City of Los Angeles Department of Building and Safety



# **MECHANICAL TESTING LABORATORY**

# LIST OF APPROVED LISTING AND TESTING AGENCIES

March 18, 2024

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. ALS Group USA, Corp.

3337 Michelson Drive, Suite CN750 Irvine, CA 92612 Phone: (714) 730-6239

#### Expiration: March 1, 2024

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, 2023 Edition:

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

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

ASME A112.18.3 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 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/CSA B45.15 Flush Valves and Spuds for Water Closets, Urinals and Tanks

ASME A112.19.10 Retrofit 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, and Valves: Classes 150, 300, 600, 900, 1500 and 2500

ASSE 1001 Atmospheric Type Vacuum Breakers

ASSE 1002/ASME A112.1002/CSA B125.12

Anti-Siphon Fill Valves for Water Closet Tanks

ASSE 1003 Water Pressure Reducing Valves for Domestic Water Distribution Systems

ASSE 1004 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/ASME A112.1037/CSA B125.37 Pressurized Flushing Devices for Plumbing Fixtures

ASSE 1044 Trap Seal Primer- 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 with Integrated Backflow Protection

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 Supply Fittings

#### ASSE 1066

Individual Pressure Balancing In-Line Valves for Individual Fixture Fittings

ASSE 1069 Automatic Temperature Control Mixing Valves

#### ASSE 1070/ASME A117.1070/CSA B125.70

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 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 – 2014** 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.

## 2. ASSE International

18927 Hickory Creek Dr., Suite 220 Mokena, IL 60448 Phone: (708) 995-3019

### Expiration: April 1, 2024

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, 2023 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 A112.1.2 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 Vacuum Applications, Above- and Below-Ground

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

ASME A112.14.1 Backwater Valves

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 A112.19.1/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 B45.15 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 A112.21.3M Hydrants for Utility and Maintenance Use

ASME A112.36.2M Cleanouts

ASSE 1001 Atmospheric-Type Vacuum Breakers

ASSE 1002/ASME A112.1002/CSA B125.12 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 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 Protection Backflow Prevention Assemblies

#### ASSE 1016/ASME A112.1016/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 1032 Dual Check Valve Type Backflow Preventers for Carbonated Beverage Dispensers, Post Mix Type

ASSE 1035 Laboratory Faucet Backflow Preventers

ASSE 1037/ASME A112.1037/CSA B125.37 Pressurized Flushing Devices for Plumbing Fixtures

ASSE 1044 Trap Seal Primer- Drainage Types and Electric 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 1053 Dual Check Backflow Preventer Wall Hydrants - Freeze Resistant Type

ASSE 1055 Chemical Dispensing Systems

ASSE 1056 Spill Resistant Vacuum Breakers

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 Supply Fittings

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

ASSE 1069 Automatic Temperature Control Mixing Valves

ASSE 1070/ASME A112.1070/CSA B125.70

Water Temperature Limiting Devices

ASSE 1071 Temperature Activated Mixing Valves for Plumbed Emergency Equipment

ASSE 1079 Dielectric Pipe Unions

AWWA C510 Double Check Valve Backflow Prevention Assembly

AWWA C511 Reduced-Pressure Principle Backflow Prevention Assembly

IAPMO PS 50 Flush Valves with Dual Flush Devices for Water Closets or Water Closet Tank with an Integral Flush Valves with a Dual Flush Device

IAPMO PS 72 Valves with Atmospheric Vacuum Breakers

IAPMO PS 76 Trap Primers for Fill Valves and Flushometer Valves

IAPMO PS 79 Multiport Electronic Trap Primer

IAPMO PS 113 Hydraulically Powered Household Food Waste Disposer

NSF 3 Commercial Warewashing Equipment

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 ASSE standard specified.

## 3. CSA Group Testing & Certification Inc.

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

(Branch Lab) No. 10, Ke Yan Road, Science Park Luo Gang District, Guangzhou Guangdong 510663 People's Republic of China (Branch Lab) 8501 E. Pleasant Valley Road Cleveland, OH 44131 Phone: (216) 524-4990 (Branch Lab) 34 Bunsen Irvine, CA 92618 Phone: 949-733-4300

## Expiration: July 1, 2024

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, 2023 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)

#### **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

#### **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 D2466**

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

#### **ASTM D2564**

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

#### **ASTM D2683**

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

#### **ASTM D2737**

Polyethylene (PE) Plastic Tubing

#### ASTM D2846/D2846M

Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Hot-and Cold-Water Distribution Systems

#### 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 F1282

Polyethylene/Aluminum/Polyethylene (PE-AL-PE) Composite Pressure Pipe

#### ASTM F493

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

#### CSA B137.1

Polyethylene (PE) Pipe, Tubing, and Fittings for Cold-Water Pressure Services

#### CSA B137.11

Polypropylene (PP-R) Pipe and Fittings for Pressure Applications

#### CSA B137.18

Polyethylene of Raised Temperature Resistance (PE-RT) Tubing Systems for Pressure Applications

#### CSA B137.6

Chlorinated Polyvinylchloride (CPVC) Pipe, Tubing, and Fittings for Hot-and Cold-Water Distribution Systems

**CSA FC 1** Fuel Cell Technologies-Part 3-100: Stationary Fuel Cell Power Systems-Safety

#### CSA LC 1

Fuel Gas Piping Systems Using Corrugated Stainless Steel Tubing (same as CSA 6.26)

#### CSA LC 4a

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

CSA Z21.1

Household Cooking Gas Appliances

CSA Z21.5.1 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 Z21.11.2 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 Z21.19 Refrigerators Using Gas Fuel (same as CSA 1.4)

**CSA Z21.20a** Automatic Gas Ignition Systems and Components

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

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

**CSA Z21.40.1a/CGA 2.91a-M97** 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 Z21.47 Gas-Fired Central Furnaces (same as CSA 2.3)

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

CSA Z 21.54 Gas Hose Connectors for Portable Outdoor Gas-Fired Appliances (same as CSA 8.4)

CSA Z 21.56 Gas-Fired Pool Heaters (same as CSA 4.7)

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

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

CSA Z21.61 Gas-Fired Toilets

**CSA Z21.66** Automatic Damper Devices for Use with Gas-Fired Appliances (same as CSA 6.14)

**CSA Z 21.69** Connectors for Moveable Gas Appliances (same as CSA 6.16)

**CSA Z21.71a** Automatic Intermittent Pilot Ignition Systems for Field Installation

CSA Z 21.75 Connectors for Outdoor Gas Appliances and Manufactured Homes (same as CSA 6.27)

**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 Z 21.88 Vented Gas Fireplace Heaters (same as CSA 2.33)

**CSA Z21.90** Gas Convenience Outlets and Optional Enclosures (same as 6.24) CSA Z 21.93

Excess Flow Valves for Natural and Propane Gas with Pressures up to 5 psig (same as CSA 6.30)

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

**CSA Z83.18** Recirculating Direct Gas-Fired Heating and Forced Ventilation Appliances for Commercial and Industrial Applications

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

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

IAPMO PA 117 Press and Nail Connections

UL 21 LP-Gas Hose

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

UL 127 Factory-Built Fireplaces

UL 144 LP-Gas Regulators

UL174 Household Electric Storage Tank Water Heaters

UL 252 Compressed Gas Regulators

UL 295 Commercial-Industrial Gas Burners

UL 296 Oil Burners

UL 343 Pumps for Oil-Burning Appliances

UL 378 Draft Equipment

**UL 391** Solid-Fuel and Combination-Fuel Central and Supplementary Furnaces UL 441 Gas Vents

UL 569 Pigtails and Flexible Hose Connectors for LP-Gas

UL641 Type L Low-Temperature Venting Systems

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

UL 726 Oil-Fired Boiler Assemblies

UL 727 Oil-Fired Central Furnaces

#### Plumbing

ASCE 25 Earthquake-Actuated Automatic Gas Shutoff Devices

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 Macerating Toilet Systems and Waste-Pumping Systems for Plumbing Fixtures

ASME A112.4.1 Water Heater Relief Valve Dain Tubes

ASME A112.4.14/CSA B125.14 Manually Operated Valves for Use in Plumbing Systems

ASME A112.4.2/CSA B45.16 Personal Hygiene Devices for Water Closets

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

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

UL778 Motor Operater Water Pumps

ASME A112.6.2 Framing-Affixed Supports (Carriers) for Off-the-Floor Plumbing Fixtures

ASME A112.6.3 Floor and Trench Drains

ASME A112.6.7 Sanitary Floor Sinks

ASME A112.14.3 Hydromecahnical 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 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 Enameled Cast Iron and Enameled Steel Plumbing Fixtures

ASME A112.19.2/CSA B45.1 Ceramic Plumbing Fixtures UL 795 Commercial-Industrial Gas Heating Equipment

UL 896 Oil-Burning Stoves

UL 921 Commercial Dishwashers

UL 1482 Solid-Fuel Type Room Heaters

UL 1995 Heating and Cooling Equipment

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

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 Retrofit 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 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 A112.21.3M Hydrants for Utility and Maintenance Use

#### ASME A112.36.2M

Cleanouts

#### **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

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

ASSE 1001 Atmospheric Type Vacuum Breakers

ASSE 1002/ ASME A112.1002/ CSA B125.12 Anti-Siphon Fill Valves for Water Closet Tanks

ASSE 1003 Water Pressure Reducing Valves for Domestic Water Distribution Systems

ASSE 1004 Commercial Dishwashing Machines

ASSE 1008 Plumbing Aspects of Residential Food Waste Disposer Units

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/ ASME A112.1016/ 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 1035 Laboratory Faucet Backflow Preventers

#### ASSE 1037/ ASME A112.1037/ CSA B125.37

Pressurized Flushing Devices For Plumbing Fixtures

ASSE 1044 Trap Seal Primer - Drainage Types and Electric 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 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 Supply Fittings

ASSE 1064

Performance Requirements for Backflow Prevention Assembly Field Test Kits

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

ASSE 1069 Automatic Temperature Control Mixing Valves

ASSE 1070/ ASME A112.1070/ CSA B125.70 Water Temperature Limiting Devices

ASSE 1071 Temperature Actuated Mixing Valves for Plumbed Emergency Equipment

ASSE 1079 Dielectric Pipe Unions

#### ASSE 1081

Backflow Preventers with Integral Pressure Reducing Boiler Feed Valve and Intermediate Atmospheric Vent Style for Domestic and Light Commercial Water Distribution Systems

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 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 D2466

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

#### 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 D2683**

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

ASTM D2737 Polyethylene (PE) Plastic Tubing

#### ASTM D2846/D2846M

Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Hot- and Cold-Water Distribution Systems

#### **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 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 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 F1282**

Polyethylene/Aluminum/Polyethylene (PE-AL-PE) Composite Pressure Pipe

#### ASTM F1743

Rehabilitation of Existing Pipelines and Conduits by Pulled-in-Place Installation of Cured-inPlace Thermosetting Resin Pipe (CIPP)

#### **ASTM F1807**

Metal Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-linked **AWWA C510** Double Check-Valve Backflow Prevention Assembly

#### AWWA C511

Reduced-Pressure Principle Backflow Prevention Assembly

#### AWWA C900

Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 4 in. through 12 in. (100 mm through 300 mm)

#### 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 A257

Concrete Pipe and Manhole Sections

CSA B45.5/IAPMO Z124 Plastic Plumbing Fixtures

CSA B45.11/IAPMO Z401

Glass Plumbing Fixtures

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

#### **CSA B458/IAPMO Z403**

Terrazzo, Concrete, Composite Stone, and Natural Stone 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 B66

Design, Material, and Manufacturing Requirements for Prefabricated Septic Tanks and Sewage Holding Tanks

#### 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 B137.6

Chlorinated Polyvinylchloride (CPVC) Pipe, Tubing, and Fittings for Hot- and Cold-Water Distribution Systems

#### CSA B137.9

Polyethylene/Aluminum/Polyethylene (PE-AL-PE) Composite Pressure-Pipe Systems

#### CSA B137.11

Polypropylene (PP-R) Pipe and Fittings for Pressure Applications

#### CSA B137.18

Polyethylene of Raised Temperature Resistance (PE-RT) Tubing Systems for Pressure Applications

