



Product Portfolio

Systems and Solutions Guide

Wall Panels / Roof Panels / Accessories



Insulated Panel Systems

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.

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Kingspan

Your Global Partner 4

Products

02

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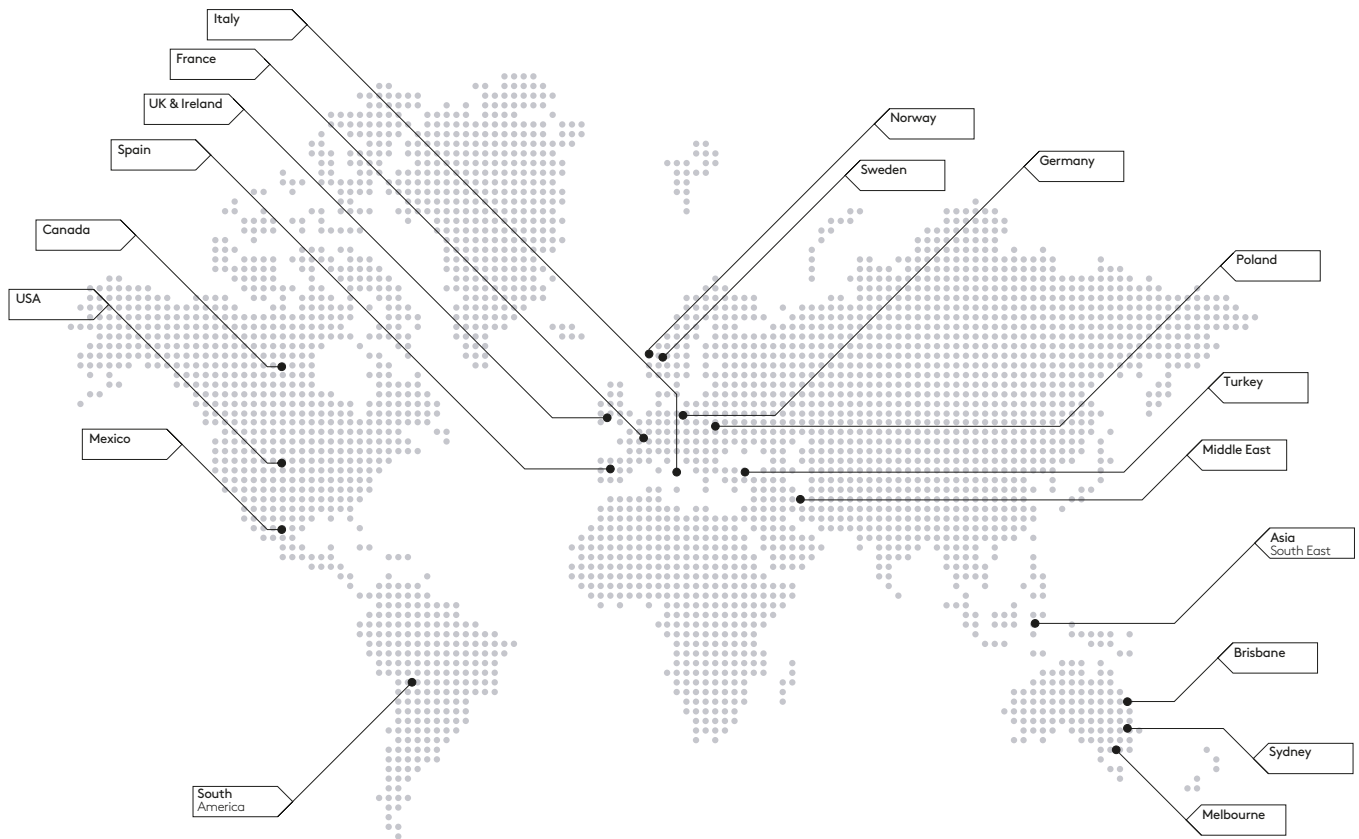
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Your Global Partner

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



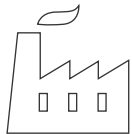
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regional R&D centers



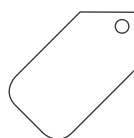
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manufacturing sites worldwide



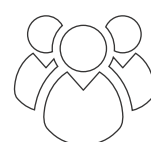
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billion USD revenue in 2016



10,000+

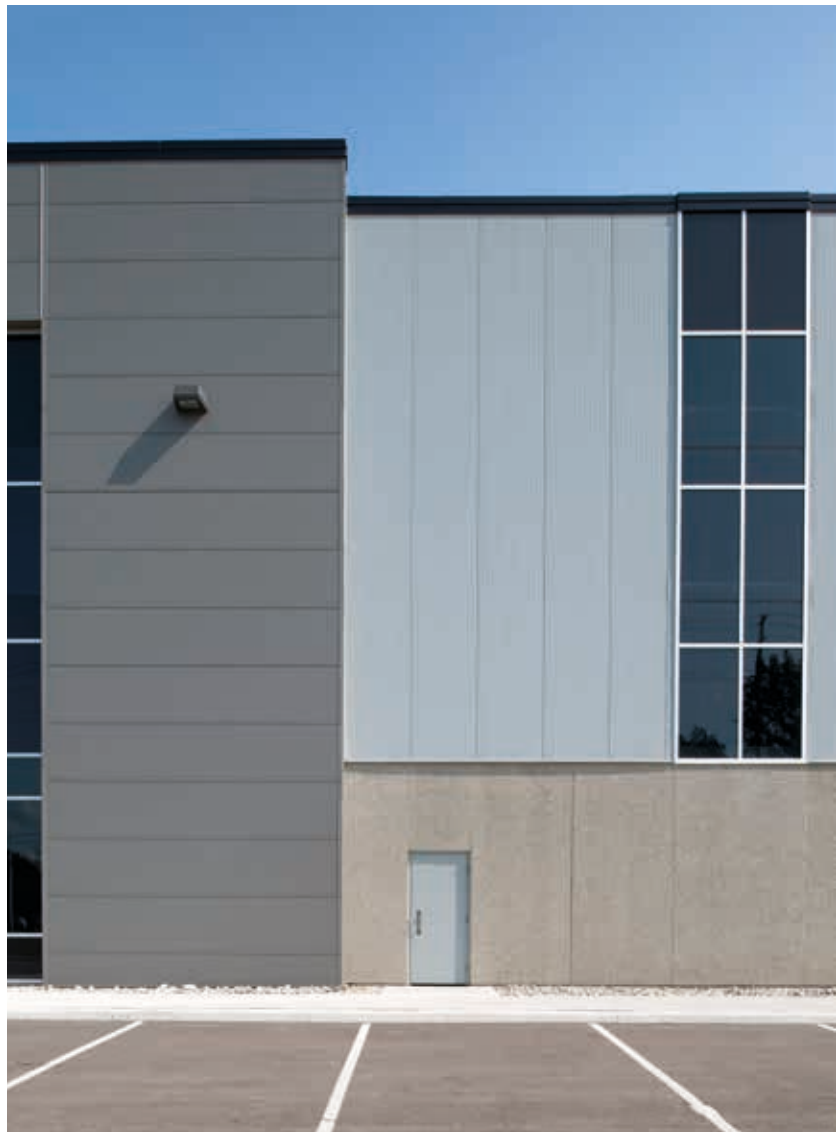
employees worldwide



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.

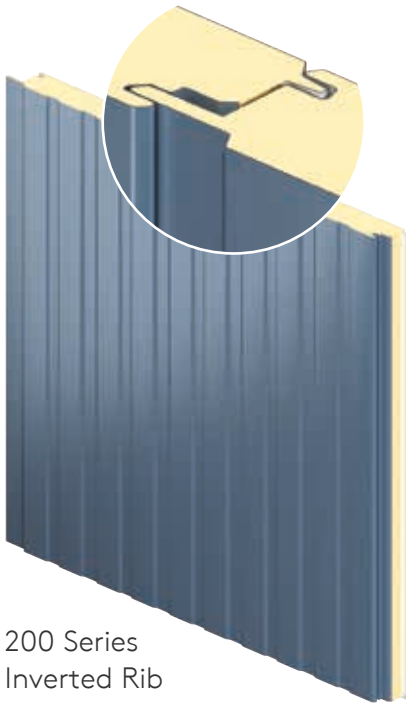
As the world demands more from buildings in terms of energy efficiency, fire safety, weather resilience, health and aesthetics, we have expanded beyond insulated panels in recent years to encompass high-end facades, smart LED lighting, integrated PV and structural steel solutions.

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.

