

J & L Wells Consulting LLC

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Product Evaluation Report

Date: November 2, 2021

Product Manufacturer:

Sun-Tek Manufacturing, Inc.

10303 General Dr.

Orlando, FL 32725

(407) 859-2117

Product Name: HSF Polycarbonate Aluminum Fixed Skylight

Product Category: Skylights

Product Sub-Category: Skylights

Product Approval Method: Rule 61G20-3.005 Method 1(a) – Certification Mark or Listing

Prepared By:

James D. Wells, Jr. P.E.

Florida P.E. License Number 53616

J & L Wells Consulting, LLC (J & L)

FBPE Certification of Authorization No. 27162

This item has been electronically signed and sealed by James D. Wells, Jr., P.E. on 11/2/2021 using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

J & L Project No. 221134

J & L Report No. 2021-001



Digitally
signed by
James D Wells
Jr

Date:
2021.11.02
17:46:06
-04'00'

Certificate of Independence

J & L Wells Consulting, LLC and James D. Wells, Jr. P.E. do not have nor will acquire financial interest in the company manufacturing or distributing the product or in any other entity involved in the approval process of the product named herein.

Scope

This is a Product Evaluation Report issued by James D. Wells, Jr., P.E. (FL # 53616) for Sun-Tek Manufacturing, Inc. based on Product Approval Rule 61G20-3.005 Method 1(a) – Certification Mark or Listing of the State of Florida Product Approval, Department of Community Affairs – Florida Building Commission.

This product has been evaluated for compliance to the 7th Edition (2020) Florida Building Code (2020 FBC) and (2020) Florida Residential Code (2020 FRC) including the High Velocity Hurricane Zone (HVHZ) sections of the code. This evaluation is not an endorsement of this product or a recommendation for the specific use of this product.

Description of Product

See Installation Detail Instructions dated August 10, 2021 by James D. Wells, Jr. P.E. (FL # 53616) (Reference 1) for a description of the product, its installation and other pertinent data related to its use.

Installation Requirements

This product is to be installed as per the manufacturers Installation Detail Instructions dated August 10, 2021 signed and sealed by James D. Wells, Jr. P.E., (FL # 53616).

Installation instructions have been verified to the test reports NCTL-210-4221-1A and NCTL-210-4221-2A dated June 30, 2021 (Reference 2) and supported by Anchor Calculations dated August 6, 2021, by James D. Wells, Jr. P.E. (Reference 3).

Code Conformance

This product has been evaluated and complies with the 2020 FBC and 2020 FRC, High Velocity Hurricane Zone (HVHZ).

Where approved for use in areas requiring wind born debris protection, this product complies with Section 1609.1.2 of the 2020 FBC and R301.2.1.2 of the 2020 FRC and does not require Wind Bourne Debris Protection. This product meets missile level “D” and includes Wind Zone 4 as defined in ASTM E1996 and TAS 201.

This product meets the water infiltration requirements for HVHZ.

Testing and Labeling

Section 2405.5 - Unit Skylights and Tubular Daylighting Devices
R308.6.9 Testing and Labeling

Skylight shall be tested and labeled.

Testing - Design Pressure Rating

Design Pressure Rating 60 PSF positive, 60 PSF negative.

Exterior Skylights shall be tested for conformance to the 2020 FBC and 2020 FRC in accordance with the following:

1. Exterior Skylights shall be tested for air infiltration, water penetration and static wind loading in accordance with 1709.6 (refers to Chapter 24 FBC) of the 2020 FBC and per TAS 202 for conformance to the HVHZ, WBDR and areas not requiring opening protection.
2. Impact and Cyclic Wind Pressure Loading shall be tested in accordance with the following per TAS 201 and TAS 203 for conformance to the HVHZ and WBDR.
 - a. Sections 1609.1.2, 1626.1 and 1626.2 of the 2020 FBC and
 - b. Sections R301.2.1.2 and R4403 (refers to Chapter 16 FBC) of the 2020 FRC

This product does not meet Risk Category IV, essential facility buildings or structures, requirements of Section 1604.5.

NCTL test reports document testing to: TAS 201-94, TAS 202-94, and TAS 203-94 in accordance with the above.

NCTL test reports document testing the Curb Mounted Skylight to the following test pressures:

1. Uniform Load Structural Test Pressures where +180/-120 psf.
2. Water Test Pressure of +15 psf.
3. Cyclic Wind Loading Pressure of +/-60 psf.

Apply the following factors to arrive at Design Pressure:

1. A Safety Factor of 2 (2020 FBC, Sections 1504.9 and 1523.4) applied to the Uniform Load Structural Test Pressures to arrive at Design Pressures of +60/-60 psf. Note: Miami-Dade Code Compliance Office defines skylight test loading as follows:
 - a. + 3.0 x Design Pressure
 - b. - 2.0 x Design Pressure
2. A factor of $1/0.15 = 6.67$ applied to the Water Test Pressure to arrive at Design Pressure of +100 psf.

Therefore, the Overall Design Pressure is +/-60 psf.

Glazing Requirements

Sections 2405, 2411, and R308.6 of the 2020 FBC and FRC were reviewed. The product depicted in testing drawings meets the applicable requirements of these sections as follows:

Section 2405.1 – Scope

Section R308.6.1 Definitions

Section R308.6.2 - Permitted Materials: Allowed glazing material includes approved plastic materials. Skylight dome comprised of polycarbonate meets HVHZ requirements per NOA No. 20-0828.02 Palram (Reference 4).

Mounting Requirements

Sections 2405.4 Framing and R308.6.8 Curbs for Skylights of the 2020 FBC and FRC were reviewed for compliance with the following requirements:

Section 2405.4 - Skylight frames shall be constructed of noncombustible materials. As shown in the documented Testing Drawings, the skylight metal frame is made of 0.080" thick 6063-T6 aluminum.

Section 2405.4 - All skylights at an angle less than 45 deg. from the horizontal shall be mounted at least 4" above the planar of the roof. Installation of a skylight without a curb shall be permitted on roofs with a minimum slope of 14 degrees (three units vertical in 12 units horizontal) in Group R-3 occupancies. All unit skylights installed in a roof with a pitch flatter than 14 degrees (0.25 rad) shall be mounted at least 4 inches (102 mm) above the plane of the roof on a curb constructed as required for the frame unless otherwise specified in the manufacturer's installation instructions.

R308.6.8 Curbs for skylights. All unit skylights installed in a roof with a pitch flatter than three units vertical in 12 units horizontal (25-percent slope) shall be mounted on a curb extending at least 4 inches (102 mm) above the plane of the roof unless otherwise specified in the manufacturer's installation instructions.

In accordance with documented Testing and as shown in Installation Instructions, the skylight assembly is installed on a metal frame 4 inches or more above the roof surface.

Product Approval

Section 2410.4 - High-Velocity Hurricane Zones - General

Skylights shall have product approval.

Plastics

The following plastic glazed skylight assembly mounting requirements required by the 2020 FBC and FRC have been met.

Section 2606.4 –Light-Transmitting Plastics - Specifications

Miami-Dade NOA No. 20-0828.02 documents the following plastics testing results meeting the requirements of Sections 2606.4 and 2615.2.2C of the 2020 FBC and Section R4412 of the 2020 FRC.

1. Self-Ignition Temperature in accordance with ASTM D1929 of 1162°F > 650°F
2. Smoke Density Rating in accordance with ASTM E84 < 450
3. Burning Rate Classification in accordance with ASTM D635
4. Tensile Strength affects due to weathering in accordance with ASTM D 638 of less than 10%

Section 2610 – Light-Transmitting Plastic Skylight Glazing

Section 2610.2 – Mounting

The plastic shall be mounted a minimum of 4 inches (102 mm) above the plane of the roof on a curb constructed in accordance with requirements of types of construction. In accordance with documented Testing and as shown in Installation Drawings, the skylight assembly plastic dome is installed on a metal frame 4 inches or more above the roof surface.

The edges of the skylights shall be protected by incombustible material in Types I, IV, protected and Type IIB construction. In accordance with documented Testing and as shown in Installation Drawings the skylight assembly plastic dome is protected with a non-combustible metal ring made of 0.080" thick 6063-T6 Aluminum.

