

**GRANDIO**<sup>®</sup>  
GREENHOUSES

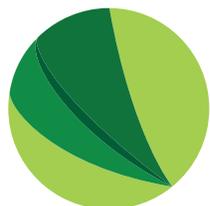
## **ASSEMBLY MANUAL 2**

### **SUMMIT GREENHOUSE ASSEMBLY INSTRUCTIONS**

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

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April 18, 2018 Summit Greenhouse Assembly Manual 2*

**ASSEMBLY MANUAL 2**



**GRANDIO SUMMIT GREENHOUSE  
INSTALLATION & ASSEMBLY 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 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)

**Backyard Living Source  
9543 W. Emerald St., Suite 101  
Boise, ID 83704  
[www.grandiogreenhouses.com](http://www.grandiogreenhouses.com)**

## **IMPORTANT! PLEASE READ BEFORE BEGINNING ASSEMBLY**

**Before you begin, take time to 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 be careful what you clean them with.
- 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 8x16 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 HOA's, as you may need a permit or documentation before you build.
- Contact your insurance company to make sure your Grandio Greenhouse will be covered on your policy.
- Call your local utilities companies before digging.
- Do not attempt to begin construction on a windy day, plan to complete assembly in one day. Damage caused by incomplete assembly is not covered by warranty.
- Your greenhouse should be built on a flat, level surface allowing for drainage.
- 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 with your eye 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 this manual 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](http://www.GrandioGreenhouses.com).

\* If building a back door you will follow the instructions in the manual included with the Back Door Kit box, the parts will be in box **GRA-SUM-BD**.

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 style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <b>GRA-SUM-12A-1</b> Aluminum Extrusions Box 1         </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <b>GRA-SUM-12A-2</b> Aluminum Extrusions Box 2         </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <b>GRA-SUM-12P-1</b> Polycarbonate Panels Box 1         </div> <div style="border: 1px solid black; padding: 5px;"> <b>GRA-SUM-12P-2</b> Polycarbonate Panels Box 2         </div>	<div style="border: 1px solid black; padding: 10px; text-align: center;"> <b>GRA-SUM-4X</b>            4' Extension Aluminum Extrusions            4' Extension Polycarbonate Panels         </div>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <b>GRA-SUM-8XA</b> 8' Extension Aluminum Extrusions         </div> <div style="border: 1px solid black; padding: 5px;"> <b>GRA-SUM-8XP</b>            8' Extension Polycarbonate Panels         </div>

GRANDIO STEEL BASE KIT 12X8	GRANDIO STEEL BASE KIT 4' X	GRANDIO STEEL BASE KIT 8' X
<div style="border: 1px solid black; padding: 5px;"> <b>GRA-BASE-S128</b>      12x8 Steel Base Kit         </div>	<div style="border: 1px solid black; padding: 5px;"> <b>GRA-BASE-S4X</b>      4' Steel Base Kit Extension         </div>	<div style="border: 1px solid black; padding: 5px;"> <b>GRA-BASE-S8X</b>      8' Steel Base Kit Extension         </div>

# PREPARE FOR GREENHOUSE ASSEMBLY



## IMPORTANT: POLYCARBONATE PANELS

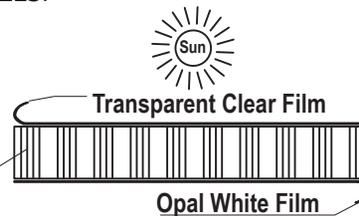


The UV-Protected side is covered with clear film with printed warnings listed on the panel and must face toward the sun. The side covered in white film will always face the interior of the greenhouse. We suggest you peel all film off completely prior to assembly and use a permanent marker to place a 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



## 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.

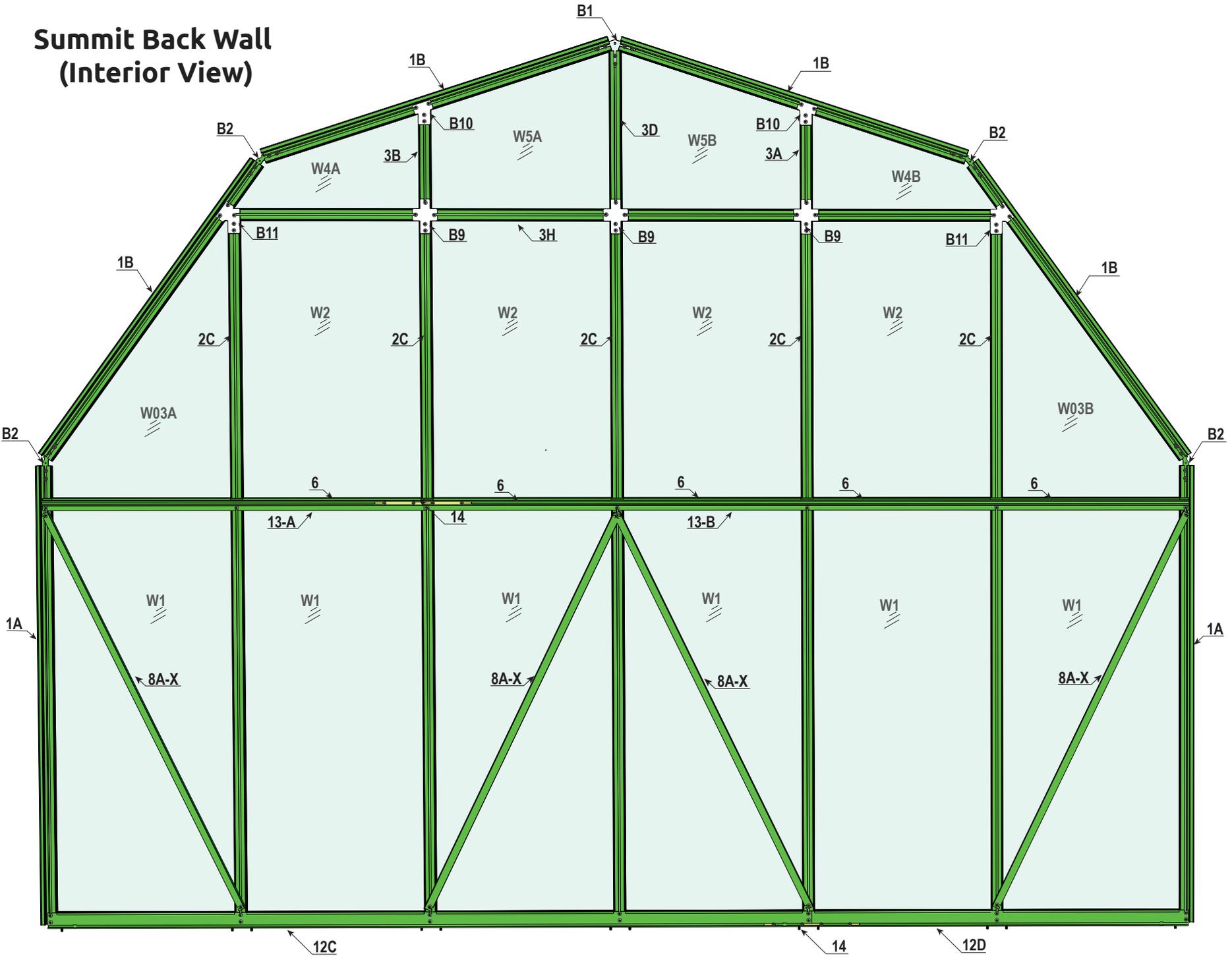
See MANUAL 1 for base kit installation methods.

## 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 case of an act of God or natural disaster.

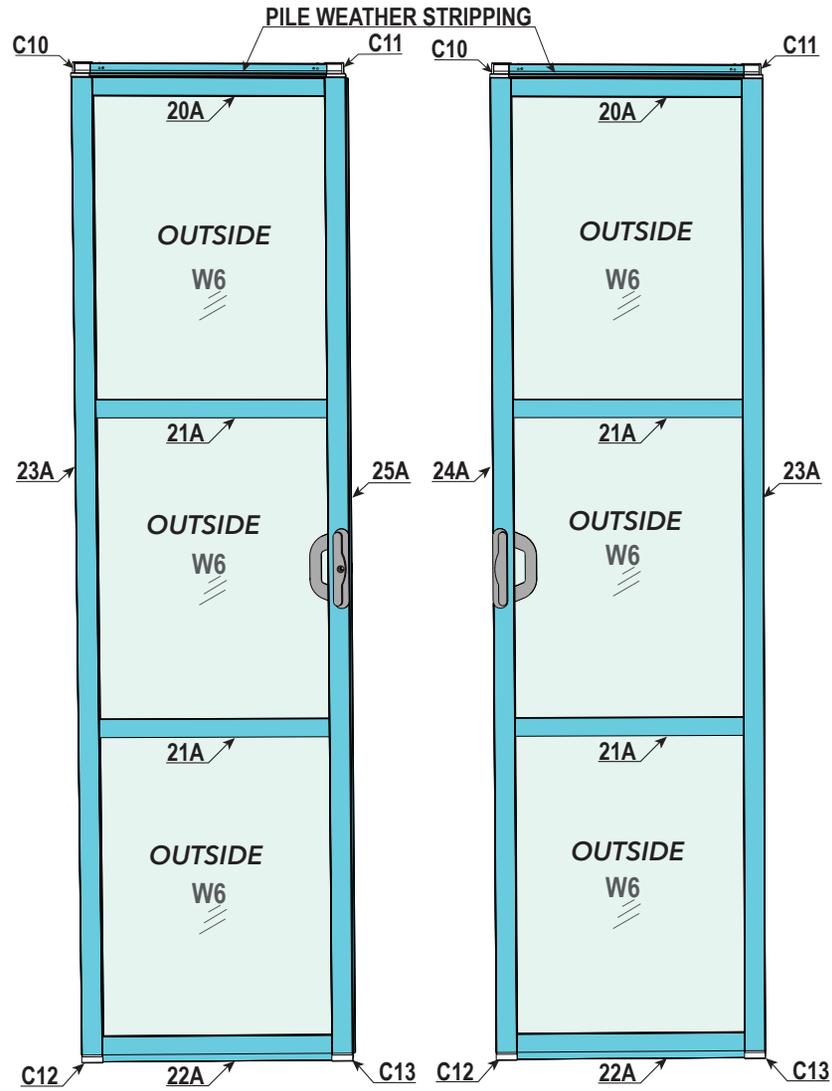


# Summit Back Wall (Interior View)



# Summit Doors (Exterior View)

OUTSIDE VIEW LOOKING AT THE FRONT DOORS  
FROM THE FRONT WALL OF THE GREENHOUSE PERSPECTIVE



# MOISTURE CONTROL KIT INSTALLATION AND APPLICATION

## PARTS LIST QUANTITIES FOR GRANDIO SUMMIT GREENHOUSES

Part Name	12' x 8'	12' x 12'	12' x 16'	12' x 20'	12' x 24'	12' x 28'	12' x 32'
<b>ANTI DUST TAPE</b> 110' ROLL OF TAPE	3	3	4	4	5	5	6
<b>SILICONE CAULK</b> 10 OZ. TUBE	6	7	8	9	10	11	12



ANTI DUST TAPE AND SILICONE CAULK  
FOR POLYCARBONATE GREENHOUSE PANELS

# POLYCARBONATE PANEL ANTI DUST TAPE APPLICATION

You will apply the Anti Dust Tape to all polycarbonate panels prior to installation.

**1.1** Measure the length of the panel, cut the vented tape with about a 1/2 inch extra on each end for a wrap around seal. See **A**.

**1.2** Carefully peel the backing off the vented tape and gently align so the vented holes are centered on the flutes of the twin wall polycarbonate panel and the 1/2" over hang on both ends, see **A**. Apply the tape by laying across the flutes, gently pressing the tape flat down at the middle at first then working your way over the edges of the panel trying to prevent wrinkles or air bubbles, see **B**. Press the ends flat so they can envelope around the sides for a seal, see **C** and **D**. Press down firmly along the entire edge of the panel.

**1.3** Apply the vented anti dust tape to both ends of your polycarbonate panels. This will prevent critters from entering the flutes of your panels while acting as a filter to prevent mildew or algae from forming inside your panel walls. Note moisture is going to form inside the panels at different times with humidity, this is normal and the tape will allow the moisture to evaporate out.



## IMPORTANT: POLYCARBONATE PANELS

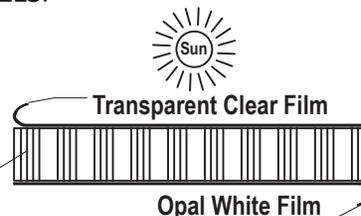


The UV-Protected side is covered with clear film with printed warnings listed on the panel and must face toward the sun. The side covered in white film will always face the interior of the greenhouse. We suggest you peel all film off completely prior to assembly and use a permanent marker to place a 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.

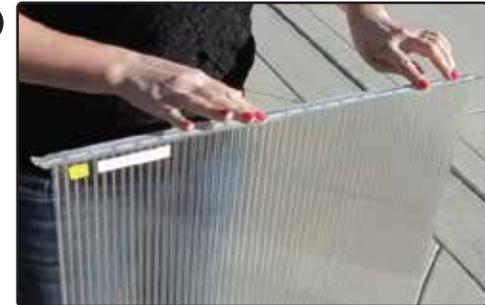
**DO NOT REMOVE LABELS UNTIL YOU INSTALL PANELS.**

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



**A**



**B**



**C**



**D**



## SILICONE CAULK APPLICATION INSTRUCTIONS

Note you will caulk around your polycarbonate window panels as you assemble your Grandio Summit Greenhouse. We will remind you in this manual when it will be helpful to caulk before continuing with your build.

\*Follow the directions on your Silicone Caulk package for drying times and safety precautions.

**1.4** You will need a caulk gun to apply the silicone caulk. We recommend you apply caulk into the aluminum edge at the bottom and sides of each polycarbonate panel, and where the aluminum extrusions meet. You may leave the top edge clear where the panels meet the roof extrusions however any gap where aluminum pieces meet may be caulked to prevent water seepage.

**1.5** Cut the caulk tube tip with sharp scissors at an angle that will allow you to control the stream of caulk to output a bead of about an 1/8" flow. See **A**.

**1.6** Begin applying the caulk at a corner, making sure you are applying enough pressure to the tube while keeping an appropriate angle to get the silicone caulk down into the extrusion to create a nice seal between the frame of the greenhouse and the polycarbonate panels. See **B** and **C**.

**1.7** Clean up any smudges with a clean dry cloth by sliding down the caulk line, double check your caulk lines for a complete seal ensuring no gaps. See **D**. If you made a little mess on the outer edge of the frame it should easily rub off once the caulk dries. See package for drying times and safety guidelines.



# FRONT WALL FRAME ASSEMBLY INSTRUCTIONS

ALWAYS ASSEMBLE FRONT HORIZONTAL

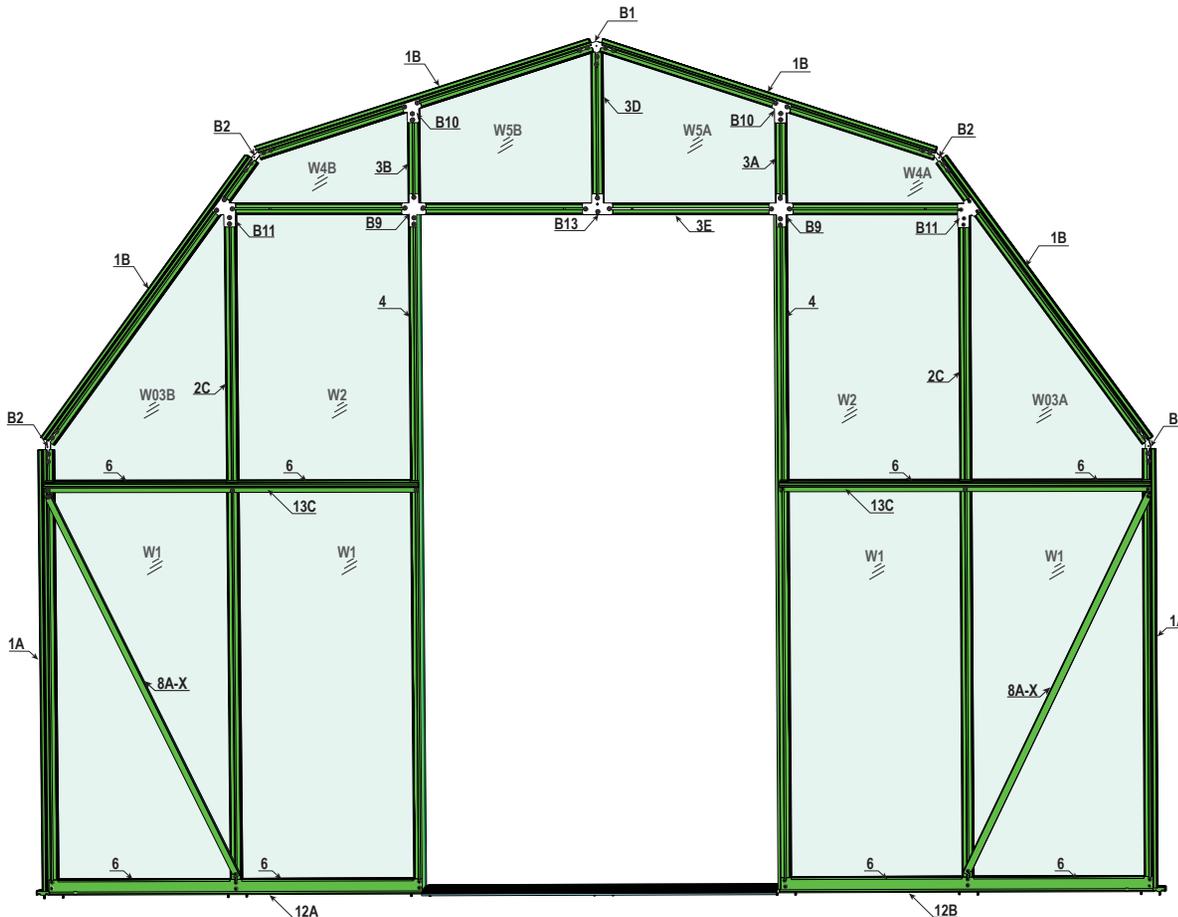
This picture shows the inside view of front wall section fully assembled.

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.

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



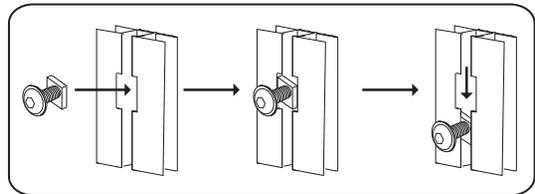
We recommend watching our how to assembly videos with tricks and tips for easier assembly and installation of your Grandio Greenhouse at: [www.grandiogreenhouses.com](http://www.grandiogreenhouses.com)



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.

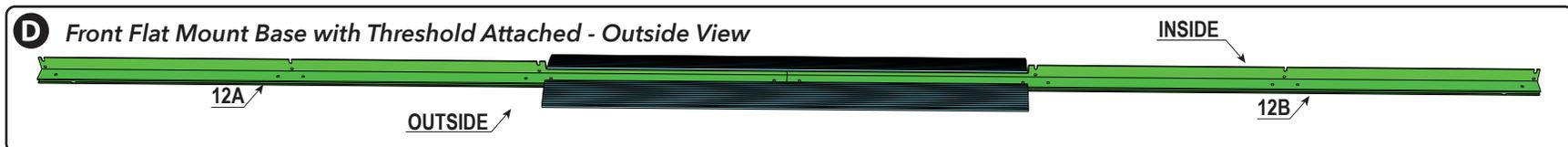
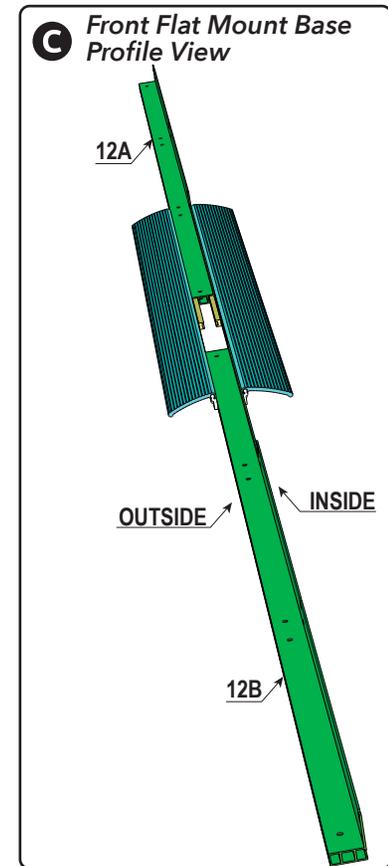
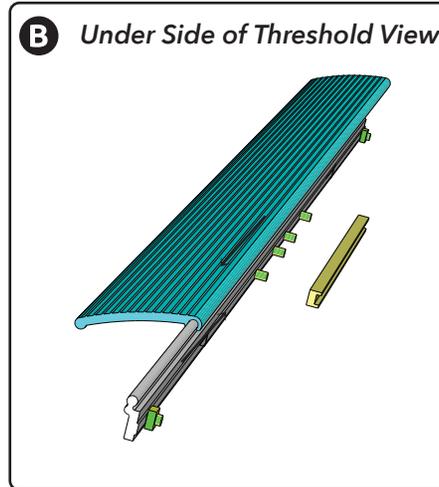
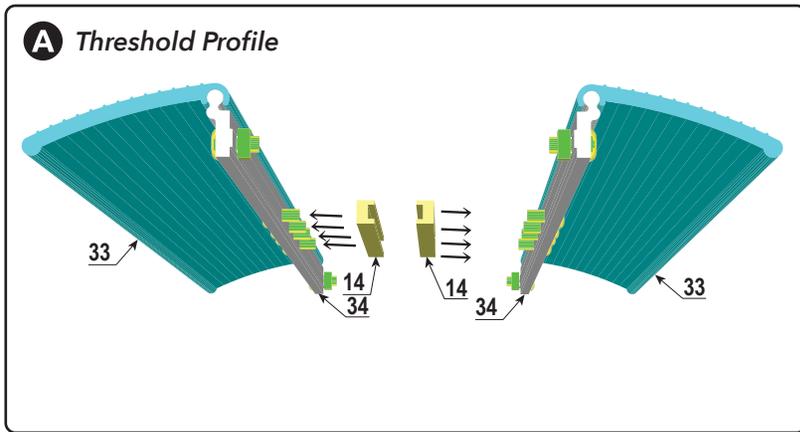


**BOLT INSTALLATION TIP:** Locate all nuts and bolts, pre thread and place in the groove of the extrusion to make installation easier. Move up or down for exact placement.



# FRONT WALL FRAME THRESHOLD ASSEMBLY

- 2.1 Use ABS-612 screws to attach the 14 to the 34. See **A** and **B**.
- 2.2 Slide the 33 onto the track of the 34. See **A** and **B**.
- 2.3 Slide the SQ-NUT-6 Combos and the 14 tracks into the track of the 12A and 12B. See **C**.
- 2.4 Align the threshold to the center gap on the 12A and 12B, see **D**.



# FRONT WALL FRAME UPPER ROOF ASSEMBLY

ALWAYS ASSEMBLE FRONT HORIZONTAL

\*MOISTURE CONTROL KIT MUST BE INSTALLED PRIOR TO POLYCARBONATE PANEL INSTALLATION

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

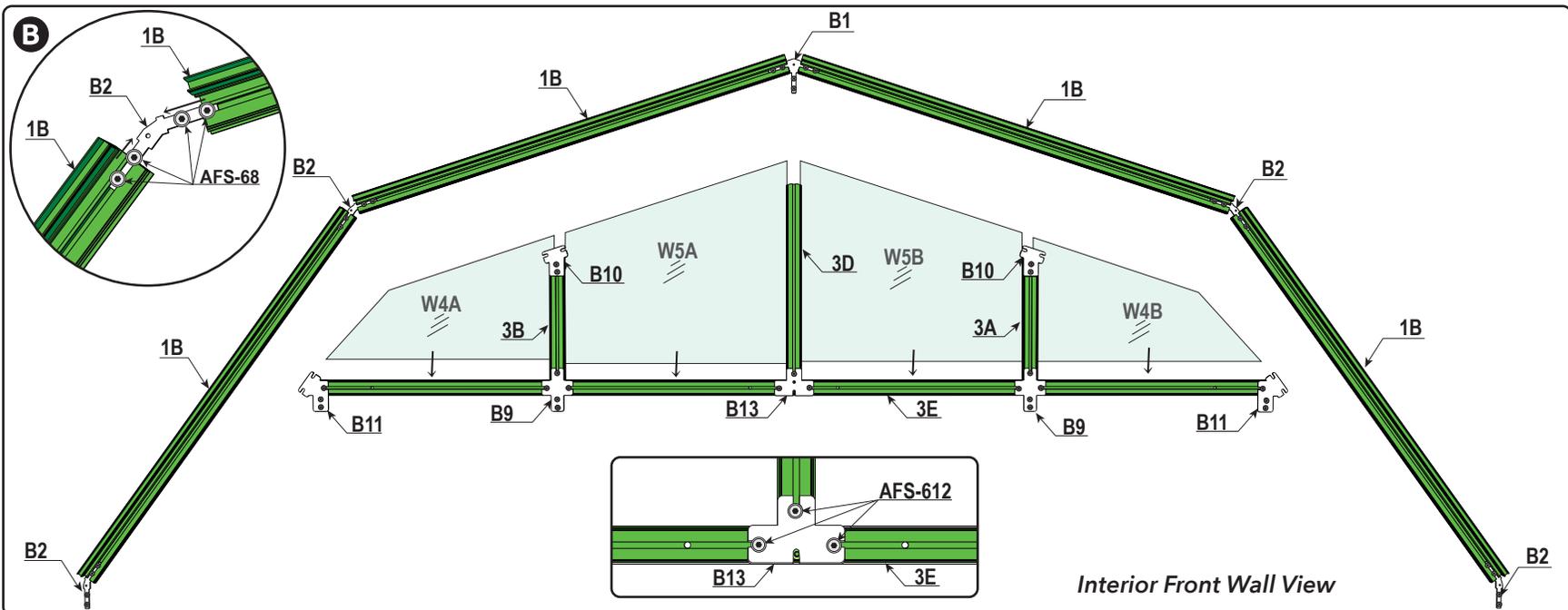
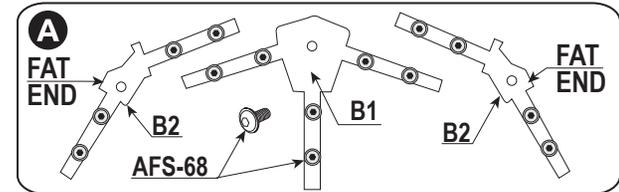
**2.6** Slide the B1 into the 1B's and the B2's into the 1B pieces as is shown in the diagram **B**. Tighten the allen heads using the W17 or W18 allen driver.

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

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

**2.9** Slide the W4B, W5B, W5A and W4A 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.

**GRANDIO TIP** **PRETHREAD SCREWS TIP:** Locate all **B1**, **B2**, and **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

\*MOISTURE CONTROL KIT MUST BE INSTALLED PRIOR TO POLYCARBONATE PANEL INSTALLATION

**2.10** Attach the 1A, 2C and 4 extrusions to the 12A flat mount base using AFS-612 and SQ-NUT-6 combos. Slide the PILE weather strip into both of the 4 extrusions. See **A**.

