



Structural Insulated Sheathing. (SIS)

Product Information Sheet

System Description:

ROK-ON™ SIS is a *structural insulated sheathing* that combines structure, fire performance and insulation all in one sheathing panel for exterior walls of buildings. It eliminates many of the steps for a code compliant assembly for fire, energy, and moisture management performance. It is non-combustible, will not rot, will not support mold or mildew, is impact resistant and bug-proof.

ROK-ON™ SIS is made by laminating an insulative core between a ¼" and a ½" fiberglass reinforced ceramic cement board. The back sheet adds tremendous strength and incredible fire performance while helping to provide dimensional stability to the wall after application. It also helps to eliminate damage during transportation and install.

ROK-ON™ SIS is attached directly to framing in lieu of traditional sheathing (OSB/DensGlass®), eliminating many of the steps required for a traditional code compliant assembly. It is suitable for above and below grade applications.

The standard panel is 2 ¾" thick and is cut and installed using normal tools and trades and contains no harmful ingredients. It is R-10.5, meeting the code mandates for continuous insulation. (think of it as thick sheathing). The panel core can be adjusted to up to R-21 in a 3 ¾" panel.

ROK-ON™ can accept direct applications of stuccos or brick/stone veneers and can accept fasteners for direct cladding attachment, providing significant architectural flexibility.

As it eliminates multiple trips around the building to install, labor costs are significantly reduced and speed to enclosure is increased. It is also perfect for prefabrication.

ROK-ON™ is fully tested and completely code compliant. The panel has both 1-hour and 2-hour fire rated assemblies (ASTM-E119/UL-263) and the NFPA285.

ROK-ON™ has been fully tested for structure for use in shear applications. Its strength can at times, help reduce the steel gauge needed or additional bracing/strapping of framing.

ROK-ON™ is safe to use, silicate free, hyper-allergenic, inert, has no off gassing, is recyclable, and green.



Application:

ROK-ON™ SIS meets the 2021 IBC/IRC code requirements for continuous insulation, eliminating many of the steps required for a code compliant exterior wall.

It is simply screwed onto wood or steel framing in lieu of traditional sheathing in residential or commercial projects. Where the insulative core is permanently exposed to the elements, it should be covered. Contact ROK-ON™ representative for details. End-caps and window bucks are provided as part of the system.

ROK-ON™ SIS can accept direct applications of stuccos and brick/stone veneers. It can also accept and hold fasteners for cladding attachment, eliminating the expensive cladding attachment systems needed in other assemblies.

ROK-ON™ can be installed on-site or in prefabricated setting. It has a structural impact resistant cement board on the outside of the assembly, which helps eliminate damage during transportation and installation.

Tested ASTM/UL assemblies for 1-hour and 2-hour fire rated walls. NFPA 285 completed. Non-Combustible (ASTM E136). 0 Flame / 0 Smoke (ASTM E84)

Benefits:

- Less steps directly allows for faster construction for the building owner, regardless of the building type.
- Labor costs significantly reduced while increasing productivity. Less materials handling.
- Time is money: Quicker occupancy can significantly increase the ROI for all constituents.
- Architecturally flexible to achieve almost any design.
- Perfect for Prefabrication. Increased productivity/reduced materials handling
- Low long-term maintenance costs.
- Better life safety – Superior fire performance – will not support mold or mildew.
- Competitively priced with high value.

Panel Sizing and Insulation Values:

| Panel Size | Thickness. | R-Value. | Weight. | Fire Rating |
|-----------------------|------------|----------|----------|-------------|
| 4'x8' | 1 ¾" | R 5 | 125 lbs. | 1-hour |
| 4'x8' | 2 ¾" | R 10.5 | 125 lbs. | 1-hour |
| 4'x8' | 3 1/4" | R 12.5 | 132 lbs. | 1&2-hour |
| 4'x8' (phenolic core) | 2 ¾" | R 15 | 132 lbs. | 1&2-hour |
| 4'x8' (phenolic core) | 3 ¾" | R 21 | 132 lbs. | 1&2-hour |

