

CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Wiss, Janney, Elstner Associates, Inc.
330 Pfingsten Road
Northbrook, Illinois 60062

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: 22 April 2024 Certificate Number: AT-2564





SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Wiss, Janney, Elstner Associates, Inc.

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TESTING

Valid to: April 22, 2024 Certificate Number: AT-2564

Chemical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Metallurgical Chemical Analysis	ASTM A238, A751, E34, E35, E106, E351, E352, E478, E536	Alloys, Anchors, Metals, Rebar, Semi-Finished and Finished Components, Steel	Optical Emission Spectroscopy (OES)
Corrosion Testing	ASTM B117, G1, G85, AC257	Admixture, Anchors, Concrete, Epoxy, Fasteners, Metals, Mortar, Rebar, Semi- Finished and Finished Components, Steel	QFOG
Chemical Analysis	ASTM C114, C150, C233, C260, C289-07, C311, C494, C595, C618, C1017, C1084, C1152, C1218, C1240, C1324, C1602, E350	Admixture, Aggregate, Cement, Clay, Concrete, Concrete Masonry Unit (CMU), Epoxy, Fiber, Fly Ash, Grout, Mortar, Pozzolans, Slate, Silica Fume, Stone, Tile, Water	Wet Chemistry Methods, LECO, pH meter, X-ray Diffraction (XRD), X-ray Fluorescence (XRF), Atomic Absorption(AA)
Heat Measurement	ASTM C1702	Admixture, Aggregate, Cement, Concrete, Fly Ash, Grout, Mortar, Pozzolans, Silica Fume, Water	Isothermal Conduction Calorimetry (ICC)
Chemical Analysis	ASTM D512, D516, D4327, D6919, E70 AASHTO T26	Water	Ion Chromatography (IC)





Chemical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Metallurgical Chemical Analysis	ASTM E415, E1086, E1251	Alloys, Metals, Steel	Atomic Absorption (AA), Atomic Emission Spectroscopy, LECO, Optical Emission Spectroscopy (OES)
Chemical Analysis	ASTM E573, E1019, E1252, E1508	Admixture, Polymer-Based Construction Materials P Asphalts, Rubbers, Resins, Inorganic Fillers, Flame Retardants, Plasticizers, Silicones, Corrosion Products	Fourier Transform Infrared Spectroscopy (FTIR)

Construction Materials

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Chemical Analysis	ASTM C114, C233, C289, C1017, C1084, C1152, C1218, C1324, E350	Admixture, Aggregate, Cement, Clay, Concrete, Concrete Masonry Unit (CMU), Epoxy, Fiber, Fly Ash, Grout, Mortar, Pozzolans, Slate, Silica Fume, Stone, Tile	Wet Chemistry Methods, LECO, pH meter, X-ray Diffraction (XRD), X-ray Fluorescence (XRF), Atomic Absorption (AA), Fourier Transform Infrared Spectroscopy (FTIR)
Chemical Analysis	ASTM D512, D516, D4327, D6919, E70 AASHTO T26	Water	Ion Chromatography (IC)
Metallurgical Chemical Analysis	ASTM E34, E351, E352, E415, E478, E536	Alloys, Anchors, Metals, Rebar, Semi-Finished and Finished Components, Steel	Energy Dispersive Spectroscopy (EDS), Scanning Electron Microscopy (SEM)
Metallurgical Chemical Analysis	ASTM E415, E1086, E1251, E1252	Alloys, Metals, Steel	Atomic Absorption (AA), Atomic Emission Spectroscopy, LECO, Optical Emission Spectroscopy
Corrosion Analysis	ASTM C876	Steel in Concrete	Half-Cell, Copper-Sulfate Reference Electrode





