



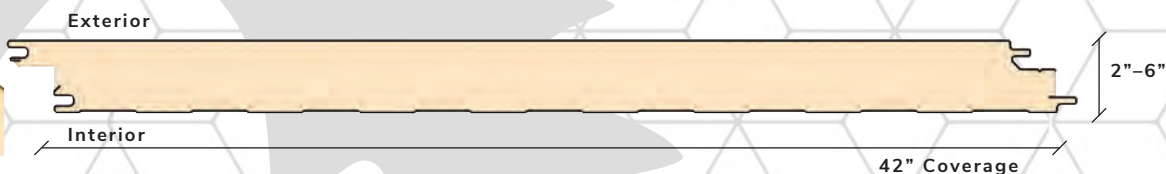
# GREEN SPAN PROFILES®

INSULATED PANEL TECHNOLOGIES



*Designed specifically for dust-free environments, the CleanLine exterior face is free of all embossing and profiling. CleanLine insulated metal panels are manufactured specifically for interior use as partition-walls, liner-walls and ceilings. The unique Green-Lock side-joint facilitates accurate sealant placement and helps ensure a high-performance vapor seal.*

Panel Use	Partition Wall, Liner Wall, Ceiling
Coverage Width	42-inch
Thickness	2, 2.5, 3, 4, 5, 6-inch
Length	8'-0" to 40'-0"
Exterior Gauge	26, 24, 22
Interior Gauge	26
Exterior Substrate	Galvalume®, G90
Interior Substrate	Galvalume®, G90
Exterior Finish	Polyester, Siliconized Polyester, Plastisol (PVC)
Interior Finish	Polyester, Siliconized Polyester, Plastisol (PVC)
Exterior Texture	Embossed, Smooth
Interior Texture	Embossed, Smooth
Joint	Green-Lock, offset double tongue-and-groove
Core	Continuously poured-in-place polyisocyanurate insulating foam
R-Value	R-8 per inch of thickness (nominal)



*"Built to Perform, Built to Last, Built Right"*

## TESTING: CLEANLINE INSULATED METAL PANEL

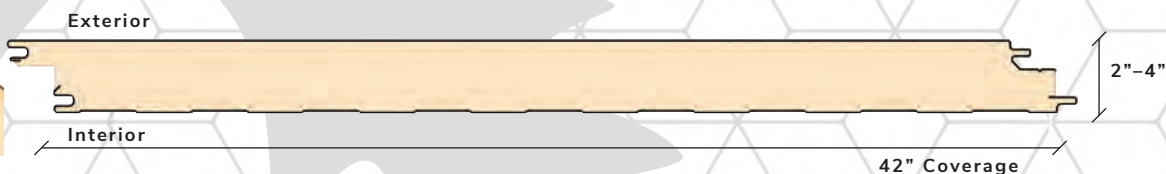
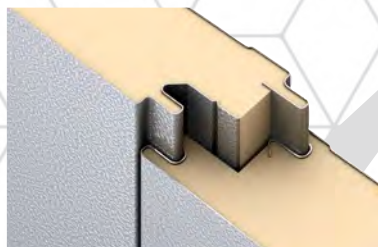
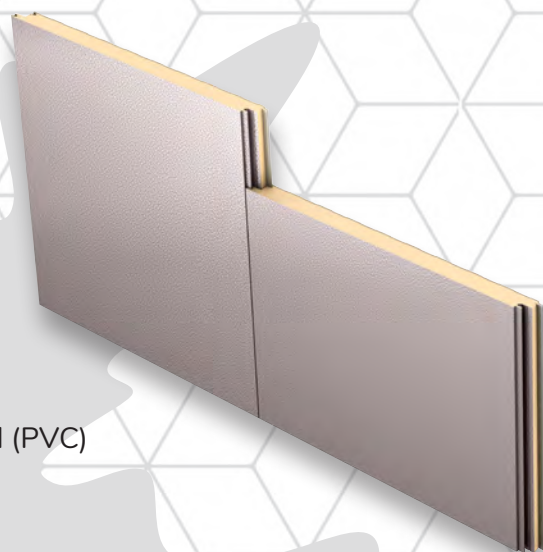
TYPE	TEST PROTOCOL	DESCRIPTION	RESULTS
<b>ENVIRONMENTAL PERFORMANCE</b>	ASTM C518	Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus	K-Factor 0.139 BTU-in/hr-ft <sup>2</sup> -F° at 75° mean K-Factor 0.129 BTU-in/hr-ft <sup>2</sup> -F° at 35° mean
	ASTM E283	Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Differences Across the Specimen	0.0011-cfm/sf at 20-psf
	ASTM E331	Water Penetration of Exterior Windows, Skylights, Doors and Curtain Walls by Uniform Static Air Pressure Difference	Zero penetration at 20-psf
<b>FOAM CORE CHARACTERISTICS</b>	ASTM C273	Shear Properties of Sandwich Core Materials	Shear Strength = 16-psi
	ASTM D1621	Compressive Properties of Rigid Cellular Plastics	Compressive Strength — 18-psi
	ASTM D1622	Apparent Density of Rigid Cellular Plastics	Apparent Density — 2.25-pcf
	ASTM D1623	Tensile and Tensile Adhesion Properties of Rigid Cellular Plastics	Tensile Strength — 21-psi
	ASTM D6226	Open Cell Content of Rigid Cellular Plastics	Open Cell Content ≥ 90% closed cells
<b>FIRE RESISTANCE</b>	ASTM E84	Surface Burning Characteristics of Building Materials	Flame Spread < 25, Smoke Developed < 450
	NFPA 285	Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components	Passed — see technical bulletin ATB-0007
	FM 4880	Factory Mutual Approval Standard for Class 1 Fire Rating of Insulated Wall or Wall and Roof/Ceiling Panels, Interior Finish Materials or Coatings and Exterior Wall Systems	Class 1 Fire Rated — see technical bulletin ATB-0005
<b>IMPACT RESISTANCE</b>	FM 4881	Factory Mutual Approval Standard for Class 1 Exterior Wall Systems	
	TAS 201	Florida Building Code Impact Test Procedure	Miami Dade County NOA No. 15-0204.02
<b>ENGINEERING PROPERTIES</b>	ASTM E1592	Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference	See Load Tables
	ASTM E72	Strength Tests of Panels for Building Construction	See Load Tables
	FM 4881	Factory Mutual Approval Standard for Class 1 Exterior Wall Systems	Class 1 Approved — see technical bulletins ETB-0008 and ETB-0013
<b>APPROVALS</b>	Miami-Dade County	Miami-Dade County Product Control Section — Notice of Acceptance	Miami Dade County NOA No. 15-0204.02
	State of Florida	Florida Product Approval	#16327-R1
	TX Dept. of Insurance	Product Evaluation	Evaluation ID: EC-103
<b>BOND STRENGTH</b>	Fatigue Endurance	2,000,000 Alternating Cycles of L/180 Deflection	No evidence of facer or liner delamination, fracture of foam core or permanent set
	Freeze/Heat Cycle	Twenty-One (21) Eight-hour Temperature Cycles (-20° F to 180° F)	No evidence of delamination, blistering or permanent set
	Humidity Endurance	1,200 Hours of 93% Humidity at a Temperature of 158° F	No evidence of delamination, blistering or interface corrosion
	Autoclave	Exposure to 218° F and a pressure of 2-psig for 2½ hours	No evidence of facer or liner delamination







Panel Use	Exterior Wall
Coverage Width	42-inch
Thickness	2, 2.5, 3, 4-inch
Length	8'-0" to 40'-0"
Exterior Gauge	26, 24
Interior Gauge	26
Exterior Substrate	Galvalume®, G90
Interior Substrate	Galvalume®, G90, Stainless Steel
Exterior Finish	Siliconized Polyester, low-gloss PVDF
Interior Finish	Polyester, Siliconized Polyester, Plastisol (PVC)
Exterior Texture	Heavy Embossed
Interior Texture	Embossed, smooth
Joint	Green-Lock, offset double tongue-and-groove
Core	Continuously poured-in-place polyisocyanurate insulating foam
R-Value	R-8 per inch of thickness (nominal)



