



<b>Product</b>	<b>5V</b>
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<b>FL No.</b>	<b>9610.1</b>
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<b>Material</b>	<b>Finish</b>
	Galvalume Painted

<b>Gauge (minimum)</b>	<b>26</b>
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<b>Deck Description</b>	<b>Plywood</b>
	New construction: 19/32" Existing construction: 15/32"

<b>Deck Attachment</b>	<b>Spacing</b>
	Nails: 8d - 2" ring shank nails: 6" O.C. Screws: #8 - 2" wood screws: 6" O.C.

<b>Underlayment</b>	<b>30# Felt</b>
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<b>Roof Slope Ranges</b>	<b>Sealant</b>
	Slope: 1/2 /12 to less than 3/12: Side Lap Slope: 3/12 and greater: None

<b>Panel Fasteners</b>	<b>Spacing</b>
	SDS Screws: #9-15 x 2" long: See Tables

<b>Fastener Spacing (along panel length, inches)</b>					
Wind Z Speed mph	one No. Roof Hip Location	Roof Slope			
		Gable Roof			Roof
		.5 to <1.5/12	1.5 to <6/12	6 to 12/12	1.5 to 5.5/12
100	1 Field	24	24	24	24
	2 Edge	24	24	24	24
	3 Corner	24	24	24	24
110	1 Field	24	24	24	24
	2 Edge	24	24	24	24
	3 Corner	24	24	24	24
120	1 Field	24	24	24	24
	2 Edge	24	24	24	24
	3 Corner	24	24	24	24
130	1 Field	24	24	24	24
	2 Edge	24	24	24	24
	3 Corner	12	12	24	24
140	1 Field	24	24	24	24
	2 Edge	24	24	24	24
	3 Corner	N/A	12	24	24

<b>Fastener Spacing* (across panel width)</b>	<b>Location</b>
	Panel Ends (eave, valley, hip and ridge): 6" o.c. Ribs and Flat
Place fasteners 2" from panel end	
Between Panel Ends (Intermediates): 12" o.c. Ribs Only	

\*Fastener spacing based on testing

**Notes:**

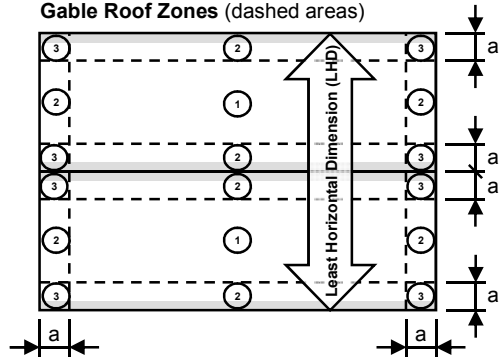
1. Read all Notes before purchasing material and check compliance of the product with local building code requirements.
2. The Fastener Spacing Table below is based on a mean roof height of up to 25' for Exposure C. For roof eave heights over 25' and other exposures contact Union Corrugating Company.
3. Installation must be in complete compliance with the materials and related specifications listed on this page, 5V Installation drawings, and the Florida Building Code RAS No. 133.
4. See 5V installation drawings for additional approved trim details and applications.
5. Refer to Florida Building Code RAS No. 133 "Standard Procedures for Installation of Metal Roof Systems".
6. For applications not in compliance with this product approval as listed contact Union Corrugating Company for other options.
7. This application and installation method is for use in HVHZ areas governed by Miami Dade Product Approval. See the Union Corrugating Miami Dade Approved Product use guide for these areas.
8. If the roof has both Gables and Hips use the Gable Roof Fastener Spacing Table.
9. For Hip Roof slopes greater than 5.5/12 use Gable Roof Table, 6 to 12/12 column.
10. Guide is subject to change without notice.