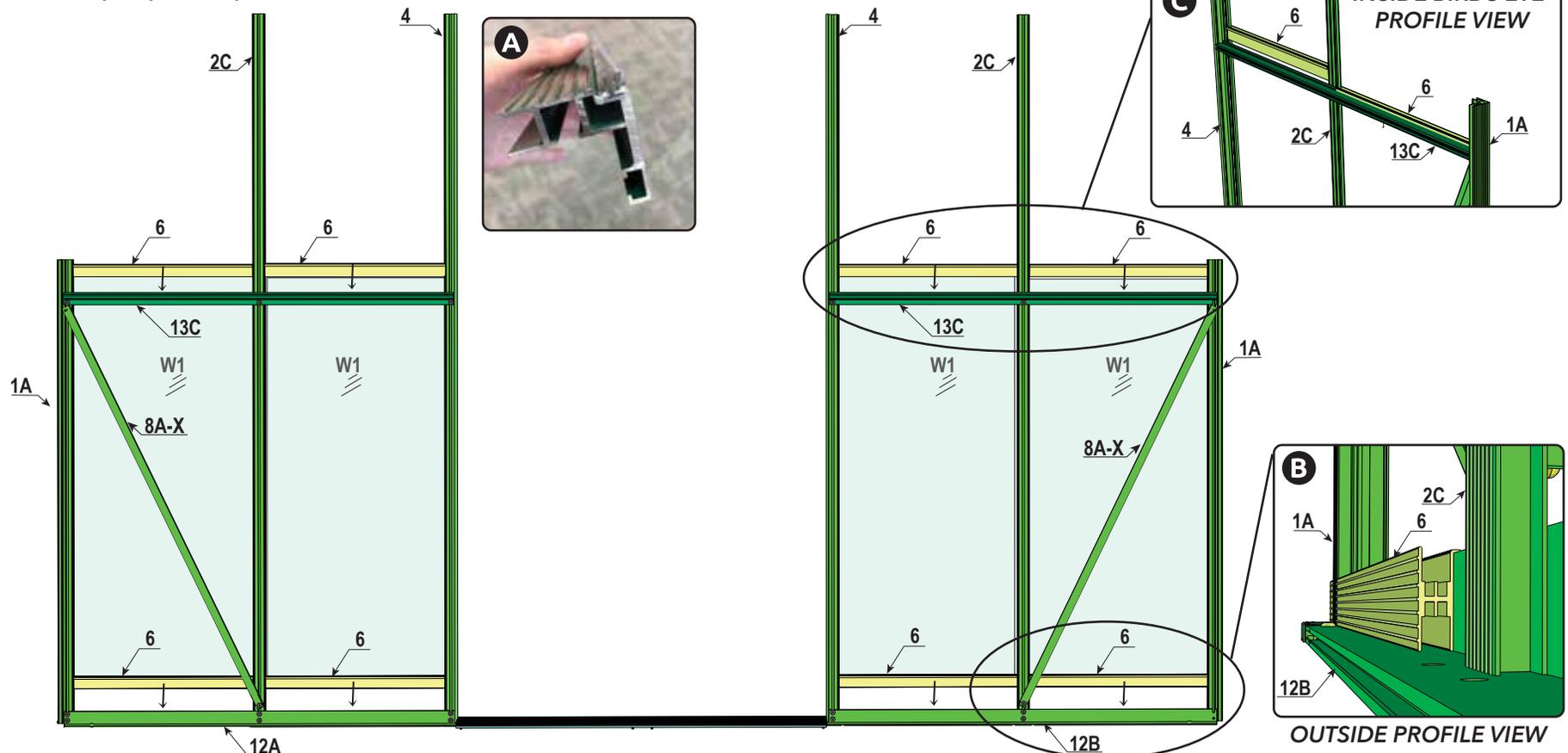
**2.11** Attach the 1A, 2C and 4 extrusions to the 12B flat mount base using AFS-612 and SQ-NUT-6 combos.

**2.12** Attach the (4) 6's to the 12A and 12B. They will slide onto the extrusion and lock into place and will hold the polycarbonate panels into place, see **B**.

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

**2.14** Slide the 13C pieces under 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 13C's into place, be sure the panels are pushed down firmly into the 6's.

**2.15** 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.

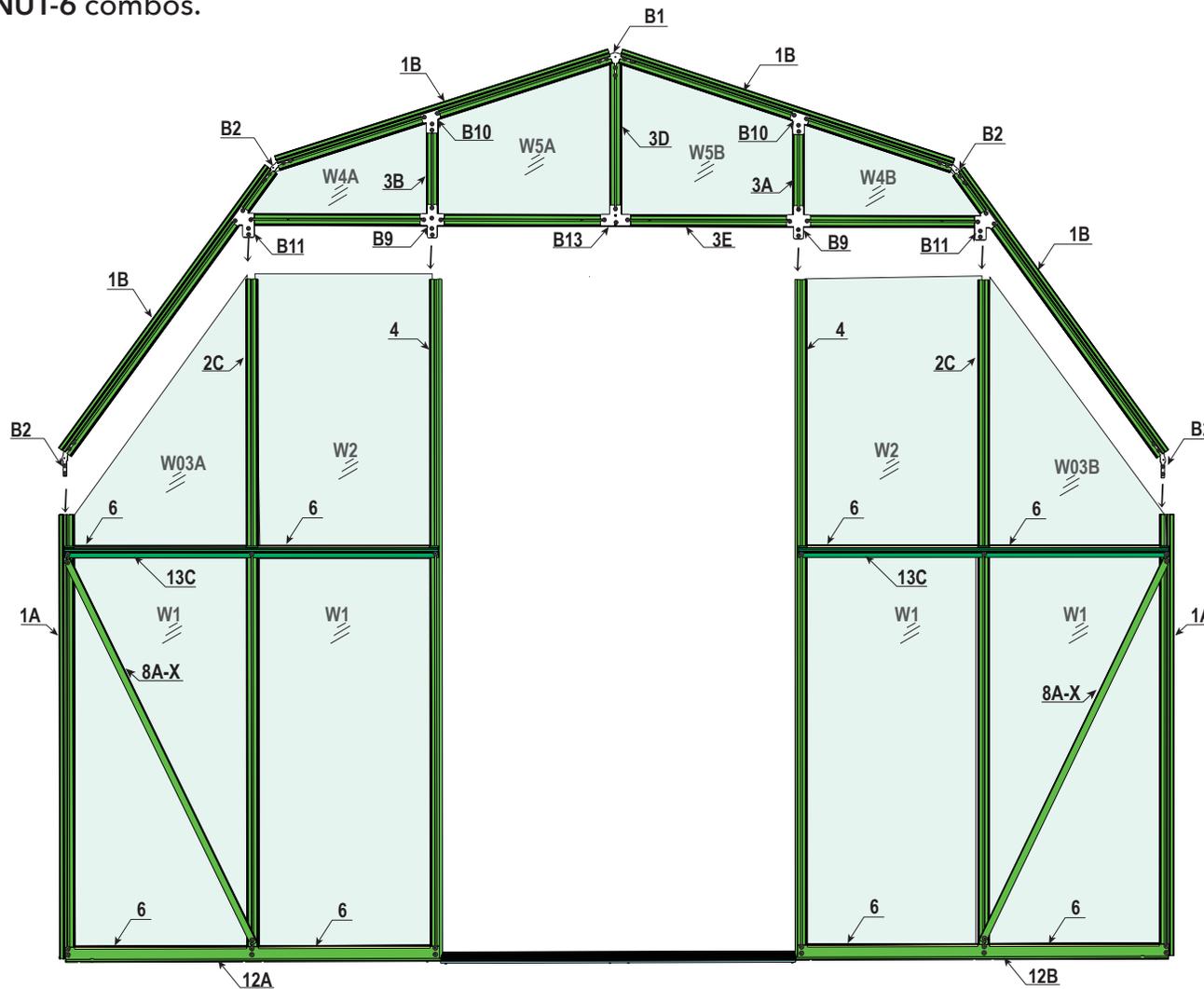


**2.16** Slide the W03B, W2, W2 and W03A panels into place, be sure the panels are pushed firmly into the 6's.

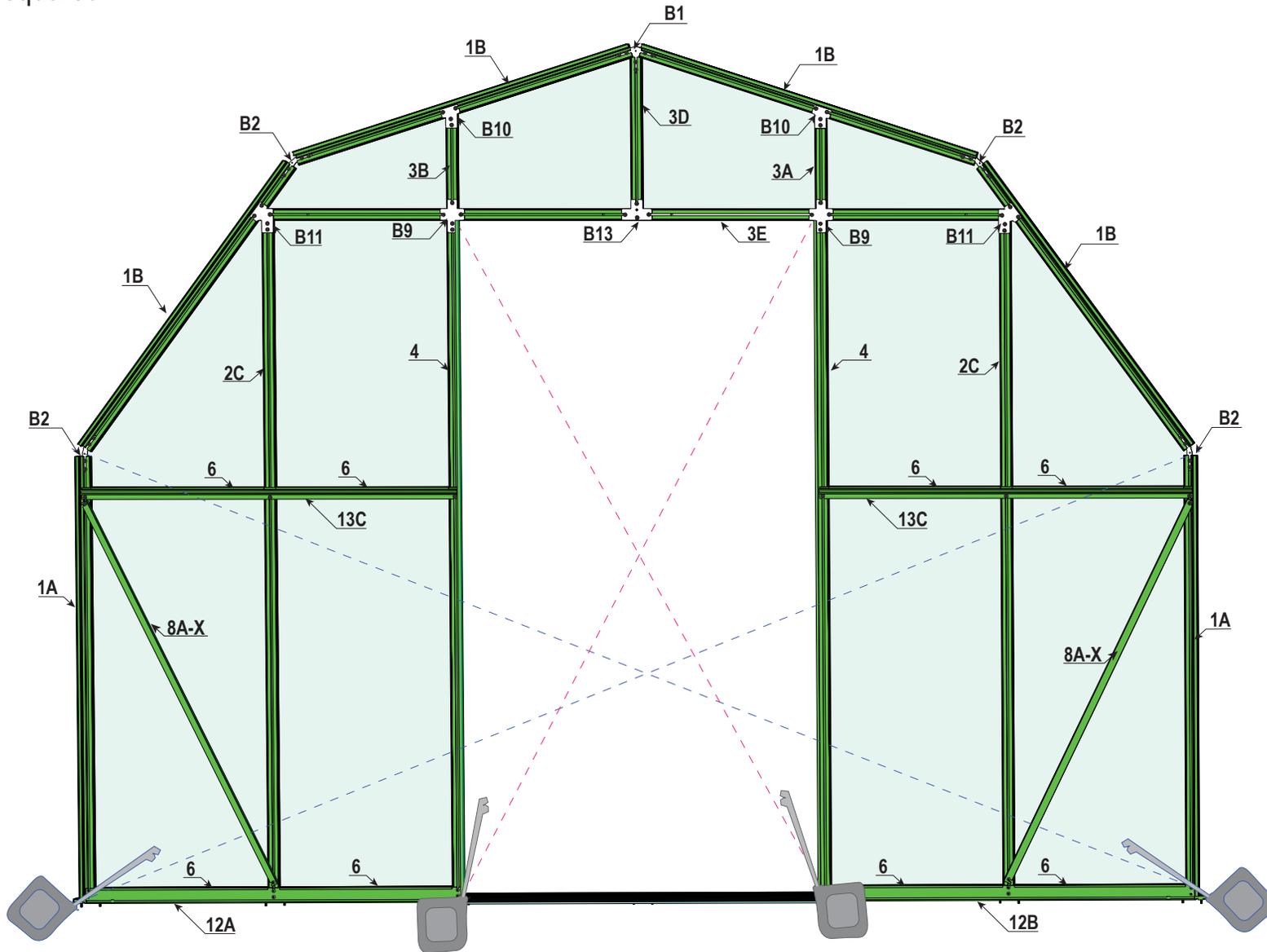
**2.17** You will need a helper to slide the upper front wall roof section down to attach to the lower front wall section. Carefully slide the top section downward, and align the B2's with the 1A's, align the B9's with the 4's and align the B10's with the 2C's as shown in diagram.

**2.18** The pre threaded AFS-612/SQ-NUT-6 combos on the B9's and B10's will slide into the extrusion 4 or 2C.

**2.19** 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.



**2.20** 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.



# BACK WALL FRAME ASSEMBLY INSTRUCTIONS

ALWAYS ASSEMBLE FRONT HORIZONTAL

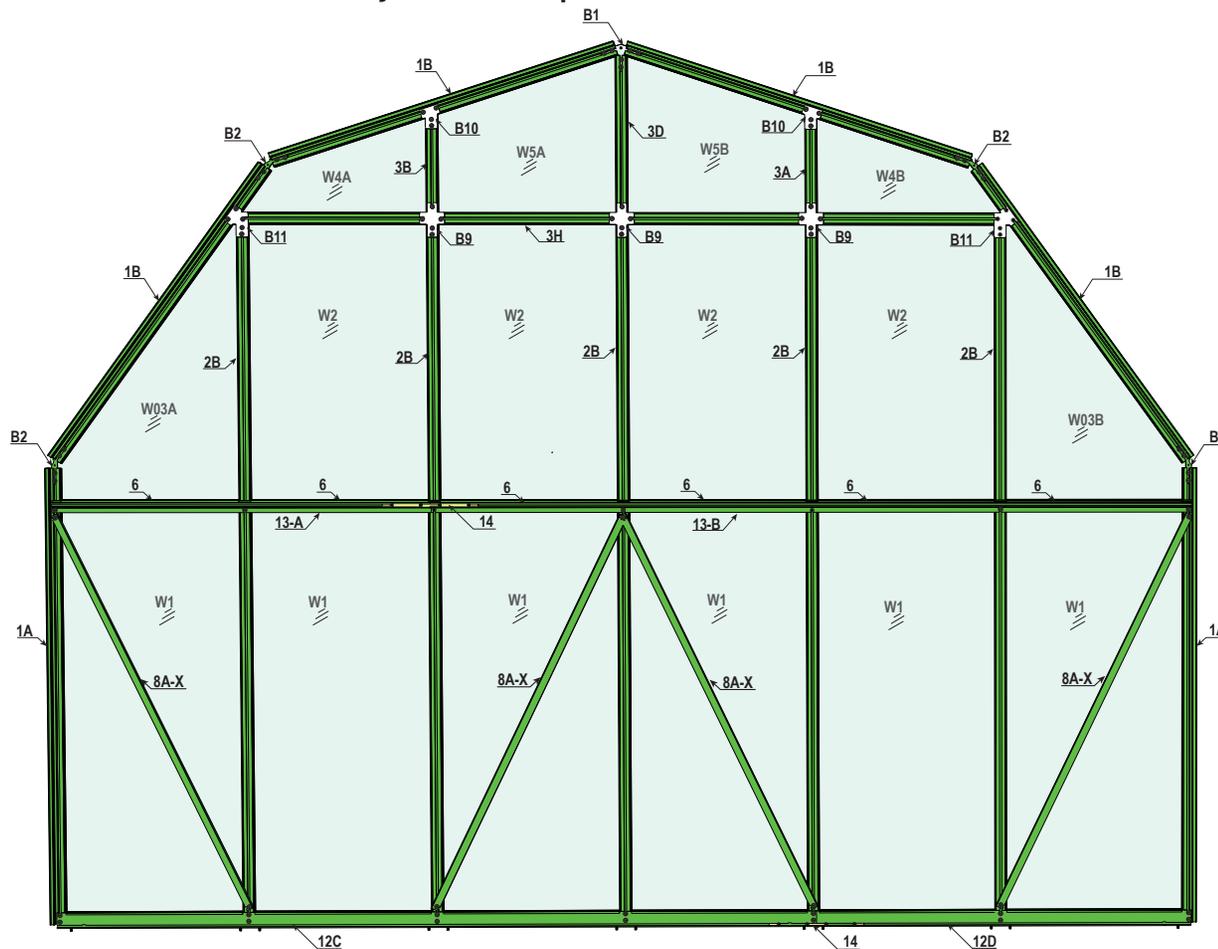
This picture shows the inside view of back wall section fully assembled.

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



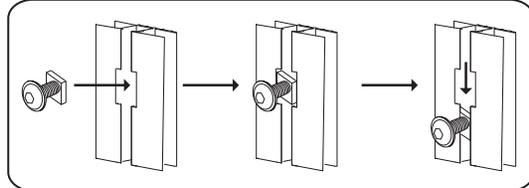
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Lay flat on ground to assemble the front frame of your greenhouse. If possible try to find a shady area protected from the wind. Panels can burn grass and plants if in direct light.



**BOLT INSTALLATION TIP:** Locate all nuts and bolts, pre thread and place in the groove of the extrusion to make installation easier. Move up or down for exact placement.



# BACK WALL FRAME UPPER ROOF ASSEMBLY

ALWAYS ASSEMBLE BACK WALL HORIZONTAL

\*MOISTURE CONTROL KIT MUST BE INSTALLED PRIOR TO POLYCARBONATE PANEL INSTALLATION

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

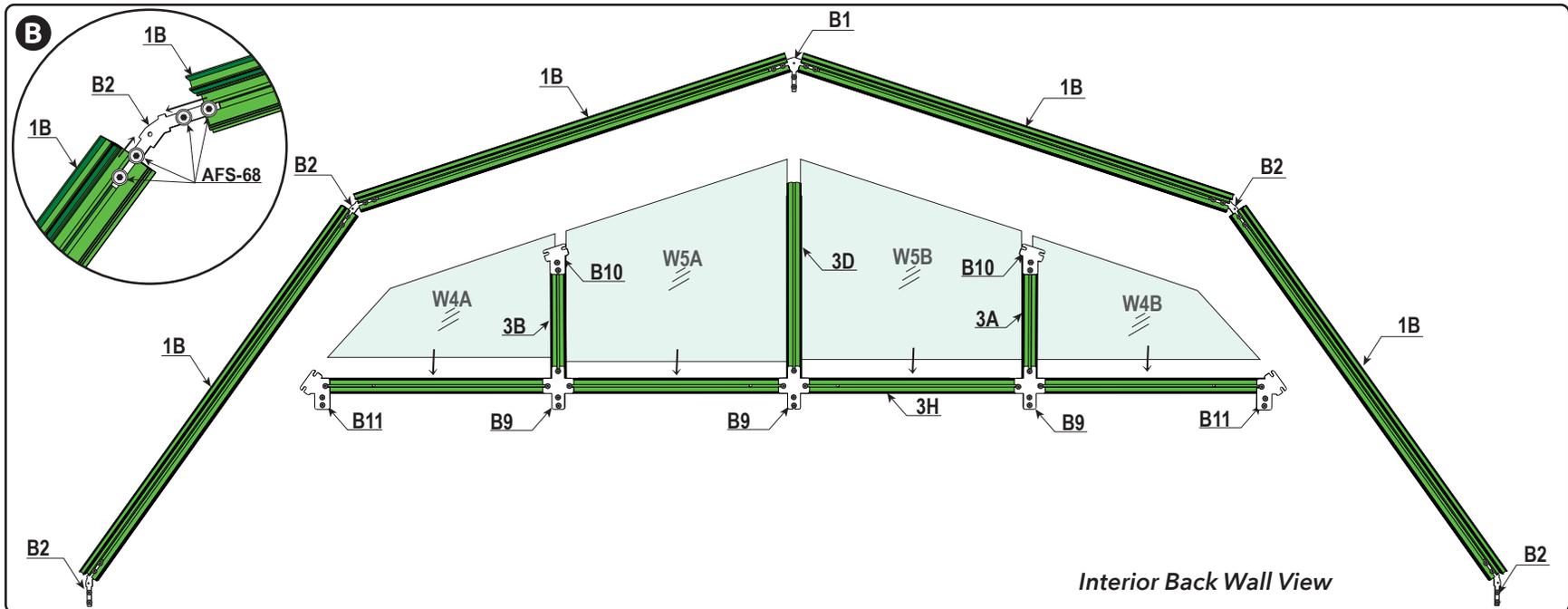
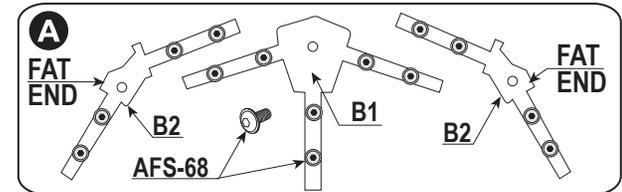
**3.2** Slide the B1 into the 1B's and the B2's into the 1B pieces as is shown in the diagram **B**. Tighten the allen heads using the W17 or W18 allen driver.

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

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

**3.5** Slide the W4B, W5B, W5A and W4A 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.

**GRANDIO TIP** **PRETHREAD SCREWS TIP:** Locate all **B1**, **B2**, and **AFS-68** screws, pre thread these to make installation easier. Note that the fat end on the **B2** will always face downward.



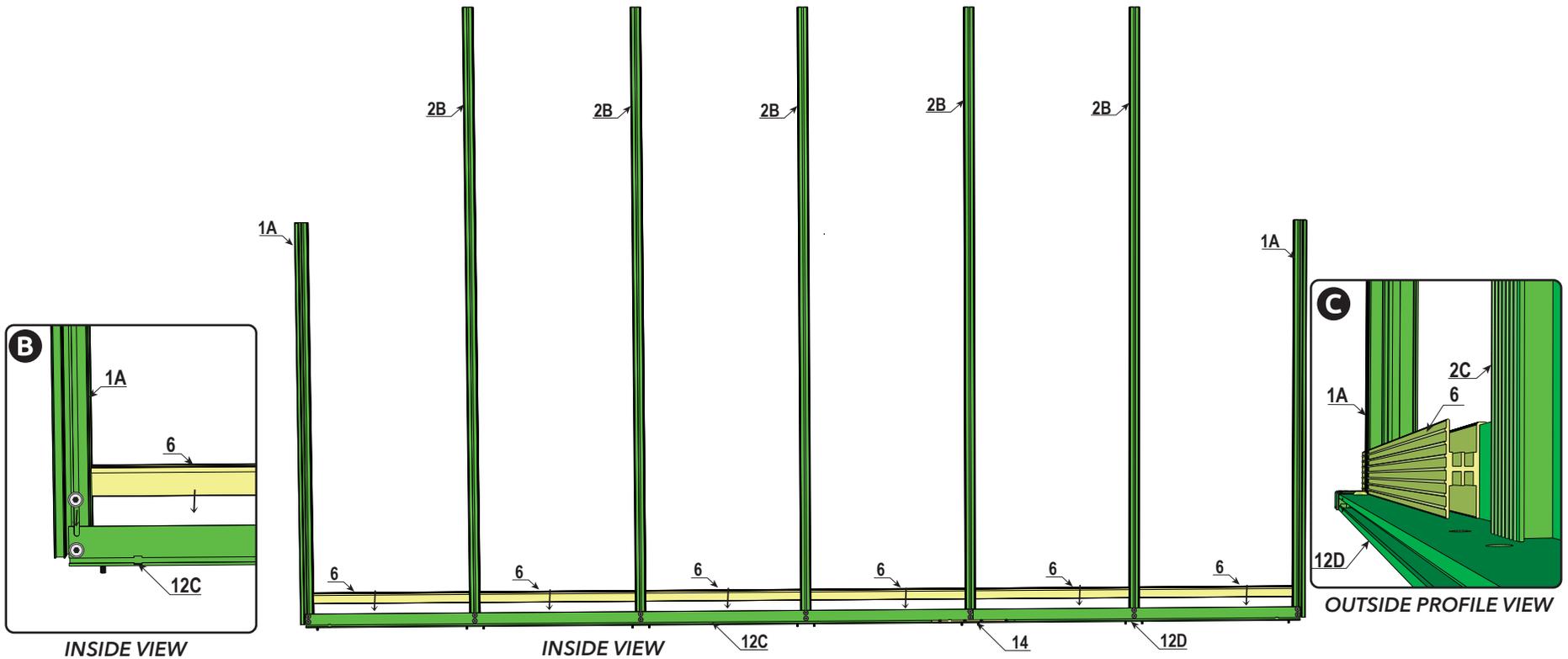
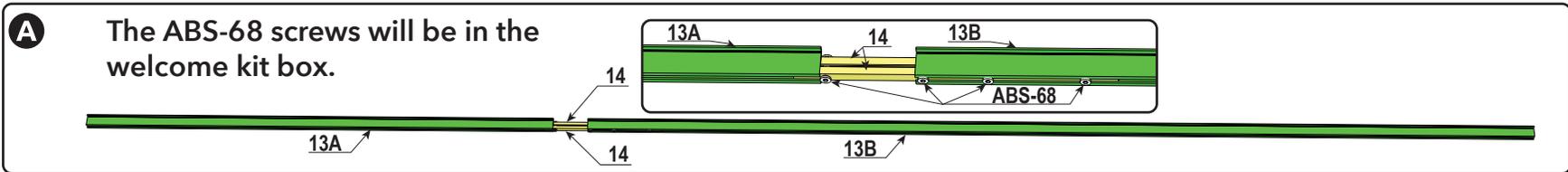
# BACK WALL FRAME ASSEMBLY CONTINUED

**3.6** Connect the 13A to the 13B using the (2) 14 connecting brackets with (8) ABS-68 screws. See **A**.  
(ABS-68 Screws will come in welcome kit box)

**3.7** Attach the 1A corner pieces to the 12B 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**.

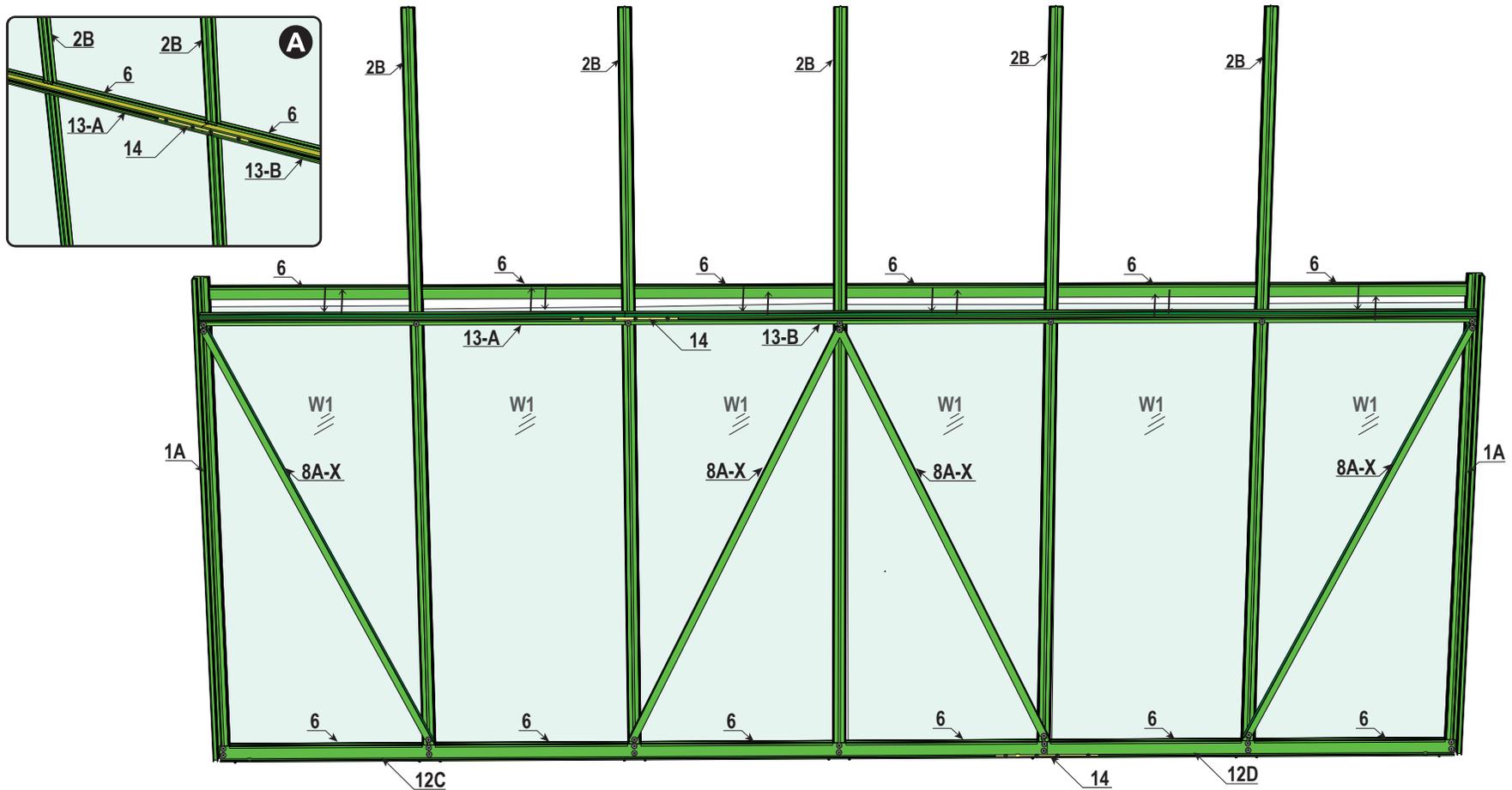
**3.8** Attach the (5) 2B extrusions to the 12B and 12D base using AFS-612 screws with SQ-NUT-6 nuts, the same way as in previous step.

**3.9** Slide the (6) part name 6 extruded window brackets onto the 12B and 12D base as shown below in **C**.



## BACK WALL FRAME ASSEMBLY CONTINUED

- 3.10** Slide the (6) W1 panels into the corresponding (6) 6 extruded window brackets.
- 3.11** Attach (loosely) the 8A-X cross supports as shown in the diagram below with AFS-612/SQ-NUT-6 combos.
- 3.12** Slide the (6) 6 extruded window brackets to the top of the W1 panels, push down on the 6 extruded window brackets and square up the back wall, then tighten the combos attached to each of the 8A-X's.
- 3.13** Pre load AFS-612/SQ-NUT-6 combos onto each of the 1A and 2B extrusions to prepare to attach the 13A/13B piece up under the top row of (6) 6 extruded window brackets. Each of the 6's must slide and lock onto the 13A/13B piece, then push down firmly to be sure the panels are all the way down, then tighten the combos to hold the 13A/13B into place, see **A**.



