## Step By Step Guide

## to Your Dream Dome



### 1. Determine Your Size

Different sizes lend themselves best to different applications

### 13'/4m - 140sqft

An ideal addition to restaurant or backyard patios to allow for all-season dining, entertaining, or gardening experiences. Host guests, grow food, or both! Sized from 3-4m/10-13', these are our smallest domes.



### 26'/8m - 520sqft

Spacious luxury accommodation or a home for larger families. Best taken advantage of with an integrated loft, usually located above the bathroom/kitchen. These also make a great education space or workshop.

### 16'/5m - 210sqft

Suitable for short-term guest accommodation or solo tiny house living where kitchen and bathroom facilities are minimal or located close by. Ideal as a home office, bodywork studio, or creative space.



### 30'/9m - 690sqft

Suitable as a full-size long-term residence for a couple or a young family. A half loft or full second floor starts to become possible. Often turned into yoga or aerial studios, classrooms, workshops, utility buildings, or home business spaces.

### 20'/6m - 290sqft

Ideal for a couple with room to lounge and stretch out and a good-sized kitchenette if outside bathroom facilities exist. Enough space for a small bathroom cell if necessary. Often used as movement spaces, art/bodywork/tattoo studios, or large offices.



### 33'/10m - 840sqft

A complete two story house with enough square footage for a family residence. Yoga studios, circus arts, dance studios, workshop or retreat space all lend themselves nicely at this size.

### 23'/7m - 400sqft

Suitable guest accommodation for a couple with a kitchenette, bathroom, and king size bed, or add a loft to accommodate a young family of four.

Our most popular size!



### Large Domes 36'/11m+

Dance studios, exhibition halls, retreat spaces, enormous greenhouses, experiments in community housing... We're able to manufacture Domes and Zomes of up to 80m in diameter. With Phoenix, the sky is very nearly the limit.

### 2. Platform & Floor

Exact fit platforms come highly recommended!

### Many of our customers choose to build wooden platforms.

These can be elevated off the ground, erected on uneven or sloped terrain, are low-impact on the environment, and are ultimately removable if ever necessary.





Alternate options include gravel, earthen/cob, or poured concrete floors (potentially with radiant heat!)



We provide complimentary exact-fit wooden platform plans for our most common sizes on the Resources page of our website, with engineer-stamped versions available upon purchase. We have stamped plans available for 6-11m Domes for AB, BC, NB, NS, and ON!



### For best results, we recommend building an exact-fit platform

This ensures ease of sealing the Dome's cover skirt and any weatherproof trim around the platform's edges, in order to prevent rainwater from pooling and seeping into your Dome or subfloor. In cases where a larger flat deck is desired or required, you will need to account for drainage gaps around your Dome's perimeter, as well as building up an elevated, insulated floor for the Dome itself internally

### 3. Lifts & Lofts

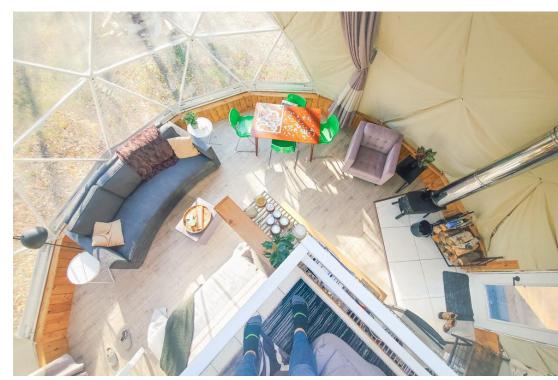
A little extra height can really add to and open up your space

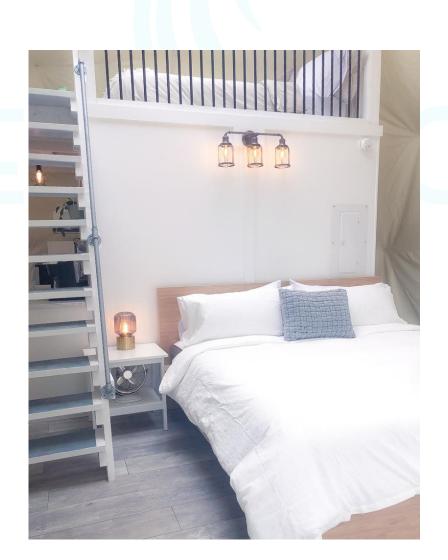


Lofts or central islands with bathroom below and sleep space on top are a great option for maximizing your Dome's livable area!

