Sunlast Metal
Value Engineered Metal Roofing ™

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 2014 Per Rule 61G20-3

Method: 1 –D

Category: Roofing Subcategory: Metal Roofing

Compliance Method: Rule 61G20-3

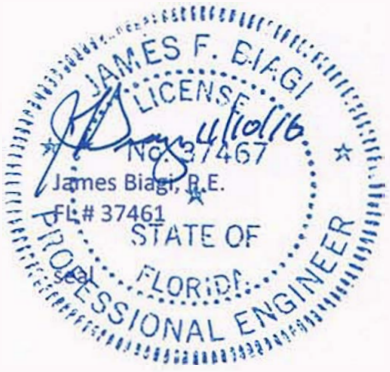
HVHZ

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

Engineer Evaluator
James Biagi, P.E. FL # 37467
1915 NE 45th ST. #107
Fort Lauderdale, FL 33308
954-776-8004

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

Contents:
Evaluation Report 1-10



Compliance Statement: The product as described in this report has demonstrated compliance with the

Florida Building Code 2014, Sections 1504.3.2, 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 2014 Section 1507.4.3
Corrosion Resistance: Panel Material shall comply with Florida Building Code 2014, 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 2014 Section 1506.7
¼" minimum penetration through plywood . Corrosion Resistance: Per Florida Building Code 2014, 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 2014.

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) 2014 Section 1504.3.2. The product evaluation is limited to compliance with the structural wind load requirements of the FBC 2014, 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 2014

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 2014 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 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 2014 Chapter 22 for steel, Chapter 23 for wood and Chapter 16 for structural loading.

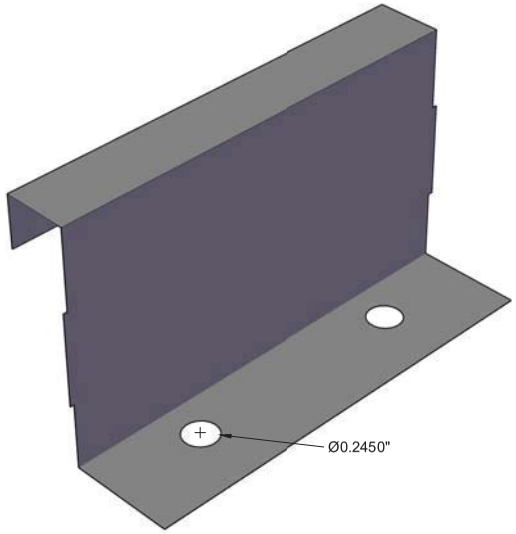
Certificate of Independence: James Biagi, P.E. does not have nor will acquire financial interest in any company manufacturing or distributing products under this evaluation. James Biagi, P.E. is not owned or operated or controlled by any company manufacturing or distributing product under this report.

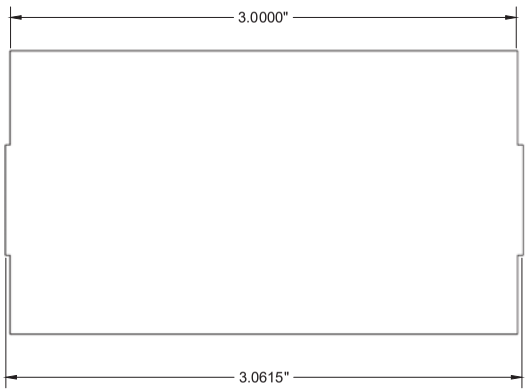
PALM BEACH SERIES (1.5" MECHANICAL SEAM ALUM)

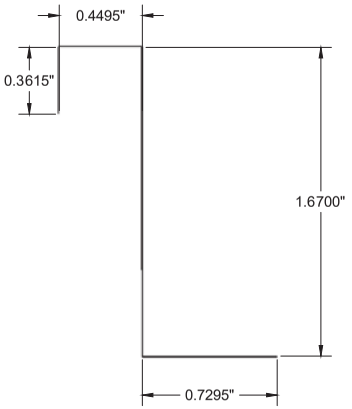
12" - 20" ROOF PANEL .032 ALUM OVER PLYWOOD

INSTALL DETAILS

1.50" Mechanical
(Palm Beach Series)







