MECHANICAL TESTING LABORATORY

LIST OF APPROVED LISTING AND TESTING AGENCIES

August 2, 2019

Part I: Approved Listing Agencies
Part II: Approved Testing Agencies

201 N. Figueroa Street, Suite 500
Los Angeles, CA 90012
Phone: (213) 482-0065
www.ladbs.org

As a covered entity under Title II of the Americans with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability and, upon request will provide reasonable accommodation to ensure equal access to its programs, services and activities.
Part I: Approved Listing Agencies

1. CSA Group Testing & Certification Inc.

(Main Lab) 178 Rexdale Boulevard
Toronto, ON M9W 1R3
Canada
Phone: (416) 747-2798

(Branch Lab) CSA America Testing & Certification LLC
8501 E. Pleasant Valley Road
Cleveland, OH 44131
Phone: (216) 524-4990

(Branch Lab)
No. 10, Keyan Road, Science Park
Luo Gang District, Guangzhou
Guangdong 510663
People’s Republic of China

Expiration: May 1, 2020

This agency is approved for listing of plumbing and mechanical products to meet the referenced standards listed below as found in the City of Los Angeles Plumbing and Mechanical Codes, 2017 Edition:

This agency is also approved for listing of plumbing products to meet the lead-free requirements of Section 116875 of the California Health and Safety Code (Toronto location only).

Mechanical

ASME B16.33
Manually Operated Metallic Gas Valves for Use in Gas Piping Systems up to 175 PSI (Sizes NPS 1/2 Through NPS 2)

CSA Z21.1b
Household Cooking Gas Appliances

CSA Z21.5.1a
Gas Clothes Dryers- Volume I, Type 1 Clothes Dryers (same as CSA 7.1a)

CSA Z21.5.2
Gas Clothes Dryers- Volume II, Type 2 Clothes Dryers (same as CSA 7.2)

CSA Z21.11.2
Gas-Fired Room Heaters, Volume II, Unvented Room Heaters

CSA Z21.12b
Draft Hoods

CSA Z21.13
Gas-Fired Low Pressure Steam and Hot Water Boilers (same as CSA 4.9)

CSA Z21.19a
Refrigerators Using Gas Fuel (same as CSA 1.4a)

CSA Z21.20a
Automatic Gas Ignition Systems and Components

CSA Z21.23
Gas Appliance Thermostats

CSA Z21.24a
Connectors for Gas Appliances (same as CSA 6.10a)

CSA Z21.40.1a/CGA 2.91a
Gas-Fired, Heat Activated Air-Conditioning and Heat Pump Appliances

CSA Z21.41
Quick Disconnect Devices for Use with Gas Fuel Appliances (same as CSA 6.9)

CSA Z21.42
Gas-Fired Illuminating Appliances

CSA Z21.61
Gas-Fired Toilets

CSA Z21.66/CGA 6.14
Automatic Vent Damper Devices for Use with Gas-Fired Appliances

CSA Z21.71a
Automatic Intermittent Pilot Ignition Systems for Field Installation
CSA Z21.90b
Gas Convenience Outlets and Optional Enclosures (same as 6.24b)

CSA Z83.11b
Gas Food Service Equipment (Same as CSA 1.8b)

CSA Z83.18
Recirculating Direct Gas-Fired Industrial Air Heaters

CSA Z83.19a
Gas-Fired High-Intensity Infrared Heaters (same as CSA 2.35a)

UL 21
LP-Gas Hose

UL 125
Flow Control Valves for Anhydrous Ammonia and LP-Gas

UL 144
LP-Gas Regulators

UL 252
Compressed Gas Regulators

UL 296
Oil Burners

UL 343
Pumps for Oil-Burning Appliances

UL 353
Limit Controls

UL 378
Draft Equipment

UL 391
Solid-Fuel and Combination-Fuel Central and Supplementary Furnaces

UL 429
Electrically Operated Valves

UL 441
Gas Vents

UL 536
Flexible Metallic Hose

UL 569
Pigtails and Flexible Hose Connectors for LP-Gas

UL 726
Oil-Fired Boiler Assemblies

UL 727
Oil-Fired Central Furnaces

UL 729
Oil-Fired Floor Furnaces

UL 730
Oil-Fired Wall Furnaces

UL 731
Oil-Fired Unit Heaters

UL 732
Oil-Fired Storage Tank Water Heaters

UL 733
Oil-Fired Air Heaters and Direct-Fired Heaters

UL 795
Commercial-Industrial Gas Heating Equipment

UL 896
Oil-Burning Stoves

UL 1482
Solid-Fuel Type Room Heaters

UL 1995
Heating and Cooling Equipment

Plumbing

ASCE 25
Earthquake-Actuated Automatic Gas Shutoff Devices

ASME A112.3.4/CSA B45.9
Plumbing Fixtures with Pumped Waste and Macerating Toilet Systems

ASME A112.4.14
Manually Operated Quarter-turn Shutoff Valves for Use in Plumbing Systems

ASME A112.18.1/CSA B125.1
Plumbing Supply Fittings

ASME A112.18.2/CSA B125.2
Plumbing Waste Fittings

ASME A112.18.3
Performance Requirements for Backflow Protection Devices and Systems in Plumbing Fixture Fittings

ASME A112.19.2/CSA B45.1
Ceramic Plumbing Fixtures

ASME A112.19.3/CSA B45.4
Stainless Steel Plumbing Fixtures

ASME A112.19.5
Flush Valves and Spuds for Water Closets, Urinals and Tanks

ASME A112.19.7/CSA B45.10
Hydromassage Bathtub Systems

ASME A112.19.10
Dual Flush Devices for Water Closets

ASME B16.33
Manually Operated Metallic Gas Valves for Use in Gas Piping Systems up to 175 PSI (Sizes NPS 1/2 Through NPS 2)

ASME B16.40
Manually Operated Thermoplastic Gas Shutoffs and Valves in Gas Distribution Systems

ASSE 1001
Atmospheric Type Vacuum Breakers

ASSE 1002
Anti-Siphon Fill Valves for Water Closet Tanks

ASSE 1003
Water Pressure Reducing Valves for Domestic Water Distribution Systems

ASSE 1010
Water Hammer Arrestors

ASSE 1011
Hose Connection Vacuum Breakers

ASSE 1012
Backflow Preventers with an Intermediate Atmospheric Vent

ASSE 1013
Reduced Pressure Principle Backflow Preventers and Reduced Pressure Principle Fire Protection Backflow Preventers

ASSE 1014
Backflow Prevention Devices for Hand-Held Showers
ASSE 1015
Double Check Backflow Prevention Assemblies and Double Check Fire Prevention Backflow Prevention Assemblies

ASSE 1016
Automatic Compensating Valves for Individual Showers and Tub/Shower Combinations

ASSE 1017
Temperature Actuated Mixing Valves for Hot Water Distribution Systems

ASSE 1018
Trap Seal Primer Valves - Potable Water Supplied

ASSE 1019
Wall Hydrant with Backflow Protection and Freeze Resistance

ASSE 1020
Pressure Vacuum Breaker Assembly

ASSE 1022
Backflow Preventer for Beverage Dispensing Equipment

ASSE 1024
Dual Check Backflow Preventers

ASSE 1035
Laboratory Faucet Backflow Preventers

ASSE 1037
Pressurized Flushing Devices (Flushometers) For Plumbing Fixtures

ASSE 1044
Trap Seal Primer Devices - Drainage Types and Electronic Design Types

ASSE 1047
Reduced Pressure Detector Fire Protection Backflow Prevention Assemblies

ASSE 1048
Double Check Detector Fire Protection Backflow Prevention Assemblies

ASSE 1052
Hose Connection Backflow Preventers

ASSE 1056
Spill Resistant Vacuum Breakers

ASSE 1061
Push-Fit Fittings

ASSE 1062
Temperature Actuated, Flow Reduction (TAFR) Valves for Individual Supply Fittings

ASSE 1066
Individual Pressure Balancing In-Line Valves for Individual Fixture Fittings

ASSE 1069
Automatic Temperature Control Mixing Valves

ASSE 1070
Water Temperature Limiting Devices

ASTM C1173
Flexible Transition Couplings for Underground Piping Systems

ASTM C1277
Shielded Couplings Joining Hubless Cast Iron Soil Pipe and Fittings

ASTM C1460
Shielded Transition Couplings For Use With Dissimilar DWV Pipe and Fittings Above Ground

ASTM D2235
Solvent Cement for Acrylonitrile-Butadiene-Styrene (ABS) Plastic Pipe and Fittings

ASTM D2466
Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40

ASTM D2564
Solvent Cements for Poly (Vinyl Chloride) (PVC) Plastic Piping Fittings

ASTM D2654
Sewer Pipe and Fittings

ASTM D2661
Acrylonitrile-Butadiene Styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe and Fittings

ASTM D2665
Poly (Vinyl Chloride) (PVC) Plastic Drain, Waste, and Vent Pipe and Fittings

ASTM D2683
Socket-Type Polyethylene Fittings for Outside Diameter-Controlled Polyethylene Pipe and Tubing

ASTM D3034
Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings

ASTM D3138
Solvent Cements for Transition Joints Between Acrylonitrile-Butadiene-Styrene (ABS) and Poly (Vinyl Chloride) (PVC) Non-Pressure Piping Components

ASTM F493
Solvent Cements for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe and Fittings

CISPI 310
Coupling for Use in Connection with Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping Applications

CSA B45.0
General Requirements for Plumbing Fixtures

CSA B45.5
Plastic Plumbing Fixtures

CSA B64
Backflow Preventers and Vacuum Breakers

CSA B64.1.1
Atmospheric Vacuum Breakers (AVB)

CSA B64.1.2
Pressure Vacuum Breakers (PVB)

CSA B64.2
Hose Connection Vacuum Breakers (HCVB)

CSA B64.2.1.1
Hose Connection Dual Check Vacuum Breakers (HCDVB)

CSA B64.4
Reduced Pressure Principle (RP) Backflow Preventers

CSA B64.4.1
Reduced Pressure Principle Backflow Preventers for Fire Protection Systems (RPF)

CSA B64.5
Double Check Valve (DCVA) Backflow Preventers

CSA B64.5.1
Double Check Valve Backflow Preventers for Fire Protection Systems (DCVAF)
CSA B64.7
Laboratory Faucet Vacuum Breakers (LFVB)

CSA B79
Commercial and Residential Drains and Cleanouts

CSA B125.3
Plumbing Fittings

CSA B181.3
Polyolefin and Polyvinylidene Fluoride (PVDF) Laboratory Drainage Systems

CSA B356
Water Pressure Reducing Valves for Domestic Water Supply Systems

CSA LC 1b
Fuel Gas Piping Systems Using Corrugated Stainless Steel Tubing (CSST) (same as CSA 6.26b)

CSA LC 4a
Press-Connect Metallic Fittings For Use in Fuel Gas Distribution Systems (same as CSA 6.32a)

CSA Z21.10.1
Gas Water Heaters-Volume I, Storage Water Heaters With Input Ratings of 75,000 Btu Per Hour or Less (same as CSA 4.1)

CSA Z21.12b
Draft Hoods

CSA Z21.13
Gas-Fired Low Pressure Steam and Hot Water Boilers (same as CSA 4.9)

CSA Z21.22b
Relief Valves for Hot Water Supply Systems (same as CSA 4.4b)

CSA Z21.24a
Connectors for Gas Appliances (same as CSA 6.10a)

CSA Z21.40.1a
Gas-Fired, Heat Activated Air-Conditioning and Heat Pump Appliances (same as CGA 2.91a)

CSA Z21.41
Quick-Disconnect Devices for Use with Gas Fuel Appliances (same as CSA 6.9)

CSA Z21.47
Gas-Fired Central Furnaces (same as CSA 2.3)

CSA Z21.56
Gas-Fired Pool Heaters (same as CSA 4.7)

CSA Z21.86
Vented Gas-Fired Space Heating Appliances (same as CSA 2.32)

CSA Z83.11b
Gas Food Service Equipment (same as CSA 1.8b)

IAPMO PS 90
Elastomeric Test Caps, Cleanout Caps, and Combination Test Caps / Shielded Couplings

IAPMO Z124.5
Plastic Toilet Seats

NSF 41
Non-Liquid Saturation Treatment Systems

NSF 42
Drinking Water Treatment Units - Aesthetic Effects

NSF 53
Drinking Water Treatment Units - Health Effects

NSF 61
Drinking Water System Components – Health Effects

PDI WH-201
Water Hammer Arresters

UL 125
Flow Control Valves for Anhydrous Ammonia and LP-Gas

UL 144
LP-Gas Regulators

UL 252
Compressed Gas Regulators

UL 296
Oil Burners

UL 343
Pumps for Oil-Burning Appliances

UL 441
Gas Vents

UL 569
Pigtails and Flexible Hose Connectors for LP-Gas

UL 726
Oil-Fired Boiler Assemblies

UL 732
Oil-Fired Storage Tank Water Heaters

UL 778
Motor-Operated Water Pumps

UL 1081
Swimming Pool Pumps, Filters, and Chlorinators
## Certification Marks:

<table>
<thead>
<tr>
<th>CSA Mark</th>
<th>Type of Mark/Label</th>
<th>CSA Mark/Label Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="CSA Mark" /></td>
<td>Certification mark</td>
<td>Indicates that the product was tested and has met the certification requirements for electrical, plumbing and/or mechanical products.</td>
</tr>
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<td><img src="image" alt="CSA Mark" /></td>
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<td>Indicates that the product was tested and has met the certification requirements for gas-fired products.</td>
</tr>
<tr>
<td><img src="image" alt="CSA Mark" /></td>
<td>Certification mark</td>
<td>Indicates the product was tested and has met low lead content requirements.</td>
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</tr>
<tr>
<td><img src="image" alt="CSA Mark" /></td>
<td>Certification mark</td>
<td>Indicates that the product was tested and has met the Drinking Water requirements. Applicable NSF/ANSI and/or CSA Group standard is listed under DRINKING WATER.</td>
</tr>
<tr>
<td>Field certification label</td>
<td>Indicates that the product was tested and has met the certification and regional installation requirements for products.</td>
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<td>Field certification label</td>
<td>Indicates that the gas-fired product was tested and met the certification and regional installation requirements for products.</td>
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</tr>
<tr>
<td>Field evaluation label</td>
<td>Indicates that the product was tested and has met the all requirements, including the National Fire Protection Association and the National Electric Code for installation and use.</td>
<td></td>
</tr>
</tbody>
</table>
2. FM Approvals LLC

(Main Lab)  
1151 Boston-Providence Turnpike  
P.O. Box 9102  
Norwood, MA 02062  
Phone: (781) 762-4300

(Branch Lab)  
Hydraulics Laboratory  
743A Reynolds Road  
West Glocester, RI 02814  
Phone: (401) 567-0590

Expiration: October 1, 2019

This agency is approved for listing of fire protection equipment to meet applicable ANSI or UL Standards as long as the listed products and their installations are not in violations of the Los Angeles Plumbing, 2017 Edition.

Where FM Standards are used, they shall meet or exceed the ANSI or UL Standards. The equipment includes automatic sprinkler system components, fire pumps, tanks, hydrants, flame and smoke testing to ASTM E84 (UL 723).

Certification Marks:

<table>
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| ![FM Approved Mark](image) | **FM Approved Mark**  
This marking indicates that the product has been evaluated and is listed to the applicable standard specified. |
| ![FM Approved Mark with “C” and “US”](image) | **FM Approved Mark with “C” and “US”**  
This marking indicates that the product has been evaluated to meet Canadian and U.S. standards, and is listed to the applicable standard specified. |
| ![FM Approved Cast-On Marks](image) | **FM Approved Cast-On Marks**  
Where reproduction of the FM Approved mark described above is impossible because of production restrictions, use of these modified versions of the FM Approved mark is allowed. |
3. International Association of Plumbing and Mechanical Officials Research and Testing (IAPMO R&T)

5001 E. Philadelphia Street
Ontario, CA 91761
Phone: (909) 472-4100

Expiration: June 1, 2020

This agency is approved for listing of plumbing and mechanical products to meet the referenced standards listed below as found in the City of Los Angeles Plumbing and Mechanical Codes, 2017 Edition:

This agency is also approved for listing of plumbing products to meet the lead-free requirements of Section 116875 of the California Health and Safety Code.

