



Artists Conception

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# SET UP MANUAL

The original designer and manufacturer of the modern yurt, the highest quality for over 20 years. Manufactured by Pacific Yurts Inc. • 77456 Hwy 99S • Cottage Grove, OR 97424 • (541) 942-9435

# Have you done these important things?

Please be sure you have done the following:

- The screw in the tip of the rafter is installed to keep the rafter from lifting off the tension cable in high winds. (Page 8)
- The rafters over the door should be secured to the top door sill with the screws provided. (Page 9)
- If the Snow & Wind Kit was purchased, the cables in the rafters zigzag in *opposite* directions so they pull against each other <u>and</u> both cables need to have the same amount of tension on them (20', 24' and 30' models only). (Page 10 and diagram on page 14)
- If the Snow & Wind Kit was purchased, the screw needs to be installed through the lattice wall into the back of each rafter support. (Page 11)
- The gap between the side cover and grommet strip on the top cover needs to be a consistent 1" before securing the bottom of the side cover to the deck platform. (Page 19)
- After making sure the gap is 1", the lacing cord for the zigzag lacing is *securely* tied to the last grommet on the top cover next to the door. (Page 19)
- A cord needs to be laced through the grommets at the bottom of the top cover valance, pulled as *tight as possible*, and secured at the door frame. (Page 21)
- If the dome opener is purchased it is *extremely important* to make sure the opener spindle is installed correctly to avoid breaking the dome skylight. (Page 22)
- When cleaning the dome skylight **DO NOT USE** glass cleaners! See care recommendations on page 33.

If you do not fully understand the Set Up process call us at (800)944-0240.

# The Yurt Set Up Manual Including Care & Maintenance

Pacific Yurts, Inc.

Warning:

Safety is very important in assembly, set up and use of yurts. Therefore, purchaser should read the manual thoroughly before starting assembly and set up in order to avoid accidental injury.

# **WELCOME ABOARD!**

We would like to take this opportunity to thank you for purchasing a Pacific Yurt and to welcome you to the growing Pacific Yurts' family. Pacific Yurts was established in 1978 and is the original designer and manufacturer of the modern lattice wall yurt. Today Pacific Yurts, Inc. enjoys an international reputation for successfully adapting the ancient shelter into a modern recreational living structure. We are committed to the highest quality in our materials and workmanship. Each yurt is made of select kiln dried, second growth Douglas fir and space age architectural fabrics. As a Pacific Yurts' customer we are dedicated to earning your confidence by giving you the same professional quality and service we ourselves appreciate. We welcome your comments and suggestions. Count on us to be here in the future for all your future needs.

If after reading through this manual you have any questions about the installation of the yurt please call us at (800)944-0240.

Enjoy your yurt!

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#### TOOL LIST

#### Tools:

8' step ladder (for smaller yurts) or scaffolding for 30' (10' high) Blanket or pad (for protecting top cover while installing dome) Cable cutters (for trimming excess on snow/wind or safety cables) Electric drill (or cordless driver drill) with Phillips bit Hand saw (cutting lattice for stove pipe) Knife (for cutting nylon cord) Level Masking tape Miter saw (for trimming rafter supports on snow/wind kit) Phillips screwdriver Pliers (for crimping springs on dome opener if applicable) Sawsall or equivalent (for cutting door opening in drip edge) Sharp Scissors Small crescent wrench Staple gun Talcum Powder Tape measure

**NOTE:** Remember the tools required may vary according to your deck height, options chosen and yurt size. Read entire manual before installation.

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#### SITE LOCATION

Being what we call a 'soft' structure, the yurt reacts more readily to climatic conditions than do 'rigid' structures, therefore, it is important to choose your site carefully and take into account prevailing wind patterns, overhead tree limbs, water runoff, etc. In general, the best site would be protected from the wind, would receive morning sun and afternoon shade and be free from overhead obstructions that could damage the yurt in heavy winds such as large dead tree limbs. Plan your entry so that the doorway is facing away from prevailing winds. It is essential to follow the wind protection recommendations on pages 8 through 10 and anchor the framework as soon as possible after set up.

We do not recommend setting up the yurt for extended periods without a deck. However, if you do set up the yurt on the ground, make sure your site is leveled, leaving enough room to ditch around the perimeter for watershed control. Plan your site with the lay of the land and runoff patterns in mind so that you don't get caught by surprise in the first rainstorm. Also, we recommend a ring of gravel or bricks so that the side cover does not come in contact with the damp earth. A temporary floor can be easily installed using a layer of bark chips covered with heavy black plastic and layered with carpeting. Follow the recommendations on page 5 for laying out the perimeter, and be sure to stake down the lattice wall securely.

#### PLATFORM CONSTRUCTION

For a secure and comfortable installation, a well-built deck is necessary. To insure a weather proof installation the deck needs to be circular. Follow our plan for the correct size deck to match your yurt. Unless you are skilled, enlist the help of an experienced carpenter or contractor. The strongest deck is built using 4" x 6" beams no more than 4' apart, which are supported on pier blocks no more than 8' apart. The beams are then leveled, using wood blocks and shingle shims. On sloping terrain support posts (usually 4" x 4") will have to be used, which must be attached to the pier blocks and to the beams with metal straps. Cross bracing may also be required. On a severe slope you may want to consider using large beams to support the 4" x 6" beams, thus reducing the number of posts and piers. Next, the 2" x 6" perimeter blocking is cut and nailed to the 4" x 6" beam ends. (Note: Before nailing down the floor you should definitely consider installing insulation under the floor-see page 29.) Now, the 2" x 6" tongue-and-groove flooring is laid down, leaving the ends extended past what will be the finished deck perimeter. If this is to be your finished floor then kiln dried select material is best since it won't shrink and leave gaps to catch debris. Often this type of material is used for open beam ceilings and may have a V-groove which should face down so as not to catch debris and make floor sweeping difficult.

Another option for flooring is 1 1/8" tongue-and-groove plywood laid over the 4" x 6" joists. This can be secured with deck screws instead of nails for easy disassembly later if the platform is to be moved. A power drill with a Phillips head bit is used to drive in the screws. A good solid color stain or floor enamel can provide an attractive finish.

Mark your perimeter by extending a tape measure from a nail at the center of the circle, and holding a pencil at the radius measurement, mark out the circle. Cut the perimeter carefully using a circular saw with a small blade. Staple 2" wide strips of tar paper to the deck edge perimeter. Then, carefully rip (cut) 3/8" rough sawn exterior grade plywood siding into 6" x 8' pieces. This is your deck drip edge material. Join the drip edge sections over the 4" x 6" joist ends and provide blocking as needed to screw or nail to for support. Finally, nail or screw (holds better) the plywood strips or bender board around the edge of the deck, leaving 1" extended above the surface to contain the lattice wall. When the yurt is erected, the bottom of the side cover will be secured to the drip edge, giving a draft-free and water-tight seal. Depending on your use for the yurt, site and climate, plywood skirting (to prevent air flow beneath the floor) and a vapor barrier may be desirable.

