

**EVALUATION REPORT OF
UNION CORRUGATING COMPANY
'26 GA. ADVANTAGE-LOK II'**

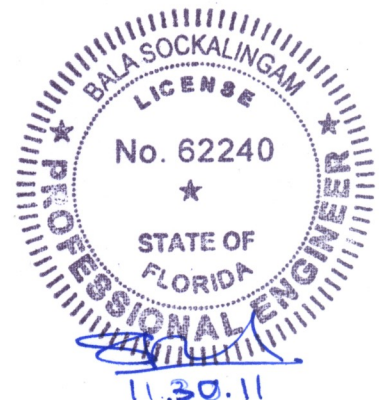
**FLORIDA PRODUCT APPROVAL
FL 7271.5-R2
ROOFING
METAL ROOFING**

**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. C1805-13
Date: 11.30.11**



Manufacturer: Union Corrugating Company

Product Name: Advantage-Lok II Panel

Panel Description: Max. 16" wide coverage with 1" high ribs

Materials: Minimum 26 ga., 50 ksi steel. Galvanized coated steel (ASTM A653) or Galvalume coated steel (ASTM A792) or painted steel (ASTM A755).

Deck Description: Min 15/32" thick plywood for new and existing constructions. Designed and installed as per FBC 2010.

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

Underlayment: Minimum underlayment as per FBC 2010 Section 1507.4.5

Slope: 1/2:12 or greater in accordance with FBC 2010 Section 1507.4.2

Design Uplift Pressure: 59.4 psf @ fastener spacing of 6" o.c. in 15/32" thick plywood
(Factor of Safety = 2) 97.5 psf @ fastener spacing of 6" o.c. in 15/32" thick plywood with 3/16" diameter bead sealant in panel seam
107.9 psf @ fastener spacing of 4" o.c. in 19/32" thick plywood with 3/16" diameter bead sealant in panel seam

Panel Attachment:
At panel seam #10-12 x 1" long A-point pancake head screws
At panel ends #9-15 x 1.5" wood screw with washer – 4 per panel width
At panel sides #9-15 x 1.5" wood screw with washer @ 12" o.c.

Seam Sealant: Sikaflex-201 Sealant

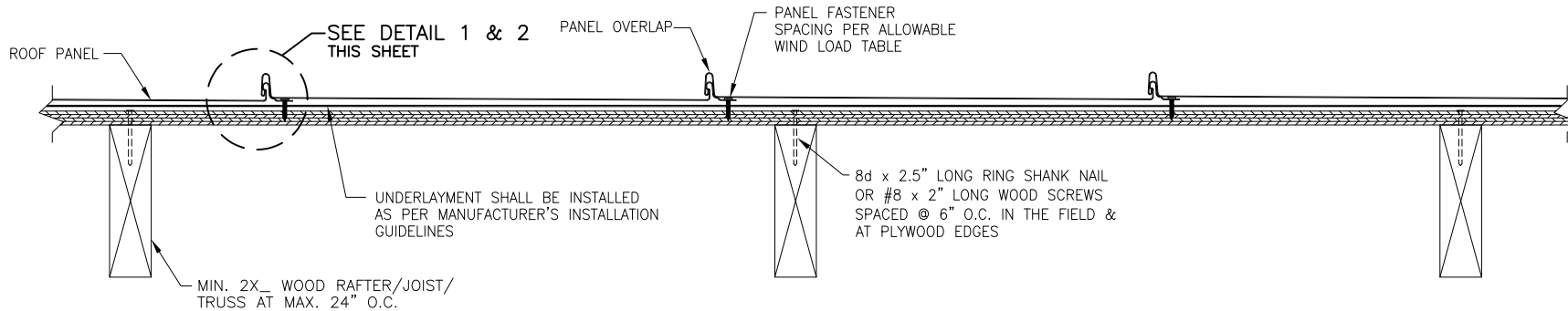
Test Standards: Roof assembly tested in accordance with TAS 125-03 ‘Standard Requirements for Metal Roofing Systems’.