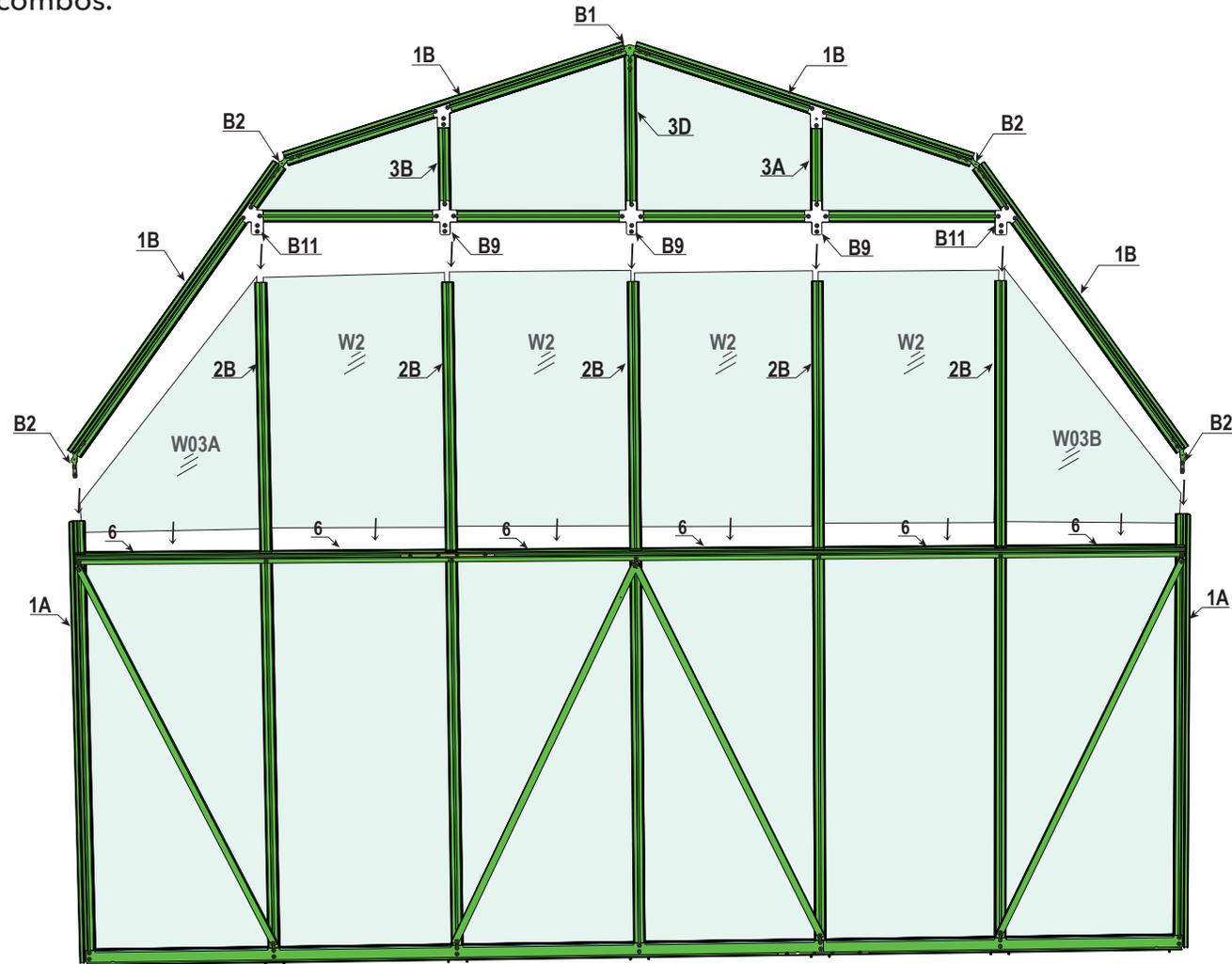
## BACK WALL FRAME ASSEMBLY CONTINUED

**3.14** Slide the W03B, W2's and W03A panels into place, be sure the panels are pushed firmly into the 6's.

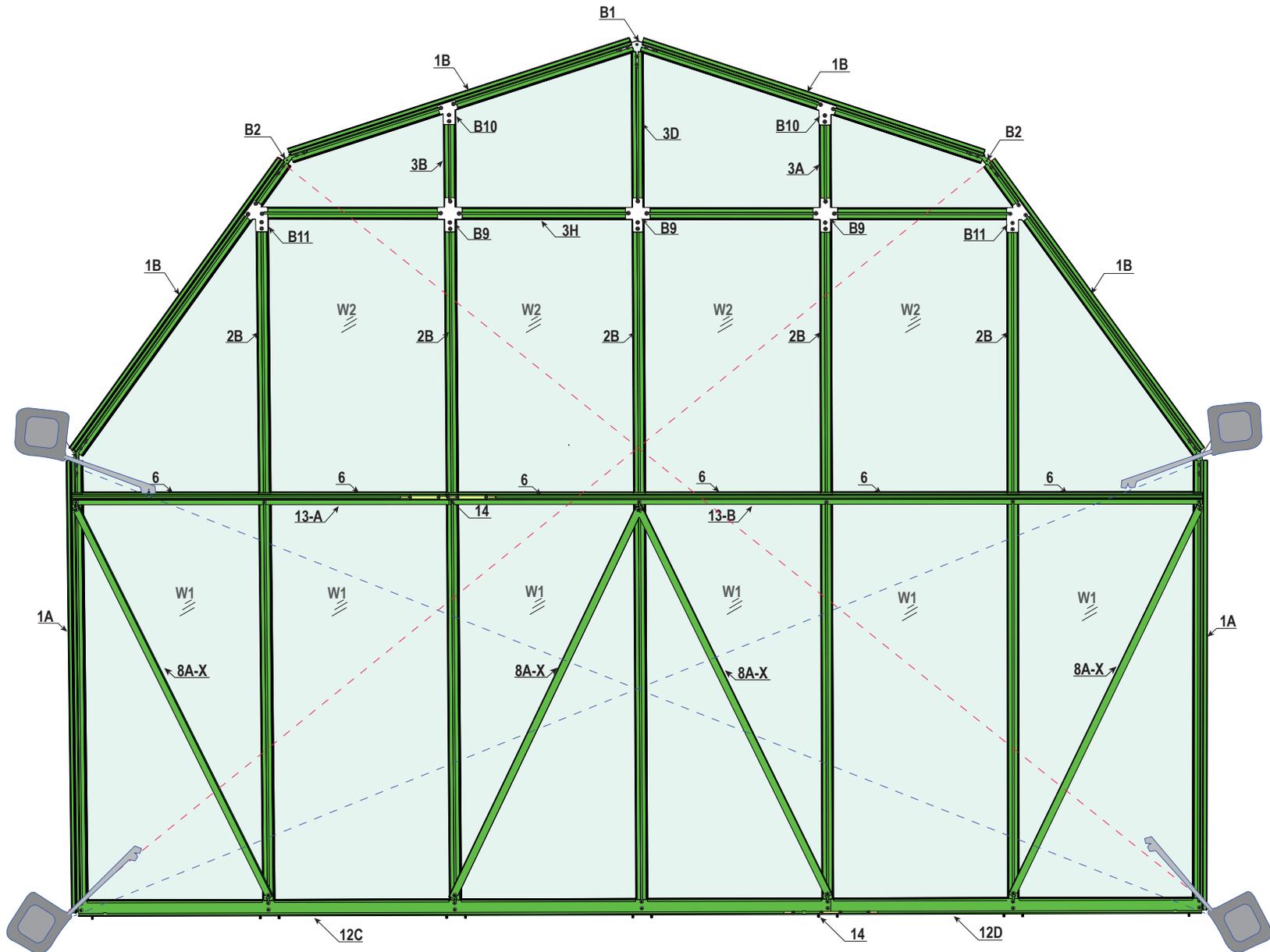
**3.15** You will need another person to slide the upper back wall roof section down to attach to the lower front wall section. Carefully slide the top section downward, and align the B2's with the 1A's, align the B9's and B10's with the 2B's as shown in diagram.

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

**3.17** 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.

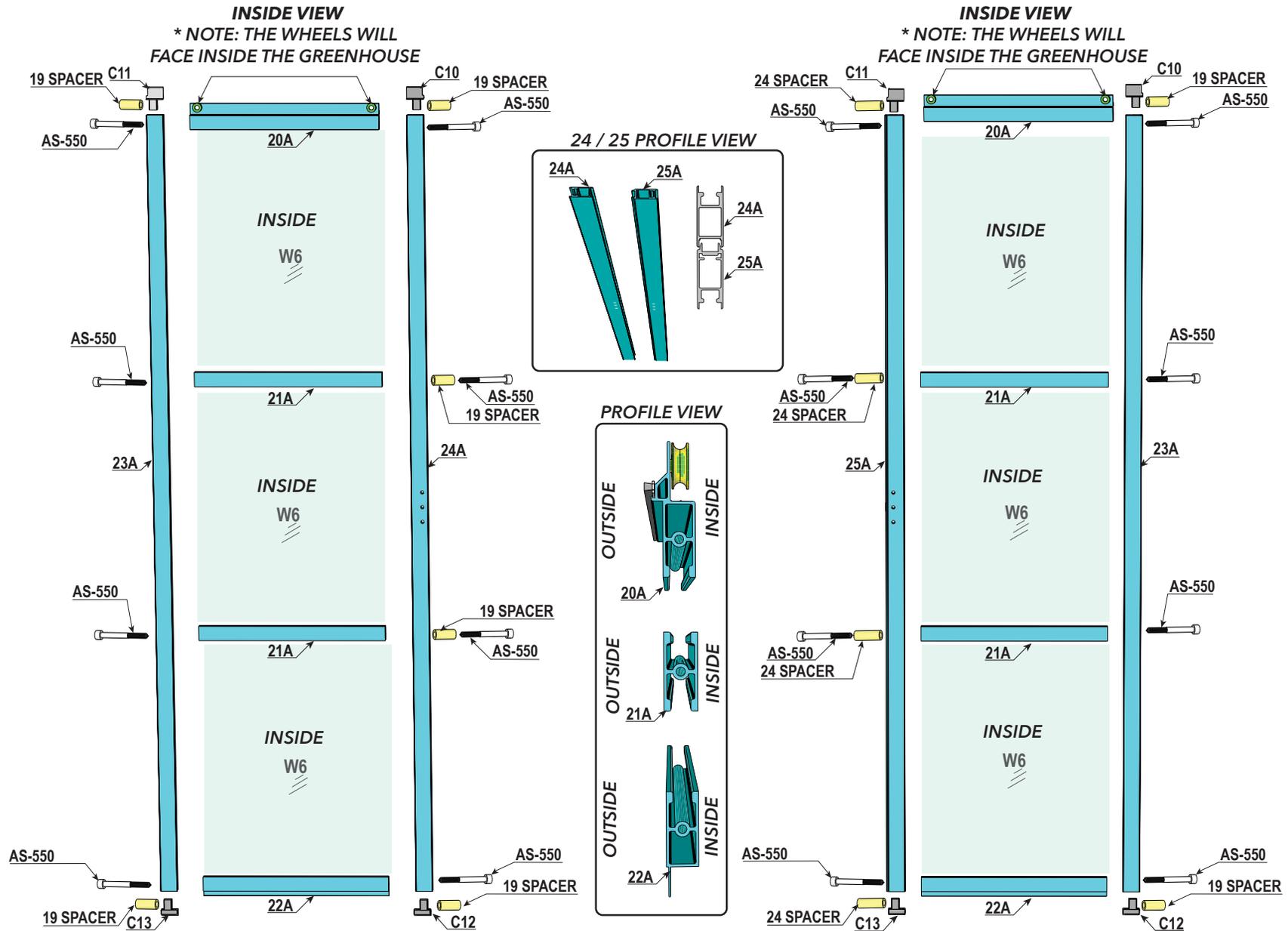


**3.18** Measure corner to corner on the outer back wall frame as shown below to confirm square. You may need to loosen various combos, adjust then re tighten to confirm the back wall is squared.



# DOOR PANEL ASSEMBLY

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



# DOOR ASSEMBLY

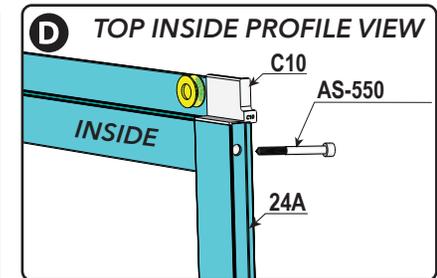
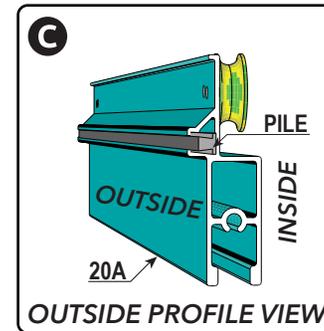
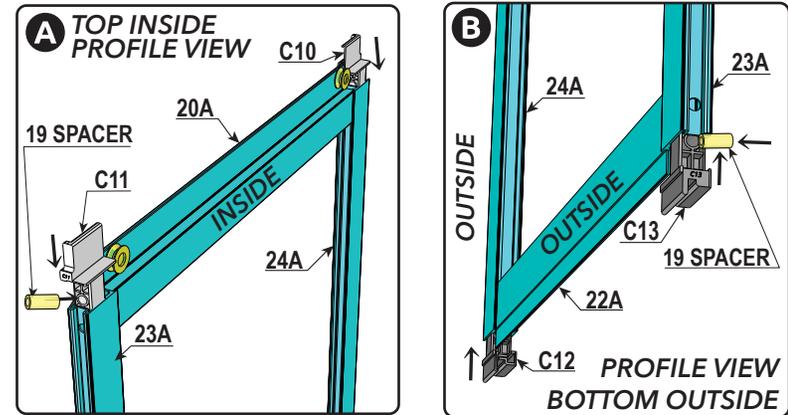
LAY OUT THE DOOR PANELS AND PREPARE TO ASSEMBLE ON A TARP OR PROTECTED SURFACE.  
 FOR THE ACTUAL ASSEMBLY A TABLE IS HELPFUL FOR SCREW INSTALLATION AND ALIGNMENT.  
 \*MOISTURE CONTROL KIT MUST BE INSTALLED PRIOR TO POLYCARBONATE PANEL INSTALLATION.

**4.1** See diagram of doors on page 26 for exact layout prior to beginning installation. It is recommended to assemble in sections using the diagram to not make errors in assembly.

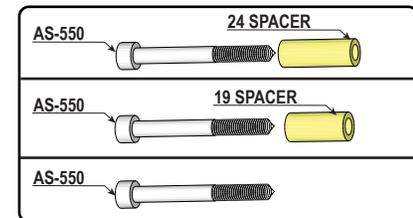
**4.2** Slide the corresponding SPACER into the C10, C11, C12, and C13, then slide into the corresponding extrusion 23A, 24A or 25A as shown in diagrams **A** and **B**. Refer to diagram on page 26 as needed to confirm placement.

**4.3** 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**.

**4.4** 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



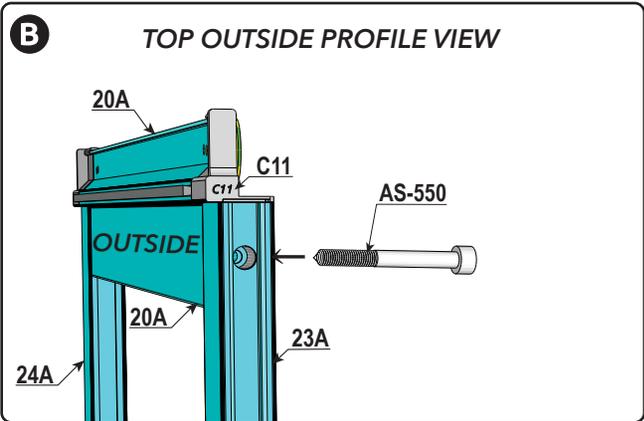
**DOORS & PANEL ORIENTATION:**

Pay special attention to the orientation of the 20A wheels, as they will face inside the 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.

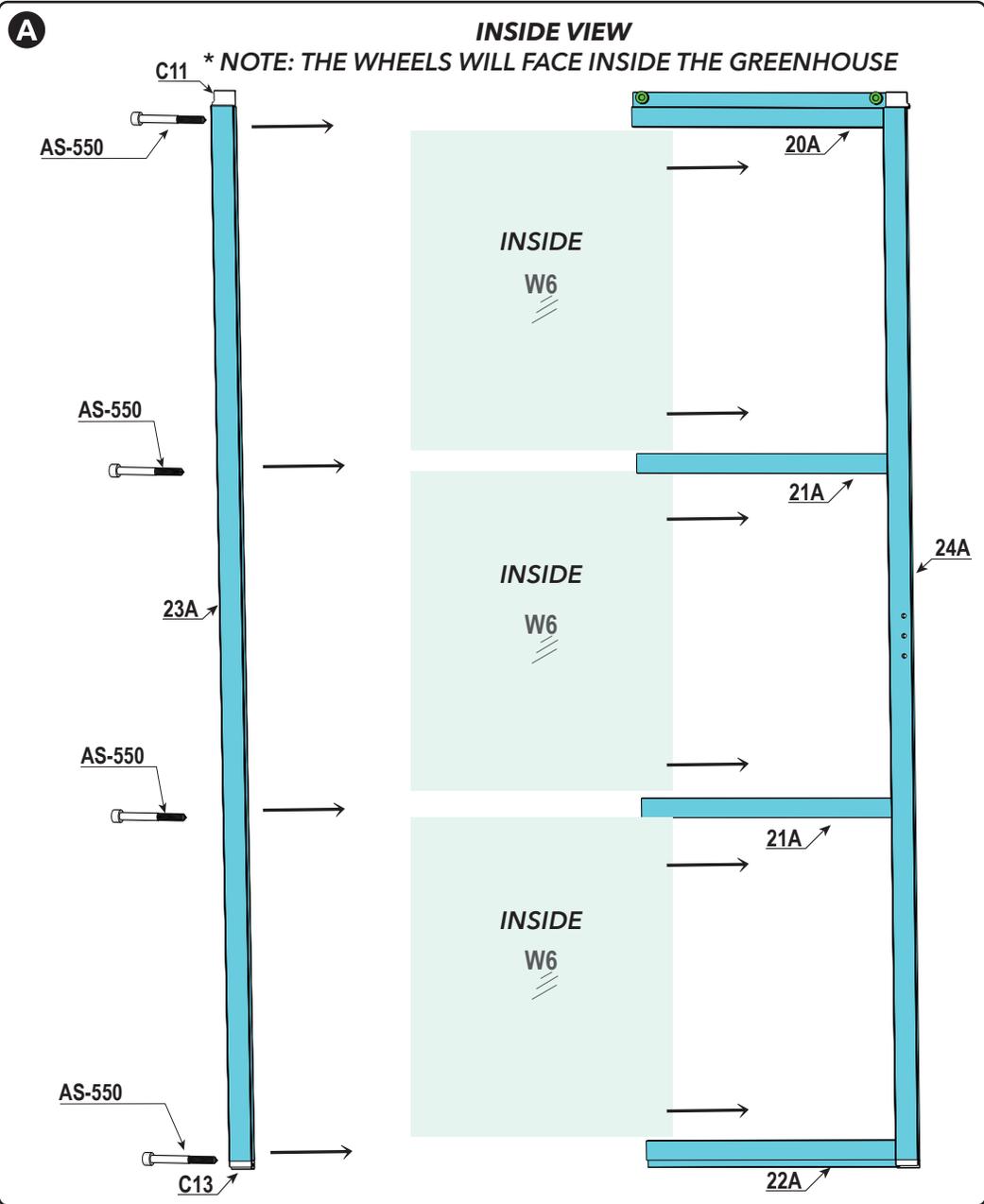
# DOOR ASSEMBLY CONTINUED

**4.5** Slide the W6 window panels into the profiles as shown in diagram **A**. \*Be sure the correct side of the panels face downward, note you are looking at the inside of the greenhouse if assembling as shown in the diagram.

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



**GRANDIO TIP** **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.



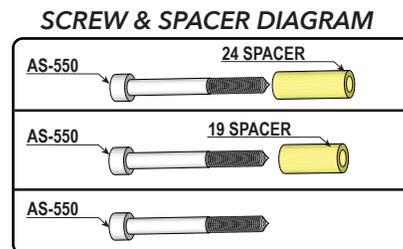
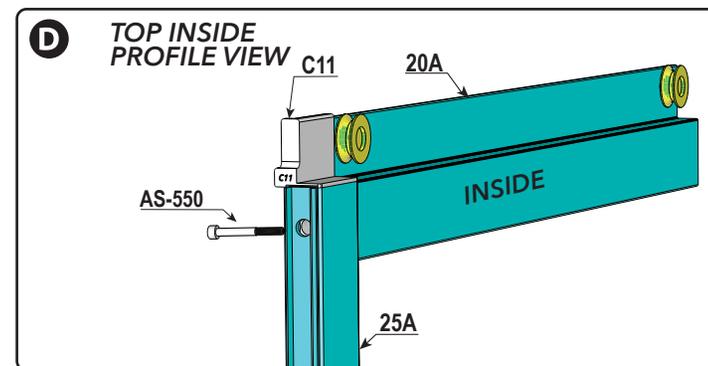
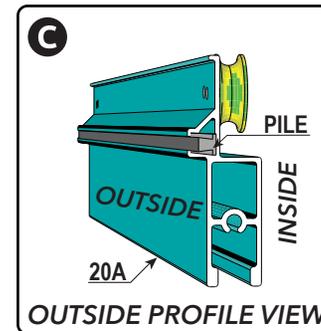
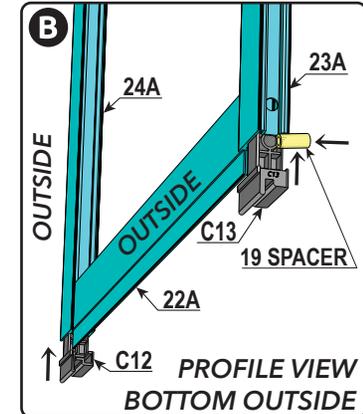
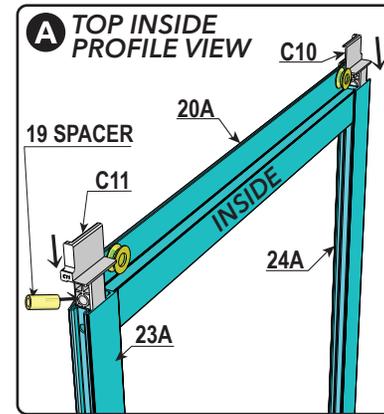
## DOOR ASSEMBLY CONTINUED

**4.7** See diagram of doors on page 26 for exact layout prior to beginning installation. It is recommended to assemble in sections using the diagram to not make errors in assembly.

**4.8** Slide the corresponding **SPACER** into the **C10**, **C11**, **C12**, and **C13**, then slide into the corresponding extrusion **23A**, **24A** or **25A** as shown in diagrams **A** and **B**. Refer to diagram on page 26 as needed to confirm placement.

**4.9** 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**.

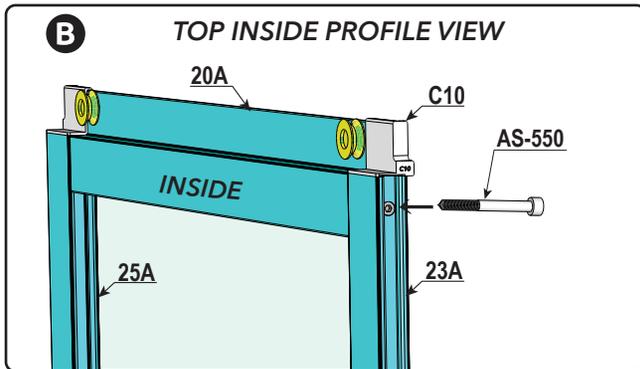
**4.10** Use the **AS-550** Screws as shown in the diagram to attach the **25A** to the **20A**, **21A**'s and **22A**. See **D**. Be careful to insert the screws into the corresponding track, and not to over tighten the screws.



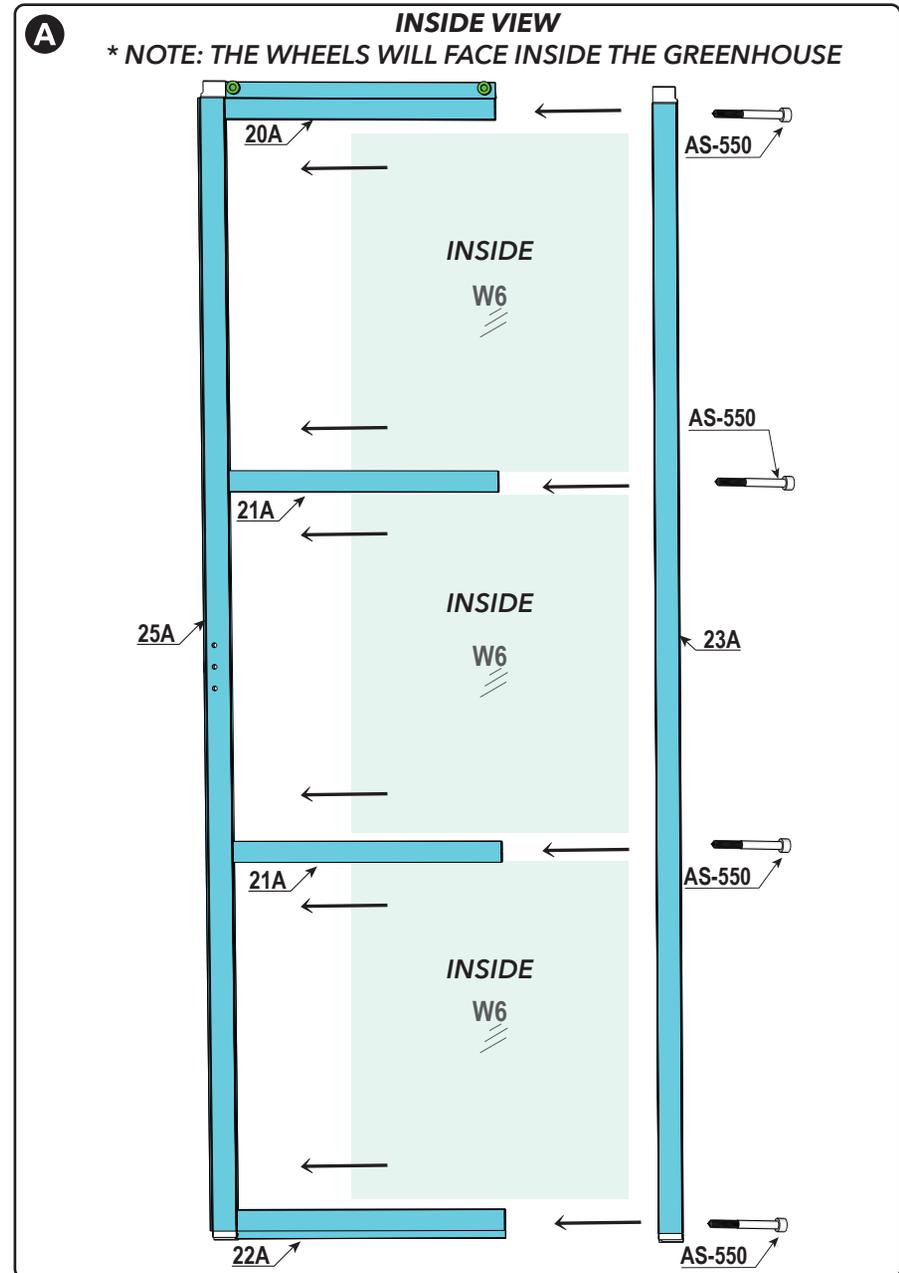
# DOOR ASSEMBLY CONTINUED

**4.11** Slide the W6 window panels into the profiles as shown in diagram **A**. \*Be sure the correct side of the panels face downward, note you are looking at the inside of the greenhouse if assembling as shown in the diagram.

