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BOARD OF SUPERVISORS' MEETING
April 15, 2025

Report on Building Permit Requirements for Cargo Containers.

County of Lassen
Department of Planning and Building Services
• Planning • Building • Environmental Health • Code Enforcement • Surveyor • Surface Mining

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Zoning and Building
Inspection Requests
Phone: 530 257-5263

April 9, 2025

TO: Lassen County Board of Supervisors
Agenda Date: April 15, 2025

FROM: Gaylon F. Norwood, Acting Director GFN

SUBJECT: Report on building permit requirements for cargo containers

ACTION REQUESTED:

1. Receive report; and
2. Provide direction to staff

Summary:
As the Board of Supervisors has been made aware, the California Building Standards Commission modified the California Building Code to adopt Section 3115 (attached) to require a building permit for the placement of a cargo container. Please see the attached memorandum and bulletin for more information on the building permit requirements. The Department has been requiring a building permit since becoming aware of the above Section on July 31, 2024.

The Board of Supervisors adopted Ordinance 2024-06 on July 9, 2024, to update the building permit fee structure. At that time, the Department was not requiring a building permit for cargo containers. Therefore, it has been determined that the minimum building permit fee will be charged. Subsection "(j)" of Section 3.18.090 reads as follows:

> "(j) The minimum fee for any permit issued by the county of Lassen building division shall be three hundred dollars."

The minimum building permit fee is based on the analysis in the table on the following page.

:gfn
Enclosures: Minimum building permit fee workup.
Memorandum and cargo container bulletin
California Building Code Section 3115

x/pla/admin/files/1407.07/"Board letter cargo container (4-8-2025)"

	Prior fee	current fee					
MINIMUM FEE FOR ANY PERMIT	$250.00	$300.00	Time Front Desk/Secretary		0.25	$ 50.98	12.75
			Time Building Tech		1	$ 47.53	47.53
			Time Planner		0.25	$ 65.59	16.40
				Desk Subtotal			**$ 76.67**
			Time inspector		1.8	$ 70.47	126.85
			Mileage/motorpool		60	$ 1.00	60.00
			Mileage/fuel		60	$ 0.66	$ 39.30
				Inspection Subtotal			**$ 226.15**
			Times number of inspections		1		**$ 226.15**
			(use inspector and Mileages)				
			Total				**$ 302.82**

County of Lassen
Department of Planning and Building Services
• Planning • Building • Environmental Health • Code Enforcement • Surveyor • Surface Mining

Maurice L. Anderson, *Director*
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August 27, 2024

TO: Contractors, Engineers, Landowners, Agents, and other Interested Parties

FROM: Maurice L. Anderson, Director
Mike Johnson, Building Official

SUBJECT: Building permit requirements for sea-land cargo containers (intermodal shipping containers)

With the 2022 cycle of the California Building Code (CBC), the California Building Standards Commission added Section 3115 (Intermodal Shipping Containers) (CBC, Part 2 of Title 24 of the California Code of Regulations), effective January 1, 2023, to require a building permit for placement of cargo containers. Therefore, effective July 31, 2024, a building permit is required for the permanent placement (more than 180 days) of a cargo container on a parcel. As such, the attached bulletin has been prepared to summarize the permitting requirements.

An intermodal shipping container (cargo container) is a metal shipping container which was designed to be used to transport goods and materials by truck, train, ship and/or air, and which is used for the storage of goods, merchandise, or equipment, excepting any such metal shipping container that is on a chassis.

Please contact the Building Division of the Department of Planning and Building Services for with any questions on the submittal requirements.

MLA/MJ:gfn
Enclosure: Bulletin – Cargo Containers for Incidental Storage Process and Instructions

cc: Board of Supervisors
Clerk of the Board of Supervisors

X/pla/admin/files/1400/01/"building permit required for cargo containers 8-26-2024"

Cargo Containers for Incidental Storage
Process and Instructions

DEPARTMENT OF PLANNING AND BUILDING SERVICES
707 Nevada Street, Suite 5 · Susanville, CA 96130-3912
(530) 251-8269 · (530) 251-8373 (fax)
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The purpose of this information bulletin is to explain permitting requirements for using cargo containers on private property in Lassen County. Cargo containers are also known as intermodal shipping containers. An intermodal shipping container is a metal shipping container which was designed to be used to transport goods and materials by truck, train, ship and/or air, and which is used for the storage of goods, merchandise, or equipment, excepting any such metal shipping container that is on a chassis.

