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## Worksheet Reference

### Construction Class

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**A (Fireproof Steel Frame)**

**B (Reinf. Conc. Frame)**

**C (Masonry Bearing Walls)**

**D (Stud Frame/Walls)**

**S (Metal Frame & Walls)**

Construction Class divides all buildings into basic cost groups by type of framing (supporting columns and beams), walls, floor and roof structures, and fireproofing. Segregated Estimator has the following Marshall & Swift construction classes (each of which is defined beginning on the following page):

- **A** - Fireproof Structural Steel Frame
- **B** - Reinforced Concrete Frame
- **C** - Masonry Bearing Walls
- **D** – Wood or Steel Stud Framed Exterior Walls
- **S** - Metal Frame and Walls

Not all classes are available for all occupancies. See the *Occupancy Reference*, or the occupancy help when using Segregated Estimator, for a list of classes available for each occupancy.

Construction class is required.

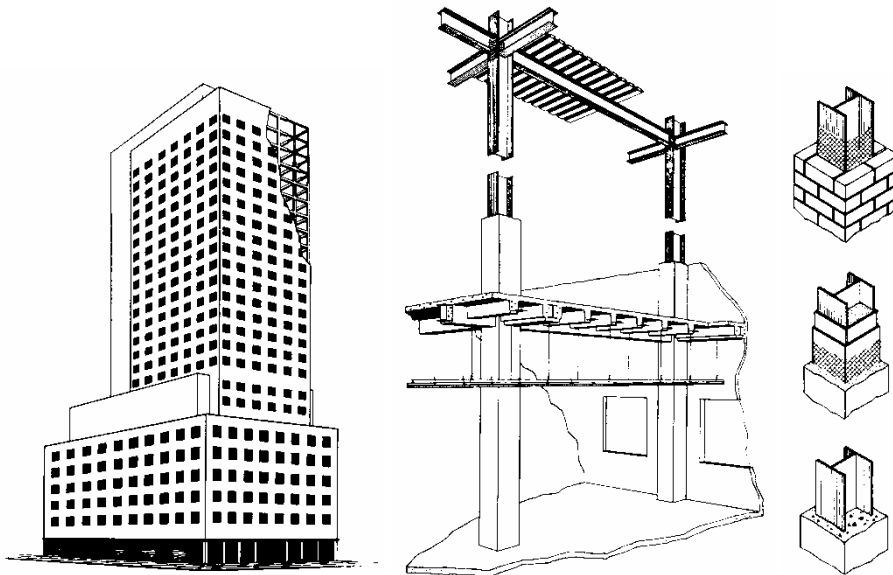
### Class A: Fireproof Structural Steel Frame

The primary feature of class A buildings is the fireproofed structural steel frame, which may be welded, bolted or riveted together. The fireproofing may be masonry, poured concrete, plaster, sprayed fiber or any other method, which gives a high fire-resistance rating.

Floor and roof in class A structures are normally reinforced concrete on steel decking or formed slabs resting on the frame or poured to become integral with it. They may also be composed of prefabricated panels and may be mechanically stressed.

Exterior walls are curtain walls of masonry, concrete, steel studs and stucco, or one of the many types of panels of metal, glass, masonry or concrete. Interior partitions frequently are of masonry or gypsum block, although many movable and lightweight steel partitions are used.

Included in this class are Uniform, Basic and Standard Building Code construction, Types I and II (noncombustible) and ISO classes 5 and 6, if the framing is protected steel. ISO class 5 and 6 buildings with load-bearing walls and no interior framing, and most low-rise buildings, should be classified as class C for pricing purposes. This class is also referred to as Modified Fire Resistive or Two to Four-hour construction.



