Miami-Dade County, Florida
DEPARTMENT OF REGULATORY AND ECONMIC RESOURCES
BOARD AND CODE ADMINISTRATION DIVISON
PRODUCT CONTROL SECTION
11805 S.W. 26 Street-Room 208
Miami, Florida 33175-2474
T (786) 315-2590 Fax (786) 315-2599

Laboratory Certificate

MIAMI-DADE COUNTY APPROVED

This certifies that R & D Services, Inc. located at 209 Tennessee Boulevard, Watertown, TN 37184 is an approved Testing Laboratory in accordance with Miami-Dade County Department of Regulatory and Economic Resources and Protocol TAS301-94, and is Certified to perform the following tests:

ASTM C518	ASTM C578 (Excludes Section 11.10, & Appendix X1.1 & X1.2)
ASTM C739	ASTM C665 (Excludes Sec. 13.3)
ASTM C1303	ASTM C764 (Excludes Sec. 12.5)
ASTM C1338	ASTM C1224 (Excludes Sec. 6.5 & 9.1)
ASTM C1371	ASTM C1313 (Excludes Sec. 7.2.3 & 7.2.5)
ASTM D2842	IAS Certificate TL-566
ASTM D2856	
ASTM E96	
MIL-STD-810D	

Results of the above mentioned test shall be properly submitted to the Miami-Dade County Department of Regulatory and Economic Resources per TAS301-94, along with all other documentation required for the approval of products. Approved engineer(s) for this laboratory:

David W. Yarbrough, P.E.

This Certification and Registration Approved: **December 18, 2025**
This Certification and Registration Expires : **February 13, 2031**

Certification No. : **25-1205.01** *Renews: 20-0806.01*

Helmy A. Makar, P.E., M.S.
Product Control Section Supervisor
Product Control Section

Americo Segura, M.S., CGC
Quality Assurance Unit Supervisor
Product Control Section

The Miami-Dade County Department of Regulatory and Economic Resources reserves the right to remove this certification for non-compliance with rules and regulations as set by Protocol TAS301-94.

R&DSERVICES10

CERTIFICATE OF ACCREDITATION

This is to attest that

R&D SERVICES, INC.

209 TENNESSEE BOULEVARD
WATERTOWN, TENNESSEE 37184, U.S.A.

Testing Laboratory TL-566

has met the requirements of AC89, *IAS Accreditation Criteria for Testing Laboratories*, and has demonstrated compliance with ISO/IEC Standard 17025:2017, *General requirements for the competence of testing and calibration laboratories.* This organization is accredited to provide the services specified in the scope of accreditation.

Effective Date September 20, 2024

IAS ACCREDITED

International Accreditation Service
Issued under the authority of IAS management

Visit www.iasonline.org for current accreditation information.

SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

R&D SERVICES, INC.

www.rdservices.com

Contact Name Stuart Ruis **Contact Phone** +1-931-372-8871

Accredited to ISO/IEC 17025:2017 *Effective Date September 20, 2024*

Thermal/Fire	
16 CFR-Part 1209.6	Test procedures for critical radiant flux (loose-fill cellulose only)
16 CFR-Part 1209.7	Test procedures for smoldering combustion (loose-fill cellulose only)
ASTM C335	Standard test method for steady-state heat transfer properties of pipe insulation
ASTM C518	Standard test method for steady-state thermal transmission properties by means of the heat flow meter apparatus
ASTM C739	Critical radiant flux (gas) (loose-fill cellulose) (section 10 only)
ASTM C739	Smoldering combustion (loose-fill cellulose) (section 14 only)
ASTM C1303	Standard test method for predicting long-term thermal resistance of closed-cell foam insulation
ASTM C1485	Standard test method for critical radiant flux of exposed attic floor insulation using an electric radiant heat energy source
ASTM C1536	Standard test method for measuring the yield for aerosol foam sealants, procedure A only.
ASTM D586	Standard test method for ash in pulp, paper, and paper products
ASTM D2863	Standard test method for measuring the minimum oxygen concentration to support candle-like combustion of plastics (oxygen index)
ASTM D6413	Standard test method for flame resistance of textiles (vertical test only)
ASTM D7348	Standard test methods for loss on ignition (LOI) of solid combustion residues
ASTM E970	Standard test method for critical radiant flux of exposed attic floor insulation using a radiant heat energy source
CAN/ULC-S129-06	Standard method of test for smoulder resistance of insulation
CAN/ULC-S129-15	Standard method of test for smoulder resistance of insulation
CAN/ULC-S130-M87	Standard method of test for ignition resistance of loose fill insulation (cigarette methodonly)
CAN/ULC-S770-09	Standard test method for determination of long-term thermal resistance of closed-cell thermal insulating foams
CAN/ULC-S770-15	Standard test method for determination of long-term thermal resistance of closed-cell thermal insulating foams

