

TYPES OF CONSTRUCTION

TYPE I – This concrete and steel structure, called fire resistive when first built at the turn of the century, is supposed to confine a fire by its construction. This type of construction in which the building elements listed in IBC Table 601 are of non-combustible materials, such as concrete and steel. The roof is also of non-combustible material, such as concrete or steel.

TYPE II – This type of building has steel or concrete walls, floors, and structural framework similar to type I construction; however, the roof covering material is combustible. The roof covering of a type II building can be a layer of asphalt waterproofing, with a combustible felt paper covering. Another layer of asphalt may be mopped over the felt paper.

TYPE III – This type of constructed building is also called a brick-and-joist structure by some. It has masonry-bearing walls but the floors, structural framework, and roof are made of wood or other combustible material; for example, a concrete-block building with wood roof and floor trusses. Fire-retardant-treated wood framing complying with IBC Sec. 2303.2 shall be permitted within exterior wall assemblies of a two-hour rating or less.

TYPE IV – These buildings have masonry walls like type III buildings but the interior wood consists of heavy timber. In a heavy-timber building, a wood column cannot be less than 8" thick in any dimension and a wood girder cannot be less than 6" thick. The floor and roof are plank board. One difference between a heavy timber type IV building and type III construction is that a heavy-timber type IV building does not have plaster walls and ceilings covering the interior wood framework. The details of type IV construction shall comply with the provisions of 602.4.1 through 602.4.7. Fire-retardant-treated wood framing complying with IBC Section 2303.2 shall be permitted within exterior wall assemblies with a two-hour rating or less.

TYPE V – Wood-frame construction is the most combustible of the five building types. The interior framing and exterior walls may be wood. A wood-frame building is the only one of the five types of construction that has combustible exterior walls. This is the typical single-family home construction method. These buildings are built with 2 x 4 or 2 x 6 studs and load-bearing walls, wood floor trusses, or wood floor joist and wood roof framing.