Section 2610.3 – Slope

Dome-shape skylights shall rise above the mounting flange a minimum distance equal to 10 percent of the maximum span of the dome, but not less than 4 inches (102 mm). In accordance with documented Testing and as shown in Installation Drawings, the skylight assembly plastic dome rises more than 10% of the maximum dome span but not less than 4 inches.

Limitation and Conditions of Use

Limitations and Conditions of Use are shown on the Installation Detail Instructions.

Product anchors shall be as designated and located as shown in the Installation Detail Instructions. Anchor embedment and edge distance exclude roofing material including, but not limited to, moisture barrier and sheathing.

All roofing details shall comply with Chapter 15 of the 2020 FBC.

Installation details described within the Installation Detail Instructions are generic and may not reflect actual conditions for a specific site. Site conditions that deviate from the details shown in the Installation Detail Instructions require further engineering analysis by a Licensed Engineer or Registered Architect.

Product to be labeled in accordance with FBC 1709.5.1 and 2405.5.

Quality Insurance

This product will be manufactured under a quality assurance program audited by National Accreditation & Management Institute (NAMI). NAMI is an approved Certification and Quality Assurance Entity per Rule 61G20-3(3).

Applications / Installations Outside the Limitations and Conditions of Use

Any modification to this product as evaluated in this report and approved by the Florida Building Commission is outside the scope of this evaluation and will be the responsibility of others. As allowed in Rule 61G20-3(1)(e), a project specific approval by local authorities having jurisdiction may be used given an appropriate rational analysis and acceptance by local authority having jurisdiction.

Summary

This product complies with the 2020 FBC and 2020 FRC.

Performance and Testing Standards

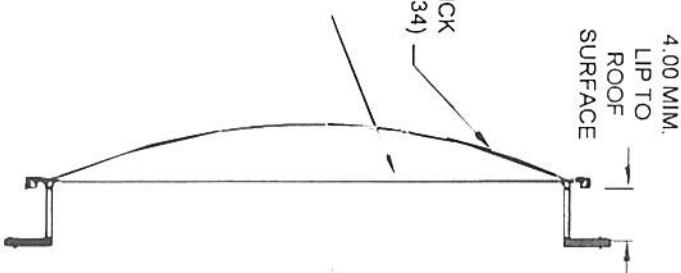
Structural Test Reports NCTL-210-4221-1A and NCTL-210-4221-2A documents testing to the following:

High Velocity Hurricane Zone (HVHZ) Testing Application Standards (TAS):

1. TAS 201-94, Impact Test Procedures, Dade County Building Code Compliance Office
2. TAS 202-94, Criteria for Testing Impact and Non-Impact Resistant Building Envelope Components using Uniform Static Air Pressure, Dade County Building Code Compliance Office
3. TAS 203-94, Criteria for Testing Products Subjected to Cyclic Pressure Loading

References and Supporting Documents

1. Installation Detail Instructions, dated August 10, 2021 reviewed by J & L Wells Consulting LLC, and signed and sealed by James D. Wells, Jr. P.E. (FL # 53616)
2. Structural Test Reports (Including Drawings) NCTL-210-4221-1A and NCTL-210-4221-2A dated June 30, 2021
3. Anchor calculations prepared by J & L Wells Consulting LLC, Dated August 6, 2021, signed and sealed by James D. Wells, Jr. P.E. (FL # 53616)
4. Palram Americas, Inc.- Palsum NOA 20-0828.02 issued by Miami Dade County Product Control Section Expiration date January 22, 2026
5. Drawings, dated November 2, 2021 signed and sealed by James D. Wells, Jr. P.E. (FL # 53616).



Digitally signed
by James D
Wells Jr
Date:
2021.11.11
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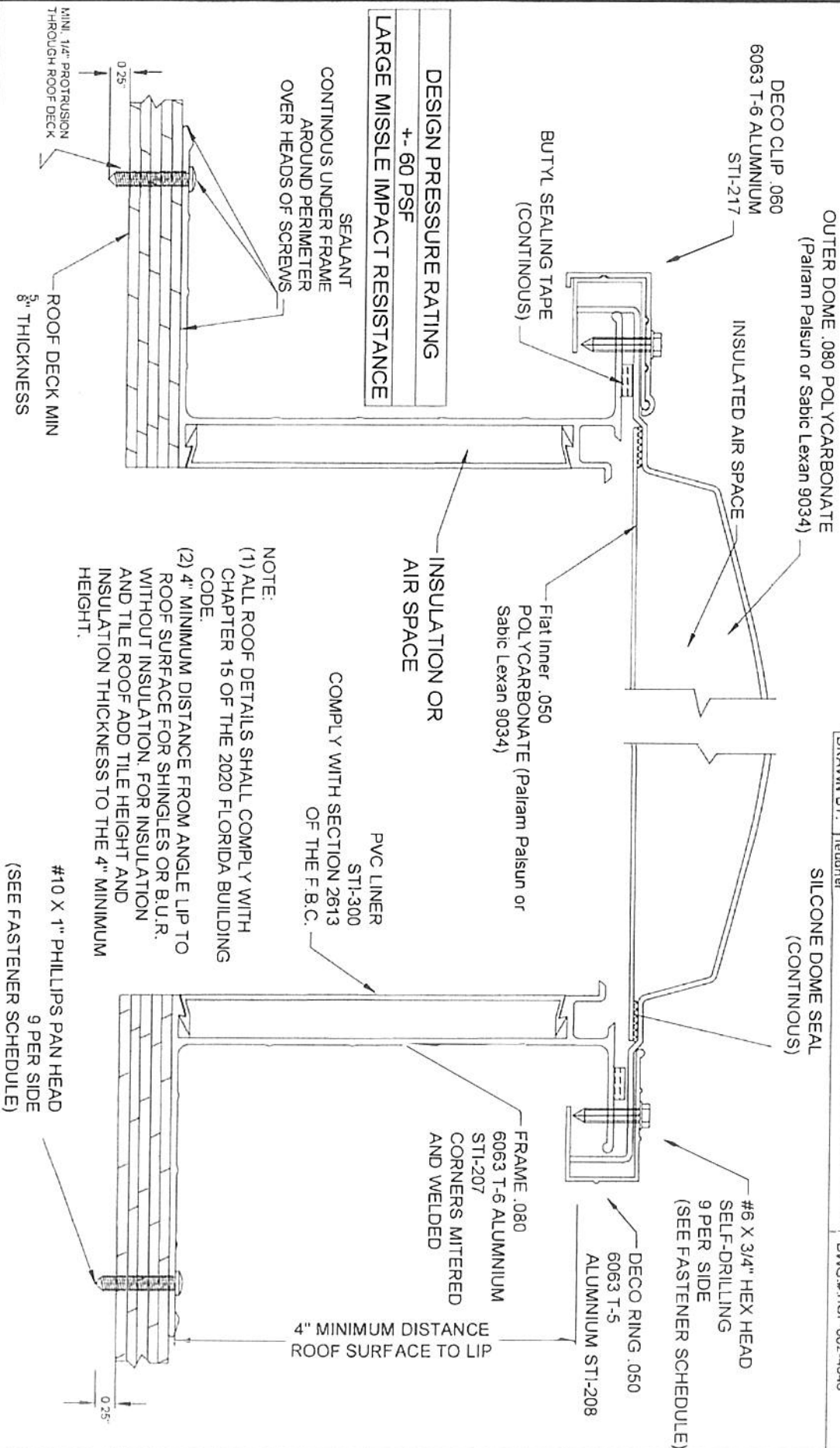
PART NAME: HSF-4646

SHEET 2 OF 5

DRAWN BY: J. Feudner

DWG.# HSF-002-4646

Engineer of Record:
James D. Wells, Jr., P.E.
Professional Engineer No. 53616
1 & L Wells Consulting LLC
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Certificate of Authorization No. 27162



REVISION

REVISION

PRODUCT NAME:

DATE: 03.26.21

DATE:

HSF 4646

DATE: 03/26/21

SCALE:

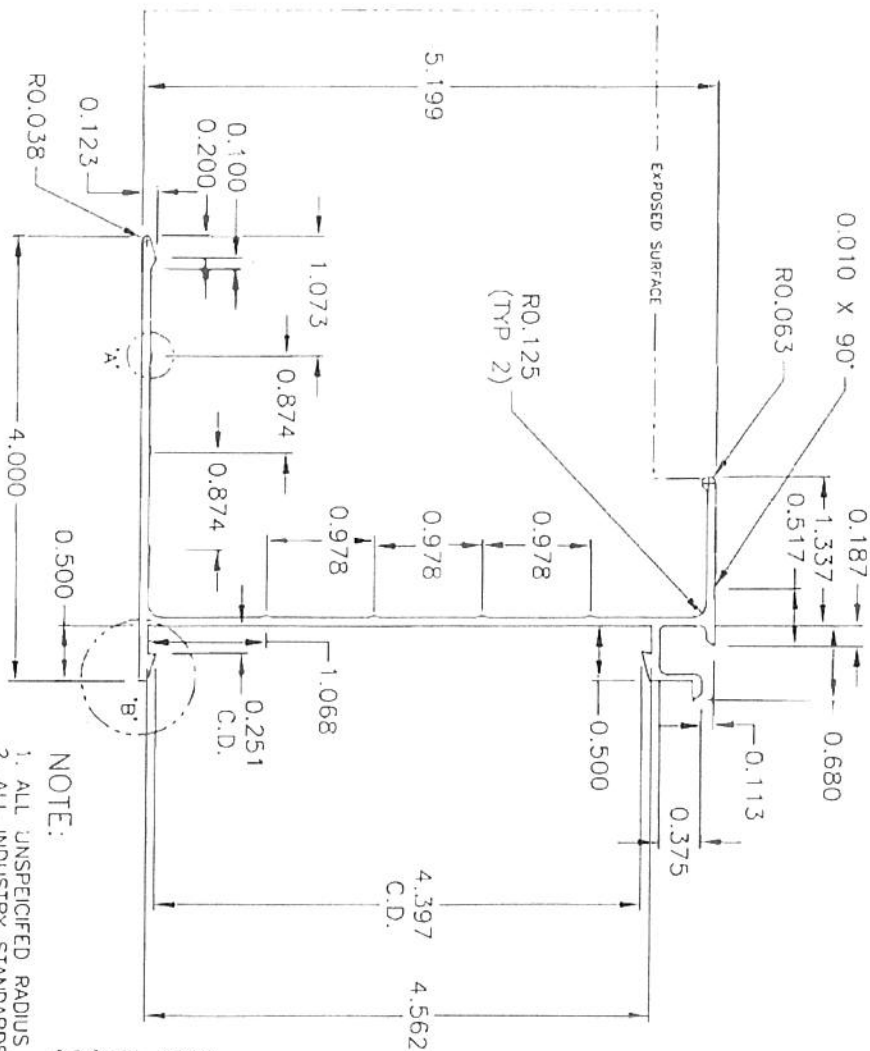
DWG. NO. HSF-002-4646

SUN-TEK MANUFACTURING, INC.

10303 GENERAL DRIVE ORLANDO, FL 32824

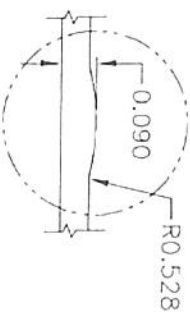
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FILE NAME: H:\DWG\DWG\STI\STI-207.dwg		DRAWN BY: L. B. REED			0.911	1.142			

PERIMETER	EXT. PERIM	CIRCLE SIZE
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SOLID	SEMI-HOLLOW	HOLLOW
	☒	☐
MATERIAL: 6063-T6		
WEBSTER: 11-13 SURFACE AREA:		

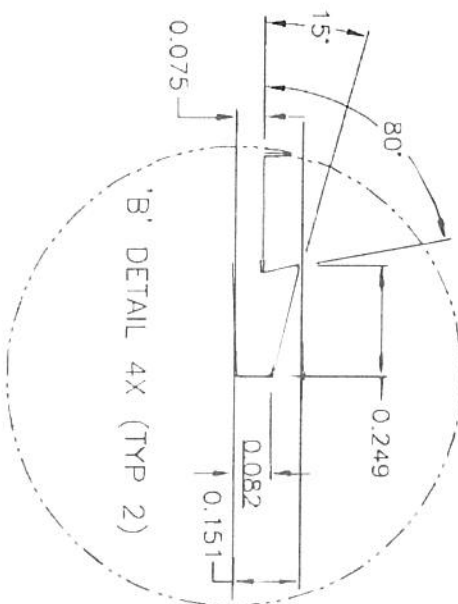


- NOTE:
1. ALL UNSPECIFIED RADIUS 0.015"
 2. ALL INDUSTRY STANDARDS APPLY UNLESS NOTED OTHERWISE.
 3. TYPICAL WALL THICKNESS 0.075"

Engineer of Record:
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'A' DETAIL 4X (TYP 7)



'B' DETAIL 4X (TYP 2)

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REVISION	DATE	INITIALS	REVISION	DATE	INITIALS	PRODUCT NAME:	SCALE	DWG. NO.	STI-207
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						SUN-TEK MANUFACTURING, INC.			
						10303 GENERAL DRIVE			
						ORLANDO, FL 32824			

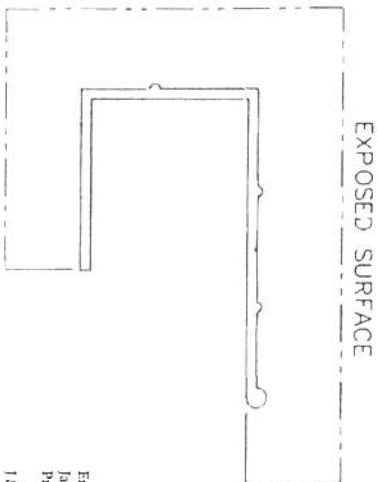
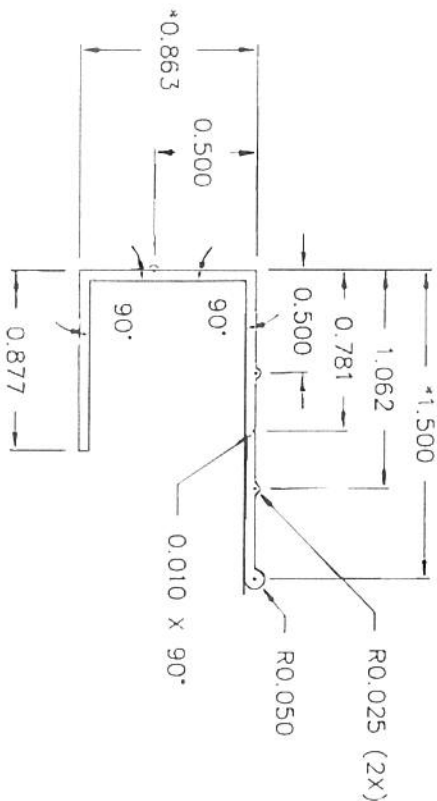
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SHT. 4 OF 6

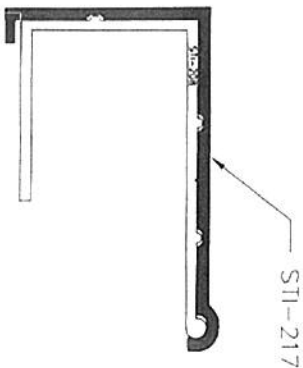
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AREA	WT/FT	FACTOR	STI-208
0.166	0.208		
PERIMETER	EXT. PERIMETER	CIRCLE SIZE	
6.609		1.781	
SOLID	SEMI-HOLLOW	HOLLOW	
MATERIAL: 6063-T52			
WEBSTER:		SURFACE AREA:	



Engineer of Record
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Certificate of Authorization No. 27162

- NOTE:
1. TYPICAL WALL THICKNESS EQUALS 0.050"
 2. UNSPECIFIED RADIUS EQUALS 0.015"
 3. ALUMINUM ASSOCIATION STANDARD TOLERANCES FOR EXTRUDED SHAPES APPLY UNLESS SPECIFICALLY SHOWN OTHERWISE.
 4. * DENOTES CRITICAL DIMENSION.
 5. MUST SNAP FIT WITH STI-217.



PART NAME: HSF DECO RING EXTRUSION

DRAWN BY: BSD

CHECK BY:

DRAWING NO. STI-208

DATE: 02/12/08

REV.	DESCRIPTION	BY	DATE

SUN-TEK MANUFACTURING, INC.

