



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)  
BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY  
PRODUCT CONTROL SECTION  
11805 SW 26 Street, Room 208  
Miami, Florida 33175-2474  
T (786) 315-2590 F (786) 315-2599

[www.miamidade.gov/economy](http://www.miamidade.gov/economy)

## NOTICE OF ACCEPTANCE (NOA)

**Metal Sales Manufacturing Corporation**  
545 south 3<sup>rd</sup> Street, Suite 200  
Louisville, KY 40202

### SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER- Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

### DESCRIPTION: 0.024" (min.) Galvanized Structural Steel Roof Panel

**APPROVAL DOCUMENT:** Drawing No. MS, titled "PBR-Panel Profile", sheet 1 through 12 of 12, prepared by Yoosef Lavi, P.E., dated December 08, 2017, signed and sealed by Yoosef Lavi, P.E. on December 30, 2017, bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and the expiration date by the Miami-Dade County Product Control Section.

### MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

**LABELING:** Each panel shall bear a permanent label with the manufacturer's name or logo, Jacksonville, FL and the following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA 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 NOA revises NOA #15-0601.02 and consists of this page 1, evidence submitted pages E-1, E-2, & E-3 as well as approval document mentioned above.

The submitted documentation was reviewed by **Helmy A. Makar, P.E., M.S.**



*Helmy A. Makar*  
05/17/2018

NOA No. 18-0131.05  
Expiration Date: 06/02/2020  
Approval Date: 05/17/2018  
Page 1

**Metal Sales Manufacturing Corporation**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #03-1210.03**

**A. DRAWINGS**

1. *Drawing No. R-W, titled " PBR-Panel Profile ", sheet 1 through 12 of 12, prepared by Yoosef Lavi, P.E., dated April 13, 2005, signed and sealed by Yoosef Lavi, P.E. on May 04, 2005.*

**B. TEST**

1. *Test report on Uniform Static Air Pressure test and Air & Water Infiltration tests on Roof Panels over Galvanized Steel supports prepared by Farabaugh Engineering and Testing, Inc., report No. T270-02, dated November 5, 2002, signed and sealed by Daniel G. Farabaugh, P.E.*
2. *Test report on Uniform Static Air Pressure test and Air & Water Infiltration tests on Roof Panels over Galvanized Steel supports prepared by Farabaugh Engineering and Testing, Inc., report No. T301-02, dated November 5, 2002, signed and sealed by Daniel G. Farabaugh, P.E.*
3. *Test report on Large Missile Impact test on Roof Panels over Galvanized Steel supports prepared by Farabaugh Engineering and Testing, Inc., report No. T298-02, dated November 17, 2002, signed and sealed by Daniel G. Farabaugh, P.E.*
4. *Susceptibility to leakage test in accordance with Protocol PA 114 Appendix G, prepared by Farabaugh Engineering and Testing, Inc., report No. T303-02, dated December 20, 2002, signed and sealed by Daniel G. Farabaugh, P.E.*
5. *Test report on Salt Spray Testing of Coating 1000 hours per ASTM B117-95, prepared by Valspar, dated 05/14/2001, signed by A. N. Dunlop.*
6. *Test report on Accelerated Weathering Testing of Coating 2000 hours per ASTM G23, prepared by Valspar, dated 05/14/2001, signed by A. N. Dunlop.*
7. *Test Procedure for Wind and Wind Driven Rain Resistance of Discontinuous Roof System, prepared by Architectural Testing, Test Report No. 01-44143.01, dated April 04, 2003, signed and sealed by Joseph A. Reed, P.E.*

**C. CALCULATIONS**

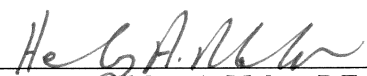
1. *Panel allowable calculation and Fasteners verification prepared by John M. Dahdah, P.E., 4 pages, dated February 16, 2004.*

**D. QUALITY ASSURANCE**

1. *By Miami-Dade County Building Code Compliance Office.*

**E. MATERIAL CERTIFICATION**

1. *Tensile test report of metal panel, prepared by Architectural Testing, Test Report No. 01-44143.01, dated April 04, 2003, signed and sealed by Joseph A. Reed, P.E.*



**Helmy A. Makar, P.E., M.S.**  
**Product Control Section Supervisor**  
**NOA No. 18-0131.05**  
**Expiration Date: 06/02/2020**  
**Approval Date: 05/17/2018**

**Metal Sales Manufacturing Corporation**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #10-0427.04**

**A. DRAWINGS**

1. *Drawing No. MS, titled " PBR-Panel Profile ", sheet 1 through 12 of 12, prepared by Yoosef Lavi, P.E., dated March 24, 2010, signed and sealed by Yoosef Lavi, P.E. on March 24, 2010.*

**B. TEST**

1. *None.*

**C. CALCULATIONS**

1. *None.*

**D. QUALITY ASSURANCE**

1. *By Miami-Dade County Building Code Compliance Office.*

**E. MATERIAL CERTIFICATION**

1. *None.*

**3. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #15-0318.02**

**A. DRAWINGS**

1. *Drawing No. MS, titled " PBR-Panel Profile ", sheet 1 through 12 of 12, prepared by Yoosef Lavi, P.E., dated April 24, 2015, signed and sealed by Yoosef Lavi, P.E. on May 05, 2015.*

**B. TEST**

1. *Test report on Uniform Static Air Pressure test on Roof Panels over Galvanized Steel supports per TAS 125-03 (ASTM E1592), prepared by Farabaugh Engineering and Testing, Inc., report No. T125-15, dated March 03, 2015, signed and sealed by Daniel G. Farabaugh, P.E.*

**C. CALCULATIONS**

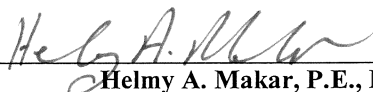
1. *None.*

**D. QUALITY ASSURANCE**

1. *By Miami-Dade County department of Regulatory and economic Resources.*

**E. MATERIAL CERTIFICATION**

1. *Tensile test report of metal panel, Farabaugh Engineering and Testing, Inc., report No. T125-15, dated March 03, 2015, signed and sealed by Daniel G. Farabaugh, P.E.*



**Helmy A. Makar, P.E., M.S.  
Product Control Section Supervisor**

**NOA No. 18-0131.05**

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**Metal Sales Manufacturing Corporation**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**4. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #15-0601.02**

**A. DRAWINGS**

1. *Drawing No. MS, titled " PBR-Panel Profile ", sheet 1 through 12 of 12, prepared by Yoosef Lavi, P.E., dated May 22, 2015, signed and sealed by Yoosef Lavi, P.E. on July 06, 2015.*

**B. TEST**

1. *None.*

**C. CALCULATIONS**

1. *None.*

**D. QUALITY ASSURANCE**

1. *By Miami-Dade County department of Regulatory and economic Resources.*

**E. MATERIAL CERTIFICATION**

1. *None.*

**5. NEW EVIDENCE SUBMITTED**

**A. DRAWINGS**

1. *Drawing No. MS, titled " PBR-Panel Profile ", sheet 1 through 12 of 12, prepared by Yoosef Lavi, P.E., dated December 08, 2017, signed and sealed by Yoosef Lavi, P.E. on December 30, 2017.*

