



ECTEK BUILDING MATERIAL, INC.

16314 Grandview Street
Lewes, Sussex, DE 19958
(416) 564-4617

www.ectekbm.com

MEGABOARD® STRUCTURAL PANELS INSTALLED ON COLD-FORMED STEEL OR WOOD-FRAMED SHEAR WALLS

CSI Sections:

- 05 40 00 Cold-Formed Metal Framing
- 05 41 00 Structural Metal Stud Framing
- 06 00 00 Wood, Plastics, and Composites
- 06 11 00 Wood Framing
- 06 16 00 Sheathing
- 06 16 63 Cementitious Sheathing
- 07 44 53 Glass-Fiber-Reinforced Cementitious Panels
- 09 28 13 Cementitious Backing Boards
- 09 28 15 Magnesium Oxide Backing Panels

1.0 RECOGNITION

Ectek Building Material's MEGABOARD Structural Panels, recognized in this report, have been evaluated for use as shear panels for wood or steel light-frame walls. The structural performance, durability, surface-burning characteristics, and fire-resistance properties of the MEGABOARD Structural Panels comply with the intent of the provisions of the following codes and regulations:

- 2024, 2021, 2018, 2015, and 2012 International Building Code® (IBC)
- 2024, 2021, 2018, 2015, and 2012 International Residential Code® (IRC)
- 2025 and 2022 California Building Code® (CBC) – Attached Supplement
- 2025 and 2022 California Residential Code® (CRC) – Attached Supplement
- 2026 and 2023 Florida Building Code, Building (FBC, Building) – Attached Supplement
- 2026 and 2023 Florida Building Code, Residential (FBC, Residential) – attached Supplement
- 2026 City of Los Angeles Building Code (LABC) – Attached Supplement
- 2026 City of Los Angeles Residential Code (LARC) – Attached Supplement

2.0 LIMITATIONS

Use of the MEGABOARD Structural Panels recognized in this report is subject to the following limitations:

2.1 Panels are manufactured, identified, and installed in accordance with this report.

2.2 The Nominal (V_n), Load and Resistance Factor Design (V_{lrfd}), and Allowable Stress Design (V_{asd}) shear values for shear walls are limited to the values noted in Tables 1 to 5 of this report.

2.3 Complete construction documents, including plans and calculations verifying compliance with this report, shall be submitted to the building official with the permit application for approval. The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.

2.4 Applied loads shall be adjusted in accordance with Section 1605 of the IBC. Calculations shall demonstrate, in addition to other requirements as stipulated by the building official, that the applied loads are less than the design loads described in the IBC or IRC, and this report.

2.5 All nominal and allowable load capacities provided in this report do not include a 1.33 stress increase. The 1.33 increase for transient loads shall not be applied to allowable shear loads for these products.

2.6 Use of the MEGABOARD Structural Panels, where a sound transmission classification is required, is outside the scope of this report.

2.7 Support framing, including type and spacing for MEGABOARD Structural Panels, shall comply with Sections 4.3 or 4.4 of this report, as applicable.

2.8 Metals and metal fasteners in direct contact with MEGABOARD Structural Panels shall be non-corrosive or corrosion-resistant.

2.9 Use as a nail or screw base is beyond the scope of this report. Fasteners shall pass through the MEGABOARD Structural Panels and into supports.

2.10 MEGABOARD Structural Panels are limited to locations protected from weathering conditions. The exterior wall shall be protected with a code-complying exterior wall covering. The exterior wall coverings shall be approved by the building official and installed in accordance with the applicable code or the manufacturer's instructions.

The product described in this Uniform Evaluation Service (UES) Report has been evaluated as an alternative material, design or method of construction in order to satisfy and comply with the intent of the provision of the code, as noted in this report, and for at least equivalence to that prescribed in the code in quality, strength, effectiveness, fire resistance, durability and safety, as applicable, in accordance with Section 104.2.3 of the 2024 IBC and Section 104.11 of previous editions. This document shall only be reproduced in its entirety.

Produced by International Association of Plumbing and Mechanical Officials. All rights reserved. Printed in the United States. Ph: 1-877-4IESRPT • Fax: 909.472.4171
web: www.uniform-es.org • 4755 East Philadelphia Street, Ontario, California 91761-2816 – USA





2.11 In accordance with IBC Section 2603.8; 2024 IRC Section R305.4, and 2021, 2018, 2015, and 2012 IRC Section R318.4, in areas of “Very Heavy” termite infestation probability, and 2024 IRC Section R304.1.5; 2021, 2018, 2015, and 2012 Section R317.1.5, the clearance between the MEGABOARD Structural Panels and exposed earth shall be no less than 6 inches (152 mm). This clearance shall be increased to 8 inches (203 mm) from exposed earth for wood framing and sheathing in contact with exterior foundation walls in accordance with IBC Section 2304.12, 2024 IRC Section R304.1.2; and 2021, 2018, 2015, and 2012 Section IRC R317.1, Item 2.

2.12 Use of the MEGABOARD Structural Panels as a thermal barrier is beyond the scope of this report. Where foam plastic insulation is used, a thermal barrier complying with IBC Section 2603.4, 2024 IRC Section R303, or 2021, 2018, 2015, and 2012 IRC Section R316, as applicable, is required.

2.13 The evaluation of volatile organic compound emissions from the MEGABOARD Structural Panels is outside the scope of the report.

2.14 The MEGABOARD Structural Panels are produced at Weihai City, Shangdong, China, facilities.

3.0 PRODUCT USE

3.1 General: MegaBoard Structural Panels are panels attached to exterior or interior walls of cold-formed steel (CFS) or wood framing. When constructed in accordance with Tables 1 to 3 of this report, the panels may be used for shear wall applications within a Seismic Force-Resisting System conforming to item A.18 in Table 12.2-1 of ASCE/SEI 7-22, or item A.17 in Table 12.2-1 of ASCE/SEI 7-10 or ASCE/SEI 7-16; or within a Wind Force-Resisting System. When constructed in accordance with Tables 4 and 5 of this report, the panels may be used for shear wall applications within a Seismic Force-Resisting System conforming to item A.17 in Table 12.2-1 of ASCE/SEI 7-22, item A.16 in Table 12.2-1 of ASCE/SEI 7-10 or ASCE/SEI 7-16; or within a Wind Force-Resisting System. The design parameters in ASCE/SEI 7 Table 12.2-1 applicable to the MEGABOARD Structural Panels are provided in Table 3.1 of this report.

Table 3.1 – Design Parameters for Seismic Force-Resisting Systems

Design Parameter	Shear Resistance from Tables 1,2,3	Shear Resistance from Tables 4,5
Response Modification Coefficient, R	2	6½
Overstrength Factor, Ω_0	2½	3
Deflection Amplification Factor, C_d	2	4
SDC B height limit	No Limit	No Limit
SDC C height limit	No Limit	No Limit
SDC D height limit	35 feet	65 feet
SDC E height limit	Not Permitted	65 feet
SDC F height limit	Not Permitted	65 feet

Note: Structures shall also comply with height limitations in Chapter 5 of the IBC.

