



**CSI:** DIVISION: 23 00 00—MECHANICAL  
Section: 23 00 00—HVAC

**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:** Surface Burning Characteristics for Ultra-Pure® and HYDRAPRO BLUE CPVC Pipe and Fittings

**Listee:** IPEX USA LLC  
900 Riverside Drive  
Asheville, NC 28804  
[www.ipexna.com](http://www.ipexna.com)

**Additional Listee:**

Silver-Line Plastics LLC  
900 Riverside Drive  
Asheville, North Carolina 28804  
[www.slpipe.com](http://www.slpipe.com)

Sunbelt Marketing Investment Corporation  
7400 Sunbelt Drive  
Austell, GA 30168  
[www.sunbeltmarketing.com](http://www.sunbeltmarketing.com)

**Compliance with the following codes:**

2024, 2021, 2018, 2015, 2012, 2009 and 2006 *International Mechanical Code*® (IMC)  
2018, 2015, 2012, 2009 and 2006 *Uniform Mechanical Code*® (UMC)\*

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**Compliance with the following standards:**

ASTM E84d-2023, Test Method for Surface Burning Characteristics of Building Materials  
UL 723 (Ed. 11), Test for Surface Burning Characteristics of Building Materials

**Identification:**

Pipe must bear the manufacturer's name or trademark, test standard, rating and the ICC-ES PMG listing mark.

Fittings must bear manufacturer's name or trademark, nominal size and a third party certification mark. Packaging must be marked with test standard, rating and ICC-ES PMG listing mark.

**Installation:**

The pipe and fittings are to be installed in accordance with the manufacturer's instructions and the applicable code.

Installation of pipe and fittings within ducts and plenums shall be in accordance with Section 602 of the IMC or 602.0 of the UMC.

**Models:**

The Ultra-Pure® CPVC pipe and fittings was assembled using one 15 ft. length of pipe, four 2 ft. sections of pipe, four splices combining them and two end caps. Rods measuring ¼" in diameter were placed in the tunnel at 2 ft. intervals with the 23 ft. length of pipe being tied down to the rods with 18 gage copper wire. The samples were butted end to end in the test chamber with cement board placed between the lid and sample either water-filled or dry as a modified\* version of UL 723 / ASTM E 84, Test Methods for Surface Burning Characteristics. The following ratings were obtained and have been found to meet the 25/50 flame spread/smoke developed requirements.

- 1/2" – 2" water-filled Ultra-Pure® CPVC pipe and fittings have a flame spread index of 0 and a smoke developed index of no more than 5.
- 1/2" – 2" dry Ultra-Pure® CPVC pipe and fittings have a flame spread index of 0 and a smoke developed index of no more than 25.

\* The specimens tested are not conducive to full coverage of the 20 in. x 24 ft. test sample as specified by UL 723/ASTM E84. Therefore, only a certain portion of the total area exposed to the flame is covered by the test samples. The tested specimens are representative models of finish product.

**Additional Models:**

The HYDRAPRO BLUE CPVC pipe and fittings was assembled using one 15 ft. length of pipe, four 2 ft. sections of pipe, four splices combining them and two end caps. Rods measuring ¼" in diameter were placed in the tunnel at 2 ft. intervals with the 23 ft. length of pipe being tied down to the rods with 18 gage copper wire. The samples were butted end to end in the test chamber with cement board placed between the lid and sample either water-filled or dry as a modified\* version of UL 723 / ASTM E 84, Test Methods for Surface Burning Characteristics. The following ratings were obtained and have been found to meet the 25/50 flame spread/smoke developed requirements.

- 1/2" – 2" water-filled HYDRAPRO BLUE CPVC pipe and fittings have a flame spread index of 0 and a smoke developed index of no more than 5.
- 1/2" – 2" dry HYDRAPRO BLUE CPVC pipe and fittings have a flame spread index of 0 and a smoke developed index of no more than 25.

\* The specimens tested are not conducive to full coverage of the 20 in. x 24 ft. test sample as specified by UL 723/ASTM E84. Therefore, only a certain portion of the total area exposed to the flame is covered by the test samples. The tested specimens are representative models of finish product.

**Conditions of listing:**

1. The pipe and fitting models recognized by this listing have been evaluated for surface burning characteristics only. Evaluation of the CPVC pipe and fittings to the applicable performance standard in accordance with Chapter 6 of the IPC or UPC is outside the scope of this report.
2. The plumbing systems must be installed in accordance with the applicable codes.
3. The CPVC resin used in the manufacturing of the pipe and fittings covered by this report are under a quality control program with annual surveillance inspections by ICC-ES.