NON-COMBUSTIBLE STRUCTURAL INSULATED BUILDING SYSTEMS

ROK-ON™

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ROK-ON™ fiberglass reinforced ceramic cement sheathing is laminated to EPS foam to create a thin structural panel that is attached directly to steel or wood framing as the exterior insulated sheathing. The result is a high-performance, lower cost solution for exterior walls that exceeds the North American building codes for energy and fire performance.

**ROK-ON™**

3 STEPS:
- Attaches to wood/steel
- R-11
- Non-combustible
- Will not rot
- Mold resistant
- Impact resistant
- Bug proof
- Easily inspected

*Cuts and attaches like OSB/DensGlass without special tools or fasteners*

**(VERSUS) STUCCO / EIFS SYSTEM**

8 STEPS:
- 8 Chances to FAIL
- R-5
- Easily Damaged
- High Maintenance

- Superior performance
- Easy installation
- competitively priced

*BETTER - FASTER - CHEAPER*

Fully tested to meet all applicable 2015 IBC building codes.
NFPA 285 – exceeded criteria by 30%
0 flame/0 smoke / ASTM E 84
0 flame/0 smoke / ASTM E136  non-combustible

**IBC Code Compliance**
Chapter 7 – Fire-resistant rated construction
Chapter 16 – Structural transverse wind load resistance
Chapter 26 – Types I-IV (non-combustible)

**Energy Standards Performance**
Exceeds IECC and ASHRAE 90.1 for energy performance. Eliminates thermal bridging. A typical panel is 2.75" thick and provides an R-11.

Dew Point Remains Outside the Wall Cavity
Nine (9) layers of moisture protection in the system. Superior water resistance.

**Tremendous Architectural Flexibility**
ROK-ON™ can accept direct application of finishes (stone or brick veneer, metal panels, stucco, etc.)

**Full Quality Control**
Issued the Warnock Hershey stamp from Intertek.

$10M per occurrence product liability policy in place.
• New mandated codes around energy performance have forced architects and builders to look at new ways to meet the requirements. Continuous external insulation is now required to meet the codes.

• Fire and health codes continue to become more stringent and buildings are going up and not out. Mold replaced asbestos as the most litigated construction issue.

• Labor is increasingly harder to find and more expensive. All of this comes at a time when pricing pressure is at its greatest.

The Solution - ROK-ON™

Traditional EIFS systems require up to 5 steps before any final finish can be applied. ROK-ON™ does this in one step. It is installed directly to framing in the same time as the first layer of sheathing in other systems. This significantly reduces costs, increases productivity, and reduces construction time across the entire supply chain.

ROK-ON™ can be installed directly onto a building or in a modular environment. Either way, less steps means it can be installed much faster than traditional methods. This reduces the critical path timeline for the GC and leads to earlier occupancy for the building owner. All of this with a high performing system that will reduce long-term energy costs with less...

BETTER - FASTER - CHEAPER
Located in the capital city of Mexicali, Baja, California, Grupo Metalco has constructed a 7-story, 129-room limited express service hotel for the municipality. Metalco, the developer/owner and general contractor, provided both the iron framing, as well as steel fabrication and installation of ROK-ON™ ‘insulated' structural walls.

Tremendous construction savings were realized panelizing ROK-ON™ insulated structural sheathing onto six-inch, 20-gauge steel. Fabricated off-site, exterior wall assemblies of ten varying sizes up to 12’ x 18’ were complete with glazing and stucco finish. Easily transportable, panels were lifted and mechanically fastened above the floor joists and joints filled with Stucco Flex. The elimination of horizontal scaffolding improved the construction timeline; its cost savings paid for the building’s shell. A direct finish material, ROK-ON™ does not require the conventional application of dens glass, a vapor barrier, rain screen, mesh, drainage tracks or any furring for the brick applications. Using ROK-ON™ required installation and joint fill (2-steps) compared to the time and labor of a conventional 8-step exterior stucco finish method. Metalco closed-in one-half the building in 9 days and its complete installation was under 30 days. Shortening the construction schedule by several weeks improved the project’s critical path for completion and offered the potential for unanticipated revenue.

Providing a lower cost solution, ROK-ON™ is comprised of ceramic cement sheathing laminated to sandwich EPS foam to create a thin structural, direct finish panel. Panels may be directly attached to steel or wood framing on-site or be fabricated in a modular environment. ROK-ON™ is fully tested to exceed all applicable 2015 IBC building codes and compliance, and 2015 IECC and ASHRAE 90.1 energy performance requirements.