With the 2022 cycle of the California Building Code, the California Building Standards Commission added Section 3115 (Intermodal Shipping Containers) (CBC, Part 2 of Title 24 of the California Code of Regulations), effective January 1, 2023. As such, effective August 1, 2024, a building permit is now required for the placement of a cargo container on private property in Lassen County (with the exceptions noted below). If the requirements of this bulletin can be met, a cargo container may be placed without engineering.

Please consult with the Building Division for building application requirements and fees.

Building Permit Submittal Requirements

1. Planning review to establish correct zoning, if allowed in zoning, setbacks, etc.
2. A completed and signed building permit application.
3. Plans and information for the installation of an Intermodal Shipping Container (Cargo Container), shall include but not be limited to the following:

    a. A cover sheet that indicates the project address; accessors parcel number; owners name, address and phone number; a scope of work; the zoning; and a statement that the container is a “U” occupancy for private storage only and shall not be used for any other purpose. “Private storage” in this case means storage only of goods incidental to the existing permitted use and not available for public access or use.
    b. Cargo containers require anchorage to the ground at all four corners of the container using an earth auger or other system approved by the Building Official. Each anchor will need to have a minimum hold down pressure of 2,600 pounds. If the requirements of this bulletin are not met, cargo containers may require anchorage of the container to a foundation system designed by a registered engineer.
    c. A site plan that indicates all the required setbacks for a U occupancy storage building are met, the general topography of the property including slope of grade around all four orientations of the proposed cargo container.
    d. The cargo container shall be placed on level, stable, earth and at least five feet away from slopes greater than one vertical to three horizontal.
    e. Clearance between ground and container floor shall not exceed 12 inches. If a container is raised above grade the corner anchor lengths will need to be increased to account for the additional height.
    f. Grade around the cargo container shall be sloped away from container so that runoff goes around the container and not under it.
    g. The cargo container shall not be attached to other structures or other containers. Containers shall not be “stacked.”

   h. The cargo container shall be an industry-standard shipping container. The container shall be constructed of steel or aluminum with a minimum 14-gauge thickness except for a wood floor within the metal shell. The container and its manufactured physical dimensions (width, length, and height) and shall not be altered. Structural plans and calculations are not required for the container itself.
   i. The cargo container shall not contain or utilize electrical, plumbing, gas or mechanical components or utilities.
4. Cargo containers are for storage only and shall not be installed in flood hazard areas.
5. The applicable codes for this type of permit are found in the current edition of the CBC, more specifically sections 107 (Construction Documents), Chapter 16 (Structural Design) and Section 3115 (Intermodal Shipping Containers)

Zoning requirements
Cargo containers are not allowed in the O-H district (Historical Site District), O-D district (Primitive Area District) and O-S district (Open Space District). A primary use of the subject property must be established before a cargo container can be placed on a property (e.g. residential use for residentially zoned properties, agricultural use for agriculturally zoned properties, industrial use for industrially zoned properties or commercial use for commercially zoned properties). Additionally, cargo containers cannot be placed in setback areas or in exclusion areas. An exclusion area is an area established by the map that created a parcel where certain buildings or uses are not allowed. To check your Zoning and set back regulations you may Email the Lassen County Department of Planning and Building Services at landuse@co.lassen.ca.us.

Agricultural Exemption for Intermodal Shipping Containers
Cargo containers may be placed without a building permit with an approved agricultural exemption pursuant to the Guidelines for Agricultural Exemptions (see Board of Supervisors Resolution 24-020).

Temporary use of Intermodal Shipping Containers
Cargo containers may be temporarily placed without a building permit for up to 90 days, or during the time there is an active issued building permit. An extension of 90 days will be available upon request from the Building Department. Any such temporary placement shall not be in an exclusion area or within a required setback.

Can an Intermodal Shipping Container be stacked on top of another or installed on wheels or skids?
Cargo containers cannot be placed on top or stacked. Containers shall not be attached to other structures nor other containers. Cargo containers on wheels or on a chassis are considered truck trailers, which cannot be permitted as a permanent building or structure.

Can I modify an Intermodal Shipping Container by cutting windows or adding a roof spanning two containers?
Yes, subject to the provisions of the California Building Code Title 24, Part 2, Chapter 31, Section 3115, other provisions of the California Building Code, and an approved building permit, cargo containers may be modified. Any proposed modification of a cargo container requires engineering. We recommend consulting with a registered design professional regarding any proposed modifications.

x/pla/admin/files/1407.07/"Lassen Cargo Container process"

include the following in addition to the information required by Section 1603A:

1. Manufacturer's name and address.
2. Date of manufacture.
3. Serial number of module.
4. Manufacturer's design drawings.
5. Type of construction in accordance with Section 602.
6. Design loads including: roof live load, roof snow load, floor live load, wind load and seismic site class, use group and design category.
7. Additional building planning and structural design data.
8. Site-built structure or appurtenance attached to the relocatable building.

