



Listing and Technical Evaluation Report™

A Duly Authenticated Report from an Approved Agency

Report No: 2601-123



Issue Date: July 7, 2026

Revision Date: August 3, 2026

Subject to Renewal: July 1, 2027

Rmax® Below Grade Insulation for Exterior Wall and Foundation

Trade Secret Report Holder:

Rmax®

Phone: 800-527-0890

Website: www.rmax.com

Email: technical@rmax.com

CSI Designations:

DIVISION: 06 00 00 - WOOD, PLASTICS AND COMPOSITES

Section: 06 16 00 - Sheathing

Section: 06 16 13 - Insulated Sheathing

Section: 06 16 53 - Moisture-Resistant Sheathing Board

DIVISION: 07 00 00 - THERMAL AND MOISTURE PROTECTION

Section: 07 20 00 - Thermal Protection

Section: 07 21 00 - Thermal Insulation

Section: 07 21 13 - Foam Board Insulation

Section: 07 25 00 - Water-Resistive Barriers/Weather Barriers

Section: 07 27 00 - Air Barriers

Section: 07 27 23 - Board Product Air Barriers

1 Innovative Product Evaluated¹

1.1 Rmax Below Grade Insulation

2 Product Description and Materials

2.1 The innovative product evaluated in this report is shown in **Figure 1**.



Figure 1. Rmax Below Grade Insulation



- 2.2 Rmax Below Grade Insulation is a non-structural Foam Plastic Insulating Sheathing (FPIS) panel consisting of a closed-cell rigid polyisocyanurate (polyiso) foam core bonded to reinforced aluminum facers on each side.
- 2.2.1 Rmax Below Grade Insulation conforms to ASTM C1289, Type 1, Class 1 and Class 2.
- 2.3 The closed-cell matrix of the foam core and the durable facers provide a multi-layered defense against water absorption and protection during backfill.
- 2.4 *Material Availability*
- 2.4.1 *Thickness:*
- 2.4.1.1 0.75" (19 mm) through 3" (76 mm)
- 2.4.2 *Standard Product Width:*
- 2.4.2.1 48" (1,219 mm)
- 2.4.3 *Standard Product Length:*
- 2.4.3.1 96" (2,438 mm)
- 2.4.3.2 108" (2,743 mm)
- 2.4.3.3 120" (3,048 mm)
- 2.4.4 Custom lengths, widths, and thicknesses are available upon request.
- 2.5 As needed, review material properties for design in **Section 6** and the regulatory evaluation in **Section 8**.

3 Definitions²

- 3.1 New Materials³ are defined as building materials, equipment, appliances, systems, or methods of construction, not provided for by prescriptive and/or legislatively adopted regulations, known as alternative materials.⁴ The design strength and permissible stresses shall be established by tests⁵ and/or engineering analysis.⁶
- 3.2 Duly authenticated reports⁷ and research reports⁸ are test reports and related engineering evaluations that are written by an approved agency⁹ and/or an approved source.¹⁰
- 3.2.1 This report utilizes intellectual property and/or trade secrets to create public domain material properties for commercial end-use.
- 3.2.1.1 This report protects confidential Intellectual Property and trade secrets under the regulation, 18.U.S.Code.90, also known as Defend Trade Secrets Act of 2016 (DTSA).¹¹
- 3.3 An approved agency is "approved" when it is ANAB ISO/IEC 17065 accredited. DrJ Engineering, LLC (DrJ) is accredited and listed in the ANAB directory.
- 3.4 An approved source is "approved" when a professional engineer (i.e., Registered Design Professional, hereinafter RDP) is properly licensed to transact engineering commerce. The regulatory authority governing approved sources is the state legislature via its professional engineering regulations.¹²
- 3.5 Testing and/or inspections conducted for this duly authenticated report were performed by an ISO/IEC 17025 accredited testing laboratory, an ISO/IEC 17020 accredited inspection body, and/or a licensed RDP.
- 3.5.1 The Center for Building Innovation (CBI) is ANAB¹³ ISO/IEC 17025 and ISO/IEC 17020 accredited.
- 3.6 The regulatory authority shall enforce¹⁴ the specific provisions of each legislatively adopted regulation. If there is a non-conformance, the specific regulatory section and language of the non-conformance shall be provided in writing¹⁵ stating the nonconformance and the path to its cure.
- 3.7 The regulatory authority shall accept duly authenticated reports from an approved agency and/or an approved source with respect to the quality and manner of use of new materials or assemblies as provided for in regulations regarding the use of alternative materials, designs, or methods of construction.¹⁶



- 3.8 ANAB is an International Accreditation Forum (IAF) Multilateral Recognition Arrangement (MLA) signatory. Therefore, recognition of certificates and validation statements issued by conformity assessment bodies accredited by all other signatories of the IAF MLA with the appropriate scope shall be approved.¹⁷ Thus, all ANAB ISO/IEC 17065 duly authenticated reports are approval equivalent,¹⁸ and can be used in any country that is an MLA signatory found at this link: <https://iaf.nu/en/recognised-abs/>
- 3.9 Approval equity is a fundamental commercial and legal principle.¹⁹