General Notes

No.	Revision/Issue	Date

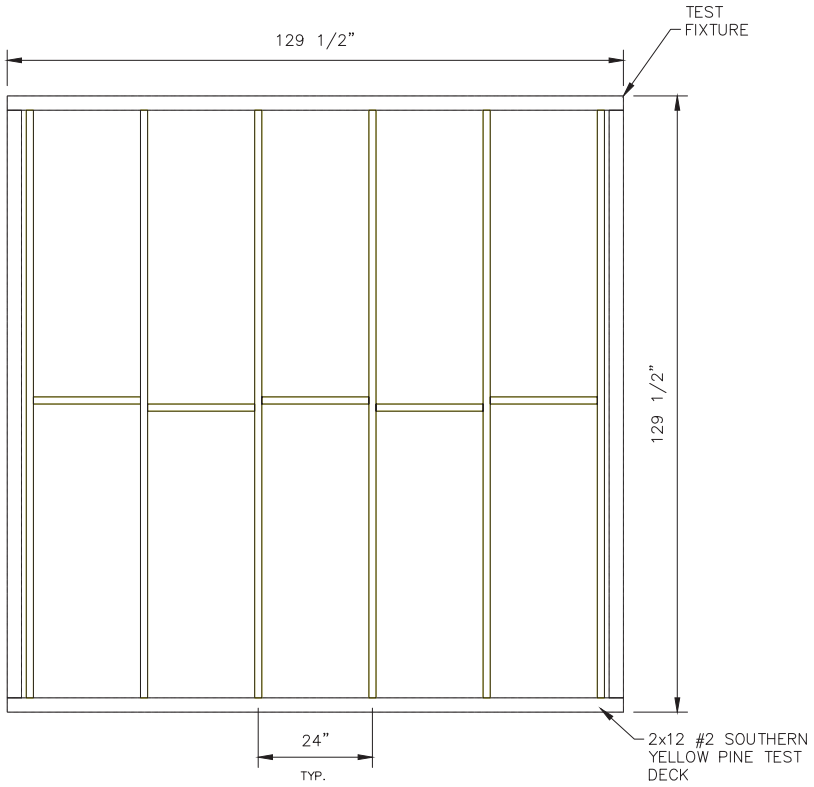
Firm Name and Address

SUNLAST METAL AND SOLAR, INC.
2120 SW POMA DRIVE
PALM CITY, FLORIDA 34990

Project Name and Address

1.5 MECHANICAL PANEL CLIP
(PALM BEACH SERIES)

Drafter	Sheet
O. CARTY	A-101
Date: OCT 19, 2016	
Scale:	



TEST DECK ELEVATION

N.T.S.

