Infinish ES & Infinish ES2 **TER No. 1405-01**

Fire Performance in Interior Exposed Conditions

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DIVISION: 07 00 00 – THERMAL AND MOISTURE PROTECTION
Section: 07 21 00 – Thermal Insulation
Section: 07 27 00 – Air Barriers

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1. Products Evaluated:

1.1. Infinish ES

1.2. Infinish ES2

1.1. For For the most recent version of this Technical Evaluation Report (TER), visit drjengineering.org. For more detailed state professional engineering and code compliance legal requirements and references, visit drjengineering.org/statelaw. DrJ is fully compliant with all state professional engineering and code compliance laws.

1.2. This TER can be used to obtain product approval in any country that is an IAF MLA Signatory (all countries found here) and covered by an IAF MLA Evaluation per the Purpose of the MLA (as an example, see letter to ANSI from the Standards Council of Canada). Manufacturers can go to jurisdictions in the U.S., Canada and other IAF MLA Signatory Countries and have their products readily approved by authorities having jurisdiction using DrJ's ANSI accreditation.

1.3. Building code regulations require that evaluation reports are provided by an approved agency meeting specific requirements, such as those found in *IBC* Section 1703. Any agency accredited in accordance with ANSI ISO/IEC 17065 meets this requirement within ANSI's scope of accreditation. For a list of accredited agencies, visit ANSI's website. For more information, see drjcertification.org.

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1.4. Requiring an evaluation report from a specific private company (i.e. ICC-ES, IAPMO, CCMC, DrJ, etc.) can be viewed as discriminatory and is a violation of international, federal, state, provincial and local anti-trust and free trade regulations.

1.5. DrJ's code compliance work:

1.5.1. Conforms to code language adopted into law by individual states and any relevant consensus based standard such as an ANSI or ASTM standard.

1.5.2. Complies with accepted engineering practice, all professional engineering laws and by providing an engineer's seal DrJ takes professional responsibility for its specified scope of work.

2. Applicable Codes and Standards:[1]

2.1. *2012, 2015 and 2018 International Building Code* (*IBC*)

2.2. *2012, 2015 and 2018 International Residential Code* (*IRC*)

2.3. *2014 and 2017 Florida Building Code* (*FBC*)

2.4. *ANSI/AWC – National Design Specification (NDS) for Wood Construction*

2.5. *ASTM C1289 – Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board*

2.6. *ASTM C1371 – Test Method for Determination of Emittance of Materials near Room Temperature Using Portable Emissometers*

2.7. *ASTM D1929 – Standard Test Method for Determining Ignition Temperature of Plastics*

2.8. *ASTM E84 – Standard Test Method for Surface Burning Characteristics of Building Materials*

2.9. *ASTM E119 – Standard Test Methods for Fire Tests of Building Construction and Materials*

2.10. *ASTM E136 – Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°*

2.11. *ASTM E1354 – Standard Test Method for Heat and Visible Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter*

2.12. *NFPA 259 – Standard Test Method for Potential Heat of Building Materials*

2.13. *NFPA 285 – Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components*

2.14. *NFPA 286 – Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth*

2.15. *UL 263 – Fire Tests of Building Construction and Materials*

2.16. *UL 723 – Test for Surface Burning Characteristics of Building Materials and Flammability Ratings*

3. Performance Evaluation:

3.1. Infinish ES, Infinish ES2 were evaluated to determine:

3.1.1. Performance for use in buildings of Type I-IV construction in accordance with *IBC* Section 2603.5.

3.1.1.1. Performance in accordance with *UL 723* for flame spread and smoke development ratings in accordance with *IBC* Section 2603.3 and 2603.5.4.

3.1.1.2. Performance for use without a thermal barrier in accordance with *IBC* Section 2603.4 and 2603.5.2.

3.1.1.3. Performance with regard to the potential heat generated by the foam plastic insulated sheathing (FPIS) in accordance with *IBC* Section 2603.5.3.

3.1.1.4. Performance with regard to vertical and lateral fire propagation in accordance with *IBC* Section 2603.5.5.

[1] Unless otherwise noted, all references in this code compliant technical evaluation report (TER) are from the 2018 version of the codes and the standards referenced therein, including, but not limited to, *ASCE 7*, *SDPWS* and *WFCM*. This product also complies with the 2000-2015 versions of the *IBC* and *IRC* and the standards referenced therein. As required by law, where this TER is not approved, the building official shall respond in writing, stating the reasons this TER was not approved. For variations in state and local codes, if any see Section 8.

