

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 <u>www.anab.org</u>.



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Jason Stine, Vice President

Expiry Date: 22 April 2026 Certificate Number: AT-2564

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

Wiss, Janney, Elstner Asso<mark>c</mark>iates, Inc.

330 Pfingsten Road Northbrook, Illinois 60062 John Pearson | jpearson@wje.com 847 272 7400 | www.wje.com

TESTING

Valid to: April 22, 2026

Certificate Number: AT-2564

Chemical

Specific Tests and/or Properties Measured	Specifica <mark>tion, Standard,</mark> Method, o <mark>r Test Technique</mark>	Items, Materials or Product Tested	Key Equipment or Technology
Metallurgical Chemical Analysis	ASTM <mark>A238, A751</mark>	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 E3294	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 Pr <mark>o</mark> duct 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	Specifica <mark>tion, Standard,</mark> Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Chemical Analysis	ASTM C114, C233, C289, C1017, C1084, C1152, C1218, C1324, E3294	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 E415	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 Product Tested	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, 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, C1585, C1602 ICC AC529 (except Sections 3.2 and 3.3)	Admixture, Aggregate, Brick, Cement, Clay, Concrete, Concrete Masonry Unit (CMU), Epoxy, Fiber, Fly Ash, Grout, Metals, Mortar, Pozzolans, Slate, Silica Fume, Stone, Tile	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, 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 Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or 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, C1135, C1202, C1222, C1260, C1293, C1314, C1324,	Admixture, Aggregate, Anchors, Brick, Cement, Clay, Concrete, Concrete Masonry Unit (CMU), Epoxy, Fasteners, Fiber, Fly Ash, Grout, Mortar, Pozzolans, Rebar, Sealants, 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, Modulu of Elasticity (MoE), Poisson's Ratio, Scanning Electron Microscope (SEM), Service Life Modeling, Shrinkage, Siev Analysis, Slump, Specific Gravity, Temperature, Tensile Strength, Voids, Yield, QFOG
Nondestructive Evaluation	ASTM C597	Concrete	Ultrasonic Pulse Velocity





Mechanical Testing

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Item <mark>s</mark> , Materials or Pr <mark>od</mark> uct 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), B487, B748, E3, E112, E45, 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, Dept 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, C393, D732, D790, E72, E328, E488, E564, E1190, E1512, F3125, AC557	Anchors, Fasteners, Fiber, Pipe, Plastic, Rebar, Slate, Steel, Prestressing Steel, Rebar Couplers, Headed Rebars	Compression, Flexure, Relaxation, Shear, Tension





Mechanical Testing

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Tensile Strength Testing	ASTM A370, A615, A775, C297, E8 AASHTO T 397 BS EN ISO 6892-1 FM5-626	Fiber, Headed Rebars, Pipe, Plastic, Prestressing Steel, Rebar, Rebar Couplers, Steel, Ultra-High Performance Concrete	Compression, Flexure, Relaxation, Shear, Tension
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: 8597 BS EN 13391 BS EN ISO15630-1, 15630-2, 15630-3 IAPMO UES EC 006 ISO 15698-1, 15835-1, 15835-2, 15835-3 EOTA EAD 160004-00-0301, EAD 330232-00-0601, TR048 ACI 349, 355.2, 355.4, 359, 423.7 MTO LS-434 TxDOT Tex-744-1 PTI M10	Anchors, Fasteners, Fiber, Pipe, Plastic, Rebar, Slate, Steel, Prestressing Steel, Rebar Couplers, Headed Rebars	Compression, Flexure, Relaxation, Shear, Tension





Thermal

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Item <mark>s</mark> , Materials or Pr <mark>od</mark> uct 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 Materials, Polymers, Polymer-Based Construction Materials, Asphalts, Rubbers, Resins, Plasticizers, Silicones	Differential Scanning 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



