Product Portfolio
Systems and Solutions Guide
Wall Panels / Roof Panels / Accessories
Together we have the opportunity to make our built environments more energy efficient, attractive, adaptable, environmentally sensitive and productive. The way we build can be more effective and reach higher standards than ever before.

“We can make our buildings really work for us; consuming and generating energy smartly to become real investments in our future.”

Gene M. Murtagh, CEO, Kingspan Group.
## Insulated Panel Systems

### Product Portfolio

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Kingspan Insulated Panels is a global leader in the design, development and delivery of advanced building envelope products and solutions.

13 regional R&D centers

101 manufacturing sites worldwide

3.2 billion USD revenue in 2016

10,000+ employees worldwide
At Kingspan Insulated Panels, we are pioneering better technologies and methods of building for a low carbon world. Improving building performance, construction methods and ultimately people’s lives – that’s what drives our people across the world. Energy efficiency is at the heart of our innovation, from making the industry’s most thermally efficient core for our insulated panels, to producing the most airtight interfaces, to providing technical and field-service support on how to build optimally.

As the world demands more from buildings in terms of energy efficiency, fire safety, weather resilience, health and aesthetics, we have expanded beyond insulated panels in recent years to encompass high-end facades, smart LED lighting, integrated PV and structural steel solutions.

Together with the learnings from our ongoing research into better building design, these enhanced Kingspan envelopes will take our built environment to the next era of efficiency and wellbeing.
Products at a Glance

Wall – Vertical Application

200 Series Inverted Rib

300 Series Minor Rib

300 Series Azteco Embossed

300 Series Striated

300 Series Granitstone

900 High Rib
Products at a Glance

Wall – Vertical and Horizontal Application

- KS Series Azteco
- KS Series Shadowline
- KS Series Mini Micro-Rib
- KS Series Micro-Rib
- KS Series Mini-Wave
- 400 Wave
Insulated Panel Systems

Product Portfolio

Wall with Façade

Wall (Mineral Fiber Core)

KS Series Gravitstone

Brick Rainscreen on KarrierPanel

Metal Rainscreen on KarrierPanel

Optimo

MF Fire Rated TF (Interior & Exterior)

MF Fire Rated HF* (Interior & Exterior)

* Available in MF QT Acoustical Panel.
Products at a Glance – Vertical Application

Panels on metal studs

“Install vertical panels onto horizontally oriented supports”
Products at a Glance – Horizontal Application

Panels on metal studs

“Install horizontal panels onto vertically oriented supports”
Products at a Glance

Roof

KingZip

900 High Rib
Performance Benefits – Build Speed

Kingspan single component roof systems increases speed of build, decreases number of trades, minimizes delays and allows for safety and fall arrest systems.

Simple Saver System vs. KingZip Insulated Standing Seam Roof System

- Provides the exterior weather barrier, high efficiency insulation core and integral vapor barrier ‘all-in-one’
- Reduces on-site installation time by up 50% compared to multi-part roof systems
- Easily adaptable to accommodate safety & fall arrest systems
- Pre-finished
- Increases in build speed allow for faster project completion and minimizes business disruption
Performance Benefits – Build Speed

Wall Assembly Installation

Water, air, vapor and thermal control layers all in one system creating the ideal barrier wall installed efficiently by one contractor.

Standard built up wall system involving multiple product and trades to install.

<table>
<thead>
<tr>
<th>Wall Assembly with Interior Finish</th>
<th>Number of Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insulated Metal Panels</td>
<td>3</td>
</tr>
<tr>
<td>Single Skin Metal (Rainscreen)</td>
<td>7-8</td>
</tr>
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<tr>
<td>Tilt-Up Concrete / Pre-Cast</td>
<td>3-6</td>
</tr>
</tbody>
</table>
Performance Benefits – Case Study

Consultants for a large retail chain estimate construction schedule time savings of up to five weeks were achieved in a multiple unit construction program with insulated metal panels.

An average retail store with profits of $35,000 a week can potentially save $175,000 profit in this time as the building is open for business and revenue is generated.

Construction Schedule

Area – 100,000ft²

Design Flexibility and Aesthetic Appeal

Kingspan’s insulated roof and wall panels offer designers a comprehensive range of building solutions for vertical and horizontal wall applications.

