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LEADING THE FUTURE



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CAN 2-108 Temporary Structures and Uses

Richard Tannahill, Deputy Division Chief, HCAI



CAN 2-108 Temporary Structures and Uses



Facilities Development Division
Office of Statewide Health Planning and Development
2020 West El Camino Avenue, Suite 800 • Sacramento, CA 95833
(916) 440-8300
355 South Grand Avenue, 19th Floor • Los Angeles, CA 90071
(213) 897-0166

CODE APPLICATION NOTICE (CAN)
H&S Code §129851

SUBJECT:

Temporary Structures and Uses

CAN: 2-108

Effective: 02/03/2021
Revised: 06/25/2021



CODE SECTIONS

2019 California Building Code (CBC)

SECTION 108. TEMPORARY STRUCTURES AND USES (Also refer to Section 107 of the CEBC)

108.1 General. The *building official* is authorized to issue a *permit* for temporary structures and temporary uses. Such permits shall be limited as to time of service but shall not be permitted for more than 180 days. The building official is authorized to grant extensions for demonstrated cause.

108.2 Conformance. Temporary structures and uses shall comply with the requirements in Section 3103.

108.3 Temporary power. The building official is authorized to give permission to temporarily supply and use power in part of an electric installation before such installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in NFPA 70 [CEC].

108.4 Termination of approval. The building official is authorized to terminate such permit for a temporary structure or use and to order the temporary structure or use to be discontinued.

SECTION 202 DEFINITIONS

INTERIM EQUIPMENT means temporary equipment that will be in use for the duration of the construction project that it is related to.

SECTION 111. CERTIFICATE OF OCCUPANCY (Also refer to Section 110 of the CEBC)

111.3. Temporary occupancy. The building official is authorized to issue a temporary certificate of occupancy before the completion of the entire work covered by the permit, provided that such portions shall be occupied safely. The building official shall set a time period during which the temporary certificate of occupancy is valid.



Objectives

- When do you need a permit for temporary work, for emergency work, and for interim construction related to a larger project?
- What support, anchorage, and special seismic certifications apply to each case?
- How long can work remain as temporary?



Know the Difference

- Temporary work
- Interim work
- Emergency work
- COVID work



On Who's Authority?

SECTION 108. TEMPORARY STRUCTURES AND USES (Also refer to Section 107 of the CEBC)

108.1 General. The *building official* is authorized to issue a *permit* for temporary structures and temporary uses. Such permits shall be limited as to time of service but shall not be permitted for more than 180 days. The building official is authorized to grant extensions for demonstrated cause.

108.2 Conformance. Temporary structures and uses shall comply with the requirements in Section 3103.



CBC 3130

TEMPORARY STRUCTURES

3103.1 General. The provisions of Sections 3103.1 through 3103.4 shall apply to structures erected for a period of less than 180 days. Tents, umbrella structures and other membrane structures erected for a period of less than 180 days shall comply with the *California Fire Code*. Those erected for a longer period of time shall comply with applicable sections of this code.

3103.1.1 Conformance. Temporary structures and uses shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this code as necessary to ensure public health, safety and general welfare.

3103.1.2 Permit required. Temporary structures that cover an area greater than 120 square feet, including connecting areas or spaces with a common means of egress or entrance that are used or intended to be used for the gathering together of 10 or more persons, shall not be erected, operated or maintained for any purpose without obtaining a permit from the building official.

3103.2 Construction documents. A permit application and construction documents shall be submitted for each installation of a temporary structure. The construction documents shall include a site plan indicating the location of the temporary structure and information delineating the means of egress and the occupant load.

3103.3 Location. Temporary structures shall be located in accordance with the requirements of Table 602 based on the fire-resistance rating of the exterior walls for the proposed type of construction.

3103.4 Means of egress. Temporary structures shall conform to the means of egress requirements of Chapter 10 and shall have an exit access travel distance of 100 feet or less.



Temporary Power

108.3 Temporary power. The building official is authorized to give permission to temporarily supply and use power in part of an electric installation before such installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in NFPA 70 [CEC].



Termination of Approval

108.4 Termination of approval. The building official is authorized to terminate such permit for a temporary structure or use and to order the temporary structure or use to be discontinued.



Interim Equipment

Section 202

INTERIM EQUIPMENT means equipment that will be in use for the duration of the need for the equipment, not to exceed duration of the construction project that it is related to.



Certificate of Occupancy

111.3. Temporary occupancy. The building official is authorized to issue a temporary certificate of occupancy before the completion of the entire work covered by the permit, provided that such portions shall be occupied safely. The building official shall set a time period during which the temporary certificate of occupancy is valid.



Temporary and Interim

SECTION 1617A.1.18 5.