Physical	
16 CFR-Part 1209.4	Test procedures for determining settled density (loose-fill cellulose only)
16 CFR-Part 1209.5	Test procedures for corrosiveness (loose-fill cellulose only)
ANSI/SBCA FS 100	Standard requirements for wind pressure resistance of foam plastic insulating sheathing used in exterior wall covering assemblies (annex A.1 only)
ASTM C165	Standard test method for measuring compressive properties of thermal insulations (procedure A only)
ASTM C167	Standard test methods for thickness and density of blanket or batt thermal insulations
ASTM C203	Standard test methods for breaking load and flexural properties of block-type thermal insulation
ASTM C209	Standard test methods for cellulosic fiber insulating board (Sections 9, 13, 14, & 18 only)
ASTM C240	Standard test method for testing cellular glass insulation block (excluding sections 5.4 and 5.7)
ASTM C272/C272M	Standard test method for water absorption of core materials for sandwich constructions (excluding procedure B)
ASTM C273/C273M	Standard test method for shear properties of sandwich core materials
ASTM C302	Standard test method for density and dimensions of preformed pipe-covering-type thermal insulation
ASTM C303	Standard test method for dimensions and density of preformed block and board-type thermal insulation
ASTM C356	Standard test method for linear shrinkage of preformed high-temperature thermal insulation subjected to soaking heat
ASTM C365	Standard test method for flatwise compressive properties of sandwich cores
ASTM C390	Standard practice for sampling and acceptance of thermal insulation lots
ASTM C411	Standard test method for hot-surface performance of high-temperature thermal insulation
ASTM C447	Standard practice for estimating the maximum use temperature of thermal insulations
ASTM C520	Standard test methods for density of granular loose fill insulations (except section 8.2 method B)
ASTM C550	Standard test method for measuring trueness and squareness of rigid block and board thermal insulation
ASTM C653	Standard guide for determination of the thermal resistance of low-density blanket-type mineral fiber insulation
ASTM C665	Standard specification for mineral-fiber blanket thermal insulation for light frame construction and manufactured housing (section 13.8 only)

ASTM C687	Standard practice for determination of thermal resistance of loose-fill building insulation
ASTM C692	Standard test method for evaluating the influence of thermal insulations on external stress corrosion cracking tendency of austenitic stainless steel
ASTM C764	Standard specification for mineral fiber loose-fill thermal insulation (section 12.7 only)
ASTM C870	Standard practice for conditioning of thermal insulating materials
ASTM C892	High temperature fiber blanket thermal insulation (except section 11.1.2)
ASTM C1101/C1101M	Standard test methods for classifying the flexibility or rigidity of mineral fiber blanket and board insulation
ASTM C1104/C1104M	Standard test method for determining the water vapor sorption of unfaced mineral fiber insulation
ASTM C1149	Corrosion test method - standard specification for self-supported spray applied cellulosic thermal insulation (section 6.7 only)
ASTM C1258	Standard test method for elevated temperature and humidity resistance of vapor retarders for insulation
ASTM C1263	Standard test method for thermal integrity of flexible water vapor retarders
ASTM C1304	Standard test method for assessing the odor emission of thermal insulation materials
ASTM C1335	Standard test method for measuring non-fibrous content of man-made rock and slag mineral fiber insulation
ASTM C1338	Standard test method for determining fungi resistance of insulation materials and facings
ASTM C1371	Standard test method for determination of emittance of materials near room temperature using portable emissometers
ASTM C1374	Standard test method for determination of installed thickness of pneumatically applied loose-fill building insulation
ASTM C1427	Standard specification for extruded preformed flexible cellular polyolefin thermal insulation in sheet and tubular form (section 11.5 only)
ASTM C1488	Standard practice for simulated aging of loose-fill insulation
ASTM C1498	Standard test methods for hygroscopic sorption isotherms of building materials
ASTM C1511	Standard test method for determining the water retention (repellency) characteristics of fibrous glass insulation (aircraft type)
ASTM C1549	Standard test method for determination of solar reflectance near ambient temperature using a portable solar reflectometer
ASTM C1574	Standard guide for determining blown density of pneumatically applied loose-fill mineral fiber thermal insulation

