

DATE: June 17, 2003

TO: Building Officials, Contractors, Designers

FROM: Thomas R. Joachim
State Building Official

SUBJECT: **R-2/U MIXED OCCUPANCY BUILDINGS**

The IBC contains provisions for construction of R-2 buildings used or classified as dwelling units with attached private garages. The concern relates to the appropriate classification of the building, “separated” or “non separated” use, occupancy separations and allowable areas.

The IBC references a “separated” R-2 occupancy, which may contain numerous, yet minor, Group U uses within the building. The proper occupancy separation would be as stated in IBC Table 302.3.3 which requires an 1-hour occupancy (fire barrier) separation.

The individual dwelling and their garages, in turn, must be separated from each other by an 1-hour fire-resistive tenant separation wall (fire partition) per IBC section 310.3.

For the purposes of determining allowable area in a building containing mixed occupancies, under general provisions of the code, one is normally required to add the cumulative area of each occupancy together to run through the allowable area computations. In this instance however, IBC Section 406.1.1 supercedes the general requirement by providing for specific conditions that are applicable only to group U private garages. IBC Section 406.1.1 implies that group U occupancies can be analyzed

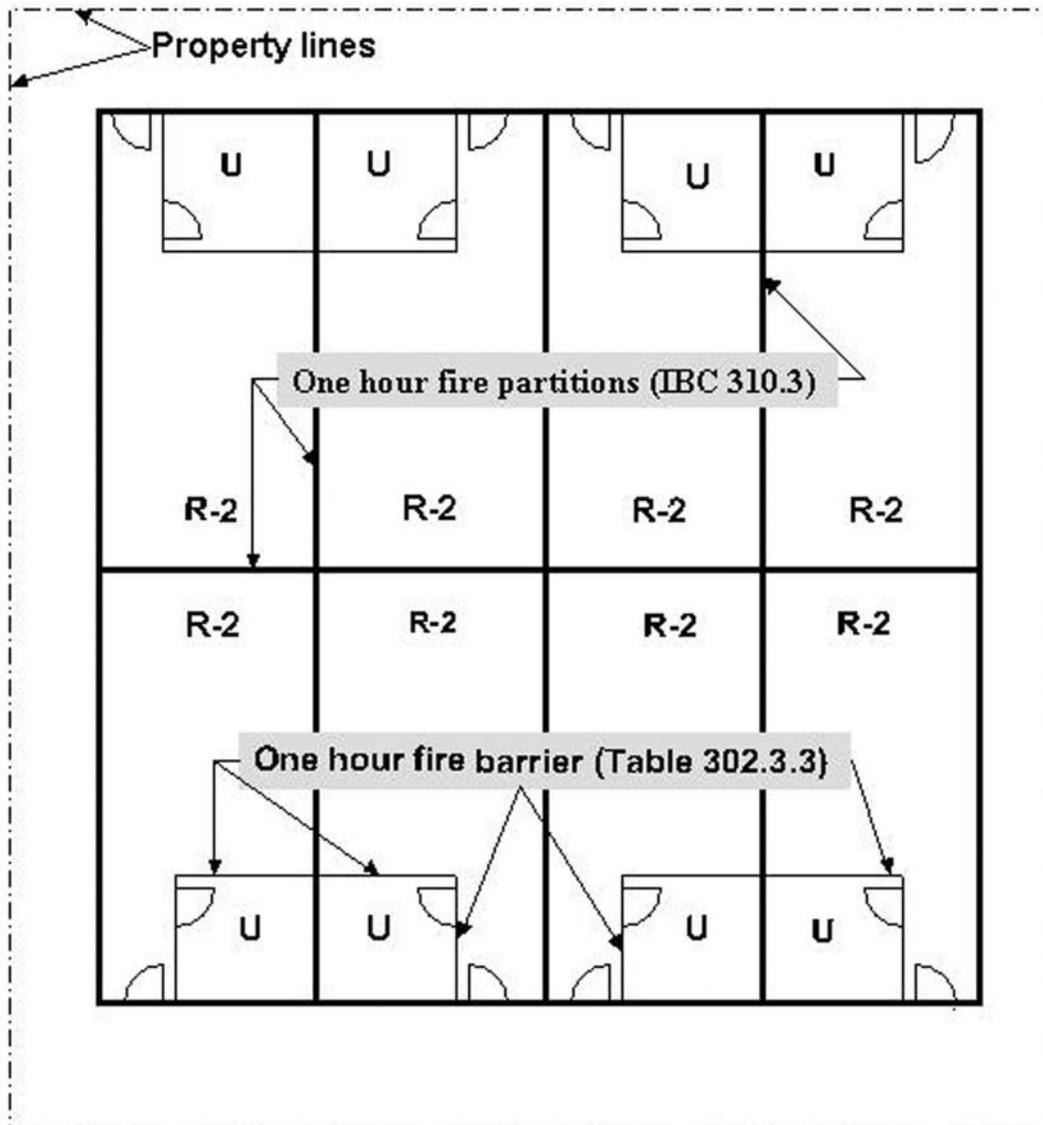
as individual buildings, or as “parts” of larger mixed occupancy buildings. The garages referenced herein seem to meet those provisions. We support this interpretation due in part to the fact that each garage is privately accessed and that the actual size of each garage is limited to a very small area within each dwelling unit. With additional requirements mandating 1-hour dwelling unit separations, which further define the boundary of each dwelling and respective private garage, there is simply a greater degree of safety provided, and as such, recognized. In our opinion, item 1 of IBC Section 406.1.2 should be applied. This section indicates that the primary or major occupancy use group should be used for determination of allowable area. In this case, we are talking about the R-2 occupancy. The R-2 type V-B construction, along with area increases permitted by Chapter 5, would dictate actual/maximum building size. The number and/or area of the individual private garages would have nothing to do with the building’s allowable area in this case.

The question of applying exception 2 (and possibly 3) of section 302.3.3, which allows for a ½” gypsum separation between the garage and the dwelling is unfortunately, inappropriate. This is supported by footnote “g” found in Table 302.3.3. Footnote “g,” in this case, references one back to the exceptions in question. However, footnote “g” is only applicable to S-2, R-3 and R-4 occupancies – not R-2. This also supports our theory that the exceptions found under section 302.3.3 are erroneously placed there and that they are not exceptions to “section” 302.3.3, but language placed there for reference from the footnotes to “Table” 302.3.3.

In summary, for this application, the building should be considered a “separated” use design containing a group R-2 and a group U occupancy. The private garages must be separated from individual dwelling units by a 1-hour fire-barrier (occupancy separation) and each dwelling must be separated from each other by 1-hour fire-partitions at common party walls. The private garages may be located next to each other and be constructed up to 1000 square feet in area (individually), provided they are accessed by only one dwelling unit/tenant and are separated by 1-hour fire-partition separations at common tenant demising wall locations within the building. The basic allowable area of the building (type V-B) is 7000 square feet plus the increases allowed for frontage increases pursuant to IBC section 506.

Please see the attached drawing that should further explain the provision of the IBC relating to the R-2/U issues.

os/tj/R-2/U Mixed Occ Bldgs.



R-2 / U Mixed Occupancy Buildings