



FLORIDA PRODUCT APPROVAL

PALM BEACH SERIES (1.5" MECHANICAL SEAM ALUM)
12" - 20" ROOF PANEL .032 ALUM OVER PLYWOOD
FLORIDA PRODUCT APPROVAL NO 21423.6

Product Evaluation Report

1.5 Mechanical Seam .032 AL Roof Panel over 15/32" Plywood
Florida Product Approval # 21423.6

Florida Building Code 2017 6th ed.
Per Rule 61G20-3

Method: 1 -D

Category: Roofing Subcategory: Metal Roofing
Compliance Method: Rule 61G20-3
HVHZ

Product Manufacturer:
Sunlast Metal
2120 SW Poma Drive
Palm City, Florida 34990

Engineer Evaluator
Diane Marotta, P.E. FL # 82591
1915 NE 45th ST. #107
Fort Lauderdale, FL 33308
954-776-8004

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

Diane G. Marotta, P.E.
FL reg # 82591
seal



Compliance Statement: The product as described in this report has demonstrated compliance with the Florida Building Code 2017, Sections 1504.3.2, 1507.1.1, 1507.4.3, 1518.9, 1523.6.5.2.4

Product Description: 1.5" Mechanical Standing Seam Roof Panel, .032 ALUM 12"- 20:" Widths, Roof panels Panel restrained with 24GA steel clips into 15/32" 4 -ply CDX Plywood decking. Non-structural Application.

Material: .032 ALUM conforming to Florida Building Code 2017 Section 1507.4.3
Corrosion Resistance: Panel Material shall comply with Florida Building Code 2017, Section 1507.4.3

Panel Dimensions: Panel Widths: 12"- 20" 90° Seam, and 180° Seam Double Lock .032 AL

Roof Panel Clips: 24GA Galvanized steel 3" long .

Roof Clip Fastener: (2 per clip) #10 Pancake Type A. Corrosion Resistant per Florida Building Code 2017 Section 1506.7 ¼" minimum penetration through plywood . Corrosion Resistance: Per Florida Building Code 2017, Section 1506.6, 1507.4.4 15/32" 4-ply CDX Rated plywood. Plywood 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 2017.

Design Uplift Pressures: Uplift Design Pressure: with Safety Factor of 2

Method 1-(90° seam) -63.5 24" o.c. clip spacing

Method 2(90° seam)-86psf 24" o.c. clip spacing

Method 3 (180 degree seam) -131psf 6"o.c clip spacing

Fasteners per Clip: 2

Reference: TAS 125-03 - Report # F9156.02-450-18 TAS 100-95 D956.03-450-18
by Architectural Testing, Inc. an Intertek Company, West Palm Beach Facility. Miami-Dade County Notification No. ATIWPB 16031

Code Compliance: The product described herein demonstrated compliance with The Florida Building Code (FBC) 2017 6th ed., Section 1504.3.2. The product evaluation is limited to compliance with the structural wind load requirements of the FBC 2017, as relates to Rule **61G20-3**.

Minimum Slope Range 2:12 Min. Slope per Florida Building Code 2014, and in accordance with Manufacturers recommendations.

Installation: Install per manufacturer's recommended details.

Underlayment: Per Manufacturer's installation guidelines per Florida Building Code 2017 Chapter 1507 Chart 1507.1.1

Roof Panel Fire Classification: No classification

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

Design Procedure: Based on the dimensions of the structure, applicable wind loads are determined using Chapter 16 of the Florida Building Code 2017 -roof cladding wind loads. Component wind loads for roof cladding are compared to the allowable pressure listed above. The design professional shall select the applicable erection details to reference in drawings for correct fastener attachment to his structure and analyze the panel fasteners for pullout and pullover. Support framing must be compliant with Florida Building Code 2017 Chapter 22 for steel, Chapter 23 for wood and Chapter 16 for structural loading.

Certificate of Independence:

Diane G.Marotta P.E. does not have nor will acquire financial interest in any company manufacturing or distributing products under this evaluation. Diane G. Marotta, P.E. is not owned, operated or controlled by any company manufacturing or distributing product under this report.

