



Dear valued A.O. Smith Customer:

As of April 30, 2021 the Board of State Examiners of Plumbers and Gas Fitters (the “Plumbing Board”) released an amendment to the code for Massachusetts regarding the use of Plastic Piping used for venting gas appliances. The new text in the code states:

Plastic Piping. The only plastic piping which may be used for venting appliances shall be CPVC, polypropylene, and other pipes which have been Product-accepted for that purpose by the board.

Although the code itself is unclear, recently, the Plumbing Board issued “Frequently Asked Questions” regarding this new code amendment. In the FAQ, the Plumbing Board appears to have taken the position that only plastic vent piping accepted by the Board may be used for venting gas appliances in Massachusetts.

A. O. Smith is providing this letter as guidance to distributors and contractors on how to identify the proper vent piping that complies with A. O. Smith’s product certifications for its gas-fired water heaters and meets the Plumbing Board’s interpretation of the Massachusetts code amendments.

A.O. Smith lists approved vent materials in the Installation Manuals. In order for A.O. Smith to list venting materials in our installation manuals, we must first test the venting system with the water heater according to the ANSI test procedure for water heaters. This test measures the actual pipe wall temperature of the venting material in a worst-case condition and compares that temperature to a listed maximum temperature of the material. In the case of PVC and CPVC the maximum temperature is determined through the ASTM standards for pipe and fittings. It is for this reason that in our installation manuals we list approved PVC and CPVC materials per the ASTM standards. When selecting a plastic venting system for A.O. Smith water heaters please be sure that the materials meet the ASTM requirements listed in our Installation Manuals.

UL-1738, by contrast, tests vent piping on a standalone basis, without regard to the appliance.

To determine what plastic venting system is acceptable for use on A. O. Smith water heaters, you should first determine what plastic venting system is listed with the Massachusetts Plumbing Board and then verify that the plastic venting system is also listed to the appropriate ASTM standards as referenced in the A.O. Smith Installation Manual.





At present, this means that in Massachusetts a PVC, CPVC or polypropylene venting product must both be listed on the Massachusetts Board's database as an acceptable product and to the applicable ASTM standard (for PVC and CPVC) or listed by manufacture and model number in the water heater's installation instructions (for polypropylene) in order to be used with an A. O. Smith gas-fired water heater. To A. O. Smith's knowledge, the only non-metallic venting products that have been accepted by the Massachusetts Plumbing Board are IPEX System 1738 PVC and M & G DuraVent PPS polypropylene.

Contractors interested in using PVC venting with an A. O. Smith gas-fired water heater should look for IPEX's System 1738 vent system, which A. O. Smith understands based on IPEX's product literature is certified both to UL-1738 and to ASTM-D1785. This PVC vent piping can be used with A. O. Smith's gas-fired water heaters. There may be other manufacturers who have certified their plastic piping both to UL-1738 and the applicable ASTM standard identified by A. O. Smith, and this dual certified piping also may be used.

The recent changes to the Massachusetts Plumbing Code require the installer to pay very close attention when selecting a plastic venting system that it meets both requirements.

As other plastic venting systems come on the market, please follow the above guidelines for installations in the state of Massachusetts.

