

**EVALUATION REPORT OF
UNION CORRUGATING COMPANY
'7/8" CORRUGATED PANEL'**

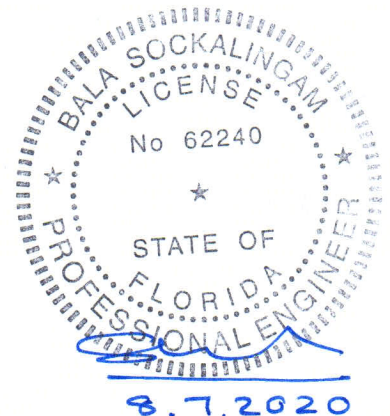
**FLORIDA BUILDING CODE 7TH EDITION (2020)
FLORIDA PRODUCT APPROVAL
FL 9557.1-R5
PANEL WALLS
SIDING**

**Prepared For:
Union Corrugating Company
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**This report consists of
Evaluation Report (3 Pages including cover)
Installation Details (2 Pages)
Load Span Tables (1 Page)**

**Report No. C2372-1
Date: 8.7.2020**



Manufacturer:	Union Corrugating Company
Product Name:	7/8" Corrugated
Panel Description:	7/8" high ribs spaced at 2.67" o.c
32SLR or 32SLV	Min. 26 ga., 32" wide with (13) ribs. Coverage width = 32"
34SLR or 34SLV	Min. 24 ga., 34.67" wide with (14) ribs. Coverage width = 34.67"
37SLR or 37SLV	Min. 24 ga., 37.33" wide with (15) ribs. Coverage width = 37.33"
Materials:	Min. 26 ga., 80 ksi steel or min. 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 2020 Section 1405.2.
Support Description:	Min. 16 ga., 50 ksi steel section (Must be designed by others)
Design Uplift Pressure:	Inward and outward loads are shown in the load span tables. The allowable loads for strength and deflection limits of L/120 were developed from test data. The allowable loads were calculated with safety factor of 2. Maximum span is 7' 9".
Panel Attachment:	#12-14 self-drilling screws (SDS) with washer at max. 8" o.c. across panel width. The panels were fastened through the panel ridge with 2" long screws or through the panel valley with 1.25" long screws. Fasteners are corrosion resistant as per FBC 2020 Section 1405.17.
Sidelap Attachment:	¼"-14 x 7/8" long SDS with washer at max. 24" o.c. Fasteners are corrosion resistant as per FBC 2020 Section 1405.17.
Test Standards:	Wall assembly tested in accordance with ASTM E1592-05(2017) '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 E1592-05(2017) 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's load span table. This evaluation report is not applicable in High Velocity Hurricane Zone.

Supporting Documents: ASTM E1592 Test Reports
ENCON Technology Inc.
C2260-1, Reporting Date 4/30/19
C2260-2, Reporting Date 10/31/19