3113.3 Manufacturer's data plate. Each relocatable module shall have a data plate that is permanently attached on or adjacent to the electrical panel, and shall include the following information:

1. Occupancy group.
2. Manufacturer's name and address.
3. Date of manufacture.
4. Serial number of module.
5. Design roof live load, design floor live load, snow load, wind and seismic design.
6. Approved quality assurance agency or approved inspection agency.
7. Codes and standards of construction.
8. Envelope thermal resistance values.
9. Electrical service size.
10. Fuel-burning equipment and size.
11. Special limitations if any.

Exception: [DSA-SS and DSA-SS/CC] *Each relocatable module shall have two metal identification labels permanently attached to the structure as enforced by the enforcement agency.*

3113.4 Inspection agencies. The building official is authorized to accept reports of inspections conducted by approved inspection agencies during off-site construction of the relocatable building, and to satisfy the applicable requirements of Sections 110.3 through 110.3.12.1.

Exception: [DSA-SS and DSA-SS/CC] *Each relocatable module shall be inspected during construction and installation at the project site by project inspectors acceptable to the enforcement agency in accordance with Part 1, California Administrative Code, Title 24, CCR.*

SECTION 3114
PUBLIC USE RESTROOM BUILDINGS IN FLOOD HAZARD AREAS

3114.1 General. For the purpose of this section, public restroom buildings are located on publicly owned lands in flood hazard areas and intended for public use. Public restroom buildings and portions of other buildings that contain public restrooms are limited to toilet rooms, bathrooms, showers and changing rooms. Public restroom buildings and portions of buildings that contain public restrooms shall comply with the requirements of this section. Public-use restrooms that are not elevated or dry floodproofed in accordance with Section 1612 shall comply with Section 3114.2. Portions of buildings that include uses other than public-use toilet rooms, bathrooms, showers and changing rooms shall comply with Section 1612.

3114.2 Flood resistance. Public-use restrooms on publicly owned lands in flood hazard areas shall comply with the requirements of ASCE 24, except for elevation requirements, and shall comply with all of the following criteria:

1. The building footprint is not more than 1,500 square feet (139 m^2).
2. Located, designed and constructed to resist the effects of flood hazards and flood loads to minimize flood damage from a combination of wind and water loads associated with the base flood.
3. Anchored to prevent flotation, collapse or lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy during conditions of the base flood.
4. Constructed of flood-damage-resistant materials.
5. Where enclosed by walls, the walls have flood openings.
6. Mechanical and electrical systems are located above the base flood elevation.
7. Plumbing fixtures and plumbing connections are located above the base flood elevation.
8. An emergency plan, approved by the jurisdiction, is submitted to the building official and includes building design documents specifying implementation of protection measures prior to the onset of flooding conditions.

Exceptions:

1. Minimum necessary electric equipment required to address health, life safety and electric code requirements is permitted below the base flood elevation in accordance with ASCE 24 provisions for electric elements installed below the minimum elevations.
2. Plumbing fixtures and connections are permitted below the base flood elevation provided that the fixtures and connections are designed and installed to minimize or eliminate infiltration of floodwaters into the sanitary sewage system and discharges from sanitary sewage systems into floodwaters.

SECTION 3115
INTERMODAL SHIPPING CONTAINERS

Not permitted by OSHPD.

3115.1 General. The provisions of Section 3115 and other applicable sections of this code shall apply to intermodal

shipping containers that are repurposed for use as buildings or structures, or as a part of buildings or structures.

Exceptions: *[DSA-SS & DSA-SS/CC] Not permitted by DSA.*

1. Intermodal shipping containers previously approved as existing relocatable buildings complying with Chapter 14 of the *California Existing Building Code.*
2. Stationary storage battery arrays located in intermodal shipping containers complying with Chapter 12 of the *California Fire Code.*
3. Intermodal shipping containers that are listed as equipment complying with the standard for equipment, such as air chillers, engine generators, modular data centers, and other similar equipment.
4. Intermodal shipping containers housing or supporting experimental equipment are exempt from the requirements of Section 3115, provided that they comply with all of the following:
   - 4.1. Such units shall be single stand-alone units supported at grade level and used only for occupancies as specified under Risk Category I in Table 1604.5.
   - 4.2. Such units are located a minimum of 8 feet (2438 mm) from adjacent structures, and are not connected to a fuel gas system or fuel gas utility.
   - 4.3. In hurricane-prone regions and flood hazard areas, such units are designed in accordance with the applicable provisions of Chapter 16.
5. *[HCD] Shipping containers constructed or converted off-site that meet the definition of Factory-built Housing in Health and Safety Code Section 19971 or Commercial Modular(s) as defined in Health and Safety Code Section 18001.8 shall be approved by the Department of Housing and Community Development.*

3115.2 Construction documents. The construction documents shall contain information to verify the dimensions and establish the physical properties of the steel components and wood floor components of the intermodal shipping container, in addition to the information required by Sections 107 and 1603.

