Listing

A Duly Authenticated Report from an Approved Agency

Report No: 2302-41

Issue Date: June 22, 2023

Revision Date: February 20, 2026

Subject to Renewal: April 1, 2027

Allowable Holes for OX Sheathing Products

Trade Secret Report Holder:

Amrize Building Envelope, LLC

Phone: 800-345-8881 Website: www.oxengineeredproducts.com

CSI Designations:

DIVISION: 06 00 00 - WOOD, PLASTICS AND COMPOSITES

Section: 06 12 00 - Structural Panels

Section: 06 12 19 - Shear Wall Panels

Section: 06 16 00 - Sheathing

DIVISION: 07 00 00 - THERMAL AND MOISTURE PROTECTION

Section: 07 21 00 - Thermal Insulation

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

Section: 07 27 00 - Air Barriers

1 Innovative Products Evaluated[1]

1.1 OX Sheathing Products:

1.1.1 ThermoPLY® Red and ThermoPLY® Red AMG

1.1.2 ThermoPLY® Blue and ThermoPLY® Blue AMG

1.1.3 OX-IS™ and OX-IS™ HD

1.1.4 SI-Strong and Strong-R®

1.2 For the purposes of this report, these products are collectively referred to as OX Sheathing Products.

2 Product Description and Materials

2.1 The innovative products evaluated in this report are shown in **Figure 1**.

Figure 1. OX Sheathing Products

Information contained in this report was developed using report holder's confidential intellectual property (IP) and trade secrets (TS), which is protected by Defend Trade Secrets Act 2016, © DrJ Engineering, LLC

2.2 OX Sheathing Products are described in **Table 1**.

Table 1. Product Information

Product	Description
OX Sheathing Products	Structural Sheathing composed of pressure-laminated plies consisting of high-strength cellulosic fibers placed in proprietary orientation(s) to provide a given set of strength properties. These fibers are specially treated to be water-resistant and are bonded with a proprietary water-resistive adhesive. A protective polymer layer is applied on both sides of the panel, and additionally, foil facings may be applied on one or both faces. Insulated sheathing products have a polyiso foam sheathing adhered to the structural sheathing component.

2.3 As needed, review material properties for design in **Section 6**.

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]

Information contained in this report was developed using report holder's confidential intellectual property (IP) and trade secrets (TS), which is protected by Defend Trade Secrets Act 2016, © DrJ Engineering, LLC

4 Applicable Standards for the Listing[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 *Standards*

4.2.1 *ANSI/AWC SDPWS: Special Design Provisions for Wind and Seismic*

4.2.2 *ASCE/SEI 7: Minimum Design Loads and Associated Criteria for Buildings and Other Structures*

4.2.3 *ASTM D7989: Standard Practice for Demonstrating Equivalent In-Plane Lateral Seismic Performance to Wood-Frame Shear Walls Sheathed with Wood Structural Panels*

4.2.4 *ASTM E72: Standard Test Methods of Conducting Strength Tests of Panels for Building Construction*

4.2.5 *ASTM E84: Standard Test Method for Surface Burning Characteristics of Building Materials*

4.2.6 *ASTM E330: Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*

4.2.7 *ASTM E331: Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference*

4.2.8 *ASTM E564: Standard Practice for Static Load Test for Shear Resistance of Framed Walls for Buildings*

4.2.9 *ASTM E2126: Standard Test Methods for Cyclic (Reversed) Load Test for Shear Resistance of Vertical Elements of the Lateral Force Resisting Systems for Buildings*

4.2.10 *ASTM E2178: Standard Test Method for Air Permeance of Building Materials*

4.2.11 *UL 723: Test for Surface Burning Characteristics of Building Materials*

Information contained in this report was developed using report holder's confidential intellectual property (IP) and trade secrets (TS), which is protected by Defend Trade Secrets Act 2016, © DrJ Engineering, LLC

4.3 Structural performance for shear wall assemblies used as lateral force resisting systems in Seismic Design Categories A through F have been tested and evaluated in accordance with the following standards:

4.3.1 *ASCE/SEI 7: Minimum Design Loads and Associated Criteria for Buildings and Other Structures*

4.3.2 *ASTM D7989: Standard Practice for Demonstrating Equivalent In-Plane Lateral Seismic Performance to Wood-Frame Shear Walls Sheathed with Wood Structural Panels*

4.3.2.1 ASTM D7989 is accepted engineering practice used to establish Seismic Design Coefficients (SDC).

4.3.2.2 Tested data generated by ISO/IEC 17025 approved agencies and/or professional engineers, which use ASTM D7989 as their basis, are defined as intellectual property and/or trade secrets.

