

### GRANDIO ELEMENT FLAT MOUNT BASE 6X4, 6X8 & 4' EXTENSION KIT MANUAL



Grandio Element 6x8 with Base Kit Shown In Image

## **GREENHOUSE USER MANUAL**

© 2015 Grandio Greenhouses, Backyard Living Source Inc. All rights reserved February 2, 2016 Extendable Models STOP This manual is for Flat Mount Element 6x4, 6x8 and adding on 4' extension kits to both Element models



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 aluminium and polycarbonate and 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 Standard Time)

Backyard Living Source 9543 W. Emerald St., Suite 101 Boise, ID 83704 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 at the back of this manual on pages 55-61. The base kit parts list is at the front on page 12.

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.

- 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 this entire manual to get familiar with all pieces and parts prior to beginning assembly. Follow the steps outlined in the order presented!

### 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, read the instructions and identify all parts using the hardware identifier and parts list on pages 55-61. 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 or leave in the sun 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 cleaners.

• 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 manual. Please anchor the greenhouse down to a firm and level base. If not properly installed warranty may be void.

#### NEEDED FOR ASSEMBLY

- Tape Measure • Level
- 2 Step Ladders • Work Gloves
- Carpenter Square • At Least 2 Adults
- Permanent Marker
- Masking Tape
- Safety Glasses
- Drill
- Silicone Caulk
- Folding Utility Table



When you see this icon pay special attention to

the helpful tips we have provided that will

make installation more efficient.



## **ASSEMBLY INSTRUCTION STEPS**

PREPARE FOR ASSEMBLY					
<b>STEP ONE:</b> BASE ASSEMBLY					
<b>STEP TWO:</b> FRONT ASSEMBLY					
<b>STEP THREE:</b> BACK ASSEMBLY					
<b>STEP FOUR:</b> MIDDLE ASSEMBLY					
<b>STEP FIVE:</b> DOOR ASSEMBLY					

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# **PREPARE FOR GREENHOUSE ASSEMBLY**

## 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 or surface conditions in your area.

Pre-read pages 10-18 for flat mount base kit assembly information.

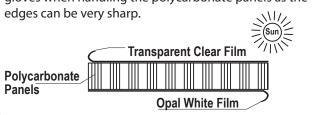
Go to **www.grandiogreenhouses.com** for foundation ideas and tour our online learning center for tips, tricks and videos for putting your greenhouse together.

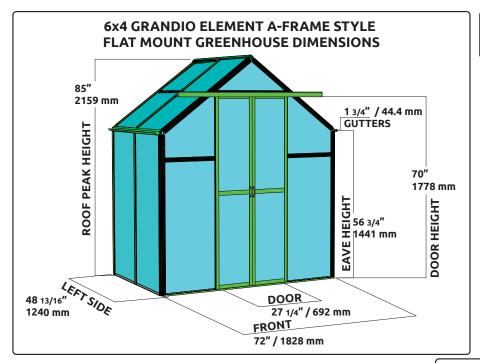
#### MPORTANT: GREENHOUSE ASSEMBLY

Before assembling your new greenhouse, you must have at least 2 people available to help. You must finish assembly in 1 day, do not leave a partially assembled greenhouse out in the elements. Your greenhouse must be anchored to your surface.

#### IMPORTANT: POLYCARBONATE PANELS

The UV-Protected side is covered with clear film 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.

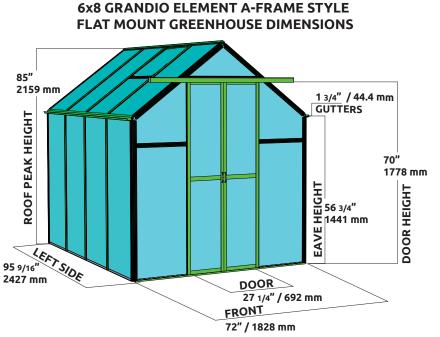




#### \*SEE BASE KIT ASSEMBLY SECTION FOR ALL GREENHOUSE BASE DIMENSIONS ON PAGES 13-15.

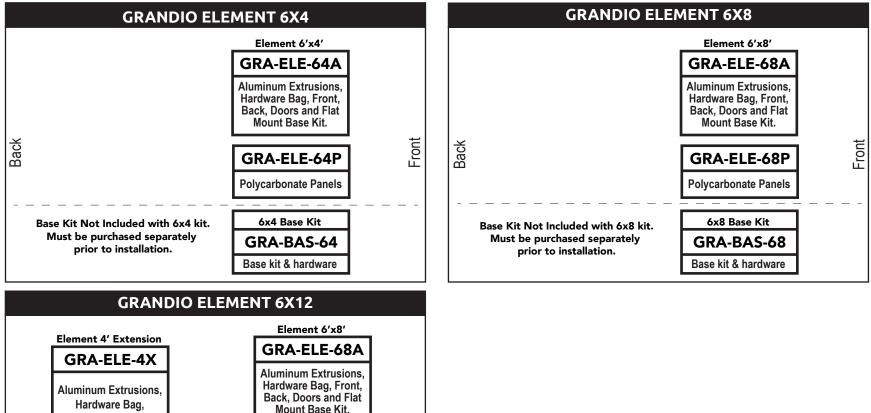
- \* INTERIOR DOOR DIMENSIONS: 27 1/4" WIDE X 69" HEIGHT
- \* 1 ROOF VENT WITH 6X4
- \* 2 ROOF VENTS WITH 6X8
- \* 3 ROOF VENTS WITH A 6X12
- \* IF USING A 4' EXTENSIONS KIT WITH A 6X4 KIT YOUR DIMENSIONS WILL BE THAT OF THE 6X8.

\* IF USING A 4' EXTENSION KIT WITH A 6X8 KIT, YOU WILL BE BUILDING A 6X12, THE LENGTH WILL BE 3626 MM OR 142 3/4".



# **ELEMENT BOX CONFIGURATIONS**

We recommend that you lay all of your boxes out as shown below for an organized assembly. Locate your greenhouse size and situate near your assembly site. We suggest you lay the parts out on a tarp so you do not lose items in the grass or dirt near your building site. \*See the reference diagrams on pages 7-9 for more information about how the parts will go together and what makes up each section for the assembly.



Back

for 4' Extension. Base Kit Not Included with 6x8 kit. Must be purchased separately

prior to installation.

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4' Base Kit Extension.

1 Roof Vent.

**Polycarbonate Panels** 

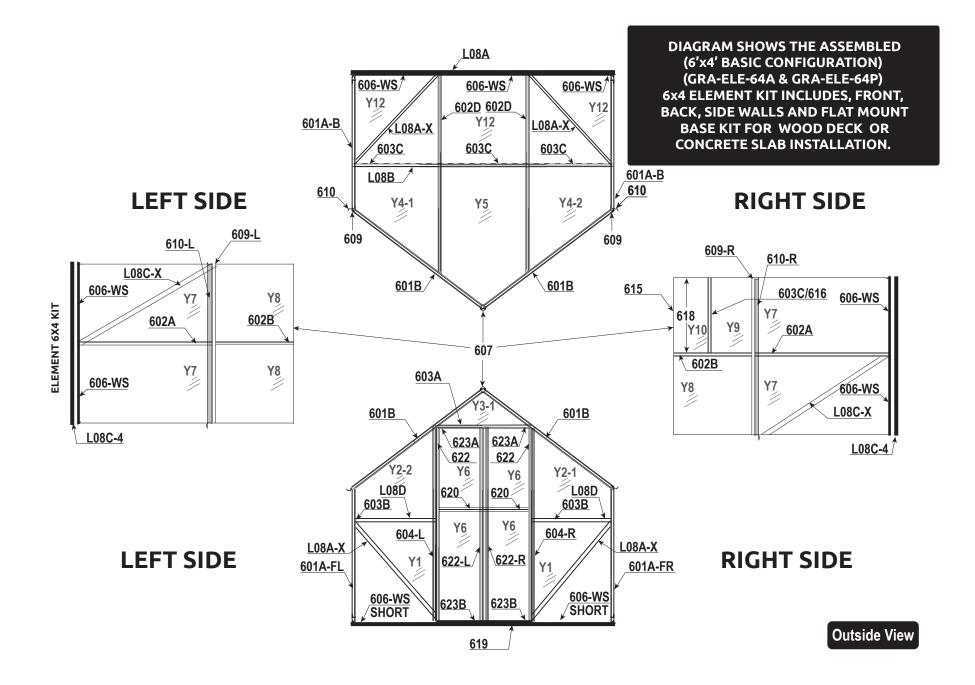
GRA-BAS-68 Base kit & hardware

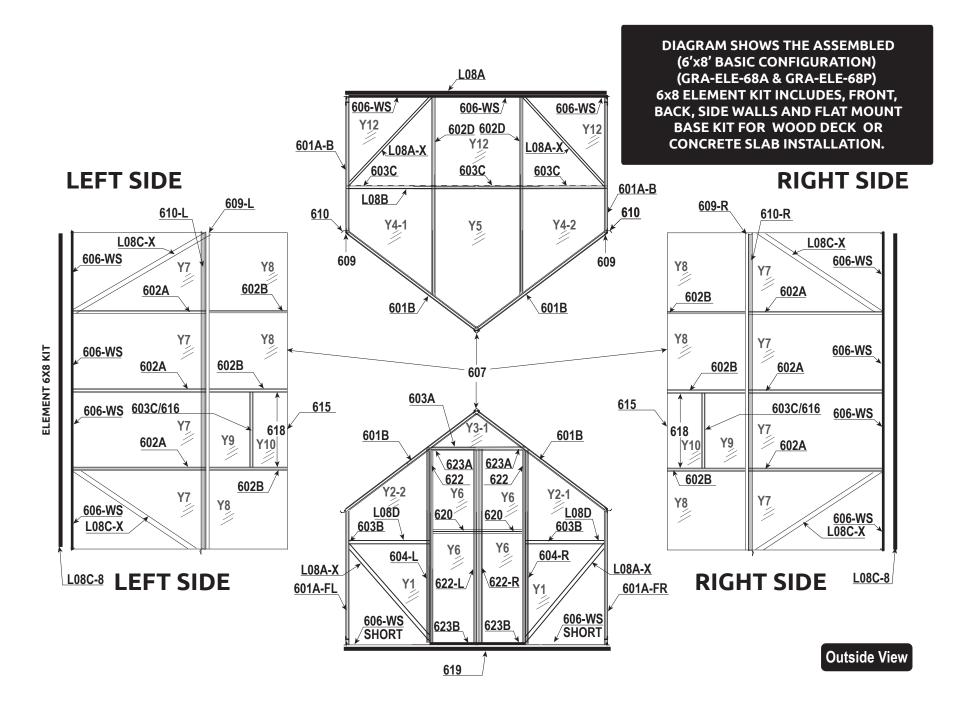
**GRA-ELE-68P** 

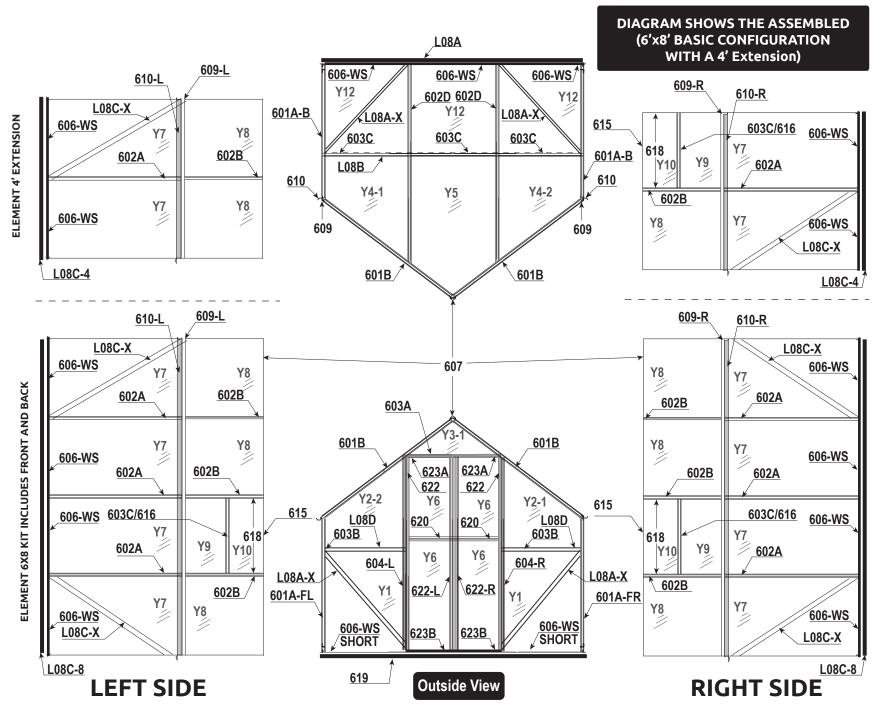
**Polycarbonate Panels** 

6x8 Base Kit

Front







# **BASE KIT** ASSEMBLY INSTRUCTIONS

#### Pre-Plan The Placement Of Your Structure

Allow enough room to get a wheel barrow in and around your structure.

Be sure the orientation will allow for proper drainage in and around your greenhouse.

It is recommended that you place your greenhouse in an area of your property that receives the most sunlight but is also somewhat protected by trees, fencing or your home for wind protection and also to keep the temperature up during early spring and late fall.

The best placement depends on the features of your property, it is suggested in most scenarios to have your greenhouse face South on its broadest side and to have the door face East or West depending on typical wind directions in your area. Do not worry if your orientation will not allow for the placement to be as suggested, as a greenhouse that is facing North is better than no greenhouse at all.