**Calculate Zone width (dimension "a"):**

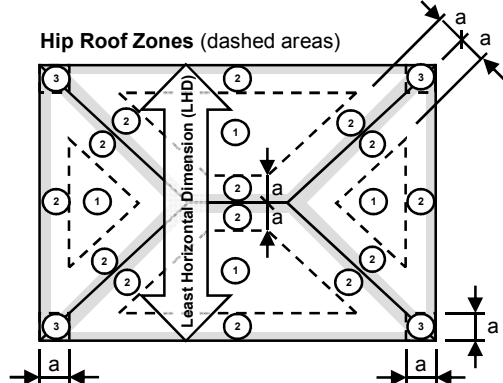
$a = \text{LHD} \times 10\%$

Note: "a" must be a minimum of 3'.

**Gable Roof Zones (dashed areas)**



**Hip Roof Zones (dashed areas)**



Gray highlighted lines indicate the location of panel end fastening at the eave, hip, valley (not shown), and ridge.



**BUILDING CODE COMPLIANCE OFFICE (BCCO)  
PRODUCT CONTROL DIVISION**

**MIAMI-DADE COUNTY, FLORIDA  
METRO-DADE FLAGLER BUILDING  
140 WEST FLAGLER STREET, SUITE 1603  
MIAMI, FLORIDA 33130-1563  
(305) 375-2901 FAX (305) 375-2908**

**NOTICE OF ACCEPTANCE (NOA)**

**Union Corrugating Company  
P.O. Box 229  
Fayetteville, NC 28302**

**SCOPE:**

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

**DESCRIPTION: 5V Metal Roof Panel**

**LABELING:** Each panel shall bear a permanent label with the manufacturer's name or logo, city, state and the following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA # 06-1002.13 and consists of pages 1 through 7.  
The submitted documentation was reviewed by Alex Tigera.



**NOA No.: 07-1114.01  
Expiration Date: 05/17/12  
Approval Date: 01/03/08  
Page 1 of 7**

**ROOFING ASSEMBLY APPROVAL:**

**Category:** Roofing  
**Sub-Category:** Non-Structural Metal Roofing  
**Material:** Steel  
**Deck Type:** Wood  
**Maximum Design Pressure** -120.9 psf (See General Limitation #1)  
**Fire Classification Pressure** See General Limitation #2

**TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:**

<u>Product</u>	<u>Dimensions</u>	<u>Test Specifications</u>	<u>Product Description</u>
5V Metal Roof Panel	Length: varies Width: 26" (Coverage width : 24") Height: ½" Min. Thickness 0.019"	TAS 125	Metal Roof panel coated with various approved coatings of Ceram-A-Star® 900.

**TRADE NAMES OF PRODUCTS MANUFACTURED BY OTHERS:**

<u>Product</u>	<u>Dimensions</u>	<u>Product Description</u>	<u>Manufacturer</u>
Fasteners (Panel)	#9	Corrosion resistant, sharp point hex-head screws with neoprene sealing washer.	Generic (with current NOA)

**EVIDENCE SUBMITTED:**

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Test Name/Report</u>	<u>Date</u>
Farrabaugh Engineering and Testing, Inc.	T164-06	TAS-125	06/08/06
Farrabaugh Engineering and Testing, Inc.	T164-06	TAS-125	10/15/07
Akzo Nobel Coatings, Inc.	Lab Test Certification	ASTM B-117 ASTM G-23	
PRI Asphalt Technologies, Inc.	HTL-001-01-01	PA 100	02/18/02
Hurricane Test Laboratory, Inc.	0293-0202-06	TAS 125	06/05/06
Hurricane Test Laboratory, Inc.	0293-0609-05	TAS 125	06/22/05



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**SYSTEM DESCRIPTION**

**SYSTEM A-1S:** "5V" 26 Ga. Metal Panel  
**Deck Type:** Wood, Non-insulated  
**Deck Description:** 1<sup>9</sup>/<sub>32</sub>" or greater plywood or wood plank.  
**Slope Range:** 2": 12" or greater  
**Maximum Uplift Pressure:** See Table A Below. (See General Limitation #1)

**Deck Attachment:** In accordance with applicable Building Code, but in no case shall it be less than 8d ring shank nails spaced 6" o.c. around the perimeter and 6" o.c. in the field. In reroofing, where the deck is less than 1<sup>9</sup>/<sub>32</sub>" thick (Minimum 1<sup>5</sup>/<sub>32</sub>") The above attachment method must be in addition to existing attachment.

