



Listing and Technical Evaluation Report™

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Versetta Stone® Panelized Stone Veneer Applications Over Continuous Insulation

Trade Secret Report Holder:

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CSI Designations:

DIVISION: 07 00 00 - THERMAL AND MOISTURE PROTECTION

Section: 07 44 53 - Glass-Fiber-Reinforced Cementitious Panels

Section: 07 44 63 - Fabricated Faced Panel Assemblies

1 Innovative Product Evaluatedⁱ

1.1 Versetta Stone® Panelized Stone Veneer

2 Product Description and Materials

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



Figure 1. Versetta Stone Panel with Nailing Hem (Across Top of Panel)



- 2.2 Versetta Stone is a non-structural, fiber-reinforced, cement-based masonry wall cladding that is mechanically attached to wall framing.
- 2.3 The panels have a simulated stone veneer surface.
- 2.4 The panels measure 36.4" long, 9.5" tall and 1.8" thick and have tongue-and-groove edges that engage adjacent panels.
 - 2.4.1 The finished exposure of the panels is 8"x36".
- 2.5 A 0.0217" thick painted G90 galvanized steel nailing flange is molded along the top edge of the panels for attachment to the framing and/or nail base (see **Figure 1**).
- 2.6 The bottom edge and the ends of the panels fit together using tongue-and-groove technology.
- 2.7 The panels have an installed weight of approximately 8.5 psf (17 lbs per panel).
- 2.8 Additionally, the stone veneer panels are supplemented with various accessories to aid with installation.
- 2.9 As needed, review material properties for design in Section 6 and to regulatory evaluation in Section 8.

3 Definitions

- 3.1 New Materialsⁱⁱ 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.ⁱⁱⁱ The design strengths and permissible stresses shall be established by tests^{iv} and/or engineering analysis.^v
- 3.2 Duly Authenticated Reports^{vi} and Research Reports^{vii} are test reports and related engineering evaluations, which are written by an approved agency^{viii} and/or an approved source.^{ix}
 - 3.2.1 These reports contain intellectual property and/or trade secrets, which are protected by the Defend Trade Secrets Act (DTSA).^x
- 3.3 An approved agency is "approved" when it is ANAB ISO/IEC 17065 accredited. DrJ Engineering, LLC (DrJ) is listed in the ANAB directory.
- 3.4 An approved source is "approved" when a professional engineer (i.e., Registered Design Professional) is properly licensed to transact engineering commerce. The regulatory authority governing approved sources is the state legislature via its professional engineering regulations.^{xi}
- 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 Registered Design Professional (RDP).
 - 3.5.1 The Center for Building Innovation (CBI) is ANAB^{xii} ISO/IEC 17025 and ISO/IEC 17020 accredited.
- 3.6 The regulatory authority shall enforce^{xiii} 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^{xiv} 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.^{xv}
- 3.8 ANAB is an International Accreditation Forum (IAF) Multilateral Recognition Arrangement (MLA) signatory where recognition of certificates, validation, and verification statements issued by conformity assessment bodies accredited by all other signatories of the IAF MLA with the appropriate scope, shall be approved.^{xvi} Therefore, all ANAB ISO/IEC 17065 Duly Authenticated Reports are approval equivalent.^{xvii}
- 3.9 Approval equity is a fundamental commercial and legal principle.^{xviii}



4 Applicable Standards for the Listing; Regulations for the Regulatory Evaluation^{xix}

4.1 Standards

- 4.1.1 *ASTM C1186: Standard Specification for Flat Fiber-Cement Sheets*
- 4.1.2 *ASTM D3679: Standard Specification for Rigid Poly (Vinyl Chloride) (PVC) Siding*
- 4.1.3 *ASTM D5206: Standard Test Method for Windload Resistance of Rigid Plastic Siding*
- 4.1.4 *ASTM E2273: Standard Test Method for Determining the Drainage Efficiency of Exterior Insulation and Finish Systems (EIFS) Clad Wall Assemblies*

4.2 Regulations

- 4.2.1 *IBC – 15, 18, 21: International Building Code®*
- 4.2.2 *IRC – 15, 18, 21: International Residential Code®*

5 Listed^{xx}

- 5.1 A nationally recognized testing laboratory such as CBI, states that the materials, designs, methods of construction, and/or equipment have met nationally recognized standards and/or have been tested and found suitable for use in a specified manner.

6 Tabulated Properties Generated from Nationally Recognized Standards

- 6.1 Versetta Stone is used as an exterior wall covering in accordance with the applicable sections of IBC Chapter 14 and IRC Section R703, and is installed over wood-framed walls and Wood Structural Panel (WSP) capable of supporting the imposed loads in accordance with IBC Section 1609 and IRC Section R301.2.1, including all required transverse wind loads.
- 6.2 Versetta Stone is also used as an exterior wall covering installed over wood or steel-framed walls where the WSPs are over-sheathed with continuous insulation. Connections for this installation are as shown in **Table 1**.
- 6.3 Unless designed as provided in Section **9.4** or Section **9.5**, Versetta Stone shall not be installed in areas where the design wind pressure exceeds the capacity of the cladding and its attachment to resist the load in accordance with **Table 2** for wood-framed walls and **Table 3** for steel-framed walls.
- 6.4 See **Table 4** for wind pressures associated with V_{ult} per ASCE 7.
 - 6.4.1 Design in accordance with generally accepted engineering practice may be used as an alternative to Section **6.3**.
- 6.5 **Table 4** provides an aid for designers in determining the allowable wind pressures for Versetta Stone panel installation.
 - 6.5.1 For example, given the following:
 - 6.5.1.1 Wind Speed, V_{ult} = 180 mph
 - 6.5.1.2 Exposure D
 - 6.5.1.3 Wood Framing



