

Evaluation Report

of

Advanced Aluminum

“PermaTile”

Metal Roof Assembly

for

Florida Product Approval

FL 5284.1-R1

Florida Building Code 2004

Method: 1 - D

Category: Roofing

Sub - Category: Non – Structural Metal Roofing

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

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

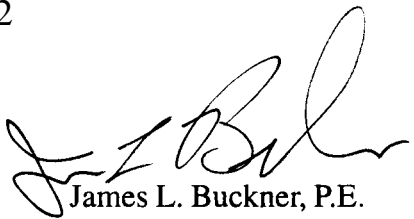
Florida Evaluation ANE ID: 1916

Engineer Assistant: Gil Samson

Report No. 05-282-PT-28-S6W

Date: 9 / 6 / 05

*Revision: 11 / 17 / 05



James L. Buckner, P.E.

Florida P.E. # 31242

11/15/05

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Specialty Structural Engineering

Certificate of Authorization # 8064

Manufacturer: Advanced Aluminum of Polk County, Inc.

Product Name: PermaTile

Panel Type: Steel, minimum 26 gauge, minimum yield strength 50 ksi

Panel Material Standards: Material shall comply with Table 1507.4.3

Panel Width(s) 28" Maximum (Net Coverage Width)

Support Type: Wood Deck
(Design of support system is not included in this evaluation)

Support Description: 1/2" or greater CDX plywood, or wood plank, per Section 2308.10.8

Slope Range: 3 : 12 or greater

Design Uplift Pressure: 57.2 psf (with a Safety Factor of 2:1)

Attachment To Support: Panels shall be through-fastened to the deck with #9 x minimum penetration through deck 3/16", hex-head, self-tapping, corrosion resistant, wood screws, per ANSI/ASME B18.6.4 with 1/2" diameter aluminum backed EPDM washers.

Underlayment: Minimum underlayment shall be per Section 1507.4.5

Fire Classification: 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.

Installation: Install the "PermaTile Panel" to the deck with screw rows spaced 3" from all ends and maximum 15" o.c. thereafter, along the length of the panel, located just below each panel "step". Within rows, screws shall be spaced maximum 14" o.c., across the width of the panel, located at the top of every other major corrugation. Install the system in compliance with the attached installation method.



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Performance Standards: Roof assembly tested in accordance with **ASTM E 1592-01 Uplift Resistance Standard.**

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:

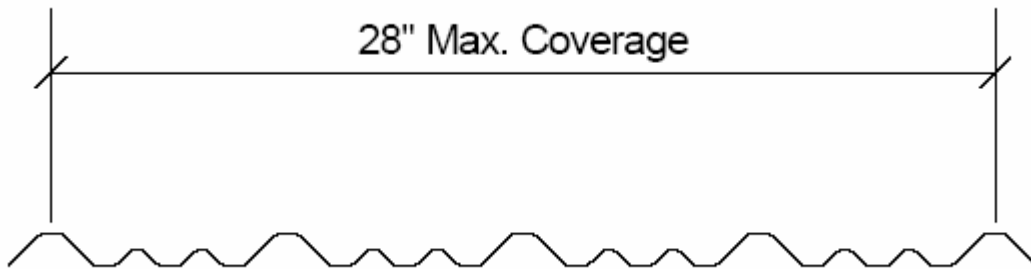
1. ASTM E 1592-98 Test (Equivalent to ASTM e 1592-01)
Cerny & Ivey Engineers, Inc.
Report #21312-1, Report Date: 1/4/02
2. Certification of Independence
3. Quality Assurance
Architectural Testing, Inc.- Q.A. Entity System ID: 1844