Plumbing:

AHAM FWD-1
Food waste disposers

APSP 1
Public Swimming Pools

ASCE 25
Earthquake-Actuated Automatic Gas Shutoff Devices

ASME A13.1
Scheme for the Identification of Piping Systems

ASME A112.1.2
Air Gaps in Plumbing Systems (For Plumbing Fixtures and Water-Connected Receptors)

ASME A112.1.3
Air Gap for use with Plumbing Fixtures, Appliances, and Appurtenances

ASME A112.3.1
Stainless Steel Drainage Systems for Sanitary DWV, Storm and Vacuum Applications, Above and Below Ground

ASME A112.3.4 / CSA B45.9
Plumbing Fixtures with Pumped Waste and Macerating Toilet System

ASME A112.4.1
Water Heater Relief Valve Drain Tubes

ASME A112.4.2
Water Closet Personal Hygiene Devices

ASME A112.4.3
Plastic Fittings for Connecting Water Closets to the Sanitary Drainage System

ASME A112.4.14
Manually Operated, Quarter-Turn Shutoff Valves for Use in Plumbing Systems

ASME A112.6.1M
Floor-Affixed Supports for Off-the-Floor Plumbing Fixtures for Public Use

ASME A112.6.2
Framing-Affixed Supports for Off-the-Floor Water Closets with Concealed Tanks

ASME A112.6.3
Floor and Trench Drains

ASME A112.6.4
Roof, Deck, and Balcony Drains

ASME A112.6.7
Sanitary Floor Sinks

ASME A112.6.9
Siphonic Roof Drains

ASME A112.14.1
Backwater Valves

ASME A112.14.3
Grease Interceptors

ASME A112.14.4
Grease Removal Devices

ASME A112.14.6
FOG (Fats, Oils, and Greases) Disposal Systems

ASME A112.18.1/CSA B125.1
Plumbing Supply Fittings

ASME A112.18.2 / CSA B125.2
Plumbing Waste Fittings

ASME A112.18.3
Performance Requirements for Backflow Protection Devices and Systems in Plumbing Fixture Fittings

ASME A112.18.6 / CSA B125.6
Flexible Water Connectors

ASME A112.18.9
Protectors/Insulators for Exposed Waste and Supplies on Accessible Fixtures

ASME A112.19.1/CSA B45.2
Enamelled Cast Iron and Enamelled Steel Plumbing Fixtures

ASME A112.19.2/CSA B45.1
Ceramic Plumbing Fixtures

ASME A112.19.3/CSA B45.4
Stainless Steel Plumbing Fixtures

ASME A112.19.5/CSA B45.15
Flush Valves and Spuds for Water Closets, Urinals and Tanks

ASME A112.19.7 / CSA B45.10
Hydromassage Bathtub Appliances
ASME A112.19.10
Dual Flush Devices for Water Closets

ASME A112.19.12
Wall Mounted, Pedestal Mounted, Adjustable, Elevating, Tilting, and Pivoting Lavatory, Sink and Shampoo Bowl Carrier Systems and Drain Waste Systems

ASME A112.19.14
Six-Liter Water Closets Equipment with a Dual Flushing Device

ASME A112.19.15
Bathtub/whirlpool bathtubs with pressure sealed doors

ASME A112.19.19
Vitreous China Nonwater Urinals

ASME A112.21.3M
Hydrants for Utility and Maintenance Use

ASME A112.36.2M
Cleanouts

ASME B1.20.1
Pipe Threads, General Purpose, Inch

ASME B1.20.3
Dryseal Pipe Threads, Inch

ASME B16.1
Gray Iron Pipe Flanges and Flanged Fittings: Classes 25, 125, and 250

ASME B16.3
Malleable Iron Threaded Fittings: Classes 150 and 300

ASME B16.4
Gray Iron Threaded Fittings: Classes 125 and 250

ASME B16.5
Pipe Flanges and Flanged Fittings: NPS 1/2 through NPS 24 Metric/Inch

ASME B16.12
Cast Iron Threaded Drainage Fittings

ASME B16.15
Cast Copper Alloy Threaded Fittings: Classes 125 and 250

ASME B16.18
Cast Copper Alloy Solder Joint Pressure Fittings

ASME B16.20
Metallic Gaskets For Pipe Flanges: Ring-Joint, Spiral-Wound, and Jacketed

ASME B16.22
Wrought Copper and Copper Alloy Solder-Joint Pressure Fittings

ASME B16.23
Cast Copper Alloy Solder Joint Drainage Fittings: DWV

ASME B16.24
Cast Copper Alloy Pipe Flanges and Flanged Fittings: Classes 150, 300, 600, 900, 1500 and 2,500

ASME B16.26
Cast Copper Alloy Fittings for Flared Copper Tubes

ASME B16.29
Wrought Copper and Wrought Copper Alloy Solder Joint Drainage Fittings - DWV

ASME B16.33
Manually Operated Metallic Gas Valves for use in Gas Piping Systems up to 175 psi (Size NPS 1/2 - NPS 2)

ASME B16.34
Valves - Flanged, threaded and welding end

ASME B16.39
Malleable Iron Threaded Pipe Unions: Classes 150, 250 and 300 (Includes Revision Services)

ASME B16.40
Manually Operated Thermoplastic Gas Shutoffs and Valves in Gas Distribution Systems

ASME B16.47
Large Diameter Steel Flanges: NPS 26 through NPS 60 metric/Inch

ASME B16.50
Wrought Copper and Copper Alloy Brazé-Joint Pressure Fittings

ASME B31.1
Power Piping

ASME B31.3
Process Piping

ASME B36.10M
Welded and Seamless Wrought Steel Pipe

ASME B36.19
Stainless Steel Pipe

ASME BPVC Section IV
Rules for Construction of Heating Boilers

ASME BPVC Section VIII
Rules for Construction of Pressure Vessels Division 1

ASME B36.10M
Welded and Seamless Wrought Steel Pipe

ASME B36.19
Stainless Steel Pipe

ASME BPVC Section IV
Rules for Construction of Heating Boilers

ASME BPVC Section VIII
Rules for Construction of Pressure Vessels Division 1

ASSE 1001
Atmospheric Type Vacuum Breakers

ASSE 1002
Anti-Siphon Fill Valves for Water Closet Tanks

ASSE 1003
Water Pressure Reducing Valves for Domestic Water Distribution Systems

ASSE 1004
Backflow Preventing Requirements for Commercial Dishwashing Machines

ASSE 1008
Plumbing Aspects of Residential Food Waste Disposer Units

ASSE 1010
Water Hammer Arresters

ASSE 1011
Hose-Connection Vacuum Breakers

ASSE 1012
Backflow Preventer with Intermediate Atmosphere Vent

ASSE 1013
Reduced Pressure Principle Backflow Preventers and Reduced Pressure Principle Fire Protection Backflow Preventers

ASSE 1014
Backflow Prevention Devices for Hand-Held Showers
ASSE 1015
Double Check Backflow Prevention Assemblies and Double Check Fire Protection Backflow Prevention Assemblies

ASSE 1016/ASME 112.1016/CSA B125.16
Automatic Compensating Valves for Individual Showers and Tub/Shower Combinations

ASSE 1017
Temperature Actuated Mixing Valves for Hot Water Distribution Systems

ASSE 1018
Trap Seal Primer Valves- Potable Water Supplied

ASSE 1019
Wall Hydrant with Backflow Protection and Freeze Resistance

ASSE 1020
Pressure Vacuum Breaker Assembly

ASSE 1022
Backflow Preventer for Beverage Dispensing Equipment

ASSE 1023
Hot Water Dispensers Household Storage Type-Electrical

ASSE 1024
Dual Check Backflow Preventers

ASSE 1025
Dual Check Valve Type Backflow Preventers for Carbonated Beverage Dispensers, Post Mix Types

ASSE 1035
Laboratory Faucet Backflow Preventer

ASSE 1037
Pressurized Flushing Devices (Flushometers) for Plumbing Fixtures

ASSE 1044
Trap Seal Primer Devices-Drainage Types and Electronic Design Types

ASSE 1047
Reduced Pressure Detector Fire Protection Backflow Prevention Assemblies

ASSE 1048
Double Check Detector Fire Protection Backflow Prevention Assemblies

ASSE 1052
Hose Connection Backflow Preventer

ASSE 1055
Chemical Dispensing Systems

ASSE 1056
Spill Resistant Vacuum Breakers Assemblies

ASSE 1057
Freeze Resistant Sanitary Yard Hydrant with Backflow Protection

ASSE 1060
Outdoor Enclosures for Fluid Conveying Components

ASSE 1061
Push-Fit Fittings

ASSE 1062
Temperature Actuated, Flow Reduction (TAFR) Valves for Individual Fixture Fittings

ASSE 1066
Individual Pressure Balancing In-Line Valves for Individual Fixture Fittings

ASSE 1069
Automatic Temperature Control Mixing Valves

ASSE 1070
Water Temperature Limiting Devices

ASSE 1071
Temperature Actuated Mixing Valves for Plumbed Emergency Equipment

ASSE 1079
Dielectric Pipe Unions

ASSE Series 5000
Cross-Connection Control Professional Qualifications

ASSE Series 6000
Professional Qualifications Standard for Medical Gas Systems Personnel

ASTM A47
Ferritic Malleable Iron Castings

ASTM A48
Gray Iron Casting

ASTM A53/A53M
Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded, and Seamless

ASTM A74
Cast Iron Soil Pipe and Fittings

ASTM A106/A106M
Seamless Carbon Steel Pipe for High-Temperature Service

ASTM A126
Gray Iron Casting for Valves, Flanges, and Pipe Fittings

ASTM A197/A197M
Cupola Malleable Iron

ASTM A254/A254M
Copper-Brazed Steel Tubing

ASTM A269
Seamless and Welded Austenitic Stainless Steel Tubing for General Service

ASTM A312/A312M
Seamless Welded, and Heavily Cold Worked Austenitic Stainless Steel Pipes

ASTM A377
Ductile-Iron Pressure Pipe

ASTM A479/A479M
Stainless Steel Bars and Shapes for Use in Boilers and Other Pressure Vessels

ASTM A518/A518M
Corrosion-Resistant High-Silicon Iron Castings

ASTM A536
Ductile Iron Castings

ASTM A653/A653M
Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process

ASTM A733
Welded and Seamless Carbon Steel and Austenitic Stainless Steel Pipe Nipples

ASTM A861
High-Silicon Iron Pipe and Fittings

ASTM A888
Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping Applications
ASTM A1045  Flexible Poly (Vinyl Chloride) (PVC) Gaskets used in Connection of Vitreous China Plumbing Fixtures to Sanitary Drainage Systems

ASTM A1056  Cast Iron Couplings used for Joining Hubless Cast Iron Soil Pipe and Fittings

ASTM B29  Refined Lead

ASTM B32  Solder Metal

ASTM B42  Seamless Copper Pipe, Standard Sizes

ASTM B43  Seamless Red Brass Pipe, Standards Sizes

ASTM B75/B75M  Seamless Copper Tube

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Cast Copper Alloy Pipe Flanges and Flanged Fittings: Classes 150, 300, 600, 900, 1500, and 2500

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Cast Copper Alloy Fittings for Flared Copper Tubes

ASME B16.29
Wrought Copper and Wrought Copper Alloy Solder-Joint Drainage Fittings-DWV

ASME B16.33
Manually Operated Metallic Gas Valves for use in Gas Piping Systems up to 175 psi (Sizes NPS ½- NPS 2)

ASME B16.50
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Copper-Brazed Steel Tubing

ASTM A312 / A312M
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ASTM A420 / A420M
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Steel, Sheet, Carbon, Structural, and High-Strength, Low-Alloy, Hot-Rolled and Cold-Rolled

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| ASTM D2609 | Plastic Insert Fittings for Polyethylene (PE) Plastic Pipe |
| ASTM D2683 | Socket-Type Polyethylene Fittings for Outside Diameter-Controlled Polyethylene Pipe and Tubing |
| ASTM D2837 | Obtaining Hydrostatic Design Basis for Thermoplastic Pipe Materials or Pressure Design Basis for Thermoplastic Pipe Products |
| ASTM D3035 | Polyethylene (PE) Plastic Pipe (DR-PR) Based on Controlled Outside Diameter |
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Factory Assembled Anodeless Risers and Transition Fittings in Polyethylene (PE) and Polyamide 11 (PA11) and Polyamide12 (PA12) Fuel Gas Distribution Systems

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CSA Z21.69a  Connectors for Movable Gas Appliances (same as CSA 6.16a)
CSA Z21.71a  Automatic Intermittent Ignition Systems for Field Installation
CSA Z21.80a  Line Pressure Regulators (same as CSA 6.22a)
CSA Z21.86  Vented Gas-Fired Space Heating Appliances (same as CSA 2.32)
CSA Z21.88a  Vented Gas Fireplaces Heaters (same as CSA 2.33a)
CSA Z21.90b  Gas Convenience Outlets and Optional Enclosures (same as CSA 6.24b)
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CSA Z83.7  Gas-Fired Construction Heaters (same as CSA 2.14)
CSA Z83.8  Gas Unit Heaters, Gas Package Heaters and Gas-Fired Duct Furnaces (same as CSA 2.6)
CSA Z83.11b  Gas Food Service Equipment (same as CSA 1.8b)
CSA Z83.18b  Recirculating Direct Gas-Fired Industrial Air Heaters
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IAPMO Z1033  Flexible PVC Hoses and Tubing for Pools, Hot Tubs, Spas and Jetted Bathubs
IAS 1-91  U.S. Requirements for Indirect Water Heaters for Use With External Heat Sources
IIAR 2  Equipment, Design, and Installation of Closed-Circuit Ammonia Mechanical Refrigerating Systems
MSS SP-6  Finishes for Contact Faces of Pipe Flanges and Connecting-End Flanges of Valves and Fittings
MSS SP-58  Pipe Hangers and Supports-Materials, Design, Manufacture, Selection, Application, and Installation
MSS SP-67  Butterfly Valves
MSS SP-80  Bronze Gate, Globe, Angle, and Check Valves
MSS SP 104  Wrought Copper Solder Joint Pressure Fittings
MSS SP 106  Cast Copper Alloy Flanges and Flanged Fittings: Class 125, 150 and 300
MSS SP 109  Welded Fabricated Copper Solder Joint Pressure Fittings
NEBB 2005  Procedural Standards for Testing Adjusting and Balancing of Environmental Systems
PPI TR-4  Listing for Hydrostatic Design Basis (HDB), Strength Design Basis (SDB), Pressure Design Basis (PDB) and Minimum Required Strength (MRS) Ratings for Thermoplastic Piping Materials or Pipe
SAE J512  Automotive Tube Fittings
SMACNA 2002
HVAC Systems Testing, Adjusting and Balancing

SMACNA 2003
Fibrous Glass Duct Construction Standard

SMACNA 2006
HVAC Duct Construction Standards Metal and Flexible

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Vent or Chimney Connector Dampers for Oil-Fired Appliances

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LP-Gas Hose

UL 33
Heat Responsive Links for Fire-Protection Service

UL 51
Power-Operated Pumps and Bypass Valves for Anhydrous Ammonia, LP-Gas and Propylene

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Steel Tanks for Oil-Burner Fuels and Other Combustible Liquids

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Factory Built Chimneys for Residential Type and Building Heating Appliances

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Flow Control Valves for Anhydrous Ammonia and LP-Gas

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LP-Gas Regulators

UL 174
Household Electric Storage Tank Water Heaters

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Liquid-Level Indicating Gauges for Oil Burner Fuels

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Factory-Made Air Ducts and Air Connectors

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Closure Systems for Use with Rigid Air Ducts

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Closure Systems for Use with Flexible Air Ducts and Air Connectors

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Commercial Electric Cooking Appliances

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Compressed Gas Regulators

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Smoke Detectors for Duct Application

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Oil Burners

UL 300
Fire Testing of Fire Extinguishing Systems for Protection of Commercial Cooking Equipment

UL 343
Pumps for Oil-Burning Appliances

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UL 378
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UL 391
Solid-Fuel and Combination-Fuel Central and Supplementary Furnaces

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UL 404
Gauges, Indicating Pressure for Compressed Gas Service

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Electrically Operated Valves

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Steel Auxiliary Tanks for Oil-Burner Fuel

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Flame Arresters

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UL 555C
Ceiling Dampers

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Liquid-Level Gauges and Indications for Anhydrous Ammonia and LP-Gas

UL 569
Pigtails and Flexible Hose Connectors for LP-Gas

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Exhaust Hoods for Commercial Cooking Equipment

UL 710B
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UL 723
Test for Surface Burning Characteristics of Building Materials

