CARGO CONTAINERS USED AS STORAGE

Disciplines: Structural, Access

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Division of the State Architect (DSA) documents referenced within this publication are available on the DSA Publications webpage.

PURPOSE

This Interpretation of Regulations (IR) clarifies DSA’s definition of school building as it applies to cargo containers used as storage facilities on public school campuses.

SCOPE

This IR is applicable to the use of cargo containers for storage purposes on public school campuses. Cargo containers used as storage units on public school campuses are not considered by DSA to be school buildings as defined in the California Administrative Code (CAC) Section 4-314.

This document does not address the conversion of cargo containers to use as school buildings. Refer to IR 16-10: Cargo Container Conversion to Modular School Buildings.

BACKGROUND

Many California school districts use cargo containers (also known as cargo boxes, sea vans, shipping containers or conexs) on school campuses to store various materials.

Cargo container is defined in the Code of Federal Regulations (49 CFR 450.3). It is an article of transport equipment that is:

- Of a permanent character and suitable for repeated use.
- Specially designed to facilitate the transport of goods, by one or more modes of transport (rail, truck or ship), without intermediate reloading.
- Designed to be secured and readily handled, having corner fittings for these purposes.
- Of a size that the area enclosed by the four outer bottom corners is either:
  - At least 150 square feet (sq. ft.)
  - At least 75 sq. ft. if it has top corner fittings

See 49 CFR 450.3 for additional requirements.

Cargo containers are manufactured all over the world to meet the standards set by the International Convention of Safe Containers (CSC). The CSC is an international agreement ratified by various countries including the United States. Inspection and testing services at the point of manufacture of the cargo containers are provided by a Certified Inspection and Testing Agency (CITA) specifically authorized to certify containers by an administration signatory to the CSC. The selected CITA inspects the cargo containers at the point of manufacture, and if they pass the inspection, places a CSC safety approval placard (CSC plate) on each container and assigns a unique CSC tracking number to each container. The inspected containers will also have the selected CITA organization logo affixed to them.
1. LIMITATIONS

School districts may install cargo containers as storage units on public school campuses under their own authority and are not required to submit the design to DSA for review and approval provided they are installed in compliance with all the following limitations:

1.1 The maximum size is 10' wide by 60' long.
1.2 The maximum height is 10'.
1.3 They are not used to store hazardous materials exceeding the exempted quantities as indicated on California Building Code (CBC) Tables 307.1(1) and 307.1(2). The school district is responsible for contacting the local regulating authority regarding any necessary storage and use permits.
1.4 They are not stacked upon each other or elevated by a substructure.
1.5 They are placed directly on even grade (not sloping more than 1/4:12) and at a distance of five feet or more away from the top of any descending inclination having slope greater than 1:12.
1.6 They are not placed in fire access lanes.
1.7 They are maintained to ensure their structural integrity is not compromised.
1.8 They are not modified by the addition of doors or windows.
1.9 They are located a minimum of 20 feet from any building.
1.10 They shall not be placed within any building’s required side yard setback.
1.11 They shall be placed a minimum of five feet from property lines adjoining commercial, industrial or residential zoned property.
1.12 They may have a zero-foot setback at property lines, adjoining streets or public right-of-ways.

REFERENCES

California Code of Regulations (CCR) Title 24
   Part 1: California Administrative Code (CAC), Section 4-314
   Part 2: California Building Code