Building Code Clarifications - 6. Types of Construction

6.1 (13-60-100) Framing into walls

This is to clarify how floors and roofs are framed into walls. The walls can be constructed of masonry, steel stud or wood stud. There has been confusion about what method is acceptable.

The recessing of floor/roof framing members into walls has always been a common construction practice. Fire cuts of floor framing members are provided to prevent a structural collapse. Floor/roof framing of member roofs, supported by only a metal hanger or a ledger board, is much more of a hazard than recessing a floor into a wall. Ledger boards and hangers have no fire rating.

Therefore, it shall be acceptable to recess a floor or a roof framing member into an interior or exterior wall.

6.2 (13-60-100) Type III-B construction - One-hour floor system

In Type III-B construction, the required one hour fire rating of the beams and the columns can be attained by simply enclosing or boxing the columns and beams with a minimum two layers of 5/8 inches thick Type X gypsum board. Beams that are completely enclosed within a one hour listed floor assembly are acceptable.

When insulation within a one-hour floor system is added for the sound/acoustical purposes or to separate an unheated space, an additional 5/8 inches thick Type X gypsum board shall be added to the listed floor/ceiling assembly. This is because there is not a specific UL assembly indicating a floor with insulation. Therefore, and additional layer of Type X gypsum board is accepted.

6.3 (13-60-010) Mixed construction types

When two or more types of constructions occur in the same building, the entire building shall be classified by the lowest construction type that occurs in the building. Whereas, the Type I, Fire Resistive Construction being the best construction type and Type IV, Combustible Frame Construction being the lowest construction type among the listed construction types in the Section (13-60-010). (For example, if the original construction was III-B and an IV-A addition is constructed as permitted per CBC, the entire building would then be viewed as Type IV-A construction.)
Frame porches that are permitted to be attached to an ordinary construction type building, in accordance with the Section (15-8-320), shall not be considered as constituting mixed construction type.

6.4 (13-60-140) Fire protection for lintels

The bottom flange of the lintel over the exterior wall window opening need not be fire protected regardless of the exterior wall opening size.