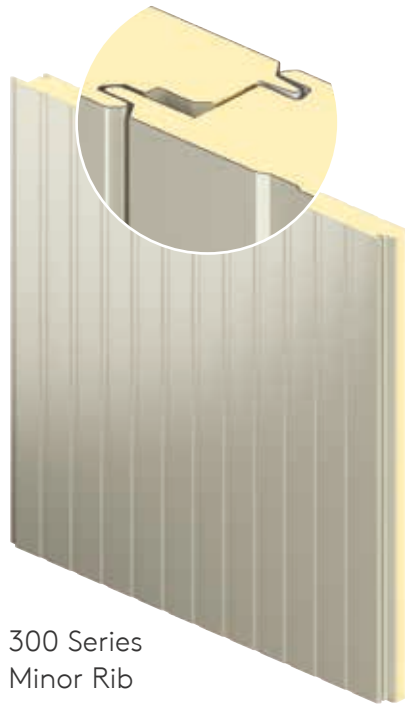


Products at a Glance

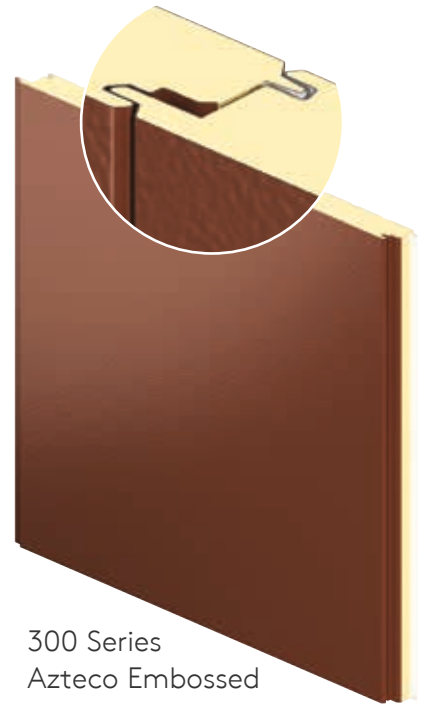
Wall – Vertical Application



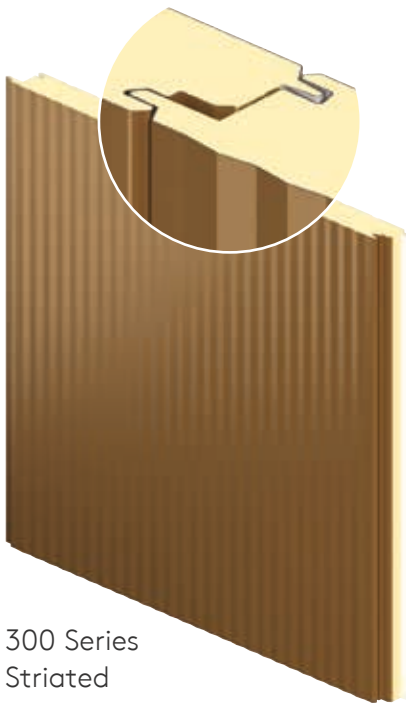
200 Series
Inverted Rib



300 Series
Minor Rib



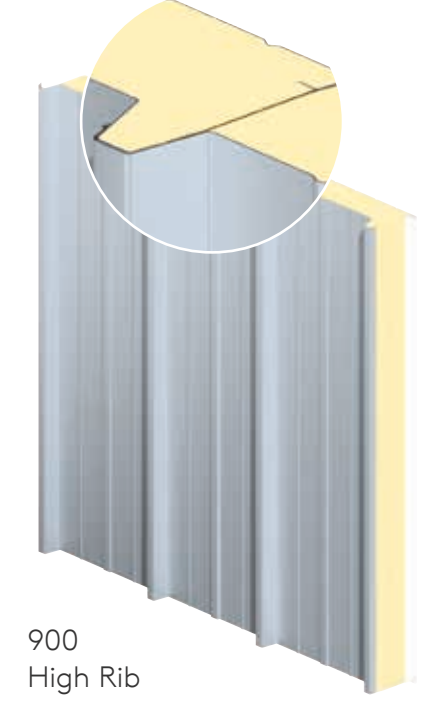
300 Series
Azteco Embossed



300 Series
Striated



300 Series
Granitstone

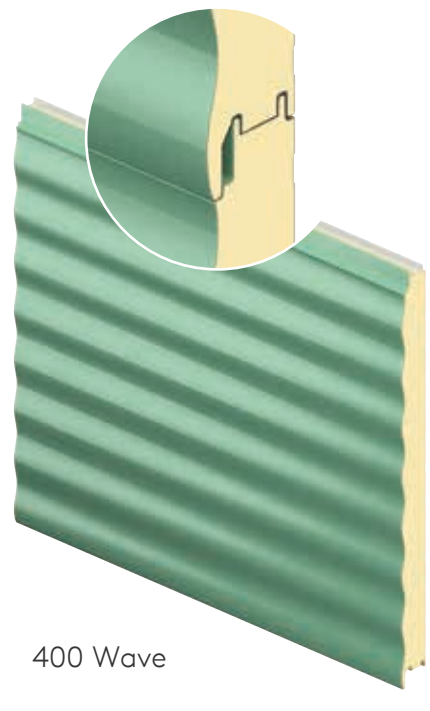
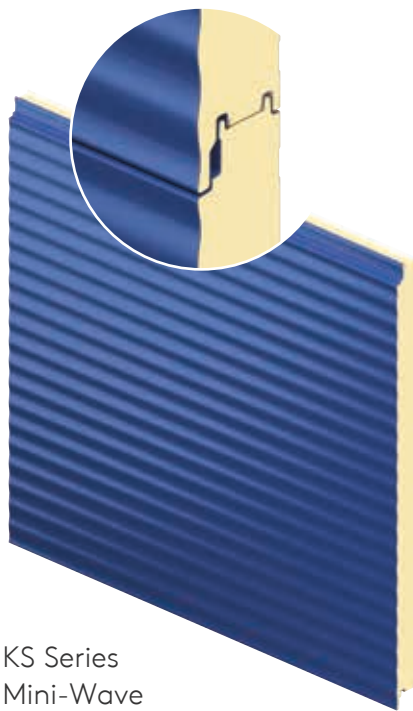
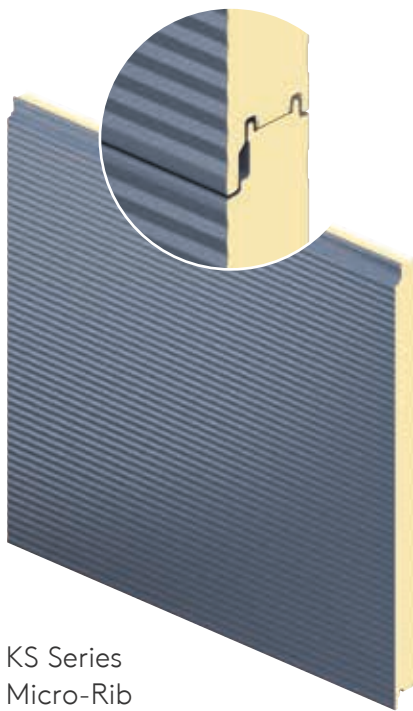
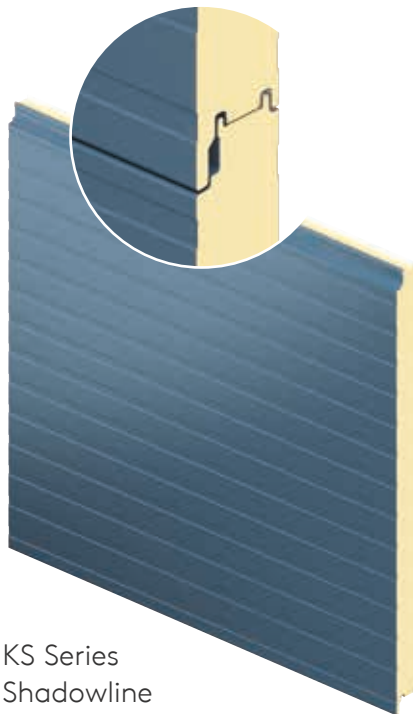
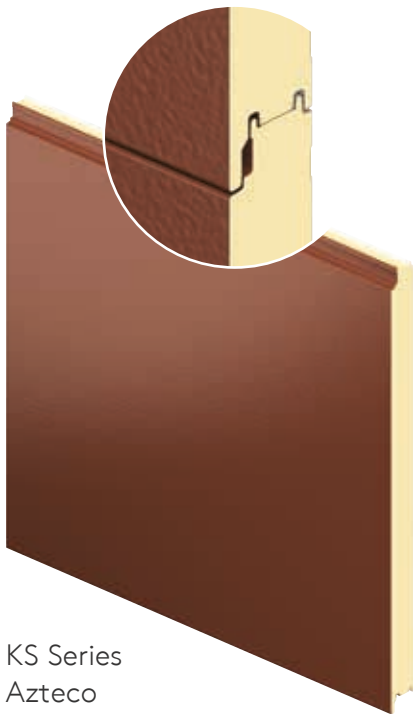


900
High Rib



Products at a Glance

Wall – Vertical and Horizontal Application



Wall with Façade

Wall (Mineral Fiber Core)



KS Series
Granitstone



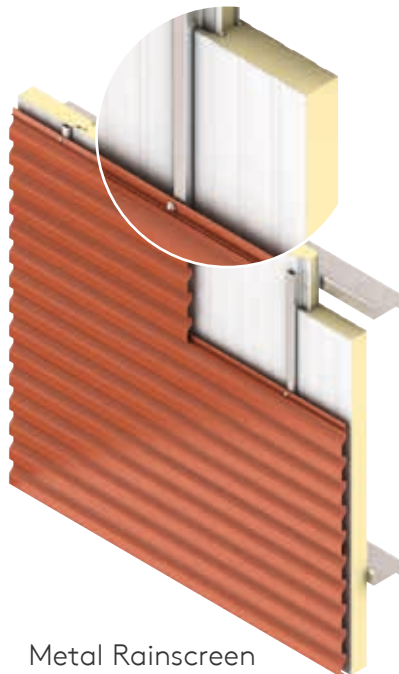
Brick Rainscreen
on KarrierPanel



MF Fire
Rated TF
(Interior & Exterior)



Optimo



Metal Rainscreen
on KarrierPanel



MF Fire
Rated HF*
(Interior & Exterior)

* Available in MF QT Acoustical Panel.

