METAL DEPOTS

YOUR METAL CONSTRUCTION SOLUTION

PRODUCT INFORMATION 5V CRIMP

ARCHITECT/ENGINEER INFORMATION

1. Minimum recommended slope is 3:12. For slopes less than 3:12, call Metal Depots.

2. Use a properly aligned and uniform substructure to avoid panel distortion. Typical substructure - ⅝" plywood; alternate substructure metal or wood stringers. Spacing of stringers to be determined by load tables. For illustration purposes, details are shown over plywood.

3. 5V Crimp panels are water shedding panels and therefore must be installed on a minimum 3:12 roof slope. The panels must be installed over a completely waterproofed substructure. If the waterproof membrane is mechanically attached with metal fasteners of any type, fasteners should be covered to protect the back side of the roof panels. Any mechanical attachment device that does not lay flat on the deck will telegraph through the panels.

4. Panels are subject to surface distortion due to improperly applied fasteners. Overdriven fasteners will cause stress and induce oil canning across the panel at or near the point of attachment. Oil canning is not a cause for rejection.

5. For proper fastener application, see Product Checklist.

6. For continuous panels over 25', please inquire. Panels may be endlapped.

7. All panel ends must be sealed at eave and valley conditions. Refer to Pages V-11, V-14 and V-15 for end sealant details.

8. Fastener spacings across the width of the panel are shown on Page V-7. For fastener spacings along the length of the panel, use the wind load table on Page V-5 in conjunction with the governing code.

CAUTION

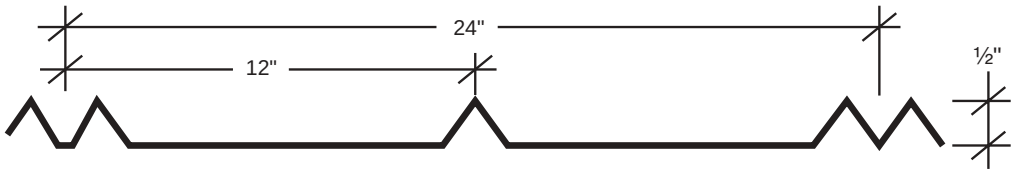
Most of the 5V Crimp load tables indicate panels can obtain a 20# live load on 2'-6" centers when installed over stringers. Please keep in mind these are uniform live loads and will not support a 200 pound man standing on one square foot. From an erectability and industry standard point of view, it is recommended that you should not span the panels more than 2'-6".

METAL DEPOTS

YOUR METAL CONSTRUCTION SOLUTION

5V CRIMP PRODUCT INFORMATION

GENERAL DESCRIPTION



Coverage Width - 24"

Minimum Slope - 3:12

Panel Attachment - Wood screws

Panel Substrate - Galvanized or Galvalume Plus®

Gauges - 29 or 26

Finishes - Smooth or embossed

Coating - Signature® 200 (Siliconized Polyester)

PRODUCT SELECTION CHART

Product	Galvanized	Galvalume Plus ®	Signature® 200
5V Crimp	29	26	26
24" Wide	●	●	●

● - Available in any quantity.

■ - Minimum quantity may be required.

METAL DEPOTS

YOUR METAL CONSTRUCTION SOLUTION

PRODUCT INFORMATION 5V CRIMP

UL 90 Requirements
5V Crimp
Construction # 453

1. Metal Panels (26 gauge) – 24"wide, continuous over two or more spans.

2. Fastener spacing along the length of the panel is 3 feet on center.

3. Fasteners – No.14-10 x 1½" Type A, Hex Head with separate ⅝ in. O.D. steel washer and a bonded neoprene washer. Fastener spacing is as follows: a line of fasteners is to be installed adjacent to the double "V" in the middle of the panel for a total of four fasteners across the width of the panel. Fastener spacing along the length of the panel is 3 feet on center.