10303 GENERAL DRIVE ORLANDO, FL 32824

FILE NAME:

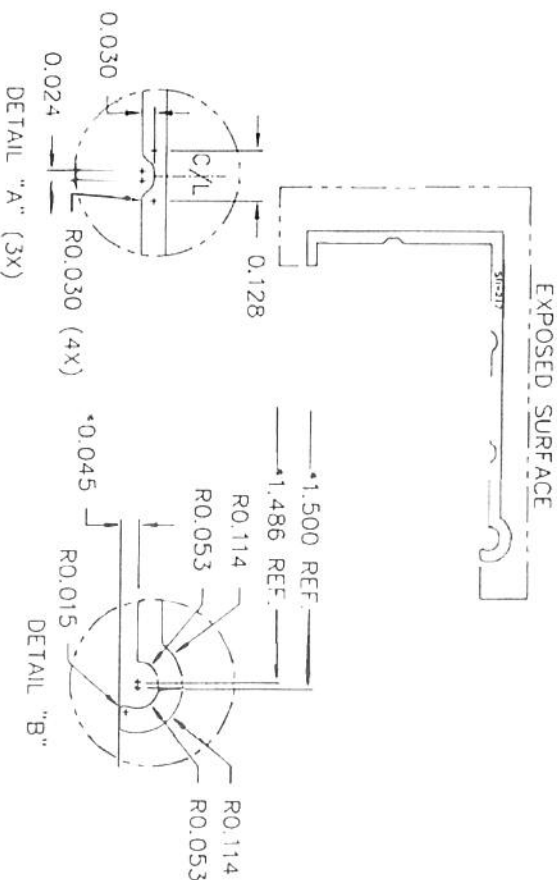
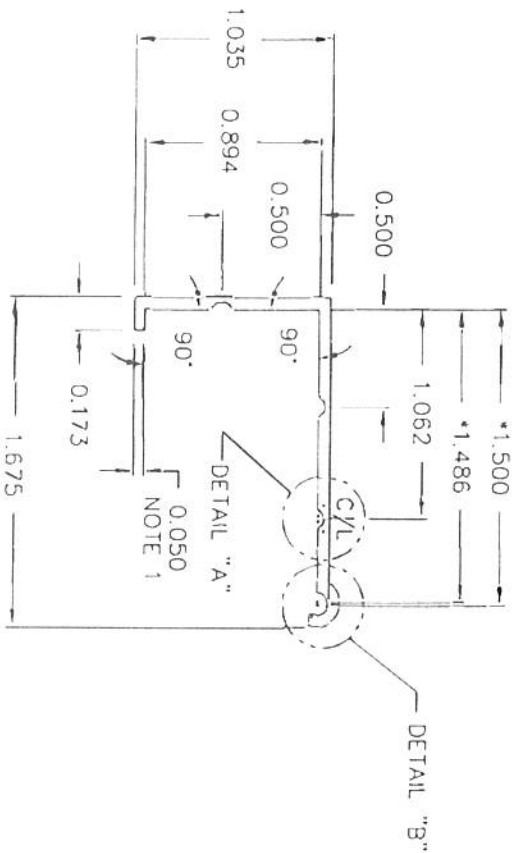
H:\DWG\DWG\STI\STI-217.DWG

NEXT ASSY.:

SH. 5 OF 6

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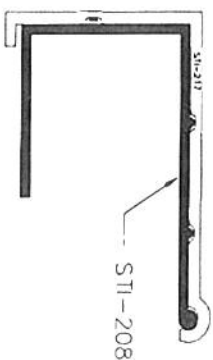
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PERIMETER	5.824	EXT. PERIMETER			CIRCLE SIZE 2-3
SOLID		SEMI-HOLLOW			HOLLOW
MATERIAL:	6063-T6				
WEBSTER:	11-13 SURFACE AREA:				



- NOTE:
1. TYPICAL WALL THICKNESS EQUALS 0.061"
 2. UNSPECIFIED RADIUS EQUALS 0.015"
 3. ALUMINUM ASSOCIATION STANDARD TOLERANCES FOR EXTRUDED SHAPES APPLY UNLESS SPECIFICALLY SHOWN OTHERWISE.
 4. * DENOTES CRITICAL DIMENSION.
 5. MUST SNAP FIT WITH STI-208.

Engineer of Record:
James D. Wells, Jr., P.E.
Professional Engineer No. 53616

J & L Wells Consulting LLC
1453 Arbutus Circle
Oviedo, FL 32765
(407) 496-5189
Certificate of Authorization No. 27162



PART NAME: HSF DECO CLIP EXTRUSION

DRAWN BY: BSD
DATE: 02/12/08

CHECK BY:
DATE:

DRAWING NO. STI-217

REV.	DESCRIPTION	BY	DATE

SUN-TEK MANUFACTURING, INC.

10303 GENERAL DRIVE

ORLANDO, FL 32824

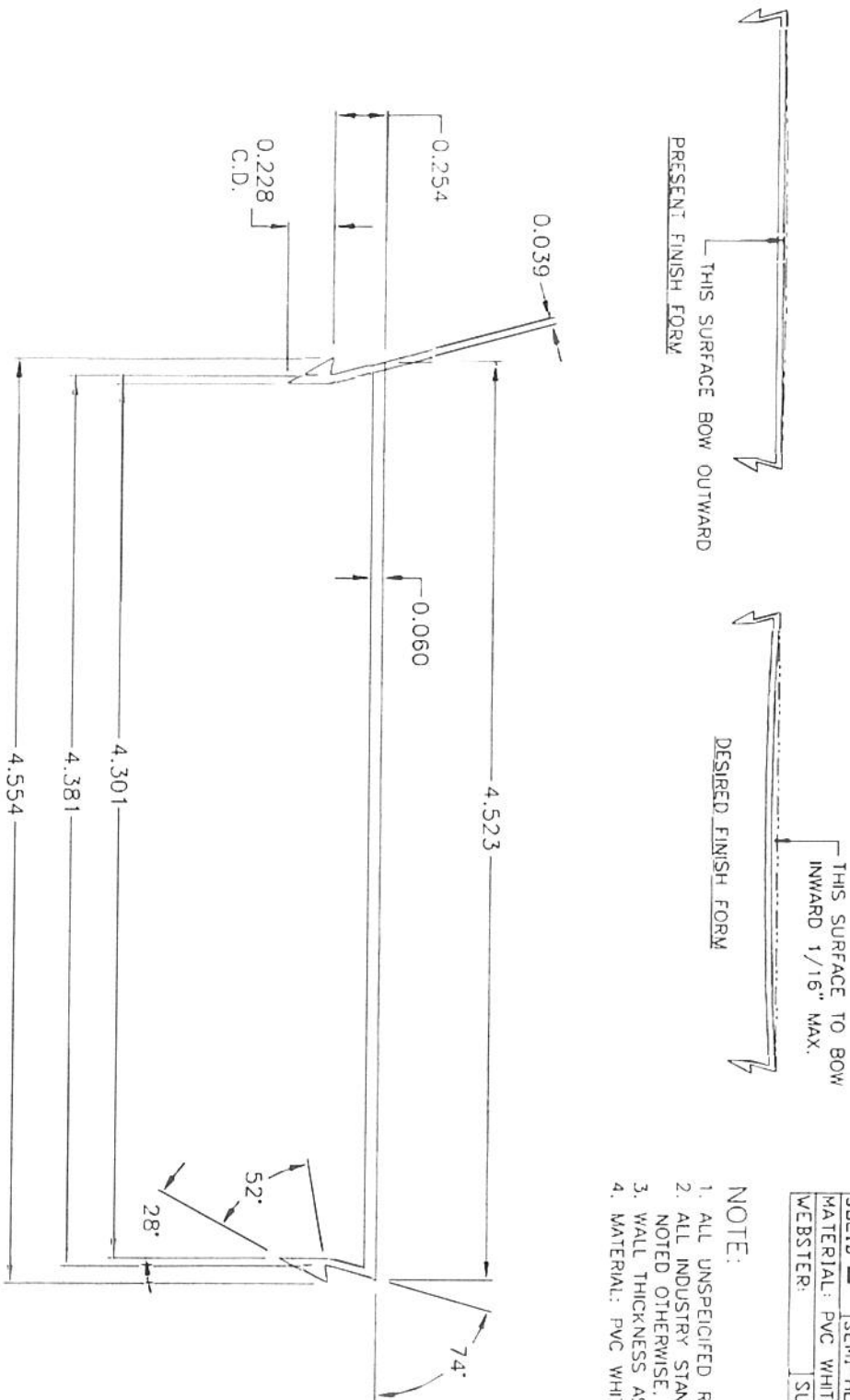
SHEET 6 OF 6
DRAWN BY: L. B. REED

DRAWN BY: L. B. REED

AREA	W/T/FT	FACTOR	DWG. #: SI-300
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PERIMETER		EXT. PERIM	CIRCLE SIZE
11,061		00,000	0
SOLID ☒		SEMI-HOLLOW ☒	HOLLOW ☐
MATERIAL:	PVC WHITE		
WEBSTER:	SURFACE AREA:		

WEBSTER:	SURFACE AREA:
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1. ALL UNSPECIFIED RADIUS 0.015
2. ALL INDUSTRY STANDARDS APPLY UNLESS NOTED OTHERWISE.
3. WALL THICKNESS AS NOTED.
4. MATERIAL: PVC WHITE



Engineer of Record:
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Professional Engineer No. 53616

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SUN-TEK MANUFACTURING, INC.