The structural panels are alternatives to cold-formed steel or wood stud light-frame shear wall systems described in Section 2206.1 of the 2024 IBC, Section 2211.1 of the 2021 and 2018 IBC, Section 2211.6 of the 2015 and 2012 IBC, Section 2305 of the IBC, Section 12.2 of ASCE/SEI 7, and Sections R602 and R603 of the IRC. The structural panels may also be used where an engineered design is submitted in accordance with Section R301.1.3 of the IRC.

3.2 Design:

3.2.1 Shear Wall Design

3.2.1.1 Seismic loadings shall be determined in accordance with IBC Section 1613 and ASCE/SEI 7, subject to limitations set forth for Seismic Force-Resisting Light-Frame Shear Wall Bearing Wall Systems conforming to items A.17 or A.18 in Table 12.2-1 of ASCE/SEI 7-22; or items A.16 or A.17 in Table 12.2-1 of ASCE/SEI 7-10 or ASCE/SEI 7-16, as appropriate. The shear walls shall conform to height limits and seismic design categories listed in ASCE/SEI 7, Table 12.2-1, for the respective light-frame shear wall bearing wall system.

Wind loadings shall be determined in accordance with IBC Section 1609 and ASCE/SEI 7.

Steel-framed shear walls shall be designed as Type I shear walls in accordance with 2024 IBC Section 2206.1.1, 2021 or 2018 IBC Section 2211.1, or 2015 or 2012 IBC Section 2211.6, with chords, collectors, anchorage, and hold-downs provided as necessary to resist applicable wind or earthquake loadings.



Wood-framed shear walls shall be designed as Individual Full-Height Wall Segments in accordance with IBC Section 2305, with chords, collectors, anchorage, and hold-downs provided as necessary to resist applicable wind or earthquake loadings.

The shear walls shall be designed to resist all applicable load combinations in Section 1605 of the IBC. Orthogonal combinations shall be considered in accordance with the applicable provisions in IBC Chapter 16 and ASCE/SEI 7.

3.2.1.2 The Allowable Stress Design (V_{asd}) and Load and Resistance Factor Design (V_{lrfd}) shear values for wind and earthquake forces are shown in Tables 1 to 5 of this report

3.2.1.3 Design Deflection:

3.2.1.3.1 Steel: The deflection of a MEGABOARD shear wall fastened throughout on steel stud framing shall be permitted to be calculated in accordance with Eq. 3.2.1.3.1. Eq. 3.2.1.3.1 shall not be used to estimate deflection for shear strengths exceeding the tabulated values in this report:

$$\Delta = \frac{2vh^3}{3E_s A_c b} + \omega_1 \omega_2 \left(\frac{vh}{\rho G t_{s_MB}} \right) + (\omega_1)^{1.25} \omega_2 \omega_3 \omega_4 \left(\frac{v}{\beta} \right)^2 + \left(\frac{h}{b} \right) \delta_{anchorage} \quad (Eq. 3.2.1.3.1)$$

where

- A_c = Gross cross-sectional area of chord/boundary studs, in² (mm²)
- b = Width of the shear wall, in. (mm)
- E_s = Modulus of elasticity of steel, 29,500,000 psi (203,000 MPa)
- G = Shear modulus of the MEGABOARD Structural Panel, 80,568 psi (555 MPa)
- h = Wall height, in. (mm)
- s = Fastener spacing at panel edges, in. (mm)
- t_{s_MB} = MEGABOARD Structural Panel design thickness, in. (mm)
- t_{s_F} = Cold-formed steel framing design thickness, in. (mm)
- V = Shear demand, lbf (N)
- v = Unit shear demand, lb/in (N/mm)
= V/b
- Δ = Calculated deflection, in. (mm)
- $\delta_{anchorage}$ = Vertical deformation from anchorage system, in. (mm)
- ρ = 1.0
- β = Product-specific inelastic stiffness factor, in Table 3.2.1.3.1 of this report.
- ω_1 = $s/(6 \text{ in.}) \{s/152.4 \text{ mm}\}$
- ω_2 = $(0.0346 \text{ in.})/t_{s_F} \{(0.8788 \text{ mm})/t_{s_F}\}$
- ω_3 = $[(h/b)/2]^{0.5}$
- ω_4 = 1.0

Table 3.2.1.3.1 — MEGABOARD Shear Wall Deflection Parameters

Parameter	MEGABOARD
β [(lb./in. ^{1.5})]	57
β [(N/mm ^{1.5})]	2.0

3.2.1.3.2 Wood: The deflection of a MEGABOARD shear wall fastened throughout on wood stud framing shall be calculated in accordance with Eq. 3.2.1.3.2. The deflection shall not exceed the deflections in Table 3 of this report. Eq. 3.2.1.3.2 shall not be used to estimate deflection for shear strengths exceeding the tabulated values in this report:

$$\Delta = \frac{8vh^3}{EA_c b} + \left(\frac{vh}{G t_{s_MB}} \right) + \gamma h e_n + \left(\frac{h}{b} \right) \delta_{anchorage} \quad (Eq. 3.2.1.3.2)$$

where:

- A_c = Area of end-post cross-section in square inches (mm²).
- B = Shear wall length, in inches (mm).
- d_a = Total vertical elongation of wall anchorage system (including fastener slip, device elongation, rod elongation) at the induced unit shear in the shear wall (v), inches (mm).
- E = Modulus of elasticity of end posts, in pounds per square inch (N/mm²).
- G = Shear modulus of the MEGABOARD Structural Panel, 80,568 psi (555 MPa)
- t_{s_MB} = MEGABOARD Structural Panel design thickness, 0.625 in. (15.9 mm)
- h = Shear wall height, in inches (mm).
- V = Shear demand, lbf (N)
- v = Unit shear demand, lb/in (N/mm)
= V/b
- $\delta_{anchorage}$ = Vertical deformation from anchorage system, inch (mm)
- γ = Shear wall deflection parameter, in Table 3.2.1.3.2.1 of this report.
- e_n = Values of nail-joint slippage, inch (mm), in Table 3.2.1.3.2.2 of this report.

Table 3.2.1.3.2.1 — MEGABOARD Shear Wall Deflection Parameter- γ

γ [(/in.)]	0.55
γ [(/mm)]	0.022



Table 3.2.1.3.2.2 — Nail-Joint Slippage (e_n)

Load Per Fastener(lb)	e_n (in.)
82	0.004
134	0.006
163	0.007
407	0.044

For SI: 1 inch = 25.4 mm

Note: Minimum 10d common nails shall be used.

3.2.1.4 The maximum shear wall height-to-width ratio is 2:1. Panels shall be fastened in accordance with Tables 1 to 4 of this report, as applicable.

