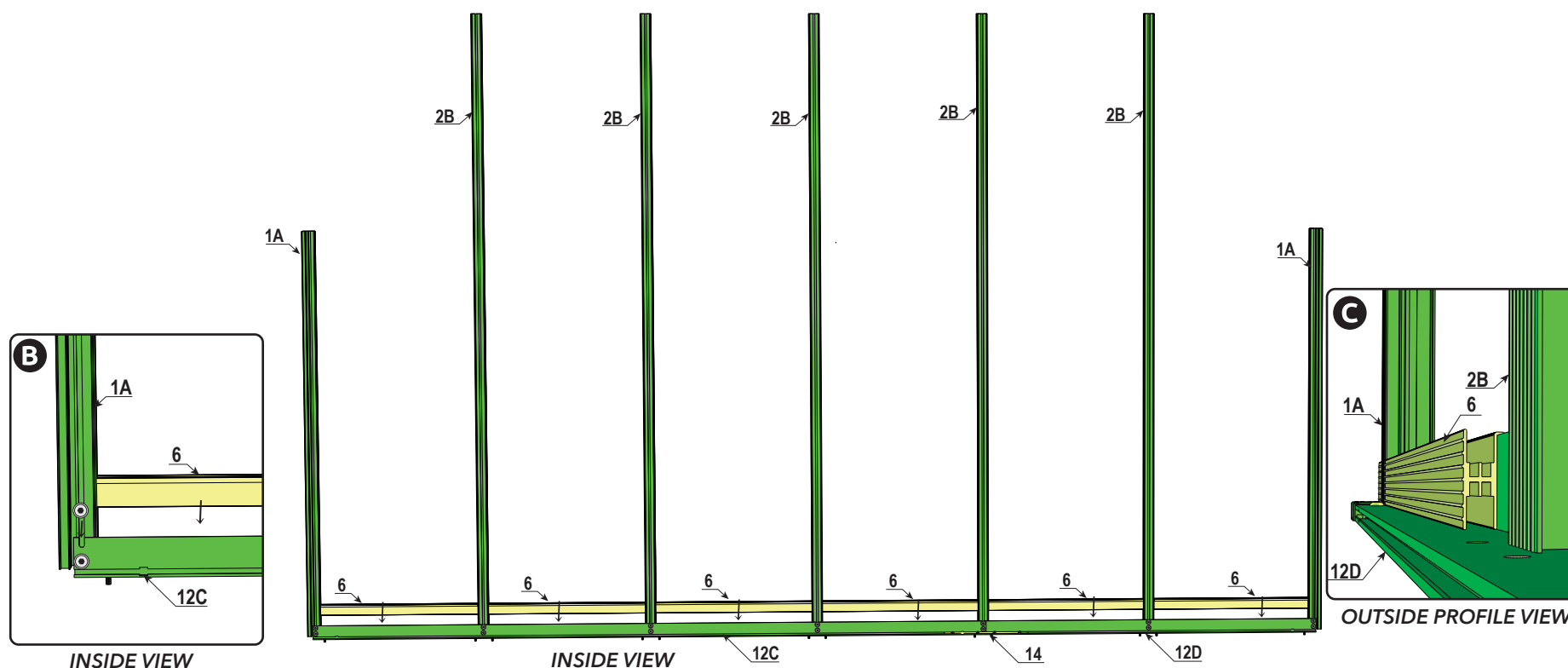
BACK WALL FRAME ASSEMBLY CONTINUED

2.7 Connect the 12C to the 12D using the (2) 14 connecting brackets preloaded with (4) ABS-68 screws and (4) AFS-68. The 14's that have the ABS-68 will be on the outside of the greenhouse and the AFS-68 will be on the inside.

2.8 Attach the 1A corner pieces to the 12C and 12D base using AFS-612 screws with SQ-NUT-6 nuts. Pre thread the bottom combo, then slide the extrusion down onto the square nut, tighten, then slide the other pre threaded combo down into the slot as shown in **B**.

2.9 Attach the (5) 2B extrusions to the 12C and 12D base using AFS-612 screws with SQ-NUT-6 nuts, the same way as in previous step.

2.10 Attach the (6) 6's to the 12C and 12D. They will slide on to the extrusion and lock into place and hold the polycarbonate panels in place. See **C**. * Raised ridges will always face the outside of the greenhouse.



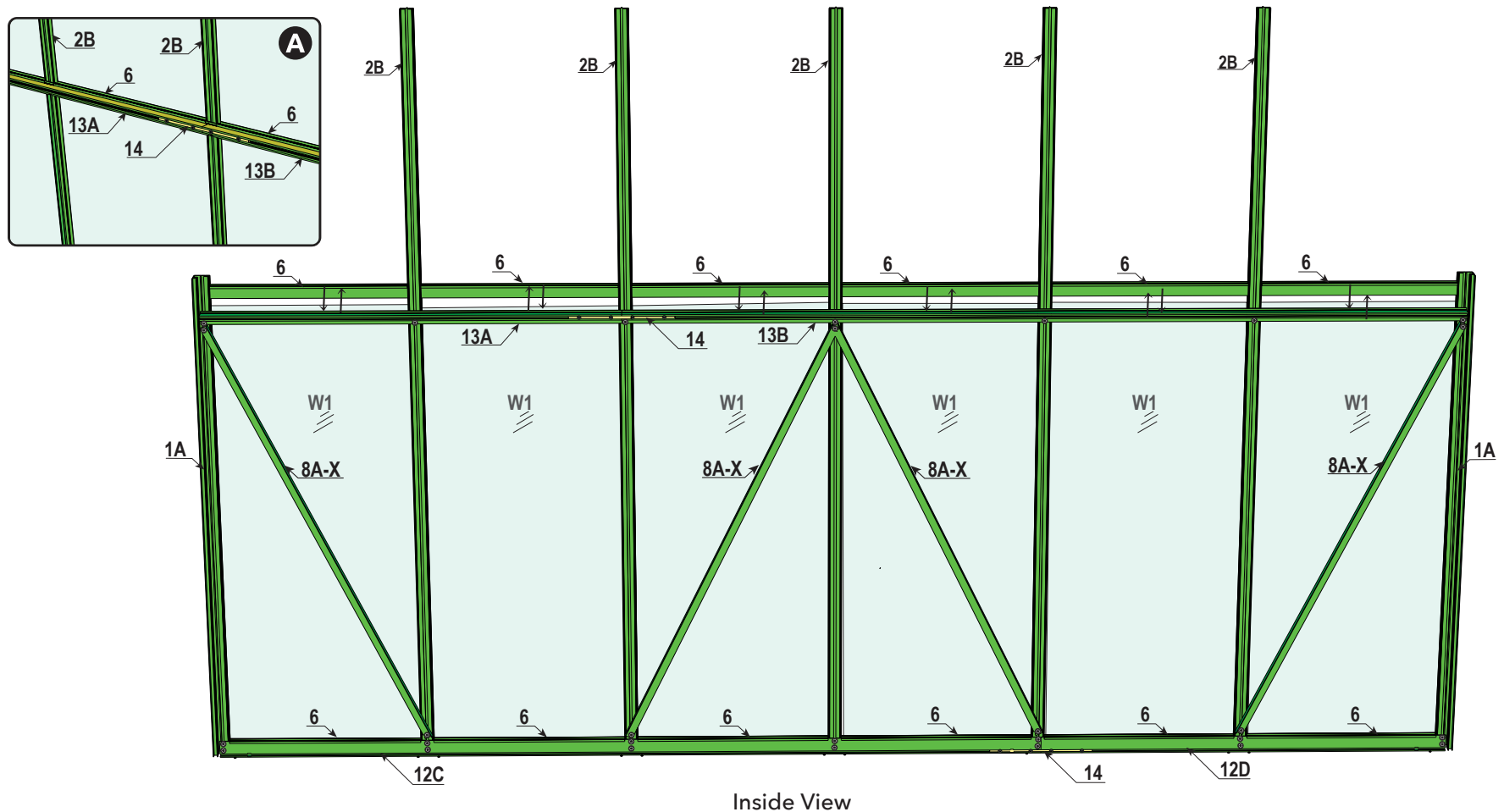
BACK WALL FRAME ASSEMBLY CONTINUED

2.11 Slide the (6) W1 panels into the corresponding (6) 6 window brackets.

2.12 Attach (loosely) the 8A-X cross supports as shown in the diagram below with AFS-612/SQ-NUT-6 combos.

2.13 Slide the (6) 6's atop the W1 panels, push down on the 6's and square up the back wall, then tighten the combos attached to each of the 8A-X's.

2.14 Pre load AFS-612/SQ-NUT-6 combos onto each of the 1A and 2B extrusions to prepare to attach the 13A/13B piece under the lip of the top row of (6) 6's. Position the 13A/13B under the lip of the (6) 6's making sure the 6's are positioned tightly on top of the W1 panels. Tighten the bolts to hold the 13A/13B into place. See **A**.



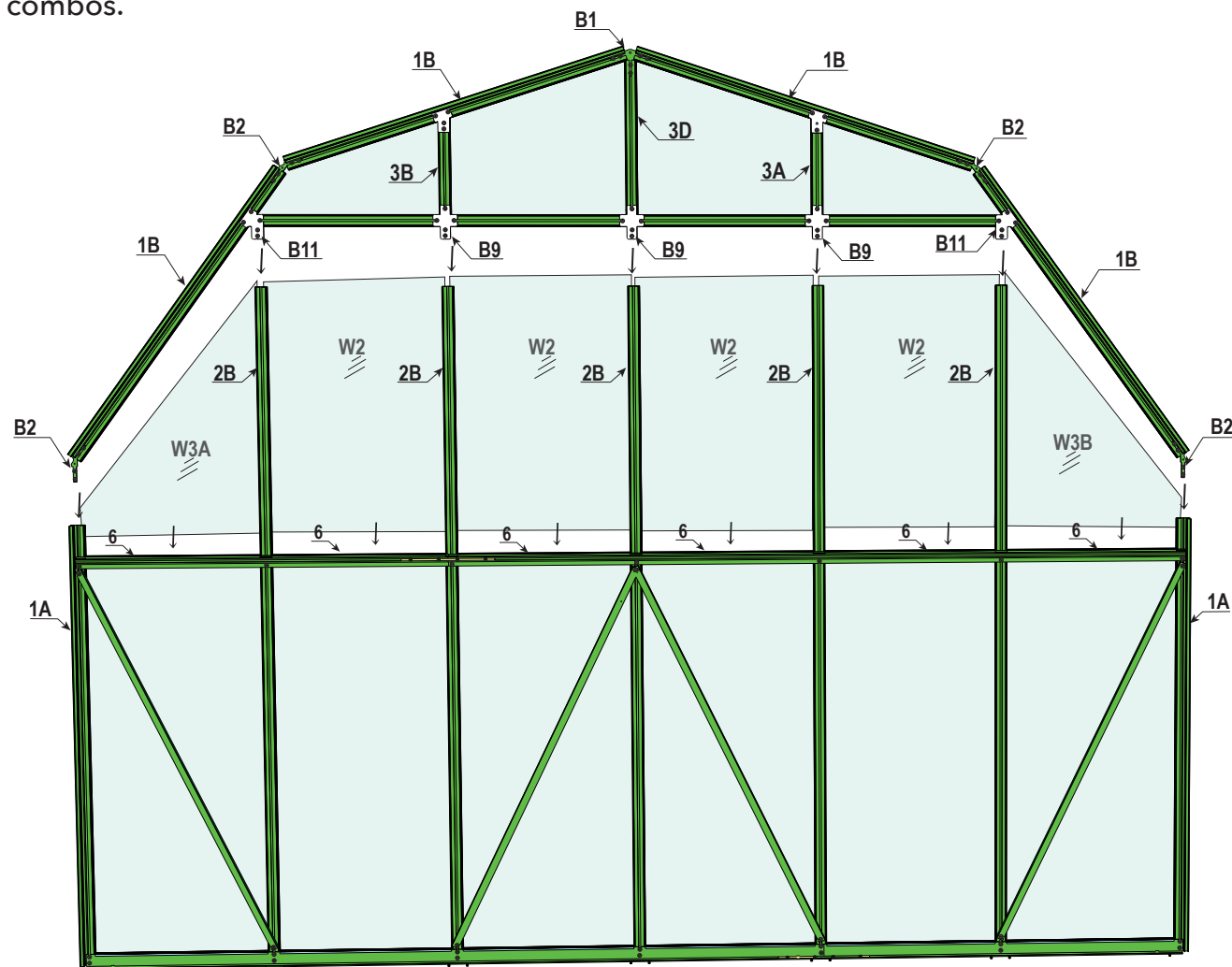
BACK WALL FRAME ASSEMBLY CONTINUED

2.15 Slide the W3A, W2's and W3B panels into place, be sure the panels are pushed firmly into the 6's.

2.16 You will need another person to slide the upper back wall roof section down to attach to the lower front wall section. Carefully slide the top section downward, and align the B2's with the 1A's, align the B9's and B11's with the 2B's as shown in diagram.

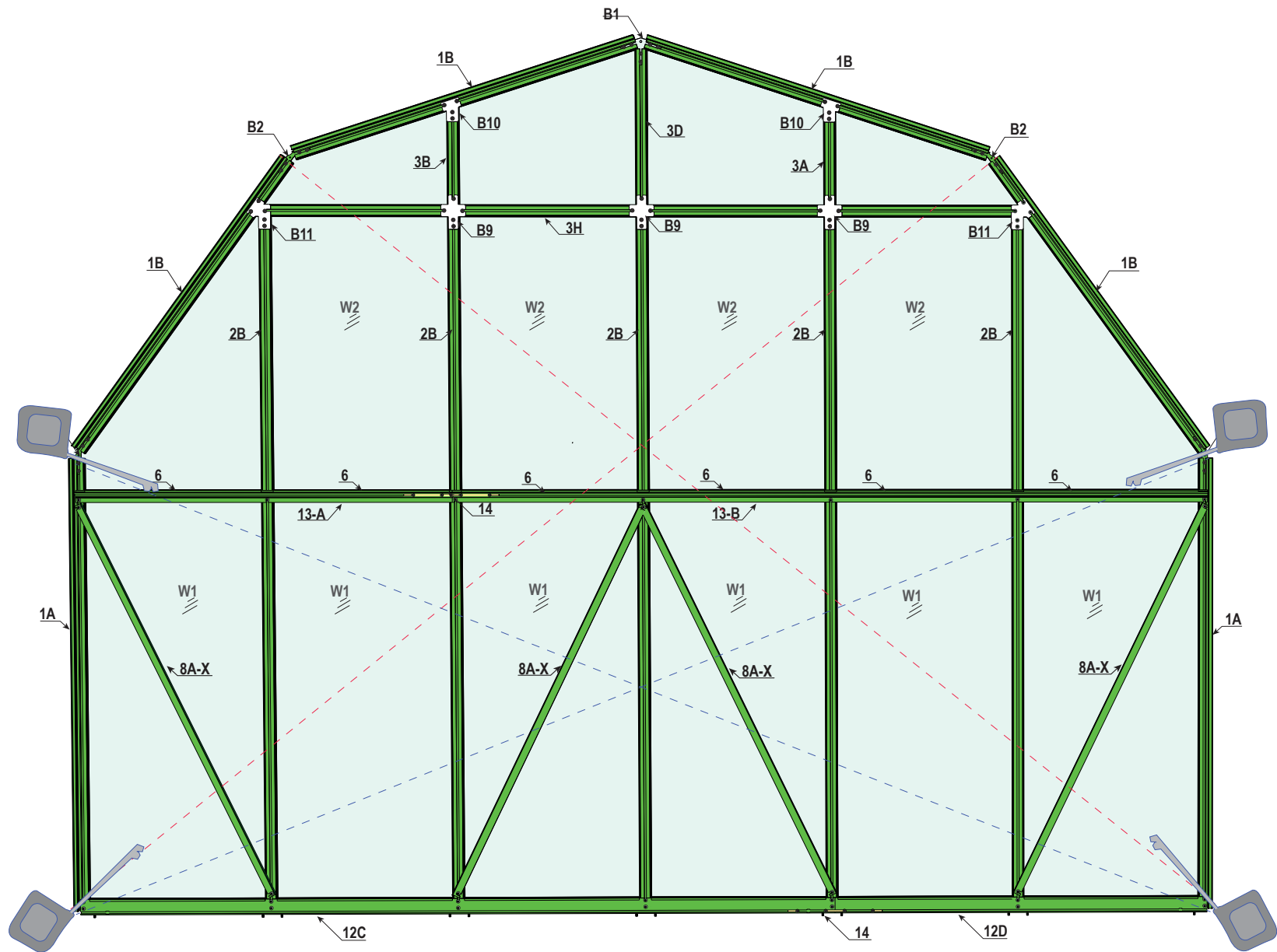
2.17 The pre threaded AFS-612/SQ-NUT-6 combos on the B11's and B9's will slide into the 2B extrusions.

2.18 The B2's will slide into the 1A extrusions. Once every piece is aligned and into the corresponding extrusion and the panels are pushed tight and all the way into their corresponding extrusions begin tightening all the AFS-68 and AFS-612/SQ-NUT-6 combos.



INSIDE VIEW

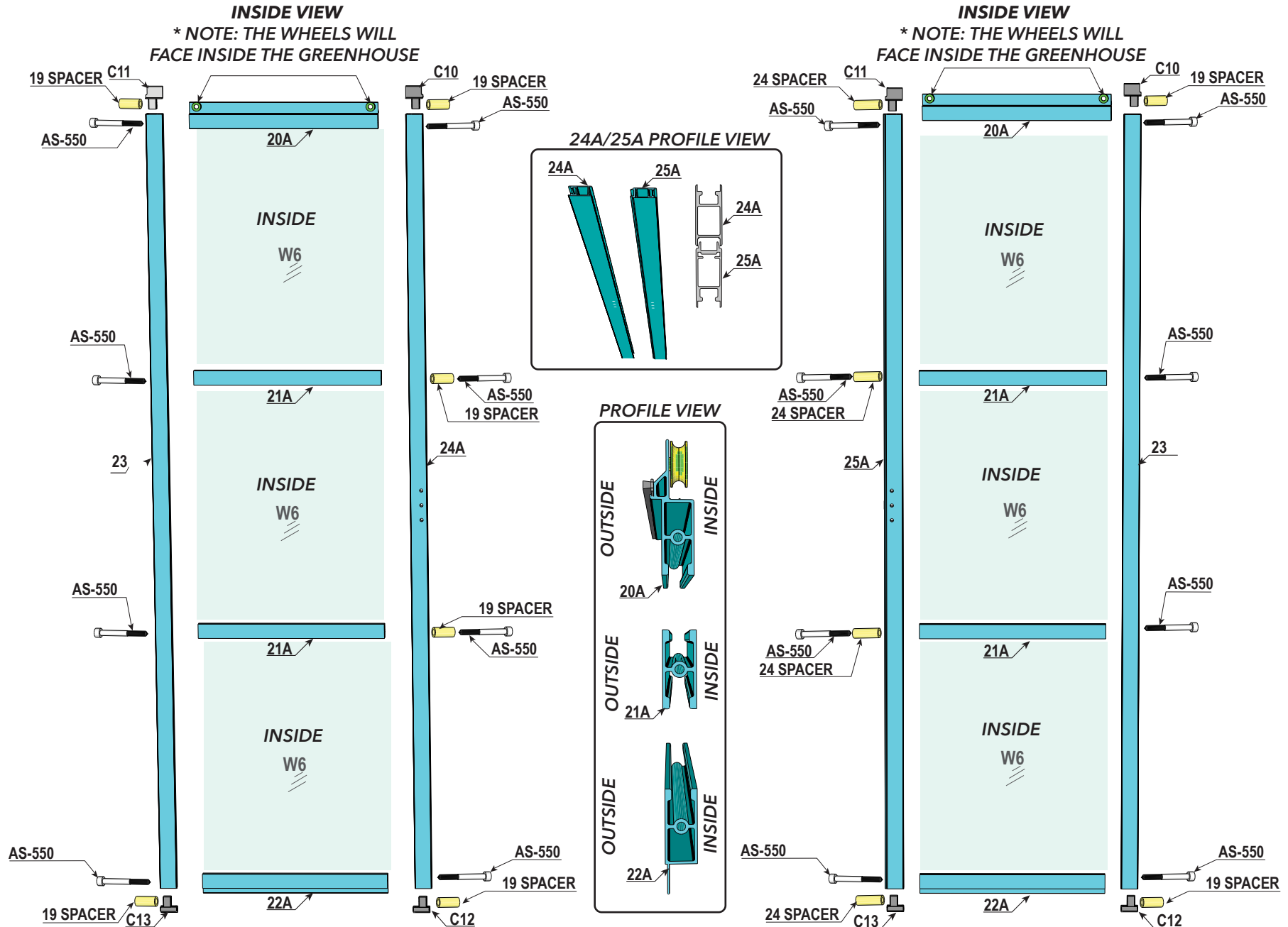
2.19 Measure corner to corner on the outer back wall frame as shown below to confirm square. You may need to loosen various combos, adjust then re-tighten to confirm the back wall is squared.



DOOR PANEL ASSEMBLY

LAY OUT THE DOOR PARTS AS SHOWN AND PREPARE TO ASSEMBLE ON A TARP OR PROTECTED SURFACE.

* If you are installing the Back Door Transformation Kit you will repeat the steps in this section, pages 23-27.



DOOR ASSEMBLY

LAY OUT THE DOOR PANELS AND PREPARE TO ASSEMBLE ON A TARP OR PROTECTED SURFACE.
FOR THE ACTUAL ASSEMBLY A TABLE IS HELPFUL FOR SCREW INSTALLATION AND ALIGNMENT.

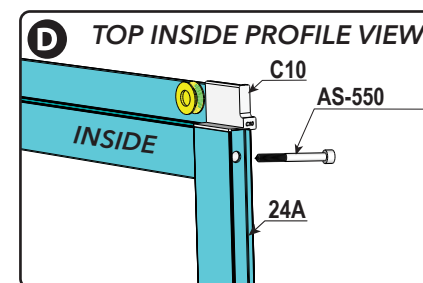
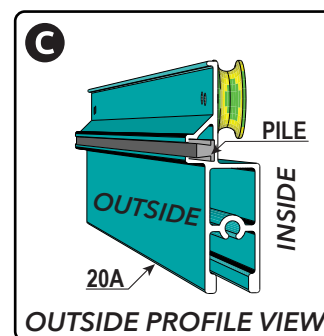
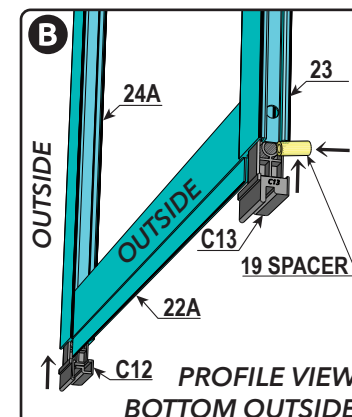
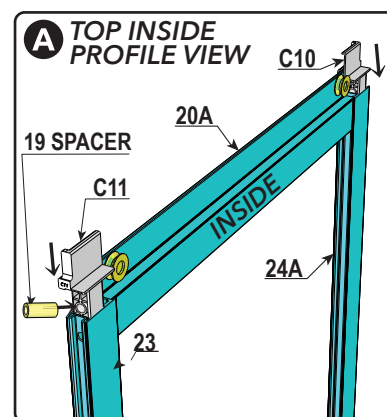
* If you are installing the Back Door Transformation Kit you will repeat the steps in this section, pages 23-27.

3.1 See diagram of doors on page 22 for exact layout prior to beginning installation. It is recommended to assemble in sections using the diagram to not make errors in assembly.

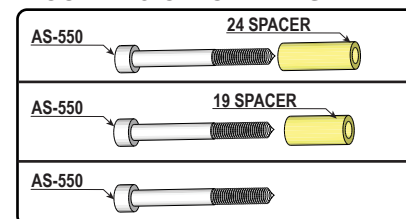
3.2 Slide the corresponding **SPACER** into the **C10**, **C11**, **C12**, and **C13**, then slide into the corresponding extrusion **23**, **24A** or **25A** as shown in diagrams **A** and **B**. Refer to diagram on page 22 as needed to confirm placement.

3.3 Slide the **PILE** weather strip into the two **20A** pieces, note the side with the wheels will face inside the greenhouse when the doors hang and the **PILE** weather strip will face to the outside of the greenhouse. See **C**.

3.4 Use the **AS-550** Screws to attach the **24A** to the **20A**, **21A**'s and **22A**. See **D**. Be careful to insert the screws into the corresponding track, and not to over tighten the screws.



SCREW & SPACER DIAGRAM



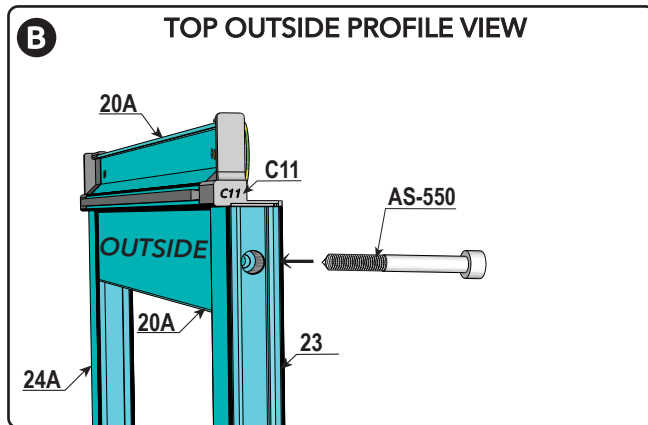
DOORS & PANEL ORIENTATION:

Pay special attention to the orientation of the **20A** wheels, as they will face inside the green-house, verses the **PILE** strip side will face outward. Make sure that your panels face the correct way, as only one side has the UV Protectant specially designed to face the sun.