If you plan to add an entry deck to your platform, be sure the deck is at a lower level than, or separated from the platform floor, so that the side cover can be properly attached. This insures a good weather seal. If the deck is elevated, be sure to include railings for safety. Building the deck on a steep slope or several feet off the ground will make it difficult to install the side cover unless you provide a perimeter deck or catwalk for easy access. If you have not received the deck framing plan for your specific size yurt please call our office.

**NOTE:** The following list of materials is approximate, actual usage may vary according to cutting efficiency and design changes.

MATERIAL	K.D. SELECT DECK	PLYWOOD SHEETS (* <i>ALTERNATE</i> )	CONCRETE	STANDARD & BTR FIR	EXTERIOR PLYWOOD SIDING	STANDARD & BTR FIR
DIMENSION	2" X 6"	4' X 8'	16"	4" X 6"	3/8'' X 6''	2" X 6"
DESCRIPTION	T&G DECKING	T&G PLYWOOD DECKING	PIERS	BEAMS	DRIP EDGE	BLOCKING
DIA. UNIT	(LIN. FT.)	(SHEETS)	N/A	(LIN. FT.)	(LIN. FT.)	(LIN. FT.)
12'	300	6	11	36	38	20
14'	400	8	13	53	44	30
16'	520	8	13	57	51	36
20'	840	12	16	88	63	46
24'	1225	18	20	112	76	74
30'	1800	24	30	179	95	96

#### DECK PLAN SPECIFICATIONS

**NOTE:** Materials specified do not include any exterior porch materials. You may want to add 15% to 20% to the lumber materials for greater selectivity.

\*Decking material specified is tongue and groove. 4' x 8' x 1 1/8" T&G plywood may be substituted for 2" x 6" select decking materials. Follow standard recommended procedures from your lumber supplier for plywood layout over 4" x 6" joists, to determine number of sheets needed. We recommend 2" x 6" blocking every 4' on center between 4" x 6" beams to provide additional support for plywood if this method is used.



TYPICAL DECK ELEVATION

#### PERIMETER LAYOUT

If you are setting up the yurt on a level ground location (without a deck), you can mark the perimeter as follows: Determine the center of the chosen site and drive in a stake at this point. If you have a 50' or 100' tape with a swivel on the end, set a nail in the stake and hook the swivel to it. Otherwise, have a helper hold the end of the tape at the center stake. Now stretch out the tape to the radius of the yurt and mark out the circle using stakes, powdered chalk or equivalent.

\* \* \* \* \*

Now you are ready to start setting up the yurt. It is helpful at this point to familiarize yourself with the various components (see diagram on front cover) and to have read through the entire set up sequence so that it is clear and you know what to expect. All hardware is provided in the Hardware Box. Locate your door position(s) **exactly** and mark the center on your drip edge. Now measure the door sill length (40" for standard door and 47" for French door) and notch out 1" of drip edge material to this dimension using your mark as center. It should be flush with the floor surface to provide space for the door sill to overhang the deck.

#### LATTICE WALL

The first step of expanding the lattice wall definitely requires two people to accomplish, so take your partner and the lattice wall to the back of the circle, opposite to where you want the door to be, and stand the lattice wall on end. (Note: Make sure the lattice wall is right side up! The bottom of the lattice wall is easily identified by the bolts that have been installed for the tie-down brackets.) Also, note that there is an inside and an outside. The outside is the side with the holes in the rivet caps. Carefully undo the straps around the lattice wall and stretch it out around the circle, making sure to keep it stable as you proceed. (Safety note: Careful of pinch points while extending lattice wall.) Leave about 3 ft. for the door opening. Now go around the perimeter and check the wall height, which should be consistent and about 72-73" (on standard walls), and about 10-11" more with the custom "Tall Wall" option. If necessary, adjust the height by working from the middle of the wall around toward the door, expanding out the lattice wall to make it shorter and contracting it to make it taller. Be sure to keep the wall on the circle as you go. The finished height will vary slightly, depending on the yurt diameter and number of doors. You can determine this by adjusting the lattice wall so that it looks like it is of consistent height around the perimeter first. Then after the door is in place, go around the perimeter and measure the height every 10' to determine the average height (within 1/2") for final adjustment. Helpful Hint: Using a stick with average height marked on it is a quick and easy way of measuring the height of the lattice. If you are setting up a 2-door model, be sure the doors are exactly opposite by running a string through the center point of the circle to the outside perimeter on each side. This is the center line of the doors. If your doors are at 3:00 or 9:00 be sure their positioning is exact. The positioning of multiple doors is critical to be sure that they match up with the top cover. The lattice wall is secured to the deck after the door is in place.

#### **DOOR FRAME**

Position the door frame at the opening, with the door-clamp side facing inward. Remove the wing nuts, washers and 1" x 4" clamps from the inside of the door. Place the ends of the lattice wall over the bolts so the bolts pass through the wall and fit into the corners of the lattice wall. The clamp bolts will correspond to the three inside corners of the lattice wall end (four inside corners on Tall Wall). (See diagram below left) **Note:** Bolts may not always fit snugly into the corners of the lattice. Replace the clamps, washers and wing nuts and snug them down (not too tightly at this point). Be sure the clamps are on the correct side. The outer edge is the one closest to the bolt holes. Check to see that the rest of the wall is still on the circle and at the proper height. Now position the bottom door sill so that the back of the 3" x 4" door frame upright is lined up with the inner face of the drip edge. The bottom door sill may overhang slightly. Secure it by screwing two 2 1/2" drywall screws through the bottom sill and down into the deck. Check to make sure the door frame is plumb (vertical) and then **securely tighten** the door clamp wing nuts.

After the yurt is assembled, if the door latch is misaligned, the door can be easily adjusted by loosening the door clamp wing nuts and the 8 bolts at the corners of the door frame, canting the frame slightly to the right or left to bring the latch into alignment, and then retightening all the bolts. Carefully placing shims under the appropriate side of the bottom door sill can also help bring the door latch into alignment if necessary.

#### SECURING THE LATTICE WALL

This process is very important and should be done **before** you install the rafters and covers. First remove the cap nuts, washers, and bolts, located approximately every sixth crotch along the bottom of the lattice wall. Then bolt on the formed 4" straps (in your hardware box) and anchor them to the edge of the deck with #6 x 2" screws provided. (See diagram below right)



#### **TENSION CABLE**

Begin to unroll the cable by starting with one end **centered** above the door for 12', 14' and 16' yurts and **off center** above the door for 20', 24' and 30' yurts. Lay the cable in the crotches along the top of the lattice wall. Take the slack out as you go and be sure not to miss a crotch. Hook the two ends together as you come around, meeting above the door where you began. If the two ends do not meet there is excess slack in the cable. Simply pull out the slack a little at a time, working it towards the cable ends. Before setting the rafters, make sure the cable is as taut as possible all the way around. Distribute any excess evenly around the perimeter.