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3.1.1.5. Performance with regard to ignition in accordance with *IBC* Section 2603.5.7.

3.1.1.6. Performance with regard to fire resistance rated wall assemblies in accordance with *IBC* Section 2603.5.1.

3.1.1.7. The emissivity of the material in accordance with *ASTM C1371*.

3.1.2. Performance for use in buildings of Type V construction in accordance with *IBC* Section 2603 and *IRC* Section R316.

3.2. Any code compliance issues not specifically addressed in this section are outside the scope of this evaluation.

4. Product Description and Materials:

4.1. Infinish ES and Infinish ES2 are proprietary FPIS.

4.1.1. Infinish ES and Infinish ES2 are polyisocyanurate insulation boards that include a coated aluminum foil facer material on the front side and a reflective aluminum facer on the back side (*ASTM C1289* Type I). The products are considered Class I vapor retarders at all thicknesses.

4.1.2. Infinish ES sheathing is an *ASTM C1289* Class 1 sheathing.

4.1.3. Infinish ES2 has a glass fiber reinforced polyiso core, which qualifies it as a Class 2 sheathing in accordance with *ASTM C1289*.



Figure 1: Infinish ES & Infinish ES2

4.2. Material Availability

4.2.1. Thickness: 1/2" (13 mm) through 4" (76 mm)

4.2.2. Standard product width: 48" (1219 mm)

4.2.3. Standard lengths: 96" (2438 mm) and 108" (2743 mm)

5. Applications:

5.1. General

5.1.1. The insulation boards are FPIS complying with *IBC* Section 2603 and *IRC* Section R316.

5.1.2. The insulation boards are used in buildings of Type I through V construction in accordance with *IBC* Section 2603.4, 2603.5, and 2603.9[2], and in residential construction in accordance with *IRC* Section R316.

5.1.3. Infinish ES and Infinish ES2 have an emittance value for the reflective side of less than 0.1, as measured by *ASTM C1371*.

[2] *2012 IBC* Section 2603.10

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5.2. Fire Safety Performance

5.2.1. Surface Burn Characteristics

Product Name	Flame Spread	Smoke Developed
Infinish ES & Infinish ES2[1]	< 25	< 450
1. Foam core tested in accordance with *UL 723*. Flame spread and smoke developed numbers are shown for comparison purposes only and are not intended to represent the performance of Infinish ES, Infinish ES2 and related components under actual fire conditions.		

Table 1: Fire Performance of Infinish ES & Infinish ES2

5.2.2. Infinish ES Insulation panels were tested in accordance with *NFPA 286* on walls and on ceilings and have met the acceptance criteria of *IBC* Section 803.2 for use on either walls only or ceilings only without a thermal barrier, in accordance with *IBC* Section 2603.4, 2603.5.2 and 2603.9.

5.2.2.1. In addition, engineering analysis was performed to compare Infinish ES and Infinish ES2 sheathing with respect to their flammability characteristics.

5.2.2.2. Testing in accordance with the following test methods was compared for both of the products to determine the similarities between the products.

5.2.2.2.1. *ASTM C1929 – Standard Test Method for Determining Ignition Temperature of Plastics*

5.2.2.2.2. *NFPA 259 – Standard Test Method for Potential Heat of Building Materials*

5.2.2.2.3. *UL 723 – Test for Surface Burning Characteristics of Building Materials*

5.2.2.2.4. *ASTM E1354 – Standard Test Method for Heat and Visible Smoke Release Rates for Materials and Products using an Oxygen Consumption Calorimeter*

5.2.2.3. Based on the similar performance of both products in these tests, both Infinish ES and Infinish ES2 sheathing are approved for use without a thermal barrier in accordance with *IBC* Section 2603.9. However, installation on walls and ceilings in the same room is not approved.

5.2.3. Insulation boards were tested to assess the potential heat generated by the FPIS in accordance with *IBC* Section 2603.5.3 and are shown in Table 2.

Product	Potential Heat (Btu/lb.)[1]
Infinish ES	12,000
Infinish ES2	12,000
1. Tested in accordance with *NFPA 259*.	

Table 2: Potential Heat of Insulation Boards

5.2.4. Infinish ES and Infinish ES2 were tested to assess their performance with regard to vertical and lateral fire propagation in accordance with *NFPA 285* and *IBC* Section 2603.5.5.

