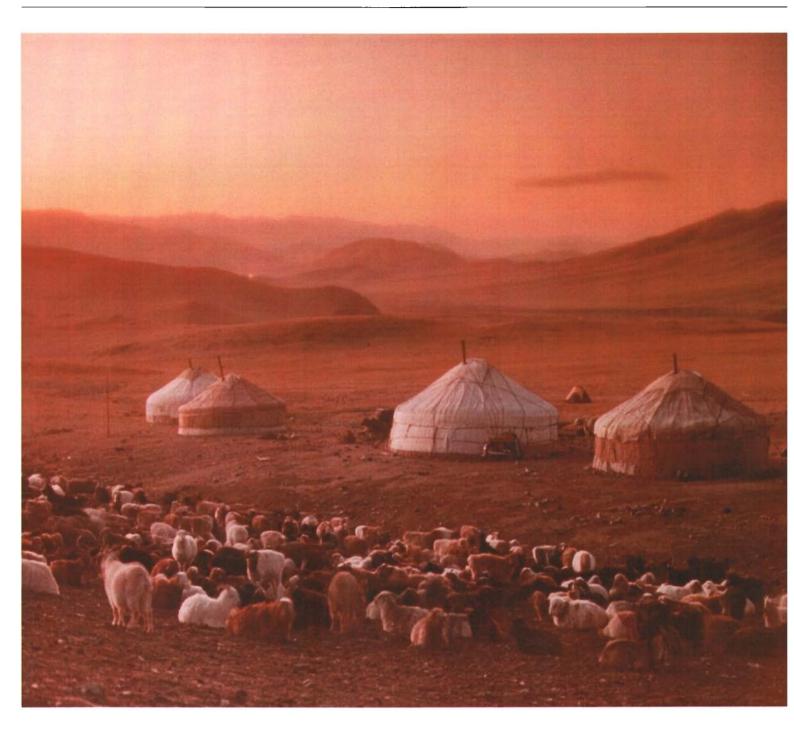
# Guide to erecting a traditional Mongolian yurt



#### Copyright 2009 Ulaantaij Ltd

All rights reserved. No part of this book shall be reproduced, stored in a retrieval system or transmitted by any means, electronic, mechanical, photocopying, recording or otherwise without the express permission of Ulaantaij Ltd. No patent liability is assumed with respect of the use of the information contained herein. Although every precaution has been taken in the preparation of this booklet, Ulaantaij and authors assume no responsibility for errors or omissions. Neither is any liability assumed for damages resulting from the use of information contained herein. For more information please contact. Ulaantaij Ltd, P.O. Box 1540, Ulaanbaatar 211213, Mongolia.

Welcome to Ulaantaij's yurt erection guide. This guide will walk you step by step through erecting your traditional Mongolian yurt. We strongly recommend that you read through this guide before attempting to erect your yurt. This will allow you to get a feel for what is involved, but don't let this read through put you off – it is really very simple!

Please bear in mind that our guide is exactly that, a guide. Erecting a yurt is not an exact science. Whilst the order of doing each task is pre-determined, the exact methodology of performing each task is a matter for debate here in Mongolia, sometimes experiment and sometimes just plain experience.

This guide outlines the procedure for erecting a standard No.5 or 5.8 meter yurt. The process for smaller and larger yurts is the same, the only difference being that the size, and number of various components may change. You will need a minimum of two people to erect a yurt.

Any questions raised by this guide please feel free to contact us directly at yurt erection guide@ulaantaij.com

# **Contents**

warning: - What a yurt is and is not.	Page 6
Checklist - Make sure you have all the components you need to build your yurt - Tools you will need	Page 7
Quick overview of how to erect your yurt - Wooden framework - Material covers	Page 9
A pictorial, step-by-step guide to erecting your yurt  - Wooden frame  - Material covers	Page 12
Troubleshooting & other notes	Page 45
Taking down your yurt	Page 46
Storing your yurt	Page 46

## Warning No 1. What is a yurt?

Please remember a yurt is not a permanent building — it is a tent. Moreover it's a tent for a nomad, hence it is intended to be moved up to three or four times a year. A yurt is a tent made from wood, cotton, leather, wool and horsehair. Putting such a structure in the great outdoors does have consequences, and you will need to regularly schedule time to take care of it. Airing it, heating it, cleaning it and most importantly - taking it down and drying it out regularly. You cannot simply put up your yurt and then forget about it as you may do with a summer house or a shed. If you are not going to be using your yurt for a couple of weeks, then please take it down and store it away carefully.

## Warning No 2. Air your yurt!

During the warm dry summer months you will need to ensure your yurt is aired. This involves having the door open and having the crown wheel open to allow air to circulate through the yurt. This is important as a yurt needs to be dried from inside AND out. A dry yurt is a long lived yurt.

## Warning No 3. Heat your yurt!

A permanently wet yurt will be a short lived yurt indeed. Add a stove to your yurt and light it – regularly, during the winter this means every day. You will be amazed how cosy your yurt is, and more importantly, how quickly this will help disperse dampness, dry out the inner covers and generally stop mould making inroads into your yurt. If you do not heat, air or use your yurt whilst it is erected, it's lifespan is getting shorter and shorter.

## Warning No 4. Where to put your yurt!

We recommend that our yurts are sited on a wooden base. This gives a very permanent feel to the yurt and ensures it is kept away from dampness. Plans for building a Mongolian style yurt floor are available for download from our website.

### Warning No 5. Where to put your yurt!

As mentioned above a yurt is a tent. And as with all tents you have the option of putting it where you want it to go or putting it where it wants to go. We recommend that the yurt is not placed under trees or in woods. The surrounding area is not prone to dampness or flooding and that the yurt is not sited near water. Clear good airflow all the way around the yurt is important to ensure longevity.

# **Checklist - Wooden components**

The wooden components are packed individually and hence are easily identifiable.