*"Built to Perform, Built to Last, Built Right"*

## TESTING: IMPRESSION INSULATED METAL PANEL

TYPE	TEST PROTOCOL	DESCRIPTION	RESULTS
<b>ENVIRONMENTAL PERFORMANCE</b>	ASTM C518	Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus	K-Factor 0.139 BTU-in/hr-ft <sup>2</sup> -F° at 75° mean K-Factor 0.129 BTU-in/hr-ft <sup>2</sup> -F° at 35° mean
	ASTM E283	Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Differences Across the Specimen	0.0011-cfm/sf at 20-psf
	ASTM E331	Water Penetration of Exterior Windows, Skylights, Doors and Curtain Walls by Uniform Static Air Pressure Difference	Zero penetration at 20-psf
<b>FOAM CORE CHARACTERISTICS</b>	ASTM C273	Shear Properties of Sandwich Core Materials	Shear Strength = 16-psi
	ASTM D1621	Compressive Properties of Rigid Cellular Plastics	Compressive Strength — 18-psi
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	ASTM D1623	Tensile and Tensile Adhesion Properties of Rigid Cellular Plastics	Tensile Strength — 21-psi
	ASTM D6226	Open Cell Content of Rigid Cellular Plastics	Open Cell Content ≥ 90% closed cells
<b>FIRE RESISTANCE</b>	ASTM E84	Surface Burning Characteristics of Building Materials	Flame Spread < 25, Smoke Developed < 450
	NFPA 285	Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components	Passed — see technical bulletin ATB-0007
	FM 4880	Factory Mutual Approval Standard for Class 1 Fire Rating of Insulated Wall or Wall and Roof/Ceiling Panels, Interior Finish Materials or Coatings and Exterior Wall Systems	Class 1 Fire Rated — see technical bulletin ATB-0005
<b>IMPACT RESISTANCE</b>	FM 4881	Factory Mutual Approval Standard for Class 1 Exterior Wall Systems	
	TAS 201	Florida Building Code Impact Test Procedure	Miami Dade County NOA No. 15-0204.02
<b>ENGINEERING PROPERTIES</b>	ASTM E1592	Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference	See Load Tables
	ASTM E72	Strength Tests of Panels for Building Construction	See Load Tables
	FM 4881	Factory Mutual Approval Standard for Class 1 Exterior Wall Systems	Class 1 Approved — see technical bulletins ETB-0008 and ETB-0013
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<b>BOND STRENGTH</b>	Fatigue Endurance	2,000,000 Alternating Cycles of L/180 Deflection	No evidence of facer or liner delamination, fracture of foam core or permanent set
	Freeze/Heat Cycle	Twenty-One (21) Eight-hour Temperature Cycles (-20° F to 180° F)	No evidence of delamination, blistering or permanent set
	Humidity Endurance	1,200 Hours of 93% Humidity at a Temperature of 158° F	No evidence of delamination, blistering or interface corrosion
	Autoclave	Exposure to 218° F and a pressure of 2-psig for 2½ hours	No evidence of facer or liner delamination

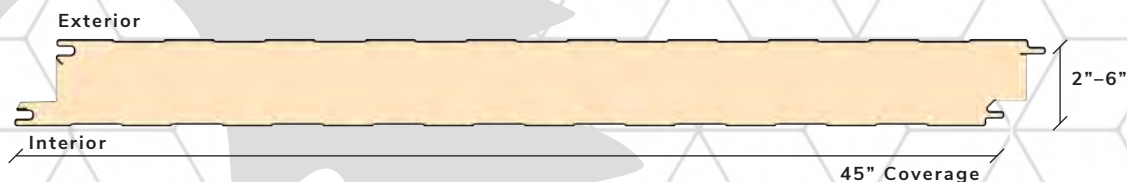
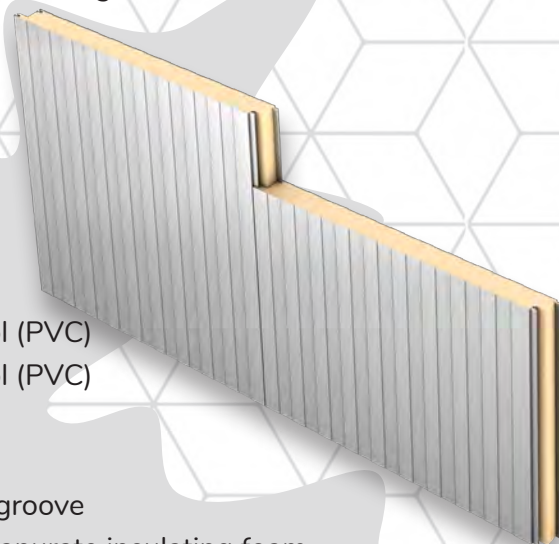






*We specifically designed the MaxLine insulated metal panel as our widest and most economical insulated metal panel offering. It is intended to maximize installation efficiency and maximize cost-effectiveness. The unique Green-Lock side-joint facilitates accurate sealant placement and helps ensure a high-performance vapor seal.*

Panel Use	Partition Wall, Liner Wall, Tee Supported Ceiling
Coverage Width	45-inch
Thickness	3, 4, 5, 6-inch
Length	8'-0" to 53'-0"
Exterior Gauge	26
Interior Gauge	26
Exterior Substrate	Galvalume®
Interior Substrate	Galvalume®
Exterior Finish	Polyester, Siliconized Polyester, Plastisol (PVC)
Interior Finish	Polyester, Siliconized Polyester, Plastisol (PVC)
Exterior Texture	Embossed, Smooth
Interior Texture	Embossed, Smooth
Joint	Green-Lock, offset double tongue-and-groove
Core	Continuously poured-in-place polyisocyanurate insulating foam
R-Value	R-8 per inch of thickness (nominal)



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## TESTING: MAXLINE INSULATED METAL PANEL