4 Applicable Local, State, and Federal Approvals; Standards; Regulations²⁰

4.1 Local, State, and Federal

- 4.1.1 Approved in all local jurisdictions pursuant to ISO/IEC 17065 duly authenticated report use, which includes, but is not limited to, the following featured local jurisdictions: Austin, Baltimore, Broward County, Chicago, Clark County, Dade County, Dallas, Detroit, Denver, DuPage County, Fort Worth, Houston, Kansas City, King County, Knoxville, Las Vegas, Los Angeles City, Los Angeles County, Miami, Nashville, New York City, Omaha, Philadelphia, Phoenix, Portland, San Antonio, San Diego, San Jose, San Francisco, Seattle, Sioux Falls, South Holland, St. Louis County, Texas Department of Insurance, and Wichita.²¹
- 4.1.2 Approved in all state jurisdictions pursuant to ISO/IEC 17065 duly authenticated report use, which includes, but is not limited to, the following featured states: California, Florida, New Jersey, Oregon, New York, Texas, Washington, and Wisconsin.²²
- 4.1.3 Approved by the Code of Federal Regulations Manufactured Home Construction: Pursuant to Title 24, Subtitle B, Chapter XX, Part 3282.14²³ and Part 3280²⁴ pursuant to the use of ISO/IEC 17065 duly authenticated reports.
- 4.1.4 Approved means complying with the requirements of local, state, or federal legislation.

4.2 Regulations

- 4.2.1 *IBC – 18, 21, 24: International Building Code®*
- 4.2.2 *IRC – 18, 21, 24: International Residential Code®*
- 4.2.3 *IECC – 18, 21, 24: International Energy Conservation Code®*
- 4.2.4 *IGCC – 18, 21, 24: International Green Construction Code®*
- 4.2.5 *CBC – 22, 25: California Building Code²⁵ (Title 24, Part 2)*
- 4.2.6 *CRC – 22, 25: California Residential Code²⁵ (Title 24, Part 2.5)*
- 4.2.7 *CEC – 22, 25: California Energy Code (Title 24, Part 6)*
- 4.2.8 *CALGreen – 22, 25: California Green Building Code (Title 24, Part 11)*
- 4.2.9 *FBC-B – 20, 23: Florida Building Code²⁶ – Building*
- 4.2.10 *FBC-R – 20, 23: Florida Building Code²⁶ – Residential*

4.3 Standards

- 4.3.1 *ASHRAE 90.1: Energy Standard for Sites and Buildings Except Low-Rise Residential Buildings*
- 4.3.2 *ASHRAE 189.1: Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings*
- 4.3.3 *ASTM C272: Standard Test Method for Water Absorption of Core Materials for Sandwich Constructions*
- 4.3.4 *ASTM C518: Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus*
- 4.3.5 *ASTM C1289: Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board*
- 4.3.6 *ASTM C1763: Standard Test Method for Water Absorption by Immersion of Rigid Cellular Plastics*



- 4.3.7 *ASTM D1621: Standard Test Method for Compressive Properties of Rigid Cellular Plastics*
- 4.3.8 *ASTM E84: Standard Test Method for Surface Burning Characteristics of Building Materials*
- 4.3.9 *ASTM E96: Standard Test Methods for Gravimetric Determination of Water Vapor Transmission of Materials*
- 4.3.10 *ASTM E2178: Standard Test Method for Determining Air Leakage Rate and Calculation of Air Permeance of Building Materials*

5 Listed²⁷

- 5.1 Equipment, materials, products, or services included in a List published by a nationally recognized testing laboratory (e.g., CBI), an approved agency (e.g., CBI and DrJ), and/or an approved source (e.g., DrJ), or other organization(s) concerned with product evaluation (e.g., DrJ), that maintains periodic inspection (e.g., CBI) of production of listed equipment or materials, and whose listing states either that the equipment or material meets nationally recognized standards or has been tested and found suitable for use in a specified manner.

6 Tabulated Properties Generated from Nationally Recognized Standards

6.1 General

- 6.1.1 Rmax Below Grade Insulation is used as protection board and continuous insulation in buildings constructed in accordance with the IBC and IRC.
- 6.1.2 Rmax Below Grade Insulation is a non-structural FPIS panel used as thermal insulation within the building envelope including, but not limited to, below-grade exterior walls, blind side walls, under-slab, slab-on-grade and perimeter slab applications.
 - 6.1.2.1 Rmax Below Grade Insulation does not contribute to foundation-wall strength, soil-retention capacity, lateral bracing, shear resistance, axial resistance, gravity-load resistance, or slab structural capacity.
 - 6.1.2.1.1 Foundation walls, slabs, footings, and supporting construction shall be designed independently in accordance with the adopted code and approved construction documents.
- 6.1.3 Foundation drainage, dampproofing, waterproofing, and drainage materials shall comply with the adopted codes and approved construction documents. Drainage materials, including composite drainage mats, may be used where compatible with the insulation and adjacent waterproofing or dampproofing system.
- 6.1.4 The Environmental Product Declaration (EPD) for Rmax Below Grade Insulation is available at www.polyiso.org/page/EPDs.
- 6.1.5 Where the application exceeds the limitations set forth herein, design shall be permitted in accordance with accepted engineering procedures, experience, and good technical judgment.

