How to Build Your Own Tiki Hut

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How To Build A Tiki Hut
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By Kevin C. Dunn
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INTRODUCTION

I have found many people (such as myself) desire to have a tropical, relaxing atmosphere right in their own backyards. You can create this atmosphere yourself with this do-it-yourself guide for building your own tiki hut!

This do-it-yourself tiki hut building guide will give you all the detailed information you need to build any size tiki hut including the 10 ft. by 10 ft. tiki hut shown in this book. This size hut sells at retail for $5,000 but you can build your own for under $1,000 if you live in an area where palm leaves are readily available. The total material cost for your tiki hut is dependent upon the availability of materials in your area. This is NOT a cheap slap-together do-it-yourself hut that will blow over when you sneeze. You will enjoy your hut for many years by following the directions and recommendations carefully.

I highly suggest you read the entire contents of this book at least once before attempting to build your hut. This will give you a better understanding of the building process and the materials.

All materials that I suggest in this book can be replaced with other materials to fit your needs and budget. For example, I suggest white cedar for the framing of the tiki hut. But, red cedar, cypress, pressure treated southern yellow pine, eucalyptus, and spruce can all be used. If you are on a low budget, the pressure treated southern yellow pine and the spruce would be the least expensive. The others are all relatively close in price. I suggest if you are using spruce that you seal any exposed wood such as the poles coming out of the ground.

The palm fronds I use are sable palms. I recommend these because you will get an authentic look plus I believe these are the thickest and most durable and will hold up the longest. Other alternatives such as synthetic fronds are available. I do not recommend using rolled thatching or thatched panels. These will only get you maybe 2 years of use. Thatched properly, the individual sable palms could get you up to 5-8 years or more, depending on the weather in your region.

To build a bar for under your hut, see www.tikikev.com– ***How to Build Your Own Tiki Bar***
And to build your own bar tables and stools, see www.tikikev.com–
How to Build Your Own Tiki Bar Table and Stools
Our newest book will be out in 2009– ***Tiki Kev's Tropical Tiki Drinks***
Join Tiki Kev's free Email Newsletter to learn about new products, special internet-only offers and what's new in the world of backyard entertaining as well as all book updates and additions.

Some photos used in this book are for demonstration purposes and may be from other bars or huts I have built.

All materials listed should get you to completion, but it may change depending on errors or if you change the dimensions. You can use this book as a guide and build your hut to any size you want.

FOR QUESTIONS AND/OR CONCERNS:

Email to **tikikev@comcast.net**
OR
Visit **www.tikikev.com** to view pictures of finished huts to get your questions answered that way
OR
Call: **1-800-792-TIKI** (8454) and ask for Tiki Kev

By purchasing this e-book you will receive 10% off any online material purchase at www.tikikev.com and you will also receive free of charge any updates to this book or added pictures.

A FEW THINGS TO REMEMBER:

- Always check with your local townships, boroughs, cities or counties to see if you need a permit for constructions and what your building codes may be.

- Always check with your local utility companies to make sure you have no electric lines, water lines, gas lines, cable lines etc., buried under ground in the area you will be working.

- If you plan on putting your tiki hut close to your property line, check with your local townships, boroughs, cities, or counties to see what your set backs are.

- If you are building close to your property line, remember that after you complete the thatching, the palm fronds will hang past the frame at least 6"-8". We don't want your neighbors complaining that you are infringing on their property.

- If you plan on putting your new tiki hut close to your house I would strongly suggest applying a fireproofing to all the palm fronds both inside and out. Fireproofing is not cheap but in the long run it's pennies compared to losing your home if something were to happen. The fireproofing comes in 1 or 5 gallon containers and is applied by spraying through a yard sprayer or backpack sprayer. Home Centers do not carry this type of product, it can however be ordered through www.tikikev.com .

- If your hut is being built on your deck it is very important that the poles go through the deck, and rest on something solid on the ground such as a concrete footing or a solid concrete block. Additional framing under the deck is necessary to hold the poles secure to the framing of the deck.
  Do not attempt to build your hut on any surface where you cannot dig holes or footers for the post or attach to some sort of existing framing. The hut will not stand long if not properly secured.

- Any and all materials can be purchased through www.tikikev.com depending on availability.

TOOLS REQUIRED

Shovel
Digging bar
Posthole digger
Chainsaw (optional, sawzall is comparable)
Transit or a very straight 2"x4"x6' plank & level
Tape measure
Pencil
Small speed square
Chalk line
Drill
Hammer
Sawzall
Miter Saw
One set of saw horses
Two 8' stepladders
Two 2"x10"x12' planks to walk on or an aluminum pick
Staple gun for 2" – 2 1⁄2" staples
5/16 nut driver for timber lock screws
Caulk gun
4" disposable paintbrush for tar
Four 5 gallon buckets

* Always follow the manufacturer's safety instructions and wear eye protection when using power tools.

MATERIALS NEEDED

3 1⁄2"– 5" diameter white cedar poles
Quantity and length depends on size of tiki hut. Figuring out what you need is summarized on page 8

2" – 3" diameter white cedar poles
Quantity and length depends on size of tiki hut. Figuring out what you need is summarized on page 8

Palm Fronds
Quantity depends on size of tiki hut. Figuring out what you need is summarized on page 8

Ice and Water shield or rubber roofing (length will be determined by size of tiki hut)

4", 6" and 8" Timber lock screws (quantity depends on size of tiki hut)

One to two gallons of roof tar or pitch

2" – 2 1⁄2" galvanized roofing staples or 6D galvanized nails.