Avoid building your greenhouse at the base of a slope as these are often frost pockets where cold air collects, this will not be good for your greenhouse in keeping the temperature up inside.

**Extreme Wind Conditions:** If you live in a windy location there is no way to build a 100% storm safe greenhouse, but there are a number of things you can do to minimize the chance of damage. Ensure that the base is level and square, be sure all panels are tightly in place and that all aluminum extrusions are tight. The main problem is usually that wind gets into the greenhouse and the pressure pushes a panel out and then the force of the wind on the interior causes more damage. It is best if you are expecting an extreme weather event that you disable any auto roof vents and make sure all doors and windows are closed and locked shut. Also you may need to build a wind break for extreme condition areas where wind is constant and extreme.

See our website **GrandioGreenhouses.com** for Extreme Weather Anchoring Kits and Moisture Control Kits to aid in protecting your greenhouse in the event of harsh weather conditions prior to beginning assembly.

It is ideal for your greenhouse to have water, electricity and even gas plumbed into place before construction. This will make watering plants and keeping the temperature and air circulation to the max efficiency.

## You will need to choose an anchoring system prior to installation, see our website for options: www.GrandioGreenhouses.com

For Cement Base Installation: We recommend you use wedge style concrete anchoring bolts to secure your structure.

For Deck Base Installation: We recommend you use anchoring bolts to secure your structure.

**For Earth Installation:** We recommend you use the Grandio Base Kit with the BA-A1 / L-BOLT anchoring system. With this method you will bury the L-Bolts into the ground and secure into place with quickrete.

# **FLAT MOUNT** ASSEMBLY INSTRUCTIONS

**\*\*BASE SURFACE MUST BE LEVEL & SQUARE,** 

FOUNDATION MUST BE PROPERLY ALIGNED AND ANCHORED PRIOR TO GREENHOUSE ASSEMBLY

FOLLOW THE STEPS IN THIS SECTION AND USE PROVIDED HARDWARE TO SECURE YOUR FLAT MOUNT BASE TO YOUR CONCRETE SLAB OR WOODEN SURFACE.

IF YOU ARE INSTALLING INTO AN EARTH SURFACE USE THE GRANDIO BASE KIT WITH THE BA-A1 / L-BOLT ANCHORS AND FOLLOW THE INSTRUCTION MANUAL FOR THAT INSTALLATION METHOD.

PREPARE TO LAYOUT YOUR FLAT MOUNT BASE KIT. SEE DIAGRAMS SHOWING HOW THE FLAT MOUNT BASES SHOULD BE PRE ASSEMBLED.

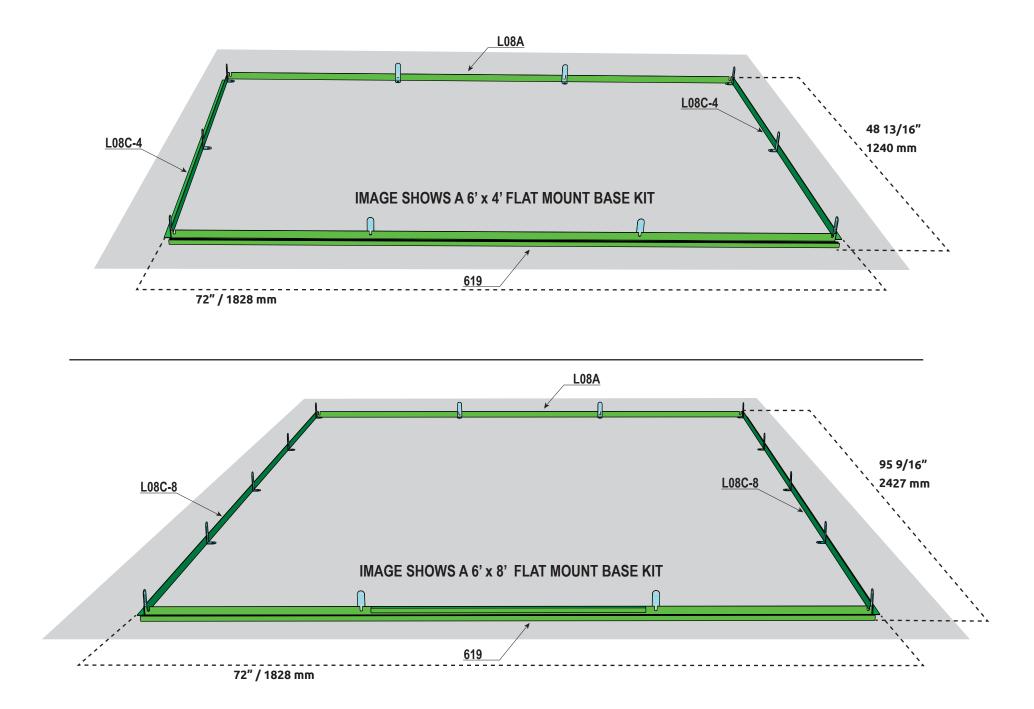


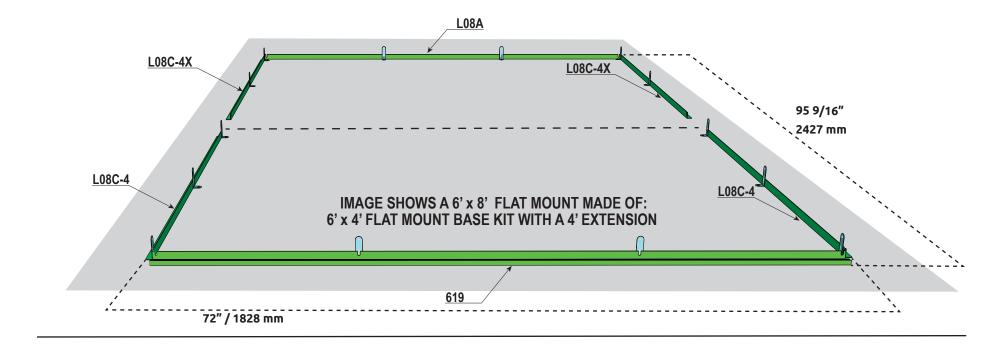
GRANDIO Make sure base is squared and level before setting anchor into concrete. Use a measuring tape to ensure all corners are the same. Use level on all four sides.

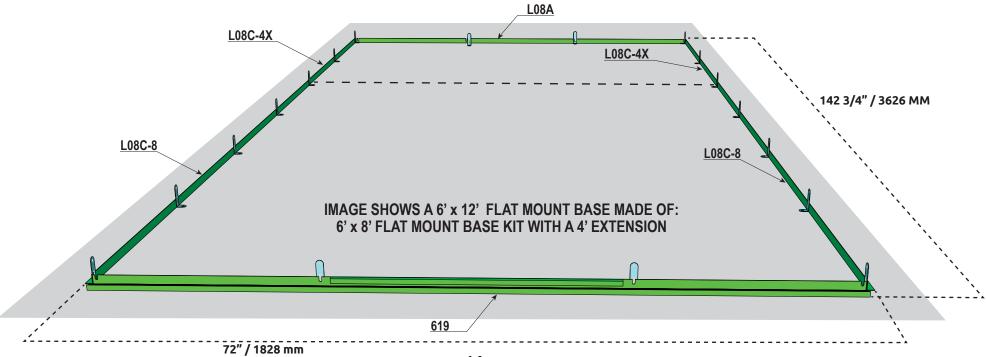
## FLAT MOUNT BASE KIT PARTS LIST FOR 6x4, 6x8 and 6x12

\*\*Locate the parts listed below to prepare and install your flat mount kit to your prepared surface

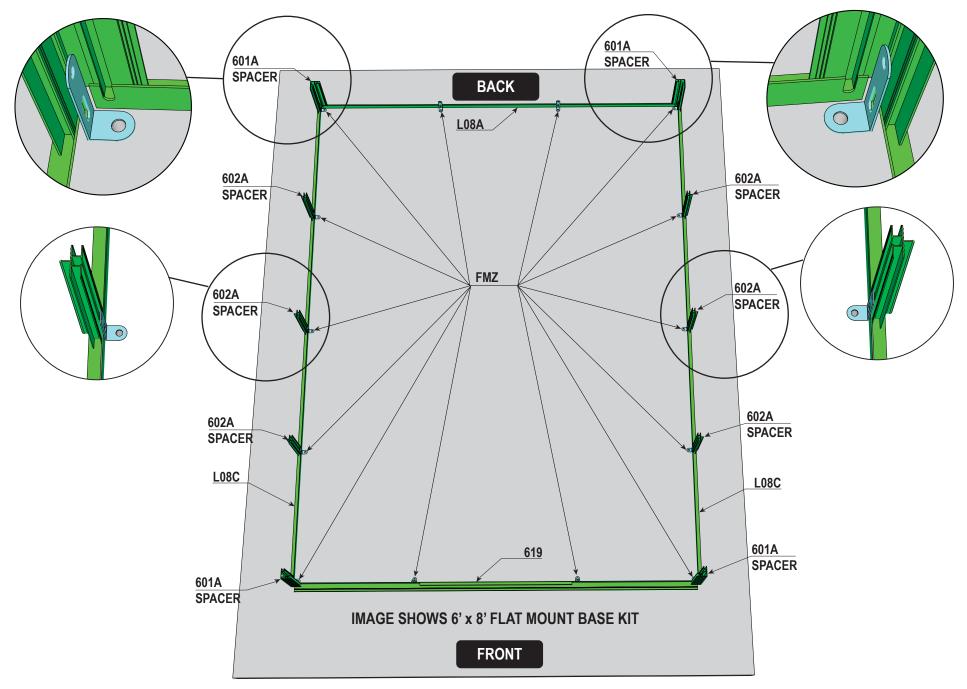
GRAPHIC	PART NAME	SIZE/LOCATION	6x4	6x8	4' EXTENSION
	L08C-4	47 1/2 in / 1207 mm	2	0	2
	L08C-8	94 1/4 in / 2394 mm	0	2	0
	L08C-4X	47 1/2"/ 1207 mm	0	0	1
	619	94 1/4 in / 2394 mm	1	1	0
	L08A	94 1/4 in / 2394 mm	1	1	0
	M03 / S03	M6*10	28	34	16
	FMZ	FLAT MOUNT BASE BRACKET	10	15	4
HI H	601A-SPACERS	100 mm/ 4" FLAT MOUNT SPACERS	4	4	0
土 🍆	602A-SPACERS	100 mm/ 4" FLAT MOUNT SPACERS	2	6	4







## **BASE KIT** ASSEMBLY INSTRUCTIONS



# **BASE KIT** ASSEMBLY INSTRUCTIONS

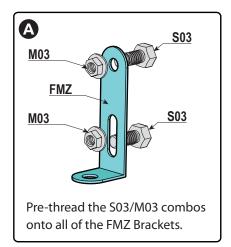
**1.1** Locate the **L08C's**, **619** and the **L08A**, lay out according to the diagrams on pages 13-14. Use **S03/M03** nut and bolt combos to pre thread to the **FMZ's** according to the diagram **A**.

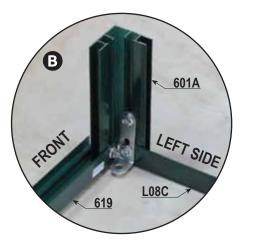
**1.2** Using the 10mm wrench and or nut driver to connect the **FMZ** to the **L08C** with the **S03/M03** combos as shown in **B**. Use one more **S03/M03** combos to connect the **601A-SPACER** to the **619** front base piece. Repeat this sequence on all corners, the **FMZ's** should be attached on the **L08C** sides of the flat mount base, see the diagram on page 15.

Note: Placement of 619 will be at front, the LO8A at the back, while the LO8C's will be at the sides of your flat mount greenhouse base.

**1.3** Attach the **FMZ's** to the **602A-SPACER's** and **L08C** on both sides of your flat mount base, see **G**. \* If you are using a 4' extension kit you will overlap the **L08C's** to connect with the **FMZ** at the notch as shown in **G**.

**1.4** Attach the **FMZ's** to the **L08A** and **619**. These are being temporarily installed for alignment to place anchors into your surface.





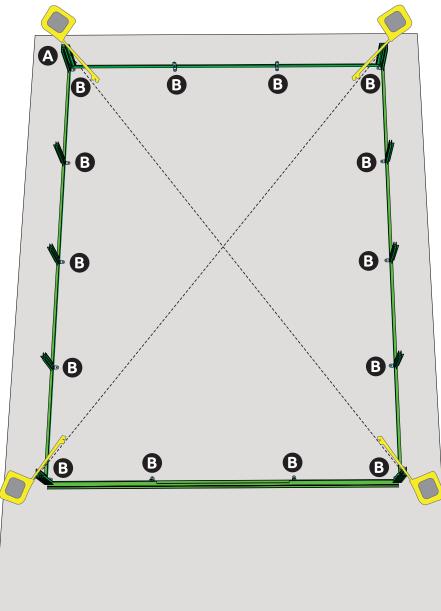


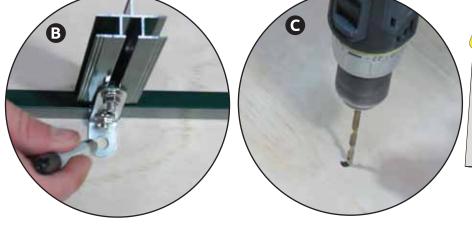
**1.5** Align your flat mount base to your surface, make sure that all **FMZ's** are aligned flush to surface and are tightened into place. Confirm that there is at least a 6" surface boarder around the flat mount base.

**1.6** Check surface is level, if off level use washers or shims under the flat mount base to level base to surface.

**1.7** Measure corner to corner to confirm that the distances are the same and that the flat mount base is square see **A**.

