

**EVALUATION REPORT OF
UNION CORRUGATING COMPANY
'29 GA. MASTERRIB PANEL'**

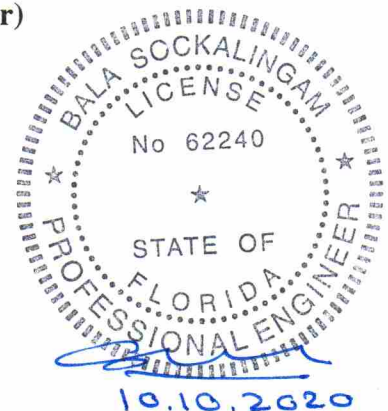
**FLORIDA BUILDING CODE 7TH EDITION (2020)
FLORIDA PRODUCT APPROVAL
FL 20484.5-R2
ROOFING
METAL ROOFING**

**Prepared For:
Union Corrugating Company
701 S. King St.
Fayetteville, NC 28301
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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. C2401-5
Date: 10.10.2020**

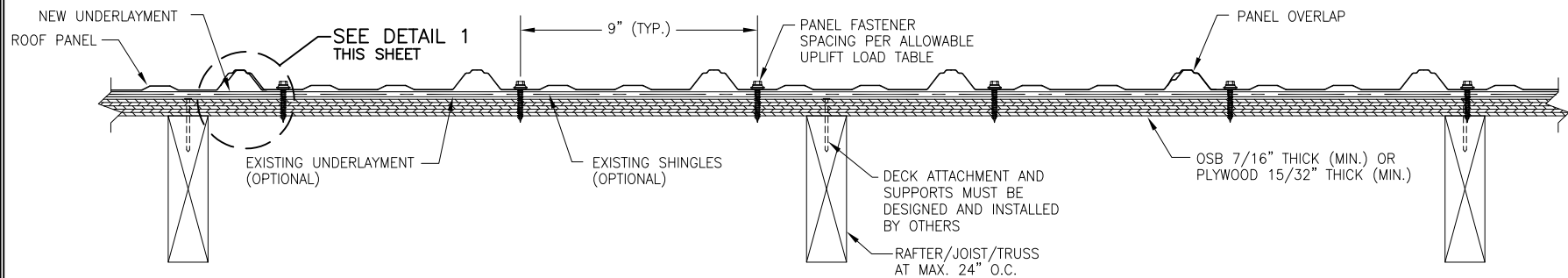


Manufacturer:	Union Corrugating Company
Product Name:	MasterRib Panel
Panel Description:	36" wide coverage with 3/4" high ribs at 9" o.c.
Materials:	Minimum 29 ga., 80 ksi steel. Galvanized coated steel (ASTM A653) or Galvalume coated steel (ASTM A792) or painted steel (ASTM A755). Corrosion resistant as per FBC 2020 Section 1507.4.3.
Deck Description:	Min. 7/16" thick OSB or min. 15/32" thick APA rated plywood or min. 3/4" thick wood plank (min SG of 0.42) for new and existing constructions. Designed by others and installed as per FBC 2020.
New Underlayment:	Minimum underlayment as per FBC 2020 Section 1507.4.5.1. Required for new construction.
Existing Underlayment: (Optional)	One layer of asphalt shingles over one layer of #30 felt. For reroofing construction only.
Slope:	1/2:12 or greater in accordance with FBC 2020 Section 1507.4.2
Design Uplift Pressure: (Factor of Safety = 2)	56.0 psf at fastener spacing of 24" o.c. 124.0 psf at fastener spacing of 6" o.c.
Panel Attachment:	#10-15 x 1.5" long wood screw with washer. Fasteners are corrosion resistant as per FBC 2020 Section 1507.4.4.
At interior	9" o.c. across panel width
At panel ends	5.5"-3.5"-5.5" o.c. across panel width
Sidelap Attachment: (Optional)	1/4"-14 x 7/8" long SDS with washer at max 24" o.c. Fasteners are corrosion resistant as per FBC 2020 Section 1507.4.4.
Test Standards:	Roof assembly tested in accordance with UL580-06 'Uplift Resistance of Roof Assemblies' & UL1897-04 'Uplift Tests for Roof Covering Systems' and FM 4470 Section 5.5 'Resistance to Foot Traffic'.
Test Equivalency:	The test procedures in UL 1897-04 comply with test procedures prescribed in UL 1897-12. The test procedure in FM 4470 (1992) comply with test procedure prescribed in FM 4470 (2016) Section 4.6 'Resistance to Foot Traffic'.
Code Compliance:	The product described herein has demonstrated compliance with FBC 2020 Section 1507.4.

