36274

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CIVIL & TRANSPORTATION ENGINEERING | ECOLOGY | GIS | LANDSCAPE ARCHITECTURE | PLANNING | SURVEYING | SUBSURFACE UTILITY ENGINEERING

March 13, 2018

Surveyor's Report regarding 979 SW Riverside Avenue, Fort White, Florida.

This surveyor has been requested to provide a finished-floor elevation on the above mentioned site, referenced to the North American Vertical Datum of 1988 (NAVD88) per client's request.

In order to establish elevations on the subject parcel this surveyor used GPS measurements on FDOT Bench Marks located along SR27. Said bench marks are "BM10" and "BM11" as per DOT Bench run data sheet for Project No.2905001 (Note all elevations in said project are in meters and referenced to the National Geodetic Vertical Datum of 1929 [NGVD29]), after converting the published benchmark information into Geodetic NAD83 and NAVD88 (feet), our findings showed both of these bench marks to be lower than our GPS equipment by an average of 0.22'. We applied a +0.22' coefficient to all elevations obtained at the subject parcel.

Our measurements show the finished floor elevation (as of 3/13/18) to be 34.47' (NAVD88). As per the letter provided from Laurie Hodson of the Columbia County Building Department dated February 9, 2018, the minimum required floor elevation is 34.00' (NAVD88'). In my opinion, the finished floor is at a satisfactory elevation, exceeding the required 34.00' by +/-0.47'.This measurement has a tolerance of +/- 0.30'.

Nathan Weber P.S.M.

DONALD A. YANSKEY ARCHITECT
FL Registration FL AR 0011010
352.278.7872
2421 NW 49 Ave., Gainesville, FL 32605
dayayan85arch@gmail.com

Permit # 0000 36274

March 14, 2018

Mr. Richard Park
979 Southwest Riverside Avenue
Columbia County, Florida

RE: Construction change for New Residence for Richard & Joan Park located at 979 Southwest Riverside Avenue in Columbia County, Florida.

Dear Mr. Richard Park,

Item No. 1 For 8'-0" Header Openings, provide double 2 x 12 No. 2 Southern Pine with ½" OSB solid continuous spacer glued and nailed with 10d x 0.128" x 3" nails in 2 rows @ 12" O.C. staggered each side with 1 - Simpson MSTA24 each side of opening with 3 header studs and 3 full height studs. Install 1– Simpson MSTA24 stud tie each side of opening.

If you have any questions, please do not hesitate to call. Thank you for the opportunity to provide you with this service.

Thank You,

Donald Alan Yanskey, Architect FL AR 0011010
File: Park Residence - Const - 03.doc

DONALD A. YANSKEY ARCHITECT
FL Registration FL AR 0011010
352.278.7872
2421 NW 49 Ave., Gainesville, FL 32605
dayayan85arch@gmail.com

PERMIT # 000036274

March 14, 2018

Mr. Richard Park
979 Southwest Riverside Avenue
Columbia County, Florida

RE: Construction change for New Residence for Richard & Joan Park located at 979 Southwest Riverside Avenue in Columbia County, Florida.

Dear Mr. Richard Park,

Item No. 1 For headers as listed in the Opening Header Schedule, it will be acceptable to install 1 – 2 x 4 Header Stud and 1 – 2 x 4 Full Height Stud each side of openings up to 4'-0" wide.

Item No. 2 Install Simpson MSTA24 Strap Tie to underside of Base Plate in lieu of where in the Opening Header Schedule I call for Simpson SPHR4.

If you have any questions, please do not hesitate to call. Thank you for the opportunity to provide you with this service.

Thank You,

Donald Alan Yanskey, Architect FL AR 0011010
File: Park Residence - Const - 02.doc

#36274

COLUMBIA COUNTY BUILDING DEPARTMENT

Blower Door Test Results Form

Date: 5-25-2018 Permit Number: 00036274

Job Address: 979 SW Riverside Ave Ft White

AIR INFILTRATION TEST RESULTS		
CFM (50) = 615		
Volume = 20,282		
ACH (50) = CFH (50) X 60 / Volume = 1.8	☒ PASS	☐ FAIL

CERTIFICATION OF TEST RESULTS

R402.4.1.2 Testing. The Building or dwelling unit shall be tested and verified as having as air leakage rate of not exceeding 7 air changes per hour in Climate Zones 1 and 2, and 3 air changes per hour in Climate Zones 3 through 8. Testing shall be conducted with a blower door at a pressure of 0.2 inches w.g. (50 Pascals). Testing shall be conducted by either individuals as defined in Section 553.993(5) or (7), Florida Statutes or individuals licensed as set forth in Section 489.105(3)(f), (g), or (i) or an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the code official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope.

I hereby certify that the above Air Infiltration Test results demonstrate compliance with Florida Energy Code requirements in accordance with the5th Edition 2014 Florida Building Code-Energy Conservation R402.4.1.2.

Testing Company Name: CEEP

Tester Name: Bryan Bonds Lic./Cert.#: CAC1815198

Tester Signature:

135 NE Hernando Avenue, B-21
Lake City, FL 32055
www.columbiacountyfla.com

Phone: 386-758-1008
Fax: 386-758-2160

DONALD A. YANSKEY ARCHITECT
FL Registration FL AR 0011010
352.278.7872
2421 NW 49 Ave., Gainesville, FL 32605
dayayan85arch@gmail.com

Permit # 0000-36274

February 26, 2018

Richard & Joan Park
979 Southwest Riverside Avenue
Columbia County, FL

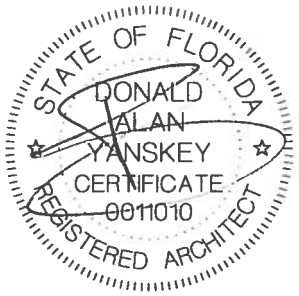
RE: Construction Change and Clarification for New Residence for Richard & Joan Park located at 979 Southwest Riverside Avenue in Columbia County, Florida.

Item No. 1 Replace existing slab and footings at Carport and columns. Install 4" thick concrete slab with heavy duty fibermesh concrete with thickened slab edge of 12" wide x 20" deep with 2 - #5 continuous.

Item No. 2 Revise footing size for pump house to 12" wide x 16" deep with 2 - #5 continuous. Install 4" thick concrete slab with heavy duty fibermesh concrete.

If you have any questions, please do not hesitate to call. Thank you for the opportunity to provide you with this service.

Thank You,



Donald Alan Yanskey, Architect FL AR 0011010

File: Harvey Bldg. Const - Park Residence - Const - 02.doc

DAY/day

DONALD A. YANSKEY ARCHITECT

FL Registration FL AR 0011010
352.278.7872

2421 NW 49 Ave., Gainesville, FL 32605
dayayan85arch@gmail.com

Permit # 0000 362 74

February 12, 2018

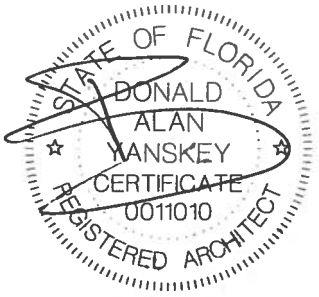
Richard & Joan Park
979 Southwest Riverside Avenue
Columbia County, FL

RE: Construction Change and Clarification for New Residence for Richard & Joan Park located at 979 Southwest Riverside Avenue in Columbia County, Florida.

Item No. 1 All vertical reinforcement from footing to top of C.M.U. stemwall shall be spaced no more than 8'-0" O.C. maximum.

If you have any questions, please do not hesitate to call. Thank you for the opportunity to provide you with this service.

Thank You,



Donald Alan Yanskey, Architect FL AR 0011010

File: Harvey Bldg. Const - Park Residence - Const - 01.doc

DAY/day

DONALD A. YANSKEY ARCHITECT
FL Registration FL AR 0011010
352.278.7872

2421 NW 49 Ave., Gainesville, FL 32605
dayayan85arch@gmail.com

Permit # 000036274

March 12, 2018

Mr. Richard Park
979 Southwest Riverside Avenue
Columbia County, Florida

RE: Construction change for New Residence for Richard & Joan Park located at 979 Southwest Riverside Avenue in Columbia County, Florida.

