

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

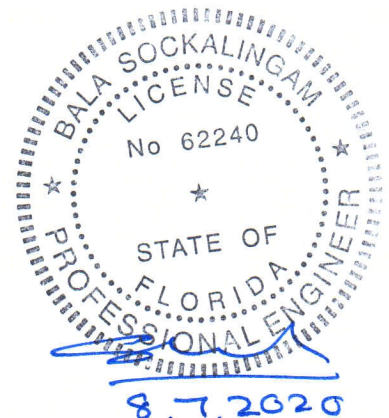
**FLORIDA BUILDING CODE 7TH EDITION (2020)
FLORIDA PRODUCT APPROVAL
FL 9557.4-R5
PANEL WALLS
SIDING**

**Prepared For:
Union Corrugating Company
701 S. King St.
Fayetteville, NC 28301
Telephone: (910) 483-0479
Fax: (910) 483-1091**

**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 (2 Pages including cover)
Installation Details (1 Page)
Load Span Table (1 Page)**

**Report No. C2372-4
Date: 8.7.2020**



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) as per FBC 2020 Section 1405.2.
Support Description:	Nom. 2" x 2" (min) SPF, SYP or DF lumber (Must be designed by others)
Design Pressure: (Based on testing)	+45.35 and -36.2 psf at support spacing of 48" o.c. (at 3 span condition with FS = 2.0)
Panel Attachment:	#9-15 or #10-14 x 1.5" long wood screws with washers. Corrosion resistant as per FBC 2020 Section 1405.17.
At panel ends	at 3.5"-5.5"-3.5" o.c. across panel width
At intermediate	at 9" o.c. across panel width
Sidelap Attachment:	1/4"-14 x 7/8" long SDS with washer at 24" o.c. Corrosion resistant as per FBC 2020 Section 1405.17.
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'.
Test Equivalency:	The test procedures in ASTM E1592-01 comply with test procedures prescribed in ASTM E1592-05(2012).
Code Compliance:	The product described herein has demonstrated compliance with FBC 2020 Section 1404.5.
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 support spacing listed herein shall not be exceeded. The design pressure for reduced support spacing may be computed using rational analysis prepared by a Florida Professional Engineer or based on Union Corrugating load span table. This product is not approved for use in the High Velocity Hurricane Zone.
Supporting Documents:	ASTM E1592 Test Report ENCON Technology Inc. C1514-1 (Test #2 & 3), Reporting Date 9/8/07

UNION CORRUGATING COMPANY

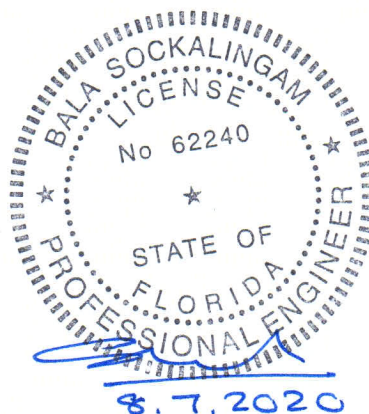
MasterRib Wall Panel

36" wide, 29 ga. (min) Steel Panel over Wood Supports

Span Condition	Loading Type	Allowable Load (psf)								
		Support Spacing (ft)								
		1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.50	4.00
Two Span	Positive	106.4	91.2	79.8	70.9	63.9	58.0	53.2	45.6	36.3
	Negative	84.9	72.8	63.7	56.6	51.0	46.3	42.5	36.4	29.0
Three Span	Positive	120.9	103.7	90.7	80.6	72.6	66.0	60.5	51.8	45.4
	Negative	96.5	82.7	72.4	64.4	57.9	52.7	48.3	41.4	36.2
Four or More Spans	Positive	116.4	99.8	87.3	77.6	69.8	63.5	58.2	49.9	42.4
	Negative	92.9	79.6	69.7	61.9	55.7	50.7	46.5	39.8	33.8

Notes:

1. Allowable load for each condition is the smallest load calculated based on fastener capacity, panel strength and deflection limit of $L/120$. Allowable loads are calculated for minimum 29 ga. panel.
2. The wind load is taken as 0.7 times the "component and cladding" loads for the purpose of determining deflection limit.
3. The panel allowable properties are determined from full scale ASTM E1592 tests at 4' 0" span
4. The panel fasteners are #9-15 or #10-14 x 1.5" long wood screws with washers. Fastener spacing across panel width is 9.0" o.c. in the interior supports and 3.5"-5.5"-3.5" o.c. at panel ends.
5. Sidelap fasteners are 1/4"-14 x 7/8" long self drilling screws with washer at 24" o.c.
6. Wood supports are minimum 2" x 2" lumber. All supports must be designed to resist all loads imposed on the panel.
7. Minimum bearing width of support is 1.5".
8. The panels may span from bottom to top supports or side to side supports.
9. Panels must be installed as per Evaluation Report FL 9557.4 and Union current installation procedure.



1216 N Lansing Ave. Suite C
Tulsa, OK 74106
918 492 5992

Bala Sockalingam, Ph.D., P.E.
PE 62240