



PRODUCT SPECIFICATIONS

Architectural Panel

901 Major Bennett Drive
Peterborough, ON
K9J 0C2

Phone: 705-639-2857
Toll Free: 1-888-556-7623
Fax: 705-639-2859
www.havelockmetal.com

Overview: Create a contemporary look with our streamlined Architectural Panel for your cladding project. Customized lengths can be installed vertically or horizontally. The hidden fastener system adds to the modern appeal and sleek design of this profile.

Associated flashings and trims are available in the same finish.

Fastening System: Hidden fastener

Applications: Exterior or interior cladding. Can run horizontally or vertically.

Minimum Slope: n/a

Available Gauges: 22ga, 24ga, 26ga

Panel Length: 30" minimum / 37.5' maximum if delivered. Private carriers and onsite rolling are available for longer lengths.

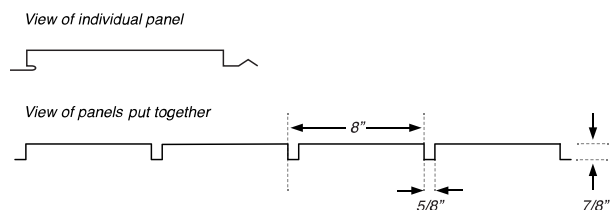
Panel Coverage: Standard widths are 8" (203.2 mm) = 7.375" (187.325 mm) face + 0.625" (15.875 mm) channel/reveal and 12" (304.8 mm) = 11.375" (288.925 mm) face + 0.625" (15.875 mm) channel/reveal). Panels can be manufactured without the channel/reveal resulting in a full 8" or 12" face. Custom widths are available.

Panel Depth: 7/8"

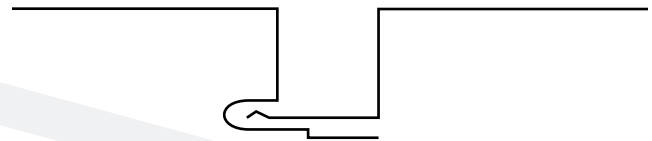
Strengthening Rib Options:

- 1 Minor Rib
- 2 Minor Ribs
- 1 V-Rib
- None

Panel Diagram:



Side Lap View:



Trims to Consider:

- Corner Cap (CC)
- Coupler (COU 1)
- Drip Cap (DC 0.75)
- Drip Cap Commercial (DCC 0.75)
- Downspout - 2 Piece (DS)
- End Cap for Eavestrough 5" (ECET 5)
- End Cap for Eavestrough 6" (ECET 6)
- Eavestrough 5" (ET 5)
- Eavestrough 6" (ET 6)
- Eavestrough Outlet for 5" & 6" (ETO)
- Fascia 6" (FAS 6)
- Fascia 8" (FAS 8)
- Gable Base Trim (GBT 1)
- Inside Corner (IC 1)
- Inside Corner with 'J' (ICJ 1)
- Jamb Flashing (JF 1)
- Jamb Flashing with 'J' (JFJ 1)
- J-Trim (JT 1)
- J-Trim Commercial (JTC 1)
- Outside Corner (OC 1)
- Outside Corner with 'J' (OCJ 1)
- Round Track Cover (RTC)
- Soffit Non-Vented 8" (SNV 8)
- Soffit Non-Vented 12" (SNV 12)
- Square Track Cover (STC)
- Soffit Vented 8" (SV 8)
- Soffit Vented 12" (SV 12)
- T-Trim (TT 1)
- Wall Ceiling Trim (WCT 1)
- Wall Soffit Trim (WST 1)
- Z-Girt (ZGIRT)

Accessories Recommended:

- #10 x 1" Galvanized Pancake Fasteners
- or
- #10 x 1" Washer Head Fasteners

Architectural Panel

Sustainability: The demand for environmentally friendly, or green product groups within the construction industry has allowed steel products to become part of the renewable or reusable requirements for programs such as LEED. The raw material steel in our panels and trims contains a minimum of 30% recycled content, comprised of 24% post-consumer and 6.8% post-industrial and is 100% recyclable.

Warranty: 40-year is most common but varies depending on paint finish. Consult with a Havelock Metal Co. Product Specialist for further information.

Material Disclaimer: Oil-canning or waving, is a characteristic of flat metal panels and is not considered a defect.