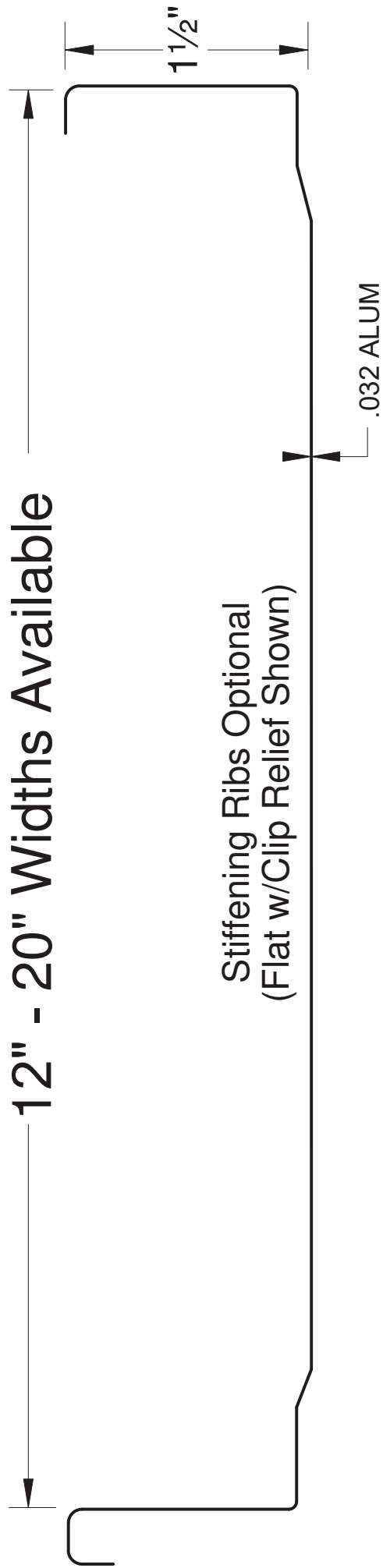
PALM BEACH SERIES (1.5" MECHANICAL SEAM ALUM)

12" - 20" ROOF PANEL .032 ALUM OVER PLYWOOD

INSTALL DETAILS

1.50" Mechanical (Palm Beach Series)

12" - 20" Widths Available



General Notes

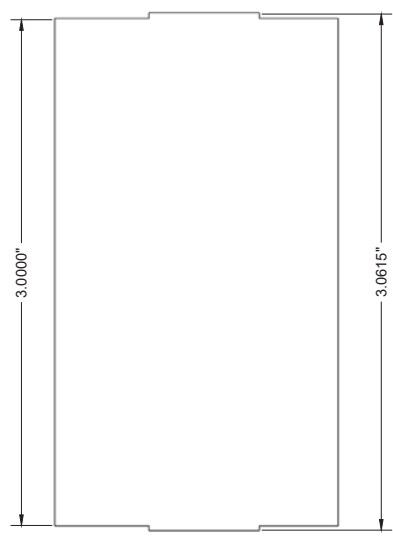
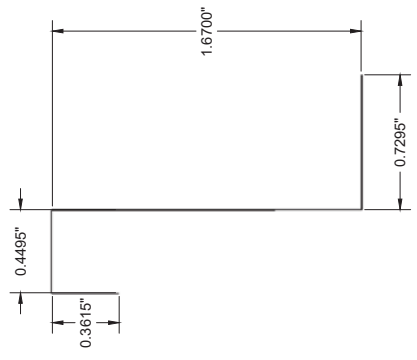
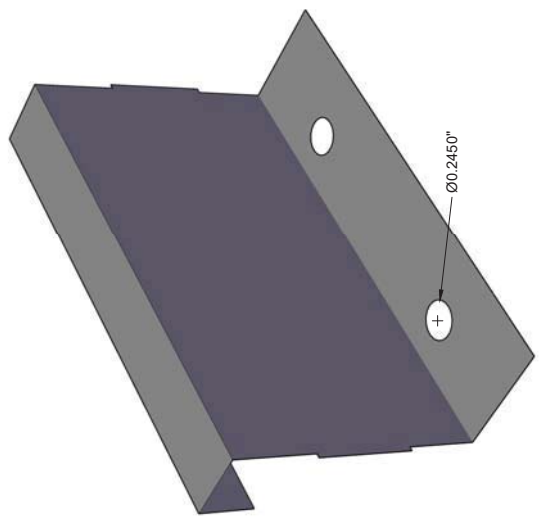
No.	Revision/Issue	Date