One tube of silicon caulk

Fish net, four bottle caps from beer of your choice - optional

Four bags of concrete – optional

2 1⁄2 gallons of fireproofing - optional

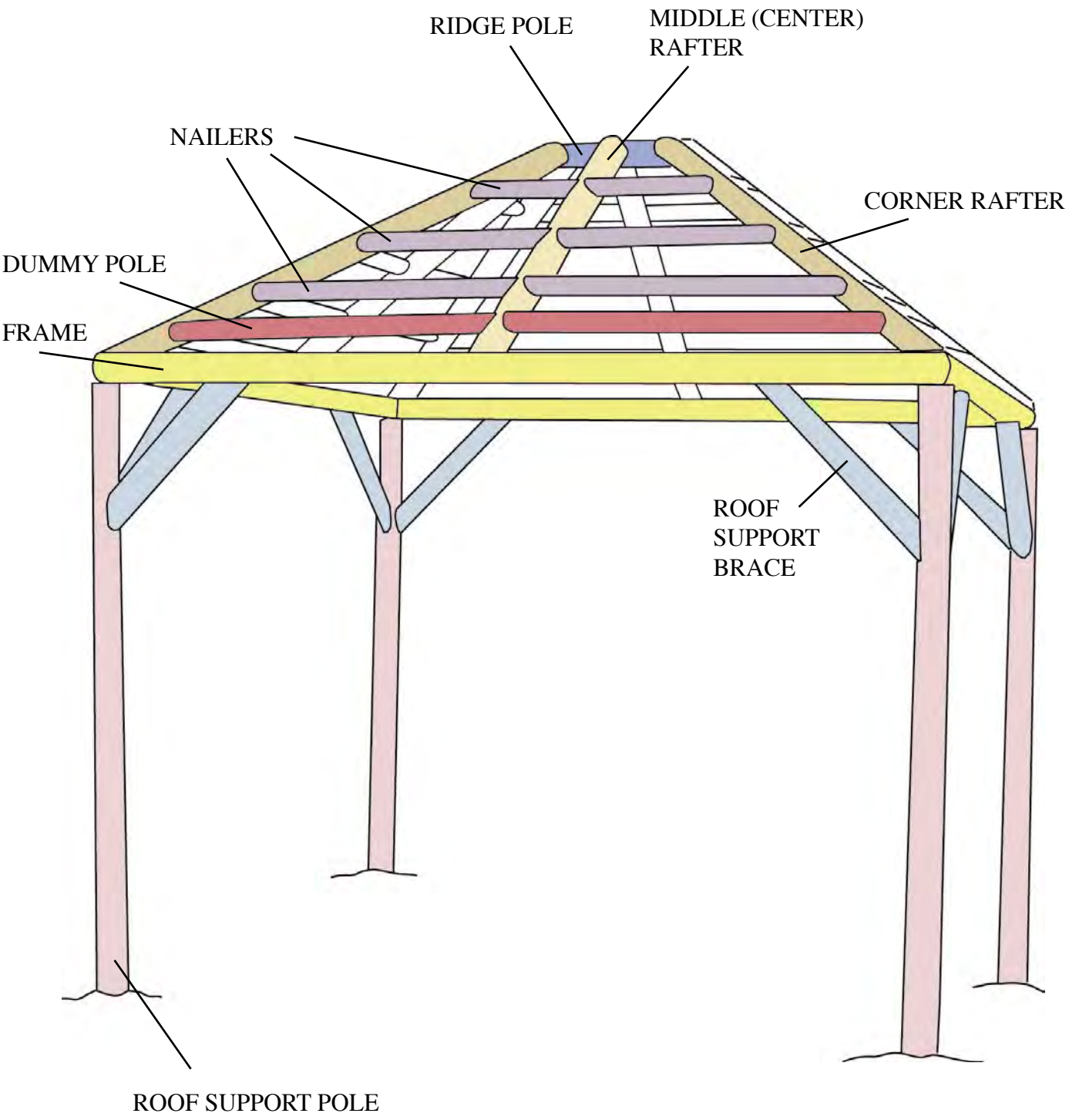
WHERE TO PURCHASE MATERIALS

Most of the standard materials that are needed can be purchased from your local hardware store or lumber yard.

The cedar or cypress poles will need to be purchased from your local mill. Some lumber stores may carry the poles – the availability depends on your area.

Palm fronds – if you live in a warm state that has palm trees, contact your local tree arborist for supply. If you live in an area where you do not have access to palm fronds, you will need to find a contact source and have them shipped. Palm fronds are also available for purchase at **www.tikikev.com** for $3.75 each plus shipping. However, fronds are available to buyers of this e-book for only $3.00 each plus shipping. Shipping of the fronds is in large wooden crates made by tikikev.com and usually runs between $150.00 and $450.00 depending on your location and size of order. Fronds are also available for pick-up at our shop location. These are big sable palm fronds, the same fronds used on my own huts and bars that are shown in the pictures and on our site at **www.tikikev.com**. *Prices are subject to change.*

FREQUENTLY USED TERMS



GETTING STARTED

The first thing you want to do is to determine where to place the tiki hut. Once selected, you can now determine what size to make your tiki hut. The location of your tiki hut is based upon what you want to do with it. Are you just going to hang a hammock from it? If so, I would keep it back away from the house to get away from things. Are you using it for shade around your pool? Ok, that one is obvious. Are you putting a bar under it? If that's the case, maybe keep it a little closer to your house for the convience of your kitchen and running water. Maybe up on your deck. These are just a few things to consider. The ultimate decision is up to you and how you plan on using your new tropical escape.

STEP 1. DETERMINE MATERIALS NEEDED

Now that you have determined where and what size the tiki hut is going to be, the materials list needs to be determined.

Here are a few examples of different size tiki huts and the materials list for each.

	8x8 tiki hut	*10x10 tiki hut*	*12x12 tiki hut*
3 1/2" to 5" x 10' cedar poles	0	4	9
3 1⁄2" to 5" x 12' cedar poles	6	6	10
3 1⁄2" to 5" x 8' cedar poles	13	9	0
2 1⁄2" to 3" x 8' cedar poles	12	0	0
2 1⁄2" to 3" x 12' cedar poles	0	11	14
Sable palm fronds (approx.)	350	400	500
Ice and water shield or rubber roofing material	36"x60"	36"x60"	36"x60"

Photo of 10x10 tiki hut framing

CONSTRUCTION BEGINS

STEP 2. PREPARING THE SUPPORT POLES

You can now start putting the tar on the posts that go into the ground. I like to get this done first so the tar has a day or two to dry. If you are constructing a tiki hut 15' or bigger I suggest using 6 posts. For the size we are building here (10' x 10') we will only be using 4 posts.