**B. TEST**

1. *None.*

**C. CALCULATIONS**

1. *None.*

**D. QUALITY ASSURANCE**

1. *By Miami-Dade County department of Regulatory and economic Resources.*

**E. MATERIAL CERTIFICATION**

1. *None.*



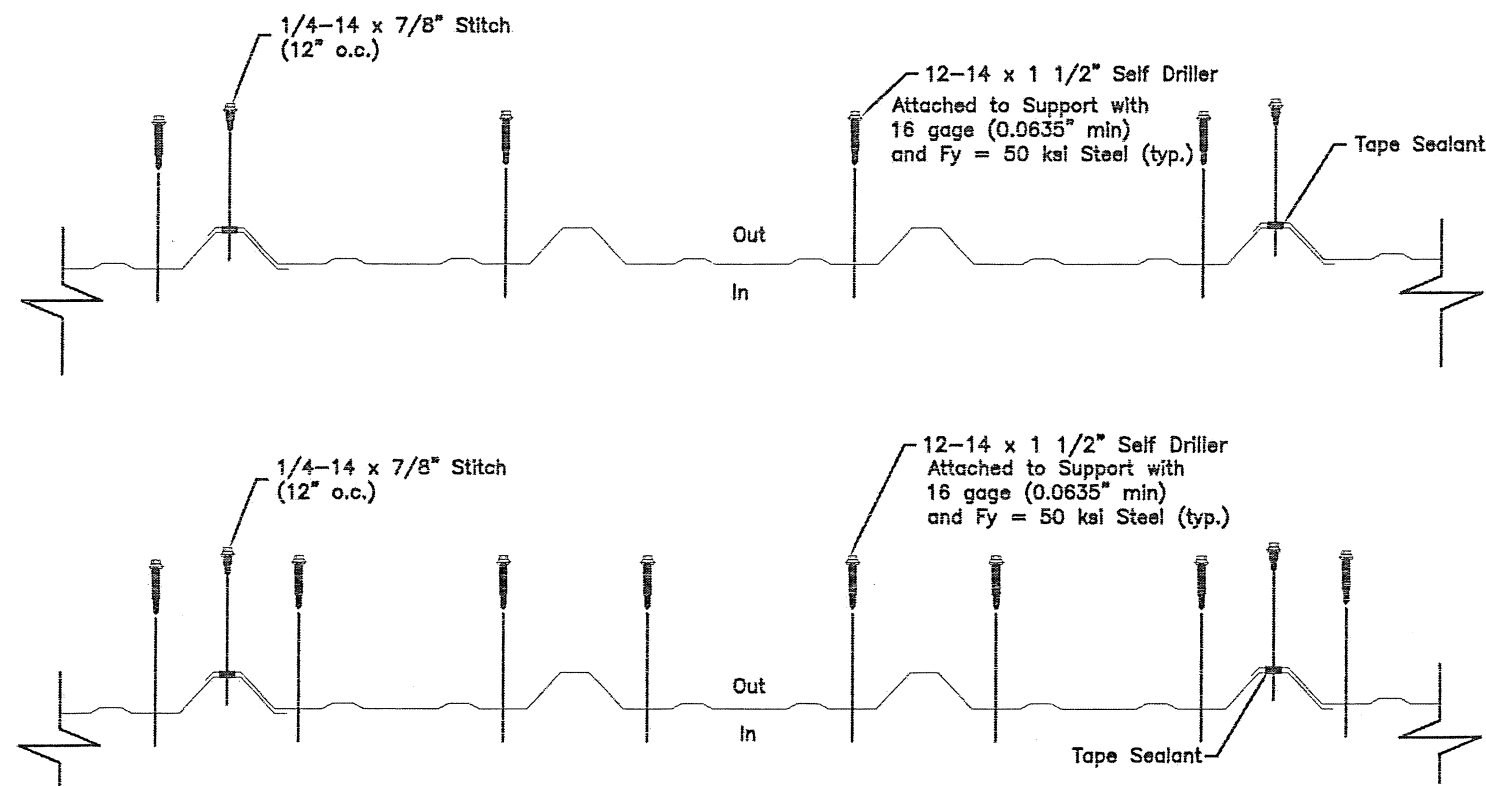
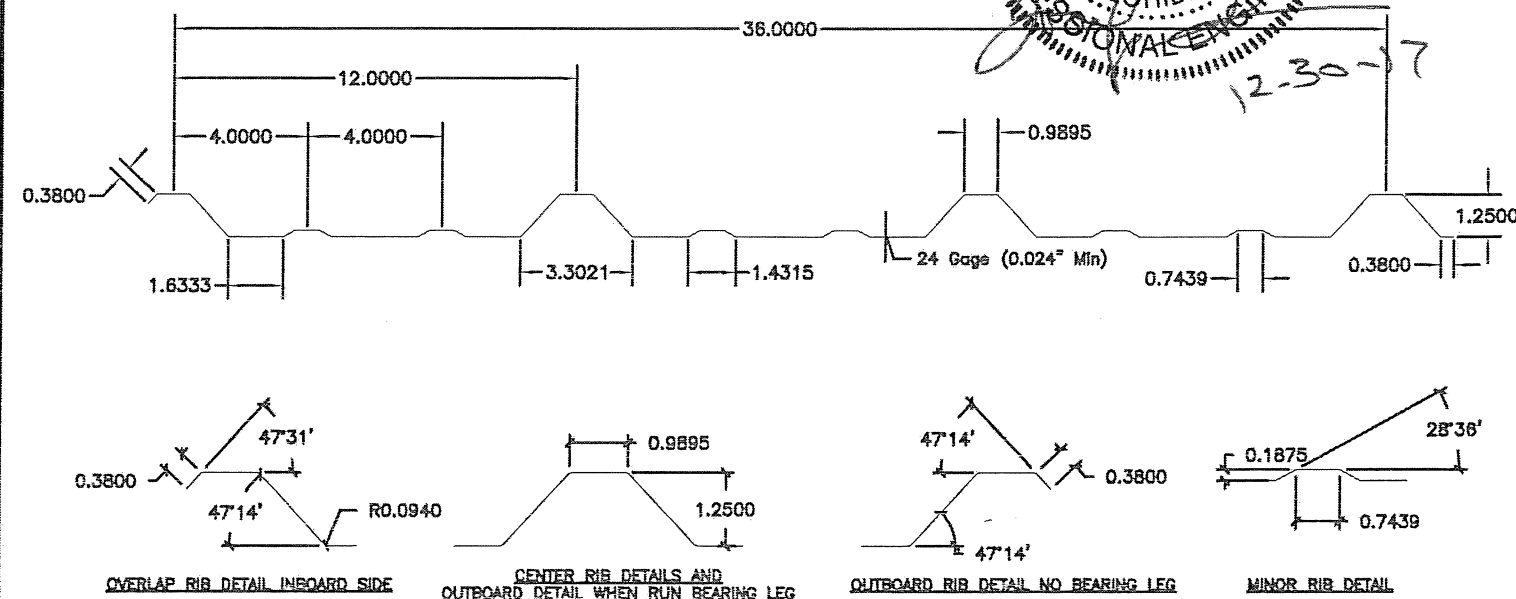
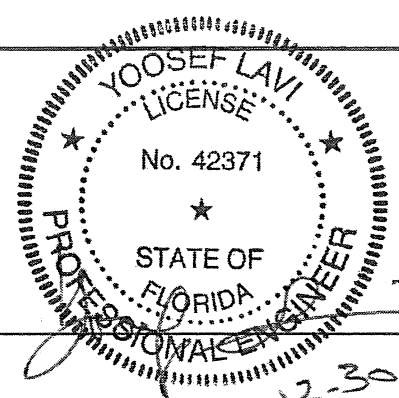
**Helmy A. Makar, P.E., M.S.**  
**Product Control Section Supervisor**

**NOA No. 18-0131.05**

**Expiration Date: 06/02/2020**

**Approval Date: 05/17/2018**

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10300 N. CENTER EXPRESSWAY, SUITE #322  
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The structural Roof PBR-Panel shown on this Product Approval Document has been designed in accordance with the Florida Building Code - 6th Edition (2017). Design wind loads shall be determined as per Section 1609 of the above mentioned code and in accordance with the ASCE 7-10 standard.

All steel sheet metal Roof PBR-Panels shall be 24 ga. (0.024" min.) and conforms to structural quality ASTM A 792, Grade 50, with  $F_y=50$ ksi (minimum).

All screws to be Hex Head, Self-Drilling, Non Corrosive "Zac" Screws as manufactured by SFS Intec.

Installation of this Roof PBR-Panel shall be based on this Product Approval Document with NO deviation from the conditions detailed on this document.

Installation of this Roof PBR-Panel shall be onto purlins with 16 ga. (0.0635" min. thickness) with fasteners as shown on this Product Approval Document.

This Product Approval Document will be considered invalid if modified.

Site specific projects shall be prepared by a Florida Registered Engineer or Architect which will become the professional of record (P.O.R.) for the project and who will be responsible for the proper use of this P.A.D.

This Roof PBR-Panel's manufacturer's permanent label shall be placed at bottom of each panel.

The Permanent Label shall read as follows:  
Metal Sales Manufacturing Corp.  
Jacksonville, Florida  
Miami-Dade County Product Control Approved.

This 24 ga. (0.024" min.) Roof PBR-Panel shall be used for roof construction only. Every Roof PBR-Panel project shall be constructed using the same details shown on this drawing including:

1. Details of all panel material characteristics and sections with dimensions and thickness.
2. Assembly details including all connections and fastener diagram with size and location.
3. Panel maximum design pressure for the roof field, perimeter, and corner zones shall be equal to or less than the lowest pressure obtained from the panel allowables shown below.

