

**Force Engineering & Testing**  
19530 Ramblewood Drive  
Humble, Texas 77338  
Phone: (281) 540-6603, Fax: (281) 540-9966  
Website: forceengineeringtesting.com

**Product Evaluation Report**  
**SENTRIGARD METAL ROOFING SYSTEMS ASSOCIATION, INC.,**  
**an NB HANDY COMPANY**

**Sentrigard ML 200, 24 Ga. 18 7/8" Wide Roof Panel over 22 Ga. Steel Deck**

**Florida Product Approval # 9860.1 R6**

Florida Building Code 2020  
Per Rule 61G20-3  
Method: 1 -D

Category: Roofing  
Subcategory: Metal Roofing  
Compliance Method: 61G20-3.005(1)(d)  
HVHZ

**Product Manufacturer:**

**Sentrigard Metal Roofing Systems Association, Inc.,**  
**an NB Handy Company**  
**65 10th Street**  
**Lynchburg, Virginia 24502**

**Engineer Evaluator:**

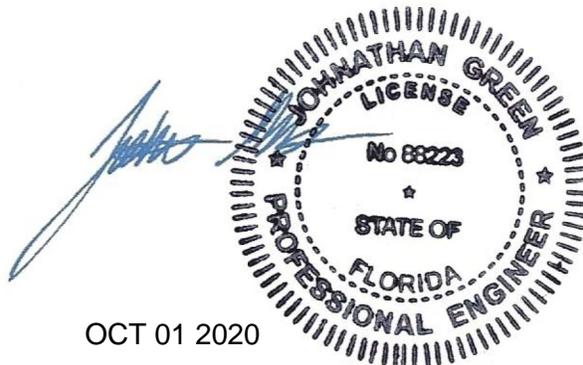
**Johnathan Green, P.E. #88223**  
Florida Evaluation ANE ID: 12901

**Validator:**

**Brian Jaks P.E. #70159**

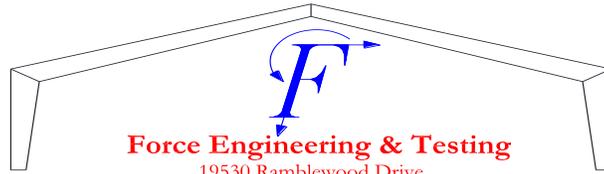
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**Compliance Statement:** The product as described in this report has demonstrated compliance with the Florida Building Code 2020, Sections 1504.3.2, 1518.9, 1523.6.5.2.4.

**Product Description:** Sentrigard ML 200, 2" Mechanical Lock Standing Seam Roof Panel, 24 Ga. Steel, 18 7/8" Wide, Roof Panel restrained with steel slider clips into min. 22 Ga. steel decking. Non-structural Application.

**Panel Material/Standards:** Material: 24 Ga. Steel, ASTM A792 unpainted or painted with Valspar Fluropon or ASTM A653 G90 conforming to Florida Building Code 2020 Section 1507.4.3. Yield Strength: Min. 50.0 ksi  
Corrosion Resistance: Panel Material shall comply with Florida Building Code 2020, Section 1507.4.3

**Panel Dimension(s):** Thickness: 0.024"  
Width: 18 7/8" max coverage  
Rib Height: 2"  
Panel Seam: 180° Seam, Double Lock w/ mechanical seamer

**Roof Panel Clips:** Product Name: 2000SNS, Sliding Clip Assembly  
Type: Two Piece Slider  
Top: 22 Ga. Galvanized Steel  
Base: 16 Ga. Galvanized Steel  
Corrosion Resistance: Per Florida Building Code 2020 Section 1506.7

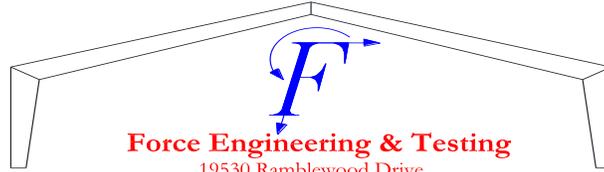
**Roof Clip Fastener:** (2) #14-13 Dek Fast per clip  
3/4" minimum penetration through steel deck  
Corrosion Resistance: Per Florida Building Code 2020, Section 1517.6.

**Substrate Description:** Min. 22 Ga. steel deck, Min. Fy = 33 ksi. Design of steel deck and steel deck supports are outside the scope of this evaluation. Substrate must be designed in accordance w/ Florida Building Code 2020.



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**Allowable Design Uplift Pressures:**

Table "A"

<b>Maximum Total Uplift Design Pressure:</b>	54.3 psf	153.5 psf
<b>Clip Spacing:</b>	36" O.C.	6" O.C.
<b># Fasteners per Clip:</b>	2	2

\*Design Pressure includes a Safety Factor = 2.0.

**Code Compliance:**

The product described herein has demonstrated compliance with The Florida Building Code 2020, Section 1504.3.2, 1518.9, 1523.6.5.2.4.

**Evaluation Report Scope:**

The product evaluation is limited to compliance with the structural wind load requirements of the Florida Building Code 2020, as relates to Rule 61G20-3.

