no ladders or stairs required.

## Windsor 485

## Features:

First Floor Area: 485 s.f. ( $45 . .1$ m2) Large enclosable porch for outdoor living Design option for drawers under queen mattress Space for full-sized stacked washer \& dryer Solar panel-friendly, passive solar Optional attic for storage Two possible frontages Thermal mass slab construction Radiant floor heat \& ductless cooling


## Overview:

The videos for my Windsor 500 have garnered a fair number of views on YouTube, and one common question is what a one-story version might look like--so here you go! I took the slightly larger Windsor 570 footprint and added a back bedroom for people who aren't enthused by the alternating tread ladder, or envision aging in place.

This bedroom could be added to any of the Windsor 1.5 story designs, turning each into a 2 bedroom compact house. Build the back "L" at the same time as the house, or add it on later when your needs justify it. You'll see a cool concept on Page 4 to increase the storage space in the bedroom which is an advantage when 8 feet of headroom is available!

## About the plan:

There are some good reasons to consider a one-story tiny house, versus the other 1.5 story Windsors. With full headroom everywhere, it's simpler to furnish the space without building custom components. Regardless of your age, it's just easier to get around and access your stuff without dealing with stairs. Forgetting your device in the other room is now a 30 second mini-errand instead of 60 , and there is no stooping required, ever!

There are some tradeoffs, of course. With a larger foundation and more framing, this house will be somewhat more expensive per square foot. This is especially true if building radiant heating in a thermal slab, which would be nearly twice the cost of the one in a Windsor 500 . Heating will be less efficient since an attic bedroom is practically heated for free (heat
rises). On the plus side, cooling the 485 should be a an attic bedroom is practically heated for free (heat
rises). On the plus side, cooling the 485 should be a tad more affordable.

Of course, a 485 sq.ft. house is small no matter how you measure it, so that will keep the overall price reasonable regardless!

## What about that attic?

This concept envisions an attic for the water heater and floor heat mechanicals, as well as unconditioned storage. The optional hi-riser stairs are a little more convenient than a pull-down ladder. The 10:12 roof pitch is good for solar PV if you eliminate the dormers, which are really just for aesthetic purposes. The Study Plans also show an option for a low-slope 5:12 roof pitch version with no attic or dormers to reduce construction costs and keep things simple.




## Bedroom Storage:

With a little creativity, it's a viable DIY project to use standard 36" high base kitchen cabinets to provide oodles of clothes storage under a slightly raised bed. This version involves some light carpentry to create raised platforms on both sides of the bed. While this gets in the way of some of the potential drawer space in the sides, the overall volume of storage goes way up if you count the space under the platforms. While it's less accessible, this is a good place to store suitcases, the vacuum cleaner, wrapping paper, paper files, etc.