Superior Performance, Installed Faster, Significant Value



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ROK-ON™ SIS Physical Properties – Highlighted Results

65 ASTM/UL tests completed – Contact ROK-ON™ Representative for test reports

Fire Ratings

| | | | |
|---------------------|---------------------|--------------------|------------------------------|
| Non-Combustible | ASTM E 136 | no flaming in test | Rated as Non-combustible |
| Surface Burning | ASTM E 84 / UL 723 | full panel | 0 flame / 0 smoke |
| Fire Resistance | NFPA 285 | per assembly | Pass |
| Fire Rated Assembly | ASTM E 119 / UL 263 | per assembly | 1-hour and 2-hour assemblies |

Physical Properties

| | | | |
|-----------------------------|-------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Water Vapor Transmission | ASTM E 96 | | .63 perms (panel) |
| Compression | ASTM D 2394 | >1250 psi | pass 1736 psi |
| Nail Pull Through | ASTM D 1037 | > 90 lbs. | 291 lbs. (top sheet only) |
| Screw Pull-Out | ASTM D 1037 | > 90 lbs. | 220.9 lbs. to 301 lbs. |
| Lateral Fastener Resistance | ASTM D 1037 | > 90 lbs. | 1/4" - Dry – 115 lbs. Wet 41 lbs. 3/8" - Dry – 196 lbs. Wet 113 lbs. 1/2" - Dry – 261 lbs. Wet 157 lbs. 3/4" - Dry – 337 lbs. Wet 209 lbs. |

Structural Properties - Ultimate Values per assembly

| | | | |
|--------------------|-------------|-------------------|----------------|
| Transverse Loading | ASTM E 72 | 3 5/8" 20 Ga stud | 183.1 lbs./ft. |
| | | 3 5/8" 18 Ga stud | 261.2 lbs./ft. |
| | | 5 5/8" 18 Ga stud | 517.2 lbs./ft. |
| Monotonic Shear | ASTM E 564 | 3 5/8" 20 Ga stud | 831.0 lbs./ft. |
| Seismic Shear | ASTM E 2126 | 3 5/8" 20 Ga stud | 943.0 lbs./ft. |

STC (panel only)

38 dB

Fasteners:

ROK-ON™ SIS is screwed directly onto steel or wood framing. Use only ROK-ON™ approved fasteners, supplied with system. Attach to framing in accordance with fastening pattern in ROK-ON™ SIS Installation Guide, typically every 12" in the field and 8" on the perimeter of an assembly. Impact drill or screw guns work best. Secure fastener so that it countersinks into the face of the panel but does not penetrate it.

Weather Resistant Barrier / Air Water Barrier:

ROK-ON™ SIS requires a Weather Resistant Barrier prior to application of architectural finishes. This can be house wrap, peel and stick, or a fluid applied membrane. Peel and Stick membranes are recommended. Follow manufacturers instructions for application.

Storage and Handling:

All ROK-ON™ products should be stored horizontally and shall be fully supported in storage and prevented from contact with the ground. All products shall be fully protected from weather. Protect against exposure to rain, water, dirt, mud, and other residue that may affect performance. ROK-ON™ SIS can remain uncovered once applied to the wall assembly up to 180 days prior to application of WRB/finishing.

Installation:

ROK-ON™ SIS can be cut and installed using common tools and trades. While it contains no harmful ingredients, dust is created when cutting. Always wear approved eye and dust protection when cutting. Follow the instructions in the Installation Guide and Safety Data Sheets.

ROK-ON™ SIS can be installed vertically or horizontally. Panels should be butted as tightly as possible to each other with a maximum 1/8" gap. There does not necessarily need to be a stud at the panel-to-panel joints as long as the panel is attached to at least 2 studs. (Structural testing was done in this condition)

ROK-ON™ SIS can go above and below grade. If below grade, it must have an approved water barrier. Contact ROK-ON™ representative for details.

Warranty:

ROK-ON™ has a 20-year limited product warranty. Contact ROK-ON™ representative for details.

Technical Service:

Contact ROK-ON™ Representative for more information or e-mail info@rok-on.com