**Performance Standards:**

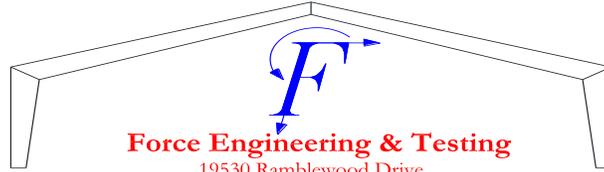
The product described herein has demonstrated compliance with:

- TAS 125-03
- UL 580-06 - Test for Uplift Resistance of Roof Assemblies
- UL 1897-2012 - Uplift Test for Roof Covering Systems
- TAS 100-95 - Test Procedure for Wind and Wind Driven Rain Resistance of Discontinuous Roof Systems
- TAS 110-00 - Accel. Weathering ASTM G 155 / Salt Spray ASTM B 117



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**Reference Data:**

1. TAS 125-03: UL 580-94 / 1897-98 Uplift Test  
Force Engineering & Testing, Inc. (FBC Organization # TST-5328)  
Report No. 72-0272T-07\*
2. TAS 100-95  
Farabaugh Engineering & Testing, Inc. (FBC Organization # TST-1654)  
Report No. T106-08\*
3. TAS 110-00: Valspar Fluropon coated metal panel testing  
A) ASTM G 155  
B) ASTM B 117
4. Miami-Dade County  
Dept. of Regulatory and Economic Resources Board and Code Admin. Div.  
Notice of Acceptance (NOA) 19-0722.07; Expires 08/25/2025  
Sentrigard Metal Roofing Systems Association, Inc.
5. Certificate of Independence  
By Johnathan Green, P.E. #88223

**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 1897-2012 test standard.

**Quality Assurance Entity:**

The Report Holder has demonstrated compliance with Florida Building Code and Rule 61G20-3.005 (3) for manufacturing locations audited by an approved quality assurance entity (Keystone Certifications, Inc – FBC OrgID QUA 1824). A listing of manufacturers authorized by the Report Holder to employ the Florida Product Approvals qualified by this report can be found at

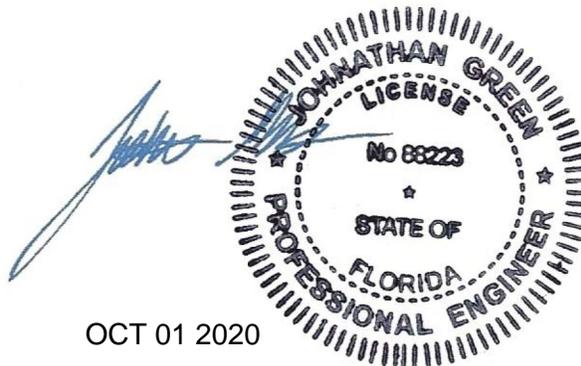
<http://www.keystonecerts.com/ga-assoc/sentrigard>

or by scanning the following QR Code:



**Minimum Slope Range:**

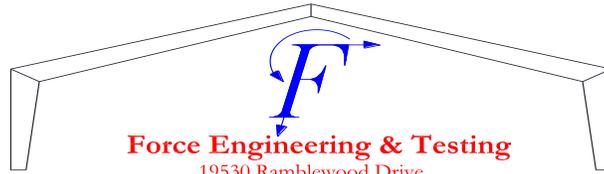
2:12. Minimum Slope shall comply with Florida Building Code 2020, including Sections 1515.2.2 and in accordance with Manufacturers recommendations.



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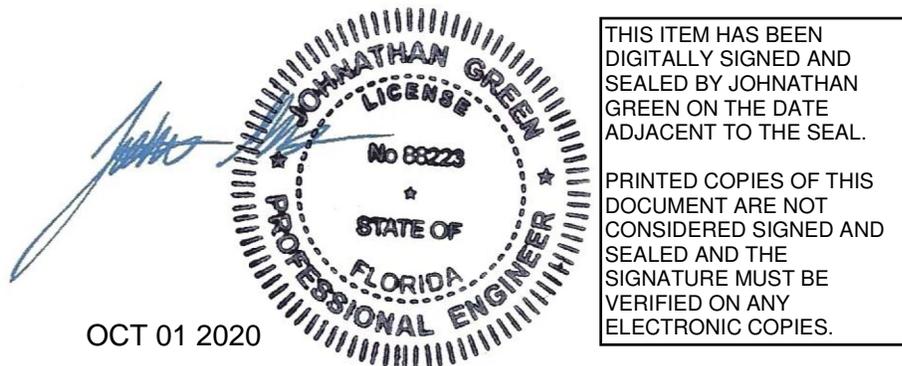
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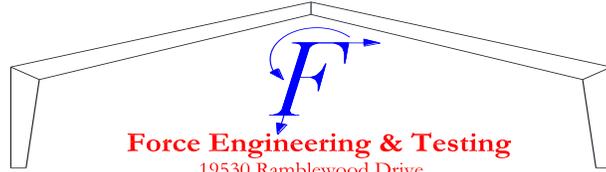
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- Installation:** Install per manufacturer's recommended details and RAS 133.
- Underlayment:** Per Manufacturer's installation guidelines per Florida Building Code 2020 Section 1518.2, 1518.3, 1518.4.
- Fire Barrier:** ½" Georgia Pacific "Dens Deck" or manufacturer approved equal with current NOA.
- Insulation:** 1"-4" thick Polyiso rigid insulation, min. 20 psi compressive strength. Manufacturer approved with current NOA and conforming to Florida Building Code 2020.
- 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 2020 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 2020 Chapter 22 for steel, Chapter 23 for wood and Chapter 16 for structural loading.

\*The Test Reports are owned by Metalforming, Inc. Metalforming, Inc. gives the above manufacturer permission to use these test reports.