FIRE RESISTANCE RATING

The panel qualifies for a Class A fire rating when installed over a non-combustible substrate in compliance with Underwriters Laboratories Standard UL-263. Panels installed over combustible substrate will qualify for a Class C Fire Rating only.

IMPACT RESISTANCE

The 5V panels carry a Class 4 rating under UL-2218 "Test Standard For Impact Resistance".

For UL 90 Rated Roofs, the above requirements must be followed. See UL Roofing Materials and Systems Directory for additional requirements. If you have any questions, call Metal Depots before proceeding.

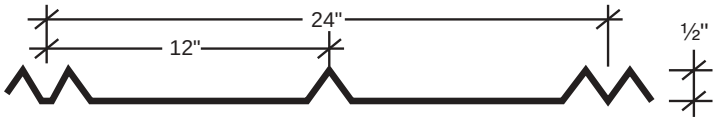
METAL DEPOTS

YOUR METAL CONSTRUCTION SOLUTION

5V CRIMP PRODUCT INFORMATION

5V CRIMP

24" Coverage



SECTION PROPERTIES								
			NEGATIVE BENDING			POSITIVE BENDING		
PANEL GAUGE	Fy (KSI)	WEIGHT (PSF)	Ixe (IN.4/FT.)	Sxe (IN.3/FT.)	Maxo (KIP-IN.)	Ixe (IN.4/FT.)	Sxe (IN.3/FT.)	Maxo (KIP-IN.)
29	80	0.75	0.0014	0.0069	0.2154	0.0028	0.0061	0.2941
26	80	0.95	0.0018	0.0099	0.2849	0.0032	0.0077	0.3695

NOTES:

1. All calculations for the properties of 5V CRIMP panels are calculated in accordance with the 1996 edition of the *COLD-FORMED STEEL Design Manual*, w/ 1999 supplement - published by the American Iron and Steel Institute (AISI).
2. Ixe is for deflection determination.
3. Sxe is for Bending.
4. Maxo is allowable bending moment.
5. All values are for the one foot of panel width.

ALLOWABLE UNIFORM LOADS

IN POUNDS PER SQUARE FOOT

29 Gauge (Fy = 80 KSI)								
SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		1.0	1.5	2.0	2.5	3.0	3.5	4.0
SINGLE	WIND LOAD	191.5	85.1	47.9	30.6	21.3	15.6	12.0
	LIVE LOAD/DEFLECTION	171.9	71.5	30.2	15.4	8.9	5.6	3.8
2-SPAN	WIND LOAD	261.4	116.2	65.4	41.8	29.0	21.3	16.3
	LIVE LOAD/DEFLECTION	143.6	63.8	35.9	23.0	16.0	11.7	9.0
3-SPAN	WIND LOAD	299.2	133.0	74.8	47.9	33.2	24.4	18.7
	LIVE LOAD/DEFLECTION	179.5	79.8	44.9	28.7	16.9	10.6	7.1
4-SPAN	WIND LOAD	305.1	135.6	76.3	48.8	33.9	24.9	19.1
	LIVE LOAD/DEFLECTION	167.6	74.5	41.9	26.8	17.9	11.3	7.6

26 Gauge (Fy = 80 KSI)								
SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		1.0	1.5	2.0	2.5	3.0	3.5	4.0
SINGLE	WIND LOAD	253.2	112.6	63.3	40.5	28.1	20.7	15.8
	LIVE LOAD/DEFLECTION	246.3	83.4	35.2	18.0	10.4	6.6	4.4
2-SPAN	WIND LOAD	328.4	146.0	82.1	52.6	36.5	26.8	20.5
	LIVE LOAD/DEFLECTION	189.9	84.4	47.5	30.4	21.1	15.5	10.6
3-SPAN	WIND LOAD	395.7	175.9	98.9	63.3	44.0	32.3	24.7
	LIVE LOAD/DEFLECTION	237.4	105.5	59.4	34.0	19.7	12.4	8.3
4-SPAN	WIND LOAD	383.3	170.4	95.8	61.3	42.6	31.3	24.0
	LIVE LOAD/DEFLECTION	221.7	98.5	55.4	35.5	20.9	13.1	8.8

