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STEPHEN D. COAN
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Memorandum

To: Heads of Fire Department

From: Stephen D. Coan
State Fire Marshal

Date: November 1, 2012

RE: BBRS Interpretation

The Board of Building Regulations and Standards issued this official interpretation regarding egress requirements involving restaurant or nightclub occupancies and outdoor deck seating arrangements. We are passing this information on to you.

If you have any questions please contact the Code Compliance and Enforcement Unit at 978-567-3375 or in Western MA 413-587-3181.

BBRS

Official Interpretation No. 2012_3

Date: September 11, 2012

Subject: Restaurant or nightclub occupancy issues when outdoor decks are involved.

Background/Discussion:

It is not uncommon to see restaurants and nightclubs take advantage of warm weather and incorporate outdoor decks for bar and dining purposes.

From an egress standpoint, often these decks communicate with the existing restaurant or nightclub building raising concerns regarding whether the posted occupant load of the interior of the building can inadvertently be exceeded, thereby negatively impacting design required means of egress in the building (i.e., a condition where the interior restaurant or nightclub might be at full, approved occupant load but because of unexpected bad weather, people on the deck move back into the interior of the occupied restaurant/nightclub).

Two likely situations would include;

QUESTION 1: What are occupancy/egress requirements for a new construction restaurant or nightclub that at the time of design and construction also includes such exterior deck?

QUESTION 2: What are occupancy/egress requirements for an existing restaurant or nightclub where, later, an exterior deck is added?

It is critical that the applicable requirements the 8th Edition of the MA State Building Code (780 CMR), be understood and properly applied and this Interpretation reviews certain pertinent sections of the 8th Edition of 780 CMR, regulating this matter.

QUESTION 1, DETAIL:

NEW CONSTRUCTION - The 8th Edition of 780 CMR, Base (“commercial”) Volume, Chapter 10, Section 1004, titled “OCCUPANT LOAD” presents methods required for establishing the required design occupant load of a new construction building and/or structure.

Section 1004.1, “Design Occupant Load”, in part states: *“In determining means of egress requirements, the number of occupants for whom means of egress facilities shall be provided shall be determined in accordance with this section. Where occupant from accessory areas egress through a primary space, the calculated occupant load for the primary space shall*

include the total occupant load of the primary space plus the number of occupants egressing through it from the accessory area.”

Section 1004.1.1, “Areas Without Fixed Seating”, in part, states: *“The number of occupants shall be computed at the rate of one occupant per unit of area as prescribed in Table 1004.1.1. For areas without fixed seating, the occupant load shall not be less than that number determined by dividing the floor area under consideration by the occupant load per unit of area factor assigned to the occupancy as set forth in Table 1004.1.1....”*

Section 1004.2, “Increased Occupant Load”, does allow increasing the occupant load to be increased above the limits set forth in Table 1004.1.1 with certain restrictions.

Section 1004.3, “Posting of Occupant Load” requires that every room or space that is an assembly occupancy have the occupant load of the room or space posted (this would include posting of the Assembly Use deck area as well as posting of the interior of the building Assembly Use spaces.

Section 1004.5, “Egress Convergence” requires that where means of egress from floors above and below, converge at an intermediate level, the capacity of the means of egress from the point of convergence shall not be less than the sum of the two floors. 1004.5 + 1004.8 (all new construction).

Finally, and specifically addressing outdoor areas, **Section 1004.8, “Outdoor Areas”** in part, states: *“Yards, patios, courts and similar outdoor areas (for this interpretation, outdoor decks are assumed included in this Code subsection) accessible to and usable by the building occupants shall be provided with means of egress as required by this chapter... Where outdoor areas are to be used by persons in addition to the occupants of the building, and the path of egress travel from outdoor areas passes through the building, means of egress requirements for the building shall be based on the sum of the occupant loads of the building plus the outdoor area (emphasis added).”*

ANSWER 1: On these bases, for a new construction restaurant or nightclub building that will also feature, as part of the new construction, an outdoor deck to be used for bar and dining purposes and where occupants of the deck egress back through the building proper, the means of egress requirements for the building shall be based on the sum of the occupant loads of the building plus the deck.

QUESTION 2, DETAIL:

For an existing restaurant or nightclub, that at a later time has an outdoor deck attached and from which the deck occupants can egress back through the existing building, one starts the Code

analysis by first looking at the MA-amended International Existing Building Code-2009 (MA-amended IEBC-09).

The MA-amended Chapter 1 to the IEBC-09, Section 102.2.2.1, “Existing non Conforming Means of Egress”, essentially impacts/overrides some, and in some cases**, all virgin IEBC Egress requirements regardless of which of the 3 Compliance methodologies are selected (PRESCRIPTIVE METHOD, IEBC-09, Chapter 3, Section 303.6) or (Work Area Method, IEBC-09, Chapters 4 – 12 and applicable running Sections 504.1, 604.1, 705.2, etc., 805, 905, 1011.1 & 1201.2 / Note 1103.3 is unique to Historic Buildings), (PERFORMANCE METHOD, Sections 1301.5.2 and 1301.6.11).

ANSWER 2: As MA-amended IEBC-09, Section 102.2.2.1 sends the Reader to the MA-amended IBC-09**, then it is concluded that the means of egress of existing restaurants and existing nightclubs need to be evaluated and, where necessary modified, to accommodate deck occupants egressing back through the existing building (See MA-amended IEBC-09, Section 102.2.2.1 & default back to the MA-amended IBC-09, Chapter 10, Section 1004.8, “Outdoor Areas” requirements.

** The MA-amended IEBC-09 Existing Building Egress requirements in total, need to be reviewed carefully for each property-specific application but narrow to the specific matter of how to design means of egress in existing restaurants and nightclubs that later add an outdoor deck from which deck occupants can egress back through the existing building, MA-amendment 102.2.2.1 to the IEBC-09 will require the means of egress of the existing building to be evaluated based on the added occupant load of the deck per IBC-09, Chapter 10, Section 1004.8, as is required for new construction.

Note: Although not part of this Official Interpretation subject matter, for Code conformance purposes, a publically occupied outdoor deck and egress to and from same, in addition to being required to conform to applicable portions of 780 CMR, must also conform to all applicable portions of 521 CMR.