3.2.1.5 Design of shear wall chords, collectors, anchorage, hold-downs, and connections, such as uplift hold-downs, shear to base anchorage, and shear transfer from horizontal elements, is beyond the scope of this report, and the design professional shall provide appropriate design and detailing information to the building official for approval. The collector shall be designed in accordance with the IBC or the IRC and be sized to exceed the loads resisted by the shear wall.

3.2.2 Load Bearing and Non-Load Bearing Wall Design:

Cold-formed steel or wood framing design for out-of-plane and axial loads shall comply with the IBC or IRC, as applicable. The framing shall be designed to resist all applicable load combinations in Section 1605 of the IBC. Structural design shall be performed by the design professional in accordance with Section 2206.1 of the 2024 IBC, Section 2211.1 of the 2021 and 2018 IBC, Section 2211.6 of the 2015 and 2012 IBC, IBC Chapter 23, Section R301.1.3 of the IRC, IRC Chapter 6, AISI S100, AISI S240, AISI S400, ANSI/AWC NDS, ANSI/AWC SDPWS, and ASCE/SEI 7, as applicable.

3.2.3 Transverse (Out-of-Plane) Load Design: The MEGABOARD Structural Panels shall be designed to resist all applicable load combinations in Section 1605 of the IBC. Allowable Stress Design (ASD) out-of-plane values for MEGABOARD Structural Panels are shown in Tables 6 and 7 of this report.

3.3 Installation:

3.3.1 General: Installation shall be in accordance with the IBC or IRC, this report, and the manufacturer's published instructions. Where conflicts occur, the more restrictive shall govern. The panels shall be directly applied to the studs of walls and are limited to applications where there is no continuous direct exposure to the weather or damp environments. Weather protection complying with IBC Section 1402 or IRC Section R703 shall be provided. Walls shall be protected by waterproof membranes or weather-resistive barriers during construction as soon as possible to

prevent extended direct sun, rain, or snow exposure to MEGABOARD. Holes cut in MEGABOARD panels shall be approved by the building official based on the recommendations supplied by the manufacturer and as specified by the Design Professional. In areas that may be exposed to possible moisture intrusion, water-resistant sheathing is required. MEGABOARD Structural Panels may be installed as specified by the registered design professional on assemblies as permitted by the IBC or IRC in all Seismic Design Categories for non-shear walls, and in accordance with Section 3.2.1 of this report for shear walls.

3.3.2 Steel Framing: MEGABOARD Structural Panels shall be placed with the long dimension parallel to steel stud framing with intervening isolation material. All panel edges (top and bottom) shall be fully blocked by framing studs, track, blocking, or flat straps of the same gage as the framing material and include an end collector element to be determined by the Design Professional in accordance with the IBC, IRC, AISI S100, AISI S213 (2012 and 2015 IBC and IRC), AISI S240 or S400 (2024, 2021, and 2018 IBC and IRC), and the ASCE/SEI 7 seismic or wind provisions. Minimum required collector elements are defined in Section 3.2.1.1 of this report and are required at both shear wall ends. Maximum stud spacing shall be 24 inches (610 mm) on center. Screws attaching panels shall be installed in one operation through the panels into the framing. Screw heads are required to be located one-inch (25.4 mm) minimum from panel edges. Lead holes into MEGABOARD shall be approximately 70 percent of the fastener root diameter. Screws at panel joints shall be staggered from adjacent rows. Screw heads shall be driven flush with the surface to accommodate the application of finish material where required. Screws shall penetrate at least three exposed threads into framing members.

3.3.3 Wood Framing: MEGABOARD Structural Panels shall be placed with the long dimension parallel to stud framing. All panel edges shall be fully blocked by framing studs, blocking, or plates. Minimum required collector elements are defined in Section 3.2.1.1 of this report and are required at both shear wall ends. Maximum stud spacing shall not exceed 24 inches (610 mm) on center. Nail heads or screw heads are required to be located one-inch (25.4 mm) minimum from panel edges. Lead holes into MEGABOARD shall be approximately 70 percent of the fastener root diameter and comply with the ANSI/AWC NDS for insertion into wood framing, as applicable. Nail or screw heads shall be installed flush with the surface of the MEGABOARD to accommodate the application of finish material where required.

3.4 Fire-Resistance-Rated Walls

3.4.1 Two-Hour Load-Bearing, Steel-Framed Wall: The wall assembly described as Item 1 in Table 8 of this report



has a two-hour fire-resistance rating based on load-bearing wall testing in accordance with ASTM E119 and complies with IBC Section 703.2.1 as symmetrical wall construction for interior walls. The assembly may be used where required by the IBC, including Sections 705, 706, and 707, and IRC Section R302.

3.4.2 Two-Hour Load-Bearing, Wood-Framed Wall: The wall assembly described as Item 2 in Table 8 of this report has a two-hour fire-resistance rating based on load-bearing wall testing in accordance with ASTM E119 and engineering analysis, and complies with the 2024 and 2021 IBC Sections 703.2.1 and 703.2.2 (2018, 2015, and 2012 IBC Sections 703.2 and 703.3) as symmetrical wall construction for interior walls. The assembly may be used where required by the IBC, including Sections 705, 706, and 707, and IRC Section R302.

3.4.3 Alternative Fire-Resistance-Rated Assemblies: The panels are permitted to be used as a component of a fire-resistance-rated assembly in accordance with IBC Section 703.2, based on testing conforming to ASTM E119 or UL 263. Alternative methods in 2024 and 2021 IBC Section 703.2.2 (2018, 2015, and 2012 IBC Section 703.3) are also permitted. Fire resistance based on testing in accordance with ASTM E119 or UL 263 may be established when the registered design professional specifies and then the building official approves, a fire-resistance-rated assembly with the MEGABOARD Structural Panels in a documented design from approved sources.

3.5 Interior Finish: MEGABOARD Structural Panels exhibit a flame-spread index of 0 and a smoke-developed index of 0 based on results of ASTM E84 testing and are classified as Class A for surface-burning characteristics in accordance with IBC Section 803.1.2. The MEGABOARD Structural Panels comply with IRC Section R302.9 for interior wall coverings.

3.6 Types of Construction: MEGABOARD Structural Panels comply with IBC Section 703.3 as noncombustible based on testing in accordance with ASTM E136-24b and ASTM E2652-22, and are permitted to be used in Types I through V Construction as set forth in Chapter 6 of the IBC. The panels also comply with IBC Sections 603.1.20 and 703.2.1.2 for use in Types I through V Construction based on fire-resistance testing as described in Sections 3.4.1 or 3.4.2 of this report.

3.7 Special Inspections

Periodic special inspections for seismic or wind resistance shall be in accordance with the requirements of IBC Chapter 17 corresponding to the applicable type (wood or cold-formed steel) of light-framed construction.

