Listing and Technical Evaluation Report™

Report No: 2211-02

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Subject to Renewal: October 1, 2027

Superior Walls® Precast Concrete Wall Panels

Trade Secret Report Holder:

Superior Walls® of America, Ltd.
937 E Earl Rd
New Holland, PA 17557-9597
Phone: 1-800-452-9255
Website: www.superiorwalls.com

Additional Listees:

Advanced Concrete Systems, Inc.
55 Advanced Ln
Middleburg, PA 17842

Northeast Precast
dba: Superior Walls of New Jersey
4081 S Lincoln Ave
Vineland, NJ 08361

Superior Walls Systems, LLC
dba: Superior Walls of N Carolina
3570 S Main St
Salisbury, NC 28147

Superior Walls by Collier Foundation Systems, Inc.
1500 Ellsworth Ave Ste 210
Heidelberg, PA 15106

Weaver Superior Walls LLC dba: Superior Walls by Weaver Precast
824 E Main St
Ephrata, PA 17522

Great Lakes Superior Walls
4555 134th Ave
Hamilton, MI 49419

Superior Walls by Warrior Precast, LLC
dba: Superior Walls of East Tennessee
10144 Sparta Hwy
Rock Island, TN 38581

Superior Walls of Central Virginia
10101 Superior Way
Amelia, VA 23002

Superior Walls of Upstate New York
7574 E Main Rd
Lima, NY 14485

Superior Concrete Block Company
401 S McKinzie St
Mankato, MN 56001

Superior Walls of North Dakota, LLC
2512 Lockheed Drive
Bismarck, ND 58504

Skill Precast, LLC
815 East Ramsey Road
Vincennes, IN 47591

CSI Designations:

DIVISION: 03 00 00 - CONCRETE

Section: 03 40 00 - Precast Concrete

Section: 03 41 00 - Precast Structural Concrete

1 Innovative Products Evaluated[1]

1.1 Superior Walls Xi™ and Xi™ Plus Wall Panels

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No 73618
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Kirk Grundahl

Digitally signed by Kirk Grundahl
Date: 2024.10.15 10:23:31 -05'00'

10/15/2024

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2 Product Description and Materials

2.1 The innovative products evaluated in this report are shown in **Figure 1**, **Figure 2**, **Figure 3** and **Figure 4**.

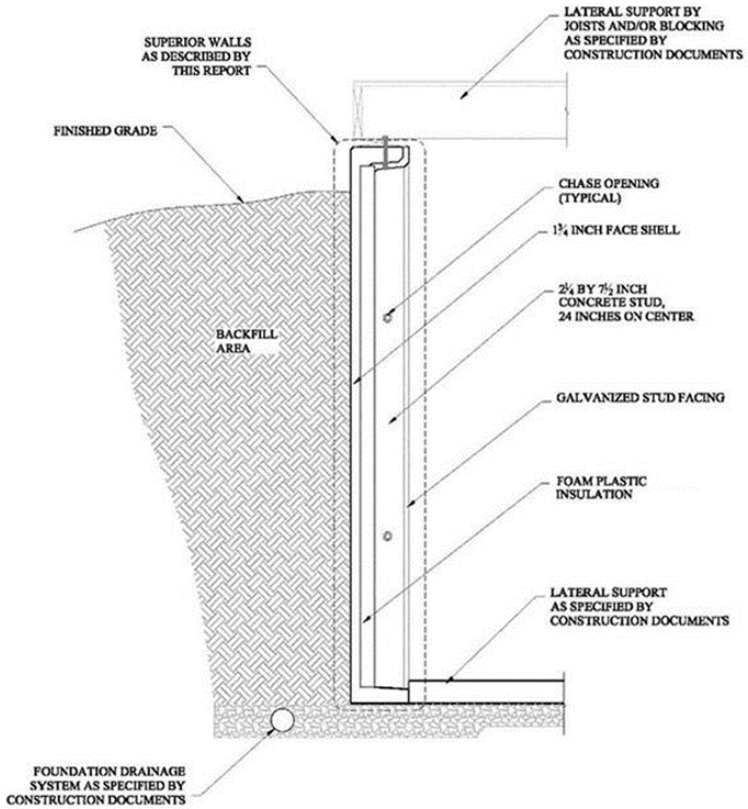

Figure 1. Vertical Cross Section of Superior Walls Xi and Xi Plus Wall Panels Assembly

