Listing and Technical Evaluation Report™

A Duly Authenticated Report from an Approved Agency

Report No: 2408-115

Issue Date: June 12, 2025

Revision Date: June 12, 2025

Subject to Renewal: July 1, 2026

Richland Laminated Columns

Trade Secret Report Holder:

Richland Laminated Columns

Phone: 419-895-0036 Website: richlandcolumns.com Email: quality@richlandcolumns.com

CSI Designations:

DIVISION: 06 00 00 - WOOD, PLASTICS AND COMPOSITES

Section: 06 17 00 - Shop-Fabricated Structural Wood

Section: 06 18 00 - Glued-Laminated Construction

Section: 06 18 16 - Glued-Laminated Columns

1 Innovative Product Evaluated[1]

1.1 Richland Laminated Columns

1.1.1 Glue-Laminated Timber (GLT) Columns

2 Product Description and Materials

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

Figure 1. Richland Laminated Columns

2.2 Richland Glue-Laminated Timber is manufactured and identified in accordance with ANSI A190.1, as specified in IBC Section 2303.1.3.

2.2.1 Richland GLT is a glue-laminated timber column comprised of nominal 2" thick, visually-graded No. 1 or 2400f-2.0E Machine Stress Rated (MSR) Southern Pine laminations adhered together to form rectangular beam/column sections.

2.2.1.1 Adhesive, Bostik ISOSET™ HX 1007-1080 in conjunction with ISOSET™ HX300 primer, used for face and end-joints comply with ANSI 405 as specified in ANSI A190.1 Section 8.

2.2.1.2 End joints (finger-joints) comply with ANSI A190.1.

2.2.1.3 Richland GLT columns are planed on all four sides.

2.3 Richland Laminated Columns are available with one end of the product treated with Chromated Copper Arsenate (CCA) in accordance with American Wood Protection Association (AWPA) Standard U1 for ground-contact applications, as required in IBC Section 2304.12.2.2, IBC Section 2304.12.2.6.1, IRC Section R407.1, and IRC Section R304.

2.3.1 Laminations are spliced in a staggered configuration. See **Figure 2**.

Figure 2. Staggered Treated Laminations

2.3.2 Fully treated and untreated columns are also available.

2.4 *Size Availability:*

2.4.1 Richland Laminated Columns are available in heights/lengths up to 36', or up to 48' by request.

2.4.2 *Richland Glue-Laminated Timber (GLT):*

2.4.2.1 Nominal 2 x 6 laminations

2.4.2.1.1 3-ply, 4-ply, or 5-ply

2.4.2.2 Nominal 2 x 8 laminations

2.4.2.2.1 3-ply, 4-ply, or 5-ply

2.5 Product dimensions for Richland Laminated Columns are listed in **Table 1**.

Table 1. Product Dimensions and Section Properties - Richland Laminated Columns

Product Type	Product ID	Dimensions (in)[1]		Section Properties[2,3,4]				
		Width	Depth	A $(in)^2$	S_x $(in)^3$	L_x $(in)^4$	S_y $(in)^3$	L_y $(in)^4$
Richland Glue-Laminated Timber	RG-326	4.19	5.13	21.46	14.98	31.36	18.33	46.97
	RG-426	5.50	5.13	28.19	25.84	71.06	24.08	61.70
	RG-328	4.19	7.13	29.84	20.82	43.60	35.43	126.22
	RG-428	5.50	7.13	39.19	35.92	98.79	46.54	165.78
	RG-528	6.88	7.13	48.98	56.13	192.94	58.17	207.23

SI: 1 in = 25.4 mm, 1 in2 = 645.16 mm^2, 1 in^3 = 16,387.06 mm^3, 1 in4 = 416,234.43 mm^4

1. Dimensions are for vertically laminated beams/columns.
2. See **Figure 3** for axis orientation.
3. X-X axis is the neutral axis for bending produced by loads applied perpendicular to the wide face of the laminations.
4. Y-Y axis is the neutral axis for bending produced by loads applied parallel to the wide face of the laminations.

