



DEPARTMENT OF BUILDING SAFETY & FACILITIES DEVELOPMENT

411 3rd Street South, Nampa, ID 83651
(208) 468-5435 CityofNampa.us

REVISED

3:30 pm, Nov 12, 2008

IBC WALL DESCRIPTIONS & USES

*Dennis D. Davis,
C.B.O.
Director*

*Jimmie B. Brown,
C.B.O.
Building Official*

*Maggie Deleon
Administrative
Operations
Manager*

*Robin Collins, C.B.O.
Asst. Building Official*

*Roger Baumchen
Building Inspection
Supervisor*

*Robert Overfield
Senior Electrical
Inspector*

*Cache Olson
Senior Plumbing
Inspector*

*Les Tibbals
Senior Mechanical
Inspector*

FIRE BARRIERS—A fire-resistance rated wall assembly of materials designed to restrict the spread of fire in which continuity is maintained. *This wall is Vertical Only. If the fire barrier is to run in a horizontal position, it is now referred to as a HORIZONTAL ASSEMBLY.*

A Fire Barrier is used:

- To separate a (SINGLE USE-OCCUPANCY) within the building into smaller FIRE AREAS to eliminate the requirement for sprinklers.
- To separate different types of occupancies. (MIXED USE-OCCUPANCY SEPARATION)
- To separate INCIDENTAL USE AREAS.
- For Shaft/Exit Enclosures (stairs, elevators, mechanical)
- For Horizontal Exits
- For Exit Passageways
- For Atriums
- For Control Areas
- Ducts and air transfer openings in fire barrier walls to be protected with *fire dampers* (see exceptions).

FIRE WALLS—A fire resistance rated wall having protected openings, which restricts the spread of fire and extends continuously from the foundation to or through the roof, with sufficient structural stability under fire conditions to allow collapse of construction on either side without collapse of the wall. *This wall is a Vertical Only Assembly. There is an exception to this in the code for Open and Enclosed Parking Garages.*

A Fire Wall is used:

- To separate the building into TWO SEPARATE BUILDINGS to meet compliance with the maximum allowable area requirements in Chapter 5. (AREA SEPARATION)
- To separate the building into TWO SEPARATE BUILDINGS having two different construction types.
- To separate the building into TWO SEPARATE BUILDINGS due to fire flow requirements. (IFC)
- To separate an un-sprinklered area of a building from the sprinklered area, therefore, allowing for a fully sprinklered building.
- Ducts and air transfer openings in fire walls to be protected with *fire dampers*.

“Building Safety is No Accident”

FIRE PARTITIONS—A vertical assembly of materials designed to restrict the spread of fire in which openings are protected. This wall is Vertical Only from the foundation or floor/ceiling assembly below to the underside of the floor or roof sheathing, deck or slab above OR to the fire-resistance rated floor-ceiling or roof/ceiling assembly above. If the fire partition is to run in a horizontal position, it is now referred to as a HORIZONTAL ASSEMBLY.

A Fire Partition is used:

- To separate dwelling units within a single structure.
- Rated Corridors.
- Walls separating sleeping units in Group R-1 hotel, R-2 and I-1.
- Walls separating tenant spaces in covered mall buildings.
- Elevator Lobbies.
- Residential aircraft hangars

NOTE: Ducts and air transfer openings in a fire partition are to be protected with *fire dampers* (see exceptions) and special requirements for corridors.

EXTERIOR FIRE RATED WALLS—A fire resistance rated exterior wall in accordance with Tables 601 and 602 of the IBC.

An Exterior Fire Rated Wall is used:

- Due to location of building to property line. (Chapter 6)

The distance measured from the building face to one of the following is the FIRE SEPARATION DISTANCE:

- Measured to the closest interior lot line
- Measured to the centerline of a street, an alley or public way; OR
- Measured to an imaginary property line between two buildings on the property

NOTE: 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. Distance >5' shall be rated for exposure to fire from the inside only (however, this takes a special non-symmetrical rated approved assembly).

CORRIDORS—An enclosed exit access component that defines and provides a path of egress travel to an exit. Corridors may be rated or non-rated according to Table 1017.1 and other sections within the code. Corridors may have vertical or horizontal rated walls. A corridor required to be rated will utilize a FIRE PARTITION wall construction.

- Ducts and air transfer openings in a vertical fire partition are to be protected with *smoke dampers* (see exception).
- Ducts and air transfer openings in a horizontal assembly are to be protected with *fire dampers* (see exception) **OR** protected as required for a *shaft enclosure*.

SMOKE BARRIERS—A continuous membrane, either vertical or horizontal, such as a wall, floor, or ceiling assembly, that is designed and constructed to restrict the movement of smoke.

A Smoke Barrier Wall is used:

- Smoke barriers are required to have a 1-hour fire resistance rating.
- Ducts and air transfer openings within a smoke barrier wall shall be protected with *smoke dampers* (see exception).

SMOKE PARTITION—An un-rated wall used to limit the transfer of smoke.

A Smoke Partition:

- Is Vertical or horizontal, wall/floor/or ceiling assembly.
- Shall extend from the top of the foundation or floor below to the underside of the floor or roof sheathing, deck or slab above or to the underside of the ceiling above where the ceiling membrane is constructed to limit the transfer of smoke.

NOTE: Ducts and air transfer openings within a smoke partition wall shall be protected with *smoke dampers (see exception)*, **AND** *the space around a duct penetration shall be filled with an approved material to limit the free passage of smoke.*

HORIZONTAL ASSEMBLIES—A fire resistance rated floor or roof assembly of materials designed to restrict the spread of fire in which continuity is maintained.

A Horizontal Assembly is used:

- Where a FIRE BARRIER is constructed horizontally.
- Where a FIRE PARTITION is constructed horizontally.
- Where a FIRE WALL in a parking garage is permitted to be constructed horizontally for building separation.
- Where a RATED SHAFT ENCLOSURE is constructed horizontally.

NOTE: Ducts and air transfer openings protected by a *shaft enclosure in accordance with 707. OR in accordance with 716.6.1 through 716.6.3. Through penetrations can require *fire dampers or shaft enclosure protection. Membrane penetrations* can require *shaft enclosure protection or a listed ceiling radiation damper.**

FLEXIBLE DUCTS AND AIR CONNECTORS— Flexible ducts and air connectors SHALL NOT pass through any fire resistance rated assembly. Flexible air connectors SHALL NOT pass through any wall, floor, or ceiling (whether rated or not).