3.8 Mold Resistance: When tested in accordance with ASTM G21, MEGABOARD Structural Panels exhibit a mold growth rating of 0 in compliance with ASTM C1288 and ASTM C1325.

4.0 PRODUCT DESCRIPTION

4.1 MEGABOARD Structural Panels: MEGABOARD Structural Panels consist of 5/8-inch thick (16 mm) fiberglass-reinforced magnesium oxide cement-based boards complying with the Type B Grade III provisions of ASTM C1186. These panels are available in widths of 48 inches (1219 mm) and standard lengths of 8 feet (2438 mm) or 10 feet (3048 mm). MEGABOARD panels have a density of 72 pcf (1153 kg/m³) and weigh approximately 3.75 psf (18.3 kg/m²).

4.2 Fasteners

4.2.1 MEGABOARD Panels Attached to Steel Framing (Tables 1, 2, 4, 5, 6, and 7): The fasteners used for attaching the MEGABOARD Structural Panels to steel framing shall be No. 8 self-drilling tapping screws with a minimum 0.164 inch (4.2 mm) nominal shank diameter and a minimum 0.372 inch (9.5 mm) diameter wafer head, complying with ASTM C1513, Chapter J of AISI S100, and Section B1.5 of AISI S240, with either corrosion-resistant treatments rated for exterior use or stainless steel composition.

4.2.2 MEGABOARD Panels Attached to Wood Framing (Tables 3, 6, and 7): The fasteners used for attaching the MEGABOARD Structural Panels to wood framing shall be smooth shank 10d common nails, minimum 3 inches (76.2 mm) long, and comply with Section 12.1.6 of ANSI/AWC NDS and ASTM F1667, with either protective coatings rated for exterior use or stainless steel composition.

4.2.3 MEGABOARD Panels Attached to Wood Framing (Tables 6 and 7): The fasteners used for attaching the MEGABOARD Structural Panels to wood framing shall be minimum No. 8 wood screws complying with Section 12.1.5 of the ANSI/AWC NDS and ANSI/ASME B18.6.1, with sufficient length to penetrate 1 inch (25.4 mm) into the framing, with either corrosion-resistant treatments rated for exterior use or stainless steel composition.

4.3 Steel Framing

4.3.1 In this report, for steel framing members, the following gage reference numbers and corresponding designated and minimum design base-metal thicknesses shall apply:

No. 18 gage: 43 mils, 0.0428 inch (1.09 mm)

No. 16 gage: 54 mils, 0.0538 inch (1.38 mm).



4.3.2 Steel studs for shear walls are C-shaped, with a minimum depth of 3½ inches (89 mm) and a minimum flange width of 1½ inches (41 mm), with a ½-inch (12.7 mm) return lip. Tracks shall be a minimum of 3½ inches (89 mm) wide, with minimum 1¼-inch (31.7 mm) high flanges.

4.3.3 No. 16 gage steel members shall comply with AISI S240, Grade 50, with minimum yield and tensile strengths of 50 ksi (340 MPa) and 65 ksi (450 MPa), respectively. No. 18 gage steel members shall comply with AISI S240, Grade 33, with minimum yield and tensile strengths of 33 ksi (227 MPa) and 45 ksi (310 MPa), respectively. Collector posts at each end of the shear wall shall be a minimum double stud and the same or heavier gage as the framing material. Actual collectors may be increased to larger or heavier gage elements, as determined by the design professional.

4.3.4 IRC: Walls constructed in accordance with this report may be used in lieu of provisions in IRC Section R603. Steel framing shall be designed to resist all applicable loading conditions.

4.4 Wood Framing

4.4.1 Wood framing members shall be sawn lumber or structural composite lumber conforming to Chapter 23 of the IBC or the IRC. The minimum framing member size for shear walls shall be a nominal 2 by 4 studs.

4.4.2 End Posts for shear walls shall be minimum double 2 by 4 or greater douglas fir, southern pine, or equal. Sill plates for shear walls shall be minimum 2 by 4 or greater douglas fir, southern pine, or equal.

4.4.3 IRC: Walls constructed in accordance with this report may be used in lieu of provisions in IRC Section R602. Wood framing shall be designed to resist all applicable loading conditions.

5.0 IDENTIFICATION

A label shall be affixed to the products. The label shall include the company name (Ectek Building Material, Inc.), product name (MEGABOARD), lot number, date code, and the Evaluation Report Number (IAPMO UES ER-710) to identify the products recognized in this report. A die-stamp may also substitute for the label. The IAPMO Uniform Evaluation Service Mark of Conformity also may be used as shown below:



IAPMO UES ER-710

6.0 SUBSTANTIATING DATA

6.1 Data in accordance with the IAPMO Uniform ES Evaluation Criteria for the Testing and Analysis of Steel Sheet Sheathing for Wood and Cold-Formed Steel Light Framed Structure Shear Walls (EC 003-25), adopted January 2025.

6.2 Data in accordance with ASTM C1186.

6.3 Reports of fire-resistance tests in accordance with ASTM E119.

6.4 Reports of surface burning tests in accordance with ASTM E84.

6.5 Reports of combustibility tests in accordance with ASTM E136-24b and ASTM E2652-22.

6.6 Reports of fastener pull-through, pull-out, withdrawal, and lateral strength tests in accordance with ASTM C1396, and DOC VPS PS-2.

6.7 Reports of transverse load, concentrated load, and impact testing in accordance with DOC VPS PS-2.

6.8 Reports of Mold Resistance testing in accordance with ASTM G21.

6.9 Engineering analysis for fire-resistance rated load-bearing walls based on a comparison of assemblies having fire-resistance ratings as determined by testing set forth in ASTM E119.

6.10 Quality control manual.

6.11 The test reports are from laboratories in compliance with ISO/IEC 17025.

7.0 STATEMENT OF RECOGNITION

This evaluation report describes the results of research completed by IAPMO Uniform Evaluation Service on Ectek Building Material's MEGABOARD Structural Panels to assess conformance to the codes shown in Section 1.0 of this report and serves as documentation of the product certification. Products are manufactured at the location noted in Section 2.14 of this report under a quality control program with periodic inspection under the supervision of IAPMO UES.

For additional information about this evaluation report please visit www.uniform-es.org or email us at info@uniform-es.org



TABLE 1 — NOMINAL AND ALLOWABLE SHEAR RESISTANCE TO WIND FORCES AND DISPLACEMENT (inches) FOR BLOCKED SHEAR WALLS WITH MEGABOARD STRUCTURAL PANELS NOT SUBJECT TO WETTING ATTACHED TO LIGHT GAGE STEEL C-STUDS SPACED AT 24 INCHES O.C. MAXIMUM WITH No. 8 SELF-DRILLING TAPPING SCREWS AND INTERIOR FASTENERS AT 12 INCHES O.C. (pounds per linear foot)^{1,2,3}

STEEL FRAMING ⁴	FASTENER SPACING AT PANEL EDGES/INTERMEDIATE FRAMING, INCHES ON CENTER ⁵					
Minimum Gage	6/12			2/12		
	V _{nom} ⁶ (plf) ⁶	V _{asd-wind} ⁷ (plf)	V _{lrfd-wind} ⁸ (plf)	V _{nom} ⁶ (plf) ⁶	V _{asd-wind} ⁷ (plf)	V _{lrfd-wind} ⁸ (plf)
No. 16 54 mil (0.0538 inch)	1,555	656	937	3,836	1,085	1,551

For SI: 1 inch = 25.4 mm, 1 plf = 0.0146 N/mm.

