E-17 Followup

1004.1.1 Cumulative occupant loads. Where the path of egress travel includes intervening rooms, areas or spaces, cumulative occupant loads shall be determined in accordance with this section.

1004.1.1.1 Intervening spaces or accessory areas. Where occupants egress from one or more room, area or space through others, the design occupant load shall be the combined occupant load of interconnected accessory or intervening spaces. Design of egress path capacity shall be based on the cumulative portion of occupant loads of all rooms, areas or spaces to that point along the path of egress travel.

1004.1.1.2 Adjacent levels for mezzanines. That portion of the occupant load of a mezzanine with required egress through a room, area or space on an adjacent level shall be added to the occupant load of that room, area or space.

1004.1.1.3 Adjacent stories. Other than for the egress components designed for convergence in accordance with Section 1005.6, the occupant load from separate stories shall not be added.

1005.3.1 Stairways. The capacity, in inches, of means of egress stairways shall be calculated by multiplying the occupant load served by such stairways by a means of egress capacity factor of 0.3 inch (7.62 mm) per occupant. Where stairways serve more than one story, only the occupant load of each story considered individually shall be used in calculating the required capacity of the stairways serving that story.

1006.2.1 Egress based on occupant load and common path of egress travel distance. Two exits or exit access doorways from any space shall be provided where the design occupant load or the common path of egress travel distance exceeds the values listed in Table 1006.2.1. The portion of the occupant load from adjacent rooms, areas or spaces shall be based on the capacity of the means of egress components providing access to the space under consideration.

Exceptions:

1. The number of exits from foyers, lobbies, vestibules or similar spaces need not be based on cumulative occupant loads for areas discharging through such spaces, but the capacity of the exits from such spaces shall be based on applicable cumulative occupant loads.

4-2. In Group R-2 and R-3 occupancies, one means of egress is permitted within and from individual dwelling units with a maximum occupant load of 20 where the dwelling unit is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 and the common path of egress travel does not exceed 125 feet (38 100 mm).
**2-3.** Care suites in Group I-2 occupancies complying with Section 407.4.

**1006.3 Egress from stories or occupied roofs.** The means of egress system serving any story or occupied roof shall be provided with the number of exits or access to exits based on the aggregate occupant load served in accordance with this section. The path of egress travel to an exit shall not pass through more than one adjacent story. Where stairways serve more than one story, only the occupant load of each story considered individually shall be used in calculating the required number of exits or access to exits serving that story.

**Exception:** Where the only access to required exits from a mezzanine is through an adjacent story, the entire occupant load of such mezzanine shall be added to the occupant load of the adjacent story.

**10/8 meeting notes: Move forward to BCAC but combine with the CTC item dealing with adjacent spaces.**

**Reason:**

Cumulative occupant load provisions were clarified in the 2015 IBC. There were several proposals initially submitted to address these provisions. For the final action hearings, proponents agreed to support one proposal: E15-12. E15 addressed the concerns by modifying Section 1004.1, Cumulative occupant loads.

This proposal is intended to enhance the functionality of these requirements by placing them in context with the applicable means of egress design requirements. For example, Section 1004.1.1.1 states, “Design of egress path capacity shall be based on the cumulative portion of the occupant loads of all rooms, areas or spaces to that point along the path of egress travel.” This proposal places the same requirement at Section 1006.2.1 in the context of using capacity to determine the required number of exits or access to exits.

A new Exception 1 to Section 1006.2.1 has been added. This language was contained in proposal E16-12 and was lost in the consolidation. Nevertheless, it is a logical concern. Literally interpreted, a building with an occupant load of 4,000 and having four required exits with one of those exits having a foyer, lobby, vestibule or similar space would require four exits from such space based on the cumulative occupant load of 1,000. The number of exits from such space would be based on the occupant load of the space; however, the capacity of that exit(s) would be based on the cumulative occupant load served.

Perhaps the most important feature of the 2015 code change was that it clarified that cumulative occupant loads are not considered when calculating the required number of exits or access to exits serving an adjacent story. An exception clarifies that occupant loads from isolated mezzanines will be considered in determining the number of required exits from the adjacent story.
Some seasoned practitioners consult a specific code provision without reviewing the applicable general requirements when researching a given design condition. If for instance, a design professional or plans examiner is verifying the procedure for the determination of the required number of exits or access to exits, he or she will likely consult Section 1006 although many other general provisions potentially apply to the situation, to include Section 1004. This proposal is intended to be user friendly in that it restates important cumulative occupant load provisions in technical context without providing a generic cross-reference.

Approval of this proposal will improve the consistency in the determination and application of fundamental IBC means of egress provisions.