UL 726
Oil-Fired Boiler Assemblies

UL 727
Oil-Fired Central Furnaces

UL 729
Oil-Fired Floor Furnaces

UL 730
Oil-Fired Wall Furnaces

UL 731
Oil-Fired Unit Heater

UL 732
Oil-Fired Storage Tank Water Heaters
UL 733  Oil-Fired Air Heaters and Direct-Fired Heaters
UL 737  Fireplace Stoves
UL 791  Residential Incinerators
UL 795  Commercial-Industrial Gas Heating Equipment
UL 834  Heating, Water Supply, and Power Boilers-Electric
UL 842  Valves for Flammable Fluids
UL 858  Household Electric Ranges
UL 867  Electrostatic Air Cleaners
UL 896  Oil-Burning Stoves
UL 900  Air Filter Units
UL 907  Fireplace Accessories
UL 921  Commercial Dishwashers
UL 959  Medium Heat Appliance Factory-Built Chimneys
UL 984  Hermetic Refrigerant Motor-Compressors
UL 1026  Electric Household Cooking and Food Serving Appliances
UL 1046  Grease Filters for Exhaust Ducts
UL 1206  Electric Commercial Clothes-Washing Equipment
UL 1240  Electric Commercial Clothes-Drying Equipment
UL 1453  Electric Booster and Commercial Storage Tank Water Heaters
UL 1479  Fire Tests of Through-Penetration FireStops
UL 1482  Solid-Fuel Type Room Heaters
UL 1746  External Corrosion Protection Systems for Steel Underground Storage Tanks
UL 1777  Chimney Liners
UL 1812  Ducted Heat Recovery Ventilators
UL 1815  Nonducted Heat Recovery Ventilators
UL 1820  Fire Test of Pneumatic Tubing for Flame and Smoke Characteristics
UL 1887  Fire Test of Plastic Sprinkler Pipe for Visible Flame and Smoke Characteristics
UL 1963  Refrigerant Recovery/Recycling Equipment
UL 1978  Grease Ducts
UL 1995  Heating and Cooling Equipment
UL 2021  Fixed and Location-Dedicated Electric Room Heaters
UL 2043  Fire Test for Heat and Visible Smoke Release for Discrete Products and Their Accessories Installed in Air-Handling Spaces
UL 2157  Electric Clothes Washing Machines and Extractors
UL 2158  Electric Clothes Dryers
UL 2200  Stationary Engine Generator Assemblies
UL 2221  Tests of Fire Resistive Grease Duct Enclosure Assemblies
Certification Marks:

**UPC®**  
Uniform Plumbing Code Certification Marks  
The product complies with BOTH the product's performance standard AND the Uniform Plumbing Code (UPC). Applies to all plumbing products, appliances, pipe, fixtures, valves and related products.

**UMC®**  
Uniform Mechanical Code Certification Marks  
The product complies with BOTH product's performance standard AND the Uniform Mechanical Code (UMC).

**USPC®**  
Uniform Pool, Spa & Hot Tub Code Certification Marks  
The product complies with BOTH the product's performance standard AND the Uniform Swimming Pool, Spa and Hot Tub Code (USPC).

**USEC®**  
Uniform Solar Energy Code Certification Marks  
The product complies with BOTH the product's performance standard AND the Uniform Solar Energy Code (USEC).

**IAPMO R&T Mark**  
This marking indicates that the product has been tested and complies with the product’s specifications or legislative standard.

**IAPMO R&T Low Lead Mark**  
This marking indicates that the product has been tested and found to comply with the low-lead requirements for drinking water system components.
4. ICC Evaluation Service, LLC

3060 Saturn Street, Suite 100
Brea, CA 92821
Phone: (562) 699-0543

Expiration: July 1, 2020

This agency is approved for listing of plumbing and mechanical products to meet the referenced standards listed below as found in the City of Los Angeles Plumbing and Mechanical Codes, 2017 Edition:

This agency is also approved for listing of plumbing products to meet the lead-free requirements of Section 116875 of the California Health and Safety Code.

Mechanical Standards

AHRI 700
Specification for Fluorocarbon Refrigerants

ASCE 25
Earthquake Actuated Automatic Gas Shutoff Devices

ASHRAE 62.1
Ventilation for Acceptable Indoor Air Quality

ASME A13.1
Scheme for the Identification of Piping Systems

ASME A112.18.6/CSA B125.6
Flexible Water Connectors

ASME A112.4.1
Water Heater Relief Valve Drain Tubes

ASME B1.20.1
Pipe Threads, General Purpose (Inch)

ASME B1.20.3
Dryseal Pipe Threads (Inch)

ASME B16.1
Gray Iron Pipe Flanges and Flanged Fittings: Classes 25, 125, and 250

ASME B16.18
Cast Copper Alloy Solder Joint Pressure Fittings

ASME B16.20
Metallic Gaskets For Pipe Flanges: Ring-Joint, Spiral-Wound, And Jacketed

ASME B16.22
Wrought Copper and Copper Alloy Solder-Joint Pressure Fittings

ASME B16.23
Cast Copper Alloy Solder Joint Drainage Fittings: DWV

ASME B16.24
Cast Copper Alloy Pipe Flanges and Flanged Fittings: Classes 150, 300, 600, 900, 1,500 and 2500

ASME B16.26
Cast Copper Alloy Fittings for Flared Copper Tubes

ASME B16.29
Wrought Copper and Wrought Copper Alloy Solder-Joint Drainage Fittings-DWV

ASME B16.33
Manually Operated Metallic Gas Valves for Use in Gas Piping Systems up to 175 psi (Sizes NPS 1/2 - NPS 2)

ASME B16.50
Wrought Copper and Copper Alloy Braze-Joint Pressure Fittings

ASME B31.5
Refrigeration Piping and Heat Transfer Components

ASME B36.10M
Welded and Seamless Wrought Steel Pipe

ASME Section IV
Rules for Construction of Heating Boilers

ASME Section VIII
Rules for Construction of Pressure Vessels Division 1

ASTM A53 / A53M
Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded, and Seamless

ASTM A254 / A254M
Copper-Brazed Steel Tubing

ASTM A312/ A312M
Seamless, Welded and Heavy Cold Worked Austenitic Stainless Steel Pipes

ASTM A653 / A653M
Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process

ASTM A733
Welded and Seamless Carbon Steel and Austenitic Stainless Steel Pipe Nipples
ASTM A861
High-Silicon Iron Pipe and Fittings

ASTM B32
Solder Metal

ASTM B42
Seamless Copper Pipe, Standard Sizes

ASTM B43
Seamless Red Brass Pipe, Standard Sizes

ASTM B75 / B75M
Seamless Copper Tube

ASTM B88
Seamless Copper Water Tube

ASTM B135
Seamless Brass Tube

ASTM B210
Aluminum and Aluminum-Alloy Drawn Seamless Tubes

ASTM B241 / B241M
Aluminum and Aluminum-Alloy Seamless Pipe and Seamless Extruded Tube

ASTM B280
Seamless Copper Tube for Air Conditioning and Refrigeration Field Service

ASTM B302
Threadless Copper Pipe, Standard Sizes

ASTM B306
Copper Drainage Tube (DWV)

ASTM B370
Copper Sheet and Strip for Building Construction

ASTM B447
Welded Copper Tube

ASTM B587
Welded Brass Tube

ASTM B687
Brass, Copper, and Chromium-Plated Pipe Nipples

ASTM B813
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IAPMO Z1001
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Flexible PVC Hose for Pools, Hot Tubs, Spas and Jetted Bathtub (supersedes IAPMO PS 33)

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NSF 4
Commercial Cooking, Rethermalization, and Powered Hot Food Holding and Transport Equipment

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PDI-WH 201
Water Hammer Arresters

PSAI Z4.1
For Sanitation - In Places of Employment - Minimum Requirements

SAE J 512
Automotive Tube Fittings

SAE J1670
Type "F" Clamps for Plumbing Applications

TCNA A118.10
Load, Bearing, Bonded, Waterproof Membranes for Thin-Set Ceramic Tile and Dimension Stone Installations

TCNA A137.1
Specification for Ceramic Tile

UL 70
Septic Tanks, Bituminous-Coated Metal

UL 80
Steel Tanks for Oil-Burner Fuels and Other Combustible Liquids

UL 103
Factory-Built Chimneys for Residential Type and Building Heating Appliances

UL 125
Flow Control Valves for Anhydrous Ammonia and LP-Gas

UL 132
Safety Relief Valves for Anhydrous Ammonia and LP-Gas

UL 144
LP-Gas Regulators

UL 174
Household Electric Storage Tank Water Heaters

UL 252
Compressed Gas Regulators

UL 263
Fire Tests of Building Construction and Materials

UL 296
Oil Burners

UL 343
Pumps for Oil-Burning Appliances

UL 378
Draft Equipment

UL 399
Drinking Water Coolers

UL 404
Gauges, Indicating Pressure, for Compressed Gas Service

UL 429
Electrically Operated Valves

UL 430
Waste Disposers

UL 441
Gas Vents

UL 443
Steel Auxiliary Tanks for Oil-Burner Fuel

UL 499
Electric Heating Appliances

UL 536
Flexible Metallic Hose

UL 563
Ice Makers

UL 565
Liquid-Level Gauges and Indicators for Anhydrous Ammonia and LP-Gas

UL 569
Pigtails and Flexible Hose Connectors for LP Gas

UL 723
Test for Surface Burning Characteristics of Building Materials

UL 726
Oil-Fired Boiler Assemblies

UL 732
Oil-Fired Storage Tank Water Heaters

UL 749
Household Dishwashers

UL 778
Motor-Operated Water Pumps

UL 834
Heating, Water Supply, and Power Boilers—Electric

UL 921
Commercial Dishwashers

UL 959
Medium Heat Appliance Factory-Built Chimneys

UL 1081
Swimming Pool Pumps, Filters, and Chlorinators

UL 1206
Electric Commercial Clothes-Washing Equipment

UL 1261
Electric Water Heaters for Pools and Tubs

UL 1331
Station Inlets and Outlets

UL 1453
Electric Booster and Commercial Storage Tank Water Heaters

UL 1469
Strength of Body and Hydraulic Pressure Loss Testing of Backflow Special Check Valves

UL 1479
Fire Tests of Through-Penetration Firestops

UL 1951
Electric Plumbing Accessories
Certification Marks:

This mark indicates that the product is listed under the Evaluation Service (ES) Program, and a technical evaluation for code compliance has been performed on the product, and the product has been found to comply with applicable codes and standards indicated in the report.

This mark indicates that the product is listed under the PMG Listing Program, which certifies products in the areas of plumbing, mechanical and fuel gas. While most listing programs only verify that products adhere to standards, the ICC-ES program provides comprehensive coverage of both codes and standards.

This mark indicates that the product is listed under the PMG Listing Program, which certifies products in the areas of plumbing, mechanical and fuel gas, and meets the requirements of the Uniform Plumbing Code (UPC).

This mark indicates that the product is listed under the PMG Listing Program, which certifies products in the areas of plumbing, mechanical and fuel gas, and meets the low-lead requirements for drinking water system components.

This mark indicates that the product is listed under the PMG Listing Program, which certifies products in the areas of plumbing, mechanical and fuel gas, and meets the low-lead requirements for drinking water system components.

This mark indicates that the product is listed under the PMG Listing Program, which certifies products in the areas of plumbing, mechanical and fuel gas, and meets the Uniform Solar Energy Code (USEC).
5. Intertek Testing Services NA, Inc.

(Main Lab)
545 E. Algonquin Road
Arlington Heights, IL 60065
Phone: (847) 439-5667

(Branch Lab)
16015 Shady Falls Road
Elmendorf, TX 78112-9784
Phone: (210) 635-8100

(Branch Lab)
1500 Brigantine Drive
Coquitlam, BC V3K 7C1, Canada
Phone: (604) 520-3321

(Branch Lab)
8431 Murphy Drive
Middleton, WI 53562
Phone: (604) 529-3321

(Branch Lab)
25791 Commercentre Drive
Lake Forest, CA 92630
Phone: (714) 448-4100

(Branch Lab)
3933 US Route 11
Cortland, NY 13045
Phone: (607) 753-6711

Expiration: June 1, 2020

This agency branch is approved for listing of plumbing and mechanical products to meet the referenced standards listed below as found in the City of Los Angeles Plumbing and Mechanical Codes, 2017 Edition:

This agency branch is also approved for listing of plumbing products to meet the lead-free requirements of Section 116875 of the California Health and Safety Code.

Plumbing Standards:

**AHAM FDW-1**
Food Waste Disposers

**ASME A112.18.1**
Plumbing Supply Fittings

**ASME A112.19.1 / CSA B45.2**
Enamelled Cast Iron and Enamelled Steel Plumbing Fixtures

**ASME A112.19.2 / CSA B45.1**
Ceramic Plumbing Fixtures

**ASME A112.19.3 / CSA B45.4**
Stainless Steel Plumbing Fixtures

**ASME A112.19.5 / CSA B45.15**
Flush Valves and Spuds for Water Closets, Urinals, and Tanks

**ASME A112.19.7 / CSA B45.10**
Hydromassage Bathtub Systems

**ASME A112.19.10**
Dual Flush Devices for Water Closets

**ASME A112.19.15**
Bathtubs/Whirlpool Bathtubs with Pressure Sealed Doors

**ASME B16.18**
Cast Copper Alloy Solder Joint Pressure Fittings

**ASME B42**
Seamless Copper Pipe, Standard Sizes

**ASME B43**
Seamless Red Brass Pipe, Standard Sizes

**ASME B75/B75M**
Seamless Copper Tube

**ASTM B135**
Seamless Brass Tube

**ASTM B302**
Threadless Copper Pipe, Standard Sizes

**ASTM B306**
Copper Drainage Tube (DWV)

**ASTM C14**
Nonreinforced Concrete Sewer, Storm Drain, and Culvert Pipe

**ASTM C425**
Compression Joints for Vitrified Clay Pipe and Fittings
ASTM C443  
Joints for Concrete Pipe and Manholes, Using Rubber Gaskets

ASTM C564  
Rubber Gaskets for Cast Iron Soil Pipe and Fittings

ASTM C700  
Vitrified Clay Pipe, Extra Strength, Standard Strength, and Perforated

ASTM C1173  
Flexible Transition Couplings for Underground Piping Systems

ASTM D2235  
Solvent Cement for Acrylonitrile-Butadiene-Styrene (ABS) Plastic Piping and Fittings

ASTM D2564  
Solvent Cements for Poly (Vinyl Chloride) (PVC) Plastic Piping Systems

ASTM D2661  
Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe and Fittings

ASTM D2665  
Poly (Vinyl Chloride) (PVC) Plastic Drain, Waste, and Vent Pipe and Fittings

ASTM D2680  
Acrylonitrile-Butadiene-Styrene (ABS) and Poly (Vinyl Chloride) (PVC) Composite Sewer Piping

ASTM D2729  
Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings

ASTM D2751  
Acrylonitrile-Butadiene-Styrene (ABS) Sewer Pipe and Fittings

ASTM E84  
Surface Burning Characteristics of Building Materials

ASTM E119  
Fire Tests of Building Construction and Materials

ASTM E814  
Fire Tests of Penetration Firestop Systems

ASTM F405  
Corrugated Polyethylene (PE) Pipe and Fittings

ASTM F628  
Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe with a Cellular Core

ASTM F891  
Coextruded Poly (Vinyl Chloride) (PVC) Plastic Pipe with a Cellular Core

ASTM F949  
Poly (Vinyl Chloride) (PVC) Corrugated Sewer Pipe with a Smooth Interior and Fittings

BS EN 12975-1  
Thermal Solar Systems and Components - Solar Collectors - Part 1: General Requirements

BS EN 12975-2  
Thermal Solar Systems and Components - Solar Collectors - Part 2: Test Methods

BS EN 12976-1  
Thermal Solar Systems and Components - Factory Made Systems - Part 1: General Requirements

BS EN 12976-2  
Thermal Solar Systems and Components - Factory Made Systems - Part 2: Test Methods

CSA B45.0  
General Requirements for Plumbing Fixtures

CSA B45.5/IAPMO Z124  
Plastic Plumbing Fixtures

CSA B45.9/ASME 112.3.4  
Plumbing Fixtures with Pumped Waste and Macerating Toilet Systems

CSA B45.11/IAPMO Z401  
Glass Plumbing Fixtures

CSA B125.3  
Plumbing Fittings

CSA Z21.10.1  
Gas Water Heaters – Volume I – Storage Water Heaters with Input Ratings of 75,000 Btu per Hour or Less (same as CSA 4.1a)

