Listing and Technical Evaluation Report™

A Duly Authenticated Report from an Approved Agency

Report No: 2209-01

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Subject to Renewal: January 1, 2028

Use of EnergyShield® XR Insulation in Areas of "Very Heavy" Probability of Termite Infestation

Trade Secret Report Holder:

Atlas® Roofing Corporation

Phone: 800-388-6134 Website: atlasrwi.com

CSI Designations:

DIVISION: 07 00 00 - THERMAL AND MOISTURE PROTECTION

Section: 07 21 00 - Thermal Insulation

DIVISION: 31 00 00 - EARTHWORK

Section: 31 31 00 - Soil Treatment

Section: 31 31 16 - Termite Control

1 Innovative Product Evaluated[1]

1.1 EnergyShield XR

2 Product Description and Materials

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

Figure 1. EnergyShield XR Insulation Board

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2.2 EnergyShield XR insulation boards are ASTM C1289 Type I, Class 1 and 2 compliant Foam Plastic Insulating Sheathing (FPIS) comprised of a rigid closed-cell polyisocyanurate foam core bonded to impermeable foil facers on both sides to provide continuous insulation for foundation walls and under slab construction.

2.3 *Material Availability*

2.3.1 *Thickness*

2.3.1.1 $^1/_2$" (13 mm) through 4" (102 mm)

2.3.2 *Standard Product Width*

2.3.2.1 48" (1,219 mm)

2.3.3 *Standard Lengths*

2.3.3.1 96" (2,438 mm)

2.3.3.2 108" (2,743 mm)

2.4 As needed, review material properties for design in **Section 6** and the regulatory evaluation in **Section 8**.

3 Definitions[2]

3.1 New Materials[3] 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 tests[5] and/or engineering analysis.[6]

3.2 Duly authenticated reports[7] and research reports[8] are test reports and related engineering evaluations that are written by an approved agency[9] 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.US.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 ANAB[13] ISO/IEC 17025 and ISO/IEC 17020 accredited.

3.6 The regulatory authority shall enforce[14] 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 writing[15] 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]

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4 Applicable Local, State, and Federal Approvals; Standards; Regulations[20]

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 3282.14[23] and Part 3280[24] 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®*

4.3 *Standards*

4.3.1 *ASTM C272: Standard Test Method for Water Absorption of Core Materials for Sandwich Constructions*

4.3.2 *ASTM C1289: Standard Specification for Faced Rigid, Cellular Polyisocyanurate Thermal Insulation Board*

5 Listed[25]

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 EnergyShield XR brand insulation complies with IBC Chapter 26 and IRC Section R303[26] for the use of foam plastics in building construction.

6.2 EnergyShield XR brand insulation is used as continuous insulation as required in some climate zones on wood-frame walls, basement walls, crawl space walls, and under slabs, per IRC Table N1102.1.3,[27] IECC Section C402.1.3, and IECC Table R402.1.3.[28]

6.2.1 EnergyShield XR brand insulation is often used in these applications due to its high resistance to thermal energy loss per inch of thickness.

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6.3 The IRC requires wood-framed buildings to be protected from termite damage, no matter what sheathing or cladding is applied.

> R305.1 Subterranean Termite Control Methods[29]
>
> In areas subject to damage from termites as indicated by Table R301.2[30] methods of protection shall be one, or a combination, of the following methods:
>
> 1. Chemical termiticide treatment in accordance with Section R305.2.[31]
> 2. Termite-baiting system installed and maintained in accordance with the label.
> 3. Pressure-preservative-treated wood in accordance with the provisions of Section R304.1.[32]
> 4. Naturally durable termite-resistant wood.
> 5. Physical barriers in accordance with Section R305.3[33] and used in locations as specified in Section R304.1.[34]
> 6. Cold-formed steel framing in accordance with Sections R505.2.1 and R603.2.1.

6.4 The IBC does not contain a similar list of termite control methods. However, IBC Section 2304.12 describes methods to protect wood framing against decay and termites. These methods are outside the scope of this report since they do not relate to the use of FPIS.