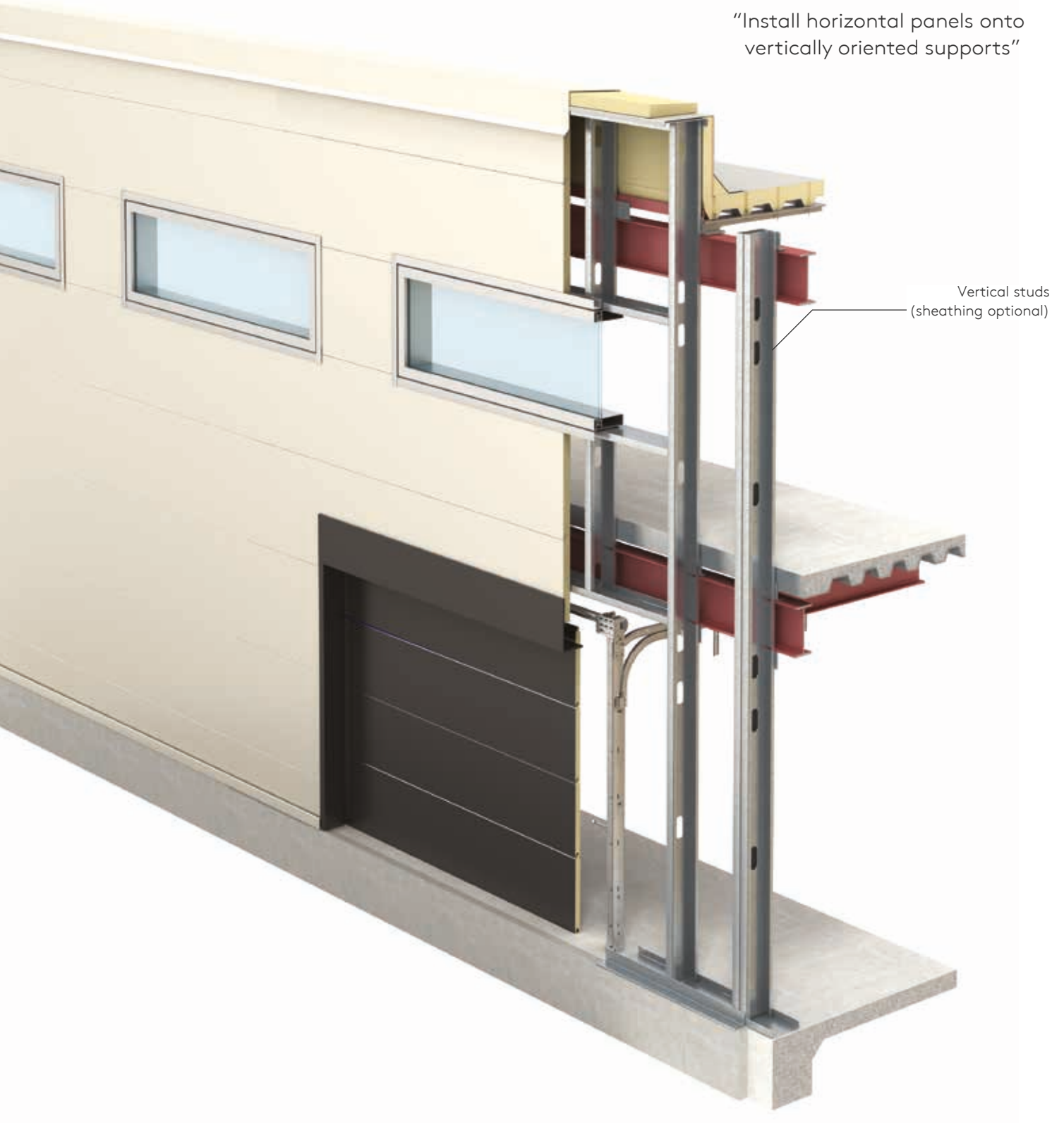
Products at a Glance – Vertical Application

Panels on metal studs



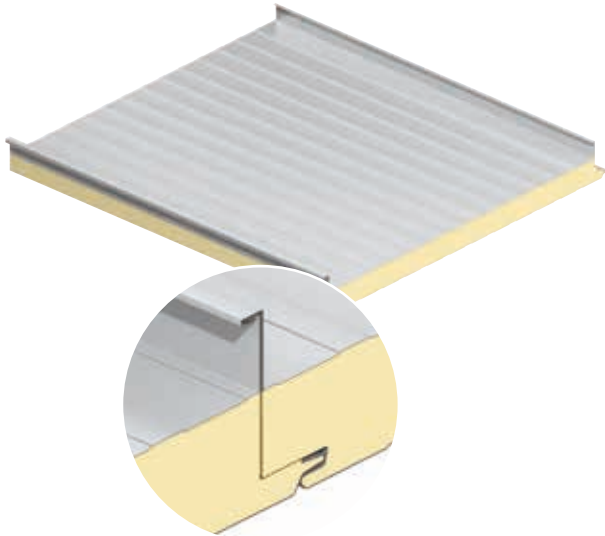
Products at a Glance – Horizontal Application

Panels on metal studs

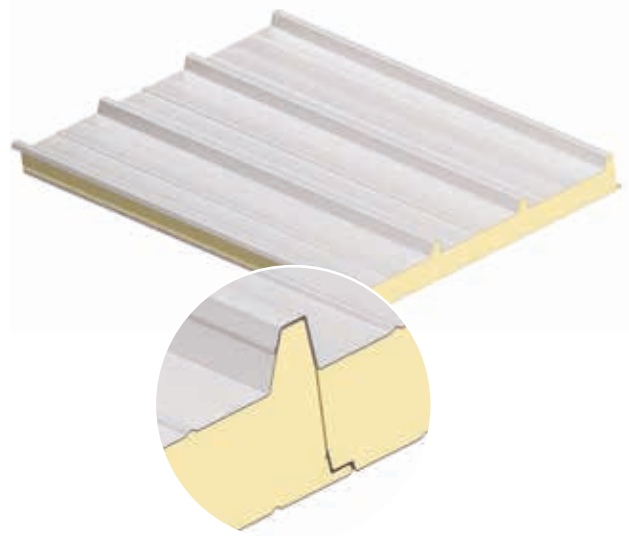


Products at a Glance

Roof



KingZip



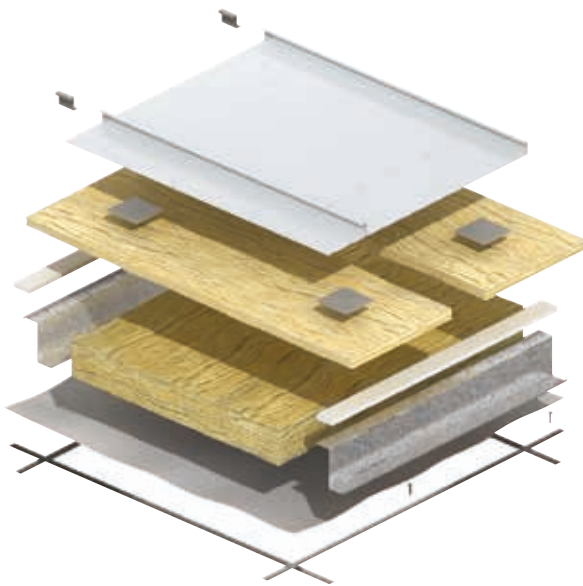
900 High Rib



Performance Benefits – Build Speed

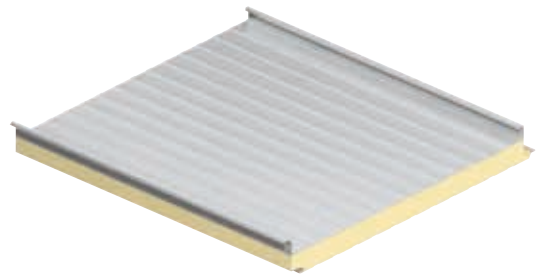
Kingspan single component roof systems increases speed of build, decreases number of trades, minimizes delays and allows for safety and fall arrest systems.

Simple Saver System vs. KingZip Insulated Standing Seam Roof System



Typical multi-part
roof system

Vs



KingZip 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 to 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



Wall Assembly with Interior Finish	Number of Components
Insulated Metal Panels	3
Single Skin Metal (Rainscreen)	7-8
Aluminum Composite Metal (Rainscreen)	6
Exterior Insulated Finish System (EIFS)	11
Masonry Veneer	7
Tilt-Up Concrete / Pre-Cast	3-6



Performance Benefits – Case Study

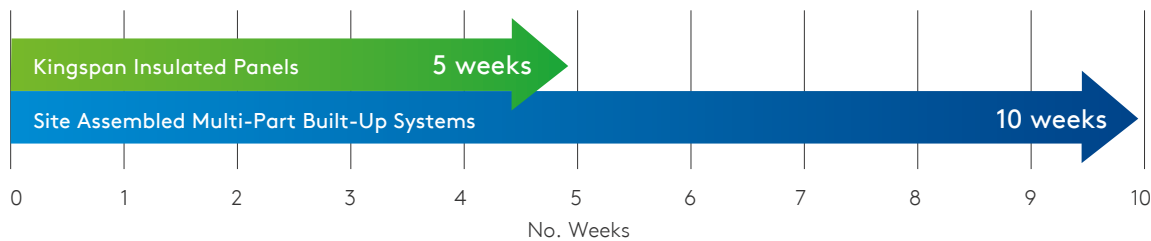
Consultants for a large retail chain estimate construction schedule time savings of up to five weeks were achieved in a multiple unit construction program with insulated metal panels.

