UM System AHJ Code Determination

Code Determination Number: 16

Date:   October 4, 2024

Code Edition: 2021 IBC, 2021 IEBC, 2018 NFPA 101

Code Section: IBC: Section 1004, IEBC (various), NFPA 101: Table 7.3.1.2

Subject: **Determining occupant loads for Class Lab spaces.**

**Questions (from various UM Staff and Design Consultants):**

The code is not specific regarding the square footage assumptions for occupants in Class Lab rooms. How many square feet per occupant should be assumed for these rooms?

Can I use a net calculation for these rooms (re. not include fixed casework, equipment, or fixed working surfaces in the overall calculation)?

**Answer (from UM AHJ):**

1. It is understood that the Educational setting occupant loads for Classrooms (20 net square feet), and Shop or Vocational areas (50 net square feet) do not accurately describe the space necessary for each occupant in higher ed Class Labs. Class lab areas tend to be more collaborative in nature, and do not align with the typical space criteria required for classrooms, shops, or labs.

* **The UM AHJ has determined that designers shall use a 30 square feet per person multiplier in Class Labs** (Class Labs are similar in nature to Business Use collaboration rooms/spaces).

* Net space calculations are allowed. The net space calculations for Class Lab spaces shall be shown on the code sheet of the construction drawings for record purposes and future reference.
* Provisions for the number of Class Lab exits doors, egress door widths, door swing, fire alarm horn/strobe requirements, etc., shall be included in the overall space design based on the resulting Class Lab occupancy load calculations.
* Where the resulting Class Lab room occupancy load is 50 or more, Occupancy Load signage shall be posted in the room, as required by code.

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