



Listing and Technical Evaluation Report™

A Duly Authenticated Report from an Approved Agency

Report No: 2402-02



Issue Date: September 9, 2024

Revision Date: July 31, 2025

Subject to Renewal: October 1, 2026

Trex[®] Company, Inc. – Trex Signature[®] X-Series[™] Railing Systems

Trade Secret Report Holder:

Trex® Company, Inc.

Phone: 800-289-8739 Website: www.trex.com

CSI Designations:

DIVISION: 05 00 00 - METALSSection: 05 73 00 - Decorative Metal RailingsSection: 05 52 00 - Metal RailingsSection: 05 73 13 - Glazed Decorative Metal RailingSection: 05 52 23 - Aluminum RailingsSection: 05 73 15 - Tempered Glass Railing Assemblies

1 Innovative Products Evaluated¹

- 1.1 Trex Signature X-Series Railing Systems:
 - 1.1.1 Cable Rail
 - 1.1.2 Frameless Glass Rail

2 Product Description and Materials

- 2.1 Trex Signature X-Series Cable Rail and Frameless Glass Rail are guardrail systems comprised of extruded aluminum components and stainless steel fasteners.
 - 2.1.1 Extruded aluminum components are available with a charcoal black powder coating.
 - 2.1.2 In-fill options include:
 - 2.1.2.1 Stainless steel cables
 - 2.1.2.2 Laminated tempered glass panel
 - 2.1.3 Additional details regarding the evaluated Trex Signature X-Series Railing Systems are shown in **Table 1**.
- 2.2 The innovative products evaluated in this report are shown in Figure 1 and Figure 2.









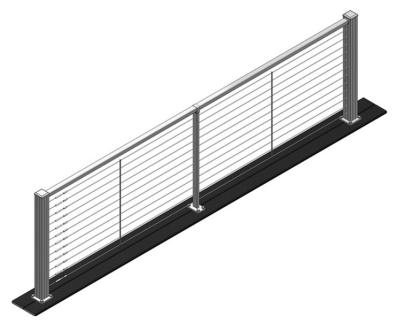


Figure 1. Trex Signature X-Series Cable Rail

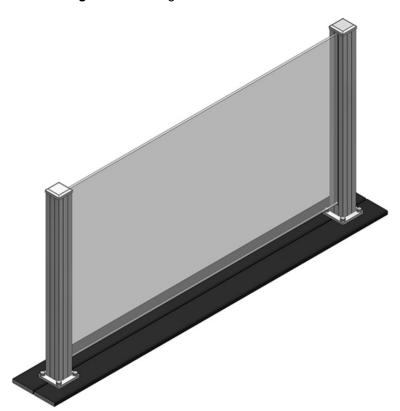


Figure 2. Trex Signature X-Series Frameless Glass Rail





Table 1. Product Information

Product	Description	Aluminum Post Styles and	Infill	Infill Section Total Dimensions		Applications
		Heights		Heights	Widths	
Trex Signature X-Series Cable Rail	Assemblage of extruded aluminum pieces, stainless steel fasteners, cast Zamak 3 bracket materials and multiple infill materials.	37" and 43" X-Series Anchor Posts	1 x 19, 1/8" diameter stainless steel cables	36" and 42"	72", 144" and 216"	Horizontal
Trex Signature X-Series Frameless Glass Rail			1/2" thick laminated glass. SGP interlayer or equivalent.		72"	
SI: 1 in = 25.4 mm						

2.2.1 Additional details regarding the components of Trex Signature X-Series Railing Systems are provided in **Table 2**.

