

Appendices

Appendix C - Product Approvals & Certifications

NSF International

NSF® is an internationally recognized independent third party product testing laboratory and certification organization. NSF® provides a variety of product certifications. Although not inclusive, the following list those most applicable to Spears® products (see listings at www.nsf.org).

NSF®/ANSI Standard 14

Plastics Piping System Components and Related Materials. NSF®-14 is a consensus standard that enables comprehensive assessment of plumbing system products, materials, and ingredients. The assessment is for health effects, quality control, quality assurance, marking, material property requirements, long-term strength evaluation, and short-term product performance evaluation to various standards such as ASME, ASTM, ASSE, etc. NSF®-14 Certified products have designated end use.

End Use Certification Marks NSF®-pw

The following are typical certification marks applicable to various Spears® products: The product is manufactured for potable water application. It meets all applicable performance standards for a pressure rated application as required in NSF®/ANSI Standard 14, and complies with NSF®/ANSI Standard 61 for health effects.

NSF®-dwv

The product complies with the applicable performance standards as required by NSF®/ANSI Standard 14 for drain, waste, and vent applications. No health effects evaluation is required.

NSF@-cw

The product meets the applicable performance standard as required by NSF®/ANSI Standard 14 for corrosive waste applications. No health effects evaluation is required.

NSF®-61

Products certified to NSF®/ANSI Standard 61. They are evaluated for health effects only. They are not evaluated for the performance requirements of NSF®/ANSI Standard 14.

NSF®-(end use) SE

Certified Special Engineered (SE) products shall bear a Mark which indicates the end use application. The SE Mark is used for products for which there is not a recognized national performance standard.

Canadian Certification Mark

cNSF Mark demonstrates compliance to a Canadian Standard, while the cNSFus Mark indicates compliance to both Canadian and U.S. requirements. Inspectors and safety code officials in Canada look for product certification by an SCC-accredited certifier.

Uniform Plumbing Code Certification

NSF® U.P.Code Mark demonstrates product compliance with the Uniform Plumbing Code. While the U.P.Code Mark is not mandatory to demonstrate product code compliance, the code marking is more readily identifiable by inspectors in the field.

NSF®/ANSI Standard 61

Drinking Water System Components — Health Effects. NSF®- 61 is a consensus standard promulgated by NSF International. This standard enables in-depth assessment of a variety of drinking water system products and materials for health effects. This standard is used to evaluate a product for health effect concerns only. NSF®/ANSI Standard 61 is narrow in its scope when compared to NSF®/ANSI Standard 14 in respect to quality and performance. NSF® conducts its own testing, review, and facility inspections when certifying products like PE and PEX. NSF®/ANSI Standard 14 addresses health and performance, NSF®/ANSI Standard 61 only addresses health effect concerns.

NSF®-61 Annex G

Weighted Average Lead Content Evaluation Procedure to a 0.25% Lead Requirement, Certified product meets various states' low lead requirement, such as California's Health & Safety Code (Section 116875) commonly known as AB1953.

ICC-ES-PMG

The ICC-ES Plumbing, Mechanical and Fuel Gas (PMG) Listing Program provides independent third party approval. Spears® LabWaste® CPVC Corrosive Waste Drainage System is certified by ICC-ES PMG for conformance to both the International Plumbing Code and the Uniform Plumbing Code under PMG-1018. Spears® LabWaste®, EverTUFF® Industrial CPVC and CTS CPVC pipe and fittings are certified by ICC-ES PMG for conformance to both the International Mechanical Code and the Uniform Mechanical Code for flame spread/ smoke development of < 25/50 under PMG-1278 (See listings at www.icc-es-pmg.org).

Underwriters Laboratories

<u>(UL)</u>

Underwriters Laboratories is a global independent third party product testing and certification organization. UL certifies Spears®. FlameGuard® CPVC Fire Sprinkler Products to both UL 1821 for US markets and to ULC/ORD-C199P for Canadian markets, under the c-UL-us mark. UL is an NFPA recognized certification listing organization for CPVC Fire Sprinkler Products (see certifications at www.ul.com).

FM GLOBAL

FM Approvals (formerly Factory Mutual Research) offers worldwide certification and testing services of industrial and commercial loss prevention products as an independent third party product testing and certification organization. FM certifies Spears® FlameGuard® CPVC Fire Sprinkler Products to FM 1635, Plastic Pipe & Fittings for Automatic Sprinkler Systems, FM is an NFPA recognized certification listing organization for CPVC Fire Sprinkler Products (see Approval Guide at www.fmglobal.com).

<u>Loss Prevention Certification</u> <u>Board (LPCB)</u> The LPCB is an independent, third-party approvals division of the BRE Global organization, that assesses and certifies fire and security systems and services against standards, such as BS, EN and LPS, developed in cooperation with manufacturers and insurers. Currently, LPCB certifies Spears® FlameGuard® CPVC Fire Sprinkler Products to LPS 1260, Plastic Pipe and Fittings for Use in Automatic Sprinkler Systems. LPCB is also the UKAS Certified Registrar of Spears® ISO 9001 Quality Management System. Approved manufacturers are listed in the LPCB Red Book (see www.redbooklive.com).

American Bureau of Shipping (ABS)

ABS is an internationally recognized Classification Society responsible for verifying that marine vessels and offshore structures comply with Society Rules and Guides established for design, construction and periodic survey. ABS is a member of the International Association of Classification Societies (IACS). Spears[®] EverTUFF® CPVC Schedule 40/80 pipe and fittings, OceanTUFF™ CPVC Marine Drainage System and specific Spears[®] valves are Type Approved by ABS (See Type Approvals at www.eagle.org)

U.S. Coast Guard

The United States Coast Guard is the Flag Administration of the United States of America and functions as a multi-mission service with jurisdictions in both domestic and international waters. Spears® EverTUFF® CPVC Schedule 40/80 pipe and fittings, OceanTUFF™ CPVC Marine Drainage System and EverTUFF® CPVC CTS Hot & Cold Water Distribution System are approved by the U S Coast Guard to 2010 FTP Codes for use in vessels and offshore platforms

Suitable for Oil-Free air handling to 25 psi, not for distribution of compressed air or gas