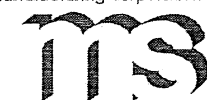
The maximum uplift design pressure for this 24 ga. (0.024" min.) Roof PBR-Panel in the roof's field, perimeter, and corner zones shall be the lowest pressure calculated based on the following panels allowable:

1. Maximum allowable bending moment of panel at supports = 107.5 ft.-lbs.\*
2. Maximum allowable bending moment of panel between supports = 86 ft.-lbs.\*
3. EI value of panel = 1,284,827 lbs.-in<sup>2</sup>\*
4. Maximum allowable deflection of the roof panel =  $L/240$ .
5. Maximum support reaction = 236.5 lbs.\*

PRODUCT REVISED  
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By: He G. A. M. W.  
Miami Dade Product Control

Maximum allowable Roof PBR-Panel's Span = 5.00 ft.

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File Name: PBR-Panel Profile

Date: 12/8/2017

Scale: None

Dwg # 1 of 12

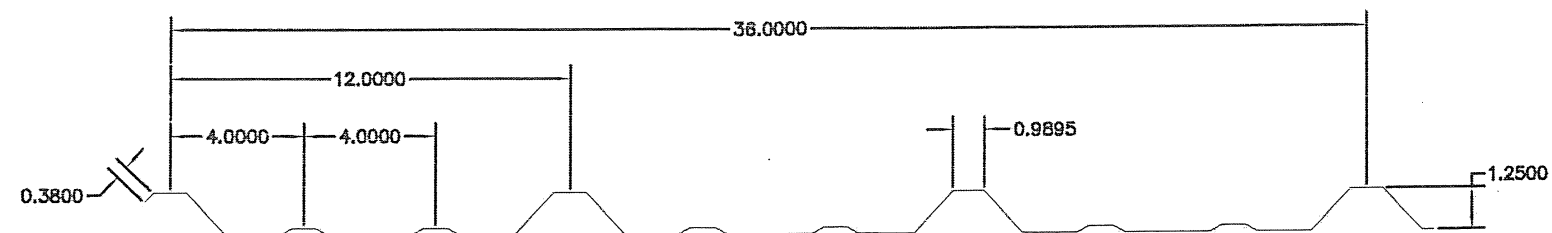
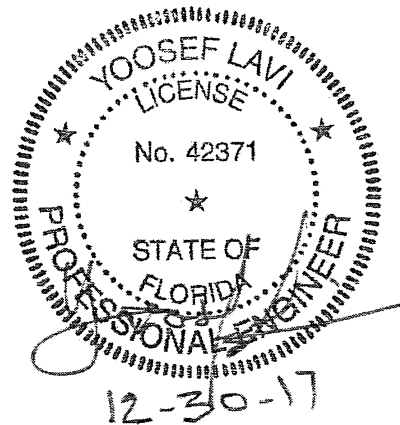
YOUSEF LAVI, P.E.

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PBR-Panel Profile

t=0.024" (min.)

Fy=53,270.00 psi (min.)

Panel Side Overlap Detail  
1/4-14 x 7/8" Stitch (12" o.c.)

12-14 x 1 1/2" Self Driller

Double Bead Tape Sealant

PBR-Panel Fastening Pattern (Field)

1/4-14 x 7/8" Stitch (12" o.c.)

Double Bead Tape Sealant

Tube Sealant

Panel Side Overlap Fastening and Sealant Detail

1/4-14 x 7/8" Stitch (12" o.c.)

12-14 x 1 1/2" Self Driller

Double Bead Tape Sealant

PBR-Panel Fastening Pattern (Ends)

1/4-14 x 7/8" Stitch (12" o.c.)

12-14 x 1 1/2" Self Driller

Double Bead Tape Sealant

PBR-Panel Fastening Pattern (Endlap Splice)

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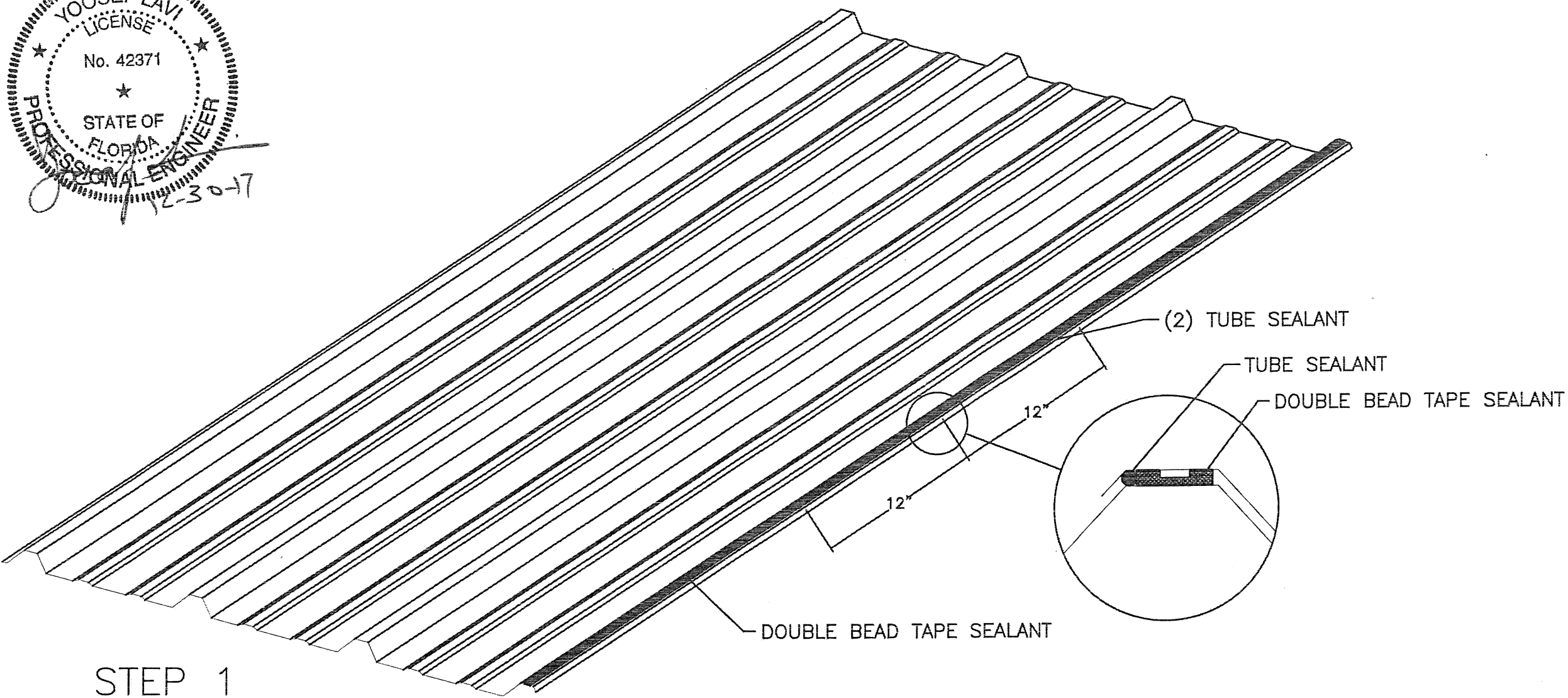
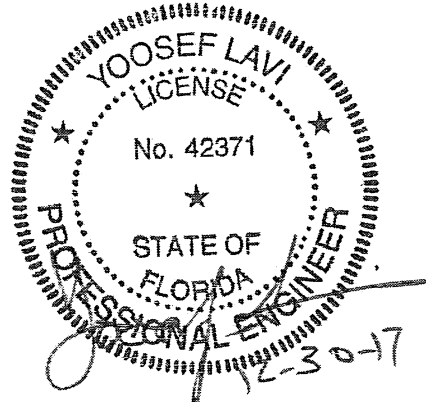


