INSTALLING YOUR

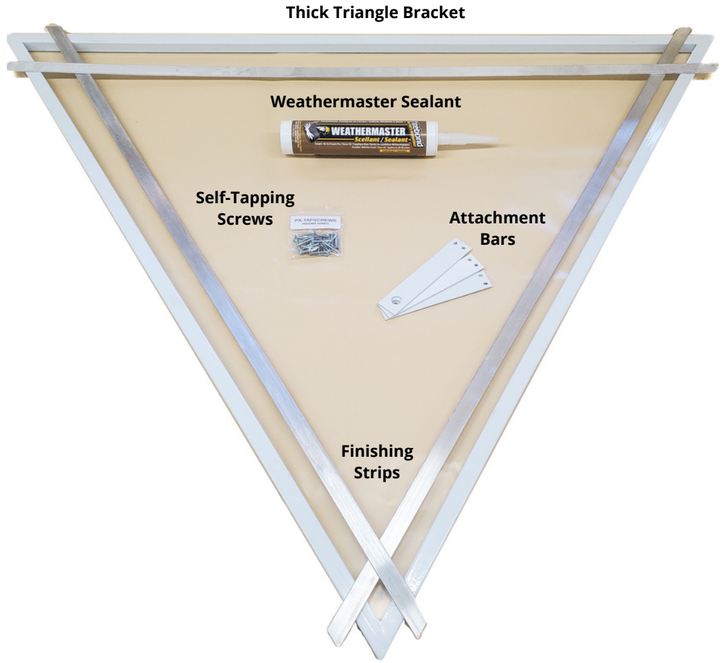
TRIANGLE GLASS WINDOW

PHOENIX DOMES

You Will Need:

-Kit materials included (opening window, thick triangle bracket, attachment bars, Weathermaster sealant, metal screws, and finishing strips) -Scissors/knife -Ladder/stepladder -Impact driver/drill -Phillips bit + bit extender -Caulking gun

we strongly recommend reading and understanding this entire guide prior to committing to which location you will be installing your window



If Installing Overtop an Existing Window Vent, You Will Also Require:

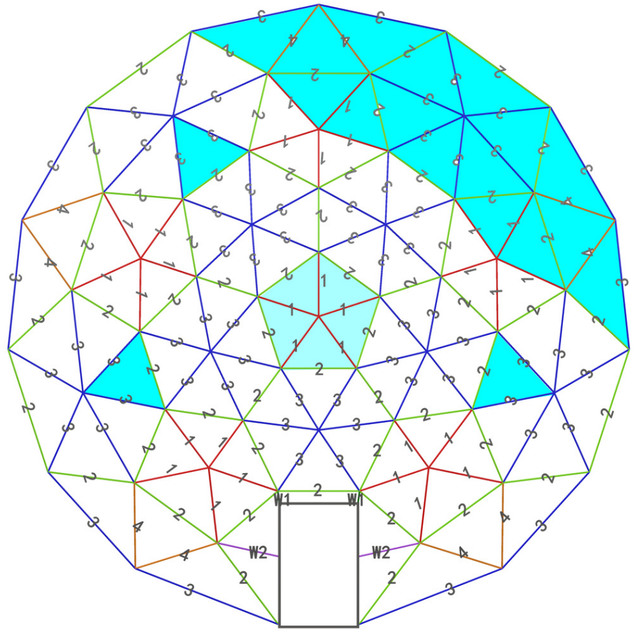
-Stitch ripper -Thick gauge metal screws -Drill + metal drill bit

If Installing in a New Location, You Will Also Require:

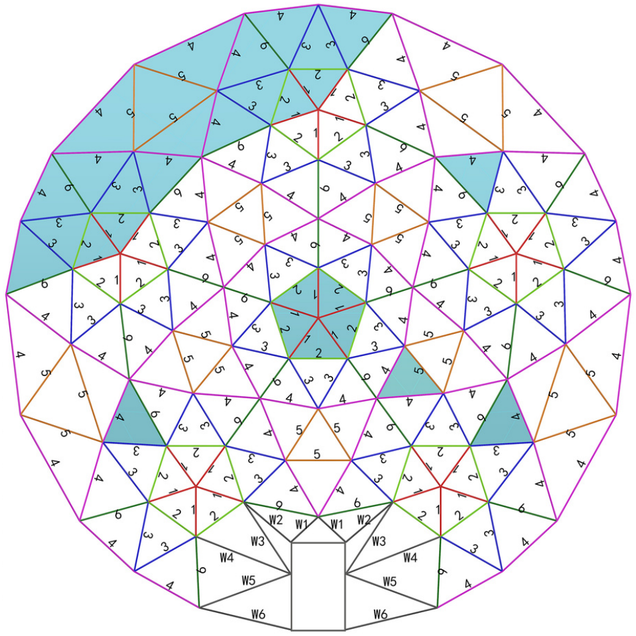
-3 x extra M12 Hex nuts from your Dome's initial setup -Impact driver -Long 19mm socket for driver