CSA B181.3 Polyclofin and Poly

Polyolefin and Polyvinylidene Fluoride (PVDF) Laboratory Drainage Systems

#### **CSA B356**

Water Pressure Reducing Valves for Domestic Water Supply Systems

**CSA B481** Grease Interceptors

CSA G401 Corrugated Steel Pipe Products

#### CSA LC 1

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

#### 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 Z21.10.3

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 Z21.12b

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 Z21.22

Relief Valves for Hot Water Supply Systems (same as CSA 4.4)

#### CSA Z21.24

Connectors for Gas Appliances (same as CSA 6.10)

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

**CSA Z21.69** Connectors for Outdoor Gas Appliances and Manufactured Homes (same as CSA 6.27)

#### CSA Z21.80a

Line Pressure Regulators (same as CSA 6.22a)

#### CSA Z21.81a

Cylinder Connection Devices (same as CSA 6.25a)

#### CSA Z21.86

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

#### CSA Z21.90

Gas Convenience Outlets and Optional Enclosures (same as CSA 6.24)

#### CSA Z21.93

Excess Flow Valves for Natural Gas and Propane Gas with Pressures up to 5 psig (same as CSA 6.30)

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

Energy Star 2012 (Version 2.0) Program Requirements Product Specification for Commercial Dishwashers

Energy Star 2016 (Version 6.0) Program Requirements for Residential Dishwashers

#### Energy Star 2018 (Version 8.0)

Program Requirements Product specification for Clothes Washers (effective February 5, 2018)

#### EPA WaterSense-2007

High-Efficiency Lavatory Faucet Specification

**EPA WaterSense-2009** Specification for Flushing Urinals

**EPA WaterSense-2014** Specification for Tank-Type Toilets

#### IAPMO IGC 115

Automatic Water Leak Detection Devices

IAPMOC IGC 154

Shower and Tub/Shower Enclosures, Bathtubs with Glass Pressure-Sealed Doors, and Shower/Steam Panels

#### IAPMO PS 23

Dishwasher Drain Airgaps

#### IAPMO PS 50

Flush Valves with Dual Flush Device For Water Closets or Water Closet Tank with an Integral Flush Valves with a Dual Flush Device

IAPMO PS 72 Valves with Atmospheric Vacuum Breakers

IAPMO PS76 Trap Primers for Fill Valves and Flushometer Valves

IAPMO PS 79 Multiport Electronic Trap Primer

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

IAPMO PS117 Press and Nail Connections

IAPMO Z124.5 Plastic Toilet Seats

ISEA Z358.1 Emergency Eyewash and Shower Equipment

NSF 2 Food Equipment

NSF 3 Commercial Warewashing Equipment

#### NSF 4

Commercial Cooking, Rethermalization, and Powered Hot Food Holding and Transportation Equipment

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

NSF 14 Plastics Piping System Components and Related Materials

#### **NSF 18**

Manual Food and Beverage Dispensing Equipment

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 58 Reverse Osmosis Drinking Water Treatment Systems

NSF 61 Drinking Water System Components – Health Effects

NSF 62 Drinking Water Distillation Systems

NSF 169 Special Purpose Food Equipment and Devices

PDI G-101

Testing and Rating Procedure for Hydro Mechanical Grease Interceptors with Appendix of Installation and Maintenance

PDI WH-201 Water Hammer Arresters UL 144 LP-Gas Regulators UL-174 Household Electric Storage Tank Water Heaters (with revisions through December 15, 2016)

UL 252 Compressed Gas Regulators

UL 296 Oil Burners

**UL430** Waste Disposers (with revisions through February 23, 2018)

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

UL749 Household Dishwashers

UL 778 Motor-Operated Water Pumps

UL 921 Commercial Dishwashers (with revisions through September 20, 2017)

UL 1081 Swimming Pool Pumps, Filters, and Chlorinators

UL 2523

Solid Fuel-Fired Hydronic Heating Appliances, Water Heaters, and Boilers (with revisions through March 16, 2018)

## **Certification Marks:**

CSA Mark	Type of Mark/Label	CSA Mark/Label Definition
C S C US	Certification mark	Indicates that the product was tested and has met the certification requirements for electrical, plumbing and/or mechanical products.
US®	Certification mark	Indicates that the product was tested and has met the certification requirements for electrical, plumbing and/or mechanical products.
DESIGN CERTIFIED ®	Certification mark	Indicates that the product was tested and has met the certification requirements for gas- fired products.
	Certification mark	Indicates the product was tested and has met low lead content requirements.
LOW LEAD CONTENT	Certification mark	Indicates the product was tested and has met low lead content requirements.
Drinking Water	Certification mark	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.

C US FIELD CERTIFICATION	Field certification label	Indicates that the product was tested and has met the certification and regional installation requirements for products.
FIELD CERTIFICATION	Field certification label	Indicates that the product was tested and has met the certification and regional installation requirements for products.
DESIGA OCENTIEEB ®	Field certification label	Indicates that the gas-fired product was tested and met the certification and regional installation requirements for products.
US FIELD EVALUATION This evaluation is limited to site installation requirements of the local AHJ and does not constitute product certification.	Field evaluation label	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.

# 4. FM Approvals LLC

(Main Lab) 1151 Boston-Providence Turnpike Norwood, MA 02062 Phone: (781) 762-4300 (Branch Lab) 743 Reynolds Road West Glocester, RI 02814 Phone: (401) 567-0590

## Expiration: October 1, 2024

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 Code, 2023 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:**

FM	<b>FM Approved Mark</b> This marking indicates that the product has been evaluated and is listed to the applicable standard specified.
C FM US APPROVED	<b>FM Approved Mark with "C" and "US"</b> This marking indicates that the product has been evaluated to meet Canadian and U.S. standards, and is listed to the applicable standard specified.
<b>FM</b> ►	<b>FM Approved Cast-On Marks</b> 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.

## 5. Home Innovation Research Labs

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

### Expiration: September 1, 2023

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, 2020 Edition:

ASME A112.9.7/ CSA B45.10 Hydromassage Bathtub Systems

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

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 Marks:**



This marking indicates that the product has been evaluated and is to be in compliance with the applicable standard specified.

# 6. 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, 2023

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, 2020 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/ CSA B45.16 Personal Hygiene Devices for Water Closets 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 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

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 Braze-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 BPVC Section IX** Welding, Brazing and Fusing Qualifications

ASSE 1001 Atmospheric Type Vacuum Breakers

ASSE 1002/ ASME A112.112/ CSA B125.12 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 1032 Dual Check Valve Type Backflow Preventers for Carbonated Beverage Dispensers, Post Mix Type

ASSE 1035 Laboratory Faucet Backflow Preventer

ASSE 1037/ ASME A112.1037/ CSA B125.37 Pressurized Flushing Devices (Flushometers) for Plumbing Fixtures

ASSE 1044 Trap Seal Primer- Drainage Types and Electric 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 Supply Fittings

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

ASSE 1069

Automatic Temperature Control Mixing Valves

ASSE 1070/ ASME A112.1070/ CSA B125.70

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 Standard

ASSE Series 6000 Professional Qualifications Standard for Medical Gas Systems Personnel

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 A254/A254M Copper-Brazed Steel Tubing

ASTM A269/A269M 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 A536 Ductile Iron Castings

ASTM A733 Welded and Seamless Carbon Steel and Austenitic Stainless Steel 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

ASTM B88 Seamless Copper Water Tube

ASTM B135 Seamless Brass Tube

ASTM B152/B152M Copper Sheet, Strip, Plate, and Rolled Bar

ASTM B210 Aluminum and Aluminum-Alloy Drawn Seamless Tubes

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

ASTM B251 General Requirements for Wrought Seamless Copper and Copper-Alloy 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 Standard Specification for 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 Liquid and Paste Fluxes for Soldering of Copper and Copper Alloy Tube

ASTM B819 Seamless Copper Tube for Medical Gas Systems

ASTM B828 Making Capillary Joints by Soldering of Copper and Copper Alloy Tube and Fittings

ASTM C4 Clay Drain Tile and Perforated Clay Drain Tile

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

ASTM C412 Concrete Drain Tile

ASTM C425 Compression Joints for Vitrified Clay Pipe and Fittings

ASTM C443 Joints for Concrete Pipe and Manholes, Using Rubber Gaskets

ASTM C444 Perforated Concrete Pipe

ASTM C478 Precast Reinforced Concrete Manhole Sections

ASTM C564 Rubber Gaskets for Cast Iron Soil Pipe and Fittings

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

ASTM C1053 Borosilicate Glass Pipe and Fittings for Drain, Waste and Vent (DWV) Applications

ASTM C1173 Flexible Transition Couplings for Underground Piping Systems ASTM C1227 Precast Concrete Septic Tanks

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

ASTM C1440

Thermoplastic Elastomeric (TPE) Gasket Materials for Drain, Waste, and Vent (DWV), Sewer, Sanitary and Storm Plumbing Systems

ASTM C1460

Shielded Transition Couplings for use with Dissimilar DWV Pipe and Fittings Above Ground

#### ASTM C1461

Mechanical Couplings Using Thermoplastic Elastomeric (TPE) Gasket for Joining Drain, Waste, and Vent, (DWV), Sewer, Sanitary, and Storm Plumbing Systems for Above and Below Ground Use

ASTM C1540

Heavy Duty 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, (SDR-PR) Based on Controlled Inside Diameter

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

ASTM D2321 Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications

ASTM D2464 Threaded Poly (Vinyl Chl

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 D2517**

Reinforced Epoxy Resin Gas Pressure Pipe 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 D2657**

Heat Fusion Joining of Polyolefin 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 D2672**

Joints for IPS PVC Pipe Using Solvent Cement

#### **ASTM D2680**

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

#### **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 D2774**

Underground Installation of Thermoplastic Pressure Piping

#### **ASTM D2855**

Two-Step (Primer and Solvent Cement) Method of Joining Poly (Vinyl Chloride) (PVC) of Chlorinated Poly (Vinyl Chloride) (CPVC) Pipe and Piping Components with Tapered Sockets

#### 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 D3122

Solvent Cements for Styrene-Rubber (SR) Plastic Pipe and Fittings

## ASTM D3138

Solvent Cement for Transitions Joints Between Acrylonitrile-Butadiene-Styrene (ABS) and Poly (Vinyl Chloride) (PVC) Non-Pressure 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 D4068**

Chlorinated Polyethylene (CPE) Sheeting for Concealed Water-Containment Membrane

#### ASTM D4551

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

#### 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 F402

Safe Handling of Solvent Cements, Primers, and Cleaners Used for Joining Thermoplastic Pipe and Fittings

#### ASTM F409

Thermoplastic Accessible and Replaceable Plastic Tube and Tubular Fittings

#### 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 F446

Grab Bars and Accessories Installed in the Bathing Area

#### ASTM F480

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

#### ASTM F493

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

#### ASTM F628

Acrylonitrile-Butadiene-Styrene (ABS) Sch. 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 24in. Corrugated Polyethylene Tubing and Fittings

#### ASTM F714

Polyethylene (PE) Plastic Pipe (SDR-PR) Based on Outside Diameter

#### ASTM F794

Poly (Vinyl Chloride) (PVC) Profile Gravity Sewer Pipe and Fittings Based on Controlled Inside Diameter

#### ASTM F810

Smoothwall Polyethylene (PE) Pipe for Use in Drainage and Waste Disposal Absorption Fields

#### 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 F1055**

Electrofusion Type Polyethylene Fittings for Outside Diameter Controlled Polyethylene and Crosslinked Polyethylene (PEX) Pipe and Tubing

#### **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 F1476**

Performance of Gasketed Mechanical Couplings for Use in Piping Applications

#### ASTM F1488

Coextruded Composite Pipe

#### **ASTM F1499**

Coextruded Composite Drain, Waste, and Vent Pipe (DWV)

#### ASTM F1673

Polyvinylidene Fluoride (PVDF) Corrosive Waste Drainage Systems

#### ASTM F1743

Rehabilitation of Existing Pipelines and Conduits by Pulled-In-Place Installation of Cured-in-place Thermosetting Resin pipe (CIPP)