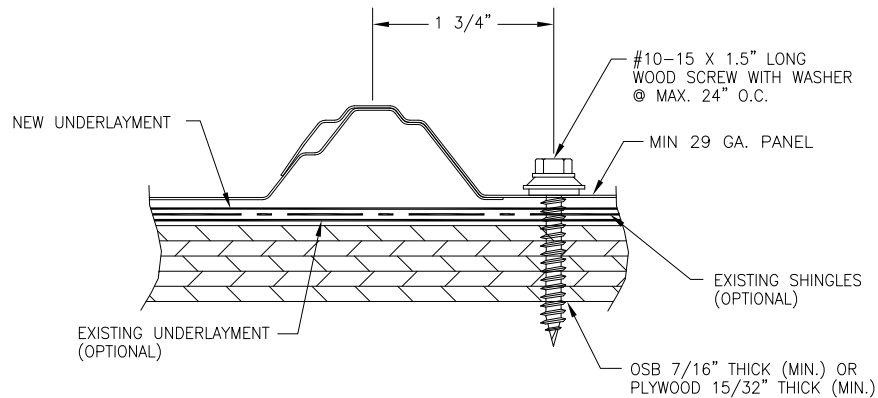
Product Limitations: Design wind loads shall be determined for each project in accordance with FBC 2020 Section 1609 or ASCE 7-16 using allowable stress design. The maximum fastener spacing listed herein shall not be exceeded. The design pressure for reduced fastener spacing may be computed using rational analysis prepared by a Florida Professional Engineer or based on Union load span table. This evaluation report is not 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: UL580 & UL1897 Test Reports
Farabaugh Engineering and Testing Inc.
Project No. T198-16, Reporting Date 5/16/16

FM 4470 Test Report
ENCON Technology Inc.
C1583-2, Reporting Date 7/24/08



TYPICAL PANEL INSTALLATION X-SECTION



DETAIL 1

GENERAL NOTES:

1. ARCHITECTURAL ROOF PANEL HAS BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (FBC).
2. ROOF PANELS SHALL BE MINIMUM 29 GA. EFFECTIVE COVERING WIDTH OF PANEL = 36".
3. THE ROOF PANELS SHALL BE INSTALLED OVER SHEATHING & 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. ALL FASTENERS MUST BE IN ACCORDANCE WITH THIS DRAWING & THE FLORIDA BUILDING CODE. IF A DIFFERENCE OCCURS BETWEEN THE MINIMUM REQUIREMENTS OF THIS DRAWING & THE CODE, THE CODE SHALL CONTROL.
6. RAFTERS/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: J.S.	
PLOT: DATE: 5/23/16			
NO.	REVISION	DESCRIPTION	DATE
1			
DRAWING TITLE: MASTERBIB PANEL			
CONSULTANTS: BALA SOCKALINGAM, PH.D., P.E.		MANUFACTURER: UNION CORRUGATING CO.	
1216 N. LANSING AVE., SUITE C		701 S. KING STREET	
FAYETTEVILLE, NC 28301		FAYETTEVILLE, NC 28301	
PHONE: 918-492-5992		910-483-2195	
DRAWING NO. C2401-5		REV.	
SHEET NO. 1		OF 1	

UNION CORRUGATING COMPANY
MasterRib Panel Uplift Loads
(Min 29 ga.)

Description	Fastener Spacing along Panel Length (in)	Allowable Uplift Load (psf)
Coverage width: 36" Panel Fasteners #10-15 hex head screws with sealed washer Panel fasteners spaced at 9" o.c. across panel width	6	124.0
	8	116.4
	10	108.9
	12	101.3
	14	93.8
	16	84.0
	18	74.7
	20	67.2
	22	61.1
	24	56.0

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 20484.5 and Union current installation procedure.



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