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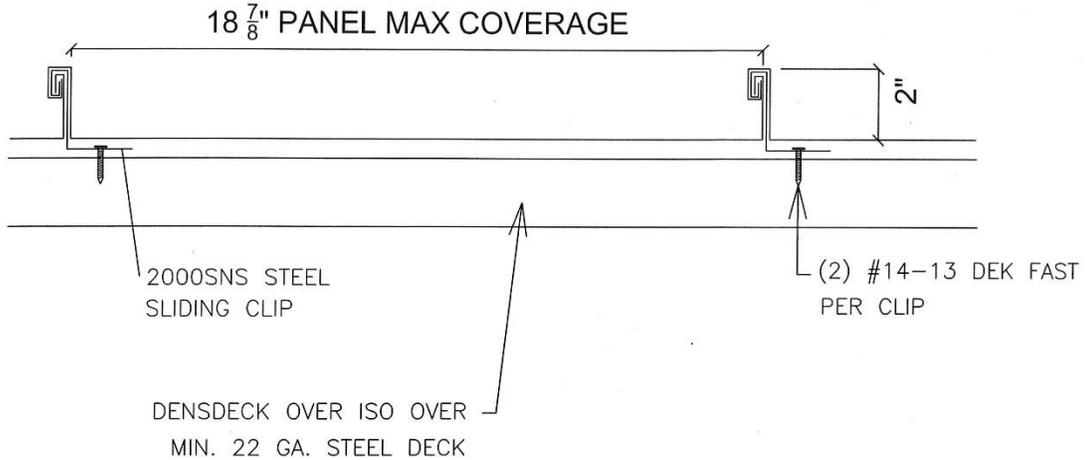
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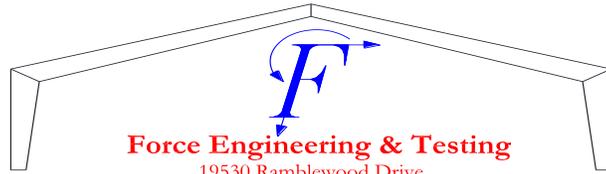
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**SENTRIGARD ML 200 24 GA. STEEL SSR PANEL**



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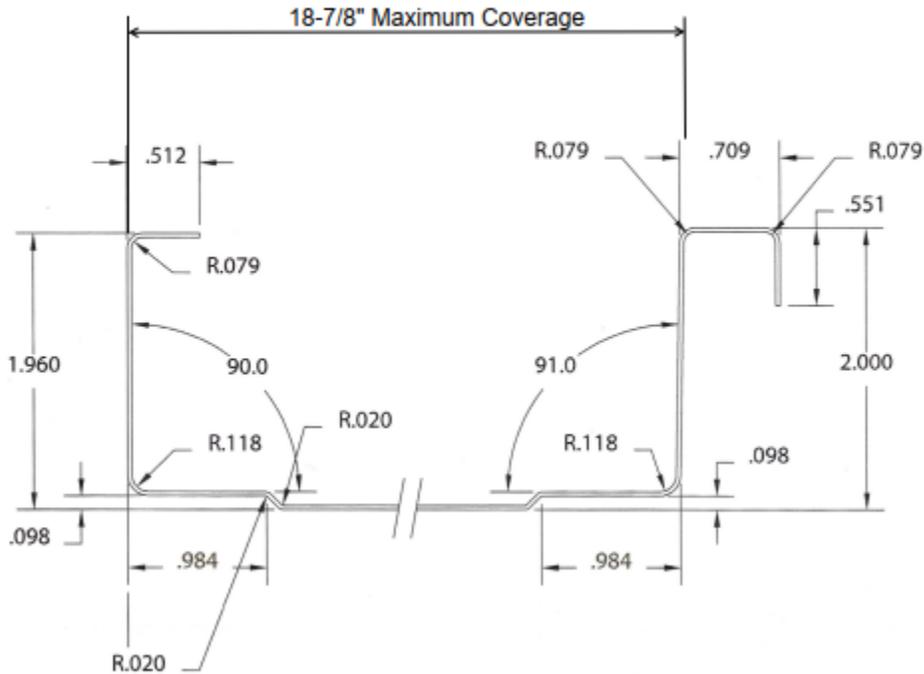
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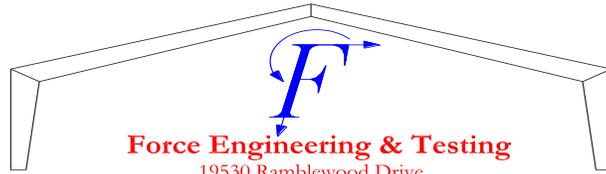
**2 Inch Mechanical Seam Panel**