6.5 Both the IBC and IRC define the probability of termite infestation with the map shown in **Figure 2**. IBC Figure 2603.8 and IRC Figure R305.4[35] are identical.

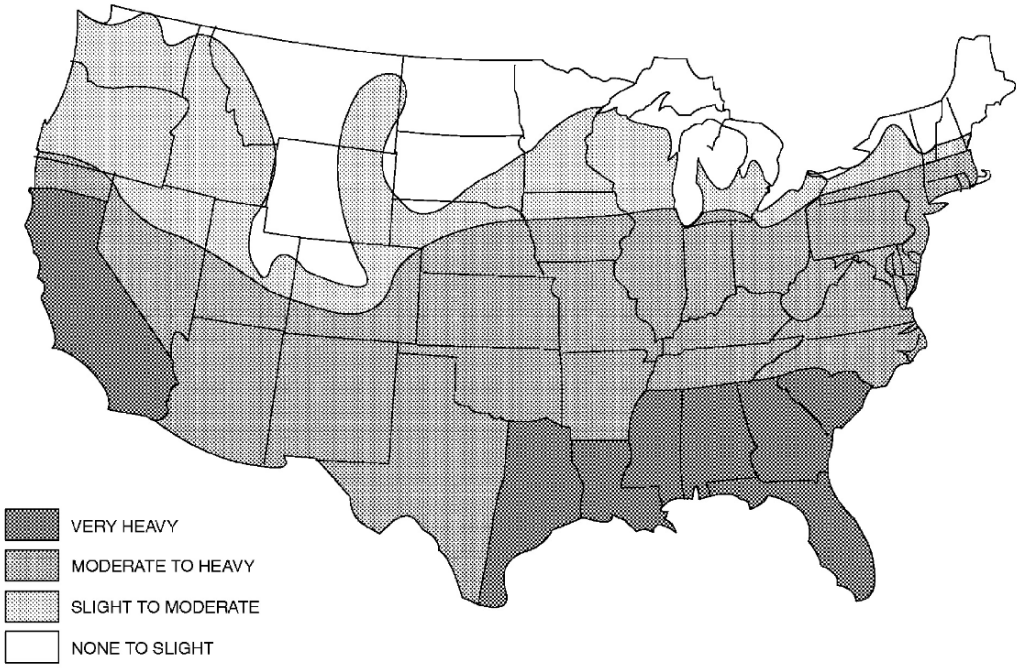

Figure 2. Termite Infestation Probability Map

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6.6 Beyond the general provisions for protection of wood structures against termites, use of foam plastic insulation in areas subject to *"very heavy"* termite infestation probability is found in both the IBC and IRC.

> IBC Section 2603.8 Protection Against Termites
>
> In areas where the probability of termite infestation is very heavy in accordance with Figure 2603.8, extruded and expanded polystyrene, polyisocyanurate and other foam plastics shall not be installed on the exterior face or under interior or exterior foundation walls or slab foundations located below grade. The clearance between foam plastics installed above grade and exposed earth shall be at least 6 inches (152 mm).
>
> Exceptions:
>
> 1. Buildings where the structural members of walls, floors, ceilings, and roofs are entirely of noncombustible materials or preservative-treated wood.
> 2. An approved method of protecting the foam plastic and structure from subterranean termite damage is provided.
> 3. On the interior side of basement walls.

> IRC Section R305.4 Foam Plastic Protection[36]
>
> In areas where the probability of termite infestation is "*very heavy*" as indicated in Figure R305.4,[37] extruded and expanded polystyrene, polyisocyanurate and other foam plastics shall not be installed on the exterior face or under interior or exterior foundation walls or slab foundations located below grade. The clearance between foam plastics installed above grade and exposed earth shall be at least 6 inches (152 mm).
>
> Exceptions:
>
> 1. Buildings where the structural members of walls, floors, ceilings and roofs are entirely of noncombustible materials or pressure-preservative-treated wood.
> 2. When in addition to the requirements of Section R305.1,[38] an approved method of protecting the foam plastic and structure from subterranean termite damage is used.
> 3. On the interior side of basement walls.