¹ These values are for short-term loads due to wind. The tabulated values apply to locations where the Megaboard structural wall panels will not be subjected to wetting during construction. For locations where wetting during construction is anticipated, the tabulated shear strengths shall be multiplied by 0.62, with no reduction of the tabulated deflections.

² The screws are described in Section 4.2.1 of this report and shall be installed in accordance with Section 3.3.2 of this report.

³ Tabulated values are for panels applied to one side (face) of a wall. Where panels are applied on two sides (opposite faces) of a wall, with the same fastener spacing, design strengths shall be determined by adding the strength from the two sides (opposite faces) together provided (1) boundary studs are designed for 1.35 times the total combined wall strength and (2) the thickness of wall top and bottom tracks (plates) are sized up a minimum of one thickness.

⁴ Section 4.3.1 of this report describes additional requirements for the framing.

⁵ All panel edges shall be blocked. Panels shall be installed vertically with the long dimension parallel to the framing.

⁶ V_{nom} = Nominal Design Strength.

⁷ V_{asd} = Allowable Stress Design (ASD) Strength.

⁸ V_{lrfd} = Load Resistance and Factor Design (LRFD) Strength.

TABLE 2 — NOMINAL AND ALLOWABLE SHEAR RESISTANCE TO EARTHQUAKE FORCES AND DISPLACEMENT (inches) FOR BLOCKED SHEAR WALLS WITH MEGABOARD STRUCTURAL PANELS NOT SUBJECT TO WETTING ATTACHED TO LIGHT GAGE STEEL C-STUDS SPACED AT 24 INCHES O.C. MAXIMUM WITH No. 8 SELF-DRILLING TAPPING SCREWS AND INTERIOR FASTENERS AT 12 INCHES O.C. (pounds per linear foot)^{1,2,3}

STEEL FRAMING ⁴	FASTENER SPACING AT PANEL EDGES/INTERMEDIATE FRAMING, INCHES ON CENTER ⁵					
Minimum Gage	6/12			2/12		
	V _{nom} ⁶ (plf)	V _{asd-eq} ⁷ (plf)	V _{lrfd-eq} ⁸ (plf)	V _{nom} ⁶ (plf)	V _{asd-eq} ⁷ (plf)	V _{lrfd-eq} ⁸ (plf)
No. 16 54 mil (0.0538 inch)	1,555	622	923	3,836	1,085	1,551

For SI: 1 inch = 25.4 mm, 1 plf = 0.0146 N/mm.

¹ These values are for short-term loads due to earthquakes. The tabulated values apply to locations where the Megaboard structural wall panels will not be subjected to wetting during construction. For locations where wetting during construction is anticipated, the tabulated shear strengths shall be multiplied by 0.62, with no reduction of the tabulated deflections.

² The screws are described in Section 4.2.1 of this report and shall be installed in accordance with Section 3.3.2 of this report.

³ Tabulated values are for panels applied to one side (face) of a wall. Where panels are applied on two sides (opposite faces) of a wall, with the same fastener spacing, design strengths shall be determined by adding the strength from the two sides (opposite faces) together provided (1) boundary studs are designed for 1.35 times the total combined wall strength and (2) the thickness of wall top and bottom tracks (plates) are sized up a minimum of one thickness.

⁴ Section 4.3.1 of this report describes additional requirements for the framing.

⁵ All panel edges shall be blocked. Panels shall be installed vertically with the long dimension parallel to the framing.

⁶ V_{nom} = Nominal Design Strength.

⁷ V_{asd} = Allowable Stress Design (ASD) Strength.

⁸ V_{lrfd} = Load Resistance and Factor Design (LRFD) Strength.



TABLE 3 — LRFD AND ASD SHEAR RESISTANCE TO WIND OR EARTHQUAKE FORCES AND DISPLACEMENT (inches) FOR BLOCKED SHEAR WALLS WITH MEGABOARD STRUCTURAL PANELS NOT SUBJECT TO WETTING ATTACHED TO DFL OR SP STUDS SPACED AT 24 INCHES O.C. MAXIMUM WITH 10D COMMON NAILS AND INTERIOR NAILS AT 12 INCHES O.C. (pounds per foot)^{1,2,3}

FRAMING ⁴	10d (3-inch min. X 0.162 inch) NAIL SPACING AT PANEL EDGES/INTERMEDIATE FRAMING, INCHES ON CENTER ⁵				
Stud: 2 x 4 End post: 2-2 x 4 Sill and top plate: 2 x 4	4/12				
	V _{nom} (plf) ⁶	V _{asd-wind} ⁷ (plf)	V _{asd-eq} ⁷ (plf)	V _{lrfd-wind} ⁸ (plf)	V _{lrfd-eq} ⁸ (plf)
	1,155	478	445	662	645

For SI: 1 inch = 25.4 mm, 1 plf = 0.0146 N/mm.

¹These values are for short-term loads due to wind or earthquake. The tabulated values apply to locations where the Megaboard structural wall panels will not be subjected to wetting during construction. For locations where wetting during construction is anticipated, the tabulated shear strengths shall be multiplied by 0.62, with no reduction of the tabulated deflections.

²The nails are described in Section 4.2.5 of this report and are installed in accordance with Section 3.3.3 of this report.

³Tabulated values are for panels applied to one side (face) of a wall. Where panels are applied on two sides (opposite faces) of a wall, design strengths shall be determined by adding the strength from the two sides (opposite faces) together provided panel joints are offset to fall on different framing members. Alternatively, the width of the nailed face of framing members shall be 3 in. nominal or greater at adjoining panel edges and nails at panel edges shall be staggered.

⁴Section 4.4.1 of this report describes additional requirements for the framing. The moisture content of the framing shall be no greater than 19 percent at the time of fabrication. For species and grades of framing other than Douglas-Fir-Larch or Southern Pine, reduced nominal unit shear capacities shall be determined by multiplying the tabulated nominal unit shear capacity by the Specific Gravity Adjustment Factor = $[1 - (0.5 - G)]$, where G = Specific Gravity of the framing lumber from the ANSI/AWC NDS (Table 12.3.3A). The Specific Gravity Adjustment Factor shall not be greater than 1.

⁵All panel edges shall be blocked. Panels shall be installed vertically with the long dimension parallel to the framing.

⁶V_{nom} = Nominal Design Strength.