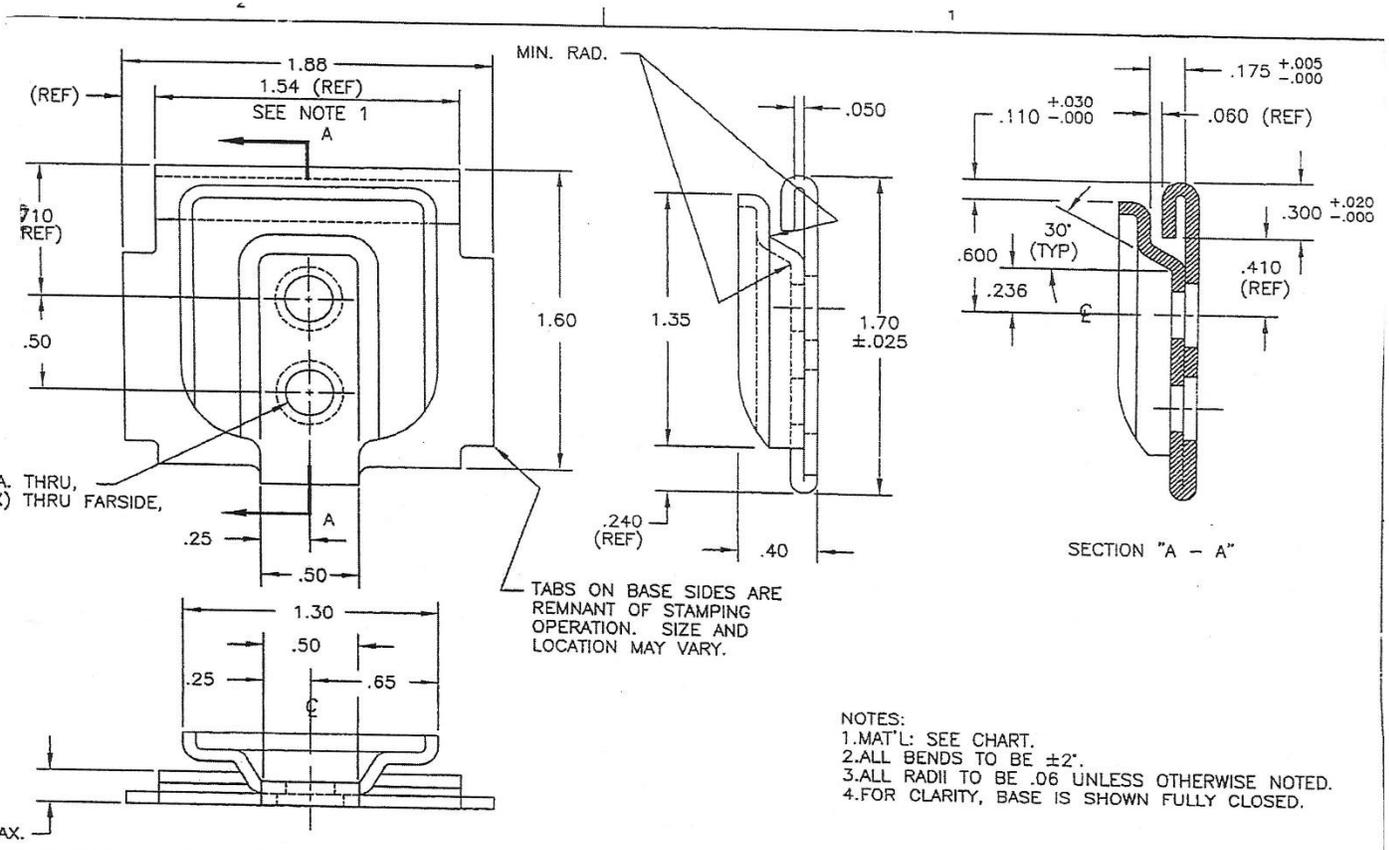
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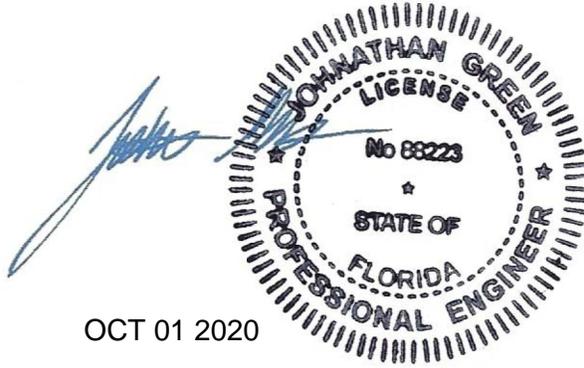


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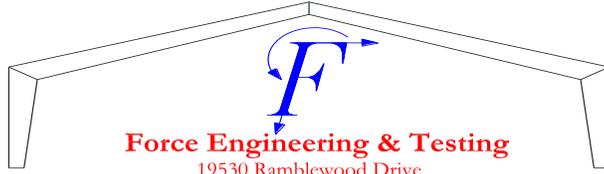
- NOTES:  
 1. MAT'L: SEE CHART.  
 2. ALL BENDS TO BE ±2'.  
 3. ALL RADII TO BE .06 UNLESS OTHERWISE NOTED.  
 4. FOR CLARITY, BASE IS SHOWN FULLY CLOSED.

MD412		(.060-.066 TH) G90 GALV. STL. PLAIN FINISH (SEE MPS-008)		L	3/11/02	5111	N/A	JCS	<b>SFS intec, Inc.</b> <small>1915 SW 103RD, TAMPA, FL 33613        Phone: (813) 278-0201 FAX: (813) 278-0201</small>		<small>TOLERANCES        UNLESS OTHERWISE SPECIFIED        FRACTIONS ± 1/64        DECIMALS .XX ± .01        DECIMAL .XXX ± .001</small>					
PN# W/ SEALANT	PN# W/O SEALANT	MATERIAL DESCRIPTION		REV.	DATE	ZONE	EDN	EDR	INTAL	DESCRIPTION	DRAWN BY ES	SCALE NTS	DATE 4/26/04	CHECKED	APPROVAL	DWG. NO. SD-714B