File Name: PBR-Panel Profile

Date: 12/8/2017

Scale: None

Dwg # 2 of 12

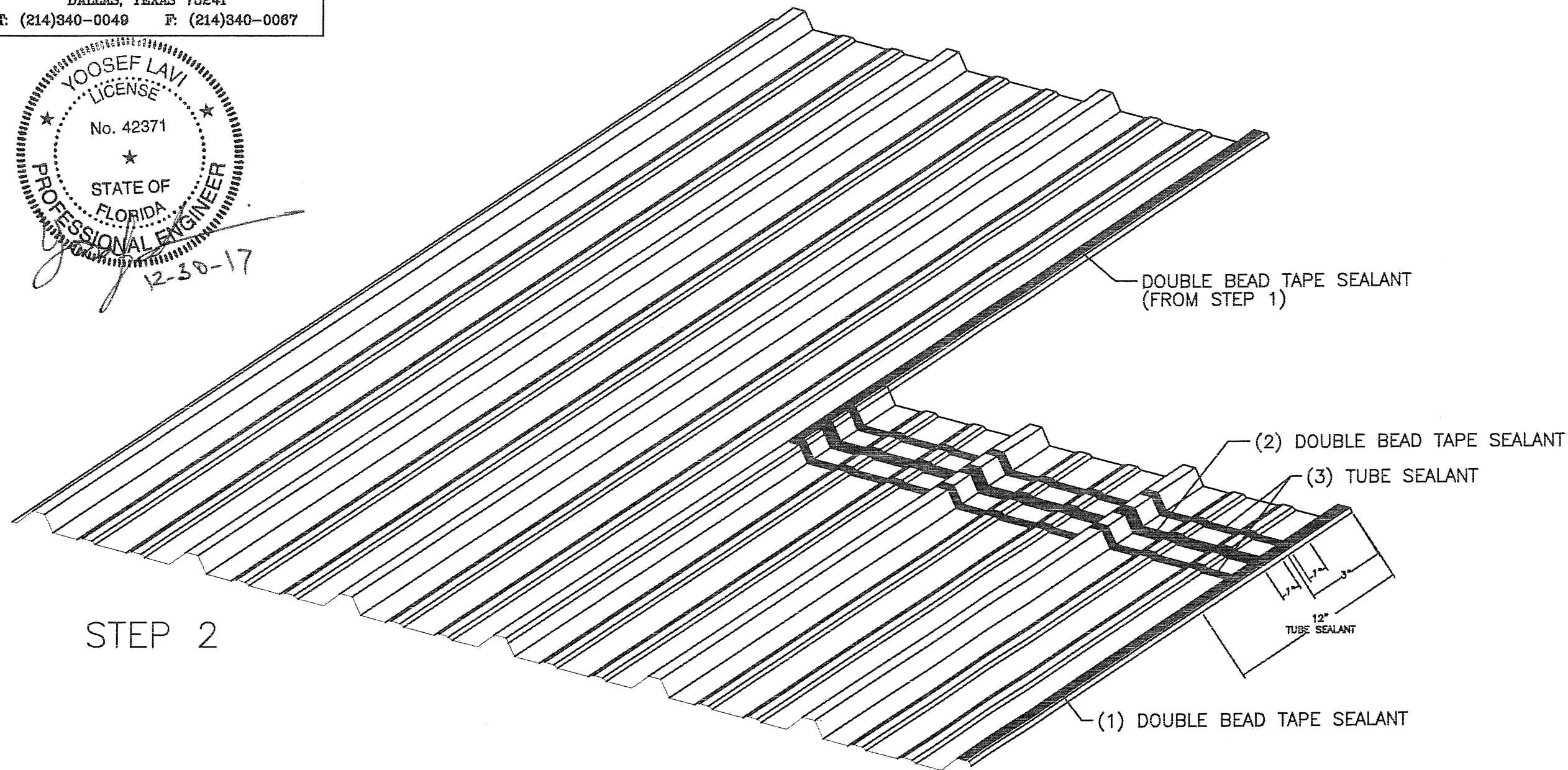
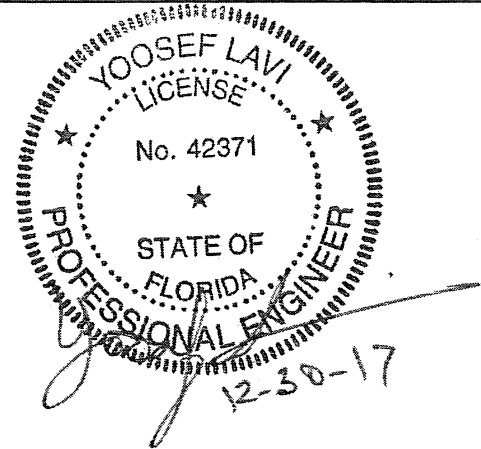


STEP 1

1. ATTACH PANEL AND APPLY DOUBLE BEAD TAPE SEALANT ON PANEL SIDELAPS
2. APPLY 1/4" TUBE SEALANT 12" ALONG PANEL SIDELAPS

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Expiration Date 06/02/2020  
By *Heidi A. Miller*  
Miami Data Product Control

File Name: Endlap Detail - Step 1		<b>metal sales</b> manufacturing corporation <b>ms</b>
Date: 12/8/2017	Scale: None	
		Dwg # 3 of 12



STEP 2

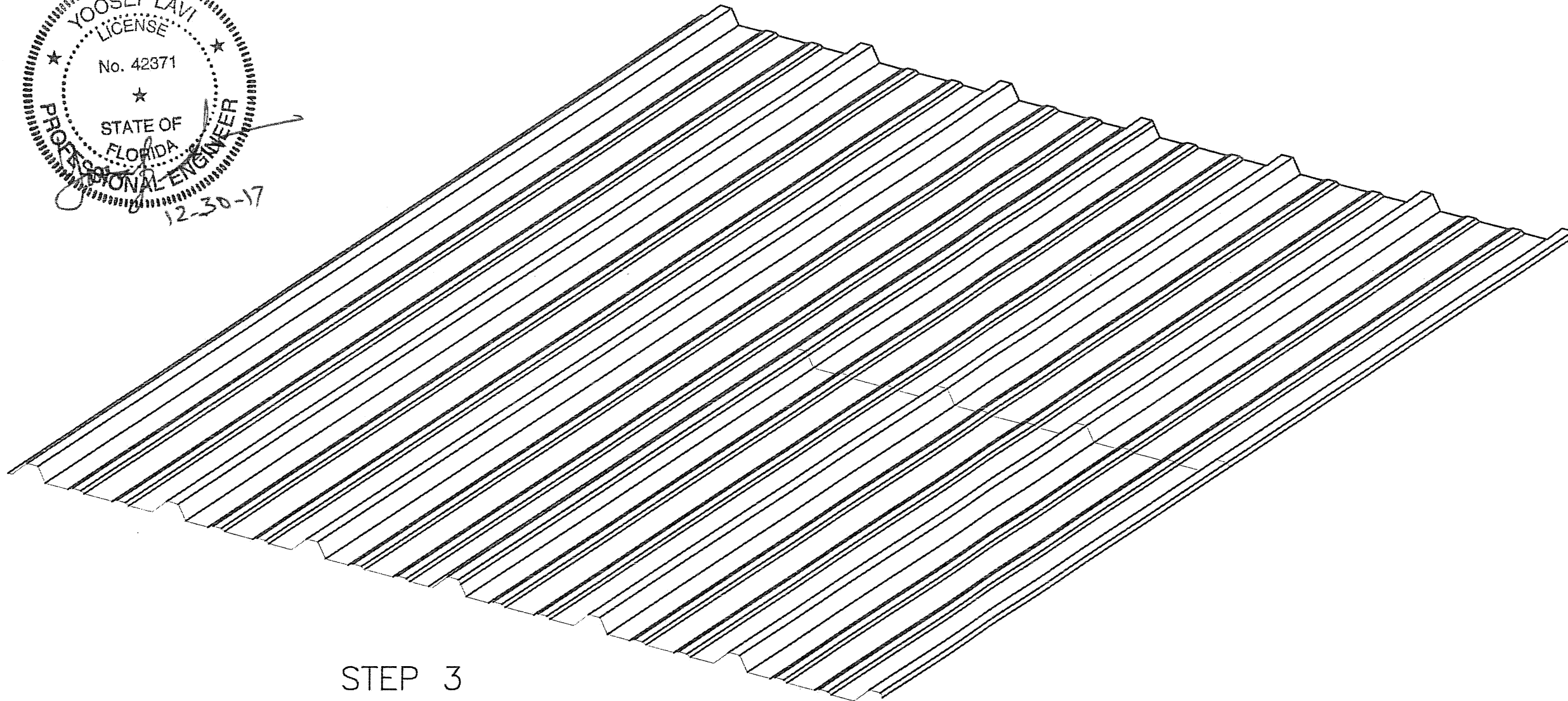
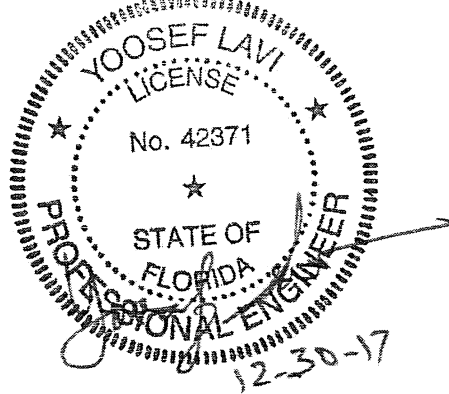
1. APPLY DOUBLE BEAD TAPE SEALANT ON PANEL SIDELAPS
2. APPLY DOUBLE BEAD TAPE SEALANT AT ENDLAP (3" FROM PANEL END)
3. APPLY 1/4" TUBE SEALANT 1" ON EACH SIDE OF TAPE
4. APPLY 1/4" TUBE SEALANT 12" ALONG SIDELAP RIBS  
(SEE SECTION CUT ON STEP 1 FOR TUBE SEALANT LOCATION)