Dear Mr. Richard Park,

Item No. 1 Existing brick columns were removed and 3 – P.T. 6 x 6 posts were installed with Simpson ABU66 Post Base Anchors.

Item No. 2 Install double 1¾" x 11 7/8" 2.0E Microllam LVL Beams from new posts to main residence with 2 – Simpson MSTA24 Strap Ties at posts and Simpson HUS410 Face-Mount Hanger at wall.

If you have any questions, please do not hesitate to call. Thank you for the opportunity to provide you with this service.

Thank You,

Donald Alan Yanskey, Architect FL AR 0011010
File: Park Residence - Const - 01.doc

FL15216.1

TRINITY ERD

EXTERIOR RESEARCH & DESIGN, LLC.
Certificate of Authorization #9503
353 CHRISTIAN STREET, UNIT #13
OXFORD, CT 06478
PHONE: (203) 262-9245
FAX: (203) 262-9243

EVALUATION REPORT

Interwrap, Inc.
32923 Mission Way
Mission, BC V2V-6E4
Canada

Evaluation Report I40510.02.12-R2
FL15216-R2
Date of Issuance: 02/17/2012
Revision 2: 04/27/2015

SCOPE:

This Evaluation Report is issued under Rule 61G20-3 and the applicable rules and regulations governing the use of construction materials in the State of Florida. The documentation submitted has been reviewed by Robert Nieminen, P.E. for use of the product under the Florida Building Code and Florida Building Code, Residential Volume. The products described herein have been evaluated for compliance with the 5th Edition (2014) Florida Building Code sections noted herein.

DESCRIPTION: RhinoRoof Underlayments

LABELING: Labeling shall be in accordance with the requirements the Accredited Quality Assurance Agency noted herein.

CONTINUED COMPLIANCE: This Evaluation Report is valid until such time as the named product(s) changes, the referenced Quality Assurance documentation changes, or provisions of the Code that relate to the product change. Acceptance of this Evaluation Report by the named client constitutes agreement to notify Robert Nieminen, P.E. if the product changes or the referenced Quality Assurance documentation changes. Trinity|ERD requires a complete review of this Evaluation Report relative to updated Code requirements with each Code Cycle.

ADVERTISEMENT: The Evaluation Report number preceded by the words "Trinity|ERD Evaluated" may be displayed in advertising literature. If any portion of the Evaluation Report is displayed, then it shall be done in its entirety.

INSPECTION: Upon request, a copy of this entire Evaluation Report shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This Evaluation Report consists of pages 1 through 3.

Prepared by:

Robert J.M. Nieminen, P.E.
Florida Registration No. 59166, Florida DCA ANE1983

ROBERT J. M. NIEMINEN LICENSE No 59166 STATE OF FLORIDA PROFESSIONAL ENGINEER

The facsimile seal appearing was authorized by Robert Nieminen, P.E. on 04/27/2015. This does not serve as an electronically signed document. Signed, sealed hardcopies have been transmitted to the Product Approval Administrator and to the named client

CERTIFICATION OF INDEPENDENCE:

1. Trinity|ERD does not have, nor does it intend to acquire or will it acquire, a financial interest in any company manufacturing or distributing products it evaluates.
2. Trinity|ERD is not owned, operated or controlled by any company manufacturing or distributing products it evaluates.
3. Robert Nieminen, P.E. does not have nor will acquire, a financial interest in any company manufacturing or distributing products for which the evaluation reports are being issued.
4. Robert Nieminen, P.E. does not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.
5. This is a building code evaluation. Neither Trinity|ERD nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.

ROOFING COMPONENT EVALUATION:

1. SCOPE:

Product Category: Roofing
Sub-Category: Underlayment
Compliance Statement: RhinoRoof Underlayments, as produced by Interwrap, Inc., has demonstrated compliance with the intent of following sections of the Florida Building Code through testing in accordance with applicable sections of the following Standards. Compliance is subject to the Installation Requirements and Limitations / Conditions of Use set forth herein.

2. STANDARDS:

Section	Properties	Standard	Year
1507.2.3, 1507.5.3, T1507.8, 1507.8.3, 1507.9.3, 1507.9.5	Unrolling, Breaking Strength, Pliability, Loss on Heating	ASTM D226	2006
1507.2.3, 1507.5.3, 1507.8.3, 1507.9.3	Unrolling, Tear Strength, Pliability, Loss on Heating, Liquid Water Transmission, Breaking Strength, Dimensional Stability	ASTM D4869	2005

3. REFERENCES:

Entity	Examination	Reference	Date
ITS (TST1509)	Physical Properties	100539395COQ-006	10/27/2011
ITS (TST1509)	Physical Properties	100539395COQ-002	10/27/2011
ITS (TST1509)	Physical Properties	100539395COQ-006	03/14/2014
ITS (QUA1673)	Quality Control	Inspection Report	11/17/2014

4. PRODUCT DESCRIPTION:

4.1 **RhinoRoof U20** is a multilayered polymer woven coated synthetic roof underlayment intended as an alternate to ASTM D226, Type I or Type II felt or D4869 Type II felt. RhinoRoof Underlayment is available in 42-inch wide rolls, and can be produced in various other sizes.

5. LIMITATIONS:

5.1 This is a building code evaluation. Neither Trinity ERD nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.

5.2 This Evaluation Report is not for use in the HVHZ.

5.3 Fire Classification is not part of this Evaluation Report; refer to current Approved Roofing Materials Directory or test report from accredited testing agency for fire ratings of this product.

5.4 RhinoRoof Underlayments may be used with any prepared roof cover where the product is specifically referenced within FBC approval documents. If not listed, a request may be made to the AHJ for approval based on this evaluation combined with supporting data for the prepared roof covering.

5.5 Allowable roof covers applied atop RhinoRoof Underlayments are follows:

TABLE 1: ROOF COVER OPTIONS

Underlayment	Asphalt Shingles	Nail-On Tile	Foam-On Tile	Metal	Wood Shakes & Shingles	Slate or Simulated Slate
RhinoRoof U20	Yes	No	No	Yes	Yes	No

5.6 Exposure Limitations:

5.6.1 RhinoRoof Underlayment shall not be left exposed for longer than 30-days after installation

6. INSTALLATION:

6.1 RhinoRoof Underlayments shall be installed in accordance with Interwrap, Inc. published installation instructions subject to the Limitations set forth in Section 5 herein and the specifics noted below.

6.2 Install RhinoRoof Underlayments in compliance with manufacturer's published installation instructions and the requirements for ASTM D226, Type I or II or D4869, Type II underlayments in FBC Sections 1507 for the type of prepared roof covering to be installed.

6.3 Re-fasten any loose decking panels, and check for protruding nail heads. Sweep the substrate thoroughly to remove any dust and debris prior to application.

6.4 RhinoRoof U20:

6.4.1 Fasteners:

For exposure ≤ 24 hours, corrosion resistant fasteners may be 1-inch roofing nails with a 3/8-inch diameter head, or those noted in 6.4.2. The use of staples is prohibited.

For exposure > 24 hours up to maximum 30 days, corrosion resistant fasteners shall be minimum 1-inch diameter plastic or metal cap nails or FBC HVHZ nails & 1-5/8" diameter tin caps (with the rough edge facing up). The use of staples is prohibited.

6.4.2 Single Layer; Roof Slope > 4:12:

End (vertical) laps shall be minimum 6-inches and side (horizontal) laps shall be minimum 4-inches. Refer to Interwrap, Inc. recommendations for alternate lap configurations and/or the use of sealant under certain conditions.

For exposure ≤ 24 hours, use of every-other fastening location printed on the surface is acceptable. For exposure > 24 hours up to maximum 30-days, use of every fastening location printed on the surface is required.

When batten systems are to be installed atop the underlayment, the underlayment need only be preliminarily attached pending attachment of the battens on the same day. Battens shall not be positioned over cap nails. If this occurs, remove the cap nail and patch the hole in accordance with Interwrap published instructions.

6.4.3 Double Layer; 2:12 < Roof Slope < 4:12:

End (vertical) laps shall be minimum 12-inches and side (horizontal) laps shall be minimum half-sheet-width plus 1-inch.