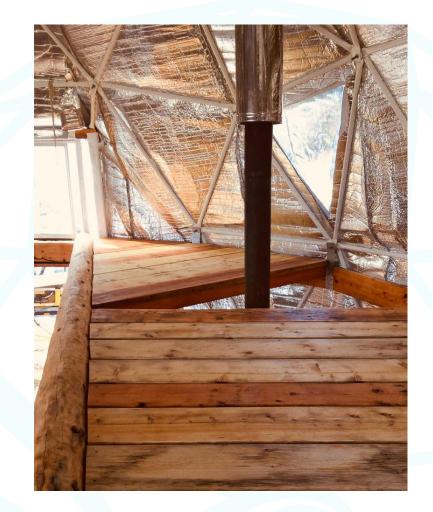
Depending on your chosen size, it may be worth building in a pony wall in order to elevate it off the ground and create enough headroom for a second level.











6 and 7m Domes will often require some elevation, with 8m Domes and up naturally lending themselves to additional floors.

If you're interested in building one, you can find a guide to all things loft-hanging on our Resources page.





Custom awnings are available for connecting to other domes or buildings

### 4. Layout

### Customizable as necessary!



A 3-layer high custom panorama window on this yoga studio dome



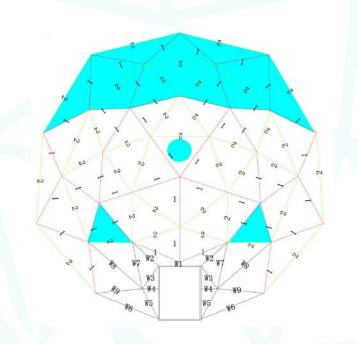
Multiple pentagon windows/skylights are possible for larger Domes!

#### The door and window layout for our glamping packages is pre-determined,

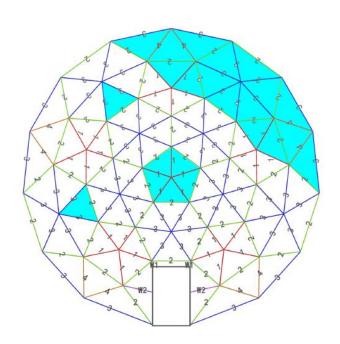
and choosing any further modifications will result in your order becoming a Custom Dome. These packages include door frame attachment bars designed to accommodate standard-sized 36x80" pre-hung exterior doors, which are available at any building supply store.

Any Dome can be modified with multiple doors, double doors, awnings, modified windows, and/or additional windows (which you'll definitely want to consider if you're planning on building a loft!).

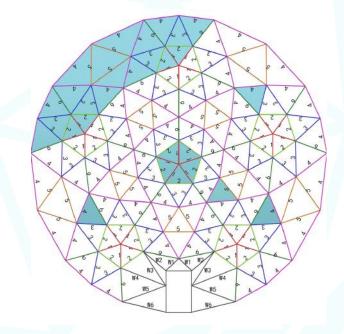
<u>Check out the Add-Ons page of our website for a look at all of the potential options</u> when it comes to customizing your Dream Dome!



5m 2V Glamping Package Diagram



6, 7, 8m 3V Glamping Package Diagram



9m+ 4V Glamping Package Diagram



### 5. Insulation

### Reflective bubble liner with Oxford fabric finish

#### 1 - Internal Reflective Bubble Liner

Many of our customers operate year-round with our dual insulation layers and good stoves, keeping their guests and their families comfortable through Canadian winters. This aluminum bubble liner layer ends up invisible, nestled between the outer PVC cover, frame, and interior Oxford layer. It traps and reflects heat back into the Dome when it's cool out, and away from it when it's hot.