- 6.5.2 From **Table 2**, the maximum mean roof height allowed for this condition is 20'.
- 6.5.3 This application assumes at least two (2) fasteners into the studs and two (2) additional fasteners into the WSP sheathing.
- 6.5.4 The corresponding wind pressure from **Table 4** shows that this installation corresponds to an allowable wind pressure of 121.2 psf.
- 6.6 For additional information or use in other applications, consult the manufacturer installation instructions.

Table 1. Fastener Requirements to Support Versetta Stone Installation over Continuous Insulation, Sheathing and Wood or Steel Framing^{1,2,3,4,5,6}

Fastener Type	Fastener Diameter (in)	Fastener Length (in)	Fasteners Required								
			Thickness of Continuous Insulation (in)								
			0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0
Nails	0.120	2.5	x	x	x						
	0.131	2.5	x	x	x	n					
	0.148	3.0	x	x	x	x	n				
	0.162	3.5	x	x	x	x	x	n			
	0.192	4.0	x	x	x	x	x	x	n	n	n
Screws	#8 screw (0.164)	2.0	x	x	x	n	n	n			
	#10 (0.190)	2.5	x	x	x	x	n	n	n	n	n
	#12 (0.216)	3.0	x	x	x	x	x	n	n	n	n
	#14 (0.242)	4.0	x	x	x	x	x	x	x	n	n

SI: 1 in = 25.4 mm

1. Fastener lengths are the maximum length commonly available for a given diameter. Longer fasteners may be available from proprietary sources. (See *Footnote 4*.)
2. Table values are based on NDS allowable lateral loads for fasteners as modified by APA TR 12 for use with a gap parameter for gravity load only (i.e., fasteners sized to support weight of cladding, while cantilevered from framing a distance equal to the foam sheathing thickness).
3. Each panel shall contain a minimum of four (4) fasteners. Two (2) of the fasteners must be installed into the stud and penetrate a minimum of 1" for wood studs or three (3) threads beyond the backside of steel studs. The other two (2) fasteners are permitted to be fastened through the WSP and must protrude out of the backside of the WSP a minimum of 1/2". Where nail-base sheathing is not used or studs are greater than 16" o.c. and not greater than 24" o.c., Versetta Bridging must be used to transfer the loads back to the studs.
4. "n" = non-standard or proprietary fasteners may be available with the additional length required to meet the penetration requirements.
5. Where a substrate other than nail-base sheathing is used, its thickness shall be added to the continuous insulation thickness for the purpose of determining the fastener size.
6. Table assumes 1/2" sheathing applied to framing. For other sheathings thicknesses, evaluate fasteners accordingly for minimum penetration into framing.



Table 2. Wind Pressure Capacity of Versetta Stone Installation in Wood Framing over Continuous Insulation and WSP Sheathing

Exposure Category	Wind Speed ^{1,2} (mph) (V_{ult}/V_{asd})	Permitted Wind Capacity ^{3,4,5,6}					
		Mean Roof Height (ft)					
		15	20	25	30	35	40
B	≤ 180/139	WSP	WSP	WSP	WSP	WSP	WSP
	200/155	WSP	WSP	WSP	ST	ST	ST
C	≤ 160/124	WSP	WSP	WSP	WSP	WSP	WSP
	180/139	ST	ST	ST	ST	ST	ST
	200/155	ST	NP	NP	NP	NP	NP
D	≤ 140/108	WSP	WSP	WSP	WSP	WSP	WSP
	150/116	WSP	WSP	WSP	WSP	WSP	ST
	160/124	ST	ST	ST	ST	ST	ST
	180/139	ST	ST	NP	NP	NP	NP

SI: 1 in = 25.4 mm, 1 mph = 1.61 km/h
 1. Listed wind speed is V_{ult} per ASCE 7-22, the maximum allowed wind speed condition for the fastening method shown.
 2. Maximum allowable wind speeds are based on the average ultimate loads tested for each condition divided by 1.5.
 3. ST = Each Versetta Stone panel contains two (2) fasteners installed into studs (ST) and at least two (2) fasteners into WSP only.
 4. NP = Not Permitted
 5. Assumes a minimum 1/4" diameter self-tapping, pan head screw with 2" of penetration into the wood framing (i.e., 1/2" WSP sheathing plus 1 1/2" into wood studs) and a minimum of 1/2" of screw protruding out of the backside of the WSP.
 6. Pressure equalization factor in accordance with ASTM D5206 Procedure B equals 1.0.