1. Select Window Location

- Our triangle windows are isosceles (2 sides of equal length) and include attachment bars optimized for 3-2-3 triangles in 3V Domes, according to their Setup Diagram (lower left). These attachment bars vary in size depending on your Dome, and are designed to situate your window in the middle of your chosen 3-2-3 triangle
- These windows are also well-suited for 4V Domes, however their installation will be slightly different and may require you to find your own mounting brackets at a local hardware store, or via mounting directly to the frame of your Dome
- One option is to replace an existing triangle vent with a glass one, where the window will be mounted directly to the struts and won't require the attachment bars. On Page 8 there is also an alternate method described that allows for installation overtop existing windows that still takes advantage of the attachment bars
- A slightly simpler route would be installing your window in a new location via using the attachment bars and cutting through the various layers of your Dome
- Unless you've predetermined your window placement prior to purchase, it's time to start thinking about your options!



6, 7, 8m 3V Glamping Package Diagram



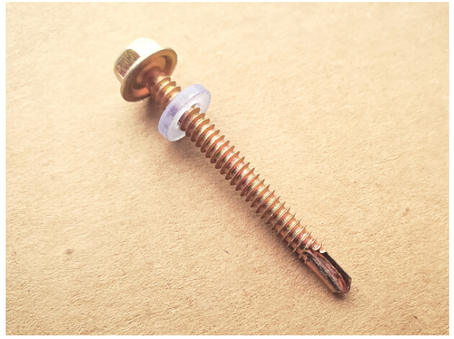
9m+ 4V Glamping Package Diagram

2. Mounting Your Thick Triangle Bracket

2a) Installing Over Existing Window Vents:

- You'll first want to position your thick triangle bracket at the base of a 3-2-3 triangle, as shown at right. Make sure the shorter side is at the top!
- The angles will be the same, and you'll want it snug up against the struts of the Dome
- This method works well for 4V Domes, as the second row triangles can often be quite high up already, thus bringing the window lower for easier access and view.
- Here we used reusable zipties to hold the bracket temporarily in place, but you could also simply have a partner hold it firmly while you drill your holes in the next step

- Our newest glass window kits include a set of 4 x 1.5" square head self-tapping metal screws, however in the event that you receive an older kit you will be responsible for finding similar screws of your own, such as these 1.5" hex heads
- Pre-drill 4 holes with a metal drill bit just smaller than your metal screws, drilling all the way through the bracket and into the struts
- Now, secure the bracket to the frame with your metal screws, and remove any tape or ties



if you'd like to consider an alternate method that allows you to use the attachment bars while installing your window overtop an existing vent, get familiar with the following pages, but don't take any action until reaching Page 8

2b) Installing in a New Location

- First, ensure you've chosen a 3-2-3 triangle as per your Dome's setup diagram if your intention is to centre it in the opening with the attachment bars. You can find all of our setup diagrams and various other instructionals on our Resources page
- Using a different triangle can certainly work too, but be aware that you will also either have to install the included attachment bars at odd angles, or find your own equivalent brackets (such as Simpson Strong Ties or other foundation tie plates, available at most building supply stores) for suspending your thick triangle bracket in its desired location. Make sure it is level and positioned with the shorter side on top, and the 2 longer sides on either sides.

For this window, we had no choice but to install overtop a non-3-2-3 triangle in a 6m 3V Dome. Rather than meeting the corner of the bracket nicely, this example shows what we mean by installing the attachment bars at odd angles!