#### **ASTM F1866**

Poly (Vinyl Chloride) Plastic Schedule 40 Drainage and DWV Fabricated Fitting

#### ASTM F1924

Plastic Mechanical Fittings for Use on Outside Diameter Controlled Polyethylene Gas Distribution Pipe and Tubing

#### ASTM F1948

Metallic Mechanical Fittings for Use on Outside Diameter Controlled Thermoplastic Gas Distribution Pipe and Tubing

#### ASTM F1970

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

#### **ASTM F1973**

Factory Assembled Anodeless Risers and Transition Fittings in Polyethylene (PE) and Polyamide 11 (PA 11) and Polyamide 12 (PA 12) Fuel Gas Distribution Systems

#### **ASTM F1974**

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

#### **ASTM F1986**

Multilayer Pipe Type 2, Compression Fittings, and Compression Joints for Hot and Cold Drinking-Water Systems

ASTM F2165 Flexible Pre-Insulated Piping

ASTM F2206 Fabricated Fittings of Butt-Fused Polyethylene (PE)

#### ASTM F2306/F2306M

12 to 60 in. [300 to 1500 mm] Annular Corrugated Profile-Wall Polyethylene (PE) Pipe and Fittings for Gravity-Flow Storm Sewer and Subsurface Drainage Applications

#### **ASTM F2509**

Field-Assembled Anodeless Riser Kits for Use on Outside Diameter Controlled Polyethylene Gas Distribution Pipe and Tubing

#### ASTM F2831

Internal Non Structural Epoxy Barrier Coating Material Used in Rehabilitation of Metallic Pressurized Piping Systems

#### AWS A5.8

Filler Metals for Brazing and Braze Welding

#### **AWS B2.2**

Brazing Procedure and Performance Qualification

#### AWS B2.4

Welding Procedure and Performance Qualification for Thermoplastic

AWWA C110

Ductile-Iron and Gray-Iron Fittings

#### AWWA C111

Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings

AWWA C151 Ductile-Iron Pipe, Centrifugally Cast

AWWA C153 Ductile-Iron Compact Fittings

#### AWWA C203

Coal-Tar Protective Coatings and Linings for Steel Water Pipe

#### AWWA C210

Liquid-Epoxy Coatings and Lining Systems for Steel Water Pipe and Fittings

#### AWWA C213

Fusion-Bonded Epoxy Coatings and Linings for Steel Water Pipe and Fittings

#### AWWA C215

Extruded Polyolefin Coatings for Steel Water Pipe

AWWA C500 Metal Seated Service Gate Valves for Water Supply Service

AWWA C504 Rubber Seated Butterfly Valves

AWWA C507 Ball Valves, 6 in. through 60 in. (150 mm through 1,500 mm)

AWWA C510 Double Check Valve Backflow Prevention Assembly

AWWA C511 Reduced Pressure Principle Backflow Prevention Assembly

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)

#### **AWWA C901**

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

#### **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

#### CGA C-9

Standard Color Marking of Compressed Gas Containers for Medical use

CGA G-4.1 Cleaning Equipment for Oxygen Service

#### CGA S-1.3

Pressure Relief Device Standards-Part 3-Stationary Storage Containers for Compressed Gases

CGA V-1 Compressed Gas Cylinder Valve Outlet and Inlet Connections

#### 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 A257 Concrete Pipe and Manhole Sections

CSA B45.5/IAPMO 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 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 (DVCAF)

CSA B64.7 Laboratory Faucet Vacuum Breakers (LFVB)

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 B242 Grooved-and Shouldered-Type Mechanical Pipe Couplings

CSA B356 Water Pressure Reducing Valves for Domestic Water Supply Systems

**CSA B481** Grease Interceptors

CSA G401 Corrugated Steel Pipe Products

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

**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 75000 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 75000 Btu Per Hour, Circulating and Instantaneous (same as CSA 4.3)

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

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

CSA Z21.24 Connectors for Gas Appliances (same as CSA 6.10) **CSA Z21.41** Quick-Disconnected Devices for Use with Gas Fuel Appliances (same as CSA 6.9)

CSA Z21.54 Gas Hose Connectors for Portable Outdoor Gas-Fired Appliances (same as CSA 8.4)

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

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

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

**CSA Z317.1** Special Requirements for Plumbing Installations in Health Care Facilities

Energy Star – 2007 Program Requirement for Commercial Dishwashers

**EPA Watersense – 2007** High-Efficiency Lavatory Faucet Specification

**EPA Watersense – 2009** Specification for Flushing Urinals

**EPA Watersense – 2014** Specification for Tank-Type Toilets

IAPMO IGC 154 Shower and Tub/Shower Enclosures, Bathtubs with Glass Pressure-Sealed Doors, and Shower/Steam Panels

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 25 Metallic Fittings for Joining Polyethylene Pipe for Water Service and Yard Piping

IAPMO PS 34 Encasement Sleeve for Portable Water Pipe and Tube

IAPMO PS 36 Lead-Free Sealing Compounds for Threaded Joints

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

IAPMO PS 42 Pipe Alignment and Secondary Support Systems

IAPMO PS 50 Flush Valves with Dual Flush Device for Water Closets or Water Closet Tank with an integral Flush Valves with a Dual Flush Device

IAPMO PS 51 Expansion Joints and Flexible Expansion Joints for DWV Piping Systems

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

IAPMO PS 53 Grooved Mechanical Pipe Couplings and Grooved Fittings

IAPMO PS 54 Metallic and Plastic Utility Boxes

IAPMO PS 57 PVC Hydraulically Actuated Diaphragm Type Water Control Valves

IAPMO PS 59 Waste Water Diverter Valves and Diversion System

IAPMO PS 63 Plastic Leaching Chambers

IAPMO PS 64 Roof Pipe Flashings 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 Breaker

IAPMO PS 73 Dental Liquid-Ring Vacuum Pumps

IAPMO PS 76 Trap Primers for Fill Valves and Flushometer Valves

IAPMO PS 79 Multiport Electronic Trap Primer

IAPMO PS 80 Clarifiers

IAPMO PS 81 Precast Concrete Seepage Pit Liners and Covers

IAPMO PS 82 Fiberglass (Glass Fiber Reinforced Thermosetting Resin) Fittings

IAPMO PS 85 Tools for Mechanically Formed Tee Connections in Copper Tubing

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

IAPMO PS 87 Diverter and Shut-Off Valves for Pool/Spas

IAPMO PS 89 Soaking and Hydrotherapy (Whirlpool) Bathtubs with Hydraulic Seatlift

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

IAPMO PS 91 Plastic Stabilizer for Use with Plastic Closet Bends IAPMO PS 92 Heat Exchangers and Indirect Water Heaters

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

IAPMO PS 100 Porous Filter Protector for Sub-Drain Weep Holes

IAPMO PS 101 Suction Relief Valves

IAPMO PS 104 Pressure Relief Connection for Dispensing Equipment

IAPMO PS 105 Polyethylene Distribution Boxes

IAPMO PS 106 Tileable Shower Receptors and Shower Kits

IAPMO PS 110 PVC Cold Water Compression Fittings

IAPMO PS 111 PVC Cold Water Gripper Fittings

IAPMO PS 112 PVC Plastic Valves for Cold Water Distribution Systems Outside a Building and CPVC Plastic Valves for Hot and Cold Water Distribution Systems

IAPMO PS 113 Hydraulically Powered Household Food Waste Disposers

IAPMO PS 115 Hot Water On-Demand or Automatic Activated Hot Water Pumping Systems

IAPMO Z124.5 Plastic Toilet Seats

IAPMO Z124.7 Prefabricated Plastic Spa Shells IAPMO Z124.8 Plastic Liners for Bathubs and Shower Receptors

IAPMO Z1000 Prefabricated Septic Tanks

IAPMO Z1001 Prefabricated Gravity Grease Interceptors

IAPMO Z1033 Flexile PVC Hoses and Tubing for Pools, Hot Tubs, Spas and Jetted Bathtubs

ICC A117.1 Accessible and Usable Buildings and Facilities

ISEA Z358.1 Emergency Eyewash and Shower Equipment

MSS SP-6 Standard Finishes for Contact Faces of Pipe Flanges and Connecting-End Flanges of Valves and Fittings

MSS SP-25 Marking Systems for Valves, Fittings, Flanges, and Unions

## MSS SP-42

Corrosion Resistant Gate, Globe, Angle and Check Valves with Flanged and Butt Weld Ends (Classes 150,300 & 600)

MSS SP-44 Steel Pipeline Flanges

MSS SP-58 Pipe Hangers and Supports -Materials, Design, and Manufacture, Selection, Application and Installation

MSS SP-67 Butterfly Valves

MSS SP-70 Gray Iron Gate Valves, Flanged and Threaded Ends

**MSS SP-71** Gray Iron Swing Check Valves, Flanged and Threaded Ends

MSS SP-72 Ball Valves with Flanged or Butt-Welding Ends for General Service MSS SP-78 Cast Iron Plug Valves, Flanged and Threaded Ends

MSS SP-80 Bronze gate, Globe, Angle, and Check Valves

MSS SP-83 Class 3000 and 6000 Pipe Unions, Socket-Welding and Threaded (Carbon Steel, Alloy Steel, Stainless Steel, and Nickel Alloys)

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 Weld-Fabricated Copper Solder Joint Pressure Fittings

MSS SP 123 Non-Ferrous Threaded and Solder Joint Unions for Use with Copper Water Tube

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 Plastics 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 Unit-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 62 Drinking Water Distillation Systems

NSF 169 Special Purpose Food Equipment and Devices

NSF 350 Onsite Residential and Commercial Water Reuse Treatment Systems.

**PDI G-101** Testing and Rating Procedure for Hydro Mechanical Grease Interceptors with Appendix of Installation and Maintenance

#### PDI G-102

Testing and Certification for Grease Interceptors with FOG Sensing and Alarm Devices

PDI WH 201 Water Hammer Arresters

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

SAE J512 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 Installation

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 144 LP-Gas Regulators

UL 174 Household Electric Storage Tank Water Heaters

**UL 252** Compressed Gas Regulators

UL 263 Fire Test of Building Construction and Materials

UL 296 Oil Burners

UL 378 Draft Equipment

UL 399 Drinking Water Coolers

UL 404 Gauges, Indicating Pressure, for Compressed Gas Services UL 429 Electrically Operated Valves

UL 430 Waste Disposers

UL 441 Gas Vents

UL 536 Flexible Metallic Hose

UL 563 Ice Makers

UL 569 Pigtails and Flexible Hose Connectors for LP-Gas

**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 Dishwasher

UL 959 Medium Heat Appliances 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 Test of Through-Penetration Firestops

UL 1795 Hydromassage Bathtubs

UL 1951 Electric Plumbing Accessories

Mechanical Standards:

AHRI 700 Specifications for Refrigerants

AMCA 500-D Laboratory Methods of Testing Dampers for Ratings

AMCA 540 Louvers Impacted by Wind Borne Debris

AMCA 550 Test Method for High Velocity Wind Driven Rain Resistance Louvers

ASCE 25 Earthquake-Actuated Automatic Gas Shutoff Devices

ASHRAE 52.2 General Ventilation Air Cleaning Devices for Removal Efficiency by Particle Size

ASME A13.1 Scheme for the Identification of Piping Systems

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

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 UL 2157 Electric Clothes Washing Machines and Extractors

WQA S-300 Point-of-Use Low Pressure Reverse Osmosis Drinking Water Systems.

