

NATURAL LIGHT ENERGY SYSTEMS

SELF FLASHING - SINGLE GLAZED TUBULAR SKYLIGHTS

INSTALLATION ANCHORAGE DETAILS

PROJECT #417-1014		
C	12/5/17	RJA
B	06/29/15	JBH
A	01/31/12	RJA
REV	DESCRIPTION	DATE

NATURAL LIGHT ENERGY SYSTEMS
10821 N. 23RD AVENUE
PHOENIX, AZ 85029

TITLE: SELF FLASHING - SINGLE GLAZED TUBULAR SKYLIGHTS
GENERAL AND INSTALLATION NOTES

DRAWN BY: RJA	DATE: 05/01/11	BY
SCALE: N.T.S.	DRAWING NO: NLS0007	DATE
REV: C	SHEET: 1 OF 5	DATE

PTC Product Design Group, LLC
 P.O. Box 520775
 Longwood, FL 32752-0775
 Phone: 321.690.1788
 Fax: 321.690.1789
 Email: info@ptc-corp.com
 FBPE C.A. NO. 25535



Robert J. Amoruso, P.E.
Florida P.E. No. 49752

GENERAL NOTES:

1. THE PRODUCT ANCHORAGE SHOWN HEREIN IS DESIGNED TO COMPLY WITH THE CURRENT EDITION OF THE FLORIDA BUILDING CODE (FBC) REQUIREMENTS INCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ) FOR WIND ZONE 4, MISSILE LEVEL D AT THE DESIGN PRESSURE(S) STATED HEREIN.
2. THE PRODUCT DETAILS CONTAINED HEREIN ARE BASED UPON SIGNED AND SEALED TEST REPORTS # HTL 0290-0318-02/0290-0604-02 AND ASSOCIATED LABORATORY STAMPED DRAWINGS.
3. THE SKYLIGHT HAS BEEN TESTED IN ACCORDANCE WITH THE HIGH VELOCITY HURRICANE ZONE (HVHZ) REQUIREMENTS OF TAS 201, TAS 202 AND TAS 203 AS REQUIRED BY THE CURRENT EDITION OF THE FLORIDA BUILDING CODE AND DOCUMENTED IN SIGNED AND SEALED TEST REPORTS # HTL 0290-0318-02/0290-0604-02 AND ASSOCIATED LABORATORY STAMPED DRAWINGS.
4. PLASTIC GLAZING REQUIREMENTS PER THE CURRENT EDITION OF THE FBC, HAVE BEEN EVALUATED AND ARE IN COMPLIANCE AS DOCUMENTED IN PRODUCT EVALUATION REPORT NO. 1842.
5. SKYLIGHT ASSEMBLY MOUNTING REQUIREMENTS PER THE CURRENT EDITION OF THE FBC HAVE BEEN EVALUATED AND ARE IN COMPLIANCE AS DOCUMENTED IN PRODUCT EVALUATION REPORT NO. 1842 AND SHOWN ON THIS PRODUCT EVALUATION DOCUMENT.
6. ADEQUACY OF THE EXISTING STRUCTURAL FRAMING AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING AND TRANSFERRING APPLIED PRODUCT LOADS TO THE STRUCTURE IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD.
7. SITE CONDITIONS THAT DEVIATE FROM THE DETAILS OF THIS DRAWING REQUIRE THE FOLLOWING:
 - 7.1. IN NON-HVHZ, FURTHER ENGINEERING ANALYSIS BY A LICENSED PROFESSIONAL ENGINEER OR REGISTERED ARCHITECT.
 - 7.2. IN HVHZ, FURTHER ENGINEERING ANALYSIS BY A LICENSED PROFESSIONAL ENGINEER OR REGISTERED ARCHITECT AND ONE TIME APPROVAL FROM MIAMI-DADE COUNTY IS REQUIRED.
8. IN HVHZ AREAS, USE OF AN APPROVED IMPACT PROTECTIVE SYSTEM COMPLYING WITH THE HVHZ REQUIREMENTS OF THE FBC IS NOT REQUIRED FOR THE PRODUCT(S) HEREIN. IN NON-HVHZ AREAS WHERE WINDBORNE DEBRIS PROTECTION REQUIREMENTS EXIST, USE OF AN IMPACT PROTECTIVE SYSTEM COMPLYING WITH THE FBC REQUIREMENTS FOR WINDBORNE DEBRIS REGIONS IS NOT REQUIRED FOR THE PRODUCT(S) HEREIN.