This attachment bar perfectly meets the corner of the triangle bracket, which will be the case for installations in 3-2-3 triangles of 3V Domes

- If you've already got an Interior Oxford Fabric Liner installed, begin by temporarily removing any sectional pieces attached to the Dome hubs surrounding your desired window opening
- The bolts of your Dome's frame should be long enough that you'll easily be able to slip on your attachment bars followed by an extra nut, some of which you should have left over from your initial Dome assembly
- Apply each attachment bar and finger tighten its bolt such that they're roughly in position. Now, have a partner hold your thick triangle bracket in place while you screw in the first of the shorter Philips head self-tapping metal screws to one of the brackets. Pre-drilling is not necessary for these shorter screws
- Check the angle of the bracket before putting in further screws, with a level if you like, and proceed with securing your attachment bars to your triangle bracket
- Once complete, take you impact driver once again and tighten each of the 3 fresh nuts all the way down to lock everything in place

We installed this window in the existing location of a non-3-2-3 triangle, hence the reason it didn't end up centred the way it should in a symmetrical hexagon triangle. This window was also an earlier version and slightly smaller than the glass windows we are now offering

3. Prepping Your Window Opening

3a) Installing Over Existing Window Vents:

- Note the velcro strips outlining your window vent
- Most of the velcro you'll be easily cutting away at the end, as it falls within the viewing area created inside the thick triangle bracket
- Looking at the orange box below however, you can see there will be some velcro on the exterior of the Dome that needs to be removed in order to glue down the outer flap such that it meets the thick bracket. You may also want to remove any velcro facing your Dome's interior
- Take a stitch ripper to the velcro now, and remove any stray thread

- Once that's done, it's time to roughly cut out the window opening itself!
- Leave 2-3" from the inner edge of the triangle bracket all around for now - this will make it easier to sandwich the cover fabric between your window and thick bracket in the next step, as well as making for easy communication between interior/exterior partners while lining up the window with the bracket
- For the upper edge, it's most likely that your window vent is different than the one at left and includes an opaque outer flap rather than transparent (there have been a few variants over the years!). Where this is the case, you'll want to cut this opaque flap horizontally 2-3" lower than the triangle bracket's inner edge, and then remove any velcro remaining along the sides in order to end up with smooth edges that can be glued together later on

3b) Installing in a New Location:

- Lucky for you, you'll have no stitch ripping or window flaps to worry about! Aside from that, your process will be essentially the same as above
- Start by cutting a small hole right in the middle of your triangle bracket and work your way outward from there, leaving 2-3" from the inner edge of the triangle bracket (photo shown right was a precise trim right to the inner edge of the triangle bracket, which we found made aligning and mounting the window more difficult... better to leave a little extra!)
- Scissors or an exacto knife work well for this purpose
- Bear in mind you're better safe than sorry, and all excess vinyl will be trimmed away later on once your window is securely fastened in place!

An Additional Method to Consider:

- There's one more potential route if you'd like to install your glass window overtop an existing window vent and centring it with the attachment bars - this option is basically a hybrid between the two previous methods
- One of the Domes shown thus far came with transparent window flaps, as some older models did. What we're about to describe is ideal for folks with opaque window flaps, which will result in a much cleaner final impression
- The concept is this - after removing the exterior velcro strips down the long ends of your window vent (both on the Dome cover itself as well as the window flap), **it's possible to simply glue this flap down permanently along its edges, before cutting out your window triangle as in 3b)**
- The tube of Weathermaster sealant included with your window provides more than enough adhesive for this purpose, as well as the necessary sealing around the window itself that is required either way. You could also use any additional HH66 vinyl cement you have remaining from the installation of other accessories
- If you'd like to go this route, make sure to remove all velcro from the outside of the Dome and the inside of the window flap in order to create a more permanent solution with glue. Then, apply thin lines of adhesive all over the surfaces to be bonded and press them together firmly with gentle rubbing to ensure a strong bond. It helps to have two partners opposing each other's force from inside and outside the Dome
- Let the bond set for several hours and ideally overnight before proceeding with cutting out your triangle as per 3b)

4. Secure Window to Bracket

- Before you begin, if you received a glass window with two hydraulic arms, try them out quickly by opening the window. If you find that they are unnecessarily strong (you'll likely agree), take a moment now to remove one of them completely with a screwdriver
- Set up your ladder on the outside of the Dome as necessary, and grab your impact driver with a bit extender and Phillips bit, and the packet of shorter self-tapping screws. There is no need to pre-drill your holes!
- You'll be securing your window with 3 screws equally spaced out along each of the 3 edges as soon as you and your partner can confirm your window is lined up accurately overtop the bracket. It helps to feel for the corners! We found it easiest to have the window open while attaching the sides, although it will of course have to be closed while sinking the screws up at the top edge
- Make sure in all cases that the Dome cover is tucked under the screw flange and laying flat before sinking screws
- The **bit extender** is crucial - you'll want to put your screws in as close to perpendicular as possible. Aiming into the seam of the window's edge on an angle can cause your screw to miss the bracket. Aim for the middle of the screw flange as shown below, and don't make the same mistake we did top right!

luckily our local building inspector was satisfied with the work thus far!