6.2 Compressive Strength

- 6.2.1 Rmax Below Grade Insulation has the load resistance properties shown in **Table 1**.

Table 1. Compressive Strength Properties of Rmax Below Grade Insulation

Product	Test Method	Results
Rmax Below Grade Insulation	ASTM D1621	25-psi minimum 30-psi minimum 40-psi minimum 60-psi minimum
SI: 1-psi = 6.89 kPa		



6.3 Thermal Resistance (R-Value)

- 6.3.1 Rmax Below Grade Insulation meets the continuous insulating requirements complying with the provisions of IRC Section N1102, IECC Section C402, and IECC Section R402.

Table 2. Thermal Properties

Nominal Thickness (in)	Thermal R-Value ¹ (°F·ft²·hr/BTU)
0.75	5.0
1.00	6.0
1.50	10.0
2.00	13.1
2.30	15.3
3.00	20.3

SI: 1 in = 25.4 mm; 1 °F·ft²·hr/BTU = 0.1761 K·m²/W
 1. Thermal values are determined by using ASTM C518 test method at 75° F mean temperature on material conditioned according to PIMA Technical Bulletin No. 101.

6.4 Water Resistance

- 6.4.1 Rmax Below Grade Insulation has the water-resistance properties shown in **Table 3**.

Table 3. Water Resistance Properties

Property	Test Methods	Results
Water Vapor Permeance	ASTM E96	< 0.1 perm
Water Absorption	ASTM C1763, Procedure B	< 0.2% Volume Change
	ASTM C272	≤ 0.3% Volume Change

SI: 1 perm [gr/(hr·ft²·inHg)] = 57.2 ng/(Pa·s·m²)

- 6.4.2 Rmax Below Grade Insulation is a Class 1 Vapor Retarder in accordance with IBC Table 1404.3(1).
 6.4.3 Insulation materials in ground contact shall have a water absorption rate no greater than 0.3% when tested in accordance with ASTM C272, per ASHRAE 90.1, Section 5.8.1.7.3.

6.5 Air Barrier

- 6.5.1 When installed in accordance with the manufacturer installation instructions and this report, Rmax Below Grade Insulation meets the requirements of IRC Section N1101.10.5, IECC Section R303.1.5, and IECC Section C402.6.2.3.1²⁸ for use as a component of the air barrier.
- 6.5.1.1 The air permeance of an air barrier material or air-impermeable insulation is defined by the IRC, IECC, and the Air Barrier Association of America (ABAA) as being no greater than 0.02 L/(s·m²) at 75 Pa pressure difference when tested in accordance with ASTM E2178.
- 6.5.2 Rmax Below Grade Insulation has the air barrier properties shown in **Table 4**.



Table 4. Air Barrier Material Properties

Property	Test Methods	Results
Air Permeance	ASTM E2178	< 0.02 L/(s·m ²)
Imperial: 1 L/(s·m ²) = 0.2 cfm/ft ²		

6.6 Fire Safety Performance

6.6.1 Surface Burning Characteristics:

- 6.6.1.1 Rmax Below Grade Insulation has the flame spread and smoke developed ratings shown in **Table 5**, when tested in accordance with ASTM E84, per IBC Section 2603.3 and IRC Section R303.3.²⁹

Table 5. Surface Burning Characteristics¹

Product Thickness (in)	Flame Spread Index	Smoke Developed Index	Classification
≥ 1"	≤ 25	< 450	Class A
< 1"	≤ 75	< 450	Class B
1. The ASTM E84 results are based on foam-core testing only.			

6.7 Fire Protection and Separation from Building Interior

- 6.7.1 Where Rmax Below Grade Insulation is installed on the exterior side of below-grade concrete or masonry foundation walls, below concrete slabs, or otherwise covered by earth/backfill and separated from the building interior by code-compliant concrete/masonry/slab construction, a separate thermal or ignition barrier is not required since the insulation is not exposed to the building interior.

- 6.8 Alternative techniques shall be permitted in accordance with accepted engineering practice and experience. These provisions for the use of alternative materials, designs, and methods of construction are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed herein. This includes, but is not limited to, the following areas of engineering: mechanics of materials, structures, building science, and fire science.

7 Certified Performance³⁰

- 7.1 All construction methods shall conform to accepted engineering practices to ensure durable, livable, and safe construction and shall demonstrate acceptable workmanship reflecting journeyman quality of work of the various trades.³¹
- 7.2 The strength and rigidity of the component parts and/or the integrated structure shall be determined by engineering analysis or by suitable load tests to simulate the actual loads and conditions of application that occur.³²

8 Regulatory Evaluation and Accepted Engineering Practice

- 8.1 Rmax Below Grade Insulation complies with the following legislatively adopted regulations and/or accepted engineering practice for the following reasons:
- 8.1.1 Performance in accordance with foam plastic requirements of IBC Section 2603 and IRC Section R303.³³
- 8.1.2 Performance for use as insulating sheathing (R-value) in accordance with IRC Section N1102, IECC Section C402, and IECC Section R402.