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



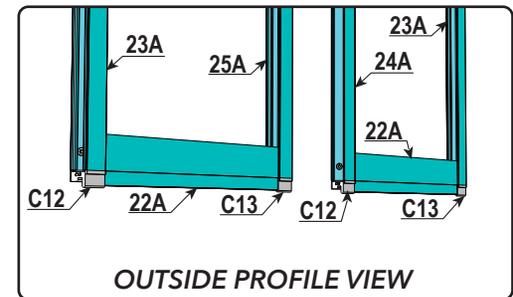
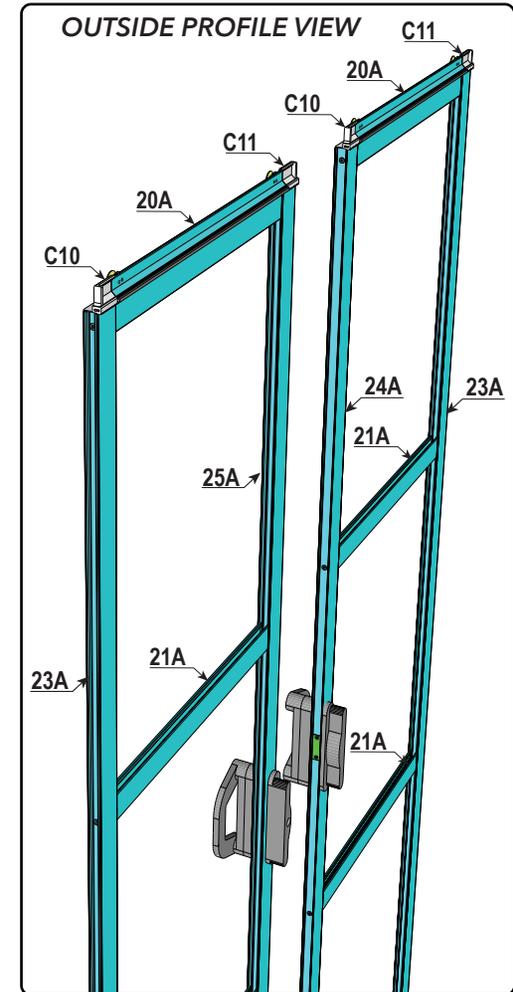
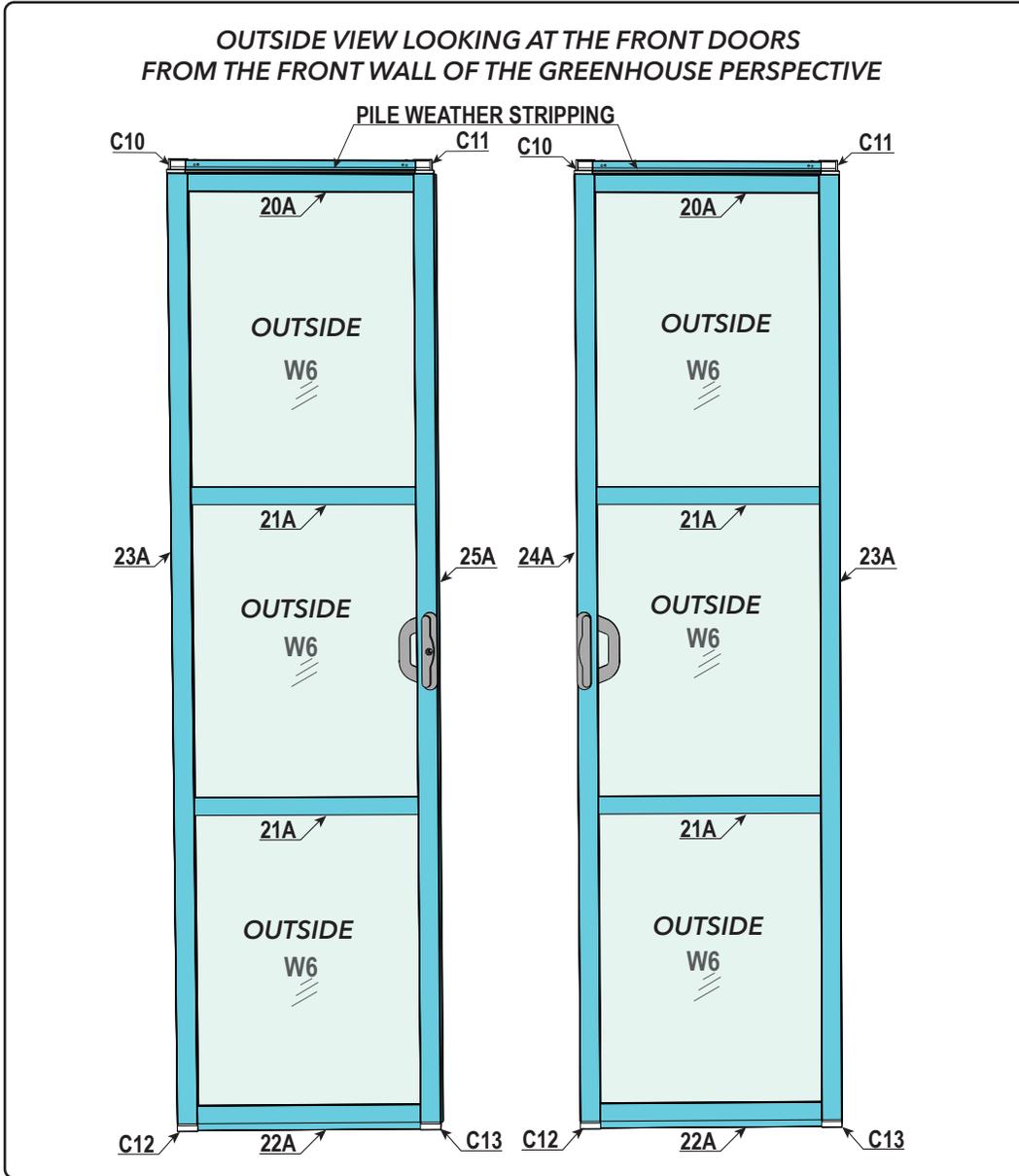
**GRANDIO TIP** **DOORS & PANEL ORIENTATION:** Pay special attention to the orientation of the 20A wheels, as they will face inside the greenhouse, versus the PILE strip side will face outward. Make sure that your panels face the correct way, as only one side has the UV Protectant specially designed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



**4.13** Confirm that your doors are assembled like the images on this page.

**4.14** 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.

**DOOR ASSEMBLY**



# 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.

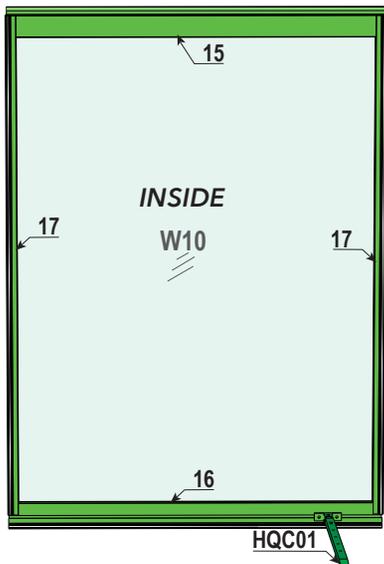
\*MOISTURE CONTROL KIT MUST BE INSTALLED PRIOR TO POLYCARBONATE PANEL INSTALLATION.

\*\*Please note that the SQ-NUT-4, and SQ-NUT6 will be in your welcome kit, as we had a packing error on this run.

We are including replacement 15 Top Roof Vent Extrusions, as some were extruded incorrectly.

## QUANTITY PER SIZE

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



SOME 15 EXTRUSIONS WILL BE IN THE WELCOME KIT AS REPLACEMENTS, NOTE THE TOP EDGE OF SOME IN THE PACKAGES ARE DAMAGED FROM EXTRUDING.

SOME SQUARE NUTS WILL BE IN WELCOME KIT BOX

PPS-46 SCREWS WILL BE IN WELCOME KIT BOX

## 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
	17	90 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 / ABS-48	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

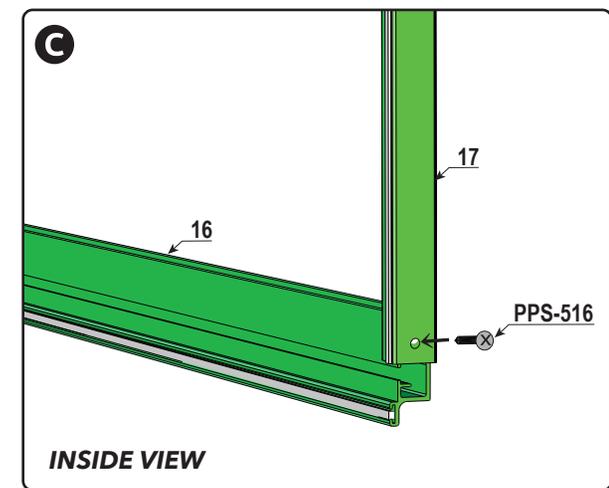
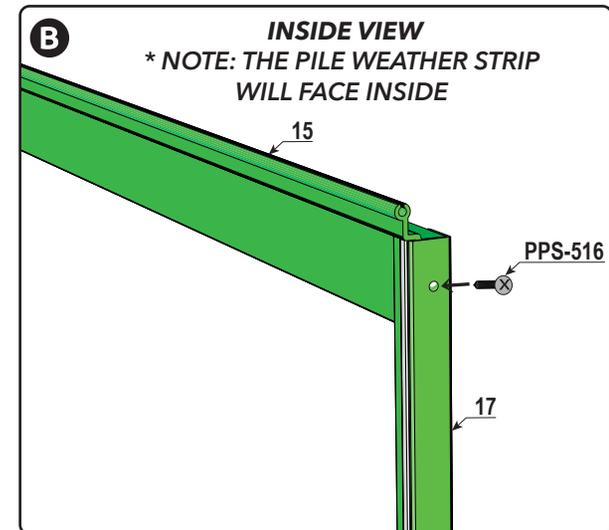
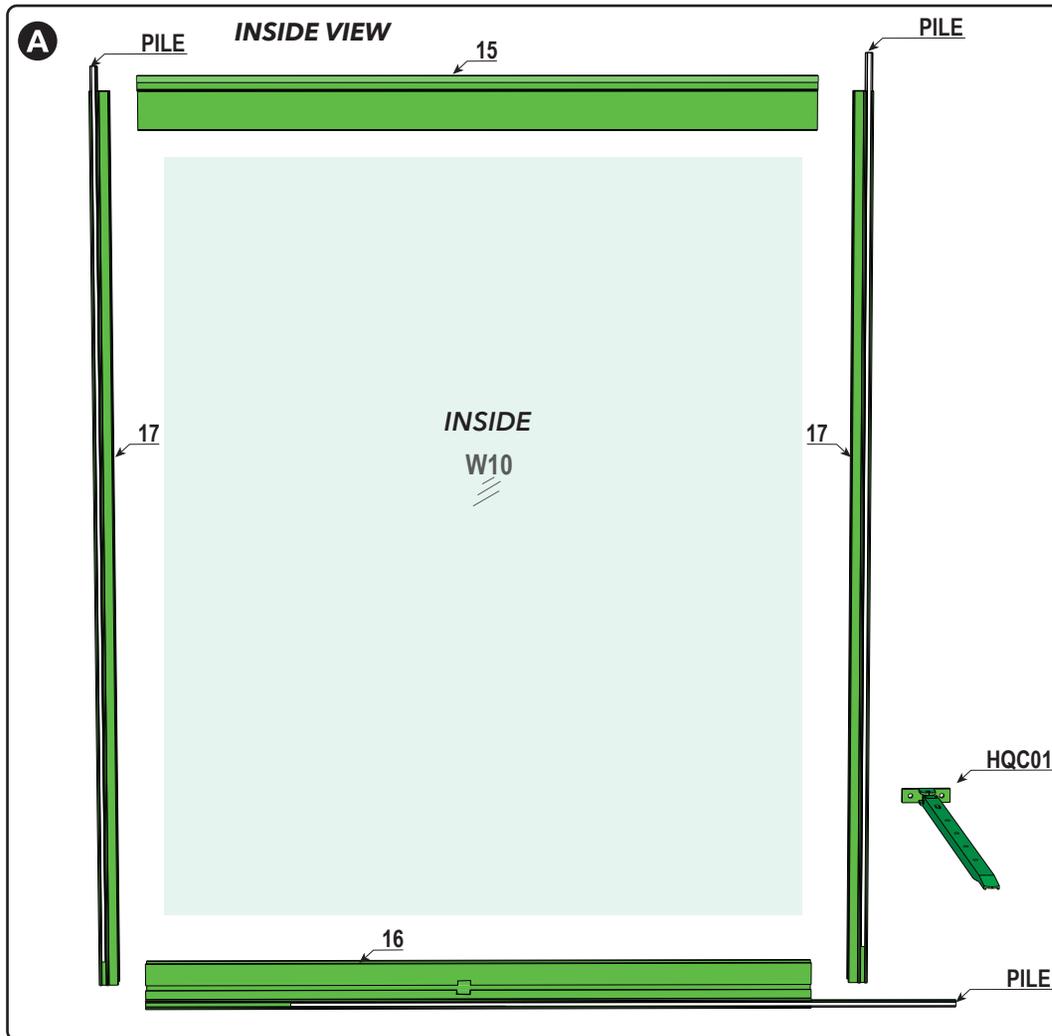
PACKED TOGETHER



**SILICONE CAULK AND ANTI DUST TAPE:** All the anti dust tape should already be applied to all polycarbonate window panels. You may apply a small dab of caulk to hold the PILE weather strip in place at the ends of the corresponding profiles. Once the Roof Vents are assembled and squared you may caulk around the frame and window panels.

# ROOF VENT ASSEMBLY CONTINUED

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



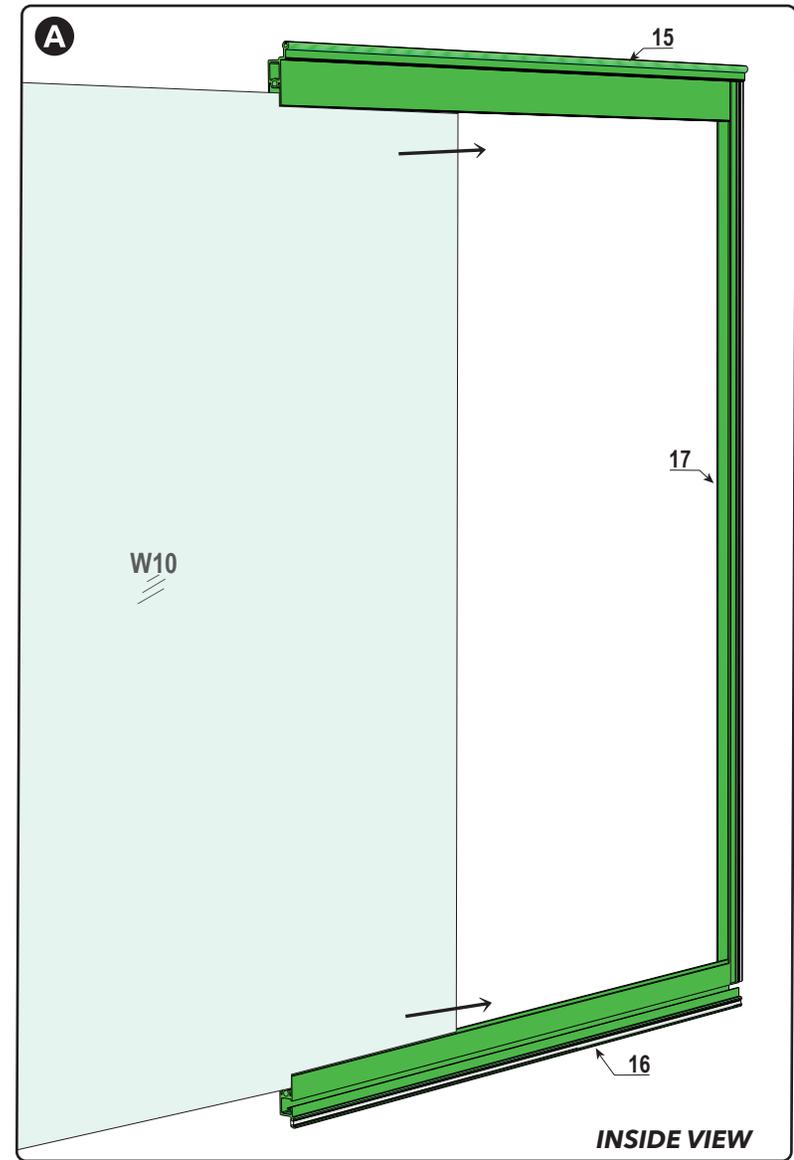
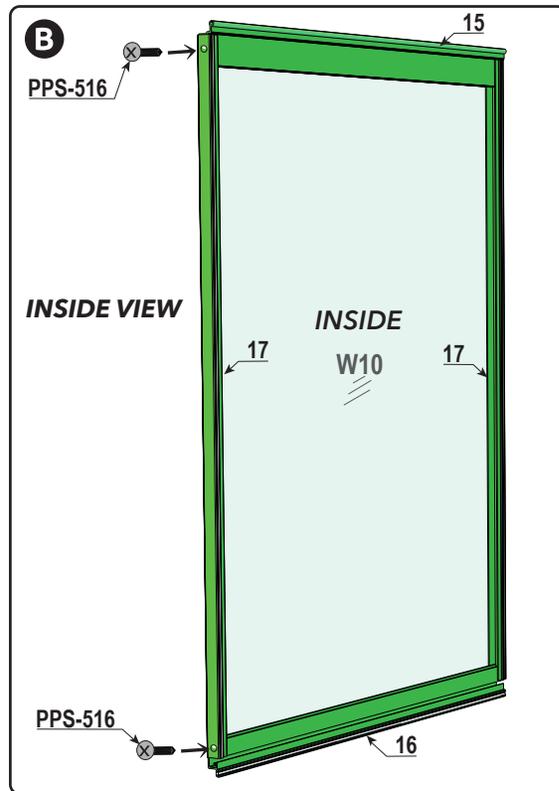
# ROOF VENT ASSEMBLY CONTINUED

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

5.5 Use the PPS-516 Screws to attach the 17 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

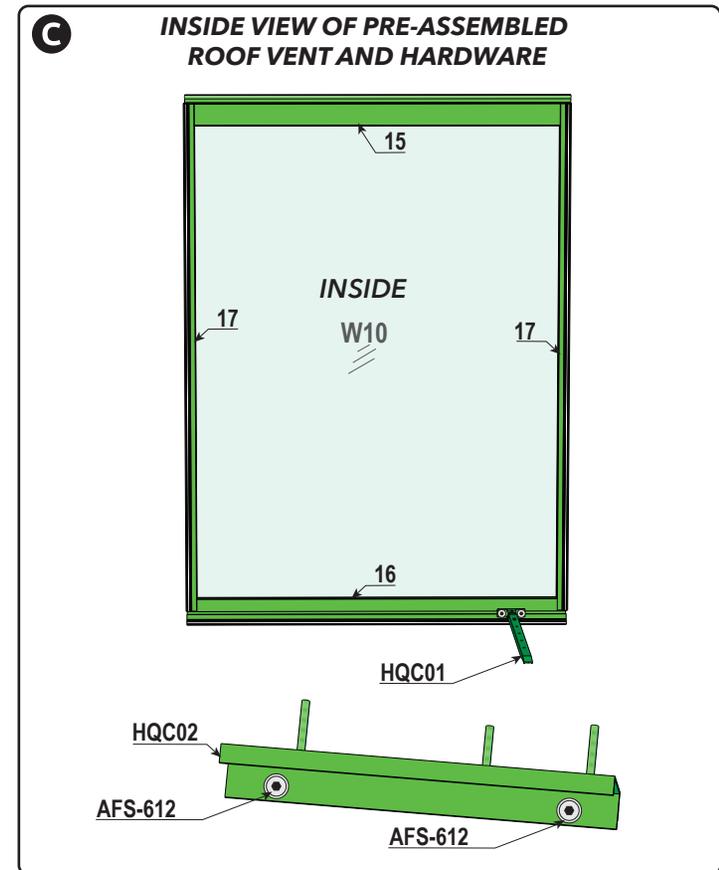
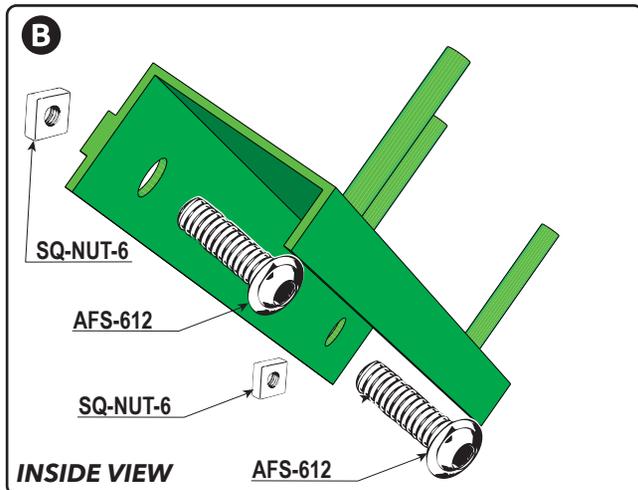
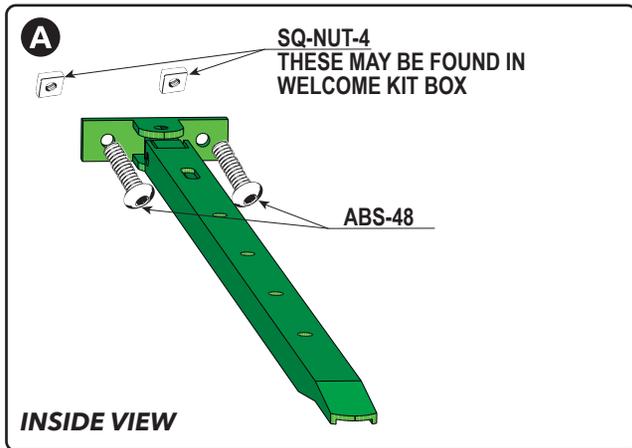
**\*\*Please note that the SQ-NUT-4, and SQ-NUT6 will be in your welcome kit, as we had a packing error on this run.**

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

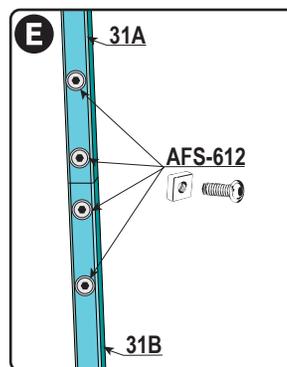
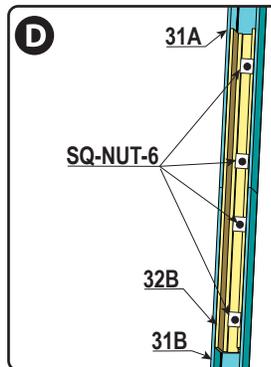
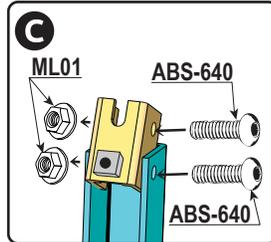
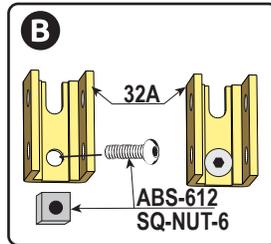
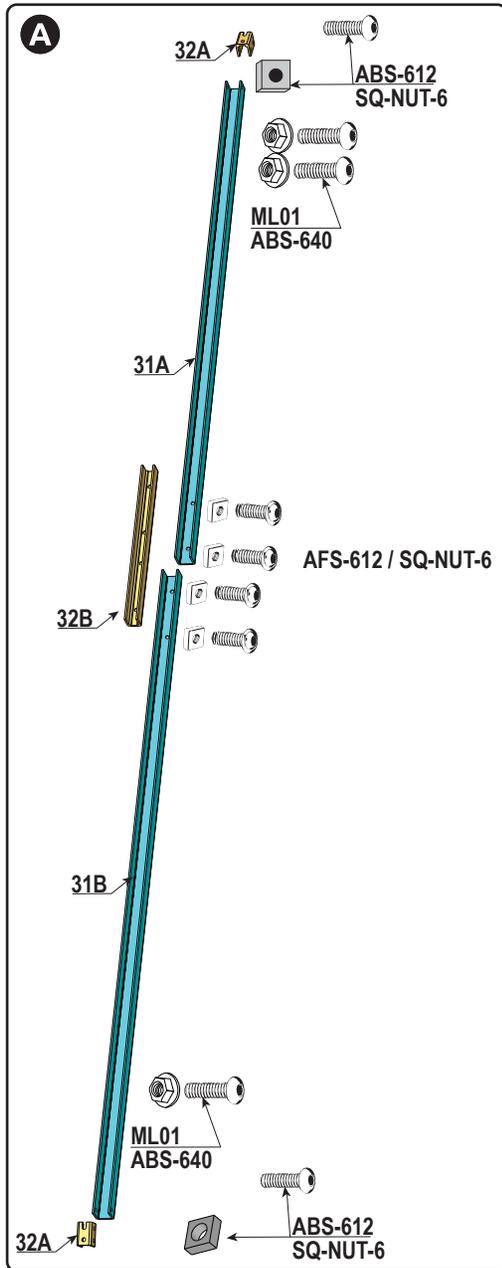
**5.7** Install the AFS-612 Screws with the SQ-NUT-6 Nuts into the HQC02 see **B**.

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

**5.9** Repeat 5.1-5.8 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



- 6.1** See the layout of the Interior Roof Supports in diagram **A**.
- 6.2** Install the ABS-612 Screws with the SQ-NUT-6 into all of the 32A's, see **B**.
- 6.3** Install the 32A into the 31A using the ABS-640 Screws with the ML01 Nuts into the 32A with 31A, see **C**.
- 6.4** 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 the see **A**, **D** and **E**.
- 6.5** Assemble all of the 31B/31A Supports, then set in a safe place for later install. See **F** for quantities. Set aside the lower 32A and hardware for attaching to the base kit.

**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

96.00mm

300.00mm

1200.00mm

# INTERIOR ROOF & WALL SUPPORTS ASSEMBLY

**6.7** See the layout of the Interior wall to roof supports in diagram **A**.

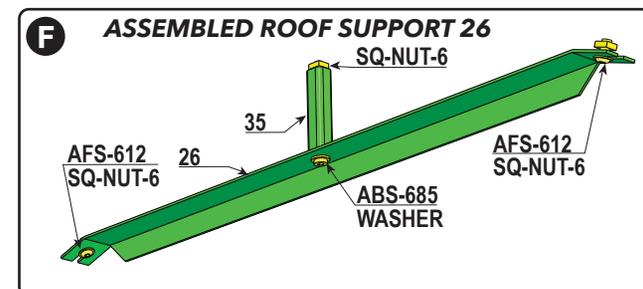
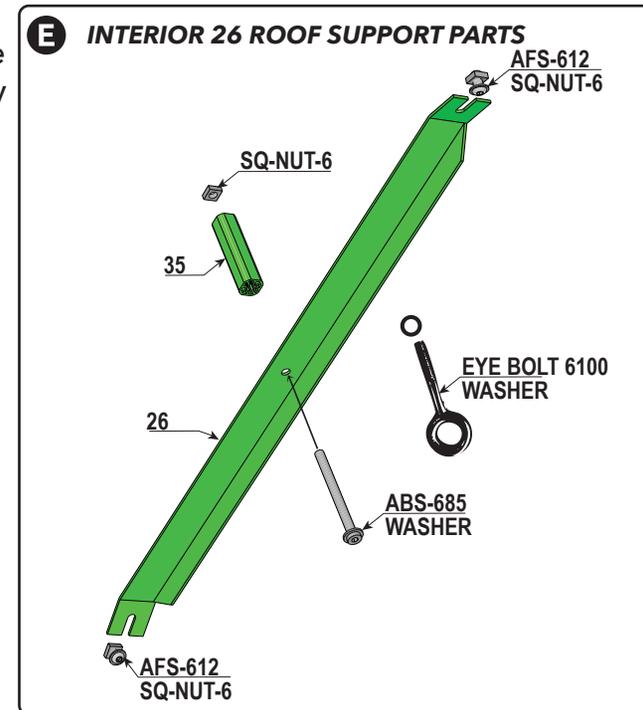
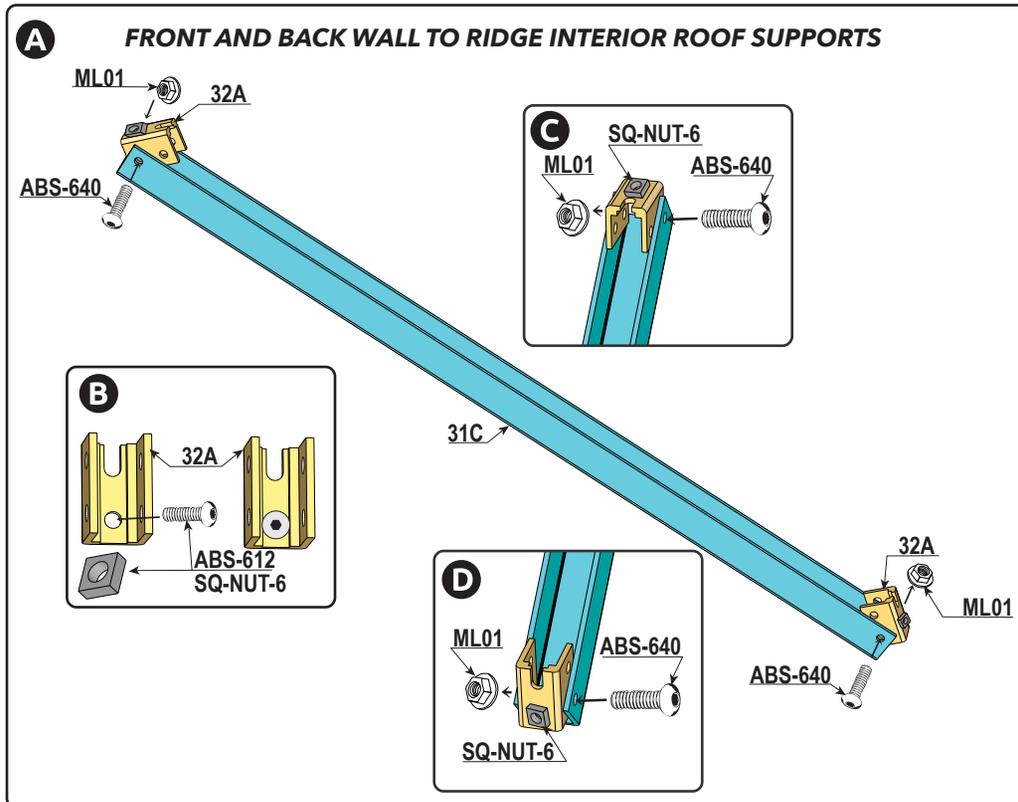
**6.8** Install the ABS-612 Screws with the SQ-NUT-6 into all of the 32A's, see **B**.