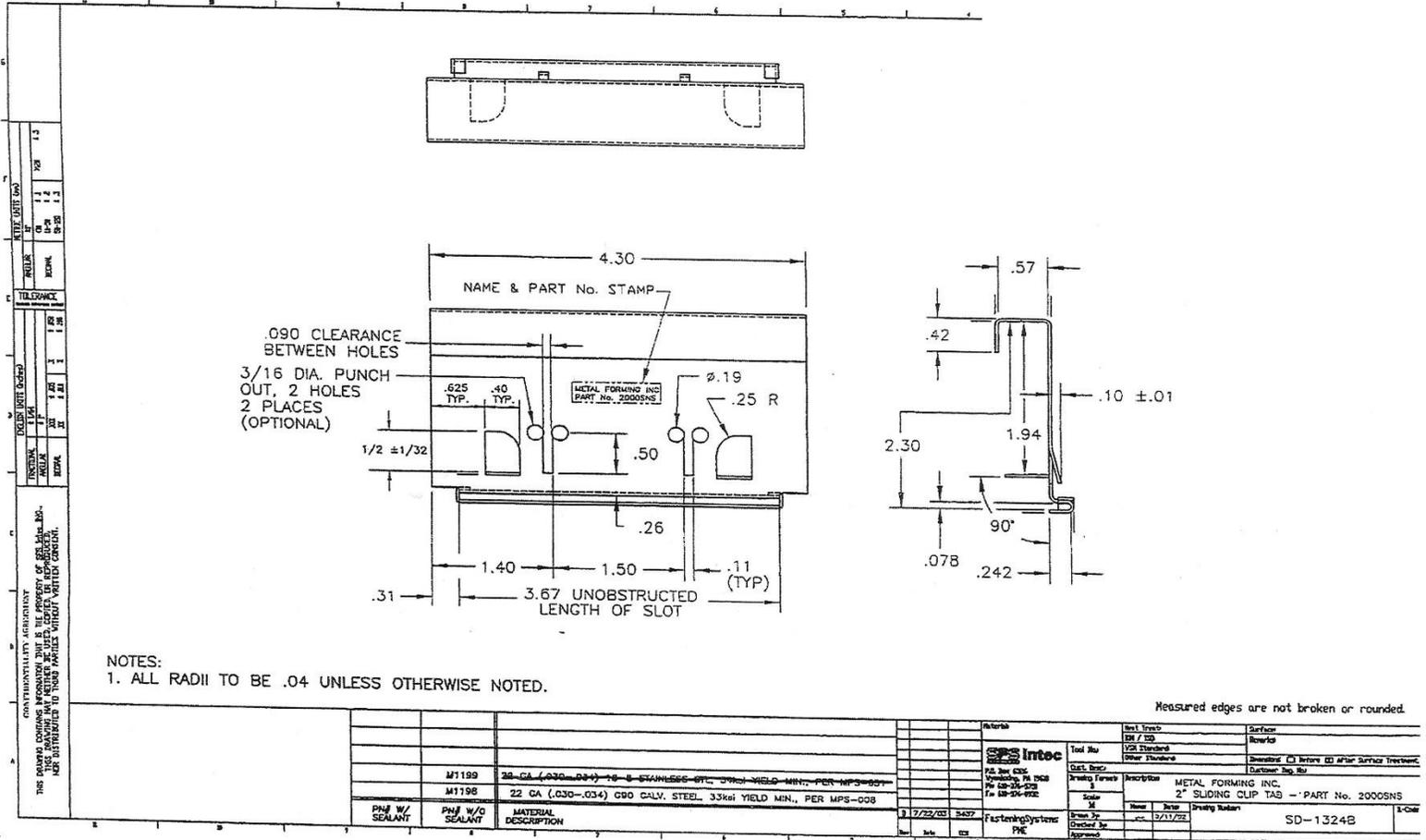


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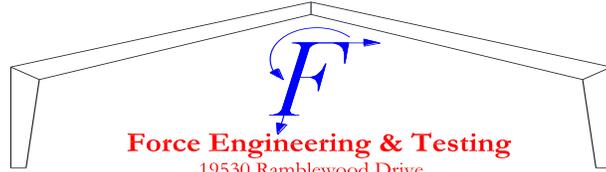


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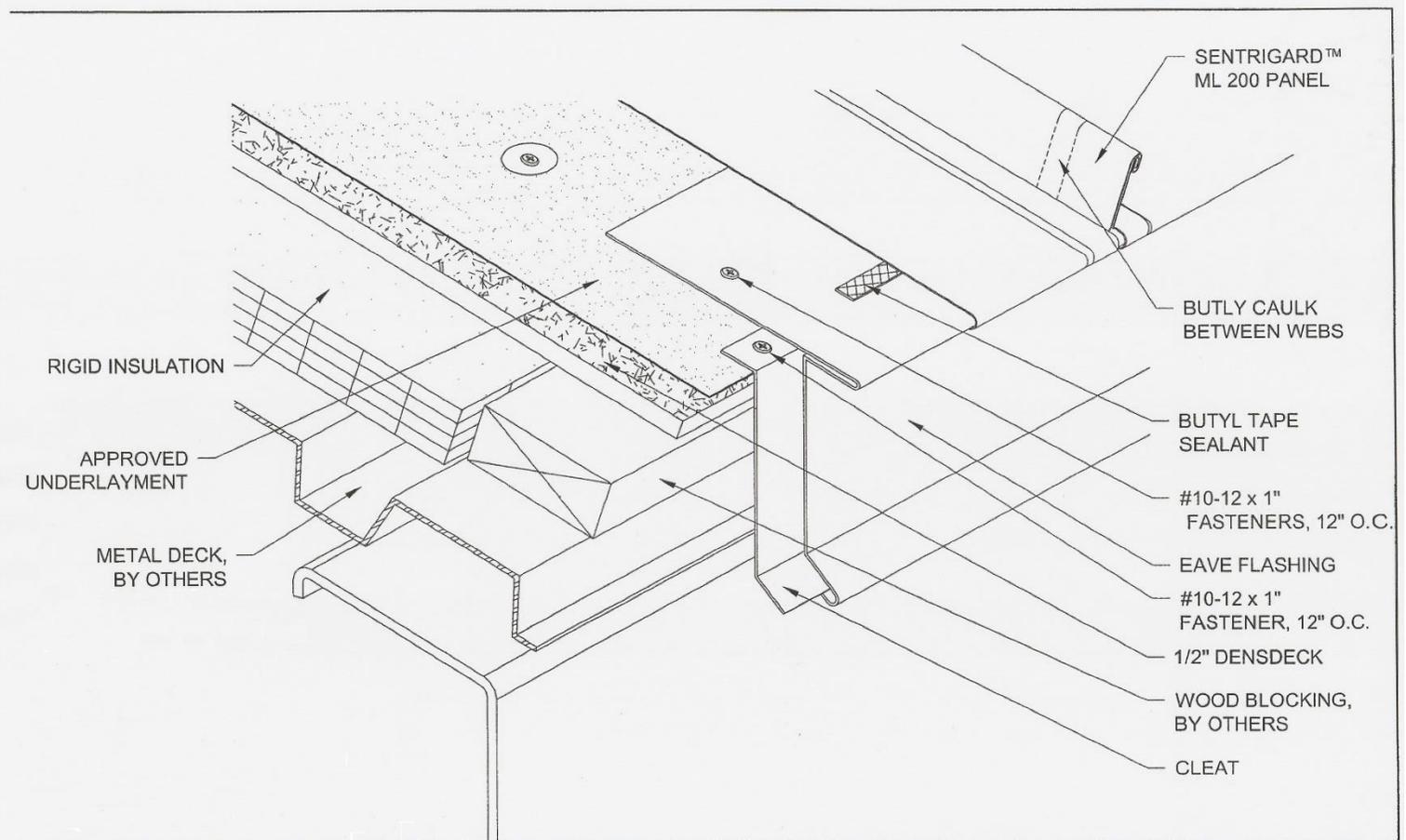
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**SENTRIGARD ML 200 E-1**