Lay 4 of the fattest poles you have from the group of 3 1⁄2" to 5" x 12' poles across the sawhorses. The fattest part of the pole is the bottom. Lay them all in the same direction. Take the tape measure and from the bottom of these poles measure up 36" and make a mark on all four of them. Open up the can of tar and using the brush, paint the tar from the bottom of the pole up to the 3-foot mark that you made. Put it on thick and make sure you get into all the cracks, also make sure you get the very bottom of the pole as well. See **PICTURES 1** and **2**.

PICTURE 1

PICTURE 2

Be sure to put plastic or a tarp under the posts on the floor. The tar will drip for a few minutes as you are applying it. All posts should be sunk into the ground at least 36" (3 feet), which is why the tar should cover the bottom 3 feet of the post. The tar will help prevent moisture getting into the wood.

STEP 3. FRAMING THE ROOF

The next step is building the frame of the tiki hut roof. All examples in this book are based on a 10 x 10 tiki hut. As we go through the construction phases of the hut I will be explaining how to do smaller and larger huts. Construction for all huts is basically the same. The only difference is when you get to the larger huts you will be adding more lumber. And, of course, the weight increases. I will also be adding pictures from different projects I have done for reference.

Set the buckets up in a 10' x 10' square for the roof to rest on. If you are building a smaller roof or a bigger roof, set the buckets up to those dimensions. For the 10' x 10' roof, cut four 3 1⁄2" x 10' poles for the frame with a 45 degree angle on each end.

Lay the 3 1⁄2" x 10' pole on the miter saw and cut your 45 degree angle on the end as shown in **PICTURE 3**.

PICTURE 3

Once that is completed, turn the cedar log around so that we can cut the other end. Before you make the second cut, measure 10' from the long side of the angle and put a mark. This mark will also be the long side of the angle.

You must now square the first 45-degree angle to the table as shown in **PICTURE 4**.

By doing this, you are making sure that the angles are exactly the same on both sides of the pole. All the angles will now match up on the frame.

Do this step for all four 3 1⁄2" x 10' poles.

PICTURE 4

After all four poles are cut with a 45-degree angle on both ends, lay all four poles on top of the buckets as shown in **PICTURE 5**.

PICTURE 5

You are now ready to screw the poles together. In this next step you will need 3 of the 6" timber lock screws for each corner.

Using the drill and the 5/16" nut driver, screw 2 timber lock screws in on one side of the corner and one on the other side as shown in **PICTURES 6** and **7**. Do this on all four corners.

PICTURE 6

PICTURE 7

Now that just the frame is built, this next step will be the easiest way for you to mark the holes for digging. I could go over all the mathematics for making a square with no reference points to start with, but this will be the easiest and simplest way for you to get it right. Take the frame and lay it in the exact spot where you want your tiki hut. Take the shovel or digging bar and mark each corner. This is where you will be digging the holes. If you have any spray paint or marking paint, you can mark the holes that way as well. After you mark where the holes are going to be, take the frame and put it back on the buckets.

STEP 4. INSTALLING THE RAFTERS AND RIDGEPOLE

Before installing the rafters and ridgepole, you will need to make a temporary brace. The temporary brace will hold the ridgepole while the rafters are installed.

On two opposite ends of the roof frame, measure from the corner of the roof to the center of the frame. In this case it will be 60", which is half of 10 feet. Put a pencil mark there. See **PICTURE 8**.

Do this on two opposite ends of the roof. *On a rectangular roof, the ends are the two shorter sides.*

On a 10' x 10' roof I like to make the ridge about 36" high from the bottom of the frame. On an 8' x 8' roof, about 32" high; and on a 12' x 12' roof, about 42" high.

As the roof gets larger, you want to go higher for pitch. The more pitch you have the better water run off you will have.

Using the 2 1⁄2" to 3" poles, cut two pieces at 36", just using straight cuts on the ends.

Attach the 36" pieces to the end of the frame where you just made the two center marks. Keep the bottom of the pole flush with the bottom of the frame. Use one 4" timber lock screw to attach the pole. Attach one pole on each end.
See **PICTURES 9** and **10**.

Next, attach a brace onto that pole. Cut two more pieces of the 2 1⁄2" to 3" pole at 30". On one side you are going to cut a 45-degree angle and just a regular straight cut on the other end.

Take those over to the poles you just attached. Using a 4" timber lock screw, screw the 45-degree angle into the pole on the frame.
See **PICTURE 11**.

PICTURE 8

PICTURE 9

PICTURE 10

PICTURE 11

Stand back, look at the center pole looking to see how straight it is. Straighten the pole and screw in the other end of the brace to the frame as shown in **PICTURE 12**.

Repeat to the opposite end of the frame using 4" timber lock screws.
See **PICTURES 13** and **14**.

PICTURE 12

PICTURE 13

PICTURE 14

Now make the actual support that holds up the ridge while you are installing the rafters. The distance between the two brace poles is 10' (the length of the frame). Using the 2 1⁄2" to 3" x 12' pole, cut a piece at 10 foot long. Make sure that you trim both ends so you have two clean straight edges. Using one 4" timber lock screw on each end, screw the 10 foot brace between the two support poles as shown in **PICTURES 15** and **16**.

PICTURE 15

PICTURE 16

Support is needed so the ridge support does not sag. Measure from the ground to the bottom of the ridge support pole. Cut a 2 1⁄2" to 3" x 12' pole to that measurement and slide it under the center of the support pole as shown in **PICTURE 17**. There is no need to screw this in, it should be snug enough.

Using the tape measure, find the center of the 10' brace pole and mark it with a pencil. This should be at 60" as shown in **PICTURES 18** and **19**.