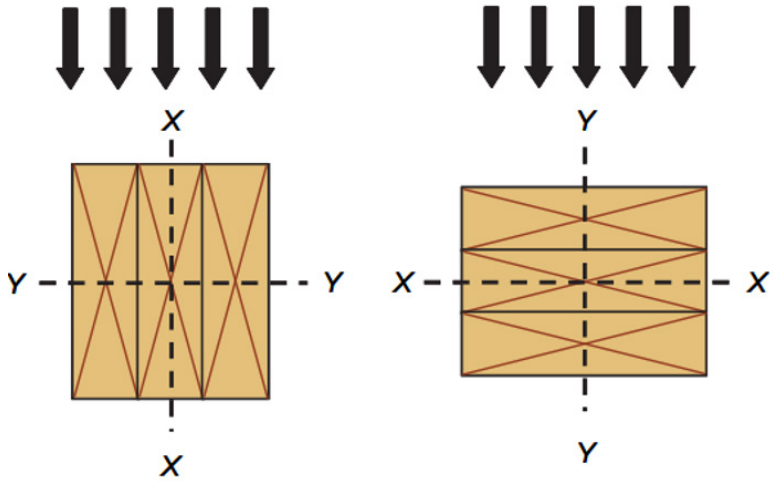

Figure 3. Vertically Laminated (Left) and Horizontally Laminated (Right)

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

3 Definitions[2]

3.1 New Materials[3] are defined as building materials, equipment, appliances, systems, or methods of construction, not provided for by prescriptive and/or legislatively adopted regulations, known as alternative materials.[4] The design strength and permissible stresses shall be established by tests[5] and/or engineering analysis.[6]

3.2 Duly authenticated reports[7] and research reports[8] are test reports and related engineering evaluations that are written by an approved agency[9] and/or an approved source.[10]

3.2.1 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 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]

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

4.1 *Local, State, and Federal*

4.1.1 Approved in all local jurisdictions pursuant to ISO/IEC 17065 duly authenticated report use, which includes the following featured local jurisdictions and is not limited to: 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 duly authenticated report use, which includes the following featured states, and is not limited to: 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 *AITC Test T107: Shear Test*

4.2.2 *AITC Test T110: Cyclic Delamination Test*

4.2.3 *AITC Test T119: Full Size End Joint Tension Test*

4.2.4 *ANSI 117: Standard Specification for Structural Glued Laminated Timber of Softwood Species*

4.2.5 *ANSI 405: Standard for Adhesives for Use in Structural Glued Laminated Timber*

4.2.6 *ANSI A190.1: Product Standard for Structural Glued Laminated Timber*

4.2.7 *ASABE EP 484.3: Diaphragm Design of Metal-Clad, Wood-Frame Rectangular Buildings*

4.2.8 *ASABE EP 486.3: Shallow Post and Pier Foundation Design*

4.2.9 *ASTM D198: Standard Methods of Static Testing of Lumber in Structural Sizes*

4.2.10 *ASTM D2559: Standard Specification for Adhesives for Bonded Structural Wood Products for Use Under Exterior Exposure Conditions*

4.2.11 *ASTM D3737: Standard Practice for Establishing Allowable Properties for Structural Glued Laminated Timber (Glulam)*

4.2.12 *ASTM D5457: Standard Specification for Computing Reference Resistance of Wood-Based Materials and Structural Connections for Load and Resistance Factor Design*

4.2.13 *ASTM D7469: Standard Test Methods for End Joints in Structural Wood Products*

4.2.14 *AWC National Design Specification (NDS®) for Wood Construction*

4.2.15 *AWC National Design Specification (NDS®) Supplement Design Values for Wood Construction*

4.2.16 *AWC Special Design Provisions for Wind and Seismic*

4.3 *Regulations*

4.3.1 *IBC – 18, 21, 24: International Building Code®*

4.3.2 *IRC – 18, 21, 24: International Residential Code®*

5 Listed[25]

5.1 Equipment, materials, products, or services included in a List published by a nationally recognized testing laboratory (i.e., CBI), an approved agency (i.e., CBI and DrJ), and/or and approved source (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 Richland Laminated Columns are intended for use as columns in the construction of buildings, pole barns, and various other structures.

