#### YURT SETUP INSTRUCTIONS:

#### Yurt

If you need to assemble the door refer to this section. If your door comes pre assembled, you are ready for the next section.

#### DOOR FRAME & LATTICE WALL

#### **Door Frame Assembly- Pre-hung Door Assembly**

This section will help you choose a door and attach the yurt door frame to a pre-hung door. It is important that the size of the door and frame is as close as possible to the dimensions suggested in this guide.

The height of the jambs are cut to 79" and can be cut again to fit a shorter door. If the height of the jambs need to be cut, you may want to take apart the jamb from the wing board and cut them individually. It's important that that you don't buy a door that is taller 79".

Here are some things to consider and look for when buying a pre-hung door:

- ✓ New doors will often have a trim (called brick mold) around the front of the door. This will need to be removed and is not usually a big deal. However if you get a used door that has the trim caulked and painted and glued on, it will be a bit of a process to remove and clean the jambs.
- ✓ Make sure that the weather seal on the threshold is working or easy to replace. If it is not working, it will cause the door to leak.
- ✓ Having a door with glass is great for adding views or light, but if you plan to do some traveling with your yurt, a glass door is heavy and breakable.
- ✓ In swinging doors work best on yurts due to the 8" band that goes around the top of the roof. However, in swing doors are more susceptible to blowing open in high winds and are more likely to leak.
- ✓ If you are going to use an out swing door, you will need to fold the band that is over the door in a way that lets the door open. I have done this many ways. One way is to cut the fabric and fold under the part of the fabric that is over the door under and screw it down.

Another method is to just roll the extra fabric without cutting it, then screw it to the top of the door frame.

✓ Another way to deal with the water over a door is to make a plywood awning and screw it to the top of the door frame. You can then use the extra fabric to transition the roof to the awning.

✓ If the fabric does get cut, folding back the corner that is at the edge of the band make a nice finish when screwed down.

# **Pre-Hung Door Assembly**

\*These instructions are based around using a standard exterior door which is 35 3/4x79 inches in dimension\*

# **Getting started**

Identifying the door frame parts

Here are a top and bottom of a door or window. The top has the curved groove and the bottom has the bevel on the outside. (Note the notches on the bottom plate in this picture are different on many of the doors we make currently)



Door top and bottom

**Step 1:** Begin by locating the angled wing boards and the jamb boards (these boards will be connected together



Step 2: after removing the brick mold from the door and any other packaging from the pre-hung door jambs, use 2 ½" screws, attach the board/wing combo to the jambs on the pre-hung frame. Be sure the edge of the

door jamb and the boards on the wing are flush on the inside of the frame.

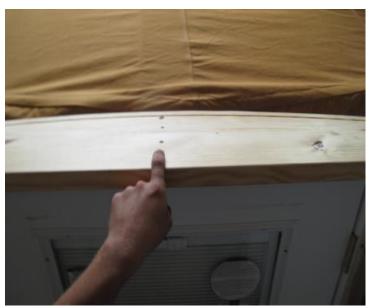


• Step 3: Take the curved top plate and center it left to right on top of the door frame. The curve should face the outside and overhang the edges of the frame and the wings by a 1/4".





- Step 4: To attach the door top plate use 2" screws directly over the door and two ½"-3" screws where the jambs and wings meet the top
- ✓ Make sure the groove (that will eventually hold the wall cable) is facing up on the door.
- Step 5: Moving on to the bottom plate, we first apply silicone to the flat part of the top side of the bottom plate. Only put



silicone out to the width of the pre-hung door frame.

- Step 6: Center the plate left to right on the frame and then set the plate front to back leaving the front edge of the yurt frame jamb (the 3/4x5.5" board attached to the wing) flush with the front edge of the flat part where the beveled (angled) edge begins.
- Step 7: Attach where the jambs and wings are over the flat part of the plate with two ½"-3" screws.