GENERAL NOTES (CONT.):

9. DOME IS GLAZED INTO DOME RING BY FIRST APPLYING A BEAD OF GEOCELL 2300 TRIPOLYMER SEALANT INTO DOME RING AND THEN INSERTING DOME. DOME ENGAGES INTO DOME RING A MINIMUM OF 1/4 INCH.
 10. WHEN APPLICABLE AND IN ACCORDANCE WITH THE CURRENT EDITION OF THE FBC DISSIMILAR METALS INCLUDING FASTENERS THAT MAY COME INTO CONTACT WITH ALUMINUM SKYLIGHT FRAMING WOOD SHALL HAVE BEEN PROTECTED.
- INSTALLATION NOTES:**
1. INSTALL DOME RING INTO FLASHING USING #8 PH SMS WITH SUFFICIENT LENGTH (3/4" SCREWS SHOWN FOR ILLUSTRATION) FOR SCREWS TO PROTRUDE THREE THREAD PITCHES BEYOND FLASHING. LOCATE SCREWS ONE AT EACH QUARTER POINT OF DOME RING. DOME RING OVERLAPS FLASHING A MINIMUM OF 1 1/4 INCH AROUND ITS CIRCUMFERENCE.

DESIGN PRESSURE RATING (PSF)	IMPACT RATING
±80.0	LARGE MISSILE IMPACT

INSTALLATION NOTES:

2. INSTALL FLASHING TO PREPARED ROOF DECK ASSEMBLY BY LAYING A BED OF CONTINUOUS BEAD OF GEOCELL 2300 TRIPOLYMER SEALANT BETWEEN ROOF DECK AND FLASHING AND A SINGLE ROW OF #10 X 1 1/2 INCH PH SMS SPACED NO MORE THAN 8 INCHES ON CENTER AROUND THE ENTIRE CIRCUMFERENCE OF THE FLASHING.
- 2.1 MINIMUM 12 SCREWS REQUIRED FOR 21" AND 18" SKYLIGHT AND MINIMUM 10 SCREWS FOR 13" AND 10" SKYLIGHT.
 - 2.2 IF MAXIMUM O.C. SPACING OF 8" CANNOT BE MAINTAINED, INCREASE QUANTITY OF FASTENERS.
 - 2.3 IF MINIMUM EMBEDMENT SHOWN IN ANCHOR SCHEDULE CANNOT BE MAINTAINED USING #10 X 1 1/2" LONG SMS, SCREW LENGTH SHALL BE INCREASED.

INSTALLATION NOTES:

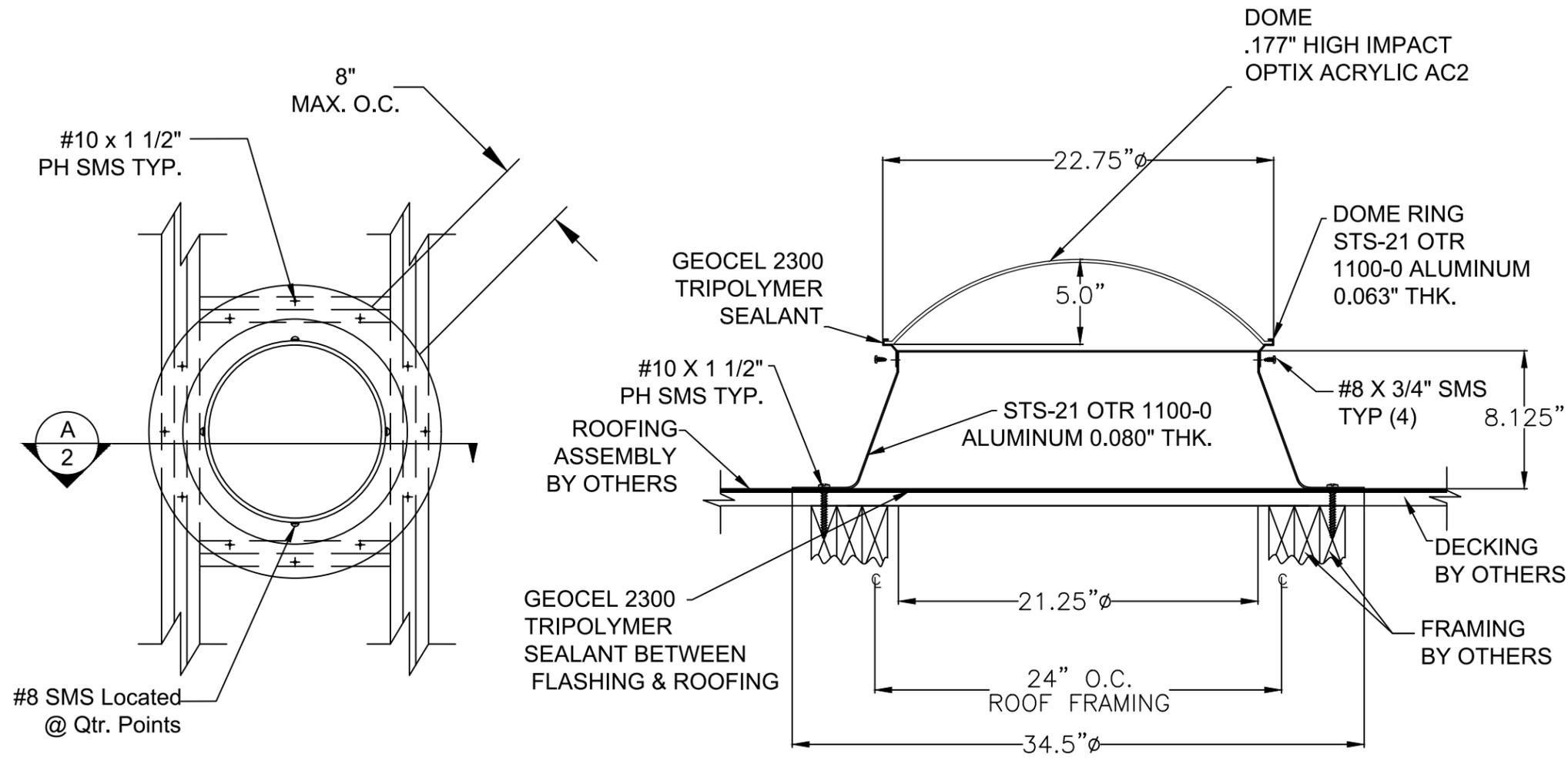
3. APPLY A BEAD OF GEOCELL 2300 TRIPOLYMER SEALANT TO EACH EXPOSED FASTENER HEAD USED IN FLASHING INSTALLATION.
4. APPLY GEOCELL 2300 TRIPOLYMER SEALANT ACCORDING TO MANUFACTURERS INSTRUCTIONS.
5. IF ROOF DECKING IS LESS THAN 5/8 INCH THICK, ANCHOR SPACING MUST BE DECREASED TO 5 3/8 INCHES MAXIMUM ON CENTER AROUND THE ENTIRE PERIMETER OF THE FLASHING.
6. PRODUCT ANCHORS SHALL BE AS DESIGNATED AND LOCATED AS SHOWN ON THE INSTALLATION DRAWINGS. ANCHOR EMBEDMENT AND EDGE DISTANCE EXCLUDE WALL FINISHES INCLUDING, BUT NOT LIMITED TO SHEATHING, UNDERLAYMENT AND SHINGLES.

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5	A	10" DIAMETER ELEVATIONS, SECTIONS AND ANCHOR INSTALLATION

ANCHOR SCHEDULE						
SUBSTRATE	TYPE	SIZE	MANUFACTURER AND/OR SPECIFICATION	EMBEDMENT (IN) ⁽²⁾	EDGE DISTANCE (IN) ⁽²⁾	ANCHOR CAPACITIES BASED ON
ALUMINUM FLASHING TO WOOD	FLAT HEAD	NO. 10	ASME B18.6.4 (TAPPING SCREW) (SMS)	1-1/4"	3/8"	WOOD WITH A MINIMUM SPECIFIC GRAVITY OF 0.42 AND 1100-0 ALUMINUM
ALUMINUM DOME RING TO ALUMINUM FLASHING	PAN HEAD	NO. 8	ASME B18.6.4 (TAPPING SCREW) (SMS)	SCREW TO PROTRUDE THREE THREAD PITCHES BEYOND FLASHING	N/A	1100-0 ALUMINUM

NOTES:

- 1) PHSMS = PAN HEAD SHEET METAL SCREW
- 2) FOR TAPPING SCREWS IF SPLITTING IS A CONCERN, DRILL 3/32" PILOT HOLE FOR NO. 10 FOR WOOD SG > 0.5.