#### 2 - Interior Oxford Fabric Liner

We like to think we have the most functional, not to mention best quality, interior liner currently available on the market. This layer is modular, machine-washable (several pieces at a time), mildew-resistant, and creates an additional air gap, all while simultaneously looking fantastic! The majority of our clients go with 4-Season Glamping Packages, which include both the reflective bubble and interior Oxford fabric liner, and together result in an insulation value of about an R-5.

For reference, most Canadian homes achieve an R-value of between R-20 to R-60, depending on whether we're talking about walls or ceilings. This means that while your Dome will trap heat nicely while you've got a heat source running, it will not retain it for long periods after it's turned off or goes out. Serious heat-trapping requires several inches of insulation material... see below!



In colder regions, Dome-builders can work with local spray foam companies to significantly increase their R-value and create more permanent installations. Some, unwilling to take any chances whatsoever on winter comfort, will create enclosed and heated basements - even sprayfoaming the ground beneath! Spray foam will yield similar R-values to conventional houses or cabins.

Another comparable option we've seen is custom cutting triangles out of Rigid foam board insulation panels, punching holes around their points, and zap-strapping them onto the hubs of your Dome to maintain transportability!



### 6. Heating

Year-round comfort across the continent

A Dome can be heated in all the same ways any house or cabin can be heated - your selection will depend on your particular region and intended use. For off-grid applications and in general, wood stoves will often make the most sense. However, if you will be renting your Dome out on a commercial basis, you may not want the trouble of teaching each of your guests how to safely operate one. In this case, one or some combination of the following may be ideal:



### **Propane or Natural Gas Heaters**

Vented options will be best due to the enclosed nature of a Dome

### **Heat Pumps**

One of the most energy-efficient choices, electric heat pumps use pressurized fluid to pick up heat from outdoors and transfer it into your space



### Air Exchangers

If you're looking for maximum year-round control over temperature, humidity, and air exchange, a dedicated air exchanger unit is the way to go



#### **Pellet Stoves**

Simple and safe to operate and refill, pellet stoves operate more automatically than wood stoves but still with the ambiance and dry heat of a real fire



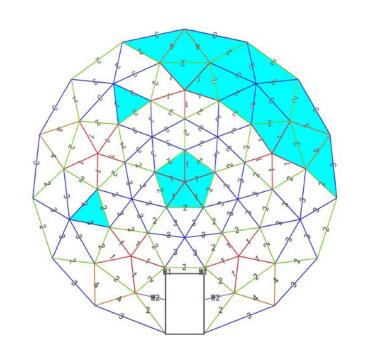
#### **Electric/Infrared Heaters**

Infrared can be a good choice as it directly heats people and objects rather than the air. Electric space heaters can help in bedrooms or bathrooms. Ask us about our line of Zero infrared heaters!



We recommend upsizing your heat source given that (without spray foam) your Dome simply will not have the same insulation factor as a conventional building. A general rule of thumb is to aim for 1.5-2.5x more than recommended - so if your Dome is 400sqft, use a stove that is good for 600-1000sqft

You can find both metal and silicon chimney flashing kits on our website under Add-Ons, which can be installed wherever necessary without a pre-determined hole



### 7. Ventilation

Your climate will determine your airflow needs

### **Cooling and Airflow**

Ventilation is an important consideration as our Dome covers are impermeable to both air and water. We design our glamping package Domes with 2 opening triangle window vents, which provide considerable natural airflow. A screened front door can be another handy passive solution.

## In the summer, with the sun shining directly into the panorama window, your Dome can get quite warm.

In this case, closing your curtains and zipping open your panorama window partially or fully are also great options for keeping cool. Depending on your region, rigging up shade sails outside can also be a good idea. Dome covers are easy to cut into, and frames are easy to attach to, when air conditioning units are desired.