1. Crown wheel. Looks like a cartwheel with spokes.

Number of pieces: 1

2. Roof poles. Long slender poles.

Number of pieces: 81

3. Lattice wall sections. Looks like a collapsible garden trellis

Number of pieces: 5.

4. Door. Entrance & exit of your yurt

Number of pieces: 1

5. Crown supports. Thick wooden pole with a large "triangular" configuration on top.

Number of pieces: 2

# **Checklist - Material components**

#### Bag No. 1.

Inner liner. Plain white cotton cover that is fitted to the outside of the roof and walls.

Number of pieces: 1

Outer cover. Made from untreated 12oz canvas.

Number of pieces: 1

Decorative skirt. A narrow band of material that circles the bottom edge of your yurt.

Number of pieces: 2

Crown cover

Octagonal wheel cover with windows sewn into the design.

Number of pieces: 1

Nylon webbing straps

Number of pieces: 5

#### Bag No. 2:

Insulating layer (Roof) Number of pieces: 2 (Packed together)

#### Bag No. 3:

Insulating layer (Wall) Number of pieces: 2 (Packed together)

#### Bag No. 4:

Water resistant layer (Roof & walls) Number of pieces: 2 (Packed together)

#### Overview

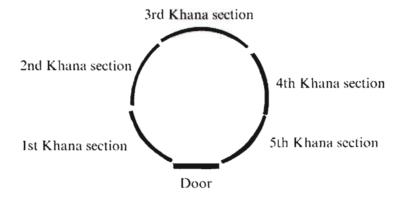
Before diving into the step-by-step guide, we felt a brief summary of the order in which your yurt should be erected would be helpful.

Firstly decide where you are going to site your yurt, and which way the door will face. The yurt should be erected on a flat serface.

For the purpose of this guide it will be presumed that the door will be facing south. With this as a base, and for ease of reference, there will be references to North, South, East and West throughout this guide. Doors that face south will also let in more light.

#### The wooden framework

Firstly, determine in your mind where the door will be. To aid in creating the round shape of a yurt, the lattice wall sections have a natural curve to them. They are numbered in the top right hand corner on the outer side from 1 to 5. Take number 1, open it up, and place it to the left of where the door is going to be. Flat cut section resting on the floor.



Important note: All lattice wall sections are equal but some are more equal than others. The khana numbered 1 and 5 are specifically made to buttress up against the door. Apart from being numbered, they are also easy to identify, as the ends have been cut straight so as to fit flush with the door.

Someone will now need to hold this section upright whilst you take lattice wall section No. 2, open it up, and mesh the edge with section No. 1 in order to create the beginnings of a semi-circle. Mesh and tie the ends together with the ropes provided. There will now be enough of a curve in these two sections for one person to hold them both. Continue this process until all five sections are lashed together. After three or more sections are done, the whole structure should be able to support itself. You will now have the visible outline of a yurt, minus a space for the door. Two people can move this structure around to ensure it is the correct size, shape and even alter its location.

**POINTER:** How high should the walls be? Each wall section should be opened approxiametely 2-3cm higher than your door frame. It is important that all wall sections are opened to the same height to ensure that you achieve the correct diameter for your yurt.

Next, the crown wheel and crown supports are put in the centre of the yurt and tied together. Place it face up, with the decorative centre ring facing upwards. You will next need to tie the two roof supports to the crown wheel with the ropes provided. Carry the door to the opening in the lattice wall sections. Make sure that the one-piece door is facing outwards. Mesh the right hand side lattice wall section to the right hand side of the door and tie it securely with the ropes provided. Repeat for the left hand side. Next, you need to tie two sets of webbing straps that run all the way around the yurt. They run from the upper left hand side of the door to the upper right hand side of the door. And, the lower left hand side of the door, all the way around to the lower right hand side of the door.

Next are the roof poles. Two people will have to enter the yurt and stand the crown wheel, and the roof supports upright in the centre of the yurt. One person should then be able to stand between the crown supports and hold it upright, whilst another person inserts the roof poles. You firstly need to insert five roof poles in order to securely hold the crown wheel in place. Once these are in place you can release the crown wheel and insert the remaining roof roles. Once all the roof poles are inserted, the wooden framework of your yurt is complete.

## The material covers

- 1. A white cotton cover that is fitted to the outside of the roof and walls; this provides a backdrop for the brightly decorated roof poles and lattice wall sections.
- 2. Insulating covers, four sections, two for the roof and two for the wall. Roof sections are placed first, followed by the wall sections. Again, these are tied in place using the ties provided.
- 3. Next is the water resistant layer. Two sections, roof and walls. The wall section goes on first and is tied in place using the rope provided. Any additional length near the door can be folded back on itself to cover the exposed insulating layer. Next is the roof section. This is simply slid into position.
- 4. The final layer is the cover that holds the Mongolian design. This is one piece, and wraps around the yurt meeting at the north side. Everything is held in place by three nylon ropes. These are tied via metal loops from the left hand side of the door, all the way around the yurt to loops at the right hand side of the door.
- 5. Crown cover, is an octagonal piece of material and has windows sewn into it. This is placed over the crown wheel and ropes tied into place.
- 6. The outer skirt comes in two pieces; each piece is enough to cover half of the yurt. The first piece runs from the left hand side of the door, all the way around the yurt to the North side. The second piece runs from the right hand side of the door, again to the North side where it attaches to the first piece.

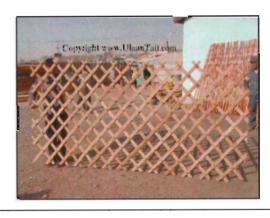
With so many different layers involved, you may need to spend sometime positioning each layer as it is fitted. Sometimes the addition of a self standing ladder, positioned inside the yurt to give access to the outside of the crown wheel can help.

# A pictorial, step-by-step guide to erecting your yurt

We hope that having gotten this far you are raring to go. However, please take the time to read through the rest of this guide. Whilst we would be the first to agree that erecting a yurt is more common sense than rocket science, we and your yurt will appreciate the time you invest in continuing to read through this guide.