Double layer application; begin by fastening a half-width plus 1-inch starter strip along the eaves. Place a full-width sheet over the starter, completely overlapping the starter course. Continue as noted in 6.5, but maintaining minimum half-width plus 1-inch side (horizontal) laps, resulting in a double-layer application.

7. BUILDING PERMIT REQUIREMENTS:

As required by the Building Official or Authority Having Jurisdiction in order to properly evaluate the installation of this product.

8. MANUFACTURING PLANTS:

Contact the manufacturer or the named QA entity for information on plants covered under Rule 61G20-3 QA requirements.

9. QUALITY ASSURANCE ENTITY:

Intertek Testing Services NA Inc.-ETL/Warnock Hersey – QUA1673; (604) 520-3321

- END OF EVALUATION REPORT -

FL#12019

ACM™

AMERICAN CONSTRUCTION METALS

5140 West Clifton Street
Tampa, FL 33634

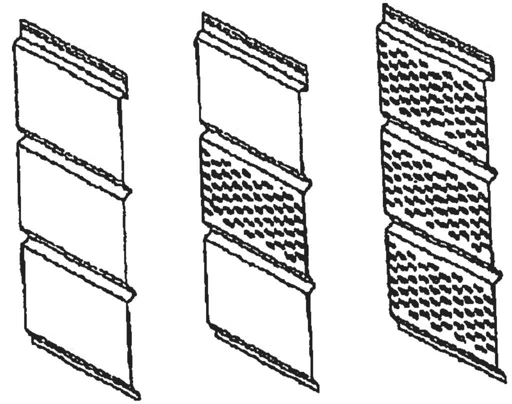
"TRIPLE 4" & "QUAD 4"

ALUMINUM SOFFIT

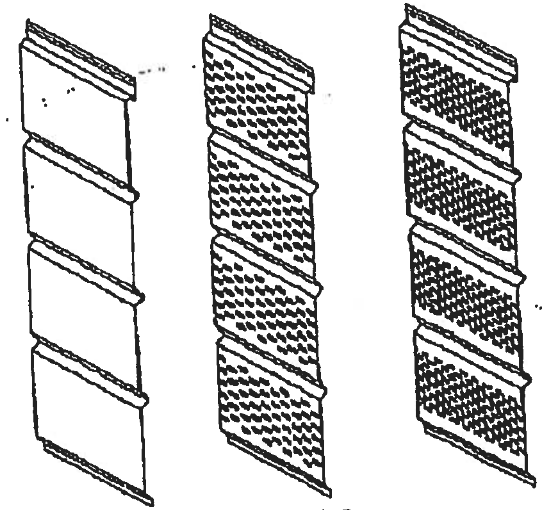
GENERAL NOTES

1. This product has been evaluated and is in compliance with the Florida Building Code excluding the "High Velocity Hurricane Zone" (HVHZ).
2. Product anchors shall be as listed and spaced as shown on details. Anchor embedment to base material shall be beyond wall dressing or stucco.
3. Site conditions not covered by this drawing are subject to further engineering analysis.
4. Wood/CMU wall construction, by others, must be designed properly to receive loads from the soffit and/or 2" x 2" batten strips.

TABLE OF CONTENTS



TRIPLE 4 (T4)
T-4012 (.0115" THICK)
T-4016 (.0135" THICK)



QUAD 4 (Q4)
Q-4012 (.0115" THICK)
Q-4016 (.0135" THICK)

Documents Prepared By:
RW BUILDING CONSULTANTS, INC.
P.O. Box 230 Valrico FL 33595
Phone No.: 813.659.9197
Florida Board of Professional Engineers
Certificate Of Authorization No. 8813
Lyndon F. Schmidt, P.E. No. 43409

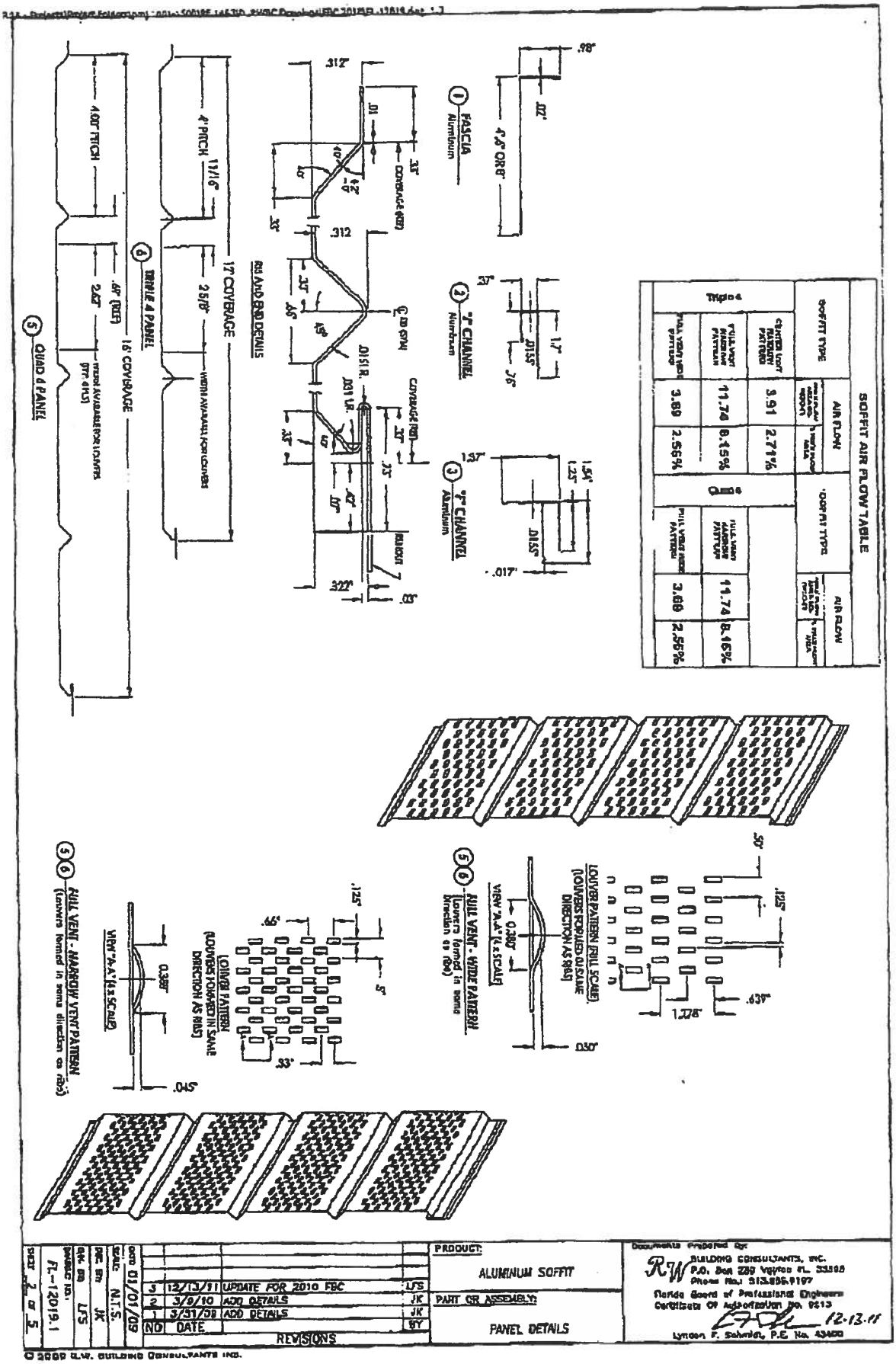
12.13.11

PRODUCT: ALUMINUM SOFFIT

PART OR ASSEMBLY: TYPICAL ELEVATIONS & GENERAL NOTES

NO	DATE	REVISIONS	BY
3	12/13/11	UPDATE FOR 2010 FBC	LFS
2	3/8/10	ADD DETAILS	JK
1	3/31/09	ADD DETAILS	JK

DATE: 1/8/09
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-12019.1
SHEET 1 OF 5