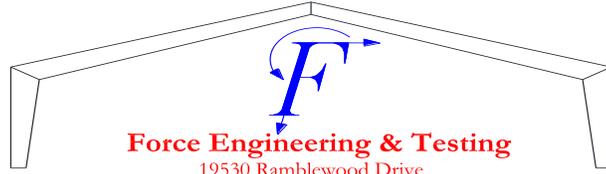
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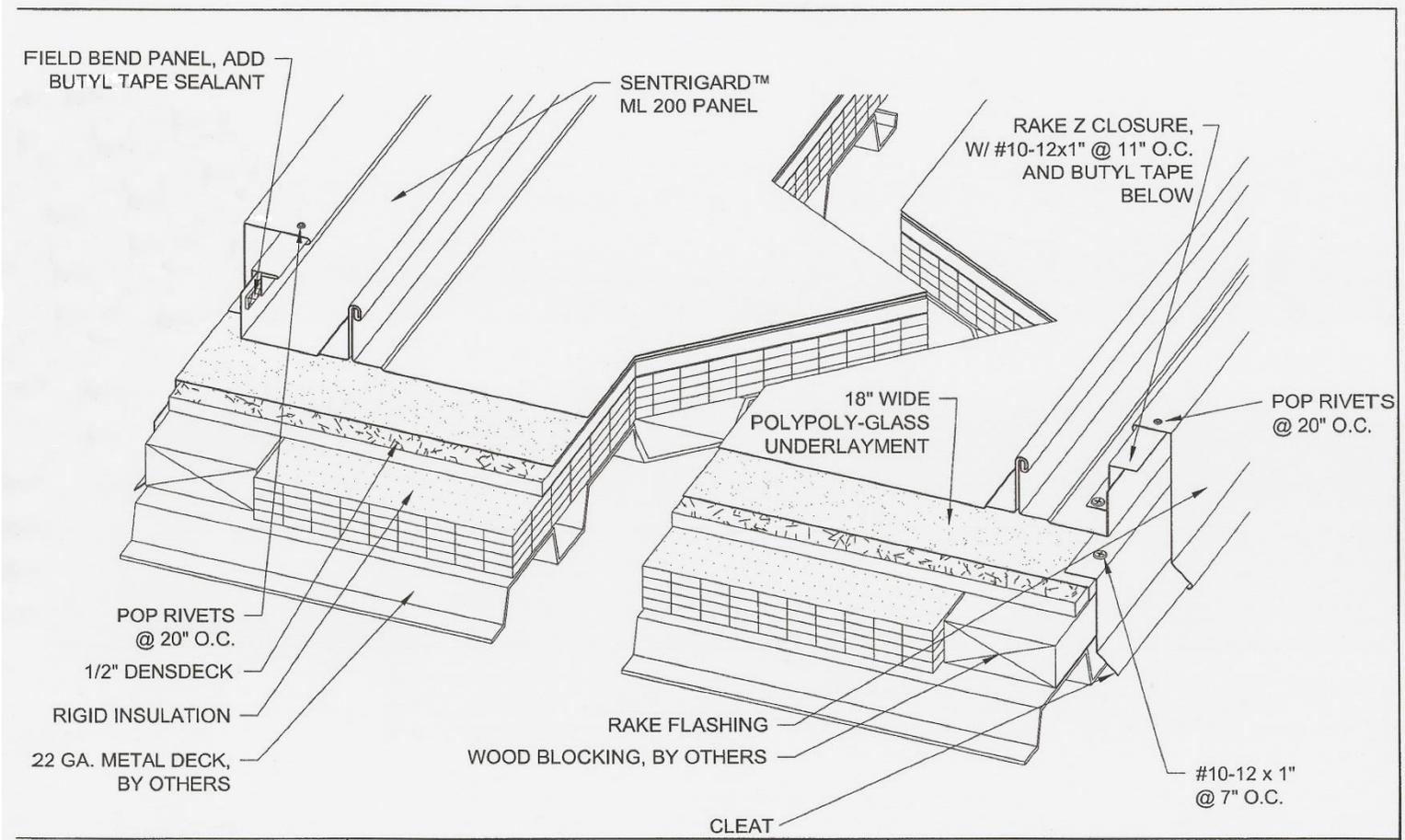
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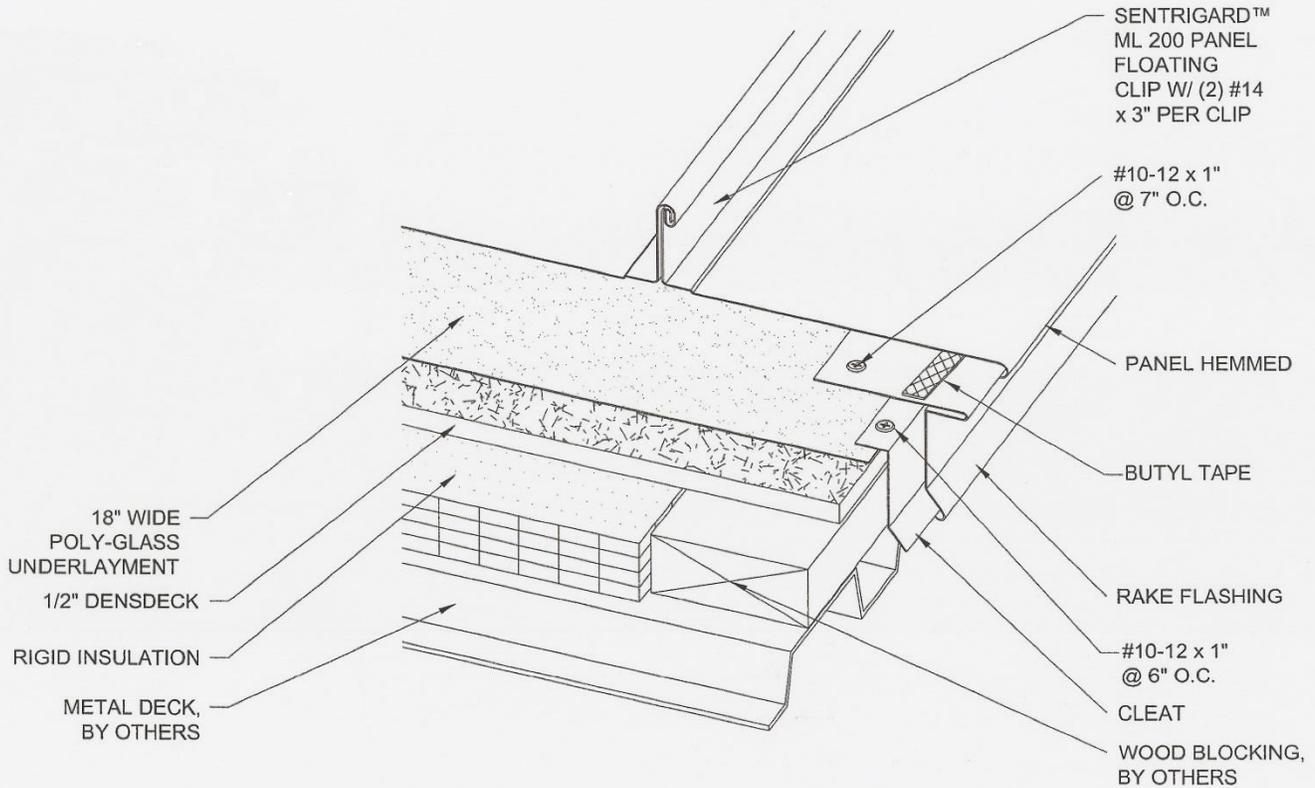


