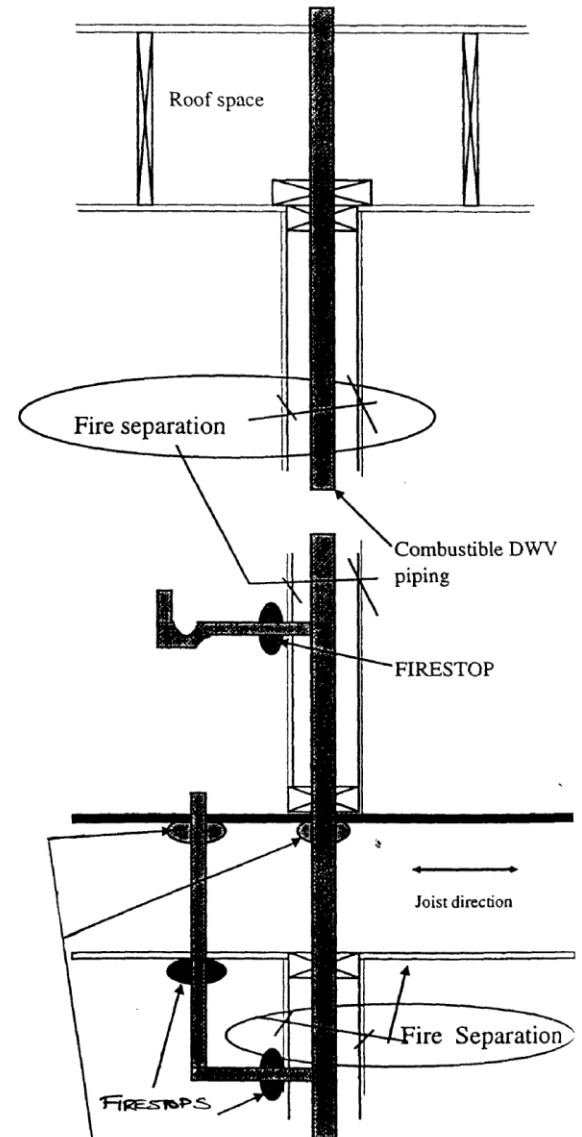


The following are guidelines taken from the *National Building Code (NBC) 2005* regarding the requirements for combustible drain, waste and vent (DWV) piping.

- Combustible DWV piping is not permitted in a vertical shaft (Sentence 3.1.9.4(4)).
- Combustible DWV piping is not allowed in buildings required to be of noncombustible construction, UNLESS it is concealed in a wall or concrete floor slab, or the piping has a flame-spread rating of not more than 25 (ie. cPVC or PVC). For high buildings described in Subsection 3.2.6, combustible DWV piping must also have a smoke developed classification of not more than 50 (ie. cPVC or XFR PVC). Refer to Article 3.1.5.16 of the NBC 2005.
- Piping located in a concealed space that acts as a return air plenum must have a flame-spread rating of not more than 25 and a smoke developed classification of not more than 50 as per Article 3.6.4.3. (ie. cPVC or XFR PVC)
- Combustible piping that penetrates a fire separation must be sealed at the penetration by a fire stop system that, when subjected to the fire test method in ULC-S115, "Standard Method of Fire Tests of Firestop Systems," has an F rating not less than the fire-protection rating required for closures in the fire separation (Sentence 3.1.9.1(1)). Where combustible DWV piping penetrates a fire separation, it must meet the fire test method in ULC-S115 with a pressure differential of 50 Pa between the exposed and unexposed sides as per Sentence 3.1.9.4(4).
- Combustible piping that penetrates a firewall must be sealed at the penetration by a fire stop system that, when subjected to the fire test method in ULC-S115, has an FT rating not less than the fire-resistance rating for the fire separation (Sentence 3.1.9.1(2)).
- Combustible drain piping is permitted to penetrate a horizontal fire separation without a firestop system, provided it leads directly from a noncombustible water closet through a concrete floor slab (Sentence 3.1.9.4(5)).
- Riser clamps and expansion joints are required where necessary to prevent excessive movement of the DWV piping.
- Firestop systems must be mechanically fastened to the wall or ceiling member except where the design allows for other methods of applications.
- Most ABS piping has a flame-spread rating greater than 25, and therefore would not be permitted in many of these locations.