CSA Z21.10.3  
Gas Water Heaters-Volume III, Storage Water Heaters with Input Ratings Above 75 000 Btu per Hour, Circulating and Instantaneous (same as CSA 4.3b)

CSA Z21.12b  
Draft Hoods

CSA Z21.13  
Gas-Fired Low-Pressure Steam and Hot-Water Boilers (Same as CSA 4.9)

CSA Z21.15b  
Manually Operated Gas Valves for Appliances, Appliance Connector Valves and Hose End Valves (same as CSA 9.1b)

CSA Z21.22b  
Relief Valves for Hot Water Supply Systems (same as CSA 4.4b)

CSA Z21.24a  
Connectors for Gas Appliances (same as CSA 6.10a)

CSA Z21.40.1a  
Gas-Fired, Heat Activated Air Conditioning and Heat Pump Appliances (same as CSA 2.91a)

CSA Z21.41  
Quick Disconnect Devices for Use with Gas Fuel Appliances (same as CSA 6.9)

CSA Z21.56  
Gas-Fired Pool Heaters (same as CSA 4.7a)

CSA Z21.69a  
Connectors for Moveable Gas Appliances (same as CSA 6.16a)

CSA Z21.80a  
Line Pressure Regulators (same as CSA 6.22a)

CSA Z21.81a  
Cylinder Connection Devices (same as CSA 6.25a)

IAPMO Z124.5  
Plastic Toilet Seats

IAPMO Z124.7  
Prefabricated Plastic Spa Shells

IAPMO Z124.8  
Plastic Liners for Bathtubs and Shower Receptors

NSF 2  
Food Equipment

NSF 3  
Commercial Warewashing Equipment
NSF 4
Commercial Cooking, Rethermalization, and Powered Hot Food Holding and Transport Equipment

NSF 5
Water Heaters, Hot Water Supply Boilers, and Heat Recovery Equipment

NSF 12
Automatic Ice Making Equipment

NSF 14
Plastic Piping System Components and Related Materials

NSF 18
Manual Food and Beverage Dispensing Equipment

NSF 61
Drinking Water System Components - Health Effects

NSF 169
Special Purpose Food Equipment and Devices

PDI WH-201
Water Hammer Arresters

UL 103
Factory-Built Chimneys for Residential Type and Building Heating Appliances

UL 125
Flow Control Valves for Anhydrous Ammonia and LP-Gas

UL 132
Safety Relief Valves for Anhydrous Ammonia and LP-Gas

UL 144
LP-Gas Regulators

UL 174
Household Electric Storage Tank Water Heaters

UL 252
Compressed Gas Regulators

UL 263
Fire Tests of Building Construction and Materials

UL 296
Oil Burners

UL 343
Pumps for Oil-Burning Appliances

UL 378
Draft Equipment

UL 399
Drinking Water Coolers

UL 404
Gauges, Indicating Pressure for Compressed Gas Service

UL 429
Electrically Operated Valves

UL 430
Waste Disposers

UL 441
Gas Vents

UL 499
Electric Heating Appliances

UL 536
Flexible Metallic Hose

UL 563
Ice Makers

UL 565
Liquid-Level Gauges for Anhydrous Ammonia and LP-Gas

UL 569
Pigtails and Flexible Hose Connectors for LP-Gas

UL 723
Test for Surface Burning Characteristics of Building Materials

UL 726
Oil-Fired Boiler Assemblies

UL 732
Oil-Fired Storage Tank Water Heaters

UL 749
Household Dishwashers

UL 778
Motor Operated Water Pumps

UL 834
Heating, Water Supply, and Power Boilers-Electric

UL 921
Commercial Dishwashers

UL 959
Medium Heat Appliance Factory-Built Chimneys

UL 1081
Swimming Pool Pumps, Filters, and Chlorinators

UL 1206
Electric Commercial Clothes-Washing Equipment

UL 1261
Electric Water Heaters for Pools and Tubs

UL 1331
Station Inlets and Outlets

UL 1453
Electric Booster and Commercial Storage Tank Water Heaters

UL 1479
Fire Tests of Through-Penetration Firestops

UL 1951
Electric Plumbing Accessories

UL 2157
Electric Clothes Washing Machines and Extractors
Mechanical Standards:

**ASME B 16.18**
Cast Copper Alloy Solder Joint Pressure Fittings

**ASTM B88**
Seamless Copper Water Tube

**ASTM B302**
Threadless Copper Pipe, Standard Sizes

**CGA 2.91a**
Gas-Fired, Heat Activated Air Conditioning and Heat Pump Appliances (same as CSA Z21.40.1)

**CSA Z21.1b**
Household Cooking Gas Appliances

**CSA Z21.5.1a**
Gas Clothes Dryers-Volume I, Type 1 Clothes Dryers (same as CSA 7.1)

**CSA Z21.5.2**
Gas Clothes Dryers-Volume II, Type 2 Clothes Dryers (same as CSA 7.2)

**CSA Z21.10.1**
Gas Water Heaters- Volume I, Storage Water Heaters with Input Ratings of 75,000 Btu per Hour or Less (same as CSA 4.1)

**CSA Z21.10.3**
Gas-Fired Water Heaters- Volume III, Storage Water Heaters with Input Ratings Above 75,000 Btu per Hour, Circulating and Instantaneous (same as CSA 4.3)

**CSA Z21.11.2**
Gas-Fired Room Heaters, Volume II, Unvented Room Heaters

**CSA Z21.12b**
Draft Hoods

**CSA Z21.13**
Gas-Fired Low Pressure Steam and Hot Water Boilers (same as CSA 4.9)

**CSA Z21.15b**
Manually Operated Gas Valves for Appliances,Appliance Connector Valves and Hose End Valves (same as CSA 9.1b)

**CSA Z21.17a**
Domestic Gas Conversion Burners (same as CSA 2.7a)

**CSA Z21.18b**
Gas Appliance Pressure Regulators (same as CSA 6.3b)

**CSA Z21.21**
Automatic Valves for Gas Appliances (same as CSA 6.5)

**CSA Z21.22b**
Relief Valves for Hot Water Supply Systems (same as CSA 4.4b)

**CSA Z21.23**
Gas Appliances Thermostats

**CSA Z21.24a**
Connectors for Gas Appliances (same as CSA 6.10a)

**CSA Z21.35a**
Pilot Gas Filters (same as CSA 6.8a)

**CSA Z21.41**
Quick Disconnect Devices for Use with Gas Fuel Appliances (same as CSA 6.9)

**CSA Z21.42**
Gas-Fired Illuminating Appliances

**CSA Z21.47**
Gas-Fired Central Furnaces (same as CSA 2.3)

**CSA Z21.50**
Vented Gas Fireplaces (same as CSA 2.22)

**CSA Z21.56**
Gas-Fired Pool Heaters (same as CSA 4.7)

**CSA Z21.58b**
Outdoor Cooking Gas Appliances

**CSA Z21.60**
Decorative Gas Appliances for Installation in Solid-Fuel Burning Fireplaces

**CSA Z21.69a**
Connectors for Moveable Gas Appliances (same as CSA 6.16a)

**CSA Z21.80a**
Line Pressure Regulators (same as CSA 6.22a)

**CSA Z21.86**
Vented Gas-Fired Space Heating Appliances (same as CSA 2.32)

**CSA Z21.88a**
Vented Gas Fireplace Heaters (same as CSA 2.33)

**CSA Z83.4**
Non-Recirculating Direct Gas-Fired Industrial Air Heaters (same as CSA 3.7)

**CSA Z83.7**
Gas-Fired Construction Heaters (same as CSA 2.14)

**CSA Z83.8**
Gas Unit Heaters, Gas Package Heaters, Gas Utility Heaters and Gas-Fired Duct Furnaces (same as CSA 2.6)

**CSA Z83.11b**
Gas Food Service Equipment (same as CSA 1.8b)

**CSA Z83.18**
Recirculating Direct Gas-Fired Industrial Air Heaters

**CSA Z83.19a**
Gas-Fired High-Intensity Infrared Heaters (same as CSA 2.35a)

**CSA Z83.20b**
Gas-Fired Low-Intensity Infrared Heaters (same as CSA 2.34b)

**UL 103**
Factory-Built Chimneys for Residential Type and Building Heating Appliances

**UL 125**
Flow Control Valves for Anhydrous Ammonia and LP-Gas

**UL 127**
Factory-Built Fireplaces

**UL 132**
Safety Relief Valves for Anhydrous Ammonia and LP-Gas

**UL 144**
LP-Gas Regulators

**UL 181**
Factory-Made Air Ducts and Air Connectors

**UL 197**
Commercial Electric Cooking Appliances
UL 252
Compressed Gas Regulators

UL 268A
Smoke Detectors for Duct Applications

UL 296
Oil Burners

UL 300
Fire Testing of Fire Extinguishing Systems for Protection of Commercial Cooking Equipment

UL 343
Pumps for Oil-Burning Appliances

UL 378
Draft Equipment

UL 391
Solid-Fuel and Combination-Fuel Central and Supplementary Furnaces

UL 399
Drinking Water Coolers

UL 404
Gauges, Indicating Pressure for Compressed Gas Service

UL 412
Refrigeration Unit Coolers

UL 429
Electrically Operated Valves

UL 441
Gas Vents

UL 471
Commercial Refrigerators and Freezers

UL 555
Fire Dampers

UL 565
Liquid-Level Gauges for Anhydrous Ammonia and LP-Gas

UL 569
Pigtails and Flexible Hose Connectors for LP-Gas

UL 710
Exhaust Hoods for Commercial Cooking Equipment

UL 723
Test for Surface Burning Characteristics of Building Materials

UL 726
Oil-Fired Boiler Assemblies

UL 727
Oil-Fired Central Furnaces

UL 729
Oil-Fired Floor Furnaces

UL 730
Oil-Fired Wall Furnaces

UL 731
Oil-Fired Unit Heaters

UL 732
Oil-Fired Storage Tank Water Heaters

UL 733
Oil-Fired Air Heaters and Direct-Fired Heaters

UL 737
Fireplace Stoves

UL 795
Commercial-Industrial Gas Heating Equipment

UL 834
Heating, Water Supply, and Power Boilers-Electric

UL 858
Household Electric Ranges

UL 867
Electrostatic Air Cleaners

UL 896
Oil-Burning Stoves

UL 900
Air Filter Units

UL 907
Fireplace Accessories

UL 921
Commercial Dishwashers

UL 959
Medium Heat Appliance Factory-Built Chimney

UL 984
Hermetic Refrigeration Motor-Compressors

UL 1026
Electric Household Cooking and Food Serving Appliances

UL 1046
Grease Filters for Exhaust Ducts

UL 1206
Electric Commercial Clothes-Washing Equipment

UL 1240
Electric Commercial Clothes-Drying Equipment

UL 1453
Electric Booster and Commercial Storage Tank Water Heaters

UL 1479
Fire Tests of Through-Penetration Firestops

UL 1482
Solid-Fuel Type Room Heaters

UL 1777
Chimney Liners

UL 1812
Ducted Heat Recovery Ventilators

UL 1815
Nonducted Heat Recovery Ventilators

UL 1963
Refrigerant Recovery/Recycling Equipment

UL 1978
Grease Ducts

UL 1995
Heating and Cooling Equipment

UL 2021
Fixed and Location-Dedicated Electric Room Heaters

UL 2157
Electric Clothes Washing Machines and Extractors

UL 2158
Electric Clothes Dryers

UL 2162
Commercial Wood-Fired Baking Ovens-Refractory Type
UL 2200
Stationary Engine Generator Assemblies

UL 2221
Tests of Fire Resistive Grease Duct Enclosure Assemblies
**Certification Mark:**

<table>
<thead>
<tr>
<th>Image</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Certification Mark" /></td>
<td>Indicates that the product was tested and has met the certification requirements for electrical, plumbing and/or mechanical products.</td>
</tr>
<tr>
<td><img src="image2.png" alt="Certification Mark" /></td>
<td>Indicates that the product was tested and has met the certification requirements for food service and pool/spa products.</td>
</tr>
<tr>
<td><img src="image3.png" alt="Certification Mark" /></td>
<td>Indicates that the product was tested and has met the certification and regional installation requirements for products.</td>
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<tr>
<td><img src="image4.png" alt="Certification Mark" /></td>
<td>Indicates that the product was tested and has met the certification requirements for the Uniform Plumbing Code.</td>
</tr>
<tr>
<td><img src="image5.png" alt="Certification Mark" /></td>
<td>Indicates that the product was tested and has met the certification requirements for electrical, plumbing and/or mechanical products.</td>
</tr>
</tbody>
</table>
6. LabTest Certification, Inc.

(Main Lab)  
205 – 8291 92nd Street  
Delta, British Columbia  
Canada V4G 0A4  
Phone: (604) 247 – 0444

(Branch Lab)  
3255 Pepper Lane, Suite 112  
Las Vegas, NV 89120  
USA, 89120  
Phone: (702) 269 - 0578

Plumbing Expiration: August 1, 2020

This Agency is approved for listing of plumbing products to meet the referenced standards listed below as found in the City of Los Angeles Plumbing Code, 2017 Edition:

Plumbing:

ASME A112.3.4 / CSA B45.9  
Plumbing Fixtures with Pumped Waste and Macerating Toilet Systems

ASME A112.18.1 / CSA B125.1  
Plumbing Supply Fittings

ASME A112.18.2 / CSA B125.2  
Plumbing Waste Fittings

ASME A112.18.6 / CSA B125.6  
Flexible Water Connectors

ASME A112.19.1 / CSA B45.2  
Enamelled Cast Iron and Enamelled Steel Plumbing Fixtures

ASME A112.19.2 / CSA B45.1  
Ceramic Plumbing Fixtures

ASME A112.19.3 / CSA B 45.4  
Stainless Steel Plumbing Fixtures

ASME 112.19.5 / CSA B45.15  
Flush valves and Spuds for Water Closet, Urinals, and Tanks

ASME A112.19.7 / CSA B 45.10  
Hydromassage Bathtub System

ASME A112.1016/CSA B125.16  
Automatic Compensating Valves for Individual Showers and Tub/Shower Combinations

CSA B45.5  
Plastic Plumbing Fixtures

UL 499  
Electric Heating Appliances

UL 1261  
Electric Water Heaters for Pools and Tubs

UL 1795  
Hydromassage Bathtubs
Certification Mark:

Indicates that the product was evaluated and has met the certification requirements for mechanical products.

Indicates that the product was field evaluated and has met the certification requirements for mechanical products.

Indicates that the product was certified for the United States and Canada.

Field Evaluated in: ____________________________
7. NSF International

789 N. Dixboro Road
Ann Arbor, MI 48105
Phone: (734) 769-8010

Expiration: February 1, 2020

This agency branch is approved for listing of plumbing and mechanical products to meet the referenced standards listed below as found in the City of Los Angeles Plumbing and Mechanical Codes, 2017 Edition:

This agency is also approved for listing of plumbing products to meet the lead-free requirements of Section 116875 of the California Health and Safety Code.