- 8.1.3 Evaluation of air permeance for use as a component of a continuous air barrier in accordance with IRC Section N1101.10.5, IECC Section R303.1.5, and IECC Section C402.6.2.3.1.³⁴
- 8.1.4 Surface burning characteristics in accordance with IBC Section 2603.3 and IRC Section R303.3.³⁵
- 8.1.5 Evaluation of load resistance properties, including compressive strength, to ensure bearing capacity in below grade applications.
- 8.1.6 Evaluation of moisture resistance properties, including water absorption and water vapor permeance, to ensure durability in below-grade exterior wall, blind side wall, under-slab, slab on grade, and perimeter slab applications.
- 8.2 Any building code, regulation and/or accepted engineering evaluations (e.g., research reports, duly authenticated reports, etc.) that are conducted for this Listing were performed by DrJ, which is an ISO/IEC 17065 accredited certification body and a professional engineering company operated by RDP or approved sources. DrJ is qualified³⁶ to practice product and regulatory compliance services within its scope of accreditation and engineering expertise,³⁷ respectively.
- 8.3 Engineering evaluations are conducted with DrJ's ANAB accredited ICS code scope of expertise, which is also its areas of professional engineering competence.

9 Installation

- 9.1 Installation shall comply with the approved construction documents, the manufacturer installation instructions, this report, and the applicable building code.
- 9.2 In the event of a conflict between the manufacturer installation instructions and this report, contact the manufacturer for counsel on the proper installation method.
- 9.3 *Installation Procedure*
 - 9.3.1 Rmax Below Grade Insulation shall be installed vertically or horizontally, in single or multiple layers as required, to achieve the specified thickness and thermal performance.
 - 9.3.1.1 Rmax Below Grade Insulation shall be installed with all edges tightly butted. Where the product is used as part of an air-barrier system, joints, penetrations, transitions, and terminations shall be sealed in accordance with the approved construction documents and manufacturer installation instructions.
 - 9.3.2 For CMU or concrete walls, secure the insulation using a quality grade construction adhesive compatible with both substrates. For other substrates (wood lagging, shotcrete, rock, earth), secure the insulation using appropriate fasteners, such as nails, soil pins, or power actuated fasteners.
 - 9.3.3 For under slab or slab on grade applications, the insulation may be laid in place on the prepared substrate or granular base.
 - 9.3.3.1 The substrate condition, placement sequence, protection during construction, and interface with vapor retarder or other control layers, if any, shall comply with the approved construction documents.
 - 9.3.4 For exterior walls, the bottom edge of the board shall rest on top of the footer and extend up to the sill plates, where applicable.

10 Substantiating Data

- 10.1 Testing has been performed under the supervision of a professional engineer and/or under the requirements of ISO/IEC 17025 as follows:
 - 10.1.1 Material properties testing in accordance with ASTM C1289
 - 10.1.2 Compressive strength in accordance with ASTM D1621
 - 10.1.3 Thermal resistance properties testing in accordance with ASTM C518



- 10.1.4 Water vapor permeance testing in accordance with ASTM E96
- 10.1.5 Water absorption testing in accordance with ASTM C1763 and ASTM C272
- 10.1.6 Air permeance testing in accordance with ASTM E2178
- 10.1.7 Flame spread and smoke developed rating tests in accordance with ASTM E84
- 10.2 Information contained herein may include the result of testing and/or data analysis by sources that are approved agencies, approved sources, and/or an RDP. Accuracy of external test data and resulting analysis is relied upon.
- 10.3 Where applicable, testing and/or engineering analysis are based upon provisions that have been codified into law through state or local adoption of regulations and standards. The developers of these regulations and standards are responsible for the reliability of published content. DrJ's engineering practice may use a regulation-adopted provision as the control. A regulation-endorsed control versus a simulation of the conditions of application to occur establishes a new material as being equivalent to the regulatory provision in terms of quality, strength, effectiveness, fire resistance, durability, and safety.
- 10.4 The accuracy of the provisions provided herein may be reliant upon the published properties of raw materials, which are defined by the grade mark, grade stamp, mill certificate, or duly authenticated reports from approved agencies and/or approved sources provided by the supplier. These are presumed to be minimum properties and relied upon to be accurate. The reliability of DrJ's engineering practice, as contained in this duly authenticated report, may be dependent upon published design properties by others.
- 10.5 *Testing and Engineering Analysis*
 - 10.5.1 The strength, rigidity, and/or general performance of component parts and/or the integrated structure are determined by suitable tests that simulate the actual conditions of application that occur and/or by accepted engineering practice and experience.³⁸
- 10.6 Where additional condition of use and/or regulatory compliance information is required, please search for Rmax Below Grade Insulation on the DrJ Certification website.