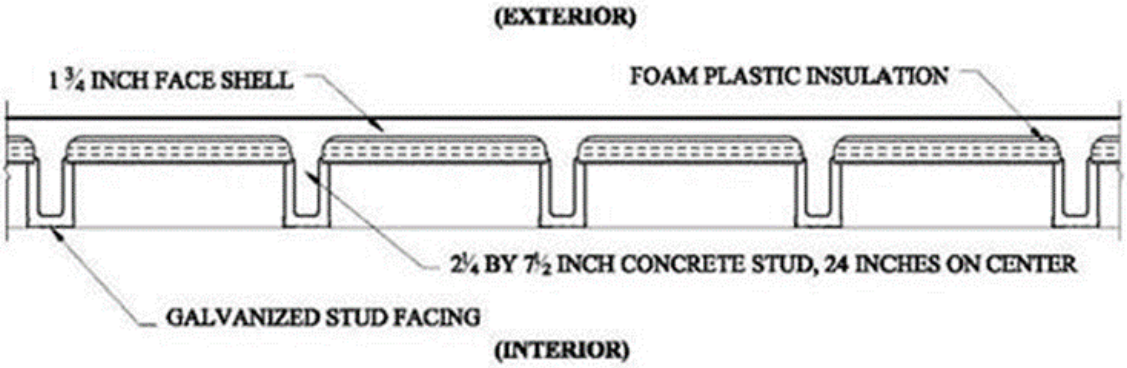

Figure 2. Horizontal Cross Section of Superior Walls Xi and Xi Plus Wall Panels Assembly

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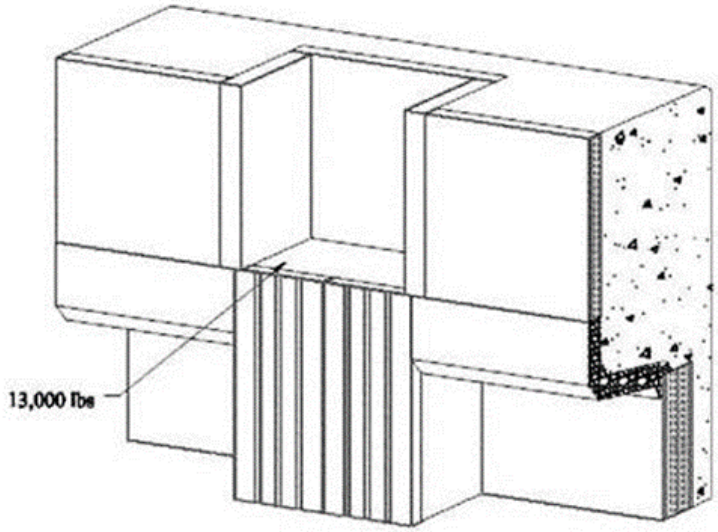