Available in multiple profiles, finishes and color options, trimless ends and cover widths, insulated panels provide customized building design and creative freedom.

The panels are easily integrated with traditional construction methods and building systems.
Performance Benefits – Thermal Performance

Kingspan insulated wall systems offer superior R-values with unparalleled thermal performance during service life, all built-in to a single off-site, factory assembled insulated panel.

High R-Value
Kingspan insulated panels’ insulating cores provide superior thermal performance with tested R-values of 7.2* per inch. Most importantly, the insulation is on the exterior of the building structure to provide the best possible thermal envelope by reducing thermal bridging typical of cavity wall systems. In addition, the panels feature excellent foam-to-foam contact, which provides an unbroken thermal shield against heat transfer.

Superior Airtightness and Weathertightness
One of the biggest sources of building heat loss (or heat gain) is air leakage i.e., “leaky buildings”. Kingspan panels are rigorously tested to ensure that they remain both airtight and weathertight over the life of a building.

*QuadCore approx. R-8/in at 75°F mean per C518.
**Life Cycle Assessment (LCA)**

**What is an EPD?**
An Environmental Product Declaration (EPD) is a comprehensive, internationally-harmonized report that documents the ways in which a product, throughout its lifecycle, affects the environment.

**What’s the relationship between an LCA and an EPD?**
An Environmental Product Declaration (EPD) is a summary of the data collected in the Life Cycle Assessment (LCA).

**What’s the purpose of an EPD?**
An EPD tells the life cycle story of a product in a single, written report, focusing on information about a product’s environmental impacts, such as global warming potential, smog creation, ozone depletion, and water pollution. An EPD can also include other product impacts such as land use changes, potential toxicity risks, as well as corporate environmental initiatives that are of particular interest to the discloser.

**Is an EPD a rating?**
No, EPDs do not rank products, and the existence of an EPD for a product does not indicate that environmental performance criteria have been met. EPDs are simply a disclosure tool that helps purchasers better understand a product’s sustainable qualities and environmental repercussions so they can make more informed product selections.

**Does Kingspan have EPDs?**
Yes, Kingspan Insulated Panels North America created the first of its kind cradle-to-grave UL-Certified ISO-compliant EPD in September of 2011. Since that time Kingspan has issued multiple revisions to document our journey of continues improvement.

**Is an EPD a rating?**
No, EPDs do not rank products, and the existence of an EPD for a product does not indicate that environmental performance criteria have been met. EPDs are simply a disclosure tool that helps purchasers better understand a product’s sustainable qualities and environmental repercussions so they can make more informed product selections.

Kingspan has EPDs which are third-party certified by UL. These are part of our greater effort for transparency and sustainability.
VOC Testing

UL Greenguard Gold

What is GREENGUARD Gold certification?
Simply put, GREenguARD Certification ensures that a product has met some of the world’s most rigorous and comprehensive standards for low emissions of volatile organic compounds (VOCs) into indoor air. The program screens over 360 VOCs and total chemical emissions plus ensures compliance with California’s CDPH Standard Method Section 01350.

Why is it important?
Because it’s an independent third-party certification that tells architects and building professionals that the product has been tested and certified for VOCs. It also helps provide confidence in an increasingly “green washed” marketplace.

Does Kingspan have GREENGUARD Gold?
Yes, Kingspan is the only metal panel manufacturer in North America to deliver GREENGUARD or GREenguARD Gold Certified products. We have GREenguARD Gold Certification across all current PIR foam core product sets.

Does GREENGUARD Gold help with certifications?
GREENGUARD Certification criteria have been the basis for the LEED credit for low emitting materials since 2002. It allows products to be used in projects where building occupants are a key concern, such as schools, offices and hospitals.

Kingspan has always believed in leading the industry in innovation and third-party certification. Pursuing the GREenguARD stamp has been an initiative to show that we can provide products that are good for not just the built environment, but also the human environment.
200 Series Inverted Rib
The 200 Series Inverted Rib panel delivers an attractive and affordable panel choice for commercial and industrial applications.