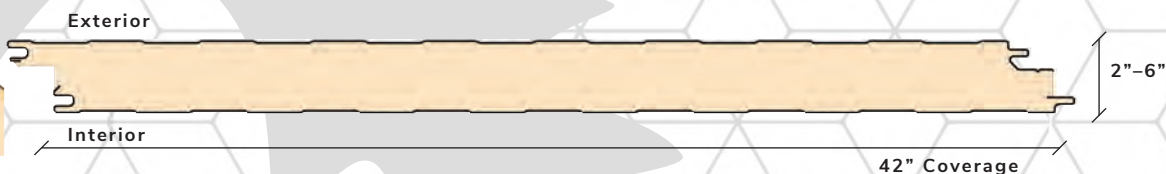
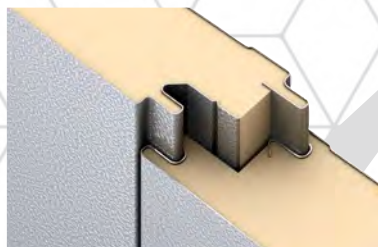
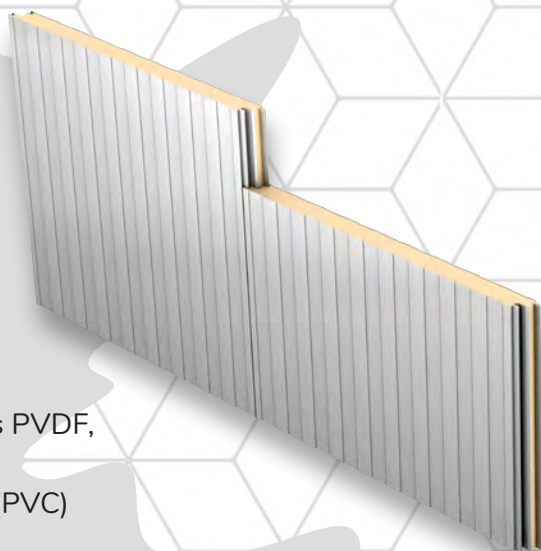
TYPE	TEST PROTOCOL	DESCRIPTION	RESULTS
<b>ENVIRONMENTAL PERFORMANCE</b>	ASTM C518	Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus	K-Factor 0.139 BTU-in/hr-ft <sup>2</sup> -F° at 75° mean K-Factor 0.129 BTU-in/hr-ft <sup>2</sup> -F° at 35° mean
	ASTM E283	Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Differences Across the Specimen	0.0011-cfm/sf at 20-psf
	ASTM E331	Water Penetration of Exterior Windows, Skylights, Doors and Curtain Walls by Uniform Static Air Pressure Difference	Zero penetration at 20-psf
<b>FOAM CORE CHARACTERISTICS</b>	ASTM C273	Shear Properties of Sandwich Core Materials	Shear Strength = 16-psi
	ASTM D1621	Compressive Properties of Rigid Cellular Plastics	Compressive Strength — 18-psi
	ASTM D1622	Apparent Density of Rigid Cellular Plastics	Apparent Density — 2.25-pcf
	ASTM D1623	Tensile and Tensile Adhesion Properties of Rigid Cellular Plastics	Tensile Strength — 21-psi
	ASTM D6226	Open Cell Content of Rigid Cellular Plastics	Open Cell Content ≥ 90% closed cells
<b>FIRE RESISTANCE</b>	ASTM E84	Surface Burning Characteristics of Building Materials	Flame Spread < 25, Smoke Developed < 450
	FM 4880	Factory Mutual Approval Standard for Class 1 Fire Rating of Insulated Wall or Wall and Roof/Ceiling Panels, Interior Finish Materials or Coatings and Exterior Wall Systems	Class 1 Fire Rated — see technical bulletin ATB-0005
<b>IMPACT RESISTANCE</b>	FM 4881	Factory Mutual Approval Standard for Class 1 Exterior Wall Systems	
	TAS 201	Florida Building Code Impact Test Procedure	Miami Dade County NOA No. 15-0204.02
<b>ENGINEERING PROPERTIES</b>	ASTM E72	Strength Tests of Panels for Building Construction	See Load Tables
<b>BOND STRENGTH</b>	Fatigue Endurance	2,000,000 Alternating Cycles of L/180 Deflection	No evidence of facer or liner delamination, fracture of foam core or permanent set
	Freeze/Heat Cycle	Twenty-One (21) Eight-hour Temperature Cycles (–20° F to 180° F)	No evidence of delamination, blistering or permanent set
	Humidity Endurance	1,200 Hours of 93% Humidity at a Temperature of 158° F	No evidence of delamination, blistering or interface corrosion
	Autoclave	Exposure to 218° F and a pressure of 2-psig for 2½ hours	No evidence of facer or liner delamination





*MesaLine is our most widely accepted and used insulated metal panel. Utilized in both cold-storage and commercial/industrial applications, the lined profile provides strength, facilitates foam adhesion and helps minimize natural imperfections in the steel faces. The shallow Mesa rib and the unique Green-Lock side-joint help ensure a high-performance vapor seal.*

Panel Use	Exterior Wall, Partition Wall, Liner Wall, Ceiling
Coverage Width	42-inch
Thickness	2, 2.5, 3, 4, 5, 6-inch
Length	8'-0" to 53'-0"
Exterior Gauge	26, 24, 22
Interior Gauge	26
Exterior Substrate	Galvalume®, G90, Stainless Steel
Interior Substrate	Galvalume®, G90, Stainless Steel
Exterior Finish	Polyester, Siliconized Polyester, low-gloss PVDF, Plastisol (PVC)
Interior Finish	Polyester, Siliconized Polyester, Plastisol (PVC)
Exterior Texture	Embossed, Smooth
Interior Texture	Embossed, Smooth
Joint	<b>Green-Lock, offset double tongue-and-groove</b>
Core	Continuously poured-in-place polyisocyanurate insulating foam
R-Value	R-8 per inch of thickness (nominal)



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## TESTING: MESALINE INSULATED METAL PANEL

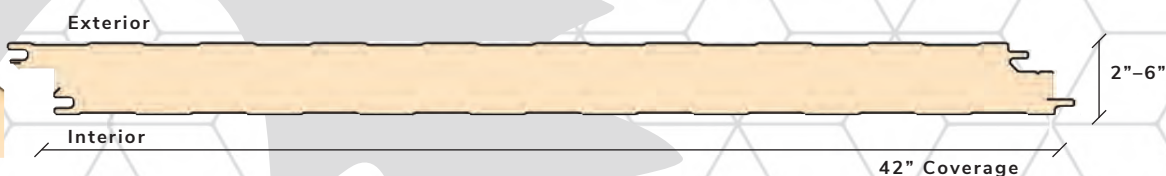
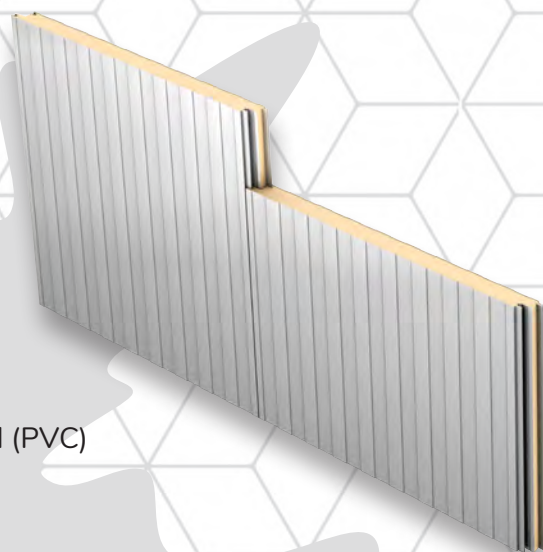
TYPE	TEST PROTOCOL	DESCRIPTION	RESULTS
<b>ENVIRONMENTAL PERFORMANCE</b>	ASTM C518	Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus	K-Factor 0.139 BTU-in/hr-ft <sup>2</sup> -F° at 75° mean K-Factor 0.129 BTU-in/hr-ft <sup>2</sup> -F° at 35° mean
	ASTM E283	Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Differences Across the Specimen	0.0011-cfm/sf at 20-psf
	ASTM E331	Water Penetration of Exterior Windows, Skylights, Doors and Curtain Walls by Uniform Static Air Pressure Difference	Zero penetration at 20-psf
<b>FOAM CORE CHARACTERISTICS</b>	ASTM C273	Shear Properties of Sandwich Core Materials	Shear Strength = 16-psi
	ASTM D1621	Compressive Properties of Rigid Cellular Plastics	Compressive Strength — 18-psi
	ASTM D1622	Apparent Density of Rigid Cellular Plastics	Apparent Density — 2.25-pcf
	ASTM D1623	Tensile and Tensile Adhesion Properties of Rigid Cellular Plastics	Tensile Strength — 21-psi
	ASTM D6226	Open Cell Content of Rigid Cellular Plastics	Open Cell Content ≥ 90% closed cells
<b>FIRE RESISTANCE</b>	ASTM E84	Surface Burning Characteristics of Building Materials	Flame Spread < 25, Smoke Developed < 450
	NFPA 285	Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components	Passed — see technical bulletin ATB-0007
	FM 4880	Factory Mutual Approval Standard for Class 1 Fire Rating of Insulated Wall or Wall and Roof/Ceiling Panels, Interior Finish Materials or Coatings and Exterior Wall Systems	Class 1 Fire Rated — see technical bulletin ATB-0005
<b>IMPACT RESISTANCE</b>	FM 4881	Factory Mutual Approval Standard for Class 1 Exterior Wall Systems	
	TAS 201	Florida Building Code Impact Test Procedure	Miami Dade County NOA No. 15-0204.02
<b>ENGINEERING PROPERTIES</b>	ASTM E1592	Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference	See Load Tables
	ASTM E72	Strength Tests of Panels for Building Construction	See Load Tables
	FM 4881	Factory Mutual Approval Standard for Class 1 Exterior Wall Systems	Class 1 Approved — see technical bulletins ETB-0008 and ETB-0013
<b>APPROVALS</b>	Miami-Dade County	Miami-Dade County Product Control Section — Notice of Acceptance	Miami Dade County NOA No. 15-0204.02
	State of Florida	Florida Product Approval	#16327-R1
	TX Dept. of Insurance	Product Evaluation	Evaluation ID: EC-103
<b>BOND STRENGTH</b>	Fatigue Endurance	2,000,000 Alternating Cycles of L/180 Deflection	No evidence of facer or liner delamination, fracture of foam core or permanent set
	Freeze/Heat Cycle	Twenty-One (21) Eight-hour Temperature Cycles (-20° F to 180° F)	No evidence of delamination, blistering or permanent set
	Humidity Endurance	1,200 Hours of 93% Humidity at a Temperature of 158° F	No evidence of delamination, blistering or interface corrosion
	Autoclave	Exposure to 218° F and a pressure of 2-psig for 2½ hours	No evidence of facer or liner delamination





