



# **TECHNICAL BULLETIN**

## **PERMIT AND RESOURCE MANAGEMENT DEPARTMENT**

2550 Ventura Avenue, Santa Rosa, CA 95403  
(707) 565-1900 FAX (707) 565-1103

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### ***Island Fixture Venting***

#### **INTRODUCTION**

The intent of this bulletin is to clarify the use of special venting for island fixtures, commonly known as loop venting, to be used at other sink locations when structural framing conditions prohibit the standard plumbing vent system from being used.

#### **TECHNICAL DETAILS**

The California Plumbing Code (CPC) requires that each plumbing fixture trap be protected against siphonage and back-pressure, and air circulation shall be assured throughout all parts of the drainage system, by means of vent pipes. CPC Section 909 describes the drainage rough in and returned venting for Island Fixtures.

The Illustrated Training Manual for the Uniform Plumbing Code states:

“Island vents must truly be island fixtures in order to justify the use of this less-than-desirable option. Fixtures mounted on cabinets that are attached to a wall are on a peninsula, not an island. When horizontal venting can be run under a counter top to reach a wall and then turn vertical, this is the preferred method of installation.”

The California Plumbing Code also requires that:

“Unless prohibited by structural conditions, each vent shall rise vertically to a point not less than 6 inches above the flood rim of the fixture served before setting off horizontally... Vents less than six inches below the flood rim of the fixture shall be installed with approved drainage fittings, material and grade to the drain.”

Based upon the above, the use of a loop vent shall be limited to islands and other conditions where a horizontal vent (trap arm) cannot be used due to the distance to a wall. (Table 10-1 of the CPC gives the maximum length of a trap arm.) Such conditions include a peninsula which is too long to allow a horizontal vent, or a window above a sink which is too wide to allow a trap arm.

Island vents shall not be used to substitute for conventional vents when a trap arm can be used. Typically, the trap arm can be run through the wall studs, although the structural integrity of the studs must be maintained, or the trap arm can be installed

outside the wall and run through the back of the cabinets.

For the same reasons, island vents shall not be used because structural conditions prevent the vent from rising to six inches above the flood rim of the fixture. In this case the fixture shall be conventionally vented, with drainage fittings used for all vent piping which is not six inches above the flood rim of the fixture, and the vent shall slope to the drain.

In summary, a loop vent is a “last resort”, and should be used only in true island situations. In other situations where structural conditions affect the venting configuration, a trap arm complying with the code maximums is the preferred method. If this method cannot be used, a vent utilizing approved drainage fittings and material when less than six inches below the flood rim of the fixture shall be used, rather than a loop vent.

## **REFERENCES**

California Plumbing Code, Chapter 9  
California Plumbing Code, Chapter 3  
Uniform Plumbing Code Illustrated Training Manual

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