Figure 3. Typical Beam Pocket Detail

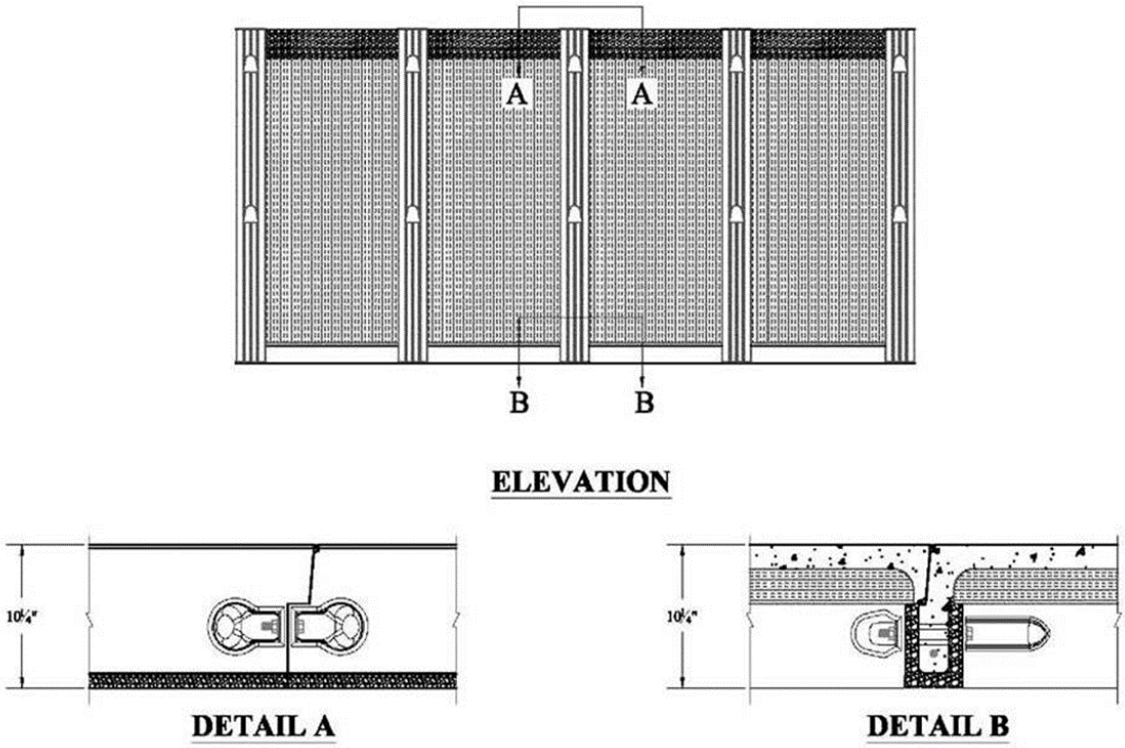

Figure 4. Wall Connection Detail for Superior Walls Xi and Xi Plus Wall Panels Assembly

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2.2 Information on Superior Walls Xi and Xi Plus Wall Panels is provided in **Table 1**.

Table 1. Product Information

Product	Foam Board Options	Wall Heights/Weight	Description	Material Properties
Xi	***Option 1***: 2 1/2 inch (63.5 mm) thick rigid polystyrene	4', 170 lb/ft; 8' 2", 303 lb/ft; 9', 329 lb/ft; and 10', 361 lb/ft	Precast Concrete Wall Panels consisting of a 1 3/4" (44 mm) thick exterior face shell of monolithically cast concrete with 10 1/4" (260 mm) wide top and bottom bond beams and 2 1/4" by 7 1/2" (57 mm by 190.5 mm) concrete studs at 24" (610 mm) on center (See **Figure 1** and **Figure 2**). Various rigid foam boards are bonded to the inside face of the shell. (see *"Foam Board Options"* column) Each stud is wrapped with 1" (25.4 mm) thick expanded polystyrene insulation on all three of the exposed sides and faced with a galvanized steel channel for interior finish fastening. Chase openings with knockouts are provided in each stud for plumbing and electrical wiring (See **Figure 1**).	Concrete has 5,000 psi (34.4 MPa) compressive strength and contains synthetic fibers.
	Option 2: 2 1/2 inch (63.5 mm) thick rigid phenolic foam insulation			
	Option 3: 2 inch (50.8 mm) thick ridged polystyrene and a 1/2 inch (12.7 mm) layer of polyisocyanurate insulation			
	Option 4: 1 1/2 inch (38.1 mm) thick rigid polystyrene and a 1 inch (25.4 mm) layer of polyisocyanurate insulation			
	Option 5: 2 1/2 inch (63.5 mm) thick rigid polyisocyanurate			
Xi Plus	4 1/2" (114.3 mm) thick ridged polystyrene and a 1/2" (12.7 mm) layer of polyisocyanurate insulation on the inside face.	4', 178 lb/ft; 8' 2", 318 lb/ft; 9', 345 lb/ft; and 10', 378 lb/ft		
SI: 1 in = 25.4 mm, 1 lb = 4.45 N, 1 lb/ft = 0.0146 kN/m, 1 psf = 0.0479 kN/m^2, 1 psi = 0.00689 MPa				

2.3 All insulation is factory-installed in precast walls and shall be as described in approved quality control documentation.

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

3 Definitions

3.1 New Materials[2] 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.[3] The design strengths and permissible stresses shall be established by tests[4] and/or engineering analysis.[5]

3.2 Duly authenticated reports[6] and research reports[7] are test reports and related engineering evaluations, which are written by an approved agency[8] and/or an approved source.[9]

3.2.1 These reports contain intellectual property and/or trade secrets, which are protected by the Defend Trade Secrets Act (DTSA).[10]

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.[11]

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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[12] ISO/IEC 17025 and ISO/IEC 17020 accredited.

