

CONSTRUCTION TYPES

Frame (ISO Class 1) - A building where the exterior walls, bearing walls, partitions, structural floors, roof and supports are wood or light-gauge metal. This includes buildings where the wood or light-gauge metal has been combined with other materials to form composite components such as wood or metal studs with brick or stone veneer, stucco, or metal siding.

Joisted Masonry (ISO Class 2) - A building that has the exterior walls constructed of masonry materials such as brick, concrete block, concrete, gypsum block, clay tile, stone, or similar materials. The structural floors or roof are wood or light-gauge metal.

Non Combustible (ISO Class 3) - A building that employs a system of pre-engineered rigid steel framing members. The exterior walls are metal siding, sandwich panels, or masonry, and the roof is clad with metal roofing or sandwich panels.

Masonry Non-Combustible (ISO Class 4) - A building where the structural floors and roof are unprotected non-combustible materials such as metal decking or concrete on metal decking, and are supported by an unprotected structural steel frame, fire resistive exterior walls, or a combination of both.

Modified Fire Resistive (ISO Class 5) - A building where the structural floors, roof, and their supports are of non-combustible construction with a fire rating of not less than one hour. A building very similar to Masonry Non-Combustible; however, in Modified Fire Resistive, the non-combustible floor, roof, and framing components are protected with sprayed-fiber fireproofing.

Fire Resistive (ISO Class 6) - A building where the structural floors and roof and their supports are of materials such as precast or poured-in-place reinforced concrete, with a fire resistive rating of not less than two hours.

If construction does not exactly fit one of these six standard types, select construction based on primary framing type. Any heavy timber or wood mill construction would usually fit Masonry Non-Combustible.

CONSTRUCTION TYPE DETERMINATION

EXTERIOR WALLS

- 1) Wood, Stucco or Brick Veneer
- 2) Metal Panels
- 3) Masonry (Brick, Concrete Block or Stone)
- 4) Fireproofed Walls

ROOF

- A) Wood
- B) Metal Panels
- C) Non-Combustible Material
- D) Reinforced Concrete

ALGORITHMS

1 + A = Frame
1 + B = Frame
1 + C = Frame
1 + D = Frame

2 + A = Frame
2 + B = Non-Combustible
2 + C = Non-Combustible
2 + D = Non-Combustible

3 + A = Joisted Masonry
3 + B = Masonry Non-Combustible
3 + C = Masonry Non-Combustible
3 + D = Masonry Non-Combustible

4 + A = Joisted Masonry
4 + B = Masonry Non-Combustible
4 + C = Modified Fire Resistive
4 + D = Fire Resistive