



EverTUFF® CTS CPVC HOT & COLD WATER DISTRIBUTION SYSTEM

CTS-2-1022

Certified Safe Alternative to Metal Plumbing Systems



All conventional metal plumbing systems corrode leaving their corrosive wastes for deposit into the water system. CPVC thermoplastic system components never corrode. Spears® EverTUFF® CTS CPVC system of fittings, pipe, supply stops, valves & solvent cement are Certified lead-free by NSF® International (NSF®) in accordance with ANSI/NSF® 61 and NSF® 372 for compliance with all State & Federal Regulations and certified to CSA B137.6. Approved by national, state and most municipal building codes* and listed by ICC to ASTM E84 for Flame & Smoke Characteristics of less than 25/50 for use in return air plenums (See PMG Listing No. PMG-1278 at www.icc-es-pmg.org). Spears® CTS CPVC products are ideally suited for hot and cold water distribution systems in residential and commercial structures, as well as recreational vehicles, modular homes and mobile homes. *Check state and local codes.

Full Line of CTS CPVC Solvent Cement, Fittings, Pipe, Supply Stops & Ball Valves 1/2" Through 2" Plus Supplemental IPS CPVC in 2-1/2" & Up

EverTUFF® CPVC pipe and fitting are available for most any size project using Copper-Tube-Size (CTS) CPVC in sizes 1/2" through 2". Plus, can be used with supplemental Schedule 40 and Schedule 80 CPVC Iron Pipe Size (IPS) for sizes 2-1/2" and larger Available for use in multi-story installations where adequate design and installation practices have been utilized.

Exceptional Corrosion Resistance

Unlike metal systems, CPVC CTS products never rust, scale, or pit, and will provide many years of maintenance-free service and extended system life.

Energy Savings

Low heat conductivity minimizes heat loss in hot water systems.

Higher Flow Capacity

Smooth interior walls result in lower pressure loss and higher volume than conventional metal systems.

Lower System Costs

Lower material costs than metallic systems, combined with lighter weight and ease of installation, can substantially reduce installation cost.

Suitable for Commercial Hot Water

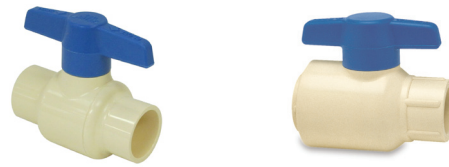
CTS CPVC products can handle fluids at service temperatures up to 180°F (82°C).

CTS CPVC 1/4-Turn Angle Supply Stop



Used with plumbing fixtures to terminate and control hot and cold water supply, Angle Supply Stops NSF® Certified to ASTM F 1970 for use in ASTM D 2846 Hot & Cold Water Distribution Systems. All Supply Stops are rated to 100 psi @ 180°F. Available in 1/2" CTS Socket, Spears® patented Special Reinforced (SR) and 1/2" FIPT female thread inlets. Choose 1/2" and 3/8" NPT male thread outlets or 1/2" and 3/8" Compression male thread outlets for connection to conventional Female NPT or Female Compression faucet or toilet supply lines with captive seals.

CTS CPVC Ball Valves



Residential

Commercial

Spears® EverTUFF® Copper-Tube-Size Ball Valves feature one-piece design that never requires adjustment. EPDM O-ring seal and PTFE Seats enable bubble-tight shut off. Choose Heavy Commercial design manufactured to ASTM F1970 for use in ASTM D 2846 Hot & Cold Water Distribution Systems or Economical Residential design. Rated to 100 psi maximum internal pressure at 180°F and NSF® Certified Lead-Free for use in potable water systems.

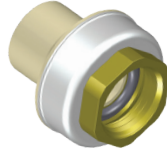
Spears® EverTUFF® Exclusive Specialty Fittings - All Lead-Free...

