

# Using shipping containers as housing for people with environmental illness

*by J. Camphill*

There are millions of shipping containers in circulation, transporting goods over long distances. Many shipping companies choose to sell off some of their older containers instead of sending them back to China empty.

It seems an enticing idea to use an old shipping container as safe housing for the environmentally ill. After all, it's pure steel, a reasonable cost and also transportable. However, it's been tried and it doesn't work well.

I know two people who tried, and both gave up. The main problem is that each time the shipping container enters the United States, it is fumigated to prevent exotic bugs from entering the country. All sorts of toxic products being shipped inside have added to the contamination. It's been tried to decontaminate them with ozoning, scrubbing with chlorine and other cleaners, etc., etc., etc. In both attempts, it was a complete failure.

Another major problem is that such a container is extremely poorly insulated. It gets very hot sitting in the sun and very cold on a winter's night. In a desert climate, it can be both brutally hot and brutally cold within the same 24 hours.

To insulate the container it would be necessary either to build an insulated shell around it, or insulate it on the inside. A durable exterior insulation would be costly and make transport more difficult.

Insulating on the inside would typically be done by putting up studs, insulation and drywall. All three cause problems with the indoor air quality. Steel studs can be used, but they will reduce the insulation value dramatically (thermal bridging). Drywall can be sealed, but that can trap moisture between the drywall and the outer steel wall, creating mold and fungus problems. A porous sealer will be necessary — and less effective.

The expense for electrical wiring and plumbing is a major part of building a house, and will be the same as for a conventionally built house of the same size.

The final product may end up costing nearly what a small built-from-scratch home would cost.

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Windows would need to be cut in the sides. They can only be small, if the container is to be moved again. Large windows will weaken the box, so it may be damaged when lifted.

The steel walls would provide some shielding from outside radio-frequency radiation, but any electronics used inside will be more troublesome as their radiation will simply bounce back from the steel walls. Many people with electrical sensitivity do not do well in a metal box, especially if the floor is metal.

Shipping containers seem like a good solution to the MCS and EHS housing crisis, but they aren't.