



# C-BUCK Engineering

Specialty Structural Engineering

Certificate of Authorization # 8064

## Evaluation Report

*of*

**Thompson Architectural Metals Company, Inc.**

**“5V Panel”**

**Metal Roof Assembly**

*for*

**Florida Product Approval**

**# FL 3539.3**

**Florida Building Code 2001**

**Method: 1 - D**

**Category: Roofing**

**Sub - Category: Non-Structural Metal Roofing**

**Product:** *5V Panel*  
**Material:** *Steel*  
**Panel Thickness:** *26 Gauge Minimum*  
**Panel Width:** *24” Maximum (Net Coverage)*  
**Deck Type:** *Wood*

**Prepared for:**

**Thompson Architectural Metals Company, Inc.**

5015 E. Hillsborough Avenue

Tampa, FL 33605

**Prepared by:**

**James L. Buckner, P.E.**

Florida Professional Engineer # 31242

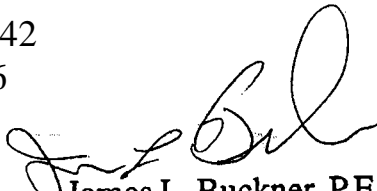
Florida Evaluation ANE ID: 1916

Report No. 04-251-5V-24-S6W

Date: 10 / 08 / 04

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James L. Buckner, P.E.  
Florida PE # 31242  
10/22/04



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<b>Manufacturer:</b>	<b>Thompson Architectural Metals Company, Inc.</b>
<b>Product Name:</b>	<b>5V Panel</b>
<b>Panel Type:</b>	<b>Steel, Minimum 26 Gauge, Minimum yield strength 40 ksi</b>
<b>Panel Material Standards:</b>	Material shall comply with Table 1507.5.3
<b>Panel Width(s)</b>	<b>24" Maximum (Net Coverage Width)</b>
<b>Support Type:</b>	<b>Wood Deck</b> <b>(Design of support system is not included in this evaluation)</b>
<b>Support Description:</b>	<b>Plywood or wood plank – 15/32" or greater, per Section 2309.3</b>
<b>Slope Range:</b>	<b>3 : 12 or greater</b>
<b>Design Uplift Pressure:</b>	<b>87.5 psf ( Safety Factor of 2 : 1 )</b>
<b>Attachment To Supports:</b>	<b>Panels shall be installed with #9 x minimum penetration through deck 3/16", Hex-Head, self-tapping, corrosion resistant, sheet metal screws, per ANSI/ASME B18.6.4 with minimum .4" weather sealing washer.</b>
<b>Underlayment:</b>	Minimum underlayment shall be per Section 1507.3.8
<b>Fire Classification:</b>	This system has a Class B fire rating, as specified in Section 1505.3 and Table 1507.3.9.2 of the Florida Building Code. A Class A fire rating may be obtained with the use of additional approved substrates.
<b>Metal Panels:</b>	<b>Install the "5V Panel" to the deck with screws through-fastened 12" o.c. along the length of the panel. Screws shall be spaced maximum 12.5" o.c. across the width of the panel. Install system in compliance with the attached installation method.</b>



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**Performance Standards:** Roof assembly tested in accordance with **UL580-94** Uplift Resistance standards.

**Code Compliance:** The product described herein has demonstrated compliance with the Florida Building Code, **Section 1507.5**.

**Evaluation Report Scope:** Evaluation of product engineering data with regards to uplift resistance based on Florida Building Code criteria for Metal Roof Panels.

**System Limitations:** Increased design pressures at perimeter and corner areas, in compliance with Florida Building Code, Chapter 16, may be met through rational analysis. The required design wind loads shall be determined for each project. The maximum fastener spacing listed herein shall not be exceeded. All rational analysis computations shall be prepared by a qualified design professional, as required by Florida Building Code, Section 104. This product is not approved for use in the High Velocity Hurricane Zone.

**Referenced Data:**

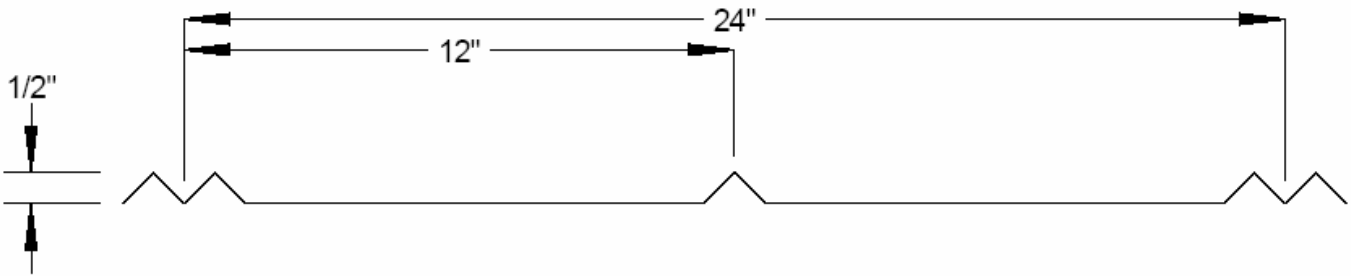
1. Certification of Independence
2. Quality Assurance  
Keystone Certifications, Inc. – Q.A. System ID: 1824
3. UL580 Test  
Hurricane Test Laboratory, Inc.  
Report # 0297-0307-02 #1, 2, & 3, Date: 4/22/02