*HSE stands for Heavy Stucco Embossed. MesaLine HSE was designed to satisfy those who desire something different for their Commercial/Industrial structure. Having all the positive attributes of the tried-and-true MesaLine profile, MesaLine HSE adds a heavy stucco embossment for a more dramatic impact. As with all of our wall profiles, MesaLine HSE has the unique Green-Lock side-joint helping to ensure a high-performance vapor seal.*

Panel Use	Exterior Wall
Coverage Width	42-inch
Thickness	2, 2.5, 3, 4, 5, 6-inch
Length	8'-0" to 53'-0"
Exterior Gauge	26, 24
Interior Gauge	26
Exterior Substrate	Galvalume®, G90
Interior Substrate	Galvalume®, G90, Stainless Steel
Exterior Finish	Siliconized Polyester, low-gloss PVDF
Interior Finish	Polyester, Siliconized Polyester, Plastisol (PVC)
Exterior Texture	Heavy Embossed
Interior Texture	Embossed, Smooth
Joint	Green-Lock, offset double tongue-and-groove
Core	Continuously poured-in-place polyisocyanurate insulating foam
R-Value	R-8 per inch of thickness (nominal)



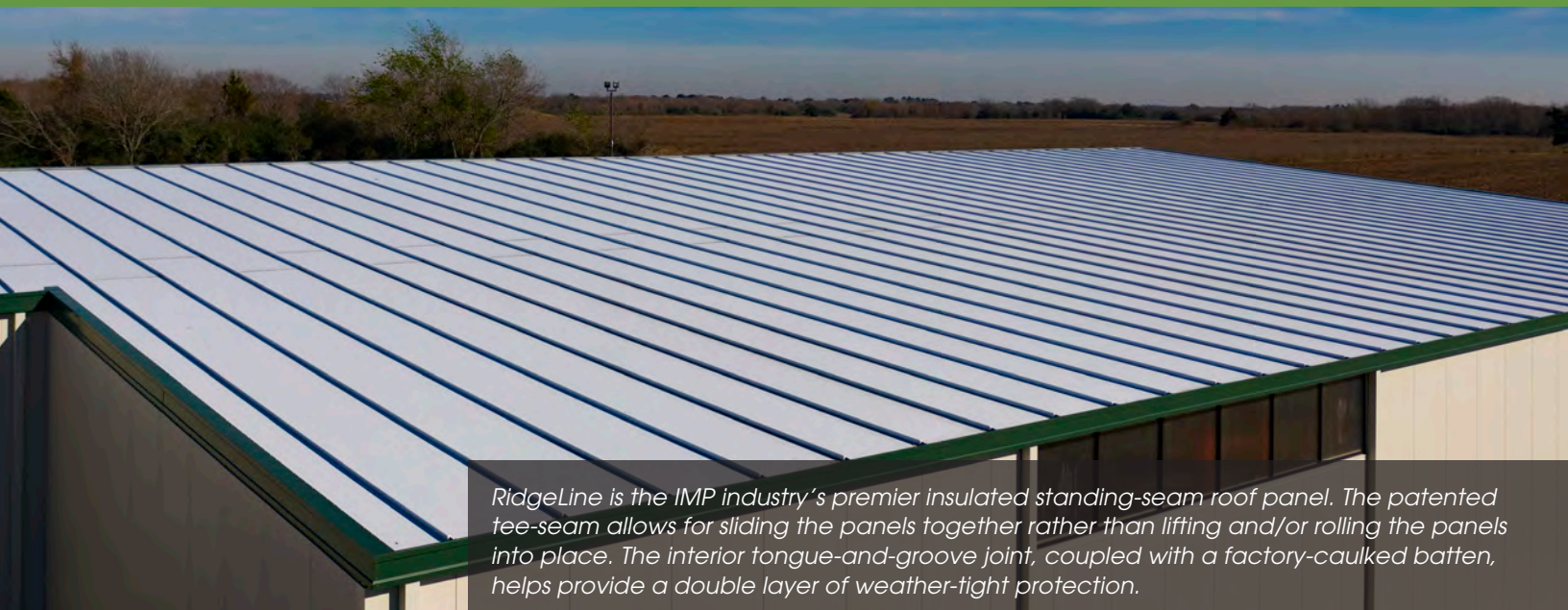
*"Built to Perform, Built to Last, Built Right"*

## TESTING: MESALINE HSE INSULATED METAL PANEL

TYPE	TEST PROTOCOL	DESCRIPTION	RESULTS
<b>ENVIRONMENTAL PERFORMANCE</b>	ASTM C518	Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus	K-Factor 0.139 BTU-in/hr-ft <sup>2</sup> -F° at 75° mean K-Factor 0.129 BTU-in/hr-ft <sup>2</sup> -F° at 35° mean
	ASTM E283	Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Differences Across the Specimen	0.0011-cfm/sf at 20-psf
	ASTM E331	Water Penetration of Exterior Windows, Skylights, Doors and Curtain Walls by Uniform Static Air Pressure Difference	Zero penetration at 20-psf
<b>FOAM CORE CHARACTERISTICS</b>	ASTM C273	Shear Properties of Sandwich Core Materials	Shear Strength = 16-psi
	ASTM D1621	Compressive Properties of Rigid Cellular Plastics	Compressive Strength — 18-psi
	ASTM D1622	Apparent Density of Rigid Cellular Plastics	Apparent Density — 2.25-pcf
	ASTM D1623	Tensile and Tensile Adhesion Properties of Rigid Cellular Plastics	Tensile Strength — 21-psi
	ASTM D6226	Open Cell Content of Rigid Cellular Plastics	Open Cell Content ≥ 90% closed cells
<b>FIRE RESISTANCE</b>	ASTM E84	Surface Burning Characteristics of Building Materials	Flame Spread < 25, Smoke Developed < 450
	NFPA 285	Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components	Passed — see technical bulletin ATB-0007
	FM 4880	Factory Mutual Approval Standard for Class 1 Fire Rating of Insulated Wall or Wall and Roof/Ceiling Panels, Interior Finish Materials or Coatings and Exterior Wall Systems	Class 1 Fire Rated — see technical bulletin ATB-0005
<b>IMPACT RESISTANCE</b>	FM 4881	Factory Mutual Approval Standard for Class 1 Exterior Wall Systems	
	TAS 201	Florida Building Code Impact Test Procedure	Miami Dade County NOA No. 15-0204.02
<b>ENGINEERING PROPERTIES</b>	ASTM E1592	Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference	See Load Tables
	ASTM E72	Strength Tests of Panels for Building Construction	See Load Tables
	FM 4881	Factory Mutual Approval Standard for Class 1 Exterior Wall Systems	Class 1 Approved — see technical bulletins ETB-0008 and ETB-0013
<b>APPROVALS</b>	Miami-Dade County	Miami-Dade County Product Control Section — Notice of Acceptance	Miami Dade County NOA No. 15-0204.02
	State of Florida	Florida Product Approval	#16327-R1
	TX Dept. of Insurance	Product Evaluation	Evaluation ID: EC-103
<b>BOND STRENGTH</b>	Fatigue Endurance	2,000,000 Alternating Cycles of L/180 Deflection	No evidence of facer or liner delamination, fracture of foam core or permanent set
	Freeze/Heat Cycle	Twenty-One (21) Eight-hour Temperature Cycles (-20° F to 180° F)	No evidence of delamination, blistering or permanent set
	Humidity Endurance	1,200 Hours of 93% Humidity at a Temperature of 158° F	No evidence of delamination, blistering or interface corrosion
	Autoclave	Exposure to 218° F and a pressure of 2-psig for 2½ hours	No evidence of facer or liner delamination