#### **Setting Door Frame**

#### On a Deck

- Find where on your deck you want to place your door (it's better to place it away from where storms tend to blow in from).
- Put the frame over chosen spot (rounded sides facing out) and lay it back and down onto deck.
  - Place two lines of silicone caulk across the bottom. Put one line near the front edge and the other line near the back edge of the bottom door plate.
     Tilt the frame back up and set it slightly (1/2") over the edge of the deck (not including the ½" plywood band.)
  - Take your 3 inch screws and put 3 or so on each side of the frame behind the wings (inside the yurt). Try to hit blocking or a floor joist if possible.
     You may substitute a larger lag screw or bolt for extra strength.
  - Once you know where your bottom door stop is going, you can place 3 or 4 more screws directly under it. Be sure to caulk over them and mark lightly where they are so as not to put the door stop screws directly into them.

#### • On the Ground

- For on ground setup you will first set your circumference, your lattice walls and then your door frame.
- Find your center point and place a stake there (be sure to have an extra foot or two beyond your yurt radius so you can move safely around it as you set up).
- Use a tape measure or stick marked with your radius and move it in a circle around the center stake while marking every 4-5 feet of your circumference (outer circle) with stakes. This will give you a good idea of where your walls will go. Lay your door frame down in the area you want it to go.

## **Wall Setup**

Setting up the lattice wall is very simple on a flat surface, like a deck or floor. We recommend attaching a plywood band around the circumference of the yurt. This makes it simple to attach the deck floor to the lattice/

✓ 3 people is ideal for this task.



These instructions assume that you have a plywood band going around the circumference of the platform that is sticking up the above the level of the deck at least 4".

\*You may want to place bulky/heavy items such as rafters, roof canvas, stove etc. around the center of the deck/ground circumference at this time, before setting up walls. This will be easier than trying to squeeze them through the door. You still want to

leave plenty of room to move around the edge inside the yurt area and a place in the very center for a step ladder.

- Take the khanna lattice walls and set the center of them directly across from your door.
- Begin to spread them slowly and equally in both directions, being sure to lift them off the ground/deck each time you move.
   When possible, spread them straight out and then bend them into the circle/ circumference of your yurt. (this will not possible on high decks). Continue stretching the khanna until both ends reach either side of the door frame.





Attach the ends of the khanna (at 4 points on each side) to the clamp board (a 1 ½ x 5" board with a routered groove in it.

Using the 2 ½", ¼ -20 carriage bolts provided, attach the

khanna to the inside of the clamp board, with the groove facing out. Next attach the clamp board to the door frame using the larger 3/8" stainless bolts (clamp boards should be inside the wing board with the groove facing out.)

• Next go around and check for height. You want to have the top bolts at f 6 foot 10 inches (a slight ¼" or less variant is okay) above the deck/ground all the way around. Slowly lift and spread high lattice points towards lower ones. It doesn't take much shift to change the height in an area so be sure to check it often.

## Attaching the Khanna Wall Section to the Plywood Band

- ✓ Make sure the wall section is in the exact place you want it (it is best to set up the whole frame before you do the drilling in this next step).
- Put a mark on a piece of wood at 6'10" from one end, and walk around holding
  - the piece of wood straight up and down to check the height of the last bolt. You want to double check that the height should be 6'10".
- sure the wall section is the same height all the way around. It is more important that the wall height is the same than that it is 6'`10". If you notice a couple inch difference at any point, stop there. There is either too many or too little khanna; this may need to be adjusted before moving on to the next step.



- Take the bottom bolt out of the wall section one at a time and drill from the inside out through the plywood band. Put the bolt back in from the outside in and put the nut back on (you will need at least a 2" bolt.)
- Next is the lattice wall wire. Start by hanging the section of wire where the two wire ends are connected just left or right of the door. Place the cable between each of the bolted lattice wall pieces at the top of the walls. Work the cable all the way around leaving no slack between sections. You are ready for the roof structure. Run the cable through the groove above the door, and lock it down

with the brackets and lathe screws provided.