Packaging: Orders are shipped in crates. Small orders may be able to be bundled and wrapped.

Installation: Recommended to install onto a flat surface secured to structural framing or a flat wall surface.

Colours: Please contact a Havelock Metal Co. Product Specialist for available colours and gauges. We stock a wide range of material, however additional colours, textures, prints, woodgrains, metallics and gauges may be available with a minimum order quantity.

Please be advised Textures, Woodgrains and Metallic Colours are batch-sensitive. We strongly advise against mixing batches on any project.

Material Specifications:

SMP Pre-Painted Steel

SMP (Silicone Modified Polyester) coating is made of polyester and silicone intermediates. Silicone acts to improve the gloss retention and weather resistance of the coatings. The biggest advantage of SMP paint systems over PVDF (Kynar®) is the price.

**Available in 22ga – 26ga
Gr33/Gr50, G90 & AZ50**

PROPERTY	SMP COATING TEST METHOD	SMP COATING SPECIFICATION
Dry Film Thickness	ASTM D 1400-94	0.75-1.85 Mil
	ASTM D 1005-95	0.90-1.15 Mil
Specular Gloss	ASTM D 523-89 @ 60°	20-35
Humidity Resistance	ASTM D 2247 (100% relative humidity @ 95°)	Passes 1,000 hrs.
Salt Spray	ASTM B 117 (5% salt spray @ 95°)	Passes 1,000 hrs.
Acid Pollutant Resistance	ASTM D 1308-87 (20% sulfuric acid 18 hrs., 10% muriatic acid 15 min.)	No effect
Graffiti Resistance	Cleanability of Defaced Panels (spray paint, pens, etc.)	No effect
Abrasion Resistance	ASTM D 968-93 (to expose 5/32" of substrate)	25-40 Litres
Chalk Resistance	ASTM D 4214 (Florida Exposure @ 45° S)	Vertical: Rating not < 8 @ 10 yrs. Non-Vertical: Rating not < 7 @ 10 yrs.
Colour Retention	ASTM 2244 – Hunter Units (Florida Exposure @ 45° S)	Vertical: Not > 5Δ Hunter Units @ 10 yrs. Non-Vertical: Not > 6Δ Hunter Units @ 10 yrs.



Architectural Panel

Adhesion	ASTM D 3359-95a (Reverse Impacted 1/16" crosshatched)	No adhesion loss
Pencil Hardness	ASTM 3363	H-2H (NCCA II-12)
Reverse Impact	ASTM D 2794-93 (3,000 x inches of metal thickness)	Passes – No pick off with Scotch #610 tape
Flexibility T-Bend	ASTM D 4145-83 (No crack, no pick-off)	2T-4T bends, no loss of adhesion
Film Cure	ASTM D 5402 (≥ 100 double MEK rubs)	Passes
Fire Rating	E 84	Fuel contributed zero, Passes
Weatherometer	D 6695	Passes 3,000 hrs.
UV Exposure	D 4587	Passes 1,000 hrs.
Film Integrity		40 years – limited warranty

Hunter Units: a standard of key colour scales and colour values that are used by industry for colour control. Oil Canning is a characteristic of metal roofing and not a cause for material rejection. Removable protective film is available upon request on all SMP sheet products. This protective film **MUST** be removed immediately after installation. Due to high mechanical properties, Grade 80 material is not suitable for Trims, Architectural Panels, Board and Batten or Legacy Standing Seam Panels.

SMP Pre-Painted TEXTURED Steel

SMP (Silicone Modified Polyester) TEXTURED coating is a low gloss finish made of polyester and silicone intermediates. Silicone acts to improve the gloss retention and weather resistance of the coatings. The biggest advantage of SMP paint systems over PVDF (Kynar®) is the price.

The TEXTURED finish not only delivers an eye-catching, 3D visual effect to the product, but also provides a surface that is more durable and scratch-resistant than standard pre-painted product. This texturized finish also offers stronger colour retention and the best resistance yet to chalking and fading.

A perfect product for both residential and commercial projects, SMP Pre-Painted TEXTURED Steel is ideal for roofing, wall panel and architectural applications where enhanced visual depth and proven performance are desired.

