INNOVA PANEL

InnovaPanel Code-Approval & Permitting Path

2026

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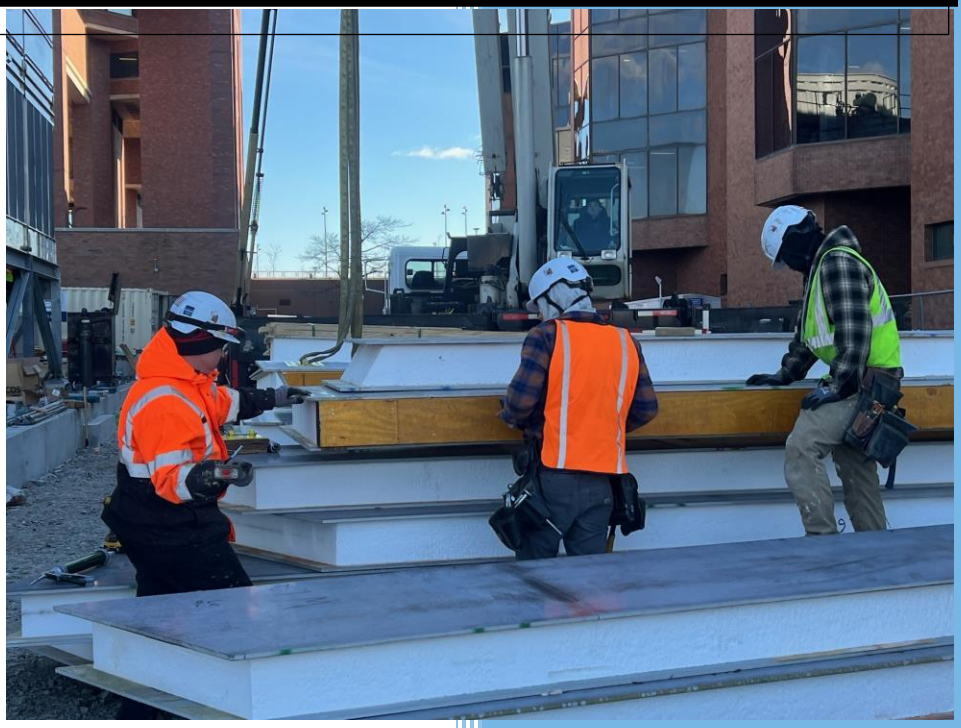


Integrates well with conventional building systems, including masonry, structural, and light-gauge steel framing, and other building systems.

MIAMI-DADE COUNTY APPROVED

www.innovapanel.com

Innova Panel, LLC.

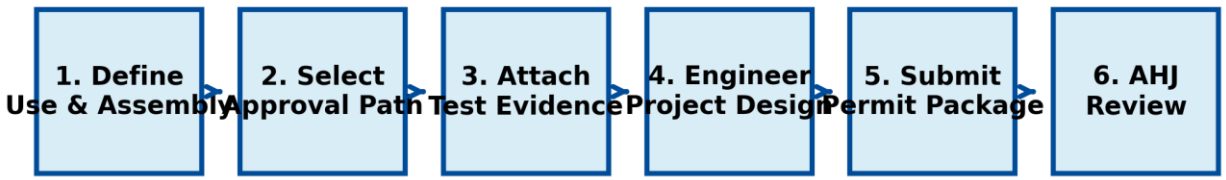
5/11/2026

INNOVAPANEL

Design, Approval & Permitting Response Guide

A step-by-step guide for architects, engineers, developers, contractors, and code officials evaluating the patented InnovaPanel composite MGO structural insulated panel system.

InnovaPanel Code-Approval & Permitting Path



Executive Summary

Purpose: Provide a clear response to five common questions: How do I specify it? What code path exists? What approvals exist? What testing exists? How do I defend it in permitting?

Question	Short Answer
How do I specify it?	Specify InnovaPanel by manufacturer, approved assembly, panel thickness, facing materials, connection details, required performance, and project-specific engineered drawings.
What code path exists?	Use approved product documentation where applicable, or an Alternative Materials and Methods path under IBC/FBC Section 104.11 supported by testing and engineering.
What approvals exist?	Miami-Dade NOA No. 25-0401.02 for 6 in Magnesium Oxide High Impact Wall Panel; prior Innova product approval summaries list Florida approvals and legacy NOA items.
What testing exists?	NOA evidence references TAS 201, TAS 202, TAS 203, and ASTM E72 testing. Provided ASTM E72 data support preliminary ASD value screening.
How do I defend permitting?	Submit a bundled package: NOA/Product Approval, test reports, sealed project calculations, installation drawings, QA labels, and an AHJ-specific code narrative.