3115.3 Intermodal shipping container information. Intermodal shipping containers shall bear an existing data plate containing the following information as required by ISO 6346 and verified by an approved agency. A report of the verification process and findings shall be provided to the building owner.

1. Manufacturer's name or identification number.
2. Date manufactured.
3. Safety approval number.
4. Identification number.
5. Maximum operating gross mass or weight (kg) (lbs).
6. Allowable stacking load for 1.8G (kg) (lbs).
7. Transverse racking test force (Newtons).
8. Valid maintenance examination date.

Where approved by the building official, the markings and existing data plate are permitted to be removed from the intermodal shipping containers before they are repurposed for use as buildings or structures or as a part of buildings or structures.

3115.4 Protection against decay and termites. Wood structural floors of intermodal shipping containers shall be protected from decay and termites in accordance with the applicable provisions of Section 2304.12.1.1.

3115.5 Under-floor ventilation. The space between the bottom of the floor joists and the earth under any intermodal shipping container, except spaces occupied by basements and cellars, shall be provided with ventilation in accordance with Section 1202.4.

3115.6 Roof assemblies. Intermodal shipping container roof assemblies shall comply with the applicable requirements of Chapter 15.

Exception: Single-unit, stand-alone intermodal shipping containers not attached to, or stacked vertically over, other intermodal shipping containers, buildings or structures. *[DSA-SS & DSA-SS/CC] Not permitted by DSA.*

3115.7 Joints and voids. Joints and voids that create concealed spaces between connected or stacked intermodal shipping containers at fire-resistance-rated walls, floor or floor/ceiling assemblies and roofs or roof/ceiling assemblies shall be protected by an approved fire-resistant joint system in accordance with Section 715.

3115.8 Structural. Intermodal shipping containers that conform to ISO 1496-1 and are repurposed for use as buildings or structures, or as a part of buildings or structures, shall be designed in accordance with Chapter 16 and this section.

3115.8.1 Foundations. Intermodal shipping containers repurposed for use as a permanent building or structure shall be supported on foundations or other supporting structures designed and constructed in accordance with Chapters 16 through 23.

3115.8.1.1 Anchorage. Intermodal shipping containers shall be anchored to foundations or other supporting structures as necessary to provide a continuous load path for all applicable design and environmental loads in accordance with Chapter 16.

3115.8.2 Welds. New welds and connections shall be equal to or greater than the original connections.

[DSA-SS & DSA-SS/CC] The strength of new welds and connections shall be no less than the strength provided by the original connections. All new welds and connections shall be designed and constructed in accordance with Chapters 16, 17 and 22.

3115.8.3 Structural design. The structural design for the intermodal shipping containers repurposed for use as a building or structure, or as part of a building or structure, shall comply with Section 3115.8.4 or 3115.8.5.

3115.8.4 Detailed design procedure. A structural analysis meeting the requirements of this section shall be provided to the building official to demonstrate the structural adequacy of the intermodal shipping containers.

Exception: Intermodal shipping containers designed in accordance with Section 3115.8.5.

3115.8.4.1 Material properties. Structural material properties for existing intermodal shipping container steel components shall be established by material testing where the steel grade and composition cannot be identified by the manufacturer's designation as to manufacture and mill test. ***[DSA-SS & DSA-SS/CC]*** *Not permitted by DSA.*

3115.8.4.2 Seismic design parameters. The seismic force-resisting system shall be designed and detailed in accordance with ***[DSA-SS & DSA-SS/CC]*** *ASCE 7 and* one of the following:

1. Where all or portions of the corrugated steel container sides are considered to be the seismic force-resisting system, design and detailing shall be in accordance with the ASCE 7, Table 12.2-1 requirements for light-frame bearing-wall systems with shear panels of all other materials. ***[DSA-SS & DSA-SS/CC]*** *Not permitted by DSA.*
2. Where portions of the corrugated steel container sides are retained, but are not considered to be the seismic force-resisting system, an independent seismic force-resisting system shall be selected, designed and detailed in accordance with ASCE 7, Table 12.2-1.
3. Where portions of the corrugated steel container sides are retained and integrated into a seismic force-resisting system other than as permitted by Item 1, seismic design parameters shall be developed from testing and analysis in accordance with Section 104.11 and ASCE 7, Section 12.2.1.1 or 12.2.1.2.

