SUBJECT
Weather Protection for Gypsum Wallboard

CODE SECTIONS

Sections 2508.2, 2508.2.1, 2502, 1403.2, 1405.2 and 1503.1
2019 California Building Code (CBC)

2019 California Building Code

SECTION 2508 GYPSUM CONSTRUCTION

2508.2 Limitations. Gypsum wallboard or gypsum plaster shall not be used in any exterior surface where such gypsum construction will be exposed directly to the weather. Gypsum wallboard shall not be used where there will be direct exposure to water or continuous high humidity conditions. Gypsum sheathing shall be installed on exterior surfaces in accordance with ASTM C 1280.

2508.2.1 Weather protection. Gypsum wallboard, gypsum lath or gypsum plaster shall not be installed until weather protection for the installation is provided.

SECTION 2 DEFINITIONS

WEATHER-EXPOSED SURFACES. Surfaces of walls, ceilings, floors, roofs, soffits and similar surfaces exposed to the weather except the following:

1. Ceilings and roof soffits enclosed by walls, fascia, bulkheads or beams that extend a minimum of 12 inches (305 mm) below such ceiling or roof soffits.

2. Walls or portions of walls beneath an unenclosed roof area, where located a horizontal distance from an open exterior opening equal to at least twice the height of the opening.

3. Ceiling and roof soffits located a minimum horizontal distance of 10 feet (3048 mm) from the outer edges of the ceiling or roof soffits.

OTHER RELATED CODE SECTIONS

SECTION 1402 PERFORMANCE REQUIREMENTS

1402.2 Weather protection. Exterior walls shall provide the building with a weather-resistant exterior wall envelope. …
SECTION 1404 INSTALLATION OF WALL COVERINGS

1404.2 Weather protection. Exterior walls shall provide weather protection for the building. …

SECTION 1503 WEATHER PROTECTION

1503.1 General. Roof decks shall be covered with approved roof coverings secured to the building or structure in accordance with the provisions of this chapter. …

PURPOSE

The purpose of this Code Application Notice (CAN) is to clarify the appropriate code requirements that apply to weather protection for the installation of gypsum wallboard.

BACKGROUND

Hospital buildings are often large, complex structures that may take multiple years to construct. It is often desirable to begin early stage gypsum wallboard installation before the building is completely “weathered in”; however, mold and other infection control issues are of even greater concern in hospitals, than in most other building types. Therefore, it is essential that the installation of gypsum wallboard occur only after adequate weather protection for the gypsum wallboard is in place.

INTERPRETATION

Gypsum wallboard shall not be installed where it will have direct exposure to water or continuous humidity conditions. The CBC requires buildings to have weather protection prior to installation of gypsum wallboard. Weather protection is required for all weather exposed surfaces and is generally provided by the exterior walls and roof. Surfaces that are not weather-exposed may have gypsum wallboard installed prior to the exterior walls being constructed. This includes walls or portions of walls, beneath an upper floor deck or roof area, where located a horizontal distance from an exterior opening equal to at least twice the height of the opening. Exterior openings shall include shafts or any other opening in the deck or roof above that are unprotected and could thus expose the gypsum wallboard to direct water. For example, if the building floor-to-floor height is 15 ft., gypsum wallboard may not be installed on walls within 30 ft. of the exterior slab edge or open shafts and other openings in the deck or roof above.

There are three approaches to dealing with the weather protection requirements for gypsum wallboard installation: 1) Provide construction documents clearly describing how weather protection will be accomplished prior to the installation of gypsum wallboard, 2) Submit a deferred submittal in accordance with CAC Section 7-126, including construction documents clearly describing how weather protection will be accomplished prior to the installation of gypsum wallboard plans, or 3) Gypsum wallboard shall not be installed to weather exposed surfaces until
the building is “weathered in,” meaning that the exterior wall covering and roofing are installed, as required by CBC Sections 1405.2 and 1503.

The first two approaches may require the submittal of an Alternate Method of Compliance (AMC). OSHPD will consider AMCs if it can be demonstrated that the alternate will provide equivalent weather protection for the installation of gypsum wallboard to that required by the CBC.

In addition to the CBC requirements, the project specifications and the manufacturer’s installation instructions may also require temperature, humidity control and other conditions be maintained before, during and/or after the installation of gypsum wallboard.

Original signed 04/16/2020
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