10303 GENERAL DRIVE ORLANDO. FL 32824

REVISION	REVISION
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PRODUCT NAME:

IN:	DATE:	IN:	DATE:
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DATE: 05/22/09 SCALE:

HSE / TP

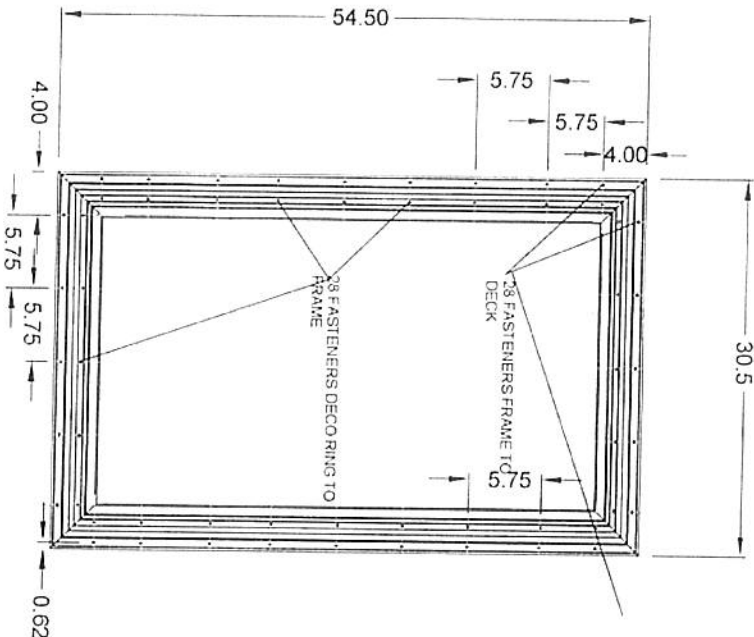
DWG No. STI-300

PART NAME: PLAN VIEW HSF-2246

SHEET 1 OF 6

DRAWN BY: J. Eudner

DWG.#:HSF-002-2246



NOTE:

- (1) ALL ROOF DETAILS SHALL COMPLY WITH CHAPTER 15 OF THE 2020 FLORIDA BUILDING CODE.
- (2) 4" MINIMUM DISTANCE FROM ANGLE LIP TO ROOF SURFACE FOR SHINGLES OR B.U.R. WITHOUT INSULATION. FOR INSULATION AND TILE ROOF ADD TILE HEIGHT AND INSULATION THICKNESS TO THE 4" MINIMUM HEIGHT.

POLYCARBONATE DOME .070 THICK
(PALRAM PALSUN OR SABIC LEXAN 9034)

POLYCARBONATE .030 THICK
(PALRAM PALSUN OR SABIC LEXAN 9034)

This item has been electronically signed and sealed by James D. Wells, Jr., P.E. on 11/27/2021 using a digital signature. Printed copies of the document are not considered signed and sealed and the signature must be verified on any electronic copies.

DESIGN PRESSURE RATING
+/- 60 PSF
LARGE MISSILE IMPACT RESISTANCE

FASTENER SCHEDULE FRAME TO DECK #10 X 1 PHILLIPS PAN HEAD SCREWS				FASTENER SCHEDULE DECO RING TO FRAME #6 X 3/4 HEX HEAD SELF DRILLING SCREWS			
MODEL	PER SHORT SIDE	PER LONG SIDE	MODEL	PER SHORT SIDE	PER LONG SIDE	MODEL	PER LONG SIDE
1430	4	6	1430	4	5		
1445	4	5	1445	4	5		
2230	5	5	2232	5	5		
2230	5	6	2230	5	5		
2236	5	7	2236	5	6		
2246	5	9	2246	5	7		

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Certificate of Authorization No. 27162



Digitally signed
by James D
Wells Jr
Date:
2021.11.03
14:05:42 -04'00'

SUN-TEK MANUFACTURING, INC.

10203 GENERAL DRIVE ORLANDO, FL 32824

HSF 2246

PRODUCT NAME

DATE: 04/15/21 SCALE:

DWG. No. HSF-002-2246

DATE

REV

DATE

PRODUCT NAME

DATE: 04/15/21

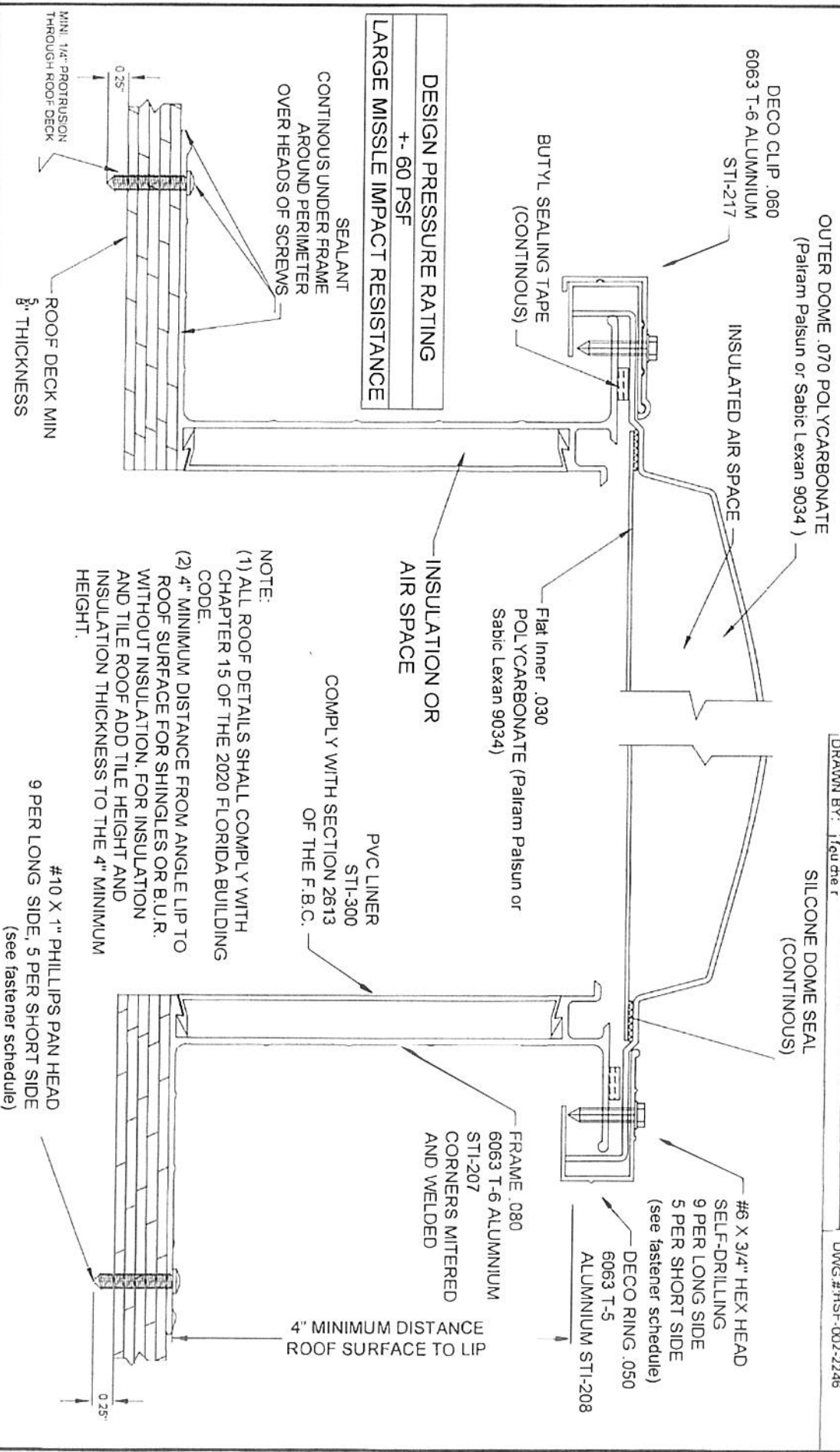
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SUN-TEK MANUFACTURING, INC.

