

**EVALUATION REPORT OF  
UNION CORRUGATING COMPANY  
'29 GA. MASTERRIB PANEL'  
OVER WOOD SUPPORT AND DECK**

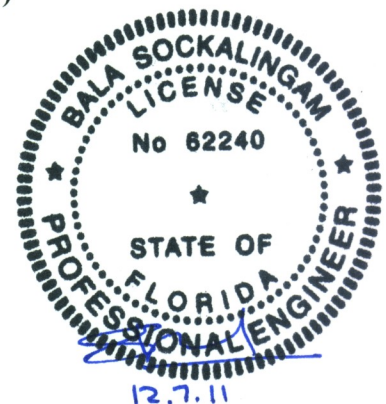
**FLORIDA PRODUCT APPROVAL  
FL 7271.9-R2  
ROOFING  
METAL ROOFING**

**Prepared For:  
Union Corrugating Company  
P. O. Box 229  
Fayetteville, NC 28302  
Telephone: (910) 483-0479  
Fax: (910) 483-8897**

**Prepared By:  
Bala Sockalingam, Ph.D., P.E.  
Florida Professional Engineer #62240  
1216 N Lansing Ave., Suite C  
Tulsa, OK 74106  
Telephone: (918) 492-5992  
FAX: (866) 366-1543**

**This report consists of  
Evaluation Report (3 Pages including cover)  
Installation Details (1 Page)**

**Report No. C1805-15  
Date: 12.7.11**

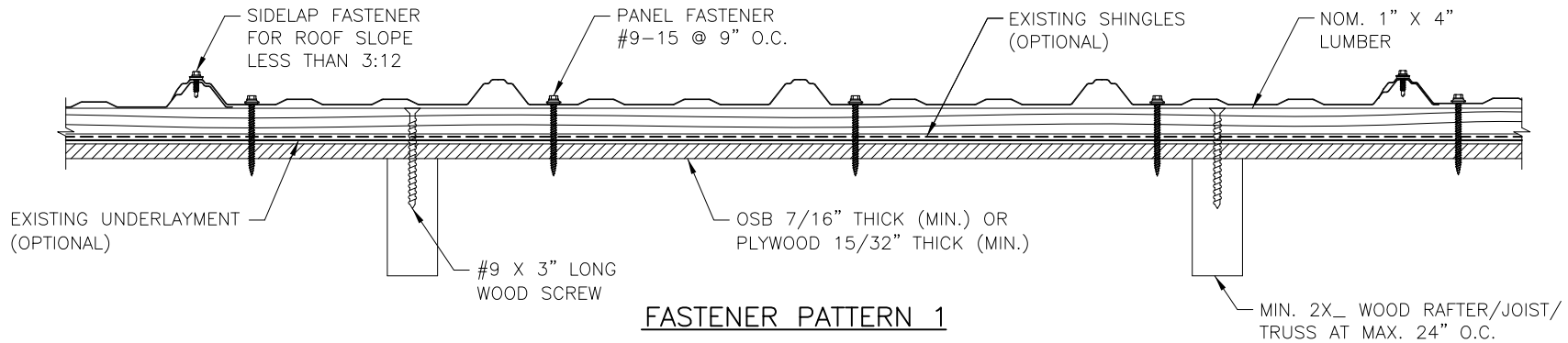


Manufacturer:	Union Corrugating Company
Product Name:	MasterRib Panel
Panel Description:	36" wide coverage with 3/4" high ribs at 9" o.c.
Materials:	Minimum 29 ga., 80 ksi steel. Galvanized coated steel (ASTM A653) or Galvalume coated steel (ASTM A792) or painted steel (ASTM A755).
Support Description:	Nom. 1" x 4" (min) lumber (Must be designed by others)
Support Attachment:	(1) #9 x 3" long wood screw into rafters spaced at max 24" o.c.
New Underlayment:	Minimum underlayment as per FBC 2010 Section 1507.4.5. Required for new construction and optional for reroofing construction.
Existing Underlayment: (Optional)	One layer of asphalt shingles over one layer of #30 felt. For reroofing construction only.
Deck Description:	Min 15/32" thick plywood or 7/16" thick OSB deck for new and existing constructions.
Deck Attachment:	8d x 2.5" long ring shank nails or #8 x 2" long wood screws @ 6" o.c. at plywood field and edges
Slope:	1/2:12 or greater in accordance with FBC 2010 Section 1507.4.2
Design Uplift Pressure: (Factor of Safety = 2)	71 psf for Fastener Pattern 1 114 psf for Fastener Pattern 2
Panel Attachment:	#9-15 wood screw with washer. Fastener shall be of sufficient length to penetrate through the support and deck a minimum of 3/8".
Pattern 1	@ 9" o.c. across panel width
Pattern 2	@ 5.5"-3.5"-5.5" o.c. across panel width
Sidelap Attachment: (Optional)	¼"-14 x 7/8" long SDS @ 24" o.c. Recommended for roof slope less than 3:12.
Test Standards:	Panel assembly tested in accordance with ASTM E1592-01 'Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference' and FM 4470 Section 5.5 'Resistance to Foot Traffic'.
Code Compliance:	The product described herein has demonstrated compliance with FBC 2010 Section 1507.4