6.7 Specifically, the use of FPIS in the following three locations is addressed as needing special consideration:

6.7.1 Under slab foundations below grade

6.7.2 On the exterior face of foundation walls

6.7.3 Under interior or exterior foundation walls

6.8 In areas subject to *"very heavy"* termite infestation probability, the use of foam plastic insulation is permitted in the following circumstances, per the exceptions given in IBC Section 2603.8 and IRC Section R305.4:[39]

6.8.1 ***Exception #1****:* Buildings where the structural members of walls, floors, ceilings, and roofs are entirely of noncombustible materials or preservative-treated wood.

6.8.2 ***Exception #2****:* An approved method of protecting the foam plastic and structure from subterranean termite damage is used.

6.8.3 ***Exception #3****:* On the interior side of basement walls.

6.9 To comply with **Exception #2**, the following methods can be considered for approval for the protection of the FPIS in *"very heavy"* termite infestation probability areas:

6.9.1 Chemical termiticide treatment of the soil with retreatment as required, per the termiticide label (IRC Section R305.2[40]), and which is approved for use in *"very heavy"* termite infested areas.

6.9.2 Protection of EnergyShield XR brand insulation with a physical barrier product that is approved for use in *"very heavy"* termite infested areas, and that prevents access by the termites to the foam plastic insulation (IRC Section R305.3[41]). These products may include:

6.9.2.1 Approved physical coverings or approved coatings that prevent access to the foam by termites

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6.9.2.2 Termite-resistant soils, gravels, or sands

6.9.2.3 Use of termite barriers that prevent termites from accessing the wood framing through hidden pathways

6.10 FPIS is not a food source for the termites. However, FPIS may serve as a pathway for termites to travel through, causing damage that is not visible for inspection.

6.11 Products called termite shields do not necessarily protect against termites as they generally provide only a physical deterrent. However, they may make inspection easier by exposing termite activity. These products need to be used in conjunction with another method of protection in accordance with IRC Section R305.3:[42]

> Approved physical barriers, such as metal or plastic sheeting or collars specifically designed for termite prevention, shall be installed in a manner to prevent termites from entering the structure. Shields placed on top of an exterior foundation wall shall be used only if in combination with another method of protection.

6.12 The following details show the use of EnergyShield XR brand insulation on the exterior side of foundation walls and are compliant with the IBC and IRC for use in areas of *"very heavy"* probability of termite infestation.