File Name and Address
SUNLAST METAL AND SOLAR, INC.
2120 SW POMMA DRIVE
PALM CITY, FLORIDA 34990



Project Name and Address
1.5 MECHANICAL PANEL CLIP
(PALM BEACH SERIES)

Drawn	Sheet
O. CARTY	A-101
DATE	Scale
OCT 19, 2016	



General Notes

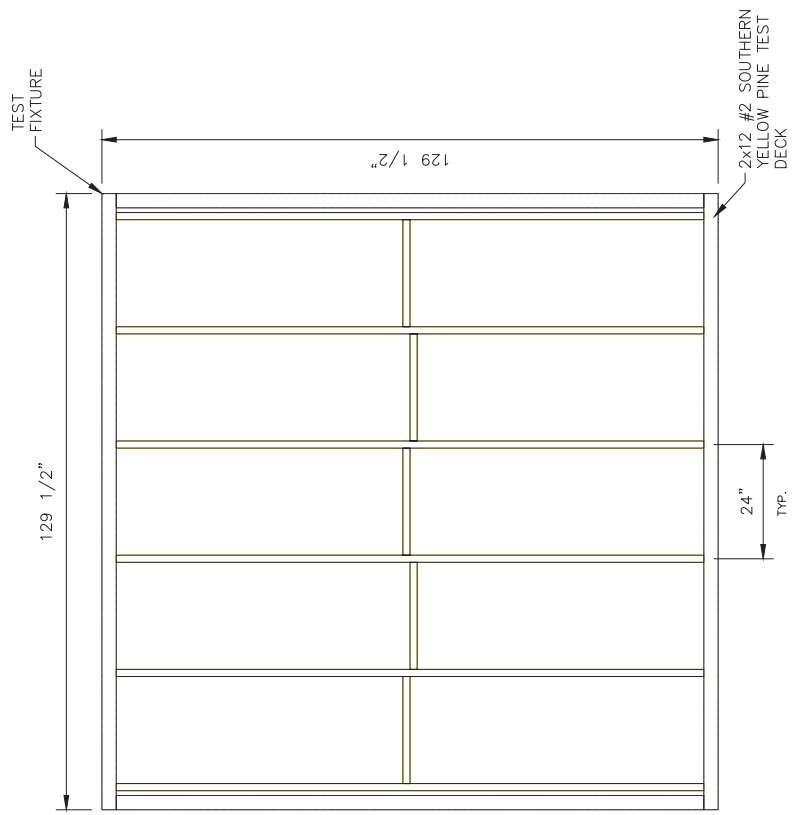
No.	Revision/Issue	Date

Plot Name and Address
SUNLAST METAL AND SOLAR, INC.
2120 SW POMA DRIVE
PALM CITY, FLORIDA 34990

