

## Evaluation Report

*of*

**Advanced Aluminum**

**“PermaTile”**

**Metal Roof Assembly**

*for*

**Florida Product Approval**

**# FL 5285.2**

**Florida Building Code 2004**

**Method: 1 - D**

**Category: Structural Components**

**Sub - Category: Roof**

**Product:** *PermaTile Roof Panel*  
**Material:** *Steel*  
**Panel Thickness:** *26 Gauge Minimum*  
**Panel Width:** *28” Maximum (Net Coverage)*  
**Support Type:** *Wood Stringers*

**Prepared for:**

**Advanced Aluminum of Polk County, Inc.**

2934 Parkway Street

Lakeland Park, FL 33811

**Prepared by:**

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

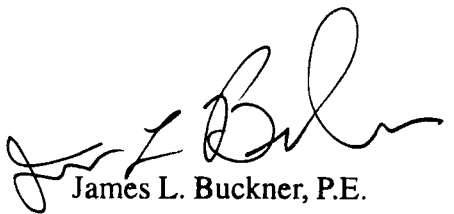
Florida Professional Engineer # 31242

Florida Evaluation ANE ID: 1916

Engineer Assistant: Gil Samson

Report No. 05-282-PT-32-S6P

Date: 9 / 6 / 05



James L. Buckner, P.E.  
Florida P.E. # 31242  
9/8/05

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# C-BUCK Engineering

Specialty Structural Engineering

Certificate of Authorization # 8064

<b>Manufacturer:</b>	<b>Advanced Aluminum of Polk County, Inc.</b>
<b>Product Name:</b>	<b>PermaTile</b>
<b>Panel Type:</b>	<b>Steel, minimum 26 Gauge, minimum yield strength 50 ksi</b>
<b>Panel Material Standards:</b>	Material shall comply with Table 1507.4.3
<b>Panel Width(s)</b>	<b>28" Maximum ( Net Coverage Width )</b>
<b>Product Name:</b>	<b>PermaTile</b>
<b>Support Type:</b>	<b>Wood Stringers – spaced maximum 15" o.c. (Design of support system is not included in this evaluation),</b>
<b>Support Description:</b>	<b>Nominal 1" x 4" Dimensional Lumber</b>
<b>Slope Range:</b>	<b>3 : 12 or greater</b>
<b>Design Uplift Pressure:</b>	<b>62.4 psf ( with a Safety Factor of 2:1 )</b>
<b>Attachment To Support:</b>	<b>Panels shall be through-fastened to the stringers with #9-14 x 1-1/2", hex-washer head, self-tapping, corrosion resistant, wood screws, per ANSI/ASME B18.6.4, with 1/2" diameter aluminum backed EPDM washers.</b>
<b>Underlayment:</b>	Minimum underlayment shall be per Section 1507.4.5
<b>Fire Classification:</b>	Fire Classification is outside the scope of Rule 9B-72, and is therefore not included in this evaluation. Additional approved substrates may be added for Fire Classification purposes.
<b>Installation:</b>	Install the " <b>PermaTile Roof Panel</b> " to the stringers with <b>screw rows spaced maximum 15" o.c., step to step, along the length of the panel. Within rows, screws shall be spaced maximum 14" o.c., across the width of the panel, located on top of the major corrugation.</b> Install system in compliance with the attached installation method.



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**Performance Standards:** Roof assembly tested in accordance with ASTM E 1592-98 Uplift Resistance Standard, which is an equivalent test to **ASTM E 1592-01**.

**Code Compliance:** The product described herein has demonstrated compliance with the **Florida Building Code 2004, Section 1507.4**.

**Evaluation Report Scope:** This product evaluation is limited to compliance with the structural wind load requirements of the Florida Building Code, as related to Rule 9B-72.

**System Limitations:** 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 105. This product is not approved for use in the High Velocity Hurricane Zone.

