



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 Street
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: 06/02/2016-08/30/2016
Version No. 006 Issued: 06/02/2016



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 January 2009).



ANSI-ASQ National Accreditation Board

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

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

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TESTING

Valid to: August 30, 2016

Certificate Number: AT-1479

I. Mechanical and Construction Materials

Field of Test	Items, Materials or Products Tested	Specific Tests or Properties Measured	Specification, Standard Method, or Technique Used	Key Equipment or Technology*
Plumbing Products, Fixtures and Fittings	Water Closets, Urinals, Lavatories, Sinks, Bidets	Material, Hydraulic Performance, Dimensions, Load Tests	ASME A112.19.2 / CSAB45.1 ASME A112.19.6-1995, 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	Flow Meters, pressure and temperature gauges, scales, calipers, weights, graduated cylinder, timer, torque meter
Plumbing Products Fixtures and Fittings	Hydromassage Bathtub Appliances	Material, Load Tests, Hair Entrapment, Water Retention	ASME A112.19.15, ASME A112.19.7 / CSA B45.10	Weights, Flow Meter, Scale, dial gauge, timer
Products Plumbing Fixtures and Fittings	Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs; Skimmers	UV Testing, Material, Impact, Deflection, Load, Vacuum, Hair and Body Entrapment. Digit Entrapment	APSP-16	UV Chamber, flow meters, pressure gauges, weights, dial gauge, timer



Field of Test	Items, Materials or Products Tested	Specific Tests or Properties Measured	Specification, Standard Method, or Technique Used	Key Equipment or Technology*
Plumbing Products, Fixtures and Fittings	Plumbing Supply Fittings	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	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 EPA WaterSense High Efficiency Lavatory Faucet Specification, Version 1.0 EPA WaterSense Specification for Showerheads, Version 1.0	Life Cycle tester, flow meter, pressure gauge, corrosion chamber, weights, calipers, temperature gauge, spectrometer, timer
Plumbing Products, Fixtures and Fittings	Plumbing Waste Fittings	Pressure, Life Cycle, Corrosion/Coatings, Flow Rate, Material, Dimensions, Load Tests	ASME A112.18.2 / CSA B125.2	Life Cycle tester, flow meter, pressure and temperature gauge, hydrostatic pump corrosion chamber, weights, calipers, spectrometer, timer
Plumbing Products, Fixtures and Fittings	Backflow Protection Devices and Systems in Plumbing Fixture Fittings	All functional tests and material tests (except durability),	ASME A112.18.3	Vacuum chamber, spectrometer, life cycle tester, flow meters, hydrostatic pump and pressure gauges
Plumbing Products, Fixtures and Fittings	Water Pressure Reducing Valves	Hydrostatic, Reduced Flowing Pressure Deviation, Minimum Reduced Pressure, Reduced Pressure Adjustment Range, Capacity Test, By-Pass Relief Valve Opening Pressure Differential Test, Materials	ASSE 1003	Vacuum chamber, timer, caliper, spectrometer, flow meters, hydrostatic pump, pressure and temperature gauges

