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 701 S. King St. Fayetteville, NC 28301 Telephone: (910) 483-0479 Fax: (910) 483-1091

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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: $\frac{1}{4}$ "-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.

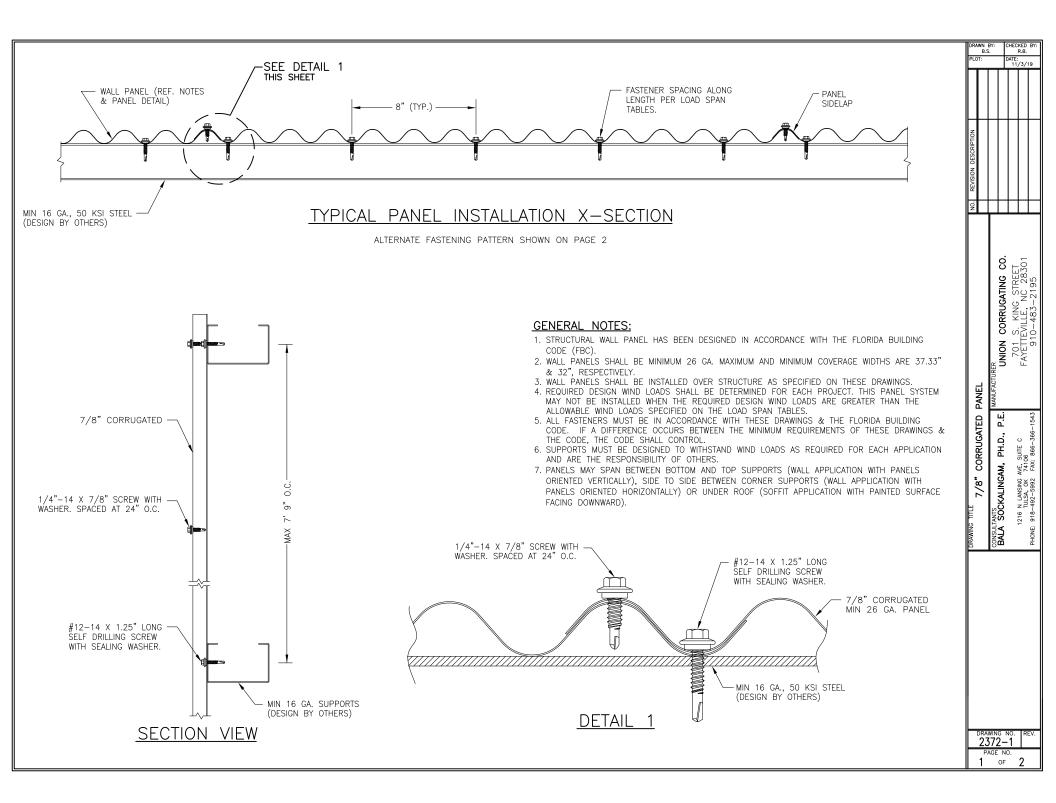
Product Limitations: Design wind loads shall be determined for each project in accordance

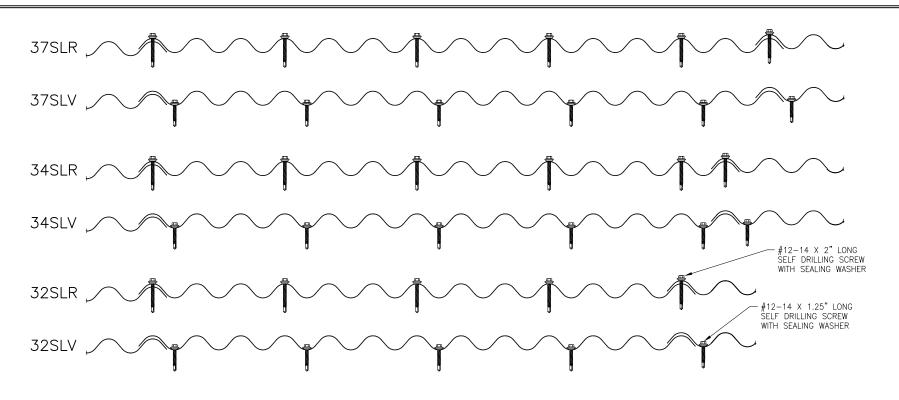
with FBC 2020 Section 1609 or ASCE 7-16 using allowable stress design. The maximum support spacing listed herein shall not be exceeded. The design pressure for reduced support spacing may be computed using rational analysis prepared by a Florida Professional Engineer or based on Union's load span table. This evaluation report

is not applicable in High Velocity Hurricane Zone.

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





DRAWN BY: B.S.

UNION CORRUGATING CO. 701 S. KING STREET FYETTEVILLE, NC 28301 910-483-2195

PANEL

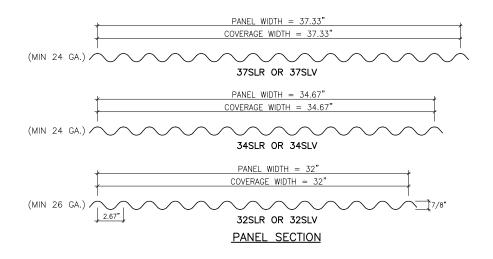
7/8" CORRUGATED

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ALTERNATE FASTENING PATTERN



UNION CORRUGATION COMPANY 7/8" CORRUGATED PANEL

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

Span	Loading	Allowable Load (psf) Support Spacing (ft)											
Condition	Type												
		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
1117	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
1.11	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	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
Spans	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

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Span	Loading	Allowable Load (psf)											
Condition	Type	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	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
Spans	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 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.

