

PRODUCT SPECIFICATIONS

Astonwood® Steel Shingles

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: Combine the warmth and appeal of cedar shingles with the strength and durability of galvanized steel to produce a roofing or siding product that replicates the rich, deep handsplit texture of wood.

Associated flashings and trims are available in the same finish.

Fastening System: Hidden fastener

Applications: Exterior roofing and siding, interior cladding

Minimum Slope: Roof minimum is 3/12 (contact our office for

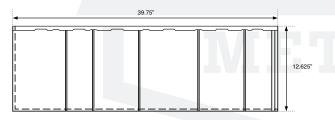
lower slope guidance), Siding n/a

Available Gauges: 28ga

Panel Coverage: 39.75"

Panel Width: 12.625"

Panel Diagram:



Trims to Consider:

- 12" Ridge Cap
- Gable/Rake Flashing
- Hip Cap Tapered

- J-Channel
- Sidewall Flashing
- Snow Guard
- Starter/Eave Flashing
- Valley

Accessories Recommended:

• Clips with 1" Galvanized Pancake Fasteners or 1.5" Nails **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: 50-year limited warranty, 25-year full start period. 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 on skids.

Installation: Recommended to install onto a flat surface secured to structural framing or a flat wall surface. In many cases they can go over existing shingles. See manufacturer for specifics.

Colours: Please contact a Havelock Metal Co. Product Specialist for available colours.

We strongly advise against mixing batches on any project.

Material Specifications:

PVDF (Kynar®) Pre-Painted Steel

PVDF (polyvinylidene fluoride) paints, also known as Kynar 500®, are know 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.

Page 2 of 2

PRODUCT SPECIFICATIONS ASTONWOOD® Steel Shingles

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 highend architectural projects. The biggest advantage of Kynar® paint systems over SMP is the exceptional long-term performance.

Available in 28ga Gr50, G90 & AZ50

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