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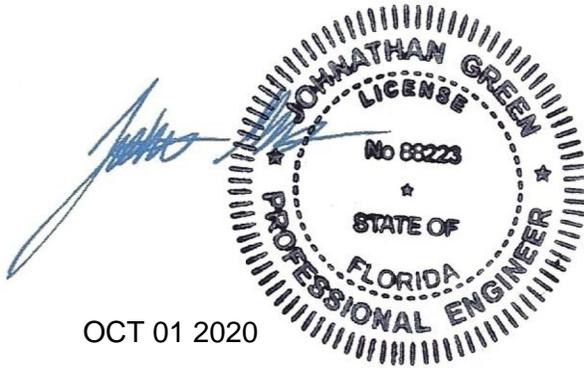


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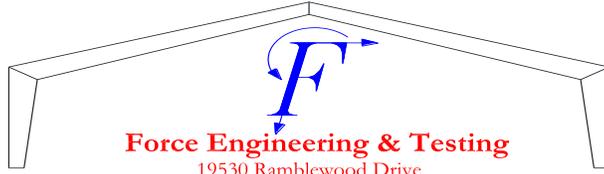
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**SENTRIGARD ML 200 | RK-3**

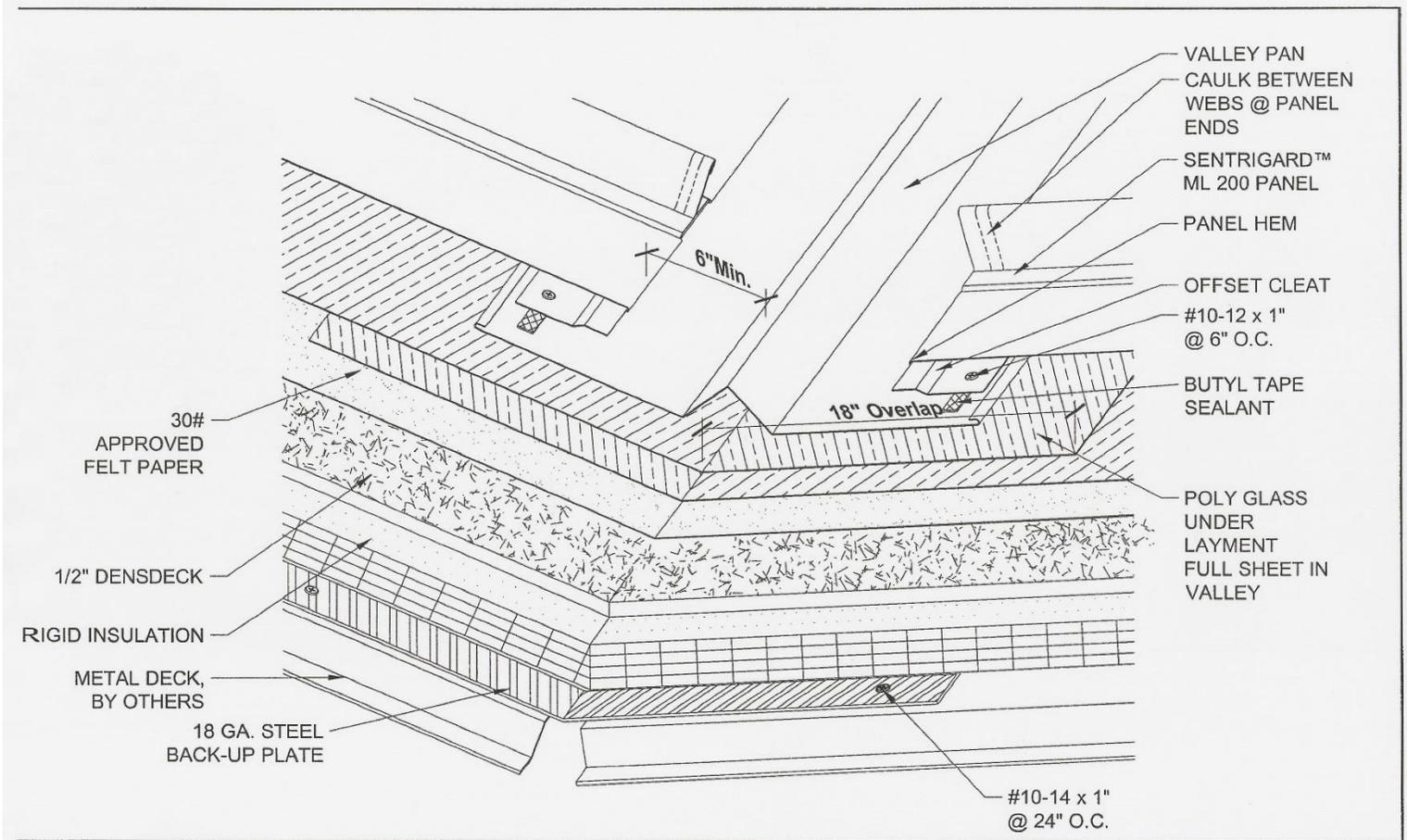


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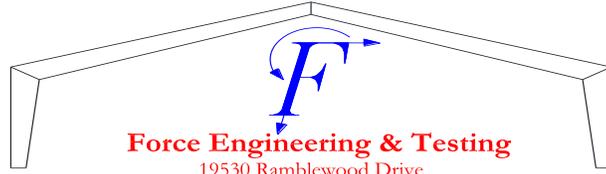