SOFFIT AIR FLOW TABLE
SOFFIT TYPE
AIR FLOW
Triple 4
CENTER LOUVER PATTERN PERFORATED
FULL VENT PATTERN
3.91
2.71%
11.74
8.15%
3.89
2.56%
Quad 6
FULL VENT PATTERN
11.74
8.15%
3.88
2.56%
1) FASCIA Aluminum
2) "J" CHANNEL Aluminum
3) "J" CHANNEL Aluminum
4) TRIPLE 4 PANEL
5) QUAD 6 PANEL
RS AND END DETAILS
6) FULL VENT - NARROW VENT PATTERN (louvers formed in same direction as ribs)
VIEW "A-A" (4:1 SCALE)
LOUVER PATTERN (LOUVERS FORMED IN SAME DIRECTION AS RIBS)
6) FULL VENT - WIDE PATTERN (Louvers formed in same direction as ribs)
LOUVER PATTERN (FULL SCALE)
PRODUCT:
ALUMINUM SOFFIT
PART OR ASSEMBLY:
PANEL DETAILS
REVISIONS
3 12/13/11 UPDATE FOR 2010 FBC LFS
2 3/9/10 ADD DETAILS JK
1 3/31/08 ADD DETAILS JK
NO DATE BY
DATE 01/01/09
SCALE N.T.S.
DRN BY JK
CHK BY LFS
DRAWING NO. FL-12019.1
SHEET 2 OF 5
BUILDING CONSULTANTS, INC.
P.O. Box 259 Vero FL 32968
Florida Board of Professional Engineers
Certificate Of Authorization No. 9513
Lyman F. Schmidt, P.E. No. 43409
12-13-11
© 2009 R.W. BUILDING CONSULTANTS INC.

SPAN	DESIGN PRESSURE (PSF) POSITIVE	DESIGN PRESSURE (PSF) NEGATIVE
6'	+78.0	-141.0
8'0"	+40.0	-60.0
12'	+50.0	-50.0
16'	+38.5	-38.5
18'0"	+30.0	-30.0

NOTE:
1. WOOD FRAMING AND CONNECTORS TO BE DESIGNED BY THE ARCHITECT OR ENGINEER OF RECORD
2. USE COMMON NAIL OR 3/16" DIA. CONCRETE SCREW (MIN. 1-1/4" EMBEDMENT) @ 24" O/C ON CENTER

NO	DATE	REVISIONS	BY
1	3/31/08	ADD DETAILS	JK
2	3/8/10	ADD DETAILS	JK
3	12/13/11	UPDATE FOR 2010 FBC	LFS

PRODUCT: ALUMINUM SOFFIT

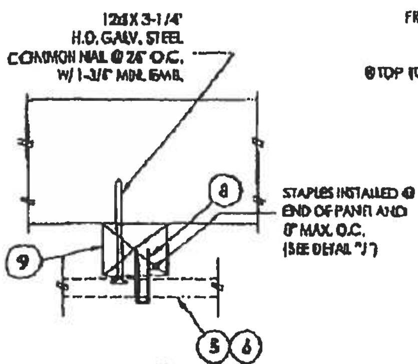
PART OR ASSEMBLY: SOFFIT DETAILS & DESIGN PRESSURES

DATE: 1/9/09
SCALE: N.T.S.
DWN BY: JK
CHK BY: LFS
DRAWING NO.: FL-12019.1
SHEET 4 OF 5

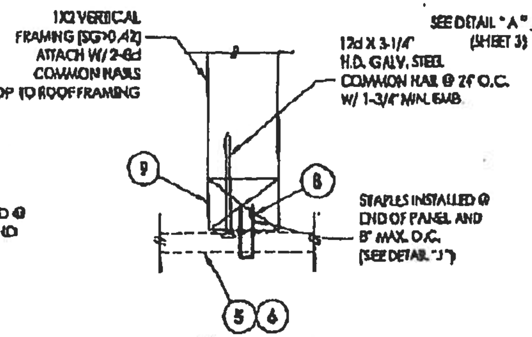
Documents Prepared By:
RW BUILDING CONSULTANTS, INC.
P.O. Box 239 Venice FL 34285
Phone No.: 813.220.0197
Florida Board of Professional Engineers
Certificate of Authorization No. 9013
12-13-11
Lyndon F. Schmidt, P.E. No. 43469

SINGLE SPAN LENGTH	DESIGN PRESSURE (PSF) POSITIVE	NEGATIVE
8'	+70.0	-141.8
10'	+60.0	-60.0
12'	+50.0	-50.0
14'	+38.5	-38.5
16'	+30.0	-30.0

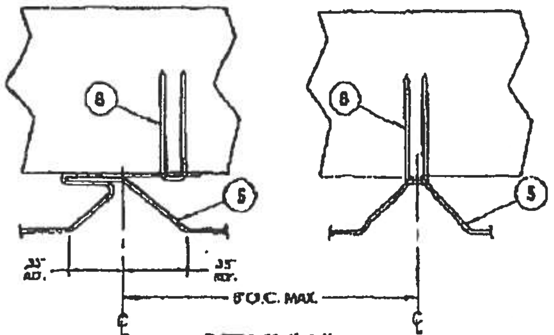
ITEM	DESCRIPTION	MATERIAL
1	FASCIA .0215" THK. AL. 3105 - H14	ALUMINUM
2	"F" CHANNEL .0155" THK. AL. 3105 - H24	ALUMINUM
3	"J" CHANNEL .0155" THK. AL. 3104 - H19	ALUMINUM
5	QUAD 4 PANEL (.0115 OR .0135" THICK) AL. 3105	ALUMINUM
6	TRIPLE 4 PANEL (.0115 OR .0135" THICK) AL. 3105	ALUMINUM
7	#15x 1-3/4" TRIM NAIL	S.S.
8	18' GA. X 1/4" SS STAPLE (W/ 7/8" MIN. EMBEDMENT)	STEEL
9	2" X 2" BATTEN STRIP SG=.42 OR BETTER	WOOD
10	APA B-C- GROUP 1 EXT. 15/32" PLYWOOD OR BETTER	WOOD
11	.097" DIA. T-NAIL (W/ 5/8" MIN. EMBEDMENT)	STEEL



DETAIL "H"



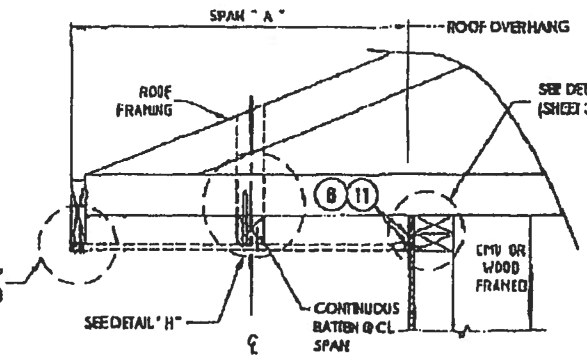
DETAIL "I"



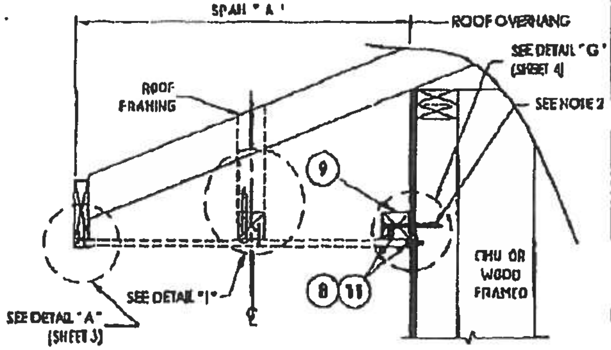
DETAIL "J"

TRUSS SPAN LENGTH W/ CONTINUOUS BATTEN "A"	DESIGN PRESSURE (PSF) POSITIVE	NEGATIVE
16"	+70.0	-70.0
18"	+66.5	-66.5
20"	+60.0	-60.0
22"	+54.5	-54.5
24"	+50.0	-50.0

NOTE
1. WOOD FRAMING AND CONNECTIONS TO BE DESIGNED BY THE ARCHITECT OR ENGINEER OF RECORD
2. 12d COMMON NAIL OR 3/16" TW CONCRETE SCREW (MIN. 1-1/4" EMBEDMENT) @ 24" ON CENTER