**Underlayment:** Minimum underlayment shall be a ASTM D 226 Type II installed with a minimum 4" side-laps and 6" end-laps. Underlayment shall be fastened with corrosion resistant tin-caps and 1<sup>1</sup>/<sub>4</sub>" annular ring-shank nails, spaced 6" o.c. at all laps and two staggered rows 12" o.c. in the field of the roll.

**Valleys:** Valley construction shall be in compliance with Roofing Application Standard RAS 133 and with Union Corrugating Company's current published installation instructions.

**Fire Barrier Board:** For class A or B fire rating, install minimum 1/4" thick Georgia Pacific "Dens Deck" (with current NOA) or minimum 4mm thick of Tritex, RockRoof (with current NOA) or 5/8" water resistant type X gypsum sheathing with treated core and facer, or Elk Versashield (with current NOA).

**Metal Panels and Accessories:** Install the "5V Steel Roofing Panel" and accessories in compliance with Union Corrugating Company's current published installation instructions and details. Flashing, penetrations, valley construction and other details shall be constructed in compliance with the minimum requirements provided in Roofing Application Standards RAS 133.

5V Roofing Panels shall be fastened with a minimum of #9 Hex Head Wood corrosion resistant fasteners with sealing washer. Fasteners shall of sufficient length to penetrate through the sheathing a minimum of 3/16". Fasteners shall be place in accordance with fastener detail herein as follows:

1. All fasteners are to be located on top of the ribs as shown in **Detail A** herein.
2. All fasteners at center rib, underlap rib, and overlap rib shall be spaced at a maximum distance listed in **Table A** below parallel to the roof slope. See **Detail A** herein.

<b>TABLE A</b>		
<b>MAXIMUM DESIGN PRESSURES</b>		
<b>Roof Areas</b>	<b>Field</b>	<b>Perimeter and Corner<sup>1</sup></b>
<b>Maximum Design Pressures</b>	<b>-85.825 psf</b>	<b>-113.1 psf</b>
<b>Maximum Fastener Spacing</b>	<b>24" o.c.</b>	<b>12" o.c.</b>

1. Extrapolation shall not be allowed



<b>SYSTEM A-2S:</b>	“5V” 26 Ga. Metal Panel
<b>Deck Type:</b>	Wood, Non-insulated
<b>Deck Description:</b>	<sup>19</sup> / <sub>32</sub> " or greater plywood or wood plank.
<b>Slope Range:</b>	2": 12" or greater
<b>Maximum Uplift Pressure:</b>	The maximum allowable design pressure for the 24" wide panel shall be <b>-120.9 psf. (See General Limitation #1)</b>

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**Deck Attachment:** In accordance with applicable Building Code, but in no case shall it be less than #8 x 2" wood screws spaced 6" o.c around the perimeter and 12" o.c. in the field.. In reroofing, where the deck is less than <sup>19</sup>/<sub>32</sub>" thick (Minimum <sup>15</sup>/<sub>32</sub>"") The above attachment method must be in addition to existing attachment.

**Underlayment:** Minimum underlayment shall be a ASTM D 226 Type II installed with a minimum 4" side-laps and 6" end-laps. Underlayment shall be fastened with corrosion resistant tin-caps and 1¼" annular ring-shank nails, spaced 6" o.c. at all laps and two staggered rows 12" o.c. in the field of the roll.

**Valleys:** Valley construction shall be in compliance with Roofing Application Standard RAS 133 and with Union Corrugating Company's current published installation instructions.