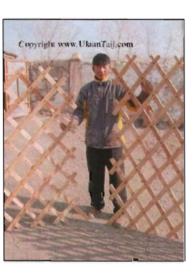
1. These should be starting to look familiar by now. Yes it's a lattice wall section. You'll need one of these to start of.





2. One of the lattice wall sections extended

3. Two lattice wall sections ready for meshing together.
Aligning them at a 90 degree angle (viewed from above) will make it easier for you to mesh them together.



4. You can see how the wooden sections in each lattice wall (running at 45 degrees to the ground) are starting to run parallel with each other in both sections.

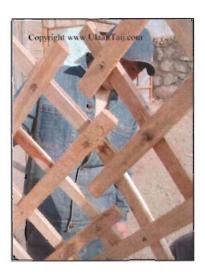


NOTE: As in most traditionally made objects, most components need to be tied together. You do not have to be a sailor to do this, a yurt is a tremendously forgiving structure, however, you will need to tie things securely.

5. How it looks at the top. Remember, meshing and lashing the khana sections together is best done whilst standing on the outside of the lattice wall



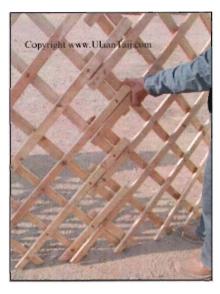
6. A close up, from the inside.



7. Top done!



8. Bottom done. You now need to lash them together. This needs to be done tightly to ensure a good fit. Take the horsehair rope that is attached to the second khana section. One end has a loop tied into it.



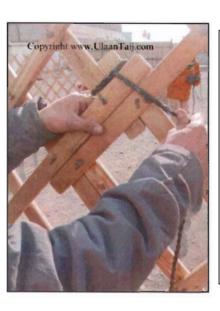
9. In the picture he is holding the looped end in his left hand.



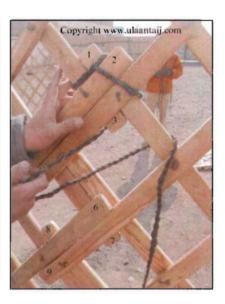
10. Pass the other end of the rope over the top of the lattice wall section as in the picture. Now thread the end of the rope through the loop and pull.



11.In order to ensure a good tight fit, you will need to hold the parallel sections of the lattice wall together by hand as you lash. The idea is to lash together the ends of each wooden strip that runs parallel to it on the adjoining lattice wall section.



12. To make this process easier to understand we have numberd the ends in the following pictures from 1 to 20. Lashing is done by weaving the rope around the different numbered ends in a set pattern.



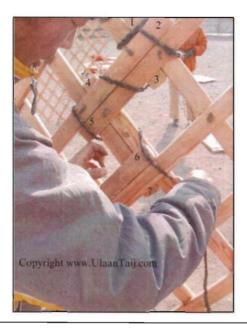
POINTER: If you have any problems figuring out which number gets lashed to which number, you may want to consider numbering the khana ends yourself as per the pictures.



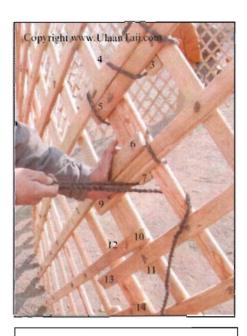
13. The rope always needs to run on the outside of the numbered ends, so when the rope is tightened, the ends are pulled together as in the photo above. Now that number 1,2 and 3 are lashed together, it's time to pass the rope to the outer side of number 4. 4 is now secured and time to lash number 5 by passing the rope around the front of it.



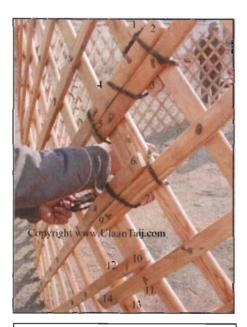
14.And around the back to ensure you come around to the front of number 6



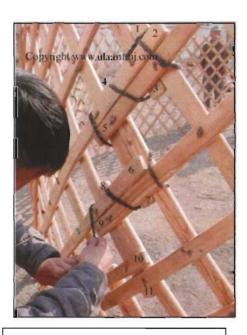
15. 6 is not quite long enough to hold the rope. This will not affect the overall integrity of the structure. This does happen occasionally, and we have made sure to list such an occurrence in this guide to re-assure you that nothing is amiss.



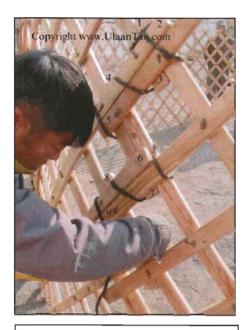
16. Pass the rope behind number 7 before pulling tight.



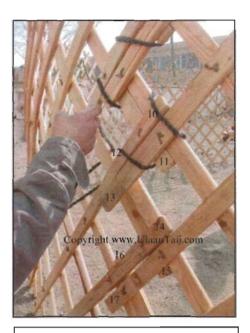
17. Continue lashing your way towards number 8



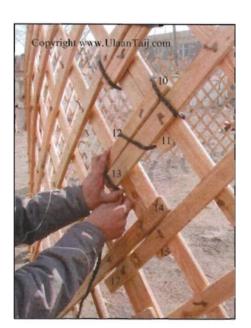
18. And around to the front of number 9



19. And again around the back again to ensure you come out on the front of number 10



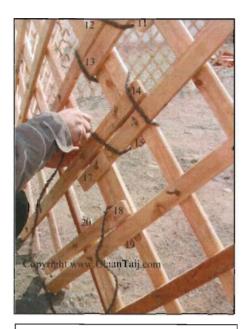
20. Number 11 & 12 completed before again pulling tight



21. And unlucky for some but not for us number 13



22. And there you are going around number 14, as well as passing the rope around to the front of number 15



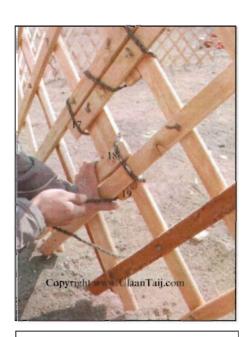
23. And back to ensure you pass the rope around the front of number 16