6.12.1 With stucco veneer (see **Figure 3**):

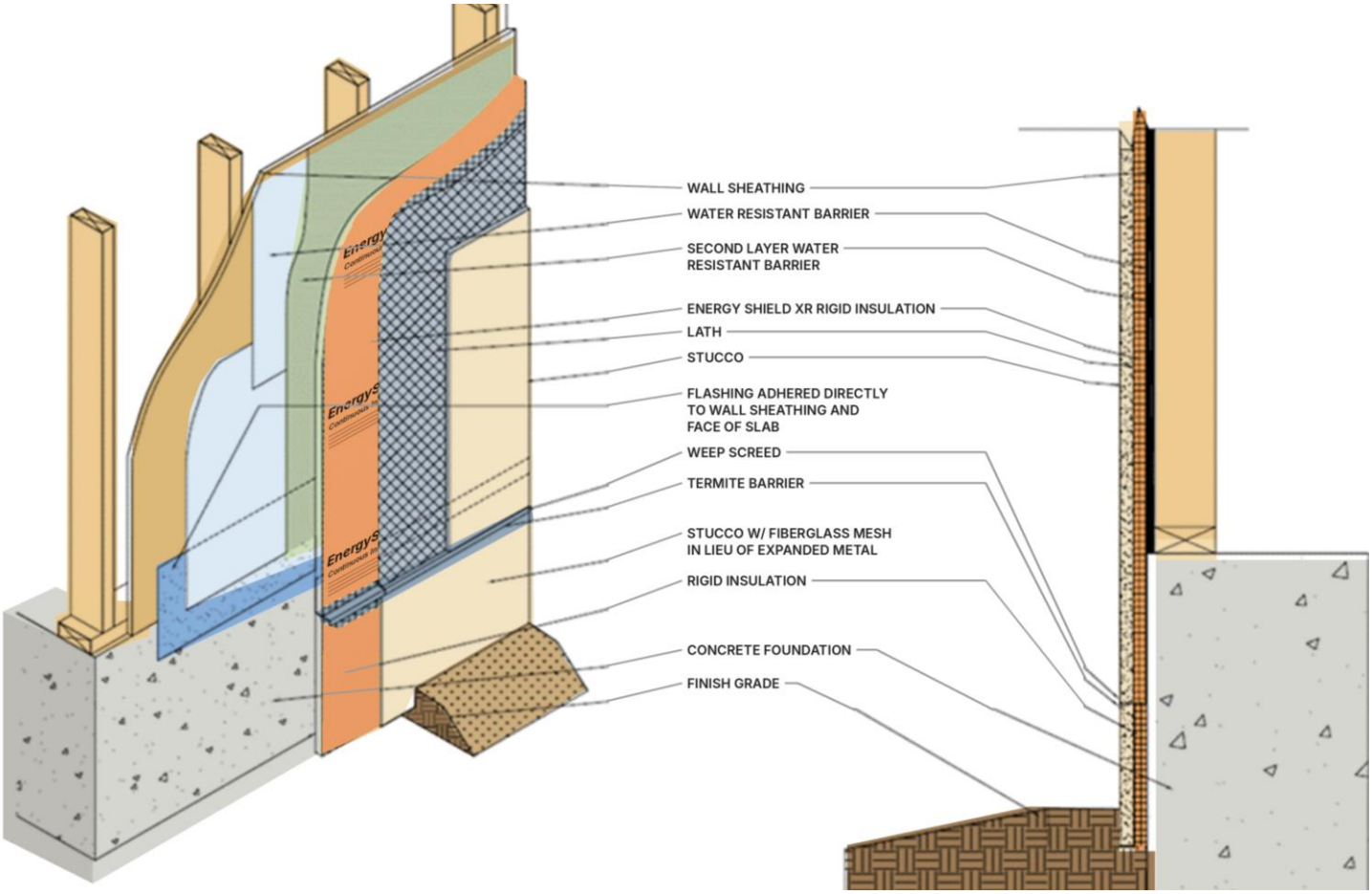

Figure 3. Stucco Veneer

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6.12.2 With stone masonry veneer (see **Figure 4**):