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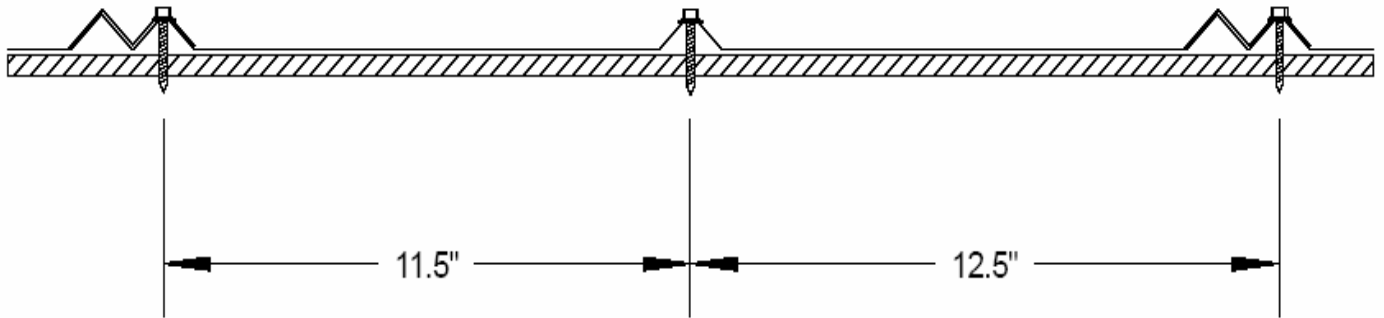
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## INSTALLATION METHOD Thompson Architectural Metals Company , Inc. "5V Panel" ATTACHED TO WOOD DECK



Panel Profile



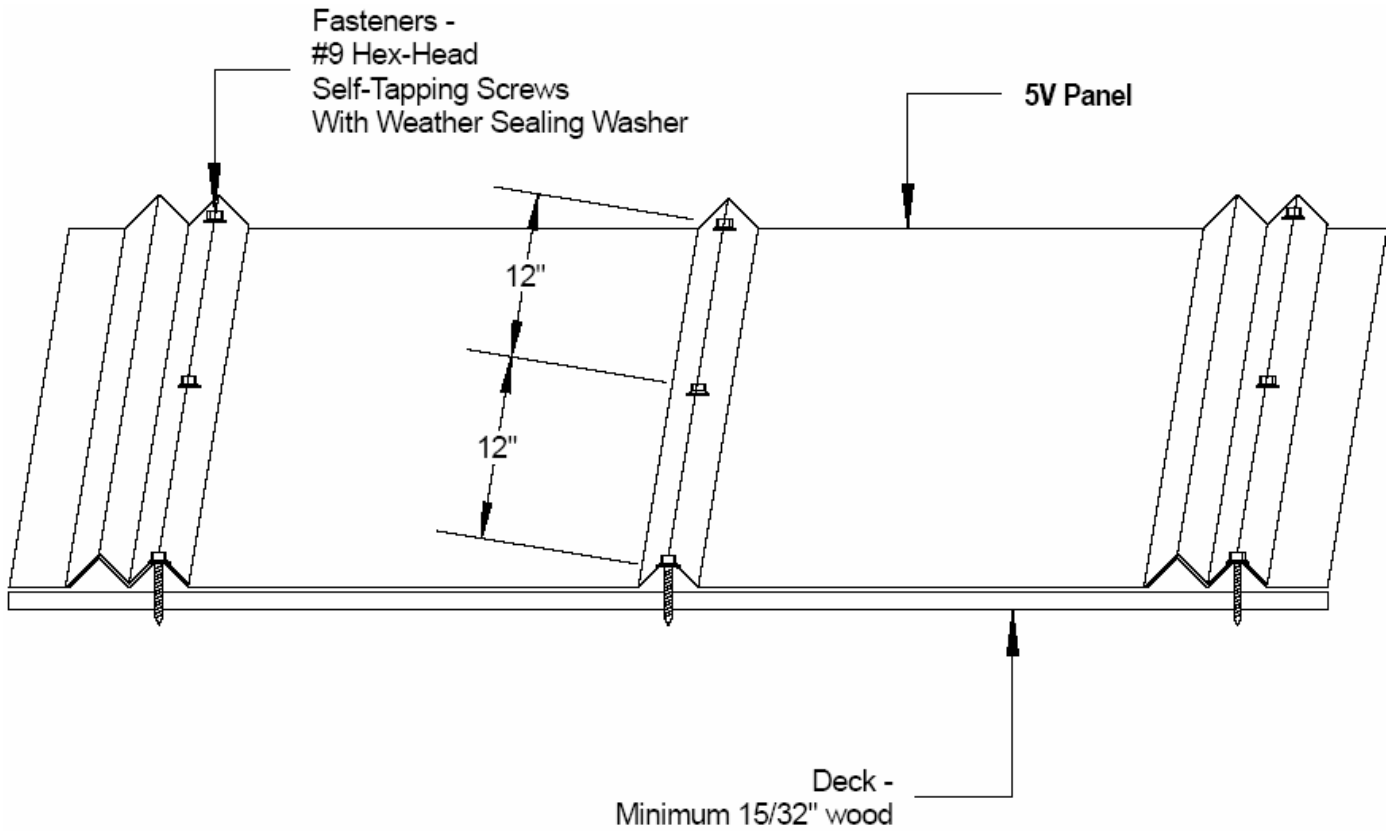
Assembly Profile

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## INSTALLATION METHOD ( Continued ) Thompson Architectural Metals Company, Inc. "5V Panel" ATTACHED TO WOOD DECK



Assembly Isometric View