24. Around the front of number 17



25. Pull tight both the rope and the lattice wall sections as you are about to start finishing off.



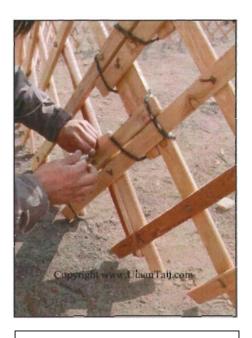
26. Number 19, almost done now



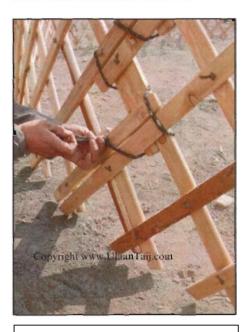
27. Around the last one, number 20



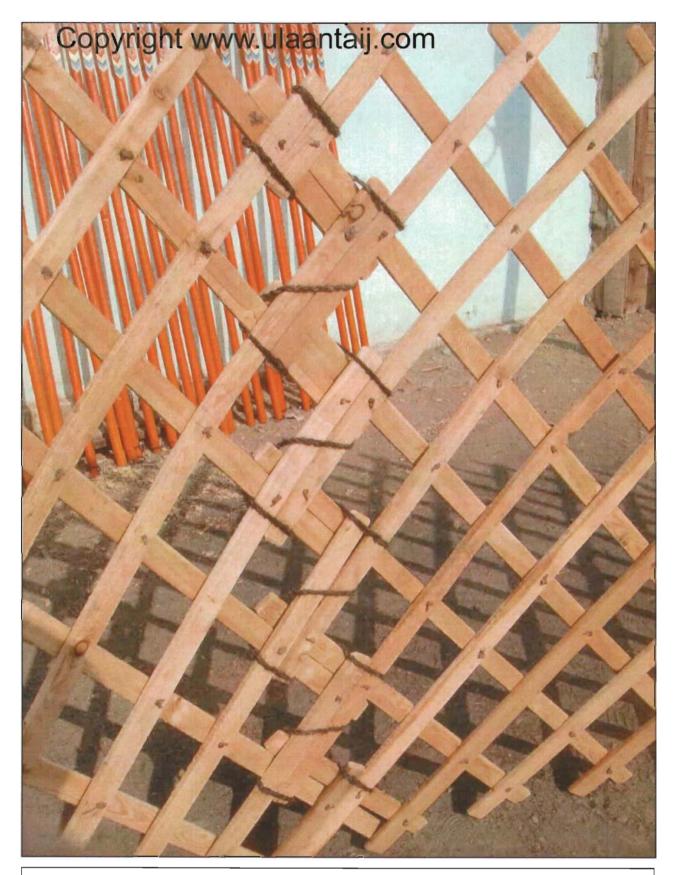
29. Now you just need to tie the end off by moving the end of the rope back on up and tying a knot under the last lashing you made.



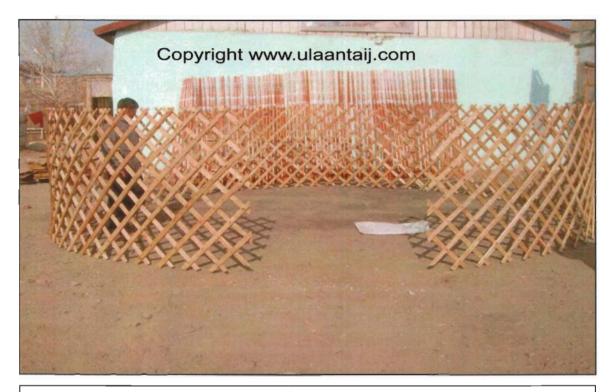
28. Do not forget to pull the parallel sections of wood closer together as you lash to ensure a tight fit.



31. You are done, now you just need to tie the end off by moving the end of the rope back on up and tying a knot under the last lashing you made.



33. The finished product. Just another three to go.



34. Continue connecting all five sections until you have the basic shape as shown.

35. At this stage you will want to adjust the shape and size of your yurt. The lattice walls need to be set at 3-4cm higher than your door. The easiest way to gauge this is by using a roof pole. Stand a roof pole next to your door. Mark on it the height of your door. Then slowly walk around your lattice walls, using your roof pole to measure if your walls need to be higher or lower. Then move that particular wall section in or out as appropriate.





36. Place the crown wheel in the centre of the yurt before placing the door.

37. Followed by the two crown supports.



POINTER: It would be easy to think that the crown wheel, being a circular piece of wood, could pretty much face any way it wanted. Unfortunately the short answer to that is NO. However, we have made it easy for you to figure out. The crown wheel windows that fit into the crown wheel face due South - towards the door when erected.

38. Here you can see one of the crown wheel supports about to be placed on the crown wheel. You can see where the top of the crown support sits on the crown wheel, as there is a space where no design is painted on the crown wheel.



39. Gently place the roof support in place.



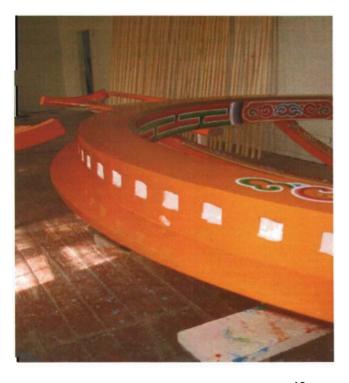


NOTE: We have made three design improvements in the design of our crown wheels.

