



CSI: DIVISION: 22 00 00—PLUMBING
Section: 22 11 16—Domestic Water Piping

Product certification system:

The ICC-ES product certification system includes testing samples taken from the market or supplier's stock, or a combination of both, to verify compliance with applicable codes and standards. The system also involves factory inspections, and assessment and surveillance of the supplier's quality system.

Product: AirKote Interior Lining Systems for Pressurized Potable Water Supply Systems

Listee: AirKote Lining Systems, LLC
2700 S. Main Street, Unit E
Santa Ana, California 92707
www.piplinerestoration.com

Compliance with the following codes:

2024, 2021, 2018, 2015, 2012 and 2009 *International Plumbing Code®* (IPC)
2024, 2021, 2018, 2015, 2012 and 2009 *International Residential Code®* (IRC)
2024, 2021, 2018, 2015, 2012 and 2009 *Uniform Plumbing Code®* (UPC)*
2022, 2019, 2016 and 2013 *California Plumbing Code®* (CPC)*
2023, 2020, 2017 City of Los Angeles Plumbing Code® (LAPC)*

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Compliance with the following standards:

ASTM F2831-2019(R2024) Standard Practice for Internal Non Structural Epoxy Barrier Coating Material Used In Rehabilitation of Metallic Pressurized Piping Systems
ASTM D 4541-2022, Standard Test Method for Pull-off Strength of Coatings Using Portable Adhesion Testers
NSF/ANSI/CAN 61-2024, Section 5, Drinking Water System Components – Health Effects
AWWA C210-2024, Liquid-Epoxy Coating System for the Interior and Exterior of Steel Water Pipe Lines

Identification:

Each container bears a label with the manufacturer's name, the NSF 61 and ASTM F2831 designations, and the ICC-ES PMG listing mark. The container shall also include the date of manufacture and the batch number.

Coated Piping or Rigid Tubing: At a maximum distance of 20 feet (6096 mm) intervals along coated pipe or tube, and at each outlet and inlet of the water system, a label is attached indicating the manufacturer's name, NSF 61, ASTM designation, the words "Attention - epoxy lined piping", contact

information, and the ICC-ES PMG listing mark. The label includes a warning against using flame or heat when repairing any part of the piping system.

Installation:

The coating must be applied by authorized applicators. Existing piping or rigid tubes must be in good condition, with any cracks or leaks or visible signs of corrosion repaired. The following steps comprise the installation sequence:

1. The existing piping system is partially disassembled into separate sections, with flexible tube, valves and gasket connections removed.
2. Each section is air-dried and sandblasted clean in accordance with the manufacturer's published instructions. The cleaned surface, when viewed without magnification, must be in a shiny metal state and free of all visible oil, grease, dirt, mill scale, rust and previously applied coatings. Evenly dispersed, very light shadows, streaks and discolorations caused by stains of mill scale, rust and old coatings may be permitted to remain on no more than 33 percent of the surface. Slight residues of rust and old coatings are permitted to be left in the craters of pits, if the original surface is pitted. Upon completion, this level of cleaning must be visually verified and recorded by the applicator.
3. Each section is then pressure-tested with air to 100 psi (689.5 kPa), to verify that the pipe has no holes, cracks or leaks.
4. The epoxy is applied in one end of a pipe or tube section and forced by air pressure through the section.
5. After drying in accordance with the manufacturer's instructions, the applicator then reassembles the piping system and hydrostatically pressure tests to 150 psi (1,034 kPa) in the presence of the code official or the official's designated representative.
6. In the presence of the code official or designated representative, the applicator then conducts a flow test to verify the minimum flow rate to each fixture in accordance with Table 604.3 of the IPC.

Models:

The AirKote Lining is recognized for application on either galvanized steel pipe or copper ridged tube from 1/2 inch to 2 inches (12.7 to 50.8 mm) in diameter. The installed minimum thickness of the coating must be 0.01 inch (0.254 mm) on all sizes. The average coating thickness must not exceed 0.010 inch (0.254 mm) on 1/2-inch-diameter (12.7 mm) galvanized steel pipe and copper tube, or 0.05 inch (1.27 mm) on larger pipe and tube. The AirKote Lining is not for application on gasket connections, on valves or on flexible pressure pipe that can be flexed more than 15%.

Conditions of listing:

1. The liner must be installed in accordance with this listing and the manufacturer's published installation instructions. In the event of a conflict, the instructions in this listing govern.
2. The existing piping system must be fabricated from rigid copper tubing or galvanized steel pipe materials in accordance with the applicable code.
3. All leaks must be repaired prior to coating in such a way so as to restore the affected sections to a code-complying condition.
4. The AirKote Lining is under a quality control program with annual surveillance inspections by ICC-ES.