6.1.1.1 Richland Laminated Columns shall be designed in accordance with the applicable sections in the AWC NDS and its supplement as specified in IBC Section 2306.1.

6.1.1.1.1 Where applicable, Richland Laminated Columns shall be laterally restrained at the top of the column by a roof diaphragm designed and detailed in accordance with AWC SDPWS or ASABE EP 484.3.

6.1.1.2 Soil and backfill underneath and around Richland Laminated Columns for post-frame buildings shall be designed in accordance with ASABE EP 486.3 as specified in IBC Section 2306.1.

6.1.2 End-joints were evaluated for tensile strength and cyclic delamination in accordance with AITC T119 and AITC T110, respectively, as required per ANSI A190.1 Section 13.1.3, and met the requirements set forth therein.

6.1.3 Face joints of Richland GLT were evaluated for shear strength and cyclic delamination in accordance with AITC T107 and AITC T110, respectively, as required per ANSI A190.1 Section 13.1.2, and met the requirements set forth therein.

6.2 *Reference Design Values*

6.2.1 Allowable Stress Design (ASD) values for Richland Laminated Columns are listed in **Table 2**.

Table 2. Reference Design Values (ASD) for Richland Laminated Columns

Product Type	Product ID	Edgewise[1] (psi)		Flatwise[2] (psi)		Axial (psi)		$F_{c\perp}$ (psi)	E_{axial}[4] (10^6 psi)	E_{app} (10^6 psi)	E_{min}[5] (10^6 psi)
		F_{by}	F_{vy}[3]	F_{bx}	F_{vx}[3]	F_t	F_c				
Visually Graded (No. 1) Richland GLT	RG-326	1,750	250	1,800	300	1,150	1,450	650	1.8	1.7	0.90
	RG-426	1,850	260				1,700				
	RG-328	1,750	250				1,450				
	RG-428	1,850	260				1,700				
	RG-528	1,850	260				1,700				
MSR Richland GLT	RG-326M	2,100	250	2,100	300	1,550	1,700	740	2.0	1.9	1.00
	RG-426M	2,300	260				2,300				
	RG-328M	2,100	250				1,700				
	RG-428M	2,300	260				2,300				
	RG-528M	2,300	260				2,300				

SI: 1 psi = 0.0689 MPa

1. Bending about the Y-Y axis. Load applied parallel to wide faces of laminations.
2. Bending about the X-X axis. Load applied perpendicular to wide faces of laminations.
3. Design values for shear shall be decreased by a factor of 0.72 for non-prismatic members, notched members, and for all members subject to impact or cyclic loading. This reduced design value shall be used for design of members at connections that transfer shear by mechanical fasteners, and for determination of design values for radial tension and torsion.
4. The true (shear-free) Modulus Of Elasticity (MOE) shall be equal to the tabulated E_{axial}.
5. The tabulated E_{min} values can be used in beam stability and column stability calculations.

6.2.1.1 Tabulated ASD values in **Table 2** can be converted to Load Resistance Factor Design (LRFD) values using the provisions set forth in NDS Chapter 2 or ASTM D5457.

6.2.2 *Allowable Axial Compression Loads:*

6.2.2.1 The allowable axial compression loads for Richland Laminated Columns are provided in **Table 3**.

Table 3. Maximum Allowable Compression Loads

Product ID		Maximum Allowable Load (lb)								
		Unbraced Column Length (ft)								
		12	14	16	18	20	21	22	23	24
Visually Graded (No. 1) Richland GLT	RG-326	18,000	13,500	10,500	8,500	7,000	6,500	6,000	5,500	5,000
	RG-426	24,000	18,500	14,500	11,500	9,500	8,500	7,500	7,000	6,500
	RG-328	36,000	31,500	26,500	22,000	18,000	16,500	15,000	14,000	13,000
	RG-428	52,000	44,000	36,000	29,500	24,000	22,000	20,000	18,500	17,000
	RG-528	65,000	54,500	44,500	36,500	30,000	27,500	25,500	23,000	21,500
MSR Richland GLT	RN-326	20,000	15,500	12,000	9,500	8,000	7,000	6,500	6,000	5,500
	RN-426	27,500	20,500	16,000	12,500	10,500	9,500	8,500	8,000	7,000
	RN-328	41,500	35,500	29,500	24,500	20,500	18,500	17,000	15,500	14,500
	RN-428	63,500	51,000	41,000	33,000	27,000	25,000	22,500	21,000	19,000
	RN-528	79,500	64,000	51,000	41,500	34,000	31,000	28,500	26,000	24,000