4.3.2.3 All professional engineering evaluations are defined as an independent design review (i.e., listings, certified reports, duly authenticated reports from approved agencies, and/or research reports, are prepared independently by approved agencies and/or approved sources, when signed and sealed by licensed professional engineer pursuant to registration law.

4.3.3 *ASTM E564: Standard Practice for Static Load Test for Shear Resistance of Framed Walls for Buildings*

4.3.4 *ASTM E2126: Standard Test Methods for Cyclic (Reversed) Load Test for Shear Resistance of Vertical Elements of the Lateral Force Resisting Systems for Buildings*

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 and 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 Small penetrations for utilities are permitted in OX Sheathing Products without the need for additional blocking when limited to the following constraints:

6.1.1 Individual penetrations of OX Sheathing Products shall not exceed 16 square inches in area.

6.1.2 Total penetrations shall not exceed 100 square inches in 100 square feet of wall area.

6.1.3 No more than two (2) penetrations are permitted in a single framing cavity.

6.1.4 Penetrations exceeding the limits of this section require the use of additional blocking around the penetrations as permitted in **Section 6.2** through **Section 6.7**.

Information contained in this report was developed using report holder's confidential intellectual property (IP) and trade secrets (TS), which is protected by Defend Trade Secrets Act 2016, © DrJ Engineering, LLC

6.2 Up to five circular holes with a maximum 4.5" diameter can be placed in one 4' x 8' panel, as represented in **Figure 2**, with no effect on the performance of OX Sheathing Products. All hole locations are not required to be used.

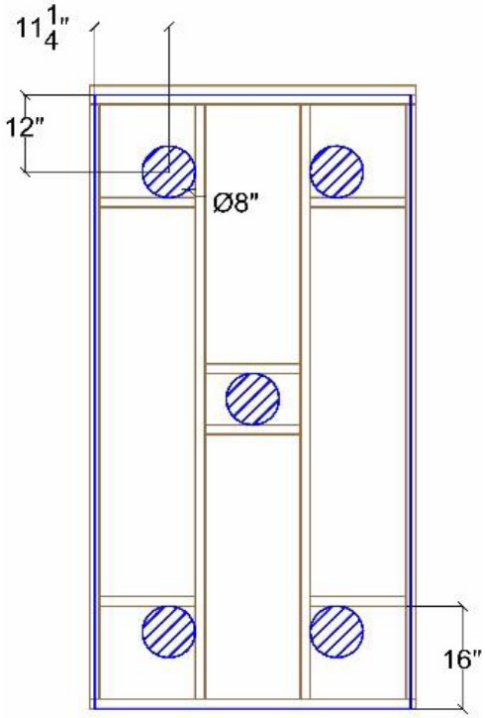

Figure 2. Small Round Hole Placement Map

6.2.1 The maximum diameter of each hole is 8".

6.2.1.1 Holes of diameter less than 8" are allowed.

6.2.2 For each hole cut into the 4' x 8' panel, the:

6.2.2.1 Specific edge distance depicted in **Figure 2** shall be maintained.

6.2.2.2 Blocking located and as depicted in **Figure 2** shall be provided.

6.2.2.3 Blocking shall be connected to existing studs using two (2) 0.131" x 3" smooth shank nails at each end of the blocking.

6.2.2.4 OX Sheathing Products shall be attached to all framing members, including the blocking, using staples 3" on center (o.c.), per the manufacturer installation instructions.

6.2.3 One 8" diameter hole can be placed anywhere in a 4' x 8' foot panel as long as the edge and end distances are maintained as a minimum, and blocking is installed on both sides of the hole in a manner similar to the center hole depicted in **Figure 2**.

Information contained in this report was developed using report holder's confidential intellectual property (IP) and trade secrets (TS), which is protected by Defend Trade Secrets Act 2016, © DrJ Engineering, LLC

6.3 Up to five square holes can be placed as shown in **Figure 3**, with no effect on the performance of OX Sheathing Products, when installed in accordance with the manufacturer installation instructions.