1. How to Specify InnovaPanel

Use a performance specification supported by project-specific engineering. The specification should identify the system as an InnovaPanel-manufactured composite MGO structural insulated panel, not a generic SIP, OSB SIP, or commodity MGO panel.

Specification Item	Recommended Language / Requirement
Manufacturer	Innova Panel, LLC, patented composite MGO structural insulated panel system.
System identity	Do not substitute without written manufacturer approval and equivalent testing for the exact assembly, raw materials, facings, core, connections, QA, and fabrication process.
Panel use	Load-bearing exterior wall, interior bearing wall, roof panel, infill wall, or cladding use as indicated on drawings and engineered calculations.
Performance basis	Miami-Dade NOA / Florida Product Approval, where applicable; ASTM E72 structural data; TAS impact/cyclic pressure data; project-specific ASCE 7 wind/seismic design.
Drawings required	Manufacturer details, panel layout, opening schedule, splines, bucks, fasteners, hold-downs, floor-to-wall connection, roof-to-wall connection, and foundation anchorage.
Engineering required	Project-specific sealed structural calculations by the Structural Engineer of Record.
Quality assurance	Panels shall be labeled and produced under the applicable quality assurance requirements associated with the approved product documentation.

Sample Short-Form Specification Note

Provide InnovaPanel composite MGO structural insulated panels as shown on the approved shop drawings and project structural calculations. Panels, connections, openings, anchorage, splines, fasteners, and accessories shall match the tested and approved InnovaPanel assembly. Generic MGO SIP, OSB SIP, cement board SIP, or alternate panel systems shall not be considered equal unless supported by equivalent third-party testing, approval documentation, and project-specific engineering accepted by the Engineer of Record and Authority Having Jurisdiction.

2. Code Path: Approval, Alternative Materials, and ESR Strategy

The code path depends on the project location, use, building height, occupancy, fire-resistance requirements, wind/seismic demands, and whether the application is within the exact scope of existing approvals.

Path	When to Use	What to Submit
Miami-Dade NOA / HVHZ route	Florida HVHZ or AHJ accepts Miami-Dade Product Control documentation.	NOA, approved drawings, limitations, labels, installation details, and project structural calculations.
Florida Product Approval route	Florida projects outside or inside HVHZ, depending on product listing and scope.	State approval listing, installation drawings, evaluation report, limitations, and EOR calculations.
IBC/FBC 104.11 route	Application is new, unique, or outside prescriptive code language.	Alternative Materials and Methods request with valid research reports, test

		evidence, engineering analysis, and code-equivalence narrative.
ESR path	National market expansion or repeated specification outside Florida.	ICC-ES AC04/AC05/AC12 test matrix, quality documentation, full-scale load testing, fire testing, installation instructions, and inspection/labeling program.

3. What Approvals Exist?

The current Miami-Dade approval record reviewed for this guide identifies NOA No. 25-0401.02 for Innova Panel, LLC, with the product description '6 in Magnesium Oxide High Impact Wall Panel.' The NOA indicates approval for the High Velocity Hurricane Zone of the Florida Building Code, missile impact resistance, an approval date of 05/01/2025, and expiration date of 05/21/2030.

Approval / Listing	Status / Description	Design Use
Miami-Dade NOA No. 25-0401.02	6 in Magnesium Oxide High Impact Wall Panel; large and small missile impact resistant; HVHZ use as described in approved drawings.	Use as the controlling product approval package where the project matches NOA scope and limitations.
Legacy NOA / prior approvals	NOA record states it revises and renews NOA #23-0928.29. Public Innova approval summary also lists MGO High Impact Wall Panels NOA #14-1202.6.	Use for historical continuity and supporting background, but rely on latest active NOA for permitting.
Florida Product Approvals	Public Innova approval summary lists MGO / plywood roof and floor panel FL #16979.1, MGO / OSB roof/floor FL #16979.2, and MGO / MGO roof panel FL 16979.3.	Verify current Florida Building Commission listings, code version, limitations, and installation drawings before permit submittal.
Project-specific engineering	Always required for gravity, wind, seismic, openings, diaphragm transfer, anchorage, fire, and foundation design.	EOR seals the final building design and demonstrates compliance with the applicable code.