Improvement No. 1 The ropes connecting the crown wheel and crown support need to go through the two holes in the side of the crown wheel., (as in picture to the left) as opposed to over the top of the crown wheel, as outlined in the instructions on page 21. The ropes are threaded through each hole TWICE

Improvement No. 2 There are 9 Perspex panels supplied with your yurt. Each Perspex panel has a number written on the protective paper covering, each number corresponds with an identical number of small holes drilled into the top of the crown wheel, enabling you to know which panel fits where. You may insert as many, or as few of these panels as you wish. Four of the eight Perspex panels are permanent once inserted, they slot into grooves in the crown wheel, with the bottom edge being secured with the screws supplied. We recommend adding exterior quality silicon sealer to all the Perspex edges in order to make a more water resistant seal. The remaining four Perspex panels screw onto the tops of the four wooden framed windows supplied. If you want to have a chimney flue exiting from your crown wheel, we supply an aluminium sheet with a hole cut into it to accommodate a chimney flue. This aluminium sheet replaces one of the Perspex panels that screws onto the wooden framed windows.

Please note that the Perspex panels provide a showerproof finish, and are not intended to replace the crown wheel cover as a weatherproof covering. If it rains hard, cover up with your crown wheel cover.



Improvement No.3 Crown wheel flashing. This is in effect a wooden "lip" that runs around the edge of your yurt and protects the area where the edge of the various material covers meets the crown wheel. This is our unique design, and takes a considerable amount of skill to make. It also gives a very nice finish to the yurt once erected.

40. Take the rope provided. It will have a loop tied in one end. (Held in his right hand) Thread the other end of the rope (held in his left hand) around the crown wheel and crown wheel support, and pass the end through the loop.



41. NOTE: The knot in the loop should be on the top of the crown wheel i.e. facing the ground here, as when the crown wheel is erected it will be out of sight.

Once the end of the rope has been passed through the loop ....



42. Pull tight and bring it back on itself the way it came. As in the photo. This needs to be done as tightly as possible.



43. Tying the roof support to the crown wheel is not intended to be a load bearing mechanism, when the whole structure is erected, the weight of the frame and material covers will be heavy enough to hold everything in place.



44. Once you have passed the rope twice around the crown wheel and crown wheel support ..





45. Pass the rope around the back of the crown support as shown



46. It now needs to be wound around the roof support and crown wheel again before being tied off.



47. Again it needs to be wound around twice.



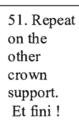
48. Pulling t-i-g-h-t.



49. As is being done here



50. You can now tie it off







52. Next you need to secure the door to the lattice wall sections. Firstly, put your door in place. With a solid wooden frame and two sets of doors, they can be heavy, so best that at least two people do this.

53. Start to bring the lattice wall section in towards the door



54. Make sure it is a good fit.
This may require some jiggling around of both the doors location, and the lattice wall sections on either side of it.



55. How it should look. The door will need to be connected to the lattice wall section in four places. Top right, bottom right, top left and bottom left.





56. A rope will come pre-attached to those four points on your door. Completely remove the rope that is threaded through the hole in the door. Thread it back through the hole in the door, but this time, also thread it around the closest strut on the lattice wall section before looping one end of the rope through the other end of the rope and pulling tight.



57. Pull loop tight. Repeat on the other three corners of the door where rope is attached.

58. Attach one of the nylon webbing straps to the bottom left hand loop you have just created.





59. Take the nylon rope all the way around the yurt



60. And thread through the loop on the bottom right hand side of the door



61. And tie off as shown. These ropes need to be taught, but not too tight. Once the weight of the roof poles and material covers are placed on the top of the lattice wall sections, they will tighten up naturally.

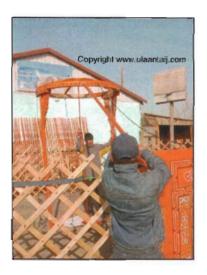


62. Undo the four ropes that are attached to the four rings connected to the outside of the crown wheel in a North, East, South and West direction.

POINTER: If you have not opened up your khana enough to create the correct circumference, or you have tied the nylon webbing straps to tight, you may have trouble inserting some or all of the roof poles. You may initially be able to force the first few roof poles into position, but as you progress this will become harder and harder, and this should be an indication that something is wrong. You will also begin to notice that your khana will begin to severely bend outwards at the top. Now is the time to stop before you do any damage to the structure. You need to loosen the nylon webbing straps and slightly open up the khana sections, thereby increasing the circumference of your yurt. Try to insert roof poles again. Repeat if necessary. The reverse is also true, if your roof poles are falling out or seem too short, then you will need to tighten the tension band and make the diameter of your yurt smaller. Once the first 10 or so roof poles are in securely in position, you will have the correct size, and you may want to recheck that the webbing straps are nice and tight.

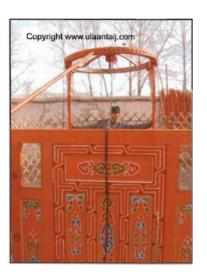


63. Stand the crown wheel and the crown supports upright. One person should be able to hold this in position, either by standing directly between the two crown supports and holding one in each hand, or as shown here, by cuddling one crown support and using the rope attached to the centre of the crown wheel for extra support.



64. The first roof pole to be inserted is the one on the left hand side of the door. Before doing so though, you will need to check that the crown wheel and crown wheel supports are placed straight and central within the overall layout. Now it is time to make use of those four ropes attached to the crown wheel and which you were wondering about. Apart from adding additional strength to the overall structure, they are also used as a plumb line of sorts.

65. You can see in the picture here how the ring in the crown wheel aligns exactly with the ring in the centre of the door.





66. If everything is straight, then now is the time to tie off the rope to the top of the door.



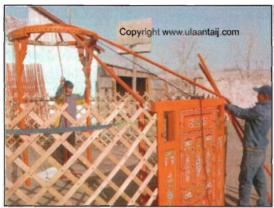
67. One end of the roof pole is quite narrow and obviously fits into the hole in the crown wheel; however, the other end with the horsehair loop needs to be fitted to the top of the lattice wall section. It is done by looping the horsehair rope over the top end of one of the **INNER** strands of one of the lattice wall, as shown in the next picture.