Table 2. Component Details of Trex Signature X-Series Railing Systems

Component	Description				
Trex Signature X-Series Post					
X-Series Post	3 ¹ / ₂ " square with a specialized internal X structure made of 6061A extruded aluminum.				
Base Plate	5.5" x 5.5" x 1/2" thick 6063-T6 aluminum base plate with four 0.397" diameter holes located approximately 1.654" on-center from each edge and approximately 2.192" apart on-center, four 0.531" diameter holes located approximately 0.575" on-center from each edge and approximately 4.35" apart on-center.				
	Trex Signature X-Series Cable Rail				
Top Rail	1.5" high x 2.0" wide x 0.125" wall 6063-T6 extruded aluminum.				
Infill	Cable Brace: 1/4" x 1/4" square 316 stainless steel brace, 0.141" diameter holes spaced 1/8" on-center from the edges, 3/8" on center from the ends and 3.15" on center from each other. Assembly Height 36": Cable Brace Height 29", Number of Holes 10 Assembly Height 42": Cable Brace Height 36", Number of Holes 12				
	Pass-Through Post Base Plate: 3.5" x 5.5" x 1/2" thick 6063-T6 aluminum base plate with two 1/2" diameter holes located approximately 2.15" on-center from the long edge and 1.75" on-center from the short edge and approximately 1.2" apart on-center, four 17/32" diameter holes located approximately 0.575" on-center from each edge.				
	Pass-Through Post: 1" x 2" rectangular post with 0.150" diameter holes spaced 2.555" on-center from the bottom plate, and 3.15" on-center from each other. There is also a 0.221" diameter hole located 2 5/8" on-center from the topmost 0.150" diameter hole and 0.28" on-center from the top of the post. Assembly Height 36": Post Height 34.1", Number of Holes 10 Assembly Height 42": Post Height 40.1", Number of Holes 12				
	1 x 19, ½" diameter stainless steel cables, held in place by 6005A aluminum Cable Infill Adapters. Assembly Height 36": Number of Cables 10 Assembly Height 42": Number of Cables 12				





Table 2. Component Details of Trex Signature X-Series Railing Systems

Component	Description			
Rail Attachment	Top Rail Straight Bracket: Cast zinc bracket (top rail). Pass-Through Post Bracket: Cast zinc bracket (top rail).			
Trex Signature X-Series Frameless Glass Rail				
Infill	Glass Infill: 731/8" long, 1/2" thick tempered glass. The glass is composed of a 0.06" thick clear SentryGlinterlayer between two 1/4" thick sheets of tempered glass. Assembly Height 36": Glass Height 33" Assembly Height 42": Glass Height 39"			

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

3 Definitions²

- 3.1 New Materials³ are defined as building materials, equipment, appliances, systems, or methods of construction, not provided for by prescriptive and/or legislatively adopted regulations, known as alternative materials.⁴ The design strength and permissible stresses shall be established by tests⁵ and/or engineering analysis.⁶
- 3.2 <u>Duly authenticated reports</u>⁷ and <u>research reports</u>⁸ are test reports and related engineering evaluations that are written by an approved agency⁹ and/or an approved source.¹⁰
 - 3.2.1 These reports utilize 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 secretes 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 <u>approved source</u> is "approved" when a professional engineer (i.e., <u>Registered Design Professional</u>, hereinafter <u>RDP</u>) 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 <u>duly authenticated report</u> were performed by an <u>ISO/IEC 17025</u> 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 <u>enforce</u>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 <u>duly authenticated reports</u> from an <u>approved agency</u> and/or an <u>approved source</u> 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. Thus, all ANAB ISO/IEC 17065 duly authenticated reports are approval equivalent, and can be used in any country that is an MLA signatory found at this link: https://iaf.nu/en/recognised-abs/
- 3.9 Approval equity is a fundamental commercial and legal principle. 19





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

- 4.1 Local, State, and Federal
 - 4.1.1 Approved in all local jurisdictions pursuant to ISO/IEC 17065 <u>duly authenticated report</u> 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, Texas Department of Insurance, and Wichita.²¹
 - 4.1.2 Approved in all state jurisdictions pursuant to ISO/IEC 17065 <u>duly authenticated report</u> use, which includes, but is not limited to, the following featured states: California, Florida, New Jersey, Oregon, New York, Texas, Washington, and Wisconsin.²²
 - 4.1.3 Approved by the Code of Federal Regulations Manufactured Home Construction: Pursuant to Title 24, Subtitle B, Chapter XX, Part 3282.14²³ and Part 3280²⁴ pursuant to the use of ISO/IEC 17065 duly authenticated reports.
 - 4.1.4 Approved means complying with the requirements of local, state, or federal legislation.