Table 3. Wind Pressure Capacity of Versetta Stone Installation in Steel Framing Over Exterior Gypsum Sheathing (DensGlass or Equal)

Exposure Category	Wind Speed ^{1,2} (mph) (V_{ult}/V_{asd})	Permitted Wind Capacity ^{3,4,5,6,7}					
		Mean Roof Height (ft)					
		15	20	25	30	35	40
B	≤ 110/85	ST	ST	ST	ST	ST	STVB
	115/89	ST	ST	ST	ST	ST	STVB
	120/93	ST	ST	ST	ST	ST	STVB
	130/101	ST	ST	ST	ST	STVB	STVB
	140/108	STVB	STVB	STVB	STVB	STVB	STVB
	150/116	STVB	STVB	STVB	STVB	STVB	STVB
	160/124	STVB	STVB	STVB	STVB	NP	NP
C	≤ 110/85	ST	ST	ST	ST	STVB	STVB
	115/89	ST	ST	STVB	STVB	STVB	STVB
	120/93	STVB	STVB	STVB	STVB	STVB	STVB
	130/101	STVB	STVB	STVB	STVB	STVB	STVB
	140/108	STVB	STVB	NP	NP	NP	NP
D	≤ 120/93	STVB	STVB	STVB	STVB	STVB	STVB
	130/101	STVB	STVB	NP	NP	NP	NP

SI: 1 in = 25.4 mm, 1 mph = 1.61 km/h
 1. Listed wind speed is V_{ult} per ASCE 7-22, the maximum allowed wind speed condition for the fastening method shown.
 2. Maximum allowable wind speeds are based on the average ultimate loads tested for each condition divided by 1.5.
 3. ST = each panel contains two (2) fasteners installed into the studs (ST) only.
 4. STVB = each panel contains two (2) fasteners installed into studs and at least two (2) fasteners into Versetta Bridging. At least two (2) fasteners shall be installed to attach Versetta Bridging (STVB) to studs.
 5. NP = Not Permitted.
 6. Assumes a minimum 1 1/4" ceramic-coated self-tapping pan head screw into studs. Where Versetta bridging is used, the additional fasteners are #8 x 3/4" truss head screw.
 7. Pressure Equalization factor in accordance with ASTM D5206, Procedure B equals 1.0.



Table 4. General Wind Pressure Resistance Criteria per ASCE 7-22 for Components & Cladding

Exposure Category	Wind Speed (mph) (V_{ult}/V_{asd})	Permitted Wind Pressure Resistance (psf)					
		Mean Roof Height (ft)					
		15	20	25	30	35	40
B	110	23.8	25.7	27.3	28.7	29.9	31.0
	115	26.0	28.1	29.9	31.3	32.7	33.8
	120	28.4	30.6	32.5	34.1	35.6	36.8
	130	33.3	35.9	38.1	40.0	41.7	43.2
	140	38.6	41.7	44.2	46.4	48.4	50.1
	150	44.3	47.9	50.8	53.3	55.6	57.6
	160	50.4	54.4	57.8	60.7	63.2	65.5
	180	63.8	68.9	73.1	76.8	80.0	82.9
	200	78.8	85.1	90.3	94.8	98.8	102.3
C	110	35.4	37.5	39.3	40.8	42.1	43.3
	115	38.7	41.0	43.0	44.6	46.0	47.3
	120	42.1	44.7	46.8	48.5	50.1	51.5
	130	49.5	52.4	54.9	57.0	58.8	60.4
	140	57.4	60.8	63.7	66.1	68.2	70.1
	150	65.8	69.8	73.1	75.8	78.3	80.4
	160	74.9	79.4	83.1	86.3	89.1	91.5
	180	94.8	100.5	105.2	109.2	112.7	115.8
	200	117.1	124.1	129.9	134.8	139.1	143.0
D	110	43.1	45.3	47.1	48.6	49.9	51.1
	115	47.1	49.5	51.4	53.1	54.5	55.8
	120	51.2	53.9	56.0	57.8	59.4	60.8
	130	60.1	63.2	65.7	67.8	69.7	71.3
	140	69.7	73.3	76.2	78.7	80.8	82.7
	150	80.1	84.2	87.5	90.3	92.8	95.0
	160	91.1	95.8	99.6	102.8	105.6	108.0
	180	115.3	121.2	126.0	130.1	133.6	136.7
	200	142.3	149.6	155.6	160.6	164.9	168.8

SI: 1 in = 25.4 mm, 1 psf = 0.0479 kN/m², 1 mph = 1.61 km/h

- 6.7 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^{xxi}

- 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.^{xxii}
- 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.^{xxiii}

8 Regulatory Evaluation and Accepted Engineering Practice

- 8.1 Versetta Stone Panelized Stone Veneer complies with the following legislatively adopted regulations and/or accepted engineering practice for the following reasons:
 - 8.1.1 Versetta Stone was evaluated for use as an exterior wall covering in accordance with IBC Section 1402^{xxiv} and IRC Section R703.
 - 8.1.1.1 Specifically, Versetta Stone was evaluated for use as a weather-resistant covering in accordance with IBC Section 1403.2^{xxv} and IRC Section R703.1.1.
 - 8.1.1.2 Versetta Stone was evaluated to determine its ability to resist wind loads in accordance with IBC Section 1609 and IRC Section R703.1.2.
 - 8.1.1.3 Versetta Stone was evaluated for installation over wood framing and WSP sheathing with the addition of continuous insulation installed between the WSP and Versetta Stone panels.
 - 8.1.1.4 Use in applications requiring a fire-resistance rating are outside the scope of this evaluation.
 - 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 Engineering, LLC (DrJ), an ISO/IEC 17065 accredited certification body and a professional engineering company operated by RDP/approved sources. DrJ is qualified^{xxvi} to practice product and regulatory compliance services within its scope of accreditation and engineering expertise, respectively.
 - 8.3 Engineering evaluations are conducted with DrJ's ANAB accredited ICS code scope of expertise, which are 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, the more restrictive shall govern.
- 9.3 *General*
 - 9.3.1 Versetta Stone shall be installed in accordance with the manufacturer published installation instructions and this report. In the event of a conflict between the manufacturer installation instructions and this report, the more restrictive shall govern.
 - 9.3.2 Installation is subject to the conditions of use set forth in Section 12.
 - 9.3.3 A Water-Resistive Barrier (WRB) is required behind Versetta Stone in accordance with IBC Section 1403.2^{xxvii} and IRC Section R703.2. The WRB may be comprised of a liquid-applied, sheet material or continuous insulation product evaluated for use as a WRB with all joints taped per the manufacturer installation instructions.