11 Findings

- 11.1 As outlined in **Section 6**, Rmax Below Grade Insulation has performance characteristics that were tested and/or meet applicable regulations. In addition, they are suitable for use pursuant to its specified purpose.
- 11.2 When used and installed in accordance with this duly authenticated report and the manufacturer installation instructions, Rmax Below Grade Insulation shall be approved for the following applications:
 - 11.2.1 Performance of foam plastics in accordance with IBC Section 2603 and IRC Section R303.³⁹
 - 11.2.2 Use as insulating sheathing in accordance with IRC Section N1102, IECC Section C402, and IECC Section R402.
 - 11.2.3 Use in below-grade exterior walls.
 - 11.2.4 Use in blind side walls.
 - 11.2.5 Use in under slab, slab-on-grade, and perimeter slab applications.
 - 11.2.6 Use on the exterior side of foundation walls.
 - 11.2.7 Use on the interior side of footings.
 - 11.2.8 Use as an air barrier material or air-impermeable insulation in accordance with IRC Section N1102.5, IECC Section R402.5,⁴⁰ and IECC Section C402.6.⁴¹
 - 11.2.9 Flame spread and smoke developed indices in accordance with IBC Section 2603.3 and IRC Section R303.3.⁴²
- 11.3 Any application specific issues not addressed herein can be engineered by an RDP. Assistance with engineering is available from Rmax.



11.4 IBC Section 104.2.3⁴³ (IRC Section R104.2.2⁴⁴ and IFC Section 104.2.3⁴⁵ are similar) in pertinent part state:

104.2.3 Alternative Materials, Design and Methods of Construction and Equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative is not specifically prohibited by this code and has been approved.

11.5 **Approved:**⁴⁶ Building regulations require that the building official shall accept duly authenticated reports.⁴⁷

11.5.1 An approved agency is “approved” when it is ANAB ISO/IEC 17065 accredited.

11.5.2 An approved source is “approved” when an RDP is properly licensed to transact engineering commerce.

11.5.3 Federal law, Title 18 US Code Section 242, requires that, where the alternative product, material, service, design, assembly, and/or method of construction is not approved, the building official shall respond in writing, stating the reasons why the alternative was not approved. Denial without written reason deprives a protected right to free and fair competition in the marketplace.

11.6 DrJ is a licensed engineering company, employs licensed RDPs and is an ANAB Accredited Product Certification Body – Accreditation #1131.

11.7 Through the IAF Multilateral Arrangement (MLA), this duly authenticated report can be used to obtain product approval in any jurisdiction or country because all ANAB ISO/IEC 17065 duly authenticated reports are equivalent.⁴⁸

12 Conditions of Use

12.1 As defined in **Section 6**, where material and/or engineering mechanics properties are created for load resisting design purposes, the resistance to the applied load shall not exceed the ability of the defined properties to resist those loads using the principles of accepted engineering practice.

12.2 Rmax Below Grade Insulation is a non-structural panel. Structural design of foundation walls, slabs, footings, lateral support, soil-retention systems, and load-bearing construction shall be provided independently of the insulation.

12.3 Use of the insulation board in areas where the probability of termite infestation is “*very heavy*” must be in accordance with IBC Section 2603.8 and IRC Section R305.1.⁴⁹

12.4 As listed herein, Rmax Below Grade Insulation shall be used:

12.4.1 In accordance with this report and the manufacturer installation instructions.

12.4.2 For conventional (positive-side) applications, insulation shall be installed after damp proofing or waterproofing has been applied to the concrete or masonry wall and prior to backfilling.

12.4.3 For blind-side applications, the insulation shall be installed against the earth retention system prior to concrete placement.

12.4.4 With all board edges tightly butted together and fitted snugly around penetrations.

12.5 When required by adopted legislation and enforced by the building official, also known as the Authority Having Jurisdiction (AHJ) in which the project is to be constructed:

12.5.1 Any calculations incorporated into the construction documents shall conform to accepted engineering practice and, when prepared by an approved source, shall be approved when signed and sealed.

12.5.2 This report and the installation instructions shall be submitted at the time of permit application.

12.5.3 At a minimum, this innovative product shall be installed per **Section 9**.

12.5.4 The review of this report by the AHJ shall comply with IBC Section 104.2.3.2 and IBC Section 105.3.1.



- 12.5.5 This innovative product has an internal quality control program and a third party quality assurance program in accordance with IBC Section 104.7.2, IBC Section 110.4, IBC Section 1703, IRC Section R104.7.2, and IRC Section R109.2.
- 12.5.6 The application of this innovative product in the context of this report is dependent upon the accuracy of the construction documents, implementation of installation instructions, inspection as required by IBC Section 110.3, IRC Section R109.2, and any other regulatory requirements that may apply.
- 12.6 The approval of this report by the AHJ shall comply with IBC Section 1707.1, where legislation states in part, *"the building official shall make, or cause to be made, the necessary tests and investigations; or the building official shall accept duly authenticated reports from approved agencies in respect to the quality and manner of use of new materials or assemblies as provided for in Section 104.2.3", all of IBC Section 104, and IBC Section 105.3.*
- 12.7 Design loads shall be determined in accordance with the regulations adopted by the jurisdiction in which the project is to be constructed and/or by the building designer (i.e., owner or RDP).
- 12.8 The actual design, suitability, and use of this report for any particular building, is the responsibility of the owner or the authorized agent of the owner.