4.2 Standards

- 4.2.1 ASCE/SEI 7: Minimum Design Loads and Associated Criteria for Buildings and Other Structures
- 4.2.2 ASTM E935: Standard Test Methods for Performance of Permanent Metal Railing Systems and Rails for Buildings
- 4.2.3 ASTM E985: Standard Specification for Permanent Metal Railing Systems and Rails for Buildings
- 4.2.4 ASTM E2353, Standard Test Methods for Performance of Glazing in Permanent Railing Systems, Guards and Balustrades

4.3 Regulations

- 4.3.1 IBC 15, 18, 21, 24: International Building Code®
- 4.3.2 IRC 15, 18, 21, 24: International Residential Code®

5 Listed²⁵

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

6 Tabulated Properties Generated from Nationally Recognized Standards

- 6.1 General
 - 6.1.1 Trex Signature X-Series Railing Systems are used as guardrail systems where a guardrail height of 36" or 42" is required in accordance with <u>IBC Section 1015.2</u>, <u>IBC Section 1015.3</u>, and <u>IRC Section R321.1</u>.
- 6.2 Structural Performance
 - 6.2.1 Trex Signature X-Series Railing Systems were tested and met the structural requirements of <u>IBC Section</u> 1607.9 and <u>IRC Section R301.5</u>.





Table 3. Allowable Design Loads for Trex Signature X-Series Railing Systems

Parameter	Design Load				
Trex Signature X-Series Cable Rail					
Infill Load ¹	50 lbf				
Concentrated Load ²	200 lbf				
Trex Signature X-Series Frameless Glass Rail					
Infill Load ¹	50 lbf				
Concentrated Load ²	200 lbf				
SI: 1 lbf = 4.448 N, 1 plf = 14.6 N/m 1. Specified test in <u>IBC Section 1607.9.1.2</u> and <u>IRC Table R301.5</u> . 2. Specified test in <u>IBC Section 1607.9.1.1</u> and <u>IRC Table R301.5</u> .					

6.3 Where the application falls outside of the performance evaluation, conditions of use, and/or installation requirements set forth herein, alternative techniques shall be permitted in accordance with accepted engineering practice and experience. This includes but is not limited to the following areas of engineering: mechanics or materials, structural, building science, and fire science.

7 Certified Performance²⁶

- 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 Regulatory Evaluation and Accepted Engineering Practice

- 8.1 Trex Signature X-Series Railing Systems comply with the following legislatively adopted regulations and/or accepted engineering practice for the following reasons:
 - 8.1.1 Structural performance in accordance with <u>IBC Section 1607.9</u> and <u>IRC Section R301.5</u>.
- 8.2 Any building code, regulation and/or accepted engineering evaluations (i.e., 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 qualified²⁹ to practice product and regulatory compliance services within its scope of accreditation and engineering expertise, ³⁰ respectively.
- 8.3 Engineering evaluations are conducted with DrJ's ANAB <u>accredited ICS code scope</u> of expertise, which is also its areas of professional engineering competence.
- 8.4 Any regulation specific issues not addressed in this section are outside the scope of this report.





9 Installation

- 9.1 Installation shall comply with the approved construction documents, the manufacturer installation instructions, this report, and the applicable building code.
- 9.2 In the event of a conflict between the manufacturer installation instructions and this report, contact the manufacturer for counsel on the proper installation method.
- 9.3 Installation Procedure
 - 9.3.1 Trex Signature X-Series Anchor Posts/Pass-Through Posts on Wood:
 - 9.3.1.1 Blocking (2) shall be installed below all post locations in accordance with Figure 3 or Figure 4.
 - 9.3.1.1.1 Material shall be nominal 2 x 8 Pressure-Preservative-Treated (PPT), Southern Pine (SP) with a specific gravity of 0.55.
 - 9.3.1.1.2 Fasteners shall be #10 x 3" PPT compatible wood screws (36 screws per post location).