4. What Testing Exists?

Test / Standard	What It Supports	Where It Fits in the Permitting Package
ASTM E72	Structural testing of wall panels, including compression and racking/shear performance.	Supports structural design values, allowable value development, stiffness interpretation, and load path discussion.
TAS 201	Large missile impact testing for wall panels in HVHZ applications.	Supports impact-resistant wall system approval where NOA applies.
TAS 202	Uniform static air pressure testing.	Supports pressure-resistance evaluation and product approval.
TAS 203	Cyclic wind pressure testing.	Supports hurricane cyclic pressure performance.

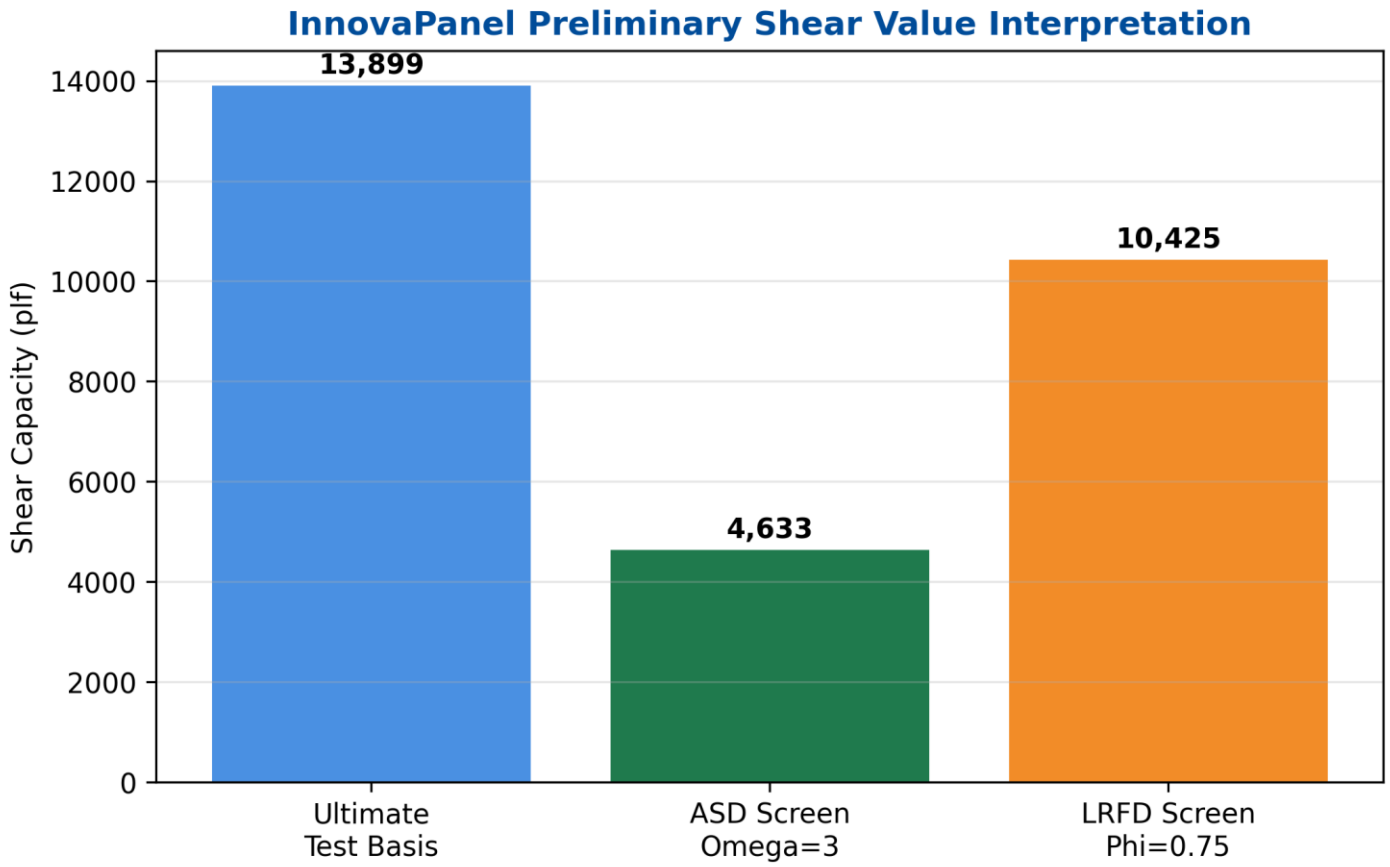
ASCE 7	Project-specific wind, seismic, and load combination analysis.	Used by EOR to translate approved product values into the final building design.

Important limitation: NOA evidence notes that air or water infiltration testing was not performed for the referenced wall panel system; therefore, air/water performance, weather barrier, sealant, flashing, window integration, and cladding details must be designed separately for the specific project.