- 9.3.4 All Versetta Stone vertical joints shall be staggered between courses.
- 9.3.5 All other installation and flashing details relevant to the project shall be in accordance with the applicable building code and the manufacturer installation instructions.
- 9.4 *Wood-Framed Walls*
 - 9.4.1 Versetta Stone shall be installed over structural sheathing (nailing base) capable of resisting 100% of the design wind loads and shall be attached at a minimum, in accordance with **Table 1**.
 - 9.4.2 Versetta Stone may be installed with an intervening layer(s) of continuous insulation and attached in accordance with **Table 1**.
 - 9.4.3 Each Versetta Stone panel shall be installed with a minimum of four (4) fasteners as follows:
 - 9.4.3.1 Two (2) of the fasteners must be installed into the wood stud framing and penetrate a minimum of 1" into the framing.
 - 9.4.3.2 The other two (2) fasteners must be installed into the nail base and must protrude out the backside of the nail base a minimum of 1/2".
 - 9.4.4 Fastener sizes shall be in accordance with **Table 1** or with generally accepted engineering practice.
- 9.5 *Steel-Framed Walls*
 - 9.5.1 Versetta Stone shall be installed over sheathing capable of resisting 100% of the design wind loads and shall be attached, at a minimum, with screws in accordance with **Table 1**.
 - 9.5.2 Versetta Stone may be installed over an intervening layer(s) of continuous insulation and attached in accordance with **Table 1**.
 - 9.5.3 Each Versetta Stone panel shall be installed as follows:
 - 9.5.3.1 Two (2) fasteners must be installed into the steel stud framing and penetrate a minimum of three (3) threads into the framing (i.e., one fastener into each stud covered by the Versetta Stone panel).
 - 9.5.3.2 Two (2) fasteners must be installed into the nail base and must protrude out the backside of the nail base a minimum of 1/2". Where nail-base sheathing is not used, Versetta Bridging shall be used to transfer loads to studs.

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 Physical and mechanical property compliance in accordance with ASTM C1186
 - 10.1.2 Nail hem bond strength testing in accordance with ASTM C1185
 - 10.1.3 Water drainage testing in accordance with ASTM E2273
 - 10.1.4 Pressure equalization testing in accordance with ASTM D3679, Annex A1
 - 10.1.5 Transverse wind load testing in accordance with ASTM D5206, Procedure B
- 10.2 Reports showing compliance with required quality control procedures and documentation.
- 10.3 *Fastening Systems for Continuous Insulation*, Final Report 10-11; New York State Energy Research and Development Authority (NYSERDA); Albany, NY; April 2010.
- 10.4 Baker, P. and Lepage, R.; *Cladding Attachment Over Thick Exterior Insulating Sheathing*; Prepared by the Building Science Corporation for the National Renewable Energy Laboratory on behalf of the U.S. Department of Energy's Building America Program; January 2014.



- 10.5 Baker, P; *Initial and Long-Term Movement of Cladding Installed Over Exterior Rigid Insulation*; Prepared by the Building Science Corporation for the National Renewable Energy Laboratory on behalf of the U.S. Department of Energy's Building America Program; September, 2014.
- 10.6 Information contained herein may include the result of testing and/or data analysis by sources that are approved agencies, approved sources, and/or RDPs. Accuracy of external test data and resulting analysis is relied upon.
- 10.7 Where pertinent, 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.
- 10.8 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.
- 10.9 Testing and engineering analysis: 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.^{xxviii}
- 10.10 Where additional condition of use and/or regulatory compliance information is required, please search for Versetta Stone on the DrJ Certification website.

11 Findings

- 11.1 As outlined in Section 6, Versetta Stone has performance characteristics that were tested and/or meet applicable regulations and is 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, Versetta Stone shall be approved for the following applications:
- 11.2.1 Versetta Stone is suitable for use as an exterior wall covering assembly when installed over sheathing separately capable of resisting 100% of the design wind pressures. An intervening layer(s) of continuous insulation may be installed between the Versetta Stone and the sheathing in accordance with **Table 1**, **Table 2** and **Table 3**.
- 11.3 Versetta Stone is equivalent to the products listed in the applicable building code for use as an exterior wall covering in accordance with IBC Section 1403.10^{xxix} and IRC Section R703.10.
- 11.4 Any application specific issues not addressed herein can be engineered by an RDP. Assistance with engineering is available from Westlake Royal Stone, LLC.
- 11.5 IBC Section 104.11 (IRC Section R104.11 and IFC Section 104.10^{xxx} are similar) in pertinent part states:

104.11 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code. Where the alternative material, design or method of construction is not approved, the building official shall respond in writing, stating the reasons the alternative was not approved.