Mechanical Standards:

**ASME A112.18.6/CSA B125.6**
Flexible Water Connectors

**ASME B16.22**
Wrought Copper and Copper Alloy Solder-Joint Pressure Fittings

**ASME B16.51**
Copper and Copper Alloy Press-Connect Pressure Fittings

**ASSE 1013**
Reduced Pressure Principle Backflow Preventers and Reduced Pressure Principle Fire Protection Backflow Preventers

**ASSE 1017**
Temperature Actuated Mixing Valves for Hot Water Distribution Systems

**ASSE 1061**
Push-Fit Fittings

**ASTM B88**
Seamless Copper Water Tube

**ASTM B280**
Seamless Copper Tube for Air Conditioning and Refrigeration Field Service

**ASTM B306**
Copper Drainage Tube (DWV)

**ASTM D1785**
Poly (Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120

**ASTM D2241**
Poly (Vinyl Chloride) (PVC) Pressure-Rated Pipe (SDR Series)

**ASTM D2464**
Threaded Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80

**ASTM D2466**
Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40

**ASTM D2467**
Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80

**ASTM D2513**
Polyethylene (PE) Gas Pressure Pipe, Tubing, and Fittings

**ASTM D2564**
Solvent Cements for Poly (Vinyl Chloride) (PVC) Plastic Piping Systems

**ASTM D2609**
Plastic Insert Fittings for Polyethylene (PE) Plastic Pipe

**ASTM D2683**
Socket-Type Polyethylene Fittings for Outside Diameter-Controlled Polyethylene Pipe and Tubing

**ASTM D2737**
Polyethylene (PE) Plastic Tubing

**ASTM D3035**
Polyethylene (PE) Plastic Pipe (DR-PR) Based on Controlled Outside Diameter

**ASTM D3139**
Joints for Plastic Pressure Pipes Using Flexible Elastomeric Seals

**ASTM D3261**
Butt Heat Fusion Polyethylene (PE) Plastic Fittings for Polyethylene (PE) Plastic Pipe and Tubing

**ASTM E84**
Surface Burning Characteristics of Building Materials.

**ASTM F437**
Threaded Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80

**ASTM F438**
Socket-Type Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 40

**ASTM F439**
Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80

**ASTM F493**
Solvent Cements for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe and Fittings

**ASTM F656**
Primers for Use in Solvent Cement Joints of Poly (Vinyl Chloride) (PVC) Plastic Pipe and Fittings
ASTM F714  
Polyethylene (PE) Plastic Pipe (SDR-PR) Based on Outside Diameter

ASTM F1807  
Metal Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR 9 Polyethylene of Raised Temperature (PE-RT) Tubing

ASTM F1960  
Cold Expansion Fittings with PEX Reinforcing Rings for Use with Cross-linked Polyethylene (PEX) Tubing

ASTM F1970  
Special Engineered Fittings, Appurtenances or Valves for Use in Poly (Vinyl Chloride) (PVC) or Chlorinated Poly (Vinyl Chloride) (CPVC) Systems

ASTM F1974  
Metal Insert Fittings for Polyethylene/Aluminum/Polyethylene and Crosslinked Polyethylene/Aluminum/ Crosslinked Polyethylene Composite Pressure Pipe

ASTM F2080  
Cold-Expansion Fittings With Metal Compression-Sleeves for Cross-Linked Polyethylene (PEX) Pipe

ASTM F2098  
Stainless Steel Clamps for Securing SDR9 Cross-linked Polyethylene (PEX) Tubing to Metal Insert and Plastic Insert Fittings

ASTM F2159  
Plastic Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Polyethylene of Raised Temperature (PE-RT) Tubing

ASTM F2434  
Metal Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-linked Polyethylene (PEX) Tubing and Cross-linked Polyethylene/Aluminum/ Cross-linked Polyethylene (PEX-AL-PEX) Tubing

AWWA C901  
Polyethylene (PE) Pressure Pipe and Tubing, 1/2 in. (13 mm) Through 3 in. (76 mm), for Water Service

Plumbing Standards:

ASME A112.1.2  
Air Gaps in Plumbing Systems

ASME A112.1.3  
Air Gap Fittings for Use with Plumbing Fixtures, Appliances, and Appurtenances

ASME A112.3.1  
Stainless Steel Drainage Systems for Sanitary DWV, Storm, and Vacuum Applications, Above- and Below-Ground

ASME A112.3.4/CSA B45.9  
Plumbing Fixtures with Pumped Waste and Macerating Toilet Systems

ASME A112.4.14  
Manually Operated, Quarter-Turn Shutoff Valves for Use in Plumbing Systems

ASME A112.6.2  
Framing-Affixed Supports for Off-the-Floor Water Closets with Concealed Tanks

ASME A112.6.3  
Floor and Trench Drains

ASME A112.14.1  
Backwater Valves

ASME A112.14.3  
Grease Interceptors

ASME A112.14.4  
Grease Removal Devices

ASME A112.18.1/CSA B125.1  
Plumbing Supply Fittings

ASME A112.18.2/CSA B125.2  
Plumbing Waste Fittings

ASME A112.18.3  
Performance Requirements for Backflow Devices and Systems In Plumbing Fixture Fittings

ASME A112.18.6/CSA B125.6  
Flexible Water Connectors

ASME A112.19.1/CSA B45.2  
Enamelled Cast Iron and Enamelled Steel Plumbing Fixtures

ASME A112.19.2/CSA B45.1  
Ceramic Plumbing Fixtures

ASME A112.19.3/CSA B45.4  
Stainless Steel Plumbing Fixtures

ASME A112.19.5  
Flush Valves and Spuds for Water Closets, Urinals, and Tanks

ASME A112.19.7/CSA B45.10  
Hydromassage Bathtub Systems

ASME A112.19.10  
Dual Flush Devices for Water Closets

ASME A112.21.3  
Hydrants for Utility and Maintenance Use

ASME A112.36.2  
Cleanouts
ASME B16.22  
Wrought Copper and Copper Alloy Solder Joint Pressure Fittings

ASME B16.51  
Copper and Copper Alloy Press-Connect Pressure Fittings

ASSE 1001  
Atmospheric Type Vacuum Breakers

ASSE 1002  
Anti-Siphon Fill Valves for Water Closet Tanks

ASSE 1003  
Water Pressure Reducing Valves for Domestic Water Distribution Systems

ASSE 1004  
Backflow Prevention Requirements for Commercial Dishwashing Machines

ASSE 1010  
Water Hammer Arresters

ASSE 1013  
Reduced Pressure Principle Backflow Preventers and Reduced Pressure Principle Fire Protection Backflow Preventers

ASSE 1015  
Double Check Backflow Prevention Assemblies and Double Check Fire Protection Backflow Prevention Assemblies

ASSE 1016  
Automatic Compensating Valves for Individual Showers and Tub/Shower Combinations

ASSE 1017  
Temperature Actuated Mixing Valves for Hot Water Distribution Systems

ASSE 1018  
Trap Seal Primer Valves-Potable Water Supplied

ASSE 1019  
Wall Hydrant with Backflow Protection and Freeze Resistance

ASSE 1020  
Pressure Vacuum Breaker Assembly

ASSE 1022  
Backflow Preventer for Beverage Dispensing Equipment

ASSE 1023  
Hot Water Dispensers Household Storage Type-Electrical

ASSE 1024  
Dual Check Backflow Preventers

ASSE 1032  
Dual Check Valve Type Backflow Preventers for Carbonated Beverage Dispensers - Post Mix Type

ASSE 1035  
Laboratory Faucet Backflow Preventers

ASSE 1037  
Pressurized Flushing Devices (Flushometers) for Plumbing Fixtures

ASSE 1047  
Reduced Pressure Detector Fire Protection Backflow Prevention Assemblies

ASSE 1048  
Double Check Detector Fire Protection Backflow Prevention Assemblies

ASSE 1052  
Hose Connection Backflow Preventers

ASSE 1056  
Spill Resistant Vacuum Breaker Assemblies

ASSE 1061  
Push-Fit Fittings

ASSE 1070  
Water Temperature Limiting Devices

ASTM A74  
Cast Iron Soil Pipe and Fittings

ASTM A536  
Ductile Iron Castings

ASTM A888  
Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping Applications

ASTM B88  
Seamless Copper Water Tube

ASTM B280  
Seamless Copper Tube for Air Conditioning and Refrigeration Field Service

ASTM B306  
Copper Drainage Tube (DWV)

ASTM B819  
Seamless Copper Tube for Medical Gas Systems

ASTM C1277  
Shielded Couplings Joining Hubless Cast Iron Soil Pipe and Fittings

ASTM D1784  
Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds

ASTM D1785  
Poly (Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120

ASTM D2235  
Solvent Cement for Acrylonitrile-Butadiene-Styrene (ABS) Plastic Pipe and Fittings

ASTM D2239  
Polyethylene (PE) Plastic Pipe (SIDR-PR) Based on Controlled Inside Diameter

ASTM D2241  
Poly (Vinyl Chloride) (PVC) Pressure-Rated Pipe (SDR Series)

ASTM D2464  
Threaded Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80

ASTM D2466  
Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40

ASTM D2467  
Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80

ASTM D2513  
Polyethylene (PE) Gas Pressure Pipe, Tubing, and Fittings

ASTM D2564  
Solvent Cements for Poly (Vinyl Chloride) (PVC) Plastic Piping Systems

ASTM D2609  
Plastic Insert Fittings for Polyethylene (PE) Plastic Pipe

ASTM D2661  
Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe and Fittings
ASTM D2665
Poly (Vinyl Chloride) (PVC) Plastic Drain, Waste, and Vent Pipe and Fittings

ASTM D2672
Joints for IPS PVC Pipe Using Solvent Cement

ASTM D2683
Socket-Type Polyethylene Fittings for Outside Diameter-Controlled Polyethylene Pipe and Tubing

ASTM D2729
Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings

ASTM D2737
Polyethylene (PE) Plastic Tubing

ASTM D2751
Acrylonitrile-Butadiene-Styrene (ABS) Sewer Pipe and Fittings

ASTM D2996
Filament-Wound “Fiberglass” (Glass-Fiber-Reinforced Thermosetting-Resin) Pipe

ASTM D3034
Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings

ASTM D3035
Polyethylene (PE) Plastic Pipe (DR-PR) Based on Controlled Outside Diameter

ASTM D3138
Solvent Cements for Transition Joints between Acrylonitrile-Butadiene-Styrene (ABS) and Poly (Vinyl Chloride) (PVC) Non-Pressure Piping Components

ASTM D3139
Joints for Plastic Pressure Pipes Using Flexible Elastomeric Seals

ASTM D3212
Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals

ASTM D3261
Butt Heat Fusion Polyethylene (PE) Plastic Fittings for Polyethylene (PE) Plastic Pipe and Tubing

ASTM D3311
Drain, Waste, and Vent (DWV) Plastic Fittings Patterns

ASTM D3965
Rigid Acrylonitrile-Butadiene-Styrene (ABS) Materials for Pipe and Fittings

ASTM D4101
Polypropylene Injection and Extrusion Materials

ASTM D4551
Poly (Vinyl Chloride) (PVC) Plastic Flexible Concealed Water-Containment Membrane

ASTM E84
Surface Burning Characteristics of Building Materials.

ASTM F049
Thermoplastic Accessible and Replaceable Plastic Tube and Tubular Fittings

ASTM F437
Threaded Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80

ASTM F438
Specification for Socket-Type Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 40

ASTM F439
Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80

ASTM F480
Thermoplastic Well Casing Pipe and Couplings Made in Standard Dimension Ratios (SDR), SCH 40 and SCH 80

ASTM F493
Solvent Cements for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe and Fittings

ASTM F628
Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe With a Cellular Core

ASTM F656
Primers for Use in Solvent Cement Joints of Poly (Vinyl Chloride) (PVC) Plastic Pipe and Fittings

ASTM F667
3 through 24 in. Corrugated Polyethylene Pipe and Fittings

ASTM F714
Polyethylene (PE) Plastic Pipe (DR-PR) Based on Outside Diameter

ASTM F891
Coextruded Poly (Vinyl Chloride) (PVC) Plastic Pipe With a Cellular Core

ASTM F894
Polyethylene (PE) Large Diameter Profile Wall Sewer and Drain Pipe

ASTM F949
Poly (Vinyl Chloride) (PVC) Corrugated Sewer Pipe with a Smooth Interior and Fittings

ASTM F1216
Rehabilitation of Existing Pipelines and Conduits by the Inversion and Curing of a Resin-Impregnated Tube

ASTM F1336
Poly (Vinyl Chloride) (PVC) Gasketed Sewer Fittings

ASTM F1412
Polyolefin Pipe and Fittings for Corrosive Waste Drainage Systems

ASTM F1488
Coextruded Composite Pipe

ASTM F1673
Polyvinylidene Fluoride (PVDF) Corrosive Waste Drainage Systems

ASTM F1807
Metal Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR 9 Polyethylene of Raised Temperature (PE-RT) Tubing

ASTM F1866
Poly (Vinyl Chloride) (PVC) Plastic Schedule 40 Drainage and DWV Fabricated Fittings

ASTM F1960
Cold Expansion Fittings with PEX Reinforcing Rings for Use with Cross-linked Polyethylene (PEX) Tubing
ASTM F1970
Special Engineered Fittings, Appurtenances or Valves for use in Poly (Vinyl Chloride) (PVC) or Chlorinated Poly (Vinyl Chloride) (CPVC) Systems

ASTM F1974
Metal Insert Fittings for Polyethylene/Aluminum/Polyethylene and Crosslinked Polyethylene/Aluminum/ Crosslinked Polyethylene Composite Pressure Pipe

ASTM F2080
Cold-Expansion Fittings With Metal Compression-Sleeves for Cross-Linked Polyethylene (PEX) Pipe

ASTM F2098
Stainless Steel Clamps for Securing SDR9 Cross-linked Polyethylene (PEX) Tubing to Metal Insert and Plastic Insert Fittings

ASTM F2159
Plastic Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Cross-linked Polyethylene of Raised Temperature (PE-RT) Tubing

ASTM F2434
Metal Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Cross-linked Polyethylene/Aluminum/ Cross-linked Polyethylene (PEX-AL-PEX) Tubing

CISPI 301
Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping Applications

CISPI 310
Couplings for Use in Connection with Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping Applications

CISPI 310B
General Requirements for plumbing fixtures

CISPI 315B
Plastic Plumbing Fixtures

CISPI 324
Backflow Preventers and Vacuum Breakers

CSA B45.0
CSA B79
Commercial and Residential Drains and Cleanouts

CSA B125.3
Plumbing Fittings

CSA B137.1
Polyethylene (PE) Pipe, Tubing, and Fittings for Cold-Water Pressure Services

CSA B181.3
Polyolefin and Polyvinylidene Fluoride (PVDF) Laboratory Drainage Systems

CSA B356
Water Pressure Reducing Valves for Domestic Water Supply Systems

CSA B481
Grease Interceptors

IAPMO IGC 157
Ball Valves

IAPMO PS 36
Lead-Free Sealing Compounds for Threaded Joints

IAPMO PS 65
Airgap Units For Water Conditioning Equipment Installation

IAPMO PS 117
Press and Nail Connections

IAPMO Z1000
Prefabricated Septic Tanks

IAPMO Z1001
Prefabricated gravity Grease interceptors

NSF 2
Food Equipment

NSF 3
Commercial Warewashing Equipment

NSF 4
Commercial Cooking, Rethermalization, and Powered Hot Food Holding and Transport Equipment

NSF 5
Water Heaters, Hot Water Supply Boilers, and Heat Recovery Equipment

NSF 12
Automatic Ice Making Equipment

NSF 14
Plastic Piping System Components and Related Materials

NSF 18
Manual Food and Beverage Dispensing Equipment

NSF 29
Detergent and Chemical Feeders for Commercial Spray-Type Dishwashing Machines

NSF 40
Residential Wastewater Treatment Systems

NSF 41
Non-Liquid Saturated Treatment Systems

NSF 42
Drinking Water Treatment Units – Aesthetic Effects

NSF 44
Residential Cation Exchange Water Softeners

NSF 46
Evaluation of Components and Devices Used in Wastewater Treatment Systems

NSF 53
Drinking Water Treatment Units – Health Effects

NSF 55
Ultraviolet Microbiological Water Treatments Systems
**NSF 58**  
Reverse Osmosis Drinking Water Treatment Systems

**NSF 62**  
Drinking Water Distillation Systems

**NSF 61**  
Drinking Water System Components – Health Effects

**NSF 169**  
Special Purpose Food Equipment and Devices

**NSF 350**  
Onsite Residential and Commercial Water Reuse Treatment Systems

**NSF 359**  
Valves for Crosslinked Polyethylene (PEX) Water Distribution Tubing Systems
Certification Marks:

This mark indicates that the product is certified to both Canadian and U.S. requirements.

This mark indicates that the product is certified to the standard indicated in the box.

This Mark indicates that the product is certified to NSF/ANSI 14 for potable water

This Mark indicates that the product is certified to NSF/ANSI 14 for drain, waste and vent
8. OMNI-Test Laboratories, Inc.