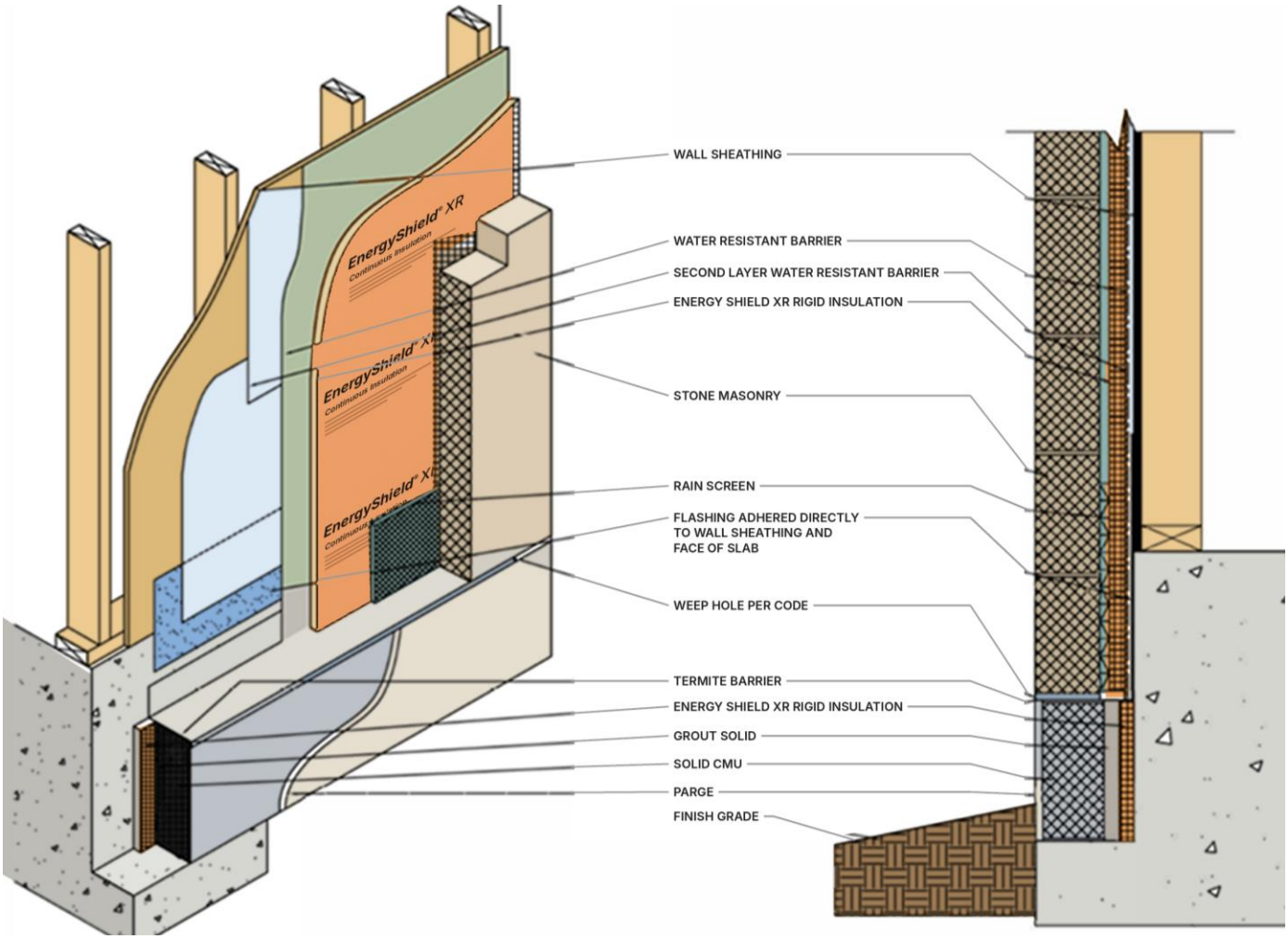

Figure 4. Stone Masonry Veneer

6.13 *Water Absorption*

6.13.1 EnergyShield XR has been tested in accordance with ASTM C272, Procedure A, and is found to have a water absorption of less than 0.3% by volume after 24 hours of immersion.

6.14 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.

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7 Certified Performance[43]

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.[44]

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.[45]

8 Regulatory Evaluation and Accepted Engineering Practice

8.1 EnergyShield XR complies with the following legislatively adopted regulations and/or accepted engineering practice for the following reasons:

8.1.1 This report evaluates EnergyShield XR brand insulation for the following:

8.1.1.1 Use in areas designated by the applicable building code as requiring protection from subterranean termites.

8.1.1.2 Use in areas designated by the applicable building code as *"very heavy"* probability of termite infestation.

8.1.1.3 Water absorption in accordance with ASTM C272, Procedure A.

8.1.2 Specifically, EnergyShield XR brand insulation is evaluated for use in the following applications:

8.1.2.1 Under slab foundations below grade

8.1.2.2 On the interior or exterior face of foundation walls

8.1.2.3 Under interior or exterior foundation walls

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 qualified[46] to practice product and regulatory compliance services within its scope of accreditation and engineering expertise,[47] 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 For application details not covered in this report, use of EnergyShield XR brand insulation is permitted, provided the application is approved and meets the intent of the applicable code.