DOOR ASSEMBLY CONTINUED

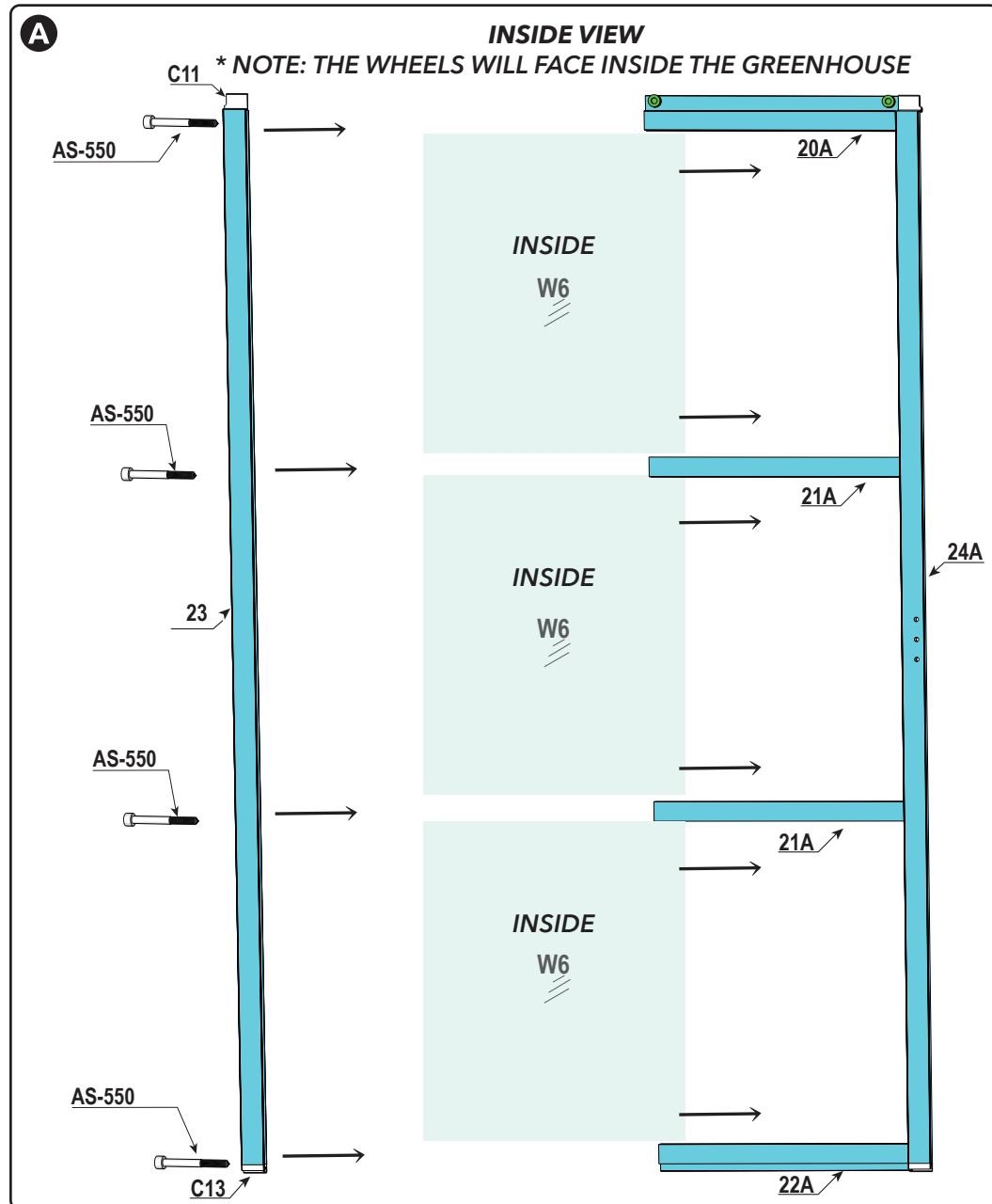
3.5 Slide the **W6** window panels into the profiles as shown in diagram **A**. *Be sure the correct side of the panels face outward. Note you are looking at the inside of the greenhouse if assembling as shown in the diagram.

3.6 Use the **AS-550** Screws to attach the **23** to the **20A** and **22A**. Use the **AS-550** Screws as shown in the diagrams **A** and **B** to attach the **23** to the **21A**'s. Be careful to insert the screws into the corresponding track, and do not over tighten the screws.



DOORS & PANEL ORIENTATION:

Pay special attention to the orientation of the **20A** wheels, as they will face inside the greenhouse, versus the **PILE** strip side will face outward. Make sure that your panels face the correct way, as only one side has the UV Protectant specially designed to face the sun.



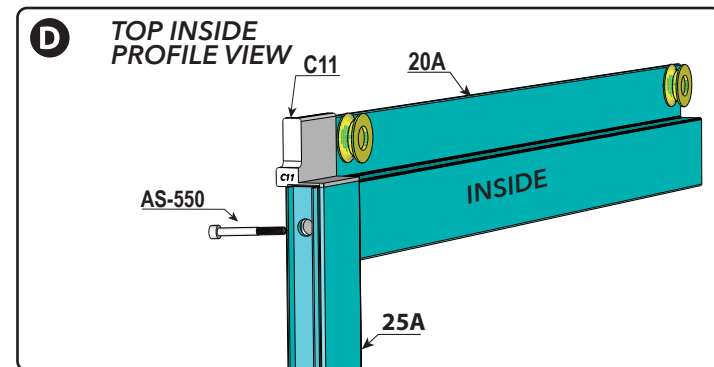
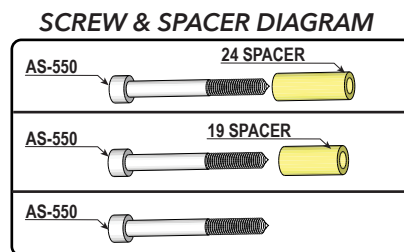
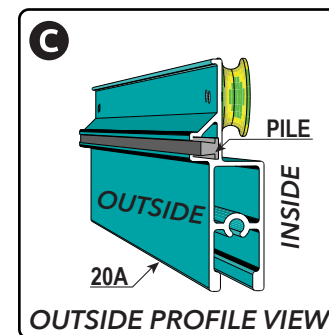
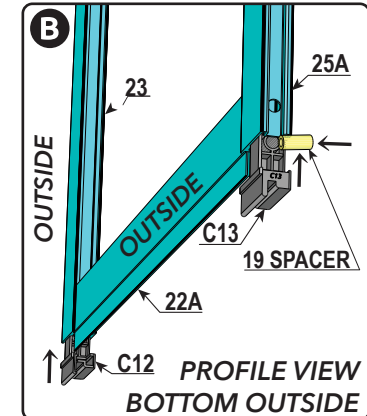
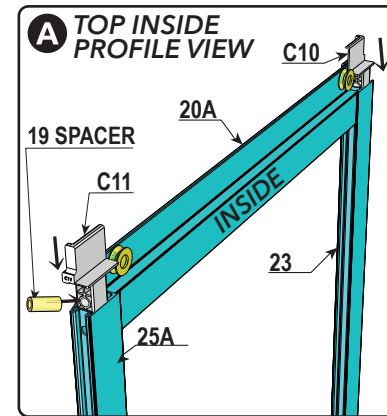
DOOR ASSEMBLY CONTINUED

3.7 See diagram of doors on page 22 for exact layout prior to beginning installation. It is recommended to assemble in sections using the diagram to not make errors in assembly.

3.8 Slide the corresponding **SPACER** into the **C10**, **C11**, **C12**, and **C13**, then slide into the corresponding extrusion **23** and **25A** as shown in diagrams **A** and **B**. Refer to diagram on page 22 as needed to confirm placement.

3.9 Slide the **PILE** weather strip into the the **20A** pieces, note the side with the wheels will face inside the greenhouse when the doors hang and the **PILE** weather strip will face to the outside of the greenhouse. See **C**.

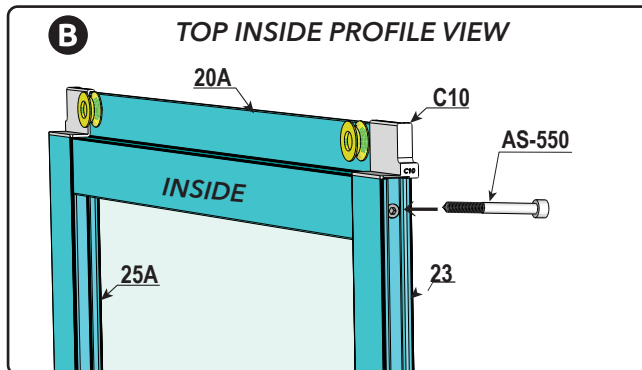
3.10 Use the **AS-550** Screws as shown in the diagram to attach the **25A** to the **20A**, **21A**'s and **22A**. See **D**. Be careful to insert the screws into the corresponding track, and not to over tighten the screws.



DOOR ASSEMBLY CONTINUED

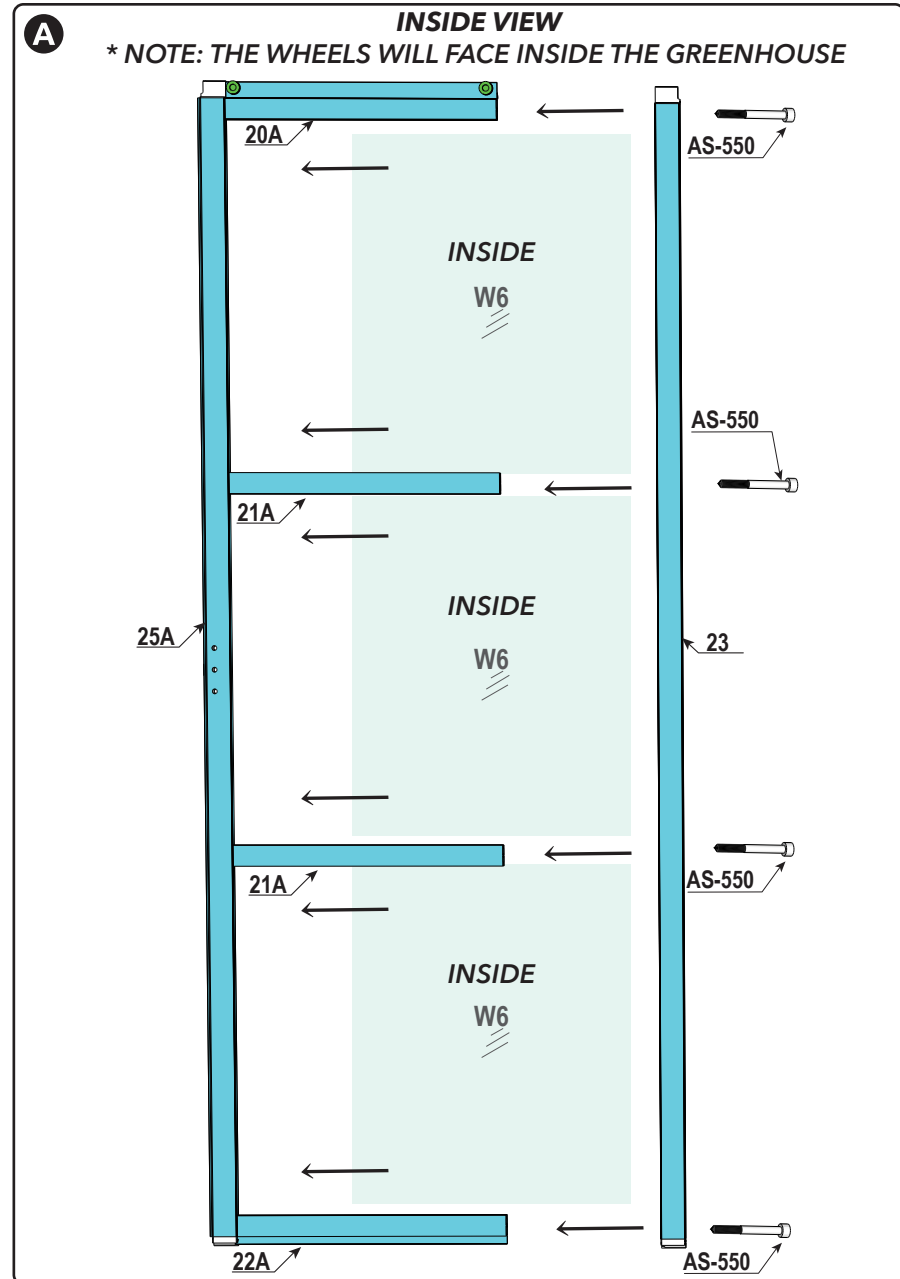
3.11 Slide the **W6** window panels into the profiles as shown in diagram **A**. *Be sure the correct side of the panels face outward. Note you are looking at the inside of the greenhouse if assembling as shown in the diagram.

3.12 Use the **AS-550** Screws to attach the **23** to the **20A** and **22A**. Use the **AS-550** Screws as shown in the diagrams **A** and **B** to attach the **23** to the **21A**'s. Be careful to insert the screws into the corresponding track, and not to over tighten the screws.

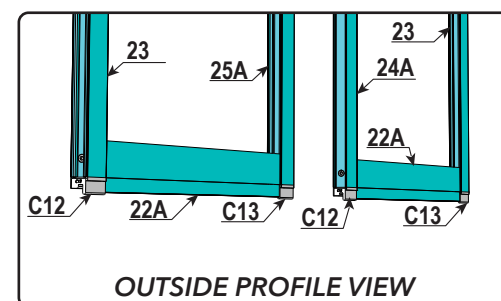
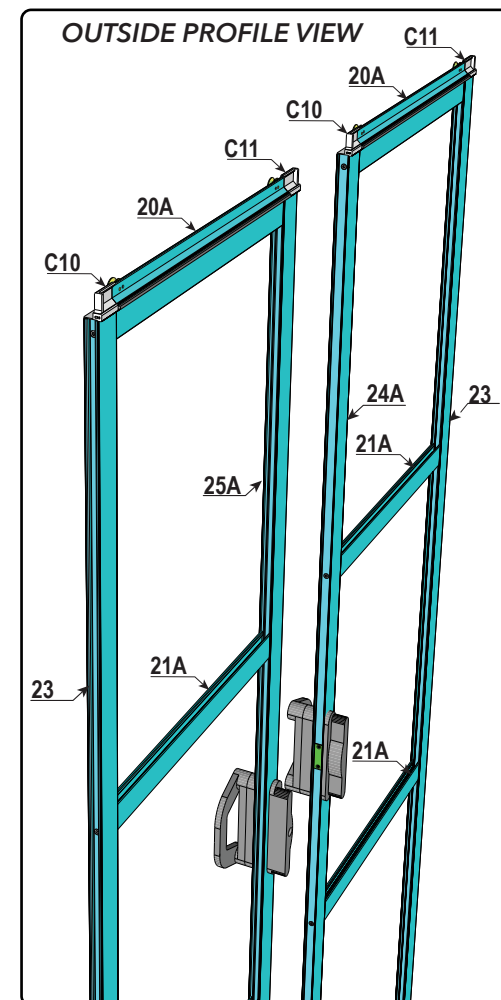
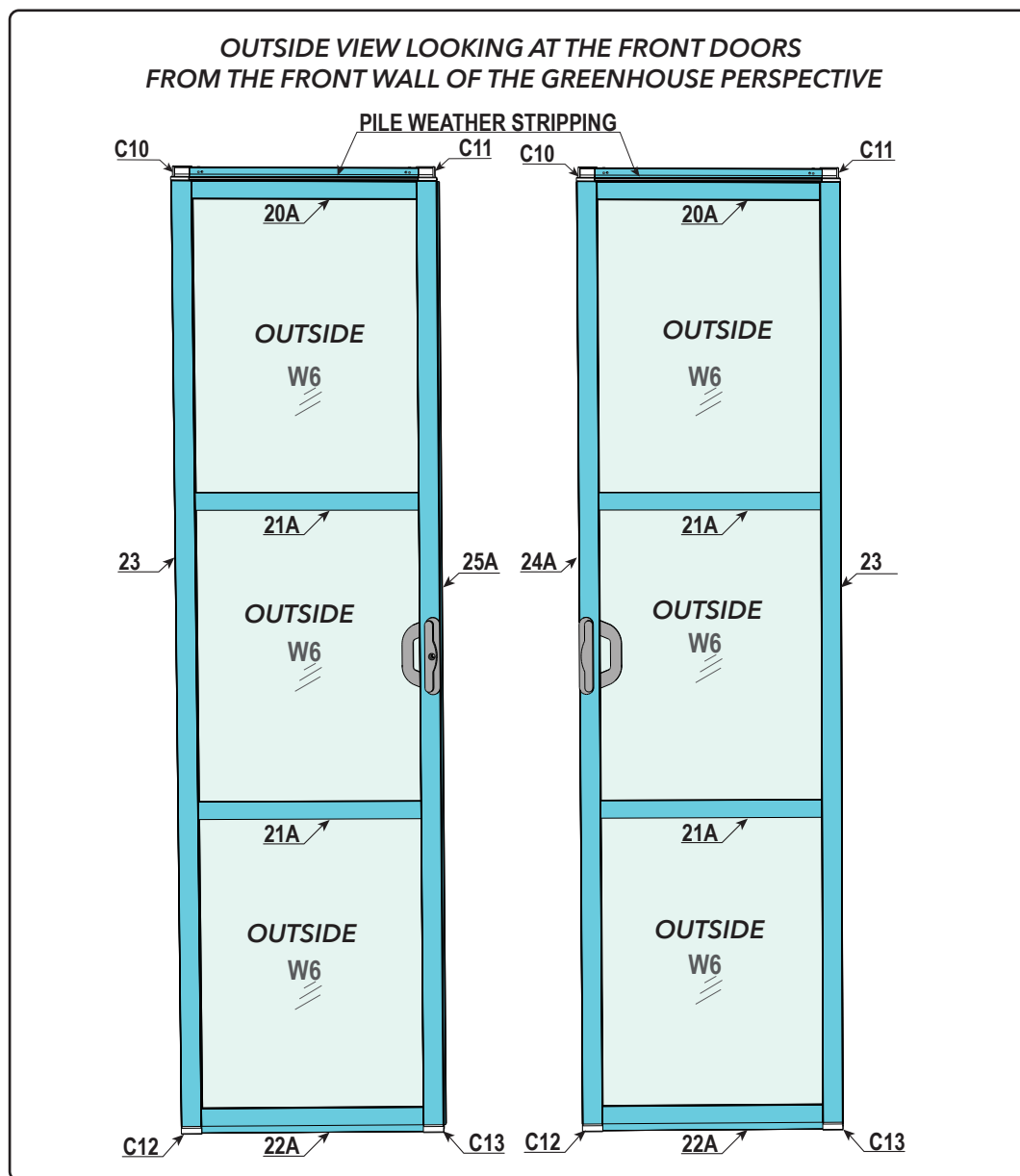


DOORS & PANEL ORIENTATION:

Pay special attention to the orientation of the **20A** wheels, as they will face inside the green-house, verses the **PILE** strip side will face outward. Make sure that your panels face the correct way, as only one side has the UV Protectant specially designed to face the sun.



- 3.13** Confirm that your doors are assembled like the images on this page.
- 3.14** Set the assembled doors aside in a safe place. We will install the door handle hardware once the doors have been installed on their track.

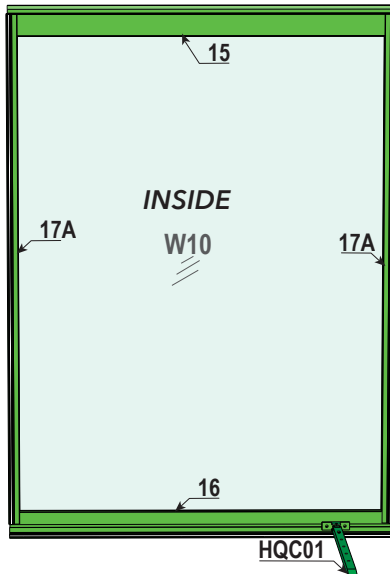


ROOF VENT ASSEMBLY

LAY OUT THE ROOF VENT PIECES AND PREPARE TO ASSEMBLE ON A TARP OR PROTECTED SURFACE.
FOR THE ACTUAL ASSEMBLY, A TABLE IS HELPFUL FOR SCREW INSTALLATION AND ALIGNMENT.

QUANTITY PER SIZE

SIZE	ROOF VENTS
12X8	4
12X12	6
12X16	8
12X20	10
12X24	12
12X28	14
12X32	16



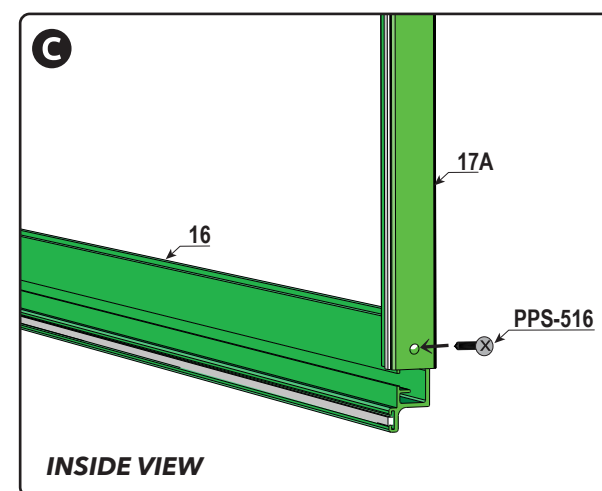
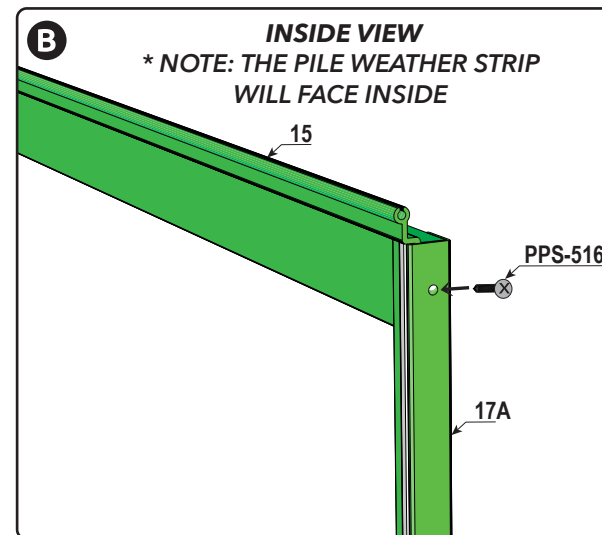
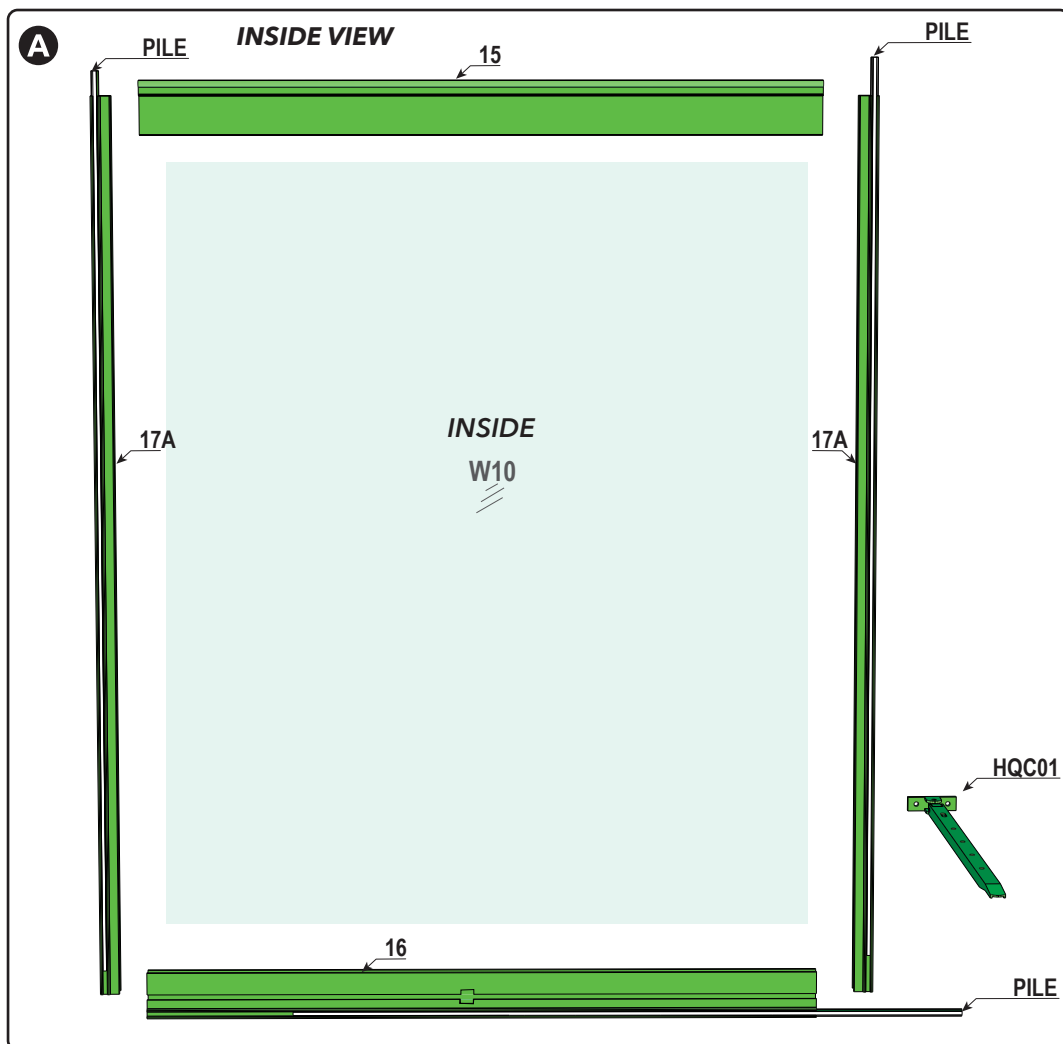
PARTS AND QUANTITIES FOR ROOF VENTS

GRAPHIC	PART NAME	SIZE/LOCATION	12X8	4X	8X
	15	22 13/16 in / 580 mm ROOF VENT TOP EXTRUSIONS	4	2	4
	16	22 13/16 in / 580 mm ROOF VENT BOTTOM EXTRUSIONS	4	2	4
	17A	30 1/2 in / 775 mm ROOF VENT SIDE	8	4	8
	ABS-48 / SQ-NUT-4 AFS-612/SQ-NUT-6	ROOF VENT HARDWARE	8 EACH	4 EACH	8 EACH
	HQC01	ROOF VENT ARM	4	2	4
	HQC02	ROOF VENT LATCH	4	2	4
	PPS-516	PHILLIPS PANHEAD SCREW 5*16 FOR ROOF VENT	17	9	17
	RVS / PPS-46	RVS with M4*6 Screw	8	4	8
	PILE	6x6 PILE STRIP FOR WINDOWS AND DOORS	9 M	4.5 M	9 M
	W10	ROOF VENT WINDOW PANEL	4	2	4

PACKED TOGETHER

ROOF VENT ASSEMBLY CONTINUED

- 4.1 Lay out the roof vent parts as shown below, pay attention to which side will face inward.
- 4.2 Slide the PILE weather strip into the extrusion of 17A's and the 16. Refer to diagram A to confirm placement.
- 4.3 Use the PPS-516 Screws to attach one of the 17A's to the 15 and 16, see B and C.