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Expiration Date 06/01/2020  
By [Signature]  
Miami Dade Product Control

File Name: Endlap Detail - Step 2		<b>metal sales</b> manufacturing corporation <b>ms</b>
Date: 12/8/2017	Scale: None	
		Dwg # 4 of 12



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STEP 3

ATTACH PANELS / ENDLAP TO SUPPORT. SEE OVERALL  
PANEL ENDLAP DETAIL FOR FASTENER SPACING

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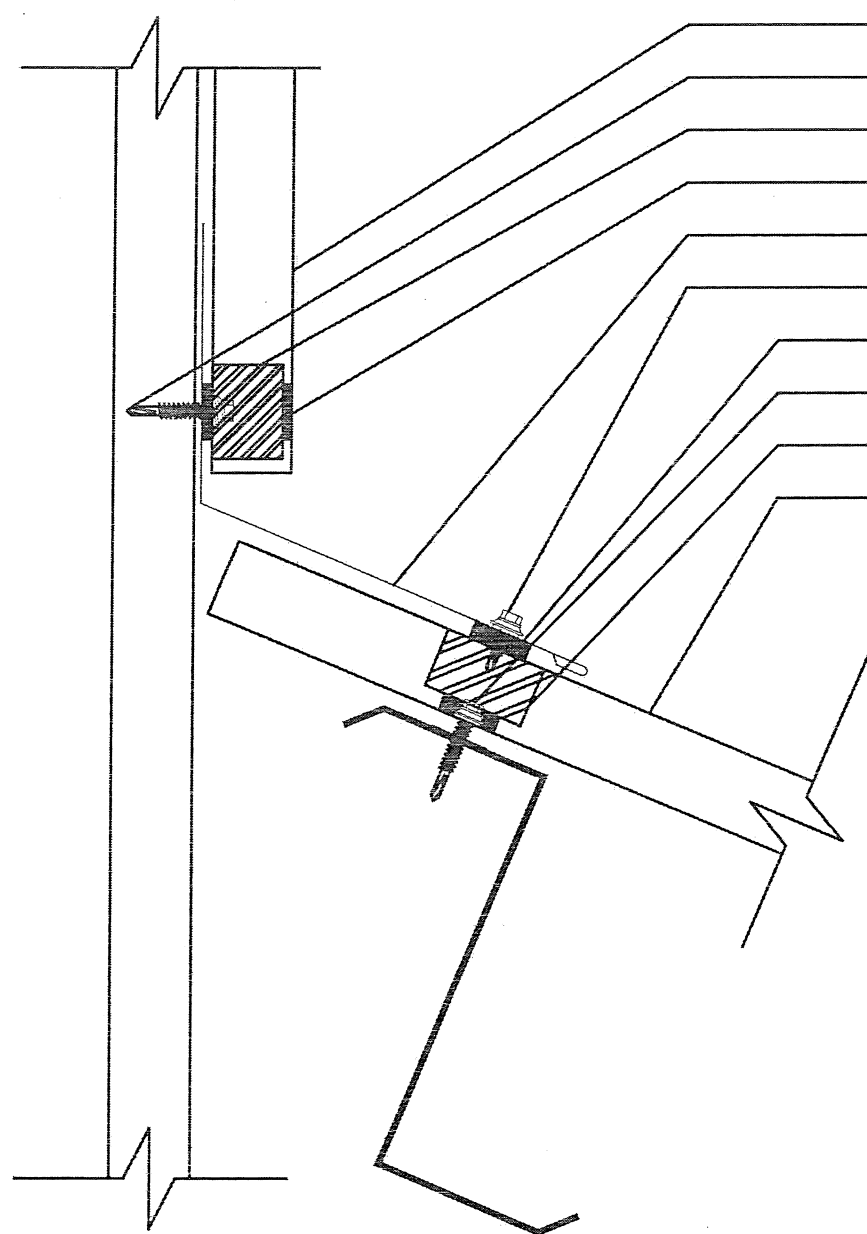
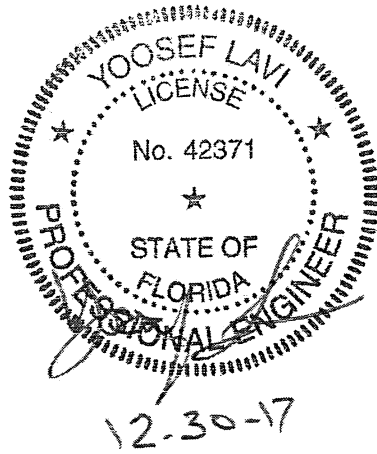
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Date: 12/8/2017

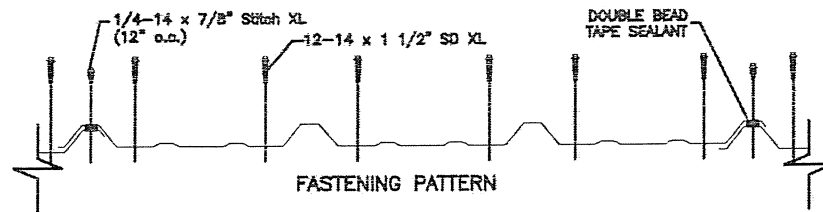
Scale: None

Dwg # 5 of 12

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10300 N. CENTER EXPRESSWAY, SUITE #322  
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- PBR-PANEL
- 9-15 x 1 1/2" SELF DRILLER
- PBR-PANEL INSIDE CLOSURE
- TAPE SEALANT
- PITCHBREAK (X)
- 1/4-14 x 7/8" STITCH (1'-0" o.c.)
- TAPE SEALANT
- #9-15 x 1 1/2" SELF DRILLER
- PBR-PANEL INSIDE CLOSURE
- PBR-PANEL