ASTM C1616	Standard test method for determining the moisture content of organic and inorganic insulation materials by weight
ASTM C1617	Standard practice for quantitative accelerated laboratory evaluation of extraction solutions containing ions leached from thermal insulation on aqueous corrosion of metals
ASTM C1699	Standard test methods for moisture retention curves of porous building materials using pressure plates (section 7.4 only)
ASTM C1763	Standard test method for water absorption by immersion of thermal insulation materials
ASTM C1794	Standard test methods for determination of the water absorption coefficient by partial immersion
ASTM C1859	Standard practice for determination of thermal resistance of pneumatically installed loose-fill building insulation (behind netting) for enclosed applications of the building thermal envelope
ASTM C1936	Standard test method for Corrosiveness of Mineral-Fiber or Cellulosic Fiber Insulation by Comparison to Control
ASTM D618	Standard practice for conditioning plastics for testing
ASTM D732	Standard test method for Shear Strength of Plastics by Punch Tool
ASTM D751	Standard test methods for coated fabrics (section 9 only)
ASTM D882	Standard test method for tensile properties of thin plastic sheeting
ASTM D1005	Standard test method for measurement of dry-film thickness of organic coatings using micrometers
ASTM D1204	Linear dimensional changes of nonrigid thermoplastic sheeting or film at elevated temperature
ASTM D1621	Standard test method for compressive properties of rigid cellular plastics
ASTM D1622	Standard test method for apparent density of rigid cellular plastics
ASTM D1623	Standard test method for tensile and tensile adhesion properties of rigid cellular plastics
ASTM D2126	Standard test method for response of rigid cellular plastics to thermal and humid aging
ASTM D2244	Standard practice for calculation of color tolerances and color differences from instrumentally measured color coordinates
ASTM D2261	Standard test method for tearing strength of fabrics by the tongue (single rip) procedure (constant-rate-of-extension tensile testing machine)
ASTM D2842	Standard test method for water absorption of rigid cellular plastics
ASTM D3310	Standard test method for determining corrosivity of adhesive materials
ASTM D3574	Standard test methods for Flexible Cellular Materials-Slab, Bonded and Molded Urethane Foams
ASTM D5587	Standard test method for Tearing Strength of Fabrics by Trapezoid Procedure