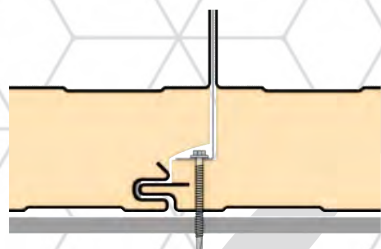
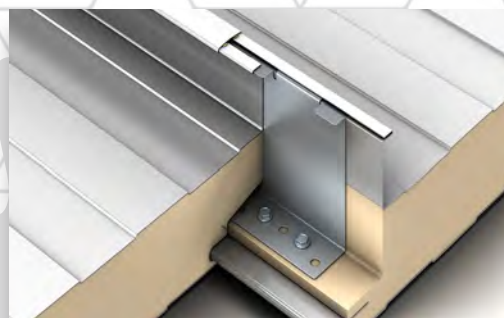






*RidgeLine is the IMP industry's premier insulated standing-seam roof panel. The patented tee-seam allows for sliding the panels together rather than lifting and/or rolling the panels into place. The interior tongue-and-groove joint, coupled with a factory-caulked batten, helps provide a double layer of weather-tight protection.*

Panel Use	Exterior Standing-Seam Roof
Coverage Width	42-inch
Thickness	2.5, 3, 4, 5, 6-inch
Length	12'-0" to 53'-0"
Exterior Gauge	26, 24, 22
Interior Gauge	26
Exterior Substrate	Galvalume®, G90
Interior Substrate	Galvalume®, G90, Stainless Steel
Exterior Finish	Siliconized Polyester, standard gloss PVDF
Interior Finish	Polyester, Siliconized Polyester, Plastisol (PVC)
Exterior Texture	Smooth
Interior Texture	Embossed, Smooth
Exterior Joint	2"-tall, tee-shaped vertical rib with mechanically seamed batten
Interior Joint	Green-Lock, offset tongue-and-groove
Core	Continuously poured-in-place polyisocyanurate insulating foam
R-Value	R-8 per inch of thickness (nominal)
Minimum Slope	½ : 12
U.S. Patent	9,206,606 B2



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## TESTING: RIDGELINE INSULATED METAL PANEL

TYPE	TEST PROTOCOL	DESCRIPTION	RESULTS
<b>ENVIRONMENTAL PERFORMANCE</b>	ASTM C518	Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus	K-Factor 0.139 BTU-in/hr-ft <sup>2</sup> -F° at 75° mean K-Factor 0.129 BTU-in/hr-ft <sup>2</sup> -F° at 35° mean
	ASTM E283	Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Differences Across the Specimen	0.0011-cfm/sf at 20-psf
	ASTM E331	Water Penetration of Exterior Windows, Skylights, Doors and Curtain Walls by Uniform Static Air Pressure Difference	Zero penetration at 20-psf
<b>FOAM CORE CHARACTERISTICS</b>	ASTM C273	Shear Properties of Sandwich Core Materials	Shear Strength = 16-psi
	ASTM D1621	Compressive Properties of Rigid Cellular Plastics	Compressive Strength — 18-psi
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<b>FIRE RESISTANCE</b>	ASTM E84	Surface Burning Characteristics of Building Materials	Flame Spread < 25, Smoke Developed < 450
	FM 4880	Factory Mutual Approval Standard for Class 1 Fire Rating of Insulated Wall or Wall and Roof/Ceiling Panels, Interior Finish Materials or Coatings and Exterior Wall Systems	Class 1 Fire Rated — see technical bulletin ATB-0005
<b>IMPACT RESISTANCE</b>	FM 4771	Factory Mutual Approval Standard for Class 1 Panel Roofs	
	TAS 201	Florida Building Code Impact Test Procedure	Miami Dade County NOA No. 17-0619.08
<b>ENGINEERING PROPERTIES</b>	ASTM E1592	Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference	See Load Tables
	ASTM E72	Strength Tests of Panels for Building Construction	See Load Tables
	FM 4471	Factory Mutual Approval Standard for Class 1 Panel Roofs	Class 1 Approved — see technical bulletin ETB-0015
<b>APPROVALS</b>	Miami-Dade County	Miami-Dade County Product Control Section — Notice of Acceptance	Miami Dade County NOA No. 17-0619.08
	State of Florida	Florida Product Approval	FL21349
	Underwriters Laboratories	Roof Deck Construction — Class 90	TGKX.698
<b>BOND STRENGTH</b>	Fatigue Endurance	2,000,000 Alternating Cycles of L/180 Deflection	No evidence of facer or liner delamination, fracture of foam core or permanent set
	Freeze/Heat Cycle	Twenty-One (21) Eight-hour Temperature Cycles (-20° F to 180° F)	No evidence of delamination, blistering or permanent set
	Humidity Endurance	1,200 Hours of 93% Humidity at a Temperature of 158° F	No evidence of delamination, blistering or interface corrosion
	Autoclave	Exposure to 218° F and a pressure of 2-psig for 2½ hours	No evidence of facer or liner delamination

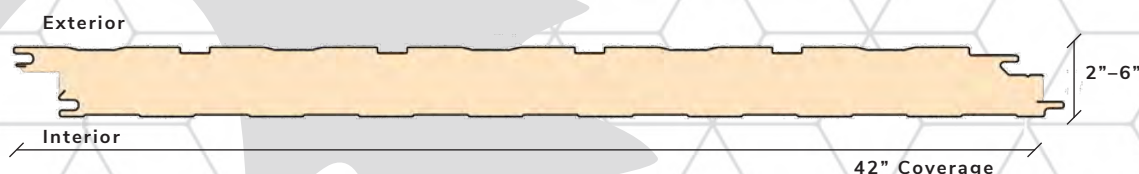
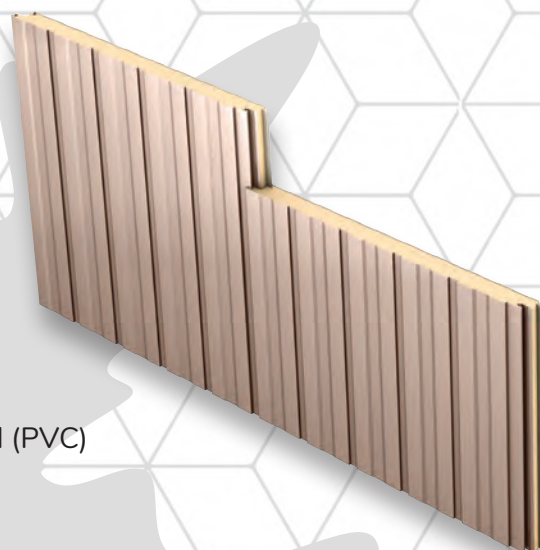






*The ShadowLine insulated metal panel is our most dramatic profiled offering. The panel has five, 1/4" deep flutes along the exterior face. The 1 1/4" reveal disguises the side-joint and yields an aesthetic, monolithic look. The unique Green-Lock side-joint helps ensure a high-performance vapor seal.*

