

**EVALUATION REPORT OF  
UNION CORRUGATING COMPANY  
'NOM 0.032" THICK ALUMINUM ML150 PANEL'**

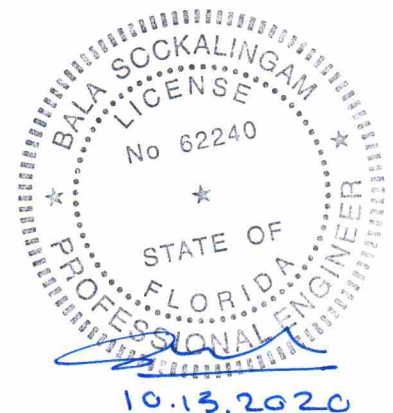
**FLORIDA BUILDING CODE 7TH EDITION (2020)  
FLORIDA PRODUCT APPROVAL  
FL 32186.1-R1  
ROOFING  
METAL ROOFING**

**Prepared For:  
Union Corrugating Company  
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**This report consists of  
Evaluation Report (3 Pages including cover)  
Installation Details (1 Page)  
Load Span Table (1 Page)**

**Report No. C2407-1  
Date: 10.13.2020**



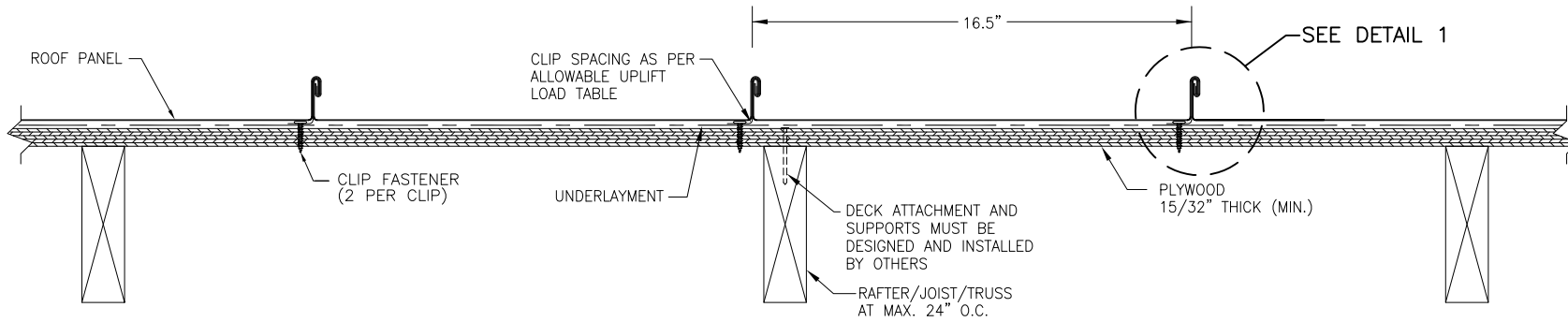
Manufacturer:	Union Corrugating Company
Product Name:	ML150
Panel Description:	Standing seam panel with max. 16.5" wide coverage with 1.5" high ribs and double lock seam.
Materials:	Nom. 0.032" thick (min.) 3105-H14 Alloy (ASTM B209) as per FBC 2020 Section 1507.4.3.
Deck Description:	Min. 15/32" thick APA rated plywood or min. 3/4" thick wood plank (min SG of 0.42) for new and existing constructions. For HVHZ, min. 19/32" thick plywood for new constructions and min. 15/32" thick plywood for existing constructions. Designed by others and installed as per FBC 2020.
Underlayment:	Minimum underlayment as per FBC 2020 Section 1507.4.5.1. For HVHZ, minimum underlayment as per FBC 2020 Section 1518.2, 1518.3 and 1518.4.
Slope:	1/4:12 or greater in accordance with FBC 2020 Section 1507.4.2 For HVHZ, 2:12 or greater in accordance with FBC 2020 Section 1515.2.
Design Uplift Pressure: (Factor of Safety = 2)	59.8 psf at clip spacing of 24" o.c. 86.0 psf at clip spacing of 6" o.c.
Panel Attachment:	24 ga., 3" long ML150 fixed clip with (2) #10-12 x 1" long pancake head wood screws per clip. Clips and fasteners are corrosion resistant as per FBC 2020 Section 1506.7 and 1507.4.4, respectively.
Test Standards:	Roof assembly tested in accordance with TAS 125-03 'Standard Requirements for Metal Roofing Systems', TAS 100-95 'Test Procedure for Wind and Wind Driven Rain Resistance of Discontinuous Roof Systems' and TAS 110-00 'Testing Requirements for Physical Properties of Roof Membrane, Insulation, Coatings and Other Roofing Components'.
Code Compliance:	The product described herein has demonstrated compliance with FBC 2020 Section 1504.3, 1507.4, 1518.9 and 1523.6.5.2.4.
Product Limitations:	Design wind loads shall be determined for each project in accordance with FBC 2020 Section 1609, Section 1620 or ASCE 7-16 using allowable stress design. Maximum clip spacing listed herein shall not be exceeded. The design pressure for reduced clip spacing may be computed using rational analysis prepared by a Florida Professional

Engineer or based on Union load span table. This evaluation report is applicable in High Velocity Hurricane Zone. Fire classification is not within scope of this Evaluation Report. Refer to FBC 2020 Section 1505 and current approved roofing materials directory or ASTM E108/UL790 report from an accredited laboratory for fire ratings of this product.