SIDE VIEW - DOUBLE SPAN W/BATTEN
(Shown w/ truss/framing cantilever)



SIDE VIEW - DOUBLE SPAN W/BATTEN
(Shown w/ truss/framing overhang)

Documents Prepared By:
RW BUILDING CONSULTANTS, INC.
P.O. Box 230 Valrico FL 33595
Phone No.: 813.659.9197
Florida Board of Professional Engineers
Certificate Of Authorization No. 9813
12-13-11
Lyndon F. Schmidt, P.E. No. 43409

PRODUCT: ALUMINUM SOFFIT

PART OR ASSEMBLY: SOFFIT DETAILS, DESIGN PRESSURES & BILL OF MATERIALS

NO.	DATE	REVISIONS	BY
3	12/13/11	UPDATE FOR 2010 FBC	LFS
2	3/6/10	ADD DETAILS	JK
1	3/31/09	ADD DETAILS	JK

DATE: 1/9/09
SCALE: N.T.S.
DRN. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-12019.1
SHEET 5 OF 5

FL# 13192-R3

Florida Product Approval

Cemplank® Lap Siding

- For use inside HVHZ:
  - Cemplank Lap Siding fastener types, fastening schedule, and installation shall be in accordance with the Miami-Dade County Florida NOA 15-0122.04. Consult the Cemplank product installation instructions on the follow pages for all other installation requirements.

- For use outside of HVHZ,
  - Cemplank Lap Siding fastener types, fastening schedule, and installation shall be in accordance with Engineering Evaluation Reports RIO-2553-15 or RIO-2557-15. Consult the Cemplank product installation instructions on the follow pages for all other installation requirements.

Cemplank® Lap Siding

South

Cemboard

INSTALLATION REQUIREMENTS - PRIMED AND FACTORY BUILT COLOR TREATED PRODUCTS

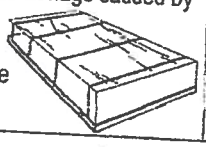
EFFECTIVE AUGUST 2010

CEDAR • BEADED CEDAR • BEADED SMOOTH

IMPORTANT: FAILURE TO INSTALL AND FINISH THIS PRODUCT IN ACCORDANCE WITH APPLICABLE BUILDING CODES AND THE MANUFACTURER'S WRITTEN APPLICATION INSTRUCTIONS MAY LEAD TO PERSONAL INJURY, AFFECT SYSTEM PERFORMANCE, VIOLATE LOCAL BUILDING CODES, AND VOID THE PRODUCT ONLY WARRANTY.

STORAGE & HANDLING:

Store flat and keep dry and covered prior to installation. Installing siding wet or saturated may result in shrinkage at butt joints. Carry planks on edge. Protect edges and corners from breakage. The manufacturer is not responsible for damage caused by improper storage and handling of the product.



⚠ CUTTING INSTRUCTIONS

OUTDOORS

1. Position cutting station so that wind will blow dust away from user and others in working area.
2. Use one of the following methods:
   - a. Best: i. Score and snap; ii. Shears (manual, electric or pneumatic)
   - b. Better: i. Dust reducing circular saw equipped with a Hardieblade™ saw blade and HEPA vacuum extraction
   - c. Good: i. Dust reducing circular saw with a Hardieblade saw blade (only use for low to moderate cutting)

INDOORS

1. Cut only using score and snap, or shears (manual, electric or pneumatic).
2. Position cutting station in well-ventilated area

- NEVER use a power saw indoors
- NEVER use a circular saw blade that does not carry the Hardieblade saw blade trademark
- NEVER dry sweep – Use wet suppression or HEPA Vacuum

Important Note: For maximum protection (lowest respirable dust production), the Manufacturer recommends always using "Best"-level cutting methods where feasible.

NIOSH-approved respirators can be used in conjunction with above cutting practices to further reduce dust exposures. Additional exposure information is available at www.cemboardsiding.com to help you determine the most appropriate cutting method for your job requirements. If concern still exists about exposure levels or you do not comply with the above practices, you should always consult a qualified industrial hygienist or contact the Manufacturer for further information.

SDL2712

GENERAL REQUIREMENTS:

- Cemplank® lap siding can be installed over braced wood or steel studs spaced a maximum of 24" o.c. or directly to minimum 7/16" thick OSB sheathing*. Irregularities in framing and sheathing can mirror through the finished application.
- Cemplank® lap siding can also be installed over foam insulation/sheathing up to 1" thick. When using foam insulation/sheathing, avoid over-driving nails (fasteners), which can result in dimpling of the siding due to the compressible nature of the foam insulation/sheathing. Extra caution is necessary if power-driven nails (fasteners) are used for attaching siding over foam insulation/sheathing.
- A water-resistive barrier is required in accordance with local building code requirements. The water-resistive barrier must be appropriately installed with penetration and junction flashing in accordance with local building code requirements. The manufacturer will assume no responsibility for water infiltration.
- Install Cemboard® products with a minimum 6" clearance to the finished grade on the exterior of the building or in accordance with local building codes if greater than 6" is required (fig. 3).
- Maintain a 1" - 2" clearance between Cemboard products and roofs, decks, patios, steps and driveways (figs. 4, 5 & 6).
- Maintain a 1/4" clearance between Cemboard products and horizontal flashing (fig. 7).
- Ensure gutters have end caps. Maintain a minimum 1" gap between end caps and siding & trim (fig.8).
- Install kickout flashing at roof-wall junctions (fig. 9).
- Adjacent finished grade must slope away from the building in accordance with local building codes - typically a minimum of 6" in the first 10'.
- Do not install Cemboard products, such that they may remain in contact with standing water.
- Cemplank® lap siding must be installed on vertical wall applications only.
- DO NOT use stain on Cemboard products.

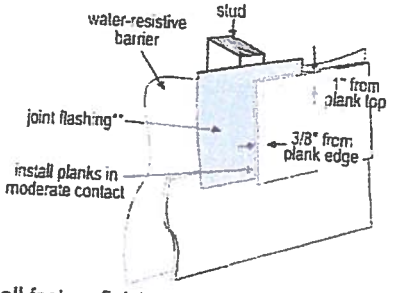
INSTALLATION:

JOINT TREATMENT*

(Required for Factory Built Color Finish, Recommended for Primed product)

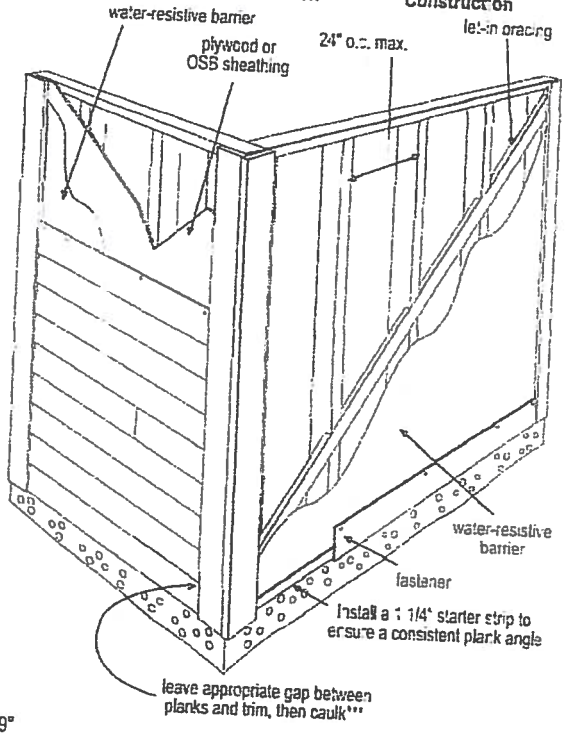
It is not recommended to use caulk at field butt joints.

Figure 2



Install factory finished edges together at butt joints.