68. If the distance between the crown wheel and lattice wall section is correct, the horsehair rope attached to the end of the roof pole should pop over the top of the lattice wall section, only after a little bit of a jiggle or applying some strength. If the distance between the crown wheel and lattice wall section is too far, the roof pole may well fall out, if it is too short, you will have a great deal of trouble in getting the horse hair loop over the top of the lattice wall section and will have to move the crown wheel or lattice wall section away from one another.

69. Please be sure to **NEVER** loop the end of the horsehair rope over one of the outer strands of the lattice wall, as shown in the picture on the right. All of the weight will be born by the camel hide joint holding the two sections together. Camel, man, woman, wood and the yurt will not be happy.



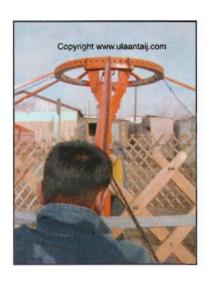


70. The next roof pole to be inserted is directly to the right of the door..

71. Here is a close up of the front of the crown wheel facing the door. You can just see to the left and right, where the first two roof poles have been inserted. There should be six holes between the two roof poles, these are for the roof poles that will connect with the top of the door. These six roof poles are the very last to be inserted.



72. The next roof pole to be inserted is the one to the East. Again you can use the horsehair rope to gauge whether or not the crown wheel is straight. Here you can see the power of experience, dead straight.



73. Once aligned, as you insert the roof poles, the horsehair ropes attached to the West, North and East of the crown wheel need to be tightened and tied to the lattice wall



74. As long as the rope is taught and a knot is involved, do not worry too much. However for reference here is how we do things. In a triangular shape





75. And a close up



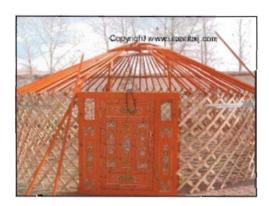
76. Repeat for the roof poles and ropes to the West and North



77. Once that is done, you just need to insert another four roof poles before letting go of the crown wheel. These are placed exactly half way between the roof poles that have already been inserted. Hence, South West, North West, North East and South East. But not between the two roof poles that have been inserted immediately to either side of the door. Again, the six roof poles that connect the crown wheel and the top of the door frame are last. These six roof poles are slightly shorter than the rest, and have no horsehair rope inserted into their ends. They instead fit directly into a hole chiselled into the top of the door frame.

78. You should now have nine roof poles inserted and can let go of the crown wheel supports, as the yurt will now be able to support itself. You can see from the picture to the right, that the nine roof poles thus far inserted roughly correspond with the spokes of the crown wheel.





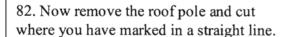
79. You can now insert the rest of the roof poles at your leisure. Here you can see all of the roof poles, apart from those that connect to the top of the door frame have been inserted. For the roof poles that connect to the top of the door, you will now need to cut them to the correct length before inserting them yourself.

80. Firstly, you should have six holes in the crown wheel above the door, six notches in the top of the door and six roof poles with no horsehair ropes inserted into the end of them. Take one of the roof poles. Place the narrow end into the 1<sup>st</sup> or furthest left hole in the crown wheel, now align the bottom edge of the pole with the 1<sup>st</sup> or furthest left notch in the top of the door.



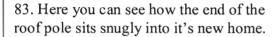


81. Then mark the pole with either a knife or saw blade. Ensuring that once cut, the end of the pole inserts tightly into the notch in the top of the door. The roof pole once cut should push firmly against the door. This ensures you have a door that will not wobble around.











84. Repeat this step until you have cut all six poles to size. Once finished you may want to write a number on the end of each roof pole in order to remember it's correct position for next time. Numbers run from left to right.

POINTER: If the roof poles are quite a bit out of alignment with the spokes of the crown wheel i.e. the crown wheel has twisted and is no longer straight or in line; and you are getting a kind of spiral effect with your roof poles, then something is wrong, and you will need to straighten things out before continuing, as the more roof poles you add, the more this mis-alignment will be magnified.

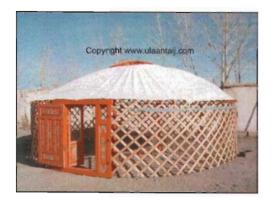
Although this will not affect the overall integrity or strength of your yurt, it does look a bit strange once completed. Hence:

- Are the roof poles inserted into the correct hole in the crown wheel?
- Are the roof poles hooked onto the correct position on the lattice wall sections?
- Is the crown wheel the right way around?



80. The final six (eight) roof poles have been inserted, congratulations. You have finished erecting the framework of your yurt.

POINTER: Now that we are ready to move onto the material covers. It is important to check that you managed to get all of the wall sections the same height. If not, many of your covers are not going to sit evenly.



81. The first layer to go on is the roof and wall liner. This is a thin cotton cover that provides a backdrop for the brightly painted roof poles and lattice wall sections. It is one piece, with a split in that meets/ overlaps at the north side. Note seams should face outwards so they cannot be seen from the inside.

Please note: This picture shows an older version that only covers the roof section. Our new design cover, covers the roof AND walls.

#### Why so many material layers?

Why is a Mongolian yurt design so strong? Because it is designed to support multiple layers of heavy coverings. A yurt is after all like a human body. Complete with bones (wooden frame) muscle (canvas) fat (felt) and skin (outer cover) Just as any human would look strange, unhealthy and physically weak without any of these parts, so will your yurt. Everything is there for a reason.



82. Next is the insulating layer. This and the canvas layer are heavy and need to be handled by two people. The first part of the insulating layer to go on is one of the wall sections.



83. It is roughly positioned on the yurt, before being manoeuvred into position. Make sure that one edge is aligned with the edge of the door as you can see being done here.