# **Roof Ring and Rafters**



- Begin by placing a step ladder in the center of the floor. An 8 or 10 foot ladder is ideal. For smaller 36" rings, the strongest and most balanced person may be able to take the roof ring and hold it on the ladder. Otherwise, it is recommended to build a stand to hold the ring up, or 2 people can hold it on scaffolding. Hold the ring at the height that will allow the rafters to fully seat in the holes and attach to the wall cable while remaining level.
- ✓ Be sure the ring is horizontal to the ground, has the eye screws facing up and has the dome bolt facing the door. Also note that those on the floor should stay towards the wall when rafters are being placed in the ring because a rafter may slip out during assembly and fall, possibly causing injury.

Start by placing four rafters at somewhat equal distance apart around the circle.
 To do so the floor people may want a small step stool near the wall to work off of.



- ✓ The rafters that go over the door should be placed as soon as the ring is stable.
- Raise a rafter with the pin end (rounded side up) over the lattice wall wire and then slide the pin end into the hole most directly facing you in the ring. If it doesn't want to fit easily, move to the next hole.
- ✓ It is important that the pin is going into the whole nice and straight, or it will become much harder to get it in all the way.
- Once the pin is all the way into the ring, push out on the wire at the end of the rafter until you can slide the notch onto the wall wire. Then use the Phillips head bolt and thread through the sleeve nut at the end of the rafter. This locks the rafter to the wire.
  - ✓ Everyone should be constantly aware of the rafters that have not been locked into the wire, as more are placed in.
  - ✓ It is ideal to lock the rafters as you go, once you are certain the door rafters are in the right place, spaced evenly over the door.



• After 4-6 of them are set around the circle, the ladder person can begin to help set them by guiding them into the proper holes while keeping the ring from being shifted from its central position (too much movement causes already set rafters to want to come off the wire and fall). The person on the ladder can also pull down evenly on the ring to tighten the rafters on the wall and in the ring and to level it over the floor.

• Once all the "easier" rafters are placed in the ring, you can start on the troubled ones. They may need to be hammered gently from their bottom end with a scrap piece of wood against them, to protect them, once they are placed in the end of the ring hole to set them all the way in. As a last resort, you can drill the hole the pin goes into (in the ring), making it a little larger. Or you can put some type of lubricant or soap on the pin to make the rafters slide easier into the appropriate hole. This should be done only after you have tried moving the rafter side to side and up and down, to find the correct angle. (move slowly, don't move the rafter too much or too fast).

Once all the rafters are set, you are ready for your liner, insulation and roof canvas.

#### Installing your liner, insulation, and roof canvas

- If you have a liner, it will go up next. Be sure to place it with the finished side down and the overlap at the place you want it (over the door or over a rafter where it won't be seen). Don't put the ends together yet.
- Next is the insulation (if you have it). Slide it up between the rafters at the overlap point of your liner if necessary. Be very careful not to snag or damage your insulation in any way as it acts as a secondary



moisture barrier. Be sure you place the white side facing down and spread it out, leaving at least 3 inches overhanging the walls all the way around.

- ✓ It shouldn't have any major humps in it once it is properly down.
- Cut a piece of foil tape to a foot or so longer than the length of your rafters. Start at the top on the ring on the silver side, and tape as far down as you safely can, leaving the rest of the tape with its covering on it. Smooth the tape firmly onto the insulation. Then go outside on the ground and set up your step ladder where you can reach the bottom of the tape. Pull tight (without pulling off the top portion) over the seam and remove the tape covering slowly and pressing it down onto the insulation when you can reach it. You can use one of the extra pieces of lattice wall to adhere the unreachable portion in between. Skip this step if you are putting up the yurt for a temporary period of time.



# If you are erecting a larger yurt, you may need to build a "scaffolding"

- Now it's time for the roof canvas. Sometimes it is easiest to lift the roof cover up through the ring and spread it out over the yurt frame. However, on larger yurts, the cover can be laid towards the door, and a rope can be tied to grommets that are opposite the door flap. (The door flap is the spot where the outer band is missing.)
- Be careful not too pull too hard. One person can pull the roof canvas to the center ring, then grab it and pull it over the other side.

