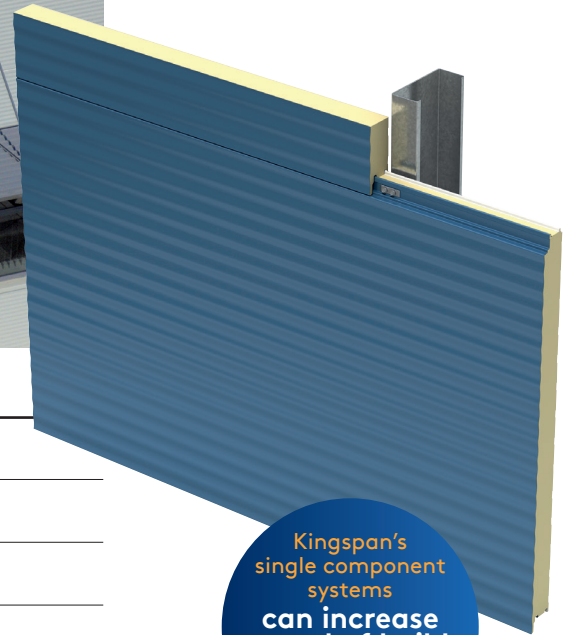


# KS Mini-Wave Data Sheet

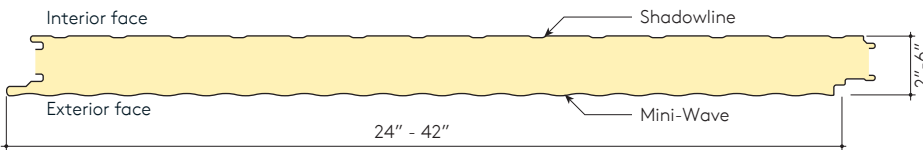
## Insulated Wall Panel System



### Product Specification

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: 1/8" Horizontal: 1/8" or 3/8"
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

Kingspan's  
single component  
systems  
can increase  
speed of build  
by up to  
**50%**



### Applications

Mini-Wave high performance wall system provides a continuous sweeping profile creating a unique wave appearance. Mini-Wave panels, horizontally or vertically applied, use a patented double seal integrated joint. Standard reveals are 1/8" for vertical applications, and 3/8" for horizontal applications.

Mini-Wave panels are suitable for new and retrofit applications across the cold storage, commercial and industrial market sectors.

### Design Features

The foamed-in-place manufacturing process produces superior panels of consistent high quality that arrive to site ready for quick and easy installation, saving up to 50% in on-site construction time.

Panels are available with optional factory-caulked side joints to save erection labor (not available for cold storage applications).

### Customer Options

Kingspan offers a full spectrum of vibrant colors for every color scheme. The high performance coatings provide long-life protection, color and gloss retention. Custom color matching is available to meet individual building designs and creative freedom.



# KS Mini-Wave Data Sheet

## Insulated Wall Panel System

### Performance Testing and Approvals

Kingspan insulated panels meet specific building envelope performance criteria and requirements stipulated by US and Canadian building codes. Panels are tested in accordance with UL, ULC, FM and ASTM approval standards, testing methods and procedures.

Kingspan insulated panels are listed by FM Global and Warnock Hersey.

Test	Procedure	Results					
Fire	FM-4880	Passed: Class 1 Fire Rating of Insulated Wall or Wall and Roof / Ceiling Panels, Interior Finish Materials or Coatings, and Exterior Wall Systems					
	ASTM E84	Flame Spread: 25 or Less / Smoke Developed: 450 or Less					
	CAN/ULC-S101	Fire Endurance Tests: 10 min and 15 min stayed in place					
	CAN/ULC-S102	Flame Spread: 5, Smoke Developed: 135 for panel with facings					
	CAN/ULC-S127	Flame Spread: <500 for foam core					
	CAN/ULC S138	Passed: Fire growth of foamed plastic insulated building panels in a full scale room configuration					
	CAN/ULC-S134	Passed: Standard method of test for fire of exterior wall assemblies					
	NFPA 259	Tested for potential heat of building materials					
	NFPA 268	Passed: Standard test method for determining ignitability of exterior wall assemblies using a radiant heat energy source					
	NFPA 285	Passed: Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components					
Structural	FM-4881	Passed: Class +110/-154 Zone H Class +100/-140 Zone HM – LM					
	ASTM E72	Vacuum chamber tested. Panel load / span and deflection tables are available					
Thermal Transmission	ASTM C518	<b>Thermal Performance at 75°</b>			<b>Thermal Performance at 35°</b>		
		<b>Thickness</b>	<b>U-Factor</b>	<b>R-Value</b>	<b>Thickness</b>	<b>U-Factor</b>	<b>R-Value</b>
		2	0.07	14.4	2	0.06	16
		2.5	0.06	18.0	2.5	0.05	20
		3	0.05	21.6	3	0.04	24
		4	0.03	28.8	4	0.03	32
		5	0.03	36.0	5	0.03	40
		6	0.02	43.2	6	0.02	48
Air Infiltration	ASTM E283	0.003 CFM/ft <sup>2</sup> of Panel Area at 6.24 psf					
Water	ASTM E331	No uncontrolled water penetration at 20 psf differential pressure					
	AAMA 501.1	Dynamic water pressure testing – no sign of water leakage at 15 psf					
Fatigue	Cyclic test to positive and negative wind loading to ± L/180 deflection	The panels exceeded 2 million alternate cycles without failure or damage					
Bond Strength	ASTM D1623	Panels tested for tensile bond strength of metal to foam					
		Sample placed in an autoclave device and pressurized to 2 PSI at 212°F for 2½ hours					
Skin Delamination		No skin delamination with direct pull off pressure up to 1188 psf					

### Kingspan North America

DeLand, FL: 386-626-6789 Modesto, CA: 209-531-9091

Caledon, ON: 905-951-5600 Langley, BC: 604-607-1101

[www.kingspanpanels.com](http://www.kingspanpanels.com)

For the product offering in other markets please contact your local sales representative or visit [www.kingspanpanels.com](http://www.kingspanpanels.com)

Care has been taken to ensure that the contents of this publication are accurate, but Kingspan Limited and its subsidiary companies do not accept responsibility for errors or for information that is found to be misleading. Suggestions for, or description of, the end use or application of products or methods of working are for information only and Kingspan Limited and its subsidiaries accept no liability in respect thereof.