Panel Use	Exterior Wall
Coverage Width	42-inch
Thickness	2, 2.5, 3, 4, 5, 6-inch
Length	8'-0" to 53'-0"
Exterior Gauge	26, 24, 22
Interior Gauge	26
Exterior Substrate	Galvalume®, G90
Interior Substrate	Galvalume®, G90, Stainless Steel
Exterior Finish	Siliconized Polyester, low-gloss PVDF
Interior Finish	Polyester, Siliconized Polyester, Plastisol (PVC)
Exterior Texture	Embossed, Smooth
Interior Texture	Embossed, Smooth
Joint	Green-Lock, offset double tongue-and-groove
Core	Continuously poured-in-place polyisocyanurate insulating foam
R-Value	R-8 per inch of thickness (nominal)



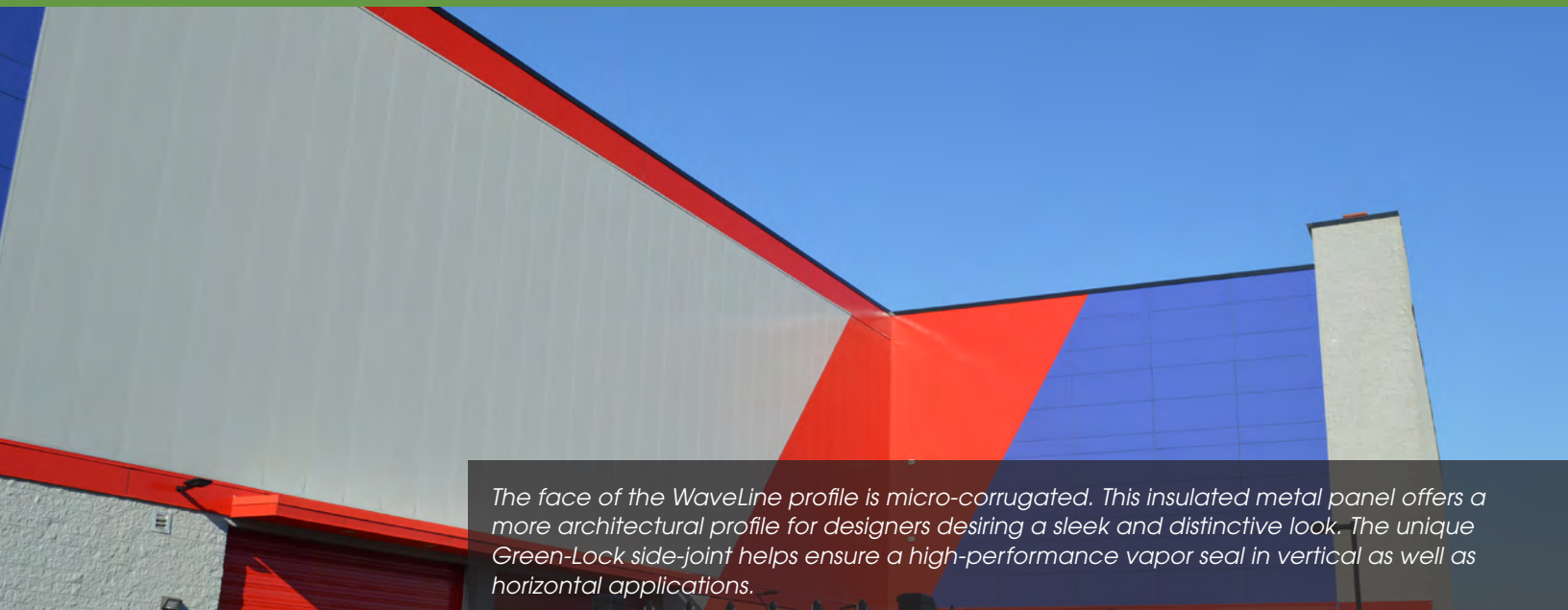
*"Built to Perform, Built to Last, Built Right"*



## TESTING: SHADOWLINE INSULATED METAL PANEL

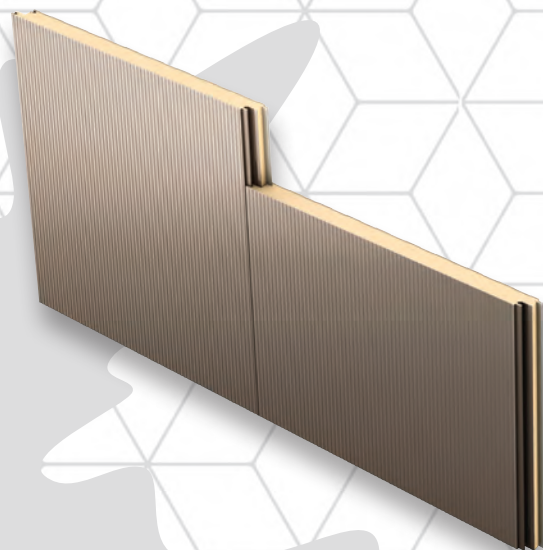
TYPE	TEST PROTOCOL	DESCRIPTION	RESULTS
<b>ENVIRONMENTAL PERFORMANCE</b>	ASTM C518	Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus	K-Factor 0.139 BTU-in/hr-ft <sup>2</sup> -F° at 75° mean K-Factor 0.129 BTU-in/hr-ft <sup>2</sup> -F° at 35° mean
	ASTM E283	Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Differences Across the Specimen	0.0011-cfm/sf at 20-psf
	ASTM E331	Water Penetration of Exterior Windows, Skylights, Doors and Curtain Walls by Uniform Static Air Pressure Difference	Zero penetration at 20-psf
<b>FOAM CORE CHARACTERISTICS</b>	ASTM C273	Shear Properties of Sandwich Core Materials	Shear Strength = 16-psi
	ASTM D1621	Compressive Properties of Rigid Cellular Plastics	Compressive Strength — 18-psi
	ASTM D1622	Apparent Density of Rigid Cellular Plastics	Apparent Density — 2.25-pcf
	ASTM D1623	Tensile and Tensile Adhesion Properties of Rigid Cellular Plastics	Tensile Strength — 21-psi
	ASTM D6226	Open Cell Content of Rigid Cellular Plastics	Open Cell Content ≥ 90% closed cells
<b>FIRE RESISTANCE</b>	ASTM E84	Surface Burning Characteristics of Building Materials	Flame Spread < 25, Smoke Developed < 450
	NFPA 285	Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components	Passed — see technical bulletin ATB-0007
	FM 4880	Factory Mutual Approval Standard for Class 1 Fire Rating of Insulated Wall or Wall and Roof/Ceiling Panels, Interior Finish Materials or Coatings and Exterior Wall Systems	Class 1 Fire Rated — see technical bulletin ATB-0005
<b>IMPACT RESISTANCE</b>	FM 4881	Factory Mutual Approval Standard for Class 1 Exterior Wall Systems	
	TAS 201	Florida Building Code Impact Test Procedure	Miami Dade County NOA No. 15-0204.02
<b>ENGINEERING PROPERTIES</b>	ASTM E1592	Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference	See Load Tables
	ASTM E72	Strength Tests of Panels for Building Construction	See Load Tables
	FM 4881	Factory Mutual Approval Standard for Class 1 Exterior Wall Systems	Class 1 Approved — see technical bulletins ETB-0008 and ETB-0013
<b>APPROVALS</b>	Miami-Dade County	Miami-Dade County Product Control Section — Notice of Acceptance	Miami Dade County NOA No. 15-0204.02
	State of Florida	Florida Product Approval	#16327-R1
	TX Dept. of Insurance	Product Evaluation	Evaluation ID: EC-103
<b>BOND STRENGTH</b>	Fatigue Endurance	2,000,000 Alternating Cycles of L/180 Deflection	No evidence of facer or liner delamination, fracture of foam core or permanent set
	Freeze/Heat Cycle	Twenty-One (21) Eight-hour Temperature Cycles (-20° F to 180° F)	No evidence of delamination, blistering or permanent set
	Humidity Endurance	1,200 Hours of 93% Humidity at a Temperature of 158° F	No evidence of delamination, blistering or interface corrosion
	Autoclave	Exposure to 218° F and a pressure of 2-psig for 2½ hours	No evidence of facer or liner delamination