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

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

ASME B16.9 Factory-Made Wrought Buttwelding Fittings

ASME B16.11 Forged Fittings, Socket-Welding and Threaded

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 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 ½- 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 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 **ASTM A53/A53 M** 

Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded, And Seamless

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

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

ASTM A254/ A254M Copper-Brazed Steel Tubing

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

ASTM A420 / A420M Piping Fittings of Wrought Carbon Steel and Alloy Steel for Low-Temperature Service

ASTM A568/ A568M Steel, Sheet, Carbon, Structural, and High-Strength, Low-Alloy, Hot-Rolled and Cold-Rolled

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 B32 Solder Metal

ASTM B42 Seamless Copper Pipe, Standard Sizes

ASTM B43 Seamless Red Brass Pipe, Standard Sizes

ASTM B75 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/A241M Aluminum and Aluminum-Alloy Seamless Pipe and Seamless Extruded Tube

ASTM B251

General Requirements for Wrought Seamless Copper and Copper-Alloy Tube

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

ASTM B302 Theadless Copper Pipe, Standard Sizes

ASTM B370 Standard Specification for Copper Sheet and Strip for Building Construction

ASTM B447 Welded Copper Tube

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

ASTM B813 Liquid and Paste Fluxes for Soldering of Copper and Copper Alloy Tube

ASTM B828 Making Capillary Joints by Soldering of Copper and Copper Alloy Tube and Fittings

ASTM C315 Clay Flue Liners and Chimney Pots

ASTM C411 Hot Surface Performance of High-Temperature Thermal Insulation

ASTM C518 Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus

ASTM D93 Flash Point by Pensky-Martens Closed Cup Tester

ASTM D396 Fuel Oils **ASTM D1693** 

Environmental Stress-Cracking of Ethylene Plastics

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

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

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 D2517 Reinforced Epoxy Resin Gas Pressure Pipe and Fittings

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

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

ASTM D3350 Polyethylene Plastics Pipe and Fittings Materials

ASTM E84 Surface Burning Characteristics of Building Materials

ASTM E96 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 Resistive Grease Duct Enclosure Systems

#### 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 F1055**

Electrofusion Type Polyethylene Fittings for Outside Diameter Controlled Polyethylene Pipe and Tubing

#### **ASTM F1476**

Performance of Gasketed Mechanical Couplings for Use in Piping Applications

#### **ASTM F1807**

Metal Insert Fittings Utilizing A Copper Crimp Ring for SDR9 Cross-Linked Polyethylene (PEX) Tubing and SDR9 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 F1961**

Metal Mechanical Cold Flare Compression Fittings with Disc Spring for Crosslinked 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 F1973**

Factory Assembled Anodeless Risers and Transition Fittings in Polyethylene (PE) and Polyamide 11 (PA11) and Polyamide12 (PA12) Fuel Gas Distribution 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 Crosslinked Polyethylene (PEX) Pipe and SDR 9 Polyethylene of Raised Temperature (PE-RT) Pipe

#### **ASTM F2098**

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

#### **ASTM F2158**

Residential Central-Vacuum Tube and Fittings

#### **ASTM F2159**

Plastic Insert Fittings Utilizing a Copper Crimp Ring for SDR 9 Crosslinked 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 SDR9 Cross-linked Polyethylene/Aluminum/Cross-linked Polyethylene (PEX-AL-PEX) Tubing

#### ASTM F2509

Field-Assembled Anodeless Riser Kits for Use on Outside Diameter Controlled Polyethylene and Polyamide-11 (PA11) Gas Distribution Pipe and Tubing

#### AWS A5.8/ A5.8M

Filler Metals for Brazing and Braze Welding

#### **AWS B2.4**

Welding Procedures and Performance Qualifications for Thermoplastics

#### AWWA C110

Ductile-Iron and Gray-Iron Fittings

#### AWWA C115

Flanged Ductile-Iron Pipe with Ductile-Iron or Gray-Iron Threaded Flanges

#### AWWA C151

Ductile-Iron Pipe, Centrifugally Cast

#### AWWA C153

**Ductile-Iron Compact Fittings** 

#### CSA B137.1

Polyethylene (PE) Pipe, Tubing, and Fittings for Cold-Water Pressure Services

#### CSA B137.2

Polyvinylchloride (PVC) Injection-Molded Gasketed Fittings for Pressure Applications

#### CSA B137.3

Rigid Polyvinylchloride (PVC) Pipe and Fittings for Pressure Applications

#### **CSA C448**

Design and Installation of Ground Source Heat Pump Systems for Commercial and Residential Buildings

#### CSA LC 1

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

#### CSA LC 4a

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

#### CSA Z21.1

Household Gas Cooking Appliances

#### CSA Z21.5.1

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

CSA Z21.20a Automatic Gas Ignition Systems and Components

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

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

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

**CSA Z21.40.1a/ CGA 2.91a-M97** 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 Z21.47 Gas-Fired Central Furnaces (same as CSA 2.3)

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

CSA Z21.54 Gas Hose Connectors for Portable Outdoor Gas-Fired Appliances (same as CSA 8.4)

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

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

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

**CSA Z21.66** Automatic Vent Damper Devices for Use with Gas-Fired Appliances

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

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

CSA Z21.90 Gas Convenience Outlets and Optional Enclosures (same as CSA 6.24) CSA Z83.4

Non-Recirculating Direct Gas-Fired Industrial Air Heaters (same as CSA 3.7)

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

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

**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)

IAPMO PS 117 Press and Nail Connections

IAPMO PS 120 Flashing and Stand Combination for Air Conditioning Units (Residential or Commercial Unit Curb)

**IIAR 2** Standard for the Safe Design of Closed-Circuit Ammonia Refrigeration Systems

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 2015** Procedural Standards for Testing Adjusting and Balancing Environmental Systems

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

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 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 127 Factory-Built Fireplaces

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 180** Liquid-Level Indicating Gauges for Oil Burner Fuels

UL 181 Factory-Made Air Ducts and Air Connectors

UL 181A Closure Systems for Use with Rigid Air Ducts

UL 181B Closure Systems for Use with Flexible Air Ducts and Air Connectors

**UL 197** Commercial Electric Cooking Appliances

UL 207 Refrigerant-Containing Components and Accessories, Nonelectrical

UL 252 Compressed Gas Regulators

UL 268A Smoke Detectors for Duct Application

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 353 Limit Controls

UL 378 Draft Equipment

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

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

UL 412 Refrigeration Unit Coolers UL 429 Electrically Operated Valves

UL 441 Gas Vents

**UL 443** Steel Auxiliary Tanks for Oil-Burner Fuel

UL 471 Commercial Refrigerators and Freezers

UL 525 Flame Arresters

UL 555 Fire Dampers

UL 555C Ceiling Dampers

UL 555S Smoke Dampers

**UL 565** Liquid-Level Gauges and Indications 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 PVD Conduit and Fittings

UL 710 Exhaust Hoods for Commercial Cooking Equipment

UL 710B Recirculating Systems

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 1046 Grease Filters for Exhaust Ducts 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 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**<sup>®</sup>

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**<sup>®</sup>

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 lowlead requirements for drinking water system components

# 7. ICC Evaluation Service, LLC

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

### Expiration: July 1, 2024

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, 2023 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 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 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

#### 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 through 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 BPVC Section IV Rules for Construction of Heating Boilers

ASME BPVC 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 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 B370

Standard Specification for Copper Sheet and Strip for Building Construction

ASTM B447

Welded Copper Tube

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

#### ASTM B813

Liquid and Paste Fluxes for Soldering of Copper and Copper Alloy Tube

#### ASTM B828

Making Capillary Joints by Soldering of Copper and Copper Alloy Tube and Fittings

#### ASTM C411

Hot-Surface Performance of High-Temperature Thermal Insulation

#### ASTM C518

Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus

#### ASTM D93

Flash Point by Pensky-Martens Closed Cup Tester

#### **ASTM D2513**

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

#### ASTM E84

Surface Burning Characteristics of Building Materials

#### **ASTM E814**

Fire Tests of Penetration Firestop Systems

#### **ASTM E2336**

Fire Resistive Grease Duct Enclosure Systems

#### ASTM F1807

Metal Insert Fittings Utilizing 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 Crosslinked Polyethylene (PEX) and SDR9 Polyethylene of Raised Temperature (PE-RT) Tubing

#### **ASTM F1970**

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

#### ASTM F1973

Factory Assembled Anodeless Risers and Transition Fittings in Polyethylene (PE) and Polyamide 11 (PA11) and Polyamide 12 (PA12) Fuel Gas Distribution 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 Crosslinked Polyethylene (PEX) Pipe and SDR9 Polyethylene of Raised Temperature (PE-RT)

#### ASTM F2098

Stainless Steel Clamps for Securing SDR9 Crosslinked Polyethylene (PEX) Tubing to Metal Insert and Plastic Insert Fittings

#### **ASTM F2158**

Residential Central-Vacuum Tube and Fittings

#### ASTM F2159

Plastic Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Crosslinked 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 SDR9 Crosslinked Polyethylene/Aluminum/Cross-linked Polyethylene (PEX-AL-PEX) Tubing

#### ASTM F2509

Field-Assembled Anodeless Riser Kits for Use on Outside Diameter Controlled Polyethylene and Polyamide-11 (PA11) Gas Distribution Pipe and Tubing

#### AWS A5.8 / A5.8M

Filler Metals for Brazing and Braze Welding

#### AWS B2.4

Welding Procedure and Performance Qualification for Thermoplastics

#### AWWA C110

Ductile-Iron and Gray-Iron Fittings

#### AWWA C151

Ductile-Iron Pipe, Centrifugally Cast

#### CSA FC 1

Fuel Cell Technologies- Part 3- 100: Stationary Fuel Cell Power Systems-Safety

#### CSA LC 1

Fuel Gas Piping Systems Using Corrugated Stainless Steel Tubing (same as 6.26)

#### CSA LC 4a

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

# CSA Z21.1

Household Gas Cooking Appliances

# CSA Z21.5.1

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 Z21.19

Refrigerators Using Gas Fuel (same as CSA 1.4)

# CSA Z21.20a

Automatic Gas Ignition Systems and Components

# CSA Z21.21

Automatic Valves for Gas Appliances (same as CSA 6.5)

# CSA Z21.22

Relief Valves for Hot Water Supply Systems (same as CSA 4.4)

# CSA Z21.24

Connectors for Gas Appliances (same as CSA 6.10)

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

# CSA Z21.54

Gas Hose Connectors for Portable Outdoor Gas-Fired Appliances (same as CSA 8.4)

# CSA Z21.56

Gas-Fired Pool Heaters (same as CSA 4.7)

#### CSA Z21.58 Outdoor Cooking Gas Appliances (same as CSA 1.6)

# CSA Z21.60

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

# CSA Z21.61

Gas-Fired Toilets

# CSA Z21.66

Automatic Vent Damper Devices for Use with Gas-Fired Appliances (same as CSA 6.14)

# CSA Z21.69

Connectors for Moveable Gas Appliances (same as CSA 6.16)

# CSA Z21.71a

Automatic Intermittent Pilot 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)

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# CSA Z21.88

Vented Gas Fireplace Heaters (same as CSA 2.33)

# CSA Z21.90

Gas Convenience Outlets and Optional Outlets (same as CSA 6.24)

# CSA Z83.4

Non-Recirculating Direct Gas-Fired Heating and Forced Ventilation Appliances for Commercial and Industrial Applications (same as CSA 3.7)

# CSA Z83.8

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

# CSA Z83.11

Gas Food Service Equipment (same as CSA 1.8)

# CSA Z83.18

Recirculating Direct Gas-Fired Heating and Forced Ventilation Appliances for Commercial and Industrial Applications

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

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

Heaters (same as CSA 2.34)

# IAPMO PS 120

Flashing and Stand Combination for Air Conditioning Units (Residential or Commercial Unit Curb)

# IIAR 2

Standard for Safe Design of Closed-Circuit Ammonia Refrigerating Systems

# 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

SAE J512 Automotive Tube Fittings

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

SMACNA-2017 HVAC Duct Construction Standards Metal and Flexible, 4th 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 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 127 Factory-Built Fireplaces

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 180** Liquid-Level Gauges for Oil Burner Fuels and Other Combustible Liquids

UL 181 Factory-Made Air Ducts and Air Connectors

UL 181A Closure Systems for Use with Rigid Air Ducts

UL 181B Closure Systems for Use with Flexible Air Ducts and Air Connectors

UL 197 Commercial Electric Cooking Appliances

UL 207 Refrigerant-Containing Components and Accessories, Nonelectrical

UL 252 Compressed Gas Regulators

UL 268A Smoke Detectors for Duct Application

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

UL 412 Refrigeration Unit Coolers

UL 429 Electrically Operated Valves UL 441 Gas Vents

UL 443 Steel Auxiliary Tanks for Oil-Burner Fuel

UL 471 Commercial Refrigerators and Freezers

UL 525 Flame Arresters

UL 555 Fire Dampers

UL 555C Ceiling Dampers

UL 555S Smoke Dampers

**UL 565** Liquid-Level Gauges and Indicators 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 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 791 Residential Incinerators