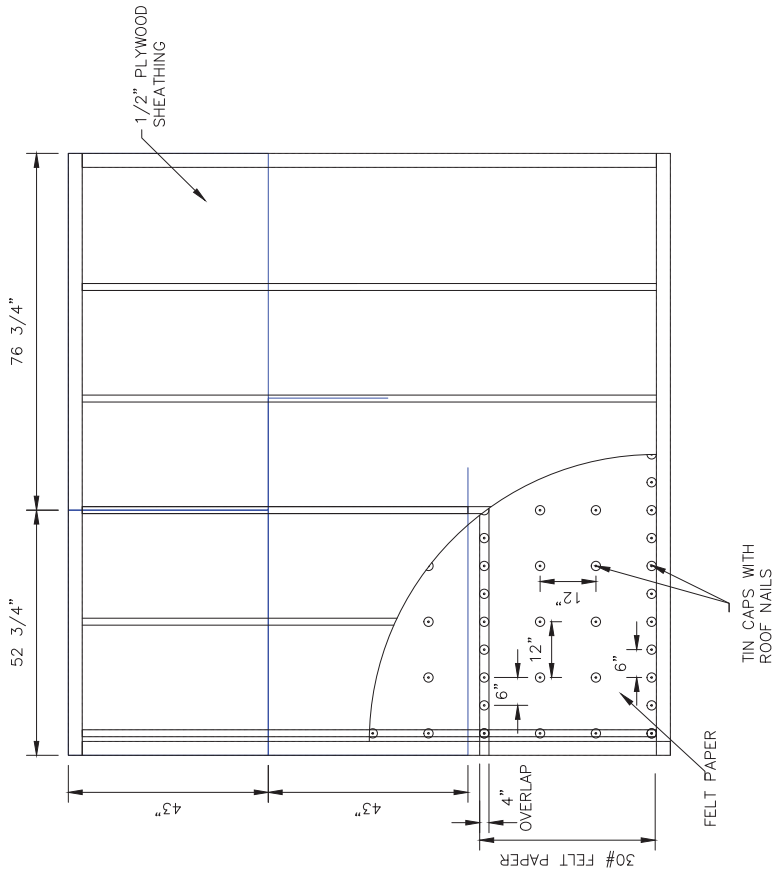


Project Name and Address
TEST DECK ELEVATION
STEEL PANEL

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Date	OCT 19 2016	Scale	N.T.S.



TEST DECK ELEVATION N.T.S.



N.T.S.

SHEATHING SYSTEM ELEVATION

- ANCHORAGE AND ATTACHMENT NOTES:**
- 1/2" PLYWOOD SHEATHING TO STRUCTURAL SUPPORT FRAME.
 - CORNER AND FIELD SPECIMENS:
 - 80 x 2-1/2" GALVANIZED RING SHANK COMMON NAILS AT 6" O.C. IN THE FIELD AND 6" O.C. AT THE PERIMETER OF EACH SHEET
 - 30 #8 FELT PAPER.
 - SHEET EDGE AND SEAM: 0.120" x 1 1/4" GALVANIZED ANNULAR RING SHANK ROOFING NAILS WITH .32ga. TIN CAPS 6" O.C.
 - SHEET INTERIOR: 0.120" x 1 1/4" GALVANIZED ANNULAR RING SHANK ROOFING NAILS WITH .32ga. TIN CAPS, TWO ROWS AT 12" O.C.
 - A 4" OVERLAP WAS USED WHEN LAYING ADJACENT SHEETS OF FELT PAPER. THE FELT PAPER WAS INSTALLED PERPENDICULAR TO THE ROOF PANELS.

General Notes


No.	Revision/Issue	Date

Client Name and Address
 SUNLAST METAL AND SOLAR, INC.
 2120 SW POMA DRIVE
 PALM CITY, FLORIDA 34990