**6.9** Install the 32A's into the 31C using the ABS-640 Screws with the ML01 Nuts, see **C** and **D**. There are (2) 32B Supports for any size greenhouse, they will attach as a support for the front and back walls.

**6.10** 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.

**6.11** Place the ABS-685 or the Eye Bolt 6100 Screw with Washer thru the 26 and 35 Spacer and loosely thread on the SQ-NUT-6. There will be only eyebolts that will hold the tension cables on the 7 every 4'.

**6.12** Pre-assemble all of the 26 Supports as instructed in step 6.11.



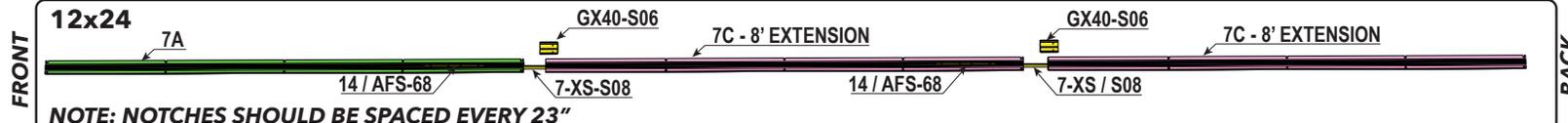
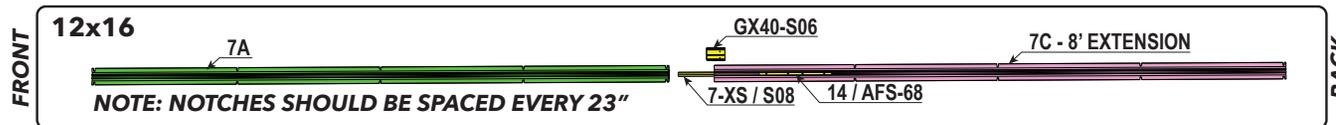
# 7 ROOF RIDGE SUPPORTS ASSEMBLY

**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.  
If you are assembling just a 12x8 size model skip ahead to page 43.

**7.2** 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.

**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.

<b>A QUANTITY PER SIZE</b>	
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

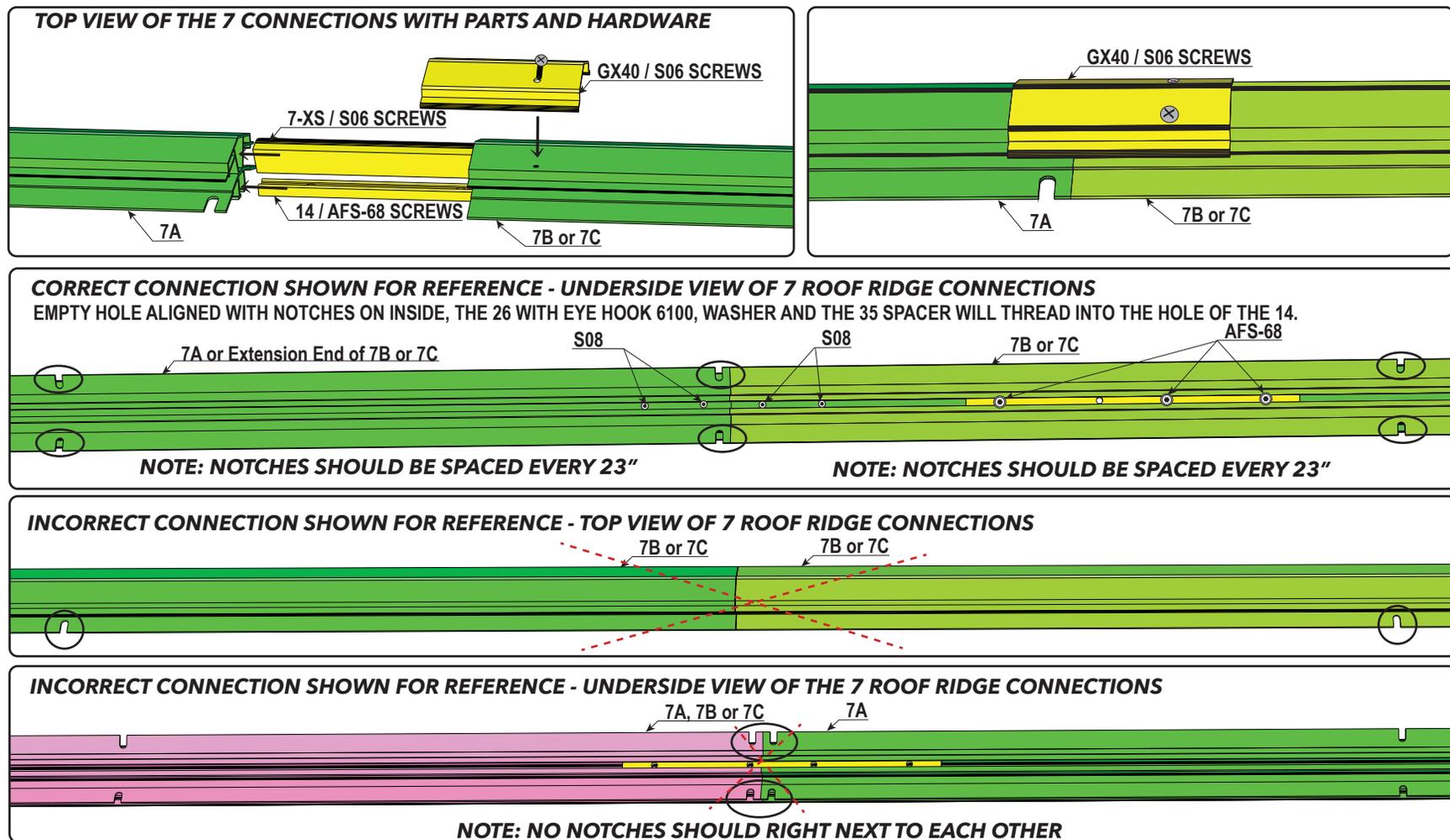


# 7 ROOF RIDGE SUPPORTS ASSEMBLY

**7.4** 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.

**7.5** Repeat step 5.3 on all 7 Roof Connection pieces for your model size

**7.6** 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

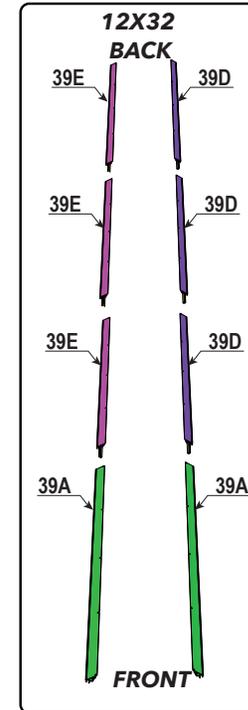
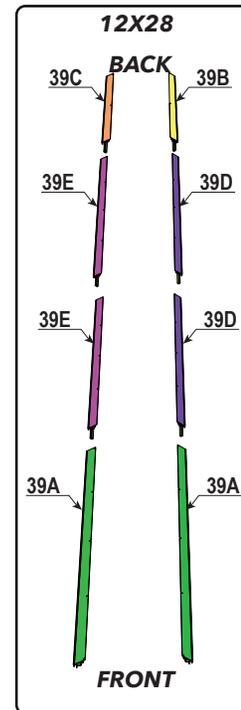
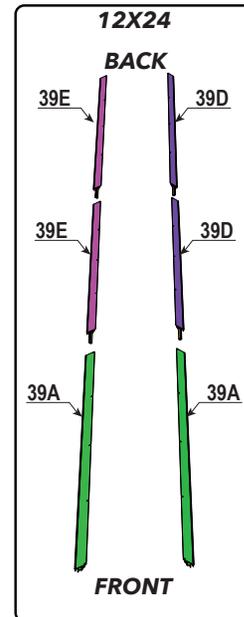
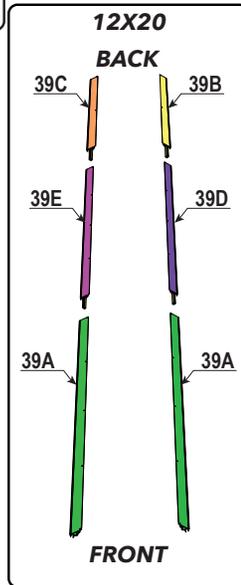
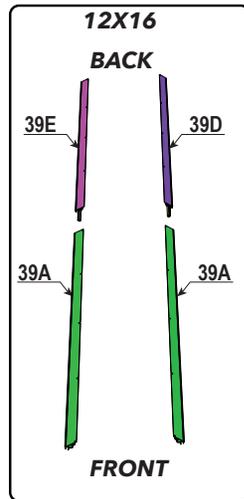
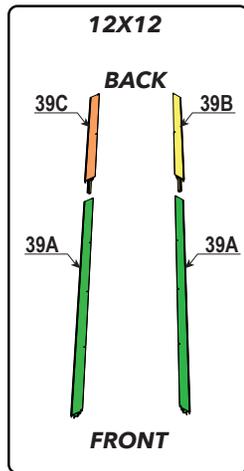
**8.1** See diagram **A** to the right, and locate the size greenhouse you are building to confirm the order of the parts to prepare for assembly. Note we are referencing Right and Left side as if standing in front of your greenhouse front door preparing to walk inside.

**8.2** 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".

**8.3** 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**

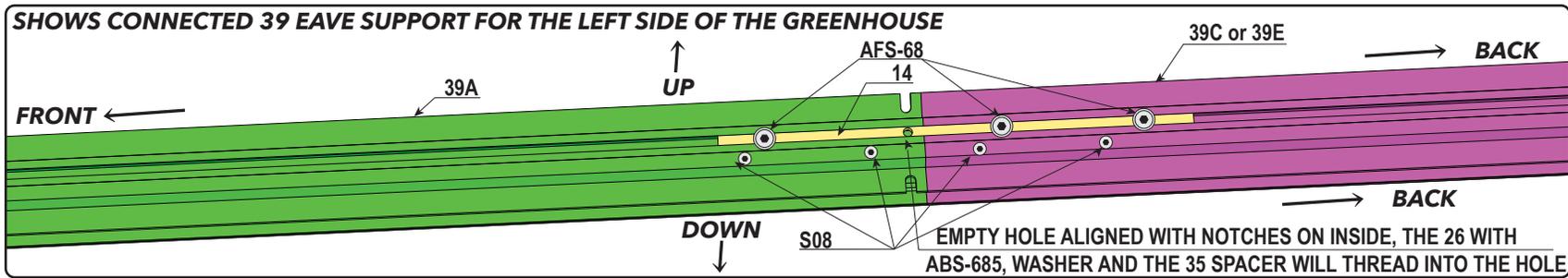
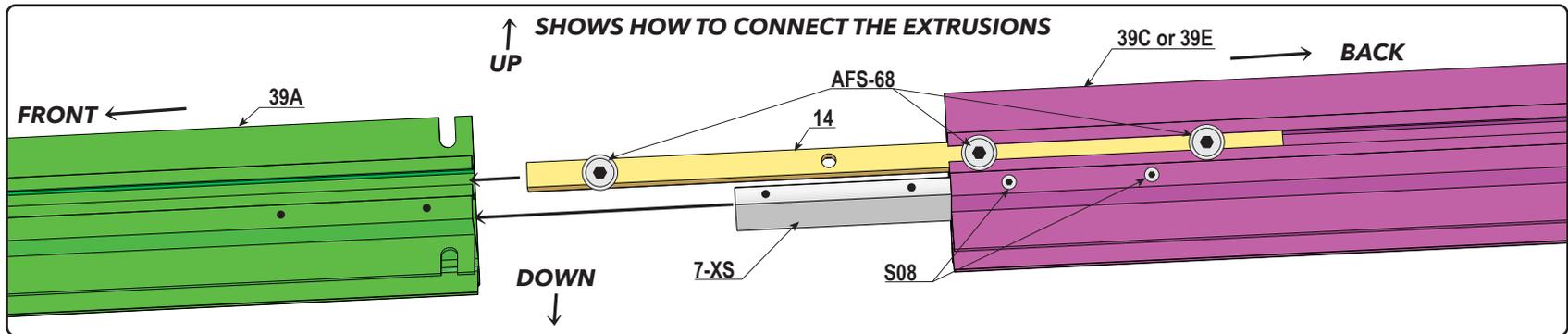
SIZE	39 LEFT SIDE	39 RIGHT SIDE
12x8	39A	39A
12x12	39A, 39C	39A, 39B
12x16	39A, 39E	39A, 39D
12x20	39A, 39E, 39C	39A, 39D, 39B
12x24	39A, 39E, 39E	39A, 39D, 39D
12x28	39A, 39E, 39E, 39C	39A, 39D, 39D, 39B
12x32	39A, 39E, 39E, 39E	39A, 39D, 39D, 39D



# 39 MID ROOF EAVE SUPPORTS EXTENSION ASSEMBLY

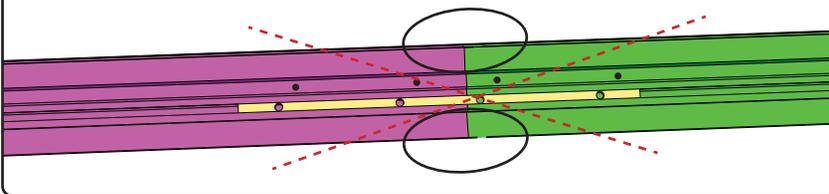
**8.4** Slide the 14 with the loosely pre-threaded AFS-68 screws into the track of each of the 39 pieces slide down so the 14 hole without a screw aligns with the notches. Slide the 7-XS into the correct track, align the holes on both pieces, then install the S08 Screws tightening with even pressure 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.

**8.5** Repeat step 8.4 on all 39 Eave Connection pieces for your model size, then carefully set beside your greenhouse base kit on the correct side for easy install.

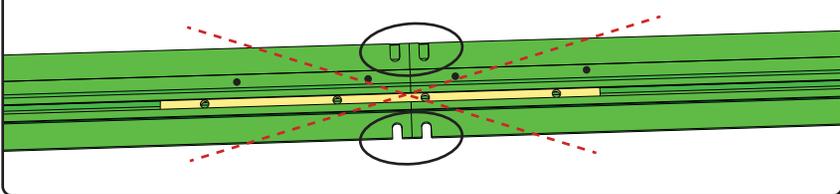


**INCORRECT CONNECTION SHOWN FOR REFERENCE - INSIDE VIEW OF 39 CONNECTIONS**

**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

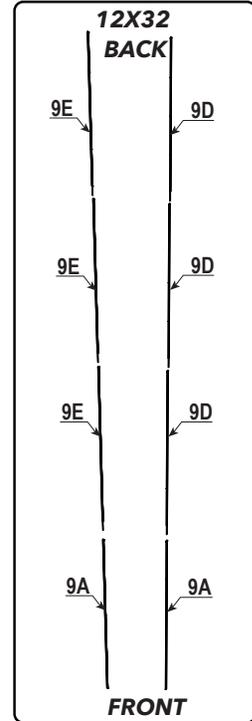
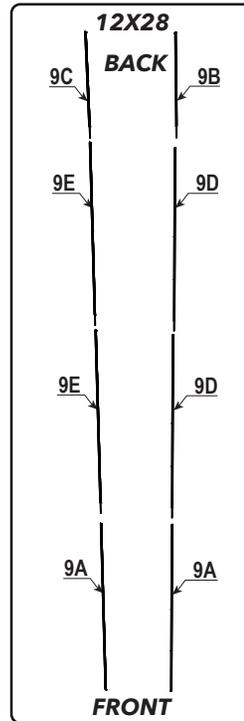
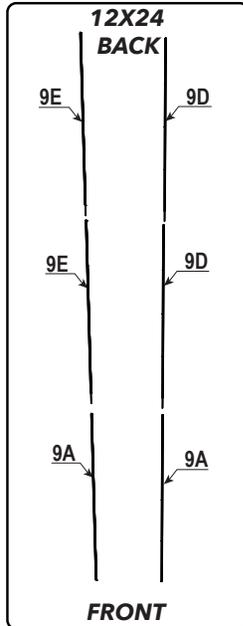
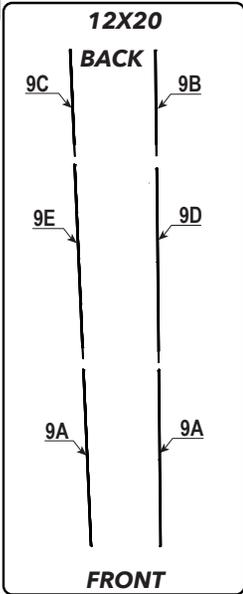
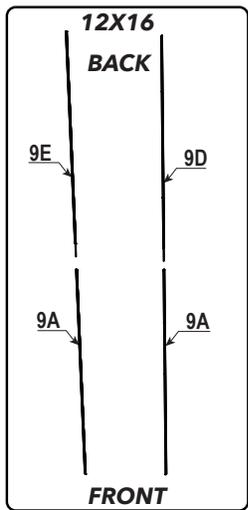
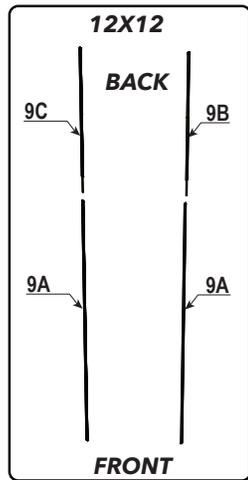
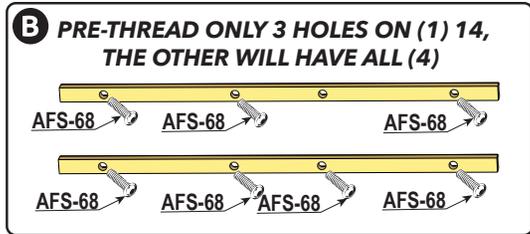
**9.1** See diagram **A** to the right, and locate the size greenhouse you are building to confirm the order of the parts to prepare for assembly. If you are assembling just a 12x8 size model skip ahead to page 43.

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

**9.3** 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**

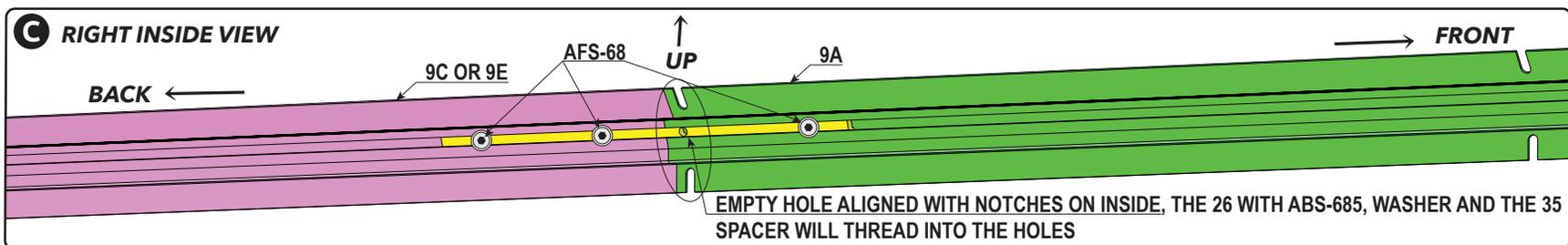
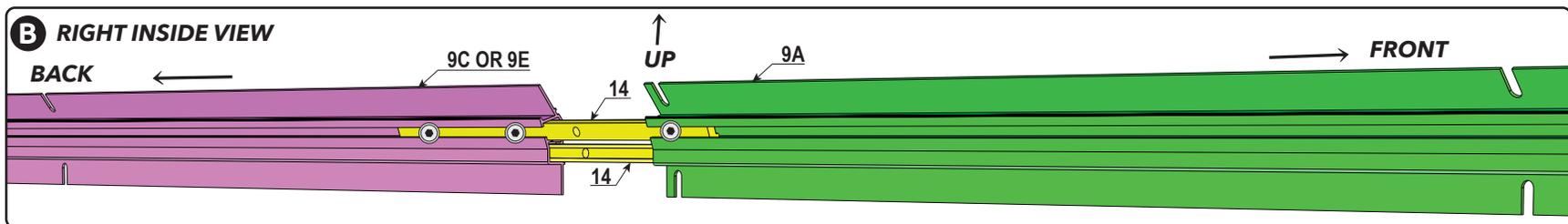
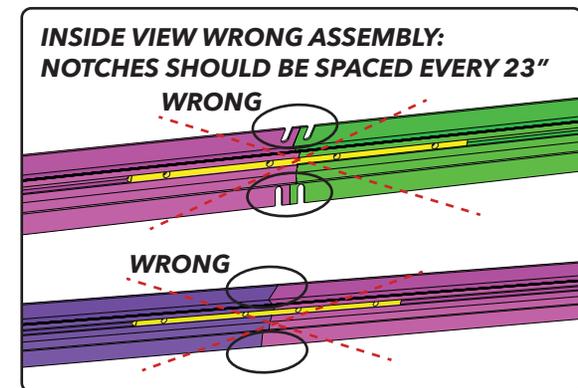
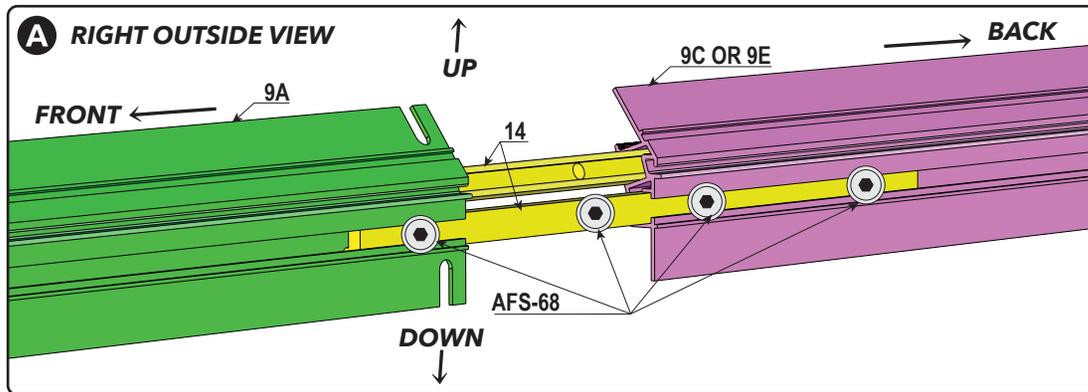
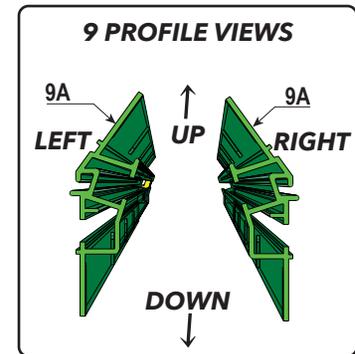
SIZE	9 LEFT SIDE	9 RIGHT SIDE
12x8	9A	9A
12x12	9A, 9C	9A, 9B
12x16	9A, 9E	9A, 9D
12x20	9A, 9E, 9C	9A, 9D, 9B
12x24	9A, 9E, 9E	9A, 9D, 9D
12x28	9A, 9E, 9E, 9C	9A, 9D, 9D, 9B
12x32	9A, 9E, 9E, 9E	9A, 9D, 9D, 9D



# 9 LOWER EAVE GUTTER SUPPORTS EXTENSION ASSEMBLY

**9.4** 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.

**9.5** Refer to layout diagrams on previous page as needed then repeat step **9.4** 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 standing in front of your greenhouse front door preparing to walk inside.



# PREPARING TO ASSEMBLE THE GREENHOUSE BODY



## **WARNING!**

**YOU MUST HAVE AT LEAST 2 PEOPLE FOR A 12x8, 12x12 or 12x16 SIZED GREENHOUSE INSTALLATION.**

**YOU MUST HAVE AT LEAST 3 PEOPLE FOR A 12X16 OR LARGER SIZED GREENHOUSE INSTALLATION.**

**FOR THE LARGER 12x24 OR LONGER GREENHOUSES 4 PEOPLE ARE RECOMMENDED, AND THE MORE PEOPLE THE BETTER GOING FORWARD.**

**DO NOT ATTEMPT ASSEMBLY ON A WINDY OR STORMY DAY CHECK YOUR WEATHER IN FOR THE NEXT DAY IN CASE YOU DO NOT FINISH ASSEMBLY AS PLANNED.**

**PLAN TO FINISH THE ENTIRE ASSEMBLY IN ONE DAY, BE PREPARED WITH COMMITTED HELP.**

**ONCE YOU BEGIN INSTALLING THE FRONT AND BACK WALLS YOU WILL NOT BE ABLE STOP ASSEMBLY, YOU MUST CONTINUE UNTIL FINISHED IF POSSIBLE TO PREVENT DAMAGE.**

## **BE PREPARED!**

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

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

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

**YOU MUST HAVE 2 LADDERS FOR AN 12X8, FOR ANY LARGER STRUCTURES THAN 12X16 YOU MUST HAVE 3 LADDERS.**

**THE MORE HELP GOING FORWARD THE BETTER FOR ANY SIZE CONSTRUCTION.**

**DO NOT ATTEMPT ASSEMBLY ON A WINDY OR STORMY DAY, CHECK YOUR WEATHER REPORT FOR THE NEXT DAY IN CASE YOU DO NOT FINISH ASSEMBLY AS PLANNED.**

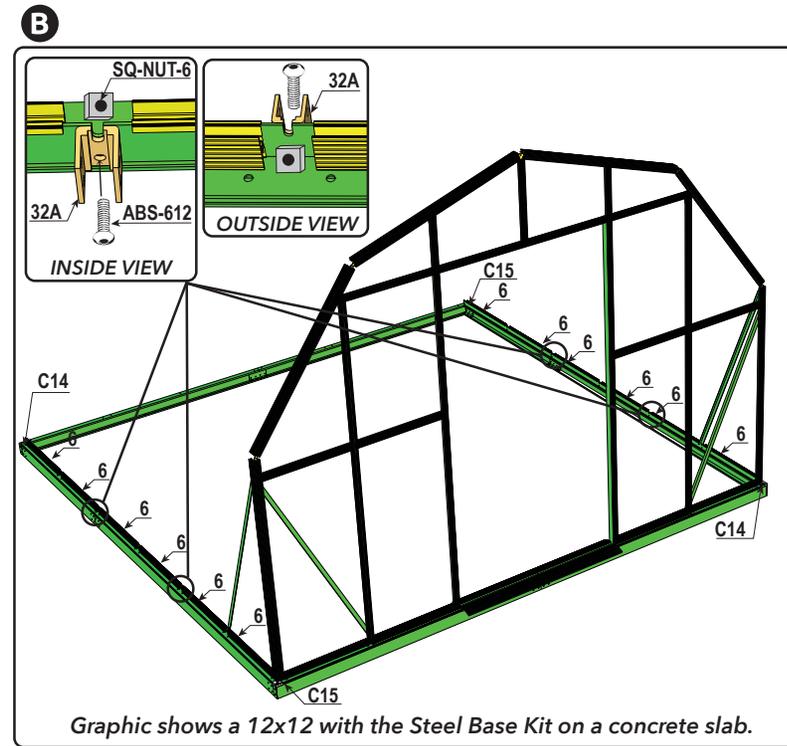
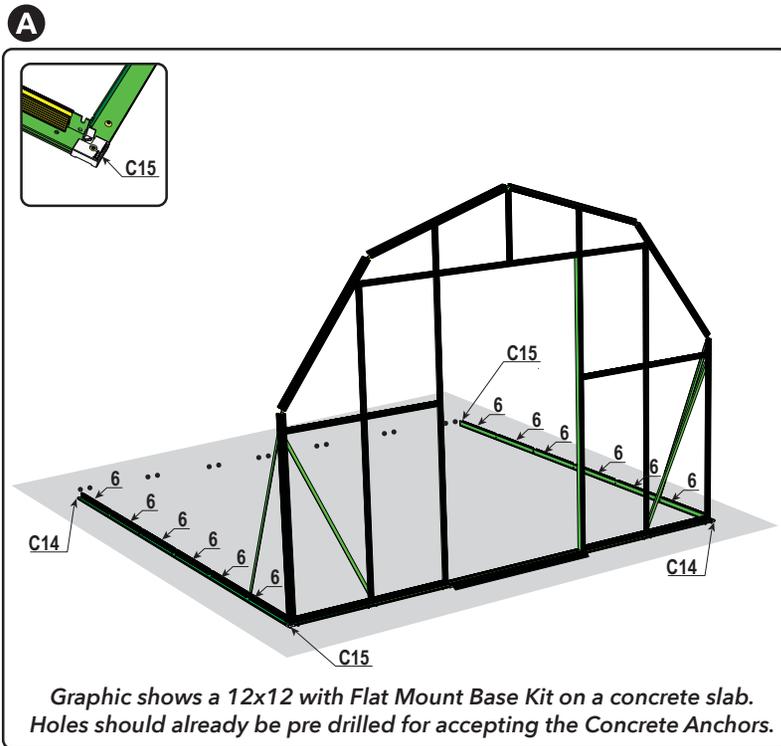
**PLAN TO FINISH THE ENTIRE ASSEMBLY IN ONE DAY, SO START EARLY AND BE PREPARED WITH COMMITTED HELP.**

**ONCE YOU BEGIN INSTALLING THE FRONT AND BACK WALLS YOU WILL NOT BE ABLE STOP ASSEMBLY, YOU MUST CONTINUE UNTIL FINISHED IF POSSIBLE TO PREVENT DAMAGE.**

# ATTACHING FRONT WALL SECURING TO BASE OR FOUNDATION

**10.1** 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 get a 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**.

