

Quick Guide

Verisk (Formerly ISO) Construction Classifications

Verisk Construction Classifications

Understanding the construction classifications outlined by Verisk (formerly the Insurance Services Office or ISO) is important for builders, appraisers, underwriters and just about anybody invested in the life of a building. The factors that go directly into understanding Verisk's construction classifications are the materials used in the construction of the building, and whether or not they're combustible.

In this Quick Guide, we will explore the fundamentals of Verisk's construction classifications. The guide will provide a detailed explanation of the origins of the classifications and the elements making up each classification. For easy reference, the Quick Guide has been divided into multiple sections as listed below.



SECTION 1 - History of Verisk and the Insurance Services Office (ISO)
SECTION 2 - Overview of Verisk Construction Classifications
SECTION 3 - Breaking down the Verisk Construction Classifications
SECTION 4 - Why Verisk Construction Classifications are Important



SECTION 1 History of Verisk and the Insurance Services Office



History of Verisk and the Insurance Services Office

History of the Insurance Services Office (ISO)

Formed in 1971, the Insurance Services Office started as an advisory and rating organization dealing with property/casualty insurance. The ISO specialized in statistical and actuarial services, developing insurance programs and assisting insurance companies in meeting State regulatory requirements.

ISO Joins Verisk

In 2009, the ISO became a subsidiary of New Jersey-based Verisk Analytics, a data analytics and risk assessment firm. Today, the helpful combustibility ratings for buildings established by the ISO are known as "Verisk Construction Classifications."



SECTION 2 Overview of Verisk Construction Classifications



Overview of Verisk Construction Classifications

Determining a construction classification

Understanding Verisk construction classifications is important for builders, property owners, appraisers, and underwriters. The classifications correlate with the combustibility of a building, or how well it can withstand damage from a fire. Two important factors help determine construction classifications:



Building elements: These are the materials used in the construction of the structural frame, exterior and interior bearing walls, exterior and interior nonbearing walls and partitions, floor construction (including supporting beams and joists) and roof construction (supporting beams and joists).



Fire-resistance rating: In construction classifications, a fire-resistance rating is usually measured in time. It's the amount of time a passive fire protection system can withstand a standard fire-resistance test. Not all of the construction classifications carry fire-resistance ratings.



Overview of Verisk Construction Classifications

Your Construction Classification Checklist

To properly classify a building according to Verisk construction classes, you'll need to be able to answer the following questions:



- 1. What materials make up the frame?
- 2. What materials make up the interior and exterior bearing walls?
- 3. What materials make up the floor construction?
- 4. What materials make up the roof construction?
- 5. What is the fire rating of these materials?





Introducing the Construction Classifications

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Frame



Joisted Masonry



Noncombustible



Masonry Noncombustible



Modified Fire Resistive



Fire Resistive



Frame – Construction Class 1

Summary: Buildings with interior walls, floors, roofs, and supports constructed of combustible materials, typically wood. Exterior walls may be made of combustible materials or may be comprised of non-combustible or slow-burning construction. Masonry veneers and metal cladding don't affect the frame classification.

Fire-resistance rating: None

Advantages: Easy to erect, economical

Examples: Housing, with no more than 3-4 stories

SOURCE: https://www.verisk.com/insurance/capabilities/underwriting/commercial-property/construction-briefs/frame/



Joisted Masonry – Construction Class 2

Summary: Buildings in which combustible materials like wood are combined with other materials such as brick or stone veneer, glass block, or adobe. Concrete block, masonry or reinforced masonry load-bearing exterior walls also fit into this classification. Typically, these buildings are constructed with wood frames, roofs and floors.

Fire-resistance rating: Not less than 1 hourAdvantages: Harder to ignite, more structural stabilityExamples: housing, small office with no more than 3-4 stories

SOURCE: https://www.verisk.com/insurance/capabilities/underwriting/commercial-property/construction-briefs/joisted-masonry/





Noncombustible – Construction Class 3

Summary: Buildings with exterior walls, floors, roofs and supports made up of slow-burning and/or noncombustible materials. Steel frames are common in this classification, and slow-burning fiberglass insulation may be used.

Fire-resistance rating: None

Advantages: Easy to erect, economical

Examples: Warehouses and manufacturing facilities

SOURCE: https://www.verisk.com/insurance/capabilities/underwriting/commercial-property/construction-briefs/noncombustible/





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Masonry Noncombustible – Construction Class 4

Summary: Buildings in which the exterior walls are constructed of masonry materials that are at least four inches thick or are made of fire-resistive construction with a rating of no less than one hour. The floor and roof are either steel, noncombustible or slow burning materials, irrespective of the insulation used. These structures might be brick, stone, hollow concrete block or tilt-up concrete walls with heavy steel framing.

Fire-resistance rating: Not less than 1 hour Advantages: Uses materials that don't readily burn

Examples: Shopping centers, office buildings, warehouses and schools

SOURCE: https://www.verisk.com/insurance/capabilities/underwriting/commercial-property/construction-briefs/masonry-noncombustible/



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Modified Fire Resistive – Construction Class 5

Summary: Buildings with exterior walls, floors and roofs made up of either masonry materials that are between four and eight inches thick OR fire-resistive materials rated for at least one hour but under two hours. Exterior nonbearing walls may be slow-burning or combustible. Exterior bearing walls must be noncombustible or made of masonry. Protected steel supports for floors and roofs are common.

Fire-resistance rating: Less than 2 hours, but greater than 1 hourAdvantages: Allows greater height and areaExamples: High and mid-rise office buildings and condos

SOURCE: https://www.verisk.com/insurance/capabilities/underwriting/commercial-property/construction-briefs/modified-fire-resistive/





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Fire Resistive – Construction Class 6

Summary: This classification requires walls of masonry materials, including reinforced concrete at least four inches thick, hollow masonry that's at least 12 inches thick, or hollow masonry between eight and 12 inches thick with a fire resistance rating of at least two hours. Exterior bearing walls must be made of noncombustible materials, but exterior nonbearing walls may be built from combustible materials.

Fire-resistance rating: Not less than 2 hoursAdvantages: Uses load-bearing materials that resist fireExamples: High-rise office buildings, condos or parking garages

SOURCE: https://www.verisk.com/insurance/capabilities/underwriting/commercial-property/construction-briefs/fire-resistive/



SECTION 4 Why Verisk Construction Classifications Matter



Why Verisk Construction Classifications Matter

Establishing Replacement Costs

Replacement cost is the amount required to replace an entire property in like size, kind, and quality. Verisk Construction Classifications help provide an understanding of the materials used to construct the building – a major factor in calculating replacement cost.

Determining Susceptibility to Risk

While Verisk construction classifications are based on the combustibility of the structure, the factors that go into determining the classification can be used by catastrophe modeling programs to analyze how likely a building is to sustain losses due to fire, windstorm, or seismic risk events.

Example: A tale of two Construction Classes

A building with the construction classification "frame" is likely to have a lower replacement cost than a similar building with the construction classification "joisted masonry." However, while it may be less expensive to build, the Frame construction might be more susceptible to risk than Joisted Masonry.



Centurisk Can Help

Don't let Verisk construction classifications get you down! For decades, Centurisk has been helping organizations, large and small, with property insurance appraisals. Our team of experts can help gather the critical building attributes needed for everything from determining Verisk construction class to establishing up-to-date, accurate replacement cost values. Our software solutions help bridge the gap between the collection and management of building attributes and valuation data.

If you have questions about maintaining detailed building records for risk management and insurance purposes, one of our experts would be happy to help. To get the conversation started, simply contact Centurisk today at 1-877-809-0600 or info@centurisk.com.