- 11.6 **Approved:**^{xxxii} Building regulations require that the building official shall accept Duly Authenticated Reports.^{xxxii}
- 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 Agreements (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.^{xxxiii}

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, Versetta Stone Panelized Stone Veneer shall be subject to the following conditions:
- 12.3.1 Installation shall be on exterior walls consisting of wood or steel framing and sheathing capable of supporting the imposed loads, including transverse wind loads.
- 12.3.2 A WRB is required over the sheathing and may consist of a liquid-applied, sheet good material or continuous insulation.
- 12.3.3 Where the seismic provisions of IRC Section R301.2.2 apply, the Versetta Stone wall assembly shall not exceed the weight limits of IRC Section R301.2.2.2 unless an engineered design is provided in accordance with IRC Section R301.1.3.
- 12.3.4 Walls shall be braced to resist shear (racking) load by other means in accordance with the applicable code.
- 12.3.5 This product shall not be used in areas where the design wind pressure exceeds the resistance of the product in accordance with **Table 2** or **Table 3**.
- 12.4 Wall framing shall be limited to a maximum out of plane deflection of $H/240$ per IBC Table 1604.3 and IRC Table R301.7.
- 12.5 Where Versetta Bridging is used, wall framing shall be limited to a maximum stud spacing of 24" o.c.
- 12.6 Where Versetta Bridging is not used, wall framing shall be limited to a maximum stud spacing of 16" o.c.
- 12.7 Use of Versetta Stone panels in installations exceeding 30' in height are outside the scope of this report.
- 12.8 Use of Versetta Stone panels in the high velocity hurricane zone of southern Florida is outside the scope of this report.
- 12.9 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:
- 12.9.1 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.
- 12.9.2 This report and the installation instructions shall be submitted at the time of permit application.
- 12.9.3 This innovative product has an internal quality control program and a third-party quality assurance program.



- 12.9.4 At a minimum, this innovative product shall be installed per Section 9 of this report.
- 12.9.5 The review of this report by the AHJ shall comply with IBC Section 104 and IBC Section 105.4.
- 12.9.6 This innovative product has an internal quality control program and a third party quality assurance program in accordance with IBC Section 104.4, IBC Section 110.4, IBC Section 1703, IRC Section R104.4, and IRC Section R109.2.
- 12.9.7 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.
- 12.10 The approval of this report by the AHJ shall comply with IBC Section 1707.1, where legislation states in part, *"the building official shall accept duly authenticated reports from approved agencies in respect to the quality and manner of use of new material or assemblies as provided for in Section 104.11,"* all of IBC Section 104, and IBC Section 105.4.
- 12.11 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).
- 12.12 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 www.westlakeroyalbuildingproducts.com or www.versettastone.com.

14 Review Schedule

- 14.1 This report is subject to periodic review and revision. For the latest version, visit drjcertification.org.
- 14.2 For information on the status of this report, please contact [DrJ Certification](#).

15 Approved for Use Pursuant to U.S. and International Legislation Defined in Appendix A

- 15.1 Versetta Stone Panelized Stone Veneer is included in this report published by an approved agency that is concerned with evaluation of products or services, maintains periodic inspection of the production of listed materials or periodic evaluation of services. This report states either that the material, product, or service meets recognized standards or has been tested and found suitable for a specified purpose. This report meets the legislative intent and definition of being acceptable to the AHJ.



Appendix A

1 Legislation that Authorizes AHJ Approval

- 1.1 **Fair Competition:** State legislatures have adopted Federal regulations for the examination and approval of building code referenced and alternative products, materials, designs, services, assemblies, and/or methods of construction that:
 - 1.1.1 Advance innovation,
 - 1.1.2 Promote competition so all businesses have the opportunity to compete on price and quality in an open market on a level playing field unhampered by anticompetitive constraints, and
 - 1.1.3 Benefit consumers through lower prices, better quality, and greater choice.
- 1.2 **Adopted Legislation:** The following local, state, and federal regulations affirmatively authorize this innovative product to be approved by AHJs, delegates of building departments, and/or delegates of an agency of the federal government:
 - 1.2.1 Interstate commerce is governed by the Federal Department of Justice to encourage the use of innovative products, materials, designs, services, assemblies, and/or methods of construction. The goal is to “*protect economic freedom and opportunity by promoting free and fair competition in the marketplace.*”
 - 1.2.2 Title 18 US Code Section 242 affirms and regulates the right of individuals and businesses to freely and fairly have new products, materials, designs, services, assemblies, and/or methods of construction approved for use in commerce. Disapproval of alternatives shall be based upon non-conformance with respect to specific provisions of adopted legislation and shall be provided in writing stating the reasons why the alternative was not approved, with reference to the specific legislation violated.
 - 1.2.3 The federal government and each state have a public records act. In addition, each state also has legislation that mimics the federal Defend Trade Secrets Act 2016 (DTSA),^{xxxiv} where providing test reports, engineering analysis and/or other related IP/TS is subject to prison of not more than ten years^{xxxv} and/or a \$5,000,000 fine or 3 times the value of^{xxxvi} the Intellectual Property (IP) and Trade Secrets (TS).
 - 1.2.3.1 Compliance with public records and trade secret legislation requires approval through the use of Listings, certified reports, Technical Evaluation Reports, duly authenticated reports, and/or research reports prepared by approved agencies and/or approved sources.
 - 1.2.4 For new materials^{xxxvii} that are not specifically provided for in any regulation, the design strengths and permissible stresses shall be established by tests, where suitable load tests simulate the actual loads and conditions of application that occur.
 - 1.2.5 The design strengths and permissible stresses of any structural material shall conform to the specifications and methods of design using accepted engineering practice.^{xxxviii}
 - 1.2.6 The commerce of approved sources (i.e., registered PEs) is regulated by professional engineering legislation. Professional engineering commerce shall always be approved by AHJs, except where there is evidence provided in writing, that specific legislation have been violated by an individual registered PE.
 - 1.2.7 The AHJ 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 IBC Section 104.11.^{xxxix}



