

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

**FLORIDA BUILDING CODE 7TH EDITION (2020)
FLORIDA PRODUCT APPROVAL
FL 38458.1
PANEL WALLS
SIDING**

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

**Report No. C2464-1
Date: 4.17.2021**



Manufacturer: Union Corrugating Company

Product Name: Aluminum 7/8" Corrugated

Panel Description: 7/8" high ribs spaced at 2.67" o.c.
32SLV 32" wide with (13) ribs. Coverage width = 32"
34SLV 34.67" wide with (14) ribs. Coverage width = 34.67"
37SLV 37.33" wide with (15) ribs. Coverage width = 37.33"

Materials: Nom. 0.032" thick (min.) 3105-H14 Alloy (ASTM B209) per FBC 2020 Section 1405.2.

Support Description: Min. 16 ga., 50 ksi steel section (Must be designed by others)

Design Pressures: Inward and outward loads are shown in the load span table. 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' 0".

Panel Attachment: #12-14 x 1.25" long self-drilling screw with washer at max. 8" o.c. across panel width. The panels were fastened through the panel valley. Fasteners are corrosion resistant as per FBC 2020 Section 1405.17.

Sidelap Attachment: ¼"-14 x 7/8" long self-drilling screws with washer at 24" o.c.
(Optional) 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'.

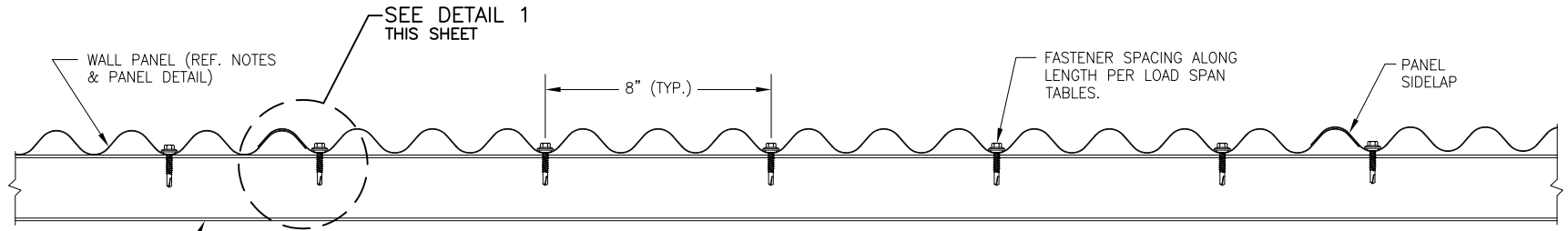
Test Equivalency: The test procedures in ASTM E1592-05(2017) comply with test procedures prescribed in ASTM E1592-05(2012).

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.
C2460-1, Reporting Date 4/17/2021

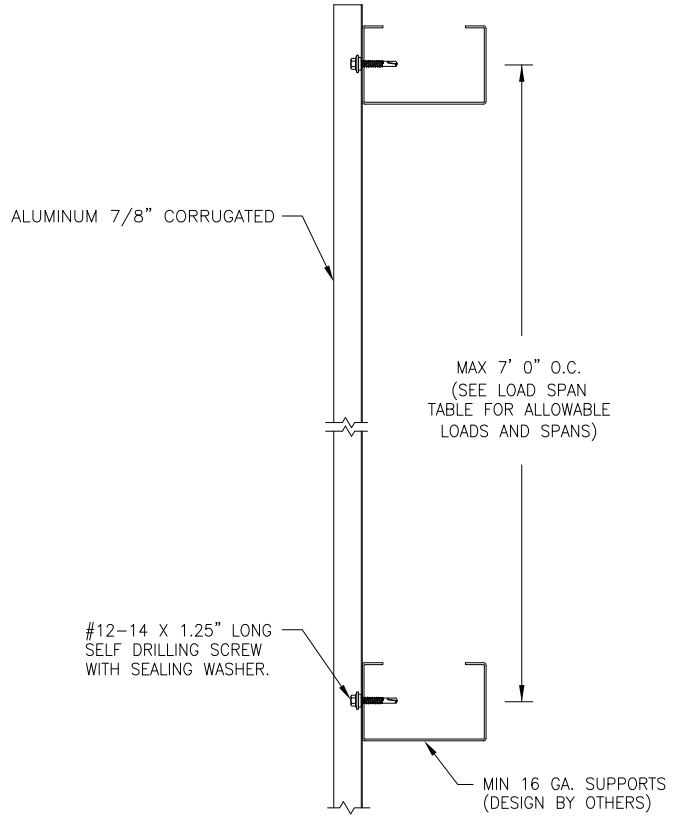
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MIN 16 GA., 50 KSI STEEL
(DESIGN BY OTHERS)