*The face of the WaveLine profile is micro-corrugated. This insulated metal panel offers a more architectural profile for designers desiring a sleek and distinctive look. The unique Green-Lock side-joint helps ensure a high-performance vapor seal in vertical as well as horizontal applications.*

Panel Use	Exterior Wall
Coverage Width	42-inch
Thickness	2, 2.5, 3, 4-inch
Length	8'-0" to 40'-0"
Exterior Gauge	24, 22
Interior Gauge	26
Exterior Substrate	Galvalume®, G90
Interior Substrate	Galvalume®, G90
Exterior Finish	Siliconized Polyester, low-gloss PVDF
Interior Finish	Polyester, Siliconized Polyester
Exterior Texture	Embossed, Smooth
Interior Texture	Embossed, Smooth
Joint	Green-Lock, offset double tongue-and-groove
Core	Continuously poured-in-place polyisocyanurate insulating foam
R-Value	R-8 per inch of thickness (nominal)



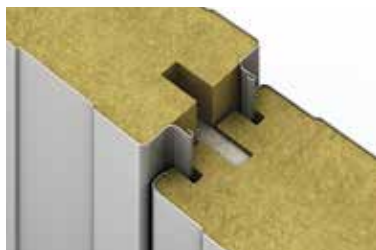
*"Built to Perform, Built to Last, Built Right"*

## TESTING: WAVELINE INSULATED METAL PANEL

TYPE	TEST PROTOCOL	DESCRIPTION	RESULTS
<b>ENVIRONMENTAL PERFORMANCE</b>	ASTM C518	Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus	K-Factor 0.139 BTU-in/hr-ft <sup>2</sup> -F° at 75° mean K-Factor 0.129 BTU-in/hr-ft <sup>2</sup> -F° at 35° mean
	ASTM E283	Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Differences Across the Specimen	0.0011-cfm/sf at 20-psf
	ASTM E331	Water Penetration of Exterior Windows, Skylights, Doors and Curtain Walls by Uniform Static Air Pressure Difference	Zero penetration at 20-psf
<b>FOAM CORE CHARACTERISTICS</b>	ASTM C273	Shear Properties of Sandwich Core Materials	Shear Strength = 16-psi
	ASTM D1621	Compressive Properties of Rigid Cellular Plastics	Compressive Strength — 18-psi
	ASTM D1622	Apparent Density of Rigid Cellular Plastics	Apparent Density — 2.25-pcf
	ASTM D1623	Tensile and Tensile Adhesion Properties of Rigid Cellular Plastics	Tensile Strength — 21-psi
	ASTM D6226	Open Cell Content of Rigid Cellular Plastics	Open Cell Content ≥ 90% closed cells
<b>FIRE RESISTANCE</b>	ASTM E84	Surface Burning Characteristics of Building Materials	Flame Spread < 25, Smoke Developed < 450
	NFPA 285	Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components	Passed — see technical bulletin ATB-0007
	FM 4880	Factory Mutual Approval Standard for Class 1 Fire Rating of Insulated Wall or Wall and Roof/Ceiling Panels, Interior Finish Materials or Coatings and Exterior Wall Systems	Class 1 Fire Rated — see technical bulletin ATB-0005
<b>IMPACT RESISTANCE</b>	FM 4881	Factory Mutual Approval Standard for Class 1 Exterior Wall Systems	
	TAS 201	Florida Building Code Impact Test Procedure	Miami Dade County NOA No. 15-0204.02
<b>ENGINEERING PROPERTIES</b>	ASTM E1592	Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference	See Load Tables
	ASTM E72	Strength Tests of Panels for Building Construction	See Load Tables
	FM 4881	Factory Mutual Approval Standard for Class 1 Exterior Wall Systems	Class 1 Approved — see technical bulletins ETB-0008 and ETB-0013
<b>APPROVALS</b>	Miami-Dade County	Miami-Dade County Product Control Section — Notice of Acceptance	Miami Dade County NOA No. 15-0204.02
	State of Florida	Florida Product Approval	#16327-R1
	TX Dept. of Insurance	Product Evaluation	Evaluation ID: EC-103
<b>BOND STRENGTH</b>	Fatigue Endurance	2,000,000 Alternating Cycles of L/180 Deflection	No evidence of facer or liner delamination, fracture of foam core or permanent set
	Freeze/Heat Cycle	Twenty-One (21) Eight-hour Temperature Cycles (-20° F to 180° F)	No evidence of delamination, blistering or permanent set
	Humidity Endurance	1,200 Hours of 93% Humidity at a Temperature of 158° F	No evidence of delamination, blistering or interface corrosion
	Autoclave	Exposure to 218° F and a pressure of 2-psig for 2½ hours	No evidence of facer or liner delamination







- Exterior Profile: MesaLine, VeeLine or Stucco
- Interior Profile: MesaLine
- Exterior Gauge: 26 (0.020"), 24 (0.023")
- Interior Gauge: 26 (0.020")
- Substrate: Galvalume®, G90 Galvanized (Grade 33) and Stainless Steel (Type 304)
- Exterior Finish: 1.0 mil thick Kynar 500®
- Interior Finish: Siliconized Polyester (USDA white), Plastisol available
- Coverage Width (B): 47.375-inch
- Thickness (A): 4, 5, 6, 8, 10 and 12-inch
- Exterior Texture: Embossed
- Interior Texture: Embossed
- Core: ROXUL® ConRock L structural mineral wool
- K-factor: 0.277 Btu-in/hr-ft²-F° @ 40° F mean temperature (R-3.61)
- Splines: Fiber-reinforced cement board (½" x 2-¾" x 8' long)
- Available Lengths: Minimum 8'-0" to maximum 30'-0"; over 30'-0", please inquire
- Note: All information subject to change without notice. Please reference website for most current data.



PANEL CROSS-SECTION



PANEL SIDELAP

## PERFORMANCE

Panel Thickness (in.)	Fire Rating (hr.)	Weight (psf)	Thermal U-factor (BTU / hr • ft² • F°)	R-factor (hr • ft² • F° / BTU)
4	1	4.6	0.069	14.49
5	2	5.3	0.055	18.18
6	3	6.0	0.046	21.74
8	3	7.5	0.035	28.57
10	3	8.9	0.028	35.71
12	3	10.3	0.023	43.48

Panel Thickness (in.)	Uniform Load (psf)						
	5	10	15	20	25	30	40
4	22.2	15.7	12.8	11.1	9.9	8.2	6.2
5	24.8	17.5	14.2	12.4	10.6	9.1	6.8
6	27.3	19.3	15.7	13.6	12.1	10.1	7.6
8	31.5	22.3	18.2	15.8	14.0	11.6	8.7
10	35.2	24.9	20.3	17.6	15.6	13.0	9.8
12	38.6	27.3	22.3	19.3	17.1	14.2	10.7