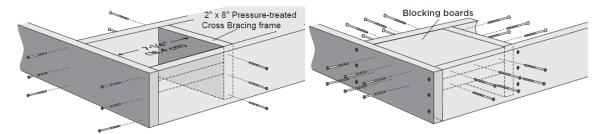


Figure 3. Corner Post Blocking - Post - Wood Installation

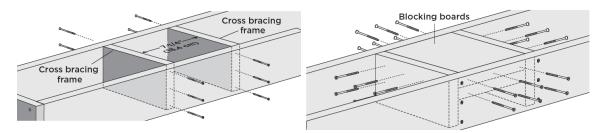


Figure 4. In-line Post Blocking – Post - Wood Installation

9.3.2 The fastening schedule per component is presented in **Table 4**.





Table 4. Fastening Schedule for Trex Signature X-Series Railing Systems

Component	Connection	Details				
Trex Signature X-Series Cable Rail						
X-Series Anchor Post/Pass-Through Post	Post to Substructure	Wood: Four 1/2" x 6" Stainless Steel hex-cap bolts, Stainless Steel washers, with Stainless Steel T-nuts installed into bottom of wood blocking.				
Top Rail	Top Rail Straight Bracket to X-Series Post	Bracket slides into channel and locked into place between the structural cover and locking assembly.				
	Top Rail Straight Bracket to Rail	One #8-18 x 0.5" pan head stainless steel screw per bracket.				
	Locking Block Assembly to Top Rail Straight Bracket and X-Series Post	Locking Block Assembly is composed of a stainless steel weld nut, 1/4 x 20 bolt and a stainless steel locking block, which interfaces between X-Series Post and bracket				
	Pass-Through Post Bracket to Pass-Through Post	Two 0.25" x 1.25" Barrel Bolts				
	Pass-Through Post Bracket to Top Rail	Two #8 18 x 0.5" Pan Head Stainless Screws per bracket				
Cable Brace	Cable Brace to Top/Bottom Cable	Cable Brace connects to the top and bottom cables via a 10-24 x 0.25" Thread Locking Cup point Set Screw in each end.				
	Trex Signature X-Series Frameless	Glass Rail				
X-Series Anchor Post	Post to Substructure	Wood: Four ¹ / ₂ " x 6" Stainless Steel hex-cap bolts, Stainless Steel washers with Stainless Steel T-nuts installed into bottom of wood blocking.				
Glass Infill to X-Series Post		Glass sits on Bottom Glass Spacer and Glass Edge Pad. Rigid Gasket slides into X-Series Post. Corner Cover and Flexible Gasket locks Glass into place.				

9.3.3 Installation of Trex Signature X-Series Railing Systems shall be installed on Trex Signature, Transcend®, Select®, or Enhance® decking, or decking with equivalent properties.

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 ASTM E935 test reports from approved sources:
 - 10.1.1.1 In-fill load tests
 - 10.1.1.2 Uniform load tests
 - 10.1.1.3 Concentrated load tests
- 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 <u>duly authenticated reports</u> from <u>approved agencies</u> and/or <u>approved sources</u> 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 <u>duly authenticated report</u>, 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.³¹
- 10.6 Where additional condition of use and/or regulatory compliance information is required, please search for Trex Signature X-Series Railing Systems on the <u>DrJ Certification website</u>.