⁷V_{asd} = Allowable Stress Design (ASD) Strength.

⁸V_{lrfd} = Load Resistance and Factor Design (LRFD) Strength.

TABLE 4 — NOMINAL, LRFD, AND ASD SHEAR RESISTANCE TO EARTHQUAKE FORCES FOR BLOCKED SHEAR WALLS WITH MEGABOARD STRUCTURAL PANELS NOT SUBJECT TO WETTING ATTACHED TO LIGHT GAGE STEEL C-STUDS SPACED AT 24 INCHES O.C. MAXIMUM WITH No. 8 SELF-DRILLING TAPPING SCREWS AND INTERIOR FASTENERS AT 6 INCHES O.C. (pounds per linear foot)^{1,2,3}

STEEL FRAMING ⁴	FASTENER SPACING AT PANEL EDGES / INTERMEDIATE FRAMING, INCHES ON CENTER ^{5,9}								
Designation Thickness (Minimum Thickness)	6/6			4/6			2/6		
	V _{nom} (plf) ⁶	V _{lrfd} (plf) ⁷	V _{asd} (plf) ⁸	V _{nom} (plf) ⁶	V _{lrfd} (plf) ⁷	V _{asd} (plf) ⁸	V _{nom} (plf) ⁶	V _{lrfd} (plf) ⁷	V _{asd} (plf) ⁸
54 mil (0.0538 inch)	1,043	626	417	1,702	995	681	3,186	1,616	1,274
43 mil (0.0428 inch)	-	-	-	1,310	736	520	-	-	-

For SI: 1 inch = 25.4 mm, 1 plf = 0.0146 N/mm

¹These values are for short-term loads due to earthquakes. Tabulated values apply to locations where the Megaboard structural panels will not be subjected to wetting during construction.

²Screw fasteners are described in Section 4.2.1 of this report and shall be installed in accordance with Section 3.3.2 of this report.

³Tabulated values are for panels applied to one side (face) of a wall. Where panels are applied on two sides (opposite faces) of a wall, with the same fastener spacing, design strengths shall be determined by adding the strength from the two sides (opposite faces) together provided (1) boundary studs are designed for 1.35 times the total combined wall strength and (2) the thickness of wall top and bottom tracks (plates) are sized up a minimum of one thickness.

⁴Section 4.3.1 of this report describes additional requirements for the framing.

⁵All panel edges shall be blocked. Panels shall be installed vertically with the long dimension parallel to the framing.

⁶V_{nom} = Nominal Design Strength.

⁷V_{lrfd} = Load and Resistance Factor Strength.

⁸V_{asd} = Allowable Stress Design Strength.

⁹Fasteners at boundary studs shall be staggered.



TABLE 5 — NOMINAL, LRFD, AND ASD SHEAR RESISTANCE TO WIND FORCES FOR BLOCKED SHEAR WALLS WITH MEGABOARD STRUCTURAL PANELS NOT SUBJECT TO WETTING ATTACHED TO LIGHT GAGE STEEL C-STUDS SPACED AT 24 INCHES O.C. MAXIMUM WITH No. 8 SELF-DRILLING TAPPING SCREWS AND INTERIOR FASTENERS AT 6 INCHES O.C. (pounds per linear foot)^{1,2,3}

STEEL FRAMING ⁴	FASTENER SPACING AT PANEL EDGES / INTERMEDIATE FRAMING, INCHES ON CENTER ^{5,9}								
Designation Thickness (Minimum Thickness)	6/6			4/6			2/6		
	V _{nom} (plf) ⁶	V _{lrfd} (plf) ⁷	V _{asd} (plf) ⁸	V _{nom} (plf) ⁶	V _{lrfd} (plf) ⁷	V _{asd} (plf) ⁸	V _{nom} (plf) ⁶	V _{lrfd} (plf) ⁷	V _{asd} (plf) ⁸
54 mil (0.0538 inch)	1043	678	521	1702	1106	851	3186	2071	1593
43 mil (0.0428 inch)	-	-	-	1310	852	655	-	-	-

For SI: 1 inch = 25.4 mm, 1 plf = 0.0146 N/mm

¹ These values are for short-term loads due to wind. Tabulated values apply to locations where the Megaboard structural panels will not be subjected to wetting during construction.

² Screw fasteners are described in Section 4.2.1 of this report and shall be installed in accordance with Section 3.3.2 of this report.

³ Tabulated values are for panels applied to one side (face) of a wall. Where panels are applied on two sides (opposite faces) of a wall, with the same fastener spacing, design strengths shall be determined by adding the strength from the two sides (opposite faces) together provided (1) boundary studs are designed for 1.35 times the total combined wall strength and (2) the thickness of wall top and bottom tracks (plates) are sized up a minimum of one thickness.

⁴ Section 4.3.1 of this report describes additional requirements for the framing.

⁵ All panel edges shall be blocked. Panels shall be installed vertically with the long dimension parallel to the framing.

⁶ V_{nom} = Nominal Design Strength.

⁷ V_{lrfd} = Load and Resistance Factor Design (LRFD) Strength.

⁸ V_{asd} = Allowable Stress Design (ASD) Strength.

⁹ Fasteners at boundary studs shall be staggered.

TABLE 6 — ASD TRANSVERSE RESISTANCE TO WIND OR EARTHQUAKE FORCES FOR WALLS WITH MEGABOARD STRUCTURAL PANELS NOT SUBJECT TO WETTING ATTACHED TO STUDS SPACED AT 24 INCHES O.C. MAXIMUM WITH SCREWS (pounds per square foot)^{1,2}

Framing ³	Fastening ⁴	Direction	@ 1/360 (psf)	@ 1/240 (psf)	@ 1/120 (psf)
Steel	No. 8 Screws	Positive	36	80	80
		Negative	36	66	66
Wood	No. 8 Wood Screws	Positive	36	80	80
		Negative	36	74	74
Wood	10d Common Nails	Positive	36	80	80
		Negative	16	16	16

For SI: 1 inch = 25.4 mm, 1 psf = 6.89 kPa

¹ The tabulated values apply to locations where the Megaboard structural wall panels will not be subjected to wetting during construction.

² Screw spacing is 6 inches on center maximum to all vertical and horizontal framing members.

³ Framing shall comply with Section 4.3 of this report

⁴ Screws and Nails shall comply with Section 4.2 of this report.



TABLE 7 — ASD TRANSVERSE RESISTANCE TO WIND OR EARTHQUAKE FORCES FOR WALLS WITH MEGABOARD STRUCTURAL PANELS SUBJECT TO WETTING ATTACHED TO STUDS SPACED AT 24 INCHES O.C. MAXIMUM WITH SCREWS (pounds per square foot)^{1,2}

Framing ³	Fastening ⁴	Direction	@ 1/360 (psf)	@ 1/240 (psf)	@ 1/120 (psf)
Steel	No. 8 Screws	Positive	36	55	55
		Negative	36	55	55
Wood	No. 8 Wood Screws	Positive	36	55	55
		Negative	36	55	55
Wood	10d Common Nails	Positive	36	55	55
		Negative	16	16	16

For SI: 1 inch = 25.4 mm, 1 psf = 6.89 kPa

¹ The tabulated values apply to locations where wetting of the Megaboard structural wall panels during construction is anticipated.

