



## CLARIFICATION/ENFORCEMENT MEMO

Community Development Department  
Building Division  
447-8437

**Date:** April 15, 2009

**From:** Kimberley Mack, AIA  
Senior Plans Examiner  
City of Helena Building Division

**Enforcement effective date: Immediately**

**Subject:** Flat Venting in Drain Lines

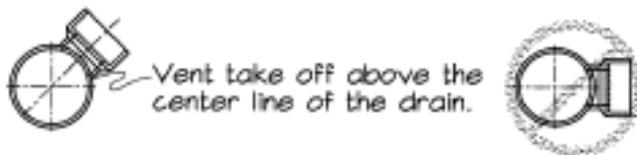
2006 ed. – Uniform Plumbing Code, Section 905.2

“Where vents connect to a horizontal drainage pipe, each vent pipe shall have its invert taken off above the drainage center line of such pipe downstream of the trap being served.”

There have been numerous occasions where the City Inspector has observed the installation of ‘flat venting’ during rough-in inspection. This is the practice where the vent pipe connection has been made perpendicular to the horizontal axis of the drain pipe.

**The practice of ‘flat venting’ of horizontal drain lines will no longer be acceptable. Where the buildings design or construction has failed to provide adequate room for the installation of the plumbing system components, modifications to the buildings structural elements or the construction of soffits below will be required to be completed by the General Contractor to permit adequate room for the installation of vent piping for a code compliant application.**

The Uniform Plumbing Code specifically states in Section 905.2 that the ...”vent pipe shall have its invert taken off above the drainage center line of such pipe downstream of the trap being served.” The ‘invert’ (interior bottom surface of a pipe) of a vent must be above the centerline of the drainage piping to which it is connects. The objective is to prevent the flow through the drainage system from detouring into the vent piping potentially clogging the venting for the drainage system.



The limitations placed on the Plumbers by the specified or installed floor joist depth have caused significant problems when they attempt to install the code required venting for plumbing fixtures. Where the floor joist systems are too shallow to accommodate the fixture trap and the required venting, Plumbers have been forced to install ‘flat venting’ to the horizontal drain pipes. The project designer must

evaluate all of the building components during the design phase to ensure the architectural features and structural elements of the building will accommodate the required plumbing fittings. Review of the proposed plumbing layout with the plumbing contractor and discussing the required clearances before installation of structural members is imperative to achieving a code compliant application.



*City of Helena, Montana*