

Undeniably, the best in its class.

Most preferred by commercial malls nationwide.

ANTI-LEAK
CAPILLARY
GROOVE

Colorbond[®]

SUPER-V-CRIMP

STRONGEST
double-ribbed profile
80,000 psi tensile strength

WIDEST
effective coverage
of 973mm



IMPORTANT NOTICE

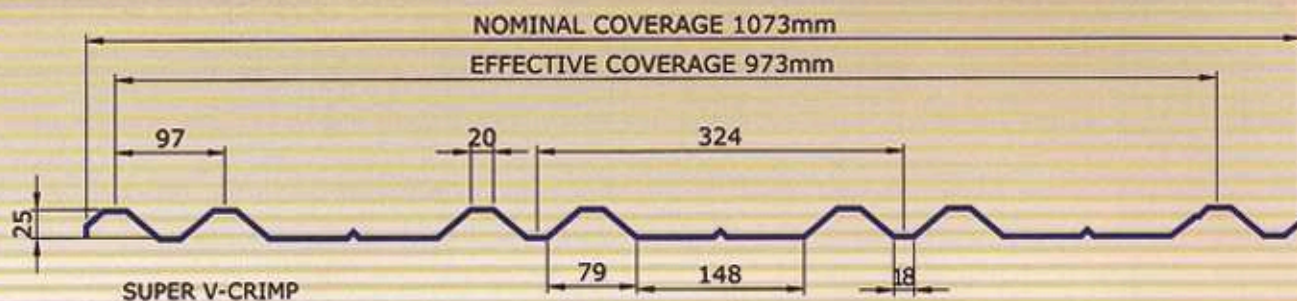
Buyers and end-users of **Super-V-Crimp** which are procured from sources not authorized by **PHILMETAL** are forewarned that they are also criminally and civilly liable for infringement of copyright once the copied **Super-V-Crimp** roofing is utilized, used and displayed for public view.

Section 217 of the Intellectual Property Code penalizes infringement with imprisonment from 1 to 9 years plus a fine of P50,000.00 up to P1,500,000.00.



SUPER-V-CRIMP™

CROSS - SECTION



GENERAL PRODUCT INFORMATION

BASE METAL TYPE : Cold Rolled Steel; 550 MPa (80,000 psi), 275 MPa (40,000 psi)

SUBSTRATE: GALVALUME 55™; Zinc-Aluminum alloy coated steel complying with ASTM A792. Also available in GALVABOND™; Lock Forming Quality (PNS 67: 1986)

PAINT COATING : STANDARD
Double oven-baked epoxy primer and high grade polyester finish.

COATING

Top: Total of 25 microns
Finish Coat: 20 microns
Primer Coat: 5 microns
Bottom: Total of 10 microns
Backing Coat: 5 microns
Primer Coat: 5 microns

OPTIONAL

Premium Fluorocarbon (PVdF) paint finish on top of corrosion-resistant epoxy primer.

SALT SPRAY TEST RATING: Class 1000 hours (passed 1000 hours of continuous exposure as per PNS 201: 1990), the only pre-painted dual-ribbed roofing profile in the market to have passed class 1000 rating.

AVAILABLE THICKNESSES: 0.40 mm to 0.80mm

LENGTH: Available up to 18m factory-cut custom lengths. Longer panels can be supplied provided satisfactory transport and on-site handling can be arranged.

ON-SITE ROLLFORMING CAN BE ARRANGED AT MINIMAL CHARGES

WIDTH : Nominal Width = 1073mm
Effective Coverage = 973mm

RAINFALL CAPACITY: Roofs in single sheet lengths without laps, 5" SUPER-V-CRIMP can drain off a rainfall intensity of 470mm/hr over a total run-off length, including expansion joints of 24,000mm

APPLICATIONS: Roofings and Sidings

STANDARD COLORS: Pacific Blue, Samar Biege, Spanish Red, Tile Red, Laguna White and Baguio Green. Special colors are available upon request.

RECOMMENDED FASTENERS:
Steel- Tek Screw # 12-24 x 55mm with Neoprene Washers
Wood- Tek Screw # 12-11 x 65mm with Neoprene Washer

(THICKER ZINC AND PAINT COATINGS AS WELL AS LONGER SPANS CAN BE ARRANGED)

MAXIMUM SUPPORT SPACING
For Roofing: End Spans 4' - 4" (1300 mm), Internal Spans 6' - 0" (1800 mm)
For Walling: End Spans 6' - 0" (1800 mm), Internal Spans 7' - 0" (2100mm)

SUPER V CRIMP PROPERTIES

Thickness	Area		I _x		S _{TOP}		S _{BOT}		Y _{TOP}		Y _{BOT}	
	mm ²	in ²	mm ⁴	in ⁴	mm ³	in ³	mm ³	in ³	mm	in.	mm	in.
0.40	395.02	0.187	38044	0.028	2261	0.042	4463	0.083	16.65	0.66	8.35	0.33
0.50	505.63	0.239	48696	0.036	2894	0.054	5647	0.106	16.60	0.65	8.40	0.33
0.60	607.21	0.287	58478	0.043	3477	0.065	6707	0.125	16.55	0.65	8.45	0.33
0.80	832.94	0.394	80218	0.059	4769	0.089	8994	0.168	16.45	0.65	8.55	0.34

* Properties are per meter width and per foot width

STRONGEST. WIDEST. Undeniably, the best in its class.