Profile:
- Exterior: Inverted Rib
- Interior: Minor Rib, Shadowline or V-groove

Embossing:
- Exterior: Stucco or non-embossed
- Interior: Stucco or non-embossed

Gauge:
- Exterior: 26, 24, 22 ga
- Interior: 26, 24, 22 ga

Width:
42"

Thickness:
- 2", 2.5", 3", 4", 5", 6"

Length:
8’ – 53’

Reveal option:
N/A

Orientation:
Vertical

Post fabrication:
N/A

R-value:
≈ 7.2 per inch per ASTM C518 @ 75°F
≈ 8.25 per inch per ASTM C518 @ 35°F

300 Series Minor Rib
300 Series Minor Rib panels are suitable for interior walls, partitions and suspended ceilings.

Profile:
- Exterior: Minor Rib
- Interior: Minor Rib, Shadowline or V-groove

Embossing:
- Exterior: Stucco or non-embossed
- Interior: Stucco or non-embossed

Gauge:
- Exterior: 26, 24, 22 ga
- Interior: 26, 24, 22 ga

Width:
42"

Thickness:
- 2", 2.5", 3", 4", 5", 6"

Length:
8’ – 53’

Reveal option:
N/A

Orientation:
Vertical

Post fabrication:
N/A

R-value:
≈ 7.2 per inch per ASTM C518 @ 75°F
≈ 8.25 per inch per ASTM C518 @ 35°F
300 Series Azteco Embossed†

300 Series Azteco Embossed panels have a flat exterior profile with a heavy embossed texture.

- **Profile:**
  - Exterior: Flat
  - Interior: Shadowline, Minor Rib or V-groove

- **Embossing:**
  - Exterior: Azteco
  - Interior: Stucco or non-embossed

- **Gauge:**
  - Exterior: 26, 24, 22 ga
  - Interior: 26, 24, 22 ga

- **Width:** 42”
- **Thickness:** 2”, 2.5”, 3”, 4”, 5”, 6”
- **Length:** 8’ – 53’
- **Reveal option:** N/A
- **Orientation:** Vertical
- **Post fabrication:** N/A

- **R-value:**
  - ≈ 7.2 per inch per ASTM C518 @ 75°F
  - ≈ 8.25 per inch per ASTM C518 @ 35°F

†Azteco is also available in our KS Series.

300 Series Striated

300 Series Striated panels create a subtle and pleasing linear visual effect.

- **Profile:**
  - Exterior: Striated
  - Interior: Shadowline, Minor Rib or V-groove

- **Embossing:**
  - Exterior: Stucco or non-embossed
  - Interior: Stucco or non-embossed

- **Gauge:**
  - Exterior: 26, 24, 22 ga
  - Interior: 26, 24, 22 ga

- **Width:** 42”
- **Thickness:** 2”, 2.5”, 3”, 4”, 5”, 6”
- **Length:** 8’ – 53’
- **Reveal option:** N/A
- **Orientation:** Vertical
- **Post fabrication:** N/A

- **R-value:**
  - ≈ 7.2 per inch per ASTM C518 @ 75°F
  - ≈ 8.25 per inch per ASTM C518 @ 35°F
300 Series Granitstone†
Granitstone has the appearance of stucco or natural stone, with an acrylic aggregate finish factory-applied over primed steel. Also available, Granitstone Quartz.

Profile: Exterior: Flat with Granitstone or Granitstone Quartz finish
Interior: Minor Rib or V-groove

Embossing: Exterior: Azteco or stucco
Interior: Stucco or non-embossed

Gauge: Exterior: 26, 24, 22 ga
Interior: 26, 24, 22 ga

Width: 42"

Thickness: 1.5", 2", 2.5", 3", 4", 5", 6"

Length: 8’ – 30’

Reveal option: N/A

Orientation: Vertical

Post fabrication: N/A

R-value:
≈ 7.2 per inch per ASTM C518 @ 75°F
≈ 8.25 per inch per ASTM C518 @ 35°F

†Granitstone is also available in our KS Series.

900 High Rib
900 High Rib panels are the ultimate in high R-value systems, making them the panel of choice where energy efficient, lightweight, low maintenance roofs are required.