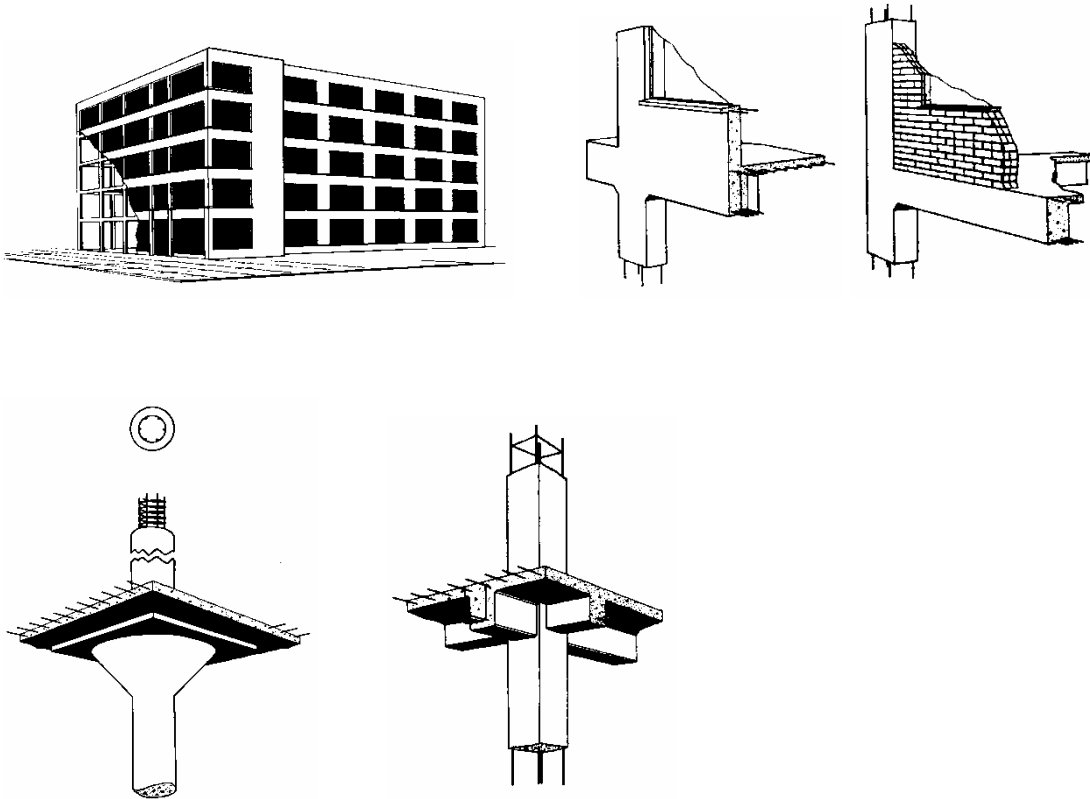
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### Class B: Reinforced Concrete Frame

The primary characteristic of class B buildings is the reinforced concrete frame in which the columns and beams can be either formed or precast concrete. They may be mechanically stressed. Class B buildings are fire-resistant structures.

Floors and roofs in class B structures are formed or precast concrete slabs. The exterior walls, generally, are masonry or reinforced concrete curtain walls or any of the many types of wall panels of concrete, metal, glass or stone. In some class B buildings the walls may be partially load bearing. Interior partitions are often masonry, reinforced concrete or gypsum block. Many lightweight and movable partitions are used where structural walls are not needed.

