



CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

International Product Assurance Laboratories
100 Clemson Research Blvd.
Anderson, SC 29625

Fulfills the requirements of

ISO/IEC 17025:2017

In the field of

TESTING

This certificate is valid only when accompanied by a current scope of accreditation document.
The current scope of accreditation can be verified at www.anab.org.

Jason Stine, Vice President

Expiry Date: 14 August 2028

Certificate Number: AT-3285



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.
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 17025:2017

International Product Assurance Laboratories

100 Clemson Research Blvd.

Anderson, SC 29625

Katelyn Simpson - ksimpson@ipalaboratories.com

Phone: (864) 646-8543

TESTING

ISO/IEC 17025 Accreditation Granted: **14 August 2026**

Certificate Number: **AT-3285**

Certificate Expiry Date: **14 August 2028**

Construction Materials

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
American national standard specifications for dry-set cement mortar	ANSI A118.1	Dry-Set Cement Mortars	Shear bond strength, tensile strength, setting time, Robinson floor testing, sag testing
American national standard specifications for chemical resistant, water cleanable tile-setting and -grouting epoxy and water cleanable tile-setting epoxy adhesive	ANSI A118.3	Chemical Resistant, Water Cleanable Tile-Setting and Grouting Epoxy and Water Cleanable Tile-Setting Epoxy Adhesives	Tensile strength, compressive strength, linear shrinkage, shear bond strength
American national standard specifications for modified dry-set cement mortar	ANSI A118.4	Modified Dry-Set Cement Mortars	Shear bond strength, tensile strength, setting time, Robinson floor testing, sag testing
American national standard specifications for standard cement grouts for tile installation	ANSI A118.6	Standard Cement Grouts for Tile Installation	Tensile strength, compressive strength, linear shrinkage, flexural strength, absorption
American national standard specifications for high performance cement grouts for tile installation	ANSI A118.7	High Performance Cement Grouts for Tile Installation	Tensile strength, compressive strength, linear shrinkage, flexural strength, absorption

Construction Materials

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
American national standard specifications for test methods and specification for cementitious backer units.	ANSI A118.9 (excluding Section 4.6)	Cementitious Backer Units	Shear bond strength, compression indentation, dimensions, impact testing, nail-head pull-through, flexural strength, linear expansion, fungus resistance, freeze/thaw resistance, warm water resistance
American national standard specifications for load bearing, bonded, waterproof membranes for thin-set ceramic tile and dimension stone installation	ANSI A118.10	Load Bearing, Bonded, Waterproof Membranes for Thin-Set Ceramic Tile and Dimension Stone Installation	Fungus and micro-organism resistance, seam strength, breaking strength, linear expansion/shrinkage, waterproofness, shear bond strength
American national standard specifications for EGP (exterior glue plywood) latex-Portland cement mortar	ANSI A118.11	EGP (Exterior Glue Plywood) Latex- Portland Cement Mortars	Shear bond strength, tensile strength, setting time, Robinson floor testing, sag testing
American national standard specifications for crack isolation membranes for thin-set ceramic tile and dimension stone installation	ANSI A118.12	Crack Isolation Membranes for Thin-Set Ceramic Tile and Dimension Stone Installation	Fungus and micro-organism resistance, shear bond strength, point load, system crack resistance test
American national standard specification for bonded sound reduction membranes for thin-set ceramic tile installation	ANSI A118.13 (excluding Section 5.3)	Bonded Sound Reduction Membranes for Thin-Set Ceramic Tile Installation	Fungus and micro-organism resistance, shear bond strength, Robinson floor test
American national standard specifications for improved modified dry-set cement mortar	ANSI A118.15	Improved Modified Dry-Set Cement Mortars	Shear bond strength, tensile strength, setting time, Robinson floor testing, sag testing
American national standard specifications for flowable hydraulic cement underlayment/self-leveling underlayment	ANSI A118.16	Flowable Hydraulic Cement Underlayments/Self-Leveling Underlayments	Initial flow, flow retention, healing, set time, compressive strength, tensile bond strength