11 Findings

- 11.1 As outlined in **Section 6**, Trex Signature X-Series Railing Systems have performance characteristics that were tested and/or meet applicable regulations. In addition, they are suitable for use pursuant to its specified purpose.
- 11.2 When used and installed in accordance with this <u>duly authenticated report</u> and the manufacturer installation instructions, Trex Signature X-Series Railing Systems shall be approved for the following applications:
 - 11.2.1 Use as a guardrail system where a guardrail height of 36" or 42" is allowed in accordance with <u>IBC Section 1015.2</u>, <u>IBC Section 1015.3</u>, and <u>IRC Section R321</u>.
- 11.3 Any application specific issues not addressed herein can be engineered by an <u>RDP</u>. Assistance with engineering is available from Trex Company, Inc.
- 11.4 IBC Section 104.2.3³² (IRC Section R104.2.2³³ and IFC Section 104.2.3³⁴ are similar) in pertinent part state:
 - **104.2.3 Alternative Materials, Design and Methods of Construction and Equipment.** The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative is not specifically prohibited by this code and has been approved.
- 11.5 Approved: 35 Building regulations require that the building official shall accept duly authenticated reports. 36
 - 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, <u>Title 18 US Code Section 242</u>, 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 <u>RDP</u>s and is an <u>ANAB Accredited Product Certification Body Accreditation #1131</u>.
- 11.7 Through the <u>IAF Multilateral Arrangement</u> (MLA), this <u>duly authenticated report</u> can be used to obtain product approval in any <u>jurisdiction</u> or <u>country</u> because all ANAB ISO/IEC 17065 <u>duly authenticated reports</u> are equivalent.³⁷





12 Conditions of Use

- 12.1 Material properties shall not fall outside the boundaries defined in **Section 6**.
- 12.2 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.
- 12.3 Trex Signature X-Series Railing Systems have only been evaluated for live loads for use as guards. Other loadings are outside of the scope of this report.
- 12.4 Attachment of Trex Signature X-Series Railing Systems to decking other than Trex Signature, Transcend, Select or Enhance decking is outside of the scope of this report.
 - 12.4.1 *Exception:* Decking with equivalent compressive strength is permitted.
- 12.5 Trex Signature X-Series Cable Rail
 - 12.5.1 Application compliant for any occupancy groups specified in <u>IBC Section 302</u> and IRC one-family and two-family dwellings.
- 12.6 Trex Signature X-Series Frameless Glass Rail
 - 12.6.1 Use of Trex Signature X-Series Frameless Glass Rail is limited to IBC and IRC one-family and two-family dwellings.
 - 12.6.2 Glass infill section is to be considered a hazardous location per <u>IBC Section 2406.4.4</u> and <u>IRC Section R324.4.4</u>.
 - 12.6.3 Each glass section must be permanently etched with the manufacturer name/logo and applicable test standard per IRC Section R324.1.
- 12.7 The compatibility of the fasteners and all other metallic parts listed in this report with the supporting structure is outside of the scope of this report.
- 12.8 This report does not cover the compatibility of fasteners and metallic components with the support structure. This includes treated wood products.
- 12.9 Shims are not required to prevent direct contact between the post base plate and supporting structure. Shims are permitted between the post base plate and supporting structure where necessary to plumb the posts.
- 12.10 When required by adopted legislation and enforced by the <u>building official</u>, also known as the Authority Having Jurisdiction (AHJ) in which the project is to be constructed:
 - 12.10.1 Any calculations incorporated into the construction documents shall conform to accepted engineering practice and, when prepared by an <u>approved source</u>, shall be approved when signed and sealed.
 - 12.10.2 This report and the installation instructions shall be submitted at the time of permit application.
 - 12.10.3 These innovative products have an internal quality control program and a third-party quality assurance program.
 - 12.10.4 At a minimum, these innovative products shall be installed per Section 9.
 - 12.10.5 The review of this report by the AHJ shall comply with IBC Section 104.2.3.2 and IBC Section 105.3.1.
 - 12.10.6 These innovative products have an internal quality control program and a third party quality assurance program in accordance with <u>IBC Section 104.7.2</u>, <u>IBC Section 110.4</u>, <u>IBC Section 1703</u>, <u>IRC Section R104.7.2</u>, and <u>IRC Section R109.2</u>.
 - 12.10.7 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.