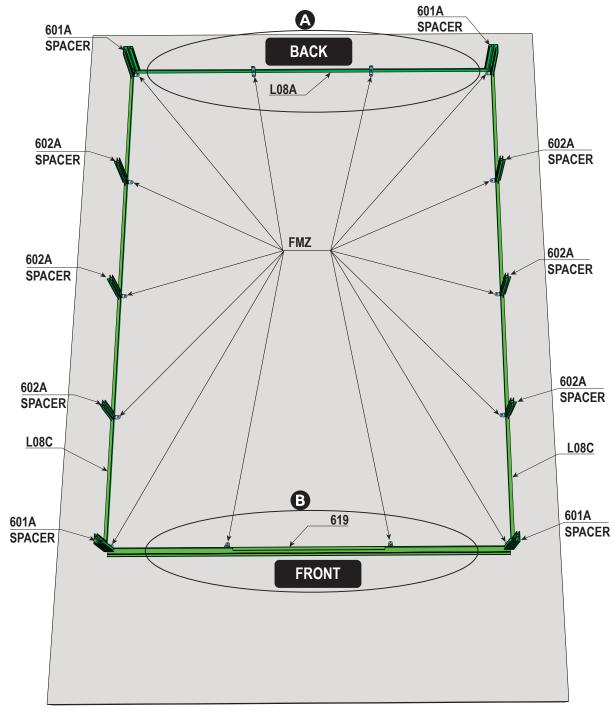
**1.8** Use marker to mark where you will drill holes into your surface thru the **FMZ** Brackets in all locations an **FMZ** is placed, see **B**. Move base aside and use a drill with an appropriate drill bit to drill holes for your anchor bolts or screws into your surface see **C**.

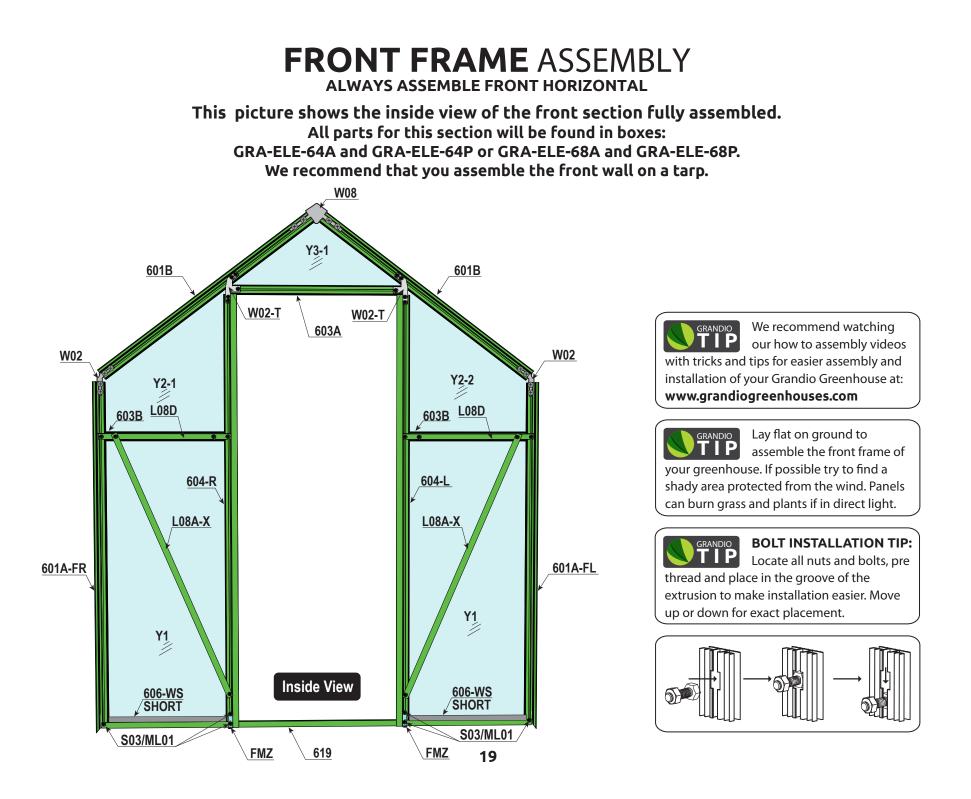




**1.9** Install the anchor bolts to hold the **FMZ** brackets into place with your surface as specified per the instructions that accompany your anchor kit.

1.10 Prepare to leave the FMZ brackets attached your L08C's and to your surface on the sides, but loosen the FMZ hardware to detach the 601A-SPACERS, and 602A-SPACERS. Remove the L08A, and 619, along with the FMZ's that are attached to the front and back see A and B, this means you will have to remove the anchor on your FMZ from your surface as well. Discard the 601A-SPACERS and 602A-SPACERS. Keep the L08C's attached to the FMZ brackets and to your surface as you will need to keep these anchored into place to attach the front and back walls.





A

\* If using the moisture control kit with anti dust tape you will apply it now following the kits directions.

**2.1** Pre thread **W08** and **W02** fasteners with **S05** for ease of installation, only turn a few times. See **A**.

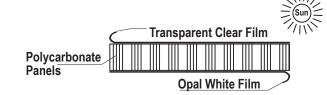
**2.2** Use **W08** bracket to attach the (2) **601B's** secure parts with the **S05** fasteners provided as shown in **B**. Screw heads will remain outside channel.

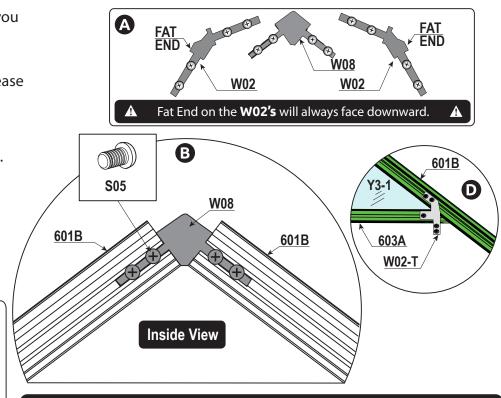
2.3 Insert Y3-1 window panel as shown in C.

**2.4** Attach **603A** with **W02-T** and **S04/ML01** fasteners as shown in **D**.

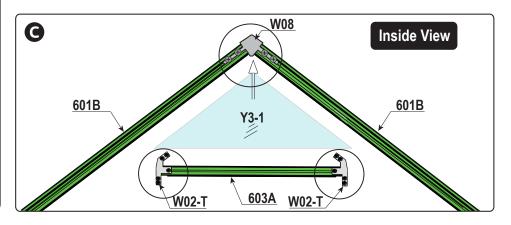
#### IMPORTANT: POLYCARBONATE PANELS

The UV-Protected side is covered with clear film 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.





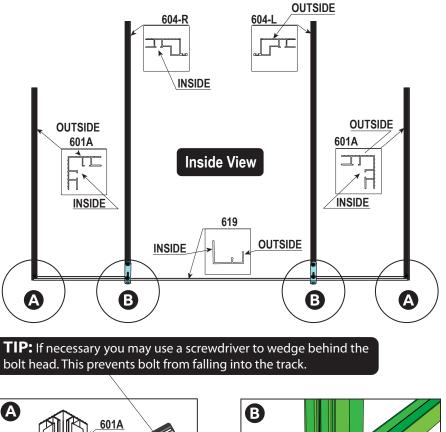
🛦 IMPORTANT: Use only S05 Screws, other screws may damage frame. 🛦



## FRONT FRAME ASSEMBLY CONTINUED **ALWAYS ASSEMBLE FRONT HORIZONTAL**

2.5 Use S03/ML01 combos to attach the (2) 601A's to the **619**. See **A**.

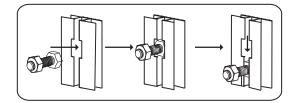
2.6 View diagrams and attach the (2) 604's to the 619 using the FMZ Brackets with S03/ML01. Note the orientation of the **604's** See diagram **B**.



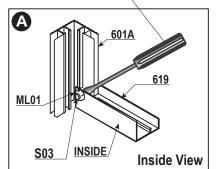


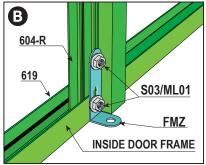
**BOLT INSTALLATION TIP:** Locate all nuts and bolts, pre

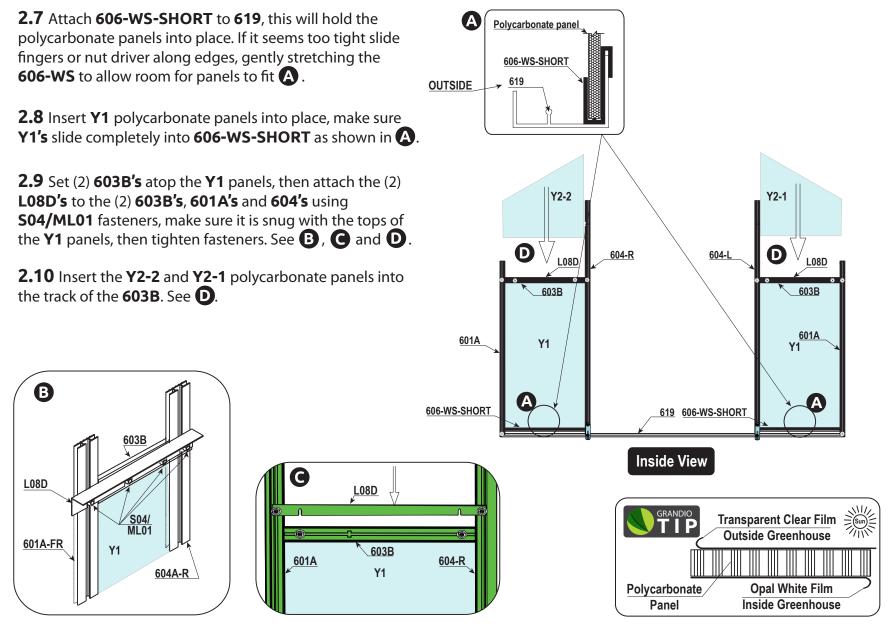
thread and place in the groove of the extrusion to make installation easier. Move up or down for exact placement.

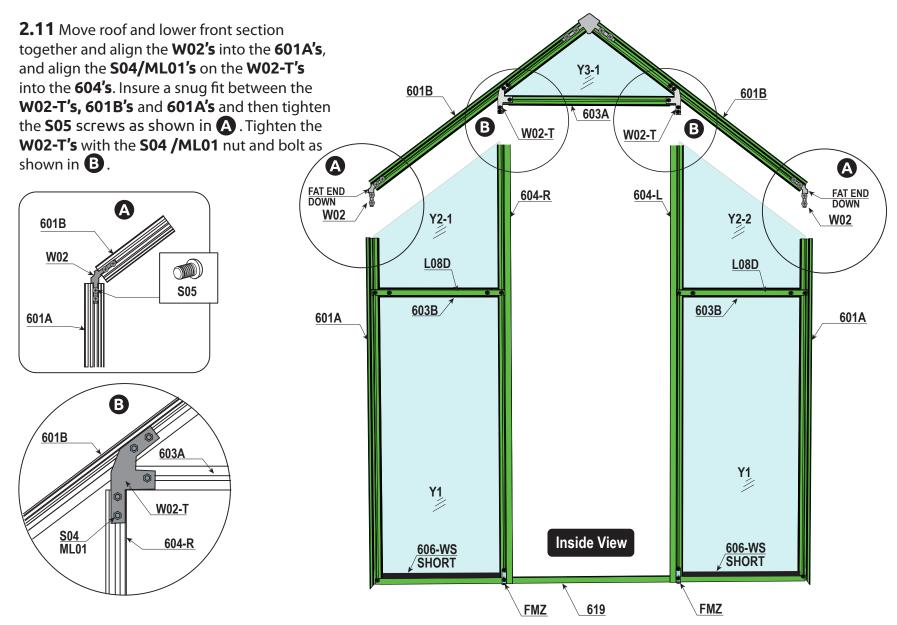


bolt head. This prevents bolt from falling into the track.