**Fire Barrier Board:** For class A or B fire rating, install minimum ¼" thick Georgia Pacific "Dens Deck" (with current NOA) or minimum 4mm thick of Tritex, RockRoof (with current NOA) or <sup>5</sup>/<sub>8</sub>" water resistant type X gypsum sheathing with treated core and facer or Elk Versashield (with current NOA).

**Metal Panels and Accessories:** Install the "5V Steel Roofing Panel" and accessories in compliance with Union Corrugating Company's current published installation instructions and details. Flashing, penetrations, valley construction and other details shall be constructed in compliance with the minimum requirements provided in Roofing Application Standards RAS 133.

5V Roofing Panels shall be fastened with a minimum of #9 Hex Head Wood corrosion resistant fasteners with sealing washer. Fasteners shall of sufficient length to penetrate through the sheathing a minimum of <sup>3</sup>/<sub>16</sub>". Fasteners shall be place in accordance with fastener detail herein as follows:

3. Panel side ribs shall be fastened along side of the panel inside ribs, one fastener at the overlap and one fastener at the underlap. Center panel rib shall be fastened with one fastener at the overlap side of the panel.
4. All fasteners at center rib, underlap rib, and overlap rib shall be spaced at a maximum of 24 inches o.c. parallel to the roof slope. See **Detail B** herein.

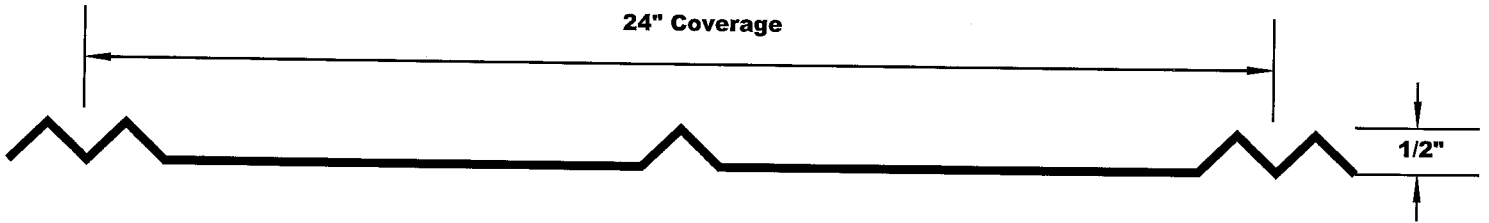


## **GENERAL LIMITATIONS:**

1. The maximum designed pressure listed herein shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners).
2. Fire classification is not part of this acceptance; refer to a current Approved Roofing Materials Directory for fire ratings of this product.
3. All panels shall be permanently labeled with the manufacturer's name or logo, city, state and the following statement: "Miami Dade County Product Control Approved".