**10.2** 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 square nut see **B**.



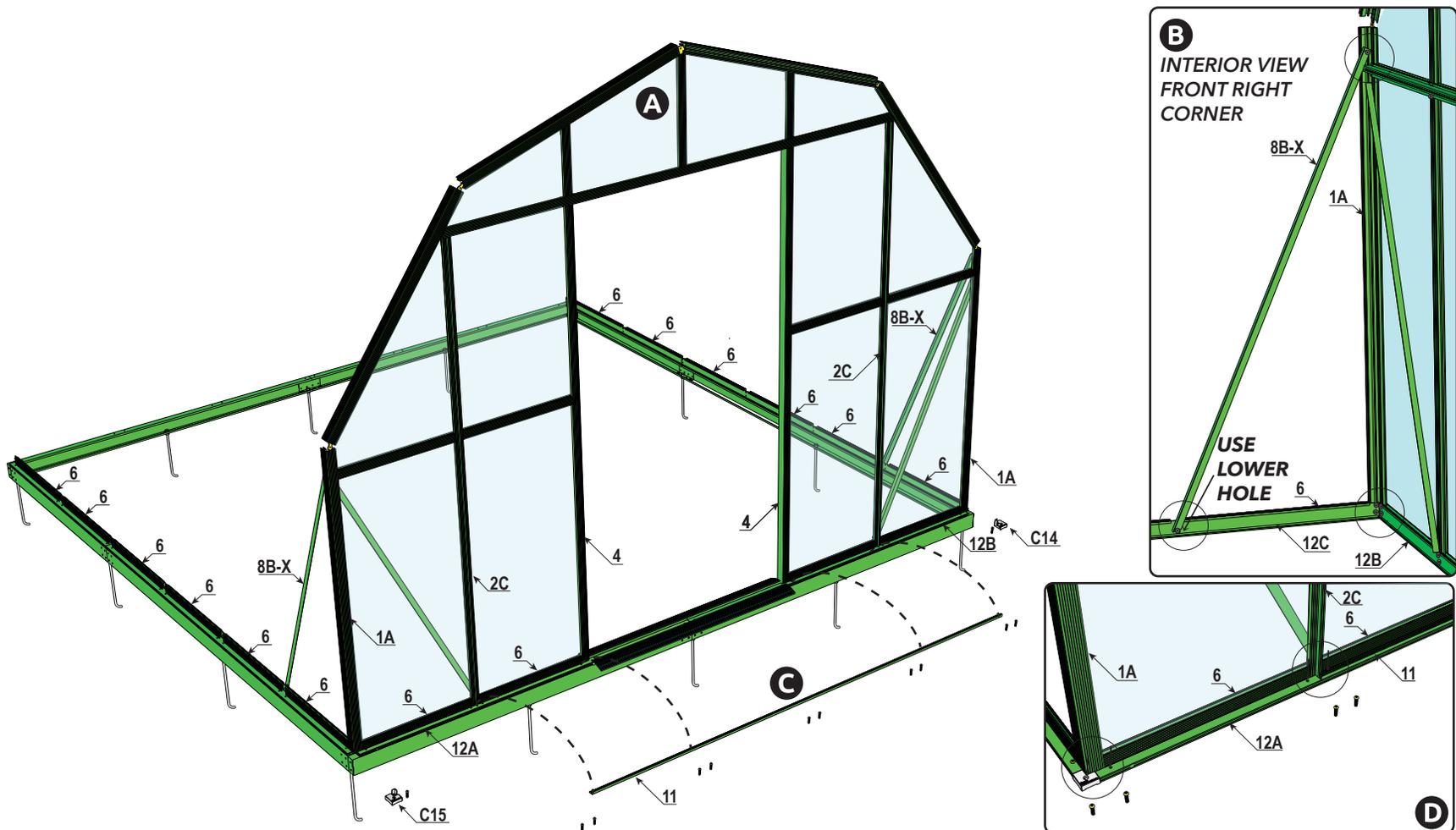
# ATTACHING FRONT WALL TO PRE-INSTALLED BASE KIT

## 10.3 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**.

10.4 Use the 8B-X supports to attach the corner 1A pieces to the base as shown in **B**. Repeat on both sides. Align your 11 track to the front door way as shown in **C**.

10.5 Use the correct fastener 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**.

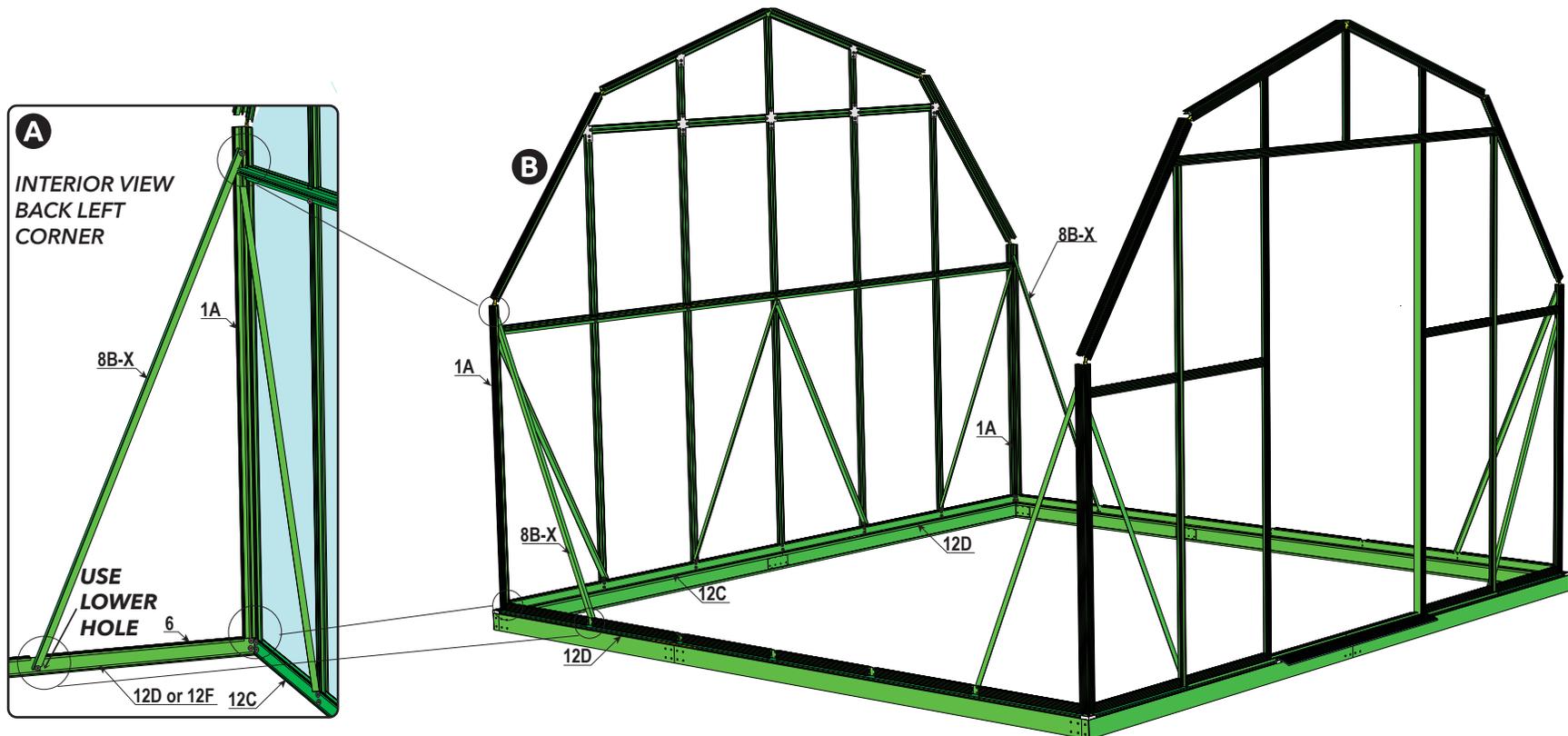


## ATTACHING BACK WALL TO PRE-INSTALLED BASE KIT

**11.1** 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.

**11.2** 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.

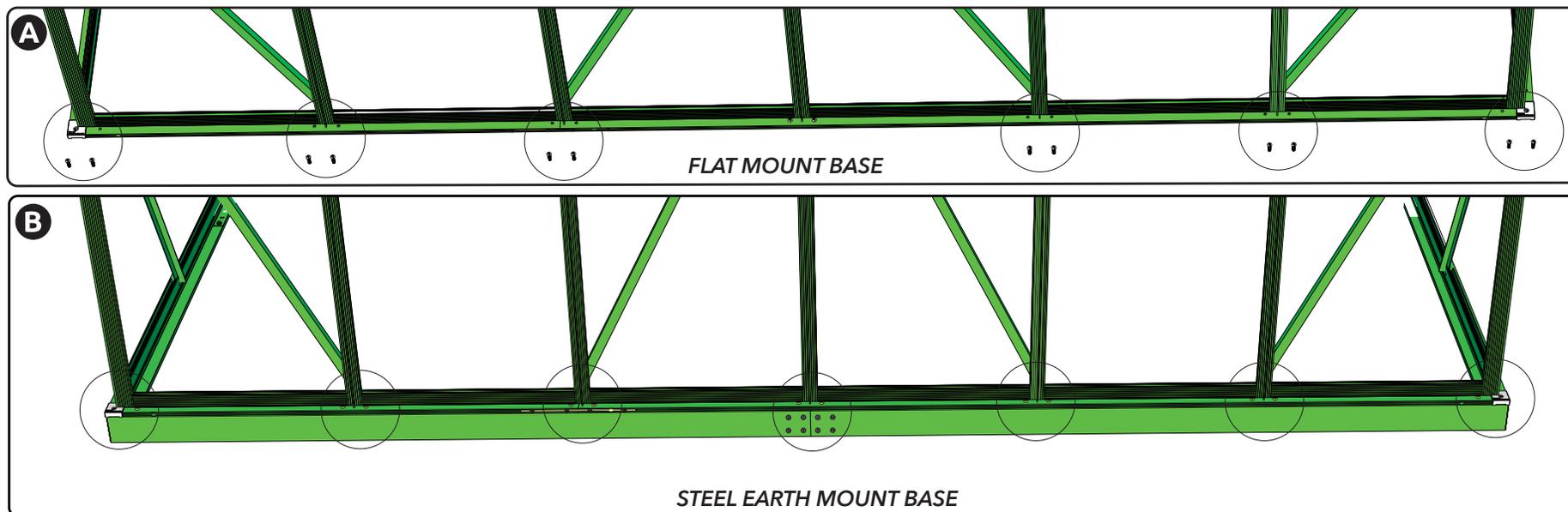
**11.3** Use the **8B-X** supports to attach the corner **1A** pieces to the base as shown in **A**.



## ATTACHING BACK WALL TO PRE-INSTALLED BASE KIT

**11.4** 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 a an anchoring screw. Have the hardware and tools ready for the installation. There will be (14) fasteners for the back wall base installation.

**11.5** Use the correct fastener 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 **A** and **B**.



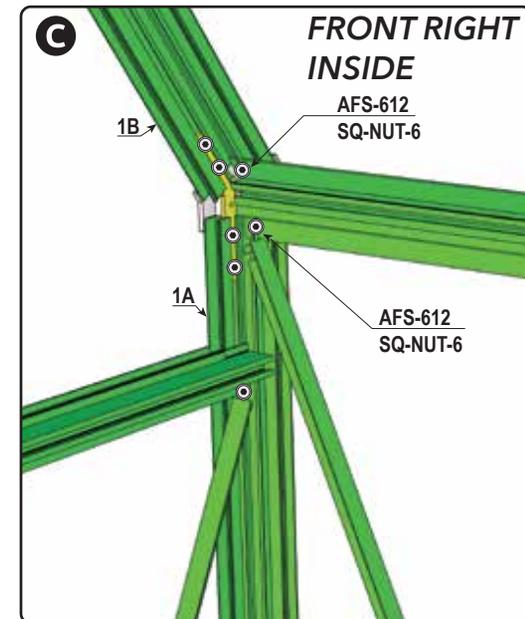
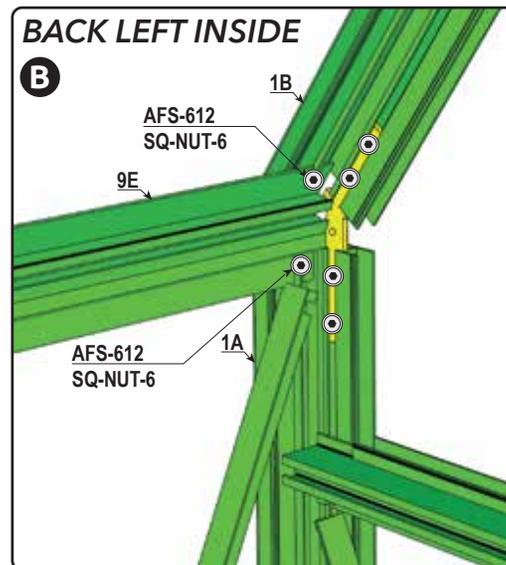
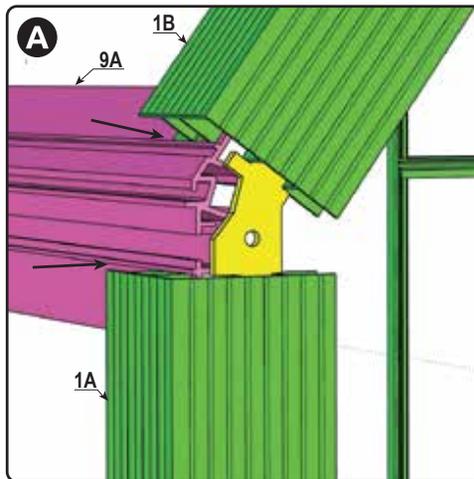


## 9 GUTTER WALL SUPPORT INSTALLATION CONTINUED

**12.2** 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.

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

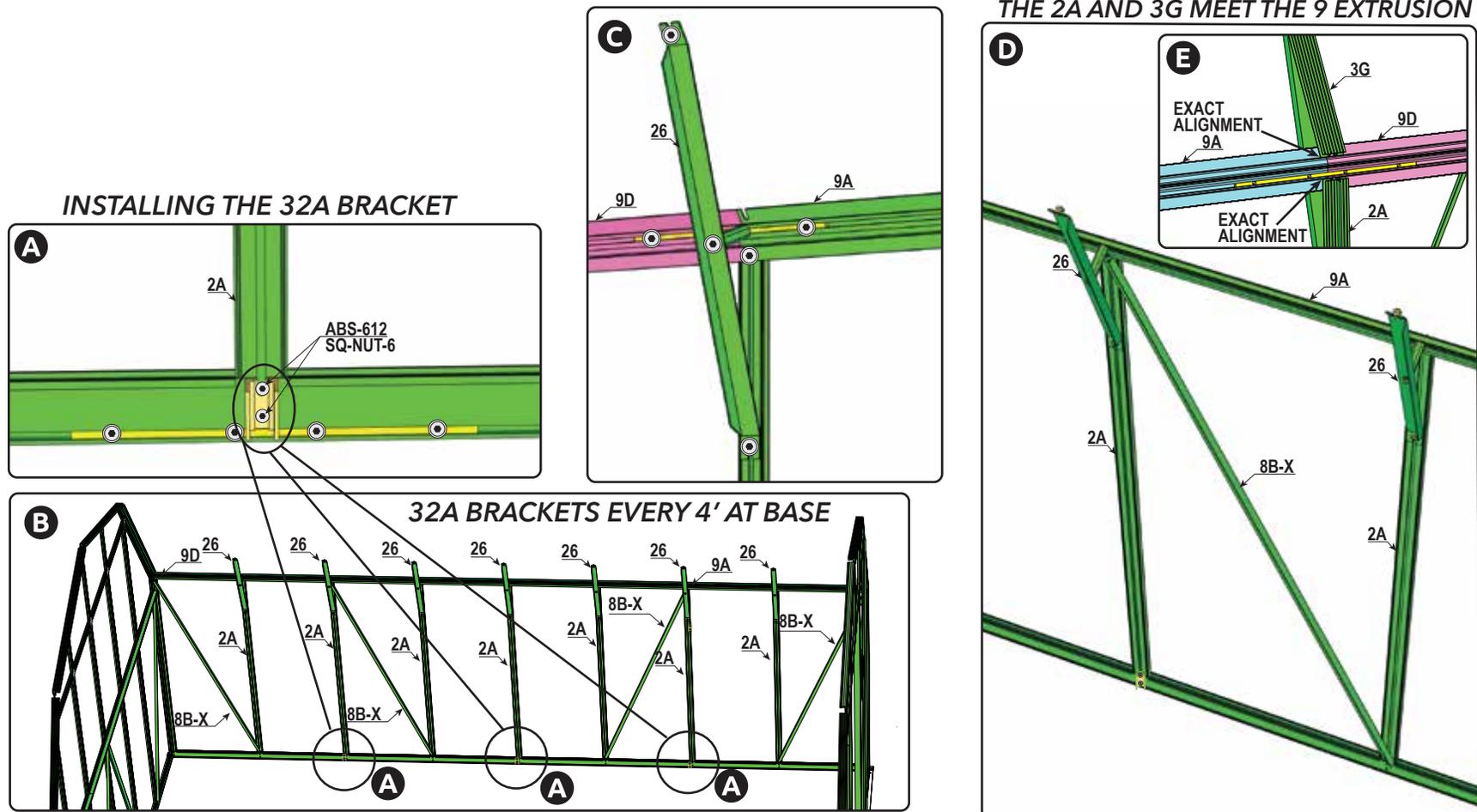
**NOTE EXACT ALIGNMENT WHERE THE 1A AND 1B MEET THE 9**



## 9 GUTTER WALL SUPPORT INSTALLATION CONTINUED

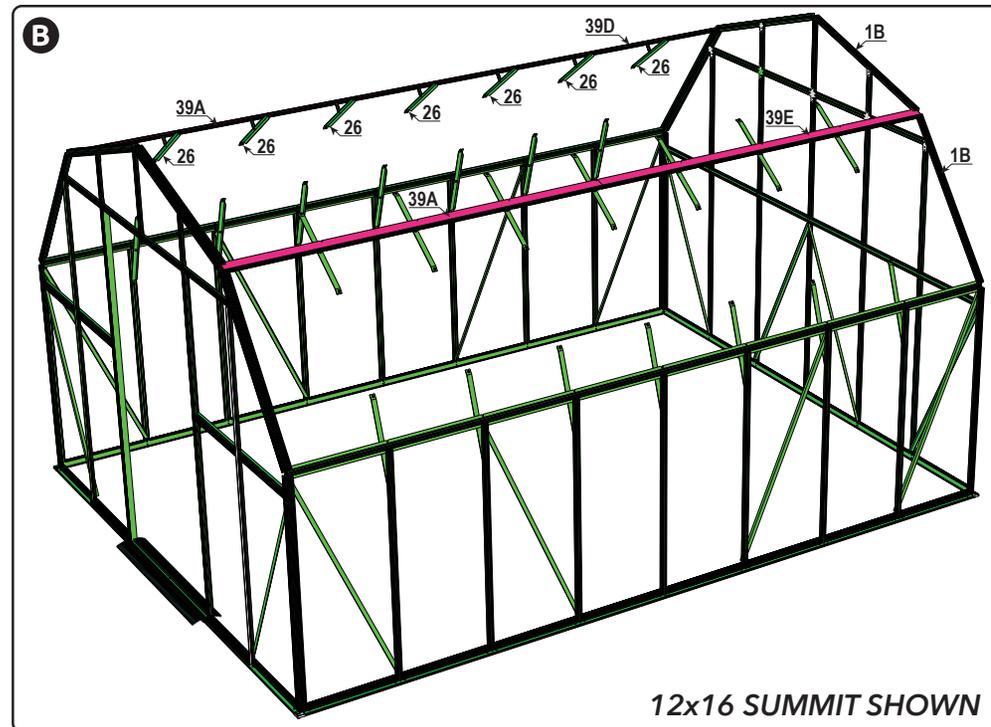
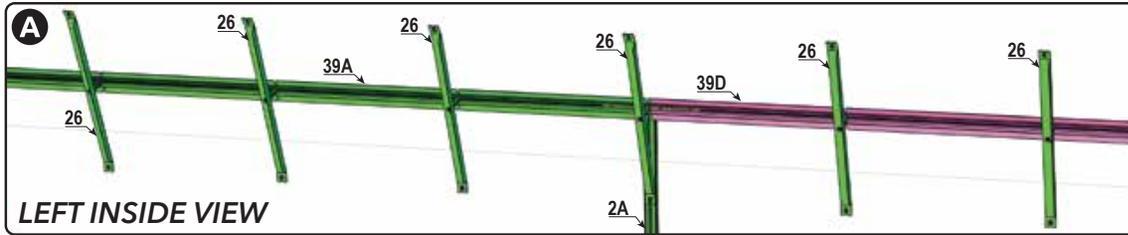
**12.4** The person supporting the middle will keep supporting the length of the 9 connections depending on the length until it is stable. The installers will attach a 2A with the 32A using the ABS-612 and SQ-NUT-6 every 4', see **A** and **B**. Install all of the 2A's along the side wall at every connecting point notch on the BASE and the 9's. Each of the 2A will also 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**.

**12.5** Repeat these steps on the other side of the greenhouse. Be very cautious of wind or weather conditions, you



## 39 UPPER ROOF SUPPORTS INSTALLATION

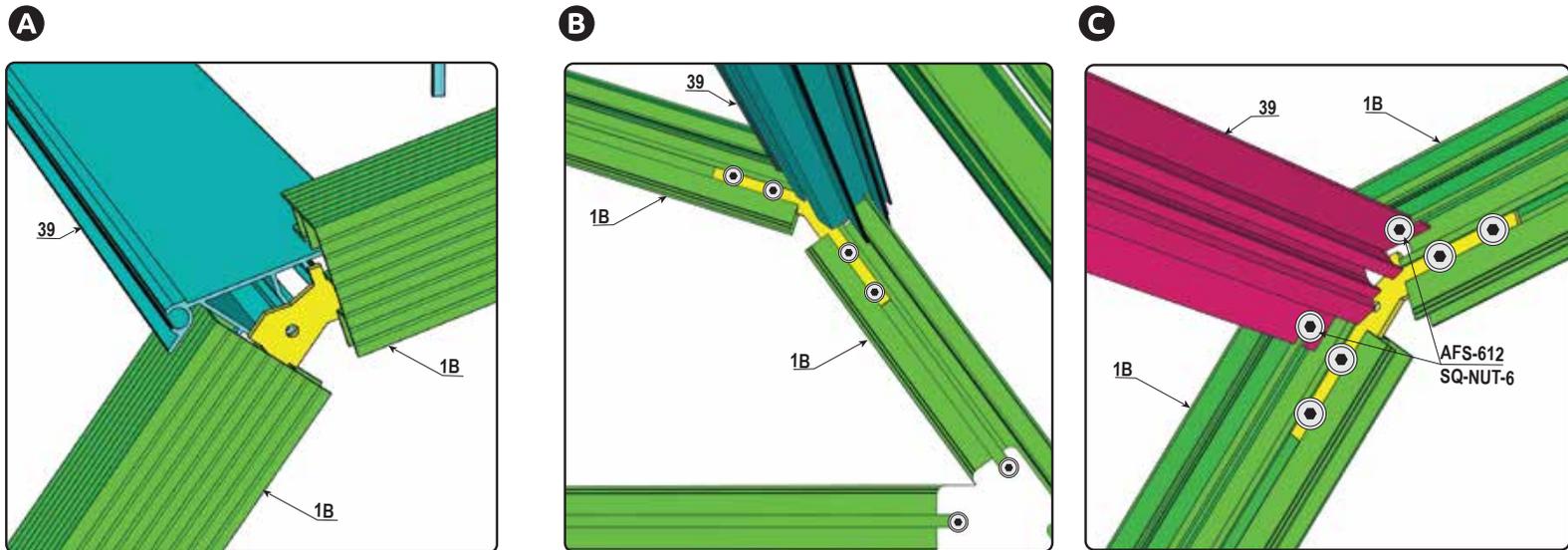
**13.1** Slide or load (loosely) the 26 brackets along the 39 extrusions, there will be a 26 at each of the notches on the 39. At each of the extensions where there is a 14, a 26 will attach directly into the hole so you will remove the nut from pre-assembly of the 26. See **A** and **B**.



## 39 UPPER ROOF SUPPORTS INSTALLATION

**13.2** With 3 people carrying the 9 into place the people at the front and back will attach to the 1B 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.

