



CARGO CONTAINERS

Permitting requirements for cargo containers that are repurposed as buildings. Cargo Containers are also known as intermodal shipping containers. Cargo Containers shall comply with the [California Building Code](#) (CBC), Chapter 31, Section 3115.

Submittal Requirements: Cargo containers used for storage.

A plan review will not be required for the permit when the cargo container installation is as follows:

A cargo container building permit application must include the following:

1. Site Plan
2. Foundation details (see pre-approved details below)
3. Elevation and dimensions

Cargo container with a maximum dimension of 8' X 20'.

Each corner of the cargo container shall be supported and anchored down to a concrete spread footing that is a minimum, 30" x 30" x 12" depth into the undisturbed soil (18" depth in expansive soil). Each spread footing shall also have (3) #4 re-bars each way with a minimum 3" clearance to the soil and a hold-down device having a minimum uplift value of 2800 lb.

Cargo container with a maximum dimension of 8' X 40'.

Each corner and at the middle of the long direction span of the cargo container shall be supported and anchored down to a concrete spread footing that is a minimum, 30" x 30" x 12" depth into the undisturbed soil (18" depth in expansive soil). Each spread footing shall also have (3) #4 re-bars each way installed with a minimum 3" clearance to the soil and a hold-down device having a minimum uplift value of 2800 lb.

Examples of hold-down devices that meet the minimum uplift value:

- Strap application: PA-23, STHD10 or HPA-28 using #10 metal self-tapping screws.
- A minimum 2' long #4 re-bar shall be installed adjacent to the hold-down, 3" to 5" from the top of the concrete.

Submittal Requirements: Cargo containers converted to habitable space or occupancies other than their approved occupancy and use.

Converted Cargo containers are not considered conventional construction. Their use must be specified by a California-licensed design professional. Therefore, all sheets of construction plans and first sheet of the structural calculations shall be stamped and signed by a California licensed architect or a registered Civil or Structural engineer.

A plan review is required for the permit when a cargo container is converted.

The building permit submittal must include the following:

1. Site Plan
2. Foundation system is required to support containers when containers are stacked (multi-level), containers are used for residential occupancy, or when containers are supplied with electrical, water, gas or sewer utilities. A foundation plan showing an engineered foundation system, including specifications, connection, and sectional details shall be provided. This foundation plan shall bear the approval stamp of a California registered civil or structural engineer or a California-licensed architect, signature and date.
3. Elevation and dimensions
4. Title 24 Energy calculations (if used as habitable space)
5. Accessibility: Cargo Containers utilized as privately funded covered multifamily dwellings or as public buildings, public accommodations, commercial buildings, or public housing are subject to the accessibility standards of the CBC, chapter 11A or Chapter 11B as applicable. Cargo containers utilized as a combination of privately funded and publicly funded multifamily dwellings shall comply with the most restrictive accessibility standards specified in CBC Chapters 11A and 11B.
6. Roof assembly and roof coverings shall be Class A and listed in accordance with ASTM E108 or UL 790. Specifications and details for the proposed roof assembly shall be shown on the roof plan.
7. Fire Sprinklers Systems: if required by occupancy and use.
8. Mechanical, Electrical and Plumbing: if required by occupancy
9. Structural calculations shall be provided for the following conditions to justify for adequacy of the structural capacity of cargo containers:
 - A. Cargo containers altered such as by the removal of any part of any part of the exterior walls, floors, or roof plane, the addition of doors, windows, or skylights.
 - B. Multiple cargo containers connected together or stacked by welding or bolted connections.

NOTE: The design strengths and permissible stresses for the material of the container shall be established by tests as provided for in Section 1707 of the CBC when such material properties cannot be identified by the manufacturer's designation as to manufacture and mill test.

When construction of cargo containers are altered or modified, in situ load test shall be required in accordance with Section 1709 of the CBC.