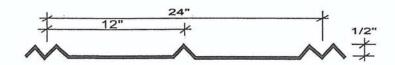
PRODUCT INFORMATION

5V CRIMP

24' COVERAGE



| | | | SECTI | ON PROPE | RTIES | | Trace | | |
|----------------|-------------|-----------------|----------------------|----------------------|---------------------|----------------------------|----------------------|---------------------|--|
| | | | TOP FLA | T IN COMPE | RESSION | BOTTOM FLAT IN COMPRESSION | | | |
| PANEL GAUGE | Fy (KSI) | WEIGHT (PSF) | l X (in.4/ft.) | S e (in.3/ft.) | M a (Kip in.) | I x (in.4/ft.) | S e (in.3/ft.) | M a (Kip in.) | |
| 29 | 80 | .70 | .0027 | .0071 | .255 | .0015 | .0055 | .192 | |
| 26 | 80 | .89 | .0035 | .0091 | .327 | .0021 | .0074 | .255 | |
| 24 | 80 | 1.12 | .0047 | .0120 | .433 | .0031 | .012 | .351 | |

ALLOWABLE UNIFORM LOADS IN POUNDS PER SQUARE FOOT

29 Gauge Live Load Deflection L/240

| SPAN | LOAD | SPAN IN FEET | | | | | | | |
|--------|----------------------|--------------|-----|-----|-----|-----|-----|-----|--|
| TYPE | TYPE | 2.0 | 2.5 | 3.0 | 3.5 | 4.0 | 4.5 | 5.0 | |
| SINGLE | NEGATIVE WIND LOAD | 42 | 27 | 19 | 14 | 10 | 8 | 7 | |
| | LIVE LOAD/DEFELCTION | 23 | 12 | 7 | 4 | 3 | 2 | 2 | |
| 2-SPAN | NEGATIVE WIND LOAD | 57 | 36 | 25 | 19 | 14 | 11 | 9 | |
| | LIVE LOAD/DEFLECTION | 32 | 20 | 14 | 10 | 6 | 5 | 4 | |
| 3-SPAN | NEGATIVE WIND LOAD | 66 | 42 | 29 | 21 | 16 | 13 | .10 | |
| | LIVE LOAD/DEFLECTION | 40 | 23 | 17 | 9 | 6 | 4 | 3 | |

26 Gauge

| SPAN | LOAD | SPAN IN FEET | | | | | | | | |
|--------|----------------------|--------------|-----|-----|-----|-----|-----|-----|--|--|
| TYPE | TYPE | 2.0 | 2.5 | 3.0 | 3.5 | 4.0 | 4.5 | 5.0 | | |
| SINGLE | NEGATIVE WIND LOAD | 55 | 36 | 25 | 18 | 14 | 11 | 9 | | |
| | LIVE LOAD/DEFELCTION | 30 | 15 | 9 | 6 | 4 | 3 | 2 | | |
| 2-SPAN | NEGATIVE WIND LOAD | 73 | 47 | 32 | 24 | 18 | 14 | 12 | | |
| | LIVE LOAD/DEFLECTION | 42 | 27 | 19 | 14 | 9 | 7 | 5 | | |
| 3-SPAN | NEGATIVE WIND LOAD | 87 | 55 | 39 | 28 | 22 | 17 | 14 | | |
| | LIVE LOAD/DEFLECTION | 53 | 29 | 17 | 11 | 8 | 6 | 4 | | |

24 Gauge

| SPAN | LOAD | SPAN IN FEET | | | | | | | | |
|--------|----------------------|--------------|-----|-----|-----|-----|-----|-----|--|--|
| TYPE | TYPE | 2.0 | 2.5 | 3.0 | 3.5 | 4.0 | 4.5 | 5.0 | | |
| SINGLE | NEGATIVE WIND LOAD | 76 | 49 | 34 | 25 | 19 | 15 | 12 | | |
| | LIVE LOAD/DEFELCTION | 40 | 21 | 12 | 8 | 6 | 4 | 3 | | |
| 2-SPAN | NEGATIVE WIND LOAD | 96 | 62 | 43 | 31 | 24 | 19 | 15 | | |
| | LIVE LOAD/DEFLECTION | 58 | 37 | 26 | 19 | 13 | 9 | 7 | | |
| 3-SPAN | NEGATIVE WIND LOAD | 119 | 76 | 53 | 39 | 30 | 24 | 19 | | |
| | LIVE LOAD/DEFLECTION | 73 | 37 | 23 | 15 | 10 | 7 | 6 | | |