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

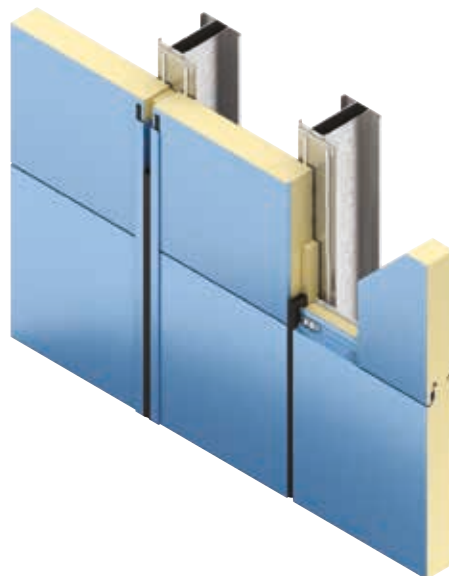


Design Flexibility and Aesthetic Appeal

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

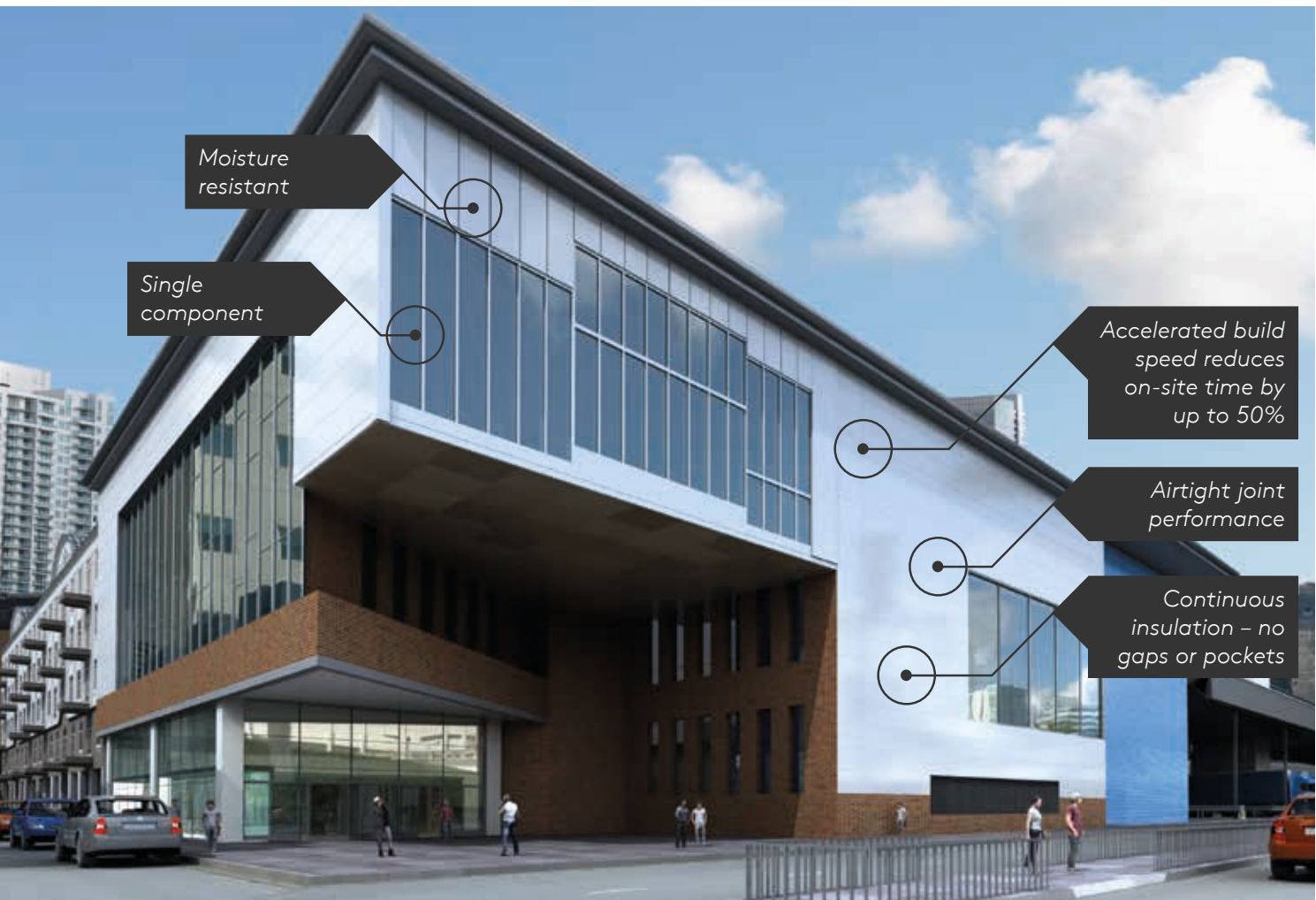
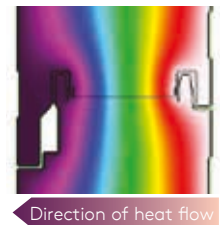
Kingspan insulated panels' insulating cores provide superior thermal performance with tested R-values of 7.2* per inch. Most importantly, the insulation is on the exterior of the building structure to provide the best possible thermal envelope by reducing thermal bridging typical of cavity wall systems.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

*QuadCore approx. R-8/in at 75F mean per C518.

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.

Kingspan Shadowline Insulated Metal Wall Panel



Performance Benefits – Sustainability

Building professionals and owners today share a newfound enthusiasm for building envelope performance. Driving this focus are mandates for green building, a focus on energy efficiency and recognized ROI.

EnvelopeFirst

Kingspan’s EnvelopeFirst is a design strategy for optimizing a building’s performance and the first step towards NetZero energy.

The EnvelopeFirst approach to design focuses on enclosure performance, including durability, airtightness, and better moisture and thermal control.

Testing and field results show that insulated metal panels (IMPs) contribute to ROI and energy efficiency.

Start with the...



Path to NetZero

Kingspan’s long-term mission will see all our facilities achieve NetZero energy consumption by 2020. NetZero Energy buildings, in the simplest terms, produce as much energy as they consume. Our insulated metal panels are a cost effective step to this high performance goal, offering a building envelope with functionality and design possibility.



Kingspan insulated wall and roof panels have achieved GreenGuard certification for both standard polyisocyanurate and QuadCore foam.

EPD (Environmental Product Declaration)

Kingspan Insulated Panels North America, has been awarded the first of its kind UL certified ISO compliant Environmental Product Declaration (EPD).

What is an EPD

An EPD is a third party verified, internationally recognized disclosure of a product’s environmental impact based on a cradle to grave life cycle assessment.


Goal of an EPD

An EPD’s goal is transparency. Knowing what’s in the product you chose and its environmental impact.

UL Environment Certified

To add credibility to our findings, we engaged UL Environment to verify the results of our EPD. UL have been impartially assessing products since 1894 for safety and viability and have conducted numerous environmental evaluations. UL certified EPDs are based on ISO compliant standards.





To learn about our sustainability journey and download the EPD, visit:
www.kingspanpanels.com




Higher Building Performance
with Kingspan

It's all in the gray cells

QuadCore Technology is Kingspan's next generation of self-blended hybrid insulation core. Across the world of insulated panels, this innovation with its distinctive gray microcells powers the industry's highest combined performance:

- Unrivalled thermal efficiency
- Superior fire protection
- Enhanced environmental credentials
- Longest performance guarantee

QuadCore Technology, together with our end-to-end services and whole building design know-how, takes Kingspan buildings to a higher level of lifetime performance, and delivers the ultimate protection for our partners, their buildings, and the environment for future generations.



360°
Services

Whole
Building
Design

Warranty

POWERED BY
QuadCore[™]
TECHNOLOGY

1

Unrivalled Thermal Efficiency

QuadCore Technology is certified as the most thermally efficient closed-cell insulation core on the market.

Lifetime performance and value benefits

- The class-leading aged lambda value of 0.18 W/m²K has the potential to reduce HVAC size, and lower both energy consumption and carbon emissions.
- QuadCore Technology is a more streamlined solution relative to other insulation materials with associated benefits in interior space optimization, for specific transport, and ease of handling during construction.

2

Superior Fire Protection

The hybrid nature of QuadCore Technology delivers a range of improvements in fire performance which surpass all other insulated panel systems incorporating closed-cell insulation materials.

Lifetime performance and value benefits

- For any building owner that wants the best protection against the impact of fire, the unique low smoke characteristics of QuadCore Technology provide the optimum solution.
- QuadCore Technology also delivers improved fire resistance ratings leading to more cost-effective installations due to economies in steelwork and fixing, also improved spans, in certain applications.

3

Enhanced Environmental Credentials

The improved thermal performance of QuadCore Technology helps to optimize resource efficiency. It is also CFC, HCFC, HFC free and has a very low Global Warming potential.

Lifetime performance and value benefits

- None of the chemical ingredients present in Kingspan's QuadCore foam are included on the ILFI Declare Red List.
- C2C Silver material health certified
- Greenguard Gold certified



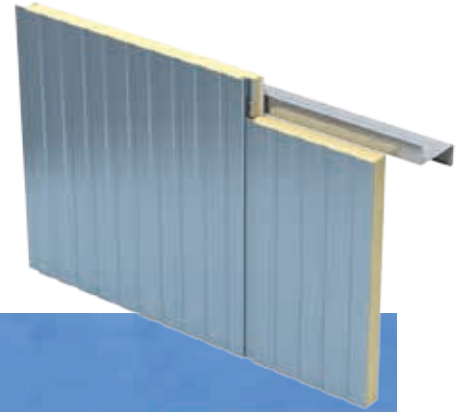
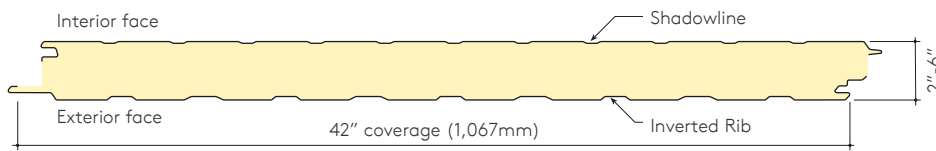
4

30 year thermal and structural panel guarantee

Complete QuadCore roof, wall or façade systems – where Kingspan has supplied the panel and all system ancillaries – have the additional security of a single-source system warranty from Kingspan.

200 Series Inverted Rib

The 200 Series Inverted Rib panel delivers an attractive and affordable panel choice for commercial and industrial applications.

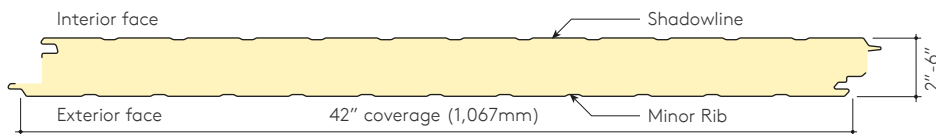


Exterior profile	Inverted Rib with stucco embossing (optional non-embossed)
Interior profile	Minor Rib, Shadowline, V-groove, Azteco Embossed or Flat with stucco embossing (optional non-embossed)
Exterior gauge	26, optional 24 or 22
Interior gauge	26, optional 24 or 22
Widths	42"
Reveal options	N/A
Lengths	8' to 48'*
Thicknesses	2", 2.5", 3", 4", 5" and 6"
Post fabrication	N/A
R-value	≈ 7.2 per inch per ASTM C518 @ 75°F ≈ 8.25 per inch per ASTM C518 @ 35°F
Orientation	Vertical



300 Series Minor Rib

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



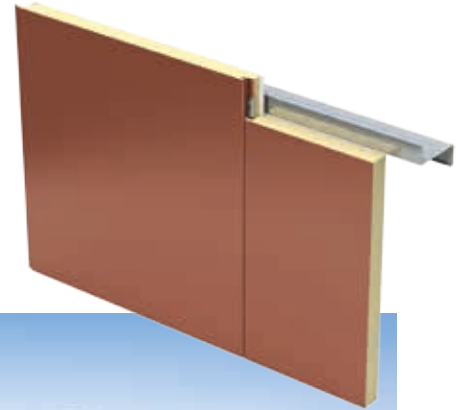
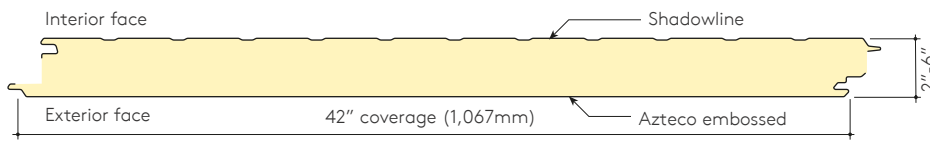
Exterior profile	Minor Rib with stucco embossing (optional non-embossed)
Interior profile	Minor Rib, Shadowline, V-groove, Azteco Embossed or Flat with stucco embossing (optional non-embossed)
Exterior gauge	26, 24 or 22
Interior gauge	26, optional 24 or 22
Widths	42"
Reveal options	N/A
Lengths	8' to 48'*
Thicknesses	2", 2.5", 3", 4", 5" and 6"
Post fabrication	N/A
R-value	≈ 7.2 per inch per ASTM C518 @ 75°F ≈ 8.25 per inch per ASTM C518 @ 35°F
Orientation	Vertical



*Consult a Regional Sales Manager for additional lengths.