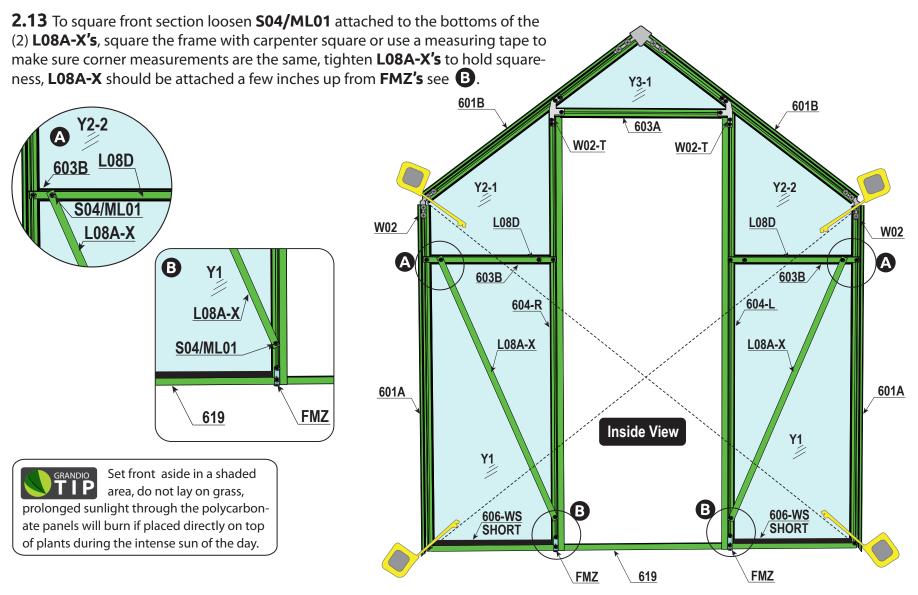








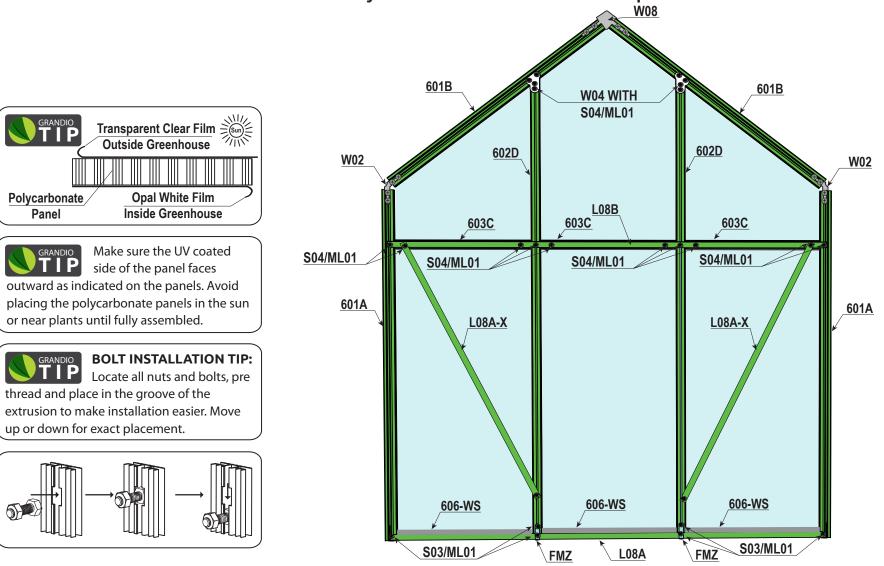
**2.12** Attach the (2) **L08A-X** to **L08D/603B's** and **604's**. See **A** and **B**.



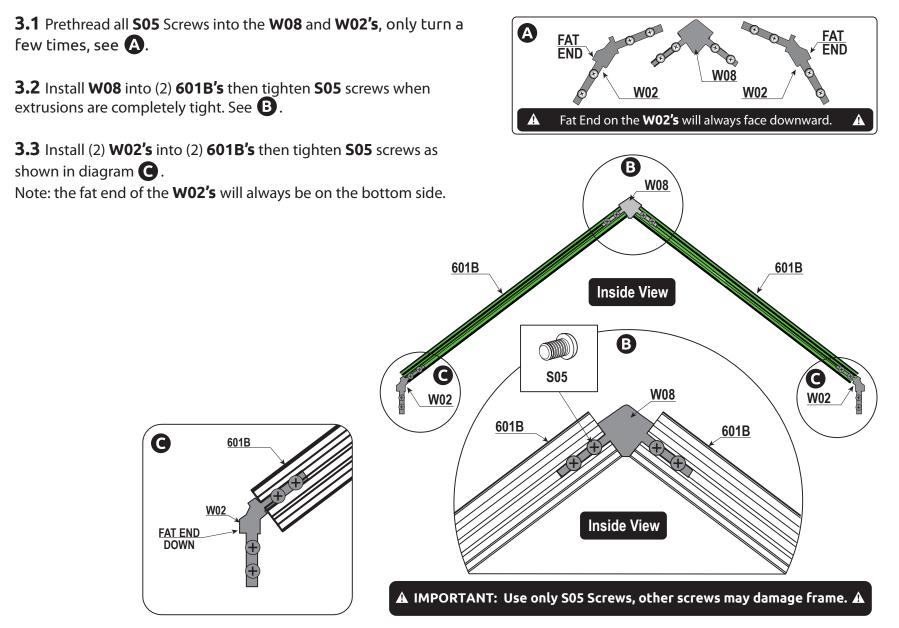
## **BACK** ASSEMBLY INSTRUCTIONS ALWAYS ASSEMBLE BACK HORIZONTAL

This image shows the inside view of the back fully assembled.

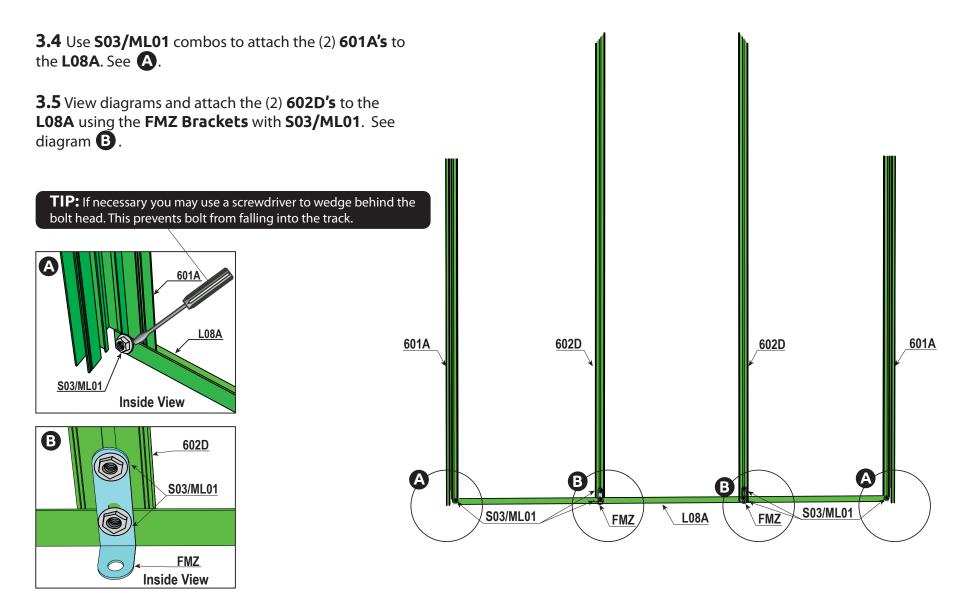
All parts for back assembly will be found in box GRA-ELE-64A and GRA-ELE-64P or GRA-ELE-68A and GRA-ELE-68P. We recommend that you assemble the back wall on a tarp.



## **BACK** CONTINUED ALWAYS ASSEMBLE BACK HORIZONTAL



# BACK FRAME ASSEMBLY CONTINUED



# BACK FRAME ASSEMBLY CONTINUED

**3.6** Attach the (3) **606-WS's** to the **L08A** as shown in **A**.

**3.7** Insert the **Y12** polycarbonate panels into the grooves of **601A** and **602D's**. Make sure **Y12** panels are inserted into **606-WS** as shown in **B**. You may need to use a screwdriver to gently open the **606-WS** to fit the polycarbonate panels into the groove of **606-WS**.

**3.8** Set the (3) **603C's** atop each of the (3) **Y12** panels as shown in **C**.

INSIDE \_\_\_\_\_ BACK WALL

603C

Y12

В

L08A

602D

Polycarbonate Panel

606-WS

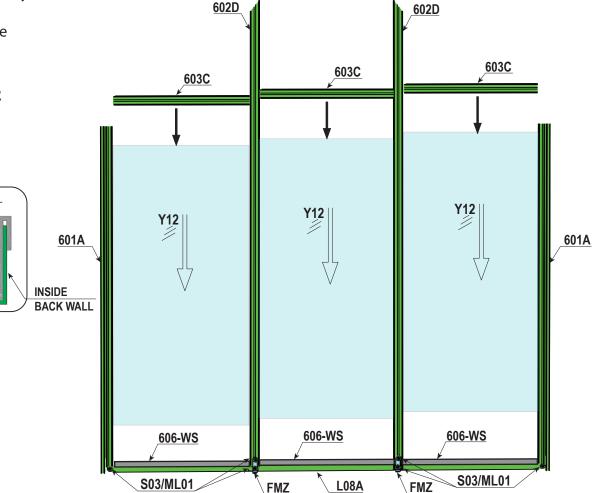
A

L08A

606-WS

G

601A

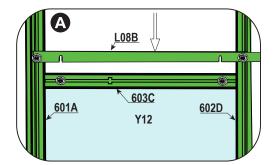


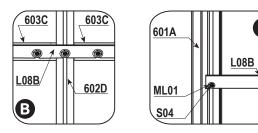
# BACK FRAME ASSEMBLY CONTINUED

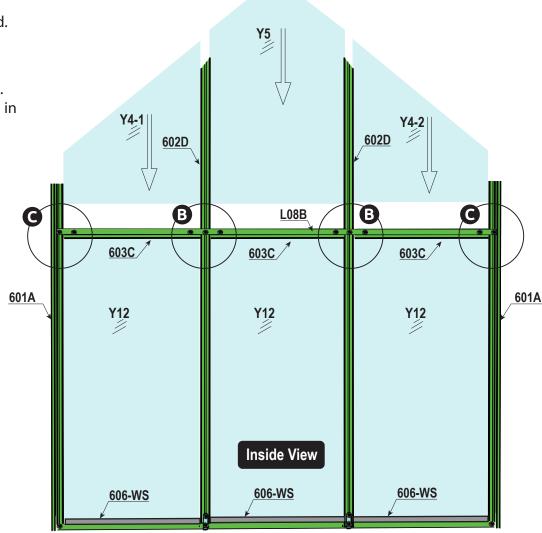
**3.9** Locate the **L08B** and align the pre threaded **S04-ML01** fasteners in each **603C's** to the **L08B** and to each of the **601A's** and **602D's**. When aligned tighten the middle first and work your way outward. See diagrams (A), (B), (C).

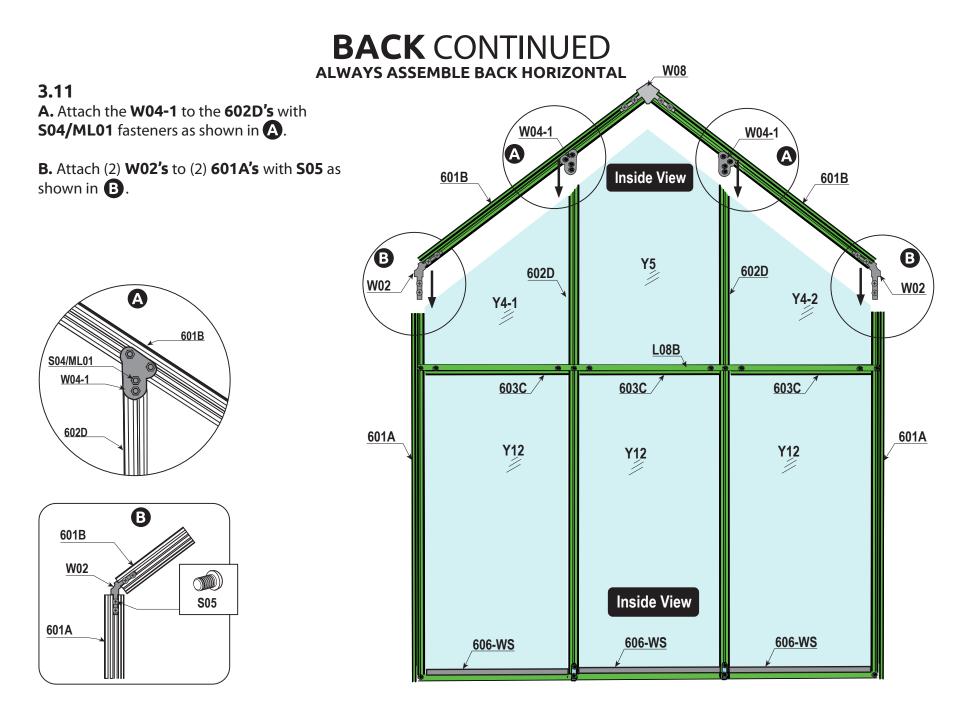
**3.10** Insert the **Y5** polycarbonate panel into place. Then insert the **Y4-1** and **Y4-2** into place as shown in the diagram.

G

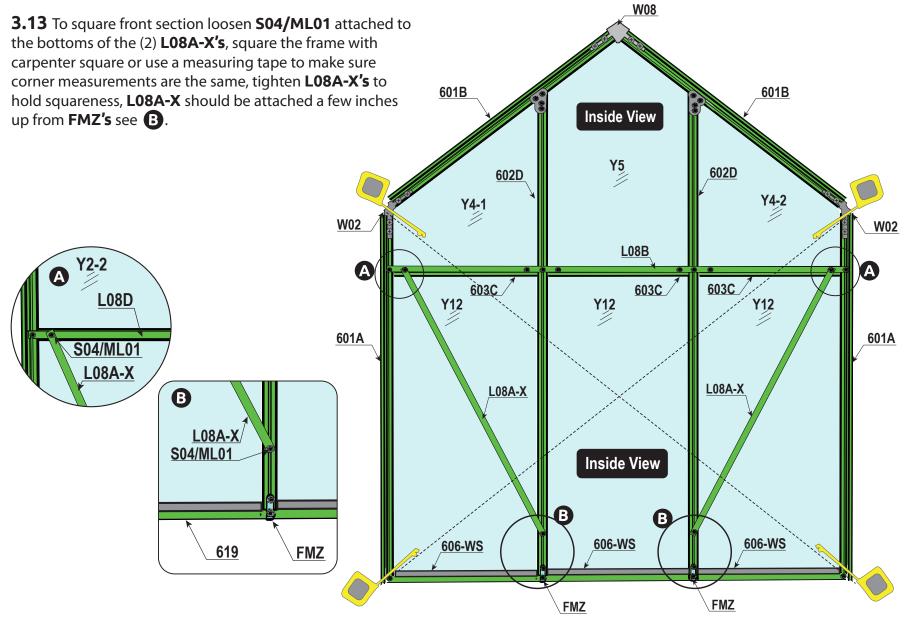








**3.12** Attach the (2) **L08A-X** to **L08B/602D's** and **602D's**. See **(A)** and **(B)**.

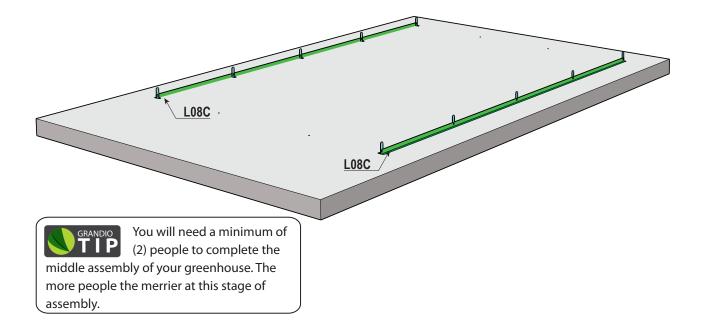


# **MIDDLE** ASSEMBLY INSTRUCTIONS

**Warning:** You will need at least (2) people to complete this section of assembly. The person(s) holding the front or back sections vertical must continue to do so until the **L08C-X** angle supports are attached securely to the front and back wall and side base FMZ brackets as shown in step **4.3**. Failure to hold front vertical will cause the front to fall and damage the flat mount base kit, front framing etc. Damage caused by improper installation is not warrantable.