13327 NE Airport Way
Portland, OR 97230
Phone: (503) 643-3788

Expiration: March 1, 2019

This agency is approved for listing of plumbing and mechanical products to meet the referenced standards listed below as found in the City of Los Angeles Mechanical Code, 2017 Edition:

CGA 6.14
Automatic Vent Damper Devices for Use with Gas-Fired Appliances (Same as CSA Z21.66)

CSA Z21.11.2
Gas-Fired Room Heaters, Volume II, Unvented Room Heaters

CSA Z21.20
Automatic Gas Ignition Systems and Components

CSA Z21.41
Quick Disconnect Devices for Use with Gas Fuel Appliances (Same as CSA 6.9)

CSA Z21.42
Gas-Fired Illuminating Appliances

CSA Z21.47
Gas-Fired Central Furnaces (Same as CSA 2.3)

CSA Z21.50
Vented Gas Fireplaces (Same as CSA 2.22)

CSA Z21.58b
Outdoor Cooking Gas Appliances (Same as CSA 1.6b)

CSA Z21.60
Decorative Gas Appliances for Installation in Solid-Fuel Burning Fireplaces (Same as CSA 2.26)

CSA Z21.86
Vented Gas-Fired Space Heating Appliances (Same as CSA 2.32)

CSA Z21.88a
Vented Gas Fireplace Heaters (Same as CSA 2.33)

CSA Z83.7
Gas-Fired Construction Heaters (Same as CSA 2.14)

CSA Z83.11b
Gas Food Service Equipment (Same as CSA 1.8)

UL 103
Factory-Built Chimneys for Residential Type and Building Heating Appliances

UL 127
Factory-Built Fireplaces

UL 197
Commercial Electric Cooking Appliances

UL 378
Draft Equipment

UL 391
Solid-Fuel and Combination-Fuel Central and Supplementary Furnaces

UL 441
Gas Vents

UL 641
Type L Low-Temperature Venting Systems

UL 726
Oil-Fired Boiler Assemblies

UL 727
Oil-Fired Central Furnaces

UL 731
Oil-Fired Unit Heaters

UL 733
Oil-Fired Air Heaters and Direct-Fired Heaters

UL 737
Fireplace Stoves

UL 858
Household Electric Ranges

UL 896
Oil-Burning Stoves

UL 907
Fireplace Accessories

UL 1026
Electric Household Cooking and Food Serving Appliances

UL 1482
Solid-Fuel Type Room Heaters

UL 1777
Chimney Liners

UL 1995
Heating and Cooling Equipment

UL 2021
Fixed and Location-Dedicated Electric Room Heaters
Certification Mark:

This mark indicates that the product is listed to the applicable standard specified.
9. PFS Corporation

1507 Matt Pass
Cottage Grove, WI 53527
Phone: (608) 839-1013

Expiration: May 1, 2020

This agency is approved for listing of plumbing and mechanical products to meet the referenced standards listed below as found in the City of Los Angeles Mechanical Code, 2017 Edition:

- **CSA Z21.11.2**
  Gas-Fired Room Heaters, Volume II, Unvented Room Heaters

- **CSA Z21.50**
  Vented Gas Fireplaces (same as CSA 2.22)

- **CSA Z21.58b**
  Outdoor Cooking Gas Appliances (same as CSA 1.6b)

- **CSA Z21.60**
  Decorative Gas Appliances for Installation in Solid-Fuel Burning Fireplaces (same as CSA 2.26)

- **CSA Z21.86**
  Vented Gas-Fired Space Heating Appliances (same as CSA 2.32)

- **CSA Z21.88a**
  Vented Gas Fireplace Heaters (same as CSA 2.33a)

- **CSA Z83.8**
  Gas Unit Heaters, Gas Packaged Heaters, Gas Utility Heaters, and Gas-Fired Duct Furnaces (same as CSA 2.6)

- **CSA Z83.20b**
  Gas-Fired Low-Intensity Infrared Heaters (same as CSA 2.34b)

- **UL 127**
  Factory-Built Fireplaces

- **UL 391**
  Solid-Fuel and Combination-Fuel Central and Supplementary Furnaces

- **UL 737**
  Fireplace Stoves

- **UL 907**
  Fireplace Accessories

- **UL 1482**
  Solid-Fuel Type Room Heaters

Certification Marks:

- This marking indicates that the product has been evaluated to meet Canadian and U.S. standards, and is listed to the applicable standard specified.

- This marking indicates that the product has been evaluated to meet U.S. standards, and is listed to the applicable standard specified.

- This marking indicates that the product has been evaluated and is listed to the applicable standard specified.
This agency is approved for listing of plumbing products to meet the referenced standards listed below as found in the City of Los Angeles Plumbing Codes, 2017 Edition:

ASME A112.1.2
Air Gaps in Plumbing Systems

ASME A112.1.3
Air Gap Fittings for use with Plumbing Fixtures, Appliances, and Appurtenances

ASME A112.3.1
Stainless Steel Drainage Systems for Sanitary DWV, Storm, and Vacuum Applications, Above- and Below Ground

ASME A112.3.4/ CSA B45.9
Plumbing Fixtures with Pumped Waste and Macerating Toilet Systems

ASME A112.6.1M
Floor-Affixed Supports for Off-the-Floor Plumbing Fixtures for Public Use

ASME A112.6.2
Framing-Affixed Supports for Off-The Floor Water Closets with Concealed Doors

ASME A112.6.3
Floor and Trench Drains

ASME A112.6.4
Roof, Deck, and Balcony Drains

ASME A112.6.7
Sanitary Floor Sinks

ASME A112.14.1
Backwater Valves

ASME A112.18.1 / CSA B125.1
Plumbing Supply Fittings

ASME A112.19.1 / CSA B45.2
Enameled Cast Iron and Enameled Steel Plumbing Fixtures

ASME A112.19.2 / CSA B45.1
Ceramic Plumbing Fixtures

ASME A112.19.3 / CSA B45.4
Stainless Steel Plumbing Fixtures

ASME A112.19.5
Flush Valves and Spuds for Water Closets, Urinals, and Tanks

ASME A112.19.10
Dual Flush Devices for Water Closets

ASME A112.19.14
Six Liter Water Closets Equipped With Dual Flush Device

ASME A112.19.15
Bathtubs/Whirlpool Bathtubs with Pressure Sealed Doors

ASME A112.19.19
Vitreous China Nonwater Urinals

ASSE 1001
Atmospheric Type Vacuum Breakers

ASSE 1002
Anti-Siphon Fill Valves for Water Closet Tanks

ASSE 1003
Water Pressure Reducing Valves for Domestic Water Distribution Systems

ASSE 1010
Water Hammer Arresters

ASSE 1011
Hose Connection Vacuum Breakers

ASSE 1012
Backflow Preventers with Intermediate Atmospheric Vent

ASSE 1013
Reduced Pressure Principle Backflow Preventers and Reduced Pressure Principle Fire Protection Backflow Preventers

ASSE 1014
Backflow Prevention Devices for Hand-Held Shower

ASSE 1015
Double Check Backflow Prevention Assemblies and Double Check Fire Protection Backflow Prevention Assemblies

ASSE 1016
Automatic Compensating Valves for Individual Showers and Tub/Shower Combinations

ASSE 1017
Temperature Actuated Mixing Valves for Hot Water Distribution Systems

ASSE 1018
Trap Seal Primer Valves - Potable Water Supplied

ASSE 1019
Wall Hydrant with Backflow Protection and Freeze Resistance

ASSE 1020
Pressure Vacuum Breaker Assembly

ASSE 1023
Hot Water Dispensers Household Storage Type - Electrical
ASSE 1024  
Dual Check Backflow Preventers

ASSE 1032  
Dual Check Valve Type Backflow Preventers for Carbonated Beverage Dispensers, Post Mix Type

ASSE 1035  
Laboratory Faucet Backflow Preventers

ASSE 1037  
Pressurized Flushing Devices (Flushometers) for Plumbing Fixtures

ASSE 1044  
Trap Seal Primer Devices - Drainage Types and Electronic Design Types

ASSE 1047  
Reduced Pressure Detector Fire Protection Backflow Prevention Assemblies

ASSE 1048  
Double Check Detector Fire Protection Backflow Prevention Assemblies

ASSE 1052  
Hose Connection Backflow Preventers

ASSE 1055  
Chemical Dispensing Systems

ASSE 1056  
Spill Resistant Vacuum Breaker Assemblies

ASSE 1057  
Freeze Resistant Sanitary Yard Hydrants with Backflow Protection

ASSE 1061  
Push-Fit Fittings

ASSE 1062  
Temperature Actuated Flow Reduction (TAFR) Valves for Individual Fixture Fittings

ASSE 1066  
Individual Pressure Balancing In-Line Valves for Individual Fixture Fittings

ASSE 1070  
Water Temperature Limiting Devices

ASTM C1277  
Shielded Couplings Joining Hubless Cast Iron Soil Pipe and Fittings

ASTM D1785  
Poly (Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120

ASTM D2239  
Polyethylene (PE) Plastic Pipe (SIDR-PR) Based on Controlled Inside Diameter

ASTM D2241  
Poly (Vinyl Chloride) (PVC) Pressure-Rated Pipe (SDR Series)

ASTM D2513  
Polyethylene (PE) Gas Pressure Pipe, Tubing, and Fittings

ASTM D2665  
Poly (Vinyl Chloride) (PVC) Plastic Drain, Waste, and Vent Pipe and Fittings

ASTM D2737  
Polyethylene (PE) Plastic Tubing

ASTM E84  
Surface Burning Characteristics of Building Materials

ASTM F409  
Thermoplastic Accessible and Replaceable Plastic Tube and Tubular Fittings

ASTM F446  
Grab Bars and Accessories Installed in the Bathing Area

ASTM F1412  
Polyolefin Pipe and Fittings for Corrosive Waste Drainage Systems

CSA B45.5 / ANSI Z124  
Plastic Plumbing Fixtures

CSA B45.11 / IAPMO Z401  
Glass Plumbing Fixtures

CSA B64.1.1  
Atmospheric Vacuum Breakers (AVB)

CSA B64.1.2  
Pressure Vacuum Breakers (PVB)

CSA B64.2  
Hose Connection Vacuum Breakers (HCVB)

CSA B64.2.1.1  
Hose Connection Dual Check Vacuum Breakers (HCDVB)

CSA B64.4  
Reduced Pressure Principle (RP) Backflow Preventers

CSA B64.4.1  
Reduced Pressure Principle Backflow Preventers for Fire Protection Systems (RPF)

CSA B64.5  
Double Check Valve (DCVA) Backflow Preventers

CSA B64.5.1  
Double Check Valve Backflow Preventers for Fire Protection Systems (DCVAF)

CSA B64.7  
Laboratory Faucet Vacuum Breakers (LFVB)

CSA B79  
Commercial and Residential Drains and Cleanouts

CSA B125.3  
Plumbing Fittings

EPA Watersense - 2007  
High-Efficiency Lavatory Faucet Specification

EPA Watersense - 2009  
Specification for Flushing Urinals

EPA Watersense - 2011  
Specification for Tank-Type Toilets

IAPMO IGC 157  
Ball Valves

IAPMO PS 34  
Encasement Sleeve for Potable Water Pipe and Tubing

IAPMO PS 52  
Pump/Dose, Sumps and Sewage Ejector Tanks with or without a Pump

IAPMO PS 54  
Metallic and Plastic Utility Boxes

IAPMO PS 59  
Wastewater Diverter Valves and Diversion Systems

IAPMO PS 65  
Airgap Units for Water Conditioning Equipment Installation
| IAPMO PS 67 | Early-Closure Replacement Flappers or Early-Closure Replacement Flapper with Mechanical Assemblies |
| IAPMO PS 69 | Bathwaste and Overflow Assemblies with Tub Filler Spout |
| IAPMO PS 72 | Valves with Atmospheric Vacuum Breakers |
| IAPMO PS 79 | Multiport Electronic Trap Primer |
| IAPMO PS 90 | Elastomeric Test Caps, Cleanout Caps, and Combination Test Caps/Shielded Couplings |
| IAPMO PS 94 | Insulated Protectors for P-Traps, Supply Stops, and Risers |
| IAPMO PS 95 | Drain, Waste, and Vent Hangers and Plastic Pipe Support Hooks |
| IAPMO PS 98 | Prefabricated Fiberglass Church Baptisteries |
| MSS SP-67 | Butterfly Valves |
| NSF / ANSI 61 | Drinking Water System Components - Health Effects |

**Certification Mark:**

**QAI Certification Mark:** This mark is used on products that have been evaluated to nationally recognized standards that fall within QAI’s scope of accreditation for the noted country, US and or Canada. QAI maintains an ongoing inspection program at the manufacturer’s location to validate that current product are representative of the product submitted for evaluation. The NRTL Logo is only used for products that fall within the Scope of QAI’s NRTL program.

**QAI Recognized Mark:** This mark is used on products that been evaluated to nationally recognized standards that fall within QAI’s scope of accreditation for the noted country, US and or Canada. The specific product is considered a component and further evaluation will be required when it is incorporated in a finished product.

**QAI Classified Mark:** This mark is used on products that have been evaluated against a portion of a published criterial, this could be a code or standard, and obtained a specific rating or performance value. QAI maintains an ongoing inspection program at the manufacturer’s location to validate that current product are representative of the product submitted for evaluation. Note C and US optional.

**QAI Verified Mark:** This mark is used on products that have been evaluated against a published criterial, this typically is a client’s own requirements, and QAI maintains an ongoing inspection program at the manufacturer’s location to validate that current products are representative of the product submitted for evaluation. Note C and US optional.
11. Solar Rating & Certification Corporation

3060 Saturn Street, Suite 100
Brea, CA 92821
Phone: (888) 422-7233, ext. 7735

Expiration: June 1, 2020

This agency is approved for listing of plumbing products to meet the referenced standards listed below as found in the City of Los Angeles Plumbing Code, 2017 Edition:

This agency is also approved for listing of plumbing products to meet the lead-free requirements of Section 116875 of the California Health and Safety Code.

- **IAPMO PS 92**
  Heat Exchangers and Indirect Water Heaters

- **IAPMO PS 96**
  Passive Direct Solar Water Heaters

- **SRCC 100**
  Solar Thermal Collectors

- **SRCC 300**
  Solar Water Heating Systems

- **NSF 50**
  Equipment for Swimming Pools, Spas, Hot Tubs and Other Recreational Water Facilities
Certification Mark:

This marking indicates that the product has been tested and has met the certification requirements of SRCC Standard 100.

This marking indicates that the product has been tested and has met the certification requirements of SRCC Standard 300.

This mark indicates the product is listed under the SRCC Solar Heating and Cooling Listing Program, which certifies solar heating and cooling products to the Uniform Solar Energy Code (USEC), Uniform Plumbing Code (UPC), Uniform Mechanical Code (UMC), and Uniform Swimming Pool and Hot Tub Code (USPC). It is also used to specify products that meet the low-lead requirements for drinking water system components.
This agency is approved for listing of plumbing products to meet the referenced standards listed below as found in the City of Los Angeles Plumbing Code, 2017 Edition:

This agency is also approved for listing of plumbing products to meet the lead-free requirements of Section 116875 of the California Health and Safety Code.