From the center mark, measure 9" in both directions. That will be the end of our ridgepole when installed.

PICTURE 17

PICTURE 18

PICTURE 19

On a 10-foot roof it is recommended to make the ridgepole 18" long. Using one of the 3 1⁄2" to 5" x 8' poles, cut a piece at 18" long. Using two 4" timber lock screws, place the ridgepole on top of the support pole on the marks and screw it in from the bottom of the support pole.
See **PICTURE 20**.

Next, the rafters will need to be cut. Using the 3 1⁄2" to 5" x 8' poles, cut a 45-degree angle on the thicker end as shown in **PICTURE 21**.

PICTURE 20

PICTURE 21

Take the rafter over to the ridgepole and place the 45-degree angle end onto the edge of the ridgepole as shown in **PICTURE 22**. (If you are working by yourself, you will want to temporarily screw the rafter into the ridge so it will stay up for your next measurement.)

Center the rafter onto the corner of the frame and mark the center of the rafter at the end of the frame as shown in **PICTURES 23** and **24**.

PICTURE 22

PICTURE 23

PICTURE 24

PICTURE 25

PICTURE 26

PICTURE 27

PICTURE 28

Take the rafter back off of the frame and cut a 55-degree angle. The mark you made on the rafter is the long side of the angle. The bottom angle usually fluxuates depending on how high you make the ridge from the frame. Starting with a 55-degree angle will be close and you may need to adjust the angle slightly, give or take a couple of degrees. You want the bottom of the rafter to sit as flat as possible on the frame.

Once this is cut and fits properly, screw in the top of the rafter to the ridge using two of the 4" timber lock screws as shown in **PICTURES 25** and **26**.

Then screw in the bottom of the rafter to the frame using 2 of the 4" timber lock screws as shown in **PICTURES 27** and **28**.

Repeat this process for all four corners.

Next is the installation of the two side rafters. Measure the ridge and place a mark in the center. In this case it will be 9" since an 18" ridge is being used. Measure from the top center of the ridge to the outside of the frame as shown in **PICTURE 29**.

Cut one of the 3 1⁄2" to 5" x 8' poles to that measurement with a 45-degree angle on both sides. Both angles must be cut the same way so the pole fits properly. Remember to use the square as you did when building the frame as shown here in **PICTURE 30**.

Make certain that the measurement needed is from long side of the angle to long side of the angle. Attach this rafter in the center of the ridge to the center of the frame as shown in **PICTURES 31** and **32**.

Repeat this procedure on opposite side. The rafters are now complete.

PICTURE29

PICTURE 30

PICTURE 31

PICTURE 32

PICTURES 33 and **34** show what the roof structure should look like at this point.

PICTURE 33

PICTURE 34

The roof will now support itself so the temporary bracing can be removed. Start with the braces on the ends by unscrewing and removing them. See **PICTURES 35** and **36**.
The ridge support pole shown still attached in **PICTURE 37** can be removed next.

PICTURE 35

PICTURE 36

PICTURE 37

The final two rafters will now be added to the roof. Measure from the corner of the frame to the center of the end frame and put a mark. This measurement should be 60".

As was done with the two side rafters, measure from the top of the ridge end to the center of the frame on the outside as shown in **PICTURE 38**.

Cut one of the 3 1⁄2" to 5" x 8' logs to that measurement with a 45-degree angle on both ends, the long point of the angle being the measurement. Use the square to make sure the angle is the square to the table. Attach the rafter using 2 of the 4" timber lock screws on both ends as shown in **PICTURES 39**, **40** and **41**. Repeat on other end of the roof.

PICTURE 38

PICTURE 39

PICTURE 40

PICTURE 41

STEP 5. MEASURING FOR DUMMY POLES AND NAILERS

For all the dummy poles and nailers we will be using the 2 1⁄2" to 3" diameter poles. Starting from any corner on the frame, measure up the rafter to the ridge. See **PICTURES 42**, **43** and **44**.

What we are trying to determine is the spacing for the nailers which will range anywhere between 18" and 22". Take the measurement of the rafter and see what will divide into it evenly.

Here is an example: If your measurement is 80", 20" will go into that evenly. If your measurement is 81", 20 1⁄4" will go into that evenly. You want to find a measurement that falls between 18" and 22" to allow proper spacing for the palm fronds.

PICTURE 42

PICTURE 43

PICTURE 44

Once the spacing measurement is determined, hold the tape measure at the very edge of the corner you started with. Measure up to the ridge marking the measurements as you go.

For example, if your measurement is 80", you will be marking the rafter from the bottom every 20". So that will be at 20", 40" and 60", the ridge would be the last measurement at 80". No need to mark that last measurement.

See **PICTURES 45**, **46**, **47** and **48**.

PICTURE 45

PICTURE 46

PICTURE 47

PICTURE 48

One more measurement needed is for the dummy pole. The dummy pole goes between the frame and the first nailer. Mark half way up to the first nailer.

For example, if the first measurement is 20", the dummy pole measurement will be at 10" up from the frame. See **PICTURE 49**.

PICTURE 49

Now make these same measurements on all 4 corner rafters. Do not re-measure for each corner. Use the same measurements from the first rafter and mark the remaining rafters.

After you finish marking all four corner rafters you will need a chalk line, eight small nails and a hammer.

On the center of each mark on the corner rafter put in a nail as shown in **PICTURES 50** and **51**.


PICTURE 50

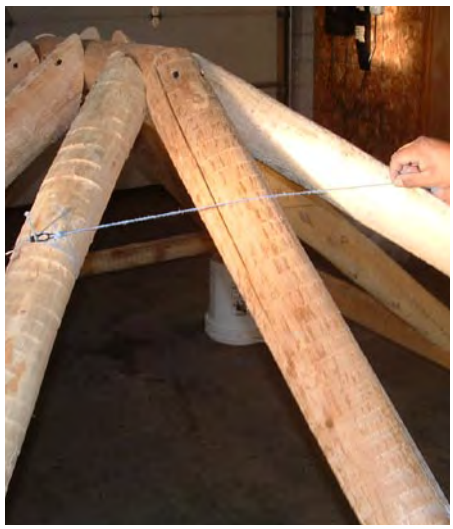

PICTURE 51

Only do this on two opposite corner rafters. Hook the chalk line on the bottom nail and pull across the middle rafter to the next corner rafter. Snap your line.
Come back to the starting rafter and go the opposite direction to the next corner rafter and snap the line. Work your way to the top and then start over on the opposite corner.
See **PICTURES 52, 53** and **54**.