Do not attempt assembly on a windy day. You must complete assembly of entire greenhouse in same day that you begin this section.

Confirm that your L08C's are anchored into place with the FMZ's to your surface.



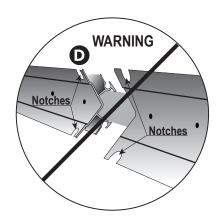
## **MIDDLE** ASSEMBLY INSTRUCTIONS CONTINUED THIS PAGE SHOWS 6X12 EXTENSION KIT ASSEMBLY ONLY, SKIP AHEAD TO PAGE 35 FOR 6X4 OR 6X8 SIZES.

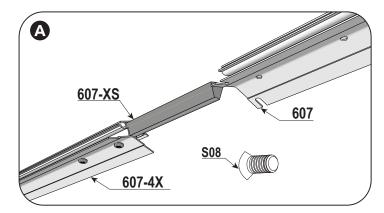
4.1 Attach the 607 to 607-4X extension with the 607-XS and the (4) S08 screws provided. See A, B. The S08 screws are to be installed on the inside as shown in diagram A. Wait to tighten the screws all at one time when both sections are aligned correctly, apply even pressure while tightening.

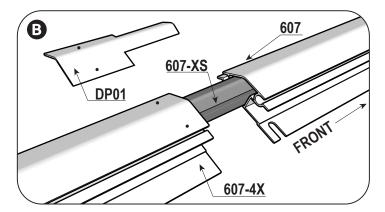
**4.2** Apply a bead of silicone to the seam where the **607's** meet and to the holes where the **S06** screws will attach the **DP01** to the **607** ridge.

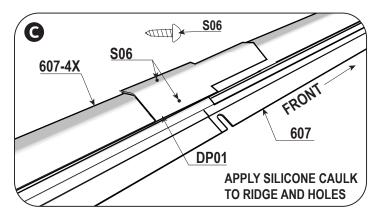
See **G**. Immediately align the **DP01** apply a small amount of silicone to the holes on the exterior of **DP01** then insert the **S06** screws.

### NOTE ORIENTATION OF THE NOTCHES, THEY SHOULD BE SPACED ABOUT 2 FEET APART. SEE **D**.







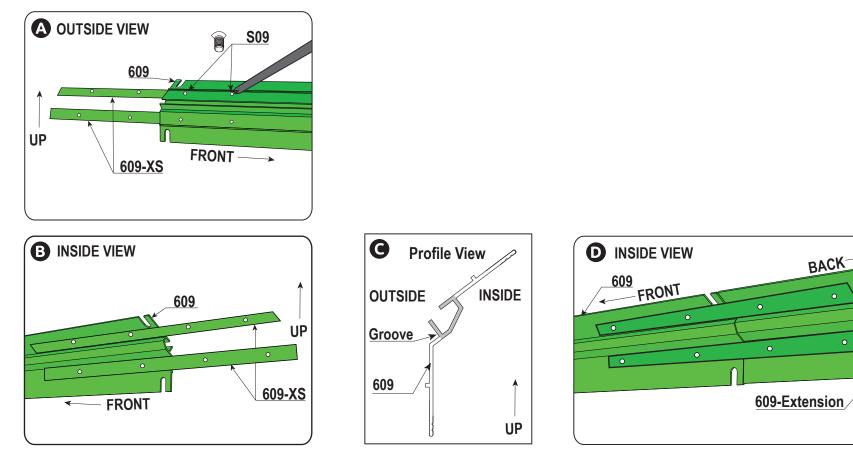


## **MIDDLE** ASSEMBLY INSTRUCTIONS CONTINUED THIS PAGE SHOWS 6X12 EXTENSION KIT ASSEMBLY ONLY, SKIP AHEAD TO PAGE 35 FOR 6X4 OR 6X8 SIZES.

**4.3** Attach the **609-XS's** to the **609** with (4) of the **S09** screws provided see **A** and **B**. The **S09** screws are to be installed on the outside of the **609** and will tighten into the **609-X** as shown in the diagrams. Repeat with other set, note they will be opposite of each other when assembled. Make sure the **609-4X's** are toward the back of the greenhouse.

### Pay special attention to the orientation of the 609, make sure the correct side faces down, see **G**.

**4.4** Locate the (2) **609-4X's**, align each with the **609** and **609-XS** brackets. Make sure that no notches are right next to each other. If the **609** pieces are matching up correctly, match to **D**, use the **S09** screws to attach the **609-4X** extension pieces to the **609's**. Screws will install from the outside.

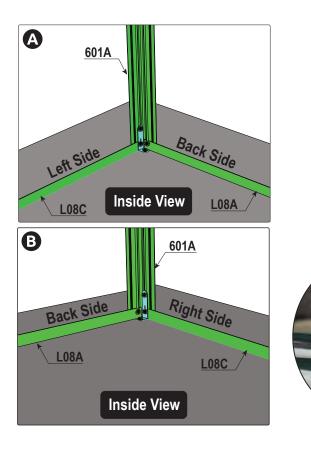


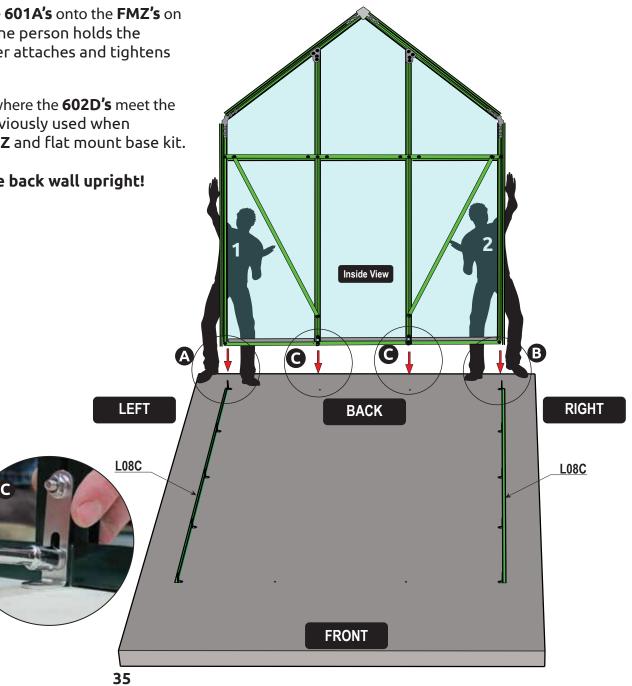
# MIDDLE ASSEMBLY CONTINUED

**4.5** Attach back wall by sliding the sides of the **601A's** onto the **FMZ's** on both sides as shown in **(A)** and **(B)**. Be sure one person holds the greenhouse back wall up right and the other attaches and tightens the **S03/ML01** combos.

**4.6** Reattach the **FMZ's** to your floor surface where the **602D's** meet the **L08A**. Use the anchoring hardware you previously used when aligning and drilling your holes for your **FMZ** and flat mount base kit.

### At least (1) Person must keep holding the back wall upright!

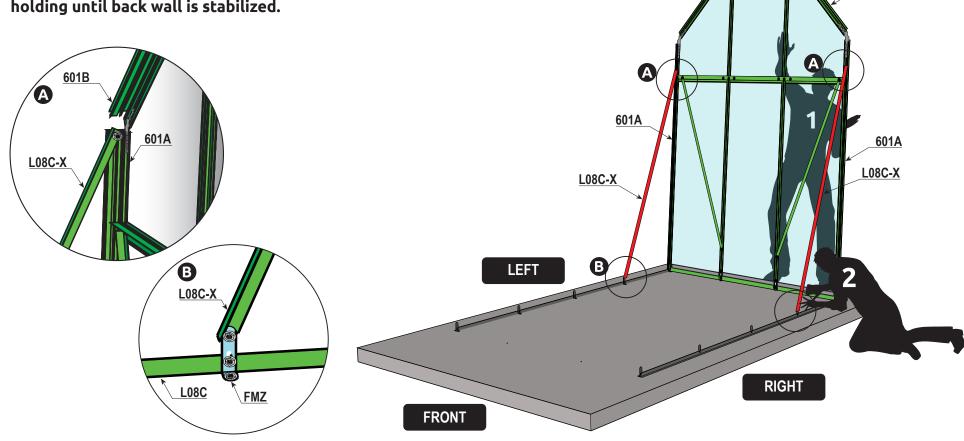




**4.7** Use a square to be sure that the back wall is square to the ground, then attach **L08C-X's** to the **FMZ** brackets with the **S04/ML01** as shown in the image. See **A** and **B**.

**4.8** Confirm that the back wall is stable and square before letting go to stand alone. **If the wind is blowing do not let go of the back wall at this point.** 

If the wall is staying upright and strong on its own, continue on to the next step. If it seems unstable have one person continue holding until back wall is stabilized.



BACK

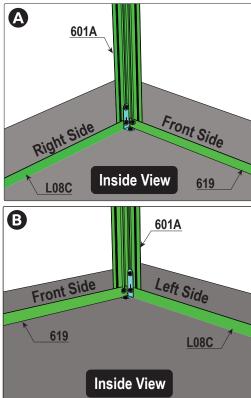
601B

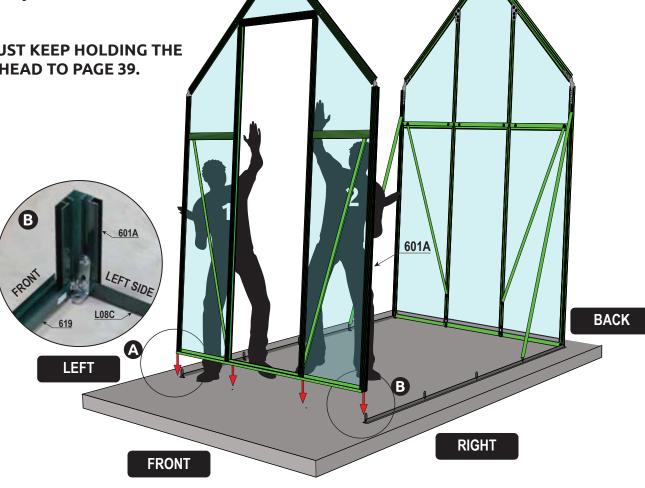
601B

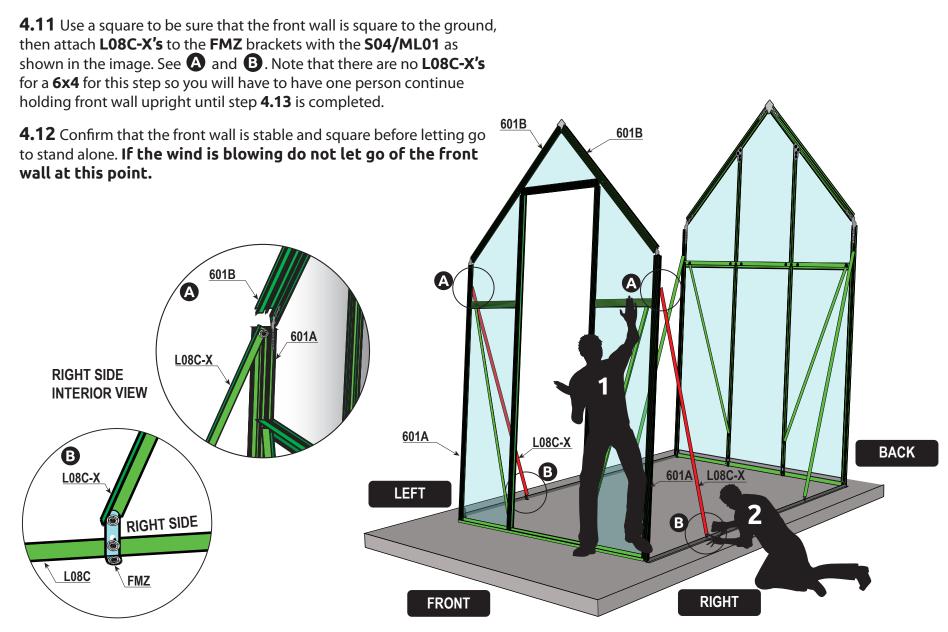
**4.9** Attach front wall by sliding the sides of the **601A's** onto the **FMZ's** on both sides as shown in **(A)** and **(B)**. Be sure one person holds the greenhouse front wall up right and the other attaches and tightens the **S03/ML01** combos.