TYPICAL PANEL INSTALLATION X-SECTION

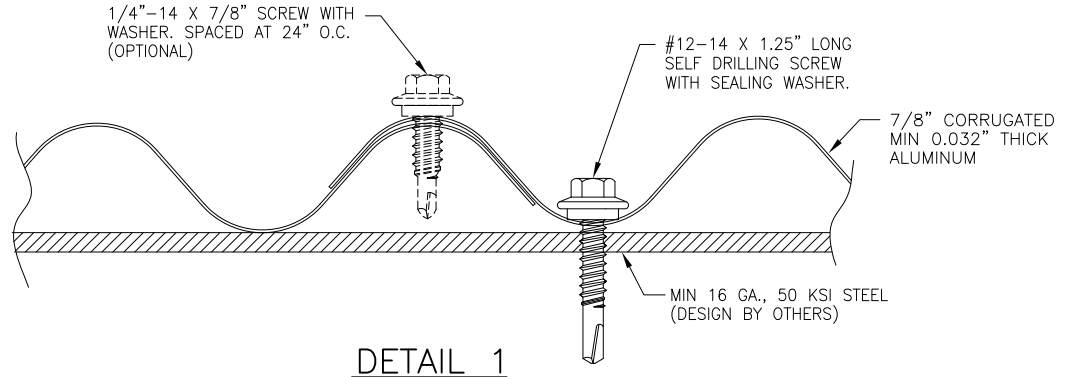
ALTERNATE FASTENING PATTERN SHOWN ON PAGE 2



SECTION VIEW

GENERAL NOTES:

1. STRUCTURAL WALL PANEL HAS BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (FBC).
2. WALL PANELS SHALL BE MINIMUM 0.032" THICK ALUMINUM. 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).

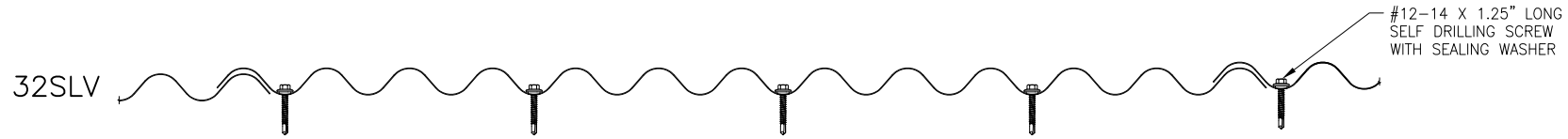


DETAIL 1

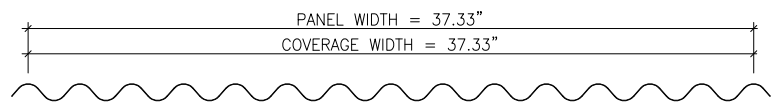
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	MANUFACTURER UNION CORRUGATING CO. 701 S. KING STREET FAYETTEVILLE, NC 28501 910-483-2195
CONSULTANTS	BALA SOCKALINGAM, PH.D., P.E. 1216 N LANSING AVE, SUITE C TULSA, OK 74106 PHONE: 918-492-5892 FAX: 966-366-1543

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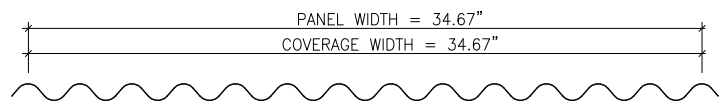
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ALTERNATE FASTENING PATTERN



37SLV



34SLV



32SLV

PANEL SECTION

**UNION CORRUGATION COMPANY
ALUMINUM 7/8" CORRUGATED PANEL**

Max. 37.33" wide coverage, Nom. 0.032" Thick Aluminum 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
Two Span	Inward	105.9	84.7	70.6	60.5	52.9	47.1	42.3	38.5	33.0	28.1	22.8
	Outward	105.9	84.7	70.6	60.5	52.9	47.1	38.9	32.1	27.0	23.0	19.8
Three Span	Inward	116.9	96.2	80.2	68.7	60.2	51.3	41.6	34.4	28.4	22.3	17.9
	Outward	116.9	96.2	80.2	68.7	53.2	42.0	34.0	28.1	23.6	20.1	17.4
Four or More Spans	Inward	115.8	92.6	77.2	66.2	57.9	51.5	43.2	35.7	30.0	23.7	19.0
	Outward	115.8	92.6	77.2	66.2	55.2	43.6	35.3	29.2	24.5	20.9	18.0

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. Allowable loads are calculated for nominal 0.032" thick aluminum panels.
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.
4. The panel fasteners are #12-14 x 1.25" long self drilling fastener with washer.
5. Steel supports are minimum 16 ga.. All supports must be designed to resist all loads imposed on the panel.
6. Panels must be installed as per Evaluation Report FL 38458.1 and Union current installation procedure.

