



CERTIFICATE OF ACCREDITATION

ANSI-ASQ National Accreditation Board

500 Montgomery Street, Suite 625, Alexandria, VA 22314, 877-344-3044

This is to certify that

**IAPMO R&T Lab &
IAPMO Institute of Building Technology (IBT)
5001 E. Philadelphia St.
Ontario, CA 91761**

has been assessed by ANAB
and meets the requirements of international standard

ISO/IEC 17025:2005

while demonstrating technical competence in the field of

TESTING

Refer to the accompanying Scope of Accreditation for information regarding the types of tests to which this accreditation applies.

AT-1479

Certificate Number



ANAB Approval

Certificate Valid: 11/15/2018-08/30/2020
Version No. 011 Issued: 11/15/2018



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

**IAPMO R&T Lab &
IAPMO Institute of Building Technology (IBT)**

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Ontario, CA 91761
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TESTING

Valid to: **August 30, 2020**

Certificate Number: **AT-1479**

Mechanical and Construction Materials

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Material, Hydraulic Performance, Dimensions, Load Tests	ASME A112.19.2 / CSAB45.1, AS/NZ 1172.1, AS/NZ 3982, AS/NZ 6400 ASME A112.4.2 EPA WaterSense High Efficiency Flushing Urinal Specification, Version 1.0 EPA WaterSense Specification for Tank-Type Toilets, Version 1.2 EPA WaterSense Specification for Flushometer-Valve Waterclosets, Version 1.0	Water Closets, Urinals, Lavatories, Sinks, Bidets	Flow meter, Pressure and temperature gauges, Torque meter, Scale
Material, Load Tests, Hair Entrapment, Water Retention	ASME A112.19.15, ASME A112.19.7 / CSA B45.10	Hydromassage Bathtub Appliances	Flow meter, Dial gauge
UV Testing, Material, Impact, Deflection, Load, Vacuum, Hair and Body Entrapment. Digit Entrapment	APSP-16	Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs; Skimmers	UV Chamber, Flow meter, Pressure gauges, Dial gauge



Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
<p>Design Requirements, Coatings, Corrosion, Adhesion, Decorative Organic Coatings, Pressure and Temperature, Static and Dynamic Seals, Burst Pressure, Cross-flow check valves, Hose Assemblies, Ball Joints, Diverters, Flow Rate, Supply Fittings, Life Cycle, Resistance to Installation Loading, Resistance to Use Loading, Backflow Prevention, Automatic Compensating valves, Accessible Designs, Threaded Connections, Connections other than Threaded Connections, Toxicity</p>	<p>ASME A112.18.1 / CSAB125.1 and ASME A112.18.1M-1996, AS/NZ 3718, ASSE 1016, ASSE 1017, ASSE 1066, ASTM B456, ASTM B571, ASTM G85, ASTM B368, ASTM D3359, ASTM B117, AS/NZ 3662</p> <p>EPA WaterSense High Efficiency Lavatory Faucet Specification, Version 1.0</p> <p>EPA WaterSense Specification for Showerheads, Version 1.0</p>	<p>Plumbing Supply Fittings</p>	<p>Life cycle tester, Flow meter, Pressure and temperature gauges, XRF analyzer, Corrosion chamber</p>
<p>Pressure, Life Cycle, Corrosion/Coatings, Flow Rate, Material, Dimensions, Load Tests</p>	<p>ASME A112.18.2 / CSA B125.2</p>	<p>Plumbing Waste Fittings</p>	<p>Life cycle tester, Flow meter, Pressure and temperature gauges, XRF analyzer, Corrosion chamber</p>
<p>All functional tests and material tests (except durability)</p>	<p>ASME A112.18.3</p>	<p>Backflow Protection Devices and Systems in Plumbing Fixture Fittings</p>	<p>Vacuum tank, XRF analyzer, Life cycle tester, Flow meter, Pressure gauges</p>
<p>Hydrostatic, Reduced Flowing Pressure Deviation, Minimum Reduced Pressure, Reduced Pressure Adjustment Range, Capacity Test, Bypass Relief Valve Opening Pressure Differential Test, Materials</p>	<p>ASSE 1003</p>	<p>Water Pressure Reducing Valves</p>	<p>Vacuum tank, XRF analyzer, Flow meter, Pressure and temperature gauges</p>