NOTES:

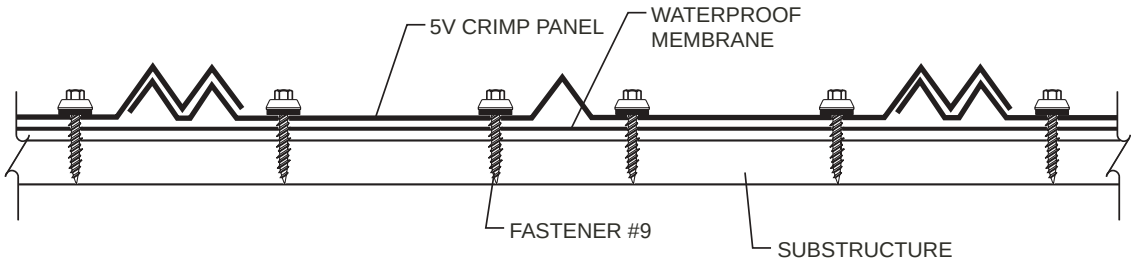
1. Allowable loads are based on uniform span lengths.
2. LIVE LOAD is limited by bending, shear, combined shear & bending, or web crippling.
3. DEFLECTION is limited by a maximum deflection ratio of L/180 of span.
4. 4. NEGATIVE WIND LOAD has been increased by 33.333% and does not consider fastener pullout or pullover.
5. Panel weight has not been deducted from allowable loads.

METAL DEPOTS

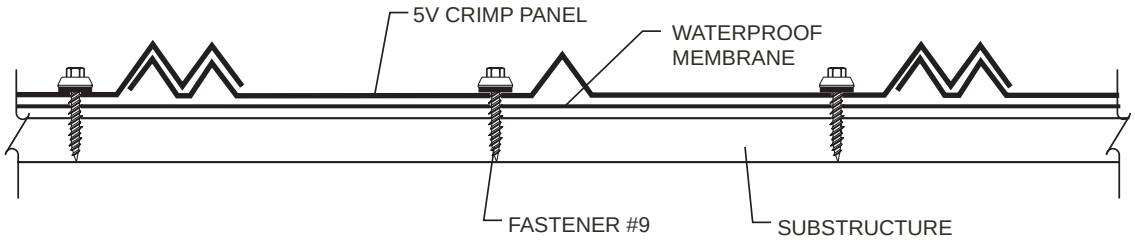
YOUR METAL CONSTRUCTION SOLUTION

PRODUCT INFORMATION 5V CRIMP

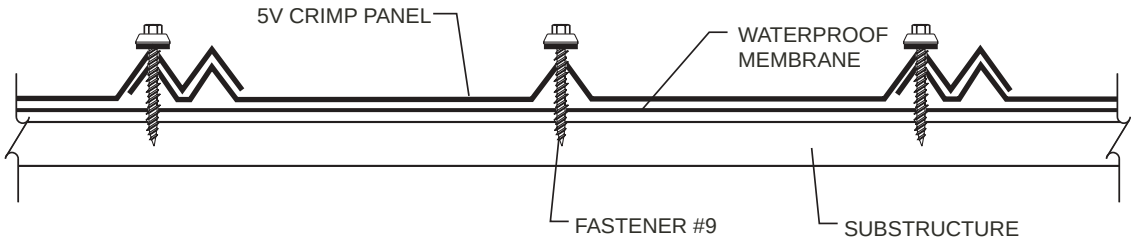
FASTENER PATTERNS



FASTENER PATTERN AT EAVE AND ENDLAP



FASTENER PATTERN AT INTERIOR OF PANEL



ALTERNATE FASTENER PATTERN