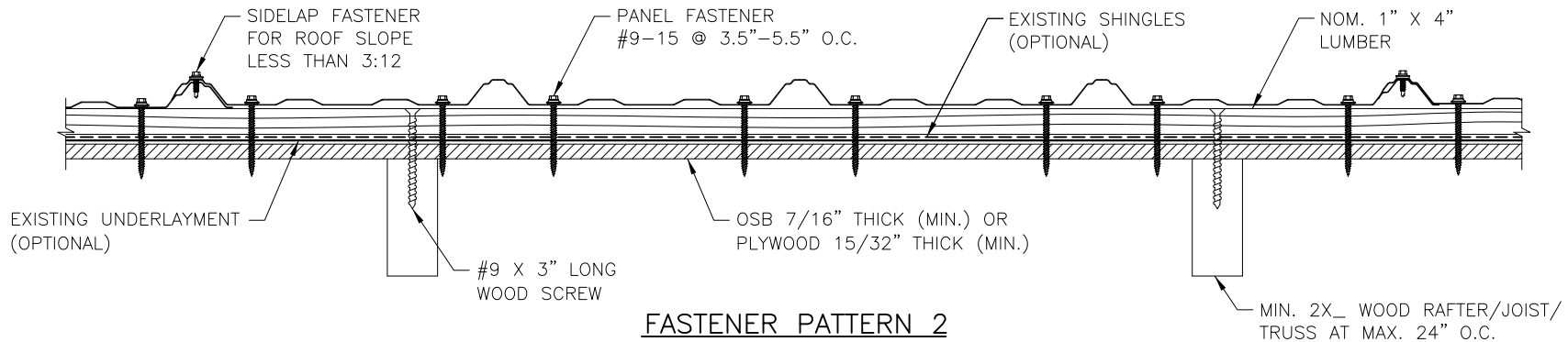
**Product Limitations:** Design wind loads shall be determined for each project in accordance with FBC 2010 Section 1609 or ASCE 7-10 using allowable stress design. The maximum fastener spacing listed herein shall not be exceeded. This product is not approved for use in the High Velocity Hurricane Zone. Fire classification is not within scope of this Evaluation Report. Refer to FBC 2010 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 Report  
ENCON Technology Inc.  
C1811-1, Reporting Date 11/30/11

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



**FASTENER PATTERN 1**



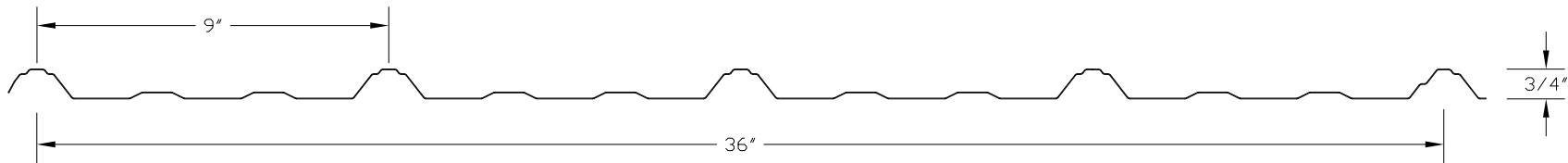
**FASTENER PATTERN 2**

**GENERAL NOTES:**

1. ARCHITECTURAL ROOF PANEL HAS BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (FBC).
2. THE ROOF PANELS SHALL BE INSTALLED OVER SHEATHING & STRUCTURE AS SPECIFIED ON THIS DRAWING.
3. 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.
4. 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.
5. RAFTERS/JOISTS/TRUSSES MUST BE DESIGNED TO WITHSTAND WIND LOADS AS REQUIRED FOR EACH APPLICATION AND ARE THE RESPONSIBILITY OF OTHERS.

**ALLOWABLE UPLIFT PRESSURE**

FASTENER PATTERN	PRESSURE (PSF)
1	71.0
2	114.0



**MASTERRIB PANEL PROFILE**

29 Gauge, Minimum Yield = 80 KSI

REV	DATE	NAME	DATE
1		Belo Soedelingham	11-28-2011
CAD FILE: MASTERRIB		SCALE: NONE	
DRAWN: MASTERRIB		CHECKED: NONE	APPROVED: NONE
<b>MasterRib Panel</b>			
UNION CORRUGATING COMPANY 701 SOUTH KING ST FAYETTEVILLE, NC 28302 Ph: 610-485-2105 Fax: 610-485-1081			
DATE: 11-30-2011		<b>1 OF 1</b>	