

ICC TRI-CHAPTER UNIFORM CODE COMMITTEE (TUCC)



POLICY NUMBER: 2

APPROVAL DATE: April 3, 2008

SUBJECT: R-3 Occupancy – Allowable openings in exterior wall

This guideline is developed by the Tri-chapter Uniform Code Committee and is intended to enhance regional consistency in application and enforcement of the Building Code. Please verify acceptance of this guideline with your local building department prior to its application.

CODE REFERENCE (S):

2007 CBC - Chapter 2 Definitions, Section and Table 704.8, Table 602 and 2006 IRC Table R302.1

ISSUE (S):

The building code has historically permitted detached, single family (R-3) occupancy to have “unprotected openings” in exterior walls located 3 feet or more from the property line. 2007 CBC regulates openings when the exterior wall is less than 5 feet from the property line.

Footnote “c” of Table 704.8 states: “*For occupancies in Group R-3, the maximum percentage of unprotected and protected exterior wall openings shall be 25 percent.*” And footnote “g” states; “*The area of unprotected and protected openings is not limited for occupancies in Group R-3, with a fire separation distance greater than 5 feet.*” The table also refers to CBC Table 602, which is amended in California to permit unrated walls in R-3 occupancies at 5 feet or more (see Table 602, footnote f). There is confusion on how Table 704.8 (footnotes c and g) should be applied with respect to this new requirement and when openings are limited.

GUIDELINE/ INTERPRETATION:

WHAT IS AN OPENING?

Openings are not specifically defined in the 2007 CBC. However, Section 704.8 states; “The maximum area of unprotected or protected openings permitted in an exterior wall in any story shall not exceed the values set forth in Table 704.8.”

The definition of story (2007 CBC, Ch.2) states; “The portion of a building included between the upper surface of a floor and the upper surface of the floor or roof next above. It is measured as the vertical distance from top to top of two successive tiers of beams or finished floor surfaces and, for the topmost story, from the top of the floor finish to the top of the ceiling joists, or where there is not a ceiling, to the top of the roof rafters.”

Therefore, all openings from the first floor level and above should be considered in calculating the maximum allowable openings. Under floor ventilation openings need not be considered in calculating the maximum allowable percentage.

The fact that California amendment allows exterior walls at 5 feet from the property line to be unrated can be interpreted as unprotected openings are allowed when the wall is at 5 feet from the property line. To be consistent, unprotected openings are not limited for occupancies in Group R-3, with a fire separation distance of 5 feet or greater. The percentage of allowable openings is only limited when the exterior wall is less than 5 feet from the property line.

These interpretations are applicable to new construction only and do not apply to existing construction.