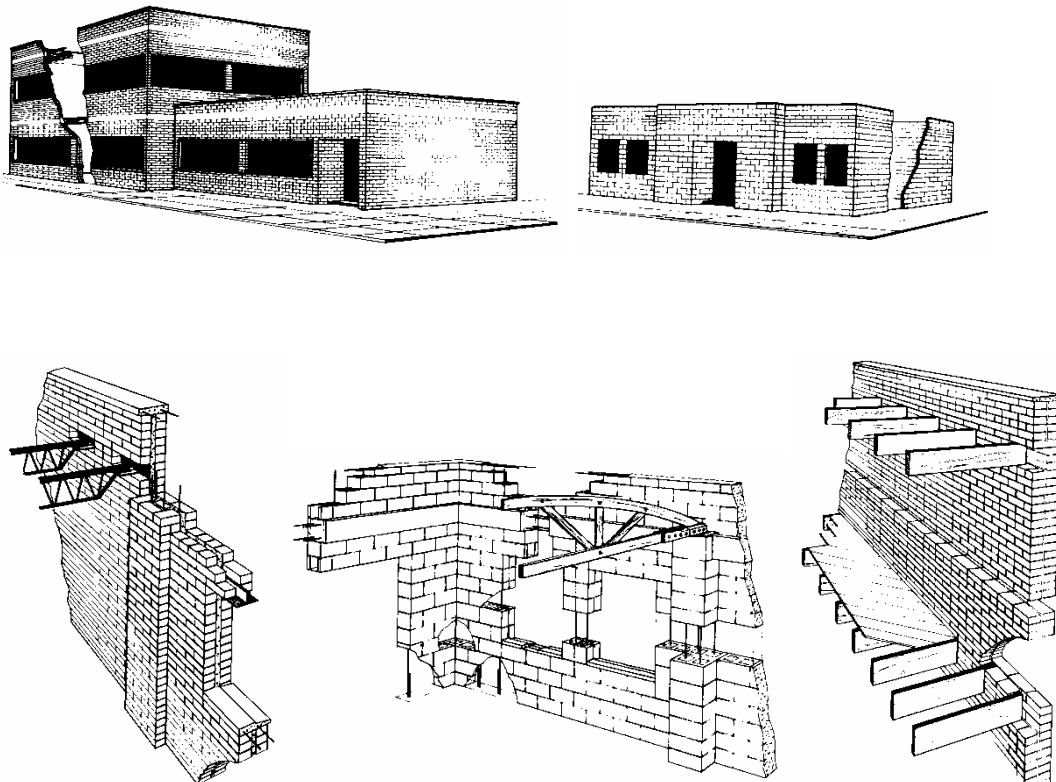
Included in this class are Uniform, Basic and Standard Building Code construction, Types I and II (noncombustible) and ISO classes 5 and 6, if the framing is concrete. ISO class 5 and 6 buildings with load-bearing walls and no interior framing and most low-rise buildings should be classified as class C for pricing purposes. This class is also referred to as Fire Resistant or Two to Four-hour construction.



### Class C: Masonry Bearing Walls

Masonry or reinforced concrete (including tilt-up) construction characterizes class C buildings. The walls may be load-bearing, i.e., supporting roof and upper floor loads, or nonbearing with concrete, steel or wood columns, bents or arches supporting the load. Wood or steel joists or trusses support upper floors and roofs. Ground floors may be concrete slabs. Upper floors may be of concrete plank, steel deck or wood. Bearing walls are frequently strengthened by concrete bond beams and pilasters. Class C buildings are not fire-resistant structures.

Included in this class are Uniform and Basic Building Code, Type III (noncombustible wall), Standard Code Type V and ISO classes 2 and 4, and those ISO class 5 and 6 buildings that have load-bearing walls without interior framing and of low-rise design (3 stories or less). This class is also referred to as Masonry or Unprotected Noncombustible, Joisted or Unprotected Masonry, or Ordinary or Unprotected One-hour, and includes certain Two-hour or heavy timber construction.