3115.8.4.3 Allowable shear value. The allowable shear values for the intermodal shipping container corrugated steel sheet panel side walls and end walls shall be demonstrated by testing and analysis *in* accordance with Section 104.11. Where penetrations are made in the side walls or end walls designated as part of the lateral force-resisting system, the penetrations shall be substantiated by rational analysis.

3115.8.5 Simplified structural design of single-unit containers. Single-unit intermodal shipping containers conforming to the limitations of Section 3115.8.5.1 shall be permitted to be designed in accordance with the simplified structural design provisions of Section 3115.8.5.2. ***[DSA-SS and DSA-SS/CC]*** *Not permitted by DSA.*

3115.8.5.1 Limitations. The use of Section 3115.8.5 is subject to the following limitations:

1. The intermodal shipping container shall be a single-unit, stand-alone unit supported on a foundation and shall not be in contact with or supporting any other shipping container or other structure.
2. The intermodal shipping container top and bottom rails, corner castings, and columns or any portion thereof shall not be notched, cut, or removed in any manner.
3. The intermodal shipping container shall be erected in a level and horizontal position with the floor located at the bottom.
4. The intermodal shipping container shall be located in Seismic Design Category A, B, C or D.

3115.8.5.2 Simplified structural design. Where permitted by Section 3115.8.5.1, single-unit, stand-alone intermodal shipping containers shall be designed using the following assumptions for the corrugated steel shear walls:

1. The appropriate detailing requirements contained in Chapters 16 through 23.
2. Response modification coefficient, R = 2.
3. Overstrength factor, $\Omega_0 = 2.5$.
4. Deflection amplification factor, $C_d = 2$.
5. Limits on structural height, h_n = 9.5 feet (2900 mm).

3115.8.5.3 Allowable shear. The allowable shear for the corrugated steel side walls (longitudinal) and end walls (transverse) for wind design and seismic design using the coefficients of Section 3115.8.5.2 shall be in accordance with Table 3115.8.5.3, provided that all of the following conditions are met:

1. The total linear length of all openings in any individual side wall or end wall shall be limited to not more than 50 percent of the length of that side wall or end wall, as shown in Figure 3115.8.5.3(1).
2. Any full-height wall length, or portion thereof, less than 4 feet (305 mm) shall not be considered as a portion of the lateral force-resisting system, as shown in Figure 3115.8.5.3(2).
3. All side walls or end walls used as part of the lateral force-resisting system shall have an existing or new boundary element on all sides to form a continuous load path, or paths, with adequate strength and stiffness to transfer all forces from the point of application to the final point of resistance, as shown in Figure 3115.8.5.3(3).
4. Where openings are made in container walls, floors or roofs, for doors, windows and other openings:
   - 4.1 The openings shall be framed with steel elements that are designed in accordance with Chapters 16 and 22.
   - 4.2 The cross section and material grade of any new steel element shall be equal to or greater than the steel element removed.

5. A maximum of one penetration not greater than 6 inches (152 mm) in diameter for conduits, pipes, tubes or vents, or not greater than 16 square inches (10 323 mm2) for electrical boxes, is permitted for each individual 8-foot (2438 mm) length of lateral force-resisting wall. Penetrations located in walls that are not part of the lateral force-resisting system shall not be limited in size or quantity. Existing intermodal shipping container vents shall not be considered a penetration, as shown in Figure 3115.8.5.3(4).
6. End wall doors designated as part of the lateral force-resisting system shall be welded closed.