5. Temporary Equipment: Equipment for uses greater than 30 days but less than or equal to 180 days and where this section requires supports and attachments, the following shall apply:

- a. Seismic design for supports and attachments for temporary equipment shall meet the requirements of Chapter 13; however, the **calculated F_p may be reduced by 50 percent**. It is acceptable to use ballasts for seismic bracing supports and attachments and to limit the design criteria to overturning unless directly or indirectly supported by the building structure.
- b. Wind design speeds may be reduced as prescribed in ASCE 37-14 or other standard approved by HCAI.
- c. Temporary piping, conductors and ductwork shall be supported. Seismic design for supports and attachments of temporary piping, conductors and ductwork is not required.

6. Interim Equipment: Equipment for uses greater than 30 days but less than the duration of construction and where this section requires supports and attachments, the following shall apply:

- a. Seismic design for supports and attachments for interim equipment shall meet the requirements of Chapter 13; however, the **calculated F_p may be reduced by 50 percent**. It is acceptable to use ballasts for seismic or wind bracing supports and attachments and to limit the design criteria to overturning unless directly or indirectly supported by the building structure.
- b. Wind design speeds may be reduced as prescribed in ASCE 37-14 or other standard approved by HCAI.
- c. Piping, conductors and ductwork shall be supported. Seismic design for supports and attachments of piping, conductors and ductwork is not required.



Plumbing

Chapter 12 Fuel Gas Piping

Section 1207.0 Temporary Use of Gas.

1207.1 General. Where temporary use of gas is desired, and the Authority Having Jurisdiction deems the use necessary, a permit shall be permitted to be issued for such use for a period not to exceed that designated by the Authority Having Jurisdiction, provided that such gas-piping system otherwise is in accordance with the requirements of this code regarding material, sizing, and safety.

Chapter 13 Health Care Facilities and Medical Gas and Vacuum Systems

1318.0 Testing and Inspection.

1318.1 Where Required. Inspection and testing shall be performed on components, or portions thereof, of new piped gas systems, additions, renovations, temporary installations, or repaired systems in accordance with Section 1318.2 through 1318.16 and certified in accordance with Section 1319.0. [NFPA 99:5.1.12.1.1].



Fire

Section 604 Electrical Equipment, Wiring and Hazards.

604.9 Temporary Wiring. Temporary wiring for electrical power and lighting installations is allowed for a period not to exceed 90 days. Temporary wiring methods shall meet the applicable provisions of the *California Electrical Code*.

Exception: Temporary wiring for electrical power and lighting installations is allowed during periods of construction, remodeling, repair, and demolition of buildings, structures, equipment or similar activities.

604.9.1 Attachment to structures. Temporary wiring attached to a structure shall be attached in an *approved* manner.

CBC 3310.2 Maintenance of means of egress. Means of egress and required accessible means of egress shall be maintained at all times during construction, demolition, remodeling or alterations, and additions to any building.

Exception: Existing means of egress need not be maintained where approved temporary means of egress systems and facilities are provided.



Temporary and Interim

The term “temporary” will be used in the remainder of this section to mean either temporary or interim unless otherwise noted.



What's this all mean?

Permits for temporary or interim use may be:

- included with permits for permanent construction of the work
- may be separate from, and in addition to, the primary permit
- may be added through an Amended Construction Document (ACD)

and shall be granted solely for the period needed during construction or for the purpose for which it was granted.

Temporary construction shall satisfy the requirements of this Code Application Notice (CAN) and CAN 2-102.6 (Remodel).



Meeting the Requirements

- All code requirements for permanent equipment must be met as specifically noted in examples below.
- Temporary air handlers must meet the code requirements for filter efficiency and capacity (ability to maintain proper air balance and air flow).
- Outdoor air intake must be located the required distance from exhaust outlets, plumbing vents, etc. as required by the CMC.
- A temporary generator and temporary Automatic Transfer Switch for the emergency power supply must be sized to provide adequate capacity to meet the demand for the operation of all functions and equipment to be served by each branch, be fully automatic and be identified for emergency use.
- Temporary power installations shall meet the requirements of Article 590 of the CEC.
- Temporary use of fuel gas may be issued per CMC section 1307 or CPC section 1207.
- The temporary use of gas is under the condition the piping system conforms to the requirements of the code regarding material, sizing, and safety.



Application for Temporary Use

Applications for use of temporary systems, utilities and/or equipment shall be made to the Office in advance of the anticipated use, allowing adequate time for review.

Applications shall include:

- plans clearly delineating the location of the temporary equipment
- routing and sizing of utility lines to power and/or fuel the equipment and identification of the points of connection
- routing and sizing of conduit, cabling, piping, and/or ducting between the temporary equipment and the existing distribution system
- locations, sizes, and construction of any barriers, fencing and/or other protective measures for the equipment and/or piping, conductors, and duct work showing adequate clearances when appropriate; and detailing of any temporary anchorage and bracing when required.

Applications shall also include certification from a structural engineer and supporting calculations when required.

Applications shall also include a Testing, Inspection and Observation Program (TIO) indicating related structural, mechanical, plumbing, and/or electrical testing, balancing, inspections or observations that are required.

Duration of use of temporary systems shall be noted on the plans.



Temporary Occupancies and Uses

Temporary occupancies and uses must be shown on the plans for a related project or in a report issued by HCAI.