Construction Materials

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or P <mark>roduct Tested</mark>	Key Equipment or Technology
Fenestration and Roofing Testing	ASTM E330, E331, E1105 TAS 114 (excluding Appendix A), 124	Curtain Walls, Doors, Roofing, Skylights, Windows	Uplift, Pressure, Water Leakage
Material Characterization and Evaluation	ASTM A90, A247, A309, A428, E45, E53, E112, F606, F788, F812 SAE J123	Anchors, Fasteners, Metals, Rebar, Semi-Finish and Finished Components, Steel	
Material Characterization and Evaluation	ASTM C33, C40, C126, C144, C150, C260, C294, C311, C404, C406, C494, C511, C595, C618, C637, C1077, C1157, C1240, C1602		Concrete Material Performance and Durability
Material Characterization and Evaluation	ASTM F710, F1869, F2170, F2659	Flooring	Relative Humidity Measurements
Accelerated Weathering Testing	ASTM G154		QUV
Moisture Testing	ASTM C1498, C1794, E96	Brick, Ceramic, Concrete, Concrete Masonry, Gypsum, Insulation, Membranes, Slate, Stone, Wood	Hygrothermal, Sorption, Water Absorption Coefficient, Water Vapor Transmission, WUFI
Petrographic and Microscopic Examination	ASTM A90, A309, A428, B487, B748	Alloys, Metals, Steel	Scanning Electron Microscopy (SEM)
Petrographic and Microscopic Examination	ASTM C295, C457, ASTM C856, C1084, C1324, C1723, E2809	Admixture, Aggregate, Anchors, Brick, Cement, Clay, Concrete, Concrete Masonry Unit (CMU), Epoxy, Fly Ash, Grout, Metals, Mortar, Polymers, Pozzolans, Rebar, Semi-Finished and Finished Components, Slate, Silica Fume, Steel, Stone, Tile	Air-Void Analysis, Scanning Electron Microscopy (SEM)





Construction Materials

Specific Tests and/or	Specification, Standard,	Items, Materials or	Key Equipment or
Properties Measured	Method, or Test Technique	P <mark>r</mark> oduct Tested	Technology
Physical Testing	ASTM A239, C29, C31, C39, C42, C67, C78, C88, C97, C99, C109, C117, C120, C121, C123, C125, C127, C128, C136, C138, C140, C142, C143, C151, C157, C170, C172, C174, C183, C185, C187, C188, C191, C192, C204, C215, C217, C231, C233, C293, C305, C311, C403, C426, C430, C469, C490, C496, C512, C566, C617, C666, C672, C702, C880, C944, C1194, C1195, C1012, C1038, C1064, C1074, C1202, C1222, C1260, C1293, C1314, C1324, C1354, C1437, C1542, C1552, C1556, C1567, C1581, C1583, C1609, C1856, D75, E329, E518 (Method A), E519 AASHTO T277, T303, T336, T357, T358 ICC-ES AC32, AC51, AC232, AC233, AC257, AC509 (except sections 3.3 and 3.4) ICRI 210.3R CSA A3004-C8	Admixture, Aggregate, Anchors, Brick, Cement, Clay, Concrete, Concrete Masonry Unit (CMU), Epoxy, Fasteners, Fiber, Fly Ash, Grout, Mortar, Pozzolans, Rebar, Slate, Silica Fume, Steel, Stone, Tile, Ultra-High Performance Concrete (UHPC), Water	Absorption, Air Content, Autoclave Expansion, Chloride Diffusion, Chloride Resistance, Coefficient of Thermal Expansion, Compressive Strength, Creep, Cyclic Testing, Density, Durability, Fineness, Flexural Strength, Freeze and Thaw, Length Change, Metallic Coating, Modulus of Elasticity (MoE), Poisson's Ratio, Scanning Electron Microscope (SEM), Service Life Modeling, Shrinkage, Sieve Analysis, Slump, Specific Gravity, Temperature, Tensile Strength, Voids, Yield, QFOG