3.6 The regulatory authority shall enforce[13] 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[14] 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.[15]

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.[16] Therefore, all ANAB ISO/IEC 17065 duly authenticated reports are approval equivalent.[17]

3.9 Approval equity is a fundamental commercial and legal principle.[18]

4 Applicable Standards for the Listing; Regulations for the Regulatory Evaluation[19]

4.1 *Standards*

4.1.1 *ASTM E72: Standard Test Method of Conducting Strength Tests of Panels for Building Construction*

4.1.2 *ASTM E119: Standard Test Methods for Fire Tests of Building Construction and Materials*

4.1.3 *CalGreen – The California Green Building Standards Code – Part 11, Title 24, California Code of Regulations*

4.1.4 *CAN/ULC S101: Standard Methods of Fire Endurance Tests of Building Construction Materials*

4.1.5 *ICC 700 National Green Building Standard*

4.1.6 *NFPA 286: Standard Methods of Fire Test for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth*

4.1.7 *UL 1715: Fire Test of Interior Finish Material*

4.2 *Regulations*

4.2.1 *IBC – 15, 18, 21: International Building Code®*

4.2.2 *IRC – 15, 18, 21: International Residential Code®*

4.2.3 *IECC – 15, 18, 21: International Energy Conservation Code®*

4.2.4 *FBC-B—20, 23: Florida Building Code – Building*[20]

4.2.5 *FBC-R—20, 23: Florida Building Code – Residential*[20]

5 Listed[21]

5.1 Equipment, materials, products or services included in a List published by a nationally recognized testing laboratory (i.e., CBI), approved agency (i.e., CBI and DrJ), and/or approved source (i.e., DrJ) or other organization 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.

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6 Tabulated Properties Generated from Nationally Recognized Standards

6.1 *Transverse Loading*

6.1.1 **Table 2** provides the maximum allowable loads for positive and negative transverse wind loads for above grade walls and allowable transverse soil loads for below grade walls.

Table 2. Allowable Transverse Loads for Superior Walls Xi and Xi Plus Wall Panels[1]

Product	Wall Height (ft)	Allowable Transverse Positive Load, psf (kN/m^2)	Allowable Transverse Negative Load, psf (kN/m^2)
Superior Walls Xi and Xi Plus Wall Panels	≤10	235 (11.25)	120 (5.7)

1. Assumes wall is supported at top and bottom.

6.2 *Backfill Soil Loads*

6.2.1 A maximum 100 lbf/ft^2/ft equivalent fluid pressure is permitted for backfill soil loading.

6.3 *Brick Ledge Loads*

6.3.1 Use of Superior Walls Xi and Xi Plus Wall Panels with a brick ledge is limited to an allowable load of 2,900 lbf/ft (42.32 kN/m) on the brick ledge. The load applied to the brick ledge shall be considered as part of the total allowable load on the wall as described in **Table 3** of this report.

6.4 *Combined Soil and Compression Loading for Below Grade Walls*

6.4.1 **Table 3** provides the maximum allowable compression loads on the top of the wall when loads from a 100 lbf/ft^2/ft (1,602 kg/m^2/m) soil load is considered along with a 2,900 lbf/ft (42.32 kN/m) vertical load applied to a brick ledge.

Table 3. Maximum Allowable Compression Load for Superior Walls Xi and Xi Plus Wall Panels[2,3]

Product	Allowable Compression Load,[1] lbf/ft (kN/m)
Superior Walls Xi and Xi Plus Wall Panels	7,500 (109.45)

1. A maximum 2,900 lbf/ft load on a brick ledge is permitted as part of the total allowable compression load.
2. Wall shall be supported at top and bottom.
3. A maximum 100 lbf/ft^2/ft soil load is permitted in combination with the maximum allowable compression load.

6.4.2 *In-Plane Shear Loads:*

6.4.2.1 Superior Walls Xi and Xi Plus Wall Panels were tested in accordance with ASTM E72 to determine the allowable racking shear loads as shown in **Table 4**.