9.4 Installation in areas designated as *"very heavy"* termite infestation probability must comply with IBC Section 2603.8 or IRC Section R305.4.[48]

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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 Water absorption testing in accordance with ASTM C272, Procedure A

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.[49]

10.6 Where additional condition of use and/or regulatory compliance information is required, please search for EnergyShield XR on the DrJ Certification website.

11 Findings

11.1 As outlined in **Section 6**, EnergyShield XR has performance characteristics that were tested and/or meet applicable regulations and 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, EnergyShield XR brand insulation shall be approved for the following applications:

11.2.1 Installation below grade in areas designated as *"very heavy"* termite infestation probability in the following locations:

11.2.1.1 Under slab foundations below grade

11.2.1.2 On the interior or exterior face of foundation walls

11.2.1.3 Under interior or exterior foundation walls

11.2.2 Installation below grade in areas requiring a water absorption of less than 0.3% by volume when tested in accordance with ASTM C272, Procedure A.

11.3 Any application specific issues not addressed herein can be engineered by an RDP. Assistance with engineering is available from Atlas Roofing Corporation.

11.4 IBC Section 104.2.3[50] (IRC Section R104.2.2[51] and IFC Section 104.2.3[52] 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.

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11.5 **Approved:**[53] Building regulations require that the building official shall accept duly authenticated reports.[54]

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.[55]

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 When used, chemical termiticides shall be applied in accordance with the manufacturer instructions and shall comply with all applicable state and federal regulations pertaining to their use.

12.3 Installation of the methods of protection shall be in accordance with the installation instructions provided by the manufacturer of the product used for protection against termites.

12.4 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:

12.4.1 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.

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

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

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

12.4.5 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.

12.4.6 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.

12.5 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.

12.6 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).

12.7 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.

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13 Identification

13.1 EnergyShield XR, 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 atlasrwi.com.

14 Review Schedule

14.1 This report is subject to periodic review and revision. For the latest version, visit drjcertification.org.

14.2 For information on the status of this report, please contact DrJ Certification.

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Notes

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

2 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 Appendix A: Definitions/Commentary, Qualtim Appendix B: Project/Deliverables, Qualtim 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 includes the singular.

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

4 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

5 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

6 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

7 https://up.codes/viewer/mississippi/ibc-2024/chapter/17/special-inspections-and-tests#1707.1:~:text=the%20building%20official%20shall%20make%2C%20or%20cause%20to%20be%20made%2C%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.

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

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

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

11 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.

12 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/

13 https://www.cbitest.com/accreditation/

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

15 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

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

17 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

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

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

20 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 2000-2021 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.

21 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

22 See Adoptions by Publisher for the latest adoption of a non-amended or amended model code by state. https://up.codes/codes/general

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

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

25 https://www.ecfr.gov/current/title-24/subtitle-B/chapter-XX/part-3280#p-3280.2(Listed%20or%20certified); https://up.codes/viewer/colorado/ibc-2021/chapter/2/definitions#listed_ AND https://up.codes/viewer/colorado/ibc-2021/chapter/2/definitions#labeled_

26 2021 IRC Section R316

27 2018 IRC Table N1102.1.2

28 2018 IECC Table R402.1.2

29 2021 IRC Section R318.1

30 2018 IRC Table R301.2(1)

31 2021 IRC Section R318.2

32 2021 IRC Section R317.1

33 2021 IRC Section R318.3

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34 2021 IRC Section R317.1

35 2021 IRC Figure R318.4 AND 2018 IRC Figure R301.2(7)

36 2021 IRC Section R318.4

37 2021 IRC Figure R318.4 AND 2018 IRC Figure R301.2(7)

38 2021 IRC Section R318.1

39 2021 IRC Section R318.4

40 2021 IRC Section R318.2

41 2021 IRC Section R318.3

42 2021 IRC Section R318.3

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

44 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

45 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

46 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.

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

48 2021 IRC Section R318.4

49 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

50 2021 IBC Section 104.11

51 2021 IRC Section R104.11

52 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

53 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.

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

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

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