- Pin the door using the flat lathe screws, and grommets on the door flap. Once it is pinned, you can begin to adjust the roof. Be sure to place the outside of it facing up.
- Install the roof cable by weaving in and out of each pair of grommets, leaving wire visible from the inside of the yurt. Begin on either side of the door, and go all the way around. When you get to the door, make the table go under the canvas (so that it is not seen from the outside). Hook the ends together, using wire clamps provided, you are now ready to attach the walls.

## VI) WALL CANVAS, INSULATION

- Take the wall canvas, find an end and determine its top and outside (the grommets are at the top). With the upside up and the outside out, the canvas will show which side of the door to start on.
- Begin running the canvas around the yurt while someone inside the yurt attaches
  it to the roof wire (the smaller wire that is weaved through the roof cover) with
  spring clips through the wall grommets every 10 feet or so.
- $\checkmark$  For now, just hang a few (10 or less) around the yurt to get it in the yurt. Then
  - come back later and adjust the fabric, clipping the rest of the wall into place.
- once all the way around, shift the wall on the wire until both sides have equal overlap into the doorway.



• Go back and attach spring clips on the rest of the wall.



- Start at one side of the door and using the provided wood dowel, wrap the canvas around the dowel an tighten until it fits into the groove on the clamp board Once it is in and tight, tighten the wing nuts on the door frame.
- ✓ Be sure canvas goes to the top of the wing with no wrinkles down its height to where it comes out behind the front wing and over the groove that is cut into the bottom of the door frame.
- ✓ Also check that there is an equal amount of canvas wrapped from top to bottom.
- Tighten the wing nuts inside to hold the canvas in (you may need the adjustable wrench clamped on the wing nut to tighten fully). Check that the canvas out the bottom is folded on itself just as it is around the lattice wall stick.
- Pull tight and put one of the 1 inch pan head screws through the webbing along the bottom of the canvas wall and into the deck. Now test to see that the canvas is secure in the door frame by pulling on it away from the frame. If so, continue placing screws through the webbing into the deck while another person is pulling down on the canvas tightly and away from the door.

• A third person should be inside shifting the top of the wall along the wire and away from the door as well. This process ensures that the canvas has as few wrinkles as possible and looks flush along the sides of the windows. It also tightens the roof and walls over the frame and onto the deck. Do this all the way around and the repeat the process of inserting the canvas at the other side of the door.

## VII) INSTALLING SKYLIGHT (DOME)

- Using a strong string, tie one end onto the slot on the dome plate.
- Throw the other end up to the roof ring where it can be pulled up the roof. While
  one person holds the string at the roof ring, the other places the dome, round side
  down, onto the lower edge of the roof.
- Slowly pull it up the roof and lay it on top of the ring.
- ✓ Careful to avoid ripping the fabric.
- Line up the hinge and hinge holes and insert 1.5" hex bolts into holes.
- Thread Rod from the bottom until it goes through the ring (not including the dome ring) and stick up 2 1/4" of the thread above the last ply on the ring
- Thread on 1<sup>st</sup> nut (9/16 wrench) on the rod until the bottom of the nut is flush with the top of the last ply (spacer ring)
- Slide or lock washer to the second nut and tighten those to each other using two 9/16" wrenches going in opposite directions
- Slide on the small washer (approximately 1")
- Lay down the dome ring and dome and attach the hinge and tighten nuts on the hinges

- On the rod side, lay down 1 1/4" washer, then screw down the next nut so that the two threads are visible between the bottom of the nut and the top of the washer.
- Place second nut on rod and tighten the 2 nuts to each other.
- ✓ The top of the second nut should be flush or close to the top of the rod.
- Take your two springs and attach them to the four metal loops on the dome
- When dome is done, check to be sure your roof canvas is underneath the dome all the way around.

