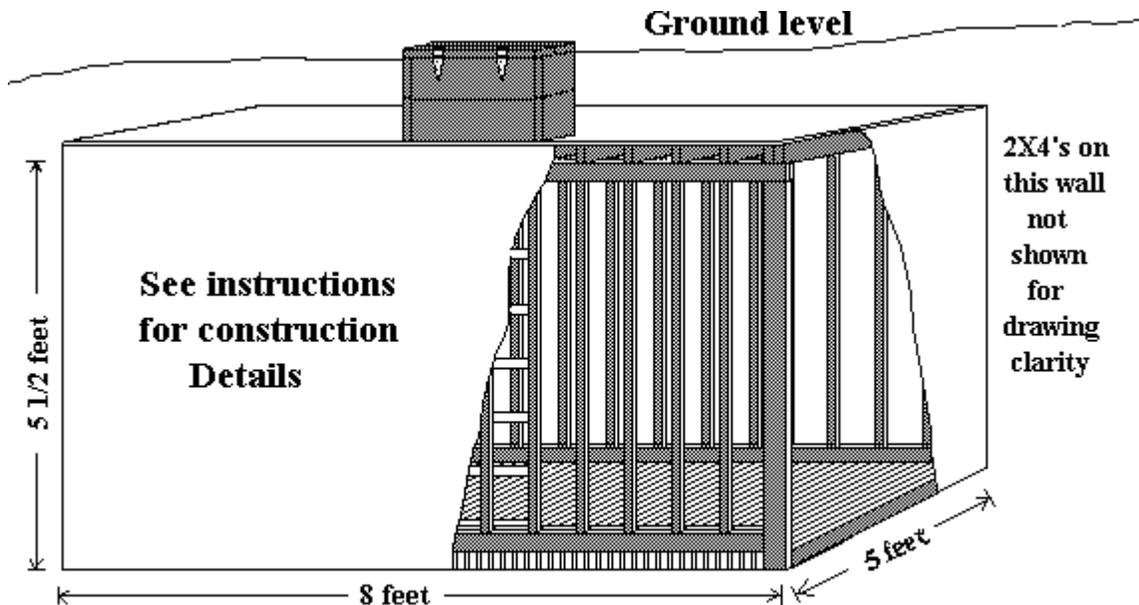


A Modern Underground Storage Cellar

This is a great example of what can be done as just about anyone who owns even a small piece of ground can make and use it.



Underground Storage Room, Cutaway View

Things went well as he dug the hole by hand until he unexpectedly struck bedrock at seven feet down. He would have liked to go deeper. In actuality, (unlike the drawing) his floor has a step in it, following the uneven bedrock. The level of the bedrock also forced him to make his roof 6 inches lower than he planned. The entrance way is a box 2 feet square and centered on one of the long walls. It is made from 2X10 lumber with the hatch made of the same material and hinged to the entrance boards. A ladder descends to the floor of his cellar for easy entry and exit.

Construction: The floor consists of pressure treated 2x4s using the bedrock as a foundation. The 2x4s are spaced with gaps, to allow any spills to flow down into the bedrock. The walls are made of 3/4 inch plywood supported by 2X4's spaced on 9" centers. The bottom support beams (to the bedrock) are pressure treated 4x4s. The ceiling is supported again by 2X4s on 9 inch centers. The top is made from two layers of 1/2 inch plywood.

It was finished by waterproofing it with two layers of heavy duty landscaping plastic, staggered to overlap significantly. It was first wrapped around the sides, then draped over the top and down the sides. Finally, tarpaper was layered over the

top and down the sides to protect the plastic from any rocks during the backfilling operation which just about completed this little project except for relandscaping the area. Only a foot of dirt covers the roof. Initially two feet was planned for, but again, the unexpected bedrock altered these plans.

Before the roof went on, two 55 gallon water barrels were set in one end of the shelter. After construction was complete, buckets of preserved foods were stacked on the other side. Between the barrels of water and the buckets, a set of deep shelves was made opposite the ladder for other goods. Note that none of these items are shown in the drawing.

A final note: Even with only 1 foot of dirt, the builder is getting a maximum temperature of 70 degrees in his shelter on 95+ degree F days with the cellar area in the full sun. As this only lasts for four months out of the year, it will be cooler during the other seasons.