5.2.4.1. Engineering analysis has also been conducted to assess substitution of other products within the approved wall assemblies, including Rboard® Pro.

5.2.4.2. The wall assemblies listed in Table 3 are approved for use in buildings of Type I-IV construction.

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***NFPA 285* Approved Wall Assemblies**	
Wall Component	**Materials**
Base Wall System Use either 1, 2 or 3	1. 1" minimum Concrete Wall 2. 1" minimum Concrete Masonry Wall 3. 20-gauge (min.) 3⅝" (min.) steel studs spaced at a maximum of 24" o.c. a. 1 layer – ⅝"-thick Type X gypsum wallboard on interior
Floorline Firestopping Use 1 or 2	1. None 2. 4 lb./cu ft. mineral wool (e.g., Thermafiber) in each stud cavity at each floor line – attached with Z-clips or equivalent
Cavity Insulation Use either 1,2,3, 4, 5, 6, 7 or 8 Note: Cavity Insulations 5-8 must use Floorline Firestopping Item 2 and ⅝" exterior gypsum sheathing.	1. None 2. Any noncombustible insulation per *ASTM E136* 3. Any mineral fiber (Board type Class A *ASTM E84* faced or unfaced) 4. Fiberglass (Batt type Class A *ASTM E84* faced or unfaced) 5. 5½" (max.) Icynene LD-C-50 spray foam in 6" deep studs (max.) full fill without an air gap 6. 5½" (max.) Icynene MD-C-200, 2 pcf spray foam in 6" deep studs (max.) full fill without an air gap 5½" (max.) Icynene MD-R-210, 2 pcf spray foam in 6" deep studs (max.) full fill without an air gap 7. 6" (max.) SWD Urethane QS 112, 2 pcf spray foam in 6" deep studs (max.) or partial fill with a maximum 2½" air gap 8. 3½" (max.) Gaco Western 183M spray foam in 3⅝" deep studs (max.)
Exterior Sheathing Use either 1, 2 or 3	1. ½" or thicker exterior type gypsum sheathing 2. None, when utilizing exterior cladding of brick or equivalent (cladding options 1-6) 3. 2" precast concrete panels attached to structural elements of building
Air Barrier or Weather-Resistive Barrier Applied to Exterior Sheathing Use any of these options	1. None 2. Tyvek CommercialWrap® D – stapled (1 or 2 layers) 3. Henry Air-Bloc 32MR (75 wet mils) 4. Any WRB that has been tested per *ASTM E1354* (at a min. of 20 kW/m^2 heat flux) and shown by analysis to be less flammable (improved T_{ign}, Pk. HRR) than those listed above[2]. Examples of such are listed below: 5. Henry Air-Bloc 31MR (32 wet mils) 6. Henry Air-Bloc 33MR (45-60 mils) 7. Henry Air-Bloc 21 FR (37-57 mils) 8. Henry VP 160 (7.5 mils) 9. BASF Enershield HP (17-60 mils DFT) 10. BASF Enershield 1 (19-60 mils DFT) 11. Grace Perm-A-Barrier VPS 12. Prosoco R-Guard Spray Wrap (12 mils) 13. Prosoco R-Guard MVP (12 mils) 14. Prosoco R-Guard VB (19 mils) 15. Prosoco R-Guard Cat-5 (14 mils) 16. Tremco Exo-Air 230 (31.5 mils) 17. STS Wall Guardian FW 100A (40 wet mils) 18. Dupont Fluid Applied (0.8 mm) 19. WR Meadows Air-Shield LMP (Gray) 20. WR Meadows Air-Shield LMP (Black) 21. WR Meadows Air-Shield TMP 22. WR Meadows Air-Shield LSR 23. Sto Emerald Coat 24. Dow Corning DefendAir 200 Low Temp 25. Hohmann & Barnard Enviro-Barrier VP 26. Hohmann & Barnard X Barrier 27. Hohmann & Barnard Enviro-Barrier 28. CCW Fire Resist 705, 705 VP, or 705 FR-A 29. CCW Fire Resist Barriteh NP, VP, or VP LT 30. Tremco ExoAir 130, or ExoAir 111 31. Grace Perm-A-Barrier PAB VPL LT, PAB NPL 10, PAB NPL, PAB NPS, PAB VPS, PAB VPL, or PAB AWM.