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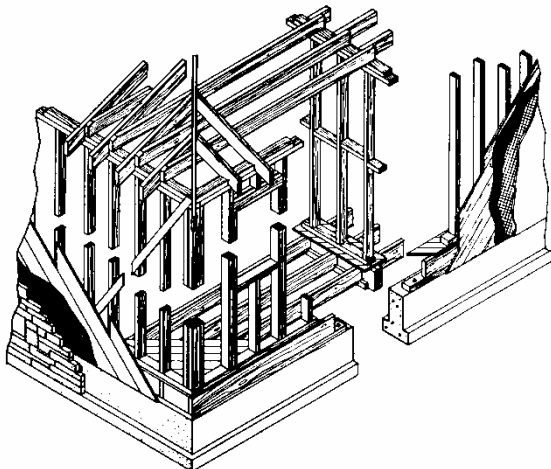
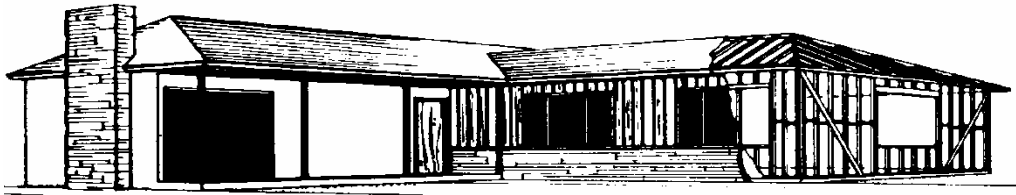
### Class D: Wood- or Steel-Framed Exterior Walls

Class D buildings are characterized by combustible construction. The exterior walls may be made up of closely spaced wood or steel studs, as in the case of a typical frame house.

Exterior covers may be wood siding, shingles, stucco, brick or stone veneer or some other type of material.

Floors and roofs are supported on wood or steel joists or trusses. The floor may be a concrete slab on the ground.

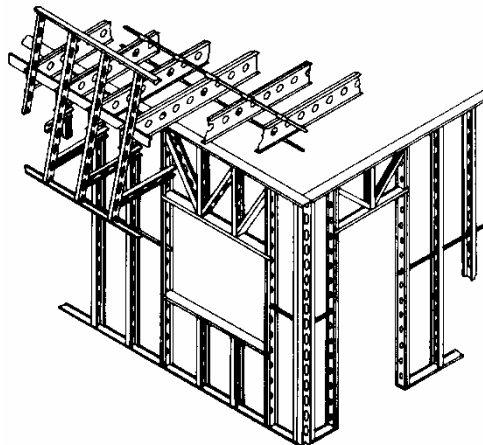
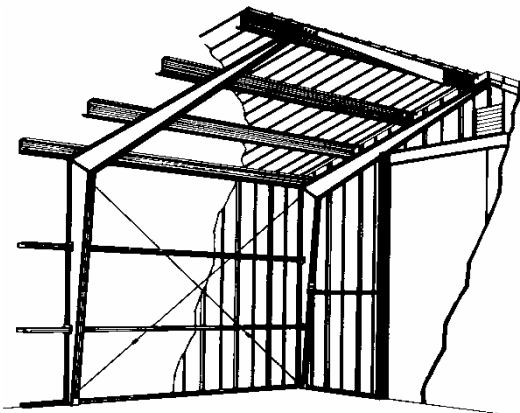
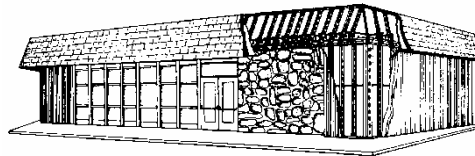
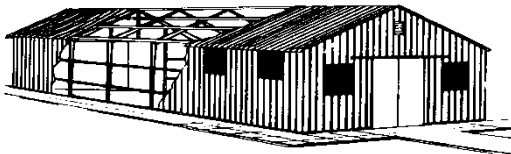
Construction Type V (wood-frame) of the Uniform, Type IV Basic and Type VI Standard Building Code are included in this class, as are ISO class 1 buildings. This class is also referred to as Unprotected-protected One-hour Construction.



### Class S: Metal Frame and Walls

Class S buildings are characterized by incombustible construction and prefabricated structural members. They are not fire-resistant buildings. The exterior walls may be steel studs or an open-steel-skeleton frame with exterior coverings of prefabricated panels or sheet siding. Upper floors and roof are supported on steel joists or beams. Ground floors are typically concrete slabs.

Included in this class are Uniform and Standard Building Code construction, Type IV (noncombustible), Basic code Type V and ISO class 3 buildings. This class is also referred to as Noncombustible and can be One-hour Type II construction.



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