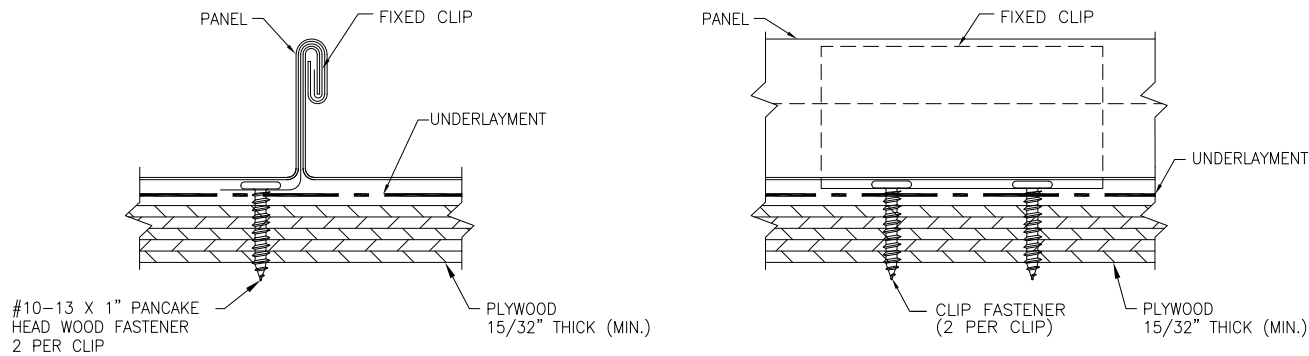
Supporting Documents: TAS 125 Test Report  
Farabaugh Engineering and Testing Inc.  
Project No. T221-19, Reporting Date 8/2/19  
Project No. T212-20, Reporting Date 4/29/20

TAS 100-95 Test Report  
Farabaugh Engineering & Testing, Inc.  
Report No. T232-20, Reporting Date 5/31/2020

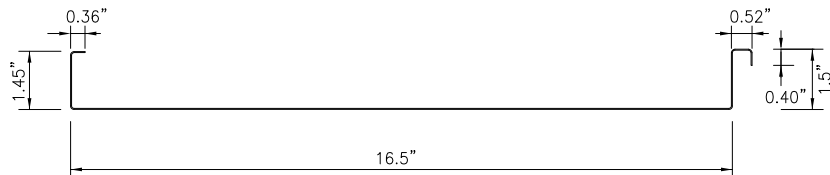
TAS 110-00 Test Report on Valspar Fluoropon coated metal panels  
PRI Asphalt Technologies  
Report No. VLS-004-02-01, Reporting Date 2/22/2013  
Report No. VLS-005-02-01, Reporting Date 2/22/2013



**TYPICAL PANEL INSTALLATION X-SECTION**



**DETAIL 1**



**PANEL SECTION**  
(0.032" THICK ALUMINUM)

**GENERAL NOTES:**

1. ARCHITECTURAL STANDING SEAM ROOF PANEL HAS BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (FBC).
2. ROOF PANELS ARE SHALL BE NOM. 0.032" THICK (MIN.) ALUMINUM. EFFECTIVE COVERING WIDTH OF PANEL = 16.5".
3. THE ROOF PANELS SHALL BE INSTALLED OVER STRUCTURE AS SPECIFIED ON THIS DRAWING.
4. REQUIRED DESIGN WIND LOADS SHALL BE DETERMINED FOR EACH PROJECT. THIS PANEL SYSTEM MAY NOT BE INSTALLED WHEN THE REQUIRED DESIGN WIND LOADS ARE GREATER THAN THE ALLOWABLE WIND LOAD TABLE.
5. CLIPS AND FASTENERS MUST BE IN ACCORDANCE WITH THIS DRAWING & FLORIDA BUILDING CODE. IF A DIFFERENCE OCCURS BETWEEN THE MINIMUM REQUIREMENTS OF THIS DRAWING & THE CODE, THE CODE SHALL CONTROL.
6. DECK AND SUPPORTS MUST BE DESIGNED TO WITHSTAND WIND LOADS AS REQUIRED FOR EACH APPLICATION AND ARE THE RESPONSIBILITY OF OTHERS.

DRAWN BY: B.S.	CHECKED BY: R.B.
PLOT:	DATE: 6/2/20
DATE:	
BY:	
REVISION DESCRIPTION:	
NO:	
DRAWING TITLE <b>ML150 STANDING SEAM ALUMINUM ROOF PANEL</b>	
CONSULTANTS <b>BALA SOCKALINGAM, PH.D., P.E.</b>	
MANUFACTURER <b>UNION CORRUGATING COMPANY</b>	
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DRAWING NO. <b>2407-1</b>	REV.
PAGE NO.	
<b>1</b>	<b>1</b>

**UNION CORRUGATING COMPANY**  
**ML150 Panel Uplift Loads**  
**(Nom. 0.032" Aluminum)**

Description	Clip Spacing Along Panel Length (in)	Allowable Uplift Load (psf)
Maximum Coverage width: 16.5" Seam: 180°  ML150 fixed clip 3" long, 24 ga.  Clip Fasteners: (2) #10-12 x 1" long pancake head screws	<b>6</b>	<b>86.0</b>
	8	83.1
	10	80.2
	12	77.2
	14	74.3
	16	71.4
	18	68.5
	20	65.5
	22	62.6
	<b>24</b>	<b>59.7</b>

**Notes:**

1. The bold numbers indicate design loads calculated from test data with safety factor of 2.
2. Panels must be installed as per Evaluation Report FL 32186.1 and Union current installation procedure.



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