Manufacturers Recommended Metal Roofing Fastening Guide

with < 20'-0" mean roof height – 2/12 to 12/12 pitch for 120-150 mph wind speeds

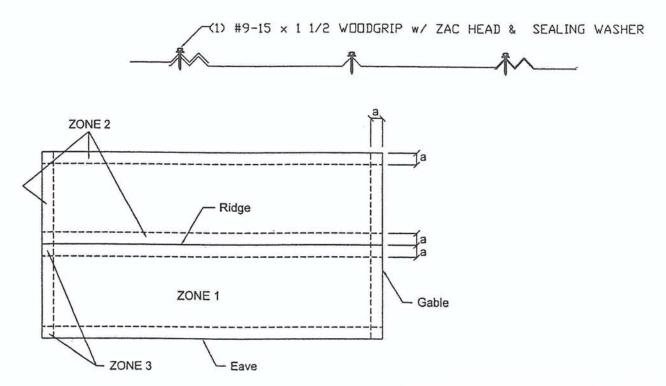
| ZONE | FASTENER | SUBSTRATE | WIND SPEED ZONE | | | | | | |
|--------|--------------|---------------------------|----------------------|----------------------|----------------------|----------------------|--|--|--|
| | | | 120 | 130 | 140 | 150 | | | |
| | | | ON CENTER SPACING | ON CENTER SPACING | ON CENTER SPACING | ON CENTER SPACING | | | |
| ZONE 1 | #9-15-1-1/2" | 15/32" CDX/ 19/32" CDX | 12" | 12" | 12" | 12" | | | |
| ZONE 2 | #9-15-1-1/2" | 15/32" CDX/ 19/32" CDX | 12" | 12" | 12" | 12" | | | |
| ZONE 3 | #9-15-1-1/2" | 15/32" CDX/ 19/32" CDX | 6" | 6" | 6" | 6" | | | |

PANEL DESCRIPTION: 5V-CRIMP, MIN. 26 GA. GRADE 50, 24" COVERAGE, 3/8" TALL.

PANEL FASTENER: (1) #9-15 X 1-1/2" WOODGRIP W/ZAC HEAD AND SEALING WASHER.

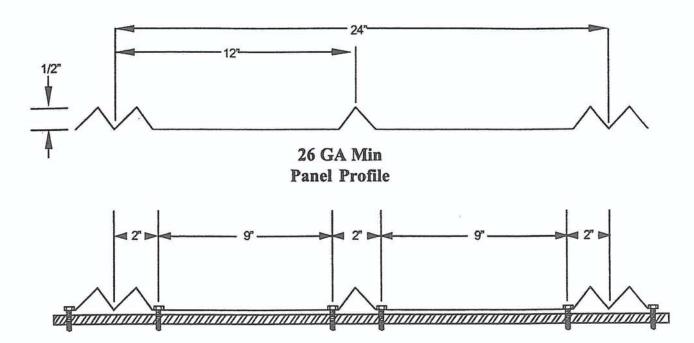
MAXIMUM ALLOWABLE PANEL UPLIFT PRESSURE: 108.5 PSF @ 12" FASTENER SPACING, 156.5 PSF @ 6"
FASTENER SPACING BASED ON TAS 125, UL 580/UL 1897 TESTING.

PLYWOOD DECKING: MIN. 15/32" PLYWOOD. PLYWOOD MUST BE DESIGNED IN ACCORDANCE WITH FBC 2004.

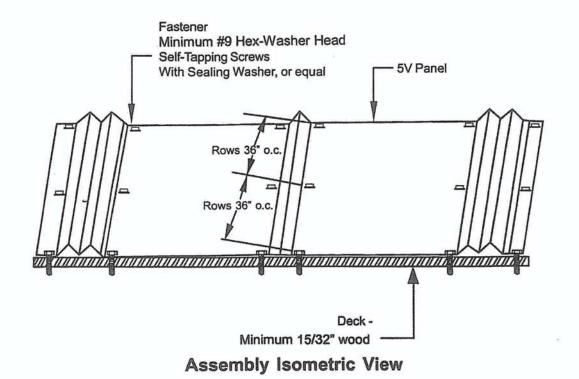


NOTE: Dimension (a) is defined as 10% of the minimum width of the building or 40% of the mean height of the roof, whichever is smaller, however, (a) cannot be less than either 4% of the minimum width of the building or 3 feet.