- 12.11 The approval of this report by the AHJ shall comply with <u>IBC Section 1707.1</u>, where legislation states in part, "the <u>building official</u> shall make, or cause to be made, the necessary tests and investigations; or the <u>building official</u> shall accept duly authenticated reports from <u>approved agencies</u> in respect to the quality and manner of use of new materials or assemblies as provided for in <u>Section 104.2.3</u>", all of <u>IBC Section 104</u>, and <u>IBC Section 105.3</u>.
- 12.12 <u>Design loads</u> shall be determined in accordance with the regulations adopted by the <u>jurisdiction</u> in which the project is to be constructed and/or by the building designer (i.e., owner or RDP).
- 12.13 The actual design, suitability, and use of this report for any particular building, is the responsibility of the owner or the authorized agent of the owner.

13 Identification

- 13.1 The innovative products 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.
- 13.2 Additional technical information can be found at www.trex.com.

14 Review Schedule

- 14.1 This report is subject to periodic review and revision. For the latest version, visit www.drjcertification.org.
- 14.2 For information on the status of this report, please contact <u>DrJ Certification</u>.





Notes

- For more information, visit <u>dricertification.org</u> 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 <u>TPI1</u>, the <u>NDS</u>, <u>AISI S202</u>, <u>US</u> professional engineering law, <u>Canadian building code</u>, <u>Canada professional engineering law</u>, <u>Qualtim External Appendix A</u>: <u>Definitions/Commentary</u>, <u>Qualtim External Appendix B</u>: <u>Project/Deliverables</u>, <u>Qualtim External Appendix C</u>: <u>Intellectual Property and Trade Secrets</u>, definitions created within Design Drawings and/or definitions within Reference Sheets. Beyond this, terms not defined shall have ordinarily accepted meanings as the context implies. Words used in the present tense include the future; words stated in the masculine gender include the feminine and neuter; the singular number includes the plural and the plural, the singular.
- https://up.codes/viewer/mississippi/ibc-2024/chapter/17/special-inspections-and-tests#1702
- Alternative Materials, Design and Methods of Construction and Equipment: The provisions of any regulation code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by a regulation. Please review https://www.justice.gov/atr/mission and http
- https://up.codes/viewer/mississippi/ibc-2024/chapter/17/special-inspections-and-tests#1706.2:~:text=the%20design%20strengths%20and%20permissible%20stresses%20shall%20be%20established%20by%20tests
- The design strengths and permissible stresses of any structural material shall conform to the specifications and methods of design of accepted engineering practice. https://up.codes/viewer/mississippi/ibc-2024/chapter/17/special-inspections-and-tests#1706.1:~:text=Conformance%20to%20Standards-,The%20design%20strengths%20and%20permissible%20stresses,-of%20any%20structural
- https://up.codes/viewer/mississippi/ibc-2024/chapter/17/special-inspections-and-tests#1707.1:~:text=the%20building%20official%20shall%20make%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%20or%20use%20or%20maw20materials%20or%20assemblies%20as%20provided%20for%20in%20section%20104.2.3.
- 8 <u>https://up.codes/viewer/mississippi/ibc-2024/chapter/17/special-inspections-and-tests#1703.4.2</u>
- 9 https://up.codes/viewer/mississippi/ibc-2024/chapter/2/definitions#approved_agency
- https://up.codes/viewer/mississippi/ibc-2024/chapter/2/definitions#approved_source
- https://www.law.cornell.edu/uscode/text/18/1832 (b) Any organization that commits any offense described in subsection (a) shall be fined not more than the greater of \$5,000,000 or 3 times the value of the stolen trade secret to the organization, including expenses for research and design and other costs of reproducing the trade secret that the organization has thereby avoided. The federal government and each state have a public records act. To follow DTSA and comply state public records and trade secret legislation requires approval through ANAB ISO/IEC 17065 accredited certification bodies or approved sources. For more information, please review this website: Intellectual Property and Trade Secrets.