ALTERNATE FASTENING PATTERN SHOWN ON PAGE 2

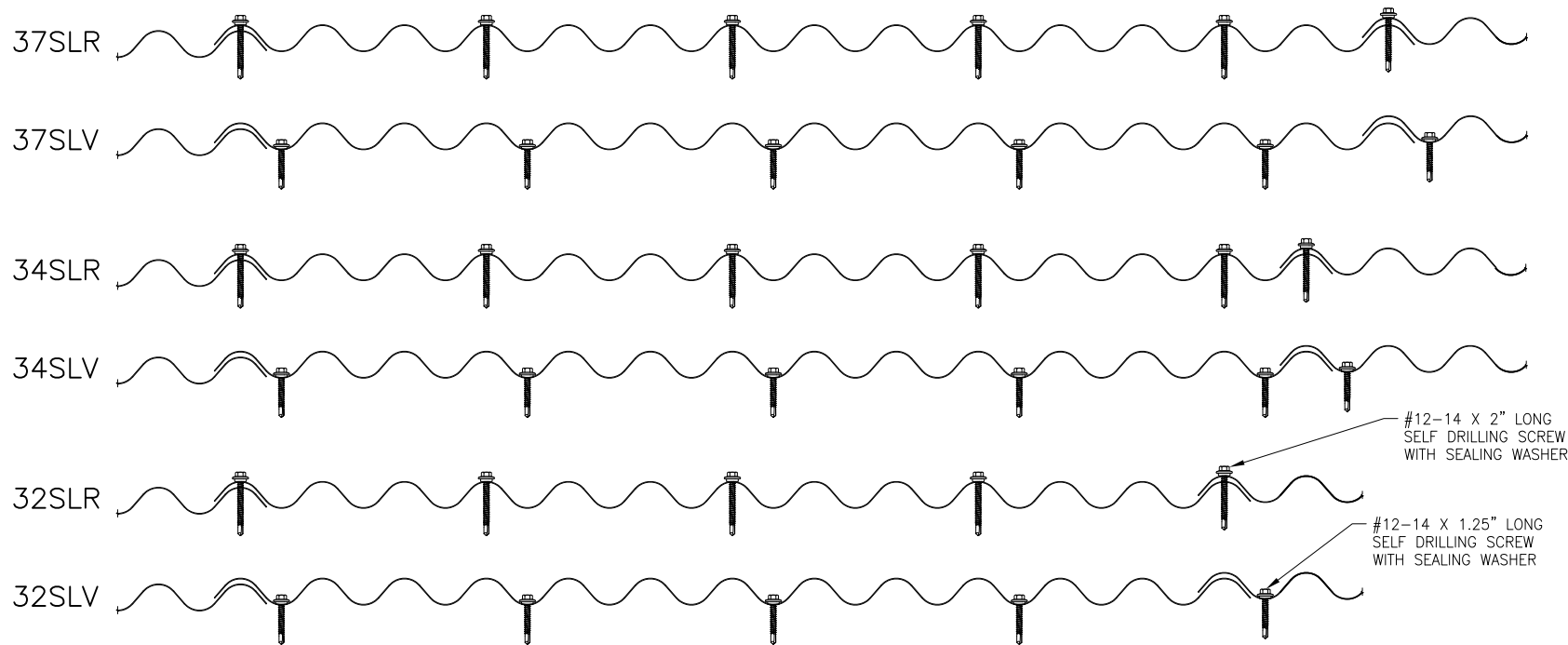


GENERAL NOTES:

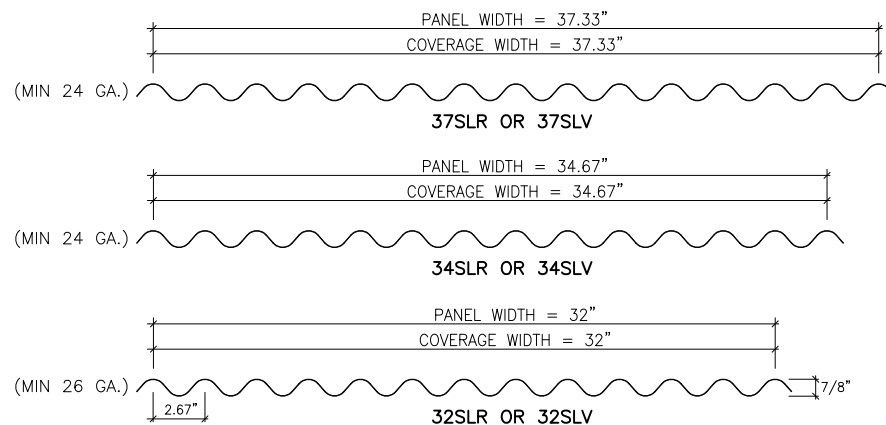
1. STRUCTURAL WALL PANEL HAS BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (FBC).
2. WALL PANELS SHALL BE MINIMUM 26 GA. MAXIMUM AND MINIMUM COVERAGE WIDTHS ARE 37.33" & 32", RESPECTIVELY.
3. WALL PANELS SHALL BE INSTALLED OVER STRUCTURE AS SPECIFIED ON THESE DRAWINGS.
4. REQUIRED DESIGN 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 THE LOAD SPAN TABLES.
5. ALL FASTENERS MUST BE IN ACCORDANCE WITH THESE DRAWINGS & THE FLORIDA BUILDING CODE. IF A DIFFERENCE OCCURS BETWEEN THE MINIMUM REQUIREMENTS OF THESE DRAWINGS & THE CODE, THE CODE SHALL CONTROL.
6. SUPPORTS MUST BE DESIGNED TO WITHSTAND WIND LOADS AS REQUIRED FOR EACH APPLICATION AND ARE THE RESPONSIBILITY OF OTHERS.
7. PANELS MAY SPAN BETWEEN BOTTOM AND TOP SUPPORTS (WALL APPLICATION WITH PANELS ORIENTED VERTICALLY), SIDE TO SIDE BETWEEN CORNER SUPPORTS (WALL APPLICATION WITH PANELS ORIENTED HORIZONTALLY) OR UNDER ROOF (SOFFIT APPLICATION WITH PAINTED SURFACE FACING DOWNWARD).