Table 4. ASTM E72 Allowable Shear Load

Product	Allowable Racking Shear Load,[1] lbf/ft (kN/m)
Superior Walls Xi and Xi Plus Wall Panels	745 (10.87)

1. Allowable shear load is applicable to wind and soil loading.

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6.4.3 *Beam Pocket Loads:*

Table 5. Maximum Allowable Load for Beam Pockets

Product	Wall Height (ft)	Maximum Allowable Beam Pocket Load, lbf (kN)
Superior Walls Xi and Xi Plus Wall Panels	10	24,000 (106.75)
Superior Walls Xi and Xi Plus Wall Panels	<10	21,600 (96.08)

1. Beam pocket with two support studs under the beam pocket.
2. Other beam pocket configurations are outside the scope of this report.

6.4.4 *Bolted Connections at the Top and Bottom of Walls:*

Table 6. Maximum Allowable Shear Load for Bolted Panel Connections

Product	Maximum Allowable Load lbf (kN)
Superior Walls Xi and Xi Plus Wall Panels	1,500 (6.75)

1. Determined by performance testing.

6.5 *Mass Walls*

6.5.1 Superior Walls Xi and Xi Plus Wall Panels are classified as a Mass Wall as defined in IRC Section N1102.2.5 and IECC Section R402.2.5. Both the header sections and the interior portions of the wall panels exceed the requirement to be 6 Btu/ft^2-F (123kJ/m^2-K) as follows:

6.5.1.1 The interior portion of the Superior Walls Xi and Xi Plus Wall Panels have a heat capacity of 6.46 Btu/ft^2-F (132 kJ/m^2-K).

6.5.1.2 The header portion of the Superior Walls Xi and Xi Plus Wall Panels have a heat capacity of 10.55 Btu/ft^2-F (216 kJ/m^2-K).

6.6 *Fire-Resistance Rated Wall Construction*

6.6.1 Superior Walls Xi and Xi Plus Wall Panels were tested to determine their fire resistance rating in accordance with ASTM E119 and CAN ULC S101 with results as follows:

6.6.1.1 *Two-Hour Fire Resistance Rating:*

6.6.1.1.1 The addition of two layers of $^5/_8$" (15.98mm) Type X gypsum wallboard complying with ASTM C1396, attached to the stud facing in accordance with the applicable code, provide Superior Walls Xi and Xi Plus Wall Panels having a maximum allowable axial compressive load of 5,000 lbf/ft. (72.97 kN/m), including brick ledge loads, with a two-hour fire-resistance rating.

6.6.1.2 *One-Hour Fire Resistance Rating:*

6.6.1.2.1 The addition of one layer of $^5/_8$" (15.98mm) Type X gypsum wallboard complying with ASTM C1396, attached to the stud facing in accordance with the applicable code, provide Superior Walls Xi and Xi Plus Wall Panels having a maximum allowable axial compressive load of 5,000 lbf/ft. (72.97 kN/m), including brick ledge loads, with a one-hour fire-resistance rating.

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6.6.2 *Thermal Barrier:*

6.6.2.1 Superior Walls Xi and Xi Plus Wall Panels were tested to determine their use as a wall finish without the use of a thermal barrier in accordance with UL 1715 or NFPA 286.

6.6.2.2 A code-prescribed thermal barrier separating the foam plastic from the interior of the building is not required based on testing conducted in accordance with IRC Section R316.6 and IBC Section 2603.9.

6.7 *Dampproofing*

6.7.1 Superior Walls Xi and Xi Plus Wall Panels require no additional dampproofing.

6.8 *Green Building Codes and Standards Compliance*

6.8.1 Superior Walls Xi and Xi Plus Wall Panels conform to the requirements of CalGreen Section A4.404.3.3 for pre-manufactured building systems.

6.8.2 Superior Walls Xi and Xi Plus Wall Panels conform to the requirements of ICC 700 Sections 601.5 and 11.601.5 for pre-manufactured components.

6.8.3 Project specific requirements for use of these products to conform to these codes and standards are outside of the scope of this report.

