thedailygreen

Twelve amazing shipping container houses

By Brian Clark Howard

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(Photo: Urban Space Management)

Invented more than five decades ago, the modern shipping container is the linchpin in our global distribution network of products. In the containers go toys from China, textiles from India, grain from America, and cars from Germany. In go electronics, chocolate, and cheese.

While a number of resourceful people have converted shipping containers into make-shift shelters at the margin of society for years, architects and green designers are also increasingly turning to the strong, cheap boxes as source building blocks.

Shipping containers can be readily modified with a range of creature comforts and can be connected and stacked to create modular, efficient spaces for a fraction of the cost, labor, and resources of more conventional materials.

Discover some of the exciting possibilities of shipping container architecture, from disaster relief shelters to luxury condos, vacation homes, and off-the-grid adventurers. See what makes them green as well as cutting edge.



(Photo: Kool-Kini / Flickr)

De Maria Design Redondo Beach House

With its modern lines and appealing spaces, the award-winning Redondo Beach House by De Maria Design turns heads. The luxury beach-side showpiece was built from eight prefabricated, recycled steel shipping containers, along with some traditional building materials. According to the architects, the modified containers are "nearly indestructible," as well as resistant to mold, fire, and termites. Seventy percent of the building was efficiently assembled in a shop, saving time, money, and resources.

One of the containers can even sport a pool! The lessons learned from Redondo Beach House are being incorporated into a line of more affordable, accessible designs, soon available as Logical Homes.



(Photo: Urban Space Management)

London's Container City

Conceived by Urban Space Management, London's Container City first sprang up in the heart of the Docklands in 2001. It took just five months to complete the original 12 work studios, at a height of three stories. Shortly after that a fourth floor of studios and living apartments was added.

Container City was designed to be low cost, as well as environmentally friendly. Recycled materials made up 80% of building supplies. Architect Nicholas Lacey and partners and engineer Buro Happold used component pieces to build up adaptable living and work spaces.



(Photo: Kool-Kini / Flickr)
Container City II

Container City I was a success, and in2002, Urban Space Management added an addition, dubbed Container City II. Reaching five stories high, Container City II is connected to its earlier iteration via walkways. It also boasts an elevator and full disabled access, as well as 22 studios.



(Photo: Paul McCredie)

Port-a-Bach

Need some flexibility with security? Need a temporary structure or small vacation home? Going off the grid? The Port-a-Bach system from New Zealand's Atelier Workshop might be a good fit.

Costing around \$55,000, Port-a-Bach sleeps two adults and two children comfortably, in a dwelling that folds up into a fully enclosed steel shell. It comes with large internal storage cupboards and shelves; a stainless steel kitchen; bathroom with shower, sink and composting toilet; bunk beds and dressing room. Fabric screens allow you to shape internal space, as well as shelter the outdoor deck area.

Bach (pronounced Batch) is Kiwi slang for "Bachelor Pad," and refers to the many small cabins that dot the famously picturesque country.



(Photo: Urban Space Management)

Cove Park Artists' Retreat

Set on 50 acres of gorgeous Scottish countryside, Cove Park is an artist's retreat designed to stimulate and reinvigorate. Urban Space Management first brought in three repurposed shipping containers in 2001, and the center became so popular that more units have been added.

Doesn't look like your average shipping box, does it?



(Photo: Bark Design Collective)

All Terrain Cabin

Canada's Bark Design Collective built the All Terrain Cabin (ATC) as a showcase for sustainable (and Canadian!) ingenuity. The small home is based on a standard shipping container, and is said to be suitable for a family of four, plus a pet, to live off the grid in comfort and style.

The cabin folds up to look like any old shipping container, and can be sent via rail, truck, ship, airplane, or even helicopter. When you're ready to rest your bones, the cabin quickly unfolds to 480 square feet of living space, with a range of creature comforts.



(Photo: Courtesy of Ecopod)

The Ecopod

Another container home designed for on- or off-grid living is the Ecopod. Made from a shipping container, an electric winch is used to raise and lower the heavy deck door (power is supplied by a solar panel). The floor is made from recycled car tires, and the walls have birch paneling (over closed-cell soya foam insulation). The glass is double paned to slow heat transfer.

The Ecopod can be used as a stand alone unit or with other structures. It is designed to minimize environmental impact.



(Photo: Quik House)

Adam Kalkin Quik House

Want your own container house? There's a six-month waiting list for the Quik House by architect Adam Kalkin, who is based in New Jersey. The distinctive Quik House comes in a prefabricated kit, based on recycled shipping containers (in fact a completed house is about 75% recycled materials by weight).

The standard Quik House offers 2,000 square feet, three bedrooms and two and one-half baths, though larger options are also available. The shell assembles within just one day, and all the interior details can be finished within about three months.

The Quik House comes in two colors (orange or natural rust bloom), and the estimated total cost, including shipping and assembly, is \$184,000. You can add even greener options such as solar panels, wind turbines, a green roof, and additional insulation (to R-50).



(Photo: Kool-Kini / Flickr)

LiNX Temporary Structures

Dublin-based designer Richard Barnwall envisioned this design, dubbed the LiNX, as a temporary structure for construction workers. The two-storey model pictured is to be comprised of four 20-foot containers. Such designs offer flexibility and rapid deployment, and may even work for more permanent homes.



(Photo: Ross Stevens / Flickr)

Ross Stevens House

Industrial designer Ross Stevens built this distinctive house in Wellington, New Zealand. Repurposed shipping containers form an intriguing contrast to the surrounding hill. In fact, the unique home makes use of the hill itself, expanding interior space beyond the containers.

Parts of the Ross Stevens house are surprisingly spacious and comfortable. There's even a cool table made from a repurposed door.



(Photo: Kool-Kini / Flickr)

Student Housing Project Keetwonen, Amsterdam

Billed as the largest container city in the world, Amsterdam's massive Keetwonen complex houses 1,000 students, many of whom are happy to secure housing in the city's tight real estate market. Designed by Tempo Housing in 2006, Keetwonen is said to be a roaring success, with units that are well insulated, surprisingly quiet and comfortable.

Each resident enjoys a balcony, bathroom, kitchen, separate sleeping and studying rooms, and large windows. The complex has central heating and high speed Internet, as well as dedicated bike parking.

Keetwonen has proved so popular that its lease has been extended until at least 2016.



(Photo: Site-Specific)

Site-Specific Exhibition

Site-Specific and Buatalah Studio were asked to design a green building exhibition for Baan Lae Suan Fair in Bangkok. They came up with a design for a family of three, made out of four reused shipping containers and prefabricated modules. The home reuses graywater and incorporates spaces for growing food.