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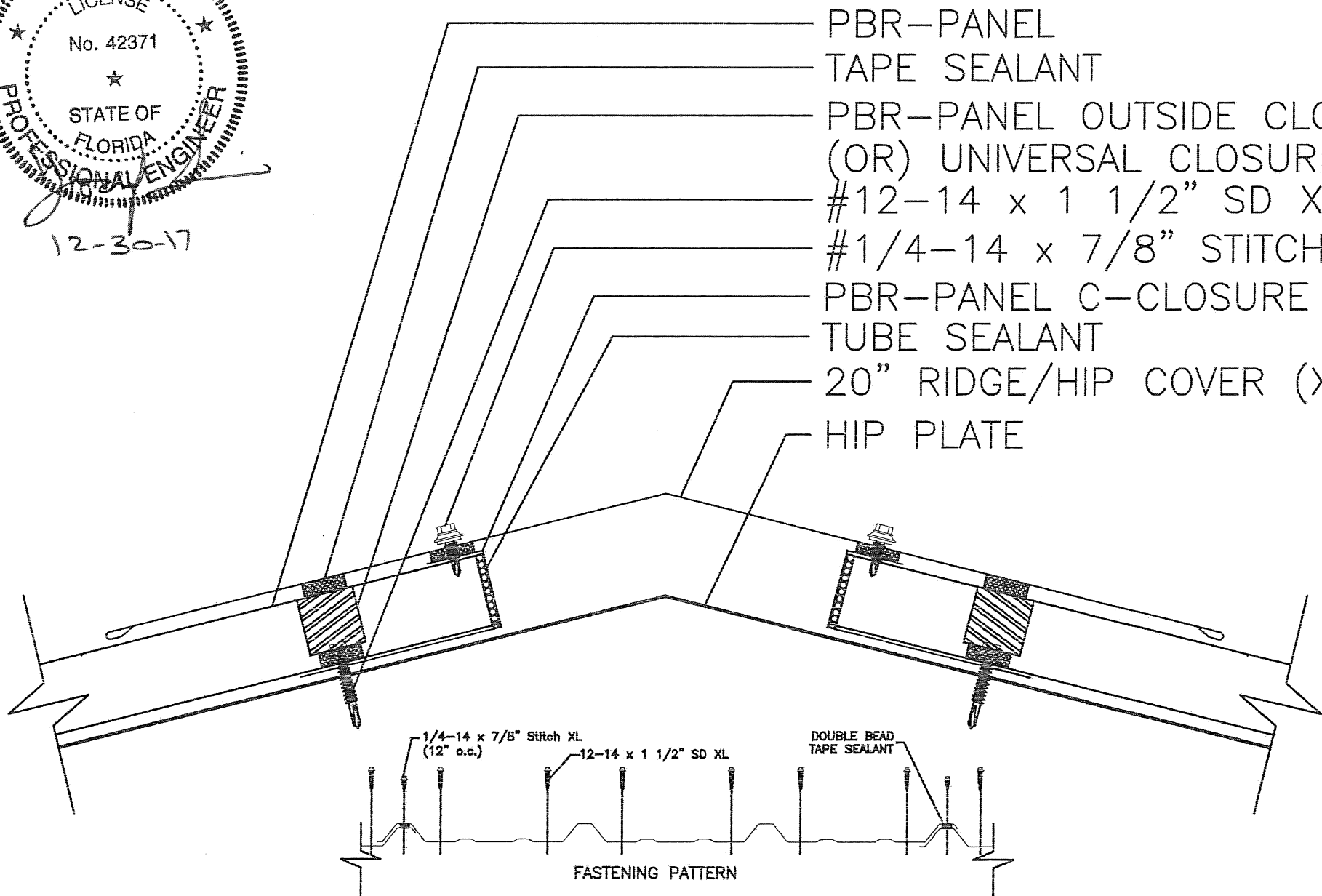
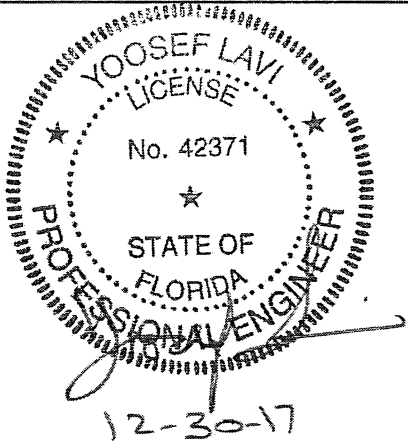
File Name: Endwall Detail

Date: 12/8/2017

Scale: None

Dwg # 6 of 12

YOUSEF LAVI, P.E.  
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10300 N. CENTER EXPRESSWAY, SUITE #322  
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- PBR-PANEL
- TAPE SEALANT
- PBR-PANEL OUTSIDE CLOSURE (RIDGE)  
(OR) UNIVERSAL CLOSURE (HIP)
- #12-14 x 1 1/2" SD XL (SEE BELOW)
- #1/4-14 x 7/8" STITCH XL (1'-0" o.c.)
- PBR-PANEL C-CLOSURE (X)
- TUBE SEALANT
- 20" RIDGE/HIP COVER (X)
- HIP PLATE

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By *Heidi A. Miller*  
Miami Data Product Control



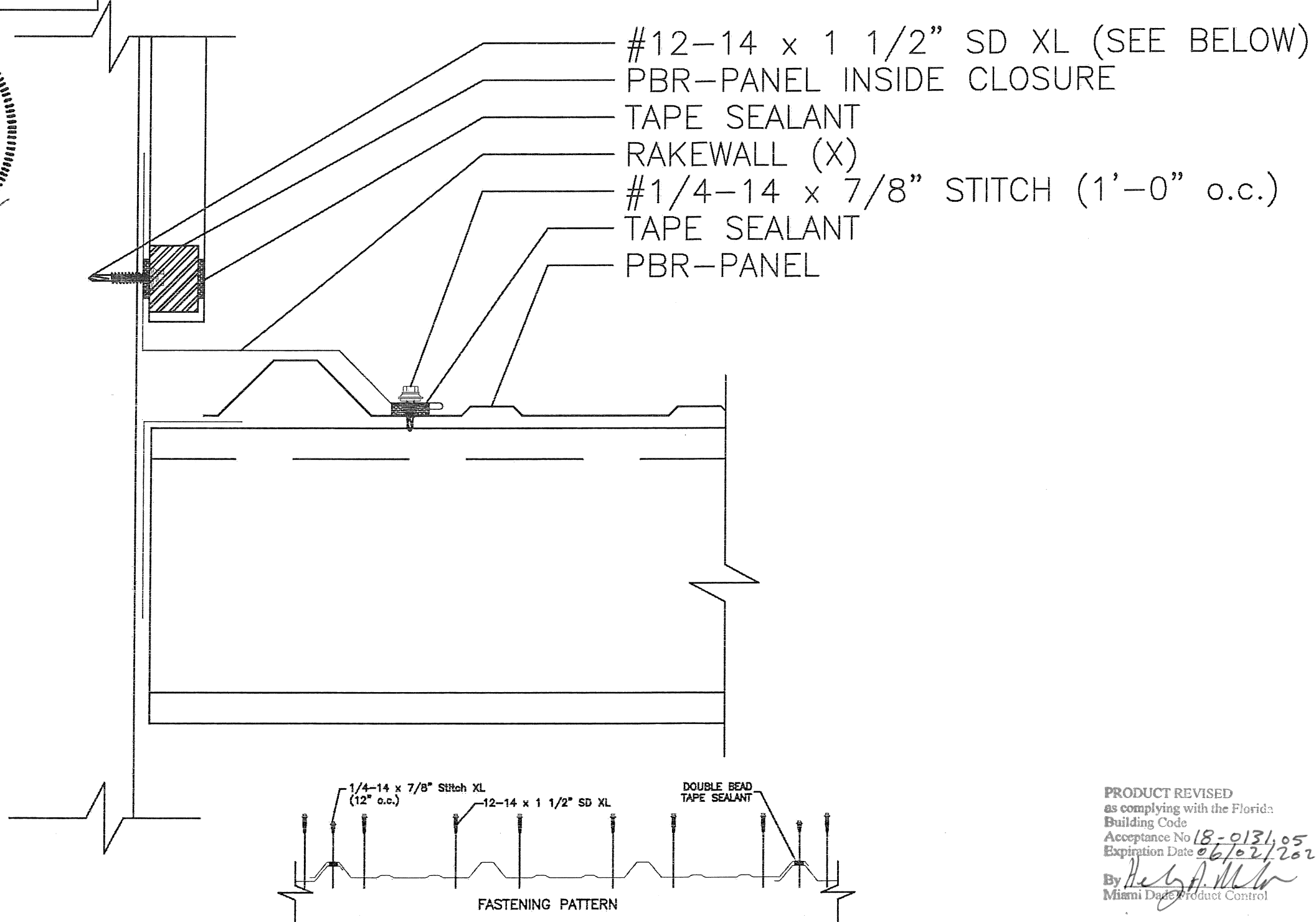
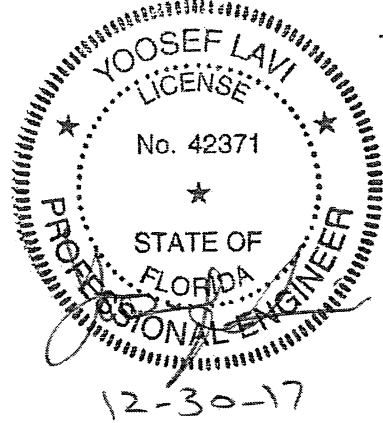
File Name: Ridge / Hip Detail		Dwg # 7 of 12
Date: 12/8/2017	Scale: None	

YOUSEF LAVI, P.E.

