

**EVALUATION REPORT OF
EUSTIS ROOFING COMPANY
'ERC ML 200 PANEL'**

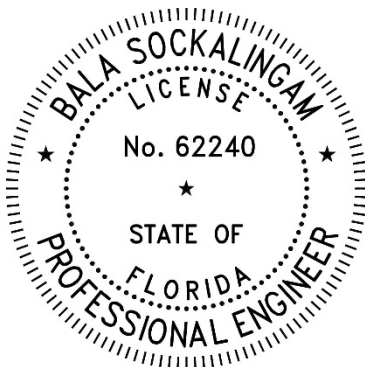
**FLORIDA BUILDING CODE 8TH EDITION (2023)
FLORIDA PRODUCT APPROVAL
FL 41681.1-R1
STRUCTURAL COMPONENTS
ROOF DECK**

Prepared For:
Eustis Roofing Company
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This report consists of
Evaluation Report (3 Pages including cover)
Installation Details (1 Page)
Load Span Tables (1 Page)

Report No. C2725-1
Date: 9.9.2023



This item has been digitally signed and sealed by Bala Sockalingam, PE, on the date indicated.

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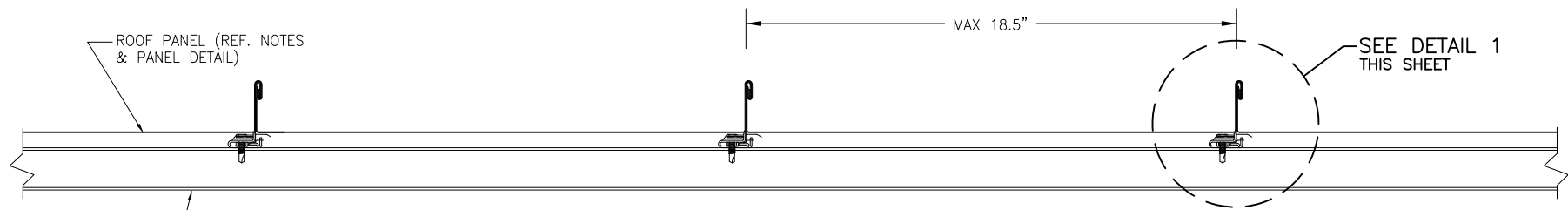
Manufacturer:	Eustis Roofing Company
Product Name:	ERC ML 200 Panel
Panel Description:	Standing seam panel with max. 18.5" wide coverage and 2" high ribs
Materials:	Minimum 24 ga., 50 ksi steel., Galvanized coated steel (ASTM A653) or Galvalume coated steel (ASTM A792) or painted steel (ASTM A755). Corrosion resistant as per FBC 2023 Section 1507.4.3.
Support Description:	Min 16 ga., 50 ksi steel section (Must be designed by others)
Slope:	1/4:12 or greater in accordance with FBC 2023 Section 1507.4.2
Design Uplift Pressure: Factor of Safety = 2	16" wide, 24 ga. panel with 180° seam -49.5 psf at clip spacing of 60" o.c. -146.7 psf at clip spacing of 12" o.c. 18.5" wide, 24 ga. panel with 180° seam -32.5 psf at clip spacing of 60" o.c. -122.5 psf at clip spacing of 12" o.c.
Panel Attachment:	NC33001-3 sliding clips with (2) 1/4"-14 x 1-1/4" HWH SDS per clip at each support. Clips and fasteners are corrosion resistant as per FBC 2023 Section 1506.7 and 1507.4.4, respectively.
Test Standards:	Roof assembly tested in accordance with ASTM E1592-01 or E1592-05(2012) 'Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference' and FM 4470 (2016) Section 4.6 'Resistance to Foot Traffic'.
Test Equivalency:	The test procedures in ASTM E1592-01 and E1592-05(2012) comply with test procedures prescribed in ASTM E1592-05(2017).
Code Compliance:	The product described herein has demonstrated compliance with FBC 2023 Section 1507.4.
Product Limitations:	Design wind loads shall be determined for each project in accordance with FBC 2023 Section 1609 or ASCE 7-22 using allowable stress design. The maximum clip spacing listed herein shall not be exceeded. The design uplift pressure for reduced clip spacing may be computed using rational analysis prepared by a Florida Professional Engineer or based on Eustis Roofing load span tables. This evaluation report is not applicable in High Velocity Hurricane Zone. Fire classification is not within the scope of this Evaluation Report. Refer to FBC 2023 Section 1505 and current approved roofing materials directory or ASTM

E108/UL790 report from an accredited laboratory for fire ratings of this product.