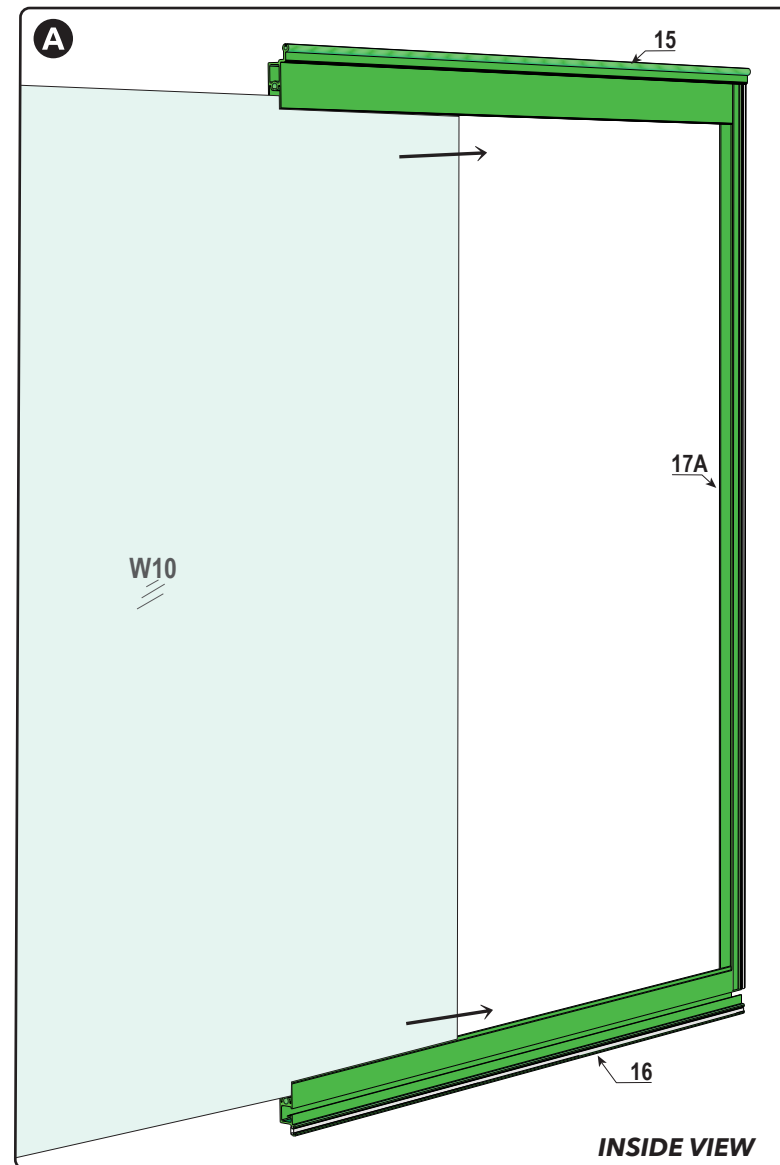
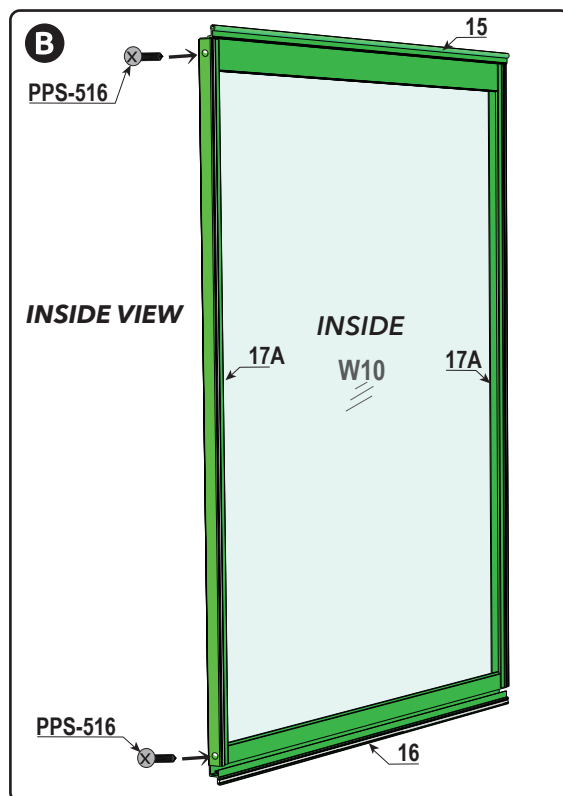
ROOF VENT ASSEMBLY CONTINUED

4.4 Slide the **W10** Polycarbonate panel into the window frame, be sure the correct side faces inward, see **A**.

4.5 Use the **PPS-516** Screws to attach the **17A**'s to the **15** and **16**, see **B**.



ROOF VENT PANEL ORIENTATION: Pay special attention to the orientation of the Roof Vents as you assemble. The **PILE** strip side will face inward. Make sure that your panels face the correct way, as only one side has the UV Protectant specially designed to face the sun.



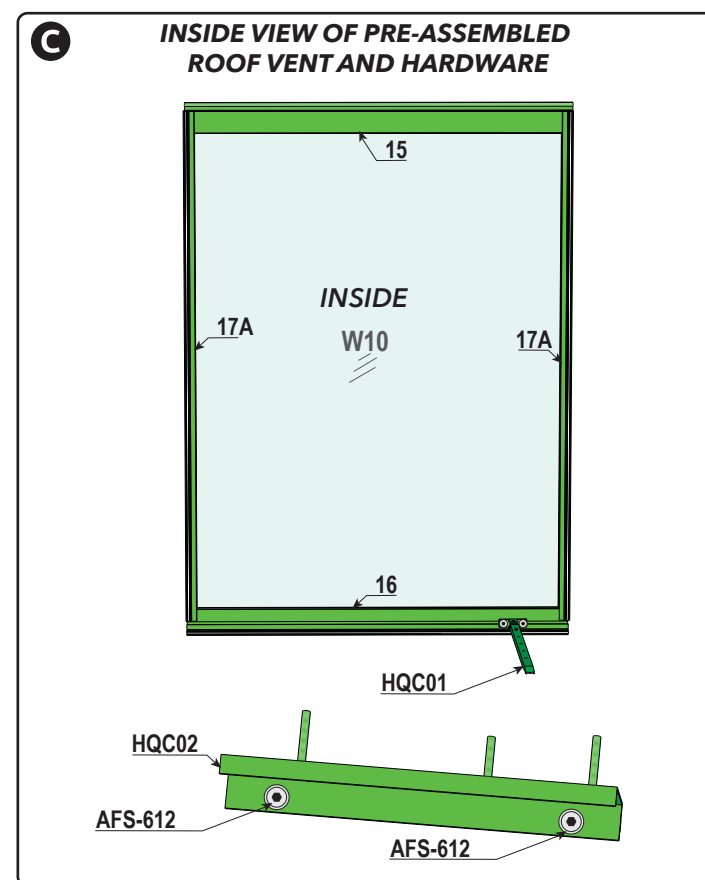
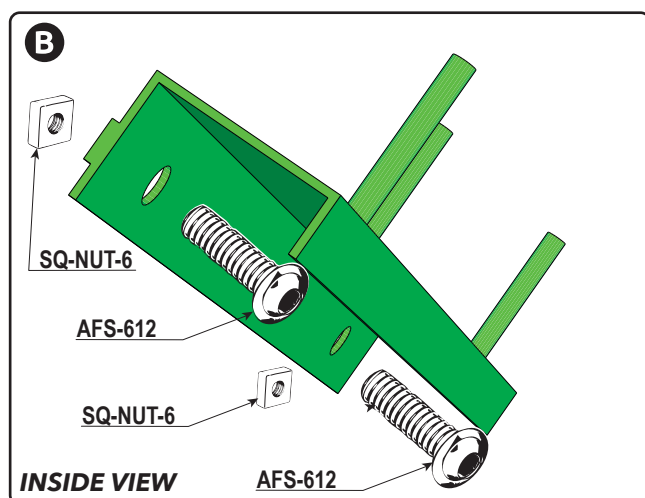
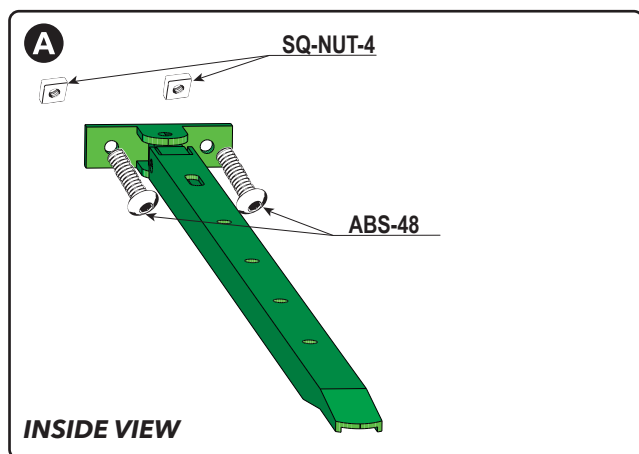
ROOF VENT ASSEMBLY CONTINUED

4.6 Install the ABS-48 Screws with the SQ-NUT-4 into the HQC01 as shown in **A**.

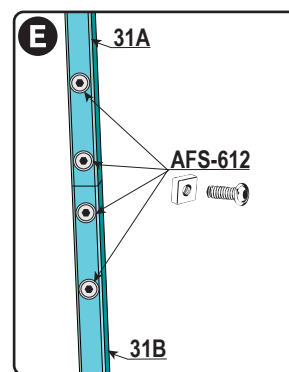
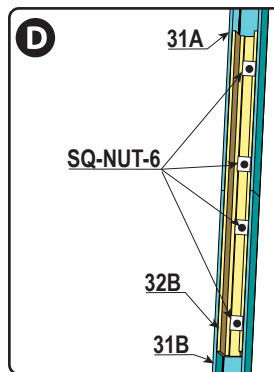
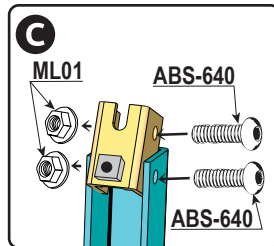
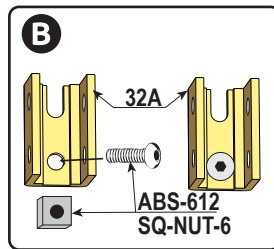
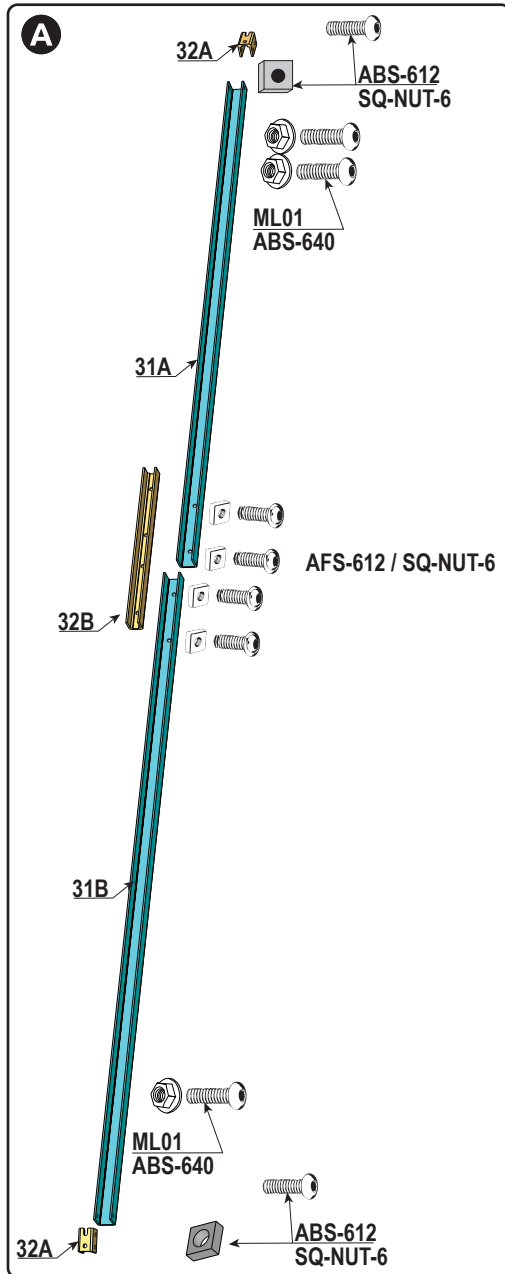
4.7 Install the AFS-612 Screws with the SQ-NUT-6 Nuts into the HQC02 see **B**.

4.8 Install the HQC01 into the 16 track on the Roof Vent, and tighten for now to keep in place, see **C**.

4.9 Repeat 4.1-4.8 steps to assemble all the Roof Vents for your greenhouse model size. Set Roof Vents and the pre-threaded HQC02 aside in a safe place for install later.



INTERIOR FLOOR TO CEILING ROOF SUPPORTS ASSEMBLY



5.1 See the layout of the Interior Roof Supports in diagram **A**.

5.2 Install the ABS-612 Screws with the SQ-NUT-6 into all of the 32A's, see **B**.

5.3 Install the 32A into the 31A using the ABS-640 Screws with the ML01 Nuts, see **C**.

5.4 Align the holes on the 31A and 31B with the 32B inside them, and install the AFS-612 Screws on the outer side with the SQ-NUT-6 Nuts inside the track. See **A**, **D**, and **E**.

5.5 Assemble all of the 31B/31A Supports, then set in a safe place for later install. See **F** for quantities.

F FLOOR TO CEILING INTERIOR ROOF SUPPORTS

SIZE	QTY
12X8.....	2
12X12.....	4
12X16.....	6
12X20.....	8
12X24.....	10
12X28.....	12
12X32.....	14

32A

31A

32B

31B

32A

38.00mm

98.00mm

38.00mm

120.00mm

INTERIOR ROOF & WALL SUPPORTS ASSEMBLY

5.6 See the layout of the Interior wall to roof supports in diagram

5.7 Install the ABS-612 Screws with the SQ-NUT-6 into all of the 32A's see

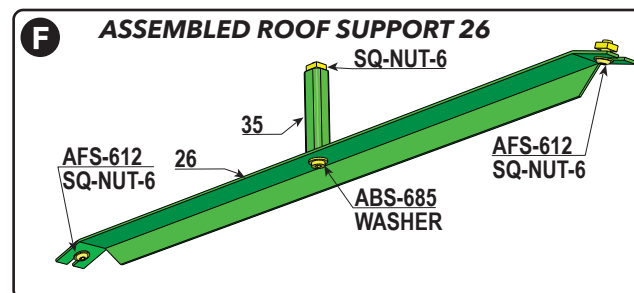
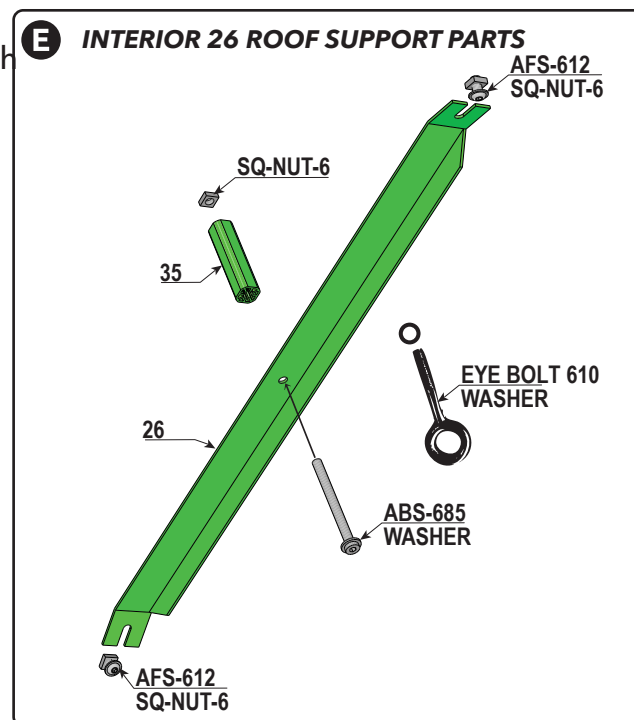
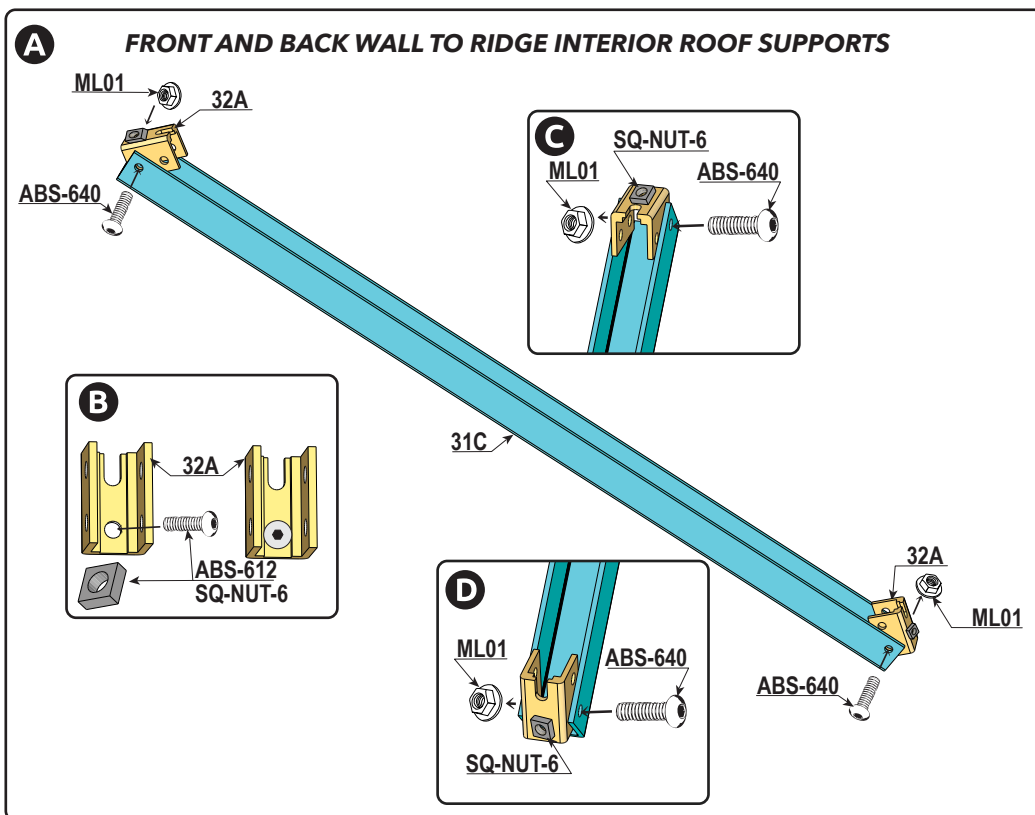
5.8 Install the 32A's into the 31C using the ABS-640 Screws with the ML01 Nuts, see **C** and **D**

There are (2) 31C Supports for any size greenhouse, they will attach as a support for the front and back wall.

5.9 See diagram **E** and **F** showing how to pre-assemble the 26 interior roof and wall supports. It is recommended that you pre-thread (30) sets of AFS-612/SQ-NUT-6 Combos.

5.10 Place the ABS-685 or the EYE BOLT-610 Screw with Washer through the 26 and 35 Spacer and loosely thread on the SQ-NUT-6. There will be only Eye bolts that will hold the tension cables on the 7 every 4'.

5.11 Pre-assemble all of the 26 Supports as instructed in 5.10.



7 ROOF RIDGE SUPPORTS ASSEMBLY

6.1 See diagram **A** to the right, and locate the size greenhouse you are building to confirm the order of the parts to prepare for assembly.

If you are assembling an 12x8 size model skip ahead to page 36.

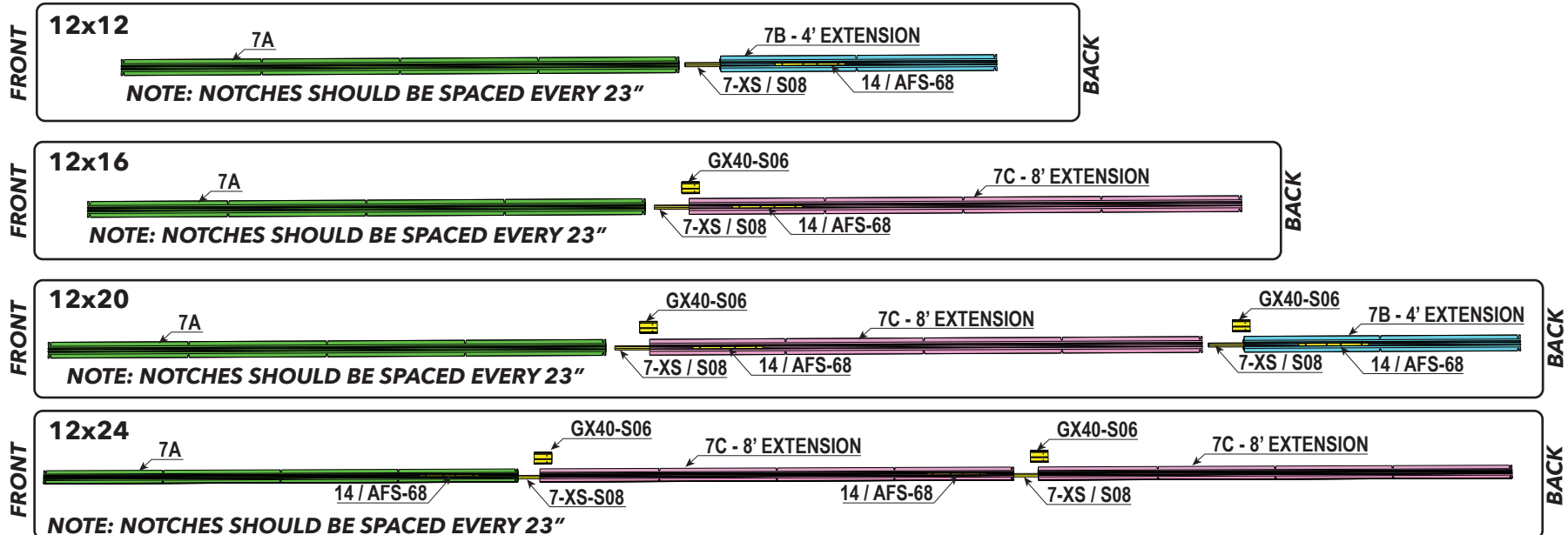
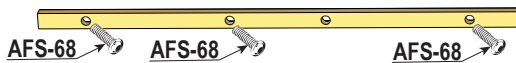
6.2 Lay out the roof ridge parts as shown below in the diagrams, pay attention to the notches as they will be spaced about every 23". If assembling a 12x20 or 12x28 the 7B 4' Extension piece is best placed at the back, see the diagram for model 12x20.