Figure 1 Double Wall Construction / Single Wall Construction

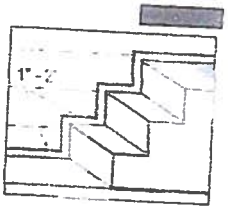


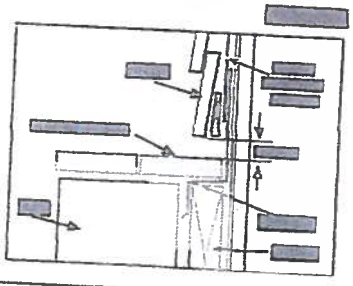
* If only nailed to sheathing, plank can be a maximum 9-1/4" wide and must be face nailed at 12" o.c. with 0.09" shank x 0.221" HD x 1.5" long corrosion resistant nails.

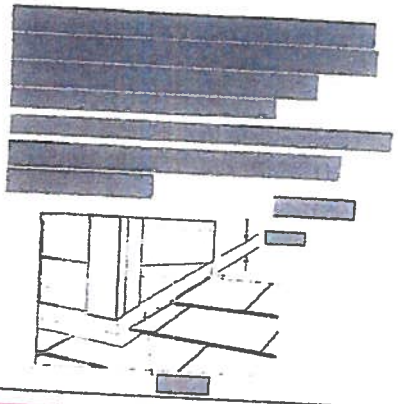
**As required by local building code ***Apply caulk in accordance with caulk manufacturers written application instructions.

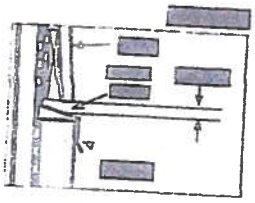
WARNING: AVOID BREATHING SILICA DUST

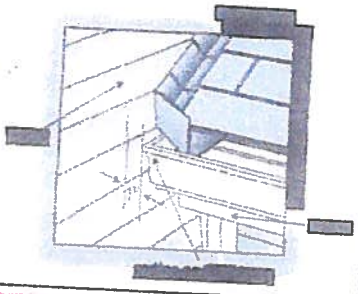
Cemboard® products contain respirable crystalline silica, which is known to the State of California to cause cancer and is considered by IARC and NIOSH to be a cause of cancer from some occupational sources. Breathing excessive amounts of respirable silica dust can also cause a disabling and potentially fatal lung disease called silicosis and has been linked with other diseases. Some studies suggest smoking may increase these risks. During installation or handling: (1) work in outdoor areas with ample ventilation; (2) use fiber cement shears for cutting or, where not feasible, use a Hardieblade™ saw blade and dust-reducing circular saw attached to a HEPA vacuum; (3) warn others in the immediate area; (4) wear a properly-fitted, NIOSH-approved dust mask or respirator (e.g. N-95) in accordance with applicable government regulations and manufacturer instructions to further limit respirable silica exposures. During clean-up, use HEPA vacuums or wet cleanup methods - never dry sweep. For further information refer to our installation instructions and Material Safety Data Sheet available at www.cemboardsiding.com or by calling 1-877-236-7526. FAILURE TO ADHERE TO OUR WARNINGS, MSDS, AND INSTALLATION INSTRUCTIONS MAY LEAD TO SERIOUS PERSONAL INJURY OR DEATH.

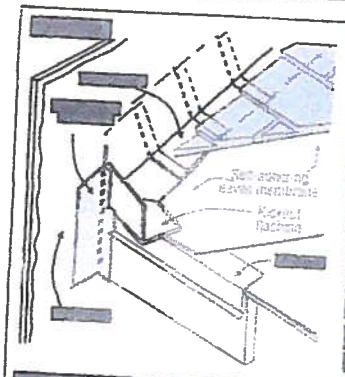












FASTENER REQUIREMENTS**

Blind Nailing is the preferred method of installation for all Cemplank® lap siding products

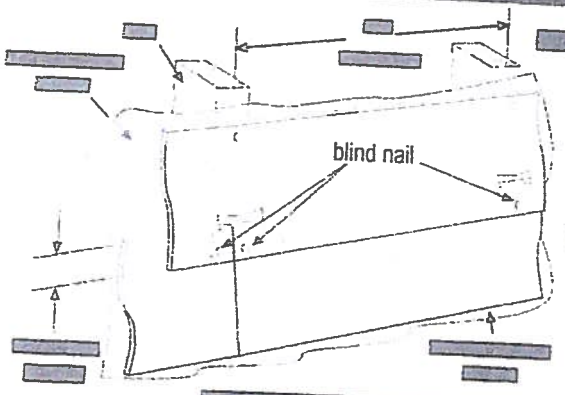
BLIND NAILING

Nails - Wood Framing

Screws - Steel Framing

Nails - Steel Framing

OSB minimum 7/16"

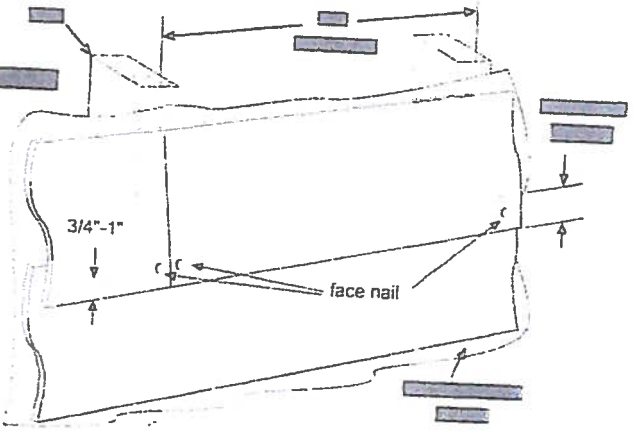


Nails - Wood Framing

Screws - Steel Framing

Nails - Steel Framing

OSB minimum 7/16"



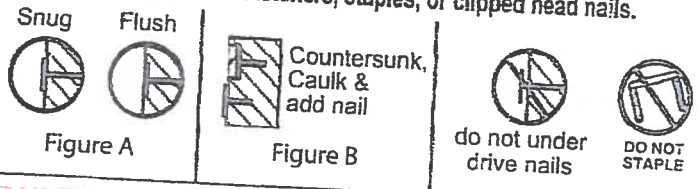
GENERAL FASTENING REQUIREMENTS

Fasteners must be corrosion resistant, galvanized, or stainless steel. Electro-galvanized are acceptable but may exhibit premature corrosion. The manufacturer recommends the use of quality, hot-dipped galvanized nails. The manufacturer is not responsible for the corrosion resistance of fasteners. Stainless steel fasteners are recommended when installing Cemboard® products near the ocean, large bodies of water, or in very humid climates.

PNEUMATIC FASTENING

Cemboard products can be hand nailed or fastened with a pneumatic tool. Pneumatic fastening is highly recommended. Set air pressure so that the fastener is driven snug with the surface of the siding. A flush mount attachment on the pneumatic tool is recommended. This will help control the depth the nail is driven. If setting the nail depth proves difficult, choose a setting that under drives the nail. (Drive under driven nails snug with a smooth faced hammer - Does not apply for installation to steel framing).

- Consult applicable code compliance report for correct fasteners type and placement to achieve specified design wind loads.
- NOTE: Published wind loads may not be applicable to all areas where Local Building Codes have specific jurisdiction. Consult the manufacturer's Technical Services if you are unsure of applicable compliance documentation.
- Drive fasteners perpendicular to siding and framing.
- Fastener heads should fit snug against siding (no air space). (fig. A)
- Do not over-drive nail heads or drive nails at an angle.
- If nail is countersunk, caulk nail hole and add a nail. (fig. B)
- For wood framing, under driven nails should be hit flush to the plank with a hammer (For steel framing, remove and replace nail).
- **Do not use aluminum fasteners, staples, or clipped head nails.**



CAULKING

For best results use an Elastomeric Joint Sealant complying with ASTM C920 Grade NS, Class 25 or higher or a Latex Joint Sealant complying with ASTM C834. Caulking/Sealant must be applied in accordance with the caulking/sealant manufacturer's written instructions or ASTM C1193.

PAINTING

DO NOT use stain on Cemboard products.
Cemboard products must be painted within 180 days for primed product and 90 days for unprimed.
100% acrylic topcoats are recommended.
Do not paint when wet. For application rates refer to paint manufacturers specifications.
Back-rolling is recommended if the siding is sprayed.