ASTM D5795	Standard test method for determination of liquid water absorption of coated wood and wood-based products via “Cobb Ring” apparatus
ASTM D6226	Standard test method for open cell content of rigid cellular plastics
ASTM D7897	Standard practice for laboratory soiling and weathering of roofing materials to simulate effects of natural exposure on solar reflectance and thermal emittance
ASTM E96	Standard test methods for water vapor transmission of materials
ASTM E308	Standard practice for computing the colors of objects by using the CIE system
ASTM E605/E605M	Standard test methods for thickness and density of sprayed fire-resistive material (SFRM) applied to structural members
ASTM E736/E736M	Standard test method for cohesion/adhesion of sprayed fire- resistive materials applied to structural members
ASTM E759/E759M	Standard test method for effect of deflection on sprayed fire- resistive material applied to structural members
ASTM E761/E761M	Standard test method for compressive strength of sprayed fire-resistive material applied to structural members
ASTM E805	Standard practice for identification of instrumental methods of color or color-difference measurement of materials
ASTM E859	Standard test method for air erosion of sprayed fire-resistive materials (SFRMs) applied to structural members
ASTM E1980	Standard practice for calculating solar reflectance index of horizontal and low-sloped opaque surfaces
ASTM F1306	Standard test method for slow rate penetration resistance of flexible barrier films and laminates
ASTM G154	Standard practice for operating fluorescent ultraviolet (UV) lamp apparatus for exposure of nonmetallic materials
BS EN 1604	Thermal insulating products for building applications – determination of dimensional stability under specified temperature and humidity conditions
BS EN 1609	Thermal insulating products for building applications – determination of short term water absorption by partial immersion
BS EN 12086	Determination of water vapour transmission properties
BS EN 13469	Determination of water vapour transmission properties of preformed pipe insulation
Virginia Test Method (VTM-46)	Water holding capacity of fiber mulch
Virginia Test Method (VTM-47)	Dry weight of fiber mulch
MISC	

ASTM C534/C534M	Standard specification for preformed flexible elastomeric cellular thermal insulation in sheet and tubular form (excluding section 11.7)
ASTM C547	Standard specification for mineral fiber pipe insulation (excluding sections 11.1.5 and 11.1.9)
ASTM C552	Standard specification for cellular glass thermal insulation (excluding sections 12.4, 12.9 and 12.10)
ASTM C553	Standard specification for mineral fiber blanket thermal insulation for commercial and industrial applications (excluding sections 11.4 and 11.9)
ASTM C578	Standard specification for rigid, cellular polystyrene thermal insulation
ASTM C591	Standard specification for unfaced preformed rigid cellular polyisocyanurate thermal insulation (excluding sections 12.9 and 12.10)
ASTM C592	Standard specification for mineral fiber blanket insulation and blanket-type pipe insulation (metal-mesh covered) (industrial type) (excluding sections 11.5, 11.10 and 11.11)
ASTM C610	Standard specification for molded expanded perlite block and pipe thermal insulation -(excluding sections 12.1.6, 12.1.9, 12.1.11, and 12.1.12)
ASTM C612	Standard specification for mineral fiber block and board thermal insulation (excluding sections 12.7 and 12.10)
ASTM C665	Standard specification for mineral-fiber blanket thermal insulation for light frame construction and manufactured housing (excluding section 13.3)
ASTM C739	Standard specification for cellulosic fiber loose-fill thermal insulation
ASTM C764	Standard specification for mineral fiber loose-fill thermal insulation (excluding section 12.4)
ASTM C795	Standard specification for thermal insulation for use in contact with austenitic stainless steel (section 12 only)
ASTM C991	Standard specification for flexible fibrous glass insulation for metal buildings (excluding sections 6.1.2 and 6.1.3)
ASTM C1029	Standard specification for spray-applied rigid cellular polyurethane thermal insulation (excluding section 10.8)
ASTM C1071	Standard specification for fibrous glass duct lining insulation (thermal and sound absorbing material) (excluding sections 12.7, 12.9, 12.11, 12.12 and 12.13)
ASTM C1126	Standard specification for faced or unfaced rigid cellular phenolic thermal insulation (excluding section 13.11)
ASTM C1149	Standard specification for self-supported spray applied cellulosic thermal insulation
ASTM C1224	Standard specification for reflective insulation for building applications (excluding section 9.3)
ASTM C1289	Standard specification for faced rigid cellular polyisocyanurate thermal insulation board