CTS CPVC Caps & Couplings



- Uses **NO Solvent Cement**
 - Permanent Connection
- Excellent for Repairs & Transition to Copper Systems
- NSF® Certified Lead-Free

Gasket Sealed Brass-Threaded Transition Fittings



- Eliminates Radial Stress
- Requires NO Thread Sealants
- Eliminates Sealant Incompatibility
- NSF® Certified Lead-Free

Patented Special Reinforced (SR) Plastic Threaded Transition Fittings



- Eliminates Split Threads
- Eliminates Leaks Associated with Over Tightening
- Eliminates MIC, Electrolytic & Soil Chemistry Corrosion
- NSF® Certified Lead-Free

Stainless Steel Threaded Transition Fittings



- Excellent for Transitions to Metal Systems
- NSF® Certified Lead-Free

Lead-Free Brass Compression Unions



- NSF® Certified Lead-Free
- Transitions to Copper Tubing and Other Metal Systems

Spears® EverTUFF®, The Full-Service CTS CPVC Product Line...

Application

Spears® EverTUFF® Copper-Tube-Size (CTS) products are manufactured from chlorinated polyvinyl chloride (CPVC) for use with SDR-11 piping systems of CTS outside diameter in hot and cold water distribution systems in nominal pipe size 1/2" through 2". CTS CPVC products can be used in conjunction with Spears® supplemental Schedule 40 and Schedule 80 CPVC Iron-Pipe-Size (IPS) pipe and fittings for sizes 2-1/2" through 12" in commercial multi-story installations. Check state and local codes for application and restrictions.

Working Pressure

Spears® EverTUFF® CTS CPVC fittings, pipe and valves have a continuous working pressure rating of 100 psi at 180°F, unless designated for cold water use only.

UL 2818 Performance Certification - Certified by Underwriters Laboratories (UL®) for conformance to UL 2818 Certification Program For Chemical Emissions For Building Materials, Finishes And Furnishings. This GREENGUARD GOLD Certification provides eligibility for LEED® credits when installing EverTUFF® CTS Hot & Cold Water Distribution System in a green building project.

Conformance Standards

Spears® EverTUFF® CTS CPVC fittings, pipe, valves and solvent cement conforms to ASTM D 2846 Specification for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Hot and Cold Water Distribution Systems. Solvent Cement meets ASTM F 493.

Product Certification

Spears® EverTUFF® CTS CPVC piping systems are certified by NSF® International (NSF®) to ASTM D 2846 for use in Hot and Cold Water Distribution Systems, to the Uniform Plumbing Code (NSF® U.P.Code) and CSA B137.6 for use in potable water service. All Spears® EverTUFF® CTS CPVC products are NSF® certified lead-free in accordance with ANSI/NSF® Standard 61 and 372 for compliance with all State & Federal regulation. All Spears® EverTUFF® CTS CPVC pipe and fittings are Listed by ICC to ASTM E84 for flame spread/smoke development of less than 25/50.



Sample Engineering Specifications

All fittings, pipe, supply stops and valves shall be EverTUFF® Copper-Tube-Size (CTS) constructed from CPVC 4120 with minimum Cell Classification of 23447. All CTS CPVC products shall be produced to applicable requirements of ASTM D 2846 and rated to 100 psi at 180°F, unless specifically designated for cold water service only. Solvent cement shall be produced to applicable requirements of ASTM D 2846 and ASTM F 493. All supply stops shall be 1/4 turn angle or straight pattern CTS CPVC with NPT or Compression male thread outlets. All ball valves shall be CTS CPVC sealed unit type with EPDM O-ring and double stop Polypropylene handle in either Commercial or Residential design. All CTS CPVC products shall be certified lead-free for potable water use by NSF® International in accordance with NSF®61 and NSF®372 and certified to CSA B137.6. All pipe and fittings shall be Listed by ICC for compliance with ASTM E84 Surface Burning Characteristic with flame spread/smoke development of less than 25/50 for use in return air plenums and all pipe and solvent cement shall be certified to UL 2818 GREENGUARD GOLD as manufactured by Spears® Manufacturing Company.