

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. Currently 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-

Underwriters Laboratories (UL) is a global independent third party product testing and certification organization. Currently, 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

ÈM 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. Currently, 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).

Loss Prevention Certification Board (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) is a member of the International Association of Classification Societies (IACS) responsible for

verifying that marine vessels and offshore structures comply with Rules that the society has established for design, construction and periodic survey. Classification and product use are specified under a Type Approval. Currently Spears® CPVC pipe, fittings and LabWaste™ pipe and fittings are specified under ABS Type Approval Certificate No. 10-HS539421-1-PDA; and Spears® CPVC Valves are specified under ABS Type Approval Certificate No. 12-HS938098-PDA (see Type Approval at www.eagle.org)