Our opening glass windows are also worth considering for maximal ease of use!



### **Humidity Management**

In the winter, and especially when cooking is regularly taking place inside, humidity becomes a major factor. We highly recommend running a dehumidifier in the winter months for the sake of preventing condensation and any potential moisture-induced mold or mildew problems. As mentioned, air exchangers can be the heavy-duty option for particularly moist or cold environments.

# Our <u>Solar Fan Kits</u> are a great base layer when it comes to addressing both heat and humidity.

They will operate even in overcast conditions, ensuring constant ventilation most days of the year. We've found that our Demo Dome remains condensation free in wet, coastal BC year-round with only a solar fan to manage its humidity.



### 8. Kitchen/Bathroom

Wet space makes humidity control essential



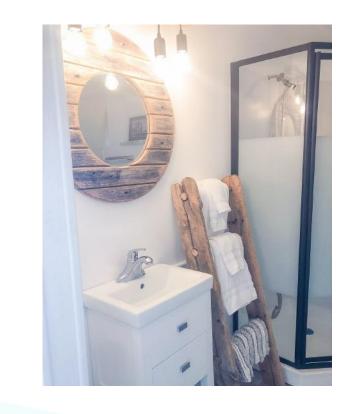




Yes, you can build in kitchens and washrooms!
Partial walls, full walls, or enclosed spaces are all possibilities.

We highly recommend an exhaust fan in any kitchen or bathroom to draw out excess moisture - kitchenettes will usually be fine without.

If you've decided on a loft, it can be a good idea to plan your kitchen and bathroom in the space beneath it. This gives you plenty of ceiling space to hang pots, pans, and cooking utensils from!





We have <u>Silicone Pipe Flashing Kits</u> available for any plumbing, electrical, or ventilation piping that needs to pass through the cover of your Dome.

You can find them on our Add-Ons page.

Please note that we do not supply any furniture, appliances, or modules. Due to the myriad ways a Dome can be used, styled, and outfitted, we've elected to leave the creativity to you!

This helps you save on the shipping costs that accompany large prefabricated units, and ultimately results in a higher quality and more personalized final product.



### 9. Permit Requirements

Make sure to satisfy local regulations prior to beginning your build!

Depending on your intended use of your Dome, legally you may be required to go through the process of permitting it with your municipality. Provincial, state, and local regulations will vary, and are worth looking into in advance.

Our Domes are technically tents, or temporary structures that can be dismantled in a day. Many of our customers living rurally will simply skip the bureaucratic hassle and not apply for permits - as long as the neighbours don't complain, this is usually fine.

For rental businesses, studios, and visible dwellings, permitting may be the best course of action. The current Dome explosion is a relatively recent phenomenon, so certain areas will have pre-existing regulatory frameworks where others will not.











We provide complimentary engineer-stamped snow and wind load ratings for **AB, BC, NB, NS, and ON** for all of our major Dome sizes to assist in the permitting process. Depending on size, our Domes are capable of withstanding between 60-100psf snow load and up to 320km/h winds. These include a safety margin of 4X for human-occupied structures, so you can rest assured that they are **more than capable** of withstanding whatever adverse weather comes their way. We can also provide fire testing data, as well as stamped plans for exact-fit wooden platforms.

#### In most cases, building inspectors will be satisfied with the above.

However, each municipality is different and we cannot make any guarantees regarding their openness to alternative structures.

Occasionally additional engineering studies may be required. In general, Canada's East Coast is very open to Domes and has plenty of precedent, with the West Coast being less familiar and potentially trickier.