13 Identification

- 13.1 Rmax Below Grade Insulation, as listed in **Section 1.1**, is identified by a label on the board or packaging material bearing the manufacturer name, product name, this report number, and other information to confirm code compliance.
- 13.2 Additional technical information can be found at www.rmax.com/rmax-below-grade-insulation-protection.

14 Review Schedule

- 14.1 This report is subject to periodic review and revision. For the latest version, visit www.drjcertification.org.
- 14.2 For information on the status of this report, please contact [DrJ Certification](#).



Issue Date: July 7, 2026

Supplement Revision Date: July 7, 2026

Subject to Renewal: July 1, 2027

CBC and CRC Supplement to Report Number 2601-123

REPORT HOLDER: Rmax

1 Evaluation Subject

1.1 Rmax Below Grade Insulation

2 Purpose and Scope

2.1 Purpose

2.1.1 The purpose of this Report Supplement is to show Rmax Below Grade Insulation, recognized in Report Number 2601-123 has also been evaluated for compliance with the codes listed below.

2.2 *Applicable Code Editions*

2.2.1 *CBC — 22, 25: California Building Code (Title 24, Part 2)*

2.2.2 *CRC — 22, 25: California Residential Code (Title 24, Part 2.5)*

3 Conclusions

3.1 Rmax Below Grade Insulation, described in Report Number 2601-123, complies with the CBC and CRC and is subject to the conditions of use described in this supplement.

3.2 Where there are variations between the IBC and IRC and the CBC and CRC applicable to this report, they are listed here:

3.2.1 CBC Section 104.11 replaces IBC Section 104.2.3 and IBC Section 104.2.3.2.

3.2.2 CBC Section 104.7 replaces IBC Section 104.7.2.

3.2.3 CBC Section 1707.1 replaces IBC Section 1707.1.

3.2.4 CBC Section 2603 replaces IBC Section 2603.

3.2.5 CBC Section 2603.3 replaces IBC Section 2603.3.

3.2.6 CRC Part IV Energy Conservation is not adopted and replaces IRC Section N1101.10.5, IRC Section N1102 and IRC Section N1102.5.

3.2.7 CRC Section R104.4 replaces IRC Section R104.7.2.

3.2.8 CRC Section R104.11 replaces IRC Section R104.2.2.

3.2.9 CRC Section R303 replaces IRC Section R303.

3.2.10 CRC Section R303.3 replaces IRC Section R303.3.



4 Conditions of Use

4.1 Rmax Below Grade Insulation, described in Report Number 2601-123, must comply with all of the following conditions:

4.1.1 All applicable sections in Report Number 2601-123.

4.1.2 The design, installation, and inspections are in accordance with additional requirements of CBC and CRC, as applicable.



Issue Date: July 7, 2026

Supplement Revision Date: July 7, 2026

Subject to Renewal: July 1, 2027

FBC Supplement to Report Number 2601-123

REPORT HOLDER: Rmax

1 Evaluation Subject

1.1 Rmax Below Grade Insulation

2 Purpose and Scope

2.1 Purpose

2.1.1 The purpose of this Report Supplement is to show Rmax Below Grade Insulation, recognized in Report Number 2601-123, has also been evaluated for compliance with the codes listed below as adopted by the Florida Building Commission.

2.2 *Applicable Code Editions*

2.2.1 *FBC-B—20, 23: Florida Building Code – Building*

2.2.2 *FBC-R—20, 23: Florida Building Code – Residential*

3 Conclusions

3.1 Rmax Below Grade Insulation, described in Report Number 2601-123, complies with the FBC-B and FBC-R and is subject to the conditions of use described in this supplement.

3.2 Where there are variations between the IBC and IRC and the FBC-B and FBC-R applicable to this report, they are listed here:

- 3.2.1 FBC-B Section 104 is reserved.
- 3.2.2 FBC-B Section 110.4 is reserved and replaces IBC Section 110.4.
- 3.2.3 FBC-B Section 104.6 is reserved and replaces IBC Section 104.4.
- 3.2.4 FBC-B Section 104.11 replaces IBC Section 104.2.3 and Section 104.2.3.2.
- 3.2.5 FBC-B Section 105.3 replaces IBC Section 105.3.
- 3.2.6 FBC-B Section 105.3.1 replaces IBC Section 105.3.1.
- 3.2.7 FBC-B Section 110.3 replaces IBC Section 110.3.
- 3.2.8 FBC-B Section 1707.1 replaces IBC Section 1707.1.
- 3.2.9 FBC-B Section 2306.1 replaces IBC Section 2306.1.
- 3.2.10 FBC-B Section 2306.3 replaces IBC Section 2306.3.
- 3.2.11 FBC-B Section 2603 replaces IBC Section 2603.
- 3.2.12 FBC-B Section 2603.3 replaces IBC Section 2603.3.
- 3.2.13 FBC-B Section 2603.8 replaces IBC Section 2603.8.
- 3.2.14 FBC-EC Section C402 replaces IECC Section C402.
- 3.2.15 FBC-EC Section C402.5 replaces IECC Section C402.6.