6.3 Locate the 14's for your size, there is one 14 / AFS-68 set, and one 7-XS / S08 set per extension. Pre-thread the AFS-68 screws into the 14 as shown in **B**. The empty hole will align with the notch to accept a support screw later in the assembly.

A QUANTITY PER SIZE

SIZE	RIDGE PARTS
12x8	7A
12x12	7A, 7B
12x16	7A, 7C
12x20	7A, 7C, 7B
12x24	7A, 7C, 7C
12x28	7A, 7C, 7C, 7B
12x32	7A, 7C, 7C, 7C

B PRE-THREAD ONLY 3 HOLES ON THE 14, A SUPPORT WILL ATTACH LATER HERE.

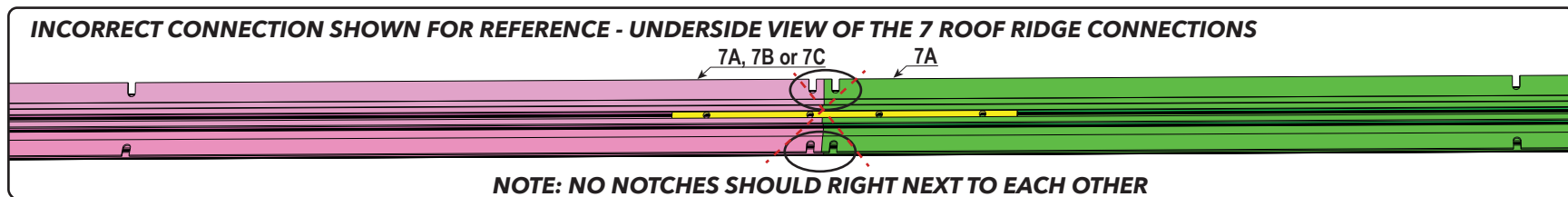
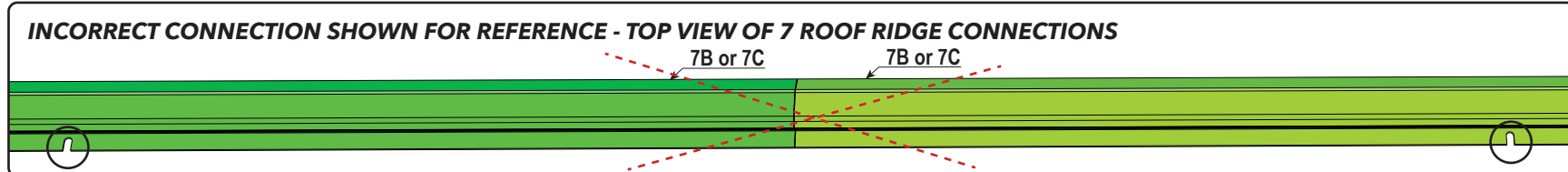
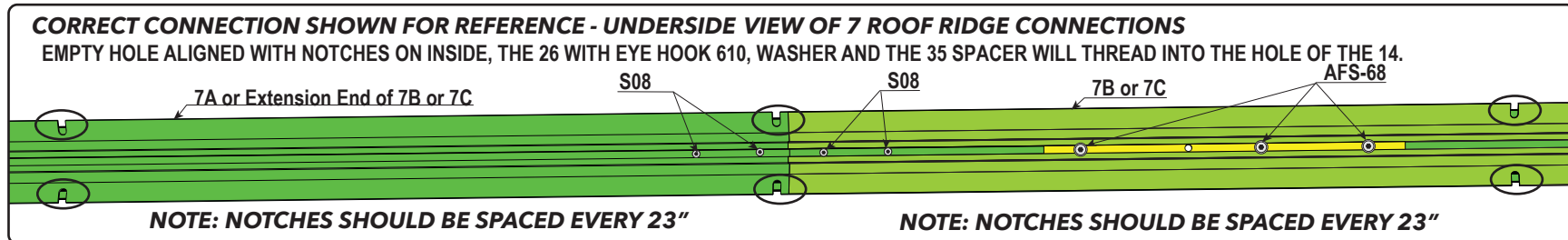
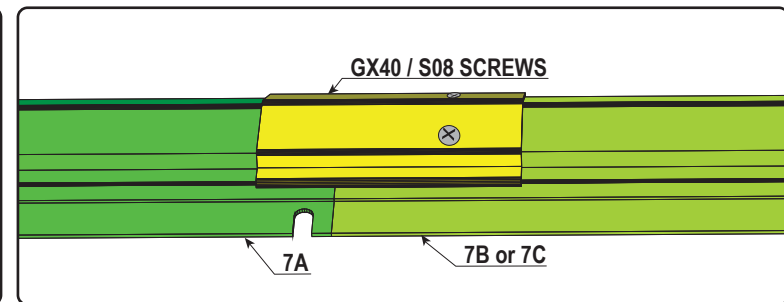
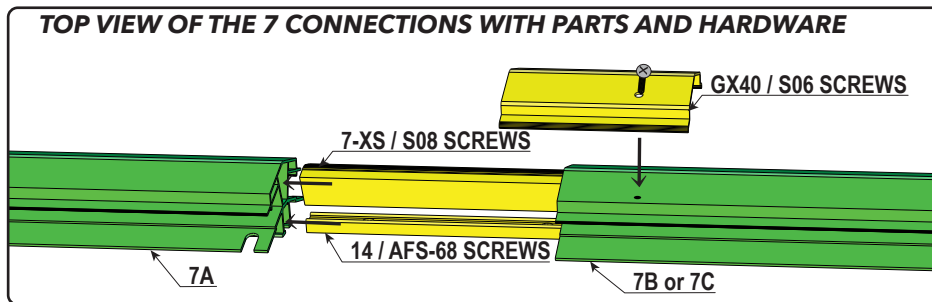


7 ROOF RIDGE SUPPORTS ASSEMBLY

6.4 Slide the 14 with the loosely pre threaded AFS-68 screws into the track of each of the 7B or 7C pieces slide down so it is out of your way to attach the 7-XS. Slide the 7-XS into that upper track, align the holes on both pieces, then install the S08 Screws tightening with even pressure along the track. Grandio recommends applying a line of silicone caulk along the roof seam when pressing the extrusions together. See the diagrams below for correct orientation. Slide 14 and tighten screws.

6.5 Repeat step 6.3 and 6.4 on all 7 Roof Connection pieces for your model size

6.6 Apply another bead of silicone caulk to the seams and the under side of the GX40 Cap, then install the GX40 caps with the S06 Screws to each connection. Once the 7 Ridge is assembled set safely beside your base kit so it is ready for installation when you begin the construction. See the images below for reference.



39 MID ROOF EAVE SUPPORTS LAY OUT AND ASSEMBLY

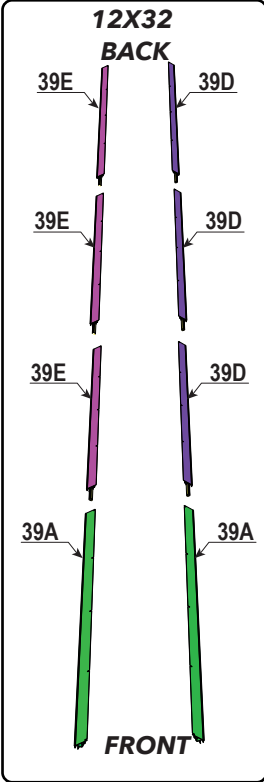
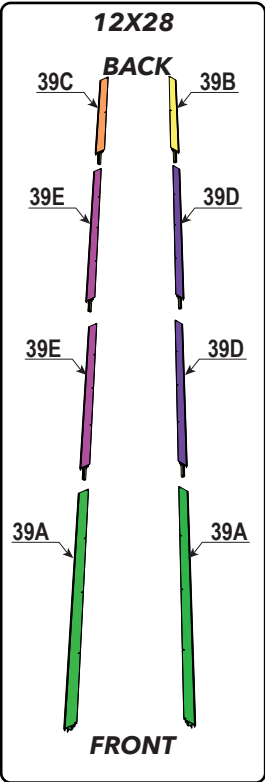
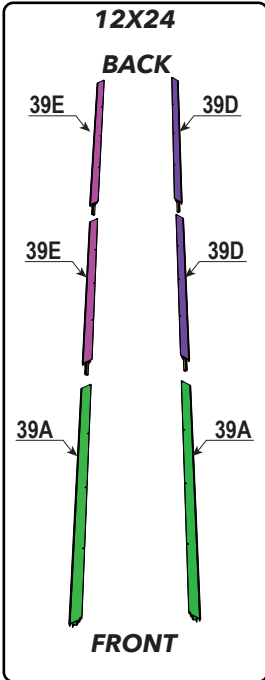
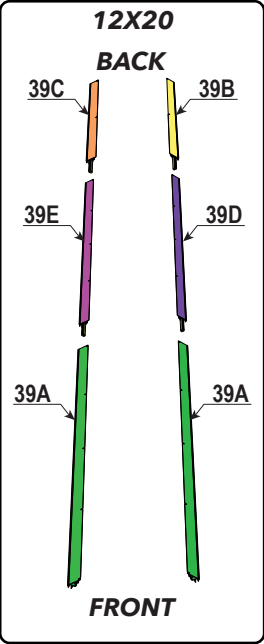
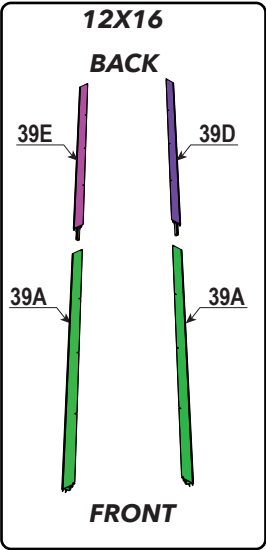
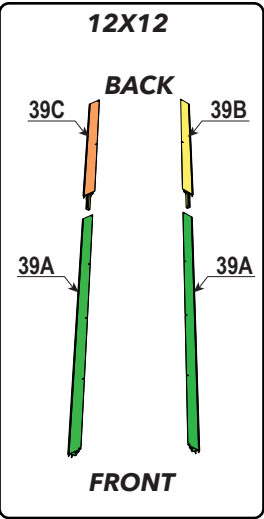
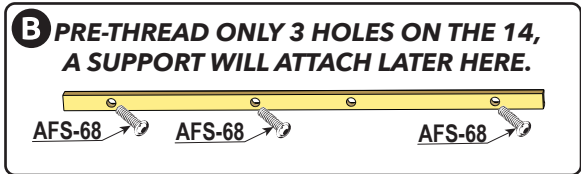
7.1 See diagram **A** to the right, and locate the size greenhouse you are building to confirm the order of the parts to prepare for assembly. Note we are referencing Right and Left side as if standing in front of your greenhouse front door preparing to walk inside.

7.2 Lay out the upper eave 39 parts as shown below in the diagram that matches your size, pay attention to the notches as they will be spaced about every 23".

7.3 Locate the 14's for your size, there is one 14 / AFS-68 set, and one 7-XS / S08 set per extension. Pre-thread the AFS-68 screws into the 14 as shown in **B**. The empty hole will align with the notch to accept a support screw later in the assembly.

A 39 UPPER EAVE SUPPORT QTY PER SIZE

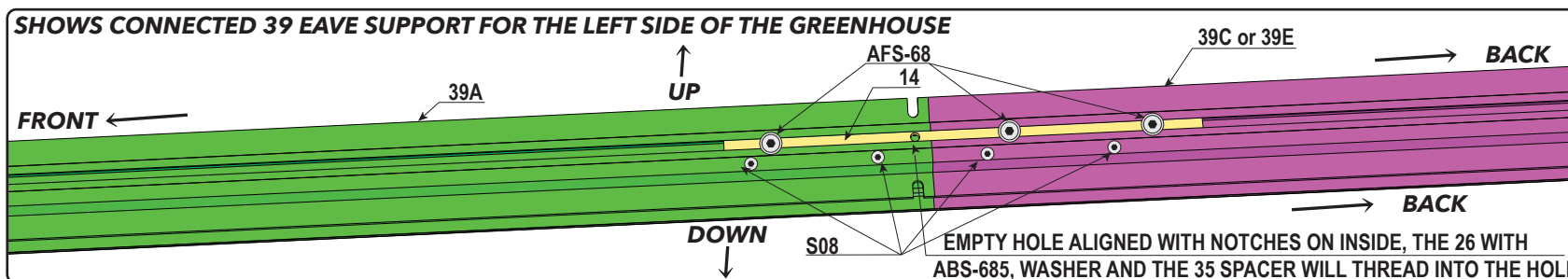
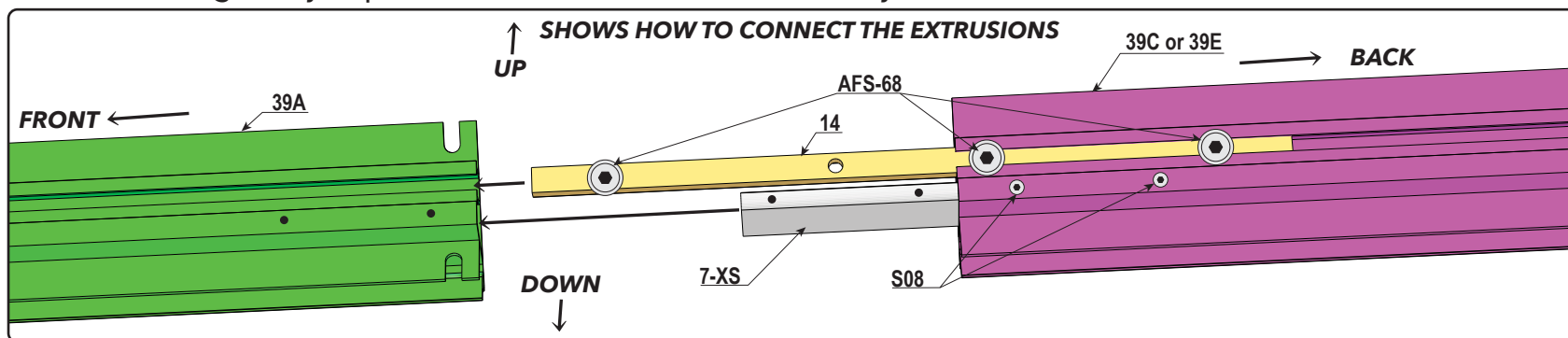
SIZE	39 LEFT SIDE	39 RIGHT SIDE
12x8	39A	39A
12x12	39A, 39C	39A, 39B
12x16	39A, 39E	39A, 39D
12x20	39A, 39E, 39C	39A, 39D, 39B
12x24	39A, 39E, 39E	39A, 39D, 39D
12x28	39A, 39E, 39E, 39C	39A, 39D, 39D, 39B
12x32	39A, 39E, 39E, 39E	39A, 39D, 39D, 39D



39 MID ROOF EAVE SUPPORTS EXTENSION ASSEMBLY

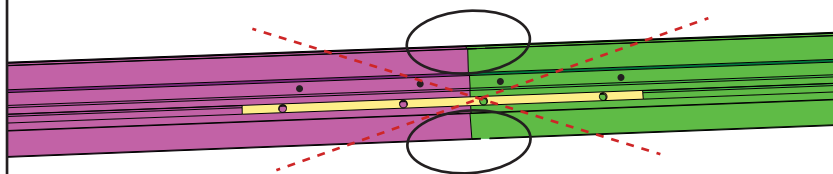
7.4 Slide the 14 with the loosely pre-threaded AFS-68 screws into the track of each of the 39 pieces slide down so the 14 hole without a screw aligns with the notches. Slide the 7-XS into the correct track, align the holes on both pieces, then install the S08 Screws tightening with even pressure along the track. Grandio recommends applying a line of silicone caulk along the exterior seam when pressing the extrusions together. See the diagrams below for correct orientation.

7.5 Repeat step on all 39 eave connection pieces for your model size, then carefully set beside your greenhouse base kit making sure you place them on the correct side for easy install.

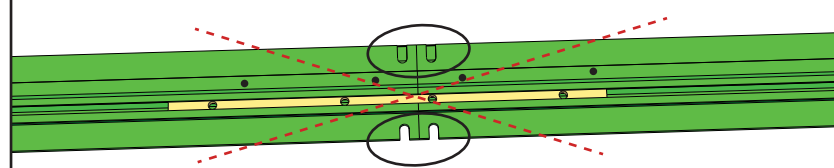


INCORRECT CONNECTION SHOWN FOR REFERENCE - INSIDE VIEW OF 39 CONNECTIONS

ONLY 1 NOTCH SPACED EVERY 23" - THIS SHOWS NO NOTCH



NO 2 NOTCHES SHOULD BE NEXT TO EACH OTHER



9 LOWER EAVE GUTTER SUPPORTS LAY OUT AND ASSEMBLY

8.1 See diagram **A** to the right, and locate the size greenhouse you are building to confirm the order of the parts to prepare for assembly. If you are assembling an 12x8 size model skip ahead to page 40.

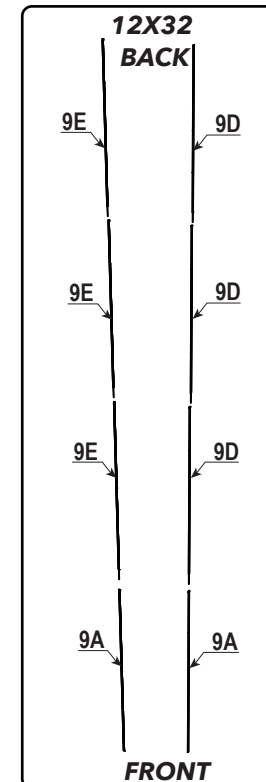
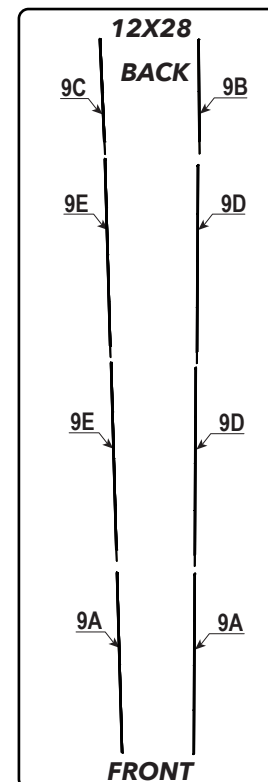
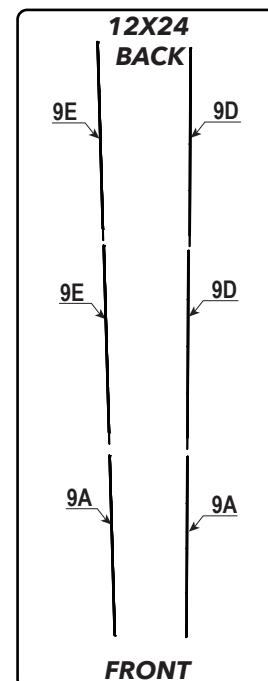
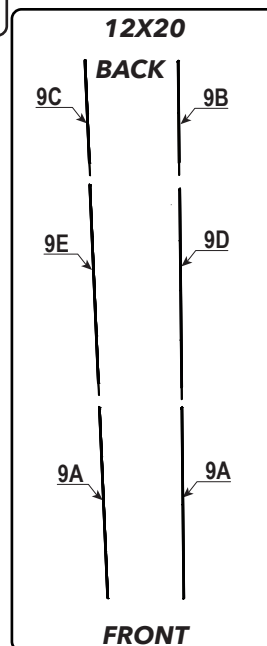
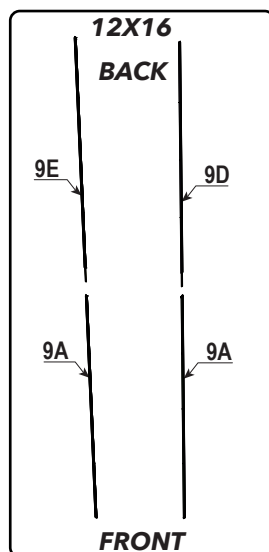
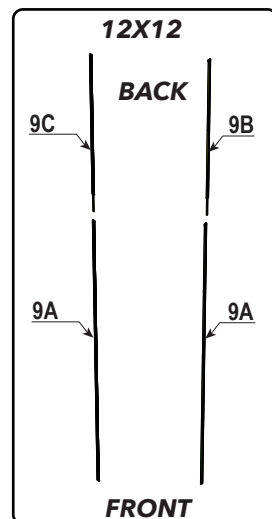
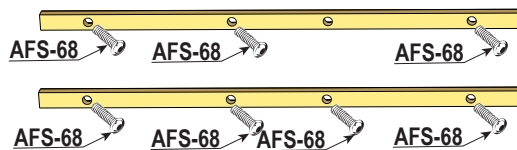
8.2 Lay out the gutter support 9 parts as shown below in the diagram that matches your size greenhouse, pay attention to the notches as they will be spaced about every 23".

8.3 Locate the 14's for your size, there is will be (2) 14 / AFS-68 sets per extension. Pre-thread the AFS-68 screws into the sets of the 14's as shown in **B**. The empty hole will align with the notch to accept a support screw on the interior wall later in assembly.

A 9 GUTTER SUPPORT QTY PER SIZE

SIZE	9 LEFT SIDE	9 RIGHT SIDE
12x8	9A	9A
12x12	9A, 9C	9A, 9B
12x16	9A, 9E	9A, 9D
12x20	9A, 9E, 9C	9A, 9D, 9B
12x24	9A, 9E, 9E	9A, 9D, 9D
12x28	9A, 9E, 9E, 9C	9A, 9D, 9D, 9B
12x32	9A, 9E, 9E, 9E	9A, 9D, 9D, 9D

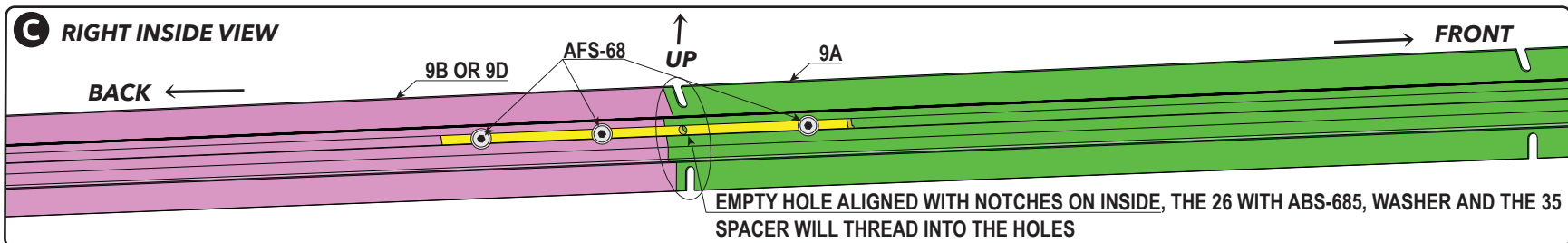
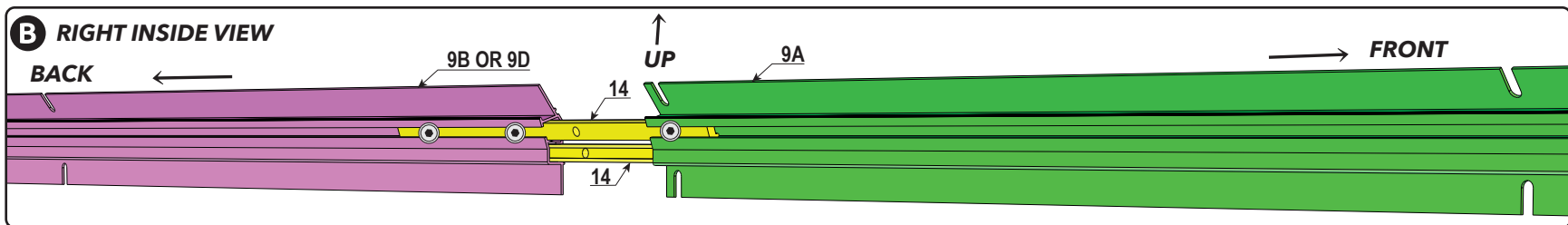
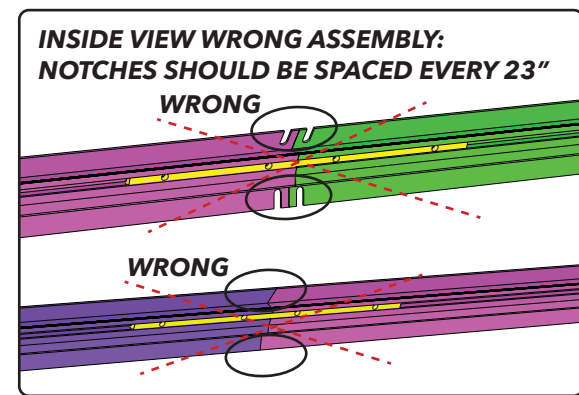
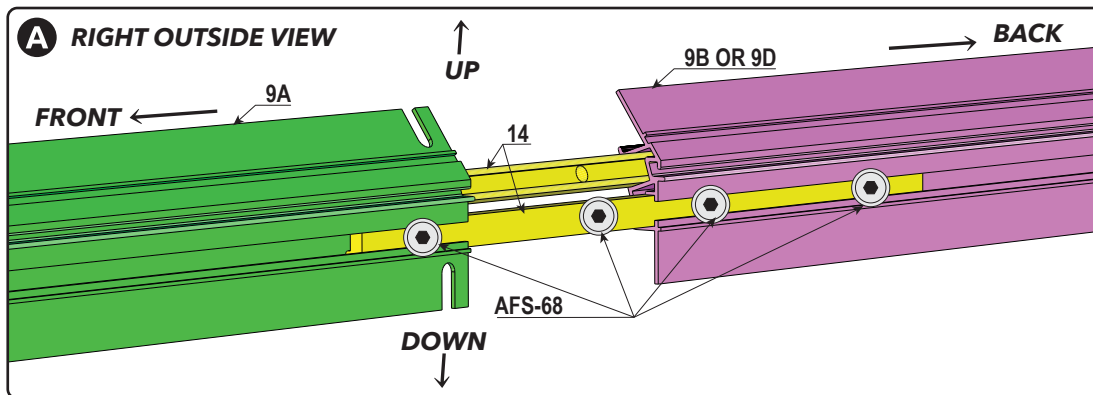
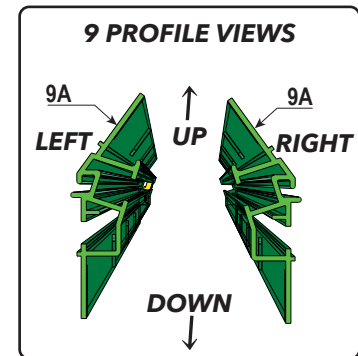
B PRE-THREAD ONLY 3 HOLES ON (1) 14, THE OTHER WILL HAVE ALL (4)



9 LOWER EAVE GUTTER SUPPORTS EXTENSION ASSEMBLY

8.4 Slide the (2) 14's with the loosely pre-threaded AFS-68 screws into the track of each of the 9 pieces. See **A**, **B** and **C**. Slide the 14 down so the interior 14 hole without a screw aligns with the notch see **C**. Grandio recommends applying a line of silicone caulk along the exterior seam when pressing the extrusions together. See the diagrams below for correct orientation.