- https://www.nspe.org/resources/issues-and-advocacy/professional-policies-and-position-statements/regulation-professional AND https://apassociation.org/list-of-engineering-boards-in-each-state-archive/
- 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
- https://up.codes/viewer/mississippi/ibc-2024/chapter/1/scope-and-administration#104.2.3 AND https://up.codes/viewer/mississippi/ibc-2024/chapter/1/scope-and-administration#105.3.1
- https://up.codes/viewer/mississippi/ibc-2024/chapter/17/special-inspections-and-tests#1707.1
- 17 <u>https://iaf.nu/en/about-iaf-</u>
 - mla/#:~:text=Once%20an%20accreditation%20body%20is%20a%20signatory%20of%20the%20IAF%20MLA%2C%20it%20is%20required%20to%20recognise%20certificates%20 and%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.
- https://www.justice.gov/crt/deprivation-rights-under-color-law AND https://www.justice.gov/atr/mission
- Unless otherwise noted, the links referenced herein use un-amended versions of the 2024 International Code Council (ICC) 2024 International Code Council (ICC) model codes as foundation references. Mississippi versions of the IBC 2024 and the IRC 2024 are un-amended. This material, product, design, service and/or method of construction also complies with the 2000-2012 versions of the referenced codes and the standards referenced therein. As pertinent to this technical and code compliance evaluation, CBI and/or DrJ staff have reviewed any state or local regulatory amendments to assure this report is in compliance.
- 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
- https://www.ecfr.gov/current/title-24/subtitle-B/chapter-XX/part-3282/subpart-A/section-3282.14
- https://www.ecfr.gov/current/title-24/subtitle-B/chapter-XX/part-3280
- 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
- https://up.codes/viewer/mississippi/ibc-2024/chapter/17/special-inspections-and-tests#1703.4
- https://www.ecfr.gov/current/title-24/subtitle-B/chapter-XX/part-3280#:~:text=All%20construction%20methods%20shall%20be%20in%20conformance%20with%20accepted%20engineering%20practices%20to%20insure%20durable%2C%20livable%2C%20and%20safe%20housing%20and%20shall%20demonstrate%20acceptable%20workmanship%20reflecting%20journeyman%20quality%20of%20work%20of%20the%20various%20trades
- https://www.ecfr.gov/current/title-24/subtitle-B/chapter-XX/part-3280#:~:text=The%20strength%20and%20rigidity%20of%20the%20component%20parts%20and/or%20the%20integrated%20structure%20shall%20be%20determined%20by%20engineering%20analysis%20or%20by%20suitable%20load%20tests%20to%20simulate%20the%20actual%20loads%20and%20conditions%20of%20application%20that%20occur







- Qualification is performed by a legislatively defined <u>Accreditation Body</u>. <u>ANSI National Accreditation Board (ANAB)</u> is the largest independent accreditation body in North America and provides services in more than 75 countries. <u>DrJ</u> is an ANAB accredited <u>product certification body</u>.
- https://anabpd.ansi.org/Accreditation/product-certification/AllDirectoryDetails?prgID=1&orgID=2125&statusID=4#:~:text=Bill%20Payment%20Date-,Accredited%20Scopes,-13%20ENVIRONMENT.%20HEALTH
- 31 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
- 32 2021 IBC Section 104.11
- 33 2021 IRC Section R104.11
- 34 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
- 35 Approved is an adjective that modifies the noun after it. For example, Approved Agency means that the Agency is accepted officially as being suitable in a particular situation. This example conforms to IBC/IRC/IFC Section 201.4 (https://up.codes/viewer/mississippi/ibc-2024/chapter/2/definitions#201.4) where the building code authorizes sentences to have an ordinarily accepted meaning such as the context implies.
- https://up.codes/viewer/mississippi/ibc-2024/chapter/17/special-inspections-and-tests#1707.1
- 37 Multilateral approval is true for all ANAB accredited product evaluation agencies and all International Trade Agreements.