SI: 1 lb = 4.45 N, 1 ft = 0.305 m

1. Calculations based on NDS Section 3.7 and the following assumptions: K_e = 1.0 and non-eccentric loading.

6.3 *Fire Resistance*

6.3.1 Per IBC Section 722.1, the methodology detailed in NDS Chapter 16 is permitted to be used in designing Richland Laminated Columns exposed to fire up to 2 hours.

6.4 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 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 Regulatory Evaluation and Accepted Engineering Practice

8.1 Richland Laminated Columns comply with the following legislatively adopted regulations and/or accepted engineering practice for the following reasons:

8.1.1 Richland Glue-Laminated Timber was evaluated in accordance with ANSI A190.1 as specified in IBC Section 2303.1.3.

8.1.2 Dimensions of Richland Laminated Columns comply with the minimum nominal size as specified in IRC Section R407.3.

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 qualified[29] 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 accredited ICS code scope 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.

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 Adhesive compliance to ANSI 405 from an approved source

10.1.2 Adhesive compliance to ASTM D2559 from an approved source

10.1.3 End-joint delamination and tension testing in accordance with AITC T110, AITC T119, and ASTM D7469

10.1.4 Face bond shear and delamination testing in accordance with AITC T107 and AITC T110

10.1.5 Flexural strength and stiffness testing in accordance with ASTM D198

10.1.6 Compression parallel-to-grain testing in accordance with ASTM D198

10.2 Information contained herein may include the result of testing and/or data analysis by sources that are approved agencies, approved sources, and/or an RDP. Accuracy of external test data and resulting analysis is relied upon.

10.3 Where applicable, testing and/or engineering analysis are based upon provisions that have been codified into law through state or local adoption of regulations and standards. The developers of these regulations and standards are responsible for the reliability of published content. DrJ's engineering practice may use a regulation-adopted provision as the control. A regulation-endorsed control versus a simulation of the conditions of application to occur establishes a new material as being equivalent to the regulatory provision in terms of quality, strength, effectiveness, fire resistance, durability, and safety.

10.4 The accuracy of the provisions provided herein may be reliant upon the published properties of raw materials, which are defined by the grade mark, grade stamp, mill certificate, or duly authenticated reports from approved agencies and/or approved sources provided by the supplier. These are presumed to be minimum properties and relied upon to be accurate. The reliability of DrJ's engineering practice, as contained in this duly authenticated report, may be dependent upon published design properties by others.

10.5 *Testing and Engineering Analysis:*

10.5.1 The strength, rigidity, and/or general performance of component parts and/or the integrated structure are determined by suitable tests that simulate the actual conditions of application that occur and/or by accepted engineering practice and experience.[31]

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

11 Findings

11.1 As outlined in **Section 6**, Richland Laminated Columns 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 duly authenticated report and the manufacturer installation instructions, Richland Laminated Columns shall be approved for the following applications:

11.2.1 Richland Laminated Columns are recognized as being in compliance with the design parameters herein and are permitted to be used as structural members in Type IV and other types of construction permitted by the IBC.

11.2.2 Richland Laminated Columns are permitted for ground-contact per IBC Section 2304.12.2.2, IBC Section 2304.12.2.6.1, and IRC Section R304.

11.3 Unless exempt by state statute, when Richland Laminated Columns 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.

11.4 Any application specific issues not addressed herein can be engineered by an RDP. Assistance with engineering is available from Richland Laminated Columns.

