STATEWIDE CODE INTERPRETATION NO. 19-02



Horizontal Wet Venting

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Code reference: 2023 Oregon Plumbing Specialty Code (OPSC)—Section 908.2

Date(s): Issued—March 2019

Last updated—Oct. 1, 2023

Subject: Horizontal wet venting

Questions/Answers:

1. Section 908.2 of the OPSC was changed in the adopted national model code and does not contain the same language as the previous edition of the OPSC stating that connections be independent and horizontal. Are the connections still required to be independent and horizontal?

Yes. The design of the horizontal wet vent requires that each fixture within the bathroom group connect independently and laterally. This reduces the potential to interrupt the airflow above the water level. Therefore, the lateral connections are critical points of the system.

- 2. Section 908.2 does not indicate a maximum slope. Section 708.1 requires drainage piping to be not less than ¼ inch per foot, and horizontal is defined in Section 210.0 to make an angle of less than 45 degrees with the horizontal. Is there a maximum grade requirement for the horizontal wet vent section?
 - **No.** Section 708.1 requires a minimum ½ inch per foot. Although there is not a maximum requirement, it is critical to maintain a *uniform slope of ½ inch per foot* to allow the drain to have sufficient air volume within the wet vent system and prevent surges of water from cresting the crown of the pipe.
- 3. If a bathroom consists of three fixtures, is it permissible that two of the fixtures be installed on a horizontal wet vent and the third fixture be conventionally (independently) vented and connected to the drainage system downstream of the water closet?
 - **No.** All fixtures within the bathroom group must connect upstream from the water closet.

There is some confusion with the term "any combination" in the OPSC definition of "Bathing Group", also a change in the adopted national model code. This change was made to clarify that a powder bath is allowed to be horizontally wet vented; it was not intended to delete fixtures within the bathroom group from connecting upstream of the water closet as required in Section 908.2.4.

Analysis:

The concept of horizontal wet venting is the same as combination waste and vent systems and circuit vent systems with minimal differences. The design of all these types of horizontal group venting allows the drainpipe to be wet vented, therefore sharing air space above the mean water surface in a horizontal drain. This air space cannot have excessive surges cresting above the mean water surface, offsets in the system, vertical discharges, excessive grade, or common fixture connections would cause disruption of this air flow.

Contact:

Visit the division website to contact a building code specialist.