**4.10** Reattach the **FMZ's** to your floor surface where the **604L** and **604R** meet the **L08A**. Use the anchoring hardware you previously used when aligning and drilling your holes for your **FMZ** and flat mount base kit.

### IF BUILDING A 6X4 ONE PERSON MUST KEEP HOLDING THE FRONT WALL UPRIGHT AND SKIP AHEAD TO PAGE 39.

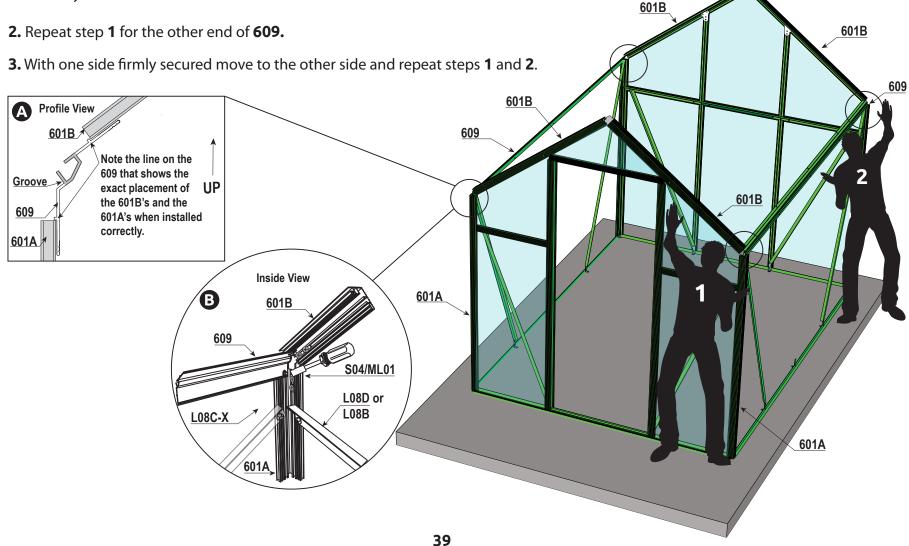




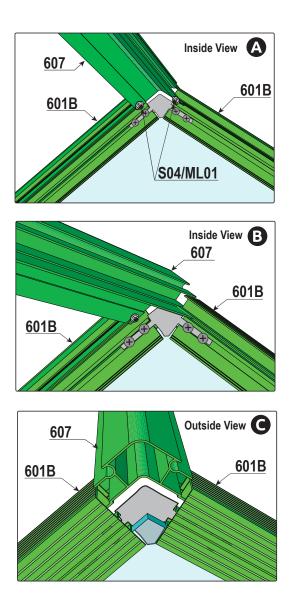


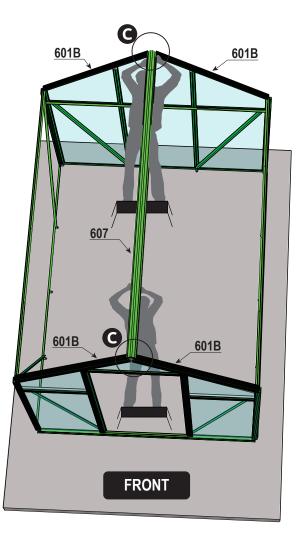
**4.13 With 2 people proceed to install 609's in this order, note that 609 must be installed with groove side down. See A**. Compare with **610 Gutter** to make sure it will slide into **609** upon completion.

1. With one person holding the 609 level and in position have the other person attach the 609 to the 601B and 601A using S04/ML01 (nut and bolt). See **B**. Note that if building a 6x4 Greenhouse Person 1 will need to hold the front wall upright and steady and hold the end of the 609 while Person 2 attaches the 609.



**4.14** With 2 people, attach the ridge to front and back by sliding into place as shown in **A** and **B**, using **S04/ML01** fasteners attach the **607** to the **601B's**. See **C** for how the final orientation should be.





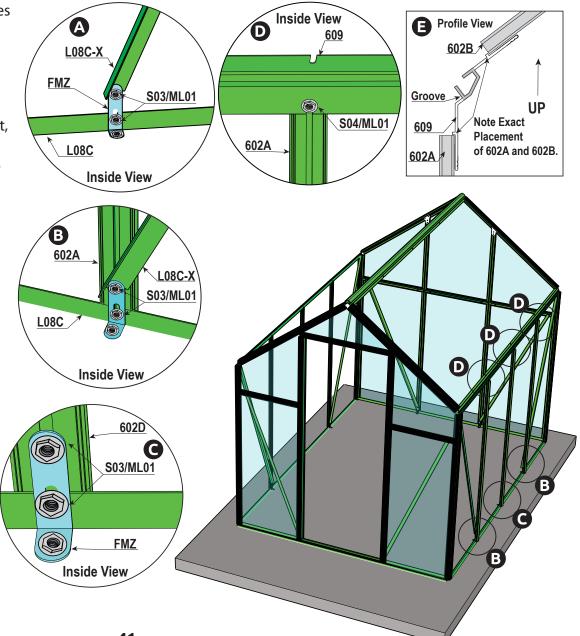
4.15 Before you attach the 602A's to the sides of the greenhouse you will need to loosen the
(2) ML01 nuts attached to the S03, L08C-X and the FMZ. See diagram A.

1. Once the S03/ML01 combos are loosened on the FMZ, and the L08C-X is allowed to rest, set the 602A onto the S03 bolts attached to the FMZ and the L08C-X. Be sure the 602A is aligned and sitting flush with bottom edge of the L08C. See B for reference. Tighten the ML01 nuts.

2. Hold the 602A in place and attach the top of the 602A to the 609 using S04/ML01 (nut and bolt). As shown in D and D.
\* Note 6x4 size greenhouses you will install only (1) 602A per side.

3. For 6x8 sizes repeat steps 1 and 2 on all four corners where the L08C-X 's meet the FMZ's.

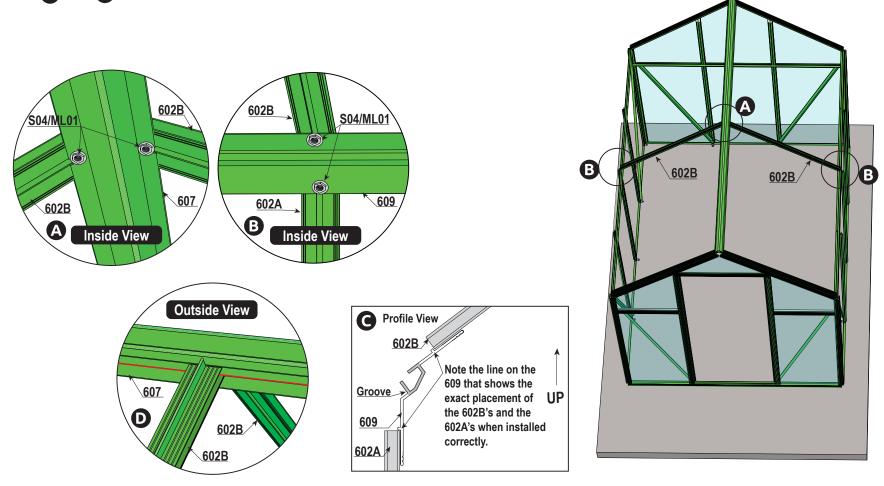
4. If building a **6x8** size greenhouse attach the remaining **602A's** to the **FMZ** and the **L08C** with the **S03/ML01** combo as shown in **O**. Then attach the top of the **602A** to the **609** with an **S04/ML01**, be sure to align the top of the **602A** to the exact line on the **609** as is shown in **D** and **E**.



607

**4.16** Attach **(1) 602B** to the middle of each side of the greenhouse as shown in the diagram. See **(A)** and **(B)**.

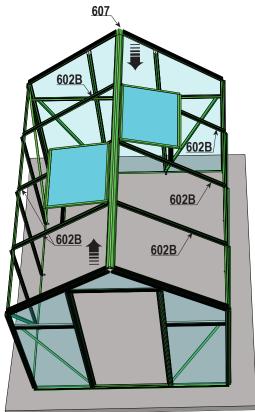
Note the exact placement where the **602B** aligns to the **609** and **607**. See **G** and **D**.

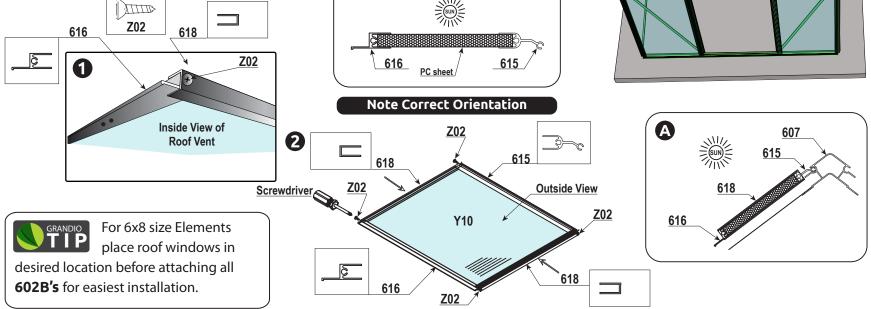


4.17 Assemble the roof window vents as shown below in 1 and 2, using the ZO2 screws attach the 615, 616, and 618's with the Y8 panel as shown. Be careful not to strip screw heads. Pay attention to the Y10 panel, stickers face the sun, and that the frames are assembled according to images below.

**4.18** Insert assembled window into the end of ridge of **607** and slide into position. See **A** . Window positions are your discretion, a **6x4** will have (1) roof vent and a **6x8** will have (2) roof vents.

**4.19** For a **6x8** attach the additonal **602B's** as shown after all roof vents are positioned.





**4.20** Install plastic strip **606-WS** before inserting polycarbonate sheet **Y7's**, see **A** . Install all **Y7** panels into the channel's of the side walls, and fit down into the **606-WS**.

**4.21** After **Y7's** are installed, loosen bolts attached to **L08C-X** in all upper corners. Using a level, adjust **602A** and tighten bolts. Repeat in every corner until the greenhouse is plumb. The top edges of **Y7's** will align when greenhouse is level or plumb.

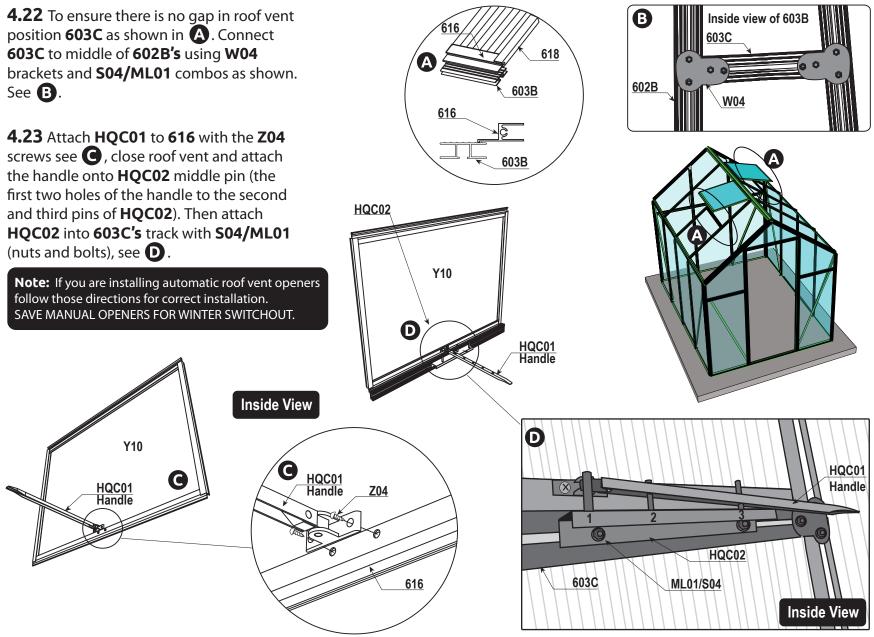
BASE BASE Make sure the UV coated

PC sheet

606-WS

A

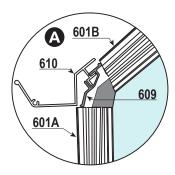
side of the panel faces outward as indicated on the panels. Avoid placing the polycarbonate panels in the sun or near plants until fully assembled.

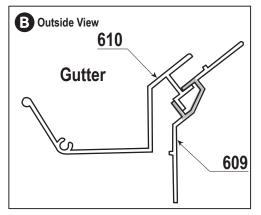


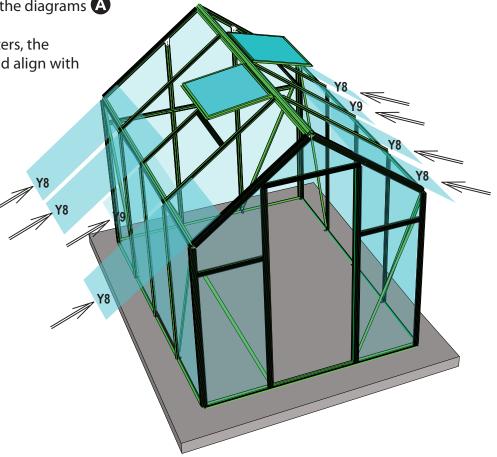
**4.24** Insert polycarbonate sheets **Y8's** and **Y9's** into the lower roof of your greenhouse. Panels may slide out before gutters are in place. You may want to place a piece of tape on the panel to prevent sliding as shown in the diagram once the panels are in place.