#### **CENTER RING/RAFTERS**

Raising the center ring is the most exciting step and needs to be executed with some care. Bring the ring into the yurt and lay the ring in the center of the yurt with the bolt heads down and nutted ends up. Using a heavy felt pen and referring to the Rafter Spacing Diagram enclosed in your hardware box, mark the locations of the three evenly spaced holes on the center ring. These will be the points at which the first set up rafters will be inserted to raise the ring. If you purchased a dome opener, it is at this point you will want to position your dome opener bracket away from the prevailing winds to avoid having the wind catch it on the open side. Now locate the positions where the set up rafters will rest on the cable (again refer to the Rafter Spacing Diagram) and mark each of these cable spaces with a piece of tape to facilitate the set up. Bring five or six rafters into the center of the yurt and lay them aside. Place one of the rafters on one of the cable's marked spaces (notched end to the cable and the pin towards the ring). Note: The notched end of the rafters has a rounded top and the pointed end should be facing down when erected. Lift the ring up so it is on edge and insert the pin of the rafter into the ring. Staying on the marked holes and spaces only, do the same with the second rafter. Now lift the ring off the ground letting the two existing rafters (legs) support the one side of it and insert the pin of the third rafter into the remaining marked hole. Use the third rafter (or leg) to hoist the tripod up into position, keeping pressure against the first two rafters, and then place the notched end on the cable. It helps to have someone standing by with an extra rafter to help push the ring up and brace it until you get a few more rafters in position.

### CAUTION: UNTIL THE RAFTERS ARE ALL INSERTED, THE INTERIOR OF THE YURT SHOULD BE CONSIDERED A HARD-HAT ZONE; CHILDREN AND THOSE NOT INVOLVED WITH THE ASSEMBLY SHOULD WAIT OUTSIDE! IF SOMEONE PUSHES A RAFTER INTO THE RING WITH TOO MUCH FORCE IT COULD MAKE THE RAFTER NEXT TO IT SLIP OUT OF THE RING AND FALL!

Now carefully insert the rest of the rafters, being sure to balance your placement by keeping the rafter pattern symmetrical (so the weight stays equally distributed) and keeping two crotches between rafters. When inserting the rafters, it works best to set the pin end in completely, bring the other end up under the cable, push out a little with your shoulder (not too far) and then hook it onto the cable. **Do not force the rafter into the ring. Once you get the correct angle it will easily slip** in. Once the rafters are all up, double check to make sure all the rafters square up with the center ring and are separated by two crotches. Four 4" mending plates are included for securing the ring to the top of four equally spaced rafters on the 20', 24' & 30' yurts only. (See diagram page 9)

To climinate the possibility of the rafter lifting off of the cable in a high wind, either a  $\#6 \ge 13/4"$  or a  $\#6 \ge 2"$  screw (depending on size of yurt) is installed on the underside of the rafter just below the tension cable in a predrilled hole. (See diagram below.) This secures the rafter end onto the cable. **Do not substitute longer screws for those provided**. When installing the screw, install it only dcep enough to make the head of the screw flush with the bottom of the rafter. **If installed too deeply it is possible to drive the screw through the rafter and damage the top cover**.



A "Safety Cable" is included which should be installed through the holes in each rafter, nearest the center ring. It will help hold the rafters into the ring. It is not a substitute for the Snow & Wind Kit which is recommended on all 24' and 30' yurts or any yurt where high snow wind may be encountered. Note: If you purchased the Snow & Wind Kit for the 20', 24' or 30' yurt you will not have a safety cable. To install the safety cable, remove the cable clamps from the end and thread it through the predrilled holes in the rafters (nearest the center ring). Do not zigzag this cable! Once the cable is laced through the rafters and you get back to the starting point, pass the end of it through the loop on the other end and pull tight. Put the cable clamps back on and tighten. Cut off excess cable. Helpful Hint: Wrapping some masking tape around the end of the cable makes it easier to thread through the rafters.

#### CENTER RING/RAFTERS (24' AND 30' MODELS)

The 24' and 30' yurts are the largest size we manufacture and they are the most difficult to set up. The added weight and bulk of the lattice wall and fabric covers, the length of the rafters, and the height of the center ring are contributing factors. We therefore recommend that you enlist the help of a few friends for the yurt raising. On the 30' model 10' high scaffolding is recommended on the deck to provide secure footing when raising the ring and unfolding the top cover.

When raising the ring on a 24' or 30' model, the procedure is the same as in the previous section, except for the following:

1. The ring is raised using four rafters instead of three. Refer to the Rafter Spacing Diagram enclosed in your hardware box for the location of these rafters.

2. After you have marked the four rafter locations on the ring and the cable and have inserted the first two rafters (using the procedure in the previous section) then lift the ring up high enough to insert the other two rafters and raise the ring with them, using a person on each of the two rafters. Having someone else standing by with an extra rafter to help push up the ring and brace it until it is stable is strongly recommended. Now set the rest of the rafters as in the previous section. For the 30', if you are using scaffolding, hold or support the ring at the center at about 13' and insert the rafters per the diagram. Extra caution is needed when raising the rings and setting the rafters on these models since the rafters are longer and heavier and therefore potentially more hazardous if dropped out of the ring.

**NOTE:** If the overall height of the lattice wall is 72" or less on a standard wall, or 82" or less on a tall wall, the rafters over the door may need the tips cut off. This will keep the tension cable at a constant height. To do this, cut approximately 1" of the tip at an angle parallel to the top of the door sill. (See diagram page 13 upper right) The rafters over the door should be fixed in position with 2 1/2" screws (provided) once the door frame is plumb to hold it in its plumb position. Check to be sure the rafter is in its proper position and, from underneath the top door sill, drill a 1/8" pilot hole through the top door sill and up into the rafter. Now drive a screw in to secure the rafter to the door sill.

3. Four 4" mending plates are included for securing the ring to the top of four equally spaced rafters. These are only on the 20', 24' & 30' yurts. (See diagrams below)



#### SNOW AND WIND PROTECTION

In heavy snow or wind areas it is necessary to purchase and install the Pacific Yurts' Snow & Wind Kit. (See diagram page 11 - Installation of Interior Bracing, page 13 - Typical Section Through Yurt and page 14 - Typical Roof Framing Plan) Because of their large size we recommend this on all 24' and 30' diameter yurts in any location. For an additional level of protection in heavy wind areas, along with the Snow & Wind Kit, we recommend the Pacific Yurts Cable Tie-Down System which may be installed or removed as needed. (See diagram page 12)

For both heavy snow and wind conditions, or when roof snow load cannot be maintained regularly, four 4" x 4" posts should be installed under the center ring as an additional shoring-up system. (See diagram page 11.) These posts are not included in the Snow & Wind Kit and can be purchased from your local lumber supplier. Make sure the posts are evenly spaced on the center ring and plumb. The posts may be secured with Simpson 4" x 4" BC40 Post Cap/Base hardware (or equivalent) using  $\# 8 \ge 1.1/2$ " wood screws at the top and bottom.

# In areas where heavy wind exposure is expected, we strongly recommend taking some precautions to prevent possible damage to the structure:

1. Make sure the bottom of your side cover is well fastened at **every** grommet. Also, be sure that the metal hold-down straps are properly installed and bolted to the lattice wall.

2. The lacing on the top and side covers should be periodically checked and pulled up tight if necessary. Double lacing is recommended in areas with frequent wind. Also recommended is zigzag lacing from the valance grommets to eyescrews which can be installed around the base as shown below.



3. Be sure your door is closed and the dome is down during heavy wind.

### **SNOW & WIND KIT**

**NOTE:** If you purchased this option continue. If you did not purchase the Snow & Wind Kit we have drilled holes in your rafters (for this) in case you choose to add it in the future. **If you are not installing the Snow & Wind Kit at this time**, go to page 15 for installing the side cover insulation. This is to be done after the wood frame is completely installed. If you did not purchase insulation for your yurt, go directly to the bottom of page 15 for side cover installation.