If you have someone helping you, there is no need to put the nails in.
Your helper can hold the chalk line.


PICTURE 52


PICTURE 53


PICTURE 54

STEP 6. CUTTING AND INSTALLING THE DUMMY POLES AND NAILERS

Starting at any one of the corner rafters, place the tape measure on the first mark you made. Hold the tape 1/2 way on the rafter as shown in **PICTURE 55**.

Pull over to the center rafter and go about 2" past the entire rafter as shown in **PICTURES 55** and **56**.

Each dummy pole and rafter will be cut slightly larger that what is needed. There are multiple angles to be dealt with and this will be the easiest and fastest way to determine the angles. The poles used for the temporary bracing will also be used in this step.

In **PICTURE 56** the measurement is about 46" extending about 2" past the center rafter. Using the 2 1⁄2" to 3" poles, cut a 46" piece with a 45-degree angle on one end as shown in **PICTURE 57**.

Take that piece and hold the 45-degree angle side to the inside of the corner rafter as shown in **PICTURE 58**.
The mark on the corner rafter is used as a guide. I generally like to hold the dummy pole and nailers centered on that line.

PICTURE 55

PICTURE 56

PICTURE 57

PICTURE 58

Extend the other side of the dummy pole over the center rafter mark as shown in **PICTURE 59**.

Mark the top of the dummy pole about 1⁄4 of the way past the inside of the center rafter as shown in **PICTURE 60**.

Using the miter saw, cut that mark on a 45-degree angle. That mark is the long side of the angle. Since we are dealing with multiple angles you do not want to square the first 45-degree angle to the table. Your angles in this part of the framing will be twisted as shown in **PICTURE 61**.

PICTURE 59

PICTURE 60

PICTURE 61

It is suggested that a little of the pencil mark is left when cutting the pole so you know that it is the end that goes to the center rafter. Once cut you can now attach your pole to the rafter as shown in **PICTURES 62, 63** and **64**.

Attach the pole using either a staple gun or a nail gun. I recommend using a staple gun with 2 1/2" staples. If you use a nail gun or hammer and nails, do not use anything less than an 8 penny nail.

PICTURE 62

PICTURE 63

PICTURE 64

Repeat this process for the rest of the roof. As you proceed moving up to the top of the roof, the nailers will get smaller. See **PICTURES 65**, **66**, **67**, **68**, **69** and **70**.

PICTURE 70 shows the side of the roof when completed.

PICTURE 65

PICTURE 66

PICTURE 67

PICTURE 68

PICTURE 69

PICTURE 70

PICTURES 71 and **72** show a completed roof structure. The framing of the four-sided roof is complete.

PICTURE 71

PICTURE 72

STEP 7. INSTALLING THE ROOF SUPPORT POLES

Now it's time to dig the holes for the roof support poles. The marks previously made on the ground will show where the support pole holes need to be dug for your hut. Each hole will need to be 12" around and no less than 36" (3 feet) deep. The reason for digging the holes at least 36" is for security of the poles and the hut; this is deep enough so that the support poles cannot be pulled out or knocked over. This measurement also covers most frost lines in the country. If the frost line in your region is deeper than 36", I recommend you dig your holes according to your frost line depth.

The roof structure is 10' x 10', so the distance of the centers of the holes should be 9' 7 ½". Distance between the outside edge of the holes should measure about 10' 7 ½", this way you have room to move and adjust your poles. See **DIAGRAM A**.

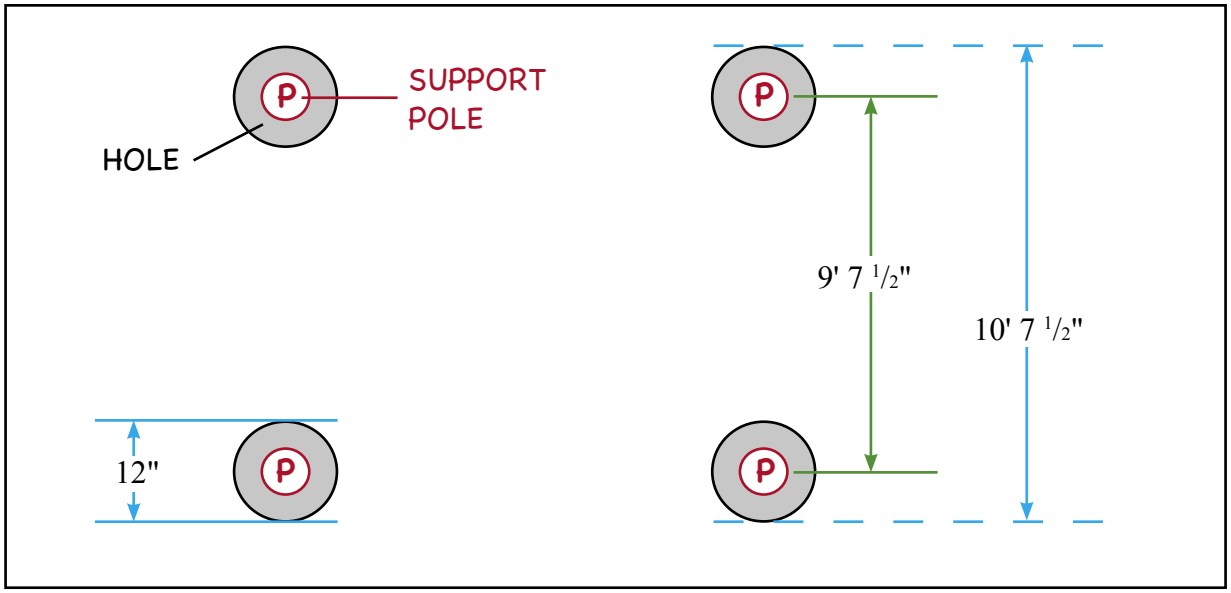


DIAGRAM A

The distance between each pole from outside edge to outside edge after installed should be approximately 10'–1 ½" at grade level. This extra one-inch will allow for tapering of the poles. See **PICTURES 73** and **74** for examples of what the finished holes should look like.

