OCCUPANCY CLASSIFICATIONS AND OCCUPANT LOAD FACTORS FOR COMMUNITY COLLEGES

IR A-26.cc

References: California Code of Regulations (CCR), Title 24
Part 1, California Administrative Code (CAC)
2007 and 2010 CAC, Sections 303, and 304
Part 2, California Building Code (CBC)
2007 CBC, Section 305, 2010 CBC, Section 426
2007 and 2010 CBC, Sections 305, 1004, 1002.

Discipline: Fire and Life Safety

This Interpretation of Regulations (IR) is intended for use by the Division of the State Architect (DSA) staff, and as a resource for design professionals, to promote more uniform statewide criteria for plan review and construction inspection of projects within the jurisdiction of DSA which includes State of California public elementary and secondary schools (grades K-12), community colleges, and state-owned or state-leased essential services buildings. This IR indicates an acceptable method for achieving compliance with applicable codes and regulations, although other methods proposed by design professionals may be considered by DSA.

This IR is reviewed on a regular basis and is subject to revision at any time. Please check the DSA web site for currently effective IRs. Only IRs listed in the document at http://www.dgs.ca.gov/dsa/Resources/IRManual.aspx at the time of plan submittal to DSA are considered applicable.

Purpose: To provide clarification on Occupancy Classifications and Load Factors for community college construction projects under the jurisdiction of the Division of the State Architect (DSA).

Background: The building code analysis for the project must reflect the occupancy classifications assigned and justify the construction types and use of areas shown. All occupancies may be:

- Accessory, per CBC Section 508.3.1
- Incidental Use, per CBC 508.2.5,
- Non separated, per CBC Section 508.3.2
- Separated, per CBC 508.2.4,
- or combination of these.

(See definitions for “net” and “gross” used in occupant load factors per 2010 CBC Chapter 10 Section 1002).

OCCUPANCIES AND LOAD FACTORS: The following occupancy classifications will be assigned to the community colleges uses indicated. For K-12 facilities, see IR A-26.

1. General educational classrooms:

1.1 Classrooms shall be classified as Group “B” occupancy, with an occupant load factor of 20 (net).

1.2 Classrooms with an occupant load of 50 or more shall be classified as an “A-3.”

1.3 Science classrooms where exempt amounts of hazardous materials are used or stored shall be classified as Group “B” occupancy, with an occupant load factor of 50 (net).

1.4 Science labs/control area exceeding the exempt amounts of hazardous materials shall be classified as Group “H” occupancy, with an occupant load factor of 50 (net).
1.5 Science labs where scientific research is being conducted shall be classified as Group “L” occupancy with an occupant load factor of 50 (net).

1.6 Lecture halls (including stepped or ramped areas) with an occupant load of 50 or more shall be classified as an “A-3” occupancy. Use an occupant load factor of 20 (net) in areas without fixed seating. In areas with fixed seating, count the seats and add one occupant for the instructor.

1.7 Cosmetology, Dental, and Nursing Classrooms where exempt amounts of hazardous materials are used or stored per 2010 CBC Tables 307.1(1) & 307.1(2) shall be classified as “B” occupancies with an occupant load factor of 50 (net).

1.8 Culinary Arts classrooms where food is prepared and later distributed for sale, shall be classified as a Group “F-1” occupancy. The occupant load factor shall be 50 (net).

1.9 Shops for Woodworking, Auto, Metal/Welding shall be individually assessed based on the activities within the shops and the amounts of hazardous materials used and stored. The occupant load factor shall be 50 (net).

2. Gymnasiums:

2.1 Gymnasiums, including practice gymnasiaums, or exercise rooms that do not include spectator seating such as bleachers: An occupancy classification of “A-3” shall be assigned. The occupant load factor shall be 50 (gross) where the area is not used for other purposes beyond physical education.

2.2 An indoor Gymnasium with spectator seating shall be classified “A-4”. Where bleachers (telescoping or fixed) are installed, the occupant load shall be determined by the number of bleacher seats available (See CBC 1004.7). In most cases bleachers will be calculated at one person for each 18 inches of seating length. The open area(s) beyond the bleachers shall use an occupant load factor of 7 (net). The combined occupant loads shall be used to determine the minimum number of exits and exit widths and the posting of the maximum occupant load signage.