**NATURAL LIGHT 21"
ELEVATION & ANCHOR LAYOUT**
EXTERIOR VIEW

**SECTION
A 21" FLAT ROOF FLASHING**

PROJECT #417-1014			
C	UPDATED TO 6TH EDITION (2017) FBC	12/5/17	RJA
B	UPDATED TO 5TH EDITION (2014) FBC	06/29/15	JBH
A	UPDATED TO 2010 FBC	01/31/12	RJA
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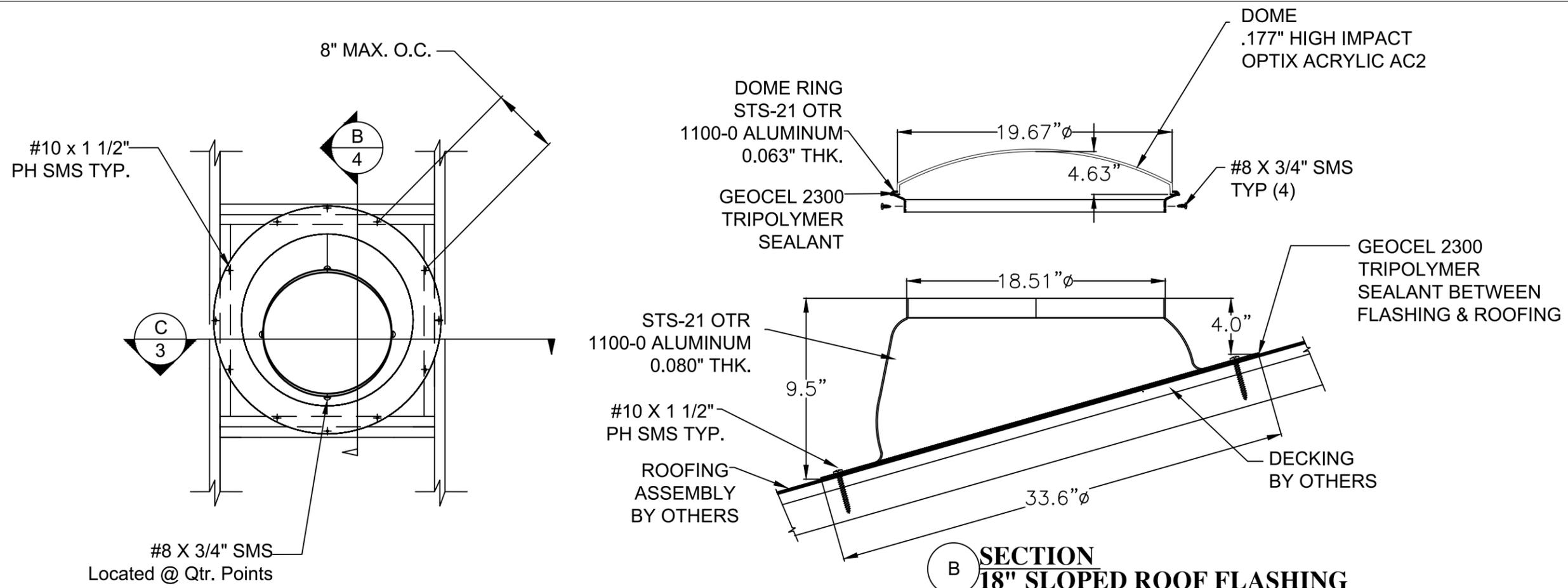
TITLE: SELF FLASHING - SINGLE GLAZED TUBULAR SKYLIGHTS
21" ANCHOR ELEVATION AND CROSS SECTION