² Screw spacing is 6 inches on center maximum to all vertical and horizontal framing members.

³ Framing shall comply with Section 4.3 of this report

⁴ Screws and Nails shall comply with Section 4.2 of this report.

TABLE 8 — TWO-HOUR FIRE-RESISTANCE-RATED WALL ASSEMBLIES

Item	Material	Construction	ASD Axial Loading
1	5/8 inch thick MEGABOARD	Minimum 1 5/8 inch x 3 3/4 inch galvanized cold-formed steel C-studs, with a 0.0472-inch base metal thickness, shall be spaced a maximum of 16 inches on center, with compatible U-shaped tracks. U-shaped 0.059-inch-thick steel channel bridging shall be inserted through the C-studs and connected to the studs with self-tapping screws and galvanized steel angle connectors, and shall be located at the middle height of the steel framing or at closer spacings as required by the structural design. Both sides shall have one layer of 5/8-inch thick MEGABOARD applied with the long direction parallel to the framing and all joints backed by framing. All butt joints and end joints shall be staggered from the opposite face. End joints shall be backed by 0.064-inch by 4-inch-wide steel plates on each face. The panels shall be attached with 0.019-inch diameter x 1 1/4 inch long corrosion-resistant, self-tapping screws having 3/8 inch diameter bugle heads at 6 inches on center maximum to studs, tracks, and backing plates. Fastener heads and joints of the wallboard shall be taped with fiberglass mesh joint tape and treated with joint compound in accordance with IBC Section 2508.4, and either ASTM C840 or GA-216. Rockwool ThermalRock S100 insulation boards, with a thickness matching the stud depth and complying with Section 720 of the IBC or Section R302.10 of the IRC, shall fill the space between the studs.	<p>Lesser of:</p> <ol style="list-style-type: none"> 1. Load-bearing capacity of the wall in accordance with Section 3.2.2 of this report; <p>Or</p> <ol style="list-style-type: none"> 2. 2,238 lbf per linear foot.
2	5/8 inch thick MEGABOARD	Nominal 2 by 4 wood studs or larger shall be spaced a maximum of 16 inches on center, with compatible sills and top plates. Solid blocking shall be provided between the studs, and shall be located at the middle height of the wood framing or at closer spacings as required by the structural design. Both sides shall have one layer of 5/8-inch thick MEGABOARD applied with the long direction parallel to the framing and all joints backed by framing or blocking. All butt joints and end joints shall be staggered from the opposite face. The panels shall be attached at 6 inches on-center maximum to studs, sills, and plates, and, where joints occur, blocking with nails or screws complying with Section 4.2.2 or 4.2.3 of this report. Fastener heads and joints of the wallboard shall be taped with fiberglass mesh joint tape and treated with joint compound in accordance with IBC Section 2508.4, and either ASTM C840 or GA-216. Rockwool ThermalRock S100 insulation boards, with a thickness matching the stud depth and complying with Section 720 of the IBC or Section R302.10 of the IRC, shall fill the space between the studs.	<p>Lesser of:</p> <ol style="list-style-type: none"> 1. Load-bearing capacity of the wall in accordance with Section 3.2.2 of this report; <p>Or</p> <ol style="list-style-type: none"> 2. 2,238 lbf per linear foot.

For SI: 1 inch = 25.4 mm, 1 plf = 0.0146 N/mm.



FLORIDA SUPPLEMENT

ECTEK BUILDING MATERIAL INC.

16314 Grandview Street

Lewes, Sussex, DE 19958

(416) 564-4617

www.ectekbm.com

MEGABOARD® STRUCTURAL PANELS INSTALLED ON COLD-FORMED STEEL OR WOOD-FRAMED SHEAR WALLS

CSI Sections:

- 05 40 00 Cold-Formed Metal Framing
- 05 41 00 Structural Metal Stud Framing
- 06 00 00 Wood, Plastics, and Composites
- 06 11 00 Wood Framing
- 06 16 00 Sheathing
- 06 16 63 Cementitious Sheathing
- 07 44 53 Glass-Fiber-Reinforced Cementitious Panels
- 09 28 13 Cementitious Backing Boards
- 09 28 15 Magnesium Oxide Backing Panels

1.0 RECOGNITION

Ectek Building Material's MEGABOARD Structural Panels, recognized in this report supplement, have been evaluated for use as shear panels for wood or steel light-frame walls. The strength, durability, surface-burning, non-combustibility, physical properties, and transverse wind load resistance properties of the panels comply with the intent of the provisions of the following codes and regulations:

- 2026 and 2023 Florida Building Code (FBC, Building)
- 2026 and 2023 Florida Building Code, Residential (FBC, Residential)

2.0 LIMITATIONS

Use of the Ectek Building Material's MEGABOARD Structural Panels recognized in this report is subject to the following limitations:

2.1 FBC, Building: All provisions of IAPMO UES ER-710 referencing the 2024 IBC shall apply to use under the 2026 FBC, Building, except as specifically noted in this supplement.

All provisions of IAPMO UES ER-710 referencing the 2021 IBC shall apply to use under the 2023 FBC, Building, except as specifically noted in this supplement.

2.2 FBC, Residential: All provisions of IAPMO UES ER-710 referencing the 2024 IRC shall apply to use under the 2026 FBC, Residential; along with Section R302 of the FBC, Residential, as applicable, except as specifically noted in this supplement.

All provisions of IAPMO UES ER-710 referencing the 2021 IRC shall apply to use under the 2023 FBC, Residential; along with Section R302 of the FBC, Residential, as applicable, except as specifically noted in this supplement.

2.3 Complete construction documents, including plans and calculations verifying compliance with this report, shall be submitted to the building official with the permit application for approval. The construction documents shall be prepared by a registered design professional where required by Chapter 471, Florida Statutes, or Chapter 481, Florida Statutes.

2.4 Evaluation for use in high-velocity hurricane zones (HVHZ), consisting of Broward and Dade counties as defined in Section 202 of the FBC, Building, and Section R202 of the FBC, Residential, is outside the scope of this report.

2.5 Verification shall be provided that a quality assurance agency audits the manufacturer's quality assurance program and audits the production quality of products, in accordance with Section (5)(d) of Florida Rule 61G20-3.008. The quality assurance agency shall be approved by the Commission (or by the building official when the report holder does not possess an approval from the Commission).