Field of Test	Items, Materials or Products Tested	Specific Tests or Properties Measured	Specification, Standard Method, or Technique Used	Key Equipment or Technology*
Plumbing Products Fixtures and Fittings	Vacuum Breaker Wall Hydrants, Freeze Resistant, Automatic Draining Type	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 chamber, timer, caliper, spectrometer, cycle tester, flow meters, hydrostatic pump, pressure and temperature gauges
Plumbing Products Fixtures and Fittings	Drain Air Gaps for Residential Dishwasher Applications	Water Flow Passage, Discharge Capacity, Critical Level, Deterioration, Resistance to Detergents, Materials	ASSE 1021	Vacuum chamber, timer, caliper, spectrometer, cycle tester, flow meters, hydrostatic pump, pressure and temperature gauges
Plumbing Products Fixtures and Fittings	Stack Air Admittance Valves for Sanitary Drainage Systems	Pressure, Air Tightness, Rating, Endurance, Frost Closure, Materials	ASSE 1050, ASSE 1051	Hydrostatic pump, life cycle tester, timer, CO2 meter, temperature, pressure and temperature gauges
Plumbing Products Fixtures and Fittings	Plastic Toilet (Water Closet Seats)	Structural Integrity, Physical Characteristics and Materials Tests	ANSI Z124.5	Toilet Seat Tester, weights, caliper, corrosion chamber
Plumbing Products Fixtures and Fittings	Plumbing Supply Fittings	Flow Rate, Life Cycle, Spray Force	EPA WaterSense Specification for Commercial Pre-Rinse Spray Valves Version 1.0	Scale, force gauge, temperature gauge, pressure gauge, timer
Miscellaneous Plumbing Products	Buildings and Facilities Providing Accessibility and Usability for Physically Handicapped People	Sections 604.4, 604.6, 605, 606, 607, 608 609 and 610	ICC A117.1	Caliper, Tape measures
Miscellaneous Plumbing Products	Grab Bars and Accessories Installed in Bathing Area	All tests	ASTM F446	Tape Measures, force, dial gauge, weights
Miscellaneous Plumbing Products	Decorative Electroplated Coatings of Copper Plus Nickel Plus Chromium on Plastics	All tests	ASTM B604	Corrosion Chamber, PH, temperature gauge
Miscellaneous Plumbing Products	Flatwide Tensile Strength of Sandwich Construction	Tensile Tests	ASTM C297/C297M	Universal Testing Machine

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Miscellaneous Plumbing Products	Determination of Impact Resistance Thermoplastic Pipe and Fittings by Means of a Tup (falling weight)	Impact Resistance	ASTM D2444	Impact Tester and Tups. Scale, ruler
All tests except Oxidative Resistance	Thermoplastic Pressure Piping Compendium	All tests except Oxidative Resistance	CSA B137	Calipers, pressure gages, temperature probe, spectrometer, hydrostatic pump
Plumbing Products Fixtures and Fittings	Test Methods for Vacuum Breakers and Backflow Preventers	Section 6 (except 6.11)	CSA B64Series (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	Vacuum chamber, spectrometer, cycle tester, flow meters, hydrostatic pump, temperature, pressure gauges and timer.
Plumbing Products Fixtures and Fittings	Testing requirements for Plumbing Fixtures	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, CSA B45.5 2011/IAPMO Z124, 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	Flow Meters, temperature, pressure gauges, timer, scales, calipers, weights
Plumbing Products Fixtures and Fittings	Floor-Affixed Supports for Off-the-Floor Plumbing Fixtures for Public Use	All Sections	ASME A112.6.1M, ASME A112.6.2	Calipers, weights, timer and dial gauge
Plumbing Products (Cast Iron Pipe and Fittings)	Cast Iron Soil Pipe and Fittings	Tensile strength, Dimensions	ASTM A74	Universal Testing Machine, calipers
Plumbing Products (Cast Iron Pipe and Fittings)	Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping Applications	Clamp Assembly Requirements, Deflection, Shear, Unrestrained Hydrostatic Test	CISPI 310, ASTM A888	Calipers
Plumbing Products (Cast Iron Pipe and Fittings)	Mechanical Couplings for Drain, Waste, and Vent Pipe and Sewer Pipe	Clamp Assembly Requirements, Deflection, Shear, Unrestrained Hydrostatic Test	CSAB602, ASTM C1277, CISPI 301	Universal Testing Machine, calipers, dial gauge, timer and force gauge