DATE: 05/01/11
DRAWING NO.: NLS0007
SHEET: 2 OF 5

PREPARED BY: RJA
SCALE: N.T.S.
REV: C

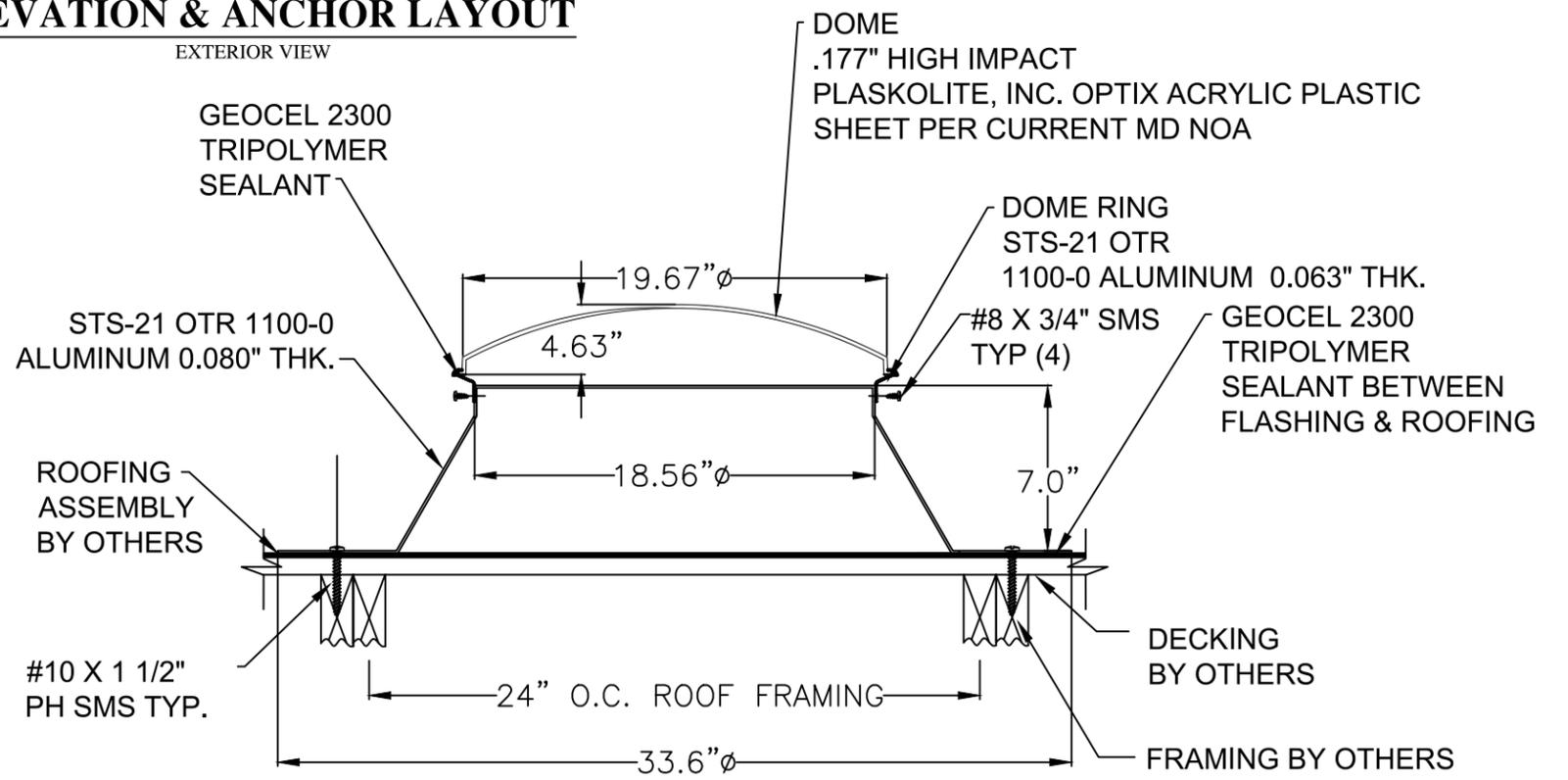
PTC Product Design Group, LLC
P.O. Box 520715
Longwood, FL 32752-0715
Phone: 321.690.1788
Fax: 321.690.1789
Email: info@ptc-corp.com
FBPE C.A. NO. 255935

Robert J. Amoruso, P.E.
Florida P.E. No. 49752



NATURAL LIGHT 18" ELEVATION & ANCHOR LAYOUT
EXTERIOR VIEW

SECTION B 18" SLOPED ROOF FLASHING



SECTION C 18" FLAT ROOF FLASHING

PROJECT #417-1014

UPDATED TO 6TH EDITION (2017) FBC	RJA	12/5/17	DATE
UPDATED TO 5TH EDITION (2014) FBC	JBH	06/29/15	BY
UPDATED TO 2010 FBC	RJA	01/31/12	DESCRIPTION
REV	A	3 OF 5	REV