300 Series Azteco Embossed†

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



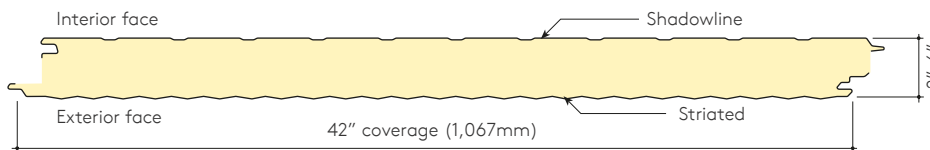
Exterior profile	Flat with Azteco embossing
Interior profile	Minor Rib, Shadowline, V-groove, Azteco Embossed or Flat with stucco embossing (optional non-embossed)
Exterior gauge	26, 24 or 22
Interior gauge	26, optional 24 or 22
Widths	42"
Reveal options	N/A
Lengths	8' to 48'*
Thicknesses	2", 2.5", 3", 4", 5", 6"
Post fabrication	N/A
R-value	≈ 7.2 per inch per ASTM C518 @ 75°F ≈ 8.25 per inch per ASTM C518 @ 35°F
Orientation	Vertical

†Azteco is also available in our KS Series.



300 Series Striated

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



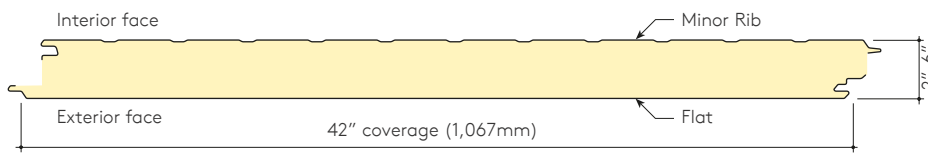
Exterior profile	Striated with stucco embossing (optional non-embossed)
Interior profile	Minor Rib, Shadowline, V-groove, Azteco Embossed or Flat with stucco embossing (optional non-embossed)
Exterior gauge	26, 24 or 22
Interior gauge	26, optional 24 or 22
Widths	42"
Reveal options	N/A
Lengths	8' to 48'*
Thicknesses	2", 2.5", 3", 4", 5" and 6"
Post fabrication	N/A
R-value	≈ 7.2 per inch per ASTM C518 @ 75°F ≈ 8.25 per inch per ASTM C518 @ 35°F
Orientation	Vertical

*Consult a Regional Sales Manager for additional lengths.



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.



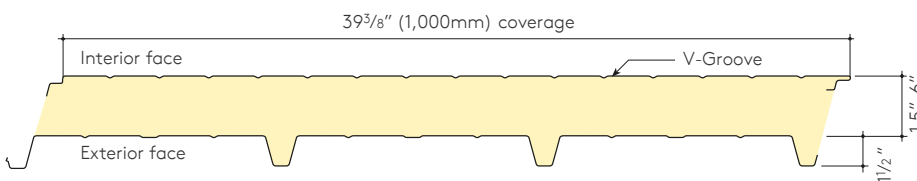
Exterior profile	Flat with Granitstone or Granitstone Quartz finish
Interior profile	Minor Rib, V-groove, Azteco Embossed or Flat with stucco embossing (optional non-embossed)
Exterior gauge	26, optional 24 or 22
Interior gauge	26, optional 24 or 22
Widths	42"
Reveal options	N/A
Lengths	8' to 35'
Thicknesses	2", 2.5", 3", 4", 5" and 6"
Post fabrication	N/A
R-value	≈ 7.2 per inch per ASTM C518 @ 75°F ≈ 8.25 per inch per ASTM C518 @ 35°F
Orientation	Vertical

[†]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.

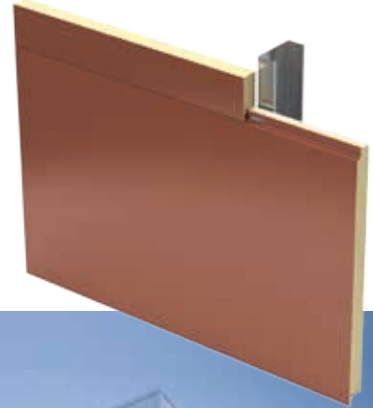
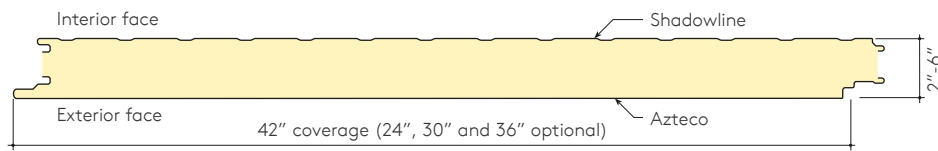


Exterior profile	High Rib with stucco embossing (optional non-embossed)
Interior profile	V-groove with stucco embossing (optional non-embossed)
Exterior gauge	26, optional 24 or 22
Interior gauge	26, optional 24 or 22
Widths	39 3/8"
Reveal options	N/A
Lengths	8' to 54'
Thicknesses	1.5", 2", 2.5", 3", 4", 5" and 6"
Post fabrication	N/A
R-value	≈ 7.2 per inch per ASTM C518 @ 75°F ≈ 8.25 per inch per ASTM C518 @ 35°F
Orientation	Vertical or Horizontal



KS Series Azteco

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



Exterior profile	Flat with Azteco embossing
Interior profile	Shadowline or Flat with stucco embossing (optional non-embossed)
Exterior gauge	24, optional 22
Interior gauge	26, optional 24 or 22
Widths	42" standard (24", 30" and 36" optional)
Lengths	8' to 48'*
Thicknesses	2", 2.5", 3", 4", 5" and 6"
Reveal options	Vertical 1/8", Horizontal 3/8"
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
Orientation	Vertical or Horizontal

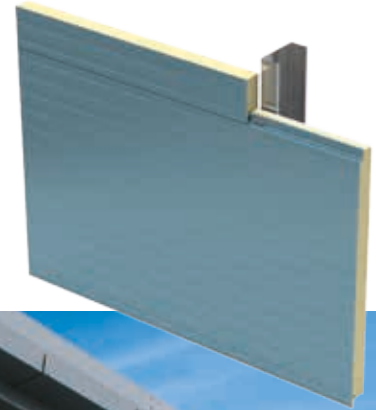
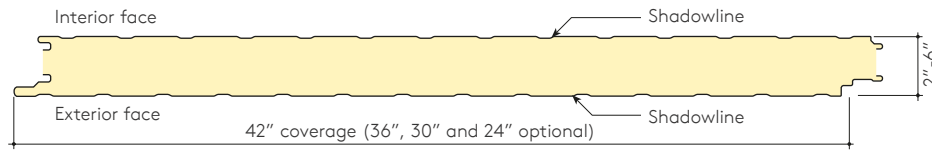


*Consult a Regional Sales Manager for additional lengths.



KS Series Shadowline

Shadowline wall systems deliver an attractive and affordable panel choice.

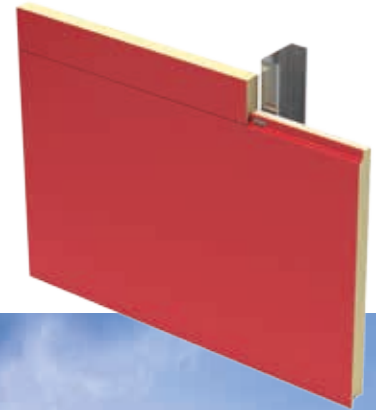
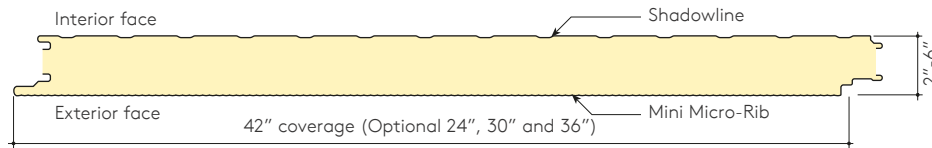


Exterior profile	Shadowline with stucco embossing (optional non-embossed)
Interior profile	Shadowline or Flat with stucco embossing (optional non-embossed)
Exterior gauge	26, optional 24 or 22
Interior gauge	26, optional 24 or 22
Widths	42" standard (24", 30" and 36" optional)
Reveal options	Vertical 1/8", Horizontal 3/8"
Lengths	8' to 48'*
Thicknesses	2", 2.5", 3", 4", 5", 6"
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
Orientation	Vertical or Horizontal



KS Series Mini Micro-Rib

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



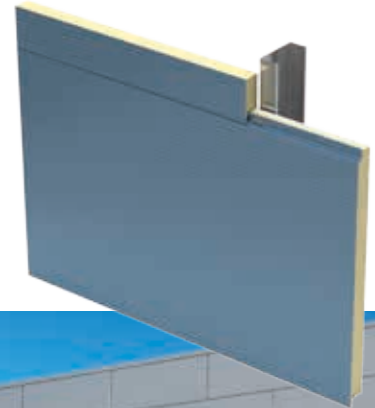
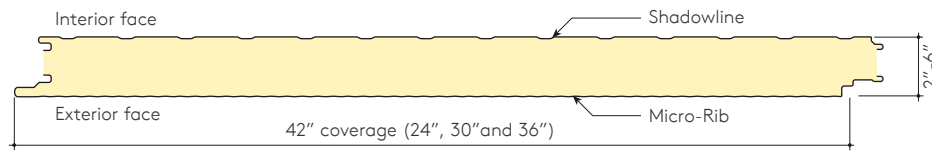
Exterior profile	Mini Micro-Rib with stucco embossing (optional non-embossed)
Interior profile	Shadowline or Flat with stucco embossing (optional non-embossed)
Exterior gauge	24
Interior gauge	26, optional 24 or 22
Widths	42" standard (optional 24", 30" and 36")
Reveal options	Vertical 1/8", Horizontal 3/8"
Lengths	8' to 48'*
Thicknesses	2", 2.5", 3", 4", 5", 6"
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
Orientation	Vertical or Horizontal



*Consult a Regional Sales Manager for additional lengths.

