

iTent

A Home Made Tent

- Proposed by Gyaneswar Pokharel, Ph.D, PE.

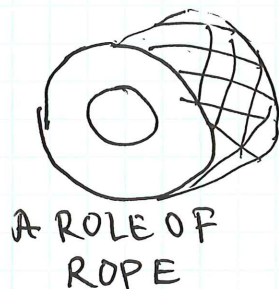
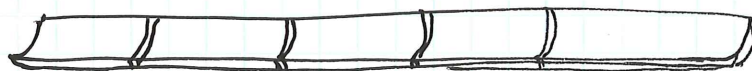
Step-1: Raw Material

(a) Two long MS steel Bars
Alternative for temp. construction
: Bamboo Stripes

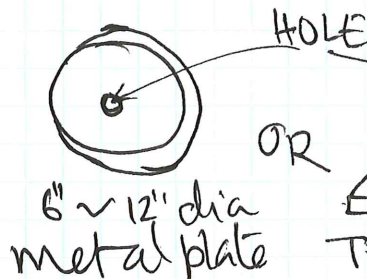
(b) Rope strong enough
Long enough $\approx 50-60$ ft

Sizes of these raw material depend
on the size of the tent.

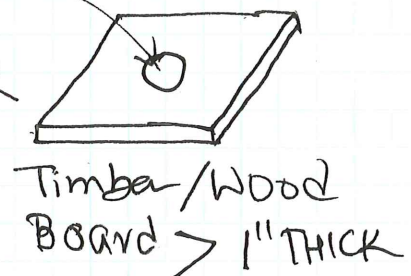
(c) Four 6" dia pteel plate with hole in the
middle or Ply-Board (water resistant)
or Wood Board



A ROLL OF
ROPE



OR



(4) Water Resistant Sheet of:
Nylon or cotton or Plastic sheets

Depending on size of tent

(a) Inside Area = 6×8 For family of four
2 kids & 2 parents
SMALL TENT

Total Area of covering sheet

$$= \left(\frac{2}{3} \times 8 \times 6\right) \times 2 + \left(\frac{1}{3} \times 6 \times 6\right) \times 2$$

$$= 64 + 24 = 88 \text{ Sq. ft}$$

$$\approx 10 \text{ Sq. meter}$$

(b) Large sized Tent: Inside Area 10×8
Good for 4 Adults and 2 kids.

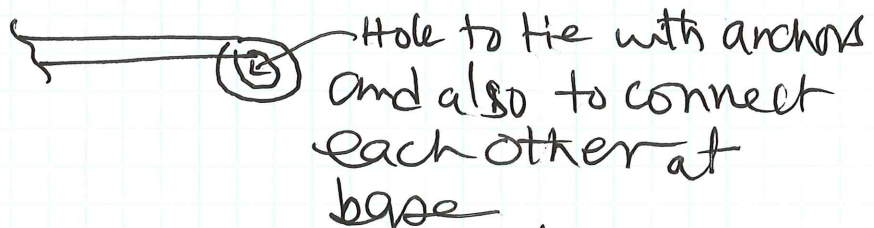
Area of covering sheets

$$= \left(\frac{2}{3} \times 8 \times 10\right) \times 2 + \left(\frac{1}{3} \times 10 \times 6\right) \times 2$$

$$\approx 110 + 40 = 150 \text{ Sqft.}$$

$$\approx 20 \text{ sq. meter (At most)}$$

* IF THE MS STEEL BARS ARE TO BE USED
THEN BEND EACH END AND FORM A
LOOP

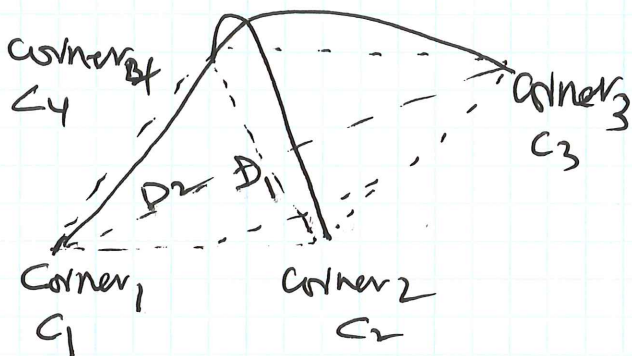


Step-2 construction Sequence

A circular shaped:

