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CODE APPLICATION NOTICE

CAN: 2-1224.4.4.4.2

Health and Safety Code §129851

SUBJECT

Self-contained Medication Dispensing Units

Effective: 10/31/2024

CODE SECTIONS

Title 24, California Code of Regulations, Including the 2022 Supplement effective July 1, 2024

2022 California Building Code, Part 2
Chapter 4 SPECIAL DETAILED REQUIREMENTS BASED ON OCCUPANCY AND USE
Section 407.2.2 Nurse stations.

Chapter 9 FIRE PROTECTION AND LIFE SAFETY SYSTEMS
Section 903 AUTOMATIC SPRINKLER SYSTEMS
Section 903.2.6.1 Group I-2.
Section 907.2.6.2.2 Automatic fire detection.

Chapter 12 INTERIOR ENVIRONMENT
Section 1224.4.4.4 Medication station.
Section 1224.4.4.4.2 Self-contained medication dispensing unit

2022 California Electrical Code, Part 3
Chapter 5 SPECIAL OCCUPANCIES, Article 517
Section 517.34 Critical Branch

2022 California Mechanical Code, Part 4
Chapter 11 REFRIGERATION
Section 1103.3 Higher Flammability Refrigerants.

2022 American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) 15

Title 19, California Code of Regulations
Section 3.11 Exits, Aisles, Ramps, Corridors and Passageways

Appendix – 2022 California Building Standards Code, Title 24, California Code of Regulations, code citation(s) related to this Code Application Notice (CAN).

Acronyms and Definitions assist the user in recognizing and identifying various acronyms and terms generally used in this CAN. Please refer to the "Master Glossary of Acronyms and Definitions – Acronyms and Definitions Used in OSHPD Published Documents" which is posted on the HCAI website at https://hcai.ca.gov/document/master-glossary-of-acronyms-and-definitions/. Other

definitions may also be found in the California Building Standards Code, Title 24, California Code of Regulations.

PURPOSE

Self-contained Medication Dispensing Units are used in hospitals, skilled nursing facilities, intermediate care facilities, and acute psychiatric hospitals. The purpose of this Code Application Notice (CAN) is to clarify the appropriate code requirements that apply to the location, quantity, and size of self-contained Medication Dispensing Units (MDU).

BACKGROUND

The requirements for self-contained Medication Dispensing Units (MDU) depend on the location and type of MDU being installed. There are several types of self-contained dispensing units and not all dispense medication. This CAN specifically addresses MDUs that dispense medication. Some MDUs are not refrigerated, and some are, which adds to the complexity of installing them in a corridor near or in a nurse station.

California Building Code Section 1224.4.4.4 Medication station indicates a MDU shall be located in a medication preparation room, nurse station, clean utility room or in an area where access to the MDU unit is under the monitoring and control of nursing staff. Section 407.2.2 Nurse stations, permits the nurse station to be open to the corridor as specified, and references Title 19, Section 3.11(d). This Section restricts combustible material or equipment in or exposed to any exit, except when specifically approved by the enforcing agency. CAN 2-407.2.2 Nurse Stations, provides clarification and coordination of the fire and life safety requirements for Group I-2 care providers, supervisory staff, nurse stations, charting areas, administrative areas, communications stations, and related clerical areas where such areas are open to the corridor. CAN 2-407.2.2 permits a maximum of two (2) under-counter refrigerators, or one (1) upright refrigerator limited to patient medication or patient storage. The CAN also permits mobile or fixed MDU classified as unit dose machines to be located in the nurse station.

Title 24 also contains electrical and seismic anchorage requirements that are addressed below in the interpretation section.

The California Mechanical Code, Section 1103 contains the refrigerant classification and the probability of leakage safety groups. Section 1103.3 provides an exclusion that allows the use of flammable refrigerants. Exception 3 to this section allows listed self-contained systems that contain not more than 0.331lbs (150 grams) of flammable refrigerant to be used. Self-contained unit systems are listed under Underwriters Laboratory standards for safety for units with less than 150 grams.

All these factors should be considered when a MDU is newly installed or replaced.

INTERPRETATION

LOCATION, QUANTITY, SIZE:

Self-contained Medication Dispensing Units may be located in a secured Medication Preparation Room if available. They may also be located in the nurse station, in a clean utility room, or in an area

where access to the self-contained medication dispensing unit is under monitoring and control of nursing staff.

