

Domicile

Here is a way that you can build a structure from almost any sticks you can get find, and they don't even have to be the same length.

There's only one rule to putting it together: The end of each stick rests upon either the center of another stick or on the ground. For additional security, tie or wire the ends in place.



This technology can help many who have to live outside. Most tents will only survive two or three months of full sunshine and constant use. By building a canopy using this structure, and covering it with anything that could be found or recycled, shade could be provided to extend the life of a tent.

If scraps of water-resistant materials can be found it could be “shingled” to shed rain, and provide an alternative living space.

To demonstrate the minimal level of materials needed for a basic structure, I salvaged twigs from a branch that had fallen on a friend's shop.



If you can build any kind of structure from the materials used here, you can produce a shelter from almost anything almost everywhere. As far as I know, there would be no theoretical limit to the size that could be built.

A SEQUENCE OF SIZE

The smallest one of these that I've used was made of twigs, to shade some tender seedlings.

You should be able to build a minimal shelter from slightly larger twigs that could be shingled with scraps of anything that could shed water.

A son and a friend actually made a structure of about 12 feet square from the thorny, twisted stems of palm fronds. It was fairly flat, and had to be supported at the edges to get it off the ground, but basically proved that you can build it from about anything.

With staff-scale branches, you could begin to give yourself a little room to move around. I've found it helpful sometimes, to slightly notch one side of each end to fit it to the adjoining surface.

The structure is surprisingly strong, and with more substantial branches, you might be able to build a structure that could hold a hammock off the ground. I haven't tried this one, and I'm sure that you would need to have the joints all wired securely.

A word of caution: Lifting up anywhere but on the outside edges can undo the whole structure. In other words, if part of it begins to sag, one of the worst things you can do is prop it up with an internal support.

For wire for tying the ends down, you can buy ¼ mile rolls of #18 wire at almost any hardware or home improvement store. It is commonly used for electric fences. If you're desperate, you might even consider using wire from a barbed-wire fence. Once you've unwound the strands, it is possible to break such wire with your bare hands; by first forming a loop and then pulling it as tight as you can. You then bend the wire repeatedly back and forth for a couple minutes at the point of the tightest bend. Be careful though, the area where the wire is being bent the most can become hot enough to brand.

Sadly, cities typically don't want homeless people living anywhere at all, so attaching a well-wired structure into a chain link fence at multiple points might make it a little more difficult to remove.

Hexagonal Any-stick Dome

This layout involving triangles and hexagons is more suitable for circular applications.

Although more challenging than the square layout, the basic rule is the same: Each end of each stick is resting either on the center of another stick or on the ground. In these photos, all the ends are securely wired together.



The large hexagonal areas might make it impractical to cover larger structures with plastic or tarp, but this could be managed if the structure were first covered with chicken wire. The layer of plastic or tarp could then be applied, and overlaid by another layer of chicken wire to hold it in place.

As the experiment continues, I am exploring the use of dried giant sunflower stocks for such a structure. They seem to have a great deal of strength for their weight. Some that I have drying as I write this, are weighted and wedged between bricks so they will dry straighter.