85. Once tied, it is time for the second wall section to go on.

86. Again, make sure that one edge meets with the door before tying it on securely with the ropes provided.



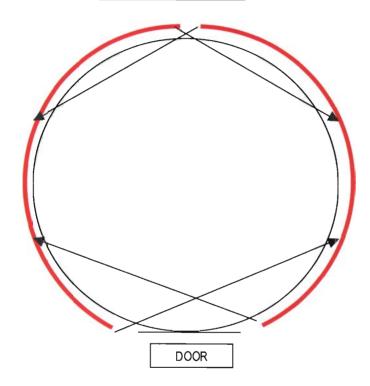
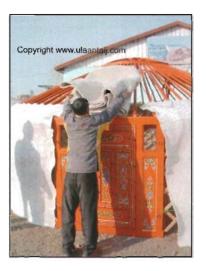


Diagram shows the direction in which you should tie of the ropes attached to your wall sections. Nylon webbing ties are attached to four points on each wall section. One at each upper comer (to which we have pre-attached horse-hair ropes) and another two in the center. To which the ropes attached to the ends of the opposite wall section are tied.

POINTER: you do not have to use the inner liner if you do not want, the felt can perform much the same function

87. Next is the front roof section. Unlike the wall sections, this is best done by placing the roof section in a folded position onto the roof poles. And then opening it up.





88. The front and rear roof section both have a semi-circle cut into roof to go around the crown wheel.



89. We supply an extra roof pole with every yurt. You will now be in a position to appreciate why. Use a roof pole to open the insulating layer, and any other layer that is to be fitted onto the roof.

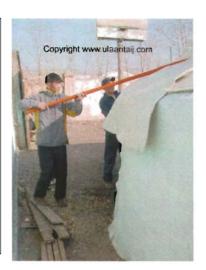


90. Although at the end of the day, there is no substitute for simple muscle power.

91. Placing the rear roof section in place. In order to keep you warm, you can see, there is quite an overlap between the roof and wall sections.



92. Before again using our now trusty roof pole to open it up.





93. Done.

IMPORTANT NOTE. The following method shows an old design canvas cover that is split into front and rear sections. Our new design canvas covers comes in two pieces. Roof and wall sections. The one piece wall section is installed first using the nylon rope provided. The extra length of canvas near the door is folded back on itself and behind the wool layer in order to provide additional protection from the elements. The roof section is one piece and simply slides over the top of the crown wheel. The extra length near the door is again folded under the wool section in order to provide additional protection for your insulating layer.



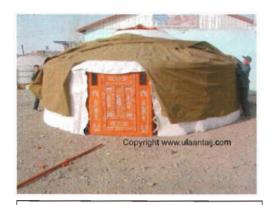
94. Same methodology as before. Place the canvas on the roof poles before opening up. However please bear in mind that our canvas is heavy. As you can see here, this is no mean feat for even our two brothers.

95. Open as before. Using your roof pole





96. To it's best effect

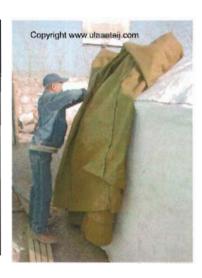


97. You may need to spend some time aligning the various layers, particularly around the door area.



98. Front section done.

99. Rear section being put in place.



100. Roof pole again.





101. Next is the outer cover. This is one piece, with a split in the back that overlaps at the rear of your yurt



102. This is a lightweight cover and can easily be manoeuvred into position. As shown here



103. And at the back. Please note that as per the first layer that went on (the roof & wall liner) the outer cover has a number of ties at the back where it overlaps.

104. You can see that we are doing this on a windy day. Although there are not many other kinds of days in Mongolia. Do not be too concerned about aligning all the various covers perfectly around the door at this stage. Much better to semi-securely tie the outer ropes in place (next step) which will then hold the various layers in place well enough for you to adjust everything.





105. Those three metal loops attached to the left and right hand side of the door. Now it's time to use them. Thread one of the long black nylon ropes provided, through the one on the top left hand side. Tie about one meter back from the door



106. Thus

107. Now walk around the yurt to the right hand side of the door





108. And loop the rope through the metal loop at the top right hand side



109. Pull tight using your bodyweight and tie off if you are blessed with no wind and have adjusted your covers perfectly. Otherwise pull semi tight in order to adjust your covers before tying off.

110. Repeat process twice more so that you have three nylon rope bands running around your yurt. Once this is done you can adjust the various layers as required. We are mainly referring to straightening the outer cover and tidying up where the various layers meet around the door section, as you will obviously not be able to move the heavy canvas and insulating layers by this stage.



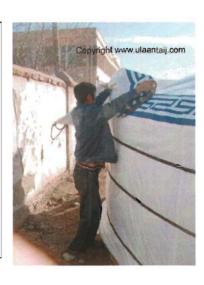


111. Next is the crown cover. Ropes are pre-attached to the four corners of the crown cover. Place it on the floor with the design facing downwards.



112. Fold in half to create a triangle, with the design facing up.

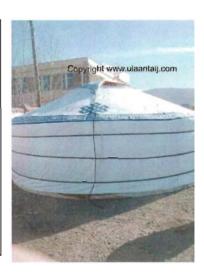
113. Place on the back of the yurt



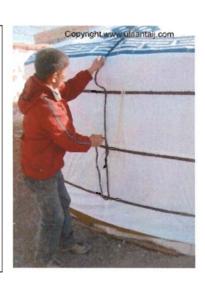
114. With one person holding ropes to the East and West, slowly pull the crown cover into position so that it covers the rear 50% of the crown wheel.



115. Thus



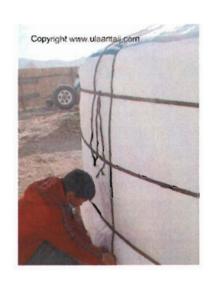
116. Now you both need to thread the ropes you were holding to the East and West, inbetween the three horsehair bands that run around



117. And tie to the lower of the three bands that run around the yurt.

NOTE: You may not want to fix the crown cover as we have done here, covering half the crown wheel. If you would like light coming through the whole of your crown wheel, it is possible to have the crown cover, folded in half and sitting on the back of the yurt, just off of the crown wheel. You can then unfold and pull the crown wheel cover closed, over the crown wheel using the rope attached to the Northern side of the crown wheel cover at either nigh time or during bad weather.