6.9 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[22]

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.[23]

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.[24]

8 Regulatory Evaluation and Accepted Engineering Practice

8.1 Superior Walls Xi and Xi Plus Wall Panels comply with the following legislatively adopted regulations and/or accepted engineering practice for the following reasons:

8.1.1 Superior Walls Xi and Xi Plus Wall Panels were evaluated to determine:

8.1.1.1 Concrete properties in accordance with ASTM C39 and C469

8.1.1.2 Transverse loads for soil and wind in accordance with ASTM E72

8.1.1.3 Racking shear loads in accordance with ASTM E72

8.1.1.4 Compression loads in accordance with ASTM E72

8.1.1.5 Brick ledge loads in accordance with ASTM E72

8.1.1.6 Beam pocket loads in accordance with general engineering principles

8.1.1.7 Bolted connections at the top and bottom of the walls in accordance with general engineering principles

8.1.1.8 Compliance with the mass wall provisions of IRC Section N1102.2.5 and IECC Section R402.2.5

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8.1.1.9 Fire resistance rated wall construction in accordance with ASTM E119 per IBC Section 703.2.1 and CAN ULC S101

8.1.1.10 Thermal barrier requirement exemption in accordance with IBC Section 2603.9 and IRC Section R316.6

8.1.1.11 *Dampproofing:*

8.1.1.11.1 Water permeability test conducted in accordance with ASTM E96

8.1.1.12 Green Construction in accordance with CalGreen Section A4.404.3.3 for pre-manufactured building systems, and ICC 700 Sections 601.5 and 11.601.5.

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[25] 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 *Installation Procedure*

9.3.1 Installation shall be performed by Superior Walls certified installers.

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 Concrete properties in accordance with ASTM C39 and C469

10.1.2 Transverse loads for soil and wind in accordance with ASTM E72

10.1.3 Racking shear loads in accordance with ASTM E72

10.1.4 Compression loads in accordance with ASTM E72

10.1.5 Brick ledge loads determined by performance testing in accordance with accepted engineering principles

10.1.6 Beam pocket loads determined by performance testing in accordance with accepted engineering principles

10.1.7 Bolted connections at the top and bottom of the walls determined by performance testing in accordance with accepted engineering principles

10.1.8 Fire resistance rated wall construction in accordance with ASTM E119 and CAN ULC S101

10.1.9 Thermal barrier requirements in accordance with IRC Section R316.6 and IBC Section 2603.9

10.1.10 Water permeability for dampproofing in accordance with ASTM E96

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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 RDPs. 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: 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.[26]

10.6 Where additional condition of use and/or regulatory compliance information is required, please search for Superior Walls Xi and Xi Plus Wall Panels on the DrJ Certification website.

11 Findings

11.1 As outlined in **Section 6**, Superior Walls Xi and Xi Plus Wall Panels have performance characteristics that were tested and/or meet applicable regulations and 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, Superior Walls Xi and Xi Plus Wall Panels shall be approved for the following applications:

11.2.1 Foundation and basement walls to support wood frame construction in accordance with IBC Section 1807, IRC Section R402.3.1 and IRC Section R404.

11.2.2 Mass wall provisions of IRC Section N1102.2.5 and IECC Section R402.2.5.

11.3 Unless exempt by state statute, when Superior Walls Xi and Xi Plus Wall Panels 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 Superior Walls of America, Ltd.

11.5 IBC Section 104.11 (IRC Section R104.11 and IFC Section 104.10[27] 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.

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11.6 **Approved**:[28] Building regulations require that the building official shall accept duly authenticated reports.[29]

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.[30]

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 For Superior Walls Xi and Xi Plus Wall Panels used in buildings constructed in accordance with the IRC, dampproofing in accordance with IRC Section R406 is not required. Waterproofing is required when a high water table or other severe soil-water condition is known to exist or required by adopted legislation and enforced by the authority having jurisdiction (i.e., building official).

12.4 For Superior Walls Xi and Xi Plus Wall Panels used in buildings constructed in accordance with the IBC, where a subsurface soil investigation has not been performed or where a subsurface soil investigation has been performed per IBC Section 1803 and indicates that the ground-water table is above or within five (5) feet below the elevation of the lowest below grade floor, the foundation wall shall be waterproofed in accordance with IBC Section 1805.

12.4.1 Evaluation of this waterproofing is outside of the scope of this report.

12.5 Superior Walls certified installers shall perform installation.

12.6 Soil capacity of the site shall either undergo a complete geotechnical evaluation or may be assumed to have the load bearing values specified in IRC Table R401.4.1.

12.7 Backfill material shall not exceed 100 $lbf/ft^2/ft$ (1602 $kg/m^2/m$) equivalent fluid pressure for Superior Walls Xi and Xi Plus Wall Panels unless a specific engineering assessment is submitted to justify greater loads.