Profile: Exterior: Trapezoidal
Interior: V-groove

Embossing: Exterior: Stucco or non-embossed
Interior: Stucco or non-embossed

Gauge: Exterior: 24, 22 ga
Interior: 26, 24, 22 ga

Width: 39 3/8"

Thickness: 1.5", 2", 2.5", 3", 4", 5", 6"

Length: 8’ – 53’

Reveal option: N/A

Orientation: Vertical

Post fabrication: N/A

R-value:
≈ 7.2 per inch per ASTM C518 @ 75°F
≈ 8.25 per inch per ASTM C518 @ 35°F
KS Series Azteco

KS Series Azteco panels have a flat exterior profile with a heavy embossed texture.

Profile:
- Exterior: Flat
- Interior: Shadowline

Embossing:
- Exterior: Azteco
- Interior: Stucco or non-embossed

Gauge:
- Exterior: 24, 22 ga
- Interior: 26, 24, 22 ga

Width:
- 24”, 30”, 36”, 42”

Thickness:
- 2”, 2.5”, 3”, 4”, 5”, 6”

Length:
- 8’ – 53’

Reveal option:
- Vertical: 1/8”
- Horizontal: 1/8” or 3/8”

Orientation:
- Vertical or horizontal

Post-fabrication:
- Trimless ends, folded corners

R-value:
- ≈ 7.2 per inch per ASTM C518 @ 75°F
- ≈ 8.25 per inch per ASTM C518 @ 35°F
KS Series Shadowline
Shadowline wall systems deliver an attractive and affordable panel choice.

Profile: Exterior: Shadowline
Interior: Shadowline
Embossing: Exterior: Stucco or non-embossed
Interior: Stucco or non-embossed
Gauge: Exterior: 26, 24, 22 ga
Interior: 26, 24, 22 ga
Width: 24", 30", 36", 42"
Thickness: 2", 2.5", 3", 4", 5", 6"
Length: 8’ – 53’
Reveal option: Vertical: 1/8”
Horizontal: 1/8” or 3/8”
Orientation: Vertical or horizontal
Post fabrication: Trimless ends, folded corners
R-value: ≈ 7.2 per inch per ASTM C518 @ 75°F
≈ 8.25 per inch per ASTM C518 @ 35°F

KS Series Mini Micro-Rib
Mini Micro-Rib insulated metal wall systems create a highly attractive solution with a fine line appearance.

Profile: Exterior: Mini Micro-Rib
Interior: Shadowline
Embossing: Exterior: Non-embossed
Interior: Stucco or non-embossed
Gauge: Exterior: 24 ga
Interior: 26, 24, 22 ga
Width: 24", 30", 36", 42"
Thickness: 2", 2.5", 3", 4", 5", 6"
Length: 8’ – 53’
Reveal option: Vertical: 1/8”
Horizontal: 1/8” or 3/8”
Orientation: Vertical or horizontal
Post fabrication: Trimless ends, folded corners
R-value: ≈ 7.2 per inch per ASTM C518 @ 75°F
≈ 8.25 per inch per ASTM C518 @ 35°F
KS Series Micro-Rib

Micro-Rib wall systems create a highly attractive linear appearance with subtle shadows.

Profile: Exterior: Micro-Rib
Interior: Shadowline

Embossing: Exterior: Stucco or non-embossed
Interior: Stucco or non-embossed

Gauge: Exterior: 24, 22 ga
Interior: 26, 24, 22 ga

Width: 24", 30", 36", 42"

Thickness: 2", 2.5", 3", 4", 5", 6"

Length: 8’ – 53’

Reveal option: Vertical: 1/4"
Horizontal: 1/4" or 3/8"

Orientation: Vertical or horizontal

Post fabrication: Trimless ends, folded corners

R-value: ≈ 7.2 per inch per ASTM C518 @ 75ºF
≈ 8.25 per inch per ASTM C518 @ 35ºF

KS Series Mini-Wave

Mini-Wave wall system provides a continuous sweeping profile creating a unique wave appearance.