Construction Materials

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
American national standard specifications for test methods and specifications for foam core backer boards	ANSI A118.18 (excluding Sections 4.4 and 4.11)	Foam Core Backer Boards	Shear bond strength, facial dimensions, nail-head pull through, flexural strength, linear expansion, fungus resistance, squareness, thickness, waterproofness, Robinson floor test
American national standard specifications for organic premixed grouts for installation of ceramic tile	ANSI A118.19	Organic Premixed Grouts for Installation of Ceramic Tiles	Indentation resistance, abrasion resistance, resistance to mold growth, water cleanability, chemical resistance
American national standard specifications for organic adhesives for installation of ceramic tile	ANSI A136.1	Organic Adhesives for Installation of Ceramic Tiles	Shear bond strength, heat resistance, impact test, stain test, Fungus and micro-organism resistance
American national standard specifications for glass tile	ANSI A137.2 (Sections 7.6, 7.7, 7.8, and 7.9)	Glass Tiles	Mounting variation (grout joint size variation), shear bond strength, compressive strength, thermal shock resistance
American national standard specifications for gauged porcelain tiles and gauged porcelain tile panels/slabs	ANSI A137.3 (Sections 5.3.11, 8.5, 8.6, and 8.7)	Gauged Porcelain Tiles and Gauged Porcelain Tile Panels/Slabs	Compressive strength, shear bond strength, soft body impact, hard body impact
American national standard test method for measuring dynamic coefficient of friction of hard surface flooring materials	ANSI A326.3	Hard Surface Flooring Materials	Dynamic coefficient of friction (BOT 3000E tribometer)
Standard test methods for absorption and bulk specific gravity of dimension stone	ASTM C97	Dimension Stone	Absorption (scale)
Standard test method for modulus of rupture of dimension stone	ASTM C99	Dimension Stone	Modulus of rupture (universal tester)
Standard test method for moisture expansion of fired whiteware products	ASTM C370	Fired Whiteware Products	Expansion (digital indicator and autoclave)

Construction Materials

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Standard test methods for determination of water absorption and associated properties by vacuum method for pressed ceramic tiles and glass tiles and boil method for extruded ceramic tiles and non-tile fired ceramic whiteware products	ASTM C373	Pressed Ceramic Tiles, Glass Tiles, Extruded Ceramic Tiles And Non-Tile Fired Ceramic Whiteware Products	Absorption (scale, oven, vacuum absorption equipment, hot plate and boiling pot)
Standard test method for crazing resistance of fired glazed whitewares by autoclave treatment	ASTM C424	Glazed Ceramic Tiles	Autoclave
Standard test method for bond strength of ceramic tile to Portland cement paste	ASTM C482	Ceramic Tiles	Shear bond strength
Standard test method for thermal shock resistance of glazed ceramic tile	ASTM C484	Glazed Ceramic Tiles	Thermal shock (timer, oven, thermocouple)
Standard test method for measuring warpage of ceramic tile	ASTM C485	Ceramic Tiles	Dimensional analysis (digital indicators)
Standard test method for facial dimensions and thickness of flat, rectangular ceramic wall and floor tile	ASTM C499	Ceramic Wall and Floor Tiles	Dimensional analysis (digital indicators and micrometer)
Standard test method for wedging of flat, rectangular ceramic wall and floor tile	ASTM C502	Ceramic Wall and Floor Tiles	Dimensional analysis (digital indicators)
Standard test method for measurement of light reflectance value and small color differences between pieces of ceramic tile	ASTM C609	Ceramic Tiles	Color difference and light reflectance (spectrophotometer)
Standard test method for evaluating ceramic floor tile installation systems using the Robinson-type floor tester	ASTM C627	Ceramic Floor Tiles	Robinson-type floor tester
Standard test method for breaking strength of ceramic tile	ASTM C648	Ceramic Tiles	Breaking strength (universal tester)

This Scope of Accreditation, version 004, was last updated on: 14 August 2026 and is valid only when accompanied by the Certificate.

Page 4 of 8

Construction Materials

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Standard test method for resistance of ceramic tile to chemical substances	ASTM C650	Ceramic Tiles	Chemical resistance (test tubes, fume hood)
Standard test method for flexural strength of dimension stone	ASTM C880	Dimension Stone	Flexural strength (universal tester)
Standard test method for measuring the resistance of ceramic and glass tile to freeze-thaw cycling	ASTM C1026	Ceramic and Glass Tiles	Freeze/thaw equipment
Standard test method for determining the static coefficient of friction of ceramic tile and other like surfaces by the horizontal dynamometer pull-meter method	ASTM C1028	Ceramic Tiles and Other Like Surfaces	Static COF (dynamometer)
Standard test method for determination of resistance to staining	ASTM C1378	Ceramic and Glass Tiles	Stain resistance (test tubes, cleaning materials)
Standard test method for determination of breaking strength and modulus of rupture of ceramic tiles and glass tiles by three-point loading	ASTM C1505	Ceramic and Glass Tiles	Universal tester, cylindrical and center support rods
Standard test method for determination of Mohs scratch hardness	ASTM C1895	Ceramic Tile, Glass Tile, and Other Hard Surfaces	Hardness picks, hardness pick sled, Jeweler's loupe, sharpening stone
Standard test methods for water vapor transmission of materials	ASTM E96 (Method A and Method E)	Underlayment Materials	Vapor transmission (scales, desiccant, environmental chamber)
Standard practice for determination of antibacterial activity on ceramic surfaces	ASTM E3031	Ceramic Surfaces	Incubator, pipetter, sterilizer, petri dishes, culture tubes and closures, cover films, vortex mixer, wrist action shaker, shaking incubator, screw top jars