- 1.3 **Approved^{xi} by Los Angeles:** The Los Angeles Municipal Code (LAMC) states in pertinent part that the provisions of LAMC are not intended to prevent the use of any material, device, or method of construction not specifically prescribed by LAMC. The Department shall use Part III, Recognized Standards in addition to Part II, Uniform Building Code Standards of Division 35, Article 1, Chapter IX of the LAMC in evaluation of products for approval where such standard exists for the product or the material and may use other approved standards that apply. Whenever tests or certificates of any material or fabricated assembly are required by Chapter IX of the LAMC, such tests or certification shall be made by a testing agency approved by the Superintendent of Building to conduct such tests or provide such certifications. The testing agency shall publish the scope and limitation(s) of the listed material or fabricated assembly.^{xii} The Superintendent of Building Approved Testing Agency Roster is provided by the Los Angeles Department of Building and Safety (LADBS). The Center for Building Innovation (CBI) Certificate of Approval License is TA24945. Tests and certifications found in a DrJ Listing are LAMC approved. In addition, the Superintendent of Building 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 the California Building Code (CBC) Section 1707.1.^{xiii}
- 1.4 **Approved by Chicago:** The Municipal Code of Chicago (MCC) states in pertinent part that an Approved Agency is a Nationally Recognized Testing Laboratory (NRTL) acting within its recognized scope and/or a certification body accredited by the American National Standards Institute (ANSI) acting within its accredited scope. Construction materials and test procedures shall conform to the applicable standards listed in the MCC. Sufficient technical data shall be submitted to the building official to substantiate the proposed use of any product, material, service, design, assembly, and/or method of construction not specifically provided for in the MCC. This technical data shall consist of research reports from approved sources (i.e., MCC defined Approved Agencies).
- 1.5 **Approved by New York City:** The 2022 NYC Building Code (NYCBC) states in part that an approved agency shall be deemed^{xiii} an approved testing agency via ISO/IEC 17025 accreditation, an approved inspection agency via ISO/IEC 17020 accreditation, and an approved product evaluation agency via ISO/IEC 17065 accreditation. Accrediting agencies, other than federal agencies, must be members of an internationally recognized cooperation of laboratory and inspection accreditation bodies subject to a mutual recognition agreement^{xiv} (i.e., ANAB, International Accreditation Forum [IAF], etc.).
- 1.6 **Approved by Florida:** Statewide approval of products, methods, or systems of construction shall be approved, without further evaluation by:
- 1.6.1 A certification mark or listing of an approved certification agency,
 - 1.6.2 A test report from an approved testing laboratory,
 - 1.6.3 A product evaluation report based upon testing or comparative or rational analysis, or a combination thereof, from an approved product evaluation entity, or
 - 1.6.4 A product evaluation report based upon testing, comparative or rational analysis, or a combination thereof, developed, signed and sealed by a professional engineer or architect, licensed in Florida.
 - 1.6.5 For local product approval, products or systems of construction shall demonstrate compliance with the structural wind load requirements of the Florida Building Code (FBC) through one of the following methods:
 - 1.6.5.1 A certification mark, listing or label from a commission-approved certification agency indicating that the product complies with the code,
 - 1.6.5.2 A test report from a commission-approved testing laboratory indicating that the product tested complies with the code,
 - 1.6.5.3 A product-evaluation report based upon testing, comparative or rational analysis, or a combination thereof, from a commission-approved product evaluation entity which indicates that the product evaluated complies with the code,