12.8 When used as lateral force-resisting systems, Superior Walls Xi and Xi Plus Wall Panels are limited to use in Seismic Design Categories A or B for compliance with the IBC and is limited to Seismic Design Categories A, B, or C for compliance with the IRC. Special inspections shall comply with IBC Section 1705.13.[31]

12.9 Design calculations and construction details shall be submitted to the code official for approval. These shall include the following:

12.9.1 Waterproofing requirements, if applicable.

12.9.2 Footing depth and specifications consistent with this report.

12.9.3 Resistance to overturning and uplift forces.

12.9.4 Details for lateral supports at the top and bottom of the wall panels.

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12.10 Brick ledges shall not be loaded in excess of 2,900 lbf/ft (42.32 kN/m) unless engineering is submitted to justify higher loads.

12.11 Footings supporting Superior Walls Xi and Xi Plus Wall Panels shall be in accordance with the applicable code.

12.12 For buildings constructed in accordance with the IRC, Superior Walls Xi and Xi Plus Wall Panels may be supported on crushed stone footings provided the construction be in accordance with IRC Section R403.4 and **Table 7** of this report.

Table 7. Minimum Depth (inches) of Crushed Stone Footings

Number of Stories	Assumed Wall Loading (plf)	Load Bearing Capacity (psf) and Class of Materials (Soil Types)					
		1,500	2,000	2,500	3,000	3,500	4,000
		MH, CH, CL, ML	SC, GC, SM, GM, SP, SW		GP, GW		
Light-Frame Construction							
1	1,100	4	4	4	4	4	4
2	1,800	7	4	4	4	4	4
3	2,900	14[1]	9[1]	5	4	4	4
Masonry Veneer over Light-Frame Construction							
1	1,500	5	4	4	4	4	4
2	2,700	13[1]	8	4	4	4	4
3	4,000	22[1]	14[1]	10[1]	7	5	4

1. For crushed Stone Footings greater than 8" in depth, footings shall be consolidated in a Maximum of 8" lifts with a plate vibrator.
2. See IRC Table R401.4.1 for description of Class of Materials associated with various bearing capacities.
3. Stone depths are determined using the assumed wall loading (plf) + 378 plf for the self-weight of a 10' Xi Plus foundation wall with a 10¼" wall width.
4. The assumed wall loading shown in pounds per linear foot (plf) is the assumed uniform load of the structure that is supported by the foundation wall and does not include the self-weight of the foundation wall.
5. Stone depths in this table are calculated as follows: Minimum Stone Depth (in) = { [Assumed uniform load (plf) + self-weight of foundation wall (plf) / soil bearing capacity (psf)-(wall width (in)/12)] / [2 x TAN(30)] } x12

12.13 Beam pockets shall be designed and constructed in accordance with the details, dimensions, and specific loading limitations identified in this report, or as engineered by an RDP.

12.14 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:

12.14.1 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.

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

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

12.14.4 At a minimum, these innovative products shall be installed per **Section 9** of this report.

12.14.5 The review of this report by the AHJ shall comply with IBC Section 104 and IBC Section 105.4.

12.14.6 These innovative products have 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.

12.14.7 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.

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12.15 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.

12.16 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).

12.17 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.superiorwalls.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 Superior Walls Xi and Xi Plus Wall Panels are 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.

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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

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 these innovative products 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),[32] where providing test reports, engineering analysis and/or other related IP/TS is subject to prison of not more than ten years[33] and/or a $5,000,000 fine or 3 times the value of[34] 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[35] 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.[36]

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.[37]

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1.3 **Approved**[38] **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.[39] 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.[40]

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[41] 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[42] (i.e., ANAB, International Accreditation Forum also known as 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,

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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,[43] 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)*".[44] 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[45] and Part 3280,[46] 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*."

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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.[47]

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.[48]

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.[49]

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.[50]

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.[51]

1.11.4 Therefore, all ANAB ISO/IEC 17065 duly authenticated reports are approval equivalent.[52]

1.12 Approval equity is a fundamental commercial and legal principle.[53]

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Issue Date: October 15, 2024

Subject to Renewal: October 1, 2027

FBC Supplement to Report Number 2211-02

REPORT HOLDER: Superior Walls® of America, Ltd.