11.5 IBC Section 104.2.3 (IRC Section R104.2.2 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.

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

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

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

11.6.3 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.

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

11.8 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]

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 As listed herein, Richland Laminated Columns shall be subjected to the following conditions:

12.3.1 The design of Richland Laminated Columns shall comply with the requirements of IBC Section 2306 for Allowable Stress Design (ASD), IBC Section 2307 for Load and Resistance Factor Design (LRFD), IRC Section R502.2, IRC Section R802.2, and NDS as applicable. All applicable adjustments to the ASD values shall be in accordance with NDS Section 5.3.

12.3.1.1 The tabulated design values in **Table 2** are for dry service conditions where the moisture content in service is less than sixteen percent (16%).

12.3.1.1.1 For wet service conditions, where the moisture content in service is greater than sixteen percent (16%), the design values in **Table 2** shall be multiplied by the applicable wet service factor, C_M, specified in Tables 5A, 5B, 5C, and 5D of the AWC NDS Supplement, Chapter 4 – Reference Design Values.

12.3.2 Per IBC Section 2304.12.2.2, Richland Laminated Columns that are not treated with a pressure-preservative shall be:

12.3.2.1 Protected by a roof, eave, overhang, or other covering if exposed to the weather. In general, untreated posts or columns are not exposed to the weather.

12.3.2.2 Supported by concrete piers or metal pedestals projected not less than 1" above the slab or deck, and are separated from the concrete pier by an impervious moisture barrier.

12.3.2.3 Located not less than 8" above exposed earth.

12.3.3 Richland Laminated Columns shall be restrained to prevent lateral displacement at the bottom end, per IRC Section R407.3.

12.3.3.1 In Seismic Design Categories (SDC) A through C, columns not more than 48" in height on a pier or footing, are exempt from the bottom end lateral displacement requirement within under-floor areas enclosed by a continuous foundation.

12.3.4 Richland Laminated Columns shall be protected from termites when installed in geographical areas where hazard of termite damage is known to be *"very heavy"* per IBC Section 2304.12.2.7 and IRC Section R305.

12.3.4.1 See IBC Figure 2603.8 or IRC Figure R305.4.

12.3.5 Fasteners used in contact with preservative-treated lumber shall comply with IBC Section 2304.10.6 and IRC Section R304.3.

12.3.6 Richland Laminated Columns shall be installed into bored holes in the ground and backfilled with suitable compacted soils, wet-poured concrete, or a self-leveling and self-compacting material.

12.3.6.1 Backfill material and foundation is outside the scope of this report and shall be designed by an engineer.

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

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

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

12.4.3 This innovative product has an internal quality control program and a third-party quality assurance program.

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

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

12.4.6 This innovative product has an internal quality control program and a third party quality assurance program in accordance with IBC Section 104.7.2, IBC Section 110.4, IBC Section 1703, IRC Section R104.7.2, and IRC Section R109.2.

12.4.7 The application of this innovative product in the context of this report is dependent upon the accuracy of the construction documents, implementation of installation instructions, inspection as required by IBC Section 110.3, IRC Section R109.2, and any other regulatory requirements that may apply.

12.5 The approval of this report by the AHJ shall comply with IBC Section 1707.1, where legislation states in part, *"the building official shall make, or cause to be made, the necessary tests and investigations; or the building official shall accept duly authenticated reports from approved agencies in respect to the quality and manner of use of new materials or assemblies as provided for in Section 104.2.3"*, all of IBC Section 104, and IBC Section 105.3.

12.6 Design loads shall be determined in accordance with the regulations adopted by the jurisdiction in which the project is to be constructed and/or by the building designer (i.e., owner or RDP).

12.7 The actual design, suitability, and use of this report for any particular building, is the responsibility of the owner or the authorized agent of the owner.

13 Identification

13.1 The innovative product listed in **Section 1.1** is identified by a label on the board or packaging material bearing the manufacturer name, product name, this report number, and other information to confirm code compliance.

13.2 Additional technical information can be found at richlandcolumns.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 DrJ Certification.

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

[30] 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] 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.