There can be two patterns as shown below:

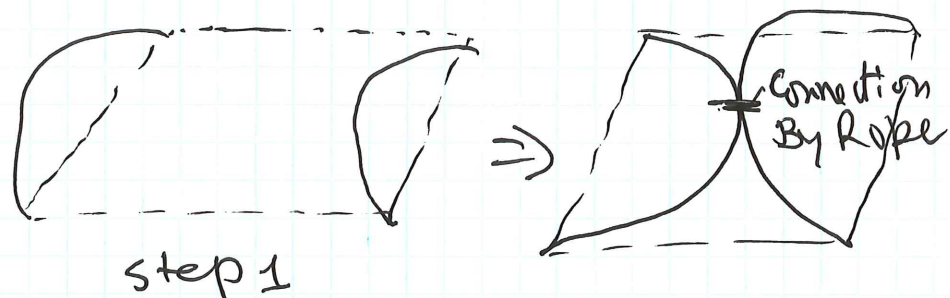
(a) The bars are placed diagonally crossing each other



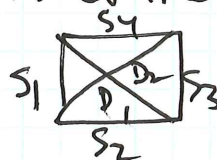
Diagonal, D_1 connects
= C_2 & C_4

Diagonal, D_2 connects
= C_1 & C_3

(b) The bars connects neighboring corner



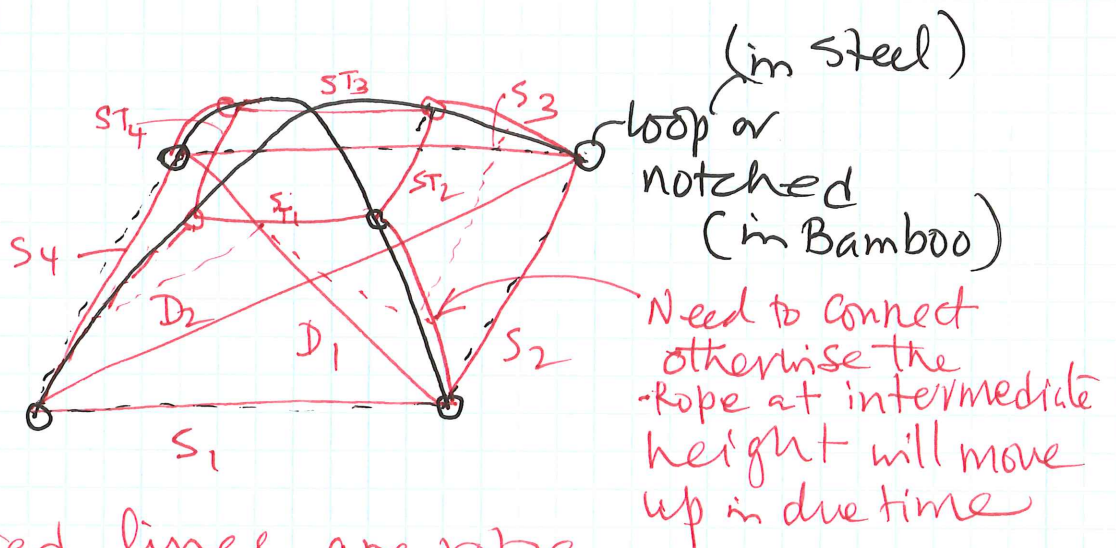
In both cases, the rope should connect such that each corner is connected to all other corners.



Ropes: S_1, S_2, S_3, S_4
 D_1, D_2

Step-3 Reinforcement of Tent Frame

Depending on the height and width of tent, Intermediate Reinforcement by Rope is Recommended.