8.5 Refer to layout diagrams on previous page as needed then repeat step 8.4 on all 9 lower eave gutter connection pieces for your model size, then carefully set beside your greenhouse base kit on the correct side for easiest install. Note we are referencing Right and Left side as if you are looking at your greenhouse from the front.



PREPARING TO ASSEMBLE THE GREENHOUSE BODY



WARNING!

YOU MUST HAVE AT LEAST 3 PEOPLE FOR A 12x8, 12x12 or 12x16 GREENHOUSE INSTALLATION.

YOU MUST HAVE AT LEAST 3-4 PEOPLE FOR A 12X16 OR 12X20 GREENHOUSE INSTALLATION.

LARGER GREENHOUSES SIZED 12x24, 12X28, AND 12X32 OR LONGER, WILL REQUIRE AT LEAST 4 PEOPLE.

DO NOT ATTEMPT ASSEMBLY ON A WINDY OR STORMY DAY!

CHECK YOUR LOCAL WEATHER PRIOR TO BEGINNING THIS SECTION OF ASSEMBLY FOR THE DAY OF, AND THE FOLLOWING DAYS IN CASE YOU DO NOT FINISH ASSEMBLY AS PLANNED.

PLAN TO FINISH THE REMAINDER OF ASSEMBLY IN ONE TO TWO DAYS. BE PREPARED WITH COMMITTED HELP.

BE PREPARED!

HAVE ALL PARTS, HARDWARE AND PRE-ASSEMBLED SECTIONS GATHERED NEAR THE INSTALLATION SITE.

CONFIRM THAT THE 7 RIDGE, THE 9 EAVE GUTTER SUPPORTS AND THE 39 UPPER MID ROOF SUPPORTS ARE SET ON THE CORRECT SIDE OF YOUR STRUCTURE READY FOR EASY INSTALLATION.

HAVE ALL THE PRE-ASSEMBLED 31 SUPPORTS AND THE FLOOR TO CEILING SUPPORTS READY FOR INSTALLATION ON EACH SIDE AT EACH EXTENSION.

YOU MUST HAVE 2 LADDERS FOR A 12X8, AND FOR ANY STRUCTURES LARGER THAN 12X16 YOU MUST HAVE AT LEAST 3 LADDERS.

IT IS BEST TO HAVE ONE PERSON IN CHARGE OF READING THE MANUAL AND DOUBLE-CHECKING THE ORIENTATION OF PARTS.

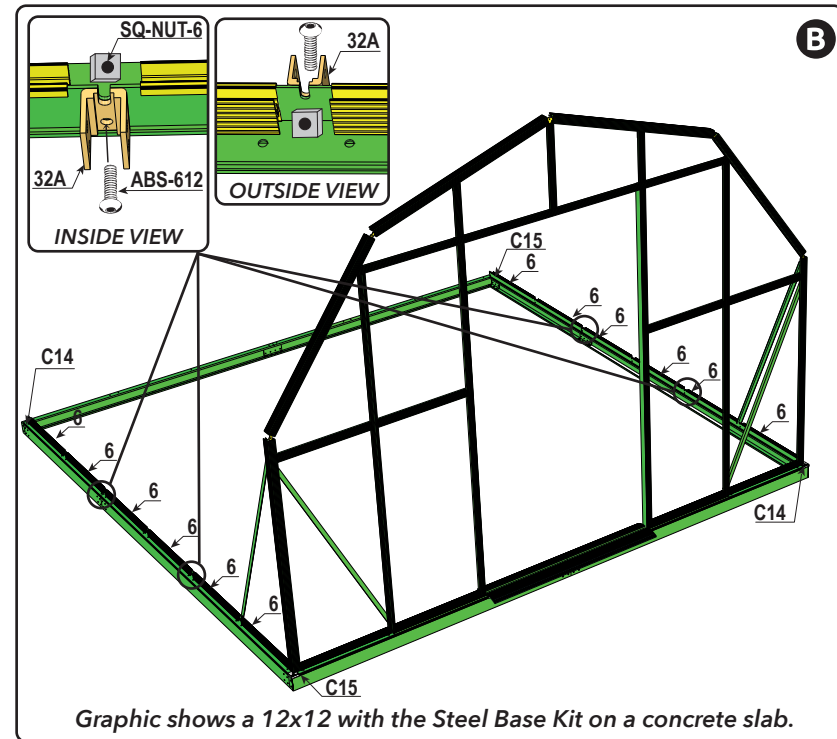
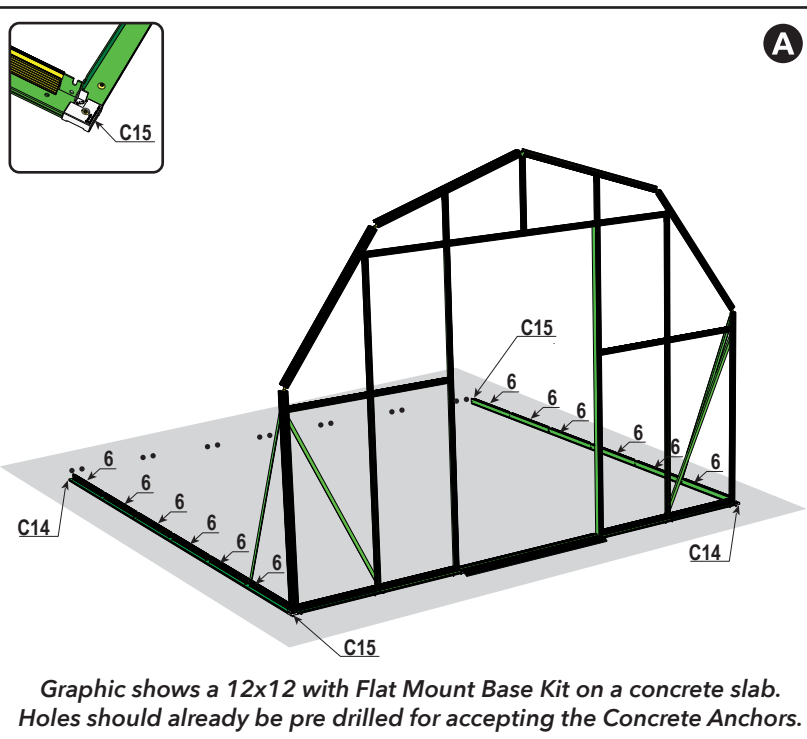
WARNING: BEFORE YOU BEGIN BODY ASSEMBLY

ATTACHING FRONT WALL SECURING TO BASE OR FOUNDATION

* If building a Summit with the Back Door Transformation Kit, you will repeat steps 9.1 - 9.5 on the back side of your base kit, in place of steps 10.1 - 10.5 since you will have (2) front wall sections.

9.1 If attaching the front wall to a Steel Base Kit you will use the **ABS-625** screws with the **ML01** combos. If attaching to a concrete slab or wooden surface use the anchor kit you chose at purchase and follow the instructions that came with the anchoring kit. Every hole on the front wall **12A**, **12B** with the **11** door track will receive an anchoring screw. Have the hardware and tools ready for the installation. There will be (14) fasteners for the front wall base installation. Align and install the **C14** and **C15** caps at each corner, see **A**.

9.2 Install the **6** window seals along the sides of your base kit. These will sit between each notch, so one **6** window bracket every 23". Every 4' you will install one of the **32A** brackets using the **ABS-612** screw with **SQ-NUT-6** see **B**. *Note the notch on **32A** will face up.



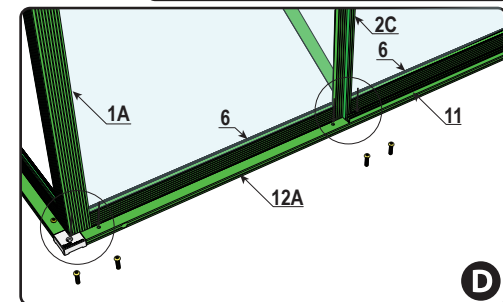
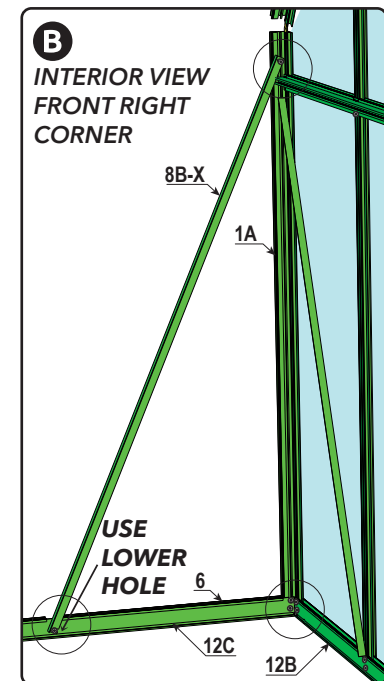
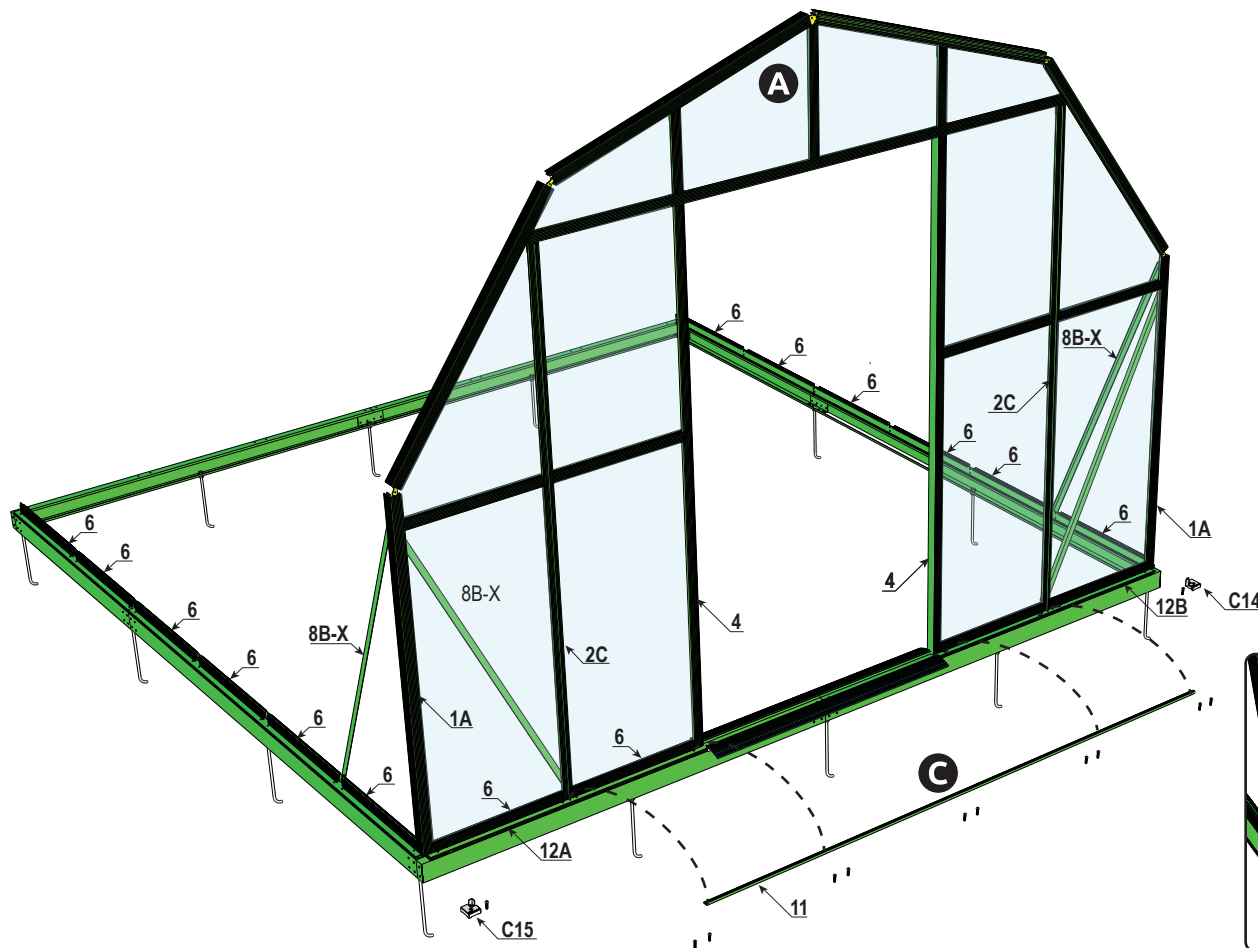
ATTACHING FRONT WALL TO PRE-INSTALLED BASE KIT

9.3 YOU MUST HAVE AT LEAST 2 PEOPLE TO ATTACH THE FRONT AND BACK WALLS.

Carefully carry the front wall and align at the corners of your previously aligned and anchored base kit side pieces. With one person continuing to hold the front wall in place, the other person will attach both of the corner 1A pieces with the AFS-612 and SQ-NUT-6 combos. See **A** and **B**

9.4 Use the 8B-X supports to attach the corner 1A pieces to the base as shown in **B** using AFS-612 and SQ-NUT-6. Repeat on both sides. Align your 11 track to the front door way as shown in **C**.

9.5 Use the correct anchor for your installation to attach the front wall to the base system you are using, there will be (14) anchoring fasteners for the front wall. See **D**



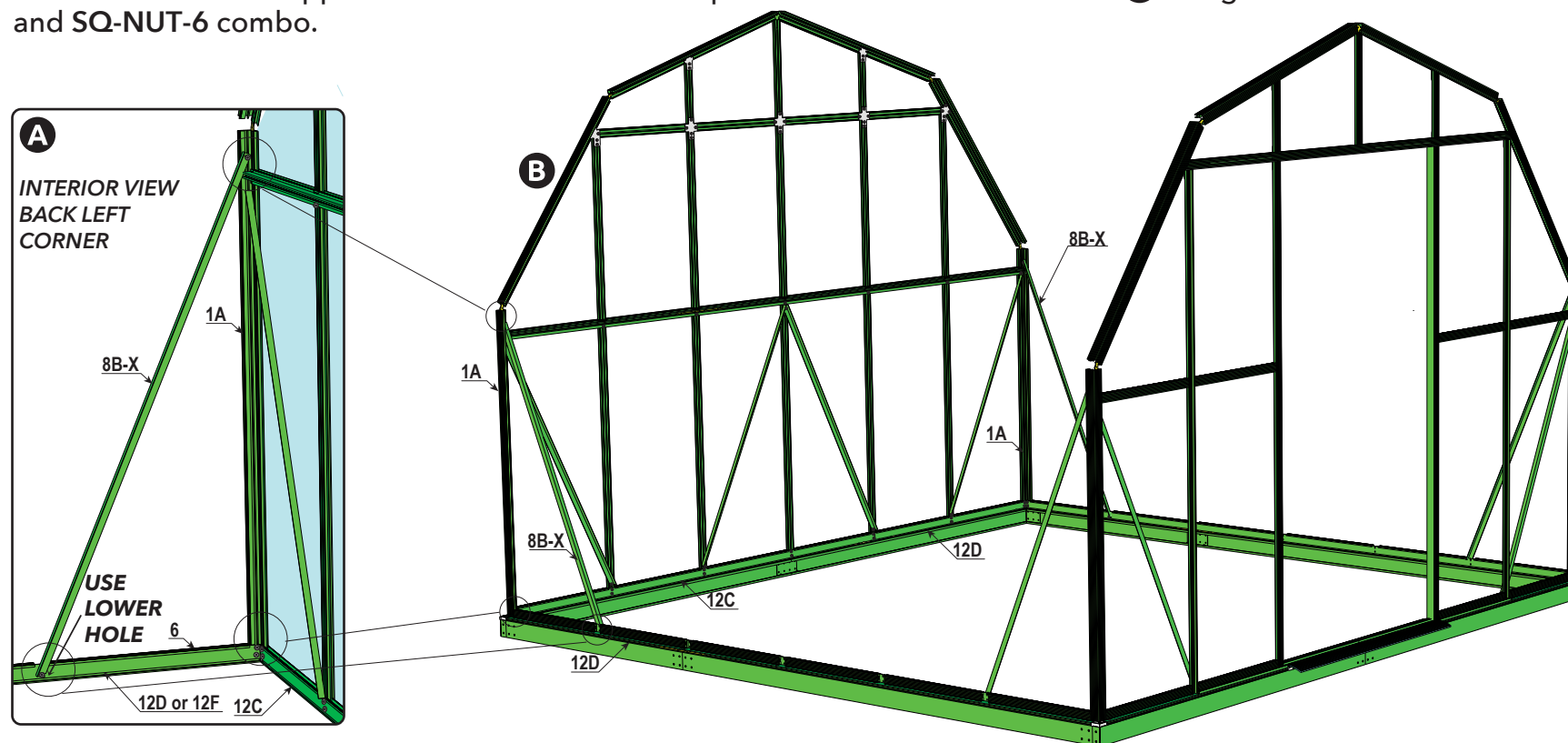
ATTACHING BACK WALL TO PRE-INSTALLED BASE KIT

* If building a Summit with the Back Door Transformation Kit, you will repeat steps 9.1 - 9.5 on the back side of your base kit, in place of steps 10.1 - 10.5 since you will have (2) front wall sections.

10.1 If attaching the back wall to a Steel Base Kit you will use the **ABS-625** screws with the **ML01** combos. If attaching to a concrete slab or wooden surface use the anchor kit you chose at purchase and follow the instructions that came with the anchoring kit. Every hole on the back wall **12C** and **12D** will get a an anchoring screw. Have the hardware and tools ready for the installation. There will be (14) fasteners for the back wall base installation.

10.2 Carefully carry the back wall and align at the corners of your previously aligned and anchored base kit side pieces. With one person continuing to hold the back wall in place, the other person will attach both of the corner **1A** pieces with the **AFS-612** and **SQ-NUT-6** combos. See **A** and **B**. Repeat on both back corners.

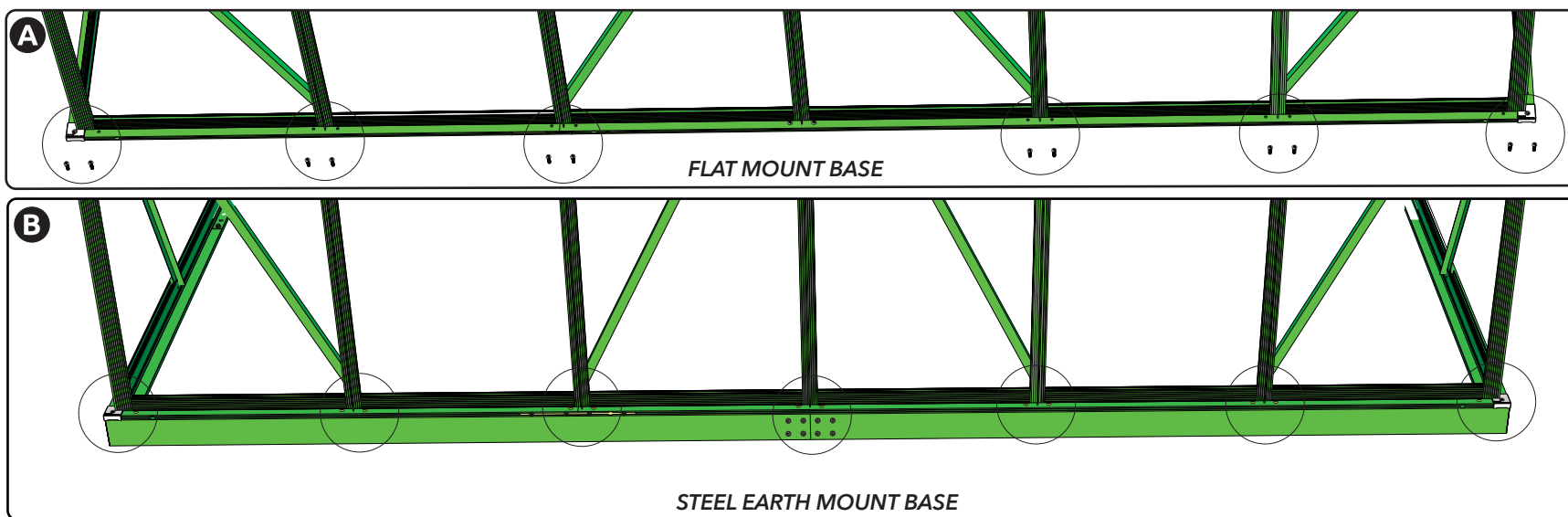
10.3 Use the **8B-X** supports to attach the corner **1A** pieces to the base as shown in **A** using the **AFS-612** and **SQ-NUT-6** combo.



ATTACHING BACK WALL TO PRE-INSTALLED BASE KIT

10.4 If attaching the back wall to a Steel Base Kit you will use the **ABS-625** screws with the **ML01** combos. If attaching to a concrete slab or wooden surface use the anchor kit you chose at purchase and follow the instructions that came with the anchoring kit. Every hole on the back wall **12C** and **12D** will get an anchoring screw. Have the hardware and tools ready for the installation. There will be (14) anchor for the back wall base installation.

10.5 Use the correct anchors for your installation to attach the front wall to the base system you are using, there will be (14) anchoring screws for the front wall. See **A** and **B**.