Installation Method Marlyn Metals, Inc. "5-V Crimp" Panel Attached To Wood Deck



Fastener Spacing Across Width



5V-CRIMP PANEL INSTALLATION SPECIFICATIONS

ROOF APPLICATION: Roof slope must be a minimum of 2:12 pitch to use this product.

Note: In residential applications, Marlyn recommends the use of plywood or OSB deck. In addition, we specify a 30# felt be installed in accordance with your local building code to control condensation. If tin tabs are used to secure the 30# felt provide 15# felt on top of the 30# felt in the same direction as the panels for a separation sheet. (Batten strips on 16" centers attached to a plywood deck are optional). If the building parameters differ from those stated in the fastening schedule, specific fastening calculations must be computed by an engineer.

Wood Deck: Must be minimum 15/32" CDX Plywood (Existing Construction), 19/32" CDX Plywood (New Construction) supported on rafters at a maximum of 24" on-center. Battens: 5V-Crimp metal roofing can be separated from the moisture barrier by minimum nominal 1" x 3" yellow pine battens spaced on maximum 16" centers or according to ASCE calculations where applicable.

CAUTION: Direct contact between pressure treated lumber and metal roofing must be avoided in order to prevent corrosion. The battens must be fastened to the roof deck with minimum #6 screws at 12" on-center or two minimum 8d common or pneumatic nails spaced 8" on-center or one every 4" on-center (or by applicable calculations according to ASCE 7-98 or 1991 NDS Standards.) Battens must be installed to support the entire width and length of ridge, eave, hip, valley, and gable end trims. Battens are optional if re-roofing over shingles. NOTE: Re-roofing over shingles without a batten is allowed providing the roof has been checked by a licensed roofing contractor to ensure levelness and pull-out integrity.

- Start at the gable or rake opposite of the prevailing wind on a gable roof, or start at the end or center of a hip roof for uniform appearance. The leading edge should be the pair of inverted V's with the antisiphon channel.
- It is imperative that the panels be laid in square to Insure proper lapping (many installers pop a chalk Line 26" from the gable edge running from the ridge To the eave to use as a guide.) CAUTION: Do not apply chalk to panels.
- SIDE LAP PROCEDURE: Please see the side lap detail. Pay careful attention that the anti-siphon channel is over lapped by the double inverted V's as shown in the side lap detail.

END LAP PROCEDURE: When 28' (feet) or longer panels are required, Marlyn recommends the customer end lap the panels a minimum of 12" to insure proper drainage. Two strips of butyl sealant tape should be used at the end lap. Fasteners should be on the uphill side of the strips of butyl Sealant tape.

EAVE DETAIL PROCEDURE: Marlyn recommends the use of an eave flashing with a pre-glued closure strip (inside)

- which will go between the underside of the roofing panel and the top side of the flashing to avoid water infiltration, fastened on 6" centers.
- RIDGE DETAIL PROCEDURE: The appropriate ridge cap is placed on top of the pre-glued closure strips (outside) and fastened on 6" centers.
- FASTENERS: Fastener selection is based on the substrate of the specific material chosen for application and the environment in which you are located.

Metal-to-Wood Application: 5V-Crimp panels should be Fastened by a minimum of #9 x 1-1/2" compatible fastener.

Metal-to-Metal Application: 5V-Crimp panels should be fastened with a minimum #12 x 1" hex head Tek screw.

- FLASHINGS: Eave, gable, valley, hip and ridge flashing must be Marlyn material.
- CAULKING: Must be approved by the manufacturer, butyl Sealant supplied in tape or gun-grade form.
- 10. PIPE BOOTS: CAUTION-Must not be lead-type boots. TRIMMING AND CUTTING STEEL PANELS:

Whether cutting with the profile (length wise) or across the profile (width wise), it is best to use an electric nibbler, shears or hand tin snips. It is very important to cut panels one at a time with the finish side of the panel facing down on wood blocks. Care should be taken to ensure that the hot metal particles and filings from cutting and screwing do not become embedded in the panel. NOTE: Nibbler can be found at most power tool distributors. CAUTION: Filings from screw and panel cuttings must be Cleaned off the panels after screws have been applied through the panel to avoid rust marks or "bleeding" on the panels. Failure to comply with the above procedures relieves Marlyn of responsibility for any resulting damage to, or deterioration of the finish and voids any paint or finish warranty.

NOTE: For slopes less than 3:12, a continuous tape seal is required at all side laps with ¼ - 14 x 7/8" lap tek screws at 24" o.c. to secure panel side laps together.