On the 20', 24' and 30' yurts each rafter has 4 holes, but you will use only two of them (having four holes makes the rafters interchangeable). Install the 1/8" cable in a zigzag pattern as shown in the diagram on page 14. The short cable will go nearest the center ring and the long cable nearest the tension cable. **Note:** Be sure the cables are installed so they zigzag in **opposite** directions. If you purchased a 12', 14' or 16' yurt you will have only one cable to install through the hole in the rafters. **Helpful Hint:** A piece of masking tape wrapped around the end of the cable makes it easier to thread through the holes in the rafters. As you install the cable pull it tight and connect the two ends of each cable together with cable clamps. Be sure the two zigzag cables have the same amount of

tension. If one is tighter than the other some of the rafters will start to pull away from the center ring.

The 2" x 3" rafter supports are purposely provided long so they can be cut to fit exactly, since the lattice wall height may vary slightly (See diagrams on pages 11 and 13). Be sure to cut the square end so the angled end is not changed. A miter saw works well for this.

2" x 4" mending plates are provided to attach the rafter supports to the rafters **on both sides**. 2" x 2" angle brackets are also provided for attaching the rafter supports to the floor on each side. **Helpful Hint:** It is easiest to attach all mending plates and brackets to the rafter supports after being cut, but before being put into position. **Be sure to pilot drill all holes** before screwing plates and brackets to rafter supports and rafters. This will prevent the heads of the screws from being twisted off. A drill bit is provided for this purpose. **Note:** This part of the Snow & Wind Kit involves a lot of screws, especially on the larger yurts. If the yurt is being set up at a site without electricity be sure to have plenty of fully charged batteries for your cordless drills.

In one location on each rafter support drill a pilot hole through the lattice wall (where it crosses) into the support using the drill bit provided (see diagram page 13). Then drive a 2" screw with finish washer through the lattice wall into the support. This will need to be done from the outside of the yurt <u>before</u> the side cover is installed.

Do not let heavy snows collect on the roof in excess of 12". A push broom can be used to sweep down the excess, or a rope thrown over the yurt can be used to cut under the snow causing it to slide off. Also, be aware that you are risking possible snow avalanche damage to the yurt if you choose your site directly under a tall coniferous tree. A protective snow fence is a good idea where there could be a large snow bank or build-up exerting pressure against the side of the yurt. A freestanding, well built, porch structure will keep snow build-up away from your entry arca, providing easy access in case of heavy snow. Integrating expanded metal grating into the porch can also help prevent excess snow build-up in front of the door by allowing the snow to fall through.



### **REMOVABLE CABLE TIE-DOWN SYSTEM**

If you purchased this option there will be four eyebolts installed in your center ring. You will need to locate and mark the exact center of yurt floor. Drill a 9/16" hole completely through the flooring at this center point. Cut a piece of 4x6 to fit between the existing beams under the floor at this center point and attach it. Drill the 9/16" hole completely through the 4x6 also. This 4x6 will ensure that the cable tie-down system is securely fastened to your deck platform. **Note:** Counter-sink this hole with a 2" bit 2" deep to avoid a trip hazard. Install the large eyebolt provided through the hole and secure with the large washer and nut. (See diagram below)

The cable tie-down has a steel ring with four shorter cables and one longer cable attached to it. The shorter cables have carabiners, which you should clip to the eyebolts installed in the center ring. The longer cable, which has a large turnbuckle in the middle of it, should hang down to the floor. Remove the cable clamps and thread the cable through the large eyebolt in the floor. Pull the cable tight, secure the cable clamps and trim any excess cable. **Note:** If the Cable Tie-Down is left in place be sure to check the cable clamps regularly making sure they are tight.

To tension the cable tie-down, use the turnbuckle. Twist the center hub until the cables start to pull the center ring down. **Do not cinch it down tight. Just snug!** 

To remove the cable tie-down, loosen the turnbuckle, unclip the carabiners from the center ring and remove the cable clamps.





### TYPICAL SECTION THROUGH YURT



Study the diagram pattern carefully. Failure to install the cables as shown could weaken the structure and result in failure at lesser snow or wind loads.

NOTE: 1) All lumber to be D.F. #1 or better except rafters to be D.F. select structural

- 2) Tension cable to be 4,200 lb. breaking strength
- 3) Design based on 25 PSF snow load, 20 PSF wind load



TYPICAL ROOF FRAMING PLAN

### **INSULATING THE YURT**

Many materials have been used successfully to insulate the yurt. Climatic conditions and individual considerations of light transmission, portability, comfort level and expense all are involved when deciding on the optimum insulation. In the milder climates no insulation at all may be required. However, in cold areas like Alaska or warm tropical climates, either our space age reflective insulation or Thermax insulation board or its equivalent (see specifications page 28) will provide more comfort. In colder climates we recommend insulating under the deck platform. (See page 29)

# NOTE: We do not recommend using blankets or other moisture retaining fabrics for insulation liners as they may cause severe mildew problems.

### SIDE COVER INSULATION WITH LINER FACING

Locate and open your side insulation liner roll. A diagram of the window placement is taped 1. to the foil side of the roll. This corresponds to the window placement you requested on your order. The insulation wall is made with the window sections separate from the wall sections. This approach allows you to locate the windows to match the side cover more exactly. There is a sticker on the foil side of the wall sections that will match the number on the diagram. All window sections are interchangeable unless vertical or horizontal windows were purchased. Use the diagram to help facilitate putting your insulation up in order. Start the first section of insulation at the edge of the door and hang it temporarily from the tension cable with the 'S' hooks provided. Grommets are installed at the top of the liner for this purpose. Any excess overlapping the door will later be folded back. It is not necessary to lace the side cover insulation since it will be secured to the tension cable once the side cover is installed. Work around the yurt clockwise hanging the wall and window sections according to your diagram. Walls should overlap window sections approximately 10". This allows adjustment later to match your side cover window position should this be necessary for a better fit.

2. After installing side cover (see next section) align the insulation with the windows if necessary, then fold any excess liner back underneath itself so it ends right at the door frame, it does not get tucked into the door frame.

#### SIDE COVER

Using the 'S' hooks provided, you are going to **temporarily** hang the side cover from the tension cable until you put the top cover on and lace it up.

Take the side cover out of the bag. To be sure it is right side up, check to see that the long horizontal seam is on the lower half. Start unrolling the side cover, beginning at the right of the door and going around counter-clockwise. Make sure you start by leaving approximately an 18" overlap at the door (to be tucked into the door frame clamp later). To be sure the correct side faces out, check the window flaps which will be on the outside. It works best to have one person on the outside unrolling the side cover around the yurt and another person on the inside hooking it to the cable

every 10' or so. When finished you should have the same amount overlapping the door frame on each side. If not, adjust it so that the overlap is approximately equal. Now install top insulation and top cover, then you will come back to lace everything up.

**NOTE:** If you purchased top cover insulation continue. If you are not installing top cover insulation at this time, go to page 18 for top cover installation.