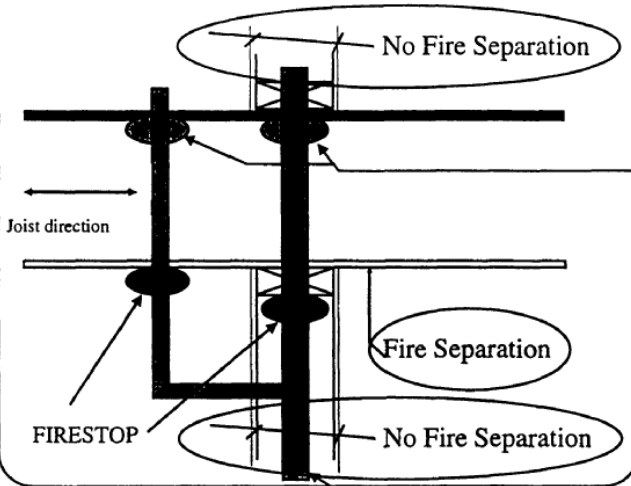


FIRESTOPS are required at both these locations if the upper membrane of the floor forms part of the fire separation. If the full rating is obtained by the bottom membrane then FIRESTOPS at these locations are not required.



COMBUSTIBLE DRAIN, WASTE & VENT PIPING GUIDELINES

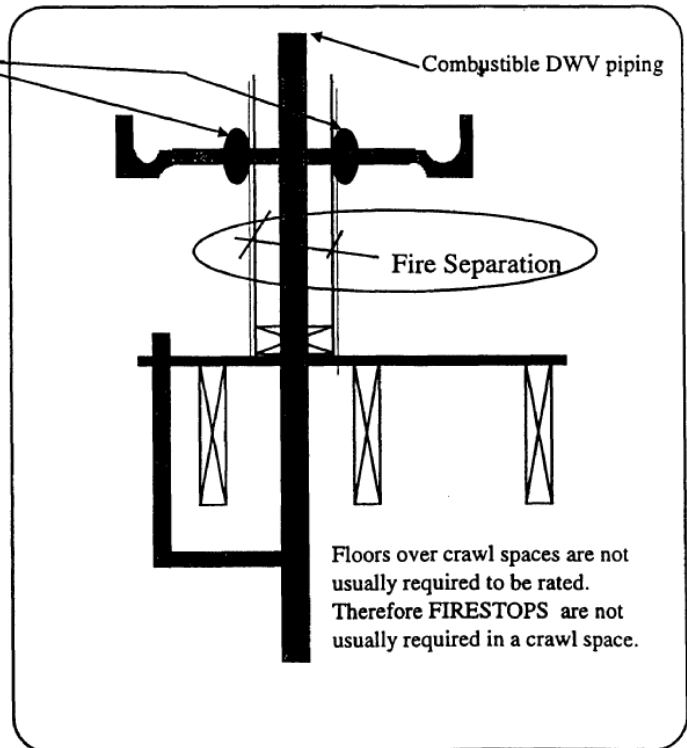
If an interior wall is not a fire separation and a combustible pipe goes up in the wall through a fire separated floor or roof assembly it will be necessary to place a FIRESTOP at the point the combustible pipe penetrates the floor/roof assembly



FIRESTOPS are required at these locations if the upper membrane of the floor forms part of the fire separation. If the full rating is obtained by the bottom membrane then FIRESTOPS would not be required at these locations.

Combustible DWV piping

FIRESTOPS required on room side of fire separations where combustible piping penetrates the wall



Floors over crawl spaces are not usually required to be rated. Therefore FIRESTOPS are not usually required in a crawlspace.