UL 795 Commercial-Industrial Gas Heating Equipment

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

#### **Plumbing Standards**

AHAM FWD-1 Food Waste Disposers

APSP 1/ ICC 1 Public Swimming Pools

ASCE 25 Earthquake-Actuated Automatic Gas Shutoff Devices

ASME A13.1 Scheme for the Identification of Piping Systems

ASME A112.1.3 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 Macerating Toilet Systems and Waste-Pumping Systems for Plumbing Fixtures

ASME A112.4.1 Water Heater Relief Valve Drain Tubes

ASME A112.4.2/CSA B45.16 Personal Hygiene Devices for Water Closets

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

ASME A112.4.14 Manually Operated 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 (Carriers) for Off-the-Floor Plumbing Fixtures

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 Hydromechanical Grease Interceptors

ASME A112.14.4 Grease Removal Devices

ASME A112.14.6 FOG (Fats, Oils, and Greases) Disposal Systems UL 921 Commercial Dishwashers

UL 959 Medium Heat Appliance Factory-Built Chimneys

UL 984 Hermetic Refrigerant Motor-Compressors

UL 1453 Electric Booster and Commercial Storage Tank Water Heaters

UL 1479 Fire Tests of Through-Penetration Firestops

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

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

ASME A112.18.3 Backflow Protection Devices and Systems in Plumbing Fixtures Fittings

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

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/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 Retrofit 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 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 A112.21.3M 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, 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 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

ASME B16.21 Nonmetallic Flat Gaskets for Pipe Flanges

#### 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, and Valves: Classes 150, 300, 600, 900, 1500 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 ½ through NPS 2)

ASME B16.34 Valves – Flanged, Threaded, and Welding End

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

#### ASME B16.40

Manually Operated Thermoplastic Gas Shutoff and Valves in Gas Distribution Systems

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

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

ASME B31.1 Power Piping

ASME B36.10M Welded and Seamless Wrought Steel Pipe

ASME B36.19M 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 BPVC Section IX

Welding, Brazing, and Fusing Qualifications- Qualification Standard for Welding, Brazing, and Fusing Procedures; Welder, Brazers; and Welding, Brazing, and Fusing Operators

ASSE 1001

Atmospheric-Type Vacuum Breakers

ASSE 1002/ASME A112.1002/ CSA B125.12

Anti-Siphon Fill Valves for Water Closet Tanks

ASSE 1003 Water Pressure Reducing Valves for Domestic Water Distribution Systems

ASSE 1004 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 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 Protection Backflow Prevention Assemblies

ASSE 1016 / ASME A112.1016 / 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 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/ASME A112.1037/ CSA B125.37 Pressurized Flushing Devices for Plumbing Fixtures

ASSE 1044 Trap Seal Primer- 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 with Integral Backflow Protection

ASSE 1056 Spill Resistant Vacuum Breaker Assemblies

ASSE 1060 Outdoor Enclosures for Fluid Conveying Components 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/ASME A112.1070/ CSA B125.70 Water Temperature Limiting Devices

ASSE 1079 Dielectric Pipe Unions

ASSE Series 5000 Cross-Connection Control Professional Qualifications Standard

ASSE Series 6000 Professional Qualifications Standard for Medical Gas Systems Personnel

ASTM A48 / A48M Gray Iron Castings

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

ASTM A74 Cast Iron Soil Pipe and Fittings

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

ASTM A269/A269M 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 A536 Ductile Iron Castings 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 B29 Refined Lead

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 B152/ B152M Copper Sheet, Strip, Plate, and Rolled Bar

ASTM B251 General Requirements for Wrought Seamless Copper and Copper-Alloy 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**

Liquid and Paste Fluxes for Soldering Applications of Copper and Copper Alloy Tube

# **ASTM B819**

Seamless Copper Tube for Medical Gas Systems

#### **ASTM B828**

Making Capillary Joints by Soldering of Copper and Copper Alloy Tube and Fittings

# ASTM C14

Nonreinforced Concrete Sewer, Storm Drain, and Culvert Pipe

ASTM C412 Concrete Drain Tile

#### ASTM C425

Compression Joints for Vitrified Clay Pipe and Fittings

### ASTM C443

Joints for Concrete Pipe and Manholes, Using Rubber Gaskets

#### ASTM C478

Circular Precast Reinforced Concrete Manhole Sections

# ASTM C564

Rubber Gaskets for Cast Iron Soil Pipe and Fittings

# ASTM C700

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

#### **ASTM C1053**

Borosilicate Glass Pipe and Fittings for Drain, Waste, and Vent (DWV) Applications

#### **ASTM C1173**

Flexible Transition Couplings for Underground Piping Systems

ASTM C1227 Precast Concrete Septic Tanks

#### **ASTM C1277**

Shielded Couplings Joining Hubless Cast Iron Soil Pipe & Fittings

# ASTM C1440

Thermoplastic Elastomeric (TPE) Gasket Materials for Drain, Waste, and Vent (DWV), Sewer, Sanitary and Storm Plumbing Systems

# **ASTM C1460**

Shielded Transition Couplings for Use with Dissimilar DWV Pipe and Fittings Above Ground

# **ASTM C1461**

Mechanical Couplings Using Thermoplastic Elastomeric (TPE) Gaskets for Joining Drain, Waste, and Vent (DWV); Sewer; Sanitary; and Storm Plumbing Systems for Above and Below Ground Use

# **ASTM C1540**

Heavy-Duty 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 D2321

Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications

# **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 D2517**

Reinforced Epoxy Resin Gas Pressure Pipe 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 D2657**

Heat Fusion Joining of Polyolefin Pipe Fittings

# ASTM D 2661

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 D2680

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

# **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 D2774**

Underground Installation of Thermoplastic Pressure Piping

# **ASTM D2855**

Two-Step (Primer and Solvent Cement) Method of Joining Poly (Vinyl Chloride) (PVC) or Chlorinated Poly (Vinyl Chloride) (CPVC) Pipe and Piping Components with Tapered Sockets

# **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 D3122**

Solvent Cements for Styrene-Rubber (SR) Plastic 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 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 Fitting for Polyethylene (PE) Plastic Pipe and Tubing

#### **ASTM D3311**

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

### **ASTM D4068**

Chlorinated Polyethylene (CPE) Sheeting for Concealed Water-Containment Membrane

#### **ASTM D4551**

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

# 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 F402

Safe Handling of Solvent Cements, Primers, and Cleaners Used for Joining Thermoplastic Pipe and Fittings

# ASTM F409

Thermoplastic Accessible and Replaceable Plastic Tube and Tubular Fittings

# 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 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 F794

Poly (Vinyl Chloride) (PVC) Profile Gravity Sewer Pipe and Fittings Based on Controlled Inside Diameter

#### ASTM F810

Smoothwall Polyethylene (PE) Pipe for Use in Drainage and Waste Disposal Absorption Fields

#### 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 F1055**

Electrofusion Type Polyethylene Fittings for Outside Diameter Controlled Polyethylene and Crosslinked Polyethylene (PEX) Pipe 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 F1476

Performance of Gasketed Mechanical Couplings for Use in Piping Applications

#### **ASTM F1488**

Coextruded Composite Pipe

# ASTM F1499

Coextrude Composite Drain, Waste, and Vent Pipe (DWV)

#### **ASTM F1673**

Polyvinylidene Fluoride (PVDF) Corrosive Waste Drainage Systems

#### **ASTM F1743**

Rehabilitation of Existing Pipelines and Conduits by Pulled-in-Place Installation of Cured-in Place Thermosetting Resin Pipe (CIPP)

#### **ASTM F1807**

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

#### **ASTM F1866**

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

### **ASTM F1924**

Plastic Mechanical Fitting for Use on Outside Diameter Controlled Polyethylene Gas Distribution Pipe and Tubing

# **ASTM F1948**

Metallic Mechanical Fittings for Use on **Outside Diameter Controlled** Thermoplastic Gas Distribution Pipe and Tubing

# **ASTM F1960**

Cold Expansion Fittings with PEX Reinforcing Rings for Use with Crosslinked Polyethylene (PEX) and Polyethylene of Raised Temperature (PE-RT) Tubing

# **ASTM F1970**

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

#### **ASTM F1973**

Factory Assembled Anodeless Riser and Transition Fittings in Polyethylene (PE) and Polvamide 11 (PA11) and Polvamide 12 (PA12) Fuel Gas Distribution Systems

#### **ASTM F1974**

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

#### **ASTM F1986**

Multilayer Pipe Type 2, Compression Fittings, and Compression Joints for Hot and Cold Drinking-Water Systems

# **ASTM F2080**

Cold-Expansion Fittings With Metal Compression-Sleeves for Cross-linked Polyethylene (PEX) Pipe and SDR9 Polyethylene of Raised Temperature (PE-RT) 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 Raise Temperature (PE-RT) Tubing

#### **ASTM F2165**

Flexible Pre-Insulated Piping

# **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

# **ASTM F2509**

Field-Assembled Anodeless Riser Kits for Use on Outside Diameter Controlled Polyethylene and Polyamide-11 (PA11) Gas Distribution Pipe and Tubing

# **ASTM F2831**

Internal Non Structural Epoxy Barrier Coating Material Used in Rehabilitation of Metallic Pressurized Piping Systems

AWS A5.8 / A5.8 Filler Metals for Brazing and Braze Welding

# **AWS B2.2**

**Brazing Procedure and Performance** Qualification

**AWS B2.4** Welding Procedure and Performance **Qualification for Thermoplastics** 

**AWWA C110** Ductile-Iron and Gray-Iron Fittings

# **AWWA C111**

Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings

**AWWA C151** Ductile-Iron Pipe, Centrifugally Cast

**AWWA C153 Ductile-Iron Compact Fittings** 

#### **AWWA C203**

Coal-Tar Protective Coatings and Linings for Steel Water Pipe

#### **AWWA C213**

Fusion-Bonded Epoxy Coatings and Linings for Steel Water Pipe and Fittings

# **AWWA C215**

Extruded Polyolefin Coatings for Steel Water Pipe

**AWWA C500** Metal-Seated Gate Valves for Water Supply Service

# **AWWA C504 Rubber-Seated Butterfly Valves**

# **AWWA C900**

Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings 4 in. through 12 in. (100 mm through 300 mm)

# **AWWA C901**

Polyethylene (PE) Pressure Pipe and Tubing, 3/4 in. (13 mm) through 3 in. (76 mm), for Water Service

## **AWWA C907**

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

# **CGA S-1.3**

Pressure Relief Device Standards-Part 3-Stationary Storage Containers for **Compressed Gases** 

# CGA V-1

Compressed Gas Cylinder Valve Outlet and Inlet Connections

# **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 A257** 

**Concrete Pipe and Manhole Sections** 

# CSA B45.5 / IAPMO Z124

**Plastic Plumbing Fixtures** 

#### **CSA B45.8/IAPMO Z403**

Terrazzo, Concrete, Composite Stone and Natural Stone Plumbing Fixtures

# **AWWA C507**

Ball Valves, 6 in. through 60 in. (150 mm through 1,500 mm)

# **AWWA C510**

**Double Check Valve Backflow Prevention** Assembly

# **AWWA C511**

**Reduced-Pressure Principle Backflow Prevention Assembly** 

# **AWWA C606**

Grooved and Shouldered Joints

# 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 B64.2.1.1** 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 (DVCA) Backflow Preventers

# CSA B64.5.1

Double Check Valve Backflow Preventers for Fire Protection Systems (DVCAF)

# CSA B64.7

Laboratory Faucet Vacuum Breakers (LFVB)

# CSA B79

Commercial and Residential Drains and Cleanouts

CSA B125.3

Plumbing Fittings

# CSA B128.1/ CSA B128.2

Design and Installation of Non-Potable Water Systems/Maintenance and Field Testing of Non-Potable Water Systems

# 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 B242**

Groove- and Shoulder- Type Mechanical Pipe Couplings

# **CSA B356**

Water Pressure Reducing Valves for Domestic Water Supply Systems **CSA G401** Corrugated Steel Pipe Products