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manufacturing corporation



File Name: Rakewall Detail

Date: 12/8/2017

Scale: None

Dwg # 8 of 12

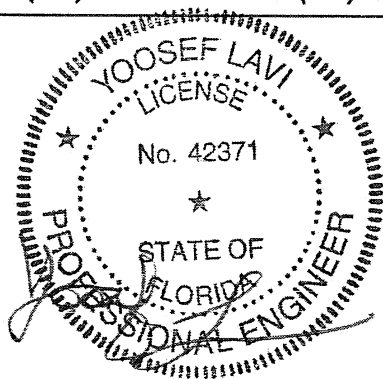
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PBR-PANEL

#1/4-14 x 7/8" STITCH XL (1'-0" o.c.)

TAPE SEALANT

PBR-PANEL OUTSIDE CLOSURE

TAPE SEALANT

SCULPTURED HIGH SIDE EAVE (X)

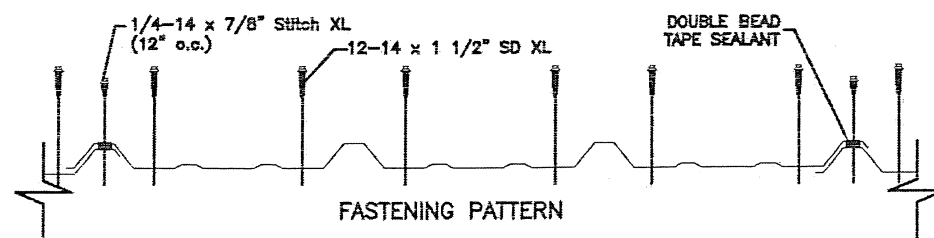
#12-14 x 1 1/2" SD XL (SEE BELOW)

TAPE SEALANT

#1/4-14 x 7/8" STITCH XL (1'-0" o.c.)

PBR-PANEL OUTSIDE CLOSURE

PBR-PANEL



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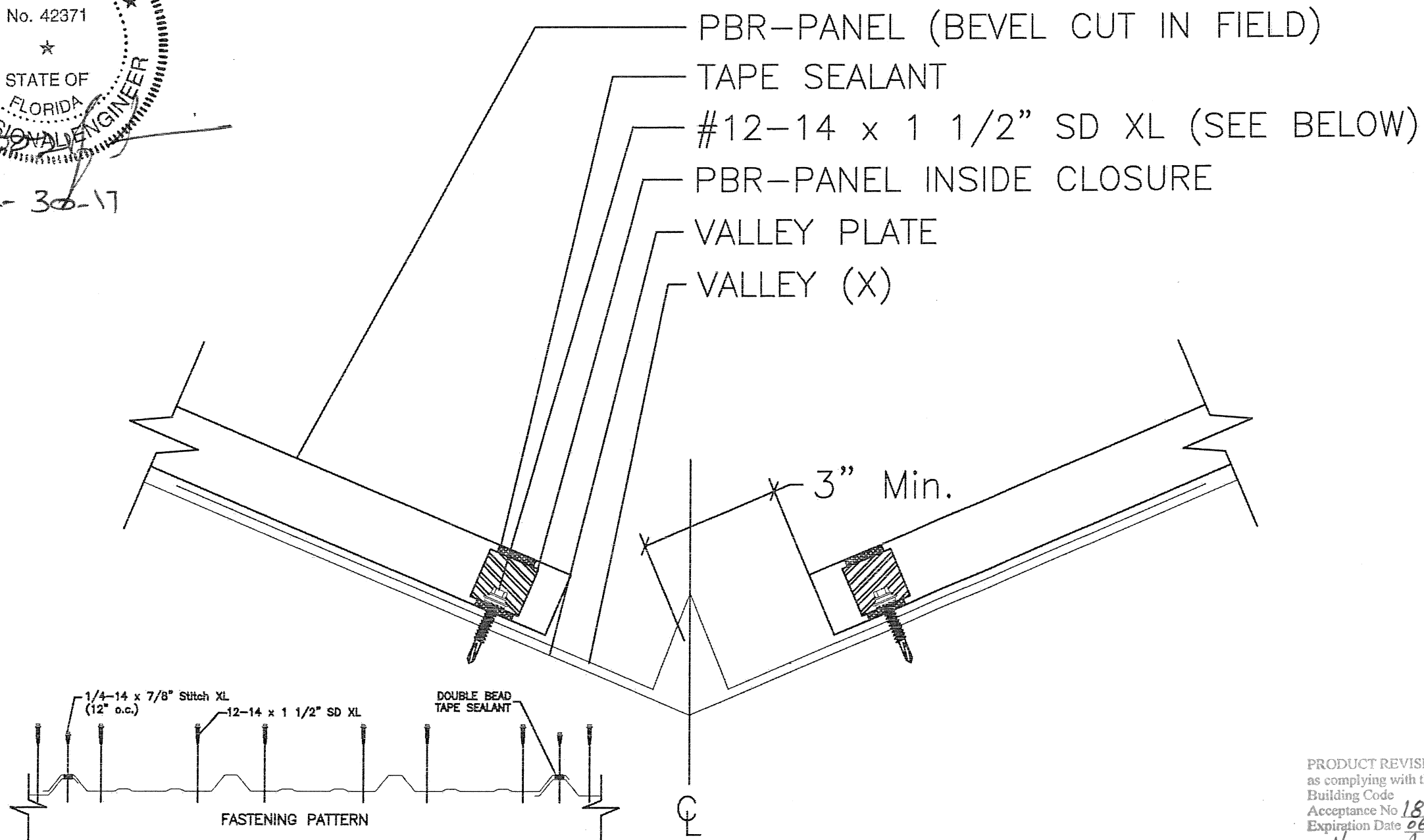
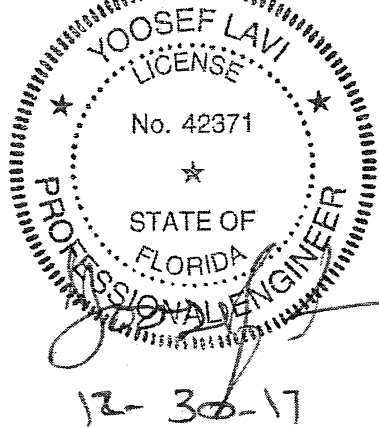
File Name: Peak Detail

Date: 12/8/2017

Scale: None

Dwg # 9 of 12

YOUSEF LAVI, P.E.  
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10300 N. CENTER EXPRESSWAY, SUITE #322  
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By *[Signature]*  
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manufacturing corporation



