



Coffee Break Training - Fire Protection Series

Building Construction: Part 1: Understanding Construction “Types”

No. FP-2009-45 November 10, 2009

Learning Objective: The student shall be able to identify where combustible and noncombustible descriptions are used in the model building codes “types of construction” categories.

The late Frank Brannigan, author of the renowned text *Building Construction for the Fire Service*, is often quoted for his famous saying, “The building is your enemy... know your enemy.”

To help you know the “enemy,” this week’s Coffee Break Training begins a series on building construction features; explaining how our modern building codes classify “types of construction,” how to identify them, and what many building code requirements might mean to code officials and fire suppression forces.



This picture illustrates examples of just a few of the many construction “types” that exist today.

The major model building codes describe construction and establish occupancy life safety, fire protection and fire resistance requirements based on five “types of construction.” The codes use Roman numerals I through V to classify buildings. In general, buildings that have a lower Roman numeral (I and II) are allowed to be larger and taller than those with a higher number (III-IV-V). Once you learn this building code shorthand, you will better understand how the construction codes work.

The following table summarizes just one element of the different construction types. The materials that make up the components of the structural frame, bearing walls or floors or ceilings generally must be noncombustible or may be combustible depending upon the construction type.

Construction Type	Structural Frame	Bearing Walls	Floor/Ceiling Assemblies
I	Noncombustible	Noncombustible	Noncombustible
II	Noncombustible	Noncombustible	Noncombustible
III	Combustible	Combustible	Combustible
IV	Combustible	Combustible	Combustible
V	Combustible	Combustible	Combustible

Upcoming Coffee Break Trainings will explain the different requirements for when the various types of construction must have some level of fire resistance built in or added to the building.

For additional information, refer to *International Building Code*[®], Chapter 6, *NFPA 5000*[™], *Building Construction and Safety Code*[™], Chapter 7, or *NFPA*[™] 220, *Standard on Types of Building Construction*.



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