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

# 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 Z21.10.3

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

#### 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 Z21.22

Relief Valves for Hot Water Supply Systems (same as CSA 4.4)

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

**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

4.7)

#### CSA Z21.69 Connectors for Movable Gas Appliances (same as CSA 6.16)

**CSA Z21.80a** Line Pressure Regulators (same as CSA 6.22a) CSA Z21.81a Cylinder Connection Devices (same as CSA 6.25a)

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

# CSA Z83.11

Gas Food Service Equipment (same as CSA 1.8)

# CSA Z317.1

Special Requirements for Plumbing Installations in Health Care Facilities

# IAPMO IGC 154

Shower and Tub/Shower Enclosures, Bathtubs with Glass Pressure-Sealed Doors, and Shower/Steam Panels

# 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 25

Metallic Fittings for Joining Polyethylene Pipe For Water Service and Yard Piping

IAPMO PS 34 Encasement Sleeve for Potable Water Pipe and Tubing

#### IAPMO PS 36 Lead Free Sealing Compounds for Threaded Joints

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

#### IAPMO PS 42 Pipe Alignment and Secondary Support

Systems

# IAPMO PS 50

Flush Valves with Dual Flush Devices For Water Closets or Water Closet Tank with an Integral Flush Valves with a Dual Flush Device

# IAPMO PS 51

Expansion Joints and Flexible Expansion Joints for DWV Piping Systems

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

IAPMO PS 53 Grooved Mechanical Pipe Couplings and Grooved Fittings

IAPMO PS 54 Metallic and Plastic Utility Boxes

IAPMO PS 57 PVC Hydraulically Actuated Diaphragm Type Water Control Valves

IAPMO PS 59 Wastewater Diverter Valves and Diversion Systems

IAPMO PS 63 Plastic Leaching Chambers

IAPMO PS 64 Roof Pipe Flashings

IAPMO PS 65 Airgap Units for Water Conditioning Equipment Installation

IAPMO PS 66 Dielectric Fittings

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 73 Dental Liquid-Ring Vacuum Pumps

IAPMO PS 76 Trap Primers for Fill Valves and Flushometer Valves

IAPMO PS 79 Multiport Electronic Trap Primer

IAPMO PS 80 Clarifiers

IAPMO PS 81 Precast Concrete Seepage Pit Liners and Covers IAPMO PS 82 Fiberglass (Glass Fiber Reinforced Thermosetting Resin) Fittings

IAPMO PS 85 Tools for Mechanically Formed Tee Connections in Copper Tubing

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

IAPMO PS 87 Diverter and Shutoff Valves for Pool/Spas

IAPMO PS 89 Soaking and Hydrotherapy (Whirlpool) Bathtubs with Hydraulic Seatlift

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

IAPMO PS 91 Plastic Stabilizers for Use with Plastic Closet Bends

IAPMO PS 92 Heat Exchangers and Indirect Water Heaters

IAPMO PS 94 Insulated Protectors for P-Traps, Supply Stops and Risers

IAPMO PS 95 Pipe Support Hangers and Hooks

IAPMO PS 98 Prefabricated Fiberglass Church Baptisteries

IAPMO PS 100 Porous Filter Protector for Sub-Drain Weep Holes

IAPMO PS 101 Suction Relief Valves

IAPMO PS 104 Pressure Relief Connection for Dispensing Equipment

IAPMO PS 105 Polyethylene Distribution Boxes

IAPMO PS 106 Tileable Shower Receptors and Shower Kits IAPMO PS 110 PVC Cold Water Compression Fittings

IAPMO PS 111 PVC Cold Water Gripper Fittings

IAPMO PS 112 PVC Plastic Valves for Cold Water Distribution Systems Outside a Building and CPVC Plastic Valves for Hot and Cold Water Distribution Systems

IAPMO PS 113 Hydraulically Powered Household Food Waster Disposers

IAPMO PS 114 Remote, Floor Box Industrial Water Supply, Air Supply, Drainage

IAPMO PS 115 Hot Water On-Demand or Automatic Activated Hot Water Pumping Systems

IAPMO PS 116 Hot Water Circulating Devices Which Do Not Use a Pump

IAPMO PS 117 Press and Nail Connections

IAPMO PS 119 Water-Powered Sump Pumps

IAPMO Z124.5 Plastic Toilet Seats

IAPMO Z124.7 Prefabricated Plastic Spa Shells

IAPMO Z124.8 Plastic Liners for Bathtubs and Shower Receptors

IAPMO Z1000 Prefabricated Septic Tanks

IAPMO Z1001 Prefabricated Gravity Grease Interceptors

IAPMO Z1033 Flexible PVC Hose and Tubing for Pools, Hot Tubs, Spas and Jetted Bathtub

IAPMO Z1088 Pre-Pressurized Water Expansion Tanks

ICC A117.1 Accessible and Usable Buildings and Facilities ISEA Z358.1 Emergency Eyewash and Shower Equipment

**MSS SP-25** Standard Marking System for Valves, Fittings, Flanges, and Unions

# MSS SP-42

Corrosion-Resistant Gate, Globe, Angle, and Check Valves with Flanged and Butt Weld Ends (Classes 150, 300, & 600)

MSS SP-44 Steel Pipeline Flanges

MSS SP-58 Pipe Hangers and Supports – Materials, Design, Manufacture, Selection, Application, and Installation

MSS SP-67 Butterfly Valves

MSS SP-70 Gray Iron Gate Valves, Flanged and Threaded Ends

MSS SP-71 Gray Iron Swing Check Valves, Flanged and Threaded Ends

MSS SP-72 Ball Valves with Flanged or Butt-Welding Ends for General Service

MSS SP-78 Gray Iron Plug Valves, Flanged and Threaded Ends

MSS SP-80 Bronze Gate, Globe, Angle, and Check Valves

MSS SP-83 Class 3000 and 6000 Steel Pipe Unions, Socket Welding and Threaded (Carbon Steel, Alloy Steel, Stainless Steels, and Nickel Alloys)

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 Weld-Fabricated Copper Solder-Joint Pressure Fittings

# MSS SP-123

Non-Ferrous Threaded and Solder-Joint Unions for Use with Copper Water Tube

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 Treatment Systems NSF 58 Reverse Osmosis Drinking Water Treatment Systems

NSF 61 Drinking Water System Components– Health Effects

**NSF 62** Drinking Water Distillation Systems

NSF 169 Special Purpose Food Equipment and Devices

PDI G-101 Testing and Rating Procedure for Hydro Mechanical Grease Interceptors with Appendix of Installation and Maintenance

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

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 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 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 536 Flexible Metallic Hose

UL 563 Ice Makers

# **Certification Marks:**

**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 Penetration Firestops

UL 1951 Electric Plumbing Accessories

UL 2157 Electric Clothes Washing Machines and Extractors

WQA S-300 Point-of-Use Low Pressure Reverse Osmosis Drinking Water Systems

	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.
ICC ES PMG	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.
ICC-ES PMG°	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.

Compiles to 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 requirements of the Uniform Plumbing Code (UPC).
LOW LEAD	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.
ICC PMG LOW LEAD	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.
ICC ESSOLAR	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).

# 8. Intertek Testing Services NA, Inc.

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

(Branch Lab) 8431 Murphy Drive Middleton, WI 53562 Phone: (604) 529-3321 (Branch Lab) 16015 Shady Falls Road Elmendorf, TX 78112-9784 Phone: (210) 635-8100/

(Branch Lab) 25791 Commercentre Drive Lake Forest, CA 92630 Phone: (714) 448-4100 (Branch Lab) 1500 Brigantine Drive Coquitlam, BC V3K 7C1, Canada Phone: (604) 520-3321

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

# Expiration: June 1, 2024

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, 2023 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 A112.3.4/CSA B45.9 Macerating Toilet Systems and Waste-Pumping Systems for Plumbing Fixtures

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/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 Retrofit 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

ASSE 1001 Atmospheric Type Vacuum Breakers

ASSE 1002/ASME A112.1002/CSA B125.12 Anti-Siphon Fill Valves for Water Closet Tanks

ASSE 1012 Backflow Preventers with an Intermediate Atmospheric Vent

ASSE 1014 Backflow Prevention Devices for Hand-Held Shower

ASSE 1016/ASME A112.1016/CSA B125.16

Automatic Compensating Valves for Individual Showers and Tub/Shower Combinations ASTM A74 Cast Iron Soil Pipe and Fittings

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 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 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 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 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 B45.5/IAPMO Z124 Plastic Plumbing Fixtures

CSA B45.11/ IAPMO Z401 Glass Plumbing Fixtures

# 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 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 Z21.12b 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 Z21.22 Relief Valves for Hot Water Supply Systems (same as CSA 4.4)

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

# 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 4.7)

#### CSA Z21.69

Connectors for Moveable Gas Appliances (same as CSA 6.16)

# 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 Makir

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 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 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 536 Flexible Metallic Hose

UL 563 Ice Makers

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 Penetration Firestops

UL 1951 Electric Plumbing Accessories

UL 2157 Electric Clothes Washing Machines and Extractors

# Mechanical Standards:

# ASME B16.18

Cast Copper Alloy Solder Joint Pressure Fittings

# ASTM B88

Seamless Copper Water Tube

# ASTM B302

Threadless Copper Pipe, Standard Sizes

ASTM E2336 Fire Resistive Grease Duct Enclosure Systems

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

**CSA Z21.5.1** 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 Z21.22 Relief Valves for Hot Water Supply Systems (same as CSA 4.4)

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

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

# CSA Z21.50

Vented Decorative Gas Fireplaces (same as CSA 2.22)

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

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

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

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

**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 Z21.88

Vented Gas Fireplace Heaters (same as CSA 2.33)

CSA Z83.4

Non-Recirculating Direct Gas-Fired Heating and Forced Ventilation Appliances for Commercial and Industrial Application (same as CSA 3.7)

# CSA Z83.8

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

CSA Z83.11 Gas Food Service Equi

Gas Food Service Equipment (same as CSA 1.8)

**CSA Z83.18** Recirculating Direct Gas-Fired Heating and Forced Ventilation Appliances for Commercial and Industrial Applications

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

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

**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 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

UL921 Commercial Dishwashers

UL 959 Medium Heat Appliance Factory-Built Chimney

UL 984 Hermetic Refrigeration Motor-Compressors UL 1046 Grease Filters for Exhaust Ducts

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

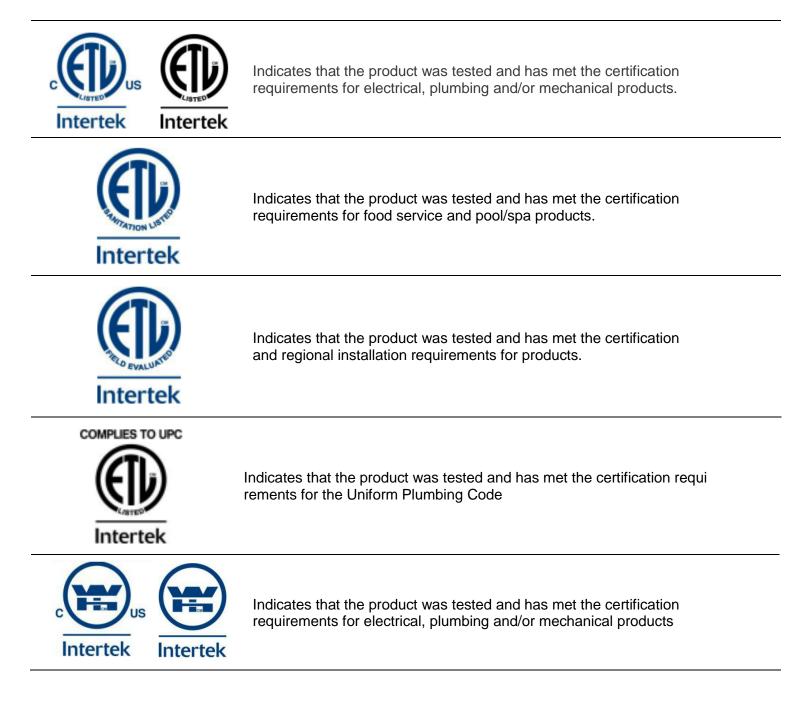
UL 2158 Electric Clothes Dryers

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:**



# 9. LabTest Certification, Inc.

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

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

# Expiration: May 1, 2024

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, 2023 Edition:

# Mechanical Standards:

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

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

# CSA Z21.50

Vented Decorative Gas Fireplaces (Same as CSA 2.22)

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

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

UL 197 Commercial Electric Cooking Equipment UL 1995 Heating and Cooling Equipment

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

# Plumbing Standards:

# ASME A112.3.4 / CSA B45.9

Macerating Toilet Systems and Waste-Pumping Systems for Plumbing Fixtures

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

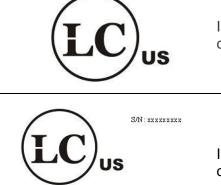
ASME A112.19.3 / CSA B 45.4 Stainless Steel Plumbing Fixtures ASME 112.19.5 / CSA B45.15 Flush valves and Spuds for Water Closet, Urinals, and Tanks

ASME A112.19.7 / CSA B 45.10 Hydromassage Bathtub System

CSA B45.5 Plastic Plumbing Fixtures

**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



Field Evaluated to:

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

# **10. NSF International**

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

# Expiration: February 1, 2025

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, 2023 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 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 D2846/D2846M

Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Hot- and Cold-Water Distribution Systems

# 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 F441/F441M

Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 40 and 80

# ASTM F442/F442M

Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe (SDRPR)

# 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 (DR-PR) Based on Outside Diameter

# **ASTM F1055**

Electrofusion Type Polyethylene Fittings for Outside Diameter Controlled Polyethylene and Crosslinked Polyethylene (PEX) Pipe and Tubing

# **ASTM F1476**

Performance of Gasketed Mechanical Couplings for Use in Piping Applications

#### **ASTM F1548**

Performance of Fittings for Use with Gasketed Mechanical Couplings Used in Piping Applications

## **ASTM F1807**

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

# **ASTM F1960**

Cold Expansion Fittings with PEX Reinforcing Rings for Use with Crosslinked Polyethylene (PEX) Tubing and Polyethylene of Raised Temperature (PE-RT) 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/

**Plumbing Standards:** 

# ASME A112.1.2

Air Gaps in Plumbing Systems (For Plumbing Fixtures and Water-Connected Receptors) Crosslinked Polyethylene Composite Pressure Pipe

#### **ASTM F2080**

Cold-Expansion Fittings with Metal Compression-Sleeves for Crosslinked Polyethylene (PEX) Pipe and SDR 9 Polyethylene of Raised Temperature (PE-RT) 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 SDR9 Cross-linked Polyethylene/Aluminum/ Cross-linked Polyethylene (PEX-AL-PEX) Tubing

# ASTM F3253

Crosslinked Polyethylene (PEX) Tubing with Oxygen Barrier for Hot- and Cold-Water Hydronic Distribution Systems

# **AWWA C901**

Polyethylene (PE) Pressure Pipe and Tubing, 3/4 in. (13 mm) Through 3 in. (76 mm), for Water Service

# CSA B137.1

Polyethylene (PE) Pipe, Tubing, and Fittings for Cold-Water Pressure Services

# CSA B137.2

Polyvinylchloride (PVC) Injection-Moulded Gasketed Fittings for Pressure Applications

# CSA B137.3

Rigid Polyvinylchloride (PVC) Pipe and Fittings for Pressure Applications

# ASME A112.1.3

Air Gap Fittings for Use with Plumbing Fixtures, Appliances, and Appurtenances

#### CSA B137.6

Chlorinated Polyvinylchloride (CPVC) Pipe, Tubing, and Fittings for Hot- and Cold- Water Distribution Systems

# CSA B137.9

Polyethylene/Aluminum/ Polyethylene (PE-AL-PE) Composite Pressure-Pipe Systems

# CSA B137.10

Crosslinked Polyethylene/Aluminum/Crosslinked Polyethylene (PEX-AL-PEX) Composite Pressure-Pipe Systems

# CSA B137.11

Polypropylene (PP-R) Pipe and Fittings for Pressure Applications

# CSA B137.18

Polyethylene of Raised Temperature Resistance (PE-RT) Tubing Systems for Pressure Applications

#### CSA C448.1

Design and Installation of Ground Source Heat Pump Systems for Commercial and Institutional Buildings

#### CSA C448.2

Design and Installation of Ground Source Heat Pump Systems for Residential and Other Small Buildings

# IAPMO PS 117

Press and Nail Connections

# NSF 358-1

Polyethylene Pipe and Fittings for Water-Based Ground-Source "Geothermal" Heat Pump Systems

# NSF 358-2

Polypropylene Pipe and Fittings for Water-Based Ground-Source "Geothermal" Heat Pump Systems

#### NSF 358-3

Cross-linked polyethylene (PEX) pipe and fittings for water-based ground-source (geothermal) heat pump systems

# 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 Macerating Toilet Systems and Waste-Pumping Systems for Plumbing Fixtures

ASME A112.4.14 Manually Operated Valves for Use in Plumbing Systems

ASME A112.6.2 Framing-Affixed Supports (Carriers) for Off-the-Floor Plumbing Fixtures

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 Hydromechanical 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 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 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/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 Retrofit Dual Flush Devices for Water Closets

ASME A112.21.3M Hydrants for Utility and Maintenance Use

ASME A112.36.2M 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/ASME A112.1002/CSA B125.12 Anti-Siphon Fill Valves for Water Closet Tanks

ASSE 1003 Water Pressure Reducing Valves for Domestic Water Distribution Systems

ASSE 1004 Commercial Dishwashing Machines

ASSE 1010 Water Hammer Arresters

ASSE 1011 Hose Connection Vacuum Breakers

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/ASME A112.1016/CSA B125.6

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/ASME A112.1037/CSA B125.37 Pressurized Flushing Devices 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 1062

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

# **ASSE 1069**

Automatic Temperature Control Mixing Valves

ASSE 1070/ASME A112.1070/CSA B125.70

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 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 D2846/D2846M

Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Hot- and Cold-Water Distribution Systems

# **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 Cement 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 D4551**

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

# ASTM E84

Surface Burning Characteristics of Building Materials.

# ASTM F409

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 F441/F441M

Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 40 and 80

# ASTM F442/F442M

Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe (SDRPR)

# 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 F1055**

Electrofusion Type Polyethylene Fittings for Outside Diameter Controlled Polyethylene and Crosslinked Polyethylene (PEX) Pipe and Tubing

# **ASTM F1216**

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

#### **ASTM F1282**

Polyethylene/Aluminum/Polyethylene (PE-AL-PE) Composite Pressure Pipe

#### **ASTM F1336**

Poly (Vinyl Chloride) (PVC) Gasketed Sewer Fittings

# ASTM F1412

Polyolefin Pipe and Fittings for Corrosive Waste Drainage Systems

### **ASTM F1476**

Performance of Gasketed Mechanical Couplings for Use in Piping Applications

## **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 F1924**

Plastic Mechanical Fittings for use on Outside Diameter Controlled Polyethylene Gas Distribution Pipe and Tubing

#### **ASTM F1960**

Cold Expansion Fittings with PEX Reinforcing Rings for Use with Crosslinked Polyethylene (PEX) and Polyethylene of Raised Temperature (PE-RT) 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 Crosslinked Polyethylene (PEX) Pipe and SDR9 Polyethylene of Raised Temperature (PE-RT) Tubing

#### **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 F2389**

Pressure-Rated Polypropylene (PP) Piping Systems

#### **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

#### **ASMT F2618**

Chlorinated Poly (Vinyl Chloride) CPVC Pipe and Fittings for Chemical Waste Drainage Systems

#### **ASTM F2769**

Polyethylene of Raised Temperature (PE-RT) Plastic Hot- and Cold-Water Distribution Systems

# **ASTM F2855**

Chlorinated Poly (Vinyl Chloride)/Aluminum/Chlorinated Poly (Vinyl Chloride) (CPVC/AL/CPVC) Composite Pressure Tubing

# AWWA C510

Double-Check Valve Backflow Prevention Assembly

#### **AWWA C511**

Reduced-Pressure Principle Backflow Prevention Assembly

# 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 C901**

Polyethylene (PE) Pressure Pipe and Tubing, 3/4 in. (13 mm) Through 3 in. (76 mm), for 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 B45.5/IAPMO Z124 Plastic Plumbing Fixtures

CSA B64.1.1 Atmospheric Vacuum Breakers (AVB)

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 B137.6

Chlorinated Polyvinylchloride (CPVC) Pipe, Tubing, and Fittings for Hot- and Cold-Water Distribution Systems

CSA B137.9 Polyethylene/Aluminum/Polyethylene (PE-AL-PE) Composite Pressure-Pipe Systems

CSA B137.10

Crosslinked Polyethylene/Aluminum/Crosslinked Polyethylene (PEX-AL-PEX) Composite Pressure-Pipe Systems

CSA B137.11

Polypropylene (PP-R) Pipe and Fittings for Pressure Applications

**CSA B137.18** Polyethylene of Raised Temperature Resistance (PE-RT) Tubing Systems for Pressure Applications

**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

EPA Water Sense- 2007 High Efficiency Lavatory Faucet Specification

IAPMO PS 36 Lead-Free Sealing Compounds for Threaded Joints IAPMO PS 51 Expansion Joints and Flexible Expansion Joints for DWV Piping Systems

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

**IAPMO Z1033** Flexible PVC Hoses and Tubing for Pools, Hot Tubs, Spas, and Jetted Bathtubs

IAPMO Z1157 Ball Valves

NSF 2 Food Equipment

NSF 3 Commercial Warewashing Equipment

**NSF 4** Commercial Cooking, Rethermalization, and Powered Hot Food Holding and Transportation 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 61 Drinking Water System Components – Health Effects

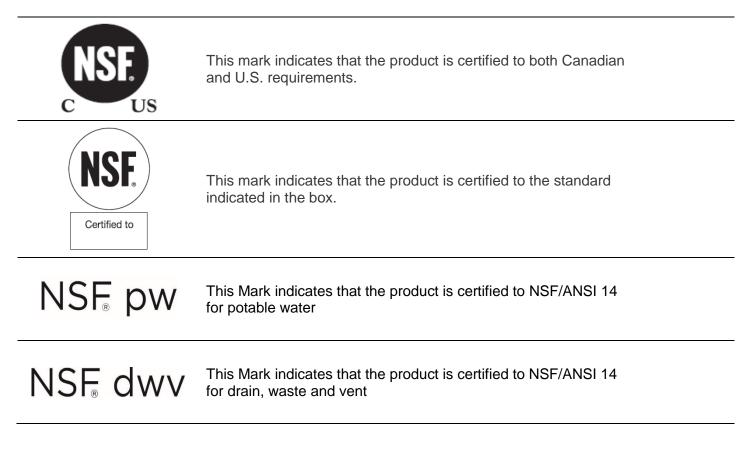
NSF 62 Drinking Water Distillation Systems

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:**



# 11. OMNI-Test Laboratories, Inc.

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

# Expiration: September 1, 2024

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, 2020 Edition:

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

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

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

**CSA Z83.11** 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 896 Oil-Burning Stoves

UL 907 Fireplace Accessories

UL 1482 Solid-Fuel Type Room Heaters

UL 1777 Chimney Liners

UL 2021 Fixed and Location-Dedicated Electric Room Heaters

# **Certification Marks:**



This mark is a legacy certification mark that indicates that the product is listed to the applicable standard specified.



This mark is used on products listed to national recognized standards that fall within OMNI's scope of accreditation for US only.



This mark is used on products listed to national recognized standards that fall within OMNI's scope of accreditation for US and Canada.



This mark is used on products listed to national recognized standards that fall within OMNI's scope of accreditation for the Canada, US and EPA.