10203 GENERAL DRIVE ORLANDO, FL 32824

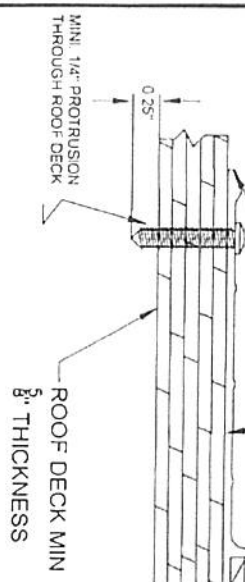
Engineer of Record
 James D. Wells, Jr., P.E.
 Professional Engineer No. 53466
 J & L Wells Consulting LLC
 1453 Arbutus Circle
 Oviedo, FL 32765
 (407) 996-5189
 Certificate of Authorization No. 27162

PART NAME: HSF 2246
 SHEET 2 OF 6
 DRAWN BY: J. G. the r
 DWG # HSF-002-2246



DESIGN PRESSURE RATING
 + - 60 PSF
 LARGE MISSILE IMPACT RESISTANCE

SEALANT
 CONTINUOUS UNDER FRAME
 AROUND PERIMETER
 OVER HEADS OF SCREWS



NOTE:
 (1) ALL ROOF DETAILS SHALL COMPLY WITH
 CHAPTER 15 OF THE 2020 FLORIDA BUILDING
 CODE.
 (2) 4" MINIMUM DISTANCE FROM ANGLE LIP TO
 ROOF SURFACE FOR SHINGLES OR B.U.R.
 WITHOUT INSULATION. FOR INSULATION
 AND TILE ROOF ADD TILE HEIGHT AND
 INSULATION THICKNESS TO THE 4" MINIMUM
 HEIGHT.

#10 X 1" PHILLIPS PAN HEAD
 9 PER LONG SIDE, 5 PER SHORT SIDE
 (see fastener schedule)

FRAME .080
 6063 T-6 ALUMINIUM
 STI-207
 CORNERS MITERED
 AND WELDED

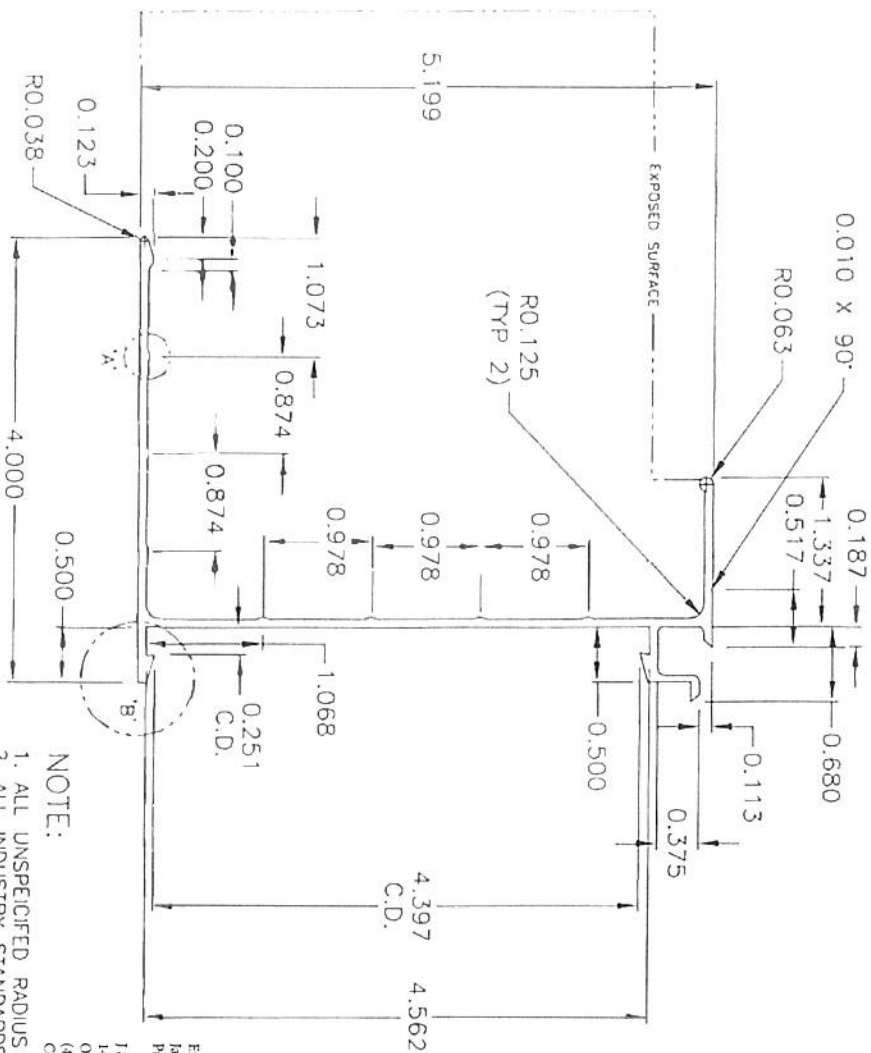
#6 X 3/4" HEX HEAD
 SELF-DRILLING
 9 PER LONG SIDE
 5 PER SHORT SIDE
 (see fastener schedule)
 DECO RING .050
 6063 T-5
 ALUMINIUM STI-208

4" MINIMUM DISTANCE
 ROOF SURFACE TO LIP

REVISION
 DATE 03.26.21
 PRODUCT NAME
 HSF 2246
 SCALE:
 DWG No. HSF-002-2246
 SUN-TEK MANUFACTURING, INC.
 10000 GENERAL DRIVE ORLANDO, FL 32834

PART NAME: FRAME		LM # 99917		SHEET 3 OF 6	AREA	WT/FT	FACTOR	DWG.#: STI-207
FILE NAME: H:\DWG\DWG\STI\STI-207.dwg		DRAWN BY: L. B. REED			0.911	1.142		

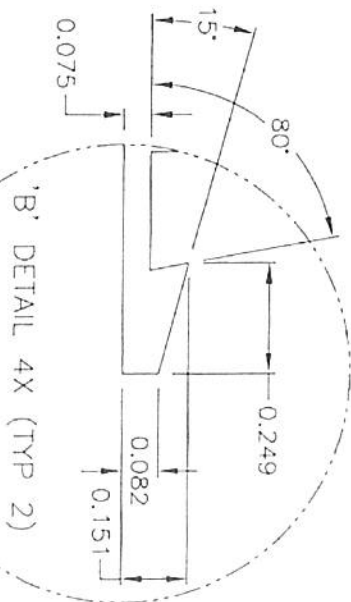
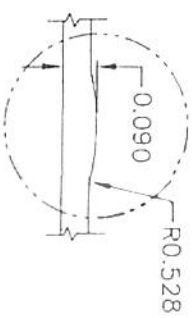
PERIMETER	EXT. PERIM	CIRCLE SIZE
23.420		7-8"
SOL ID	SEMI-HOLLOW	HOLLOW
	☒	☐
MATERIAL: 6063-T6		
WEBSTER: 11-13 SURFACE AREA.		