3115.9 Additional requirements. [DSA-SS and DSA-SS/CC]

3115.9.1 General.

1. *Intermodal shipping containers shall not have been manufactured earlier than 24 months from the date of DSA approval of the site-specific or stockpile building design drawings.*
2. *Intermodal shipping containers shall be undamaged and have no previous repairs. The acceptable tolerances shall not exceed those given in the ANSI/AISC 303—16: Code of Standard Practice for Steel Buildings and Bridges.*
3. *Intermodal shipping container type shall be standard dry cargo container, used for the transportation of dry goods only. Containers shall not have been used for transporting hazardous materials. Containers shall not have been painted with paint containing lead.*
4. *All structural elements and details shall be justified through engineering calculations in accordance with the California Administrative Code (Title 24, Part 1, CCR) Section 4-317(d).*

3115.9.2 Structural integrity verification. *Each intermodal shipping container shall have selection, structural integrity verification, general condition assessment, inspection and testing as enforced by the enforcement agency.*

3115.9.3 Seismic design requirements.

1. *The container steel frame contribution to the lateral force resistance shall be neglected even in cases where the container siding is removed.*
2. *Deformation compatibility of structural elements that are not included in the seismic force-resisting system shall be considered in the analysis and when evaluating stiffness irregularities.*
3. *The total length of siding (less openings) along a line in a lower story shall not be less than 80 percent of the total length of siding (less openings) along the same line in the story immediately above.*

TABLE 3115.8.5.3
ALLOWABLE SHEAR VALUES FOR INTERMODAL SHIPPING CONTAINER CORRUGATED STEEL WALLS FOR WIND OR SEISMIC LOADING

CONTAINER DESIGNATION[b]	CONTAINER DIMENSION (nominal length)	CONTAINER DIMENSION (nominal height)	ALLOWABLE SHEAR VALUES (PLF)[a, c]	
			Side Wall	End Wall
1EEE	45 feet	9.5 feet	75	843
1EE		8.5 feet		
1AAA	40 feet	9.5 feet	84	
1AA		8.5 feet		
1A		8.0 feet		
1AX		< 8.0 feet		
1BBB	30 feet	9.5 feet	112	
1BB		8.5 feet		
1B		8.0 feet		
1BX		< 8.0 feet		
1CC	20 feet	8.5 feet	168	
1C		8.0 feet		
1CX		< 8.0 feet		
1D	10 feet	8.0 feet	337	
1DX		< 8.0 feet		

For SI: 1 foot = 304.8 mm.

a. The allowable strength shear for the side walls and end walls of the intermodal shipping containers are derived from ISO 1496-1 and reduced by a factor of safety of 5.

b. Container designation type is derived from ISO 668.

c. Limitations of Section 3115.8.5.1 shall apply.