KS Series Micro-Rib

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

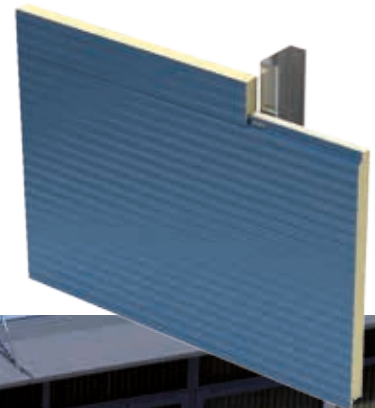
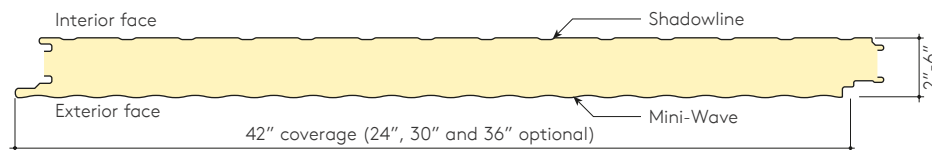


Exterior profile	Micro-Rib with stucco embossing (optional non-embossed)
Interior profile	Shadowline or Flat with stucco embossing (optional non-embossed)
Exterior gauge	24, optional 22
Interior gauge	26, optional 24 or 22
Widths	42" standard (24", 30" and 36" optional)
Reveal options	Vertical 1/8", Horizontal 3/8"
Lengths	8' to 48'*
Thicknesses	2", 2.5", 3", 4", 5", 6"
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
Orientation	Vertical or Horizontal



KS Series Mini-Wave

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



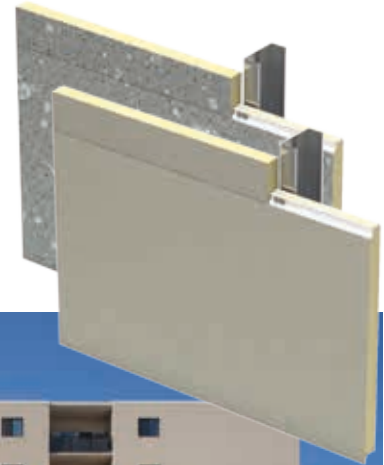
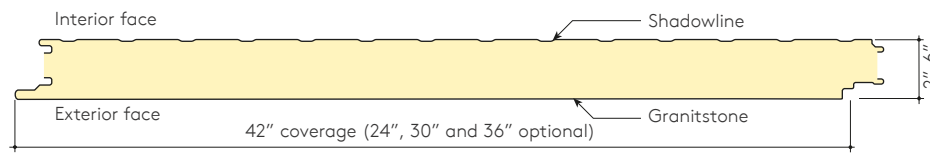
Exterior profile	Mini-Wave with stucco embossing (optional non-embossed)
Interior profile	Shadowline (optional Flat) with stucco embossing (optional non-embossed)
Exterior gauge	24, optional 22
Interior gauge	26, optional 24 or 22
Widths	42" standard (24", 30" and 36" optional)
Reveal options	Vertical 1/8", Horizontal 3/8"
Lengths	8' to 48'*
Thicknesses	2", 2.5", 3", 4", 5" and 6"
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
Orientation	Vertical or Horizontal



*Consult a Regional Sales Manager for additional lengths.

KS Series Granitstone

Granitstone has the appearance of stucco or natural stone. Also available, Granitstone Quartz.

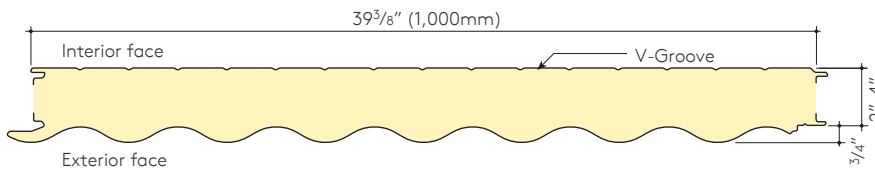


Exterior profile	Flat with Granitstone or Granitstone Quartz finish
Interior profile	Shadowline or Flat with stucco embossing (optional non-embossed)
Exterior gauge	26, 24 or 22
Interior gauge	26, optional 24 or 22
Widths	42" standard (24", 30" and 36" optional)
Reveal options	Vertical 1/8", Horizontal 3/8"
Lengths	8' to 31'
Thicknesses	2", 2.5", 3", 4", 5" and 6"
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
Orientation	Vertical or Horizontal



400 Wave

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

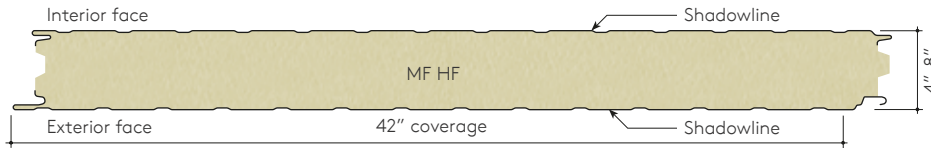


Exterior profile	Wave with stucco embossing (optional non-embossed)
Interior profile	V-groove with stucco embossing
Exterior gauge	22
Interior gauge	26, optional 24 or 22
Widths	39 3/8" (1 meter)
Reveal options	N/A
Lengths	8' to 52'
Thicknesses	2", 3" and 4"
Post fabrication	N/A
R-value	≈ 7.2 per inch (at low cell) per ASTM C518 @ 75°F ≈ 8.25 per inch per ASTM C518 @ 35°F
Orientation	Vertical or Horizontal



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.

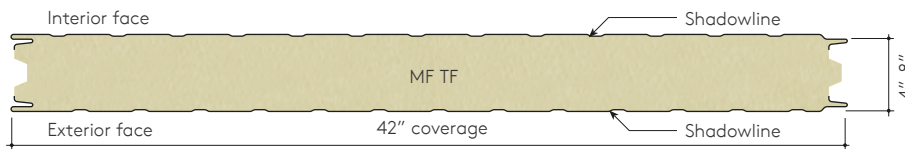


Exterior profile	Shadowline, Micro-Rib, Azteco Embossed or Flat with stucco embossing (optional non-embossed)
Interior profile	Shadowline or Flat with stucco embossing (optional non-embossed)
Exterior gauge	24, optional 22
Interior gauge	26, optional 24 or 22
Widths	42" (39 3/8" V-groove)
Reveal options	1/8"
Lengths	8' to 48'
Thicknesses	4", 6" and 8"
Wall fire resistive ratings	1 hour (4"), 2 hour (6"), 3 hour (8")
Ceiling fire resistive rating	1 hour (6" panel only)
Post fabrication	N/A
R-value	3.6 per inch per ASTM C518 @ 75°F
Orientation	Vertical or Horizontal



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.



Exterior profile	Shadowline, Azteco Embossed, Flat with stucco embossing (optional non-embossed)
Interior profile	Shadowline or Flat with stucco embossing (optional non-embossed)
Exterior gauge	26, optional 24 or 22
Interior gauge	26, optional 24 or 22
Widths	42"
Reveal options	1/8"
Lengths	8' to 48'
Thicknesses	4", 6" and 8"
Wall fire resistive ratings	1 hour (4"), 2 hour (6"), 3 hour (8")
Ceiling fire resistive rating	1 hour (6" panel only)
Post fabrication	N/A
R-value	3.6 per inch per ASTM C518 @ 75°F
Orientation	Vertical or Horizontal

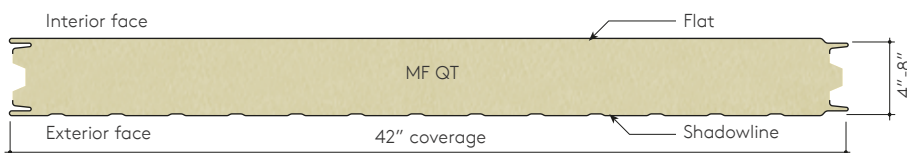


MF QT Acoustical

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.



Exterior profile	Shadowline, Micro-Rib, Azteco Embossed or Flat with stucco embossing (optional non-embossed)
Interior profile	Flat perforated non-embossed
Exterior gauge	24, optional 22
Interior gauge	26, optional 24, 22
Widths	42"
Reveal options	1/8"
Thicknesses	4", 6" and 8"
Fire resistive ratings	N/A (not tested for fire)
STC rating	30
Sound absorption	.92 minimum
Lengths	8' to 48'
Post fabrication	N/A
R-value	≈ 3.6 per inch per ASTM C518 @ 75°F
Orientation	Vertical or Horizontal

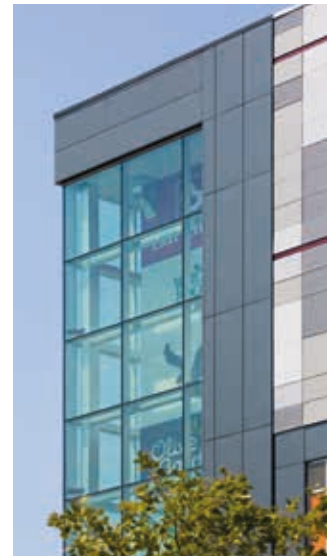


Optimo

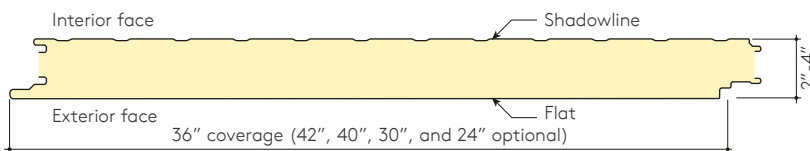
Optimo insulated metal panel wall systems deliver a clean, smooth and aesthetically appealing modern solution. Incorporating superior airtightness as well as high R-value is a critical step to achieving an energy efficient LEED certified and net-zero energy building.

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.



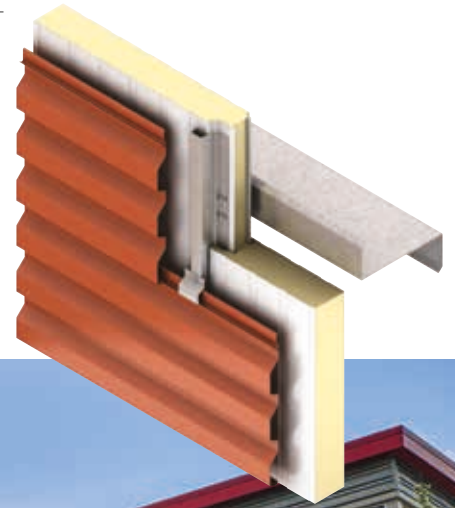
Exterior profile	Flat with stucco embossing (optional non-embossed)
Interior profile	Shadowline or Flat with stucco embossing (optional non-embossed)
Exterior gauge	22
Interior gauge	26, optional 24 or 22
Widths	42", 40", 36", 30", 24"
Reveal options	Vertical 1/8", Horizontal 3/8"
Lengths	8' to 20'
Thicknesses	2", 2.5", 3" and 4"
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
Orientation	Vertical or Horizontal



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.