ASTM C1290	Standard specification for flexible fibrous glass blanket insulation used to externally insulate HVAC ducts (excluding section 13.3)
ASTM C1313	Standard specification for sheet radiant barriers for building construction applications (excluding section 10.3)
ASTM C1427	Standard specification for extruded preformed flexible cellular polyolefin thermal insulation in sheet and tubular form (excluding section 6.4)
ASTM C1497	Standard specification for cellulosic fiber stabilized thermal insulation
ASTM C1534	Standard specification for flexible polymeric foam sheet insulation used as a thermal and sound absorbing liner for duct systems (excluding section 12.2, 12.9 practice G21, 12.10 and 12.11)
ASTM C1668	Standard specification for externally applied reflective insulation systems on rigid duct in heating, ventilation, and air conditioning (HVAC) systems (excluding section 10.3)
ASTM C1728	Standard specification for flexible aerogel insulation (excluding sections 7.8 and 7.11)
ASTM D7425	Standard specification for spray polyurethane foam used for roofing applications
CAN/ULC-S701-11	Standard for thermal insulation, polystyrene, boards and pipe covering
CAN/ULC-S701.1-2017	Standard for thermal insulation, polystyrene boards (excluding section 6.11)
CAN/ULC-S701.1 2022	Standard for thermal insulation, polystyrene boards (excluding section 17.2)
CAN/ULC-S702-09	Standard for mineral fiber thermal insulation for buildings (excluding sections 6.2.8 and 6.3.4)
CAN/ULC-S702-14	Standard for mineral fiber thermal insulation for buildings (excluding sections 6.2.8 and 6.3.6)
CAN/ULC-S702.1 2019	Standard for mineral fiber thermal insulation for buildings (excluding sections 6.2.8, 6.3.6)
CAN/ULC-S702.1 2021	Standard for mineral fiber thermal insulation for buildings (excluding sections 8.8, 9.6)
CAN/ULC-S703-09-R2015	Standard for cellulose fiber insulation (CFI) for buildings
CAN/ULC-S703-09-R2020	Standard for cellulose fiber insulation (CFI) for buildings
CAN/ULC-S704-11	Standard for thermal insulation, polyurethane and polyisocyanurate, boards, faced (excluding section 6.4.7)
CAN/ULC-S704.1-17	Standard for thermal insulation, polyurethane and polyisocyanurate, board, faced (excluding section 6.4.7)
CAN/ULC-S704.1-2022A	Standard for thermal insulation, polyurethane and polyisocyanurate, board, faced (excluding section 10.6)
CAN/ULC-S705.1.01	Standard for thermal insulation - spray applied rigid polyurethane foam, medium density - material specification (excluding sections 5.5.1, 5.5.5 and 5.5.10)

CAN/ULC-S705.1-15	Standard for thermal insulation – spray applied rigid polyurethane foam, medium density (excluding sections 5.5.1, 5.5.9 and 5.5.11)
CAN/ULC-S705.1-18	Standard for thermal insulation – spray applied rigid polyurethane foam, medium density (excluding sections 5.5.1, 5.5.8, and 5.5.10)
CAN/ULCS710.1: 2019	Standard for bead-applied one component polyurethane air sealant foam, part 1: material specification (excluding sections 10.4, 10.6 and 10.8)
CAN/ULCS710.1-11-R2018	Standard for thermal insulation – bead-applied one component polyurethane air sealant foam, part 1: material specification (excluding sections 6.5.1, 6.5.5, 6.5.8 and 6.5.10)
CAN/ULCS711.1: 2019	Standard for bead-applied two component polyurethane air sealant foam, part 1: material specification (excluding sections 10.1, 10.5, 10.7 and 10.8)
CAN/ULCS711.1-11-R2018	Standard for thermal insulation – bead-applied two component polyurethane air sealant foam, part 1: material specification (excluding sections 6.5.1, 6.5.5, 6.5.8 and 6.5.10)
CAN/ULCS712.1: 2017	Standard for thermal insulation – light density, open cell spray applied semi-rigid polyurethane foam – material specification (excluding sections 5.5.1, 5.5.6 and 5.5.8)
Miami-Dade (TAS) No. 110-2000	Testing requirements for physical properties of roof membranes, insulation, coatings, and other roofing components (section 8, roofing insulation only)