FACTORY BUILT COLOR TECHNOLOGY CAULKING, TOUCH-UP & LAMINATE

- Touch up nicks, scrapes and nail heads using the Factory Built Color technology touch-up applicator. Touch-up paint should be used sparingly. If large areas require touch-up, replace the damaged area with new Cemplank® lap siding with Factory Built Color technology.
- Laminate sheet must be removed immediately after installation of each course.
- Terminate non-factory cut edges into trim where possible, and caulk. Color matched caulks are available from your Factory Built Color product dealer.
- Treat all other non-factory cut edges using the Factory Built Color technology edge coaters, available from your Factory Built Color product dealer.

PAINTING CEMBOARD® SIDING AND TRIM PRODUCTS WITH FACTORY BUILT COLOR TECHNOLOGY

When repainting Factory Built Color products, the manufacturer recommends the following regarding surface preparation and topcoat application:

- Ensure the surface is clean, dry, and free of any dust, dirt, or mildew
- Repriming is normally not necessary
- 100% acrylic topcoats are recommended
- DO NOT use stain or oil/alkyd base paints on Cemboard products
- Apply finish coat in accordance with paint manufacturers written instructions regarding coverage, application methods, and application temperature

COVERAGE CHART/ESTIMATING GUIDE

Number of 12' planks, does not include waste

COVERAGE AREA LESS OPENINGS SQ (1 SQ = 100 sq.ft.)	CEMPLANK® LAP SIDING WIDTH (exposure)								
	5 1/4 4	6 1/4 5	7 1/4 6	7 1/2 6 1/4	8 6 3/4	8 1/4 7	9 1/4 8	9 1/2 8 1/4	12 10 3/4
1	25	20	17	16	15	14	13	13	9
2	50	40	33	32	30	29	25	25	19
3	75	60	50	48	44	43	38	38	28
4	100	80	67	64	59	57	50	50	37
5	125	100	83	80	74	71	63	63	47
6	150	120	100	96	89	86	75	75	56
7	175	140	117	112	104	100	88	88	65
8	200	160	133	128	119	114	100	100	74
9	225	180	150	144	133	129	113	113	84
10	250	200	167	160	148	143	125	125	93
11	275	220	183	176	163	157	138	138	102
12	300	240	200	192	178	171	150	150	112
13	325	260	217	208	193	186	163	163	121
14	350	280	233	224	207	200	175	175	130
15	375	300	250	240	222	214	188	188	140
16	400	320	267	256	237	229	200	200	149
17	425	340	283	272	252	243	213	213	158
18	450	360	300	288	267	257	225	225	167
19	475	380	317	304	281	271	238	238	177
20	500	400	333	320	296	286	250	250	186

This coverage chart is meant as a guide. Actual usage is subject to variables such as building design. The manufacturer does not assume responsibility for over or under ordering of product.

RECOGNITION: In accordance with ICC-ES Legacy Report NER-405, Cemplank® lap siding is recognized as a suitable alternate to that specified in the BOCA National Building Code/1999, the 1997 Standard Building Code, the 1997 Uniform Building Code, the 1998 International One-and Two-Family Dwelling Code, the 2003 International Building Code, and the 2003 International Residential Code for One-and Two-Family Dwellings. Cemplank® lap siding is also recognized for application in the following: City of Los Angeles Research Report No. 24862, State of Florida Esting FL#889, Dade County, Florida NOA No. 02-0729.02, U.S. Dept. of HUD Materials Release 1263c, Texas Department of Insurance Product Evaluation EC-23, City of New York MEA 223-93-M, and California DSA PA-019. These documents should also be consulted for additional information concerning the suitability of this product for specific applications.

Force Engineering & Testing Inc.
19530 Ramblewood Drive
Humble, TX 77338

Product Evaluation Report

GULF COAST SUPPLY & MANUFACTURING, LLC.

29 Ga. Tuff Rib Roof Panel over 15/32" Plywood

Florida Product Approval # 11651.26 R1

Florida Building Code 2010
Per Rule 9N-3
Method: 1 –D

Category: Roofing
Subcategory: Metal Roofing
Compliance Method: 9N-3.005(1)(d)
NON HVHZ

Product Manufacturer:
GULF COAST SUPPLY & MANUFACTURING, LLC.
4020 S.W. 449th Street
Horseshoe Beach, Florida 32648

Engineer Evaluator:
Terrence E. Wolfe, P.E. # 44923
Florida Evaluation ANE ID: 1920

Validator:
Locke Bowden, P.E., FL #49704
9450 Alysbury Place
Montgomery, AL 36117

Contents:
Evaluation Report Pages 1 – 4

TERRENCE E. WOLFE LICENSE No. 44923 STATE OF FLORIDA PROFESSIONAL ENGINEER

State of Florida C.O.A. #26778

February 22, 2012

Force Engineering & Testing Inc.
19530 Ramblewood Drive
Humble, TX 77338

Compliance Statement:

The product as described in this report has demonstrated compliance with the Florida Building Code 2010, Sections 1504.3.2.

Product Description:

Tuff Rib, ¾" Rib Roof Panel, Min. 29 Ga. Steel, 36" Wide, through fastened roof panel over 15/32" Plywood decking. Non-Structural Application.

Panel Material/Standards:

Material: Minimum 29 Ga. Steel, ASTM A792 or ASTM A653 G90 conforming to Florida Building Code 2010 Section 1507.4.3. Paint finish optional
Yield Strength: Min. 80.0 ksi
Corrosion Resistance: Panel Material shall comply with Florida Building Code 2010, Section 1507.4.3.

Panel Dimension(s):

Thickness: 0.0145" min.
Width: 36"
Rib Height: ¾" major rib at 9" O.C.
Panel Rollformer: MRS Metal Rollforming Systems

Panel Fastener:

#9-15 x 1-1/2" HWH Woodgrip with sealing washing or approved equal
¼" minimum penetration through plywood
Corrosion Resistance: Per Florida Building Code 2010, Section 1506.6, 1507.4.4

Substrate Description:

Min. 15/32" thick, APA Rated plywood over supports at maximum 24" O.C.
Design of plywood and plywood supports are outside the scope of this evaluation. Must be designed in accordance w/ Florida Building Code 2010.

Design Uplift Pressures:

Table "A"

Maximum Total Uplift Design Pressure:	71.75 psf	146.0 psf
Fastener Pattern:	9"-9"-9"-9"	6.5"-2.5"-6.5"-2.5"-6.5"-2.5"-6.5"
Fastener Spacing:	24" O.C.	12" O.C.

*Design Pressure includes a Safety Factor = 2.0.

TERRENCE E. WOLFE LICENSE No. 44923 STATE OF FLORIDA PROFESSIONAL ENGINEER

State of Florida C.O.A. #26778

FL# 11651.26 R1

February 22, 2012

Force Engineering & Testing Inc.
19530 Ramblewood Drive
Humble, TX 77338

Code Compliance:

The product described herein has demonstrated compliance with The Florida Building Code 2010, Section 1504.3.2.

Evaluation Report Scope:

The product evaluation is limited to compliance with the structural wind load requirements of the Florida Building Code 2010, as relates to Rule 9N-3.

Performance Standards:

The product described herein has demonstrated compliance with:

- UL 580-06 - Test for Uplift Resistance of Roof Assemblies
- UL 1897-04 - Uplift Test for Roof Covering Systems
- FM 4471, Section 5.4 - Foot Traffic Resistance Test

Reference Data:

1. UL 580-94 / 1897-98 Uplift Test
   Force Engineering & Testing, Inc. (FBC Organization # TST-5328)
   Report No. 117-0033T-05 & 117-0331T-08D, Dated 05/05/05 & 07/09/08
2. FM 4471-95, Section 5.4 Foot Traffic Resistance Test
   Force Engineering & Testing, Inc. (FBC Organization # TST-5328)
   Report No. 117-0238T-09E, Dated 07/21/2009
3. Certificate of Independence
   By Terrence E. Wolfe, P.E. (No. 44923) @ Force Engineering & Testing, Inc.
   (FBC Organization # ANE ID: 1920)

Test Standard Equivalency:

1. The UL 580-94 test standard is equivalent to the UL 580-06 test standard.
2. The UL 1897-98 test standard is equivalent to the UL 1897-04 test standard.