# TOP COVER INSULATION AND LINER FACING

**NOTE:** If you purchased the 2/3, 1/3 top cover insulation (which is typically used with a Solar Skylight Arc) please refer to the instructions on the next page.

1. Choose a day for installation that is not too windy as this may cause the liner to blow away before it is properly secured.

2. Install the fabric liner facing after the rafters have all been put in. Note that the fabric liner facing is not sewn to the insulation like on the side cover insulation. Using recommended scaffolding for a more safe and secure platform or a ladder for smaller yurts, unfold the facing with the seamed edges up and then pull the hemmed edge down around the rafter ends. Be sure the liner facing is installed evenly and overlaps the rafter ends equally around the yurt perimeter. In windy conditions the facing can be secured by using a staple gun and 5/16" staples to staple through the liner into a few evenly spaced rafter ends. This should hold the facing down tight.

3. Push the reflective insulation up onto the roof from below, placing it on top of the liner facing. Another person should handle the upper end at the center ring. Carefully unfold the insulation and bring both ends around to the other side. Check the insulation for fit. If necessary, mark and cut excess.

4. When the insulation seam is properly aligned use the foil tape to secure the open seam. Tape the top half from the ladder at the center ring. Tape the bottom half from a ladder down below. **Helpful Hint:** On large yurts you can reach the middle of the roof to seal the foil tape by using one of the "door stickers". (They were clamped into the door frame when you received the yurt.)

5. Trim excess insulation at center ring so it does not show from below. It can be easily trimmed with sharp scissors. **Do not** trim the insulation that overlaps the side wall. It will overlap the side insulation for a draft free seal. For installation of top cover, refer to page 18.

## CUSTOM 2/3, 1/3 TOP COVER INSULATION

1. Choose a day for installation that is not too windy as this may cause the liner facing to blow away before it is properly secured.

2. Using a ladder under the center ring, or scaffolding, unfold the 2/3 liner facing with the seamed edges up. Position the center of the liner facing opposite the center of the Solar Arc position. Starting in the middle and working out to the sides, fasten liner facing with staples at ring and end of rafters. It is not necessary to use a lot of staples. Liner facing should overlap the outside edge of center ring by no more than 2". Leave ends of facing loose. There will be a few inches excess which will be folded back over the insulation and stapled to the top of the nearest rafter.

3. Unfold insulation material over the liner facing and attach with staples at ring and rafter ends, as you did with the liner facing. Insulation should overlap the outside center ring edge no more than 2".

4. Install top cover carefully so that insulation and facing will not be moved out of position. (Instructions on next page)

5. After the top cover is in position, determine a satisfactory ending point for the insulation over the nearest rafter on either end of the solar arc. If necessary, carefully trim the insulation (not the liner) with scissors along the edge of the rafter being very careful not to damage the top cover. To protect the top cover from being accidentally cut during this process put heavy cardboard between the top cover and the insulation being cut.

6. Fold the excess fabric facing neatly back over the insulation and use thumb tacks every few feet along the top of the rafter for a neat finished appearance.

7. When you are ready to install the 1/3 insulation section in the solar arc area, two people (one on a stepladder, one working by the lattice wall) will need to carefully pull the insulation between the rafters and the top cover and tuck it above the previously installed insulation. You may need to loosen the side cover to allow more room for the insulation to slide between the rafter and top. The 1/3 liner facing is installed in the same way to cover the insulation. On the larger models this process is awkward and it will be necessary to unlace this side of the top cover and pull it up for better access. The side cover can be temporarily tied to the cable with short cords or 'S' hooks until the installation is complete, and then relaced.

# **TOP COVER**

1. Using a step ladder set up under the center ring, carry the top up through the center ring opening and unroll it down towards the door frame. On the 30' model it is strongly recommended to use 10' scaffolding for this process because of the extra weight of the top cover. **Caution:** Heavy Duty Top Covers are extra heavy and require 3 people to lift the cover to the scaffolding platform. Two people on the scaffolding to hold and unfold the top cover are recommended. **Hint:** Using some talcum powder between the top cover and insulation can make installation and adjustments easier.

2. At this point look for the door cut-out opening in the top cover valance. It is easily identified by the series of oval grommets around it. The door detail should be similar to that shown on the diagram below. This cut-out must be kept centered over the door frame during the rest of the installation process. The top cover will be unfolded starting at the 6:00 door on your diagram. If you have multiple doors be sure the correct door cut-out is over the correct door frame by checking the style of door and layout plan noted on Exhibit "A" sent with your Purchase Agreement.

3. Now, working with another person facing you outside at the wall perimeter, unfold the top cover to either side until it is halfway unfolded and covers half of the roof. Installing a few twist-lock connectors (see step 5) and securing the top cover at the door will help keep the door cut-out aligned.

4. Now the person at the top of the scaffolding or ladder should pull the upper half of the top cover up over the center ring and down the other side. Finish by pulling the outside edge down snugly around the ends of the rafters. Be sure that the top cover is centered and pulled down evenly around the perimeter. This can be checked by noting where the top cover grommet strip rests on the rafter ends and then pulling the cover into position so that it is uniform all the way around. It is helpful to secure this fit by cutting 4"-5" short pieces of cord and tying down the top cover to the lattice wall in a few places.

5. Check the final fit around the door frame and mark the grommet locations. Drill 7/64" pilot holes with bit provided and screw in the twist-lock connectors (from hardware box). (See diagram below.) Failure to drill pilot holes may result in breaking the twist-lock shank. Overtightening can also result in a broken shank.



6. Fold up the top cover valance. Now proceed to lace the grommets along the top of the side cover in a zigzag pattern to the grommet strip on the inside of the top cover. (See diagram below) It is easier to do this if you cut the 50' cord hanks into two or three lengths and then tie them together once the lacing is done. It works best to start at the back of the yurt (opposite the door) and work towards the door on first one side then the other (or use 2 people). With multiple doors, start in the middle of the lattice sections and work toward the doors. Try to keep about a 1" gap between the top cover grommet strip and the side cover as you lace. Later, once your side cover is secured around the base, you can cinch up this gap for a tighter fit. **Do not lace anything to the tension cable.** 

7. Ideally the grommets on the top and side cover would be off-set to create a zigzag pattern in the lacing. If the grommets start to line up instead of being offset see Lacing Adjustment Detail diagram. Once the lacing is finished temporarily tie off the cord ends at the door. The vinyl windows should be attached properly to the side cover before fastening the bottom of the side cover. This prevents stretching the window openings. **You can now remove the 'S' hooks** from the tension cable that temporarily held the side cover in place while you laced it. Now check the gap between the grommet strip and the side cover to be sure it is still approx. 1", then tie the cord ends securely to the last grommet on the top cover at the door.

#### LACING DIAGRAM



8. The side cover should be secured to the deck through the drip edge at the grommets with #6 x 1" Phillips head screws and #8 finishing washers (included in the wind protection hardware) as shown on the next page. A variable speed electric drill with a Phillips head driver works well for this and saves a lot of time. It is best to secure the side cover grommets starting at the back of the yurt and working around to the door, keeping the fabric snug as you go. Keep the side cover an even distance from the bottom of drip edge for a good appearance. If the side cover insulation is hanging below the side cover you will need to pull it up from inside the yurt. When the side cover grommets have all been secured, pull through any slack on the interior lacing to achieve a tighter fit. Note: If a tighter seal between the side cover and the plywood drip edge is desired, foam weather stripping (available at local hardware store) can be used. Adhere the foam to the drip edge at the grommet line and drive the screws through it when securing the side cover.