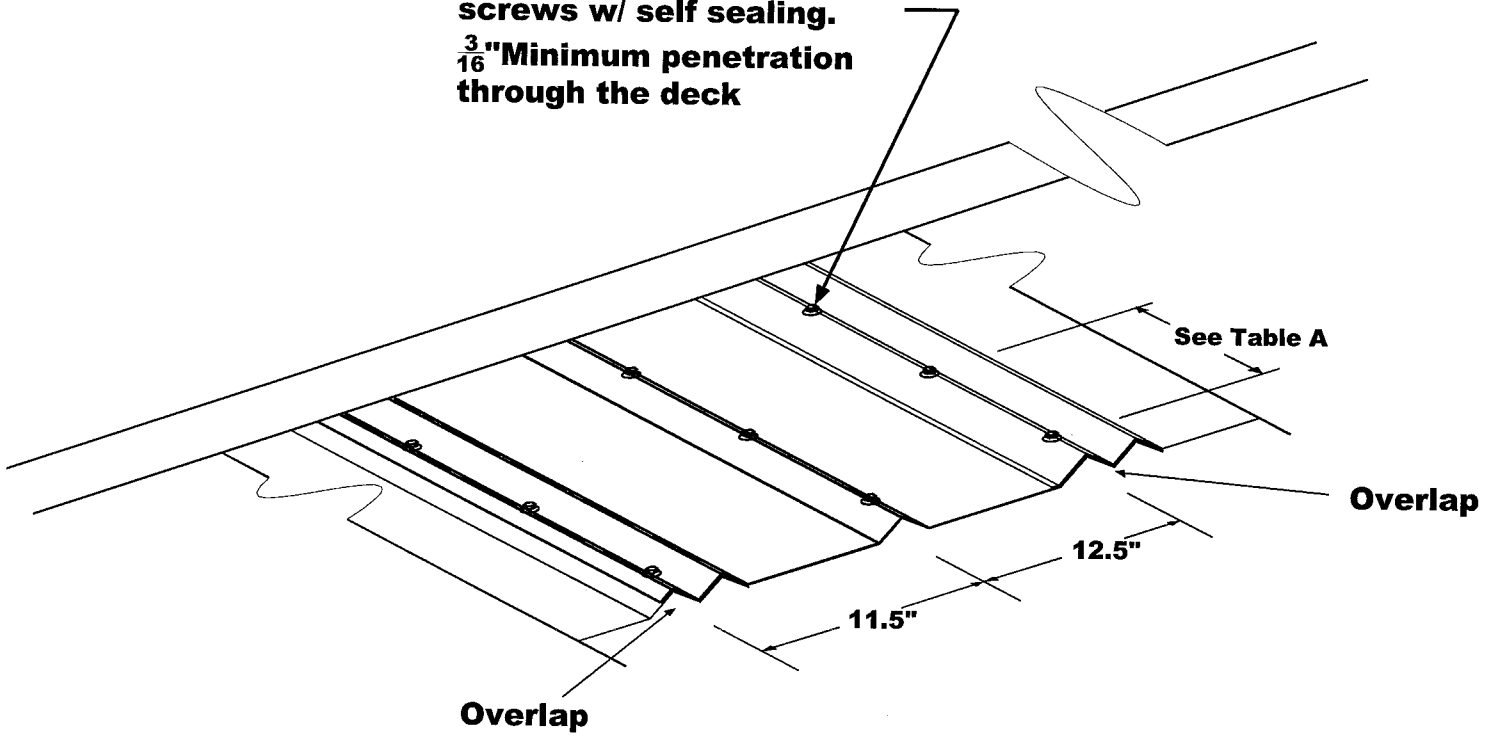


DETAIL DRAWINGS



DETAIL A

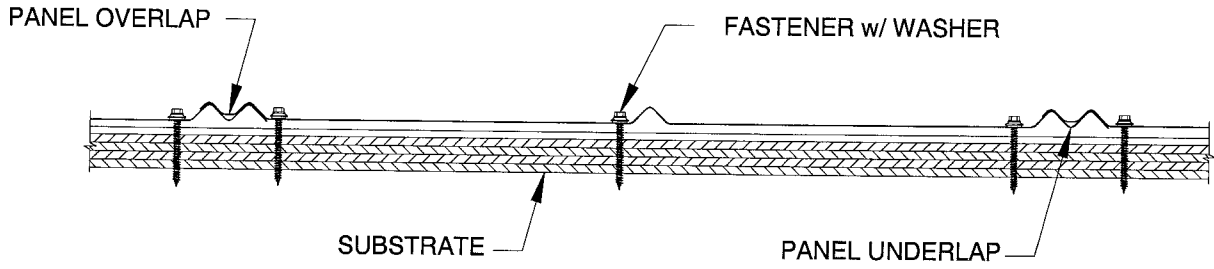
**Minimum #9HH self tapping screws w/ self sealing.**  
 **$\frac{3}{16}$ " Minimum penetration through the deck**