**Referenced Data:**

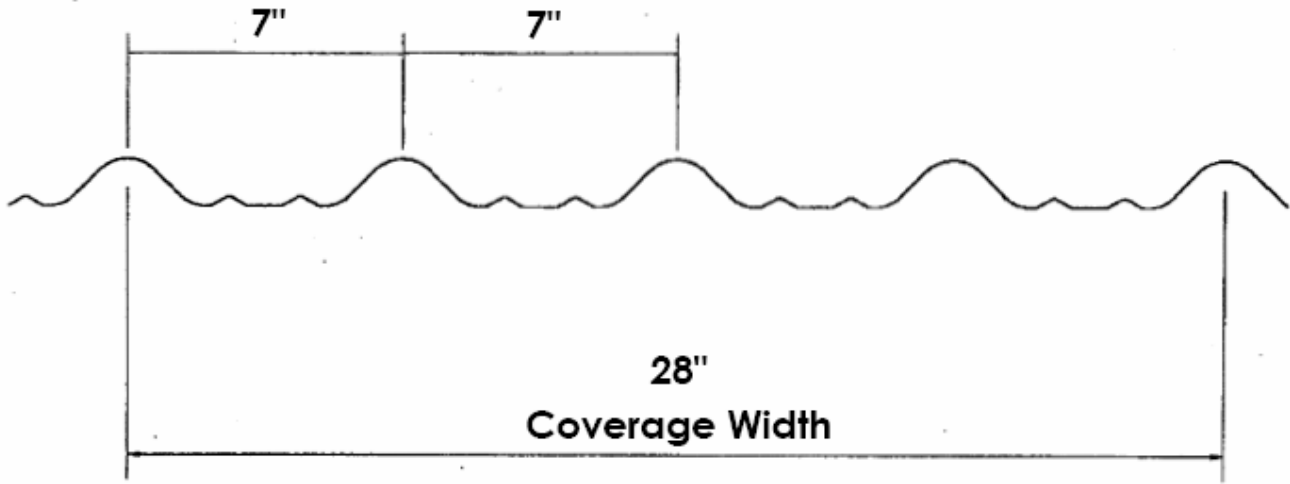
1. Certification of Independence
2. Quality Assurance  
Architectural Testing, Inc. – Q.A. Entity System ID: 1844
3. ASTM E 1592-98 Test  
Cerny & Ivey Engineers, Inc.  
Report #21312-3, Report Date: 1/4/02

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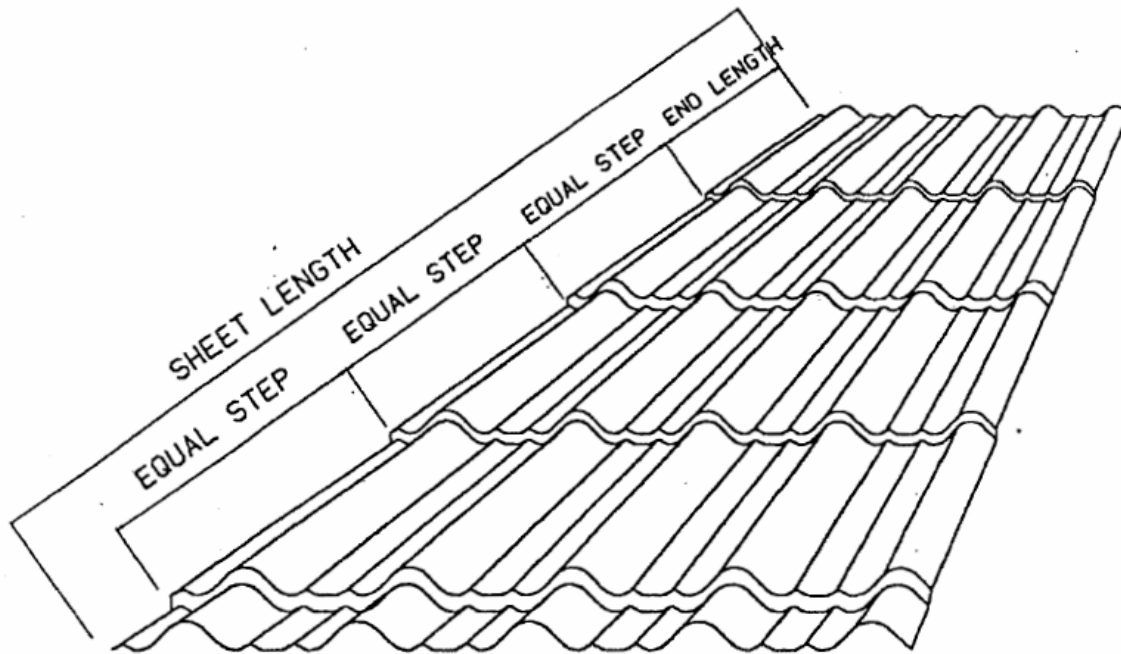
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## Installation Method Advanced Aluminum “PermaTile” Attached to Wood Stringers



TILE LINE PROFILE



TILE LINE PROFILE

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## Installation Method (Continued) Advanced Aluminum “PermaTile” Attached to Wood Stringers