9. Finally, secure the side cover overlap at the door frame. Loosen the wing nuts on the clamps as much as you can without removing them. Bring the overlap around each door sticker (2 pieces of lath labeled "door sticker") which are clamped inside the door frame. Let the excess fabric protrude on the inside of the yurt and insert them into their respective sides of the door frame until they butt against the bolts. (Note: Do not make the mistake of wrapping the side cover around the door sticker once, adjust the positioning for a tight fit and then insert into the door clamp.) Adjust the side cover so there are no wrinkles, and then tighten the door clamp wing nuts very securely, with as little of the lattice wall showing inside the door frame as possible. Be sure the side cover fabric that hangs below the door frame is folded neatly and pulled straight down from the door sill, then put a screw through it. This will create a good seal and prevent air from entering at this point.

**Note:** Make sure side cover insulation window sections match the windows on the side cover, then remove the 'S' hooks and secure them to the tension cable with a few evenly spaced plastic cable ties (from hardware box). It is not necessary to use a cable tie on every grommet.

The weather flaps covering the windows can be rolled up to create a drip edge for water runoff. Be sure to roll them **under** so that the runoff from the roof does not collect there. For privacy, most people install curtains or louvered blinds on the <u>inside</u> of the yurt. For those times when you do want to drop the window flaps, buckles are installed at the bottom for securing them down. Each of these webbing straps will have the male and female buckle. Unbuckle them and attach the short section of webbing with the male buckle to the deck platform just below the side cover (with screws provided) as shown below. When you drop the window flaps you can simply snap the buckles together to secure the flap down. **Note:** When vinyl windows have been removed, do not stack them and leave them in the sun. See care recommendations in the back of this manual.



10. After the side cover is laced up, fold down the top cover valance and lace cord through the valance grommets horizontally. You will need to install eye screws (included in hardware box) in the edge of the door frame, level with the bottom of the valance for securing the ends of the cord. Pull the cord as tight as possible before securing it to the eye screws. This cord cinches the top cover valance tight against the wall for a good seal. The majority of the cord should show on the outside of the valance.

11. After the fabric covers are in place, use the seam sealer which is included to coat the sewn seam which connects the roof overhang (valance) to the top cover. (This is not necessary on Heavy Duty tops.) Two coats are recommended. This must be done when the covers are dry and clean and it is best to do immediately after the top cover is installed. It is important that the seam at the top of the window flap is also sealed with the seam sealer provided.

12. If you purchased either a standard or custom awning a local carpenter will need to build a frame to support the awning.

13. If your yurt has a rain diverter over the door now is a good time to install the PVC pipe inserts. Slide the inserts into the pockets to make an inverted "V" over the door. The fabric strip can then be pulled down and attached under the rain diverter to secure the PVC in the pocket. (See diagram below)



14. In cold climates an effective weather seal to eliminate drafts at the lap between the top cover and side cover can be created with 3/4" iron pipe foam insulation. It also creates a slight overhang for better water runoff. This is readily available in 6' - 8' lengths from most hardware stores. To install, stuff it end-to-end under the valance making sure the valance cord is tight around the perimeter and cut off any excess at the door frame.

When disassembling the yurt, the top is folded up by first lifting the roof overhang up over the edges of the rafters and then following the reverse procedure of steps 1-3.

#### DOME SKYLIGHT

Get your helper up on the ladder again and slide the dome up to him or her. It is helpful on larger yurts to tie a strong cord through two of the eye bolts inside the dome to help with this process. It is essential to use a long flat piece of wood or blanket under the dome when you do this so as not to damage the top cover. When the dome is in place, line up the hooks on the ring with the eyebolts in the dome and snap the hooks on. Be sure the black mark on the dome lines up with the corresponding mark on the center ring.

### DOME SKYLIGHT WITH OPENER

With the dome in place attach the three springs to the eyebolts on the dome. Attach the dome skylight opener by loosening the bracket bolts on the ring, inserting the opener hub, and retightening. (See diagram page 23) **Make sure the inner brass core of the opener is screwed all the way in at this point.** Now unscrew the bolt with the wingnut on the dome bracket and align the hole in the brass core of the opener with the bolt and screw it back in. You may have to screw the opener up or down a little to do this. Do not change the position of the inner brass core while adjusting the hole alignment. Be sure not to lose the two spacers and be sure that they get back in their proper location. (See diagram page 23)

We recommend that you keep the dome closed if it is windy. In extreme wind extra precautions should be taken to secure the dome at the spring locations. Two long springs can be placed together at each side location, instead of just one. This will put more tension on the dome as it goes up, so you shouldn't crank it up more than a few inches, which should be plenty for ventilation. It will hold the dome more securely. Also, be sure to crimp the ends of the springs closed with a pair of pliers so they don't pull away from the eyebolt. Be sure to keep the dome down when you leave the yurt or in high winds. In addition you should attach the short safety chains to the cycbolts where the long springs attach on the dome. This way, even if the wind stretches your springs beyond a certain point, the chain would help hold it.

**CAUTION:** When lowering the dome skylight the opener should not continue to turn once the dome is closed. It should bottom out, which prevents overtightening that can result in a cracked or broken dome. If opener does not bottom out, it is installed improperly and should be removed and reinstalled per instructions above.

**Note:** The dome opener option is used not only to vent out excess heat, but also to vent moisture. The key to avoiding condensation is ventilation! Any time moisture is introduced into the yurt (by cooking, wet clothes or even breathing) it should be vented back out. Since warm air can hold more water vapor than cold air it is best to heat the yurt, then open the dome skylight on a regular basis to vent excess water vapor. This will minimize or eliminate condensation.



#### DOME SKYLIGHT OPENER Full Scale

# STOVEPIPE INSTALLATION

**NOTE:** There are various ways to heat a yurt. Most conventional heating methods work, but may require advance planning and understanding of the yurt chimney exit installation (see page 26 and 27), and consultation with your heating specialist. If the lattice wall is cut other than according to the diagram it will require custom cut flashing and reinforcement for the lattice wall. The size heater you should choose is relative to the yurt size and whether you have it completely insulated or not. Usually larger is better. For example for an insulated 24' we recommend a 40,000 BTU woodstove or equivalent. Following are instructions for a typical woodstove chimney installation in the standard wall (for a Tall Wall add 9"-10" approx.). For more information consult with your heating specialist or contractor.

1. Locate your stovepipe on the side of the yurt where prevailing winds will carry the smoke and ash away from the roof. Once the location is determined, cut the lath according to fig. 1 (see page 25), leaving a diamond-shaped opening in the lattice wall.

2. Center the six-sided interior flashing over the exit hole. Using a pencil, trace a line which corresponds to the top and bottom edges of the flashing onto the side cover fabric. Now, guided by the edges of the lath on the sides and the pencil lines on the top and the bottom, cut a hole in the fabric, which is 2" inside this perimeter. The cut edge can be folded back and hand sewn for extra strength if desired.