All red lines are rope.
Dark lines are Steel Rods or Bamboo Strips.

Step-4: Cover with the plastic sheet or Gethes.

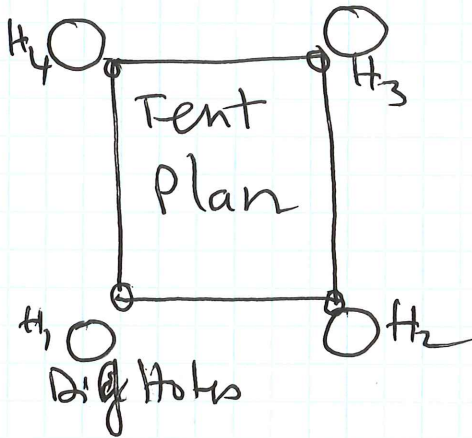
Recommended: Stich (Hand) the clothe around bar and ropes, bottom

Your Tent is ready for No Wind condition.

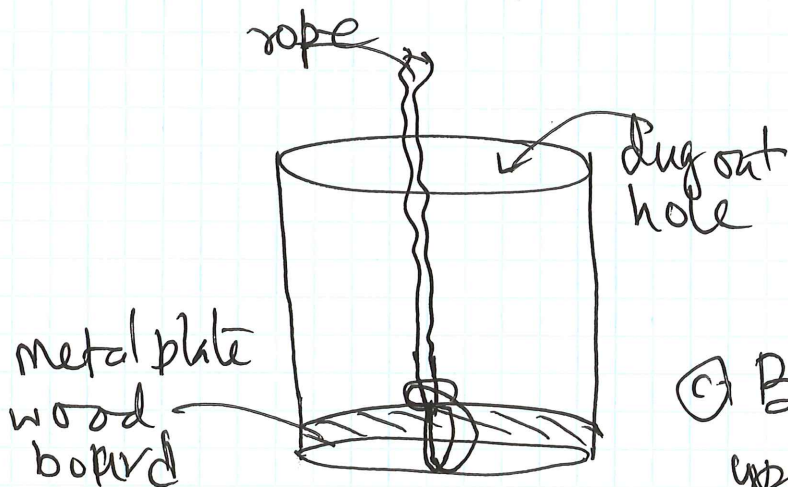
Congratulation! continue to Next Page to reinforce against Wind.

Step - 5 Resistance against Wind , Anchoring the tent to ground .

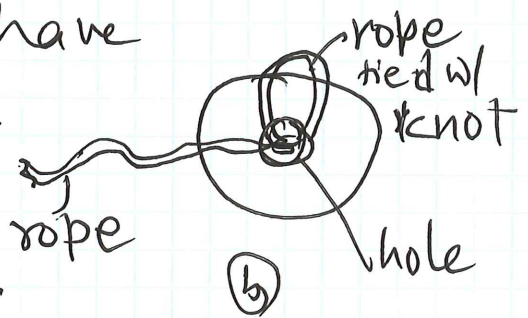
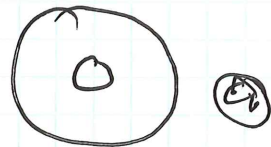
- Ⓐ Dig holes in ground at least 2 feet below grade .



- Ⓑ Insert the metal plate before inserting the metal plate into ground we have to tie the rope into it.



6" ~ 12" dia



- Ⓒ Back fill the hole ^{ground} w/ hole with soil and compact in 6" lifts "compact well enough".

Step-5 contd.

Page-6
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- (a) Now connect the rope to the loop in metal rod or on the ~~the~~ notch of the bamboo stripe.
- (e) Continue to other corner and repeat until all corners are anchored.

Congratulations!

You got your

iTent

All the best.

Have a safe return'
to a better life

Lets mourn, heal, and move on.

United we stand and tall like Mt. Everest

— J. S. Subhanal
2015.04.30