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Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Hydrostatic Pressure, Water Flow Capacity and Pressure Loss, Deterioration, Resistance to Bending, Life Cycle, Self-draining Capabilities, Low Head Back Pressure, Atmospheric Vent Opening, Backflow Prevention, Leakage from Vent Ports, Backsiphonage, Materials	ASSE 1019	Vacuum Breaker Wall Hydrants, Freeze Resistant, Automatic Draining Type	Vacuum tank, XRF analyzer, Life cycle tester, Flow meter, Pressure and temperature gauges
Water Flow Passage, Discharge Capacity, Critical Level, Deterioration, Resistance to Detergents, Materials	ASSE 1021	Drain Air Gaps for Residential Dishwasher Applications	Vacuum tank, XRF analyzer, Life cycle tester, Flow meter, Pressure and temperature gauges
Pressure, Air Tightness, Rating, Endurance, Frost Closure, Materials	ASSE 1050, ASSE 1051	Stack Air Admittance Valves for Sanitary Drainage Systems	Life cycle tester, CO2 meter, Pressure and temperature gauges
Structural Integrity, Physical Characteristics and Materials Tests	ANSI Z124.5	Plastic Toilet (Water Closet Seats)	Toilet seat tester, Corrosion chamber
Flow Rate, Life Cycle, Spray Force	EPA WaterSense Specification for Commercial Pre-Rinse Spray Valves Version 1.0	Plumbing Supply Fittings	Flow meter, Force gauge, Life cycle tester, Pressure and temperature gauges
Sections 604.4, 604.6, 605, 606, 607, 608 609 and 610	ICC A117.1	Buildings and Facilities Providing Accessibility and Usability for Physically Handicapped People	Dimensional gauges
All tests	ASTM F446	Grab Bars and Accessories Installed in Bathing Area	Dimensional gauges, Force gauge
All tests	ASTM B604	Decorative Electroplated Coatings of Copper Plus Nickel Plus Chromium on Plastics	Corrosion chamber, pH meter, Temperature gauge
Tensile Tests	ASTM C297/C297M	Flatwide Tensile Strength of Sandwich Construction	Universal Testing Machine



Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Impact Resistance	ASTM D2444	Determination of Impact Resistance Thermoplastic Pipe and Fittings by Means of a Tup (falling weight)	Impact tester
All tests except Oxidative Resistance	CSA B137	Thermoplastic Pressure Piping Compendium	Pressure and temperature gauges, XRF analyzer
Section 6 (except 6.11)	CSA B64 Series (Sections 64.0, 1.1, 1.2, 2, 2.1, 2.1.1, 2.2, 3, 3.1, 4, 4.1, 5, 5.1, 6, 6.1, 7, 8, 9), ASSE 1001, ASSE 1011, ASSE 1012, ASSE 1014	Test Methods for Vacuum Breakers and Backflow Preventers	Vacuum tank, XRF analyzer, Life cycle tester, Flow meter, Pressure and temperature gauges
Section 15 Flow Temperature Pressure Shear Load Adhesion Dimensions	CSA B45 Series (Sections 5, 6, 7, 8, 9 except 5.17), ASME A112.19.1 / CSA B45.2, ASME A119.19.3 / CSA B45.4, ANSI Z124.7, ANSI Z124.8, CSA B45.5 / IAPMO Z124, ASTM C346, ASTM C282, ASTM F462, ASTM E805, ASTM E1347, ASTM G151, ASTM D2244, PS 106	Testing requirements for Plumbing Fixtures	Flow meter, Pressure and temperature gauges,
All Sections	ASME A112.6.1M, ASME A112.6.2	Floor-Affixed Supports for Off-the-Floor Plumbing Fixtures for Public Use	Dimensional gauges
Tensile strength, Dimensions	ASTM A74	Cast Iron Soil Pipe and Fittings	Universal Testing Machine
Clamp Assembly Requirements, Deflection, Shear, Unrestrained Hydrostatic Test	CISPI 310, ASTM A888	Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping Applications	Dimensional gauges
Clamp Assembly Requirements, Deflection, Shear, Unrestrained Hydrostatic Test	CSAB602, ASTM C1277, CISPI 301	Mechanical Couplings for Drain, Waste, and Vent Pipe and Sewer Pipe	Universal Testing Machine, Dimensional gauges, Force gauge



Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Regulated Metals (including Lead and Zinc) Organics Inorganics	NSF/ANSI 61	Drinking Water System Components - Health Effects	ICP/MS, GC/MS, XRF analyzer, pH meter
Regulated Metal - Lead	NSF/ANSI 372	Drinking Water System Components – Health Effects	XRF analyzer
Regulated Metals (including Lead and Zinc) Organics Inorganics	NSF/ANSI 42	Drinking Water System Components – Health Effects	ICP/MS, GC/MS, XRF analyzer, pH meter
Regulated Metals (including Lead and Zinc) Organics Inorganics	NSF/ANSI 53	Drinking Water System Components – Health Effects	ICP/MS, GC/MS, XRF analyzer, pH meter
Regulated Metals (including Lead and Zinc) Organics Inorganics	NSF/ANSI 58	Drinking Water System Components – Health Effects	ICP/MS, GC/MS, XRF analyzer, pH meter
Elevated temperature and pressure, Cycle, Critical Level, Total Flow, Refill Capacity, Materials, Dimensions	CSA B125.3, ASSE 1002, ASSE 1037, ASME A112.19.5, ASME A112.19.10	Anti-siphon Fill and flush Valves for Water Closet Tanks	Vacuum tank, XRF analyzer, Life cycle tester, Flow meter, Pressure and temperature gauges
Pressure, Impulse Cycle, Corrosion/Coatings, Flow Rate, Material, Dimensions, Load Tests	A112.18.6 / CSA B125.6	Flexible Water Connector	Life cycle tester, Flow meter, Corrosion chamber, XRF analyzer, Pressure and temperature gauges
Hydrostatic Test Structural Integrity, Physical Characteristics and Materials Tests	ASSE 1061, PS 117, ASTM F1807, ASTM F877, ASTM F1974, ASTM F1960, ASTM D1598-2002, ASTM D2122	Fittings with Copper / PEX/CPVC Pipe	XRF analyzer, Force gauge, Pressure and temperature gauges
Flow Rate, Pressure, Dimensions, Time	ANSI Z358.1	Emergency Eyewash and Shower Equipment	Flow meter, Pressure gauge

Building Products and Assemblies

Items, Materials or Product Tested	Specification, Standard, Method, or Test Technique
Concrete, Mortar & AAC	ASTM C39, C67 (Freeze thaw only), C109, C140, C157, C190, C348, C482, C567, C1660
EIFS & Stucco	ASTM B117, E2098, E2134, E2273, E2485, E2486, E331
Fabrics & Geotextiles	AAMA 711, ASTM C794, D4533, D4632, D4869 (Liquid Water Transmission only), D5034, E96, E2556
Fasteners	AISI S904, ASTM D1761, F1575
Gypsum Panels	ASTM C473, C1658
Insulation & Core Materials	ASTM C203, C271, C272, C273, C297, C303, C365, C393, C518, D2126
Lumber and Wood Products	ASTM D2395 ASTM D4442 Methods A and B
Paper & Paperboard	ASTM D779, D828, AATCC 127
Plastics	ASTM D412, D570, D618, D635, D638, D790, D882, D1621, D1622, D1623, D1970, D2794, D2842, D3330, D4226, D5420, G151, G154, G155
Structural	ASTM D5206, E73 (limited to maximum 12 ft. long truss), E330 E72 (Transverse Load)
Acceptance Criteria	<p><u>AC11 – Cementitious Exterior Wall Coatings</u> Section 4.0</p> <p><u>AC38 – Water Resistive Barriers</u> Section 3.0, except 3.5 Air Permeance, Section 4.0</p> <p><u>AC48 – Self-adhered Roof Underlayment</u> Section 4.0</p> <p><u>AC51 – Adhered Manufactured Stone Masonry Veneer</u> Section 3.0 & Section 4.0, except Optional Tests</p> <p><u>AC120 – Wood-Frame Horizontal Diaphragms, Vertical Shear Walls and Braced Walls with Alternative Fasteners</u> Section 4.3, 4.4, 4.5, 4.9</p> <p><u>AC188 – Roof Underlayment</u> Section 3.1, 3.2</p>

Note:

1. This scope is formatted as part of a single document including Certificate of Accreditation No. AT-1479.



Vice President