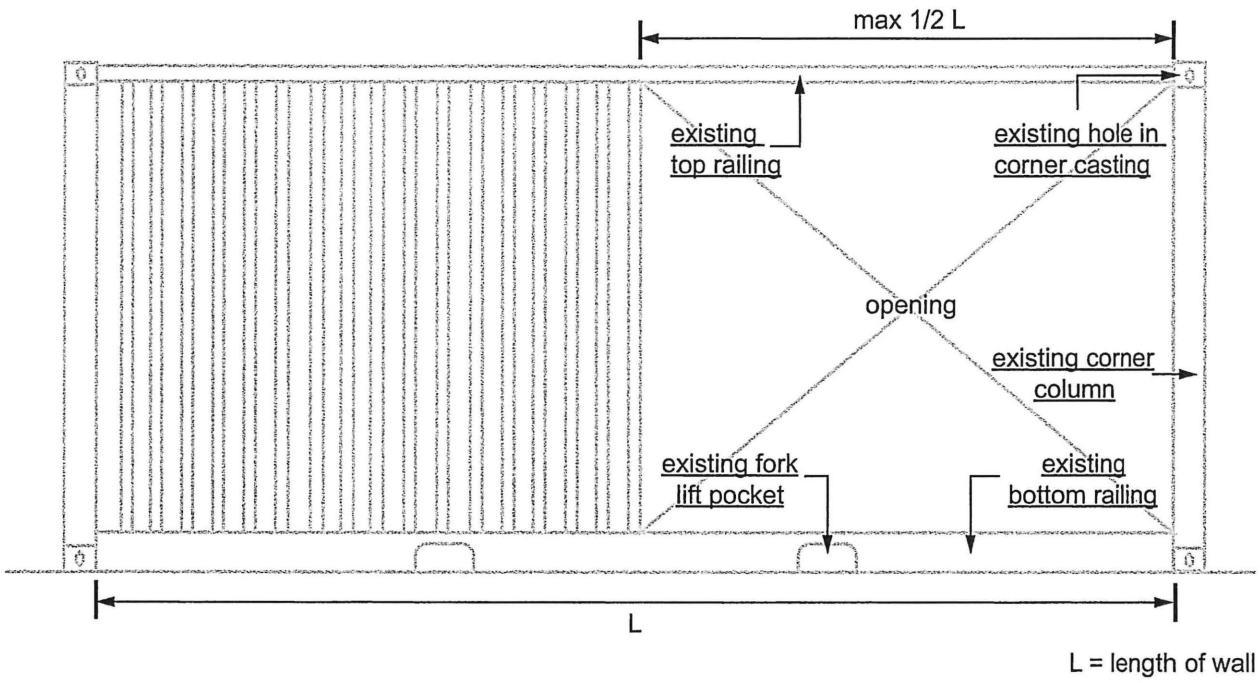
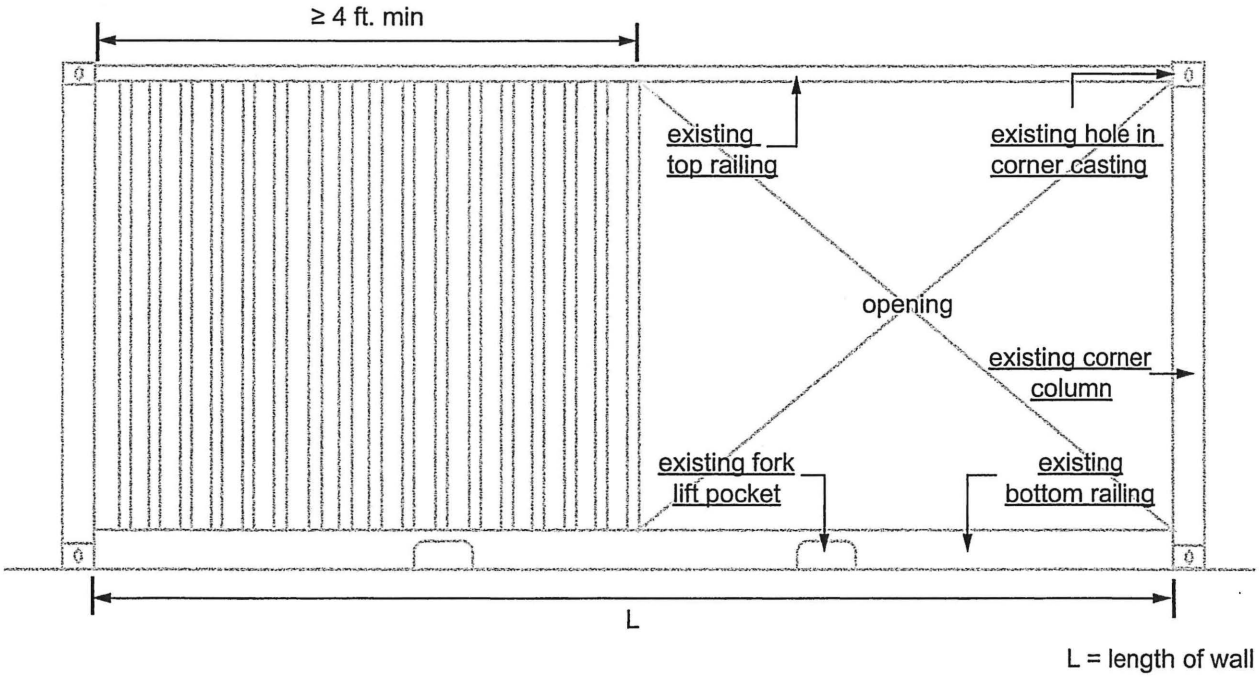


FIGURE 3115.8.5.3(1)
BRACING UNIT DISTRIBUTION—MAXIMUM LINEAR LENGTH



For SI: 1 foot = 304.8 mm.