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NFPA 285 Approved Wall Assemblies	
Wall Component	**Materials**
Exterior Insulation Use either 1, 2 or 3	1. None 2. 2" or 3" Atlas Infinish ES (or ES2), and 4" Infinish ES (or ES2) 3. Any exterior insulation that has been tested per *ASTM E1354* (at a minimum of 20 kW/m^2 heat flux) and shown by analysis to be less flammable (improved T_{ign}, Pk. HRR) than those listed above
WRB Over Exterior Insulation Use either 1, 2, 3, 4, 5, 6 or 7	1. None 2. 3" IPG Cold Weather Foil Tape and 4" Atlas WRB System Tape may be interchanged 3. Any tape that has been tested per *ASTM E1354* (at a minimum of 20 kW/m^2 heat flux) and shown by analysis to be less flammable (improved T_{ign}, Pk. HRR) than those listed above 4. Henry Foilskin 5. Henry Metal Clad 6. CCW 705FR-A 7. Grace Permabarrier PAB AWM
Flashing	Flash all exterior insulation joints and, as an option, veneer tie penetrations with maximum 4" width of one of the following: • BT25XL™ by Protecto-Wrap • Any UL Listed tape by 3M Company's Venture Tape® • Aluminum foil tape • Asphalt or butyl-based flashing tape Note: A small amount of spray primer may be used to aid in adhesion; maximum 5" width.
Exterior Cladding Use any of these options	1. Brick a. Brick veneer anchors – standard types – installed maximum 24" o.c. (max.) vertically on each stud b. Maximum 2" air gap between exterior insulation and brick c. Standard nominal 4"-thick clay brick or veneer 2. Stucco – Minimum ¾"-thick, exterior cement plaster and lath. A secondary WRB can be installed between the exterior insulation and the lath. The secondary WRB shall not be full-coverage asphalt or butyl-based self-adhered membranes. 3. Limestone – minimum 2" thick 4. Natural stone veneer – minimum 2" thick 5. Cast artificial stone – minimum 1.5" thick complying with *ICC-ES AC 51* 6. Terracotta Cladding – Use any terracotta cladding system in which terracotta is minimum 1¼" thick. Any standard installation technique can be used. 7. Any ACM that has passed *NFPA 285* 8. Uninsulated sheet metal building panels including aluminum, steel or copper 9. Uninsulated cement or fiber-cement cladding panels 10. Stone/Aluminum honeycomb composite building panels that have successfully passed *NFPA 285* criteria 11. Autoclaved-aerated-concrete (AAC) panels (minimum 1½" thick) 12. Reynobond ZCM Zinc metal composite panel
Flashing of Windows, Doors & Other Exterior Wall Penetrations	As an option, flash window, door and other exterior penetrations with limited amounts of any tape specified in "Flashing" above or any acrylic, asphalt or butyl-based flashing tape – max. 12" width

1. The assemblies' combinations created herein and the various substitutions of products are based on testing and professional thermal engineering analysis by Hughes Associates and Priest and Associates.
2. Acceptance criteria for *ASTM E1354* testing have not been well established in the referenced building codes and foam sheathing related sections. The criteria stated here for substitution of products is based on testing and professional thermal engineering analysis by Priest and Associates.
3. T_{ign} is the time to ignition from the start of the test until the sheathing ignites. Pk. HRR is the peak heat release rate during the test.

Table 3: Approved *NFPA 285* Wall Assemblies

5.2.5. The insulation boards were tested to assess their performance with regard to fire resistance rated walls in accordance with *UL 263* (or *ASTM E119*) and *IBC* Section 2603.5.1.

5.2.5.1. The insulation boards have been accorded a UL BRYX listing per *UL 723*, which allows them to be used in *UL 263* tested assemblies permitting products classified in accordance with the UL BRYX classification. Therefore, Infinish ES and Infinish ES2 are approved for the following UL assemblies:

5.2.5.1.1. BUXV.U424

5.2.5.1.2. BUXV.U425

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5.2.5.1.3. BXUV.V499

6. Installation:

6.1. Installation shall comply with the manufacturer's installation instructions and this TER. In the event of a conflict between the manufacturer's installation instructions and this TER, the more restrictive shall govern.

6.2. All code-required wall bracing shall be installed prior to insulation board installation.

6.3. The insulation boards should be oriented with the embossed foil side facing the interior side of the building.

6.4. Insulation boards shall be installed horizontally with sheathing edges bearing directly on framing members and edges of abutting panels in moderate contact with each other.