Profile: Exterior: Mini-Wave
Interior: Shadowline

Embossing: Exterior: Stucco or non-embossed
Interior: Stucco or non-embossed

Gauge: Exterior: 24, 22 ga
Interior: 26, 24, 22 ga

Width: 24", 30", 36", 42"

Thickness: 2", 2.5", 3", 4", 5", 6"

Length: 8’ – 53’

Reveal option: Vertical: 1/4"
Horizontal: 1/4" or 3/8"

Orientation: Vertical or horizontal

Post fabrication: N/A

R-value: ≈ 7.2 per inch per ASTM C518 @ 75ºF
≈ 8.25 per inch per ASTM C518 @ 35ºF
KS Series Granitstone
Granitstone has the appearance of stucco or natural stone. Also available, Granitstone Quartz.

| Profile: | Exterior: Flat with Granitstone or Granitstone Quartz finish  
|          | Interior: Shadowline |
| Embossing: | Exterior: Stucco  
|          | Interior: Stucco or non-embossed |
| Gauge: | Exterior: 24, 22 ga  
|          | Interior: 26, 24, 22 ga |
| Width: | 24", 30", 36", 42" |
| Thickness: | 2", 2.5", 3", 4", 5", 6" |
| Length: | 8" – 30" |
| Reveal option: | Vertical: ¼"  
|          | Horizontal: ¼" or ½" |
| Orientation: | Vertical or horizontal |
| Post fabrication: | N/A |
| R-value: | ≈ 7.2 per inch per ASTM C518 @ 75°F  
|          | ≈ 8.25 per inch per ASTM C518 @ 35°F |

400 Wave
400 Wave panels with a bold, undulating profile create an attractive building envelope.

| Profile: | Exterior: Wave  
|          | Interior: V-groove |
| Embossing: | Exterior: Stucco or non-embossed  
|          | Interior: Stucco or non-embossed |
| Gauge: | Exterior: 22 ga  
|          | Interior: 26, 24, 22 ga |
| Width: | 39 ¾" |
| Thickness: | 2", 3", 4" |
| Length: | 8" – 53" |
| Reveal option: | N/A |
| Orientation: | Vertical or horizontal |
| Post fabrication: | N/A |
| R-value: | ≈ 7.2 per inch per ASTM C518 @ 75°F |
MF Fire Rated HF

MF Fire Rated HF panels provide a fire resistive rating of up to three hours. Exterior profile options include Shadowline, Micro-Rib, Flat and Azteco Embossed to meet all performance and design needs. Factory applied butyl sealant is available to help increase the speed of installation.

Profile:
- Exterior: Shadowline, Micro-Rib or flat
- Interior: Shadowline

Embossing:
- Exterior: Stucco, Azteco or non-embossed
- Interior: Stucco or non-embossed

Gauge:
- Exterior: 24, 22 ga
- Interior: 26, 24, 22 ga

Width: 42"

Thickness: 4", 6", 8"

Length: 4" & 6": 8' – 48'; 8": 8' – 40'

Reveal option: N/A

Orientation: Vertical or horizontal

Post fabrication: N/A

Wall fire resistive ratings: 1 hour (4"), 2 hour (6"), 3 hour (8")

Ceiling fire resistive rating: 1 hour (6" panel only)

R-value: ≈ 3.6 per inch per ASTM C518 @ 75°F

MF Fire Rated TF

Kingspan MF Fire Rated TF panels offer long span ranges and exceptional fire performance, all in a variety of striking profiles. Panel skins are available in embossed and non-embossed skins to accommodate design needs. MF Fire Rated TF panels’ 42” cover width allows for fast, easy installation.

Profile:
- Exterior: Shadowline, Micro-Rib or flat
- Interior: Shadowline

Embossing:
- Exterior: Stucco, Azteco or non-embossed
- Interior: Stucco or non-embossed

Gauge:
- Exterior: 26, 24, 22 ga
- Interior: 26, 24, 22 ga

Width: 42"

Thickness: 4", 6", 8"

Length: 4" & 6": 8' – 48'; 8": 8' – 40'

Reveal option: N/A

Orientation: Vertical or horizontal

Post fabrication: N/A

Wall fire resistive ratings: 1 hour (4"), 2 hour (6"), 3 hour (8")

Ceiling fire resistive rating: 1 hour (6" panel only)

R-value: ≈ 3.6 per inch per ASTM C518 @ 75°F
Kingspan’s MF QT Acoustical panel is available for applications requiring sound reduction. Various exterior profiles are available including Azteco Embossed, Micro-Rib and Shadowline, providing excellent form as well as function. Nineteen standard Kynar colors are available to choose from ranging from various shades of white to bold reds and blues.