- 3.2.16 FBC-EC Section C402.5.1.2.1 replaces IECC Section C402.6.2.3.1.
- 3.2.17 FBC-EC Section R303.1.1.3 replaces IECC Section R303.1.5.
- 3.2.18 FBC-EC Section R402 replaces IECC Section R402.
- 3.2.19 FBC-EC Section R402.4 replaces IECC Section R402.5.
- 3.2.20 FBC-R Section N1101.1 replaces IRC Section N1101.10.5, IRC Section N1102, and IRC Section N1102.5.
- 3.2.21 FBC-R Section R104 and Section R109 are reserved.
- 3.2.22 FBC-R Section R316 replaces IRC Section R303.
- 3.2.23 FBC-R Section R316.3 replaces IRC Section R303.3.
- 3.2.24 FBC-R Section R318.1 replaces IRC Section R305.1.

4 Conditions of Use

- 4.1 Rmax Below Grade Insulation, described in Report Number 2601-123, must comply with all of the following conditions:
 - 4.1.1 All applicable sections in Report Number 2601-123.
 - 4.1.2 The design, installation, and inspections are in accordance with additional requirements of FBC-B Chapter 16 and Chapter 17, as applicable.



Notes

For more information, visit drjcertification.org or call us at 608-310-6748.

Capitalized terms and responsibilities are defined pursuant to the applicable building code, applicable reference standards, the latest edition of *TPI 1*, the *NDS*, *AISI S202*, *US professional engineering law*, *Canadian building code*, *Canada professional engineering law*, *Qualtim External Appendix A: Definitions/Commentary*, *Qualtim External Appendix B: Project/Deliverables*, *Qualtim External Appendix C: Intellectual Property and Trade Secrets*, definitions created within Design Drawings and/or definitions within Reference Sheets. Beyond this, terms not defined shall have ordinarily accepted meanings as the context implies. Words used in the present tense include the future; words stated in the masculine gender include the feminine and neuter; the singular number includes the plural and the plural, the singular.

<https://up.codes/viewer/mississippi/ibc-2024/chapter/17/special-inspections-and-tests#1702>

Alternative Materials, Design and Methods of Construction and Equipment: The provisions of any regulation code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by a regulation. Please review <https://www.justice.gov/atr/mission> and <https://up.codes/viewer/mississippi/ibc-2024/chapter/1/scope-and-administration#104.2.3>

<https://up.codes/viewer/mississippi/ibc-2024/chapter/17/special-inspections-and-tests#1706.2>:-:text=the%20design%20strengths%20and%20permissible%20stresses%20shall%20be%20established%20by%20tests

The design strengths and permissible stresses of any structural material shall conform to the specifications and methods of design of accepted engineering practice.

<https://up.codes/viewer/mississippi/ibc-2024/chapter/17/special-inspections-and-tests#1706.1>:-:text=Conformance%20to%20Standards-.The%20design%20strengths%20and%20permissible%20stresses,-of%20any%20structural

<https://up.codes/viewer/mississippi/ibc-2024/chapter/17/special-inspections-and-tests#1707.1>:-:text=the%20building%20official%20shall%20make%20or%20cause%20to%20be%20made%20C%20the%20necessary%20tests%20and%20investigations%3B%20or%20the%20building%20official%20shall%20accept%20duly%20authenticated%20reports%20from%20approved%20agencies%20in%20respect%20to%20the%20quality%20and%20manner%20of%20use%20of%20new%20materials%20or%20assemblies%20as%20provided%20for%20in%20Section%20104.2.3.

<https://up.codes/viewer/mississippi/ibc-2024/chapter/17/special-inspections-and-tests#1703.4.2>

https://up.codes/viewer/mississippi/ibc-2024/chapter/2/definitions#approved_agency

https://up.codes/viewer/mississippi/ibc-2024/chapter/2/definitions#approved_source

<https://www.law.cornell.edu/uscode/text/18/1832> (b) Any organization that commits any offense described in subsection (a) shall be fined not more than the greater of \$5,000,000 or 3 times the value of the stolen trade secret to the organization, including expenses for research and design and other costs of reproducing the trade secret that the organization has thereby avoided. The federal government and each state have a [public records act](#). To follow DTSA and comply state public records and trade secret legislation requires approval through ANAB ISO/IEC 17065 accredited certification bodies or approved sources. For more information, please review this website: [Intellectual Property and Trade Secrets](#).

<https://www.nspe.org/resources/issues-and-advocacy/professional-policies-and-position-statements/regulation-professional> AND <https://apassociation.org/list-of-engineering-boards-in-each-state-archive/>

<https://www.cbiteest.com/accreditation/>

<https://up.codes/viewer/mississippi/ibc-2024/chapter/1/scope-and-administration#104.1>:-:text=directed%20to%20enforce%20the%20provisions%20of%20this%20code

<https://up.codes/viewer/mississippi/ibc-2024/chapter/1/scope-and-administration#104.2.3> AND <https://up.codes/viewer/mississippi/ibc-2024/chapter/1/scope-and-administration#105.3.1>

<https://up.codes/viewer/mississippi/ibc-2024/chapter/17/special-inspections-and-tests#1707.1>

<https://iaf.nu/en/about-iaf-mla/#>:-:text=Once%20an%20accreditation%20body%20is%20a%20signatory%20of%20the%20IAF%20MLA%2C%20it%20is%20required%20to%20recognise%20certificates%20and%20validation%20and%20verification%20statements%20issued%20by%20conformity%20assessment%20bodies%20accredited%20by%20all%20other%20signatories%20of%20the%20IAF%20MLA%2C%20with%20the%20appropriate%20scope

True for all ANAB accredited product evaluation agencies and all International Trade Agreements.