- 1.6.5.4 A product-evaluation report or certification based upon testing or comparative or rational analysis, or a combination thereof, developed and signed and sealed by a Florida professional engineer or Florida registered architect, which indicates that the product complies with the code, or
- 1.6.5.5 A statewide product approval issued by the Florida Building Commission.
- 1.6.6 The [Florida Department of Business and Professional Regulation](#) (DBPR) website provides a listing of companies certified as a [Product Evaluation Agency](#) (i.e., EVLMiami 13692), a [Product Certification Agency](#) (i.e., CER10642), and as a [Florida Registered Engineer](#) (i.e., ANE13741).
- 1.7 **Approved by Miami-Dade County (i.e., Notice of Acceptance [NOA]):** A Florida statewide approval is an NOA. An NOA is a Florida local product approval. By Florida law, Miami-Dade County shall accept the statewide and local Florida Product Approval as provided for in Florida legislation [553.842](#) and [553.8425](#).
- 1.8 **Approved by New Jersey:** Pursuant to the 2018 Building Code of New Jersey in [IBC Section 1707.1 General](#),^{xlv} it states: *"In the absence of approved rules or other approved standards, 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 the administrative provisions of the Uniform Construction Code (N.J.A.C. 5:23)"*.^{xlvi} Furthermore N.J.A.C 5:23-3.7 states: *"Municipal approvals of alternative materials, equipment, or methods of construction."*
- 1.8.1 **Approvals:** Alternative materials, equipment, or methods of construction shall be approved by the appropriate subcode official provided the proposed design is satisfactory and that the materials, equipment, or methods of construction are suitable for the intended use and are at least the equivalent in quality, strength, effectiveness, fire resistance, durability, and safety of those conforming with the requirements of the regulations.
- 1.8.1.1 A field evaluation label and report or letter issued by a nationally recognized testing laboratory verifying that the specific material, equipment, or method of construction meets the identified standards or has been tested and found to be suitable for the intended use, shall be accepted by the appropriate subcode official as meeting the requirements of the above.
- 1.8.1.2 Reports of engineering findings issued by nationally recognized evaluation service programs such as but not limited to, the Building Officials and Code Administrators (BOCA), the International Conference of Building Officials (ICBO), the Southern Building Code Congress International (SBCCI), the International Code Council (ICC), and the National Evaluation Service, Inc., shall be accepted by the appropriate subcode official as meeting the requirements of the above.
- 1.8.2 The [New Jersey Department of Community Affairs](#) has confirmed that technical evaluation reports, from any accredited entity listed by [ANAB](#), meets the requirements of item the previous paragraph, given that the listed entities are no longer in existence and/or do not provide *"reports of engineering findings."*
- 1.9 **Approved by the Code of Federal Regulations Manufactured Home Construction and Safety Standards:** Pursuant to Title 24, Subtitle B, Chapter XX, [Part 3282.14](#)^{xlvii} and [Part 3280](#),^{xlviii} the Department encourages innovation and the use of new technology in manufactured homes. The design and construction of a manufactured home shall conform to the provisions of Part 3282 and Part 3280 where key approval provisions in mandatory language follow:
- 1.9.1 *"All construction methods shall be in conformance with accepted engineering practices."*
- 1.9.2 *"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."*
- 1.9.3 *"The design stresses of all materials shall conform to accepted engineering practice."*



- 1.10 Approval by US, Local and State Jurisdictions in General:** In all other local and state jurisdictions, the adopted building code legislation states in pertinent part that:
- 1.10.1 For new materials that are not specifically provided for in this code, the design strengths and permissible stresses shall be established by tests.^{xlix}
 - 1.10.2 For innovative alternatives and/or methods of construction, the building official shall accept Duly Authenticated Reports from approved agencies with respect to the quality and manner of use of new materials or assemblies.ⁱ
 - 1.10.2.1 An approved agency is “approved” when it is ANAB ISO/IEC 17065 accredited. DrJ Engineering, LLC (DrJ) is in the ANAB directory.
 - 1.10.2.2 An approved source is “approved” when an RDP is properly licensed to transact engineering commerce. The regulatory authority governing approved sources is the state legislature via its professional engineering regulations.^{li}
 - 1.10.3 The design strengths and permissible stresses of any structural material...shall conform to the specifications and methods of design of accepted engineering practice performed by an approved source.^{lii}
- 1.11 Approval by International Jurisdictions:** The USMCA and GATT agreements provide for approval of innovative materials, designs, services, and/or methods of construction through the Agreement on Technical Barriers to Trade and the IAF Multilateral Recognition Arrangement (MLA), where these agreements:
- 1.11.1 State that conformity assessment procedures (i.e., ISO/IEC 17020, 17025, 17065, etc.) are prepared, adopted, and applied so as to grant access for suppliers of like products originating in the territories of other Members under conditions no less favourable than those accorded to suppliers of like products of national origin or originating in any other country, in a comparable situation.
 - 1.11.2 **Approved:** The purpose of the MLA is to ensure mutual recognition of accredited certification and validation/verification statements between signatories to the MLA and subsequently, acceptance of accredited certification and validation/verification statements in many markets based on one accreditation for the timely approval of innovative materials, designs, services, and/or methods of construction.
 - 1.11.3 ANAB is an IAF-MLA signatory where recognition of certificates, validation, and verification statements issued by conformity assessment bodies accredited by all other signatories of the IAF MLA, with the appropriate scope, shall be approved.^{liii}
 - 1.11.4 Therefore, all ANAB ISO/IEC 17065 Duly Authenticated Reports are approval equivalent.^{liv}
- 1.12** Approval equity is a fundamental commercial and legal principle.^{lv}