2.6 Fasteners in areas within 3,000 feet (914 m) of a saltwater coastline shall be corrosion-resistant by composition (stainless steel or nonferrous metal) or by coating or galvanization in accordance with Sections 1403.12 and 1711.1 and Table 1711.1 of the 2026 Florida Building Code, Building and Sections R601.3, R701.3, and R332 of the 2026 Florida Building Code, Residential, as applicable.

2.7 This supplement expires concurrently with IAPMO UES ER-710.

For additional information about this evaluation report please visit www.uniform-es.org or email us at info@uniform-es.org



CALIFORNIA SUPPLEMENT

ECTEK BUILDING MATERIAL INC.

16314 Grandview Street
Lewes, Sussex, DE 19958
(416) 564-4617

www.ectekbm.com

MEGABOARD® STRUCTURAL PANELS INSTALLED ON COLD-FORMED STEEL OR WOOD-FRAMED SHEAR WALLS

CSI Sections:

- 05 40 00 Cold-Formed Metal Framing
- 05 41 00 Structural Metal Stud Framing
- 06 00 00 Wood, Plastics, and Composites
- 06 11 00 Wood Framing
- 06 16 00 Sheathing
- 06 16 63 Cementitious Sheathing
- 07 44 53 Glass-Fiber-Reinforced Cementitious Panels
- 09 28 13 Cementitious Backing Boards
- 09 28 15 Magnesium Oxide Backing Panels

1.0 RECOGNITION

Ectek Building Material's MEGABOARD Structural Panels, recognized in this report supplement, have been evaluated for use as shear panels for wood or steel light-frame walls. The strength, durability, surface-burning, non-combustibility, physical properties, and transverse wind load resistance properties of the panels comply with the intent of the provisions of the following codes and regulations:

- 2025 and 2022 California Building Code (CBC)
- 2025 and 2022 California Residential Code (CRC)

2.0 LIMITATIONS

Use of the Ectek Building Material's MEGABOARD Structural Panels recognized in this report is subject to the following limitations:

2.1 CBC: All provisions of IAPMO UES ER-710 referencing the 2024 IBC shall apply under the 2025 CBC, except as specifically noted in this supplement. All provisions of IAPMO UES ER-710 referencing the 2021 IBC shall apply under the 2022 CBC, except as specifically noted in this supplement.

2.2 CRC: All provisions of IAPMO UES ER-710 referencing the 2024 IRC shall apply under the 2025 CRC, along with Section R302 of the CRC, as applicable, except as specifically noted in this supplement. All provisions of IAPMO UES ER-710 referencing the 2021 IRC shall apply under the CRC, along with Section R302 of the CRC, as applicable, except as specifically noted in this supplement.

2.3 Wind and Seismic Load Design:

2.3.1 The design for horizontal loads shall be as set forth in Section 3.2 of IAPMO UES ER-710.

2.3.2 For applications involving community colleges, the provisions in 2025 CBC Sections 1617 and 2215, or 2022 CBC Sections 1617 and 2212 shall apply.

2.3.3 For applications regulated by DSA or HCAi (OSHDPD):

- a. Provisions in ASCE/SEI 7 shall be modified as set forth in CBC Section 1617A.
- b. Use of MEGABOARD Structural Panels as shear walls is permitted only when designed and constructed in accordance with Section 3.1 and Tables 4 and 5 of IAPMO UES ER-710.

2.4 Installation: Installation requirements shall be as set forth in Section 3.3 of IAPMO UES ER-710.

2.5 Special Inspection: Special inspections shall be provided as set forth in Section 3.7 of IAPMO UES ER-710.

2.6 For applications regulated by DSA or HCAi (OSHDPD), structural calculations shall comply with CBC Section 1603A.3.

2.7 This supplement expires concurrently with IAPMO UES ER-710.

For additional information about this evaluation report please visit www.uniform-es.org or email us at info@uniform-es.org



CITY OF LOS ANGELES SUPPLEMENT

ECTEK BUILDING MATERIAL INC.
16314 Grandview Street
Lewes, Sussex, DE 19958
(416) 564-4617
www.ectekbm.com

MEGABOARD® STRUCTURAL PANELS INSTALLED ON COLD-FORMED STEEL OR WOOD-FRAMED SHEAR WALLS

CSI Sections:

05 40 00 Cold-Formed Metal Framing
05 41 00 Structural Metal Stud Framing
06 00 00 Wood, Plastics, and Composites
06 11 00 Wood Framing
06 16 00 Sheathing
06 16 63 Cementitious Sheathing
**07 44 53 Glass-Fiber-Reinforced Cementitious
Panels**
09 28 13 Cementitious Backing Boards
09 28 15 Magnesium Oxide Backing Panels

1.0 RECOGNITION

Ectek Building Material's MEGABOARD Structural Panels, recognized in this report supplement, have been evaluated for use as shear panels for wood or steel light-frame walls. The strength, durability, surface-burning, non-combustibility, physical properties, and transverse wind load resistance properties of the panels comply with the intent of the provisions of the following codes and regulations:

- 2026 City of Los Angeles Building Code (LABC)
- 2026 City of Los Angeles Residential Code (LARC)

2.0 LIMITATIONS

Use of the Ectek Building Material's MEGABOARD Structural Panels recognized in this report is subject to the following limitations:

2.1 LABC: All provisions of the IAPMO UES ER-710 California Supplement referencing the 2025 CBC shall apply under the 2026 LABC, except where regulated by DSA or HCAi (OSHPD) or as specifically noted in this supplement.

2.2 CRC: All provisions of the IAPMO UES ER-710 California Supplement referencing the 2025 CRC shall apply under the LARC, except as specifically noted in this supplement.

2.3 Building design calculations and details shall be prepared, stamped, and signed by a California registered design professional.

2.4 Design, installation, and inspection shall be in accordance with Chapters 16 and 17 of the LABC, as applicable, due to local amendments to these chapters.

2.5 All shear walls shall be provided with holdowns.

2.6 When designing with MEGABOARD Structural Panels, the registered design professional shall check:

- All beams under the MEGABOARD Structural Panels for uplift and overturning.
- Foundation design for overturning, compression, and tension.
- The allowable vertical load on the header.
- The hold-down bolt capacity is based on reduced edge and end distances detailed on plans.
- The drag force at the top plates from the lateral force distribution in the same shear wall line.
- Bearing pressure to the sill plate when there are additional vertical loads on top of the MEGABOARD Structural Panels.

2.7 All nominal and allowable capacities provided in IAPMO UES ER-710, shall not be increased for short-term (transient) loading.

2.8 Panels located in exterior walls shall be covered with an approved weather-resistant exterior wall envelope complying with Section 1402 of the LABC.

2.9 Panels shall be installed with the published installation instructions by the manufacturer.

2.10 Lumber species and grade in wood-framed shear walls shall be in accordance with P/BC 2026-010.

2.11 This supplement expires concurrently with IAPMO UES ER-710.

For additional information about this evaluation report please visit www.uniform-es.org or email us at info@uniform-es.org