

WCBC Certification Training

Chapter 7

A material, device or construction installed to restrict the movement of air within open spaces of concealed areas of building components is called a **DRAFT STOP**.

The aggregate floor area enclosed and bounded by fire walls, fire barriers, exterior walls or fire-resistance-rated horizontal assemblies of a building is the **FIRE AREA**.

A "fire barrier" is an assembly of materials designed to restrict the spread of fire, the assembly can be either **VERTICAL OR HORIZONTAL**.

FIRE RESISTANCE is that property of materials or their assemblies that prevents or retards the passage of excessive heat, hot gases or flames.

A permanent no build easement line or an imaginary line between two buildings are recognized as **FIRE SEPARATION DISTANCE**.

FIRE WALLS restrict the spread of fire and extend continuously from the foundation to or through the roof.

Fire-resistance rating of building elements shall be determined in accordance with **ASTM E 119** or **IBC 703.3**.

Two of the alternative methods for determining fire resistance by IBC chapters address **PRESCRIPTIVE AND CALCULATED**.

The term "**NONCOMBUSTIBLE**" does not apply to the flame spread characteristics of interior finish or trim materials.

For the purposes of determining the required **WALL AND OPENING PROTECTION AND ROOF-COVERING** building on the same property and court walls of buildings over one story in height shall be assumed to have a property line between them.

Two or more buildings on the same property can be considered as portions of one building if the **AGGREGATE AREA OF SUCH BUILDINGS IS WITHIN THE LIMITS OF CH. 5** for a single building.

The fire resistance rating of exterior walls with a fire separation distance of **5 FEET** or less shall be rated for exposure to fire from both sides.

In buildings **EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM**, the maximum allowable area of unprotected openings shall be the same as the tabulated limitations for protected.

A building constructed as type IIB located 17' from an adjacent property line is limited to **25%** unprotected openings on the 17' side.

Construction type IIIB located 3' from the property line is **NOT** permitted protected openings and **NOT** permitted unprotected openings.

The height of a parapet shall not be less than **30"** above the point where the roof surface and the wall intersect.

FIRE WALLS shall have sufficient structural stability under fire conditions to allow collapse of construction on either side.

Fire wall fire resistance rating for an "A" occupancy is **3-HOURS**.

Fire wall fire resistance rating for an "M" occupancy is **3-HOURS**.

Walls shall be not less than 2-hour fire-resistance rated where separating **TYPE II AND V BUILDINGS**.

Exterior wall intersections at fire walls that form an angle equal to or **GREATER THAN 180 DEGREES** do not need exterior wall protection.

Fire walls require vertical continuity that extends **30"** above both **ADJACENT ROOFS**.

Section **IBC 714** shall be referenced to address opening protection in fire walls.

The aggregate width of openings at any floor level shall not exceed **25%** of the **LENGTH** of the wall.

The purpose of the fire wall identification section is to establish **A UNIFORM STANDARD FOR THE IDENTIFICATION.**

FIRE BARRIERS accomplish separation of vertical exit enclosures.

Fire barriers shall extend from the top of the floor/ceiling assembly below to **THE UNDERSIDE OF THE ROOF SLAB OR DECK ABOVE.**

Openings in a fire barrier wall shall be limited to **25%** of the length of the wall, and the maximum area of any single opening shall not exceed **120 SQUARE FEET.**

Fire-resistance-rated enclosure requirements shall not apply **TO THE EXTERIOR WALL** where the exterior wall serves as part of a required enclosure.