If there is no related project, plans must be submitted for review and approval that clearly show:

- the specific area of temporary occupancy or use
- the purpose of the temporary occupancy or use
- the time duration for the temporary occupancy or use
- any required construction for the temporary occupancy or use.

This must be part of a building permit prior to any temporary occupancy or use.



Temporary Tents or Structures

Temporary tents and structures shall comply with CBC Section 3103. In addition to CDPH, three entities are required to approve temporary tents (also known as surge tents) or temporary structures for patient care:

- The State Fire Marshal provides statewide rules for prevention of fire in connection with the use of tents, awnings or other fabric enclosures. Included in these standards is the requirement that all tents be made of material approved by the State Fire Marshal.
- Local fire departments have responsibility to inspect the location and configuration of tents or other temporary structures.
- HCAI has responsibility to verify that the hospital building is protected from adjacent hazards and exposures, including tents or other temporary structures.

Therefore, HCAI will need to review drawings, including a site plan showing the size and location of the temporary tent or structure and utility hookups that originate in or pass through any hospital buildings, if applicable.



Interim Structures

Structures erected to support healthcare functions such as exit stairs or support structures for utilities and equipment that are required during construction can be designed for a lower seismic force appropriate for the duration they are kept in service but not less than 50% of the seismic force for permanent structures.

Interim structures are permitted to use Exception 1 of Section 1617A.1.4 of the California Building Code.

Interim structures shall be removed at the end of the construction project they were erected to support before the project is granted a construction final or certificate of occupancy.



Temporary Equipment – The Table

Temporary Equipment	
Temporary Equipment	Temporary use equipment may be mobile (truck mounted) or set on the ground or roof.
Seismic Design	<p>Seismic design for supports, attachments and special seismic certification are not required for installations less than 24 hours.</p> <p>If 24 hours or longer, temporary equipment shall be anchored and braced in accordance with CBC Section 1617A.1.18, however, the calculated F_p determined with ASCE 7 may be reduced by 50%.</p> <p>Special Seismic Certification of temporary equipment is not required per CBC Section 1705A. 13.3.1 Exc. 12.</p>
Placement on existing structure	Prior to placing any temporary equipment on the roof, floor, or other structure, the adequacy of the structure to support the operating weight of the unit shall be confirmed and substantiated by a licensed structural engineer.
Equipment service access and clearances	Clearance and access around the



Temporary Equipment – The Table

- Temporary use equipment may be mobile (truck mounted) or set on the ground or roof.
- Seismic Design
 - Seismic design for supports, attachments and special seismic certification are not required for installations less than ~~24 hours~~ 30 days
 - If 30 days or greater, temporary equipment shall be anchored and braced in accordance with CBC Section 1617A.1.18, however, the calculated F_p determined with ASCE 7 may be reduced by 50%
 - Special Seismic Certification of temporary equipment is not required
- Prior to placing any temporary equipment on the roof, floor, or other structure, the adequacy of the structure to support the operating weight of the unit shall be confirmed and substantiated by a licensed structural engineer.



Temporary Equipment – The Table

- Clearance and access around the equipment shall comply with code including internal access to the equipment when required and provision of a roof guard rail if the access/service area is located within 10 feet of a roof edge.
- Where applicable, automatic shutoff of air handling units for smoke control shall be provided, with connection to the fire alarm system if temporary use is for longer than 30 days.
- Outdoor air intake for temporary air handling units must maintain required clearances from exhaust outlets, plumbing vents, etc. as required by the CMC.
- Temporary chillers located indoors shall comply with all requirements of CMC Chapter 11. If located outdoors, the pressure relief shall be located a minimum 10 feet from windows or outside air intake locations.
- Flexible ductwork is permitted between the temporary unit and the hard duct system – no length restriction.



Temporary Equipment – The Table

- Flexible piping rated for the pressure and media is permitted between the temporary unit and the rigid piping system.
- Seismic bracing of temporary piping, conductors and ductwork - temporary piping, conductors and ductwork shall be secured/supported.
- Protective barriers shall be provided for pipes, ducts and conductors associated with temporary equipment to protect them from physical damage. If temporary utility/service lines are subject to vehicular traffic they shall be covered with traffic-rated plates or provided with other suitable protection from damage. Temporary fuel gas service shall be protected against damage per CPC Section 1207.0.
- Temporary electrical equipment and cables shall be protected from physical damage and guarded with suitable fencing, barriers, or other effective means to limit access only to authorized and qualified personnel per CEC Article 590.



Emergency Work

- Emergency work may be necessary due to equipment failure, natural disaster or other occurrences that require immediate repair or replacement to ensure jobsite or building occupant health or safety.
- If buildings, systems, components, or equipment are repaired or replaced under emergency conditions, the work must be approved and permitted as required by CAC, Chapter 7, Article 20.
- Temporary equipment and systems may be required to protect occupant safety and maintain services during the repairs.



Questions?

RegsUnit@hcai.ca.gov