How-to: Build a quonset hut goat shelter

This online book details materials and steps needed to build a simple, inexpensive quonset hut structure for housing your goats. Protect them from wind, rain, and the occasional meteor shower! Total assembly time: under 1.5 hours.

Parts and supplies needed:

- Two 16' x 52" cattle panels (will provide an 8' by 10' shelter)
- One heavy-duty tarp (Costco has a nice one for sale.) (dimensions forthcoming)
- Three 6' t-posts, cut in half
- Black heavy-duty UV resistant cable ties - 8" and 10" lengths

The pages that follow will detail the process of assembling the Quonset hut. We'll include detailed photos, as well.

Please note that the design presented herein is not intended for use in areas having any snow accumulation - if you expect any amount of snow, you will need to add some kind of bracing, or, choose a narrower layout which will create a higher, sharper peak that will allow the snow to slide off the roof.
Step 1: Mark out your area and drive in stakes

Start by marking out your area. In this case, we are building a quonset hut shelter for goats, so it doesn't need to be very tall. We'll mark off an area approximately about 8' across and 10' wide - the widest area will be the distance between the ends of the cattle panels.

I start by marking off a rectangular area approximately 10 feet wide by 8 feet across.

In our case, we will be mounting the hut against an existing field fence, so we will not need to drive in as many t-posts against that side of the hut.

Starting with my back to the fence, I pace off 10 paces (about 10 feet) from the fence (feel free to use a measuring tape.)

Now, on each side of the quonset hut, make a mark about six inches in from the outer edge of your planned area ("A", "C" in the photo. Drive in a 3 foot section of t-post, about 18" into the ground. In the center of the outside edge, 4 feet from the t-post, 10 feet from the other side - this will be the center support (see "B" in the photo.) Repeat this process for the other side of your quonset hut area.
Step 2: Insert cattle panels

The next step is to insert two 16' cattle panels across the 10' area with each end of the panel inside the t-posts. Overlap each cattle panel approximately 6" at the center. This will result in a smooth arc approximately 5' high.

Secure the cattle panels to the t-posts at the base. I use bailing wire for this, but you can use whatever method you want as long as it's secure and can handle any wind load that might come up.

Next, tie the cattle panels together at the centers with bailing wire or cable ties. I'm using black cable ties in the photo below - these are quick, simple, and work great. I tie them at one foot intervals. Just make sure that the center of the hut is secure and that the two panels will not come apart easily.
**Step 3: Attach the tarp**

Now that you have inserted the cattle panels and tied them together with wire or cable ties, it's time to cover it with a heavy-duty tarp.

Try to use a tarp that is close in size - about 10' by 16'. Don't worry if it's too big, as you want it to overlap a bit.

In our example, we have a 10' by 20' tarp, so we'll be folding the long end up on one side.

We tie the tarp down with black UV-resistant cable ties. Pull the sides tight, and if possible, wrap the sides over the edge of the open part of the hut.

See the photos below for details.