**4.25** Slide **610 Gutters** into **609's** groove as shown in the diagrams (A) and (B). Repeat on both sides.

**FOR EXTENSION KIT:** Note the orientation of the gutters, the extension gutters will be at the back and the holes should align with gutter down spout holes see next page.



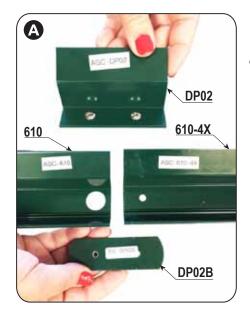




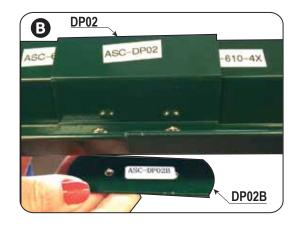
### **MIDDLE** ASSEMBLY INSTRUCTIONS CONTINUED THIS PAGE IS FOR EXTENSION KIT INSTALLATION ONLY, SKIP TO NEXT PAGE FOR 6X4 AND 6X8.

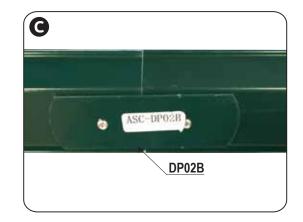
**4.26** Push gutters together so they meet in the middle, apply a small amount of the silicone caulk to the seam where the **610** gutters meet, then attach the **DP02** on the inside of the gutter and the **DP02B** will slide under the gutter and will rest above the **602A**. Apply silicone to the holes where the **S07** screws will attach the **610** gutters to the **DP02B**. Note the **DP02B** has pre-tapped holes to accept the screws, install the **S07** screws through the **DP02** and into the **DP02B**. See diagram (A), (B) and (C).

Repeat these steps to assemble the additional set(s) for both sides of your greenhouse. Remove the tape from the panels you may have used to hold in place.



Note: ASC is the abbreviation for Ascent, ELE is the abbreviation for Element. Note these are the same gutter pieces for both models they may begin with different abbreviations but are the same pieces.

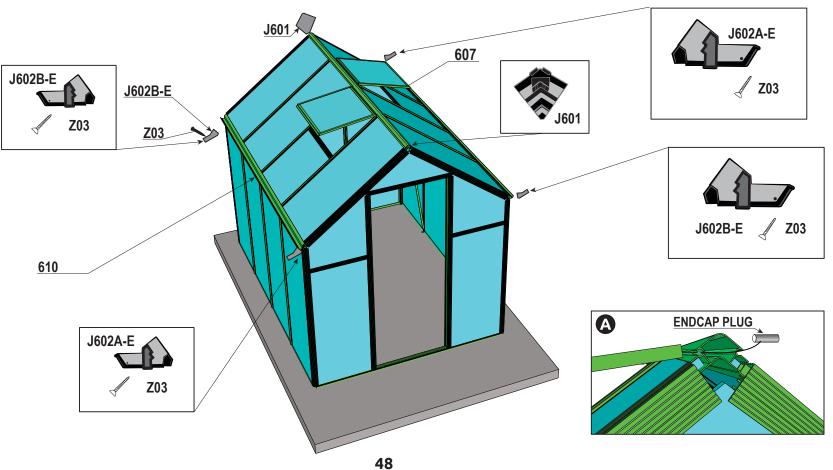




**4.27** For any greenhouse size if you have chosen to place a roof vent nearest the front or back you will need to locate the **ENDCAP PLUG**, you will slide into the **607** track just before placing the **J601** caps into place in next steps. See **A**.

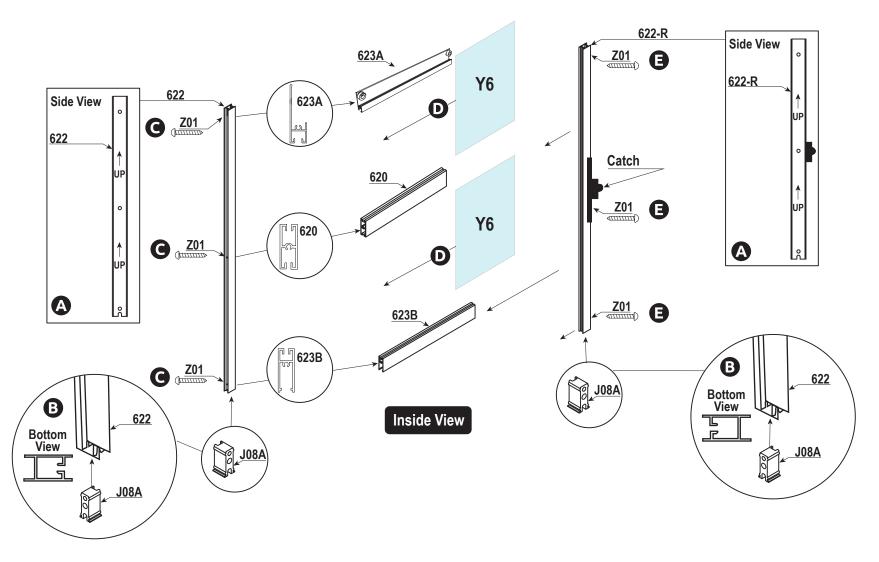
**4.28** Attach caps to the ridge and gutters on both front and back as shown below. Squeeze a small amount of rubberized silicone or construction adhesive into the ends of ridge to secure pressure fit end caps. You will need to quickly secure the **Z03's** into the **J602A-E** and **J602B-E**. It is recommended to caulk any areas that may allow water penetration such as around gutter end caps to seal against water. It is helpful to apply a piece of tape on the outside of the endcaps so they seal tight to their intended extrusion, remove tape within 24 hours once silicone has set.

4.29 It is recommended to apply silicone caulk to the seams where panels meet the frame for water resistance.



### **DOOR** ASSEMBLY DIAGRAM

This image shows the inside view of Right Door Assembly. All parts for door assembly will be found in box GRA-ELE-8A and GRA-ELE-8P or GRA-ELE-4A and GRA-ELE-4P. Use the #2 head Phillips Screw Driver for installation.



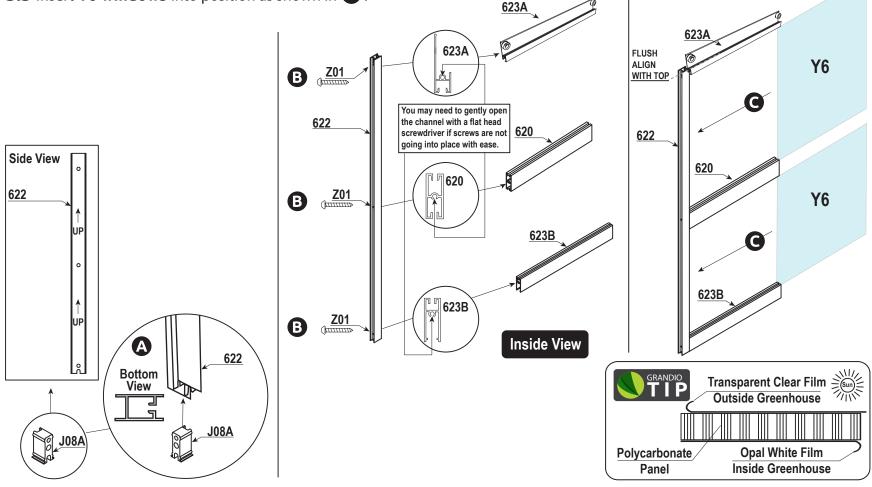
# **DOOR** ASSEMBLY

We recommend you lay out all parts for both doors to make sure they match up correctly for hanging. Double check the orientation of what is inside verses outside and how the doors will hang on page 53. Make sure window panels face the right direction to the sun and note that the panels have predrilled holes for the handles to attach later and these need to be aligned with the lock mechanisms. This will save you from assembling the wrong way. Be careful not to strip the phillips heads when assembling.

5.1 Insert J08A's into the bottom of the 622's, note the bottom groove is smaller than the top groove of 622, see A.

5.2 Use the Z01 screws to attach the 622 to the 623B, 623A and 620 as shown in B.

**5.3** Insert **Y6 windows** into position as shown in **C**.

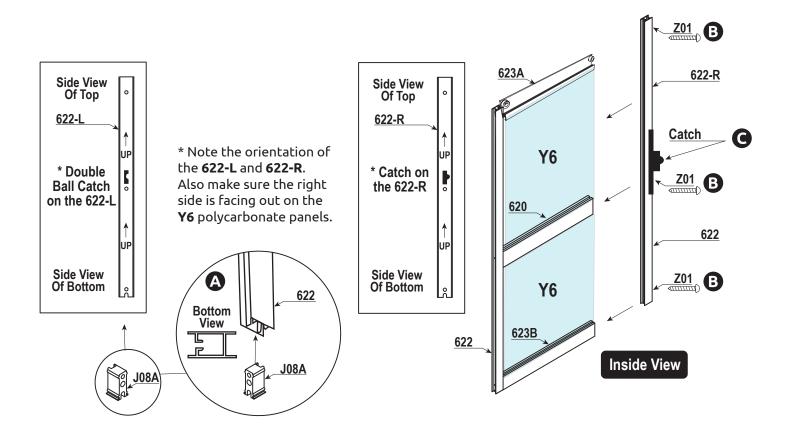


## **DOOR ASSEMBLY**

5.4 Insert J08A into the bottom of the 622-R and 622-L, note the bottom has a groove see A.

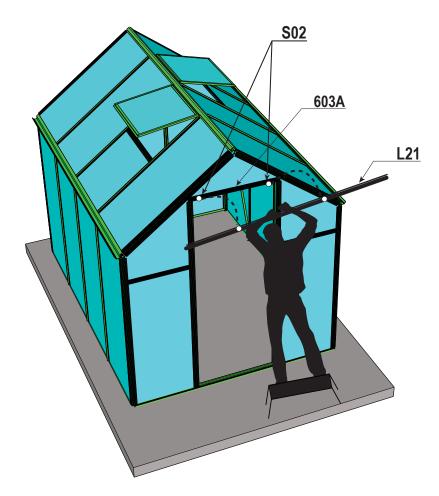
5.5 Attach the 622-R to the 623B, 623A and 620 using the Z01 screws as shown in B.

**5.6** Follow the same instructions for the other door making sure that the **622-L** and **622-R** with the double ball catch match up so doors will latch closed and slide properly **C**.



## **DOOR ASSEMBLY**

**5.7** Slide the (2) **S02** bolts down the track of the **L21**. See A. Align with the holes on the **603A** door header. With one person inside the greenhouse line up hanging door track **L21** with door header **603D**, move bolts on **L21** to line up with bolt holes on door header **603A**. From the inside hand tighten the **ML01** nut while the person outside is holding the **L21** in position, you will now center on the front of the greenhouse and tighten the **S02/ML01** combo.



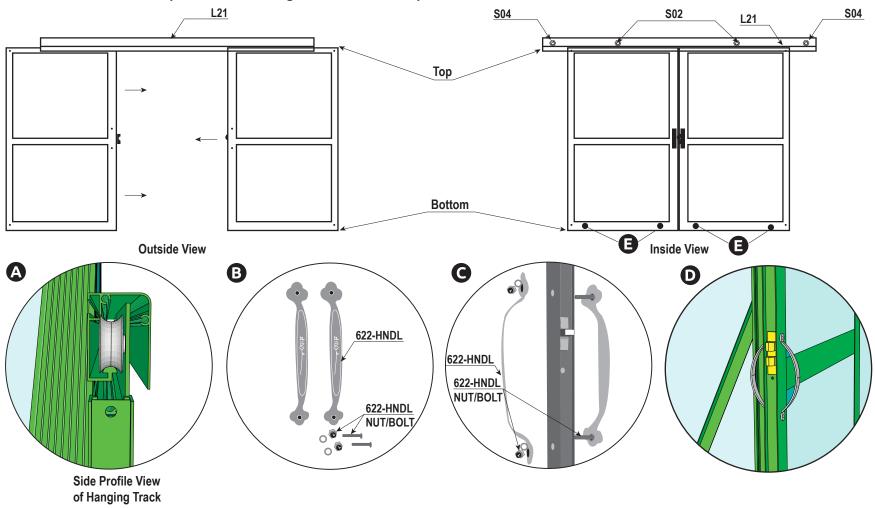


# **DOOR INSTALLATION**

**5.8** Separately slide the top of the doors in the left and right side of L21, see diagram (A), until they latch in the middle.

**5.9** Attach the door handles **622-HNDL** to both doors using the **622-HNDL-NUT/BOLT** provided to both doors as shown below in **B**, **G** and **D**.

\*\*We included some felt dots in your Grandio Welcome Kit, please apply to the inside bottom edge of the **623B** as shown in **(E)**, these felt dots will make your doors fit snug and slide smoothly.

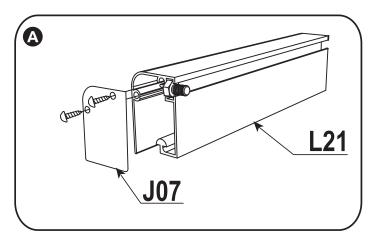


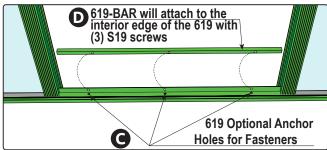
# **DOOR INSTALLATION**

5.10 Attach J07's to L21 with included screws on both ends of the L21. See (A).

**5.11** Check that the door locks are snug, you may adjust them with screwdriver if needed as they may be tightened or loosened. See **B**.