Profile:
- Exterior: Shadowline, Micro-Rib or flat
- Interior: Flat with perforations

Embossing:
- Exterior: Stucco, Azteco or non-embossed
- Interior: Non-embossed

Gauge:
- Exterior: 26, 24, 22 ga
- Interior: 24, 22 ga

Width: 42"

Thickness: 4", 6", 8"

Length:
- 4" & 6": 8’ – 48’
- 8": 8’ – 40’

Reveal option: N/A

Orientation: Vertical or horizontal

Post fabrication: N/A

Fire resistive ratings: N/A (not tested for fire)

STC rating: 30

Sound absorption: .92 minimum

R-value: ≈ 3.6 per inch per ASTM C518 @ 75°F
Optimo

Optimo insulated metal panel wall systems deliver a clean, smooth and aesthetically appealing modern solution. Incorporating superior airtightness as well as high R-value is a critical step to achieving an energy efficient LEED certified and net-zero energy building.

Kingspan’s Optimo gives you that, and more. Optimo is available in either a non-embossed or embossed texture, creating a modern and sleek building envelope. Optimo’s single component design can reduce on-site installation time by up to 50% compared to traditional site assembled systems.

Optimo is suitable for high volume, large scale, new and retrofit applications across the commercial and industrial sectors.

<table>
<thead>
<tr>
<th>Profile</th>
<th>Exterior: Flat</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Interior: Shadowline or flat</td>
</tr>
<tr>
<td>Embossing</td>
<td>Exterior: Stucco or non-embossed</td>
</tr>
<tr>
<td></td>
<td>Interior: Stucco or non-embossed</td>
</tr>
<tr>
<td>Gauge</td>
<td>Exterior: 22 ga</td>
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<tr>
<td></td>
<td>Interior: 26, 24, 22 ga</td>
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<tr>
<td>Width</td>
<td>24&quot;, 30&quot;, 36&quot;, 40&quot;</td>
</tr>
<tr>
<td>Thickness</td>
<td>2&quot;, 2.5&quot;, 3&quot;, 4&quot;, 5&quot;, 6&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>Embossed: 8” – 32’</td>
</tr>
<tr>
<td></td>
<td>Non-embossed: 8” – 20’</td>
</tr>
<tr>
<td>Reveal option</td>
<td>Vertical: 1/16”</td>
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<tr>
<td></td>
<td>Horizontal: 1/4” or 1/8”</td>
</tr>
<tr>
<td>Orientation</td>
<td>Vertical or horizontal</td>
</tr>
<tr>
<td>Post fabrication</td>
<td>Trimless ends, folded corners</td>
</tr>
<tr>
<td>R-value</td>
<td>(\approx 7.2) per inch per ASTM CS18 @ 75°F</td>
</tr>
<tr>
<td></td>
<td>(\approx 8.25) per inch per ASTM CS18 @ 35°F</td>
</tr>
</tbody>
</table>
KarrierPanel

KarrierPanel is a cost effective universal barrier wall alternative solution to traditional multi-component wall systems.

Comprising of a KS Series panel and integrated rail, KarrierPanel is the ideal barrier wall to support secondary rainscreen systems such as brick or metal façades.

Profile:
- Exterior: Shadowline or flat
- Interior: Shadowline

Embossing:
- Exterior: Stucco or non-embossed
- Interior: Stucco or non-embossed

Gauge:
- Exterior: 26, 24, 22 ga
- Interior: 26, 24, 22 ga

Width:
- 24", 30", 36", 40", 42"

Thickness:
- 2", 2.5", 3", 4", 5", 6"

Length:
- 8’ – 53’

Reveal option:
- ¾” to accommodate rail

Orientation:
- Vertical or horizontal

Post fabrication:
- N/A

R-value:
- ≈ 7.2 per inch per ASTM C518 @ 75°F
- ≈ 8.25 per inch per ASTM C518 @ 35°F
Design Flexibility

KarrierPanel can support a range of rainscreen finishes to compliment any architectural scheme.