General Notes

No.	Revision/Issue	Date

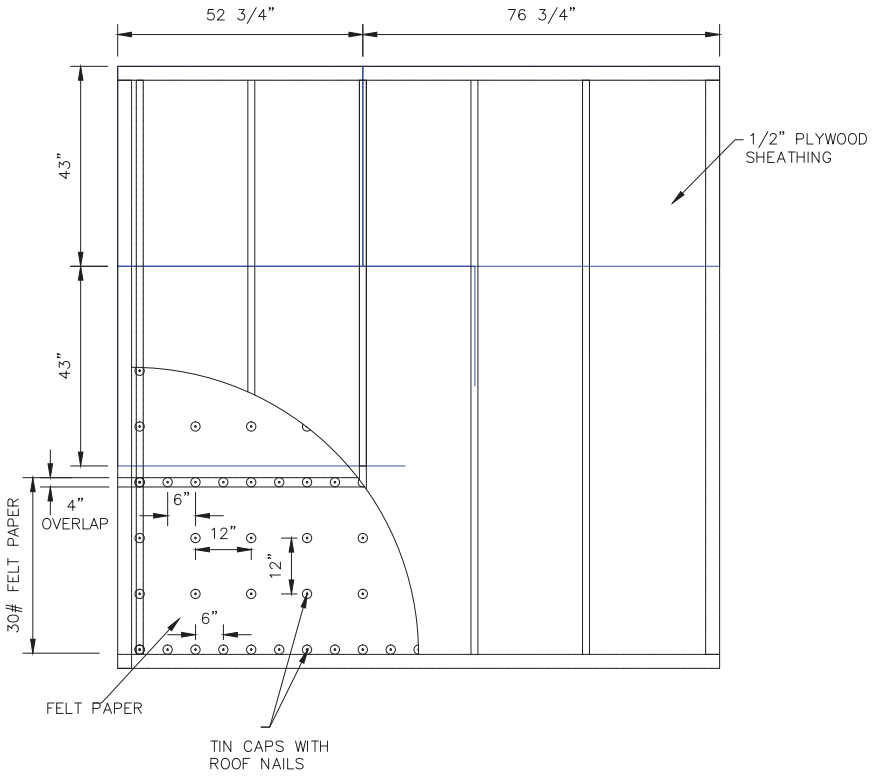
Firm Name and Address

SUNLAST METAL AND SOLAR, INC.
2120 SW POMA DRIVE
PALM CITY, FLORIDA 34990

Project Name and Address

TEST DECK ELEVATION
STEEL PANEL

Drafter	Sheet
O CARTY	A-101
Date: OCT 19 2016	
Scale: N.T.S.	



SHEATHING SYSTEM ELEVATION

N.T.S.

ANCHORAGE AND ATTACHMENT NOTES:

1/2" PLYWOOD SHEATHING TO STRUCTURAL SUPPORT FRAME.
CORNER AND FIELD SPECIMENS:
8D 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 #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.

METHOD 3 SPECIMEN#3 – 180° SEAM

General Notes

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2120 SW POMA DRIVE
PALM CITY, FLORIDA 34990

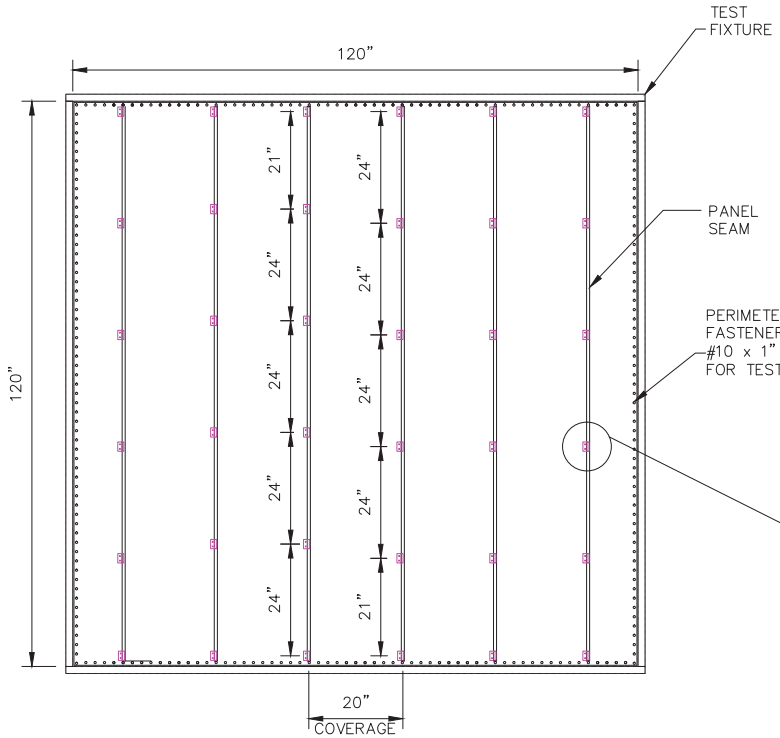
Project Name and Address
SHEATHING SYSTEM ELEVATION

Drafter	Sheet
O CARTY	A-102
Date: OCT 19 2016	
Scale: N.T.S.	

