

210 12 ft Garden Bedroom

It has proven impossible to house a significant portion of homeless people with taxpayer dollars. But how about affordable temporary shelters for those on waiting lists for housing and other programs? Suitable shelters produced by homeless labor could provide a merit - based opportunity, through which the more responsible candidates could be revealed. By replacing money with homeless labor, these shelters could be earned at very little cost.

This project offers an extremely low environmental impact solution that requires very little energy for either heating or cooling.

A 12 foot diameter circle at 113 square feet is smaller than the 150 square foot limit that would require a building permit, but greater than the minimum of 100 sq. ft required by some building codes for a room size.

The structure is surrounded by a thermal mass of earth by sinking it into the ground to a depth of 2-1/2 feet, and extending a surrounding bank of earth to a height of 2-1/2 feet above the ground level. This thermal mass would radically reduce the energy needed for both cooling and heating.

A parabolic dome 14 feet in diameter by 3-1/2 feet high would be mounted 1 foot above the surrounding retaining wall. At the inside of this wall the ceiling would begin with a 7 foot clearance above the floor, and curve inwards to a total height of 10-1/2 feet at the center.

If sculpted fragments of landfill concrete could be used in the retaining wall, then the environment would be improved by the recycling. Otherwise, earth-bags could provide a removable solution. The roof would be a bolt-together structure covered by a weather proof membrane. This could be removed if needed – leaving zero environmental impact.

I have experienced a surprisingly effective floor material by laying used indoor-outdoor carpet upon a thin bed of sand or decomposed granite.

Within such a structure, low voltage solar electric systems, potable water storage and built in cook stoves could add convenience and comfort.

This photo shows a built in stove in a prototype of this construction. The flue exits out under the retaining wall.

This brings up yet another advantage: If a fire swept through, there would be little damage.