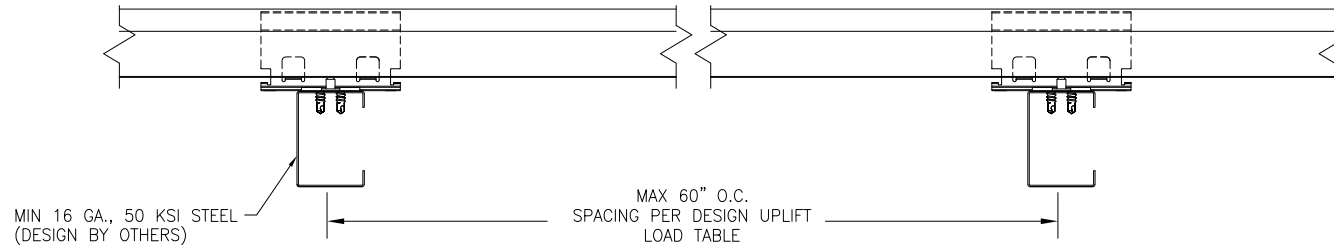
Supporting Documents: ASTM E1592 Test Reports
Force Engineering & Testing, Inc.
78-0002T-21A, B, Reporting Date 1/30/2021
78-0205T-10A, B, Reporting Date 6/16/2010

FM 4470 Test Report
ENCON Technology Inc.
C2575-1, Reporting Date 9/21/2022

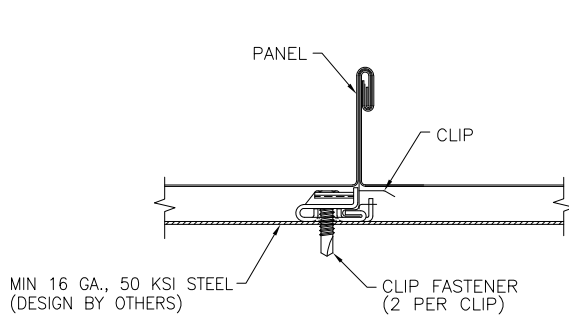
(Eustis Roofing Company is authorized to use Karr's Building Supply
& Service's Test Reports)



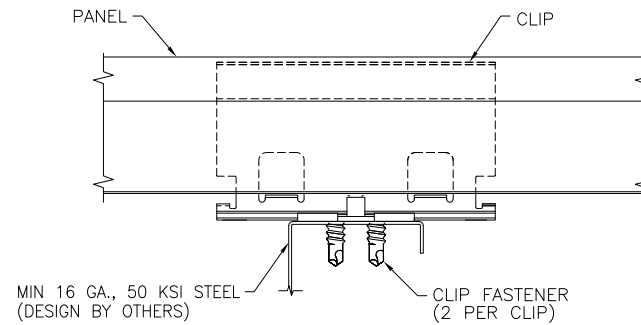
TYPICAL PANEL INSTALLATION X-SECTION



TYPICAL SIDE VIEW

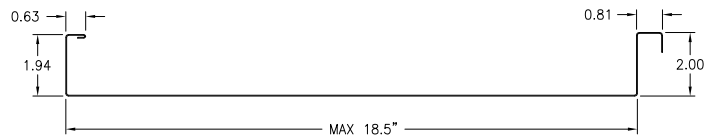


CLIP SECTION VIEW



CLIP SIDE VIEW

DETAIL 1



PANEL SECTION

(24 GA.)

GENERAL NOTES:

1. STRUCTURAL ROOF PANEL HAS BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (FBC).
2. ROOF PANELS SHALL BE 24 GA.. MAXIMUM COVERING WIDTH OF PANEL = 18.5".
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 LOADS SPECIFIED ON THIS DRAWING.
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. PURLINS/JOISTS/TRUSSES MUST BE DESIGNED TO WITHSTAND WIND LOADS AS REQUIRED FOR EACH APPLICATION AND ARE THE RESPONSIBILITY OF OTHERS.

DRAWN BY: B.S.	CHECKED BY: H.F.
PLOT:	DATE: 9/22/2022
NO.	DATE
BY	
REVISION DESCRIPTION	
NO.	
DRAWING TITLE ERC ML 200 ROOF PANEL	
CONSULTANTS BALA SOCKALINGAM, PH.D., P.E.	
MANUFACTURER EUSTIS ROOFING COMPANY	
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DRAWING NO. D2725-1	REV.
PAGE NO. 1	OF 1

EUSTIS ROOFING COMPANY
ERC ML 200 Panel
Allowable Uplift Loads

Table 1: Attachment of 24-gauge, 16" wide ERC ML 200 panels to minimum 16-gauge steel purlins

Panel Clip Spacing	Uplift Pressure (psf)
5' 0" on center	-49.5
4' 6" on center	-61.6
4' 0" on center	-73.8
3' 6" on center	-85.9
3' 0" on center	-98.1
2' 6" on center	-110.2
2' 0" on center	-122.4
1' 6" on center	-134.5
1' 0" on center	-146.7

Table 2: Attachment of 24-gauge, 18.5" wide ERC ML 200 panels to minimum 16-gauge steel purlins

Panel Clip Spacing	Uplift Pressure (psf)
5' 0" on center	-32.5
4' 6" on center	-43.8
4' 0" on center	-55.0
3' 6" on center	-66.3
3' 0" on center	-77.5
2' 6" on center	-88.8
2' 0" on center	-100.0
1' 6" on center	-111.3
1' 0" on center	-122.5

Notes:

1. The allowable uplift loads were determined from ASTM E1592 testing and are applicable for the panel and panel to clip connection. Clip fastener, purlin, frames and support connections must be designed to resist all loads imposed on the panel.
2. The factor of safety was 2.0 for all tests.
3. Panels must be installed as per Evaluation Report FL 41681.1 and Eustis Roofing Company's current installation procedure.