**5.12** You may attach the **619** to your surface through the pre drilled holes, be sure that the fastener you choose will allow enough clearance for the **619-BAR** to attach to the inside edge of your **619**. See **C** and **D**.







**Congratulations** You are now finished with assembly!

Use Goo Gone to remove any stickers to make your greenhouse shine.

### (GRA-ELE-64A) (GRA-ELE-68A) GRANDIO ELEMENT ALUMINUM PACKING LIST

GRAPHIC	PART NAME	SIZE/LOCATION	6X4 QTY	6X8 QTY		GRAPHIC	PART NAME	SIZE/LOCATION	6X4 QTY	6X8 QTY
Le La	601A	<b>1436 mm / 56</b> 9/16" ALL CORNERS	4	4		$\widehat{\nearrow} \widehat{\checkmark}$	607-4 607-8	1206 mm / 47 1/2" 2394mm / 94 1/4"	1	1
EL S	601B	1082 mm /42 5/8" CORNER ROOF	4	4	_		609-4 609-8	1206 mm / 47 1/2" 2394mm / 94 1/4"	2	2
± 🍆	602A	1437 mm / 56 1/2" SIDE WALL	2	6			610-4 610-8	1206 mm / 47 5/8" 2397mm / 94 3/8"	2	2
±	602B	<b>1082 mm / 42</b> 5/8" ROOF RIBS	2	6		4	615	<b>578 mm / 22</b> 3/4" ROOF VENT	1	2
t 🍬	602D-L	1893 mm / 74 1/2" BACK WALL	1	1			616	<b>578 mm / 22</b> 3/4" ROOF VENT	1	2
± 🌭	602D-R	1893mm / 74 1/2" BACK WALL	1	1			618	500 mm / 19 3/4" ROOF VENT	2	4
± 🍆	603A	782mm / 30 13/16" ABOVE DOOR	1	1			619 / ELE-619-BAR (3) S19 SCREWS	1800 mm / 70 7/8" 710 mm / 27 15/16" THRESHOLD SUPPORT	1	1
TE 🦠	603B	<b>466 mm / 18</b> 3/8" FRONT WALL	2	2		$\neg \bigcirc$	L08A	1799 mm / 70 13/16"	1	1
т 🦠	603C	555 mm / 21 7/8" BACK WALL & UNDER ROOF VENT	4	5		$\neg \bigcirc$	L08B	1799 mm / 70 13/16"	1	1
	604-R	<b>1797 mm / 70</b> 3/4" FRONT RIGHT DOOR FRAME	1	1			L08C-4 L08C-8	(6X4) 1207 mm / 47 1/2" (6X8) 2394 mm / 94 1/4" FLAT MOUNT BASE SIDE	2	2
PACKED TO	604-L	<b>1797mm / 70</b> 3/4" FRONT LEFT DOOR FRAME	1	1			L08D	526 mm / 20 11/16" FRONT WALL	2	2
OGETHER	FMZ	FLAT MOUNT BASE BRACKET	10	15	TOGETHER	EL S	601A-SPACERS	100 mm/4" FLAT MOUNT SPACERS	4	4
PACKED T	S03/ML01	M6*10	28	34	PACKED T	±	602A-SPACERS	100 mm/ 4" FLAT MOUNT SPACERS	2	6

#### (GRA-ELE-64A) (GRA-ELE-68A) GRANDIO ELEMENT ALUMINUM PACKING LIST

GRAPHIC	PART NAM	E SIZE/LOCATION	6X4 QTY	6X4 QTY	GRAPHIC	PART NAME	SIZE/LOCATION	6x4 QTY	6x8 QTY
$\neg \diamondsuit$	L08A-X	<b>1180 mm / 46</b> 7/16" FRONT & BACK WALL X SUPPORT	4	4	TE	J601	END CAPS	2	2
	L08C-X	1480 mm / 58 1/4" SIDE WALL X SUPPORT	2	4	T	J602A-E	END CAPS	2	2
	S02/ML01	M6*25	4	4		J602B-E	END CAP	2	2
	S04/ML01	M6*14	92	134	0	ENDCAP PLUG	34 MM PLUG FOR ROOF VENT	2	3
	S05	<b>M6*10</b> FOR W01 & W05	25	25		W11	SCREW DRIVER	1	1
and the second	W08	ROOF	2	2		W13	10 MM NUT DRIVER	1	1
LJH601A	W02	FRONT & BACK SIDES	4	4	5	W16	10 MM WRENCH	1	1
()11111111	Z01	M4*30 Screws for Doors	13	13	TER CONTRACTOR	HQC01	ROOF VENT ARM	1	2
Dummum	Z03	M3*25 Screw for End Caps	4	4	PACKED TOGETHER	HQC02	ROOF VENT LATCH	1	2
	W04	BRACKET 603C UNDER ROOF VENT	2	4		Z04, S04/ML01	ROOF VENT HARDWARE	2 EACH	4 EACH
(°) (°)	W04-1	BRACKET BACK WALL	2	2	Dunn	Z02	M3.5*16 Screws for Roof Vents	5	9
	606-WS	553 mm / 21 3/4"	7	11		S10	THRESHOLD TO BASE PHILLIPS BOLT AND NUT	4	4
	606-WS-SHORT	464 mm / 18 1/4"	2	2		W02-T	FRONT WALL TO ROOF	2	2

#### (GRA-ELE-64A) (GRA-ELE-68A) GRANDIO ELEMENT ALUMINUM PACKING LIST

	GRAPHIC	PART NA	ME SIZE/LOCATION	QTY - 64A & 68A
	622-HNDL		DOOR HANDLES	4
	0 🖗 <u> </u>	622-COMBOS	4 FASTENER SETS	4 SETS
		620	330 mm / 13"	2
	5	L21	1500 mm / 59 1/16"	1
		J07	L21 END CAP & (2) SCREWS	2 SETS
HER	F	622	1772 mm / 69 3/4"	2
PACKED TOGETHER		622-R	1772 mm / 69 3/4"	1
PAC		622-L	1772 mm / 69 3/4"	1
		623A	330 mm / 13"	2
	H M	623B 330 mm / 13'		2
		A80L	PACKED IN SETS OF 2	4

#### (GRA-ELE-64P) (GRA-ELE-68P) ELEMENT PANEL BOX PACKING LIST

GRAPHIC	NAME	SIZE/LOCATION	WIDTH	HEIGHT 1	HEIGHT 2	6x4 QTY	6x8 QTY
	¥1	FRONT WALL PANEL	488 mm / 19 3/16"	1200 mm / 47 1/4"		2	2
	Y2-1	FRONT PANEL	488 mm / 19 3/16"	596 mm / 23 7/16"	231 mm / 9 1/16"	1	1
	Y2-2	FRONT PANEL	488 mm / 19 3/16"	231 mm / 9 1/16"	596 mm / 23 7/16"	1	1
	Y3-1	FRONT PANEL	775 mm / 30 1/2"	281 mm / 11 1/16"		1	1
	Y4-1	BACK PANEL	578 mm / 22 3/4"	664 mm / 26 1/8"	230 mm / 9 1/16"	1	1
	Y4-2	BACK PANEL	578 mm / 22 3/4"	230 mm / 9 1/16"	664 mm / 26 1/8"	1	1
	Υ5	BACK PANEL	578 mm / 22 3/4"	677 mm / 26 5/8"	884 mm / 34 13/16"	1	1
	Y6	DOOR PANEL UPPER	360 mm / 14 3/16"	862 mm / 33 15/16"		2	2
	Υ7	SIDE WALL PANEL	578 mm / 22 3/4"	1450 mm / 57 1/16"		4	8
	¥8	ROOF PANEL	578 mm / 22 3/4"	1109 mm / 43 11/16"		3	6
	Υ9	UNDER ROOF VENT	578 mm / 22 3/4"	570 mm / 22 7/16"		1	2
	¥10	ROOF VENT PANEL	578 mm / 22 3/4"	486 mm / 19 1/8"		1	2
	Y12	BACK WALL PANELS	578 mm / 22 3/4"	1200 mm / 47 1/4"		3	3

GRAPHIC	PART NAME	SIZE/LOCATION	QUANTITY		GRAPHIC	PART NAME	SIZE/LOCATION	QUANTITY
± 🦠	602A	<b>1437 mm / 56</b> 1/2" SIDE WALL	4			606-WS	553mm / 21 3/4" WINDOW SEAL	4
土 🦠	602B	1082 mm / 42 5/8" ROOF RIBS	4			609-4X-R 609-4X-L	1187 mm / 46 3/4"	2
II 🦠	603C	555 mm / 21 7/8" BACK WALL & UNDER ROOF VENT	1	OGETHER	· · · ·	609-XS	609 EXTENSION CONNECTORS	4
$\neg \diamondsuit$	L08C-4X	<b>1207 mm / 47</b> 1/2" FLAT MOUNT SIDE BASE	2	PACKED 1		S09	M4*6 ATTACHES 609-XS TO 609's	20
$\widehat{\nearrow} \widehat{\diamondsuit}$	607-4X	1187 mm / 46 3/4"	1			610-4X-R 610-4X-L	1187 mm / 46 3/4"	2
	607-XS	ROOF EXTENSION	1	HER	··	DP02	GUTTER BRACKET CONNECTOR	2
	S08	M6*20 Attaches the 607-XS to 607	5	ACKED TOGETHER	•••	DP02B	GUTTER BRACKET CONNECTOR	2
	S06	M4*6 Attaches DP01 to 607	3	PACI		S07	M5*8 ATTACHES DP02 TO DP02B	5
	DP01	ROOF CAP	1			615	578 mm / 22 3/4" ROOF VENT	1
	L08C-X	1480 mm / 58 1/4" SIDEWALL SUPPORT	2			616	578 mm / 22 3/4" ROOF VENT	1
						618	500 mm / 19 3/4" ROOF VENT	2

PACKED TOGETHER

ACKED TOGETHER

#### (GRA-ELE-4XA) GRANDIO ELEMENT 4' EXTENSION ALUMINUM PACKING LIST

#### (GRA-ELE-4XA) GRANDIO ELEMENT 4' EXTENSION ALUMINUM PACKING LIST

	GRAPHIC	PART NAME	SIZE/LOCATION	QUANTITY
		S04/ML01	M6*14	50
		W04	ROOF VENT	2
	)	Z02	M3.5*16 SCREWS FOR ROOF VENTS	5
HER	Antonio	HQCO1	ROOF VENT ARM	1
PACKED TOGETHER	AL	HQC02	ROOF VENT LATCH	1
PACI	() Z04, S04/ML01		HQC01 HARDWARE	2 EACH
HER		S03/ML01	M6*10	5
PACKED TOGETHER		FMZ	FLAT MOUNT BRACKETS	4
PACI	± 🍬	602A-SPACER	100 mm / 4"	4

#### (GRA-ELE-4XP) GRANDIO ELEMENT 4' EXTENSION PANEL PACKING LIST

GRAPHIC	PART # SIZE/LOCATION		WIDTH	HEIGHT 1	HEIGHT 2	QTY
	¥7	SIDE PANEL	578 mm / 22 3/4"	1450 mm / 57 1/16"		4
	Y8	ROOF PANEL	578 mm / 22 3/4"	1109 mm / 53 5/8"		3
	Y10	ROOF VENT PANEL	578 mm / 22 3/4"	486 mm / 19 1/8"		1
	¥9	UNDER ROOF VENT PANEL	578 mm / 22 3/4"	570 mm / 22 7/16"		1

# Grandio Greenhouse Limited Lifetime Warranty

**1.** Grandio Greenhouses are warranted to the original purchaser to be free from defects in material or workmanship for ten years from the date of original retail purchase on all plastic panels. Additionally the aluminium frame is warrantied for life. The word "defects" is defined as imperfections that impair the use of the product.

**2.** Defects resulting from misuse, abuse or negligence will void this warranty. This warranty does not cover defects due to improper installation, alteration or accident. This warranty does not cover damage caused by vandalism, rusting, "acts of nature" or any other event beyond the control of the manufacturer.

**3.** This warranty is nontransferable and is expressly limited to the repair or replacement of defective product if the product is defective within the terms of this warranty, Grandio Greenhouses will repair or replace defective parts at no cost to the purchaser. Shipping charges to and from the factory or distribution center are not covered and are the responsibility of the purchaser. Labor charges and related expenses for removal, installation or replacement of the greenhouse or its components are not covered under this warranty.

**4.** This warranty does not cover scratching or scuffing of the product that may result from normal usage. In addition, defects resulting from intentional damage, negligence, unreasonable use will void this warranty.

**5.** Liability for incidental or consequential damages is excluded to the extent permitted by law. While every attempt is made to embody the highest degree of safety in all equipment, freedom from injury cannot be guaranteed. The user assumes all risk of injury resulting from the use of this product. All merchandise is sold on this condition, and no representative of the company may waive or change this policy.

6. This product is not intended for institutional or commercial use; Grandio Greenhouses does not assume any liability for such use.

7. This warranty is expressly in lieu of all other warranties, expressed or implied, including warranties of merchantability for use to extent permitted by Federal and State Law. Neither Grandio Greenhouses nor any representative assumes any other liability in connection with this product. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.



### 2015 Grandio Element 6x4, 6x8, 4x Flat Mount Models

### GREENHOUSE USER MANUAL KEEP IN A SAFE PLACE FOR REFERENCE

CONTACT US IF YOU NEED HELP OR HAVE MISSING OR DAMAGED PARTS

**GRANDIOGREENHOUSES.COM** 

BACKYARD LIVING SOURCE, INC. 9543 W. EMERALD ST., SUITE 101 BOISE, ID 83704 **1-866-448-8231**