

INSULATING COMBUSTIBLE PIPES IN PLENUMS

The 2012, 2015, 2018, 2021 and 2024 International Mechanical Codes, Section 602.2.1 and 602.3.9, exception 5.3 for PVC and polypropylene pipe, call for all combustible materials in plenum spaces to be covered with a material that is listed and labeled as having a flame spread index of ≤ 25 and a smoke-developed index of ≤ 50 when tested in accordance with ASTM E-84 or UL-723. Johns Manville's Micro-Lok® HP and Micro-Lok® HP Ultra fiberglass pipe insulation products meet these qualifications for use over both pipe materials.

The four assemblies were tested by Underwriters Laboratory (as noted in UL File # R5760), and per the requirements for listing and labeling, Micro-Lok HP and Micro-Lok HP Ultra were both audited during sample preparation and throughout the testing process to ensure the samples were representative of the end-product and the test procedures were consistent and accurate.

Both Micro-Lok HP and Micro-Lok HP Ultra were tested in two separate, aggressive configurations to ensure that the materials could be used over the vast majority of combustible pipe thicknesses that would be encountered in plenum spaces.

1. 1" of Micro-Lok HP or Micro-Lok HP Ultra over .5" of PVC
2. 1" of Micro-Lok HP or Micro-Lok HP Ultra over 1.5" of PP-R (polypropylene)

It is unlikely that installers would encounter thicknesses of PVC or PP-R that exceed 0.5" and 1.5" (respectively) in the field. As a result, designers, installers, and inspectors can rest assured that the insulated combustible pipe systems meet building code requirements when properly insulated with Micro-Lok HP or Micro-Lok HP Ultra.

The following information is printed on Micro-Lok HP and Micro-Lok HP Ultra boxes and data sheets to demonstrate compliance with the IMC requirements for insulating combustible pipes in plenums:



Pipe and Equipment Covering
Surface Burning Characteristics
FHC 25 / 50
R5760

Insulated plastic pipe assemblies (BSMP), certified in accordance with IMC, section 602.2.1, exception 5.3. The PVC or polypropylene plastic pipe shall be covered with minimum 1-inch (25.4 mm) thick Johns Manville Micro-Lok® HP or Micro-Lok® HP Ultra faced pipe insulation designated "FHC 25/50".



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Technical specifications as shown in this literature are intended to be used as general guidelines only. Please refer to the Safety Data Sheet and product label prior to using this product. The physical and chemical properties of Micro-Lok® HP and Micro-Lok® HP Ultra listed herein represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Any references to numerical flame spread or smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions. Check with the Regional Sales Office nearest you for current information.

All Johns Manville products are sold subject to Johns Manville's standard Terms and Conditions, which includes a Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville standard Terms and Conditions or for information on other Johns Manville thermal insulation and systems, visit www.jm.com/terms-conditions or call (800)654-3103.