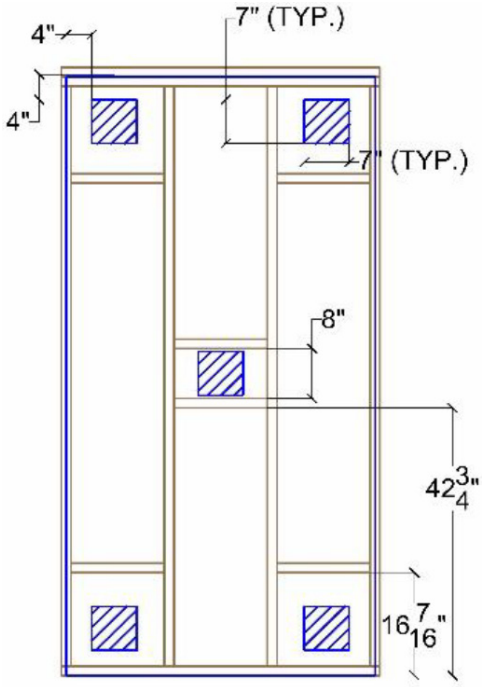

Figure 3. Small Square Hole Placement Map

6.3.1 The maximum dimension of each side of each hole is 7".

6.3.1.1 Holes of lesser dimension are allowed.

6.3.2 Blocking at the center hole (7" x 7" maximum) shall be no more than 8" apart.

6.3.3 Holes located at the corners shall be a minimum of 4" from the panel edges.

6.3.4 For each hole cut into the 4' x 8' panel, the:

6.3.4.1 Specific edge distance depicted in **Figure 3** shall be maintained.

6.3.4.2 Blocking located and as depicted in **Figure 3** shall be provided.

6.3.4.3 Blocking shall be connected to existing studs using two (2) 0.131" x 3" smooth shank nails at each end of the blocking.

6.3.4.4 OX Sheathing Products shall be attached to the blocking using staples 3" o.c., per the manufacturer installation instructions.

6.3.5 One 4" dimension square hole can be placed anywhere in a 4' x 8' panel as long as the edge and end distances are maintained and blocking is installed on both sides of the hole in a manner similar to the center hole in **Figure 3**.

Information contained in this report was developed using report holder's confidential intellectual property (IP) and trade secrets (TS), which is protected by Defend Trade Secrets Act 2016, © DrJ Engineering, LLC

6.4 One 14 1/2" x 32" rectangular hole can be placed as depicted in **Figure 4** with no effect on the performance of OX Sheathing Products, when installed in accordance with the manufacturer installation instructions.

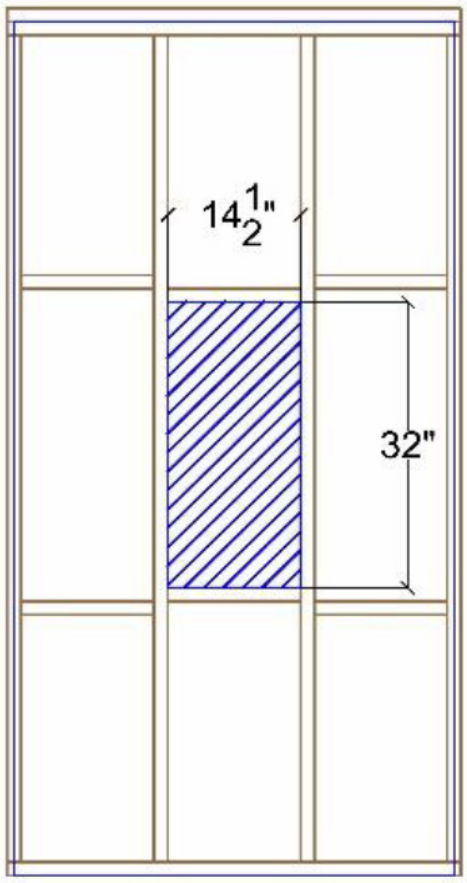

Figure 4. Large Central Rectangular Hole Placement Map

6.4.1 The maximum number of 14 1/2" x 32" rectangular holes that can be placed in one 4' x 8' panel is one, and shall to be located as defined in **Figure 4**.

