STATE BUILDING CODE INTERPRETATION NO. I-18-06

September 15, 2006

The following is offered in response to your September 7, 2006 letter to me in which you seek an official interpretation of the requirements of Section 1002.4 of the 2003 International Plumbing Code portion of the 2005 State Building Code.

Question: The referenced code section requires a trap seal primer valve where a trap is subject to loss by evaporation. Will installation of a mechanical seal in a floor drain take the place of such a trap seal primer valve by not allowing evaporation of the liquid in the trap?

Answer: No. The intent of the code is to allow the floor drain to remain fully functional while ensuring that a sufficient quantity of liquid will be supplied to the floor drain so that the trap is continually filled with a depth of liquid that will maintain the trap seal. If the floor drain is located in an area where sufficient liquid will be discharged into it on a regular basis to maintain the seal, such as a kitchen or bathroom floor subject to frequent washing, no trap seal primer valve is required. If, on the other hand, the floor drain is infrequently used or installed only for potential spills such as in a garage or in the vicinity of a water heater relief valve, the level of liquid in the trap must be maintained by use of a trap seal primer valve. Introduction of a mechanical seal in such a floor drain would prohibit drainage when the floor drain is needed and thus negate the effectiveness of the floor drain.