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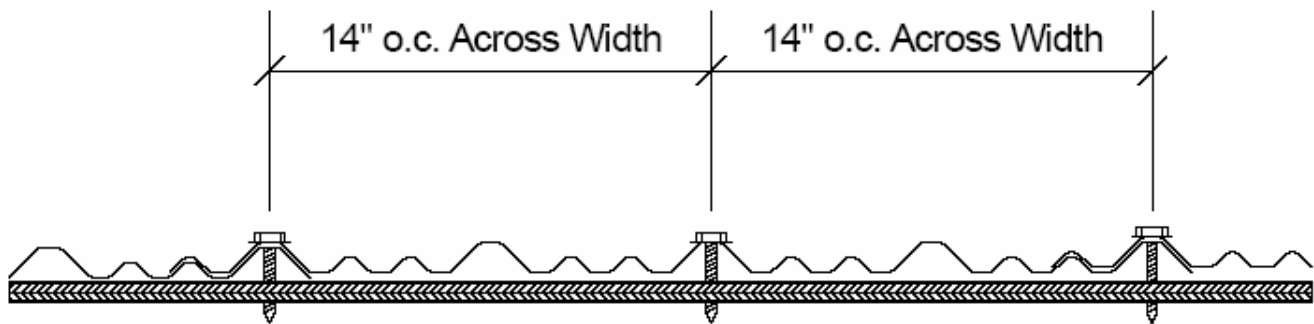
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Installation Method Advanced Aluminum “PermaTile” Attached to Wood Deck



Panel Profile



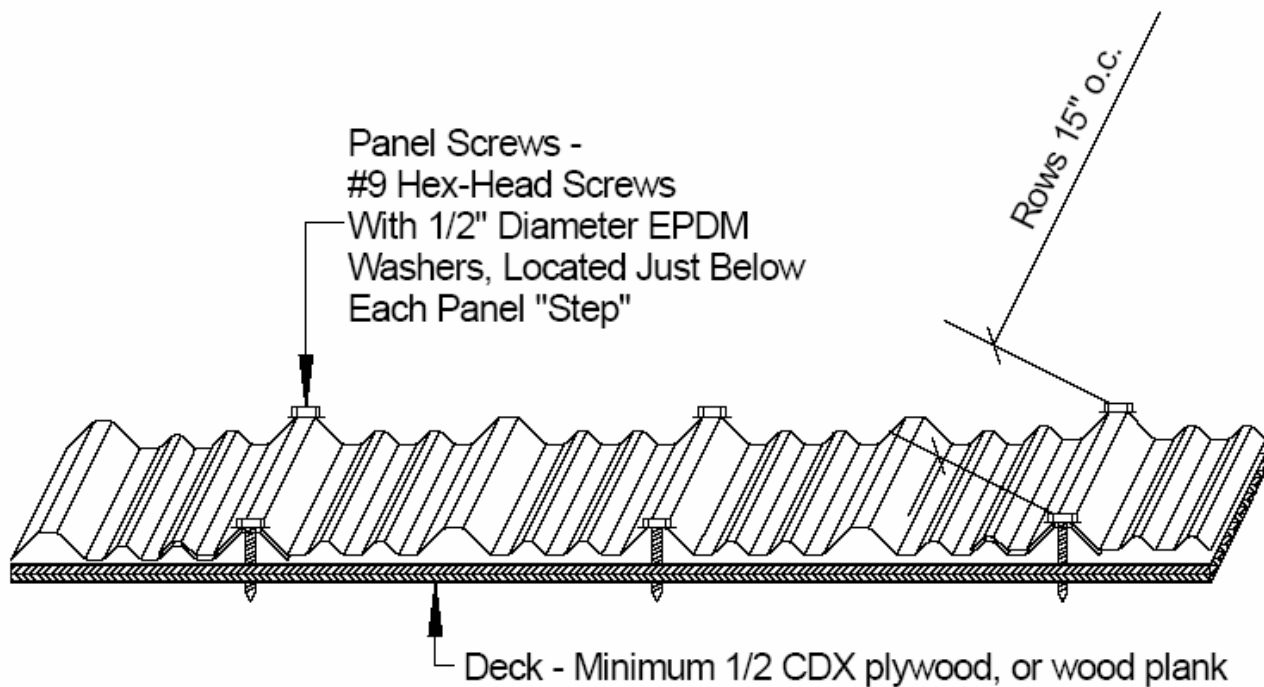
Assembly Profile

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Installation Method (Continued) Advanced Aluminum "PermaTile" Attached to Wood Deck



Assembly Isometric View