Project Name and Address
 SHEATHING SYSTEM
 ELEVATION

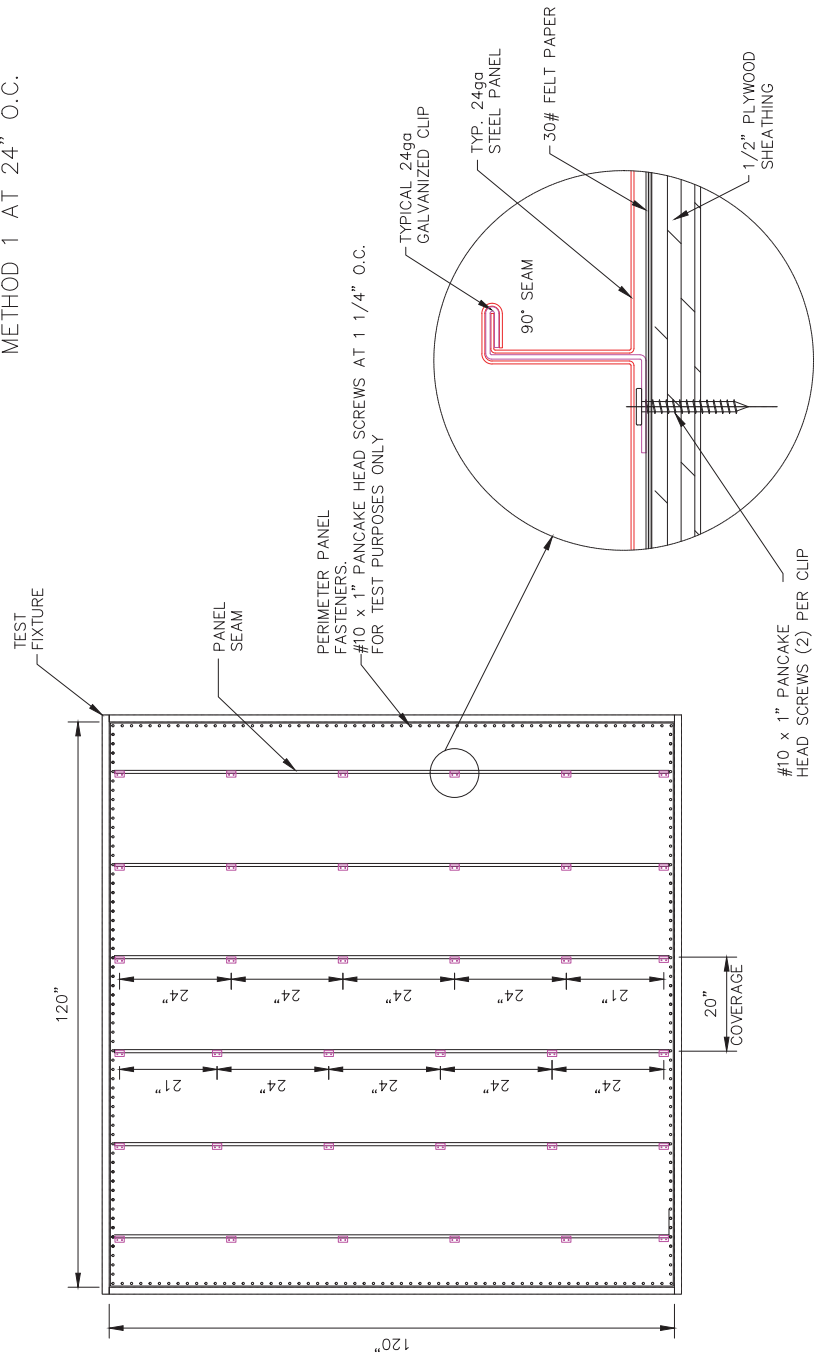
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Date	OCT 19 2016	Scale	N.T.S.

General Notes	
No.	Revision/Issue
Date	
Project Name and Address SUNLAST METAL AND SOLAR, INC. 2120 SW POMA DRIVE PALM CITY, FLORIDA 34990	
	
Project Name and Address METHOD 1 SPECIMEN #1 & #2 PANEL ELEVATION	
Drawn By	Sheet
O. GARTY	A-103
DATE	
OCT 19 2016	
Scale	
N.T.S.	

METHOD 1 SPECIMEN #1 & #2 - 90° SEAM

INDIVIDUAL 24ga GALVANIZED
STEEL CLIPS BETWEEN EACH PANEL
METHOD 1 AT 24" O.C.

24" COIL WIDTH
20" COVERAGE ON 1/2" PLYWOOD




TYP. CLIP INSTALLATION DETAIL

PANEL ELEVATION

N.T.S.

N.T.S.

