Automatic Clothes Washing Machine Drainage Fixture Units

Many certified building departments and health departments charged with enforcing the Ohio Plumbing Code (OPC) have been incorrectly requiring/enforcing a drainage fixture unit (dfu) value of “30” for residential automatic clothes washing machines. Ohio Plumbing Code Table 709.1 clearly states that a residential automatic clothes washing machine is assigned a dfu value of “2” and a commercial automatic clothes washing machine is assigned a dfu value of “3”. These are the correct values for automatic clothes washers and should not be confused with OPC §709.3 which states:

709.3 Values for continuous and semicontinuous flow. Drainage fixture unit values for continuous and semicontinuous flow into a drainage system shall be computed on the basis that 1 gpm (0.06 L/s) of flow is equivalent to two fixture units.

Section 709.3 should not be interpreted as requiring a drainage fixture unit (dfu) value of “30” for residential automatic clothes washing machines. Table 709.1 clearly provides the prescriptive dfu value for residential automatic clothes washing machine.

Additionally, the International Code Council (ICC) Commentary to the 2009 edition of the International Plumbing Code (IPC) §709.3 indicates that the phrase “continuous and semicontinuous flow” is intended to apply to pumps and ejectors. Recognizing that this language has often been misunderstood and misapplied, the ICC Plumbing, Mechanical, and Fuel Gas Code Action Committee proposed a change (P192-15) to the 2015 IPC § 709.3 which will, hopefully, clarify the intent of this section in the 2018 IPC. The IPC Code Development Committee approved the following language as proposed:

709.3 Conversion of gpm flow into dfu values. Where discharges to a waste receptor or to a drainage system are only known in gallons per minute (L/s) values, the drainage fixture unit values for those flows shall be computed on the basis that 1 gpm (0.06 L/s) of flow is equivalent to two drainage fixture units.

If approved by the ICC membership, this language will further clarify that Section 709.3 is only intended to apply when Table 709.1 does not already prescribe a dfu value for the fixture.

Finally, please note that while the rules of the Board are intended to be liberally construed (See Ohio Building Code § 101.3), enforcement should be based on the actual text of the codes. In this case OPC Table 709.1 provides a dfu value of “2” for residential automatic clothes washing machines and a dfu value of “3” for commercial automatic clothes washing machines and these values are those that are to be enforced. Best practices or conflicting information that may be presented at code classes are not enforceable.

This clarification/guidance memo, like all BBS Memos, is issued in hopes of achieving uniform enforcement of the Board’s rules across the state. If you have further questions regarding these requirements, please call the Board’s office at 614-644-2613 or E-mail to BBS@com.state.oh.us.