- NOTE:
1. ALL UNSPECIFIED RADIUS 0.015"
 2. ALL INDUSTRY STANDARDS APPLY UNLESS NOTED OTHERWISE.
 3. TYPICAL WALL THICKNESS 0.075"

Engineer of Record:
James D. Wells, Jr., P.E.
Professional Engineer No. 53616
J & L Wells Consulting LLC
1451 Arbutus Circle
Oviedo, FL 32765
(407) 896-5489
Certificate of Authorization No. 27162

'A' DETAIL 4X (TYP 7)



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REVISION		REVISION		PRODUCT NAME: HSF / ISFG BASE		SUN-TEK MANUFACTURING, INC.	
DATE	DATE	DATE	DATE	DATE: 09/22/06	SCALE:	DWG NO. STI-207	10303 GENERAL DRIVE ORLANDO, FL 32824

FILE NAME:

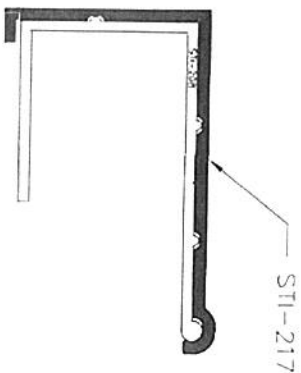
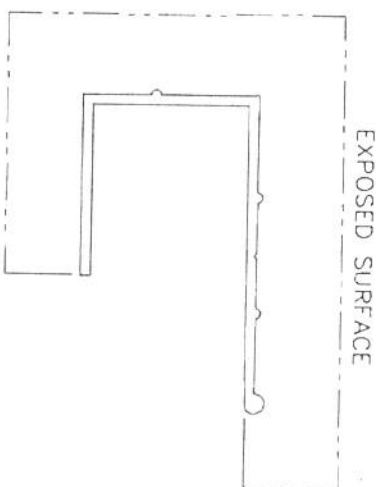
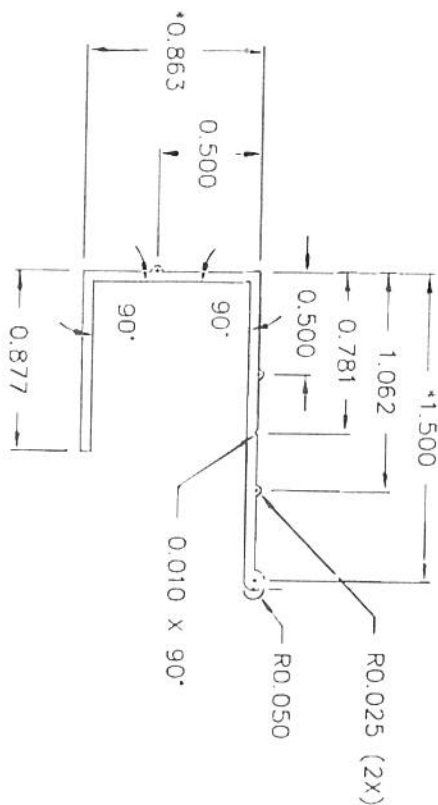
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NEXT ASSY:

SHT. 4 OF 6

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AREA	WT/FT	FACTOR	STI-208
0.166	0.208		
PERIMETER	EXT. PERIMETER	CIRCLE SIZE	
6.609		1.781	
SOLID ☒	SEMI-HOLLOW ☒	HOLLOW ☐	
MATERIAL: 6063-T52			
WEBSTER:		SURFACE AREA:	



Engineer of Record:
James D. Wells, Jr., P.E.
Professional Engineer No. 53616

I & L Wells Consulting LLC
1453 Arbutus Circle
Orlando, FL 32765
(407) 396-5189
Certificate of Authorization No. 27162

NOTE:

1. TYPICAL WALL THICKNESS EQUALS 0.050"
2. UNSPECIFIED RADIUS EQUALS 0.015"
3. ALUMINUM ASSOCIATION STANDARD TOLERANCES FOR EXTRUDED SHAPES APPLY UNLESS SPECIFICALLY SHOWN OTHERWISE.
4. * DENOTES CRITICAL DIMENSION.
5. MUST SNAP FIT WITH STI-217.

PART NAME: HSF DECO RING EXTRUSION

DRAWN BY: BSD
DATE: 02/12/08

CHECK BY:
DATE:

DRAWING NO. STI-208

REV.

DESCRIPTION

BY

DATE

SUN-TEK MANUFACTURING, INC.

10303 GENERAL DRIVE

ORLANDO, FL 32824

FILE NAME:

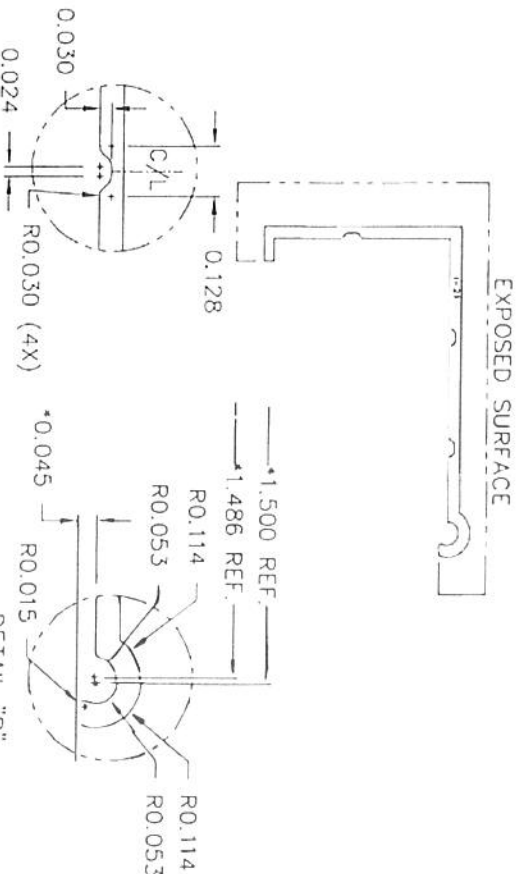
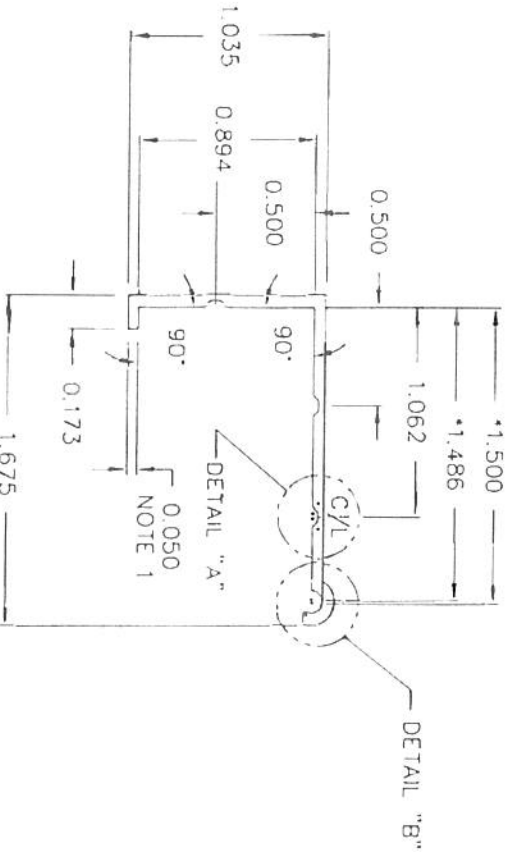
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NEXT ASSY.:

SHT. 5 OF 6

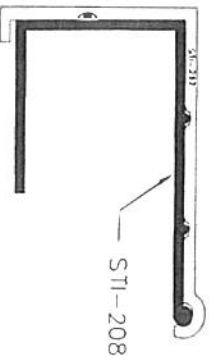
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AREA	WT/FT	FACTOR	STI-217
0.164	0.206		
PERIMETER	EXT. PERIMETER	CIRCLE SIZE	
5.824		2-3	
SOLID	SEMI-HOLLOW	HOLLOW	
MATERIAL: 6063-T6			
WEBSTER: 11-13 SURFACE AREA:			



NOTE:

1. TYPICAL WALL THICKNESS EQUALS 0.061" UNLESS OTHERWISE NOTED.
2. UNSPECIFIED RADIUS EQUALS 0.015"
3. ALUMINUM ASSOCIATION STANDARD TOLERANCES FOR EXTRUDED SHAPES APPLY UNLESS SPECIFICALLY SHOWN OTHERWISE.
4. * DENOTES CRITICAL DIMENSION.
5. MUST SNAP FIT WITH STI-208.



Engineer of Record:
James D. Wells, Jr., P.E.
Professional Engineer No. 53616
I & L Wells Consulting LLC
1453 Arbutus Circle
Oviedo, FL 32765
(407) 496-5489
Certificate of Authorization No. 27162

PART NAME: HSF DECO CLIP EXTRUSION

DRAWN BY: BSD

CHECK BY:

DATE: 02/12/08

DATE:

DRAWING NO. STI-217

REV.