SUPER V CRIMP LOADING TABLES

0.40 mm

SPAN BETWEEN SUPPORTS	mm	900	1050	1200	1350
LOAD	psf	115	84	64	51
DEFLECTION	in.	0.24	0.32	0.42	0.53
L / 240	psf	71	44	30	21
L / 360	psf	48	30	20	14

0.50 mm

SPAN BETWEEN SUPPORTS	mm	900	1050	1200	1350
LOAD	psf	148	108	83	65
DEFLECTION	in.	0.24	0.32	0.42	0.53
L / 240	psf	91	57	37	27
L / 360	psf	61	38	26	18

0.60 mm

SPAN BETWEEN SUPPORTS	mm	900	1050	1200	1350
LOAD	psf	178	131	100	79
DEFLECTION	in.	0.24	0.33	0.43	0.54
L / 240	psf	109	68	46	32
L / 360	psf	73	46	31	22

0.80 mm

SPAN BETWEEN SUPPORTS	mm	900	1050	1200	1350	1500
LOAD	psf	162	119	91	72	58
DEFLECTION	in.	0.16	0.22	0.28	0.36	0.44
L / 240	psf	150	94	63	44	32
L / 360	psf	100	63	42	30	22

DESIGN CRITERIA

1. Steel grade is 80,000 psi / 40,000 psi
2. Section properties and Load Tables were computed in strict compliance with the specifications of AISI.
3. Bending moment formulas used for flexural stress limitations are:

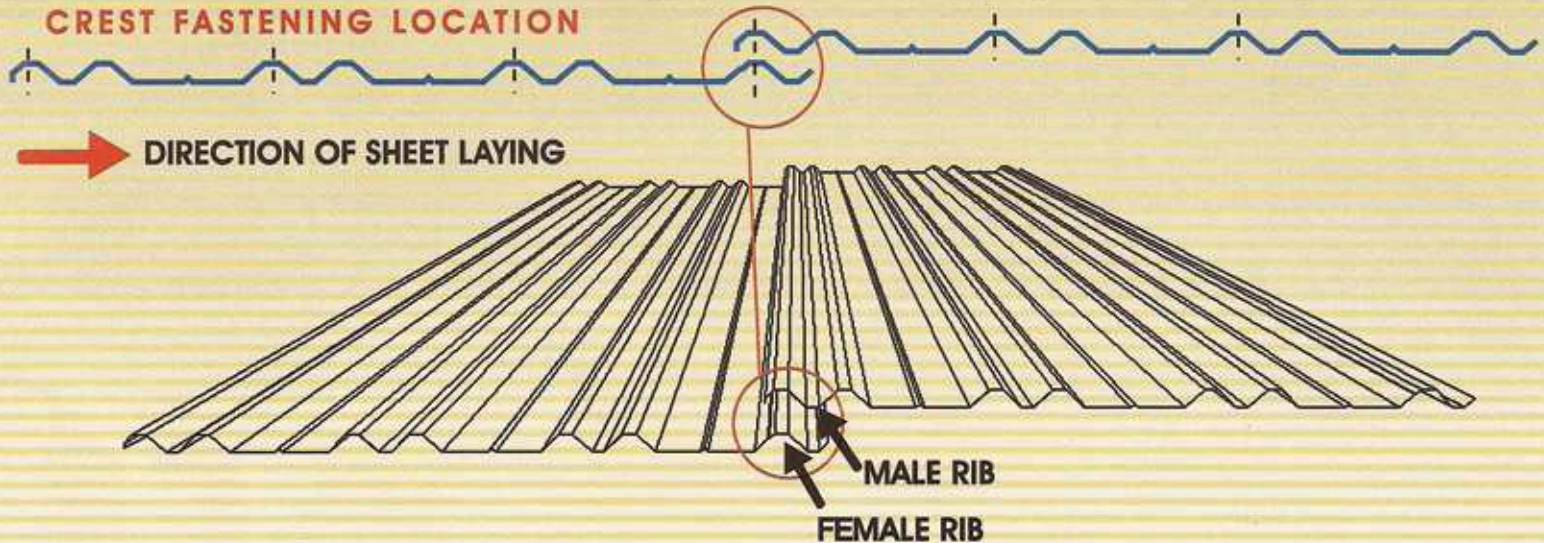
Simple Span or Double-Span	$M = \frac{WL^2}{8}$
Three-Span	$M = \frac{WL^2}{10}$

4. Deflection formulas for deflection limitations are:

One Span	$\frac{5WL^4}{384 EI}$
Two Span	$0.0054 \frac{WL^4}{EI}$
Three Span or more	$0.0069 \frac{WL^4}{EI}$

5. Minimum Yield Point 80,000 psi / 40,000 psi
Allowable Design Stress 36,000 psi / 24,000 psi

INSTALLATION GUIDE



SHEET LAYING PROCEDURE

Lift sheets onto roof right way up with either all male or all female ribs facing the same direction, otherwise, sheets will have to be turned end-for end during fixing. For correct side lapping, the side with the longitudinal anti-capillary flute (female rib) should be covered by the side of a longitudinal flute (male rib).

Fixing of walling applications is similar to roofing.

Where SUPER V CRIMP roof pitches are less than 15°; or where the roof is exposed to extreme weather conditions, sheet flanges should be turned up approximately 80° at the high-end of the roof, i.e., at ridges or fascia, and turned down approximately 15° at the gutter.

A turn-up tool is available for these operations which can be carried out before or after sheets are fixed in position. If turned up after fixing, at least 25 mm clearance is required at the end of the sheets to position the tool.