6.5. Secure the sheathing to framing members with fasteners capable of resisting the imposed loads. Fasteners will vary, depending on the substrate and cladding materials.

6.5.1. Fastener heads shall be a minimum of $^{3}/_{8}$" diameter. Do not allow the fastener head to penetrate the sheathing facer. Use of washers at the fastener head is recommended.

6.5.2. Space fasteners 12" o.c. at the perimeter and 16" o.c. in the field.

6.6. Install interior finish materials as desired in accordance with the finish manufacturer's installation instructions.

6.7. Additional information on the installation and detailing of foam sheathing can be found on the American Chemistry Council's Foam Sheathing Committee web page at fsc.americanchemistry.com.

7. Test and Engineering Substantiating Data:

7.1. Test reports and data supporting the following material properties and wall assembly performance:

7.1.1. Flame spread and smoke developed ratings in accordance with *ASTM E84* by Intertek and in accordance with *UL 723* giving a BRYX classification.

7.1.2. Potential heat in accordance with *NFPA 259* by Intertek.

7.1.3. Ignition temperature in accordance with *ASTM D1929* by Intertek.

7.1.4. Contribution of materials to room fire growth in accordance with *NFPA 286* by Intertek.

7.1.5. Emittance of materials near room temperature in accordance with *ASTM C1371* by R&D Services.

7.2. Engineering analysis comparing the fire resistance properties of In*f*inish ES and In*f*inish ES2 by Hughes Associates.

7.3. Engineering analysis assessing the substitution of products within the approved *NFPA 285* tested wall assemblies by Hughes Associates.

7.4. Engineering analysis assessing the substitution of products within the approved *NFPA 285* tested wall assemblies by Priest & Associates.

7.5. Manufacturer technical data sheets and installation instructions.

7.6. Manufacturer quality control manual and evidence of approved agency inspections.

7.7. Test reports and data for determining comparative equivalency for use as an alternative material in accordance with *IBC* Section 104.11.

7.8. The product(s) evaluated by this TER fall within the scope of one or more of the model, state or local building codes for building construction. The testing and/or substantiating data used in this TER is limited to buildings, structures, building elements, construction materials and civil engineering related specifically to buildings.

7.9. The provisions of model, state or local building codes for building construction do not intend to prevent the installation of any material or to prohibit any design or method of construction. Alternatives shall use consensus standards, performance-based design methods or other engineering mechanics based means of compliance. This TER assesses compliance with defined standards, accepted engineering analysis, performance-based design methods, etc. in the context of the pertinent building code requirements.

7.10. Some information contained herein is the result of testing and/or data analysis by other sources, which DrJ relies on to be accurate, as it undertakes its engineering analysis.

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7.11. DrJ has reviewed and found the data provided by other professional sources are credible. The information in this TER conforms with DrJ's procedure for acceptance of data from approved sources.

7.12. DrJ's responsibility for data provided by approved sources conforms with *IBC* Section 1703 and any relevant professional engineering law.

7.13. Where appropriate, DrJ relies on the derivation of design values, which have been codified into law through codes and standards (e.g., *IRC*, *WFCM*, *IBC*, *SDPWS, NDS, ACI, AISI, PS-20, PS-2*, etc.). This includes review of code provisions and any related test data that aids in comparative analysis or provides support for equivalency to an intended end-use application. Where the accuracy of design values provided herein is reliant upon the published properties of commodity materials (e.g. lumber, steel, concrete, etc), DrJ relies upon grade/properties provided by the raw material supplier to be accurate and conforming to the mechanical properties defined in the relevant material standard.

8. Findings:

8.1. The insulation boards are approved for use in accordance with the *IBC* section 2603 for Types I-V construction and the *IRC* Section R316.

8.2. The insulation boards are approved for use in exterior or interior walls only or ceilings only without a thermal barrier in accordance with the special approval of the *IBC* Section 2603.9 and *IRC* Section R316.6. However, installation on walls and ceilings in the same room is not approved. When installed on both the walls and ceiling of a room, either the walls or the ceiling shall be covered with an approved thermal or ignition barrier, as applicable.

8.3. The insulation boards are approved for use in exterior walls of buildings of Type I-IV construction in accordance with *IBC* Section 2603.5 including the NFPA 285 wall assemblies listed in Section 5.2.4.

8.4. In*f*inish ES and In*f*inish ES2 described in this TER comply with, or are a suitable alternative to, the applicable sections of the codes listed in Section 2.