CHAPTER 17

A LEFT PROFILE VIEW

AFS-612
SQ-NUT-6

9

26

AFS-612
SQ-NUT-6

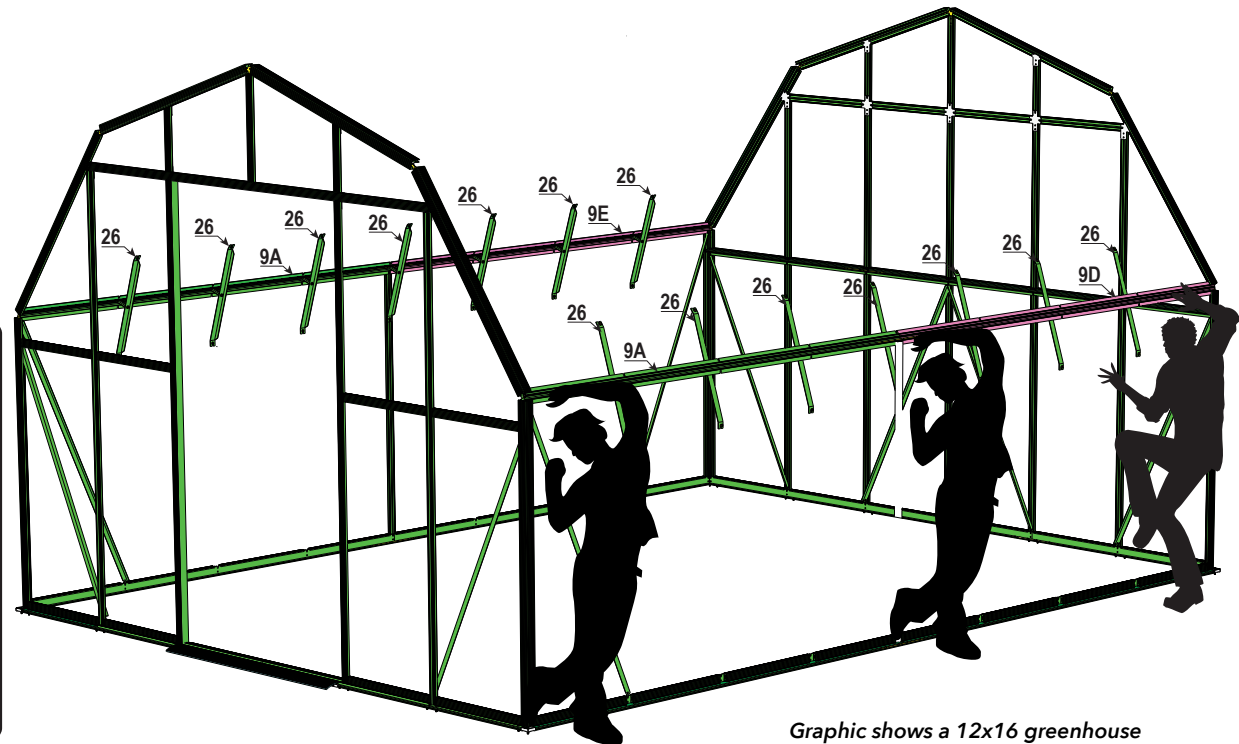
C

26

9D

9A

2A



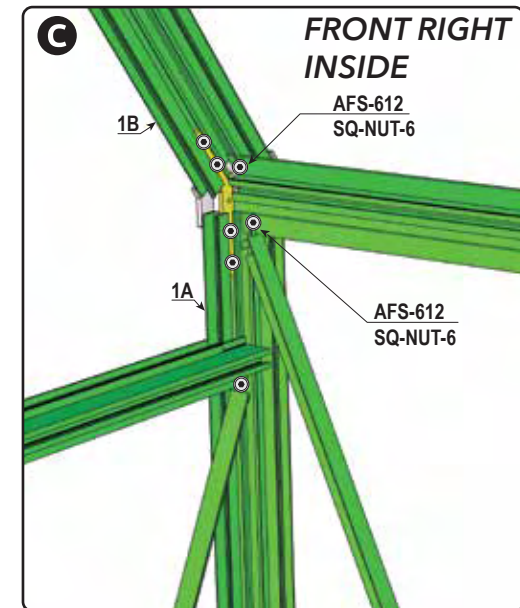
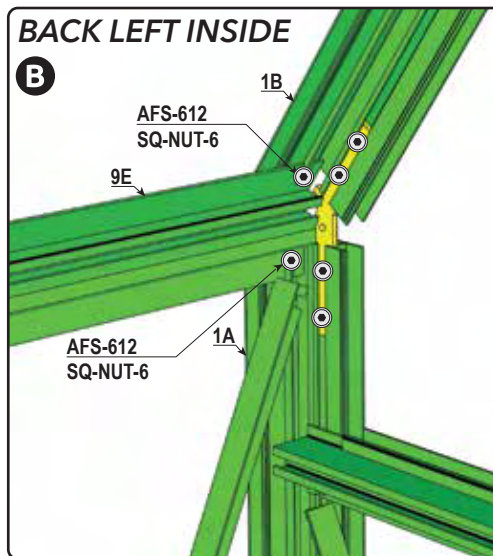
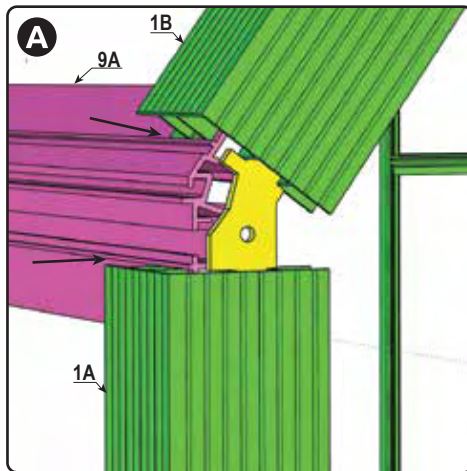
45

9 GUTTER WALL SUPPORT INSTALLATION CONTINUED

11.2 With 3 people carrying the 9 into place, the people at the front and back will attach to the 1A and 1B using the AFS-612 screws with the SQ-NUT-6 combos. See **A**, **B** and **C** for correct alignment and orientation. Refer to diagram on previous page for visual reference of over all layout.

11.3 The person supporting the middle will keep supporting the length of the 9 connections depending on the length until it is stable.

NOTE EXACT ALIGNMENT WHERE THE 1A AND 1B MEET THE 9



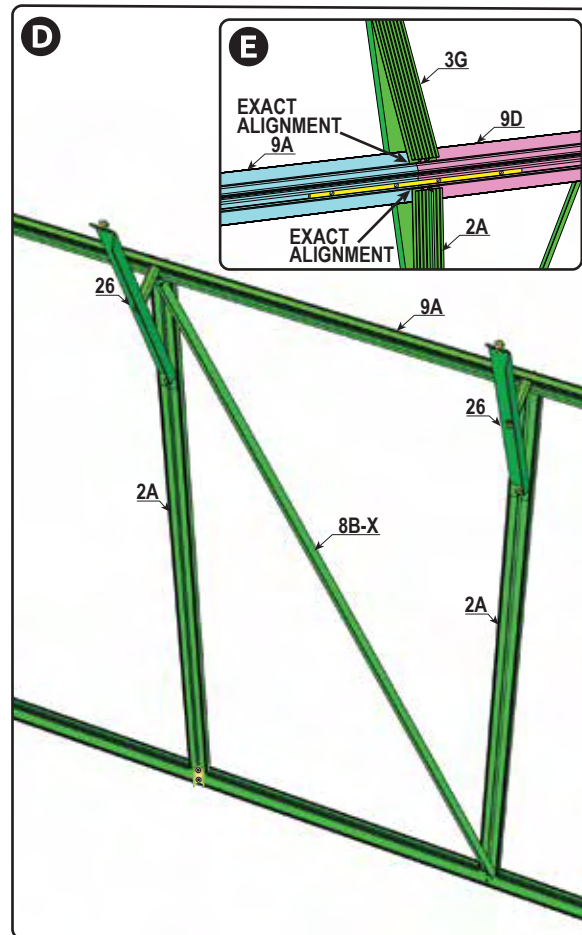
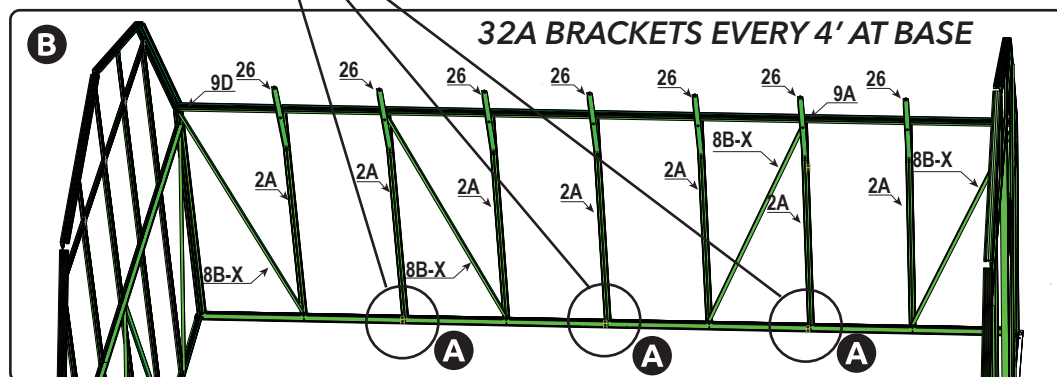
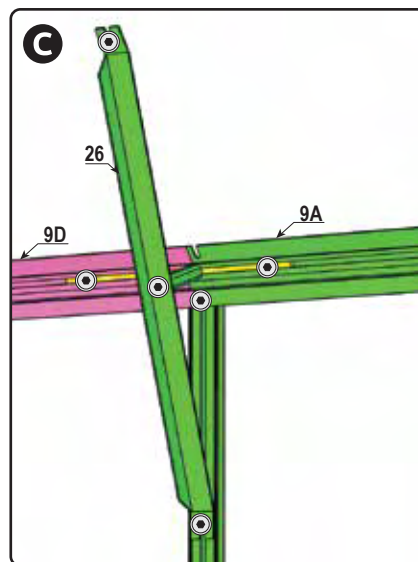
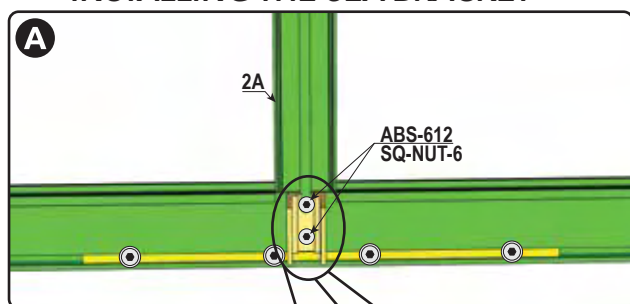
9 GUTTER WALL SUPPORT INSTALLATION CONTINUED

11.4 The person supporting the middle will keep supporting the length of the 9 connections depending on the length until it is stable. The installers will attach a 2A with the 32A using the ABS-612 and SQ-NUT-6 every 4', see **A** and **B**. Install all the 2A's along the side wall at every connecting point notch on the BASE and the 9's. Each of the 2A's will connect to a 26 at the top see **C**. Install the 8B-X supports as shown in **D**. Note the exact alignment of 2A and 3G to the 9 track in **E**. The 3G will rest just above the notch on the 9's and the 2A will rest just below the notch on the 9's for support.

11.5 Repeat these steps on the other side of the greenhouse. Be very cautious of wind or weather conditions, you may need to have a person continue supporting the side wall if building a longer greenhouse.

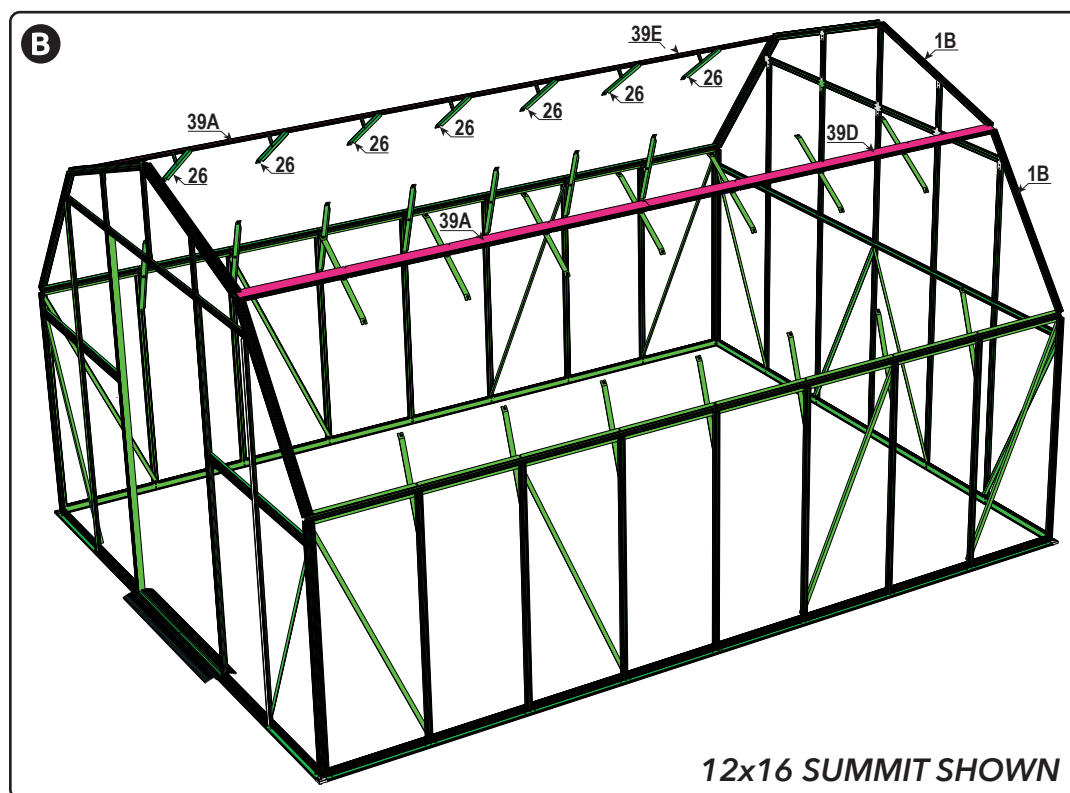
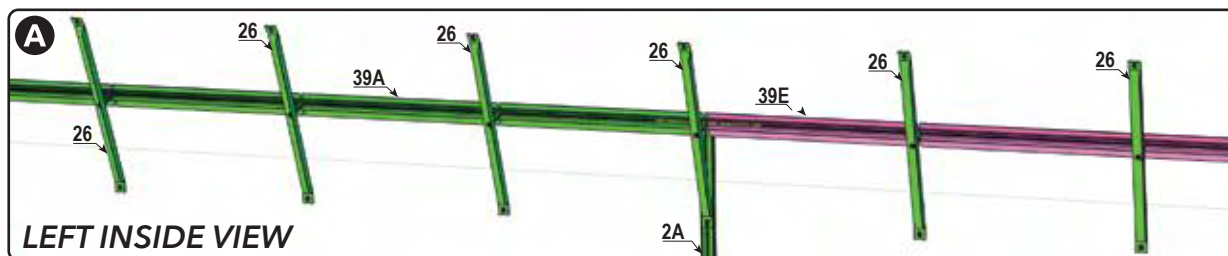
NOTE EXACT ALIGNMENT WHERE THE 2A AND 3G MEET THE 9 EXTRUSION

INSTALLING THE 32A BRACKET



39 MID ROOF SUPPORTS INSTALLATION

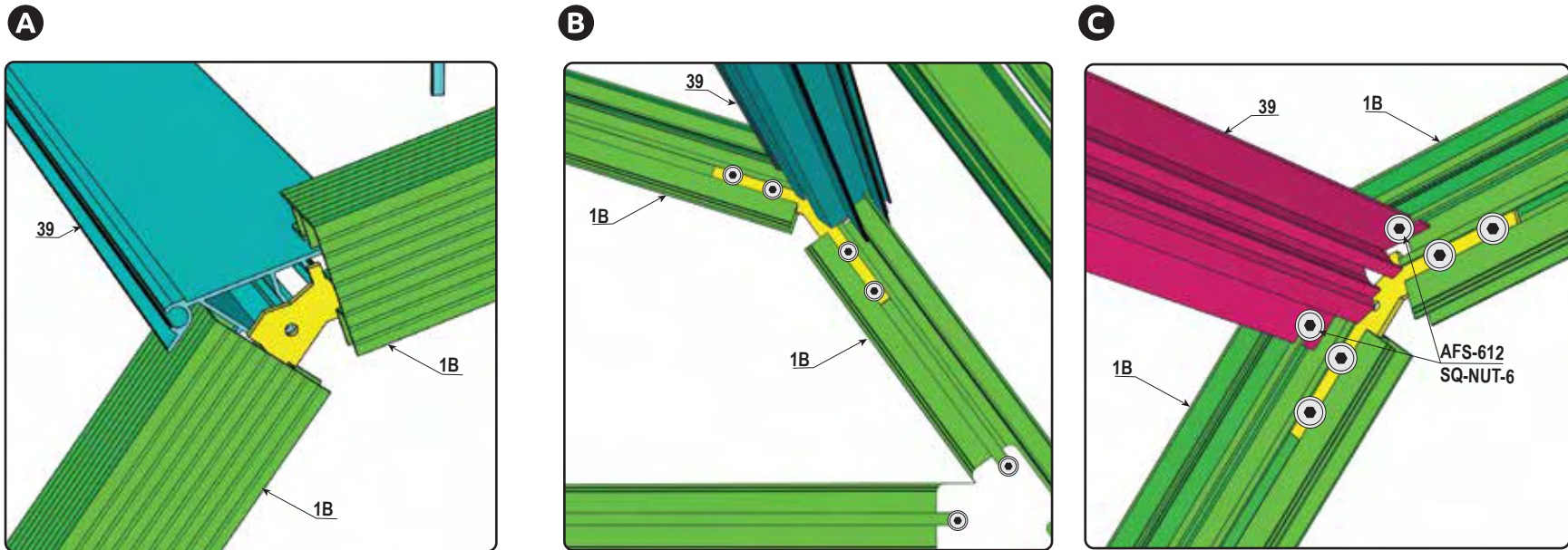
12.1 Slide or load (loosely) the 26 brackets along the 39 extrusions, there will be a 26 at each of the notches on the 39. At each of the extensions where there is a 14, a 26 will attach directly into the hole so you will remove the nut from pre-assembly of the 26. See **A** and **B**.



39 MID ROOF SUPPORTS INSTALLATION

12.2 With 3 people carrying the 39 into place, the people at the front and back will attach to the 1B's using the AFS-612 screws with the SQ-NUT-6 combos. See **A**, **B** and **C** for correct alignment and orientation. Refer to diagram on previous page for visual reference of over all layout.

12.3 The person supporting the middle will keep supporting the length of the 39 connections depending on the length until it is stable.



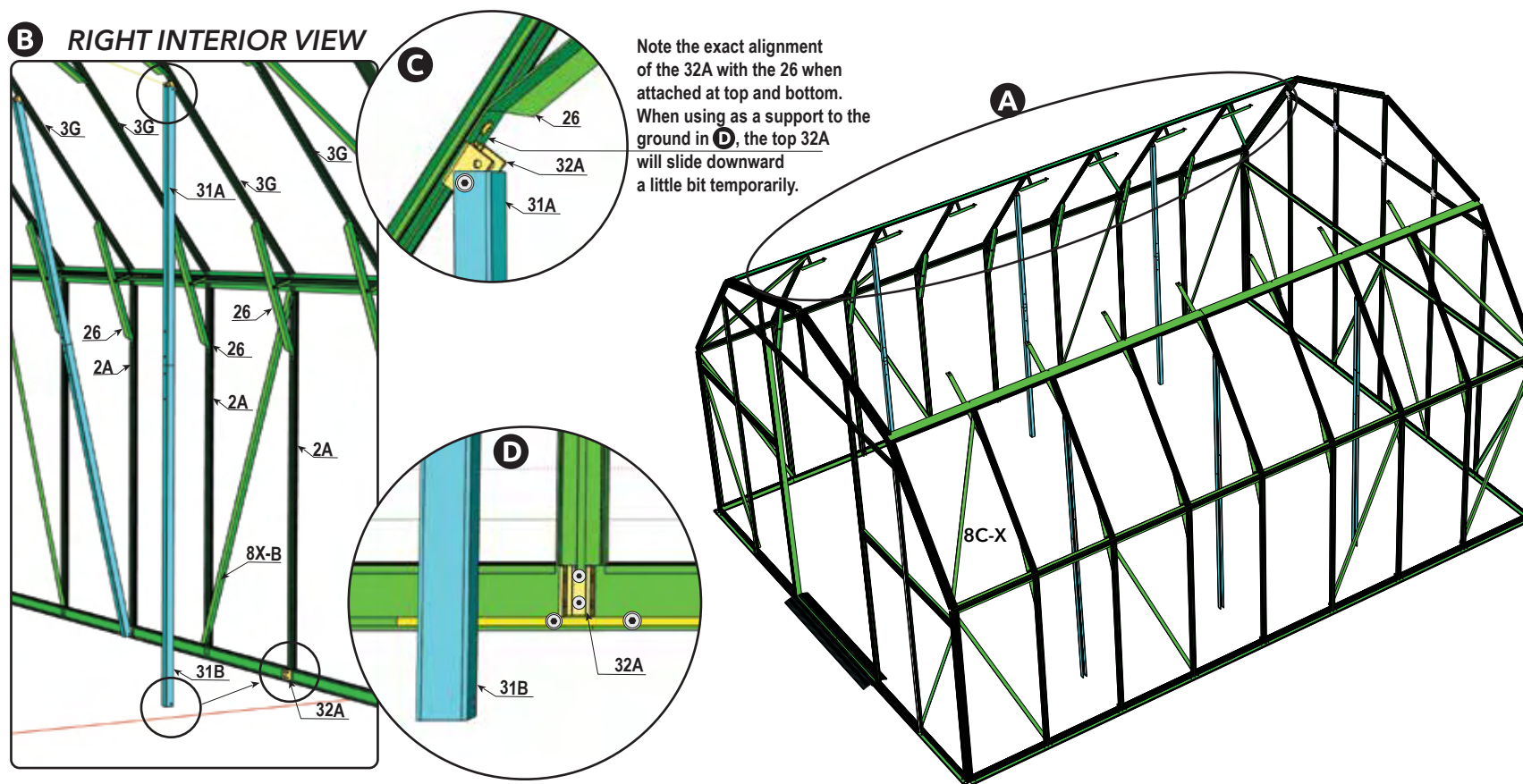
39 MID ROOF SUPPORTS INSTALLATION

12.4 The person supporting the middle will keep supporting the length of the 39 connections depending on the length until it is stable. The installers will attach all of the 3G extrusions as shown in the diagram. They will attach with an AFS-612 and SQ-NUT-6 combo to the 9's and 39's. Install the 8C-X supports as shown in the diagram below.

12.5 Attach the 26's to the top and bottom of the 3G's as shown in **A** using ABS-612 and SQ-NUT-6.

12.6 Attach the pre-assembled 31A / 31B combos as shown in the diagrams **B**, **C** and **D** or every 4' where you placed the 32A's as they will temporarily be used to support the 39 sections and side wall to the ground. You may need to slide the upper 32A down on the 3G to maximize the 31A / 31B support to the ground.

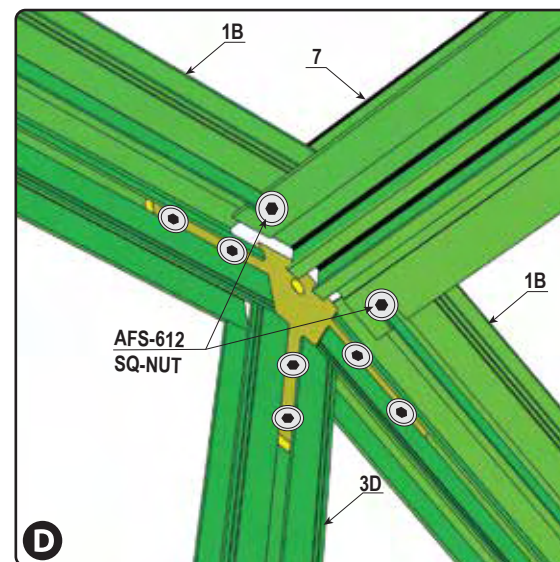
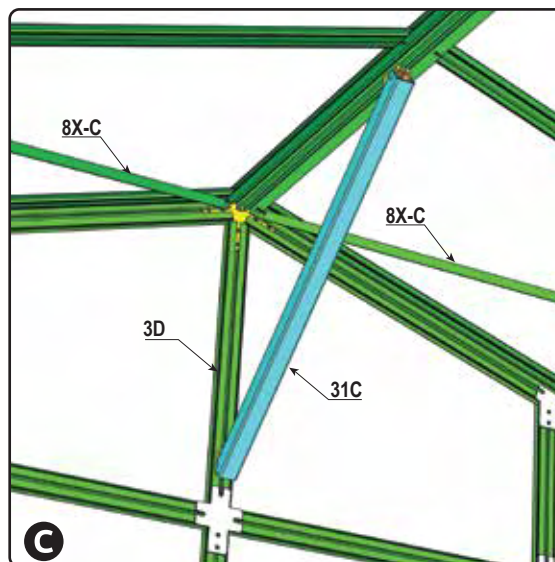
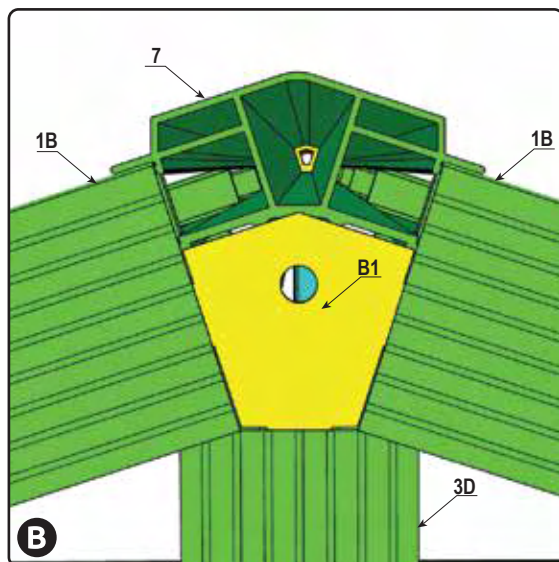
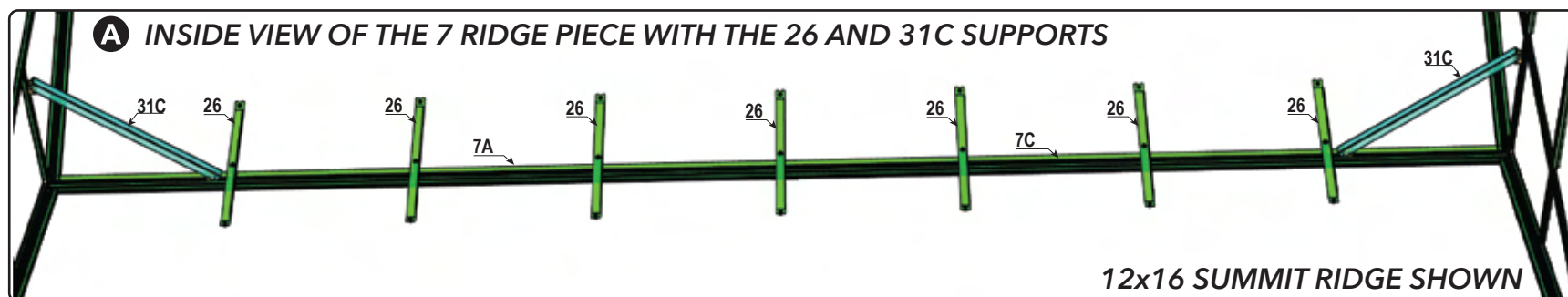
12.7 Repeat these steps on the other side of the greenhouse. Be very cautious of wind and weather conditions, you may need to have a person continue supporting the side wall if building a longer greenhouse.