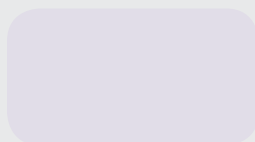


21200 FM 362  
Waller, TX 77484  
844-807-7400

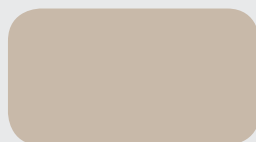
# COLOR CHART

## Standard Siliconized Polyester Roof and Wall Colors

*In-stock, Standard Gloss*



REGAL WHITE II  
SR:0.61 E:0.88 SRI:73



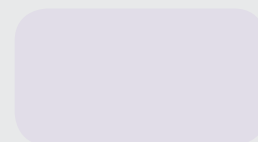
LIGHT STONE  
SR:0.50 E:0.86 SRI:57



GRAY STONE  
SR:0.41 E:0.86 SRI:45

## Standard Polyester

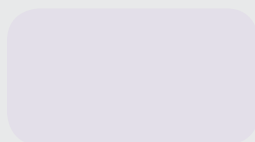
*Interior Only*



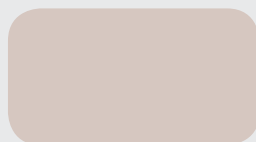
REGAL WHITE I

## Standard Fluorpon PVDF Wall Colors

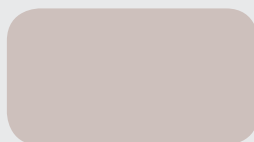
*In-stock, Low Gloss*



REGAL WHITE III  
SR:0.66 E:0.87 SRI:80



ALMOND  
SR:0.62 E:0.87 SRI:74



SANDSTONE  
SR:0.59 E:0.87 SRI:70



ASH GRAY  
SR:0.48 E:0.87 SRI:55



PATINA GREEN  
SR:0.38 E:0.87 SRI:41



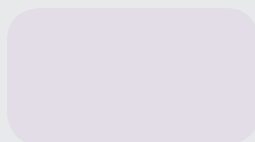
SURREY BEIGE  
SR:0.48 E:0.87 SRI:55



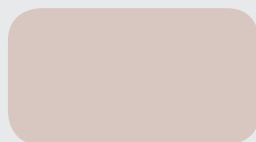
ROMAN BLUE  
SR:0.26 E:0.87 SRI:25

## Standard Fluorpon PVDF Roof Colors

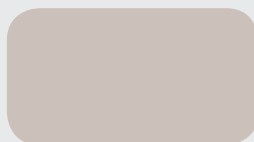
*In-stock, Standard Gloss*



REGAL WHITE III  
SR:0.68 E:0.86 SRI:82



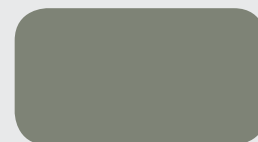
ALMOND  
SR:0.60 E:0.84 SRI:70



SANDSTONE  
SR:0.54 E:0.86 SRI:63



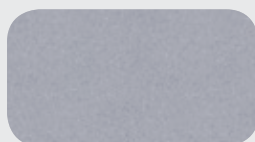
ASH GRAY  
SR:0.39 E:0.84 SRI:41



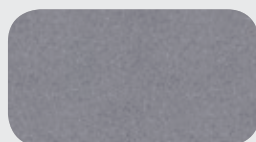
PATINA GREEN  
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## Premium Metallics

*Special Colors, Not in Stock, Additional Costs Will Apply*



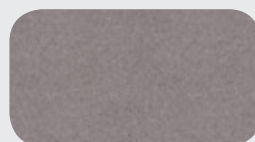
TEXAS SILVER  
SR:0.58 E:0.78 SRI:66



LEADCOAT  
SR:0.37 E:0.82 SRI:38



WEATHERED GALVALUME  
SR:0.30 E:0.79 SRI:27



CHAMPAGNE  
SR:0.38 E:0.80 SRI:38



COPPER PENNY  
SR:0.49 E:0.85 SRI:55

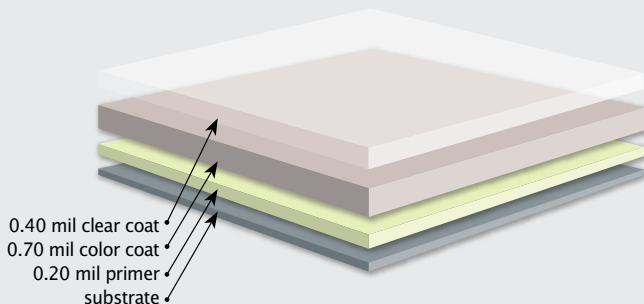
### Notes:

The colors above are representative and may vary slightly from actual colors. Prior to making final selections, please request actual color chip samples. SR stands for Solar Reflectivity and is the ability of a material to reflect solar energy back into the atmosphere. E stands for Emissivity and is the ability of a material to release absorbed energy back into the atmosphere. SRI represents Solar Reflective Index and is a measure of the material's ability to reject solar heat considering reflectance, emissivity and convection. All information is subject to change without notice. Please reference our web site for the most current data.



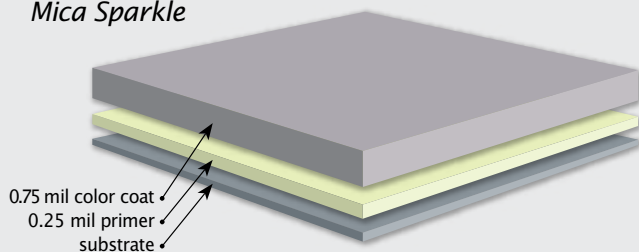
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## Fluropon® Premiere

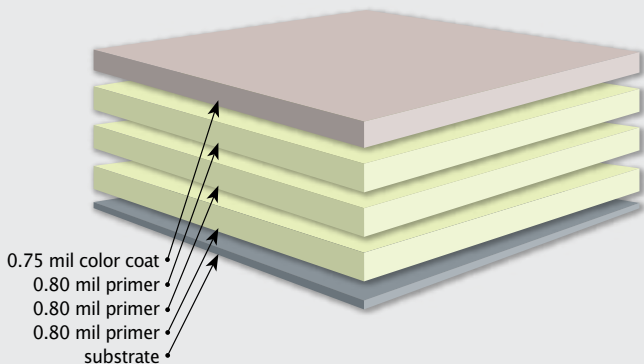


## Fluropon Classic® II

*Mica Sparkle*



## Flurothane® IV

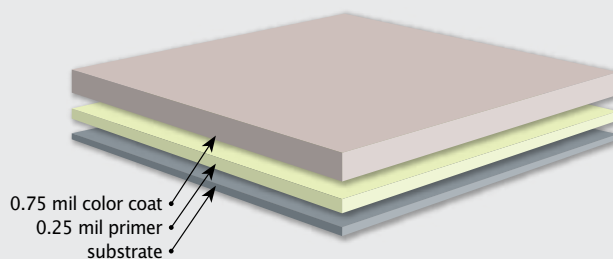


### Notes:

Kynar 500® is a registered trademark of Arkema, Inc.  
Hylar 5000® is a registered trademark of Solvay Solexis.  
All colors are produced by the Valspar Corporation.  
All colors are Energy Star compliant.  
All coatings have a min/max thickness, average thickness is shown.

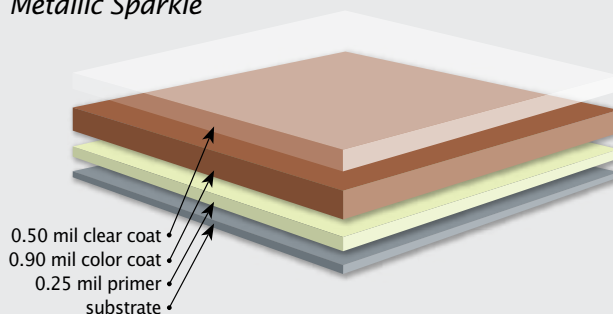
# AVAILABLE COATING PRODUCTS

## Fluropon®, WeatherX® & Dynapon®

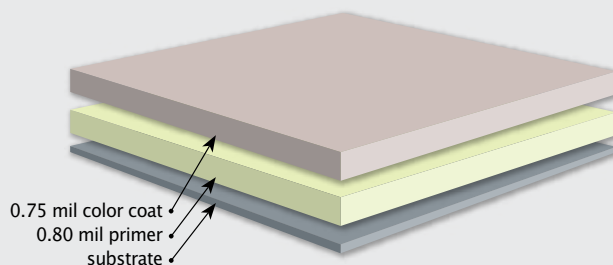


## Fluropon Classic®

*Metallic Sparkle*

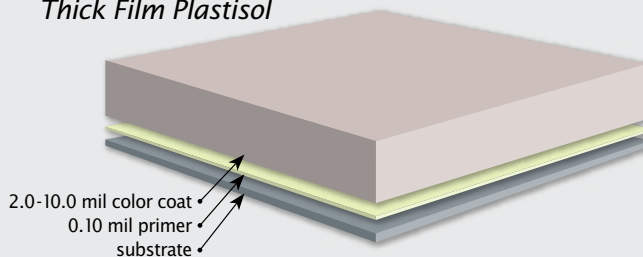


## Flurothane® II



## Valshield®

*Thick Film Plastisol*







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