Construction Materials

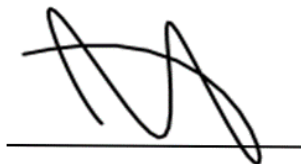
Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Standard practice for determining desistance of synthetic polymeric materials to fungi	ASTM G21	Synthetic Polymeric Materials	Petri dishes, incubator
Determination of slip resistance of pedestrian surfaces	DIN EN 16165 Methods of Evaluation – Annex B Shod ramp test	Pedestrian Surfaces	German ramp
Dimensions and surface quality of ceramic tiles — part 2: determination of dimensions and surface quality	ISO 10545-2	Ceramic Tiles	Dimensional analysis (digital indicators and micrometer)
Ceramic tiles — part 3: determination of water absorption, apparent porosity, apparent relative density and bulk density	ISO 10545-3	Ceramic Tiles	Absorption (scale, oven, vacuum absorption equipment, hot plate and boiling pot)
Ceramic tiles — part 4: determination of modulus of rupture and breaking strength	ISO 10545-4	Ceramic Tiles	Modulus of rupture (universal tester)
Ceramic tiles — part 6: determination of resistance to deep abrasion for unglazed tiles	ISO 10545-6	Ceramic Tiles	Abrasion (deep abrasion equipment)
Ceramic tiles — part 9: determination of resistance to thermal shock	ISO 10545-9	Ceramic Tiles	Thermal Shock (timer, oven, thermocouple)
Ceramic tiles — part 10: determination of moisture expansion	ISO 10545-10	Ceramic Tiles	Expansion (digital indicator and autoclave)
Ceramic tiles — part 11: determination of crazing resistance for glazed tiles	ISO 10545-11	Ceramic Tiles	Autoclave
Ceramic tiles — part 13: determination of chemical resistance	ISO 10545-13	Ceramic Tiles	Chemical resistance (test tubes, fume hood)
Ceramic tiles — part 14: determination of resistance to stains	ISO 10545-14	Ceramic Tiles	Stain resistance (test tubes, cleaning materials)

Construction Materials

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Ceramic tiles — grouts and adhesives — part 2: test methods for adhesives	ISO 13007-2	Cementitious Adhesives	Tensile adhesion, slip (sag), transverse deformation
Ceramic tiles — grouts and adhesives — part 4: test methods for grouts	ISO 13007-4	Cementitious Grouts	Flexural strength, compressive strength, absorption, shrinkage, abrasion resistance, transverse deformation
Fine ceramics (advanced ceramics, advanced technical ceramics) — test method for antifungal activity of semiconducting photocatalytic materials.	ISO 13125	Fine Ceramics	Environmental chamber, Bio-hood, centrifuge, microscope, autoclave, micropipette
Quantitative determination of antibacterial activity of ceramic tile surfaces — test methods — part 1: ceramic tile surfaces with incorporated antibacterial agents.	ISO 17721-1	Ceramic Tile Surfaces	Environmental chamber, Bio-hood, autoclave, micropipette
Quantitative determination of antibacterial activity of ceramic tile surfaces — test methods — part 2: ceramic tile surfaces with incorporated photocatalytic antibacterial agents	ISO 17721-2	Ceramic Tile Surfaces	Environmental chamber, Bio-hood, autoclave, micropipette
Fine ceramics (advanced ceramics, advanced technical ceramics) — determination of antiviral activity of semiconducting photocatalytic materials under indoor lighting environment — test method using bacteriophage Q-beta	ISO 18071	Fine Ceramics	Environmental chamber, Bio-hood, autoclave, micropipette
Textiles — determination of antiviral activity of textile products	ISO 18184	Textiles	CO2 incubator, Bio-hood, autoclave, micropipette

Construction Materials

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Textiles — determination of antibacterial activity of textile products	ISO 20743	Textiles	Environmental chamber, Bio-hood, autoclave, micropipette
Measurement of antiviral activity on plastics and other non-porous surfaces	ISO 21702	Plastics and Other Non-Porous Surfaces	CO2 incubator, Bio-hood, autoclave, micropipette
Measurement of antibacterial activity on plastics and other non-porous surfaces	ISO 22196	Plastics and Other Non-Porous Surfaces	Environmental chamber, Bio-hood, autoclave, micropipette
Fine ceramics (advanced ceramics, advanced technical ceramics) — test method for antibacterial activity of semiconducting photocatalytic materials	ISO 27447	Fine Ceramics	Environmental chamber, Bio-hood, autoclave, micropipette



Jason Stine, Vice President