119. For the two crown cover ropes at the north side of the yurt. The rope attached to the bottommost corner of the crown cover is tied as described above, by threading it through the three horsehair bands, before tying of under the lattice wall section. The remaining rope is tucked under the first horsehair band as in the photo. During rain or cold weather, this rope can be removed, and whilst holding, you can walk to the southern side of the yurt, once there you can unfold the crown cover, thus covering the opening in the crown wheel completely. The rope can then be tied securely to either the door, or one of the horsehair bands at the front of the yurt.





120. Next is the yurt skirt. This comes in two pieces. They start at the left hand and right hand side of the door and meet at the back. The ties on the uppermost edge of the skirt should be tied to the lowermost horsehair band. Please note that this skirt is purely decorative, and does not serve any practical function.

121. Here you can see it being attached to the door. If possible, please do not smoke whilst doing this!



122. And here to the lowermost horsehair band.



## **Troubleshooting & other notes**

The two main things to watch out for in locating your yurt are, (a) is the ground level or not? (b) Have you made sure all your lattice wall sections are the same height? If not, this has the unwanted effect of throwing out some of the basic alignments in your yurt. Much more than you would imagine. And can result in your material covers not fitting correctly, i.e. longer on one side than the other. Whilst either of these points may not be immediately obvious, as you advance in erecting your yurt, if you are on uneven ground, some parts of the woodwork may actually lift from the floor, and some of the various material covers may hang longer on one side of your yurt than the other. This is especially noticeable in the crown supports and lattice wall sections. See photo below of lattice wall section lifting of to the extent that I can put my hand underneath it. In this case there is nothing else to do but move your yurt, or place something under the component in question in order to support it. Being the practical nomads we are, we placed a plank of wood under this wall section.



Other than this there is nothing that many of you will not already know from basic camping.

- Select an area that is as flat as possible but avoid marshy, low lying ground that could flood under conditions of heavy rain.
- It is better not to pitch under trees, especially in very windy weather. They also drip long after it has stopped raining and some may drop sticky sap on your yurt.
- Remove stones, sticks or anything else that may damage the groundsheet or wooden base if you have purchased one. It's worth considering extra protection beneath lightweight groundsheets. A sheet of 500g polythene can not only offer protection, but can also keep the groundsheet free of wet and mud.

# Taking down your yurt

Taking your yurt down could not be easier, just follow the instructions you have read so far, but in reverse. The only points to bear in mind are

- Wherever possible please try to fold the material covers as per their original packing. Whilst this may seem like a lot of trouble for nothing, you will reap the rewards of this approach when you re-erect your yurt.
- There are very few ropes that are not supposed to be connected to some piece of material or woodwork. Hence please leave one end of the rope attached to something. This will not only stop you losing the rope, but will also help you in remembering the procedure in erecting your yurt next time around. If you do end up losing any ropes though, do let us know.
- The various material covers can aid as good packing material when storing/ packing the wooden components of your yurt for transport. Our yurts are tough; do not be afraid of using them.

# Storing your yurt

Your yurt is designed to be used and lived in as a home. However if you do decide to store it, there are a few basic precautions to be taken that we feel will pay dividends in the long run.

Firstly, please ensure that your yurt is totally dry before storing it. This is especially important for the material covers, please ensure they are totally dry before folding. Canvas in particular is famed for not liking dark damp conditions.

The camel hide knots in the lattice wall sections, whilst extremely tough, are again, not especially fond of dark damp conditions. Also be careful not to store your khana where dogs (and rodents) can get to them – the rawhide ties are irresistible to our animal friends – like a giant pack of doggie chews. And finally, please do not store your khana flat on the floor. A lot of time and energy went into steam bending the wood into the correct shape and hence if stored, they should be either stood vertically against a wall, (as in picture c) or if laid down flat on the floor they should have a piece of wood inserted at either end in order to raise the ends off the ground and ensure that the wood does not straighten out.

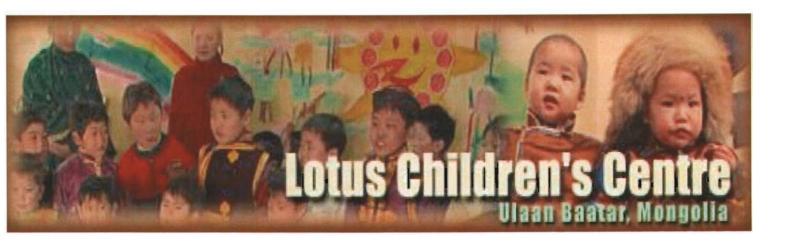
Follow these basic guidelines and your yurt will give you many, many years of loyal

service.

Picture C







#### Help us support Mongolia

Mongolia is a poor country with a young population. We donate a percentage of all our sales to The Lotus Children's charity.

Through quality education, meaningful activities and by creating small family groups (10 children to one housemother), the Lotus Centre tries to give children a chance to make a positive future. Today 148 children call the Lotus Centre their home.

The Centre has also helps many ultra poor families with income projects and food assistance, so that poverty does not tear their family unit apart. The Lotus Centre isn't a large organisation, they don't have a marketing department or a fleet of 4 wheel drives, the majority of their core staff are volunteers, while nearly all of their staff work for discounted wages with no overtime. This is a fact that they are proud of, they are a child-focused organisation and are a collection of people who are 100 percent committed to the welfare of kids.

#### Three simple goals of Lotus:

- 1. To provide primary care to all of their children, which includes food, health care, clothing and accommodation
- 2. To provide the children with developmental care so that they can break free of the poverty cycle. For example, to give each child a quality education, counselling, self esteem building exercises and the access to life skills.
- 3. To provide the children with support in their "post Lotus" lives, so that they have a safety net and are able to find employment and tertiary education placements.

If you would like to know more about The Lotus Children's charity or how to make a donation, please go to <a href="http://www.lotuschild.org/donate.htm">http://www.lotuschild.org/donate.htm</a>