Notes

- For more information, visit [drjcertification.org](#) or call us at 608-310-6748.
- i <https://up.codes/viewer/wyoming/ibc-2021/chapter/17/special-inspections-and-tests#1702>
- ii 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/colorado/ibc-2021/chapter/1/scope-and-administration#104.11>
- iii <https://up.codes/viewer/wyoming/ibc-2021/chapter/17/special-inspections-and-tests#1706>:~:text=the%20design%20strengths%20and%20permissible%20stresses%20shall%20be%20established%20by%20tests%20as
- iv 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/wyoming/ibc-2021/chapter/17/special-inspections-and-tests#1706>:~:text=shall%20conform%20to%20the%20specifications%20and%20methods%20of%20design%20of%20accepted%20engineering%20practice
- v <https://up.codes/viewer/wyoming/ibc-2021/chapter/17/special-inspections-and-tests#1707.1>:~:text=the%20building%20official%20shall%20accept%20duly%20authenticated%20reports%20from%20approved%20agencies
- vi <https://up.codes/viewer/wyoming/ibc-2021/chapter/17/special-inspections-and-tests#1703.4.2>
- vii https://up.codes/viewer/wyoming/ibc-2021/chapter/2/definitions#approved_agency
- viii https://up.codes/viewer/wyoming/ibc-2021/chapter/2/definitions#approved_source
- ix <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.
- x <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/>
- xi <https://www.cbtest.com/accreditation/>
- xii <https://up.codes/viewer/colorado/ibc-2021/chapter/1/scope-and-administration#104>:~:text=to%20enforce%20the%20provisions%20of%20this%20code
- xiii <https://up.codes/viewer/colorado/ibc-2021/chapter/1/scope-and-administration#104.11>:~:text=Where%20the%20alternative%20material%2C%20design%20or%20method%20of%20construction%20is%20not%20approved%2C%20the%20building%20official%20shall%20respond%20in%20writing%2C%20stating%20the%20reasons%20why%20the%20alternative%20was%20not%20approved AND <https://up.codes/viewer/colorado/ibc-2021/chapter/1/scope-and-administration#105.3.1>:~:text=If%20the%20application%20or%20the%20construction%20documents%20do%20not%20conform%20to%20the%20requirements%20of%20pertinent%20laws%2C%20the%20building%20official%20shall%20reject%20such%20application%20in%20writing%2C%20stating%20the%20reasons%20therefore
- xiv <https://up.codes/viewer/colorado/ibc-2021/chapter/17/special-inspections-and-tests#1707.1>:~:text=the%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%20104.11
- xv <https://iaf.nu/en/about-iaf-mla/#>:~:text=It%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
- xvi True for all ANAB accredited product evaluation agencies and all International Trade Agreements.
- xvii <https://www.justice.gov/crt/deprivation-rights-under-color-law> AND <https://www.justice.gov/atr/mission>
- xviii Unless otherwise noted, all references in this Listing are from the 2021 version of the codes and the standards referenced therein. This material, product, design, service and/or method of construction also complies with the 2000-2021 versions of the referenced codes and the standards referenced therein.
- xix <https://www.ecfr.gov/current/title-24/subtitle-B/chapter-XX/part-3280#p-3280.2>(Listed%20or%20certified); <https://up.codes/viewer/colorado/ibc-2021/chapter/2/definitions#listed> AND <https://up.codes/viewer/colorado/ibc-2021/chapter/2/definitions#labeled>
- xx <https://up.codes/viewer/colorado/ibc-2021/chapter/17/special-inspections-and-tests#1703.4>
- xxi <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
- xxii <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
- xxiii 2015 IBC Section 1403
- xxiv 2015 IBC Section 1404.2
- xxv 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.
- xxvi 2015 IBC Section 1405.2
- xxvii See Code of Federal Regulations (CFR) Title 24 Subtitle B Chapter XX Part 3280 for definition.
- xxviii 2015 IBC Section 1404.10
- xxix



xxx [2018 IFC Section 104.9](#)

xxxi 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](#) where the building code authorizes sentences to have an ordinarily accepted meaning such as the context implies.

xxxi <https://up.codes/viewer/wyoming/ibc-2021/chapter/17/special-inspections-and-tests#1707.1>

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

xxxi <http://www.drjengineering.org/AppendixC> AND <https://www.drjcertification.org/cornell-2016-protection-trade-secrets>

xxxi <https://www.law.cornell.edu/uscode/text/18/1832#:~:text=imprisoned%20not%20more%20than%2010%20years>

xxxi <https://www.law.cornell.edu/uscode/text/18/1832#:~:text=Any%20organization%20that,has%20thereby%20avoided>

xxxi <https://up.codes/viewer/wyoming/ibc-2021/chapter/17/special-inspections-and-tests#1706.2>

xxxi [IBC 2021, Section 1706.1 Conformance to Standards](#)

xxxi [IBC 2021, Section 1707 Alternative Test Procedure, 1707.1 General](#)

xi See [Section 11](#) for the distilled building code definition of **Approved**

xi [Los Angeles Municipal Code, SEC. 98.0503. TESTING AGENCIES](#)

xi <https://up.codes/viewer/california/ca-building-code-2022/chapter/17/special-inspections-and-tests#1707.1>

xi [New York City, The Rules of the City of New York, § 101-07 Approved Agencies](#)

xi [New York City, The Rules of the City of New York, § 101-07 Approved Agencies](#)

xi https://up.codes/viewer/new_jersey/ibc-2018/chapter/17/special-inspections-and-tests#1707.1

xi <https://www.nj.gov/dca/divisions/codes/codreg/ucc.html>

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

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

xi [IBC 2021, Section 1706 Design Strengths of Materials, 1706.2 New Materials](#). Adopted law pursuant to IBC model code language 1706.2.

i [IBC 2021, Section 1707 Alternative Test Procedure, 1707.1 General](#). Adopted law pursuant to IBC model code language 1707.1.

ii <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/>

iii [IBC 2021, Section 1706 Design Strengths of Materials, Section 1706.1 Conformance to Standards](#) Adopted law pursuant to IBC model code language 1706.1.

iii <https://iaf.nu/en/about-iaf-mla/#:~:text=it%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>

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

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