5. Allowable Values and Design Assumptions

The following values are preliminary design-screening interpretations developed from the ASTM E72 test values provided to InnovaPanel. They are not a substitute for final sealed structural calculations or formal code-approved design tables.

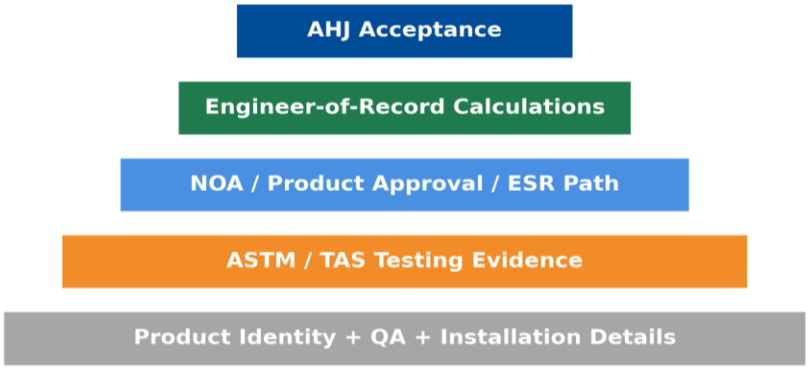
Calculation	Formula	Result
Average ultimate test load	(53,713 + 53,713 + 59,367) / 3	55,598 lb
Ultimate shear per linear foot	55,598 lb / 4 ft	13,899 plf
ASD screen, Omega = 3	13,899 plf / 3	4,633 plf
ASD panel load	55,598 lb / 3	18,533 lb per 4 ft panel
LRFD shear screen	0.75 x 13,899 plf	10,425 plf
LRFD compression screen	0.65 x 55,598 lb	36,138 lb per panel
Ultimate drift ratio	0.131 in / 120 in	0.00109, approx. H/916
150 mph raw velocity pressure	0.00256 x 150^2	57.6 psf before ASCE 7 coefficients
80% solid-wall capacity screen	4,633 plf x 0.80	3,707 plf



Assumption	Screening Value	Interpretation
Wall panel height	10 ft	Used for drift and wall self-weight screening.
Floor span strategy	24 ft joist span supported by exterior walls and interior load-bearing party walls	Typical tributary width to a bearing line may be approximately 12 ft, subject to actual layout.
Residential service load screen	75 psf x 12 ft = 900 plf	Conceptual gravity demand per floor before project-specific load combinations, live-load reduction, or load sharing.
Five floor gravity stack	900 plf x 5 = 4,500 plf	Requires EOR review with bearing details, cumulative load path, eccentricity, openings, and diaphragm distribution.
Wall + roof additive screen	wall 500 plf + roof 384 plf	Approx. total screen can approach 5,384 plf before engineering refinement.
Design conclusion	Feasible for serious engineering evaluation	Final design depends on wall layout, party walls, cores, openings, bearing plates, connectors, fire assembly, and AHJ acceptance.

Wynwood Miami - Butternut Townhomes

6. How to Defend InnovaPanel in Permitting



Step	Permit Defense Action	Deliverable
1	Start with product identity.	Identify InnovaPanel assembly, thickness, facing materials, core, connection system, approved drawing number, and current NOA/approval listing.
2	Match the project application to the approval scope.	Matrix showing wall, roof, floor, cladding, impact, HVHZ, and load-bearing use limitations.
3	Attach testing evidence.	ASTM E72 data, TAS 201/202/203 references, structural calculations, and relevant reports.
4	Provide ASCE 7 project loads.	Wind pressures, C&C loads, MWFRS loads, seismic forces, load combinations, exposure, risk category, and enclosure classification.
5	Show the load path.	Diaphragm, collector, chord, drag strut, wall line, hold-down, anchor, foundation, and roof-to-wall load paths.
6	Detail connections and openings.	Fasteners, splines, panel-to-panel details, window/door bucks, bearing plates, floor-to-wall, roof-to-wall, and concentrated loads.
7	Address fire and life safety.	Bearing wall fire ratings, floor/ceiling assemblies, shafts, corridors, exterior wall ratings, and foam plastic protections.
8	Submit an AMMR narrative if needed.	104.11 letter explaining equivalency for quality, strength, effectiveness, fire resistance, durability, and safety.
9	Close with EOR responsibility.	Final sealed project-specific structural drawings and calculations.

7. ESR Development Path

For national specification beyond Florida-specific product approvals, the logical development path is an ICC-ES evaluation report package. The core pathway is based on AC04 for Sandwich Panels, with related adhesive, foam-plastic, fire, labeling, and quality-control evidence as applicable.