1 Evaluation Subject

1.1 Superior Walls Xi and Xi Plus Wall Panels

2 Purpose and Scope

2.1 Purpose

2.1.1 The purpose of this Report Supplement is to show Superior Walls Xi and Xi Plus Wall Panels, recognized in Report Number 2211-02, have also been evaluated for compliance with the codes listed below as adopted by the Florida Building Commission.

2.2 *Applicable Code Editions*

2.2.1 *FBC-B—20, 23: Florida Building Code – Building*

2.2.2 *FBC-R—20, 23: Florida Building Code – Residential*

3 Conclusions

3.1 Superior Walls Xi and Xi Plus Wall Panels, described in Report Number 2211-02, comply with the FBC-B and FBC-R and are subject to the conditions of use described in this supplement.

3.2 Where there are variations between the IBC and IRC and the FBC-B and FBC-R applicable to this report, they are listed here:

3.2.1 FBC-B Section 104.4, Section 110.4 and 1705 are reserved.

3.2.2 FBC-R Section R104 and Section R109 are reserved.

3.2.3 FBC-B Section 1807 replaces IBC Section 1807.

3.2.4 FBC-B Section 2603.9 replaces IBC Section 2603.9.

3.2.5 FBC-R Section R316.6 replaces IRC Section R316.6.

3.2.6 FBC-R Section R403.4 replaces IRC Section R403.4.

3.2.7 FBC-R Section R404 replaces IRC Section 404.

3.2.8 FBC-R Section N1101.1 replaces IRC Section N1102.2.5.

4 Conditions of Use

4.1 Superior Walls Xi and Xi Plus Wall Panels, described in Report Number 2211-02, must comply with all of the following conditions:

4.1.1 All applicable sections in Report Number 2211-02.

4.1.2 The design, installation, and inspections are in accordance with additional requirements of FBC-B Chapter 16 and Chapter 17, as applicable.

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Notes

1 For more information, visit drjcertification.org or call us at 608-310-6748.

2 https://up.codes/viewer/wyoming/ibc-2021/chapter/17/special-inspections-and-tests#1702

3 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

4 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

5 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

6 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

7 https://up.codes/viewer/wyoming/ibc-2021/chapter/17/special-inspections-and-tests#1703.4.2

8 https://up.codes/viewer/wyoming/ibc-2021/chapter/2/definitions#approved_agency

9 https://up.codes/viewer/wyoming/ibc-2021/chapter/2/definitions#approved_source

10 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.

11 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/

12 https://www.cbitest.com/accreditation/

13 https://up.codes/viewer/colorado/ibc-2021/chapter/1/scope-and-administration#104:~:text=to%20enforce%20the%20provisions%20of%20this%20code

14 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

15 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

16 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

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

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

19 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.

20 All references to the FBC-B and FBC-R are the same as the 2021 IBC and 2021 IRC unless otherwise noted in the Florida Supplement at the end of this report.

21 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

22 https://up.codes/viewer/colorado/ibc-2021/chapter/17/special-inspections-and-tests#1703.4

23 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

24 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

25 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.

26 See Code of Federal Regulations (CFR) Title 24 Subtitle B Chapter XX Part 3280 for definition.

27 2018 IFC Section 104.9

28 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.

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

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

31 2018 IBC Section 1705.12

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

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

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

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

36 IBC 2021, Section 1706.1 Conformance to Standards

37 IBC 2021, Section 1707 Alternative Test Procedure, 1707.1 General

38 See **Section 11** for the distilled building code definition of **Approved**

39 Los Angeles Municipal Code, SEC. 98.0503. TESTING AGENCIES

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

41 New York City, The Rules of the City of New York, § 101-07 Approved Agencies

42 New York City, The Rules of the City of New York, § 101-07 Approved Agencies

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

44 https://www.nj.gov/dca/divisions/codes/codreg/ucc.html

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

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

47 IBC 2021, Section 1706 Design Strengths of Materials, 1706.2 New Materials. Adopted law pursuant to IBC model code language 1706.2.

48 IBC 2021, Section 1707 Alternative Test Procedure, 1707.1 General. Adopted law pursuant to IBC model code language 1707.1.

49 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/

50 IBC 2021, Section 1706 Design Strengths of Materials, Section 1706.1 Conformance to Standards Adopted law pursuant to IBC model code language 1706.1.

51 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

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

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

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