PICTURE 73

PICTURE 74

NOTE: If you are building your hut above your deck, make sure the poles extend at least 7'– 4" above the surface of the deck. That is the minimum height needed for the poles.

Once the holes are complete, begin placing the poles within each hole. Take one of the tarred 12' poles and place the tarred end of the pole into the center of the hole in the ground. As one person is holding the pole straight, back fill the hole about 1/3 of the way. Using the top end of the digging bar, tamp down the dirt. Repeat until the hole is full and all the dirt is tamped solid. After you tamp the dirt each time, step back and make sure the pole is still straight, left to right and front to back.

Do not attempt to plumb the pole with a level. You can't do that on a tapered post. Let your eye be the judge.

If you choose to use concrete, pour the bag of concrete into the hole dry around the pole before backfilling with dirt. Lightly tamp the concrete and then add the dirt and tamp until the hole is full. See **PICTURE 75**.

Do not worry about adding water to the concrete. The ground moisture will cure the concrete.

PICTURE 75

Follow **DIAGRAM B** for installing the second pole. From the outside of the first pole to the outside of the second pole should be 10'–1½" at grade level.

A third person may be needed to hold the tape measure when measuring from one pole to the next. Adjust the second pole so that the measurement is at 10'–1½". As the measuring is taking place, keep the second pole straight and adjust accordingly. Back fill the second hole in the same manner as was done with the first hole. Make sure to place the pole in the center of the hole,visually lining it us with the first pole.

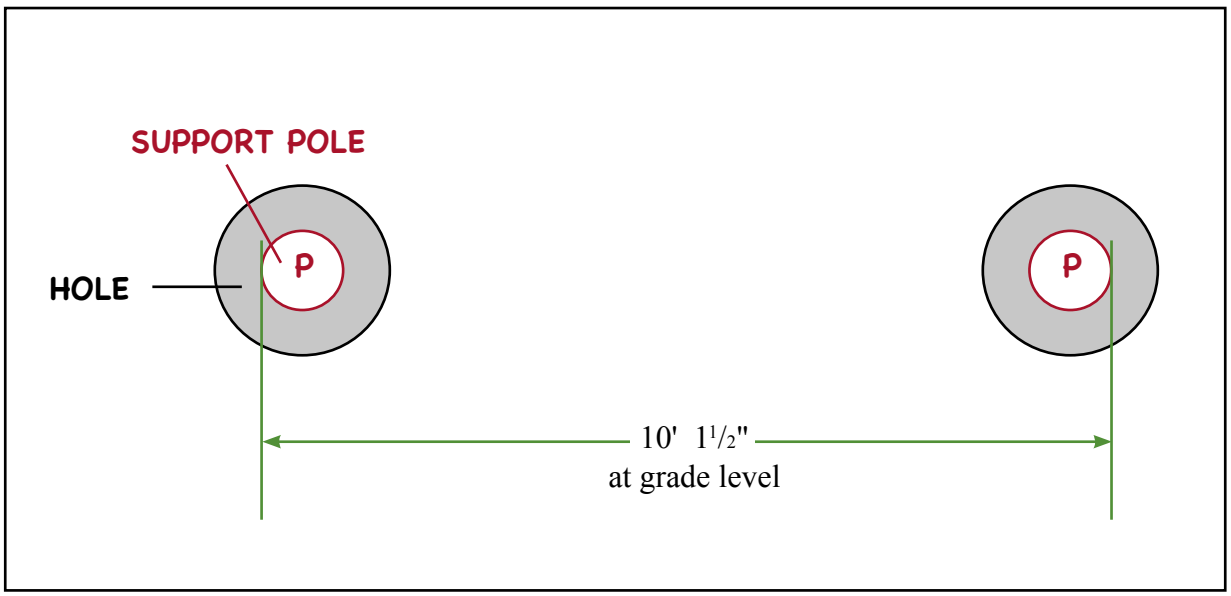


DIAGRAM B

VERY IMPORTANT STEP!

It is important that this next pole is positioned properly. Follow this next step and **DIAGRAM B** closely, otherwise the poles will not be square.

Position pole #3 in the hole. From the outside edge of pole #1 to the outside edge of pole #2 the measurement should be 10'–1½". From the outside edge of pole #1 to the outside edge of pole #3 the measurement should be approx. 14'–1¾". When setting pole #3, make sure that both measurements are accurate.

Back fill the third hole and ensure that your pole is straight every time the dirt is tamped. Visually line up pole #3 with poles #1 and #2.

Setting pole #4 will be much easier. From the outside edge of pole #1 to the outside edge of pole #4, the measurement should be 10'–1½". From the outside edge of pole #3 to the outside edge of pole #4, the measurement should also be 10'–1½". From the outside edge of pole #2 to the outside edge of pole #4 should be 14'–1¾".

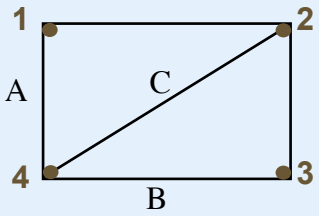
Back fill the fourth hole and ensure that the pole is straight every time the dirt is tamped.