7 PEAK ROOF SUPPORT INSTALLATION

13.1 Slide or load (loosely) the 26 brackets along the 7 extrusions, there will be a 26 at each of the notches on the 7. At each of the extensions where there is a 14 and every 4' where there is a 31A/31B support in line, a 26 will attach directly into the hole using the EYE BOLT-610 with WASHER. See **A**. See page 33 for Eye bolt-610 info.

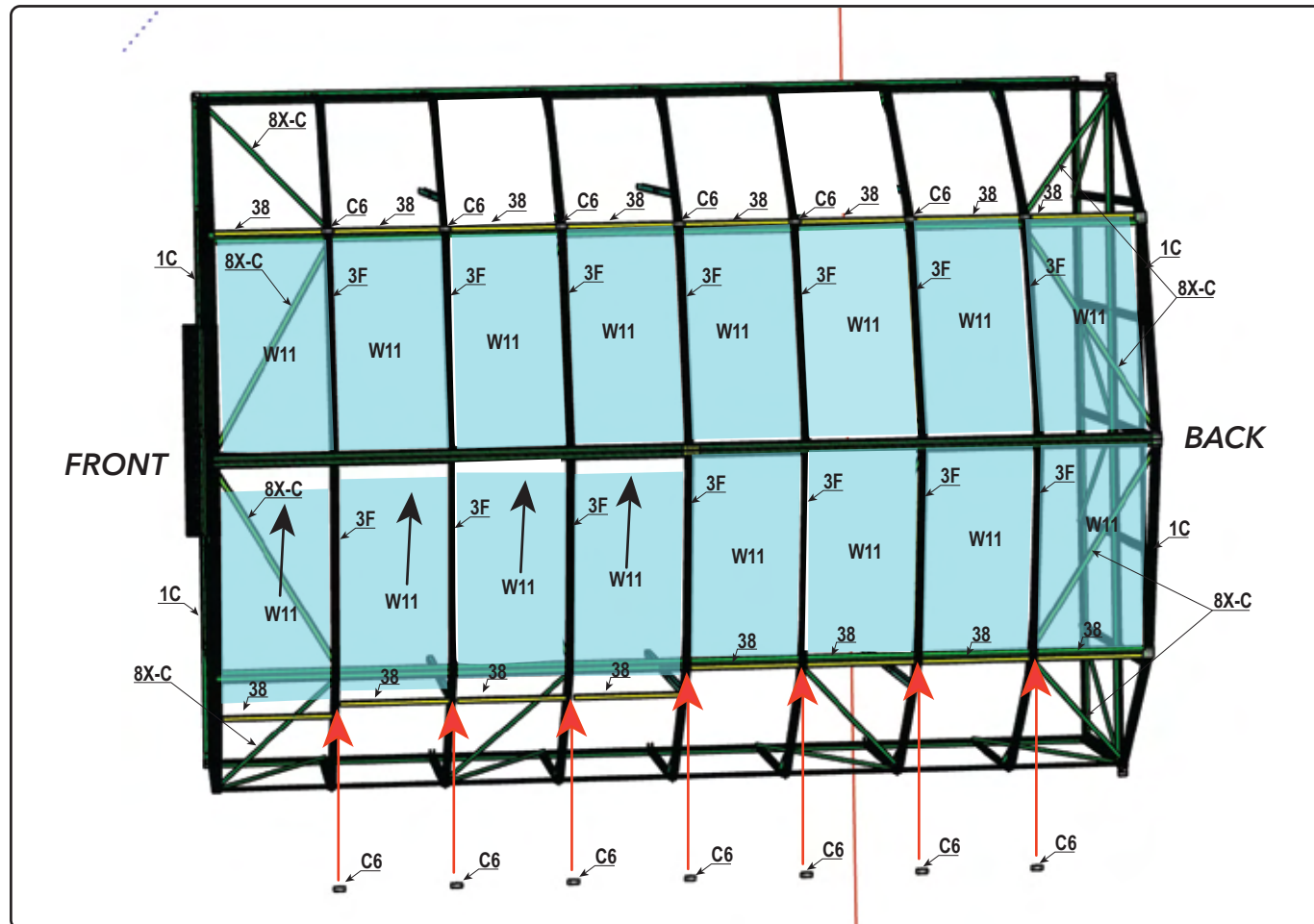
13.2 With at least 3 people, attach the 7 Ridge to the front and back wall as shown in **B**, **C** and **D**. You will use the AFS-612 with SQ-NUT-6 to attach the 7 and 31C. Attach the 31C to the 7 Ridge as shown in **C**, use the 32A brackets to hold in place to the 7 Ridge and to the front and back wall 3D extrusions. You may need 1 or 2 people to hold and support the middle section of the 7 depending on the length of your greenhouse while 2 others install to the front and back wall. The people in the middle may need to continue holding until all the supports are in place.



UPPER ROOF PANEL INSTALLATION

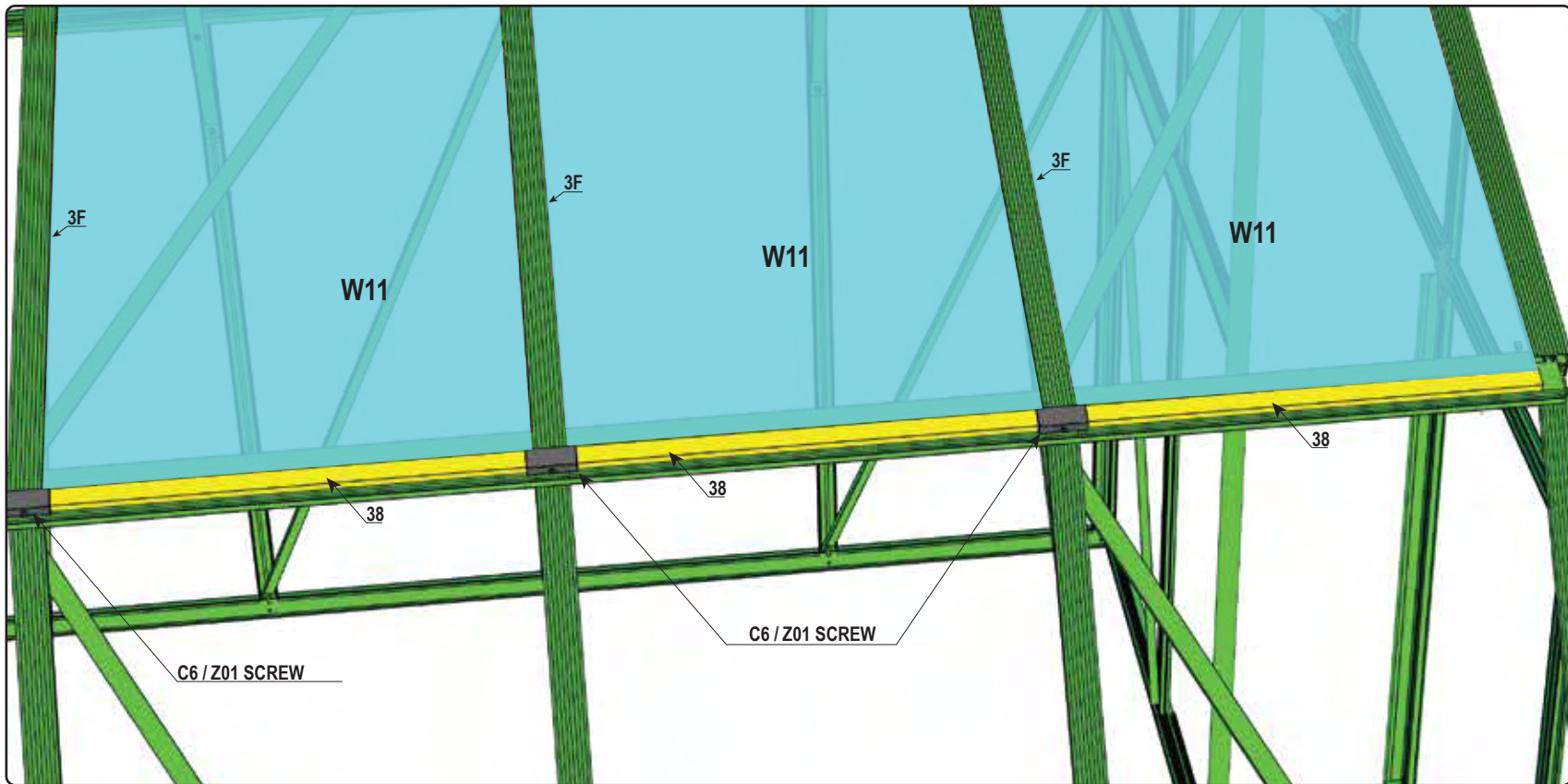
13.3 Install all the 3F extrusions between the 7 roof piece and the 39 upper eave support using the AFS-612 / SQ-NUT-6 combos, see diagram below. Install the 8C-X supports near the front and back as shown in the upper and mid roof sections using AFS-612 with SQ-NUT-6 combos as shown below.

13.4 Install all of the W11 panels as shown in the diagram below.



UPPER ROOF PANEL INSTALLATION

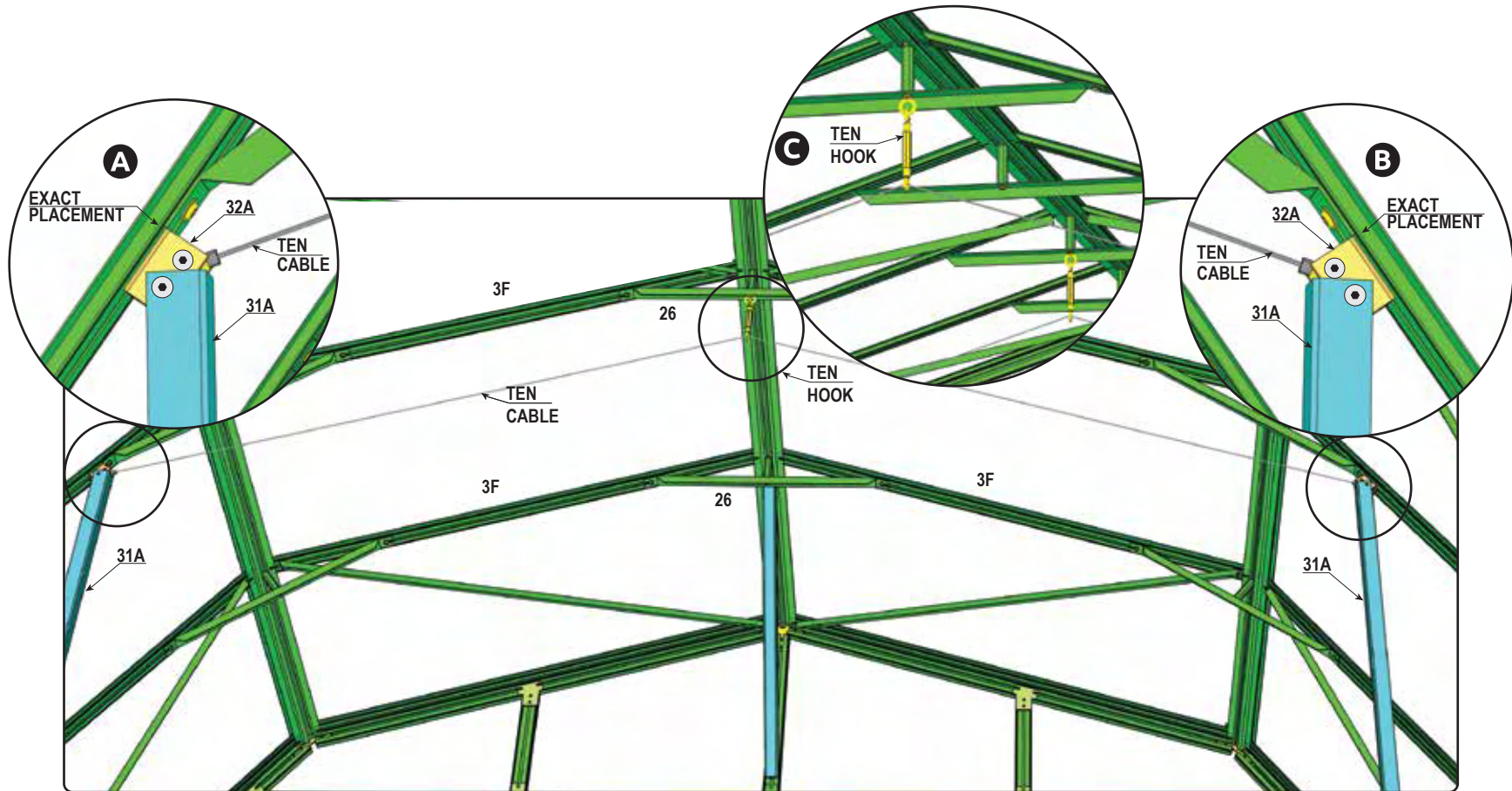
13.5 Slide the **38** onto the bottom of each of the **W11** panels. Then use the **C6** with the **Z01** screw to hold the **38** into the end of each of the **3F** extrusions as shown below.



INTERIOR SUPPORT INSTALLATION

13.6 Attach all the 26's to the 3F's on both sides of the 7 using AFS-612 and SQ-NUT-6.

13.7 Install the TEN-CABLE wire though the EYE of the TEN-HOOK and hook it onto the loop of the EYE BOLT-610 on the middle roof 26 support and over to each of the 31A / 31B supports as shown below, the wire will loop the top screw on the 32A. See **A** , **B** and **C** . *You're tension cable may already be threaded through the TEN-HOOK.



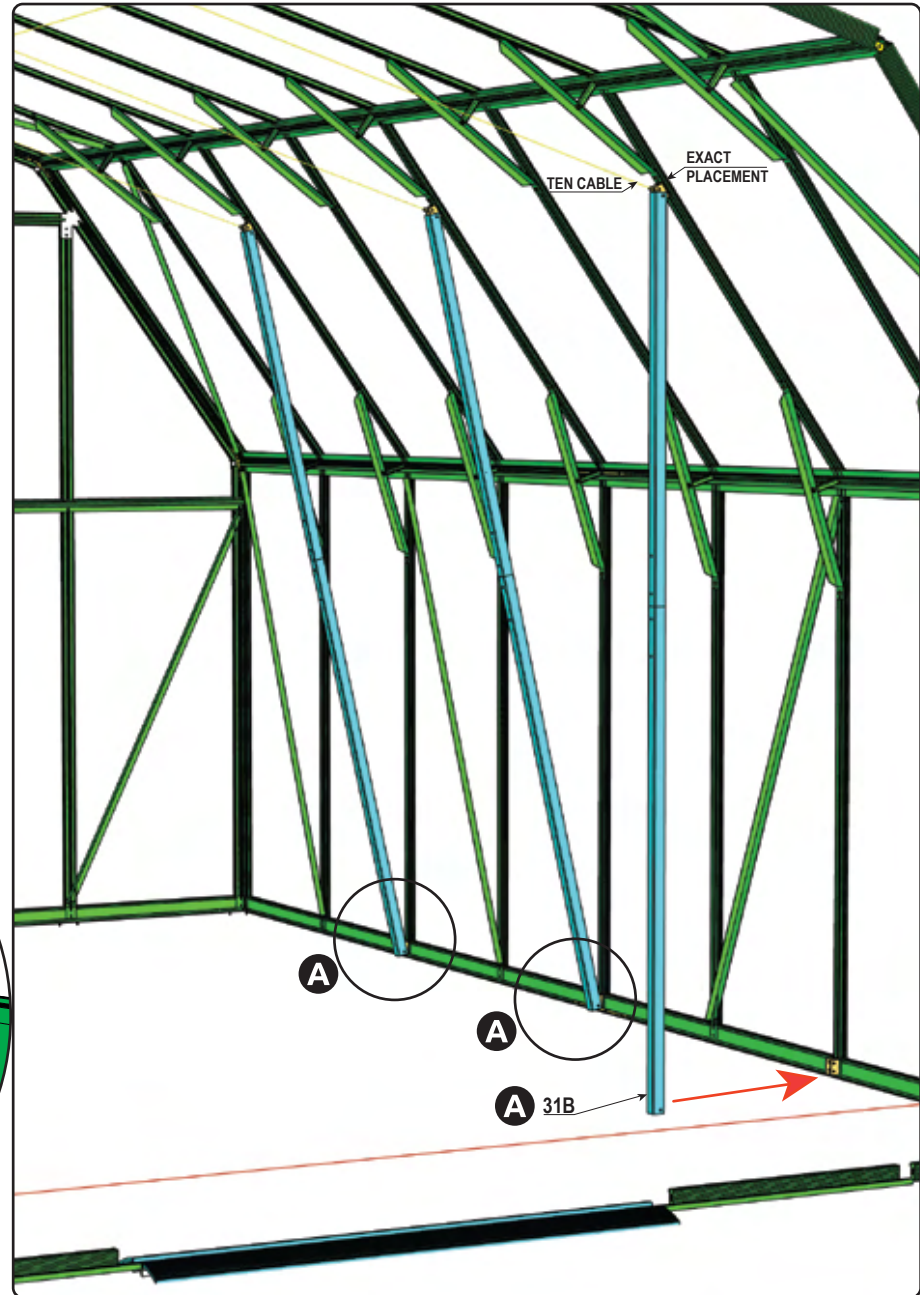
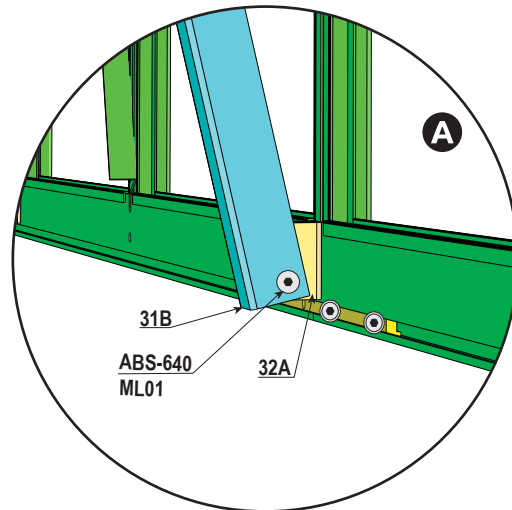
INTERIOR SUPPORT INSTALLATION

13.8 Attach all the 31A / 31B Support to the 32A at the base with the ABS-640 / ML01 combo.

13.9 With all the supports in place check your structure for square. You may need to adjust some of the 26 supports. You may also use the TEN-HOOK to tighten the TEN-CABLE once every thing is installed.

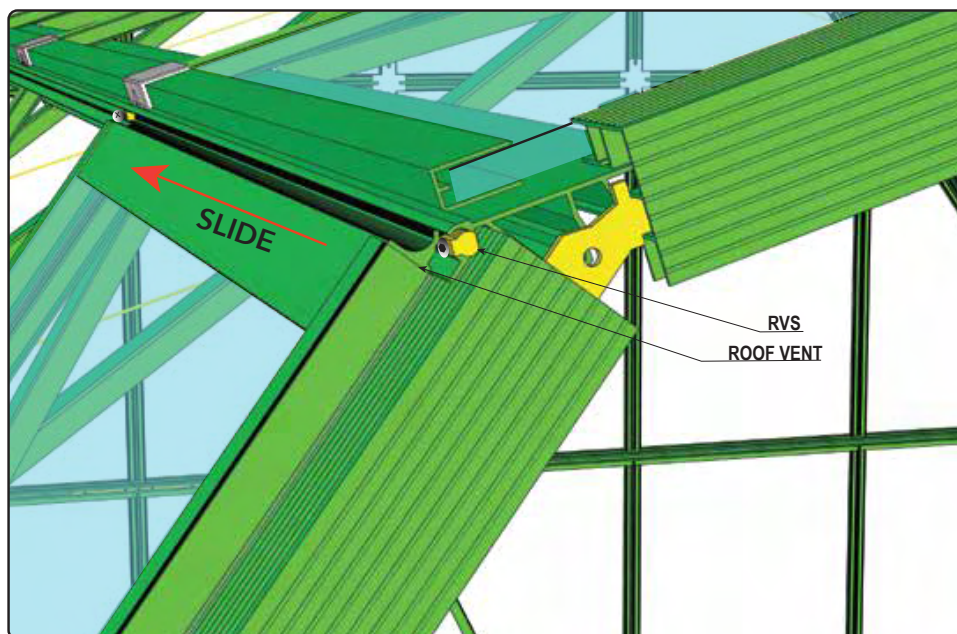
13.10 Install all the side W7 wall panels, then check for square again and look down the gutter track 9, or use a string to check for square. If things are looking good proceed, if it seems off keep adjusting until the structure is square.

** If you purchased the Moisture Control Kit, now is the time to apply caulk to the W11 roof panels as it will be difficult to reach later. Refer to page 3 in the Moisture Control Kit manual.*



ROOF WINDOW VENT INSTALLATION

14.1 Prepare to slide the Roof Window Vents into place. You will need 2 RVS / PPS-46 screw sets for **each** Roof Window Vent. See graphic below showing how to slide into the 39 track. You may place your Roof Window Vents in any location. They can be right next to each other or spaced out, your choice, just be sure that there is an RVS pre-slid along the track so there is one on **each** side of the top of your roof vent. Once your vent is positioned, tighten the screw on the RVS. This will lock your Roof Window Vent into place. * *Note the flat side of the RVS will face the greenhouse, screw head will be on the rounded part.*



ROOF WINDOW VENT INSTALLATION

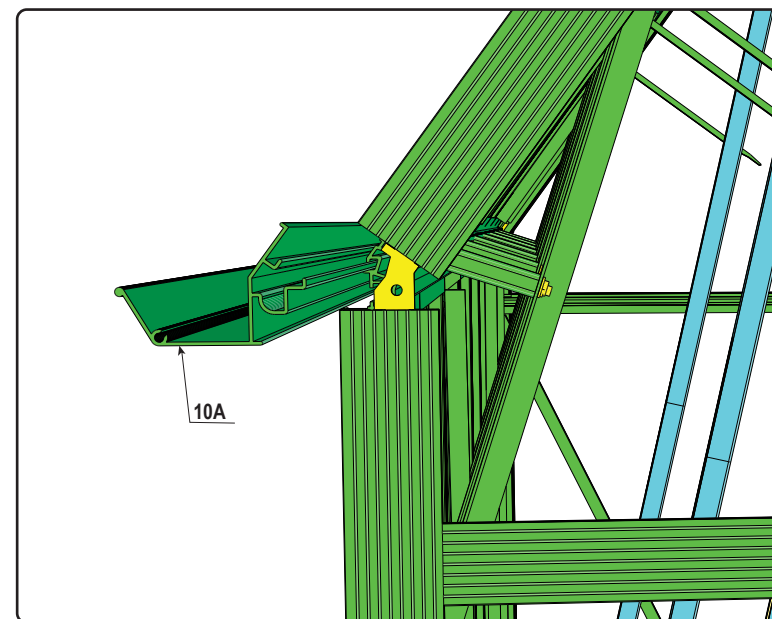
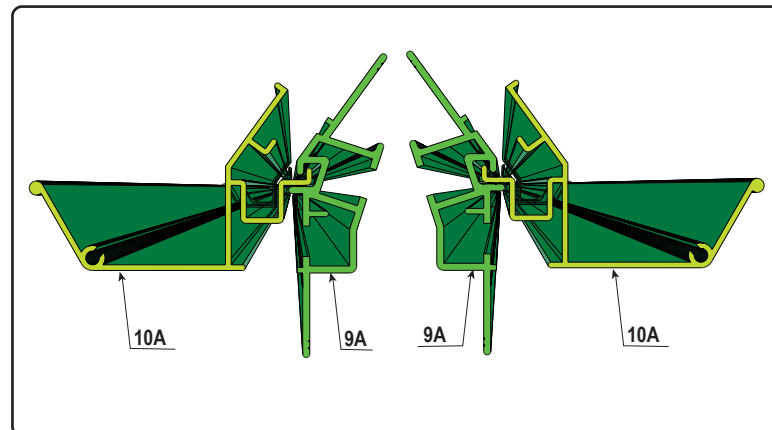
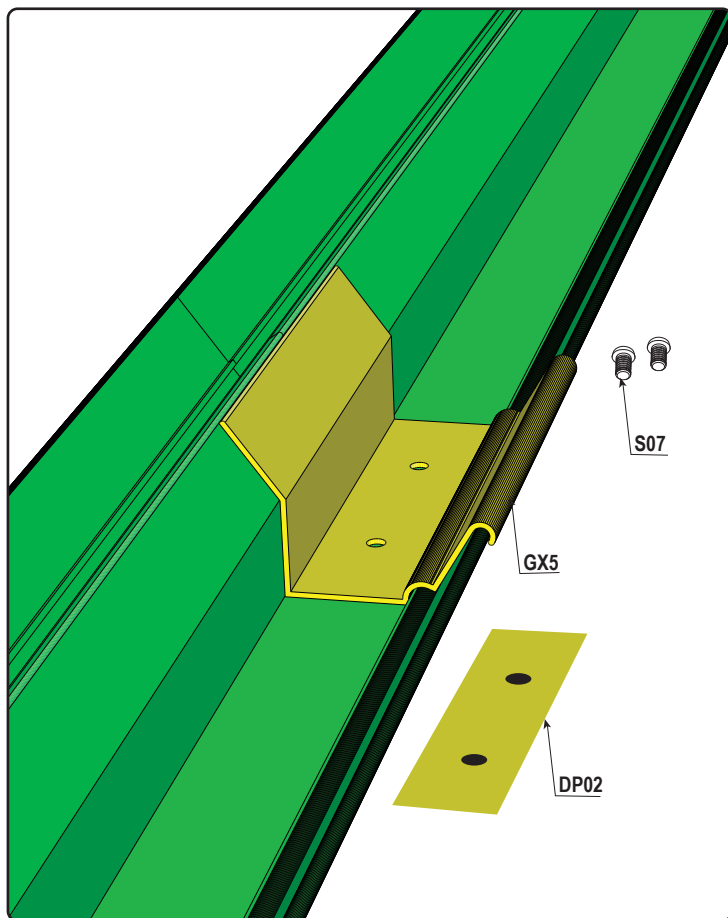
14.2 Attach a 3C under each roof vent using the appropriate B12 or B13 combination depending on how you lay out your Roof Window Vents. Use the AFS-612 screws with the SQ-NUT-6 combo to attach the B12 or B13.