3. Attach the interior flashing by means of the 3/8" screws provided. Mark and drill your screw holes so that they line up with the lath.

4. Attach the exterior flashing in the same manner and make sure it is exactly lined up with the interior flashing. The top of the flashing should be slipped under the roof overhang (valance) for protection against leakage.

5. Install the woodstove on a fire-proof base at least 3-4' away from the side cover and any other combustible surfaces. If a 4' x 4' asbestos backing board is used, this distance can be decreased. Single-wall stovepipe can be used up to the exit flashing, where a 6" Metalbestos pipe is inserted through the flashing to vent safely the hot gases through the side cover. Follow stove manufacturer's guidelines for specific distances from combustibles.

6. For the exterior stove pipe you should use Metalbestos pipe or equivalent. This is especially true if you are using an efficient, airtight stove. Using single-wall pipe with an airtight stove will result in messy and hazardous creosote build-up. The Metalbestos system must be well supported and needs to have only a few inches of clearance from the side cover. The Metalbestos system is quite a bit more expensive than single-wall stove pipe, but we strongly recommend it since it is safer, longer lasting and susceptible to fewer problems with creosote buildup. A clean-out Tee is necessary, and the vertical pipe needs to extend at least 4' above the top cover valance and to be covered with a flu cap. In high fire danger areas a spark screen must also be used.

7. We recommend choosing your woodstove carefully. A large, quality made, airtight woodstove puts out a uniform heat over a long period of time, which is decidedly to your advantage. Also, consider the total volume to be heated and the fact that the yurt has a higher rate of heat loss than a typical insulated house of the same volume. Make-up air for the wood burning stove may be provided through a 4" vent in the wood floor directly below the stove. To prevent ashes from falling into the vent do not place it under the door of the stove. A fan near the woodstove or a ceiling fan mounted on the ceiling fan support (available from Pacific Yurts) helps circulate the heat throughout the interior.

**IMPORTANT NOTE:** These recommendations should only be used as guidelines. To obtain more details about a safe and sensible installation in your area, and to comply with all local fire regulations, we recommend that you contact your local fire marshall. Safety is the best fire insurance.



### STOVEPIPE INSTALLATION

These specifications should only be used as a guideline. For more information contact your local fire marshal. Safety is the best fire insurance.



SAFETY RECOMMENDATIONS: (1) Clean stove pipe at regular, monthly intervals.
(2) Keep stove three feet from any combustible surface! (3) Flashing is designed to receive 6" (inside diameter) Metalbestos (or equivalent) insulated pipe rated to be two inches from a combustible surface. (4) Invest in a small fire extinguisher. Fire is an everpresent danger wherever wood stoves are used. (5) Seek advice from your woodstove dealer if you have any questions or give us a call.

**WOODSTOVE & CHIMNEY INSTALLATION** 

These specifications should only be used as a guideline. For more information contact your local fire marshal. Safety is the best fire insurance.



SAFETY RECOMMENDATIONS: (1) Clean stove pipe at regular, monthly intervals.
(2) Keep stove three fect from any combustible surface! (3) Flashing is designed to receive 6" (inside diameter) Metalbestos (or equivalent) insulated pipe rated to be two inches from a combustible surface. (4) Invest in a small fire extinguisher. Fire is an everpresent danger wherever wood stoves are used. (5) Seek advice from your woodstove dealer if you have any questions or give us a call.

WOODSTOVE & CHIMNEY INSTALLATION (ALTERNATE)

# **INSULATING THE ROOF WITH INSULATION BOARD**

1. Use the dimensions on the next page to lay out a full-scale pattern on a piece of cardboard. Cut the pattern out and use it to check the fit between rafters. Make sure to space your rafters so that the center of the rafter is exactly at the center of its respective crotch when determining the fit of your sample pattern. Check several locations. You may have to make slight adjustments, since the pin hole spacing in the center ring sometimes varies a little.

2. Place your pattern on a sheet of insulation board as shown on next page. Cut the pattern where it overhangs the sheet. With a **sharp** knife trace the pattern on the board and then remove the pattern and finish cutting the panel. The remaining short pieces can be cut out of scrap and taped on using duct tape or glued on using a construction adhesive like PL-200.

3. If you are using an insulation material which is not rated for exposed insulation, it is important to cover it with a flame-retardant fabric, or glue it to a matching 3/8" sheet-rock panel before installing.

4. Cut and nail stop molding with galvanized finishing nails. Either quarter round, 1" x 2" or some other molding nailed along the bottom edge of the rafters will hold the insulation panels in place.

5. The rafters can be spread apart to allow easy installation of the panels. The last panel can be installed by loosening the top cover and inserting from the outside.

YURT DIAMETER	TOP PANELS REQUIRED	# OF 4 x 8 SHEETS REQUIRED
14'	16	8
16'	28	7
20'	36	9
24'	42	15
30'	50	24



#### **FLOOR INSULATION**

For optimum comfort it is desirable to install insulation under the floor. Reflectix insulation is easily installed and available from Pacific Yurts in 4' wide rolls. It can be stapled between the 4" x 6" joists or the bottom edge. Thermax insulation board or its equivalent is also recommended and can be cut to fit between the joists and supported with protruding nails or wood strips used as stops. Alternatively it can also be nailed to the underside of the joists in full sheets and trimmed at the perimeter joists. Use large head simplex nails or lath strips when nailing so that the insulation board is firmly attached and will not work itself loose. Standard fiberglass roll insulation also works when chicken wire or the equivalent is used to support and protect it. Even so, certain nesting creatures find this material attractive for their nests and this could reduce its effectiveness.

### **EPILOGUE**

We have tried to make these directions as clear and concise as possible; however, describing the erection of something as unique as a yurt is not easy. Just take your time the first time through and think it out before acting. You should be able to manage without any major problems. After putting your yurt up once or twice, you will appreciate the simple beauty of this structure and the integrity of its design. If you have any questions about the installation of the yurt please call us at (800)944-0240.

Best wishes from Pacific Yurts.

### VINYL COVERS

As with any quality product, there are several cautions and care recommendations that must be observed to get the longest possible functional life from your fabric covers.

An accumulation of dirt or soiling can create an ideal environment for bacteria to grow and cause staining of the fabric. It is important that this be removed regularly to maintain appearance and longevity of the fabric.

The vinyl covers should be cleaned twice a year with a mild soap (Ivory soap) and warm water. We have found this to be the least aggressive to the fabric. Recommendations for cleaning would include hand scrubbing with soft bristle brushes or a standard push broom which will reach the entire cover by using a ladder around the lower perimeter areas and using the dome opening for access to the top areas. A swimming pool brush with an extension handle and hose attachment would be a good investment for this purpose. Be sure to protect the top cover before sliding the dome down to remove it. In areas where tree sap and leaves are a problem, it may be necessary to clean the top every few months. If mildew is ever found growing on the roof, it should be removed with soap and water. In the event the roof ever becomes torn, it can be repaired with a standard vinyl patch kit available from Pacific Yurts. Always be sure the covers are **completely dry** before storing them.