### 10. Payment, Warranty, & Shipping

### It's time to make your Dream Dome a reality

### **Payment Options**

Once you've finalized your decision, we require a 50% deposit for glamping packages, or 60% for Custom Domes. You're welcome to pay via a series of e-transfers, by bank deposit, or by credit card - however using a card will add a 3% processing fee to your order. The remainder will be due once your Dome is ready to ship out from our warehouse outside Vancouver, BC. *Financing options are available for those in Canada!* 



### **Warranty Information**

We offer a 5 year warranty against UV damage and premature deterioration of our Glamping Dome covers. During this time period, if any seams split or open up by themselves we will be more than happy to provide you with a complimentary patch kit via expedited shipping. If the cover is not easily reparable, we will provide a replacement.

### **Shipping Rates & Volume Discounts**

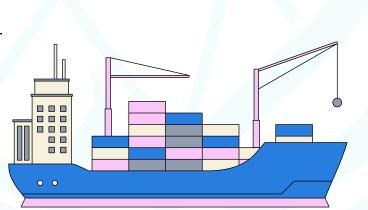
Shipping rates will vary depending on Dome size and location. Shipping a mid-size Dome to eastern Canada is typically around \$700-900 these days, but feel free to email us for a more accurate quote. We will sometimes offer free shipping and/or additional volume discounts *depending on your Domes of choice*, so feel free to ask our sales team about discounts on 4-5+ Domes!

### **International Shipping**

We deliver worldwide! For Canada and the US, we will deliver directly to your door or building site as necessary. For other countries, we will ship to the nearest international sea port, in most cases for free except for rare exceptions. In this case, you'll have to look into a local broker to help with customs and freight forwarding.

#### **Lead Times**

Our 4-Season Glamping Package Domes are in stock and ready to ship out for most sizes, frame weights, and colours. For Custom Domes, due to manufacturing and shipping times, our lead team prior to delivery is generally between 12-14 weeks.

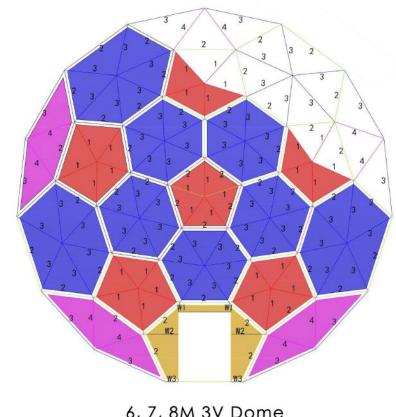




### 11. Setting Up Your Dome

Want to come to my build party?

Prior to installation you'll require four sets of documents, which you'll find located on the Resources page of our website. Several of them will be specific to the size of your Dome. We recommend familiarizing yourself with them in advance, watching our Assembling Your Phoenix Dome instructional video (also on the Resources page), and downloading them to a laptop, tablet, or printing them off in advance of the big day.



6, 7, 8M 3V Dome Interior Oxford Liner Diagram

- 1. **Setup Instructions** step by step reference guide for installation
- 2. **Setup Diagram** specific to assembling the frame of your Dome
- 3. Interior Oxford Liner Installation Diagram\* helps you put the right pieces in the right places
- 4. **Curtain Kit Installation Instructions\*** the final step before you start bringing in furnishings! \*applicable to all 4-Season Glamping Packages and certain Custom Domes

### **Tools & Materials Required:**

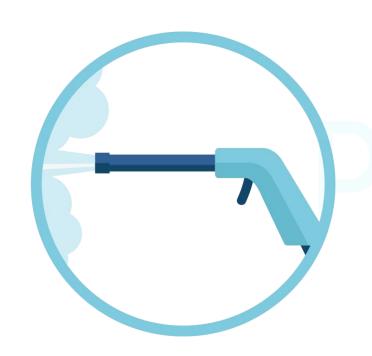
- -Impact driver(s) with long 17mm and 19mm sockets
- -1-2 sturdy standup ladders (or rolling scaffold for 8m+ Domes) + hard hats
- -A long strong rope + soccer ball (or similar) for cover pulling
- -A winch, vehicle, or group of friends
- -2x8 lumber, chop saw, level, measuring tape, screws, and screw gun for door frame
- -Strong tape + scissors/exacto
- -Ratchet straps x 6



### 12. Dome Care & Repairs

Be sure to look after your new family member!