Mechanical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Hardness Testing	ASTM A370, B294, E18, E140, E384, F606	Metals, Fasteners, Raw Materials, Semi-Finished and Finished Components	Hardness Testers
Metallography	ASTM A262 (Practice A), A604, B487, B748, E3, E112, E45, E340, E381, E407, E1077, E1268, F788, F812, F2328 SAE J123, SAE J419, SAE J423	Metals, Fasteners, Raw Materials, Semi-Finished and Finished Components	Banding/Orientation of Microstructures and Microstructural Identifications, Case Depth, Corrosion Evaluations, Depth of Decarburization, Discontinuities, Failure Analysis, Failure Mode Determination, Fractography, Grain Size (Comparison), Inclusion Ratings, Intergranular Susceptibility (Corrosion), Macroetch, Metallographic Preparation, Microetch, Plating Thickness,
Structural Testing	ANSI/AWS Standard D1.4 ASTM A421, A648, A706, A767, A881, A955, A970, A1034, A1061, A1081, D790, E328, E564, E1190, E1512, F3125	Anchors, Fasteners, Fiber, Pipe, Plastic, Rebar, Slate, Steel, Prestressing Steel, Rebar Couplers, Headed Rebars	Compression, Flexure, Relaxation, Shear, Tension
Tensile Strength Testing	ASTM A370, A615, A775, B557, C297, C393, D732, E8, E72, E488 BS EN ISO 6892-1	Anchors, Fasteners, Fiber, Pipe, Plastic, Rebar, Slate, Steel, Prestressing Steel, Rebar Couplers, Headed Rebars	Compression, Flexure, Relaxation, Shear, Tension





Mechanical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Mechanical Evaluation and Testing	ASTM A996, A1035, A1044, A209, D638, F1470 California Test 670 ICC-ES AC01, AC32, AC58, AC70, AC106, AC118, AC133, AC193, AC269, AC303, AC308, AC347, AC395, AC447 (except section 4.4.8), AC500 BS 4449:2005+A3, 4449: 8539, 4449: 8539, 4449: 8597 BS EN 13391 BS EN ISO15630-1, 15630-2, 15630-3 ISO 15698-1, 15698-2, 15835-1, 15835-2, 15835-3 EOTA EAD 160004, EAD 330232, TR048 ACI 355.2, 355.4, 423.7 PTI M10	Anchors, Fasteners, Fiber, Pipe, Plastic, Rebar, Slate, Steel, Prestressing Steel, Rebar Couplers, Headed Rebars	Compression, Flexure, Relaxation, Shear, Tension
Compressive Strength Testing	ASTM D695	Anchors, Fasteners, Fiber, Pipe, Plastic, Rebar, Slate, Steel, Prestressing Steel, Rebar Couplers, Headed Rebars	Compression





Thermal

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Heat Measurement	ASTM C1046, C1155	High Performance Buildings	Heat of Hydration, R-Value Measurement
Isothermal Conduction Calorimetry	ASTM C1679, C1702	Admixture, Aggregate, Cement, Concrete, Fly Ash, Grout, Mortar, Pozzolans, Silica Fume, Water	Isothermal Conduction Calorimeter (ICC)
Thermogravimetric Analysis	ASTM C1872, D6370, D6382, E794, E1131, E1641, E1868, E1877, E2550	Admixture, Aggregate, Cement, Clay, Concrete, Epoxy, Grout, Mortar, Supplementary Cementitious Materials, Polymers, Polymer-Based Construction Materials Asphalts, Rubbers, Resins, Inorganic Fillers, Plasticizers, Silicones	Thermogravimetric Analyzer (TGA)
Differential Scanning Calorimetry	ASTM D3418, D3895, E793, E928, E1269, E1356, E2160	Admixture, Aggregate, Cement, Clay, Concrete, Epoxy, Grout, Mortar, Supplementary Cementitious	Calorimeter (DSC)

Note:

1. This scope is formatted as part of a single document including Certificate of Accreditation No. AT-2564.

Jason Stine, Vice President