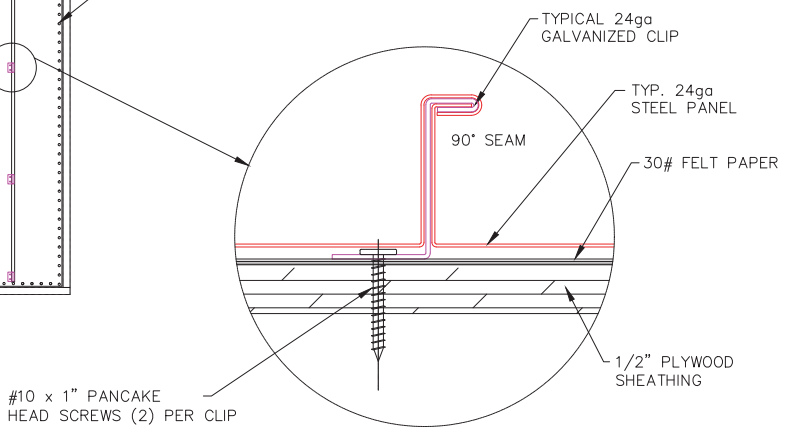
METHOD 1 SPECIMEN #1 & #2 – 90° SEAM

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

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



PERIMETER PANEL
FASTENERS.
#10 x 1" PANCAKE HEAD SCREWS AT 1 1/4" O.C.
FOR TEST PURPOSES ONLY



PANEL ELEVATION N.T.S.

CLIP LOCATIONS IN FIELD

TYP. CLIP INSTALLATION DETAIL N.T.S.

General Notes

No.	Revision/Issue	Date

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

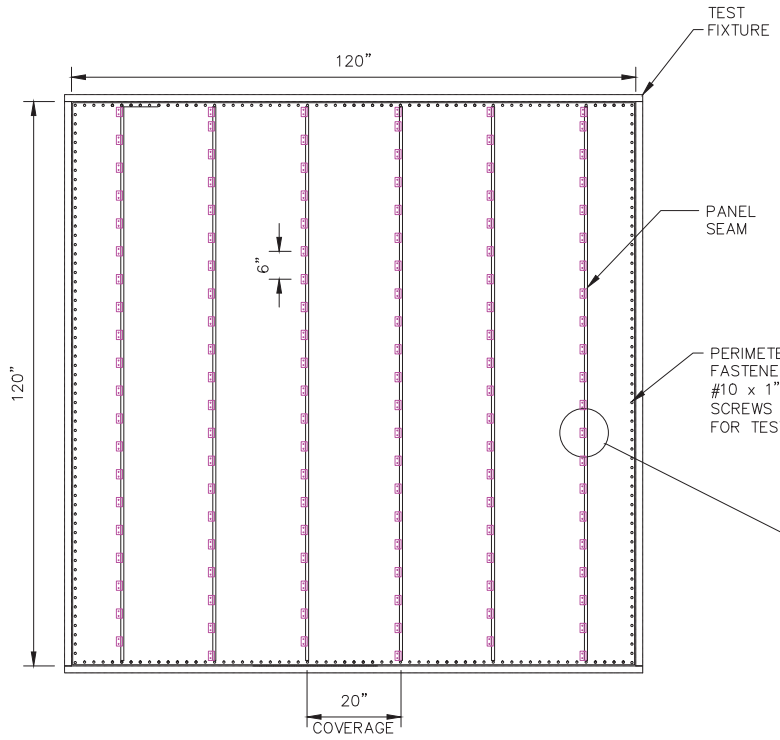
Project Name and Address
METHOD 1
SPECIMEN #1 & #2
PANEL ELEVATION

Drafter	Sheet
O CARTY	A–103
Date: OCT 19 2016	
Scale: N.T.S.	

METHOD 3 SPECIMEN#3 – 180° SEAM

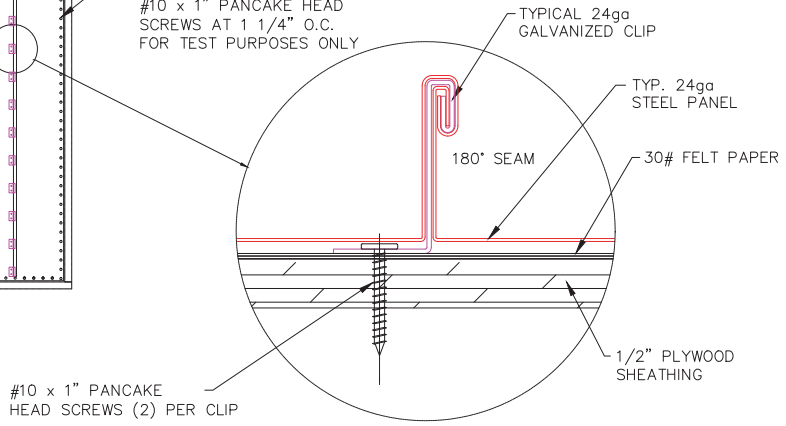
24" COIL WIDTH
20" COVERAGE ON 1/2" PLYWOOD

INDIVIDUAL 24ga GALVANIZED STEEL CLIPS BETWEEN EACH PANEL
METHOD 3 AT 6" O.C.