6.4.1.1 Holes of lesser dimension are allowed.

6.4.2 For each hole cut into the 4' x 8' panel, the:

6.4.2.1 Specific edge distance depicted in **Figure 4** shall be maintained.

6.4.2.2 Blocking located and as depicted in **Figure 4** shall be provided.

6.4.2.3 Blocking shall be connected to existing studs using two (2) 0.131" x 3" smooth shank nails at each end of the blocking.

6.4.2.4 OX Sheathing Products shall be attached to the blocking using staples 3" o.c., per the Amrize Building Envelope, LLC installation instructions.

Information contained in this report was developed using report holder's confidential intellectual property (IP) and trade secrets (TS), which is protected by Defend Trade Secrets Act 2016, © DrJ Engineering, LLC

6.5 One 11 1/4" x 32" rectangular hole can be placed as depicted in **Figure 5**, with no effect on the performance of OX Sheathing Products, when installed in accordance with the manufacturer installation instructions.

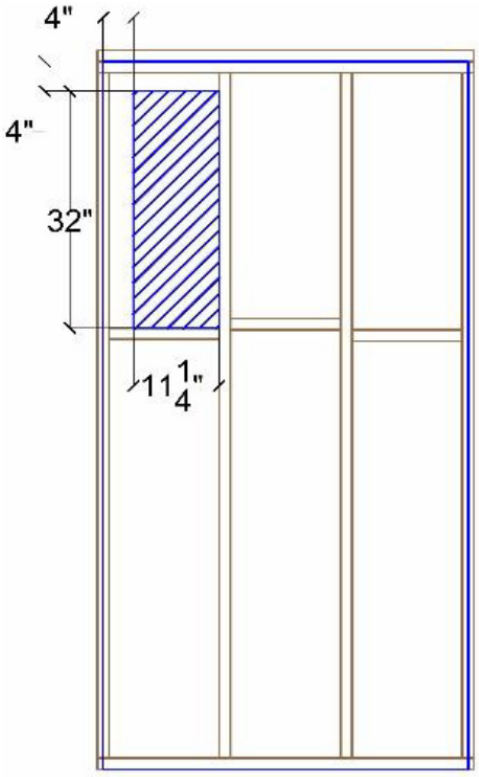

Figure 5. Large Offset Rectangular Hole Placement Map

6.5.1 The maximum number of 11 1/4" x 32" rectangular holes that can be placed on one 4' x 8' panel is one, and shall to be located as defined in **Figure 5**.

6.5.2 One 11 1/4" x 32" rectangular hole can be installed in any one of the three bays along the top of the 4' x 8' panel.

6.5.2.1 Holes of lesser dimension are allowed.

6.5.3 For each hole cut into the 4' x 8' panel, the:

6.5.3.1 Specific edge distance depicted in **Figure 5** shall be maintained.

6.5.3.2 Blocking located and as depicted in **Figure 5** shall be provided.

6.5.3.3 Blocking shall be connected to existing studs using two (2) 0.131" x 3" smooth shank nails at each end of the blocking.

6.5.3.4 OX Sheathing Products shall be attached to the blocking using staples 3" o.c., per the manufacturer installation instructions.

6.6 Up to five (5) 4" diameter holes can be cut into any 4' x 8' panel without the need for blocking, provided that each hole is no closer than:

6.6.1 12" from the edge of the 4' x 8' panel

6.6.2 12" between two hole edges

Information contained in this report was developed using report holder's confidential intellectual property (IP) and trade secrets (TS), which is protected by Defend Trade Secrets Act 2016, © DrJ Engineering, LLC

6.7 Holes larger than those shown in **Figure 2** through **Figure 5**, or in a Portal Frame, require an evaluation by a registered design professional.

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 Performance[26]

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.[27]

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.[28]

8 Installation

8.1 Installation shall comply with the approved construction documents, the manufacturer installation instructions, this report, and the applicable building code.

8.2 In the event of a conflict between the manufacturer installation instructions and this report, contact the manufacturer for counsel on the proper installation method.

8.3 *General*

8.3.1 Installation should follow the instructions given in the respective listings of the OX Sheathing Products being used.

8.4 *Hole Installation/Repair*

8.4.1 Any installation or repair of holes in the OX Sheathing Products should follow **Figure 2** through **Figure 5** to determine the allowed hole placement.