Quality Assurance Entity:

The manufacturer has established compliance of roof panel products in accordance with the Florida Building Code and Rule 9N-3.005 (3) for manufacturing under a quality assurance program audited by an approved quality assurance entity.

Minimum Slope Range:

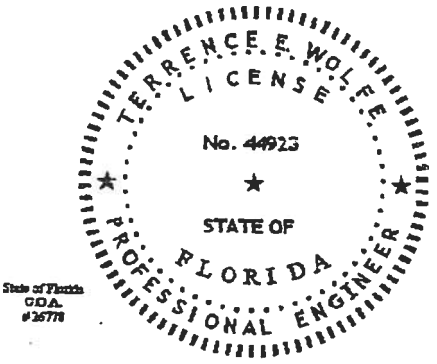
Minimum Slope shall comply with Florida Building Code 2010, including Section 1507.4.2 and in accordance with Manufacturers recommendations. For slopes less than 3:12, lap sealant must be used in the panel side laps.

Installation:

Install per manufacturer's recommended details.

Underlayment:

Per Manufacturer's installation guidelines per Florida Building Code 2010 Section 1507.4.5.



State of Florida
COA
#26778

FL# 11651.26 R1

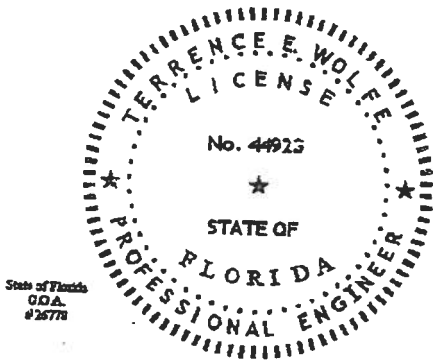
February 22, 2012

Force Engineering & Testing Inc.
19530 Ramblewood Drive
Humble,TX 77338

Roof Panel Fire Classification: Fire classification is not part of this acceptance.

Shear Diaphragm: Shear diaphragm values are outside the scope of this report.

Design Procedure: Based on the dimensions of the structure, appropriate wind loads are determined using Chapter 16 of the Florida Building Code 2010 for roof cladding wind loads. These component wind loads for roof cladding are compared to the allowable pressure listed above. The design professional shall select the appropriate erection details to reference in his drawings for proper fastener attachment to his structure and analyze the panel fasteners for pullout and pullover. Support framing must be in compliance with Florida Building Code 2010 Chapter 22 for steel, Chapter 23 for wood and Chapter 16 for structural loading.



State of Florida
C.O.A.
#26778

FL# 11651.26 R1

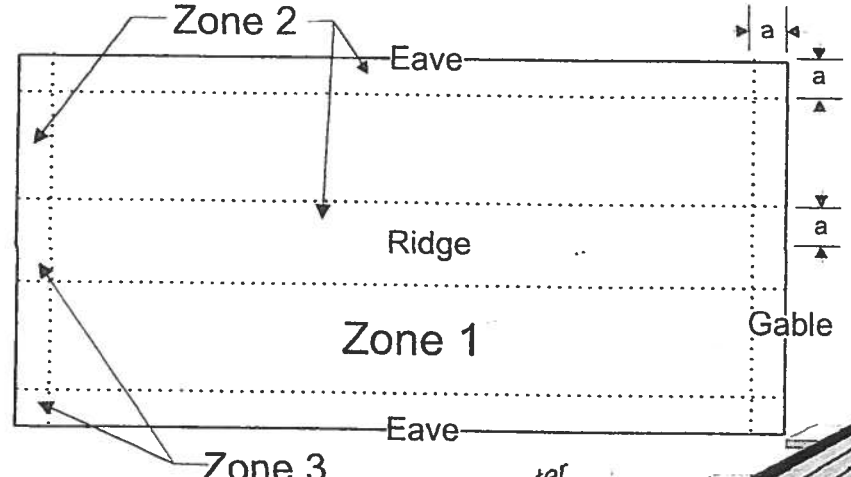
February 22, 2012

Gulf Coast Tuff-Rib® Roofing Panels

SECTION PROPERTIES											ALLOWABLE LOADS (PSF)															
Panel Gauge	Fy KSI	Thickness In.	Fb. KSI		Weight PSF	Girth In.	Ix In.	Sx In.	Ix In.	Sx In.	Wind Load					Live Load (Stress)					Live Load (Deflection)				
			Pos.	Neg.			Positive Bending		Negative Bending		2'	2'6"	3'	3'6"	4'	2'	2'6"	3'	3'6"	4'	2'	2'6"	3'	3'6"	4'
26 ga.	80	.0187	36	36	.91	42	.0288	.0482	.0288	.1892	170	109	76	56	42	128	82	57	42	32	102	52	30	19	13
29 ga.	80	.0142	36	36	.69	40.875	.0232	.0374	.0232	.1786	133	85	59	43	33	100	64	44	33	25	82	42	25	15	10

Fastening Schedule for Various Wind Speeds

				Wind Speed Zone			
				110 MPH	120 MPH	130 MPH	140 MPH
Roof Zone	Fastener Type	Fastener Size	Attaching to:	OnCenter Spacing	OnCenter Spacing	OnCenter Spacing	OnCenter Spacing
Zone 1	Woodgrip® or WoodZac®	#9-15 x 1½	1x4 wood purlins	24"	24"	24"	24"
Zone 2	Woodgrip® or WoodZac®	#9-15 x 1½	1x4 wood purlins	24"	24"	24"	12"
Zone 3	Woodgrip® or WoodZac®	#9-15 x 1½	1x4 wood purlins	24"	12"	12"	12"



Roof Zones
Each "zone" of the roof has its own screw requirements. *Dimension a* is defined as 10% of the minimum width of the building, or 40% of the mean height of the roof, whichever is smaller; however, a cannot be less than either 4% of the minimum width of the building, or 3 feet.

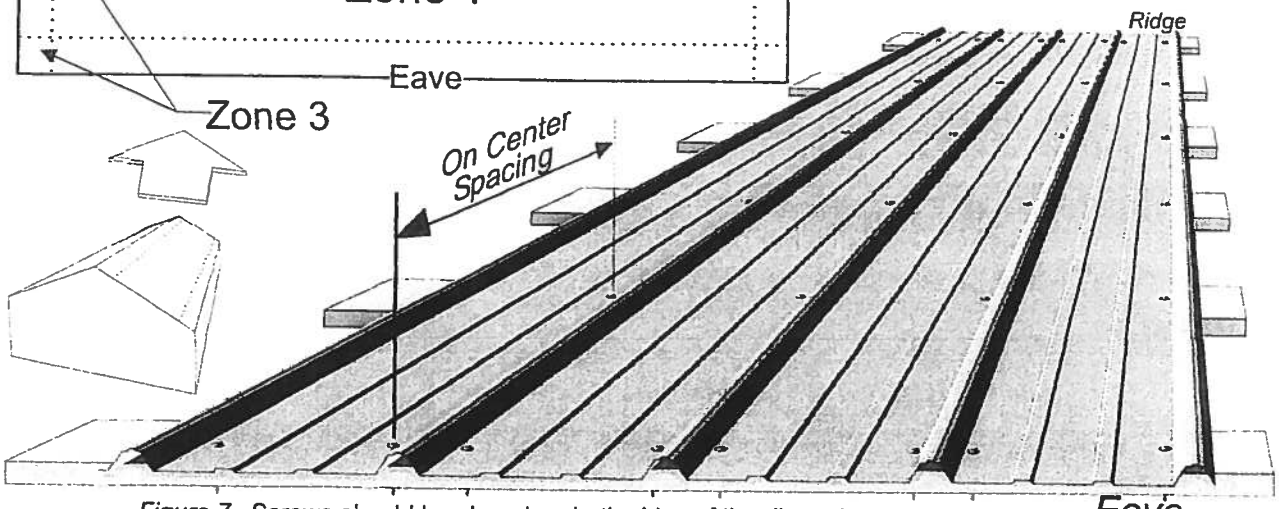


Figure 7 Screws should be placed on both sides of the ribs at both eave and ridge, and on the overlap side of the panel lap.