**Available in 24ga and 26ga
Gr33/Gr50, G90 & AZ50**

PROPERTY	SMP COATING TEST METHOD	SMP COATING SPECIFICATION
Dry Film Thickness	ASTM D 4138	Top Coat: 0.7-0.8 Mil / Primer: 0.2-0.3 Mil
Specular Gloss	ASTM D 523 @ 60°	20-80
Humidity Resistance	ASTM D 2247 (100% relative humidity @ 95°)	Passes 1,000 hrs. with no field blisters
Salt Spray	ASTM B 117 (5% salt spray @ 95°)	Passes 1,000 hrs. with creep from scribe < 1/8", none or few #8 blisters



Architectural Panel

Water Immersion	ASTM D 870 (100°F 168 hrs.)	No field blisters with min. colour change
Viscosity	ASTM D 4212 (No. 4 Zahn cup)	25 to 45 seconds
Abrasion Resistance	ASTM D 968-93 (to expose 5/32" of substrate)	35 ± 5 Litres
Chalk Resistance (Southern Florida Exposure)	ASTM D 659	Chalk: Rating not < 8 @ 90° angle and 6 @ non-vertical angle @ 30 yrs.
Colour Retention (Southern Florida Exposure)	ASTM 2244	Colour: Rating not > 5ΔE Hunter Units @ 90° vertical angle and 7ΔE non-vertical @ 30 yrs.
Adhesion	ASTM D 3359	No adhesion loss
Pencil Hardness	ASTM D 3363	F to 2H
Reverse Impact	ASTM D 2794 (3x metal thickness inch-lbs.)	No adhesion loss
Flexibility T-Bend	ASTM D 4145 (No crack, no pick-off)	2T-4T bends, no loss of adhesion
VOC (theoretical)	ASTM D 3960	3.0 to 4.0 lbs. per gallon
Film Integrity		40 years – limited warranty

Hunter Units: a standard of key colour scales and colour values that are used by industry for colour control. Oil Canning is a characteristic of metal roofing and not a cause for material rejection.

PVDF (Kynar®) Pre-Painted Steel

PVDF (polyvinylidene fluoride) paints, also known as Kynar 500®, are known throughout the steel industry for their exceptional gloss, colour retention, and overall performance. Used by some of the most prominent architects throughout the world, PVDF pre-painted steel is utilized in a wide variety of residential, commercial, institutional, and industrial applications.

PVDF pre-painted steel products provide architects, designers, and building owners with a building product solution that is not only sustainable but satisfies both the aesthetics and performance expectations of even the most rigorous projects. Complete with a warranty, these products offer environmental benefits such as recyclability, durability, low maintenance, and potential energy savings when used in a roof application. From roofing to wall panels to soffits and beyond, PVDF steel products are the right fit for your high-end architectural projects. The biggest advantage of Kynar® paint systems over SMP is the exceptional long-term performance.

**Available in 22ga and 24ga
Gr50, G90 & AZ50**

PROPERTY	PVDF COATING TEST METHOD	PVDF COATING SPECIFICATION
Dry Film Thickness	ASTM D 1400-94	0.75-1.85 Mil
	ASTM D 1005-95	0.90-1.15 Mil
Specular Gloss	ASTM D 523-89 @ 60°	20-35



Architectural Panel

Humidity Resistance	ASTM D 2247 (100% relative humidity @ 95°)	Passes 2,000 hrs.
Salt Spray	ASTM B 117 (5% salt spray @ 95°)	Passes 1,000 hrs. with < 5% #6 blisters
Acid Pollutant Resistance	ASTM D 1308-87 (20% sulfuric acid 18 hrs., 10% muriatic acid 15 min.)	No effect
Graffiti Resistance	Cleanability of Defaced Panels (spray paint, pens, etc.)	No effect
Abrasion Resistance	ASTM D 968-93 (to expose 5/32" of substrate)	100 Litres
Chalk Resistance	ASTM D 4214 (Florida Exposure @ 45° S)	Rating not < 8 @ 20 yrs.
Colour Retention	ASTM 2244 – Hunter Units (Florida Exposure @ 45° S)	Rating not > 5Δ Hunter Units @ 20 yrs.
Adhesion	ASTM D 3359-95a (Reverse Impacted 1/16" crosshatched)	No adhesion loss
Pencil Hardness	ASTM D 3363	HB-2H
Reverse Impact	ASTM D 2794-93 (3,000 x inches of metal thickness)	No cracking or loss of adhesion
Flexibility T-Bend	ASTM D 4145-83 (No crack, no pick-off)	0T-3T bends, no loss of adhesion
Mandrel	ASTM D 522-93A (180 bend around 1/8" mandrel)	No cracking

Hunter Units: a standard of key colour scales and colour values that are used by industry for colour control. Oil Canning is a characteristic of metal roofing and not a cause for material rejection. Removable protective film is available upon request. This protective film MUST be removed immediately after installation.