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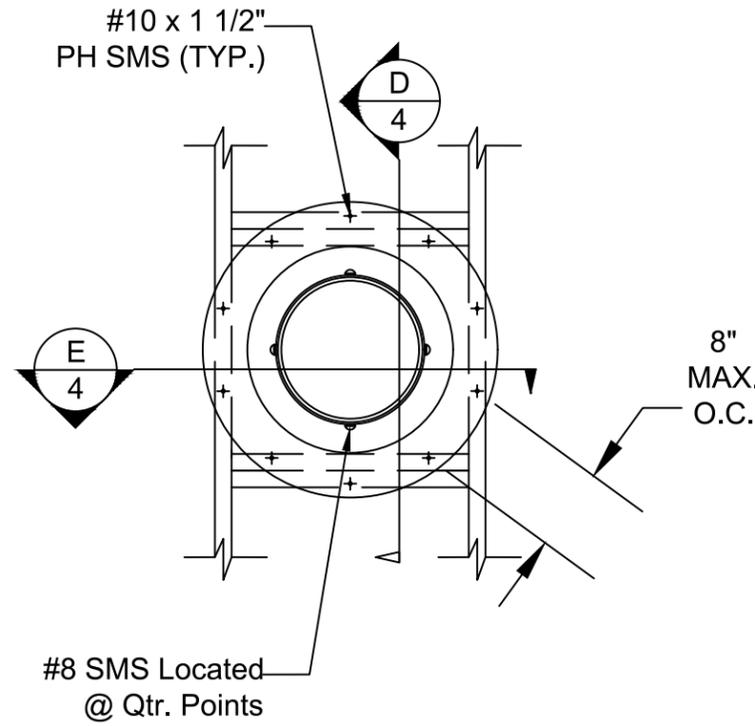
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18" ANCHOR ELEVATION AND CROSS SECTION

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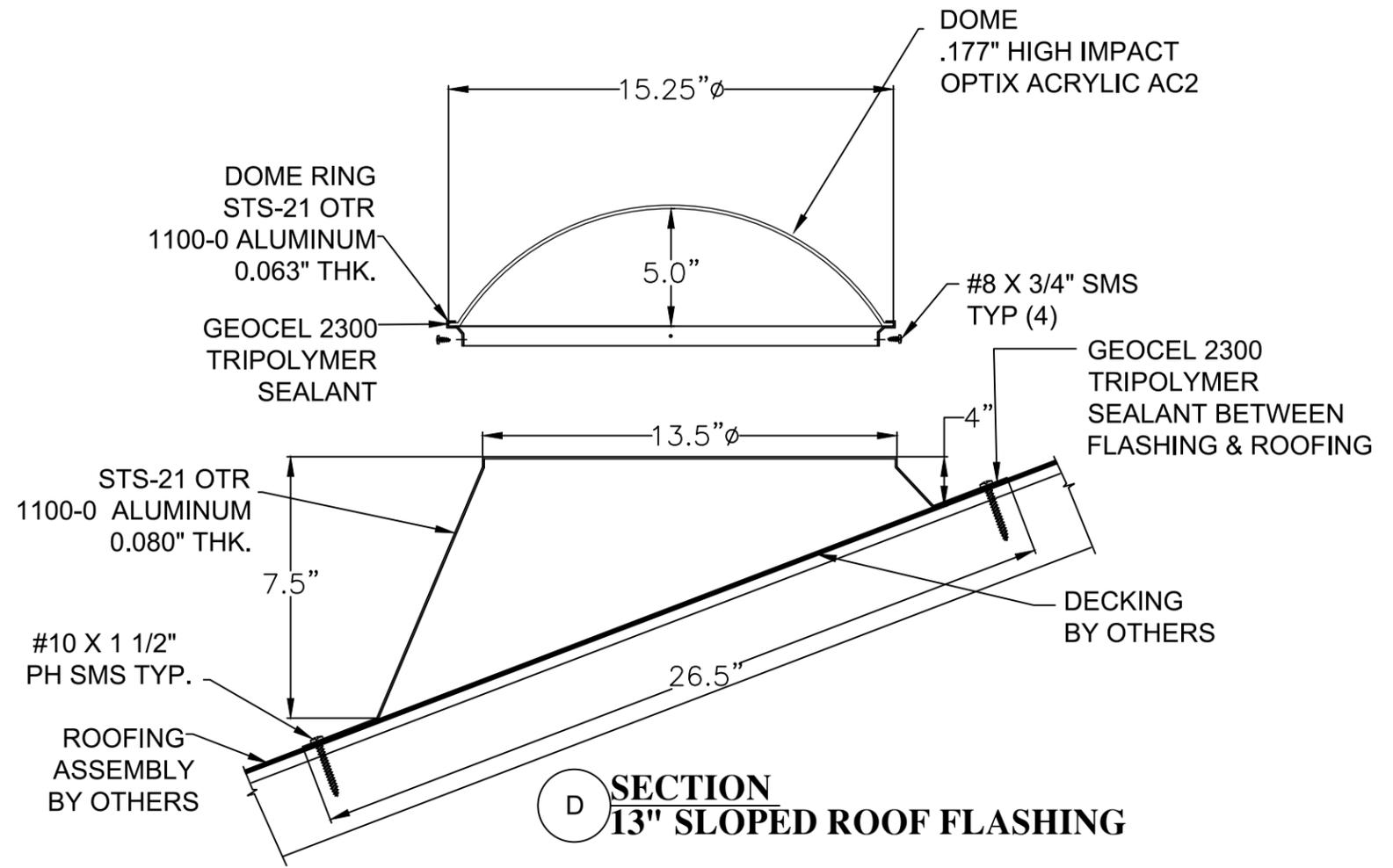
DRAWN BY: RJA
SCALE: N.T.S.
REV: C