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



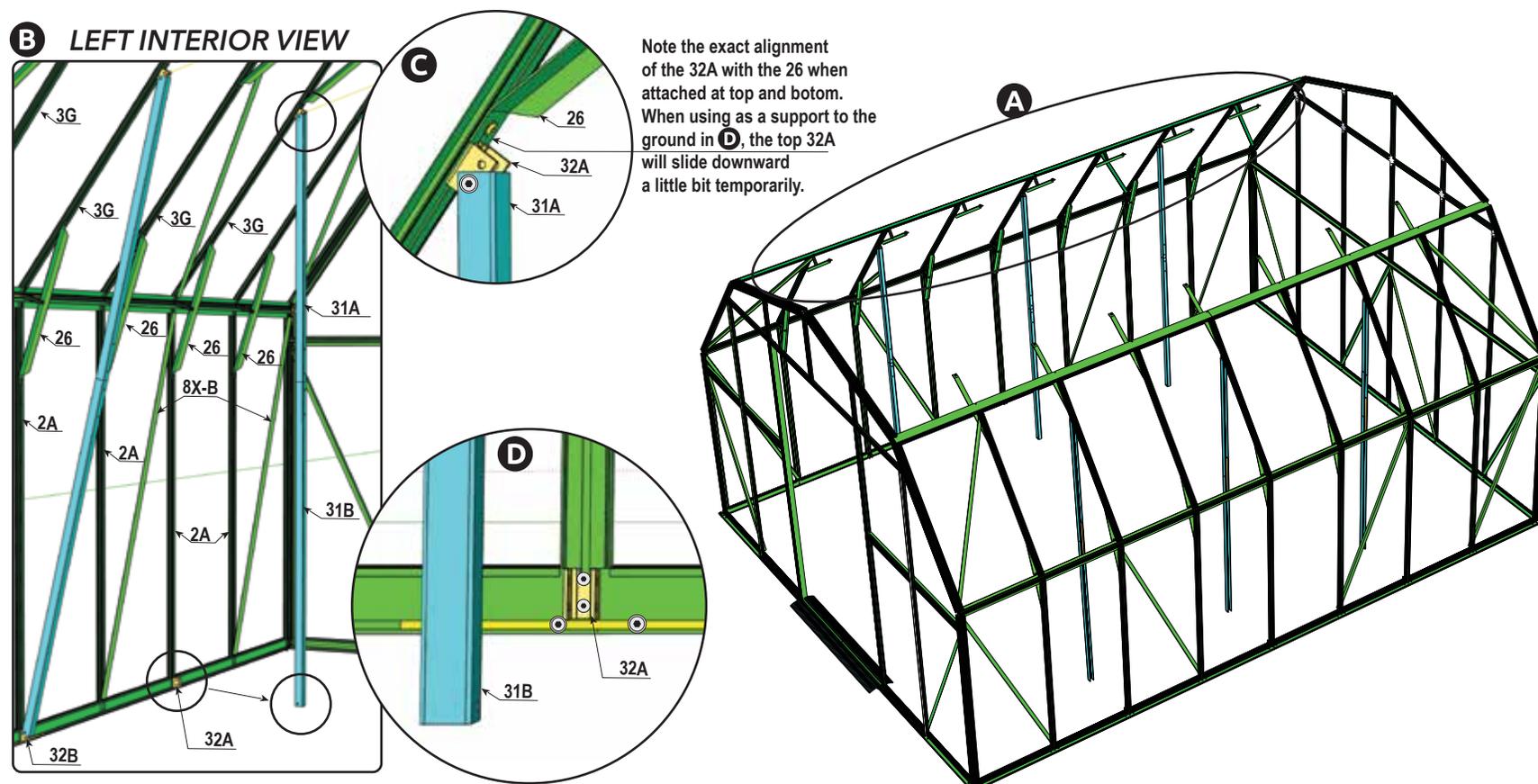
## 39 UPPER ROOF SUPPORTS INSTALLATION

**13.4** 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.

**13.5** Attach the 26's to the top and bottom of the 3G's as shown in **A**.

**13.6** 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.

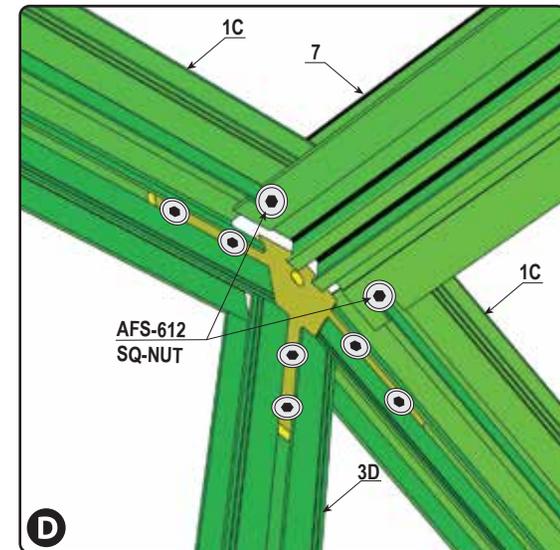
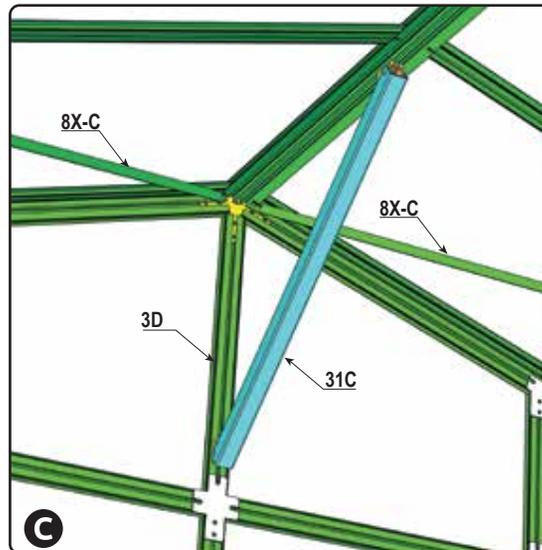
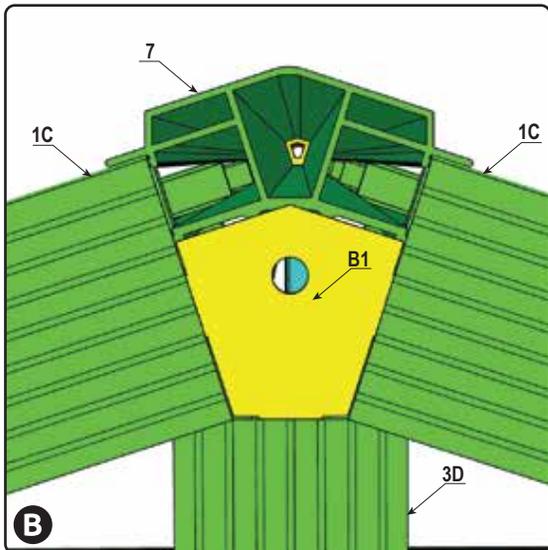
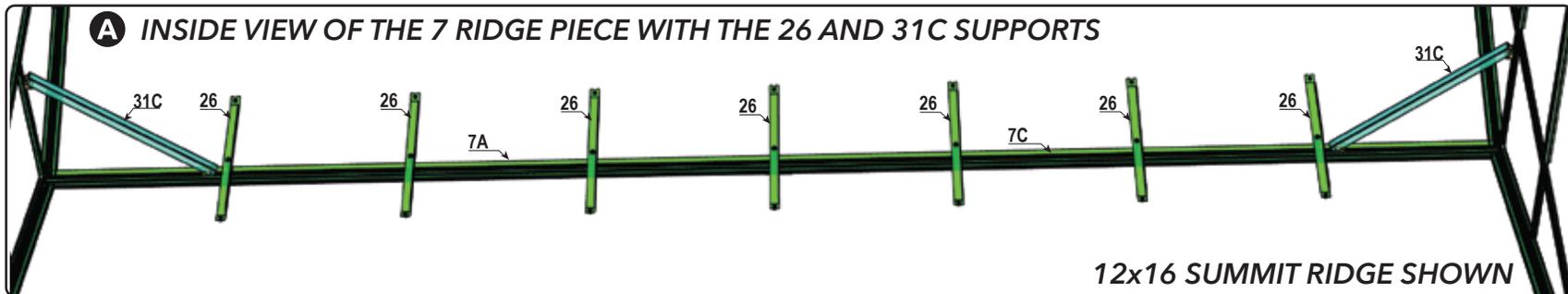
**13.7** Repeat these steps on the other side of the greenhouse. Be very cautious of wind or weather conditions, you may need to have a person continue supporting the side wall if building a longer greenhouse.



# 7 PEAK ROOF SUPPORT INSTALLATION

**14.1** 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 or 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** .

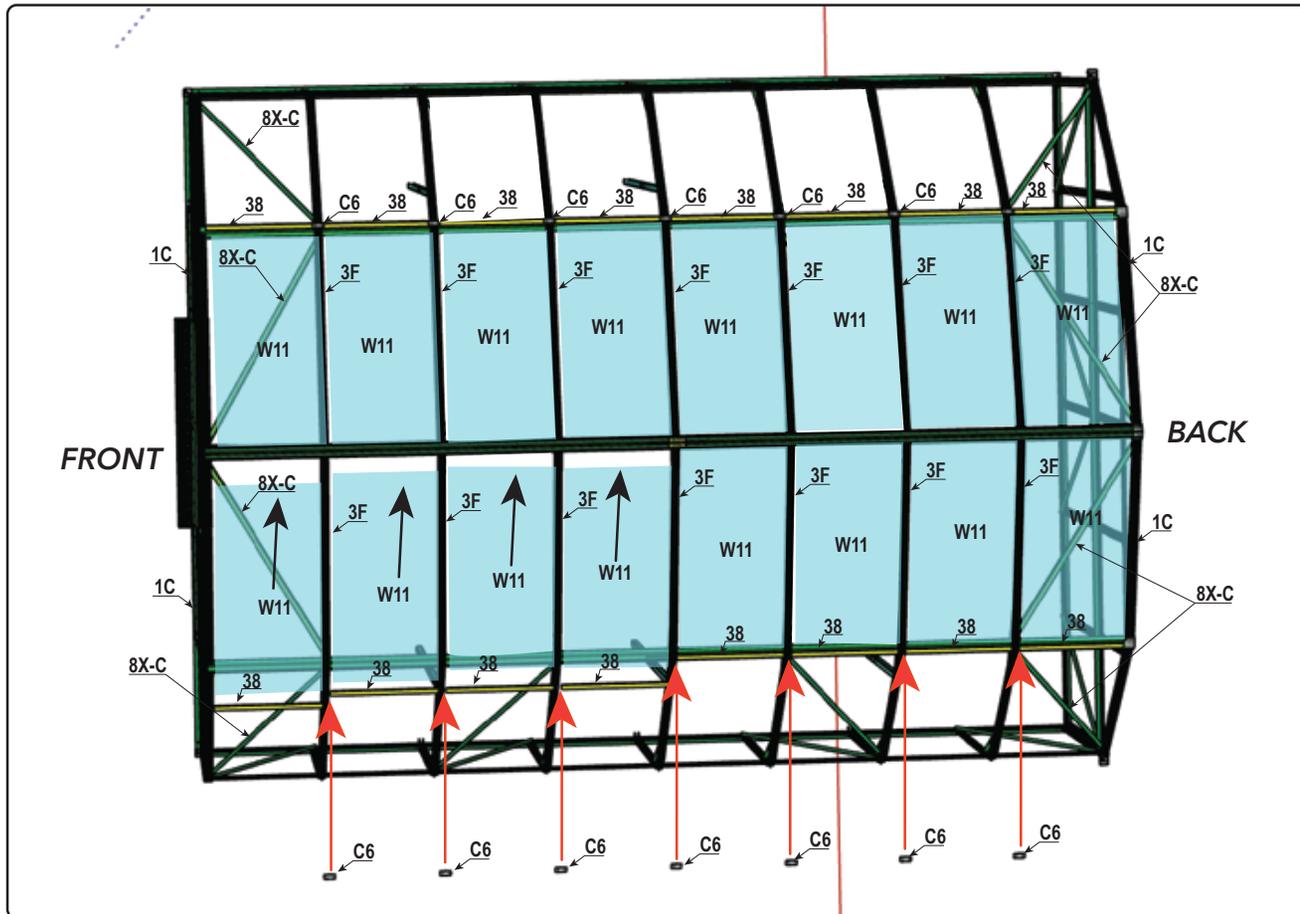
**14.2** With at least 3 people, attach the 7 Ridge to the front and back wall as shown in **B** , **C** and **D** . You will use the AFS-612 with SQ-NUT-6 to attach the 7 and 31C. Attach the 31C to the 7 Ridge as shown in **C** , use the 32A brackets to hold in place to the 7 Ridge and to the front 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

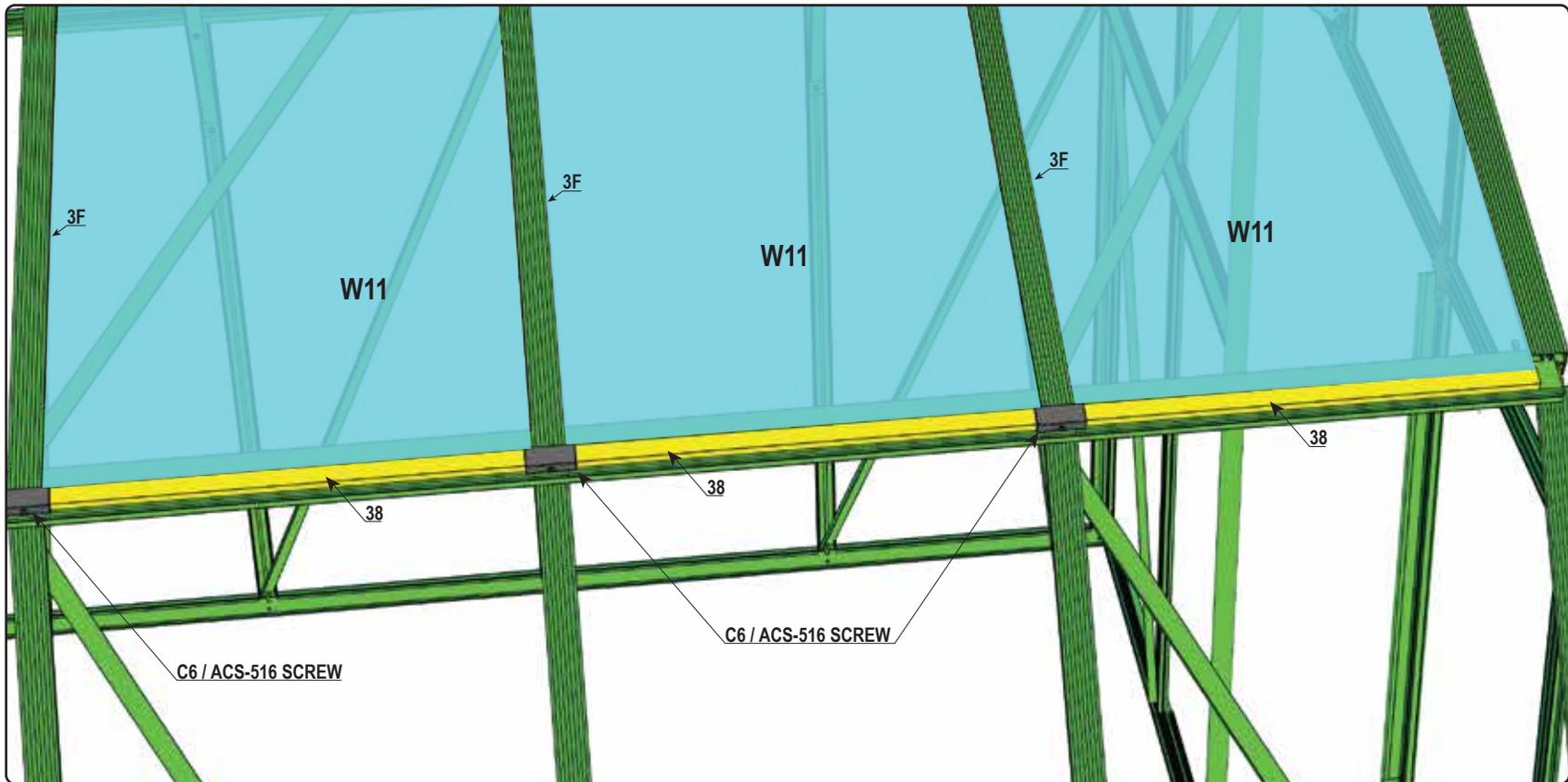
**14.3** Install all the 3F extrusions between the 7 roof piece and the 39 upper eave support using the AFS-612 / SQ-NUT-6 combos, see diagram below. Install the 8C-X supports near the front and back as shown in the upper and mid roof sections using AFS-612 with SQ-NUT-6 combos as shown below.

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



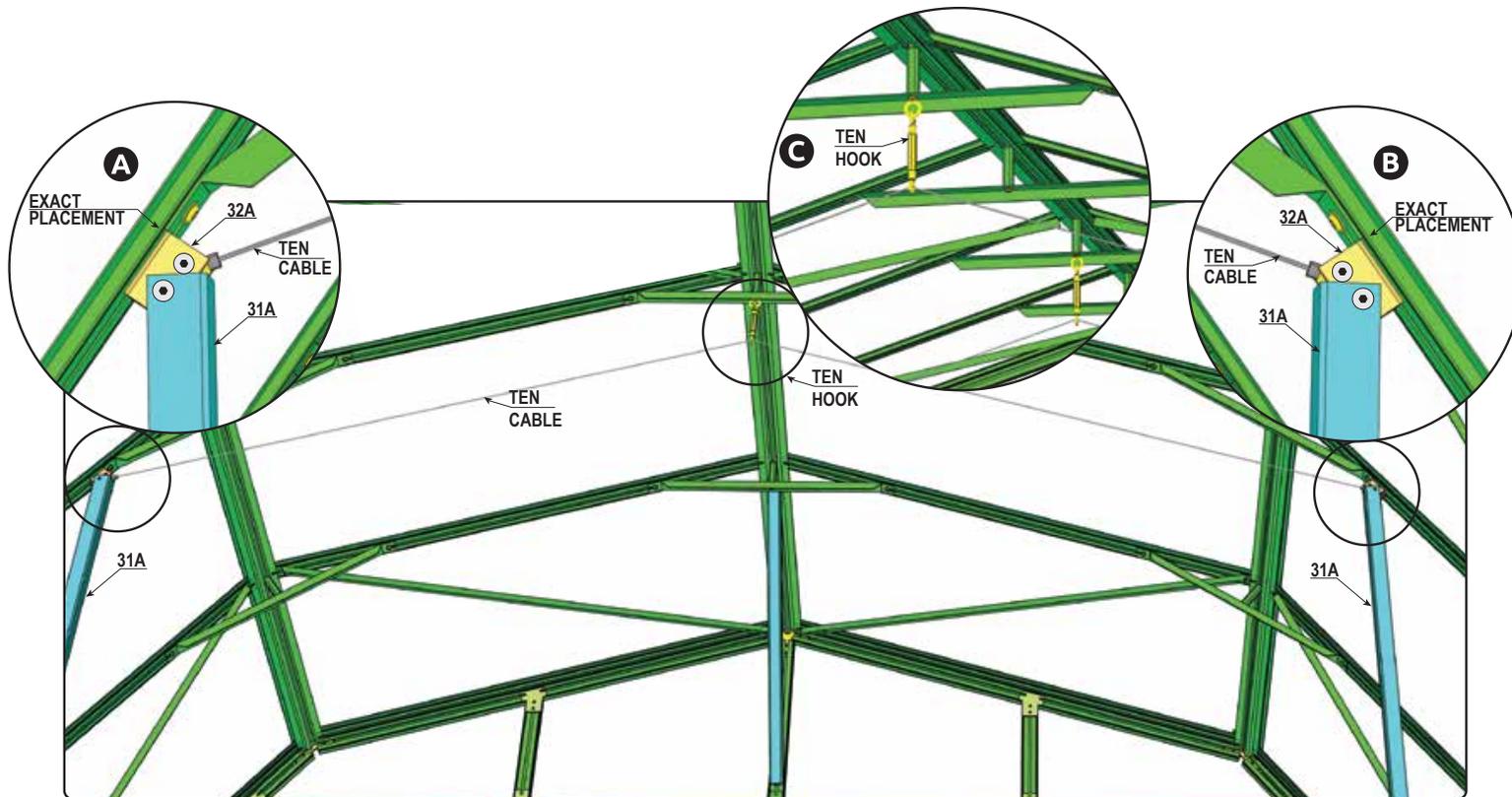
# UPPER ROOF PANEL INSTALLATION

**14.5** Slide the 38 cap onto the bottom of each of the W11 panels. Then use the C6 with the ACS-516 screw to hold the 38 into the end of each of the 3F extrusions as shown below.



## INTERIOR SUPPORT INSTALLATION

**14.6** Install the tension wire thru the EYE of the TEN HOOK on the middle roof 26 support and over to each of the 31A / 31B supports as shown below, the wire will loop the screw on the 32A. See **A**, **B** and **C**.



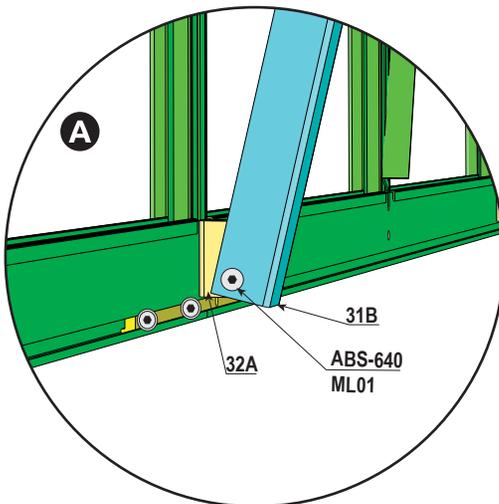
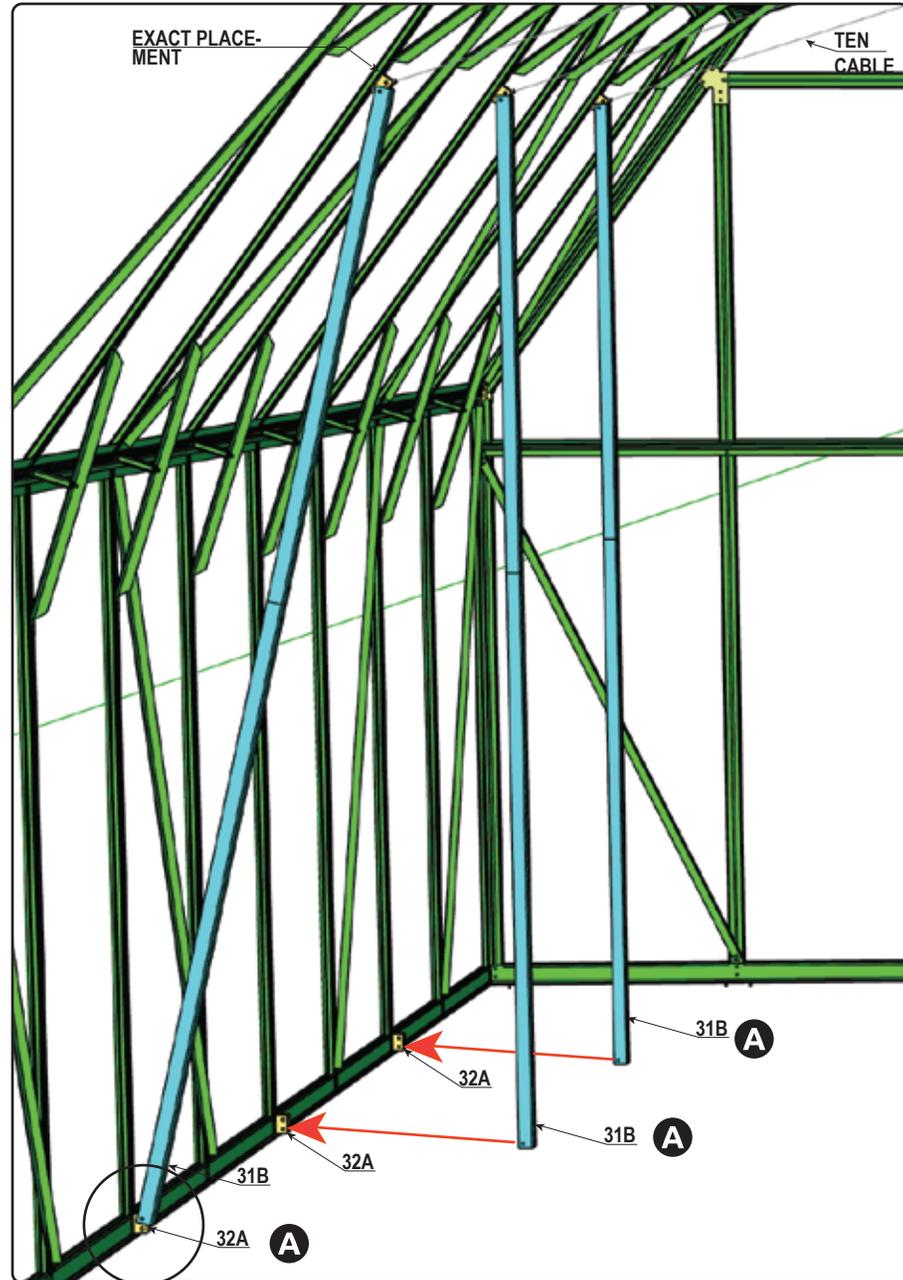
# INTERIOR SUPPORT INSTALLATION

**14.7** Re-attach the 31A / 31B Support to the 32A at the base with the ABS-640 / ML01 combo.

**14.8** 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 tension hook to tighten the TEN CABLE once every thing is installed.

**14.9** Install all the side W7 wall panels, then check for square again and sight 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.

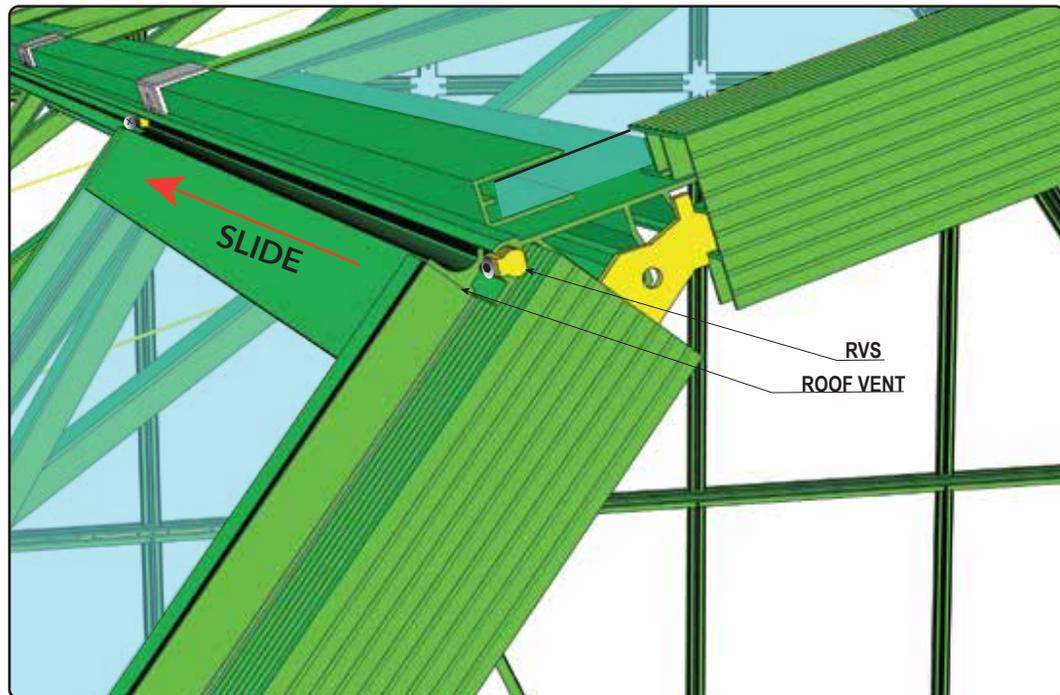
**14.10** Caulk around the top section W11 panels now as it will be difficult to reach later. Refer to the Moisture Control Kit section on pages 11 and 12.