DRAWING NO.		REV.	
2372-1			
PAGE NO. 1 OF 2			
DRAWING TITLE			
7/8" CORRUGATED PANEL			
CONSULTANTS		MANUFACTURER	
BALA SOCKALINGAM, PH.D., P.E.		UNION CORRUGATING CO.	
1216 N LANSING AVE. SUITE C		701 S. KING STREET	
TULSA, OK 74106		FAYETTEVILLE, NC 28301	
PHONE: 918-482-5992 FAX: 866-366-1543		910-483-2195	
DRAWN BY:	CHECKED BY:		
B.S.	R.B.		
PLOT:	DATE:	11/3/19	
NO.	REVISION DESCRIPTION		



ALTERNATE FASTENING PATTERN



PANEL SECTION

DRAWN BY: B.S.		CHECKED BY: R.B.	
PLOT:		DATE: 11/3/19	
DATE	BY	REVISION	DESCRIPTION
DRAWING TITLE 7/8" CORRUGATED PANEL		MANUFACTURER UNION CORRUGATING CO. 701 S. KING STREET FAYETTEVILLE, NC 28301 910-483-2195	
CONSULTANTS BALA SOCKALINGAM, P.H.D., P.E. 1216 N LANSING AVE., SUITE C DURHAM, NC 27603 PHONE: 919-492-5992 FAX: 919-492-5992		PANEL SECTION	
DRAWING NO. 2372-1		REV.	
PAGE NO. 2		OF 2	

UNION CORRUGATION COMPANY
7/8" CORRUGATED PANEL

Max. 37.33" wide coverage, 24 ga. (min) Steel Panel

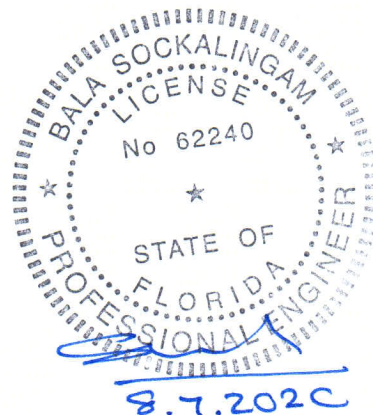
Span Condition	Loading Type	Allowable Load (psf)											
		Support Spacing (ft)											
		2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.75
Two Span	Inward	97.3	77.8	64.8	55.6	48.6	43.2	38.9	35.4	32.4	29.9	27.5	20.3
	Outward	126.8	101.4	84.5	72.4	63.4	56.3	50.7	46.1	42.3	39.0	34.3	25.3
Three Span	Inward	110.5	88.4	73.7	63.2	55.3	49.1	44.2	40.2	34.2	26.9	21.5	15.9
	Outward	140.0	115.3	96.0	82.3	72.0	64.0	57.6	52.4	46.2	39.4	33.9	19.8
Four or More Spans	Inward	106.4	85.1	70.9	60.8	53.2	47.3	42.5	38.7	35.5	28.6	22.9	16.9
	Outward	138.7	110.9	92.4	79.2	69.3	61.6	55.5	50.4	46.2	40.9	35.3	21.0

Max. 32.0" wide coverage, 26 ga. Steel Panel

Span Condition	Loading Type	Allowable Load (psf)											
		Support Spacing (ft)											
		2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.75
Two Span	Inward	97.3	77.8	64.8	55.6	48.6	43.2	38.9	35.4	32.4	29.9	27.5	20.3
	Outward	105.0	86.8	72.3	62.0	54.3	48.2	43.4	39.5	36.2	31.1	24.9	18.3
Three Span	Inward	110.5	88.4	73.7	63.2	55.3	49.1	44.2	40.2	34.2	26.9	21.5	15.9
	Outward	105.0	98.6	82.2	70.5	61.6	54.8	49.3	44.8	40.9	34.8	30.0	14.4
Four or More Spans	Inward	106.4	85.1	70.9	60.8	53.2	47.3	42.5	38.7	35.5	28.6	22.9	16.9
	Outward	105.0	94.9	79.1	67.8	59.3	52.7	47.5	43.1	39.6	36.2	31.2	15.3

Notes:

1. Allowable load for each condition is the smallest load calculated based on fastener capacity, panel strength and deflection limit of L/120.
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 2' 0" & 7' 9" spans.
4. The panel fasteners are #12-14 x 1-1/4" or 2" long self drilling fastener with washer.
5. Sidelap fasteners are 1/4"-14 x 7/8" long self drilling screws with washer at 24" o.c.
6. Steel supports are minimum 16 ga.. All supports must be designed to resist all loads imposed on the panel.
7. Panels must be installed as per Evaluation Report FL 9557.1 and Union current installation procedure.



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