PANEL ELEVATION N.T.S.

CLIP LOCATIONS IN CORNER



TYP. CLIP INSTALLATION DETAIL N.T.S.

General Notes

No.	Revision/Issue	Date

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

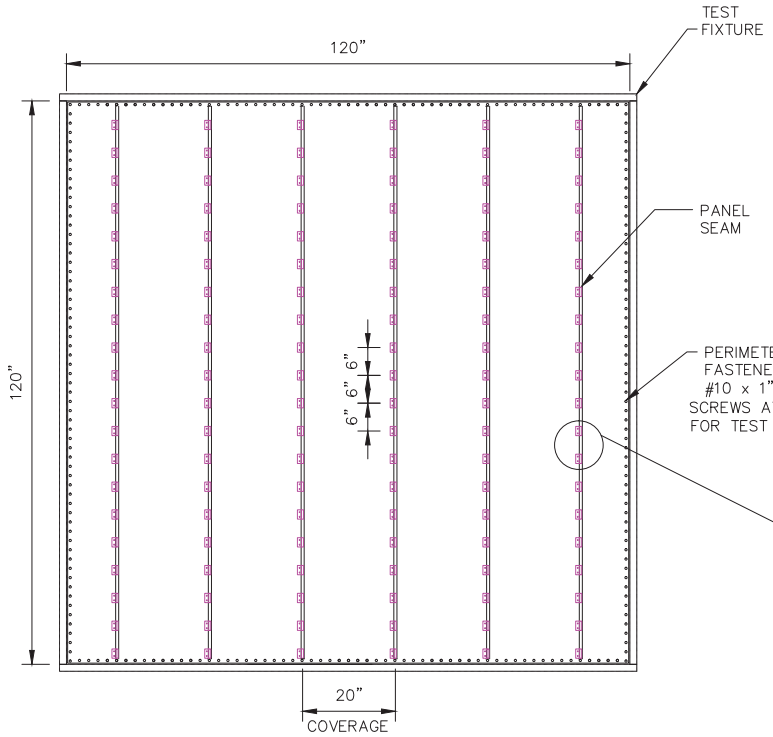
Project Name and Address
PANEL ELEVATION
METHOD #3
TYPICAL CLIP INSTALLATION DETAIL

Drafter	Sheet
O CARTY	A–104
Date: OCT 19 2016	
Scale: N.T.S.	

METHOD 2 SPECIMEN #4 – 90° SEAM

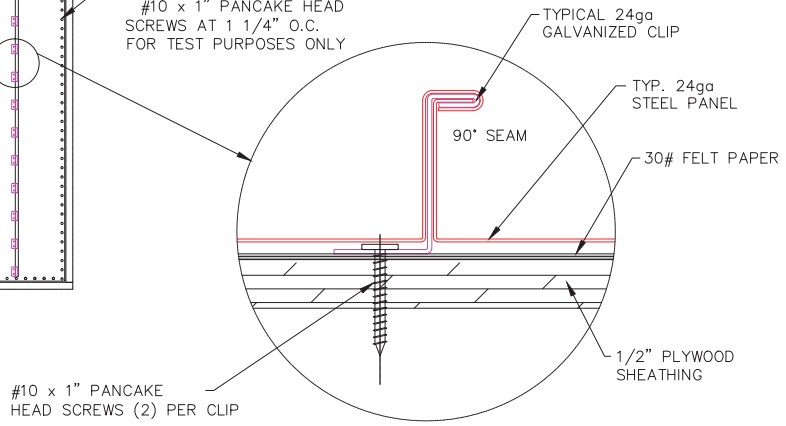
24" COIL WIDTH
20" COVERAGE ON 1/2" PLYWOOD

INDIVIDUAL 24ga GALVANIZED
STEEL CLIPS BETWEEN EACH PANEL
METHOD 2 AT 6" O.C.



PANEL ELEVATION N.T.S.

CLIP LOCATIONS IN FIELD



TYP. CLIP INSTALLATION DETAIL N.T.S.

General Notes

No.	Revision/Issue	Date

Firm 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

Drafter	Sheet
O CARTY	A–105
Date: OCT 19 2016	
Scale: N.T.S.	