CLIP LOCATIONS IN FIELD

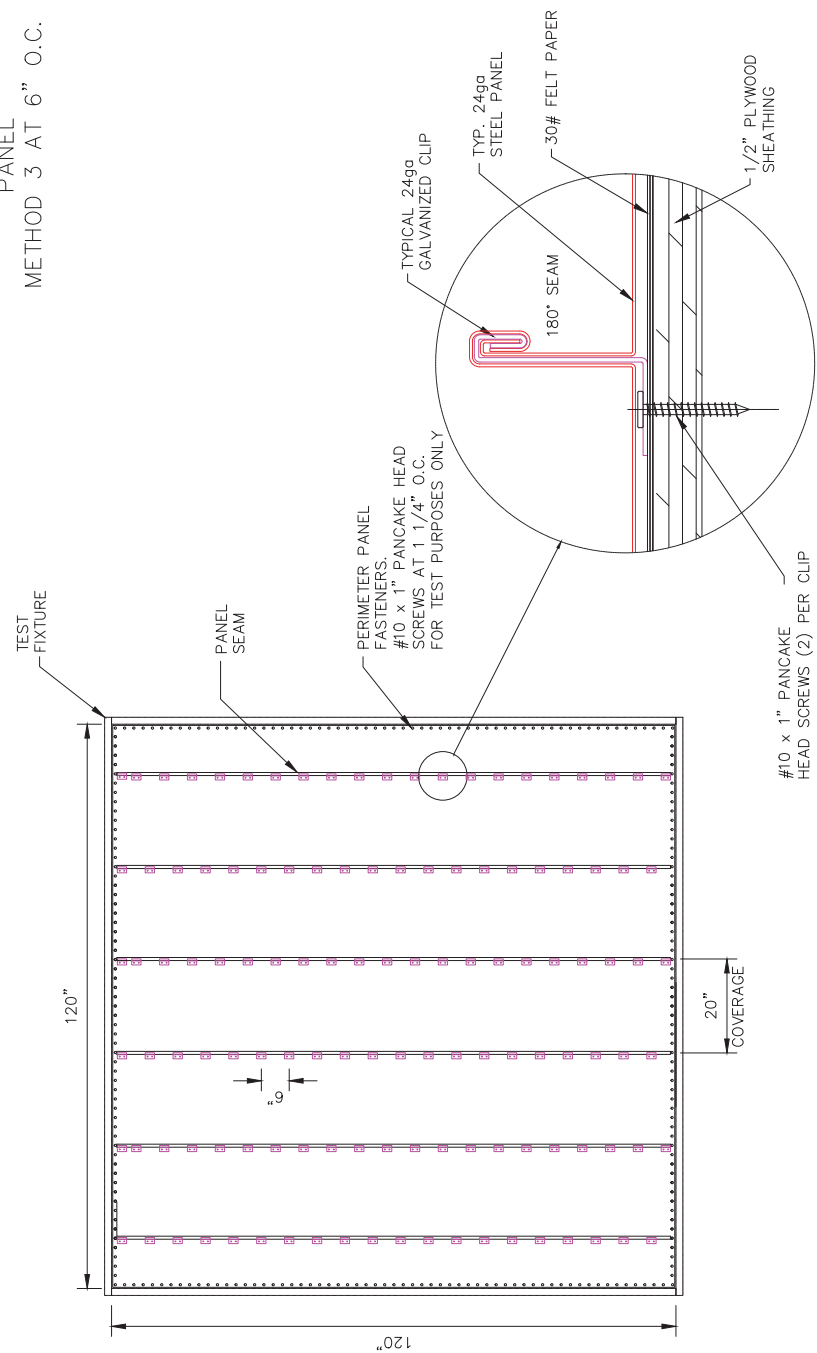
General Notes	
No.	Revision/Issue
Date	
Project Name and Address SUNLAST METAL AND SOLAR, INC. 2120 SW POMA DRIVE PALM CITY, FLORIDA 34990	
	
Project Name and Address PANEL ELEVATION METHOD #3 TYPICAL CLIP INSTALLATION DETAIL	
Designer O. CARTY	Sheet A-104
Date OCT 19 2016	Scale N.T.S.

METHOD 3 SPECIMEN #3 — 180° SEAM

INDIVIDUAL 24ga GALVANIZED
STEEL CLIPS BETWEEN EACH
PANEL

METHOD 3 AT 6" O.C.