2.3 Gymnasium combined with a raised platform or stage, the area without fixed seating shall be assigned an occupant load factor of 7 (net). The area would be considered “mixed use”. The most restrictive requirements would apply to the design.

2.4 Raised Platforms and Stages shall use an occupant load factor of 15 (net) per 2010 CBC, Table 1004.1.1.

2.5 Locker Rooms shall be classified as Group “B” occupancy with an occupant load factor of 50 (gross).

3. Weight Rooms, Aerobics Rooms, Dance Rooms and other areas with similar uses: An occupancy classification of “A-3” shall be assigned with occupant load factor of 50 (gross).
4. Theaters and Auditoriums:

4.1 Auditoriums with fixed seating: An occupancy classification of “A-1” shall be assigned where there is fixed seating. The occupant load shall be determined by counting seats or per CBC 1004.7.

4.3 Auditoriums without fixed seating may include occupant classifications of “A-1” depending on the use. An occupant load factor of 7 (net) will be used to determine the occupant load and exiting requirements.

4.4 Stages and Raised platforms shall have an occupant load based upon the occupant load factor of 15 (net) per Table 1004.1.1.

5. Cafeterias:

5.1 Cafeterias shall be classified as “A-2” and shall have the occupant load factor calculated using 2010 CBC 1004.7, or use an occupant load factor of 15 (net) where fixed seating is not provided.

5.2 Kitchen: If the kitchen floor area, including all related spaces such as refrigerator, walk-in freezer, and storage, is less than 10% of the total building floor level and it is not used to sell or distribute cooked food to other campuses, then, regardless of kitchen equipment type [commercial or non-commercial], it will be assessed as an “accessory space” to the major occupancy use of the building floor level. A separation wall is not required. (CBC 508.3.1)

5.3 If the kitchen floor area is greater than 10% of the total building area, and is used to sell or distribute cooked food to other campuses, then, regardless of kitchen equipment type and sprinkler protection, it will be assessed as an “F1” occupancy classification. A separation wall may be required, per CBC Table 508.4. The occupant load factor shall be 200 (gross).

6. Libraries:

6.1 Per CBC, Chapter 3, Section 303.1, Libraries shall be classified as an A-3, when occupant load exceeds 49 persons.

6.2 Stack Areas (Shelves and Tiered Stack rooms) shall use an occupant load factor of 100 (gross) per CBC Table 1004.1.1

6.3 Reading Room areas (computer areas, chair and table areas) shall use an occupant load factor of 50 (net), per CBC Table 1004.1.1

7. Day Care:

7.1 Day care buildings, rooms and/or areas meeting the requirements of CBC Section 305.2 shall be classified as a Group “E” occupancy. The occupant load factor shall be 35 (net).

7.2 Day care facilities where, per CBC Section 305.2 Exception and 308.5, “personal care is given” or “where occupants are not capable of responding to an emergency situation without physical assistance from staff”, shall be classified as Group “I-4.” The occupant load factor shall be 35 (net).
7.3 CBC 308.5.1 Group “I-4” occupancies on a community college campus are not limited to children. People with other debilitating conditions will also be included in the Group “I-4” category. The occupant load factor shall be 35 net).

7.4 In some instances, DSA plan reviewer may question the group “E” occupancy designation, in which case, the architect will be required to obtain a letter from the community college district (Chancellor, or Facilities Director), to provide more information for DSA plan reviewer about occupants.

Information to be provided shall include:

- Age groups
- If custodial or personal care is provided for occupants
- Ability of occupants to evacuate the building without physical assistance

8. Parking

8.1 Open or closed Parking Garages shall be classified as a Group “S-2” occupancy with an occupant load factor of 200 (gross)

8.2 Carports shall be classified as a Group “U” occupancy. Occupant load factor is not applicable.

9. Misc.: The occupant load factor of 5 (net) will be applied to the following areas:

- Line or queuing spaces in front of ticket booths, concession stands, food service windows (inside and outside).
- Lobby area that serves an assembly occupancy that has food or merchandise (or both) for sale.
- Area fronting and around stage or platform.