PTC
PTC Product Design Group, LLC
P.O. Box 520775
Longwood, FL 32752-0775
Phone: 321.690.1788
Fax: 321.690.1789
Email: info@ptc-corp.com

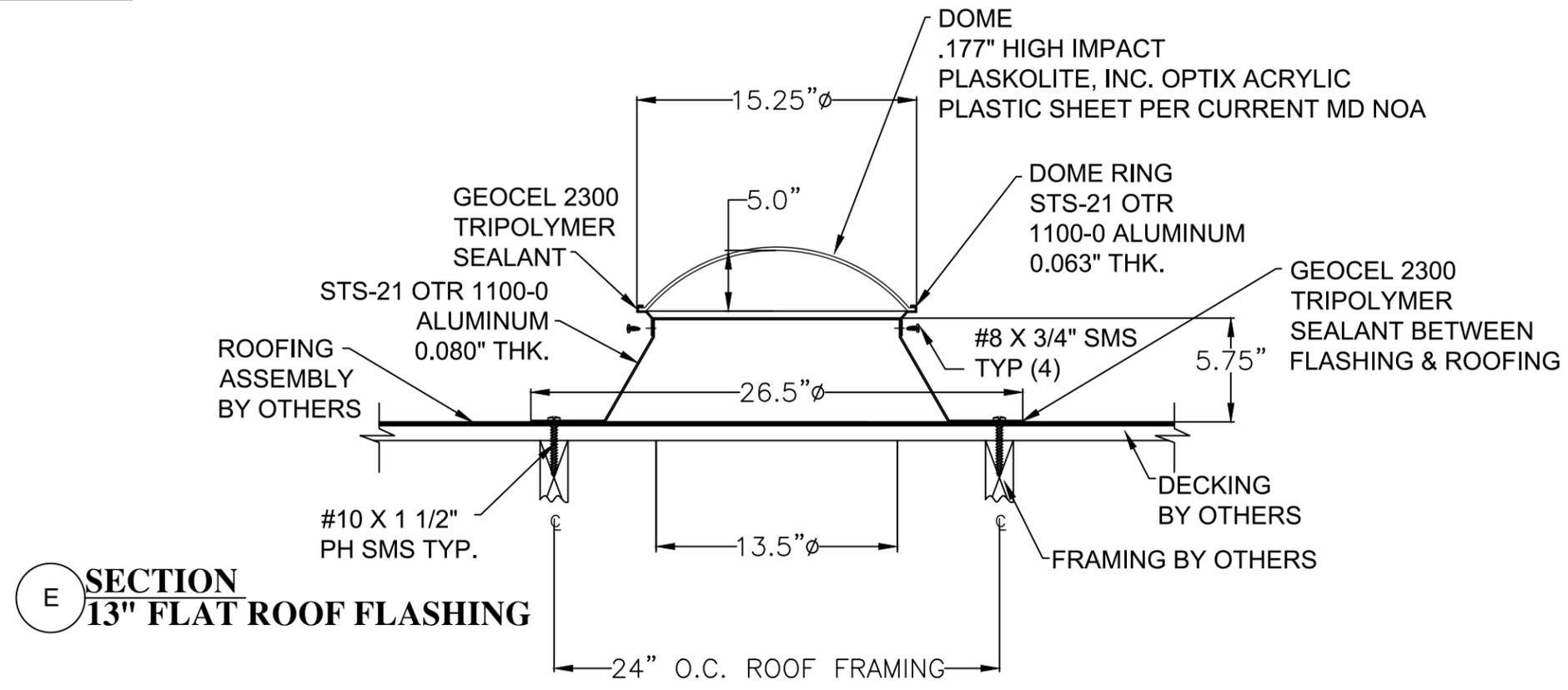
Robert J. Amoruso, P.E.
Florida P.E. No. 49752