Superior water resistance with 9 layers of moisture protection. No dens glass required.
**HILTON EMBASSY SUITES HOTEL**
Naperville, IL

**ROK-ON™ Structural Insulated Sheathing**

Resistant to fire, mold, mildew, rot, termites, insects and impact! No dens glass required!

As part of the 13-acre Freedom Plaza, Embassy Suites Hotels and Lakhany Group Investments have brought 168 spacious rooms, an interior hotel restaurant, and 13,000 square feet of banquet space to accommodate convention business in Naperville, Illinois.

The architectural design created efficiencies for construction cost savings particularly for the use of ROK-ON™ insulated structural sheathing panels. ROK-ON™ is comprised of ceramic cement sheathing laminated to sandwich EPS foam to create a thin structural, direct finish panel. Panels may be directly attached to steel or wood framing ‘on-site’ or be ‘fabricated’ in a manufactured environment. Fully tested to exceed all applicable 2015 IBC building codes and compliance, and 2015 IECC and ASHRAE 90.1 energy performance requirements, ROK-ON™ provides a 1-step exterior finish system with superior water resistance compared to the time and labor of a conventional 5-step stucco finish method.

The hotel’s structural frame consists of CMU for bearing walls, stairwells and elevator bays. Using ROK-ON™ and 18-gauge steel, insulated structural panels were fabricated off-site to include the glazing, reveals and finish. Horizontal scaffolding was eliminated, as panels up to 14’ x 9’ were lifted into slip tracks and bolted. Backer rods and joints were filled with StuccoFlex. A direct finish material, ROK-ON™ did not require the conventional application of dens glass, the vapor barrier, rain screen, mesh, drainage tracks or any furring for the brick applications. The close-in time was under two months (42 construction days), substantially ahead of schedule, offering the client earlier revenue potential. An insulated building system, the use of ROK-ON™ structural sheathing provided a conditioned structure contributing toward a better climatic working environment for the finish trades.

**“Cost Savings Using ROK-ON™”**

**“Close-in Completion in 42 Days”**

Eliminate Steps for a Lower Construction Cost Solution!

Reduce concerns for EIFS failure.

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**Project Type:** 7-Story Hotel with Convention Facilities
**Project Size:** 168 Rooms
13,000 SF Banquet Center
**Client / Developer:** Lakhany Group Investors
**Architect:** Mitchell, Carlson, Stone Inc.
**GC:** Humphreys & Associates
**Manufacturer:** ROK-ON™ (MagBoard)
**Distributors:** ROK-ON™ (MagBoard)
**Fabrication/Install:** Chicago Flameproof
**Building Assembly:** Pre-manufactured Insulated Structural Panels (EIFS)
**MgOut Panels:** 1,680
**Opening Date:** Spring 2015

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The Osaka Japanese Restaurant is sited in front of the Pier Park Target complex in Panama City, Florida. The first of its kind, the 10,000 square foot building envelope was designed and constructed with long-term sustainability in mind. Using 6" ROK-ON™ structural insulated panels, comprised of two ½" ceramic cement sheathings laminated to sandwich EPS foam, a concrete post & beam construction method was employed to meet and exceed updated mandatory fire and energy codes, as well as to improve the building’s resiliency and lifecycle costs.

Using the ROK-ON™ Post & Beam Wall and Roof System, the structural building envelope was constructed in less time and at less cost than the conventional CMU practice in the region. This building system concept provides a fire-rated structural and insulated system that connects walls, posts, headers, floors and roof with a monolithically poured concrete method. The system was modified for Osaka to provide 21’ walls only with header connections for the roof system. Contrary to CMU walls that require furring for exterior treatments, insulation and drywall, ROK-ON™ walls are laser straight. Direct-finish ROK-ON™ structural insulated panels were erected, and exterior and interior wall finishes were completed in 21 days. Osaka opened for operation several weeks earlier than originally scheduled providing an unexpected increase in revenue.

Performance features of the Post & Beam Structural Insulated Building System include Class 5 FEMA rating; high wind load and seismic resistance; and energy and sound values of R-32 and STC-57. In addition to a plus 2-hour fire-rating, the building system is resistant to mold, mildew, rot, termites, insects and impact. The Dade County Building Department has adopted this building system throughout its jurisdiction.