ASME A112.18.1/CSA B125.1
Plumbing Supply Fittings

ASME A112.18.2/CSA B125.2
Plumbing Waste Fittings

ASME A112.18.3
Performance Requirements for Backflow Protection Devices and Systems in Plumbing Fixture Fittings

ASME A112.18.6 /CSA B125.6
Flexible Water Connectors

ASME A112.19.1/CSA B45.2
Enamelled Cast Iron and Enamelled Steel Plumbing Fixtures

ASME A112.19.2/CSA B45.1
Ceramic Plumbing Fixtures

ASME A112.19.3/CSA B45.4
Stainless Steel Plumbing Fixtures

ASME A112.19.5/CSA B45.15
Flush Valves and Spuds for Water Closets, Urinals and Tanks

ASME A112.19.10
Dual Flush Devices for Water Closets

ASME A112.19.14
Six-Liter Water Closets Equipped with a Dual Flushing Device

ASME A112.19.19
Vitreous China Nonwater Urinals

ASME B16.23
Cast Copper Alloy Solder Joint Drainage Fittings: DWV

ASME B16.24
Cast Copper Alloy Pipe Flanges and Flanged Fittings: Classes 150, 300, 600, 900, 1500 and 2500

ASSE 1001
Atmospheric Type Vacuum Breakers

ASSE 1002
Anti-Siphon Fill Valves for Water Closet Tanks

ASSE 1003
Water Pressure Reducing Valves for Domestic Water Distribution Systems

ASSE 1004
Backflow Prevention Requirements for Commercial Dishwashing Machines

ASSE 1008
Plumbing Aspects of Residential Food Waste Disposer Units

ASSE 1010
Water Hammer Arresters

ASSE 1011
Hose Connection Vacuum Breakers

ASSE 1012
Backflow Preventer with Intermediate Atmospheric Vent

ASSE 1013
Reduced Pressure Principle Backflow Preventers and Reduced Pressure Fire Protection Principle Backflow Preventers

ASSE 1014
Backflow Prevention Devices for Hand-Held Showers

ASSE 1015
Double Check Backflow Prevention Assemblies and Double Check Fire Protection Backflow Prevention Assemblies

ASSE 1016 / ASME A112.1016 / CSA B124.16
Automatic Compensating Valves for Individual Showers and Tub/Shower Combinations

ASSE 1017
Temperature Actuated Mixing Valves for Hot Water Distribution Systems

ASSE 1018
Trap Seal Primer Valves- Potable Water Supplied

ASSE 1019
Wall Hydrant with Backflow Protection and Freeze Resistance

ASSE 1020
Pressure Vacuum Breaker Assembly

ASSE 1022
Backflow Preventer for Beverage Dispensing Equipment

ASSE 1023
Hot Water Dispensers Household Storage Type – Electrical

ASSE 1024
Dual Check Valve Backflow Preventers
ASSE 1032  
Dual Check Valve Type Backflow Preventers for Carbonated Beverage Dispensers-Post Mix Type

ASSE 1035  
Laboratory Faucet Backflow Preventers

ASSE 1037  
Pressurized Flushing Devices (Flushometers) for Plumbing Fixtures

ASSE 1044  
Trap Seal Primer Devices-Drainage Types and Electronic Design Types

ASSE 1047  
Reduced Pressure Detector Fire Protection Backflow Prevention Assemblies

ASSE 1048  
Double Check Detector Fire Protection Backflow Prevention Assemblies

ASSE 1052  
Hose Connection Backflow Preventers

ASSE 1055  
Chemical Dispensing Systems

ASSE 1056  
Spill Resistant Vacuum Breaker Assemblies

ASSE 1057  
Freeze Resistant Sanitary Yard Hydrants with Backflow Protection

ASSE 1060  
Outdoor Enclosures for Fluid Conveying Components

ASSE 1061  
Push-Fit Fittings

ASSE 1062  
Temperature Actuated, Flow Reduction (TAFR) Valves for Individual Fixture Fittings

ASSE 1066  
Individual Pressure Balancing In-Line Valves for Individual Fixture Fittings

ASSE 1069  
Automatic Temperature Control Mixing Valves

ASSE 1070  
Water Temperature Limiting Devices

ASSE 1071  
Temperature Actuated Mixing Valves for Plumbed Emergency Equipment

ASSE 1079  
Dielectric Pipe Unions

CSA B45.5 / IAPMO Z124  
Plastic Plumbing Fixtures

CSA B64  
Backflow Preventers and Vacuum Breakers

CSA B125.3  
Plumbing Fittings

CSA B137.1  
Polyethylene (PE) Pipe, Tubing, and Fittings for Cold-Water Pressure Services

EPA Watersense – 2007  
High-Efficiency Lavatory Faucet Specification

EPA Watersense – 2009  
Specification for Flushing Urinals

EPA Watersense – 2011  
Specification for Tank-Type Toilets

NSF 42  
Drinking Water Treatment Units-Aesthetic Effects

NSF 53  
Drinking Water Treatment Unit-Health Effects

NSF 61  
Drinking Water System Components - Health Effects

Certification Mark:

This marking indicates that the product has been evaluated and is listed to the applicable standard specified.
13. UL LLC

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Expiration: November 1, 2019

This agency is approved for listing of plumbing and mechanical products to meet the referenced standards listed below as found in the City of Los Angeles Plumbing and Mechanical Codes, 2017 Edition:

This agency is also approved for listing of plumbing products to meet the lead-free requirements of Section 116875 of the California Health and Safety Code.

Mechanical Standards:

AHRI 1200
Performance Rating of Commercial Refrigerated Display Merchandisers and Storage Cabinets

AHRI 1230
Performance Rating of Variable Refrigerant Flow (VRF) Multi-Split Air-Conditioning and Heat Pump Equipment

AMCA 500 D
Laboratory Methods of Testing Dampers for Rating

AMCA 540
Louvers Impacted by Wind Borne Debris

AMCA 550
High Velocity Wind Driven Rain Resistance Louvers

ASCE 25
Earthquake-Actuated Automatic Gas Shutoff Devices

ASHRAE 127
Method of Testing for Rating Computer and Data Processing Room Unitary Air Conditioners

ASME A112.18.6/CSA B125.6
Flexible Water Connectors

ASME B16.1
Gray Iron Pipe Flanges and Flanged Fittings: Classes 25, 125, and 250

ASME B16.3
Malleable Iron Threaded Fittings: Classes 150 and 300

ASME B16.5
Pipe Flanges and Flanged Fittings: NPS ½ through 24 Metric/Inch

ASME B16.15
Cast Copper Alloy Threaded Fittings: Classes 125 and 250

ASME B16.22
Wrought Copper and Copper Alloy Solder Joint Pressure Fittings

ASME B31.5
Refrigeration Piping and Heat Transfer Components

ASME BPVC Section I
Rules for Construction of Power Boilers

ASME BPVC Section IV
Rules for Construction of Heating Boilers

ASME BPVC Section VIII
Rules for Construction of Pressure Vessels Division 1

ASME CSD-1
Controls and Safety Devices for Automatically Fired Boilers

ASSE 1013
Reduced Pressure Principle Backflow Preventers and Reduced Pressure Fire Protection Principle Backflow Preventers

ASSE 1061
Push-Fit Fittings

ASTM A53/A53M
Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded, and Seamless

ASTM A733
Welded and Seamless Carbon Steel and Austenitic Stainless Steel Pipe Nipples

ASTM B280
General Requirements for Wrought Seamless Copper and Copper-Alloy Tube

ASTM C411
Hot-Surface Performance of High-Temperature Thermal Insulation
ASTM C518

ASTM E84
Surface Burning Characteristics of Building Materials

ASTM E96 / E96M
Water Vapor Transmission of Materials

ASTM E136
Behavior of Materials in a Vertical Tube Furnace at 750 C

ASTM E814
Fire Tests of Penetration Firestop Systems

ASTM E2231
Specimen Preparation and Mounting of Pipe and Duct Insulation Materials to Assess Surface Burning Characteristics

ASTM E2336
Fire Resistant Grease Duct Enclosure Systems

AWWA C110
Ductile-Iron and Gray-Iron Fittings

AWWA C151
Ductile-Iron Pipe, Centrifugally Cast

AWWA C153
Ductile-Iron Compact Fittings

CSA FC-1
Stationary Fuel Cell Power Systems

CSA Z21.1b
Household Cooking Gas Appliances

CSA Z21.5.1a
Gas Clothes Dryers- Volume I, Type 1 Clothes Dryers

CSA Z21.10.1
Gas Water Heaters – Volume I, Storage Water Heaters with Input Ratings of 75,000 Btu per Hour or Less

CSA Z21.10.3
Gas Water Heaters – Volume III, Storage, with Input Ratings Above 75,000 But per Hour, Circulating and Instantaneous

CSA Z21.11.2
Gas-Fired Room Heaters – Volume II, Unvented Room Heaters

CSA Z21.13
Gas-Fired Low-Pressure Steam and Hot-Water Boilers

CSA Z21.17a
Domestic Gas Conversion Burners

CSA Z21.19a
Refrigerators Using Gas Fuel

CSA Z21.20a
Automatic Gas Ignition Systems and Components

CSA Z21.23
Gas Appliance Thermostats

CSA Z21.41
Quick Disconnect Devices for Use with Gas Fuel Appliances

CSA Z21.42
Gas-Fired Illuminating Appliances

CSA Z21.47
Gas-Fired Central Furnaces

CSA Z21.50
Vented Gas Fireplaces

CSA Z21.56
Gas-Fired Pool Heaters

CSA Z21.58b
Outdoor Cooking Gas Appliances

CSA Z21.60
Decorative Gas Appliances for Installation in Solid-Fuel Burning Fireplaces

CSA Z21.61
Gas-Fired Toilets

CSA Z21.66 / CGA 6.14
Automatic Vent Damper Devices for Use with Gas-Fired Appliances

CSA Z21.86
Vented Gas-Fired Space-Heating Appliances

CSA Z21.88a
Vented Gas Fireplace Heaters

CSA Z21.8b
Non-Recirculating Direct Gas-Fired Industrial Air Heaters

CSA Z83.4
Non-Recirculating Direct Gas-Fired Industrial Air Heaters

CSA Z83.7
Gas-Fired Construction Heaters

CSA Z83.8
Gas Unit Heaters, Gas Packaged Heaters, Gas Utility Heaters and Gas-Fired Duct Furnaces

CSA Z83.11b
Gas Food Service Equipment

CSA Z83.18
Recirculating Direct Gas-Fired Industrial Air Heaters

CSA Z83.19a
Gas-Fired High-Intensity Infrared Heaters

CSA Z83.20b
Gas-Fired Low-Intensity Infrared heaters

NFPA 259
Standard Test Method for Potential Heat of Building Materials

NFPA 262
Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces

NFPA 274
Standard Test Method to Evaluate Fire Performance Characteristics of Pipe Insulation

SMACNA-2003
Fibrous Glass Duct Construction Standard, 7th Edition

SMACNA-2006
HVAC Duct Construction Standards Metal and Flexible, 3rd Edition

SMACNA-2012
HVAC Air Duct Leakage Test Manual, 2nd Edition

UL 17
Vent or Chimney Connector Dampers for Oil-Fired Appliances

UL 21
LP-Gas Hose

UL 33
Heat Responsive Links for Fire-Protection Service

UL 51
Power-Operated Pumps and Bypass Valves for Anhydrous Ammonia, LP-Gas, and Propylene

UL 80
Steel Tanks for Oil-Burner Fuel and Other Combustible Liquids

UL 103
Factory-Built Chimneys for Residential Type and Building Heating Appliances

UL 125
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UL 1046
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Electric Commercial Clothes-Drying Equipment

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UL 1479
Fire Tests of Through-Penetration Firestops

UL 1482
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UL 1746
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UL 1777
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UL 1812
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UL 1815
Nonducted Heat Recovery Ventilators

UL 1820
Fire Test of Pneumatic Tubing for Flame and Smoke Characteristics

UL 1887
Fire Test of Plastic Sprinkler Pipe for Visible Flame and Smoke Characteristics

UL 1963
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UL 1978
Grease Ducts

UL 1995
Heating and Cooling Equipment

UL 2021
Fixed and Location-Dedicated Electric Room Heaters

UL 2043
Fire Test for Heat and Visible Smoke Release for Discrete Products and Their Accessories Installed in Air-Handling Spaces

UL 2157
Electric Clothes Washing Machines and Extractors

UL 2158
Electric Clothes Dryers

UL 2162
Commercial Wood-Fired Baking Ovens - Refractory Type

UL 2200
Stationary Engine Generator Assemblies

UL 2221
Tests of Fire Resistant Grease Duct Enclosure Assemblies

UL 2523
Solid Fuel-Fired Hydronic Heating Appliances, Water Heaters, and Boilers

UL 2790
Commercial Incinerators

UL 60335-2-40
Household and Similar Electrical Appliances, Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers

Plumbing Standards:

AHAM FWD-1
Food Waste Disposers

ASCE 25
Earthquake-Actuated Automatic Gas Shutoff Devices

ASME A112.1.2
Air Gaps in Plumbing Systems (For Plumbing Fixtures and Water-Connected Receptors)

ASME A112.1.3
Air Gap Fittings for Use with Plumbing Fixtures, Appliances and Appurtenances

ASME A112.3.1
Stainless Steel Drainage Systems for Sanitary DWV, Storm, and Chemical Applications, Above- and Below-Ground

ASME A112.4.2
Water Closet Personal Hygiene Devices

ASME A112.4.3
Plastic Fittings for Connecting Water Closets to the Sanitary Drainage System

ASME A112.4.14
Manually Operated, Quarter-Turn Shutoff Valves for Use in Plumbing Systems Valves

ASME A112.6.3
Floor and Trench Drains

ASME A112.6.7
Sanitary Floor Sinks

ASME A112.18.1 / CSA B125.1
Plumbing Supply Fittings

ASME A112.18.2 / CSA B125.2
Plumbing Waste Fittings

ASME A112.18.3
Performance Requirements for Backflow Protection Devices and Systems in Plumbing Fixture Fittings

ASME A112.18.6 / CSA B125.6
Flexible Water Connectors

ASME A112.18.9
Protectors/Insulators for Exposed Waste and Supplies on Accessible Fixtures

ASME A112.19.1 / CSA B45.2
Enamelled Cast Iron and Enamelled Steel Plumbing Fixtures

ASME A112.19.2 / CSA B45.1
Ceramic Plumbing Fixtures

ASME A112.19.3 / CSA B45.4
Stainless Steel Plumbing Fixtures
ASME A112.19.5 / CSA B45.15  
Flush Valves and Spuds for Water Closets, Urinals, and Tanks

ASME A112.19.7 / CSA B45.10  
Hydromassage Bathtub Systems

ASME A112.19.10  
Dual Flush Devices for Water Closets

ASME A112.19.12  
Wall Mounted, Pedestal Mounted, Adjustable, Elevating, Tilting, and Pivoting Lavatory, Sink, and Shampoo Bowl Carrier Systems and Drainage Waste Systems

ASME A112.19.14  
Six-Liter Water Closets Equipped with a Dual Flushing Device

ASME A112.19.15  
Bathtubs/Whirlpool Bathtubs with Pressure Sealed Doors

ASME A112.19.19  
Vitreous China Nonwater Urinals

ASME A112.21.3  
Hydrants for Utility and Maintenance Use

ASME A112.36.2M  
Cleanouts

ASME B16.1  
Gray Iron Pipe Flanges and Flanged Fittings: Classes 25, 125, and 250

ASME B16.3  
Malleable Iron Threaded Fittings: Classes 150 and 300

ASME B16.4  
Gray Iron Threaded Fittings: Classes 125 and 250

ASME B16.5  
Pipe Flanges and Flanged Fittings: NPS ½ through 24 Metric/Inch

ASME B16.15  
Cast Copper Alloy Threaded Fittings: Classes 125 and 250

ASME B16.18  
Cast Copper Alloy Solder Joint Pressure Fittings

ASME B16.22  
Wrought Copper and Copper Alloy Solder-Joint Pressure Fittings Alloy

ASME B16.39  
Malleable Iron Threaded Pipe Unions: Classes 150, 250 and 300

ASME BPVC Section IV  
Rules for Construction of Heating Boilers

ASME BPVC Section VIII  
Rules for Construction of Pressure Vessels Division 1

ASSE 1001  
Atmospheric Type Vacuum Breakers

ASSE 1002  
Anti-Siphon Fill Valves for Water Closet Tanks

ASSE 1004  
Backflow Prevention Requirements for Commercial Dishwashing Machines

ASSE 1008  
Plumbing Aspects of Residential Food Waste Disposer Units

ASSE 1011  
Hose Connection Vacuum Breakers

ASSE 1012  
Backflow Preventer with an Intermediate Atmospheric Vent

ASSE 1013  
Reduced Pressure Principle Backflow Preventers and Reduced Pressure Fire Protection Principle Backflow Preventers

ASSE 1014  
Backflow Prevention Devices for Hand-Held Showers

ASSE 1015  
Double Check Backflow Prevention Assemblies and Double Check Fire Protection Backflow Prevention Assemblies

ASSE 1016  
Automatic Compensating Valves for Individual Showers and Tub/Shower Combinations

ASSE 1017  
Temperature Actuated Mixing Valves for Hot Water Distribution Systems

ASSE 1020  
Pressure Vacuum Breaker Assembly

ASSE 1022  
Backflow Preventer for Beverage Dispensing Equipment

ASSE 1023  
Hot Water Dispensers Household Storage Type-Electrical

ASSE 1024  
Dual Check Valve Backflow Preventers

ASSE 1032  
Dual Check Valve Type Backflow Preventers for Carbonated Beverage Dispensers, Post Mix Types

ASSE 1037  
Pressurized Flushing Devices (Flushometers) for Plumbing Fixtures

ASSE 1048  
Double Check Detector Fire Protection Backflow Prevention Assemblies

ASSE 1055  
Chemical Dispensing Systems

ASSE 1056  
Spill Resistant Vacuum Breaker Assemblies

ASSE 1061  
Push-Fit Fittings

ASSE 1062  
Temperature Actuated, Flow, Reduction (TAFR) Valves for Individual Fixture Fittings

ASSE 1066  
Individual Pressure Balancing In-Line Valves for Individual Fixture Fittings

ASSE 1069  
Automatic Temperature Control Mixing Valves

ASSE 1070  
Water Temperature Limiting Devices

ASTM A53/ A53M  
Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded, and Seamless

ASTM A74  
Cast Iron Soil Pipe and Fittings

ASTM A733  
Welded and Seamless Carbon Steel and Austenitic Stainless Steel Pipe Nipples