Use the following calculation for finding the measurement for the diagonal to be used for setting the posts for any size tiki hut that is square or rectangle. There must be 90º angles:

$A^2 + B^2 = C^2$

A = length of side 1
B = length of side 2
C = diagonal to be used

$C = \sqrt{A^2 + B^2}$



The roof support poles now need to be cut to the same height. Look at the ground where the poles are, pick the highest spot. Using the tape measure, start at the ground and measure up 7'–4" on the pole. Put a mark on the pole with a pencil.

If you are using a transit as shown in **PICTURE 76**, hold the end of the tape on the first mark at 7' 4" and then shoot that height and transfer it to the other three poles as shown in **PICTURE 77**. If you are not using a transit, you will need a straight 2x4x12 or 2x6x12 and a level. Holding one end of the 2x on your mark and span across to the next pole. Put the level on top of the 2x. When the 2x is level, mark the next pole. Repeat for the remaining two poles.

All four poles can be cut on the marks, making them all the same height. Use either a chain saw or sawzall as shown in **PICTURE 78**.

PICTURE 76

PICTURE 77

PICTURE 78

STEP 8. ATTACHING THE ROOF

Once all four poles are cut, bring the roof section over to the support poles. Help will be needed with this step. It is recommended to have at least four people lift the roof into place.

Set the roof on the ground inside the four posts as shown in **PICTURE 79**.

Lift roof over poles and then set the roof on top of the support poles. Each corner of the roof should sit right onto each support pole as shown in **PICTURE 80**.

Attach the roof to the support poles by using two 8" timber lock screws on each corner, screwing down from the top of the frame into the poles. The roof is now secure to the support poles.

PICTURE 79

PICTURE 80

STEP 9. INSTALLING THE ROOF SUPPORT BRACES

The next step is to add eight support braces, two to each roof support pole.

Using the 3 1⁄2" to 5" poles, cut eight pieces at 34" with a 45-degree angle on each end. Use the square to make sure that the 45-degree is square to the table before making the second cut. The 34" measurement is from long side of the angle to long side of the angle.

Attach the braces to the pole and under the frame. Use a nail gun or a staple gun to quickly attach all the support braces as shown in **PICTURE 81**. Then go back and put four 4" timber lock screws in each support brace. Screw two in the top and two in the bottom as shown in **PICTURE 82**.

Note:
It is not necessary to both nail and screw in the braces. Our crew nails the braces on site to make the process go quicker and easier for the person installing the screws. One person will put the braces in with nails and another person will follow behind with screws.

PICTURE 81

PICTURE 82

PICTURE 83 shows finished framing.

PICTURE 83

STEP 10. THATCHING THE ROOF

Once all the braces are secure, thatching can begin. For the first row of thatching it is suggested to work off of ladders and a pick or planks. Set the ladders and planks as shown on the previous page in **PICTURE 83**.

While on the roof, have available the sawzall, the hammer and the staple gun. If you do not have a staple gun, use #6D galvanized nails. It is highly recommended to use a staple gun (rent one from the local tool rental store if necessary) since each individual palm frond will be attached separately. The staple gun is easier and faster than hand nailing every frond.

On the first row of thatching, fold every frond as they are installed. Since there are no stalks on the roof to act as support yet, the palm fronds will be folded to prevent them from falling through. The dummy pole installed earlier will also act as support. See **DIAGRAM C** for detail.

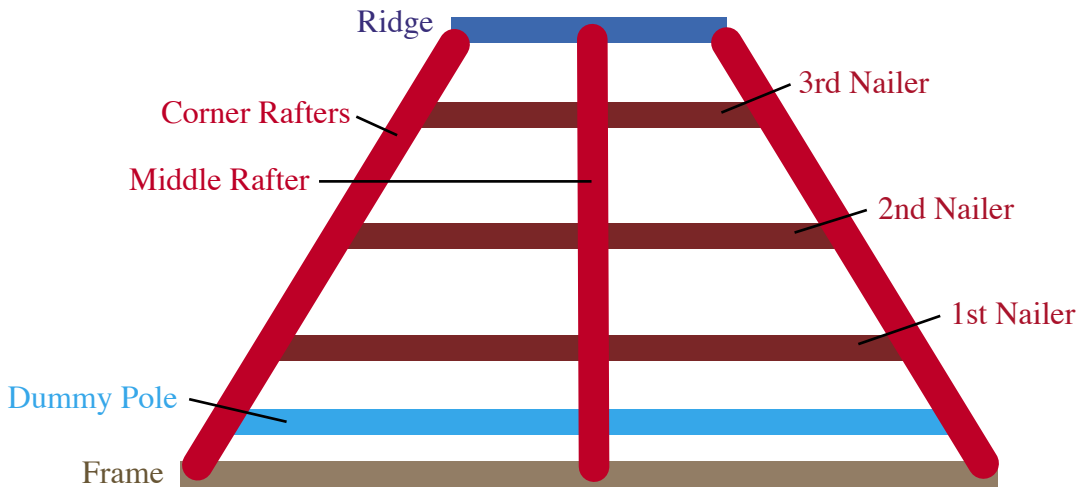


Illustration of one-side of the roof frame showing the frame, dummy pole, nailers, rafters and ridge.

DIAGRAM C

Practice folding a frond in the following manner before climbing up to the roof. There is an obvious front and back to the palm frond. The front of the palm frond is shown in **PICTURE 84**.

PICTURE 84

Face the front of the palm towards you and place your knee into the center of the frond. Hold the frond with your left hand and with your right hand fold the frond in half from right to left as shown in **PICTURES 85** and **86**. When placing these fronds on the roof you will be moving from left to right and the front of the stalk always up. Only the first row of palm fronds will need to be folded. The following rows of palm fronds will be laid flat.

PICTURE 85

PICTURE 86

PICTURE 87

Corner fronds will also be needed. *Corners* are palm fronds with the stalks removed. As the corner rafter is approached, the stalks will get progressively smaller. And as you progress around the corner, the stalks will progress back to regular size. Pre-cut approximately 120 *corners* so they are ready when needed. When cutting the *corners* it is suggested to leave about 1" of the stalk on the frond for stapling as shown in **PICTURE 87**.