#### **100% POLYESTER SIDE COVERS**

This material is also relatively maintenance free. It should be kept clean, never stored wet, and kept free of mildew much the same as the vinyl covers. The side cover may be treated with a clear water repellent as needed. This may be available through your local canvas or awning dealer, or may be purchased from Pacific Yurts. Be sure to follow instructions. Side cover should be clean and dry before applying water repellent. Seam sealer is also available.

### STOVE

A stove adds a comforting dimension to the yurt space, but along with it, the danger of fire. A cover treated with a fire retardant does not mean it is fire proof. Safety is the best fire insurance.

- 1. Clean stove pipe at regular, monthly intervals.
- 2. Keep stove 3' 4' away from any combustible surface!
- 3. Flashing is designed to receive 6" (inside diameter) Metalbestos (or equivalent) insulated pipe rated to be two inches from a combustible surface.
- 4. Invest in a small fire extinguisher. Fire is always a danger when woodstoves are used.
- 5. Seek advice from your woodstove dealer if you have any questions or give us a call.

#### LATTICE WALL

The lath is made from kiln-dried Douglas fir for its strength and resilient properties. Because of the nature of this wood a piece of lath may occasionally split or break even under normal usage. Replacement lath and rivets are available.

#### If a piece of lath should break...

- 1. Drill out the rivets holding the broken piece of lath from the **outside** of the lattice (the side with the hole). When the rivet top is drilled off (use a 1/4" drill), tap the bottom part out with a hammer and punch **carefully.**
- 2. Replace broken lath piece by lining up the holes and placing the bottom part of the rivet through the hole from the inside of the yurt. Put the top of the rivet into the bottom part and with a "Pop Rivet" tool (\*) pop the rivet, being sure it is flush on the inside and outside of the lattice. Repeat these steps with the other holes.
  - \* Available at most hardware stores or rentals.

#### ADJUSTING THE DOOR

If the door is not closing properly, it may not be hanging square. This frequently happens on an uneven surface. An easy remedy is to loosen the wing nuts on the door clamps and the corner bolts on the frame and shift the door. Shims under the bottom door sill may also help. Re-tighten the eight nuts on the door frame and the wing nuts on the door clamps.

#### VINYL WINDOWS

Always roll the vinyl windows, as folding them makes creases that impair vision and weaken the material. Rolling them with a clean cotton towel reduces the possibilities of scratches. Clean the windows with Novus plastic cleaner or equivalent and a non-abrasive cloth. The acrylic surfaces scratch very easily with even the finest dust, so hose off dirt before cleaning. Never use paper towels or newspaper when cleaning the windows. When vinyl windows have been removed, do not stack them and leave them in the sun.

#### **DOOR & DOOR FRAME**

All exterior wood should be re-coated with cedar semi-transparent or solid body stain or equivalent every year or two. Sand lightly before applying.

Lubricate door knob on a regular basis with a graphite or Teflon based lubricant.

#### DOME SKYLIGHT AND DOOR WINDOW

Wash plexiglas dome and door window with a mild soap (dish washing liquid) and plenty of lukewarm water. Rinse with clear water. Never use paper towels or other paper products which tend to scratch the surface finish.

To remove grease, oil or tar, use a good grade of hexane or kerosene. Immediately wash away oily film residues with a mild soap and water solution.

Do not use window cleaning sprays or solvents. Alcohol may cause crazing (many small cracks).

# Glossary

**Carabiner** – Oval or "D" shaped clip typically made of aluminum or steel and used for rock or icc climbing. They are designed to be strong, light weight and easy to clip and unclip.

Clamp – See door clamp.

**Countersink** – To drill or shape a depression, as at the top of a hole, for the head of a screw or bolt.

Crotch – Where two pieces of lath come together to create an "X" at the top of the lattice wall.

**Door clamp** - 1" x 4" wooden board on the inside of the door frame that clamps the lattice wall, door sticker and side cover against the door frame.

Plumb – Perpendicular position; vertical.

**Safety cable** - 1/8'' diameter cable strung through holes that are drilled in the rafters nearest the center ring. This cable ensures that rafters can not fall out of the center ring once the yurt is installed. The safety cable is included on 20', 24' or 30' yurts that do not have the Snow & Wind Kit option and all others.

**Turnbuckle** – A device in form of a sleeve connector, or union, usually with threaded rods, for regulating the length or tension of connected ropes or cables.

**Twist lock** – Metal "common sense" fastener that attaches the top cover to the door frame. It has a screw shank on one end and a turn-button on the other end.

Valance – Portion of the top cover that overhangs the exterior wall.

#### LIMITED WARRANTY

Pacific Yurts, Inc. warrants all of their products for a period of one (1) year from the date of purchase. We will repair or replace, at our option, any product covered under this warranty which proves to be defective in materials or workmanship during the warranty period. All vinyl top covers carry a five (5) year pro-rated warranty. This warranty does not apply if the unit was subjected to abuse, neglect, accidental damage or if the instructions outlined in the set up manual were not properly followed. All shipping costs on replacement parts or returned merchandise are the responsibility of the customer.

**PROMPT DISPOSITION.** Pacific Yurts, Inc. will make a good faith effort for prompt correction or other adjustment with respect to any product which proves to be defective within the warranty. For any product believed to be defective within the warranty, call or write to Pacific Yurts, Inc., giving name, address, date of purchase and description of defect. If product was damaged in transit to you, please file a claim with responsible carrier.

THE FOREGOING WARRANTY IS AN EXCLUSIVE REMEDY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE EXPRESS OBLIGATION OF PACIFIC YURTS, INC. STATED ABOVE IS IN LIEU OF ALL LIABILITIES OR OBLIGATIONS OF PACIFIC YURTS, INC. FOR DAMAGES INCLUDING, BUT NOT LIMITED TO, COMPENSATORY DAMAGES, CONSEQUENTIAL DAMAGES, INCIDENTAL DAMAGES, SPECIAL DAMAGES, INDIRECT DAMAGES, LOST PROFITS, OR OTHER DAMAGES, COSTS OR EXPENSES ARISING OUT OF OR RELATING TO THE DELIVERY, USE OR PERFORMANCE OF THE PRODUCT.

Pacific Yurts, Inc. assumes no responsibility or liability relating to or arising out of Purchaser's selection of the location for the yurt. Purchaser expressly assumes all risk of loss, injury or damage relating to or arising out of the installation, set up or site location of the yurt. In particular, but without limitation, Pacific Yurts, Inc. shall not be responsible or liable for any loss, injury or damage relating to or arising out of any forces of nature or acts of God.

Pacific Yurts, Inc. makes no representations, warranties or promises as to whether the yurt will satisfy any applicable laws, statutes, regulations or rules including, but not limited to, zoning or land use regulations or building codes.

This warranty is governed by the laws of the state of Oregon and shall be interpreted and construed by Oregon's version of the Uniform Commercial Code. Venue and jurisdiction of any legal proceeding relating to or arising out of this warranty shall be in Lane County, Oregon.

In the event of any legal proceeding arising out of or relating to the enforcement or interpretation of this warranty, the prevailing party in such proceeding shall be entitled to recover its reasonable attorney fees incurred therein, including any appeal thereof, in addition to such costs, disbursements and damages as are allowed by law.

PACIFIC YURTS, INC. 77456 Hwy. 99 S. Cottage Grove, Oregon 97424