# 12. PFS Corporation

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

# Expiration: May 1, 2023

This agency is approved for listing of mechanical products to meet the referenced standards listed below as found in the City of Los Angeles Mechanical Code, 2020 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 Z21.58 Outdoor Cooking Gas Appliances (same as CSA 1.6)

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

**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.

# 13. QAI Laboratories, Inc.

(Main Lab) 3980 North Fraser Way Burnaby, BC, Canada V5J 5K5 Phone: (877) 461-8378

# Expiration: December 1, 2022

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, 2020 Edition:

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 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 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 A112.14.1 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/ASME A112.1002/CSA B125.12

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 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 Shower

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

ASSE 1016/ ASME A112.1016/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 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/ASME A112.1037/CSA B125.37 Pressurized Flushing Devices for Plumbing Fixtures

ASSE 1044 Trap Seal Primer - Drainage Types and Electric 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 Supply Fittings

ASSE 1066

Individual Pressure Balancing In-Line Valves for Individual Fixture Fittings

ASSE 1070/ASME A112.70/CSA B125.70 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/IAPMO 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 B64.2.1.1 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

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 F

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 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 national 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.

# 14. Solar Rating & Certification Corporation (ICC-SRCC)

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

# Expiration: June 1, 2024

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, 2023 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 ICC 900/ SRCC 300 Solar Thermal System Standard

NSF 50

Equipment and Chemicals for Swimming Pools, Spas, Hot Tubs and Other Recreational Water Facilities

ICC 901/ SRCC 100 Solar Thermal Collector Standard

# **Certification Mark:**

DG-100 Certified	This marking indicates that the product has been tested and has met the certification requirements of SRCC Standard 100.
CC-SRCC OG-300 Certified	This marking indicates that the product has been tested and has met the certification requirements of SRCC Standard 300.
LISTED CSTARLISHED 158	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

# 15. UL LLC

(Main Lab) 333 Pfingsten Road Northbrook, IL 60062 Phone: (847) 272-8800

(Branch Lab) 2600 N.W. Lake Road Camas, WA 98607 Phone: (360) 817-5500 (Branch Lab) 1285 Walt Whitman Road Melville, NY 11747 Phone: (516) 271-6200

(Branch Lab) 47173 Benicia St. Fremont, CA 94583 Phone: (510) 771-1000 (Branch Lab) 12 Laboratory Drive Research Triangle Park, NC 27709 Phone: (919) 549-1400

(Branch Lab) 2929 East Imperial Hwy, Ste. 100 Brea, CA 92821 Phone: (714) 223-3600

### Expiration: November 1, 2023

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, 2023 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

Specifications for Refrigerants

### **ASHRI 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 Test Method for 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 Three

Malleable Iron Threaded Fittings: Classes 150 and 300

### **ASME B16.5**

Pipe Flanges and Flanged Fittings: NPS ½ through NPS 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

Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus

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 Resistive 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** Fuel Cell Technologies-Part-3-100: Stationary Fuel Cell Power Systems

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

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

### 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 Water Heaters – Volume III, Storage Water Heaters with Input Ratings Above 75,000 But per Hour, Circulating and Instantaneous (same as CSA 4.3)

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

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

**CSA Z21.17a** Domestic Gas Conversion Burners (same as CSA2.7a)

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

**CSA Z21.20a** Automatic Gas Ignition Systems and Components

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

CSA 21.41 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 CSA2.3)

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

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

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

### CSA Z21.60

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

CSA Z21.61 Gas-Fired Toilets

CSA Z21.66

Automatic Damper Devices for Use with Gas-Fired Appliances (same as CSA 6.14)

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

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

### CSA Z83.4

Non-Recirculating Direct Gas-Fired Heating and Forced Ventilation Appliances for Commercial and Industrial Applications (same as CSA 3.7)

#### CSA Z83.8

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

CSA Z83.18

Recirculating Direct Gas-Fired Heating and Forced Ventilation Appliances for Commercial and Industrial Applications

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

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

NFPA 82 Incinerators and Waste and Linen Handling Systems and Equipment

NFPA 259 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 Test Method to Evaluate Fire Performance Characteristics of Pipe Insulation

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

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

SMACNA-2015 Phonolic Duct Construction Standards

SMACNA-2017 HVAC Duct Construction Standards Metal and Flexible, 4th 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 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 174 Household Electric Storage Tank Water Heaters **UL 180** Liquid-Level Gauges for Oil Burner Fuels and Other Combustible Liquids

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

UL 181A Closure Systems for Use with Rigid Air Ducts

UL 181B Closure Systems for Use With Flexible Air Ducts and Air Connectors

UL 197 Commercial Electric Cooking Appliances

UL 207 Refrigerant-Containing Components and Accessories, Nonelectrical

UL 252 Compressed Gas Regulators

UL 268A Smoke Detectors for Duct Application

UL 295 Commercial-Industrial Gas Burners

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 353 Limit Controls

UL 378 Draft Equipment

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

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

UL 412 Refrigeration Unit Coolers UL 427 Refrigerating Units

UL 429 Electrically Operated Valves

UL 441 Gas Vents

UL 443 Steel Auxiliary Tanks for Oil-Burner Fuel

UL 467 Grounding and Bonding Equipment

UL 471 Commercial Refrigerators and Freezers

**UL 499** Electric Heating Appliances

UL525 Flame Arresters

UL 555 Fire Dampers

UL 555C Ceiling Dampers

UL 555S Smoke Dampers

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 705 Power Ventilators

UL710 Exhaust Hoods for Commercial Cooking Equipment

UL 710B Recirculating Systems

#### UL 710C

Ultraviolet Radiation Systems for Use in the Ventilation Control of Commercial Cooking Operations

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 762** Power Roof Ventilators for Restaurant Exhaust Appliances

UL 778 Motor Operated Water Pumps

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 923 Microwave Cooking Appliances

UL 959 Medium Heat Appliance Factory-Built Chimneys

UL 984 Hermetic Refrigerant Motor-Compressors

UL 1046 Grease Filters for Exhaust Ducts

UL 1240 Electric Commercial Clothes-Drying Equipment

UL 1453 Electric Booster and Commercial Storage Tank Water Heaters

UL 1479 Fire Tests of 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 1996 Electric Duct Heaters

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 2158 Electric Clothes Dryers

UL 2158A Clothes Dryer Transition Duct

**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

UL 2518 Air Dispersion Systems Materials

**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- Safety- 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 Vacuum Applications, Above- and Below-Ground

ASME A112.4.2 Personal Hygiene Devices for Water Closets

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

ASME A112.4.14 Manually Operated Valves for Use in Plumbing Systems

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 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 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 / 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 Retrofit 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 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 A112.21.3M 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 NPS 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

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 / AMSE A112.1002 / CSA B125.12 Anti-Siphon Fill Valves for Water Closet Tanks

ASSE 1004 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 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 / AMSE A112.1016 / 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 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 1037 / AMSE A112.1037 / CSA B125.37 Pressurized Flushing Devices for Plumbing Fixtures

ASSE 1048

Double Check Detector Fire Protection Backflow Prevention Assemblies

ASSE 1056 Spill Resistant Vacuum Breaker Assemblies

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 / AMSE A112.1070 / CSA B125.70 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 Sc

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 Firestop Systems

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)

## **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 B45.5 / IAPMO Z124 Plastic Plumbing Fixtures

**CSA B45.8/ IAPMO Z403** Terrazo, Concrete, Composite Stone, and Natural Stone Plumbing Fixtures

CSA B45.11 / IAPMO Z401 Glass Plumbing Fixtures

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

CSA B64.1.1 Atmospheric Vacuum Breakers (AVB)

CSA B64.1.2 Pressure Vacuum Breakers (PVB)

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)

## CSAZ21.10.1

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 But per Hour, Circulating and Instantaneous (same as CSA 4.3)

## CSA Z21.13

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

CSA Z21.56

**Gas-Fired Pool Heaters** 

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

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

Energy Star – 2012 Program Requirements Product Specification for Commercial Dishwashers

Energy Star- 2018 Product Specifications Product Specifications for Clothes Washers

Energy Star- 2016 Program Requirements for Residential Dishwashers

EPA WaterSense - 2007 High-Efficiency Lavatory Faucet Specification

EPA WaterSense - 2009 Specification for Flushing Urinals

**EPA WaterSense- 2014** Specification for Tank-Type Toilets

IAPMO IGC 154 Shower and Tub/Shower Enclosures, Bathtubs with Glass Pressure-Sealed Doors, and Shower/Steam Panels

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 52 Pump/Dose, Sumps and Sewage Ejectors with or without a Pump

IAPMO PS 54 Metallic and Plastic Utility Boxes

IAPMO PS 64 Roof Pipe Flushings IAPMO PS 86 Rainwater Diverter Valve for Non-Roofed Area Slabs

IAPMO PS 87 Diverter and Shutoff Valves for Pool/Spas

IAPMO PS 89 Soaking and Hydrotherapy (Whirlpool) Bathtubs with Hydraulic Seatlift

IAPMO PS 92 Heat Exchangers and Indirect Water Heaters

IAPMO PS 101 Suction Relief Valves

IAPMO PS 105 Polyethylene Distribution Boxes

IAPMO PS 106 Tileable Shower Receptors and Shower Kits

IAPMO PS 115 Hot Water On-Demand or Automatic Activated Hot Water Pumping Systems

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 Z1000 Prefabricated Septic Tanks

IAPMO Z1001 Prefabricated Gravity Grease Interceptors

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 Plastics 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 Treatment Systems

NSF 58 Reverse Osmosis Drinking Water Treatment Systems

NSF 61 Drinking Water System Components– Health Effects

NSF 62 Drinking Water Distillation Systems

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 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 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 536 Flexible Metallic Hose

UL 563 Ice Makers

**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 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 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.
GAS-FIRED LISTED	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.
	<b>Combined UL Mark for Europe, Canada and United States</b> This mark indicates that the product has been evaluated to European, Canadian and U.S. requirements, and is listed to the applicable standard specified.
	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 layetory supply fittings, bath and
No. FE 0012   No. FE 0012   This product has be evaluated in accord to the procedures limitations specified issued report   ULLC 0 2014	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

# **16. Water Quality Association**

2375 Cabot Drive Lisle, IL 60532-1088 Phone: (630) 929-2541

## Expiration: April 1, 2024

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, 2023 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.

NSF 14 Plastics 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 50** 

Equipment for Swimming Pools, Spas, Hot Tubs, and other Recreational Water Facilities

NSF 53 Drinking Water Treatment Units -Health Effects

NSF 55 Ultraviolet Microbiological Water Treatment Systems

**NSF 58** Reverse Osmosis Drinking Water Treatment Systems

**NSF 60** 

Drinking Water Treatment Chemicals-Health Effects

NSF 61 Drinking Water System Components -Health Effects

**NSF 62** Drinking Water Distillation Systems

NSF 169 Special Purpose Food Equipment and Devices

WQA S-300 Point-of-Use Low Pressure Reverse Osmosis Drinking Water Systems

## **Certification Mark:**



This marking indicates that the product is certified with the WQA Gold Seal Program and is listed to the applicable standard specified.

# Part II: Approved Testing Agencies

# 1. Home Innovation Research Labs

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

## Expiration: August 1, 2023

This agency is approved for testing of plumbing products to meet the referenced standards listed below as found in the City of Los Angeles Plumbing Code, 2020 Edition:

ASME A112.9.7/ CSA B45.10 Hydromassage Bathtub Systems

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

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)

# 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, 2025

This agency is approved for testing of plumbing products to meet the referenced standards listed below as found in the City of Los Angeles Plumbing Code, 2023 Edition:

# ASME A112.18.1/CSA B125.1

Plumbing Supply Fittings

IAPMO Z124.8 Plastic Liners for Bathtubs and Shower Receptor

#### ASME A112.19.2/CSA B45.1 Ceramic 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

ASSE 1001 Atmospheric Type Vacuum Breakers

ASSE 1002/ASME A112.1002/CSA B125.12 Anti-Siphon Fill Valves for Water Closet Tanks

### ASSE 1014

Backflow Prevention Devices for Hand-Held Shower

ASSE 1016/ASME A112.1016/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 1019

Wall Hydrant with Backflow Protection and Freeze Resistance

ASSE 1037/ASME A112.1037/CSA B125.37 Pressurized Flushing Devices for Plumbing Fixtures

CSA B45.5/IAPMO Z124 Plastic Plumbing Fixtures

IAPMO Z124.5 Plastic Toilet Seats

IAPMO Z124.7 Prefabricated Plastic Spa Shells