

## Combustible Drain Waste and Vent Piping and Plumbing Fixtures

The purpose of this brochure is to inform owners, designers and contractors of the requirements pertaining to combustible drain waste vent (DWV) systems and combustible plumbing fixtures in buildings required to be noncombustible.

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*"This information is provided for convenience only and is not in substitution of applicable City Bylaws or Provincial or Federal Codes or laws. You must satisfy yourself that any existing or proposed construction or other works complies with such Bylaws, Codes or other laws."*

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**| The following interpretations apply to all projects immediately.**

### Combustible DWV

The BC Building Code requires all exposed combustible piping (unless concealed in a wall or concrete floor slab) in buildings required to be noncombustible to have a flame-spread rating (FSR) not more than 25. If used in a high-rise building, the piping material shall also have a smoke developed classification (SDC) not more than 50.

ABS piping has a FSR exceeding 25, therefore, cannot be used in buildings required to be noncombustible.

PVC piping may have a FSR less than 25 but its SDC may exceed 50, therefore, it may be used in buildings required to be noncombustible but not in high-rise buildings.

Other requirements in the BC Building Code may prohibit the use of combustible piping. For example, if a noncombustible stack is located in a fire separation between two suites, switching to combustible piping is only permitted on one side of the fire separation, but such transition must be done outside of the fire separation. Piping serving the other suite must be noncombustible.

## Combustible Plumbing Fixtures

Combustible plumbing fixtures, including wall and ceiling enclosures, bathtubs, shower pans, sinks, etc., are permitted in a building required to be noncombustible provided they comply with the required FSR and if installed in a non-sprinklered high-rise building shall also comply with the required SDC.

Generally, the required FSR for combustible plumbing fixtures in bathrooms of residential suites shall be not more than 200. If the installation is in a non-sprinklered bathroom in a high-rise building as per NFPA 13, the combustible fixtures shall also have SDC not more than 300.

## Appeals and Interpretations

It is recommended that you review the BC Building Code, BC Appeal Board Rulings #1365, #1451, #1736 and #1737; as well as Interpretations #98-0102 and #98-0108 by the BC Building Code Interpretation Committee for further information on the requirements of installing combustible piping and combustible plumbing fixtures in buildings required to be of noncombustible construction.

It is **NOT** acceptable according to the above mentioned appeals and interpretations to use plastic piping, such as ABS, not meeting the required FSR or SDC for the following in noncombustible buildings:

- Kitchen waste arm
- washing machine standpipe
- bathtub overflow
- floor flange for toilet
- shower drain
- P traps

## Further Information

If you have any further questions please contact the Building Department at (604) 294-7130.

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