Exterior profile	Shadowline or Flat with stucco embossing (optional non-embossed)
Interior profile	Shadowline or Flat with stucco embossing (optional non-embossed)
Exterior gauge	26, optional 24 or 22
Interior gauge	26, optional 24 or 22
Widths	42" standard (24", 30", 36" optional)
Reveal options	$\frac{3}{8}$ " to accommodate rail
Lengths	8' to 48'*
Thicknesses	2", 2.5", 3", 4", 5" and 6"
Post fabrication	N/A
R-value	≈ 7.2 per inch per ASTM C518 @ 75°F ≈ 8.25 per inch per ASTM C518 @ 35°F
Orientation	Vertical or Horizontal



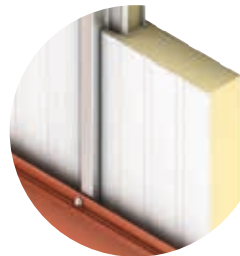
*Consult a Regional Sales Manager for additional lengths.

Design Flexibility

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



Brick Rainscreen on
KarrierPanel



Metal Rainscreen on
KarrierPanel



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.

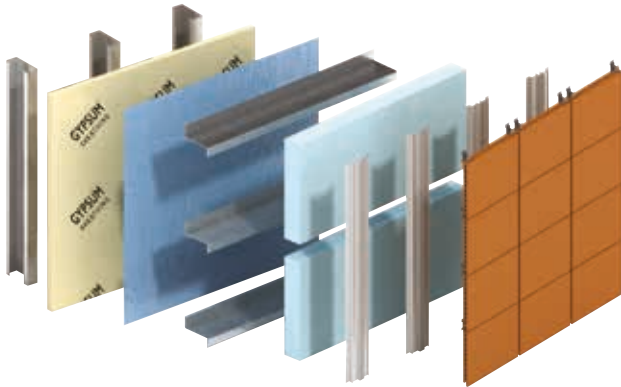
The standard rail configuration is 16 gauge Galvalume, 50 KSI steel. Available in various lengths with a 1, 2 and 3 inch bearing surface.



KarrierPanel

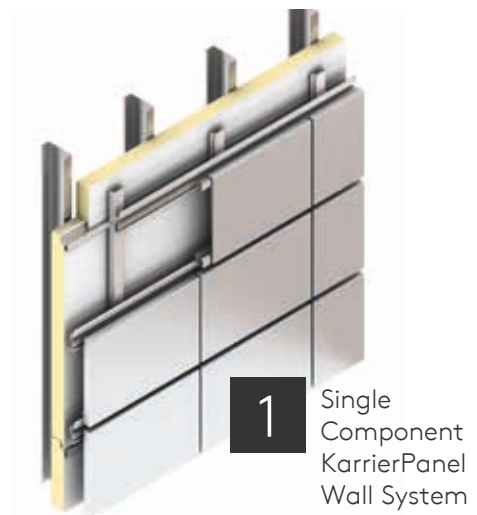
Build Speed

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



Typical multi-part façade system

Vs



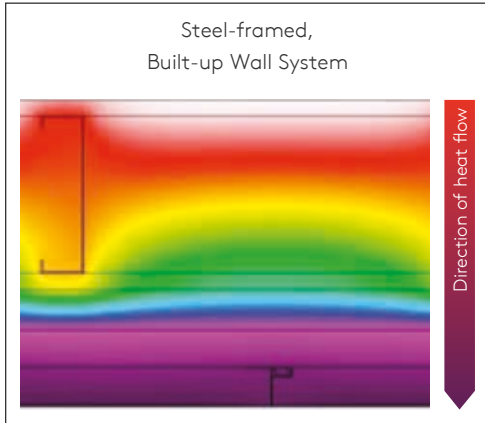
1 Single
Component
KarrierPanel
Wall System

KarrierPanel System with
Metal Single Skin Rainscreen

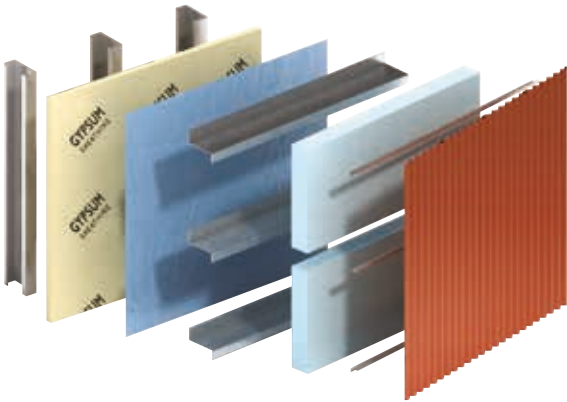
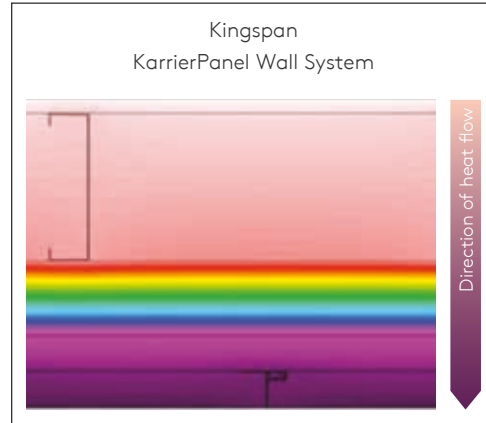
- Faster close-in and dry-in for reduced building costs.
- The single component system results in less labor time on-site and construction waste.
- Reduces delays in construction experienced with scheduling multiple trades.
- Increase in build speed allows faster project completion and reduces business disruption.



The insulated panel provides excellent thermal performance with high R-value and airtightness with an air, water and vapor barrier.



Vs



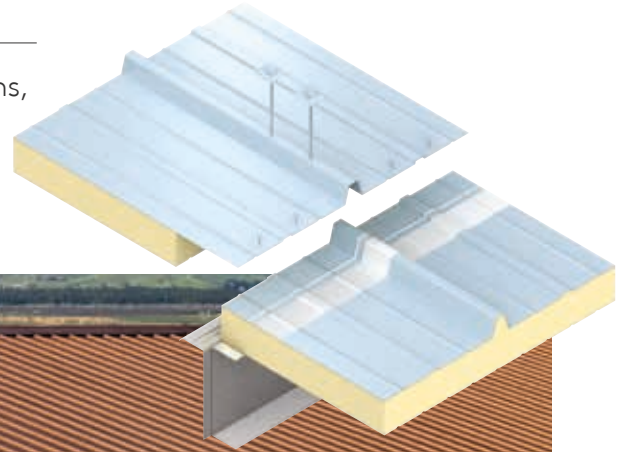
**Benefits of the KarrierPanel Wall System Vs
Traditional Built-up Construction:**

- 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.

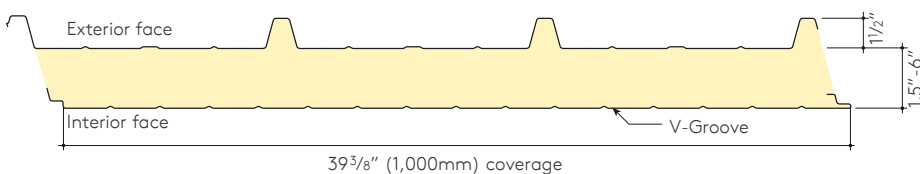


900 High Rib

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.

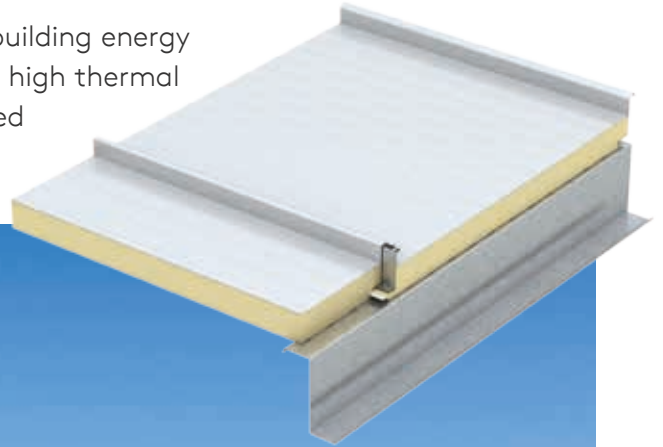


Exterior profile	High Rib with stucco embossing (optional non-embossed)
Interior profile	V-groove with stucco embossing (optional non-embossed)
Exterior gauge	26, optional 24 or 22
Interior gauge	26, optional 24 or 22
Widths	39 ³ / ₈ "
Reveal options	N/A
Lengths	8' to 54'
Thicknesses	1.5", 2", 2.5", 3", 4", 5" and 6"
Post fabrication	Cutbacks at eaves and end laps
R-value	≈ 7.2 per inch per ASTM C518 @ 75°F ≈ 8.25 per inch per ASTM C518 @ 35°F

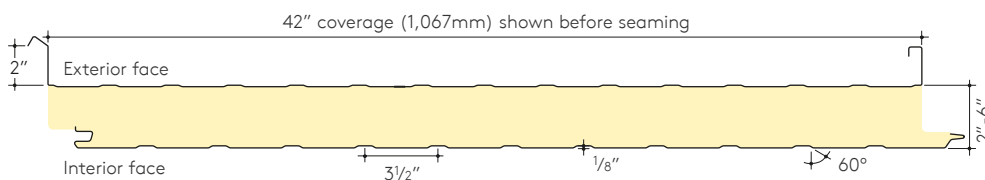


KingZip

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.