Unique KarrierRail

KarrierPanel utilizes a Kingspan designed unique rail. This stable and secure structural rail safely transmits positive loads from the multiple façades to the structural supports behind the insulated panels.

Similarly, expansion fasteners secure the exposed rail edge, ensuring that the system safely handles negative loads as well.

The rail has been developed to fully integrate with Kingspan’s KS series panel joint. This rail system does not penetrate the air vapor barrier and enables multiple types of rain screens to be attached to the KarrierPanel rail such as brick, single skin metal, aluminum composite and various tile systems.

Installation is quick, simple and easy, as the rail is installed during normal panel installation, and is secured using standard panel fasteners in a one step procedure.

The standard rail configuration is 16 gauge Galvalume, 50 KSI steel. Available in various lengths with a 1, 2 and 3 inch bearing surface.
KarrierPanel

Build Speed
KarrierPanel as a single component system increases speed of build, minimizes delays and the need for multiple trades.

- Faster close-in and dry-in for reduced building costs.
- The single component system results in less labor time on-site and construction waste.
- Reduces delays in construction experienced with scheduling multiple trades.
- Increase in build speed allows faster project completion and reduces business disruption.
The insulated panel provides excellent thermal performance with high R-value and airtightness with an air, water and vapor barrier.

Benefits of the KarrierPanel Wall System Vs Traditional Built-up Construction:
- The single component KarrierPanel wall system combines the superior thermal performance of IMPs with an air, water and vapor barrier.
- More uniform temperature distribution throughout the wall ensures moisture control.
- Eliminates energy losses associated with thermal-bridging cavity insulation.
- Eliminates concerns over UV exposure as compared to conventional rainscreen components.
- Eliminates the potential for compromising the air, water and vapor barrier and allows for visual inspection and testing.
- Results in quicker ROI.
900 High Rib panels are the ultimate in high R-value systems, making them the panel of choice where energy efficient, lightweight, low maintenance roofs are required.

| Profile: | Exterior: Trapezoidal  
Interior: V-groove |
|----------|-------------------|
| Embossing: | Exterior: Stucco or non-embossed  
Interior: Stucco or non-embossed |
| Gauge: | Exterior: 26, 24, 22 ga  
Interior: 26, 24, 22 ga |
| Width: | 39 1/8” |
| Thickness: | 1 1/2”, 2”, 2 1/2”, 3”, 4”, 5”, 6” |
| Length: | 8’ – 53’ |
| Reveal option: | N/A |
| Orientation: | N/A |
| Post fabrication: | Cutbacks |
| R-value: | ≈ 7.2 per inch per ASTM C518 @ 75°F  
≈ 8.25 per inch per ASTM C518 @ 35°F |
KingZip

KingZip is an easy and cost-effective route to reducing building energy demand and costs. This is achieved through utilizing the high thermal performance and superior airtightness benefits associated with KingZip standing seam roof systems.

Profile:
- Exterior: Ribbed standing seam
- Interior: Minor Rib or V-groove

Embossing:
- Exterior: Stucco or non-embossed
- Interior: Stucco or non-embossed

Gauge:
- Exterior: 24, 22 ga
- Interior: 26, 24, 22 ga

Width: 42"

Thickness:
- 2", 2.5", 3", 4", 5", 6"

Length: 8" – 42"*

Reveal option: N/A

Orientation: N/A

Post fabrication: Cutbacks, swaging

R-value:
- ≈ 7.2 per inch per ASTM C518 @ 75°F
- ≈ 8.25 per inch per ASTM C518 @ 35°F

*Consult a Regional Sales Manager for additional lengths.
Product Range – Aluminum Extrusions

Aluminum extrusions can be painted to match or accent wall and roof panels.
Testing and Services – Kingspan Service

Technical Service
Kingspan provides a comprehensive technical advisory service to assist architects, engineers, specifiers and installation contractors with building design, product application and site work installation training and challenges.

Energy Service
Kingspan offers a performance energy modelling service on select projects to help design teams understand scenarios contributing to optimizing the energy efficiency of insulated metal panel assemblies based on meeting or exceeding ASHRAE 90.1 requirements.