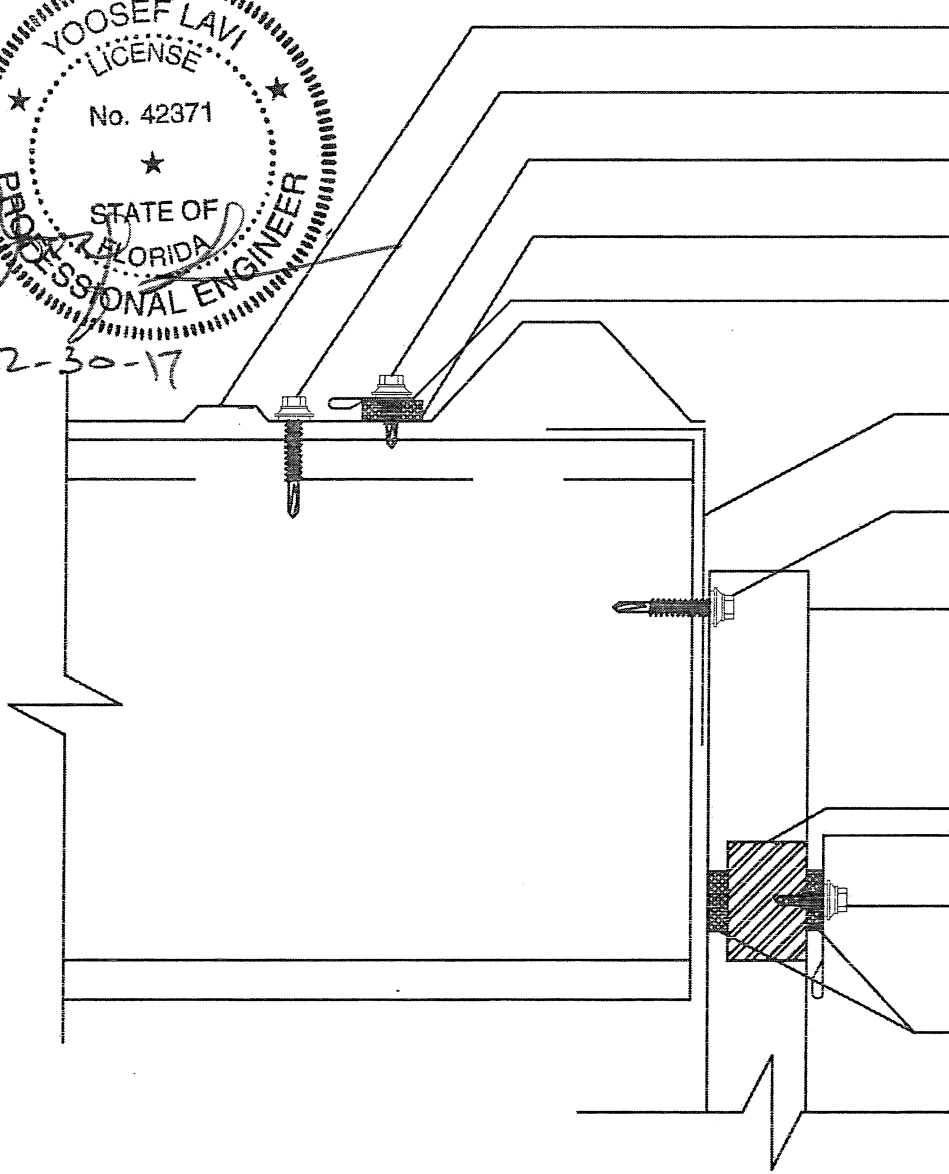
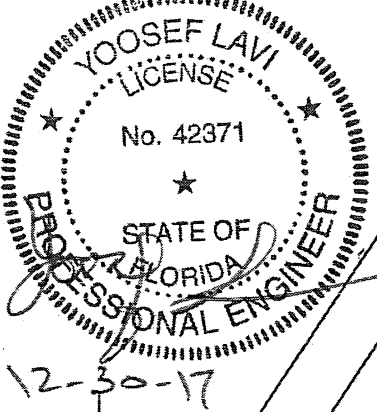
File Name: Valley Detail

Date: 12/8/2017

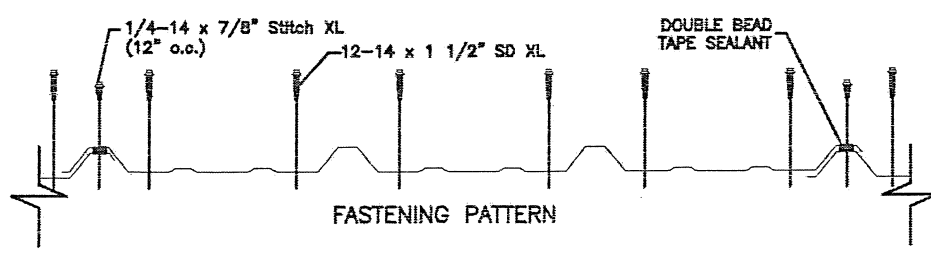
Scale: None

Dwg # 10 of 12

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- PBR-PANEL
- #12-14 x 1 1/2" SD XL (1'-0" o.c.)
- #1/4-14 x 7/8" STITCH XL (1'-0" o.c.)
- TAPE SEALANT
- RAKE ANGLE (BY OTHERS)
- #12-14 x 1 1/2" SD XL (SEE BELOW)
- PBR-PANEL
- PBR-PANEL SCULPTURED RAKE (X)
- PBR-PANEL OUTSIDE CLOSURE
- #1/4-14 x 7/8" STITCH XL (1'-0" o.c.)
- TAPE SEALANT



PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 18-0131.05  
Expiration Date 06/02/2020  
By *[Signature]*  
Miami Dade Product Control

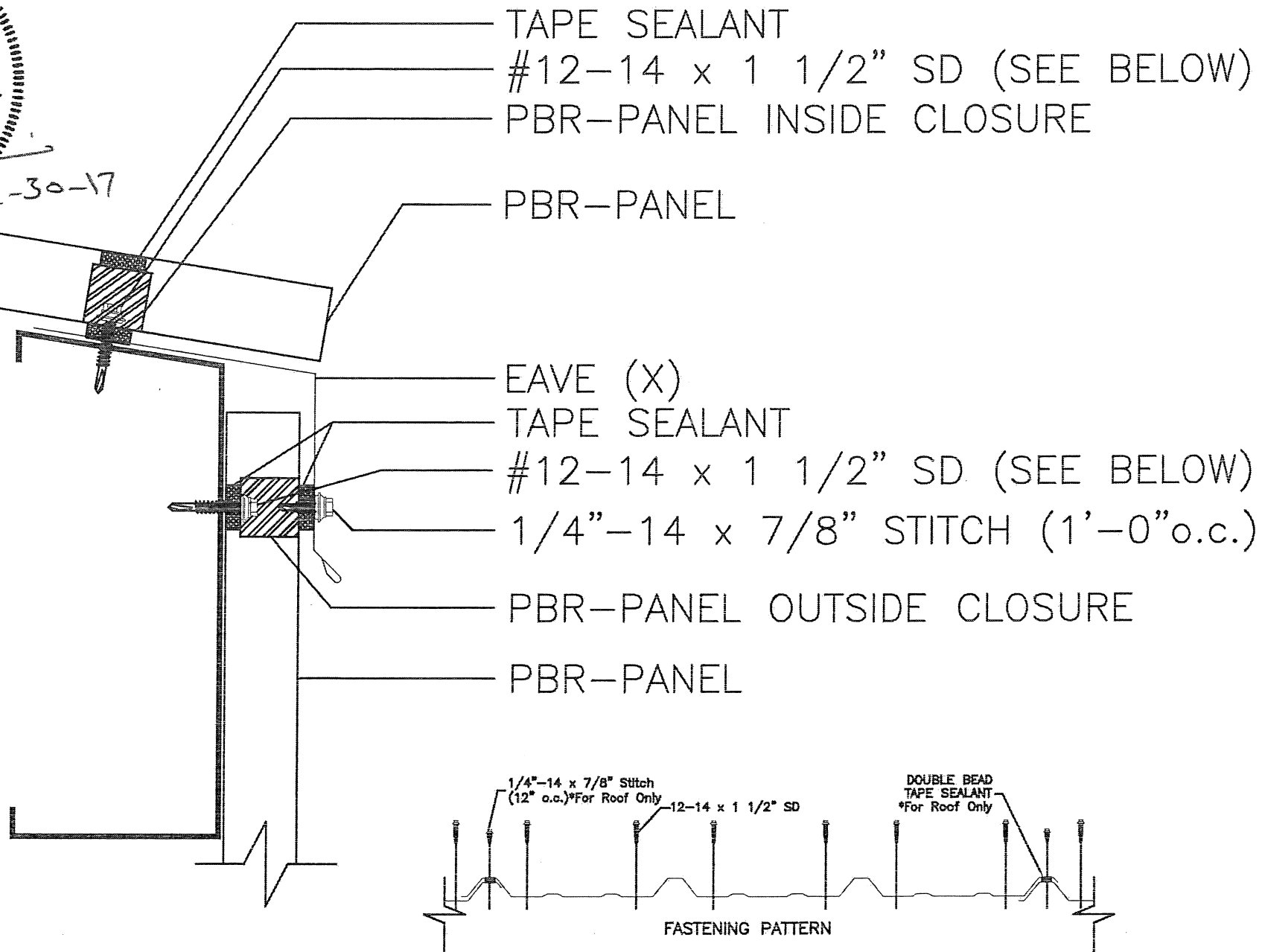
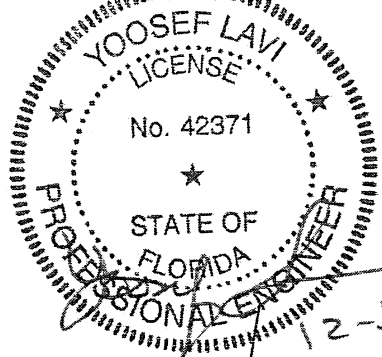
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Date: 12/8/2017	Scale: None

metal sales  
manufacturing corporation

ms

Dwg # 11 of 12

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Miami Data Product Control

metal sales  
manufacturing corporation



File Name: Eave Detail

Date: 12/8/2017

Scale: None

Dwg # 12 of 12