PVDF (Kynar®) Pre-Painted WOODGRAIN Steel

PVDF (polyvinylidene fluoride) paints, also known as Kynar 500®, are known throughout the steel industry for their exceptional gloss, colour retention, and overall performance.

The WOODGRAIN prints are available in a variety of natural colours and patterns offering an authentic woodgrain look providing the aesthetic you need for your project’s interior or exterior applications.

These prints are manufactured using an offset gravure printing process. The offset gravure printing process utilizes cylinders that have digital patterns etched into the surface. The etched cylinder rotates in an ink bath and ink collects within the etched pattern, with the excess ink being scraped from the roll. From there the inked pattern transfers to the steel substrate by passing between the transfer roll and an impression roll.

The WOODGRAIN series has the aesthetics of wood with the benefits only steel can provide.

**Available in 24ga
Gr50, G90 & AZ50**

PROPERTY	PVDF COATING TEST METHOD	PVDF COATING SPECIFICATION
Dry Film Thickness	ASTM D 1400-94	0.75-1.85 Mil
	ASTM D 1005-95	0.90-1.15 Mil



Architectural Panel

Specular Gloss	ASTM D 523-89 @ 60°	10-15
Humidity Resistance	ASTM D 2247 (100% relative humidity @ 95°)	Passes 2,000 hrs. with no field blisters
Salt Spray	ASTM B 117 (5% salt spray @ 95°)	Passes 1,000 hrs. with < 5% #6 blisters
Acid Pollutant Resistance	ASTM D 1308-87 (20% sulfuric acid 18 hrs., 10% muriatic acid 15 min.)	No effect
Graffiti Resistance	ASTM D 6578 (Cleanability of Defaced Panels spray paint, pens, etc.)	No effect
Abrasion Resistance	ASTM D 968-93 (to expose 5/32" of substrate)	100 Litres
Chalk Resistance	ASTM D 4214 (Florida Exposure @ 45° S)	Rating not < 8 @ 20 yrs.
Colour Retention	ASTM 2244 – Hunter Units (Florida Exposure @ 45° S)	Rating not > 5Δ Hunter Units @ 20 yrs.
Adhesion	ASTM D 3359-95a (Reverse Impacted 1/16" crosshatched)	No adhesion loss
Pencil Hardness	ASTM D 3363	HB-H
Reverse Impact	ASTM D 2794-93 (3,000 x inches of metal thickness)	No cracking or loss of adhesion
Flexibility T-Bend	ASTM D 4145-83 (No crack, no pick-off)	2T bends, no loss of adhesion
Mandrel	ASTM D 522-93A (180 bend around 1/8" mandrel)	No cracking
Film Integrity		25 years – limited warranty

Hunter Units: a standard of key colour scales and colour values that are used by industry for colour control. Oil Canning is a characteristic of metal roofing and not a cause for material rejection.

Galvalume® Steel

Galvalume® refers to 55% Aluminum-Zinc Alloy Coated Steel that is cold-rolled carbon steel with a metallic coating composed of Aluminum (55%), Zinc (43.4%) and Silicon (1.6%). The 55% Aluminum-Zinc Alloy Coated Steel is a favourite of architects due to its eye-catching aesthetics, long-lasting performance, design flexibility and the vast number of potential end-use applications. The aluminium-zinc metallic coating forms a permanently bonded, tough, sacrificial coating that protects the steel from corrosion in most end-use applications.

Galvalume substrate is not warranted to be used, in or around animal confinement or agriculture. Galvalume will very rapidly deteriorate when exposed to the corrosive agents of animal confinement.

**Available in 22ga – 26ga
Gr33/Gr50, G90 & AZ50**