Thatching can now begin.

Starting from any corner of the roof, begin by laying a folded *corner* palm frond and stapling it to corner rafter as shown in **PICTURE 88**. The stem of the stalk will be attached face up to the first nailer and corner rafter. Continue moving left to right around the corner spacing each palm frond stalk roughly two finger widths apart. The corners will be held tightly as you go around. Don't forget to fold the fronds as shown in **PICTURE 89**.

PICTURE 88

PICTURE 89

Proceed around the corner. As you move away from the corner, begin using regular fronds (fronds with a full length stalk). Once the stalk reaches the second nailer, attach the stalk to the second nailer as shown in **PICTURE 90**.

After attaching the stalks to the second nailer, cut off any excess with the sawzall.

See **PICTURES 91**, **92**, **93** and **94**.

Continue this process around the entire first row of the roof. Do not forget to fold all the fronds for this first row and use the *corner* fronds as you round each corner area. When you reach the starting point, tuck the palm fronds under the first ones that were attached on the corner.

PICTURE 90

PICTURE 91

PICTURE 92

PICTURE 93

PICTURE 94

PICTURE 95

PICTURE 96

PICTURE 97

When beginning the second row, it is easier to climb up on the roof and finish the thatching there. See **PICTURES 95**, **96** and **97**.

At this point it does not matter where you begin thatching the second row, it can be started in the middle of the row or at a corner.

On the second and remaining rows, the fronds will be placed flat and face up. Lay the base of the stalk on the second nailer and attach on both the second and third nailers.

Once again cut off all excess stalks extending above the third nailer.

As you approach the corner, use the *corner* fronds just as was done in the first row.

PICTURE 98

PICTURE 99

Continue going around the roof attaching the fronds in rows as described until you get to the last row on the top. The last row at the top of the roof will be all corner fronds as shown in **PICTURE 98**.

Once the last row is complete, cut a piece of stalk and staple it right on top of the ridge. The ridge is 18" in length, so the stalk will be 18" as well. See **PICTURE 99**.

Water shield or rubber roofing material can now be added to the ridge on top of the roof. Either material is used to help with waterproofing the top. Cut the waterproofing material to be 24" longer in length than the ridge length. In this case, the ridge is 18" in length so cut the waterproofing 42" long.

Center the waterproofing material on the ridge and lay it down. If the material has a plastic or paper backing, remove it. The sticky side of the waterproofing material should always be face down. See **PICTURE 100**.

PICTURE 100

A second ridge pole needs to be cut. Make the second ridge pole the same measurement as the original ridge pole in the roof. In this case, it is 18" long. Cut a 45-degree angle at each end of the second ridge pole. Lay the second ridge pole on top of the waterproofing and center it on the stalk that was stapled on the original ridge pole. See **PICTURE 101**.

Screw the second ridge pole down using two 6" timber lock screws. See **PICTURE 102**.

PICTURE 101

PICTURE 102

Once the second ridge is secure, caulk under the second ridge to prevent any water from coming in. Use the silicon caulk and go around the entire ridge as shown in **PICTURES 103** and **104**.

PICTURE 103

PICTURE 104

Using only *corner* cut palm fronds, attach them to the second ridge all the way around covering all the waterproofing. Thatching is now complete. To get down off of the roof have someone lean a ladder against the roof. Holding on to the palm fronds, slowly slide down to the ladder.

See **PICTURE 107** for what a completed roof should look like.

PICTURE 107

Now that your tiki hut is complete, you can decorate with signs, flags and pictures or even expand with a tiki bar or tiki bar table and stools (***How to Build Your Own Tiki Bar*** and ***How to Build Your Own Tiki Bar Table & Stools*** books available at **www.tikikev.com**).

We are pleased to offer an exciting new addition for both tiki huts and tiki bars -
MISTING SYSTEMS.
Misting systems are perfect for keeping cool on hot summer days. Tiki Kev Misting Systems are very easy to install and all necessary parts are included.

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HELPFUL TIPS FOR MAINTAINING YOUR TIKI HUT

First and foremost, DO NOT cover the fronds for an extended period of time. Moisture will build between the fronds and the tarp causing the fronds to rot and grow mold. Once this happens, the fronds will need replacing. However, it is OK to cover the roof for a few days during any type of bad weather to help protect the fronds. In doing so, this will actually help prolong the life of the fronds.

After the thatching is complete, the palm fronds will look wild (**PICTURE 108**). If you choose, use a large tarp and cover the roof for about two days. Every few hours pull the tarp tighter and tighter. Remove the tarp after two days and the roof will be very nicely layered (**PICTURE 109**).

PICTURE 108

PICTURE 109

A fish net may be added to the top of the roof to help prevent wind damage. A 10 x 10 roof will require a 10 x 10 fish net. The net is not intended to cover the entire roof. The net will lay approximately half way down the roof. See picture shown here.

Installing the fish net: Tie a knot in each corner of the fish net. Using an 8" timber lock screw and a beer bottle cap as a washer (very authentic) put the screw through the cap and then through the knot in the net. Throw the net over the roof, center the net and pull tight. Screw each corner of the net into the corner rafters.
Netting can be ordered from **www.tikikev.com**

If you are keeping your hut near any open flames or anything hot such as a grill, outdoor heater, or any kind of outdoor fireplace, you should fireproof the fronds. A 10x10 roof will require approximately 2.5 gallons of fireproofing.
Fireproofing may be purchased on our website at **www.tikikev.com**

SUMMARY

Whether you're looking for that little piece of paradise right in your own backyard or you need that extra special touch for your business, you've made the first step to accomplishing that goal by purchasing this guide. Take your time and enjoy the process of building your own quality tiki hut–you will be able to enjoy the fruits of your labor for many years to come.

It's a great pleasure knowing that I can share my knowledge and skills and at the same time save you some money. If at any time during the construction process you have any concerns or questions, do not hesitate to email or call. I'm with you every step of the way.

Good luck and just remember . . . it's 5 o'clock somewhere!