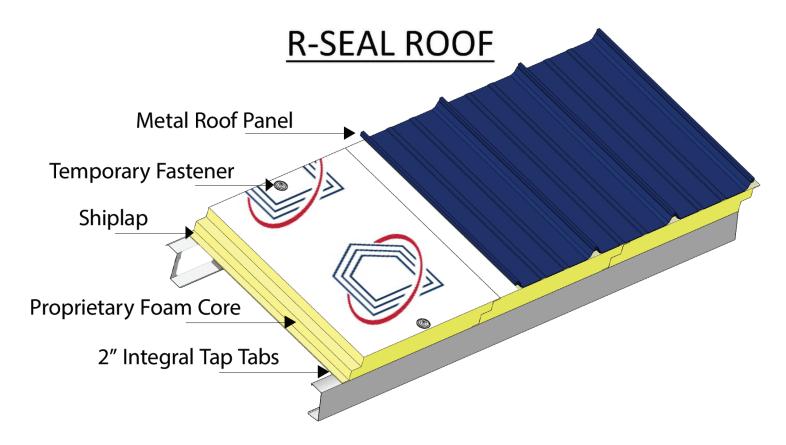




COMPARING BEYOND ENVELOPE CONTINUOUS INSULATION & CAVITY FILLED INSULATION.

When it comes to insulation, the choice between continuous beyond envelope insulation systems and cavity filled fiberglass systems can significantly impact the energy efficiency and thermal performance of a building. Here's a comparison to help you understand the key differences.



CONTINUOUS (R-SEAL) INSULATION SYSTEMS.

Continuous insulation systems provide a seamless layer of insulation around the entire building envelope. This method eliminates thermal bridging by covering structural elements that would otherwise conduct heat.

KEY BENEFITS.

- Minimizes Thermal Bridging: Covers the entire building, beyond envelope, reducing heat transfer through structural elements.
- Uniform Performance: Maintains consistent insulation value across all areas, free from gaps or compression.
- Improved Energy Efficiency: Better overall thermal performance leads to enhanced comfort and energy savings.
- Simple Installation: Smaller crews and fewer steps allow for efficient installations.
- Post Install Accessibility: Purlins/Girts exposed to interior for contractors to easily locate and attach to.





CAVITY FILLED FIBERGLASS LINER SYSTEMS.

Cavity filled fiberglass insulation is typically installed between framing members such as studs, joists, or rafters. While this method can be effective, it is prone to certain drawbacks.



KEY LIMITATIONS.

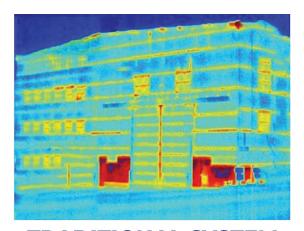
- Thermal Bridging: Structural elements can conduct heat, leading to energy loss.
- **Inconsistent Insulation:** Compression at structural supports can reduce the effectiveness of the insulation.
- Potential Gaps: May leave spaces where heat can bypass the insulation, decreasing overall performance.
- Moisture Related Failures: Gaps and thermal inconsistencies may lead to condensation related issues such as insulation decomposition or "chasing leaks" when in fact it is a build-up of moisture within the walls or roof cavity.
- **Cumbersome Installation:** Requires experienced crew, optimal weather conditions, and extensive time to complete the multitude of steps. More steps equals more opportunity for improper installation.
- **Post Install Obstruction:** Purlins/Girts are hidden behind the fabric liner that is woven against the inside face of wall/roof supports. Not only does this make it difficult for contractors to locate and attach to, but these attachments require penetrating the vapor barrier which may compromise its purpose.

CONCLUSION: THE SUPERIORITY OF BEYOND ENVELOPE CONTINUOUS INSULATION.

Investing in a continuous insulation system ensures optimal thermal performance, energy efficiency, and long-term savings. While cavity filled fiberglass systems can meet energy codes, they are often compromised by thermal bridging, compression, and gaps. Continuous insulation systems offer a more reliable and effective solution for maintaining consistent insulation coverage and enhancing the overall efficiency and comfort of your building.



R-SEAL®



TRADITIONAL SYSTEM