Customer Service
Our dedicated team provides focused customer service for all pre and post-order administration, delivery scheduling, and installer support, ensuring a seamless coordinated customer experience.

Marketing Support
Our marketing team aims to provide a fast turnaround on standard sample and literature requests, eliminating delays with planning and client approval of material, so that your project begins on time.

Additional marketing support is provided through the use of project case studies.

Field Service Support
Kingspan’s Field Service Engineering Team offer customers free contractor training on the installation of new and existing products, site inspection services as well as advice on mechanical handling solutions.

Sales Team
Our regionally based sales team can provide assistance on any project from the design stage through to site installation.

Find your local sales rep on our website www.kingspanpanels.com

Email Us
Technical services: technical.NA@kingspanpanels.com
Installation seminars: installation@kingspanpanels.com
Marketing: marketingdept@kingspanpanels.com
Product samples: samples.NA@kingspan.com

Follow Kingspan on:
High Performance Color Coating Systems

Kingspan offers a full spectrum of vibrant colors for every color scheme. The high performance coatings provide long-life protection, color and gloss retention.

Kingspan Coating System Options

Weather XL – Siliconized Modified Polyester (SMP)
Weather XL coating systems utilize only ceramic and inorganic pigments offering superior color stability, chalk and fade resistance as well as gloss retention.

Solid Fluoron PVDF Colors – Kynar 500 / Hylar 5000
Fluoron coatings are durable polyvinylidene coating system containing 70% Kynar or Hylar resins, ceramic and other inorganic pigments. This system provides a powerful chemical bond, superior resistance to ultraviolet radiation resulting in exceptional color retention, resistance to chalking and chemical degradation.

Mica Fluoron Classic II PVDF Colors
The coating system consists of a special primer and a durable color coat containing mica pearlescent flakes. Due to the orientation of aluminum / pearlescent flake pigments during application, the appearance will be directional in nature on metallic coatings.

Metallic Fluoron Classic PVDF Colors
Metallic coatings employ metal flakes in the color coat. The system uses a special primer, a 70% Kynar 500 or Hylar 5000 resin based Fluoron color coat and a clear topcoat, to provide outstanding color and gloss retention, increased abrasion resistance and added protection against atmospheric contaminants.

Inquire about our range of coatings with high Solar Reflectance Index.

*Some colors require clear-coat protection.

Flurothane Coastal PVDF Colors
This is a premium Fluoropolymer (PVDF) system developed for use in the most extreme coastal environments (less than 1500 feet from the coastline). The unique aspect about this system is the innovative thick film primer. This is field-proven and provides a high performance exterior finish delivering outstanding resistance to ultraviolet rays, exceptional color retention and resistance to chalking from salt spray and harsh coastal environments.

Warranties
Kingspan and their suppliers provide coating warranties for up to 20 years.
Product Benefits

- A wide range of solid and metallic colors
- Excellent durability and weather performance
- Energy Star and Cool Roof options
- Contributes to LEED credits
Projects

141 Trade Valley
Vaughan, ON

Maui Brewing Company
Kihei, HI

Marine Gateway Cineplex
Vancouver, BC

Northeast Kingdom Human Services
Derby, VT
Gulfstream Building 6003
Savannah, GA

Chappellet Winery
St. Helena, CA

Charter Oak Federal Credit Union
Waterford, CT

100 West 125th
New York, NY

Mattamy Cycling Centre
Milton, ON
Integrated Systems for Building Envelopes

We offer an unrivalled range of compatible systems that when designed and installed optimally, deliver superior building lifetime performance.

Kingspan building envelopes are designed to be faster to build and deliver exceptional results in terms of:
- Fire safety
- Operating costs (due to better thermal efficiency and air tightness, as well as the elimination of lighting energy costs with our Zero Energy Lighting solution)
- Low maintenance (due to robust construction and superior weather resilience)
- Comfort (due to more natural daylight, improved temperature regulation and excellent acoustics)
- Aesthetics
Our technical design team advises on how to achieve this high performance with a wide range of supports including:

- Continuous training and installation certification
- Structural calculations
- Building Information Modelling (BIM)
- Whole building energy efficiency advice
- Fire engineering and design proposals
- Whole project pricing services
- Complete envelope design support services