5. Edges and Flaps

- The last thing to do outside is to take your caulking gun and Weathermaster sealant, and carefully run a bead all the way along the exterior perimeter of the window where it comes in contact with the Dome cover as shown below. You'll also want to make sure to seal around the screw heads
- If you've replaced a window and have stitching holes visible, it's not a bad idea to fill these and use a paper towel to smear in and wipe away the excess sealant
- Also make sure to seal up the upper extent of any remaining window flaps. You can cut the square edges of these flaps to be in line with the edges of your window if you like the visual better!
- You can now trim away the excess 2-3" of cover vinyl you left sitting in your window opening with a knife

6. Interior Finishing

- If you'll be reinstalling our Interior Oxford Fabric Liner or similar, applying the included finishing strips is highly recommended
- Currently these will either come in white or as bare metal, which can be applied as-is or painted in order to match your Dome's aesthetic
- Installing a glass window during initial Dome setup or in a new location will ultimately result in a cleaner final appearance

- <u>If you haven't yet installed your Oxford fabric liner, or you've cut through your cover in order to install your window in a new location:</u>
  - Leave the finishing strips until you've got your Interior Oxford Fabric Liner set up with the relevant panel overtop of (and obscuring) your window
  - Feel for the edge of the inner window frame, take the shortest trim strip (top edge is shorter), line it up at parallel as best you can, and screw it into the thick bracket with 3 of the shorter self-tapping metal screws
  - Repeat process for the trim strips on the two vertical edges
  - Finally, with an exacto knife, trim away the liner fabric on the inside of the window frame. This should result in a perfectly clean edge when looking out the window

- <u>If you're replacing an existing window on a Dome that's already been set up for a while:</u>
  - The relevant Oxford liner panel will have already been cut through in order for it to be clipped onto the struts framing your window
  - This may result in a gap in the Oxford liner above the window. You can contact us for an extra strip of the Oxford fabric to cover this area, which can easily be attached to the struts via the usual plastic clips, or work out a trim solution of your own!

This is what the Oxford liner over the window should look like just prior to cutting it out with your knife, <u>after</u> you've already screwed each of the three finishing strips into place

We installed a wood paneling kit the same time we put this window in, so this isn't a perfect example of the sandwiching effect as described. However, the concept is the same. The trim strips ultimately create a triangle that becomes the innermost layer!

7. Installing Your Screen

- If you opted to include a velcro mosquito screen, read on!
- Your screen will have come with 3 strips of sticky-back velcro. These are intended to be stuck to the interior surface of the finishing strips, assuming you're using them as above to hold the Oxford liner in place. If you've left it as just the thick bracket, that's fine too! The triangle is the same size either way

1. Start by unpeeling and sticking a full velcro strip along one of the 3 lengths of your finishing strips (or triangle bracket). Our Dome here doesn't have an Oxford liner installed, so we stuck it to the triangle bracket! Then, snip the corners to create nice angular points
2. Snip one end of the next velcro strip so it'll nicely meet the previous one. Lay this strip down, and then cut its opposite corner to make a point once again
3. Snip one corner of the last strip to match, stick the strip down, and snip the final corner to complete the triangle
4. Use the grip of your scissors or another hard smooth object to firmly press and rub the velcro strips up and down to ensure a strong bond
5. You can now stick on your screen with its sewn velcro edge, but DO NOT remove it again or otherwise play with the velcro for at least 10 minutes, ideally half an hour, to allow the adhesive to set
6. You can now pull apart and replace the velcro as necessary anytime you want to open or close your window!

- Always be gentle when unsticking the velcro to prevent the back from pulling up! You may wish to consider using some kind of glue if problems arise over time, or additional short metal screws with washers to add surface area









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