FIGURE 3115.8.5.3(2)
BRACING UNIT DISTRIBUTION—MINIMUM LINEAR LENGTH

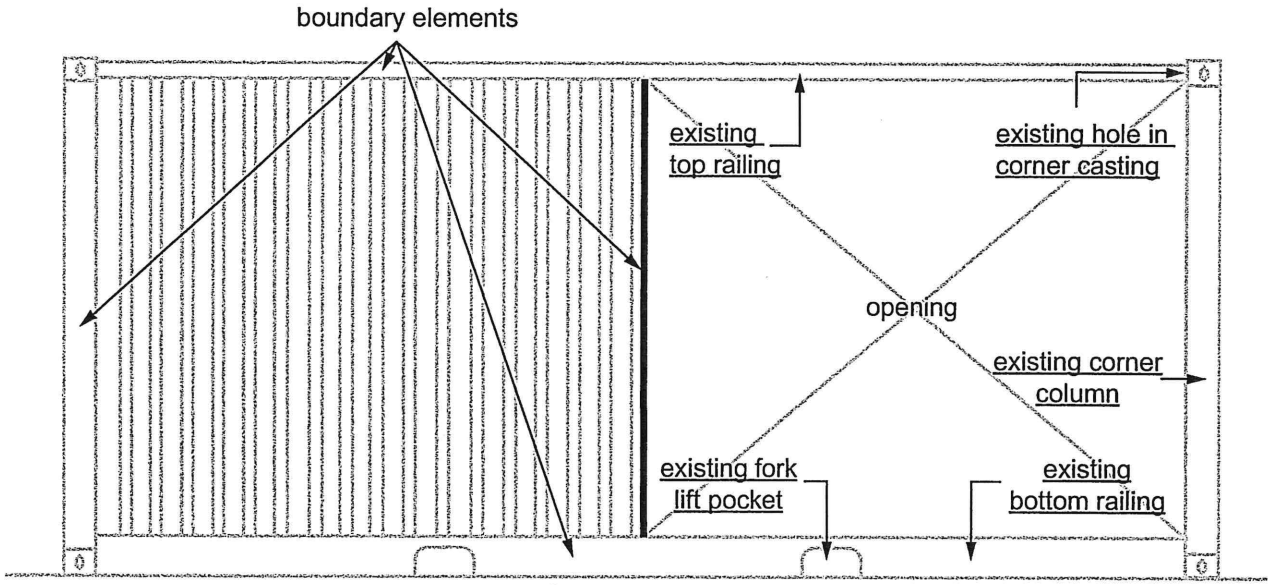
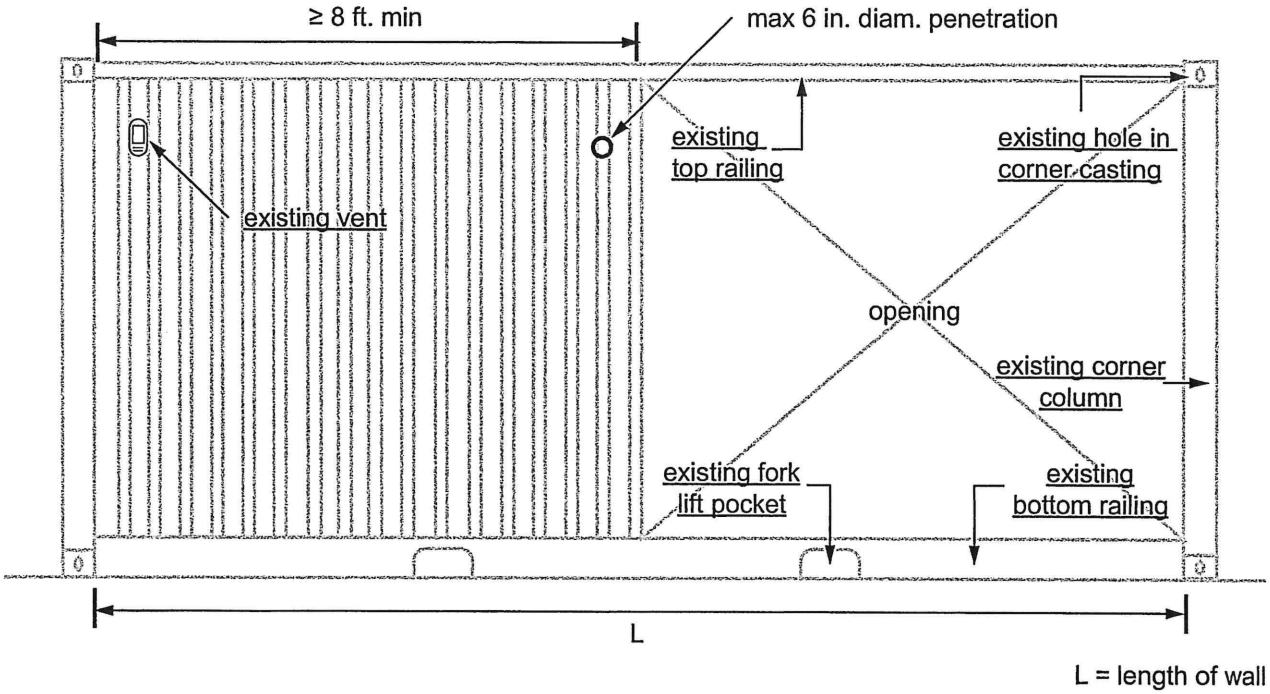


FIGURE 3115.8.5.3(3)
BRACING UNIT DISTRIBUTION—BOUNDARY ELEMENTS



For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

FIGURE 3115.8.5.3(4)
BRACING UNIT DISTRIBUTION—PENETRATION LIMITATIONS