

How to Design a Custom Shipping Container Structure

Before you start here is some free advice. Starting with what you should NOT do.

DO NOT's

- ❖ Do not attempt to use a “used” or “one time” shipping container for a structure.
 - Although less expensive you do not know what was shipped in used containers. “One time” containers are containers sold after an (alleged) “one time” use. They may have had toxic cargoes or other hazardous materials.
 - Once retired the used and “one time” containers are fumigated with chemicals that will kill anything. This gets into the container and wooden floor and will leach out for a long time to come. You should avoid using used or “one time” containers especially for human habitation or food storage. You can spend thousands of dollars to refinish and seal used containers.
 - In a used or “one time” container you will have to cut any openings and this can weaken the structure. You are not a structural engineer. We cut all holes using engineering standards, then reinforce and paint them at the factory. JMCC WING, LLC containers are built with designs that are reinforced to support the structure.
 - The biggest issue with used and “one time” containers is that you can never find 2 that are alike let alone the same color. Especially if you are purchasing multiple containers you will spend a lot of money making them look nice (making a silk purse out of a pigs ear applies here). Save your time and money and purchase our NEW NEVER USED.
 - Used and “one time” containers typically need paint work from a small amount to repainting the entire container inside and out and sealing the wood floor that may have had toxic cargo. This can cost thousands of dollars not to mention time lost. These costs can exceed the cost of buying our NEW NEVER USED factory finished containers.
 - The floor and under carriage can be damaged – used and “one time” sales photos may not show damage. Also, pictures of use or “one time” containers do not tell you the state of the door latches which are usually damaged in use as cargo containers. You get what you pay for. Hard to open doors are a pain you will live with forever. The doors of used containers can become difficult to open and close tightly.
 - Paint and finishing may have been damaged in cargo use and only with time will the defects surface with rusting. Even small dents can make finishing difficult. If you are just looking for a cheap storage container then a used or “one time” container may be right for your purpose but do not think that it is an inexpensive alternative. You will spend more on modifications than purchasing one of our NEW NEVER USED containers.
- ❖ Do NOT imagine that a shipping container is a “cheap” alternative. If you are looking for a “cheap solution” then you should look for used and deal with all the headaches that come with them especially if you plan to modify them. Other companies cut corners, we do not.

With that said here are the “DO’s”.

- At JMCC WING, LLC we sell ONLY NEW NEVER USED CONTAINERS that are engineered for cargo commerce and hurricane rated.
- You chose your color and design. You can order as many as you wish (bulk order discounts are available). Your order is placed with full payment – expect delivery in about 30 to 45 days (depending on factory lead time at the time of your order and overland shipping time). Orders are filled in the order received.
- JMCC WING, LLC containers are real ocean rated shipping containers (other companies cut corners if they know you do not intend to use them for shipping). You will receive a shipping container international registration for each container as part of the purchase. (Note: container buildings will not have container registrations as they are not intended for cargo use, BUT they are built to the same exactly standards as cargo certified).
- If you have openings we engineer them with reinforced metal at the factory to make sure the openings do not affect the structural integrity of the container. Openings are painted with exterior paint so they are not subject to rust or weather.
- In customer structures we only allow stacking of containers that are appropriate for the strength of the containers (we work with you on your design to engineer the structure).
- Orders are prepaid because they are considered custom orders. Once we receive your payment in full the order is placed and the factory begins construction of your order.
- Orders include delivery to the “site” address by the least costly transportation method (truck, train and truck, ocean cargo plus final trucking). We do not markup overland transportation costs to your site but pass this cost to you in your prepaid order. You will not receive any other bills.

Cost considerations in Shipping Container Structures

The following is a list to help you understand the costs of construction of a Shipping Container Structure. Note that because of standard height considerations it is better to order “HC” or “High Cube” containers which are a foot taller and when finished give full head room. We do not provide any finishing other than painting the container (inside and outside including bottom). People have many expectations so you have to plan to finish all interior and exterior surfaces if you wish to have them finished. We find that companies who provide “finished container home” solutions offer inexpensive finishing to keep their price down. In many cases they are not even shipping containers but structures that look like shipping containers. You are better off buying our NEW NEVER USED containers and finishing it off yourself. You should plan on sun protection for container structure to prevent large swings in temperature (siding, porches, second roofs, upper decks, etc.). We do not provide advise on finishing your container or building a foundation. You must give us your “Rough Opening” sizes for doors and windows and other openings and we will coordinate the reinforced openings to suite your design. Since every site is different you should contact local help for any concerns if you are not capable of doing the work yourself. Beware of fly by night offers that claim to finish your

container for unbelievable low prices. They are just that ... unbelievable. When the container arrives, they will be rolled off the truck at your site. You should have the site open and ready to accept the containers. You will need local equipment to move the containers after their arrival. The biggest advantage of a shipping container building is strength and cost. You could not build a structure this strong and weather, hurricane, earth quake resistant. They are ready the day they are assembled. Remember that our NEW NEVER USED Shipping Containers and Shipping Container structures are engineered to set in place upon arrival. Also note our sister companies provide solutions for electrical energy (JMCC WING Generator), Water (Reverse Osmosis, Water Filtration on small to large scale), water storage tanks, eV car charging stations, and food storage solutions (NuManna Storage Food). With that said, here is a near complete check list of other costs to consider (you may have some or all of these to consider when designing a shipping container building).

- 1) **Shipping container(s) including delivery cost**
- 2) **Zoning / Local Permit issues / Code compliance**
- 3) **Site design (relative to sun, wind, weather, other factors)**
- 4) **Site Preparation (clearing, leveling, fill, etc.)**
- 5) **Foundation (site ready for delivery)**
- 6) **Equipment on site for placement of containers**
- 7) **Doors and windows / Doors behind the double opening container doors**
- 8) **Security issues**
- 9) **Internal framing**
- 10) **Electrical wiring (rough in and finishing)**
- 11) **Electrical Source**
- 12) **Plumbing (rough in and finishing)**
- 13) **Water Source and Filtration/pump/container/etc.**
- 14) **Septic & waste water**
- 15) **Heating/air conditioning (rough in and finishing)**
- 16) **Insulation**
- 17) **Ceiling**
- 18) **Walls covering**
- 19) **Flooring (sub-floor or flooring direct on container floor)**
- 20) **Kitchen (rough in and finishing)**
- 21) **Bath (rough in and finishing)**
- 22) **Trim**

External Finishing

- 1) **External Structures attached to Container structure (decks, roofs, etc.)**
- 2) **You should plan to have container metal protected from direct sunlight**
- 3) **Siding, trim, other materials attached to the container**
- 4) **Sun and weather blockage structures / landscaping**