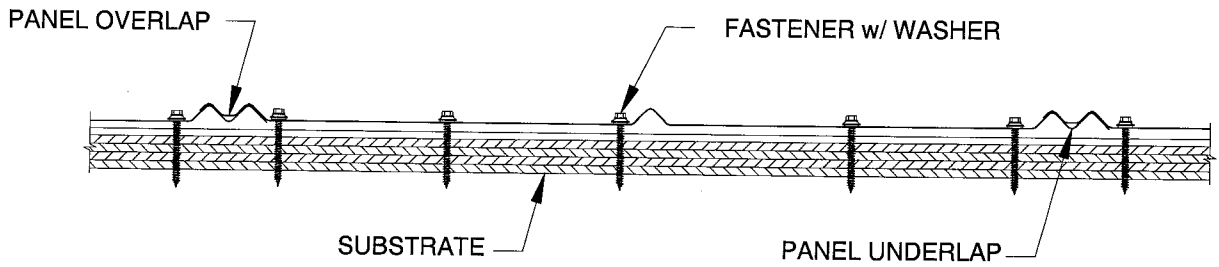
5V Panel



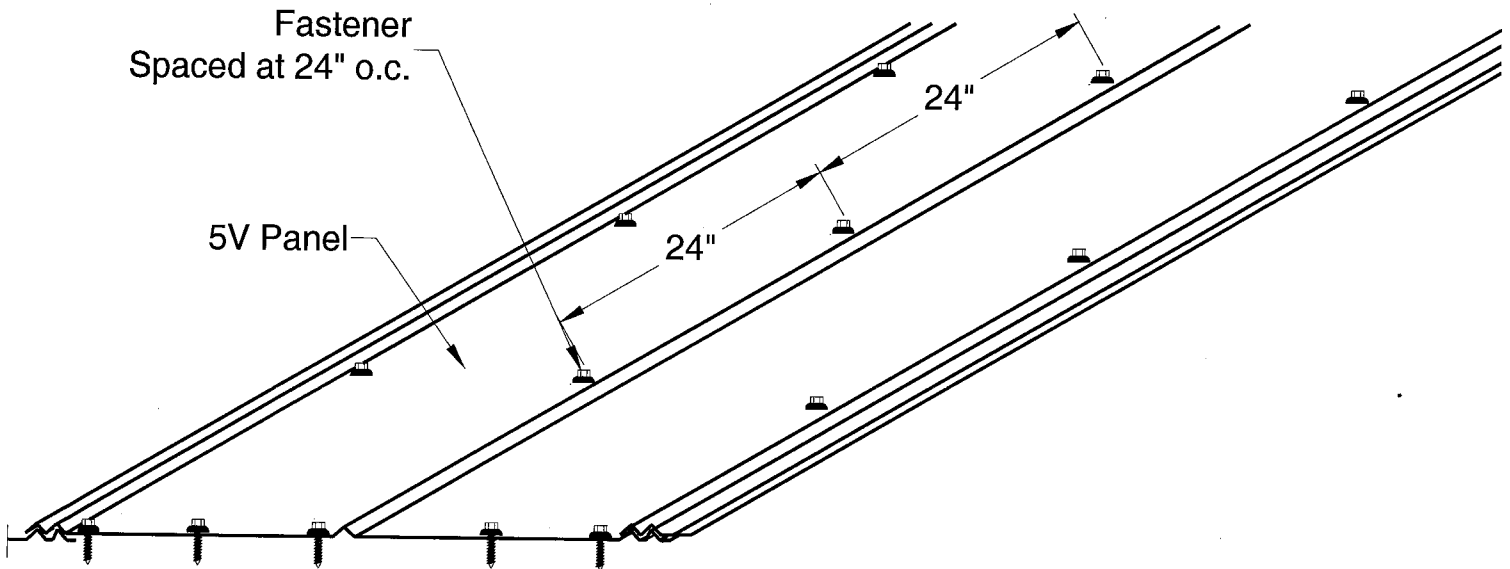
**DETAIL B**



**FASTENER PATTERN IN THE FIELD OF PANEL**



**FASTENER PATTERN AT THE EAVE & RIDGE OF PANEL**



**END OF THIS ACCEPTANCE**



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