8.5. *IBC* Section 104.11 (*IRC* Section R104.11 and *IFC* Section 104.9 are similar) states:

> **104.11 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 has been *approved*. An alternative material, design or method of construction shall be *approved* where the *building official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code. ... Where the alternative material, design or method of construction is not *approved*, the *building official* shall respond in writing, stating the reasons the alternative was not *approved.*

8.6. This product has been evaluated with the codes listed in Section 2, and is compliant with all known state and local building codes. Where there are known variations in state or local codes that are applicable to this evaluation, they are listed here:

8.6.1. No known variations

8.7. This TER uses professional engineering law, the building code, ANSI/ASTM consensus standards and generally accepted engineering practice as its criteria for all testing and engineering analysis. DrJ's professional engineering work falls under the jurisdiction of each state Board of Professional Engineers, when signed and sealed.

9. Conditions of Use:

9.1. Where required by the authority having jurisdiction (AHJ) in which the project is to be constructed, this report and the installation instructions shall be submitted at the time of permit application.

9.2. Any generally accepted engineering calculations needed to show compliance with this TER shall be submitted to the code official for review and approval.

9.3. Design loads shall be determined in accordance with the building code adopted by the jurisdiction in which the project is to be constructed and/or by the Building Designer (e.g., Owner, Registered Design Professional, etc.).

9.3.1. The insulation boards are approved for use in both interior and exterior walls.

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9.3.2. In areas where the probability of termite infestation is very heavy, in accordance with *IBC* Section 2603.8, the product must not be placed on exterior walls located within 6" (152 mm) of the ground.

9.3.3. This product shall not be used as a structural nailing base for claddings.

9.3.4. The insulation boards shall not be used to resist lateral loads. Walls shall be braced by other materials in accordance with the applicable code, and the exterior wall covering shall be capable of resisting the full design wind pressure.

9.3.5. The insulation boards are manufactured in Diboll, TX, under a quality control program with quality control inspections in accordance with *IBC* Section 110.3.8 and 110.3.9.

9.4. Design

9.4.1. Building Designer Responsibility

9.4.1.1. Unless the AHJ allows otherwise, the Construction Documents shall be prepared by a Building Designer for the Building and shall be in accordance with *IRC* Section R106 and *IBC* Section 107.

9.4.1.2. The Construction Documents shall be accurate and reliable and shall provide the location, direction and magnitude of all applied loads and shall be in accordance with *IRC* Section R301 and *IBC* Section 1603.

9.4.2. Construction Documents

9.4.2.1. Construction Documents shall be submitted to the Building Official for approval and shall contain the plans, specifications and details needed for the Building Official to approve such documents.

9.5. Responsibilities

9.5.1. The information contained herein is a product, material, detail, design and/or application TER evaluated in accordance with the referenced building codes, testing and/or analysis through the use of accepted engineering practice, experience and technical judgment.

9.5.2. DrJ TERs provide an assessment of only those attributes specifically addressed in the Products Evaluated or Code Compliance Process Evaluated sections.

9.5.3. The engineering evaluation was performed on the dates provided in this TER, within DrJ's professional scope of work.

9.5.4. This product is manufactured under a third-party quality control program in accordance with *IRC* Section R104.4 and R109.2 and *IBC* Section 104.4 and 110.4.

9.5.5. The actual design, suitability and use of this TER, for any particular building, is the responsibility of the Owner or the Owner's authorized agent, and the TER shall be reviewed for code compliance by the Building Official.

9.5.6. The use of this TER is dependent on the manufacturer's in-plant QC, the ISO/IEC 17020 third-party quality assurance program and procedures, proper installation per the manufacturer's instructions, the Building Official's inspection and any other code requirements that may apply to demonstrate and verify compliance with the applicable building code.

10. Identification:

10.1. The insulation boards described in this TER are identified by a label on the board or packaging material bearing the manufacturer's name, product name, label of the third-party inspection agency, and other information to confirm code compliance.

10.2. Additional technical information can be found at atlasroofing.com.

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11. Review Schedule:

11.1. This TER is subject to periodic review and revision. For the most recent version of this TER, visit drjengineering.org.

11.2. For information on the current status of this TER, contact DrJ Engineering.

- Mission and Professional Responsibilities
- Product Evaluation Policies
- Product Approval – Building Code, Administrative Law and P.E. Law

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