A maximum of two (2) MDUs may be located outside the nurse station in the corridor, but they shall be recessed in an alcove out of the flow of traffic and must not obstruct the required corridor width. Only one (1) of the two (2) MDUs in the corridor alcove may be refrigerated. If a refrigerated MDU is in the corridor alcove, it shall be in lieu of the drug refrigerator allowed in nurse station per CAN 2-407.2.2. The MDU shall be no larger than 24 inches wide by 27 inches deep and may only be half-height (55 inches maximum in height) (dimensions are approximate and may vary by a few inches). These requirements are per nursing unit.

An MDU larger than specified above are only permitted in secured rooms and are allowed in operating rooms and procedure rooms as they are not accessible to the public and under monitoring and control of nursing staff. MDUs are not allowed to be located in patient rooms.

MDUs are considered equipment and are not required to meet the accessibility requirements in the California Building Code Chapter 11B Accessibility. MDUs shall not encroach or obstruct the accessible path of travel or egress.

Dispensing units that supply items other than medication, such as scrubs (gowning), personal protective equipment, or other supplies are prohibited in corridors.

SEISMIC ANCHORAGE:

For anchorage and bracing see PIN 68 - Support and Attachment Requirements for Fixed, Interim, Mobile, Movable, Other and Temporary Equipment.

ELECTRICAL:

Power for new MDUs shall be fed from the critical branch. A load summary will need to be provided to verify capacity for added loads (See PIN 38 for details). All new essential electrical system overcurrent protective devices (OCPD) will need to coordinate with upstream OCPDs. See PIN 70 Electrical Coordination for additional clarification.

MECHANICAL:

The refrigerant charge for a refrigerated MDU must comply with the California Mechanical Code (CMC) Chapter 11. Refrigerant systems must also comply with American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) 15, 2022 edition as indicated in CMC Section 1102.1. A refrigerated MDU may contain flammable refrigerants. MDUs that are listed self-contained systems will need to be evaluated for maximum refrigerant quantities permitted by code for the space in which is located. Listed self-contained systems containing not more than 150 grams of a Group A3 refrigerant are permitted in all occupancies per CMC Section 1103.3, Exception 3. ASHRAE 15-2022 provides further restriction on the refrigerant charge for systems located in corridors and lobbies. Flammable refrigerants are not permitted in most refrigerant systems; however, a code provision is provided for self-contained unit systems. A self-contained system is defined as a

complete, factory-assembled and factory tested system. Refrigerated MDUs listed as a self-contained system located in a corridor alcove will need to comply with the refrigerant limitation found in Section 7.5.1.2 of ASHRAE 15 and must also fall below the maximum refrigeration concentration limit (RCL) permitted by CMC Section 1104.2 and reduced by 50% for institutional occupancies per CMC Section 1104.3. The system refrigerant charge of a unit system is limited to 10.6% of the lower flammability limit (LFL) for the refrigerant as provided in Table 4-1 of ASHRAE 34. The system must also fall under 50% of the RCL value per 1000 cubic feet of space. Small rooms may not have sufficient room volume to meet the refrigeration concentration limit.

Fire and Life Safety

Nurse stations, and alcoves containing MDUs, shall be protected with an automatic sprinkler system in accordance with CBC 903.2.6.

A minimum of one (1) smoke detector interconnected to the facility fire alarm system shall be installed in a central location at nurse stations and in alcoves containing MDUs in accordance with CBC Section 907.2.6.2.2 item 2.

Original signed	10/31/2024
Chris Tokas, Deputy Director	Date

APPENDIX

2022 California Building Standards Code, Title 24, California Code of Regulations

A viewable copy can be found on the California Building Standards Commission website (http://www.dgs.ca.gov/en/BSC/Codes)

2022 California Building Code, Part 2

Chapter 4 SPECIAL DETAILED REQUIREMENTS BASED ON OCCUPANCY AND USE
Section 407.2.2 Nurse stations.

407.2.2 *Nurse* stations. Space for care providers', supervisory staff, doctors' and nurses' charting, communications and related clerical areas shall be permitted to be open to, *or located within* the corridor, *provided the required construction along the perimeter of the corridor is maintained. Construction of nurse stations or portions of nurse stations, within the envelope of the corridor is not required to be fire-resistive rated. Nurse stations in new and existing facilities see the California Code of Regulations, Title 19, Division 1, Chapter 1, Subchapter 1, Article 3, Section 3.11(d) for storage and equipment requirements.*

In detention or secure mental health facilities, the provisions above applies to enclosed nurse stations within the corridor.