Exterior profile	2" (nominal) mechanically seamed sidelap, ribbed with stucco embossing (optional non-embossed)
Interior profile	Minor Rib or V-groove with stucco embossing (optional non-embossed)
Exterior gauge	26, optional 24 or 22
Interior gauge	26, optional 24 or 22
Widths	42"
Reveal options	N/A
Lengths	8' to 39'
Thicknesses	2", 2.5", 3", 4", 5" and 6"
Post fabrication	Cutbacks at eaves and end laps
R-value	≈ 7.2 per inch per ASTM C518 @ 75°F ≈ 8.25 per inch per ASTM C518 @ 35°F



Kingspan Energy

Kingspan Energy can transform your commercial roof into an energy-generating asset.

Everyday abundant, clean, free energy hits your building's roof. It's there to be used. Kingspan Energy designs, builds and maintains Solar PV systems that convert that energy to usable electricity. Our team of energy professionals will analyze your building's energy use, rooftop spaces, electrical and structural systems weaving available incentives into a Solar PV package that brings significant savings to your business and enabling you to run your operations on clean energy.

Whether the design requirements are high performance, LEED certification, a net-zero energy building or social responsibility, Kingspan Technical Team will evaluate the project to determine the most suitable Powerpanel option, and provide the design team and building owner with estimated energy savings, CO₂ reduction, tax benefits, first cost and return on investment calculations to assist with design decisions.

Kingspan Solar Options

- New built projects
- Retrofit projects
- Refurbishment projects



KingZip offers an ideal platform for solar PV systems – long life, low maintenance and extremely durable.



20yr

combined roof &
solar PV system
guarantee

Up to 40%

Kingspan Energy's
advanced lighting
reducing energy costs

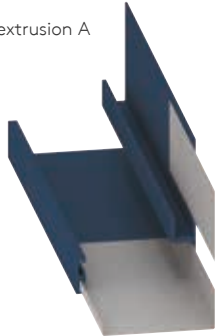
100%

fully-funded
solution



Product Range – Aluminum Extrusions

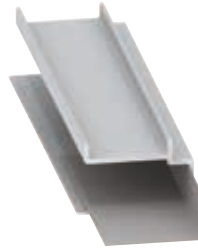
Base extrusion A



Base extrusion B



Base extrusion C



Wall parapet extrusion



Inside corner extrusion



Outside corner extrusion



Vertical top hat extrusion – flush



Vertical top hat extrusion – recessed



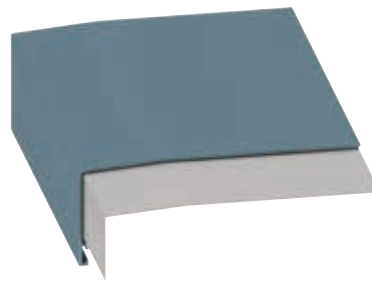
Jamb extrusion



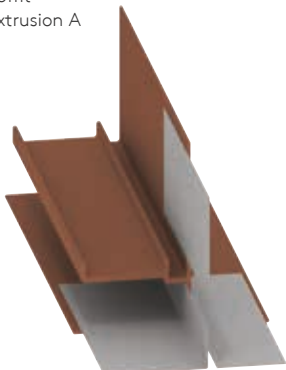
Vertical panel stack joint



Opening sill extrusion



Soffit extrusion A

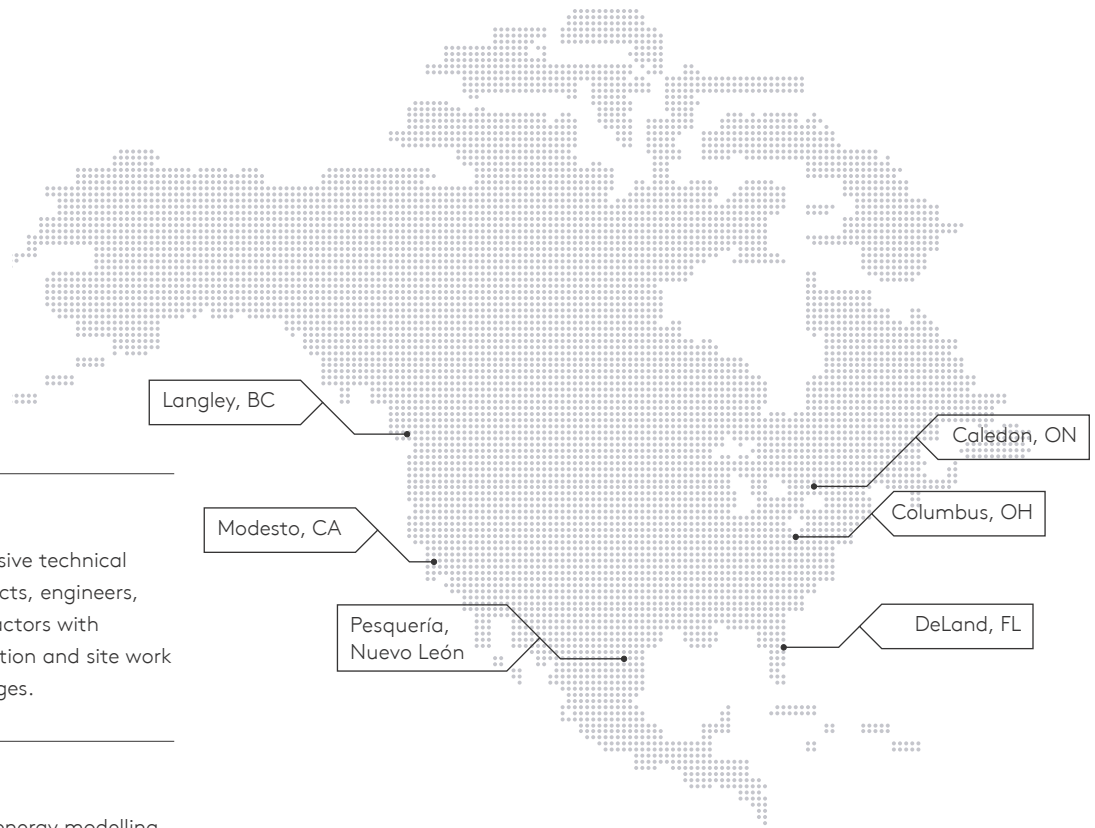


Soffit extrusion B



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 X – Siliconized Modified Polyester (SMP)

WEATHER X coating systems utilize only ceramic and inorganic pigments offering superior color stability, chalk and fade resistance as well as gloss retention.

Solid Fluoropon PVDF Colors – Kynar 500 / Hylar 5000

Fluoropon 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 Fluoropon 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 Fluoropon 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 Fluoropon 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.

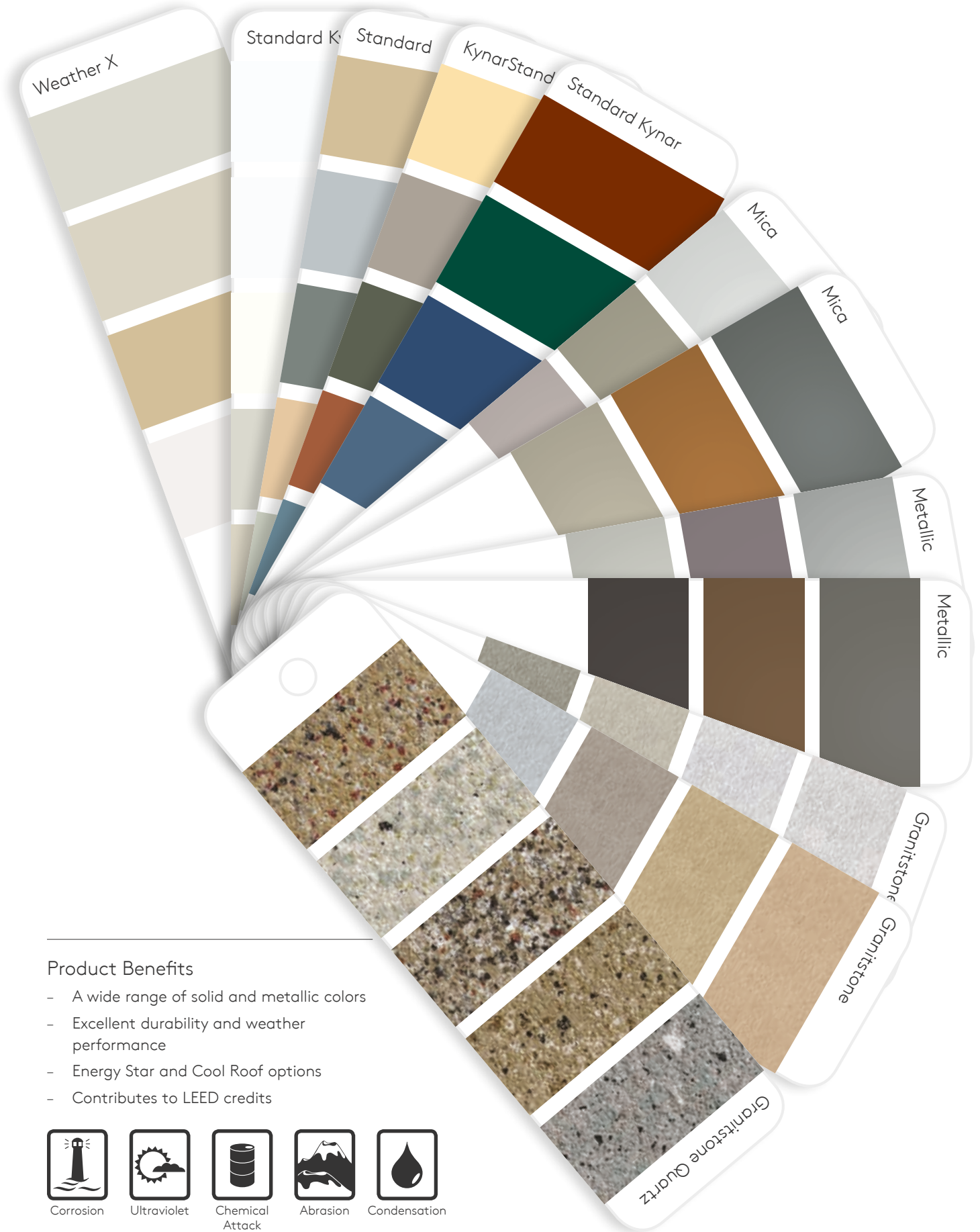
Flurothane Coastal PVDF Colors

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



Corrosion



Ultraviolet



Chemical
Attack



Abrasion



Condensation

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
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Mattamy Cycling Centre
Milton, ON



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For the product offering in other markets please contact your local sales representative or visit www.kingspanpanels.com

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09/2017