You can use a sponge with soap, or ideally a pressure washer to remove debris and algae from the cover of your Dome. We recommend a good pressure washing once each year to keep your cover looking clean and fresh.



Your Dome cover's lifespan is about 10 years, and likely longer depending on its location and UV exposure. We can provide replacement covers whenever necessary! The frame of your Dome will last indefinitely as long as it is not exposed to excess moisture or salty air

Any cuts, holes or leaks can be easily remedied with a patch kit, available on our website, which includes vinyl cement glue and additional material. Your first patch kit comes free, just ask!



At times you may notice soot streaks from your chimney that are more difficult to clean. Soap and bleach are both worth a try, but we've found that WD-40 works best!

To maintain clear visibility through your windows, make sure to only use non-abrasive rags or sponges with soap or window cleaner

If you've ordered a glamping package or Custom Dome that includes our interior Oxford fabric liner, bear in mind that it's designed to be modular and easily machine washable whenever necessary in any conventional washer/dryer 2-3 pieces at a time!

### So Why Phoenix?

#### **Same Day Customer Service**

We're available to answer any of your questions before, during, and after ordering, during setup and beyond

#### **Fast Shipping**

Our glamping package Domes are usually IN STOCK, in Canada, and ready to ship. Unless you are ordering a Custom Dome that needs to be made specially for you, you'll receive your order within just a couple weeks and be able to realize your project without delay

#### **Get What You See**

Our website and instructions are full of high quality pictures of the exact Domes and features we sell, taken either by ourselves or sent to us by our customers - not blurry, confusing images downloaded from the internet or stolen from other companies' websites, as is so often the case with low quality or offshore companies

#### **Real Testimonials**

Rather than putting up easily faked anonymous testimonials, our <u>glowing testimonials</u> will link you directly to the customer's website and contact information so you can be sure they are a real person or business and are genuinely loving their Domes. Feel free to contact them with any questions for extra peace of mind, or even book a stay with them in order to get a first-person feel for the Dome life! We also maintain a constantly-expanding list of successful commercial ventures <u>here</u>

#### **Designed for the North American Climate**

Our Domes offer the key features you need, such as:

- Zip-off panorama windows for maximum ventilation during hot days. Without it you will likely be forced to install expensive air conditioning for the summer
- Frame sizes engineered for Canadian snow loads with free stamped reports for 5 Canadian provinces
- Machine washable, multi-section interior fabric liner none of that quilted batting that's impossible to clean and only collects mildew. Easy to install, easy to clean
- <u>Double layer insulation</u> reflective bubble liner insulation that bounces heat right back into your space, plus an additional air gap thanks to the interior liner
- Free engineer-stamped exact-fit platform plans making it easy to seal out critters, creepy crawlies, and the weather. Square platforms allow water to run under and into your Dome without costly compensation via an elevated internal subfloor
- <u>Chimney and pipe flashing kits that will satisfy any inspector</u> these are designed for locally available, CSA-approved stoves and pipes, and can be installed anywhere on your Dome at any time
- <u>Heavy duty cover tensioning system</u> offering a much smoother, tighter look than the competition's weak & cumbersome lacing
- <u>Designed to install a quality door of your choice</u> some companies include a metal/glass door, which might sound great, BUT... we used to offer this type of door ourselves, until we found that it would easily blow open in the wind and basically fall apart, leaving you with an opening that does not fit a standard door available locally. Thus, we decided that getting a regular door at your local building supply will give you a better quality door over time, and allows you to choose your own style depending on your Dome's intended function. This also gives you the option of buying used, and helps you save on shipping!

#### **Customization and Ongoing Support**

Want to add an awning later? A glass window? Attach 2 domes together? Hang your Dome way up in the air? Other creative ideas? We are constantly innovating on products and features, sharing them with our customers, and supporting you straight through from ideation all the way up to the Dome of your dreams!