Chapter 9 FIRE PROTECTION AND LIFE SAFETY SYSTEMS
Section 903.2.6.1 Group I-2.
Section 907.2.6.2.2 Automatic fire detection.

903.2.6.1 Group I-2. *In an existing, unsprinklered Group I-2, nurse station open to fire-resistive exit access corridors shall be protected by an automatic sprinkler system located directly above the nurse station. It shall be permitted to connect the automatic sprinkler system to the domestic water service.*

907.2.6.2.2 Automatic fire detection. *Smoke detectors shall be provided in accordance with this section.*

…

2. Group I-2 nurse stations. A minimum of one (1) smoke detector shall be installed at the nurse station and centrally located.

Chapter 12 INTERIOR ENVIRONMENT
Section 1224.4.4.4 Medication station.

SECTION 1224.4 GENERAL CONSTRUCTION.

SECTION 1224.4.4.4 Medication station.

1224.4.4.4 Medication station. Provision shall be made for distribution of medications. This shall be done from a medication preparation room or from a self-contained dispensing unit.

1224.4.4.4.1 Medication preparation room. If provided, this room shall be lockable and be directly accessible from the nursing station. When a medicine preparation room is to be used

to store one or more self-contained medicine dispensing units, the room shall be designed with adequate space to prepare medicines with the self-contained medicine dispensing unit(s) present. Medicine preparation rooms shall include:

1. Work counter.
2. Handwashing station.
3. Refrigerator.
4. Locked storage for controlled drugs.

1224.4.4.4.2 Self-contained medication dispensing unit. If provided, a self-contained medicine dispensing unit shall be located at the nurses' station, in the clean utility room, or in an area where access to the self-contained medication dispensing unit is under the monitoring and control of nursing staff. Self-contained medication dispensing units shall be provided with essential power and lighting.

2022 California Electrical Code, Part 3
Chapter 5 SPECIAL OCCUPANCIES, Article 517
Section 517.34 Critical Branch

(A) Task Illumination, Fixed Equipment, and Selected Receptacles. The critical branch shall supply power for task illumination, fixed equipment, select receptacles, and select power circuits serving the following spaces and functions related to patient care:

…

(11) [OSHPD 1, 2, 3, 4 & 5] The following equipment:

a. Electric clocks required by California Building Code, where direct wired.

b. Sensor-operated fixtures required by California Plumbing Code, where direct wired.

c. Alarm systems for monitoring negative pressure isolation rooms and positive pressure isolation rooms.

d. Medication dispensing units.

e. Medication refrigerators and freezers.

2022 California Mechanical Code, Part 4
Chapter 11 REFRIGERATION
Section 1103.3 Higher Flammability Refrigerants.
1103.3 Higher Flammability Refrigerants. Group A3 and B3 refrigerants shall not be used except where approved by the Authority Having Jurisdiction.

Exceptions:

(1) Laboratories with more than 100 square feet (9.29 m2) of space per person.

(2) Industrial occupancies.

(3) Listed self-contained systems containing not more than 0.331 pounds (0.150 kg) of Group A3 refrigerant, provided that the equipment is installed in accordance with the listing and the manufacturer's installation instructions. [ASHRAE 15:7.5.3]

Public Safey, Title 19, California Code of Regulations
Division 1, Chapter 1, Subchapter 1, Section 3.11. Exits, Aisles, Ramps, Corridors and Passageways.

(a) No person shall install, place or permit the installation or placement of any bed, chair, equipment, concession, turnstile, ticket office or anything whatsoever, in any manner which would block or obstruct the required width of any exit.

(b) No person shall install, place or permit the installation or placement of any combustible material or equipment in or exposed to any exit.

Exceptions:

(1) Furniture or equipment constructed of wood or other material of similar combustibility may be permitted in an exit or exposed to an exit when approved by the enforcing agency.

(2) When approved by the enforcing agency, combustible materials may be permitted in exit foyers and lobbies.

(c) No person shall install, place or permit the installation or placement of any storage material of any kind in any exit regardless of the required width of such exit.

Exception: Personal material located in metal lockers in Groups B and E Occupancies as defined in California Code of Regulations, Title 24, Part 2.

(d) Aisles shall not be occupied by any person for whom seating is not available.