ESR Package Element	Purpose
ICC-ES AC04	Primary sandwich panel evaluation path for structural insulated panels.
AC05 / adhesive evidence	Validates adhesive system where adhesive bond contributes to structural performance.
AC12 / foam plastic evidence	Supports foam core identification, density, water absorption, and insulation-related code requirements.
ASTM E72 / full-scale panels	Confirms axial, transverse, and racking/shear performance.
Fire testing	ASTM E119, NFPA 286, or other code-required fire tests depending on use, occupancy, and assembly.
Quality control program	Manufacturer QA, plant inspection, product labeling, traceability, and installation instructions.
Engineering design tables	Allowable values, load span tables, shear walls, connections, and design limitations.

8. Distribution-Safe Confidentiality Notice

The information contained in this document, including ASTM E72 test results, structural evaluations, engineering concepts, material compositions, and system performance data, is confidential and proprietary to InnovaPanel. The InnovaPanel system is a patented composite structural building technology utilizing proprietary design features, engineered material assemblies, and unique manufacturing methods not common to conventional MGO SIP, OSB SIP, or other insulated panel systems.

The structural behavior, load capacities, and performance characteristics presented herein are specific to the InnovaPanel system only and shall not be relied upon, referenced, extrapolated, or used for the engineering, testing, evaluation, marketing, or structural design of any other panelized building product or insulated panel system.

Engineering Disclaimer

This document presents a conceptual engineering feasibility and permitting response guide based on the design parameters, public approval information, and ASTM E72 test summaries available at the time of preparation. It is intended for preliminary evaluation, design discussion, code-path planning, and professional coordination only.

Final building design requires project-specific structural engineering, complete structural calculations, code analysis, fire-resistance evaluation, connection and anchorage design, wind/seismic/foundation engineering, and review and approval by licensed design professionals.

References Reviewed

- Miami-Dade County Product Control Section, Notice of Acceptance No. 25-0401.02, Innova Panel, LLC, 6 in Magnesium Oxide High Impact Wall Panel, approval date 05/01/2025, expiration date 05/21/2030.
- InnovaPanel, Innova SIP Product Approvals and Testing, public product approval summary.
- InnovaPanel Technical Document Library, technical document index for SIP construction, code requirements, testing criteria, R-values, load charts, and standard details.
- ICC-ES, Acceptance Criteria for Sandwich Panels (AC04), and related sandwich panel acceptance criteria.
- Florida Building Code / IBC Section 104.11 Alternative Materials, Design and Methods of Construction and Equipment.
- ASTM E72 test data summaries provided to InnovaPanel and reviewed in this project discussion.
- User-provided InnovaPanel 5-Story Residential Feasibility Case Study source text, May 2026.

9. Architect Technical Specification Integration

The following specification concepts were incorporated from the InnovaPanel Structural Insulated Panel specification package provided for architect and engineer coordination. These items strengthen the specification pathway, QA requirements, installation sequencing, and permitting defense strategy for project applications.

Specification Item	Architect / Engineer Coordination Requirement
Panel Skins	12 mm minimum Magnesium Oxide Board complying with ASTM C1185 and ASTM C1186.
Foam Core	Expanded Polystyrene (EPS) complying with ASTM C578 with a minimum density of 0.9 pcf.
Adhesive System	Structural adhesive system complying with ASTM D2559.
Structural Design	Project-specific structural analysis and design by a licensed Professional Engineer.
Miami-Dade NOA	Structural insulated panel assemblies shall maintain a valid Miami-Dade NOA.
Installation Requirements	Panels installed plumb, square, sealed, braced, and protected from weather exposure.
Moisture Control	Joint sealing, expanding foam, surface caulking, and vapor tape integration are required.
Fasteners	Corrosion-resistant fasteners complying with ASTM B117 exposure requirements.
Quality Assurance	Installation contractor shall follow all InnovaPanel manufacturer installation instructions.
Coordination	Delivery, sequencing, and handling coordinated to minimize damage and moisture exposure.

The specification package reinforces the position of the InnovaPanel system as a proprietary engineered composite structural building system rather than a generic SIP product. The inclusion of ASTM references, NOA requirements, installation procedures, quality-assurance language, and structural engineering coordination substantially strengthens the product specification and permitting pathway.

The specification also highlights the importance of project-specific engineering for gravity loads, wind loads, diaphragm transfer, connection detailing, and code compliance. These requirements align with standard engineering practice for advanced composite structural systems.