24" COIL WIDTH
20" COVERAGE ON 1/2" PLYWOOD



TYP. CLIP INSTALLATION DETAIL

PANEL ELEVATION

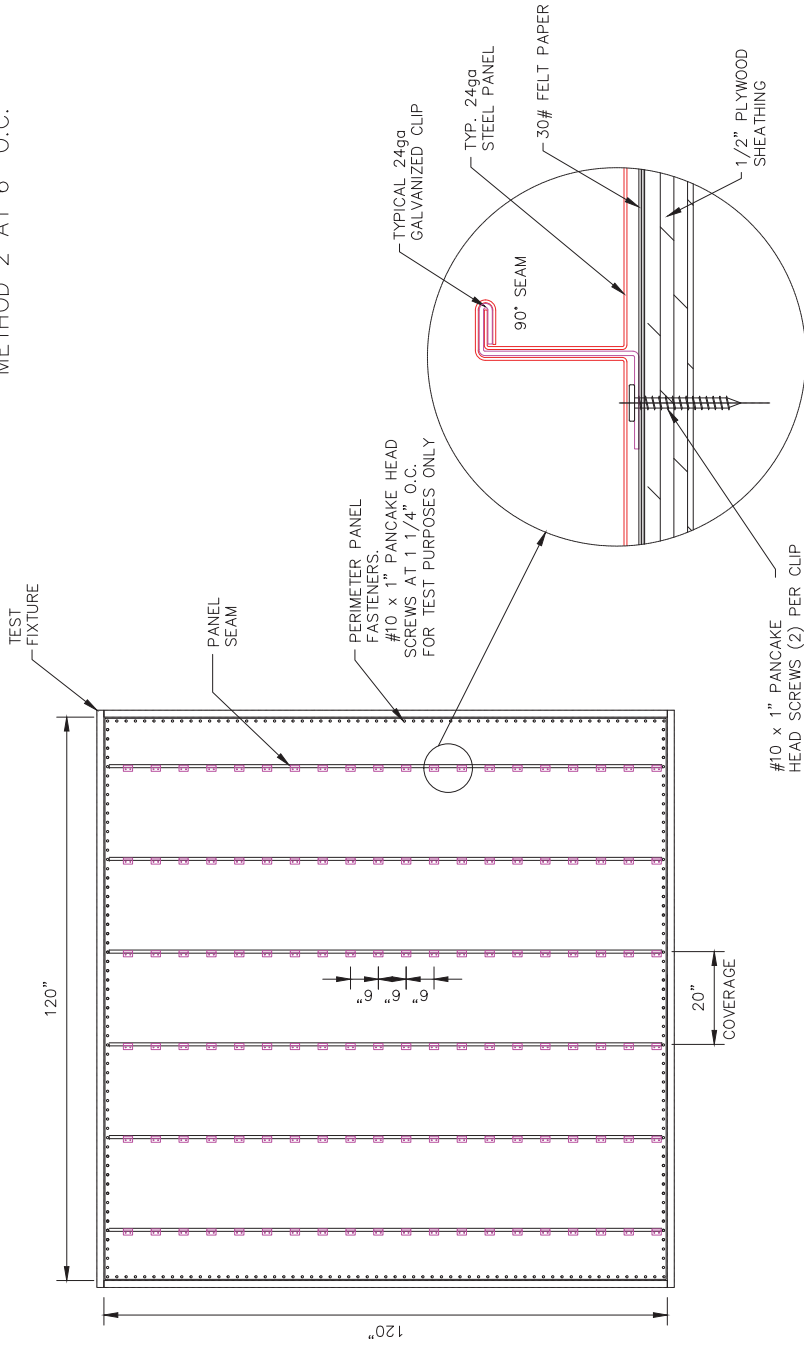
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CLIP LOCATIONS IN CORNER

METHOD 2 SPECIMEN #4 — 90° SEAM
 INDIVIDUAL 24ga GALVANIZED
 STEEL CLIPS BETWEEN EACH PANEL
 METHOD 2 AT 6" O.C.


24" COIL WIDTH
 20" COVERAGE ON 1/2" PLYWOOD



TYP. CLIP INSTALLATION DETAIL N.T.S.

PANEL ELEVATION N.T.S.

CLIP LOCATIONS IN FIELD

General Notes	
No.	Revision/Issue
Date	
Project Name and Address SUNLAST METAL AND SOLAR, INC. 2120 SW POMA DRIVE PALM CITY, FLORIDA 34990	
	
Project Name and Address METHOD 2 SPECIMEN #4 PANEL ELEVATION	
Drawn By	O. CARTY
Check	OCT 19 2016
Scale	N.T.S.
Sheet	A-105