<https://www.justice.gov/crt/deprivation-rights-under-color-law> AND <https://www.justice.gov/atr/mission>

Unless otherwise noted, the links referenced herein use un-amended versions of the 2024 International Code Council (ICC) 2024 International Code Council (ICC) model codes as foundation references. Mississippi versions of the *IBC 2024* and the *IRC 2024* are un-amended. This material, product, design, service and/or method of construction also complies with the 2000-2012 versions of the referenced codes and the standards referenced therein. As pertinent to this technical and code compliance evaluation, CBI and/or DrJ staff have reviewed any state or local regulatory amendments to assure this report is in compliance.

See [Adoptions by Publisher](#) for the latest adoption of a non-amended or amended model code by the local jurisdiction. <https://up.codes/codes/general>

See [Adoptions by Publisher](#) for the latest adoption of a non-amended or amended model code by state. <https://up.codes/codes/general>

<https://www.ecfr.gov/current/title-24/subtitle-B/chapter-XX/part-3282/subpart-A/section-3282.14>

<https://www.ecfr.gov/current/title-24/subtitle-B/chapter-XX/part-3280>

All references to the CBC and CRC are the same as the 2024 IBC and 2024 IRC unless otherwise noted in the California Supplement at the end of this report.

All references to the FBC-B and FBC-R are the same as the 2024 IBC and 2024 IRC unless otherwise noted in the Florida Supplement at the end of this report.

<https://www.ecfr.gov/current/title-24/subtitle-B/chapter-XX/part-3280#p-3280.2>(Listed%20or%20certified); <https://up.codes/viewer/mississippi/ibc-2024/chapter/2/definitions#listed> AND <https://up.codes/viewer/mississippi/ibc-2024/chapter/2/definitions#labeled>

2021 IECC Section C402.5.1.3 AND 2018 IECC Section C402.5.1.2.1

2021 IRC Section R316.3

<https://up.codes/viewer/mississippi/ibc-2024/chapter/17/special-inspections-and-tests#1703.4>

<https://www.ecfr.gov/current/title-24/subtitle-B/chapter-XX/part-3280#>:-:text=All%20construction%20methods%20shall%20be%20in%20conformance%20with%20accepted%20engineering%20practices%20to%20insure%20durable%2C%20livable%2C%20and%20safe%20housing%20and%20shall%20demonstrate%20acceptable%20workmanship%20reflecting%20journeyman%20quality%20of%20work%20of%20the%20various%20trades



<https://www.ecfr.gov/current/title-24/subtitle-B/chapter-XX/part-3280#:~:text=The%20strength%20and%20rigidity%20of%20the%20component%20parts%20and/or%20the%20integrated%20structure%20shall%20be%20determined%20by%20engineering%20analysis%20or%20by%20suitable%20load%20tests%20to%20simulate%20the%20actual%20loads%20and%20conditions%20of%20application%20that%20occur>

2021 IRC Section R316

2021 IECC Section C402.5.1.3 AND 2018 IECC Section C402.5.1.2.1

2021 IRC Section R316.3

Qualification is performed by a legislatively defined Accreditation Body. ANSI National Accreditation Board (ANAB) is the largest independent accreditation body in North America and provides services in more than 75 countries. DrJ is an ANAB accredited product certification body.

<https://anabpd.ansi.org/Accreditation/product-certification/AllDirectoryDetails?prgID=1&orgID=2125&statusID=4#:~:text=Bill%20Payment%20Date-,Accredited%20Scopes-,13%20ENVIRONMENT.%20HEALTH>

See Code of Federal Regulations (CFR) Title 24 Subtitle B Chapter XX Part 3280 for definition: <https://www.ecfr.gov/current/title-24/subtitle-B/chapter-XX/part-3280>

2021 IRC Section R316

2021 IECC Section R402.4

2021 IECC Section C402.5

2021 IRC Section R316.3

2021 IBC Section 104.11

2021 IRC Section R104.11

2018: <https://up.codes/viewer/wyoming/ifc-2018/chapter/1/scope-and-administration#104.9> AND 2021: <https://up.codes/viewer/wyoming/ibc-2021/chapter/1/scope-and-administration#104.11>

Approved is an adjective that modifies the noun after it. For example, Approved Agency means that the Agency is accepted officially as being suitable in a particular situation. This example conforms to IBC/IRC/IFC Section 201.4 (<https://up.codes/viewer/mississippi/ibc-2024/chapter/2/definitions#201.4>) where the building code authorizes sentences to have an ordinarily accepted meaning such as the context implies.

<https://up.codes/viewer/mississippi/ibc-2024/chapter/17/special-inspections-and-tests#1707.1>

Multilateral approval is true for all ANAB accredited product evaluation agencies and all International Trade Agreements.

2021 IRC Section R318.1