8.4.2 Holes may be made in OX Sheathing Products with various tools such as a knife, scissors, etc.

8.4.2.1 Any holes made larger than the allowed sizes in shown in **Figure 2** through **Figure 5**, will result in performance characteristics outside the scope of this report.

9 Substantiating Data

9.1 Testing has been performed under the supervision of a professional engineer and/or under the requirements of ISO/IEC 17025 as follows:

9.1.1 Lateral shear wall testing of the wall configurations shown in **Figure 2** through **Figure 5**, in accordance with ASTM E564.

9.2 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.

9.3 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.

Information contained in this report was developed using report holder's confidential intellectual property (IP) and trade secrets (TS), which is protected by Defend Trade Secrets Act 2016, © DrJ Engineering, LLC

9.4 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.

9.5 *Testing and Engineering Analysis*

9.5.1 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.[29]

9.6 Where additional condition of use and/or regulatory compliance information is required, please search for OX Sheathing Products on the DrJ Certification website.

10 Findings

10.1 As outlined in **Section 6**, OX Sheathing Products have performance characteristics that were tested and/or meet applicable regulations. In addition, they are suitable for use pursuant to its specified purpose.

10.2 When used and installed in accordance with this duly authenticated report and the manufacturer installation instructions, OX Sheathing Products shall be approved for the following applications:

10.2.1 Placement of holes as depicted in this report.

10.3 Unless exempt by state statute, when OX Sheathing Products are to be used as a structural and/or building envelope component in the design of a specific building, the design shall be performed by an RDP.

10.4 Any application specific issues not addressed herein can be engineered by an RDP. Assistance with engineering is available from Amrize Building Envelope, LLC.

10.5 IBC Section 104.2.3[30] (IRC Section R104.2.2[31] and IFC Section 104.2.3[32] 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.

10.6 **Approved:**[33] Building regulations require that the building official shall accept duly authenticated reports.[34]

10.6.1 An approved agency is *"approved"* when it is ANAB ISO/IEC 17065 accredited.

10.6.2 An approved source is *"approved"* when an RDP is properly licensed to transact engineering commerce.

10.6.3 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.

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

10.8 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.[35]

Information contained in this report was developed using report holder's confidential intellectual property (IP) and trade secrets (TS), which is protected by Defend Trade Secrets Act 2016, © DrJ Engineering, LLC

11 Conditions of Use

11.1 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.

11.2 As listed herein, OX Sheathing Products shall not be used:

11.2.1 As a nailing base for claddings, trim, windows, and doors, nor

11.2.2 To resist horizontal loads from concrete and masonry walls.

11.3 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:

11.3.1 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.

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

11.3.3 These innovative products have an internal quality control program and a third-party quality assurance program.

11.3.4 At a minimum, these innovative products shall be installed per **Section 8**.

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

11.3.6 These innovative products have 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.

11.3.7 The application of these innovative products 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.

11.4 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.

11.5 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).

11.6 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.

12 Identification

12.1 OX Sheathing Products (ThermoPLY Red and ThermoPLY Red AMG, ThermoPLY Blue and ThermoPLY Blue AMG, OX-IS and OX-IS HD, and SI-Strong and Strong-R), as listed in **Section 1.1**, are 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.

12.2 Additional technical information can be found at www.oxengineeredproducts.com.

13 Review Schedule

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

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

Information contained in this report was developed using report holder's confidential intellectual property (IP) and trade secrets (TS), which is protected by Defend Trade Secrets Act 2016, © DrJ Engineering, LLC

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 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.

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 2000-2012 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.

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/mississippi/ibc-2024/chapter/2/definitions#listed AND https://up.codes/viewer/mississippi/ibc-2024/chapter/2/definitions#labeled

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

27 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

28 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

29 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

Information contained in this report was developed using report holder's confidential intellectual property (IP) and trade secrets (TS), which is protected by Defend Trade Secrets Act 2016, © DrJ Engineering, LLC

30 2021 IBC Section 104.11

31 2021 IRC Section R104.11

32 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

33 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.

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

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

Information contained in this report was developed using report holder's confidential intellectual property (IP) and trade secrets (TS), which is protected by Defend Trade Secrets Act 2016, © DrJ Engineering, LLC