Field of Test	Items, Materials or Products Tested	Specific Tests or Properties Measured	Specification, Standard Method, or Technique Used	Key Equipment or Technology*
Drinking Water System Components	Drinking Water System Components - Health Effects	Regulated Metals (including Lead and Zinc) Organics Inorganics	NSF/ANSI 61	Thermo Electron X7 ICP/MS, Thermo Electron DSQ GC/MS with Tekmar Velocity Purge and Trap system, Thermo Electron DSQ GC/MS with AS2000 auto sampler, pH meter, balance, timer
Drinking Water System Components	Drinking Water System Components – Health Effects	Regulated Metal - Lead	NSF/ANSI 372	Thermo Fisher - Niton XRF Analyzer
Drinking Water System Components	Drinking Water System Components – Health Effects	Regulated Metals (including Lead and Zinc) Organics Inorganics	NSF/ANSI 42	Thermo Electron X7 ICP/MS, Thermo Electron DSQ GC/MS with Tekmar Velocity Purge and Trap system, Thermo Electron DSQ GC/MS with AS2000 auto sampler, pH meter, balance, timer, Thermo Fisher - Niton XRF Analyzer.
Drinking Water System Components	Drinking Water System Components – Health Effects	Regulated Metals (including Lead and Zinc) Organics Inorganics	NSF/ANSI 53	Thermo Electron X7 ICP/MS, Thermo Electron DSQ GC/MS with Tekmar Velocity Purge and Trap system, Thermo Electron DSQ GC/MS with AS2000 auto sampler, pH meter, balance, timer, Thermo Fisher - Niton XRF Analyzer.
Drinking Water System Components	Drinking Water System Components – Health Effects	Regulated Metals (including Lead and Zinc) Organics Inorganics	NSF/ANSI 58	Thermo Electron X7 ICP/MS, Thermo Electron DSQ GC/MS with Tekmar Velocity Purge and Trap system, Thermo Electron DSQ GC/MS with AS2000 auto sampler, pH meter, balance, timer, Thermo Fisher - Niton XRF Analyzer.
Plumbing Products, Fixtures and Fittings	Anti-siphon Fill and flush Valves for Water Closet Tanks	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	Vacuum chamber, caliper, spectrometer, life cycle tester, flow meters, hydrostatic pump, pressure and temperature gauges, timer

Field of Test	Items, Materials or Products Tested	Specific Tests or Properties Measured	Specification, Standard Method, or Technique Used	Key Equipment or Technology*
Plumbing Products, Fixtures and Fittings	Flexible Water Connector	Pressure, Impulse Cycle, Corrosion/Coatings, Flow Rate, Material, Dimensions, Load Tests	A112.18.6 / CSA B125.6	Life Cycle tester, flow meter, pressure and temperature gauge, hydrostatic pump corrosion chamber, weights, calipers, spectrometer, timer
Push Fit Fittings / Press Fit Fittings	Fittings with Copper / PEX/CPVC Pipe	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	Spectrometer, force gauge, pressure and temperature gauges, hydrostatic pump, calipers, timer
Plumbing Products Fixtures and Fittings	Emergency Eyewash and Shower Equipment	Flow Rate, Pressure, Dimensions, Time	ANSI Z358.1	Flow meter, pressure gauge, tape measure, stopwatch

II. Building Products and Assemblies

Concrete, Mortar & AAC	ASTM C39, C67 (Freeze thaw only), C109, C157, C190, C348, C482, C567, C1660
EIFS & Stucco	ASTM B117, E2098, E2134, E2273, E2485, E2486
Fabrics & Geotextiles	ASTM C794, D4533, D4632, D4869 (Liquid Water Transmission only), D5034, E96, E2556
Fasteners	ASTM D1761, F1575
Gypsum Panels	C473
Insulation & Core Materials	ASTM C203, C271, C272, C273, C297, C303, C365, C393, D2126
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
Structural	ASTM D5206, E330
Acceptance Criteria	Section 3.0 & section 4.0, except 3.5 Air Permeance, of AC38 (Water Resistive Barriers) Section 4.0 of AC48 (Self-adhered Roof Underlayment) Section 3.0 & section 4.0, except Optional Tests, of AC51 (Precast Stone Veneer) Section 3.1 & 3.2 of AC188 (Roof Underlayment)

Notes:

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



 Vice President