14.3 Install the pre-threaded **HQC02** by sliding the **SQ-NUT-6**'s into the notch on **3C**. Attach the **HQC01** handle onto **HQC02** middle pin (the first two holes of the handle to the second and third pins of **HQC02**). Then tighten **HQC02** into **3C** track.



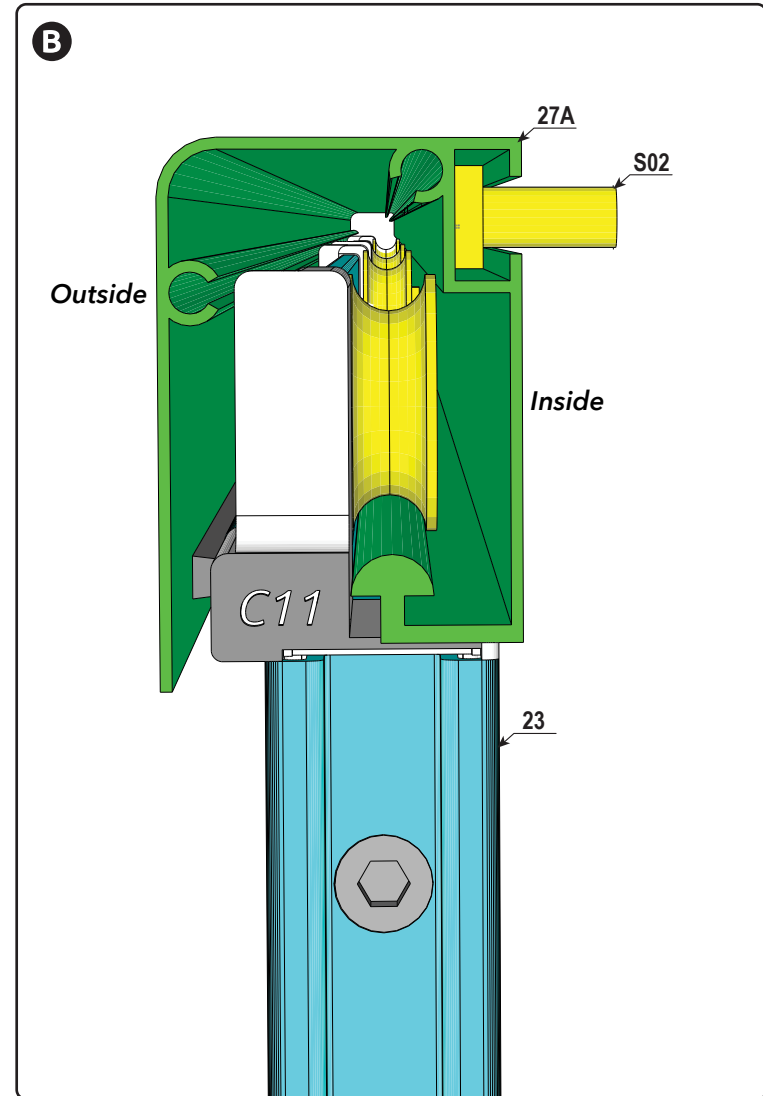
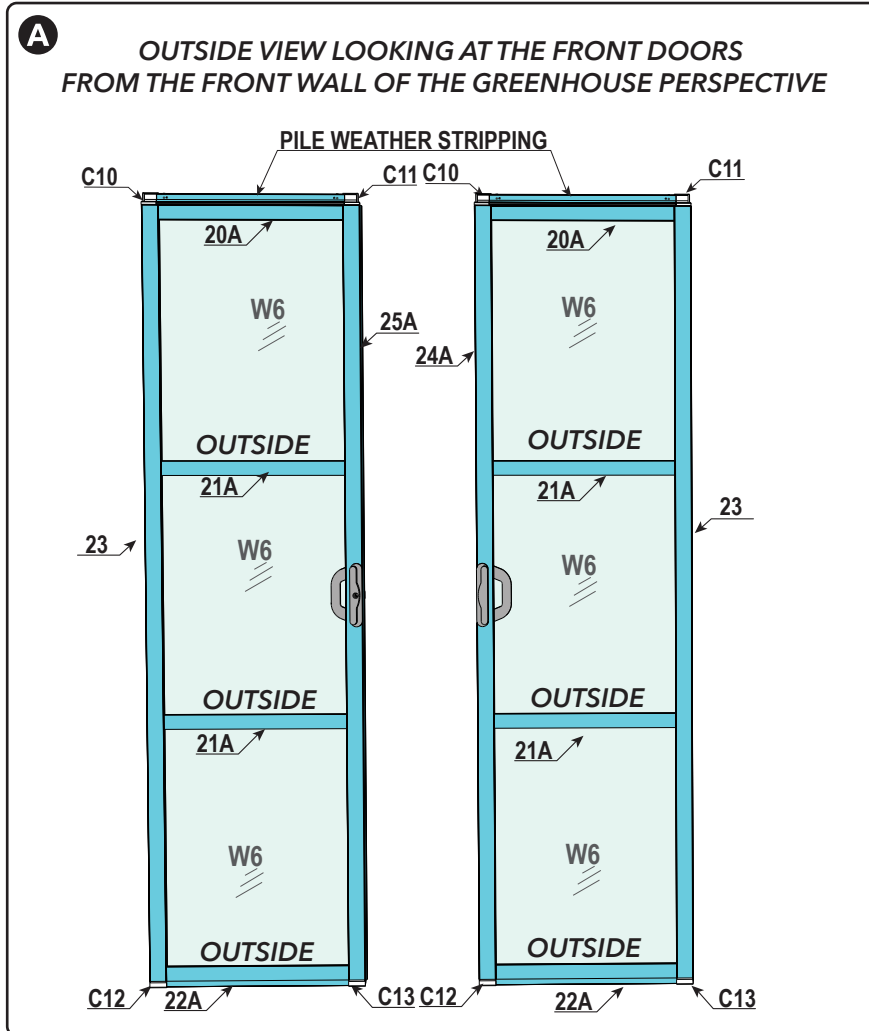
GUTTER INSTALLATION

14.4 Install the remaining roof panels. The **W9**'s will go under the Roof Window Vents, and the **W8** panels will go on the lower mid roof section beside the Roof Window Vents. You may want to use tape to temporarily hold the panels in place, then slide the gutter **10** into the **9** to lock your panels into place. Note that the gutters will have a large hole at the front and one large hole at the back. The **10A** should go at the front on both sides, then note the Right versus Left on the extension pieces. Use the **GX5** with **DP02B** and **S07** screws to attach gutter sections on both sides where the extensions meet.



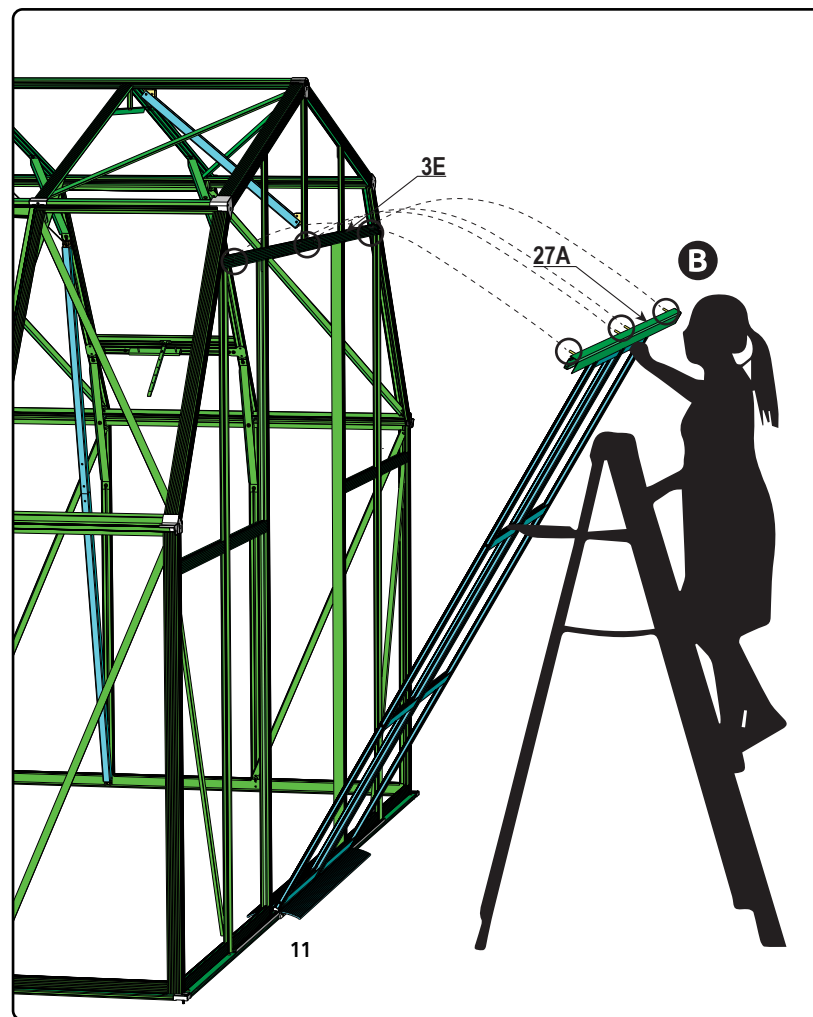
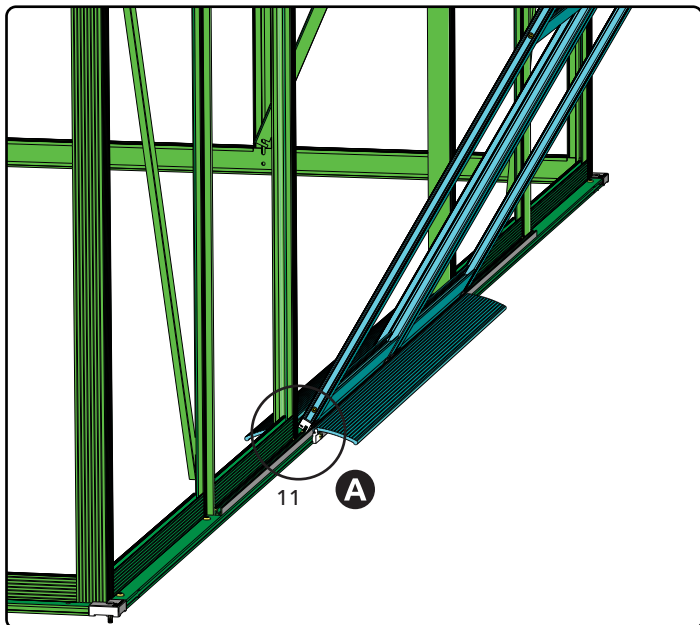
HANGING DOORS INSTALLATION

15.1 Prepare to slide the doors onto the **27A** track. Note there is a door **STOP** screw at the mid point on the interior side, so the doors must slide in from each side and will meet at the middle with the magnetic catch. The wheels on the doors will face to the front wall to be attached with the (4) **S02** screws. Slide the (4) **S02** screws onto that track. See **B** for reference.



HANGING DOORS INSTALLATION CONTINUED

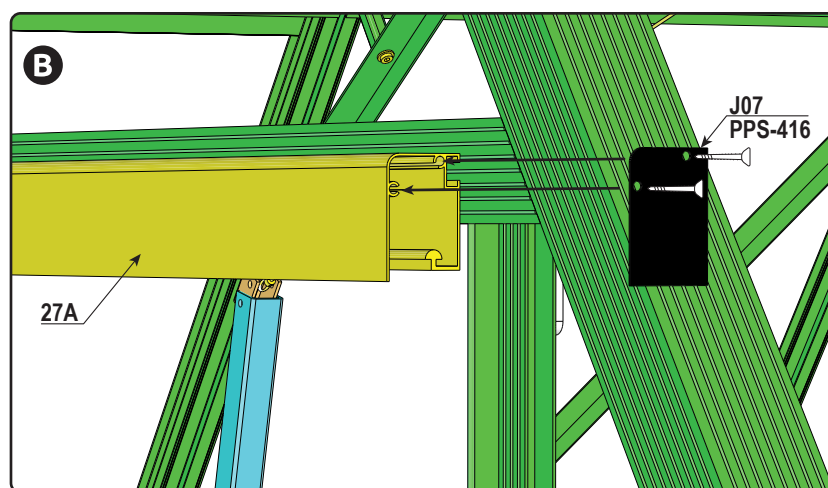
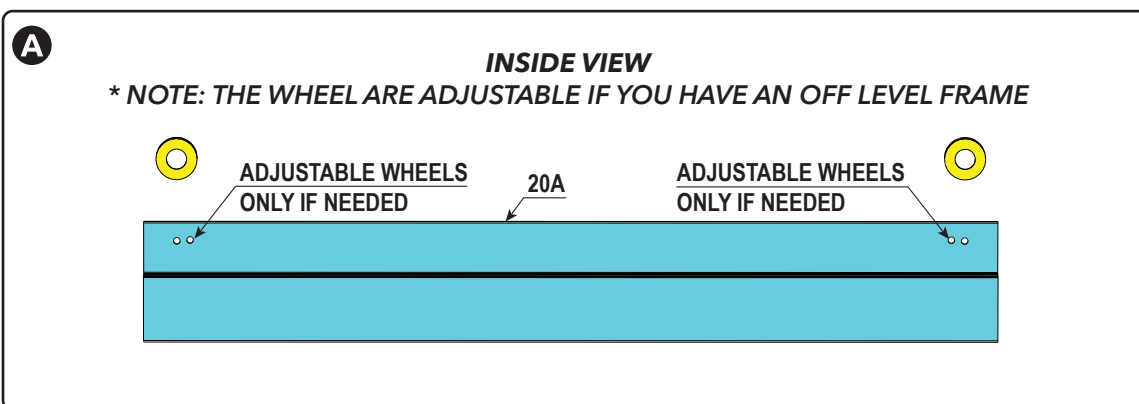
15.2 With one person on a ladder on the inside of the greenhouse with (4) ML01 nuts and a nut driver in hand, have the other person set the doors in the 11 track as shown in **A**. Then align the (4) S02 screws that were pre-loaded into the track of the 27A into the appropriate holes on the 3E. The person on the outside will hold the header 27A in place while the person inside tightens the ML01 nuts onto the S02 Screws that are through the 3E. See **B** and **C**.



HANGING DOORS INSTALLATION CONTINUED

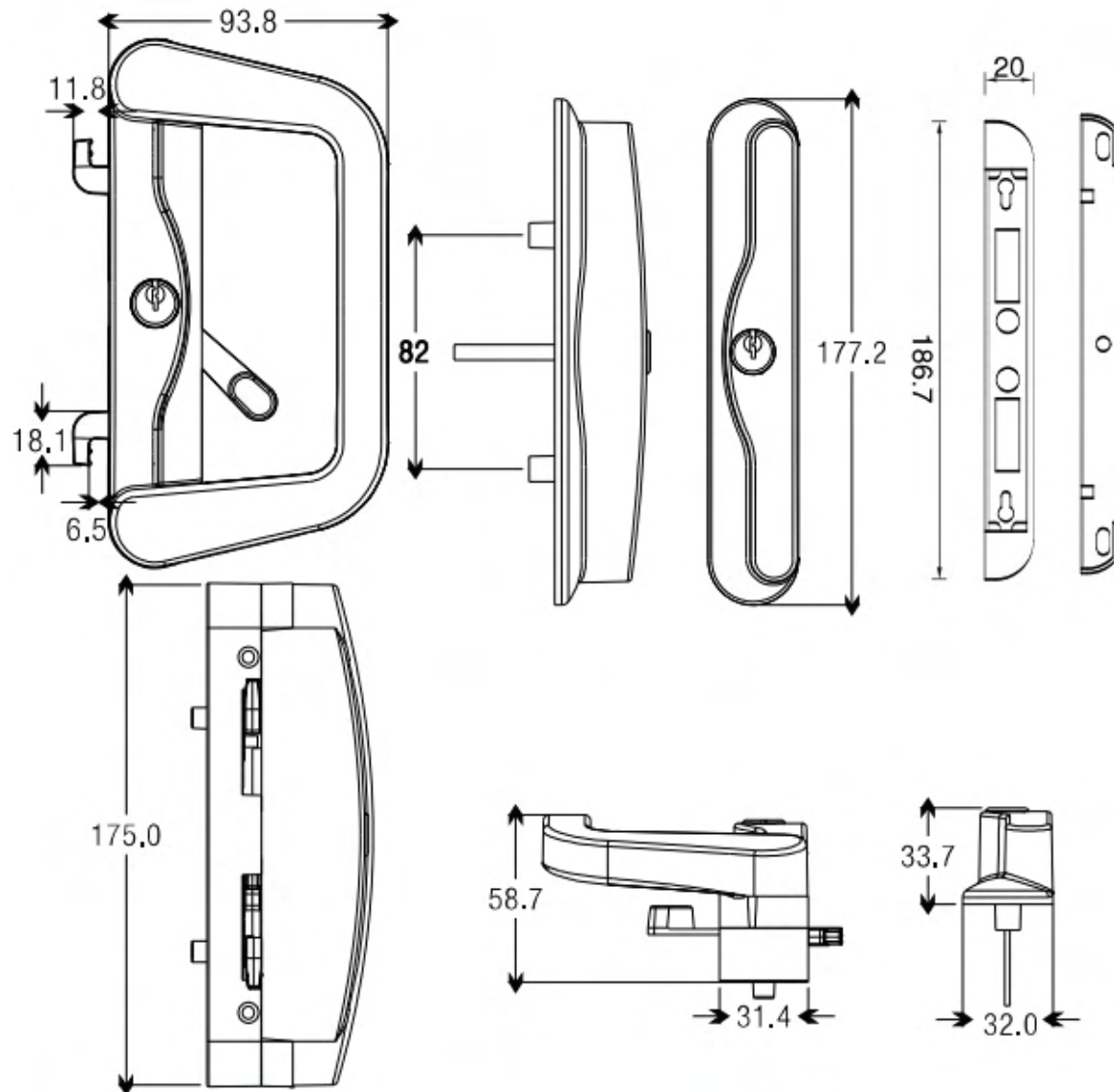
15.3 Test your doors by sliding to be sure that the doors are closing properly and there are no gaps in the closure. If there is a problem now is the time to fix it, you may need to remove the 27A from the frame and adjust the wheels, then re-attach the 27A to the wall. See **A**.

15.4 Attach the J07 Endcap on the 27A using the PPS-416 screws, see **B**.



DOOR HANDLE INSTALLATION

VISIT GRANDIOGREENHOUSES.COM OR SCAN THE CODE FOR INSTALLATION VIDEO.



END CAP INSTALLATION

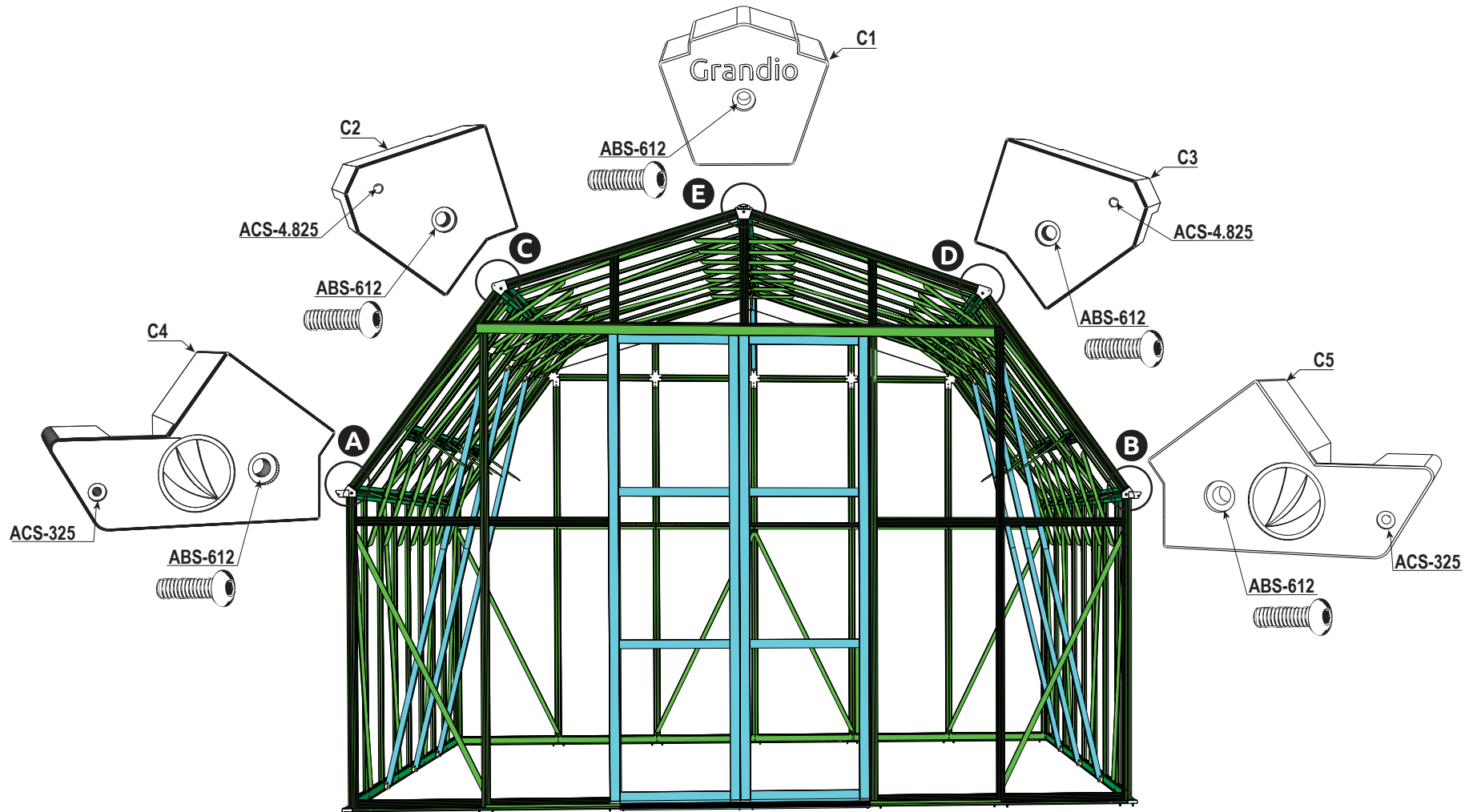
16.1 Grandio recommends applying silicone caulk to the inside edge and seams of the end caps as you are installing them to create a nice seal.

16.2 Attach the C4 and C5 gutter caps using the ACS-325 screws and the ABS-612 screws. See **A** and **B**.

16.3 Attach the C2 and C3 caps using the ACS-4.825 screws and the ABS-612 screws. See **C** and **D**.

16.4 Attach the C1 cap using the ABS-612 screw. See **E**.

16.5 Repeat these steps on back side of the greenhouse.



FINISHING TOUCHES

16.6 If you installed using a steel base kit, it is recommended to back fill with pea gravel or dirt, or at least be sure the base is sealed from any air gaps.

16.7 You may need to adjust the front door threshold or add dirt or fill to make a smooth transition.

16.8 Go around the entire greenhouse structure and confirm all screws and nut and bolt combos are tight, and secure. Keep your door keys in a safe place that you will remember!

Please call us with any questions you may have. We are here to help!
1-866-448-8231



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