# ROOF WINDOW VENT INSTALLATION

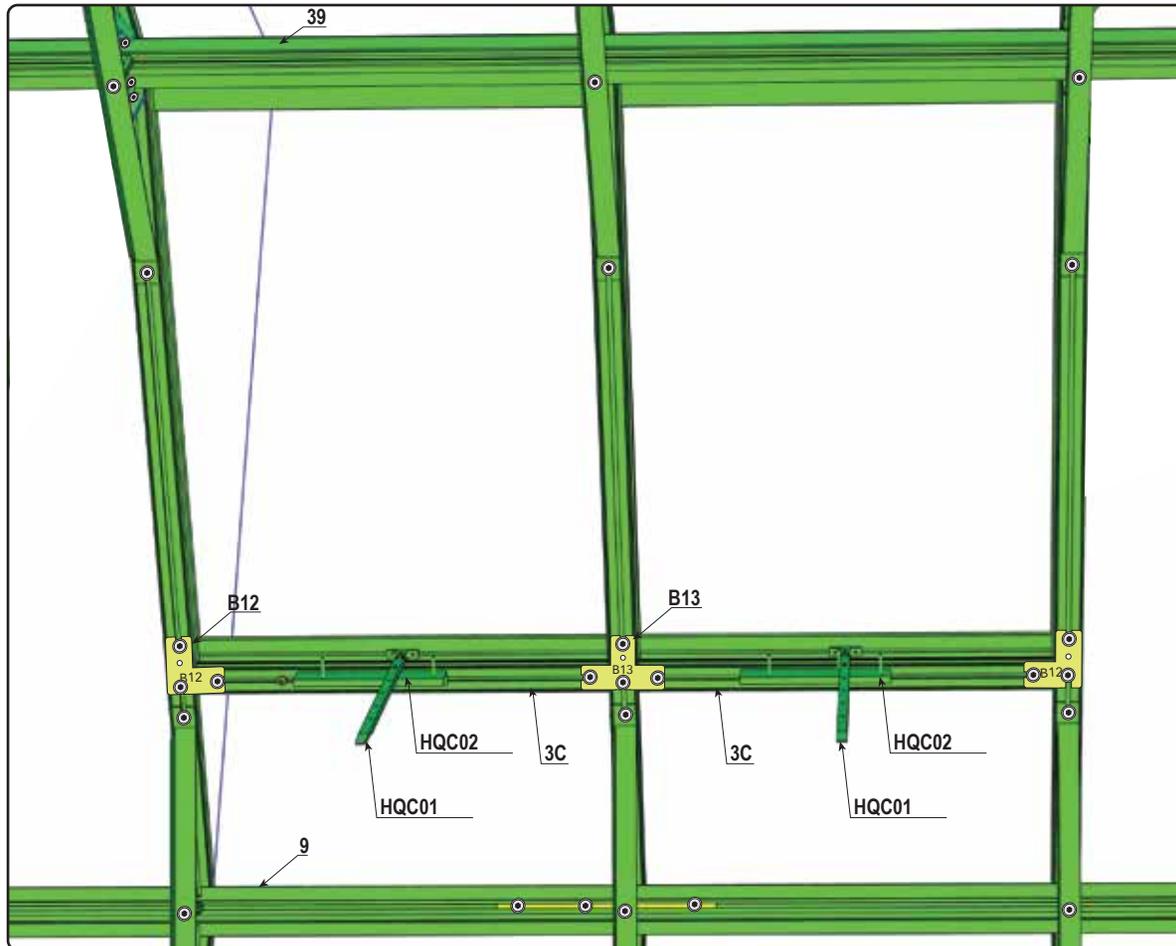
**15.1** Prepare to slide the Roof Window Vents into place, you will need 2 RVS / ABS-48 screw sets for each Roof Window Vent. See graphic below showing how to slide into the 39 track. You may place your Roof Window Vents in any location and they can be right next to each other or spaced out, your choice, just be sure that there is an RVS pre-slid along the track so 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.

**RVS Spacers with ABS-48 Screws.**  
Note the screws will be found in welcome kit with other replacement hardware for this run.



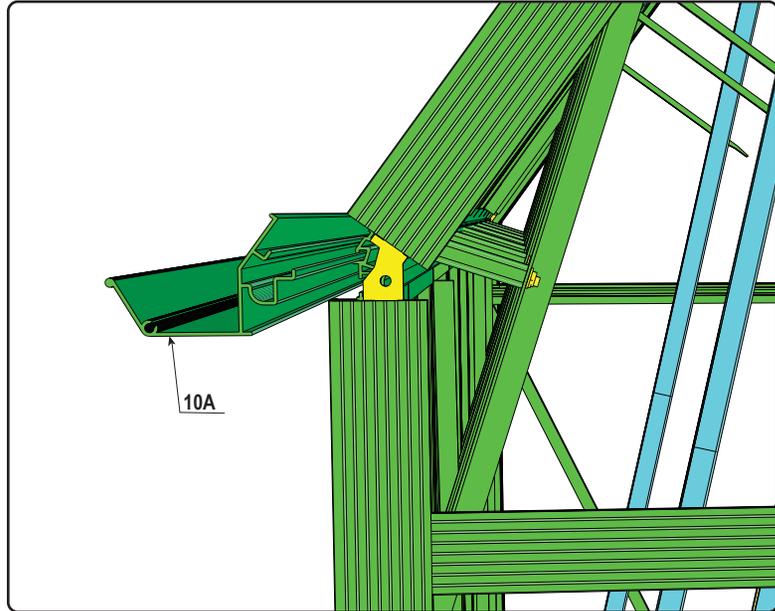
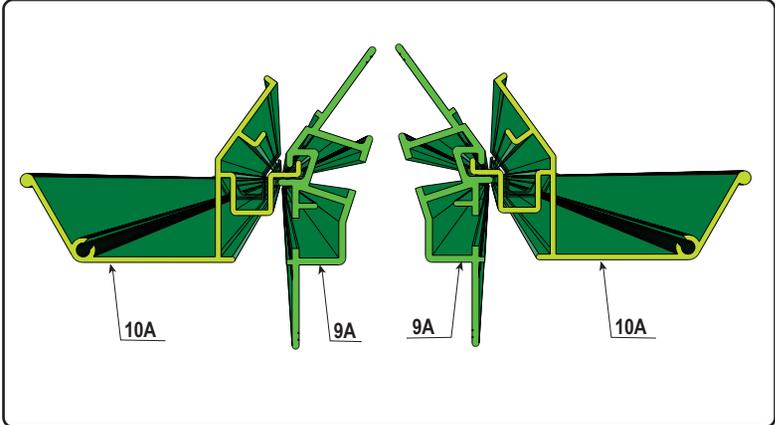
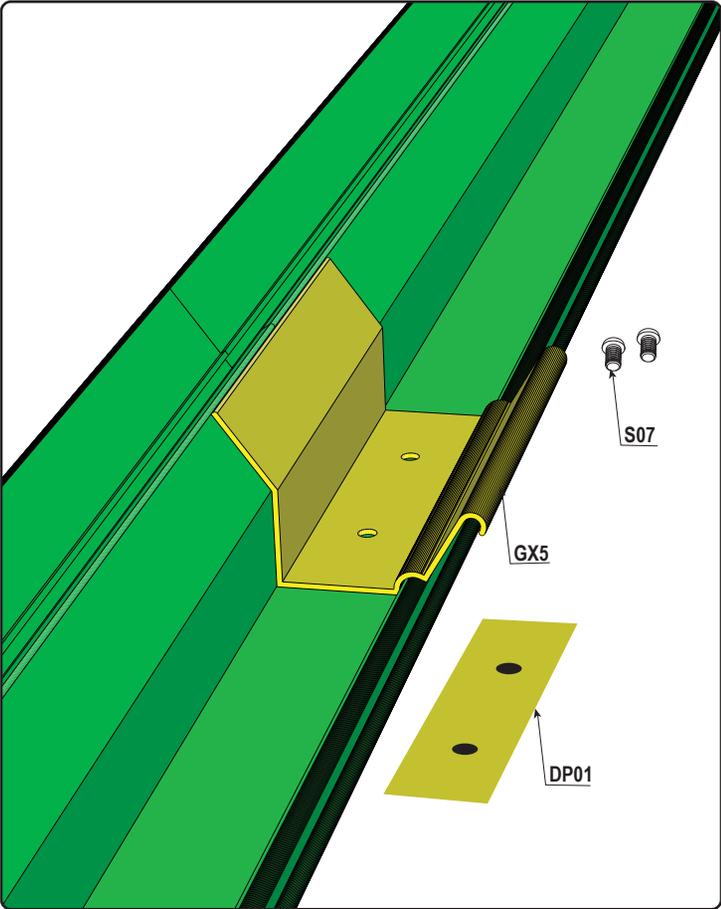
## ROOF WINDOW VENT INSTALLATION

**15.2** 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.



# GUTTER INSTALLATION

**15.3** 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 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.

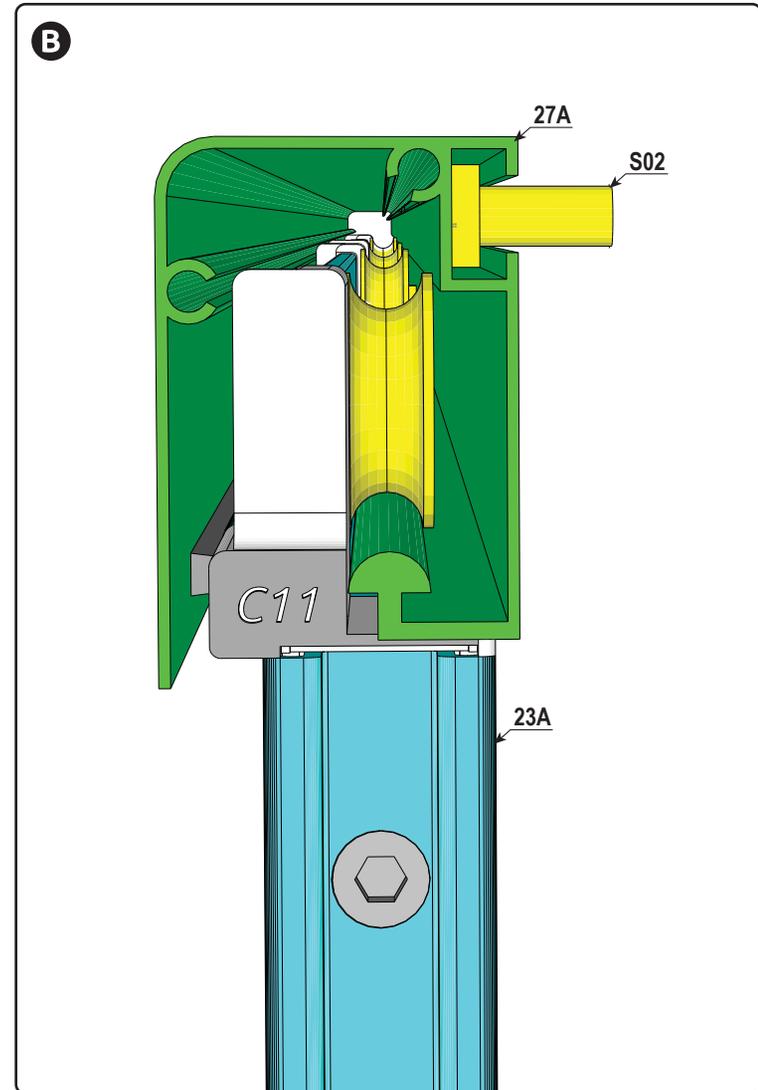
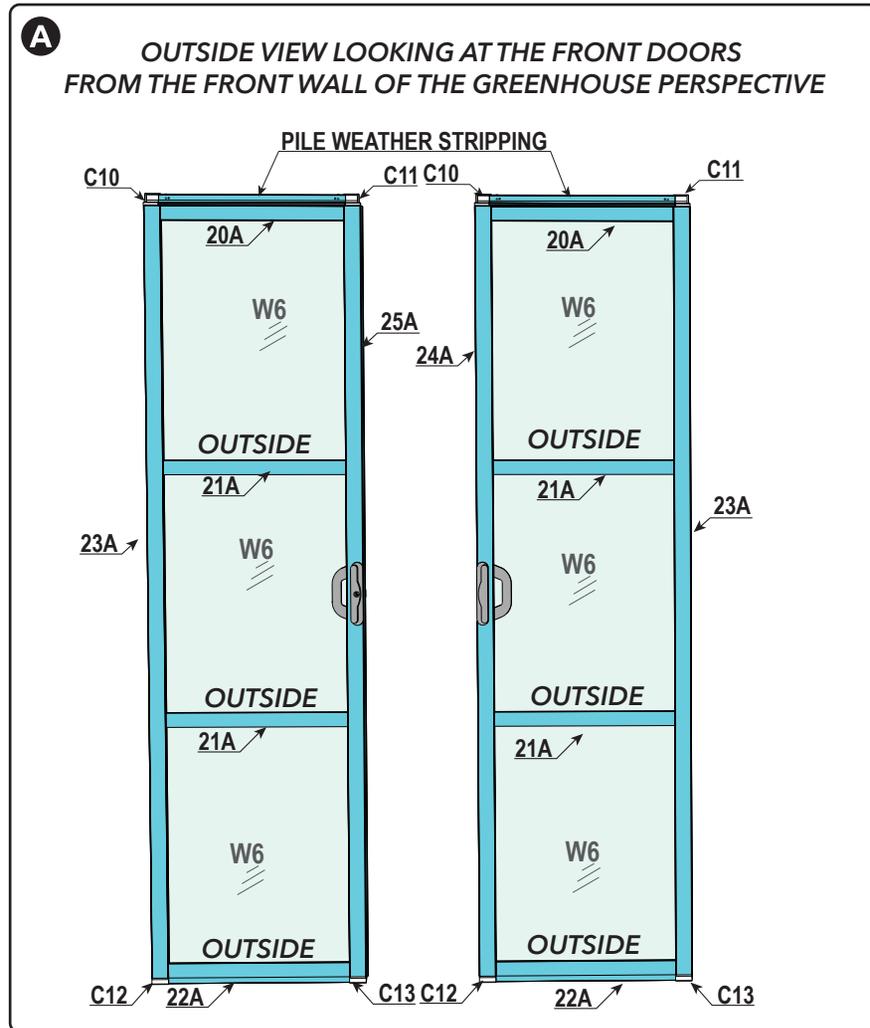


# HANGING DOORS INSTALLATION

**16.1** 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.

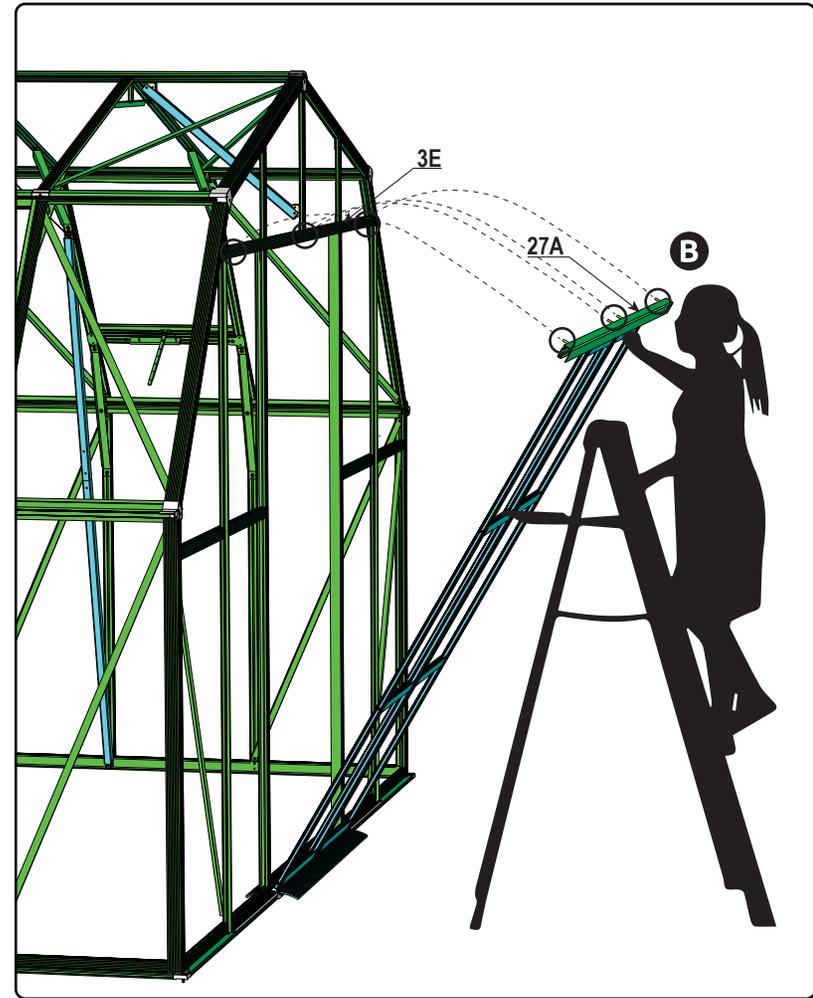
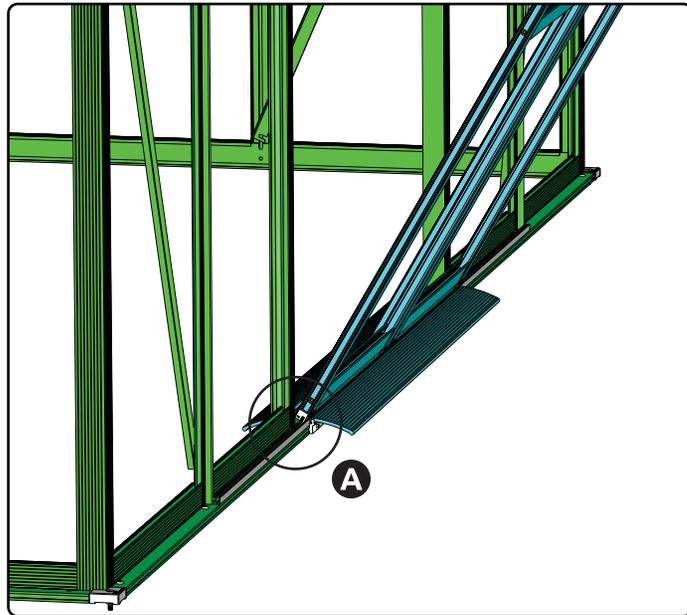
See **B** for reference.

**\*\*Please note that the S02 /ML01 bolts and screws will be in your welcome kit, as we had a packing error on this run.**



## HANGING DOORS INSTALLATION CONTINUED

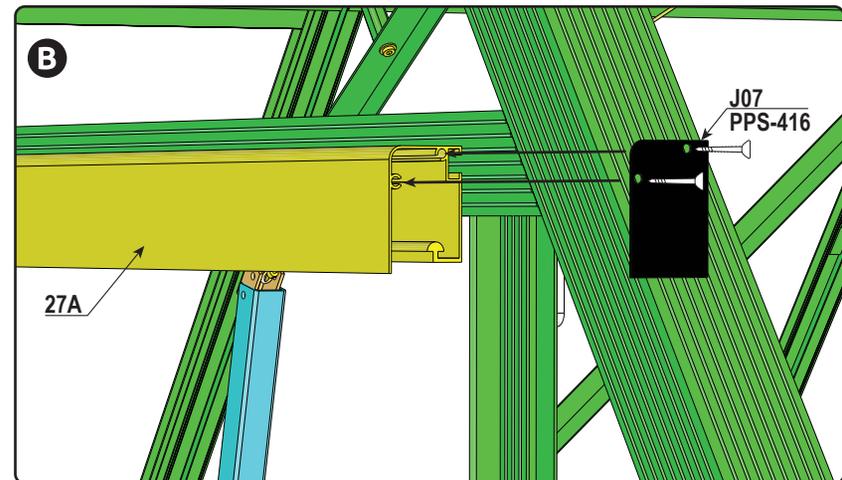
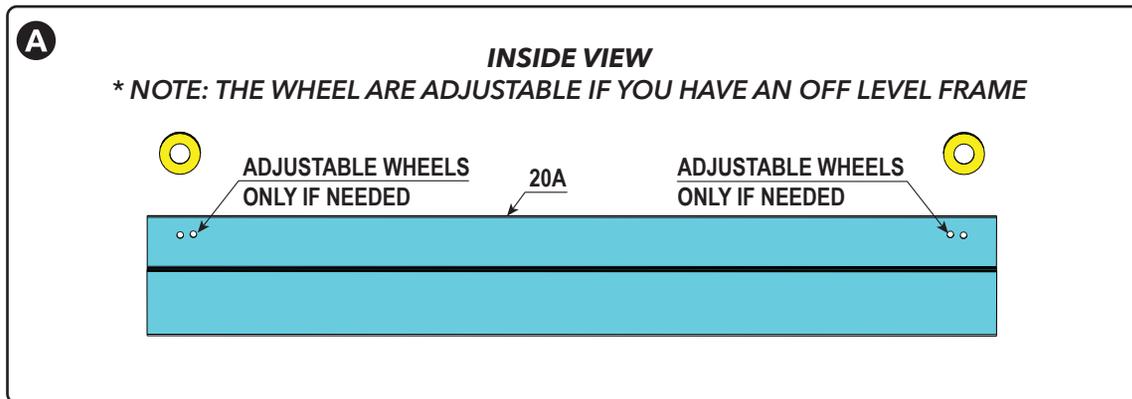
**16.2** With one person on a ladder on the inside of the greenhouse with (4) ML01 nuts and a nut driver in hand, have the other person set the doors into the 11 track as shown in **A**. Then align the (4) S02 screws that were pre-loaded into the track of the 27A into the appropriate holes on the 3E. 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 thru the 3E. See **B** and **C**.



## HANGING DOORS INSTALLATION CONTINUED

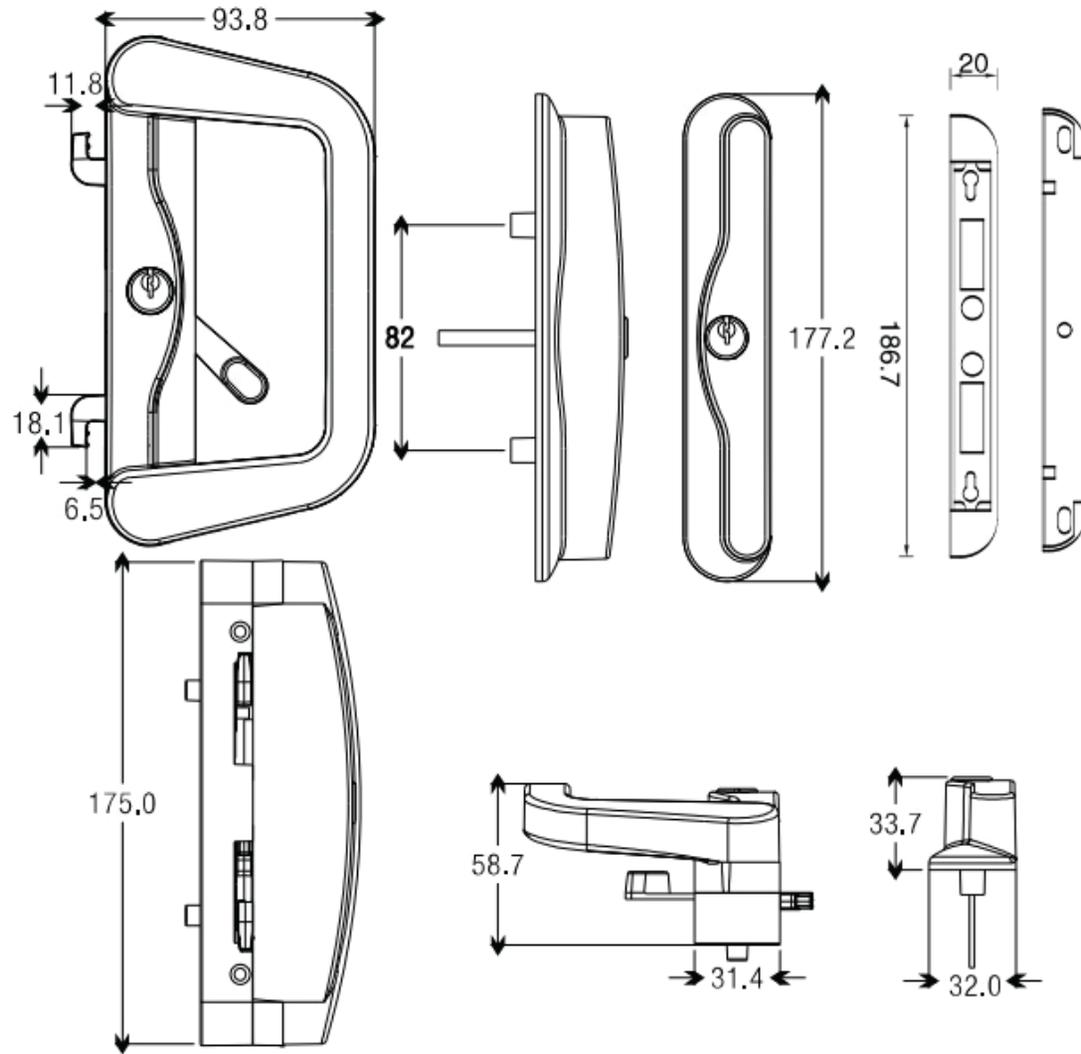
**16.3** Test your doors by sliding to be sure that the doors are closing properly and there are no gaps in the closure. If there is a problem now is the time to fix it, you may need to remove the 27A from the frame and adjust the wheels, then re-attach the 27A to the wall. See **A**.

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



# DOOR HANDLE INSTALLATION

SEE VIDEO ON OUR [GRANDIOGREENHOUSES.COM](http://GRANDIOGREENHOUSES.COM) WEBSITE FOR INSTALLATION INSTRUCTIONS.



# END CAP INSTALLATION

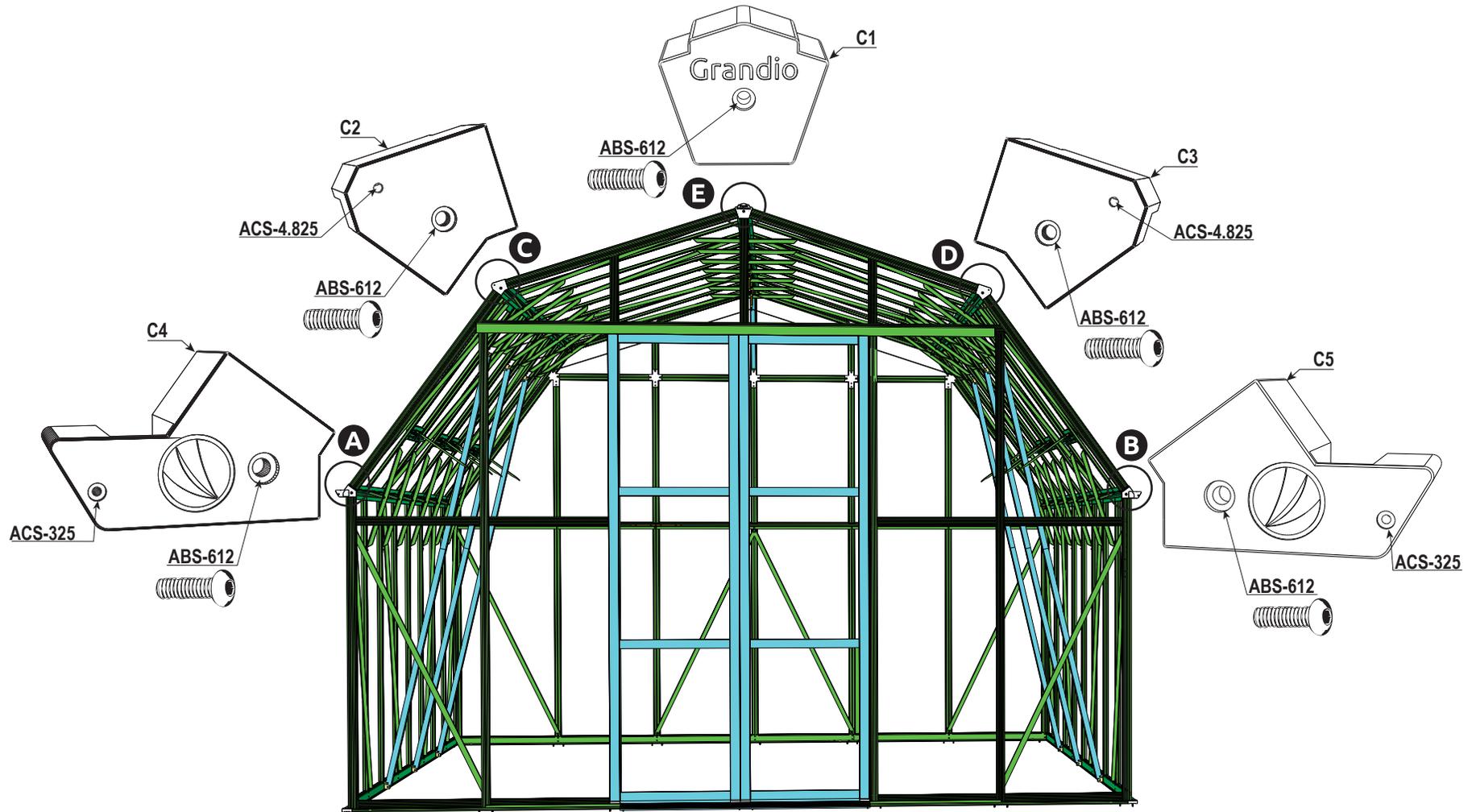
**17.1** Grandio recommends applying silicone caulk to the inside edge and seams of the end caps as you are installing them to create a nice seal.

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

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

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

**17.5** Repeat these steps on back side of the greenhouse.



## FINISHING TOUCHES

**17.6** Caulk around all polycarbonate panel windows on all sides and the doors.

**17.7** Use the provided Goo Gone to remove any remaining stickers. Check all combos and make sure they are tight.

**17.8** 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.

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

**17.10** Go around the entire greenhouse structure and confirm all nut and bolt combos are tight, and secure.

**Please call us with any questions you may have we are here to help!!**

**1-866-448-8231**



**GRANDIO**<sup>®</sup>  
GREENHOUSES

## CONTENTS OF EACH MANUAL

INSTALLATION MANUAL 1  
BASE KIT

SEE INSTALLATION MANUAL 2  
GREENHOUSE ASSEMBLY

SEE PARTS LIST MANUAL 3  
PARTS LIST

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

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

**BACK PAGE MANUAL 2**