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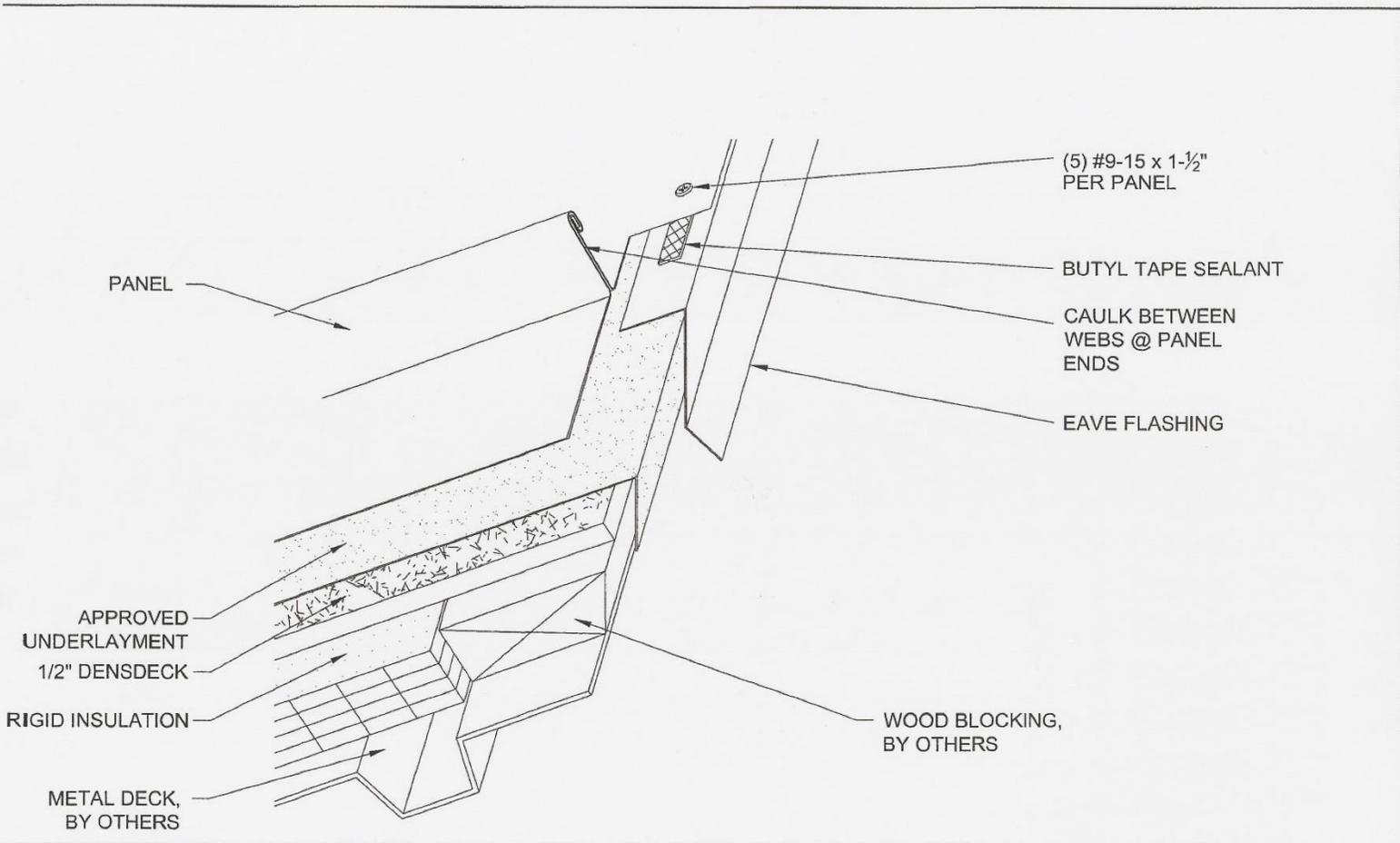
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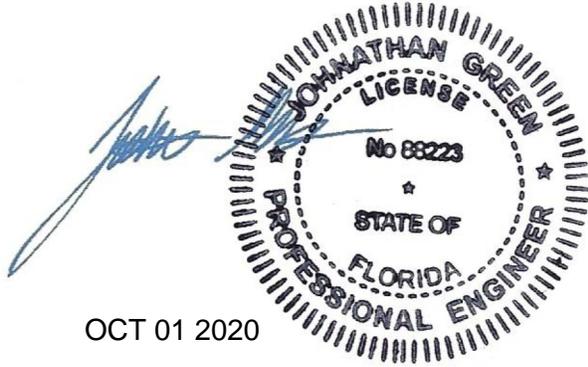


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**SENTRIGARD ML 200 PK-2**



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