DESCRIPTION

BY

DATE

SUN-TEK MANUFACTURING, INC.

10303 GENERAL DRIVE

ORLANDO, FL 32824

PART NAME: LINER INSERT

SHEET 6 OF 6
DRAWN BY: L. B. REED

AREA 0.315 WT/FT FACTOR DWG.#: STI-300

PERIMETER 11.061 EXT. PERIM 00.000 CIRCLE SIZE 0

SD LID SEMI-HOLLOW HOLLOW

MATERIAL: PVC WHITE

WEBSTER: SURFACE AREA:

DESIRED FINISH FORM

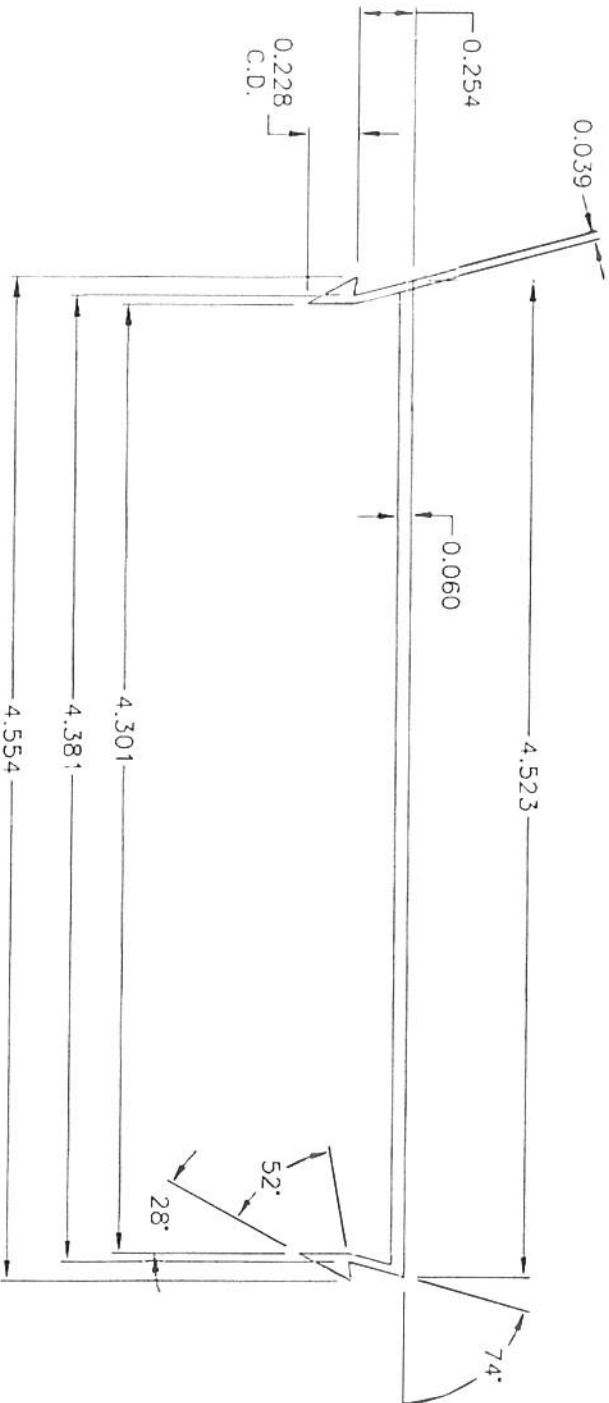
THIS SURFACE BOW OUTWARD

PRESENT FINISH FORM

THIS SURFACE TO BOW
INWARD 1/16" MAX.

NOTE:

1. ALL UNSPECIFIED RADIUS 0.015
2. ALL INDUSTRY STANDARDS APPLY UNLESS NOTED OTHERWISE.
3. WALL THICKNESS AS NOTED.
4. MATERIAL: PVC WHITE



Engineer of Record:
James D. Wells, Jr., P.E.
Professional Engineer No. 51616

J & L Wells Consulting LLC

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(407) 496-5469

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SUN-TEK MANUFACTURING, INC.

10303 GENERAL DRIVE ORLANDO, FL 32824

REVISION

REVISION

PRODUCT NAME:

HSF / TP

DATE: 05/22/00 SCALE:

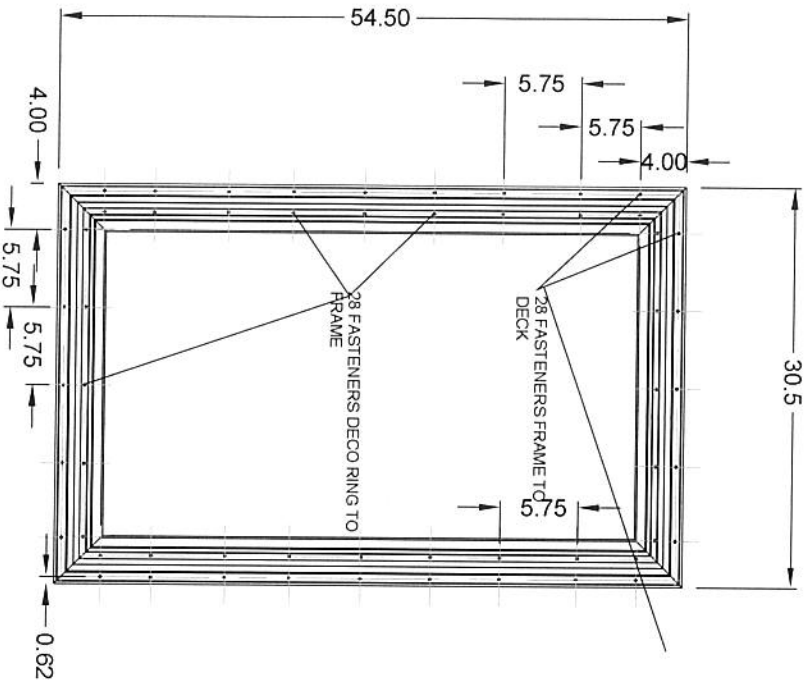
DWG. No. STI-300

INT

DATE:

INT

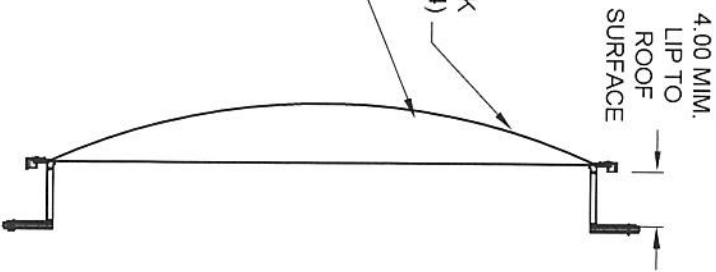
DATE:



- NOTE:
- (1) ALL ROOF DETAILS SHALL COMPLY WITH CHAPTER 15 OF THE 2020 FLORIDA BUILDING CODE.
 - (2) 4" MINIMUM DISTANCE FROM ANGLE LIP TO ROOF SURFACE FOR SHINGLES OR B.U.R. WITHOUT INSULATION. FOR INSULATION AND TILE ROOF ADD TILE HEIGHT AND INSULATION THICKNESS TO THE 4" MINIMUM HEIGHT.

POLYCARBONATE DOME .070 THICK
(PALRAM PALSUN OR SABIC LEXAN 9034)
POLYCARBONATE .030 THICK
(PALRAM PALSUN OR SABIC LEXAN 9034)

DESIGN PRESSURE RATING
+/- 60 PSF
LARGE MISSILE IMPACT RESISTANCE



FASTENER SCHEDULE FRAME TO DECK #10 X 1 PHILLIPS PAN HEAD SCREWS		FASTENER SCHEDULE DECO RING TO FRAME #6 X 3/4 HEX HEAD SELF DRILLING SCREWS	
MODEL	PER SHORT SIDE	MODEL	PER LONG SIDE
1430	4	1430	4
1446	4	1446	4
2222	5	2222	5
2230	5	2230	5
2236	5	2236	5
2246	5	2246	5

REVISION:

REVISION:

PRODUCT NAME:

HSF 2246

SUN-TEK MANUFACTURING, INC.

10303 GENERAL DRIVE ORLANDO, FL 32824