Code Compliance: The product described herein has demonstrated compliance with FBC 2010 Section 1507.4

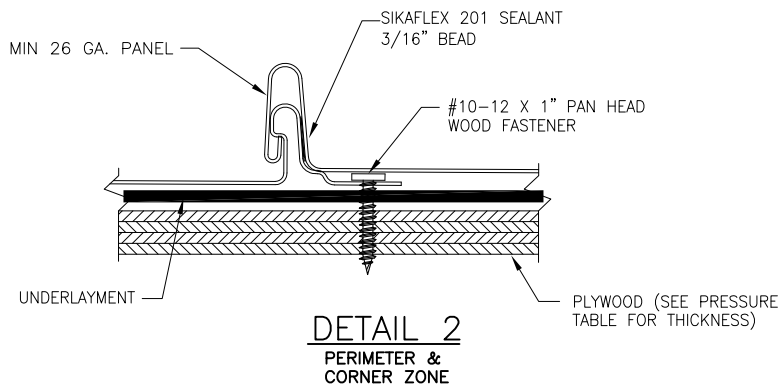
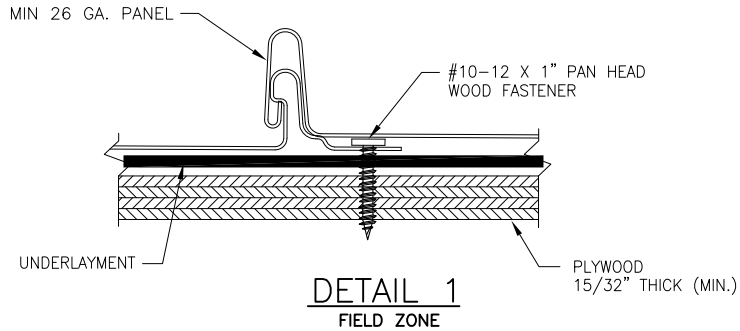
Product Limitations: Design wind loads shall be determined for each project in accordance with FBC 2010 Section 1609 or ASCE 7-10 using allowable stress design. The maximum fastener spacing listed herein shall not be exceeded. This evaluation report is not applicable in High Velocity Hurricane Zone. Refer to current NOA for use of this product in 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: TAS 125 Test Reports
Farabaugh Engineering and Testing Inc
Project No. T185-06, Reporting Date 7/25/06



TYPICAL PANEL INSTALLATION X-SECTION



ALLOWABLE UPLIFT PRESSURE

| ZONE | PANEL SIDELAP FASTENER SPACING ALONG RIB | MINIMUM PLYWOOD THICKNESS | SEAM SEALANT DIAMETER | PRESSURE (PSF) |
|--------------------|--|---------------------------|-----------------------|----------------|
| FIELD | 6" | 15/32" | NONE | 59.4 |
| PERIMETER & CORNER | 6" | 15/32" | 3/16" | 97.5 |
| PERIMETER & CORNER | 4" | 19/32" | 3/16" | 107.9 |

GENERAL NOTES:

1. ARCHITECTURAL ROOF PANEL HAS BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (FBC).
2. ALL ROOF PANELS ARE SHALL BE 26 GA. EFFECTIVE COVERING WIDTH OF OF PANEL = 16"
3. THE ROOF PANELS SHALL BE INSTALLED OVER SHEATHING & STRUCTURE AS SPECIFIED ON THIS DRAWING.
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 LOAD TABLE.
5. 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.
6. RAFTERS/JOISTS/TRUSSES MUST BE DESIGNED TO WITHSTAND WIND LOADS AS REQUIRED FOR EACH APPLICATION AND ARE THE RESPONSIBILITY OF OTHERS.

DRAWN BY: B.S.
CHECKED BY:
PLOT: 1=4
DATE: 11/28/11

| NO. | REVISION | DESCRIPTION | DATE |
|-----|----------|-------------|------|
| | | | |
| | | | |
| | | | |
| | | | |

ADVANTAGELOK II PANEL
MANUFACTURER
UNION CORRUGATING CO.
701 S. KING STREET
FAYETTEVILLE, NC 28301
910-483-2195

CONSULTANTS
BALA SOCKALINGAM, PH.D., P.E.
1216 N. LANSING AVE., SUITE C
FAYETTEVILLE, NC 28301
PHONE: 918-492-8992 FAX: 866-366-1543

CERTIFICATION
BALA SOCKALINGAM, P.E.
P.E. NO. 62240

DRAWING NO. REV.
C1805-13
SHEET NO.
1 OF 1