ASTM A888  
Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping Applications

ASTM B280  
Seamless Copper Tube for Air-Conditioning and Refrigeration Field Service

ASTM A53/ A53M  
Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded, and Seamless

ASTM A74  
Cast Iron Soil Pipe and Fittings

ASTM A733  
Welded and Seamless Carbon Steel and Austenitic Stainless Steel Pipe Nipples

ASTM A888  
Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping Applications

ASTM B280  
Seamless Copper Tube for Air-Conditioning and Refrigeration Field Service
ASTM C1277
Shielded Couplings Joining Hubless Cast Iron Soil Pipe and Fittings

ASTM E84
Surface Burning Characteristics of Building Materials

ASTM E119
Fire Tests of Building Construction and Materials

ASTM E814
Fire Tests of Penetration Fire Stops

ASTM F446
Grab Bars and Accessories Installed in the Bathing Area

AWWA C110
Ductile-Iron and Gray-Iron Fittings

AWWA C151
Ductile-Iron Pipe, Centrifugally Cast

AWWA C153
Ductile-Iron Compact Fittings

AWWA C606
Grooved and Shouldered Joints

AWWA C900
Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 4 in. through 12 in. (100 mm through 300 mm) for Water Transmission and Distribution

AWWA C907
Injection-Molded Polyvinyl Chloride (PVC) Pressure Fittings 4 in. through 12 in. (100 mm through 300 mm), for Water, Wastewater, and Reclaimed Water Service

CISPI 301
Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping Applications

CISPI 310
Couplings for Use in Connection with Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping Applications

CSA B45.0
General Requirements for Plumbing Fixtures

CSA B45.1 / ASME A112.19.2
Ceramic Plumbing Fixtures

CSA B45.2 / ASME A112.19.1
Enamelled Cast-Iron Plumbing Fixtures

CSA B45.4 / ASME A112.19.3
Stainless Steel Plumbing Fixtures

CSA B45.5 / IAPMO Z124
Plastic Plumbing Fixtures

CSA B45.10 / ASME A112.19.7
Hydromassage Bathtub Systems

CSA B45.11 / IAPMO Z401
Glass Plumbing Fixtures

CSA B45.12 / IAPMO Z402
Aluminum and Copper Plumbing Fixtures

CSA B64
Backflow Preventers and Vacuum Breakers

CSA B64.1.1
Atmospheric Vacuum Breakers (AVB)

CSA B64.1.2
Pressure Vacuum Breakers (PVB)

CSA B64.4
Reduced Pressure Principle (RP) Backflow Preventers

CSA B125.3
Plumbing Fittings

CSA Z21.10.1
Gas Water Heaters – Volume I, Storage Water Heaters with Input Ratings of 75,000 Btu per Hour or Less

CSA Z21.10.3
Gas Water Heaters – Volume III, Storage with Input Ratings Above 75,000 But per Hour, Circulating and Instantaneous

CSA Z21.13
Gas-Fired Low-Pressure Steam and Hot-Water Boilers

CSA Z21.40.1a
Gas-Fired, Heat Activated Air-Conditioning and Heat Pump Appliances

CSA Z21.47
Gas-Fired Central Furnaces

CSA Z21.56
Gas-Fired Pool Heaters

CSA Z21.86
Vented Gas-Fired Space-Heating Appliances

CSA Z83.11b
Gas Food Service Equipment

Energy Star – 2007
Specification for Commercial Dishwashers

Energy Star – 2011
Specification for Clothes Washers

Energy Star – 2012
Specification for Residential Dishwashers

EPA WaterSense - 2007
High-Efficiency Lavatory Faucet Specification

EPA WaterSense - 2009
Specification for Flushing Urinals

EPA WaterSense – 2011
Specification for Tank-Type Toilets

IAPMO IGC 157
Ball Valves

IAPMO IGC 193
Safety Plates, Plate Straps, Notched Plates and Safety Collars

IAPMO IGC 226
Drinking Water Fountains With or Without Chiller or Heater

IAPMO PS 23
Dishwasher Drain Airgaps

IAPMO PS 37
Black Plastic PVC or PE Pressure-Sensitive Corrosion Preventive Tape

IAPMO PS 42
Pipe Alignment and Secondary Support Systems

IAPMO PS 54
Metallic and Plastic Utility Boxes

IAPMO PS 86
Rainwater Diverter Valve for Non-Roofed Area Slabs

IAPMO PS 87
Diverter and Shutoff Valves for Pool/Spas

IAPMO PS 117
Press and Nail Connections

IAPMO Z124.5
Plastic Toilet Seats

IAPMO Z124.7
Prefabricated Plastic Spa Shells

IAPMO Z124.8
Plastic Liners for Bathtubs and Shower Receptors

IAPMO Z403 / CSA B45.8
Terrazzo, Concrete, and Natural Stone Plumbing Fixtures
IAPMO Z1000
Prefabricated Septic Tanks

IAPMO Z1001
Prefabricated Gravity Grease Interceptors

IAPMO Z1088
Pre-Pressurized Potable Water Tanks

ISEA Z358.1
Emergency Eyewash and Shower Equipment

MSS SP-67
Butterfly Valves

NSF 2
Food Equipment

NSF 3
Commercial Warewashing Equipment

NSF 4
Commercial Cooking, Rethermalization, and Powered Hot Food Holding and Transport Equipment

NSF 5
Water Heaters, Hot Water Supply Boilers, and Heat Recovery Equipment

NSF 12
Automatic Ice Making Equipment

NSF 14
Plastic Piping System Components and Related Materials

NSF 18
Manual Food and Beverage Dispensing Equipment

NSF 42
Drinking Water Treatment Units – Aesthetic Effects

NSF 44
Residential Cation Exchange Water Softeners

NSF 46
Evaluation of Components and Devices Used in Wastewater Treatment Systems

NSF 53
Drinking Water Treatment Units – Health Effects

NSF 55
Ultraviolet Microbiological Water Treatment Systems

NSF 58
Reverse-Osmosis Drinking Water Treatment Systems

NSF 61
Drinking Water System Components – Health Effects

NSF 169
Special Purpose Food Equipment and Devices

UL 17
Vent or Chimney Connector Dampers for Oil-Fired Appliances

UL 70
Septic Tanks, Bituminous Coated Metal

UL 80
Steel Tanks for Oil-Burner Fuels and Other Combustible Liquids

UL 103
Factory-Built Chimneys for Residential Type and Building Heating Appliances

UL 125
Valves for Anhydrous Ammonia and LP-Gas

UL 132
Safety Relief Valves for Anhydrous Ammonia and LP-Gas

UL 144
LP-Gas Regulators

UL 174
Household Electric Storage Tank Water Heaters

UL 252
Compressed Gas Regulators

UL 263
Fire Tests of Building Construction and Materials

UL 296
Oil Burners

UL 343
Pumps for Oil-Burning Appliances

UL 378
Draft Equipment

UL 399
Drinking Water Coolers

UL 404
Gauges, Indicating Pressure, for Compressed Gas Service Indicating Pressure

UL 429
Electrically Operated Valves

UL 430
Waste Disposers

UL 441
Gas Vents

UL 443
Steel Auxiliary Tanks for Oil-Burner Fuel

UL 499
Electric Heating Appliances

UL 536
Flexible Metallic Hose

UL 563
Ice Makers

UL 565
Liquid-Level Gauges for Anhydrous Ammonia and LP-Gas

UL 569
Pigtails and Flexible Hose Connectors for LP-Gas

UL 641
Type L Low-Temperature Venting Systems

UL 651
Schedule 40, 80, Type EB and A Rigid PVC Conduit and Fittings

UL 723
Test for Surface Burning Characteristics of Building Materials

UL 726
Oil-Fired Boiler Assemblies

UL 732
Oil-Fired Storage Tank Water Heaters

UL 749
Household Dishwashers

UL 778
Motor-Operated Water Pumps

UL 834
Heating, Water Supply, and Power Boilers-Electric

UL 921
Commercial Dishwashers

UL 959
Medium Heat Appliance Factory-Built Chimneys

UL 1081
Swimming Pool Pumps, Filters, and Chlorinators
UL 1206
Electric Commercial Clothes-Washing Equipment

UL 1261
Electric Water Heaters for Pools and Tubs

UL 1331
Station Inlets and Outlets

UL 1453
Electric Booster and Commercial Storage Tank Water Heaters

UL 1469
Strength of Body and Hydraulic Pressure Loss Testing of Backflow Special Check Valves

UL 1479
Fire Tests of Through-Penetration Firestops

UL 1795
Hydromassage Bathtubs

UL 1951
Electric Plumbing Accessories

UL 2157
Electric Clothes Washing Machines and Extractors

UL 2523
Solid Fuel-Fired Hydronic Heating Appliances, Water Heaters, and Boilers

Certification Marks:

UL Listing Mark
This mark is one of the most common UL Marks. If a product bears this Mark, it means UL found that representative product samples met applicable safety requirements.

UL Gas-Fired Mark
This mark is used exclusively on gas-fired appliances and equipment, to indicate a product's compliance to nationally recognized gas standards, including UL, ANSI Z21/Z83 Series, and the CSA/CGA standards. The UL Gas-Fired Mark indicates that a product has been evaluated to reasonable and foreseeable hazards including both gas and electrical.

Combined UL Mark for Europe, Canada and United States
This mark indicates that the product has been evaluated to European, Canadian and U.S. requirements, and is listed to the applicable standard specified.

UL Plumbing Mark
This mark appears on plumbing-related products and clearly identifies those products that comply with applicable health-effect and plumbing performance standards and requirements of plumbing codes, including the Uniform Plumbing Code. The UL Plumbing Mark appears on plumbing fixture fittings such as kitchen sink and lavatory supply fittings, bath and shower supply fittings and various types of automatic compensating valves.

UL Field Evaluated Product Mark
A Field Evaluated Product Mark is applied to a product that is thoroughly evaluated in the field instead of UL’s laboratories or a manufacturer’s facility. If a product has been significantly modified since its manufacture or the product doesn’t bear any third-party certification mark, a building owner, a regulatory authority or anyone else directly involved with the product can request that UL test a specific piece of equipment in the field. Products that meet appropriate safety requirements are labeled with a tamper resistant Field Evaluated Product Mark.
Part II: Approved Testing Agencies

1. **Home Innovation Research Labs**

400 Prince George’s Boulevard  
Upper Marlboro, MD 20774  
(301) 430-6246

*Expiration November 1, 2019*

This agency is approved for testing of plumbing products to the following standards:

- **ASME A112.19.7/CSA B45.10**  
  Hydromassage Bathtub Systems

- **CSA B45.5/IAPMO Z124**  
  Plastic Plumbing Systems

- **IAPMO Z124.8**  
  Plastic Liners for Bathtubs and Shower Receptors

- **ICC A117.1**  
  Accessible and Usable Buildings and Facilities (Chapter 6 Only)

**Certification Mark:**

This marking indicates that the product has been tested and is found to be in compliance with the applicable product standard.
2. **International Association of Plumbing and Mechanical Officials (IAPMO), R&T Lab**

5001 E. Philadelphia Street
Ontario, CA 91761
Phone: (909) 472-4100

Expiration: March 1, 2020

This agency is approved for testing of plumbing products to the following standards:

- **ASME A112.18.1/CSA B125.1**
  Plumbing Supply Fittings

- **ASME A112.19.2/CSA B45.1**
  Ceramic Plumbing Fixtures

- **ASME A112.19.5**
  Flush valves and Spuds for Water Closets, Urinals, and Tanks

- **ASME A112.19.7**
  Hydromassage Bathtub Systems

- **ASSE 1001**
  Atmospheric Type Vacuum Breakers

- **ASSE 1002**
  Anti-Siphon Fill Valves for Water Closet Tanks

- **ASSE 1014**
  Backflow Prevention Devices for Hand-Held Showers

- **ASSE 1016**
  Automatic Compensating Valves for Individual Showers and Tub/Shower Combinations

- **ASSE 1017**
  Temperature Actuated Mixing Valves for Hot Water Distribution Systems

- **ASSE 1019**
  Wall Hydrant with Backflow Protection and Freeze Resistance

- **ASSE 1037**
  Pressurized Flushing Devices (Flushometers) for Plumbing Fixtures

- **IAPMO Z124.5**
  Plastic Toilet Seats

- **IAPMO Z124.7**
  Prefabricated Plastic Spa Shells

- **IAPMO Z124.8**
  Plastic Liners for Bathtubs and Shower Receptors

- **IAPMO Z124**
  Plastic Plumbing Fixtures
3. TI RADCO LLP

3220 E. 59th St.
Long Beach, CA, 90805
Phone: 562-272-7231

Expiration: January 1, 2019

This agency is approved for testing of mechanical products to meet the referenced standards listed below as found in the City of Los Angeles Mechanical Code, 2017 Edition:

- **CSA/ANSI Z21.1b**
  Household Cooking Gas Appliances

- **CSA/ANSI Z21.5.1a**
  Gas Clothes Dryers - Volume 1, Type 1 Clothes Dryers

- **CSA/ANSI Z21.5.2**
  Gas Clothes Dryers-Volume II, Type 2 Clothes Dryers

- **CSA/ANSI Z21.8**
  Installation of Domestic Gas Conversion burners

- **CSA/ANSI Z21.10.1**
  Gas Water Heaters-Volume I, Storage Water Heaters with Input Ratings of 75,000 Btu Per Hour or Less

- **CSA/ANSI Z21.10.3**
  Gas Water Heaters-Volume III, storage Water Heaters with Input Ratings Above 75,000 Btu Per Hour, Circulating and Instantaneous

- **CSA/ANSI Z21.11.2**
  Gas-Fired Room Heaters-Volume II, Unvented Room Heaters

- **CSA/ANSI Z21.12b**
  Draft Hoods

- **CSA/ANSI Z21.13**
  Gas-Fired Low Pressure Steam and Hot Water Boilers

- **CSA/ANSI Z21.19a**
  Refrigerators Using Gas Fuel

- **CSA/ANSI Z21.40.1a**
  Gas-Fired, Heat Activated Air-Conditioning and Heat Pump Appliances

- **CSA/ANSI Z21.40.2**
  Gas-Fired, Work Activated Air-Conditioning and Heat Pump Appliances

- **CSA/ANSI Z21.42**
  Gas-fired Illuminating Appliances

- **CSA/ANSI Z21.47**
  Gas-Fired Central Furnaces

- **CSA/ANSI Z21.50**
  Vented Gas Fireplaces

- **CSA/ANSI Z21.56**
  Gas-Fired Pool Heaters

- **CSA/ANSI Z21.58b**
  Outdoor Cooking Gas Appliances

- **CSA/ANSI Z21.60**
  Decorative Gas Appliances for Installation in Solid-Fuel Burning Fireplaces

- **CSA/ANSI Z21.61**
  Gas-Fired Toilets

- **CSA/ANSI Z21.84**
  Manually Lighted, Natural Gas, Decorative Gas Appliances for Installation in Solid-Fuel Burning Appliances

- **CSA/ANSI Z21.86**
  Vented Gas-Fired Space Heating Appliances

- **CSA/ANSI Z21.88a**
  Vented Gas Fireplace Heaters

- **CSA/ANSI Z83.4**
  Non-Recirculating Direct Gas-Fired Industrial Air Heaters

- **CSA/ANSI Z83.7**
  Gas-Fired Construction Heaters

- **CSA/ANSI Z83.8**
  Gas Unit Heaters, Gas Packed Heaters, Gas Utility Heaters, and Gas-Fired Duct Furnaces

- **CSA/ANSI Z83.11b**
  Gas Food Service Equipment

- **CSA/ANSI Z83.18**
  Recirculating Direct Gas-Fired Industrial Air Heaters

- **CSA/ANSI Z83.19a**
  Gas-Fired High-Intensity Infrared Heaters

- **CSA/ANSI Z83.20b**
  Gas-Fired Low-Intensity Infrared Heaters

- **ASTM C518**

- **UL 103**
  Factory-Built Chimneys for Residential Type and Building Heating Appliances

- **UL 127**
  Factory-Built Fireplaces

- **UL 181**
  Factory-Made Air Ducts and Air Connectors

- **UL 295**
  Commercial-Industrial Gas Burners

- **UL 441**
  Gas Vents

- **UL 471**
  Commercial Refrigerators and Freezers

- **UL 737**
  Fireplace Stoves
**UL 1046**
Grease Filters for Exhaust Ducts

**UL 1995**
Heating and Cooling Equipment