**NATURAL LIGHT 13"
ELEVATION & ANCHOR LAYOUT**
EXTERIOR VIEW



**SECTION D
13" SLOPED ROOF FLASHING**



**SECTION E
13" FLAT ROOF FLASHING**

PROJECT #417-1014	
UPDATED TO 6TH EDITION (2017) FBC	RJA 12/5/17
UPDATED TO 5TH EDITION (2014) FBC	JBH 06/29/15
UPDATED TO 2010 FBC	RJA 01/31/12
DESCRIPTION	DATE
REV	BY

NATURAL LIGHT ENERGY SYSTEMS
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PHOENIX, AZ 85029

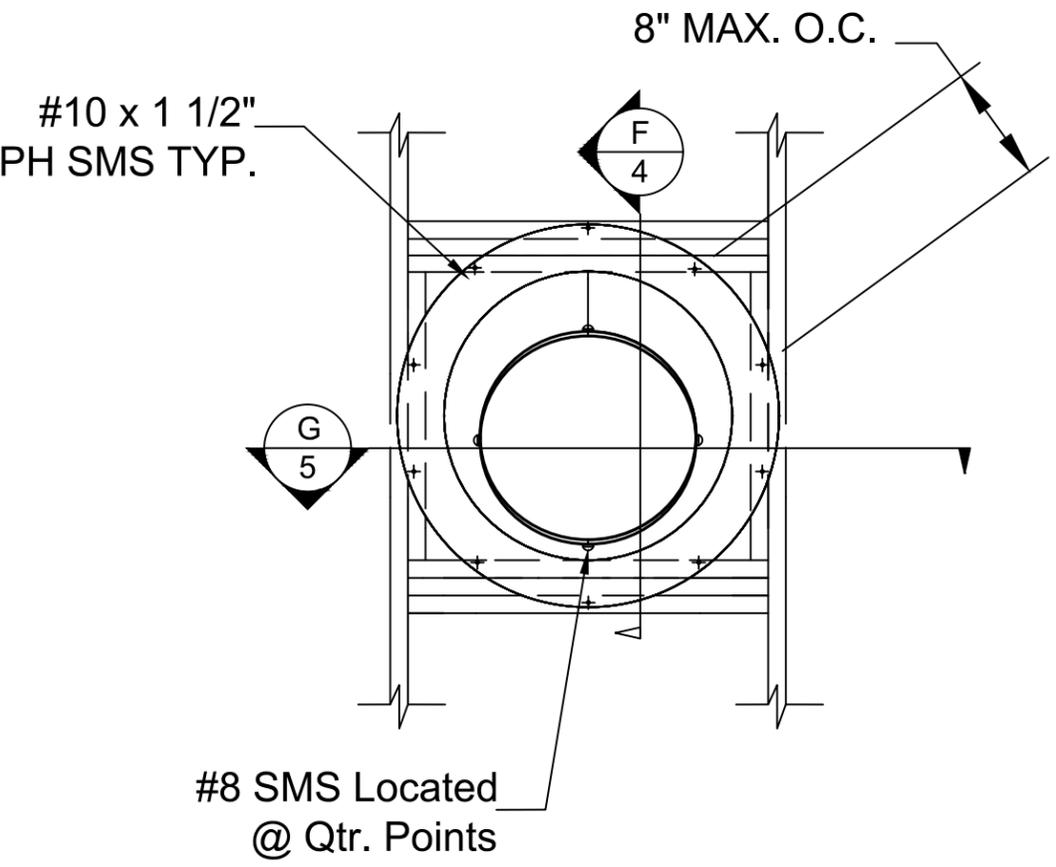
TITLE: SELF FLASHING - SINGLE GLAZED TUBULAR SKYLIGHTS
13" ANCHOR ELEVATIONS AND CROSS SECTIONS

DATE: 05/01/11
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SHEET: 4 OF 5

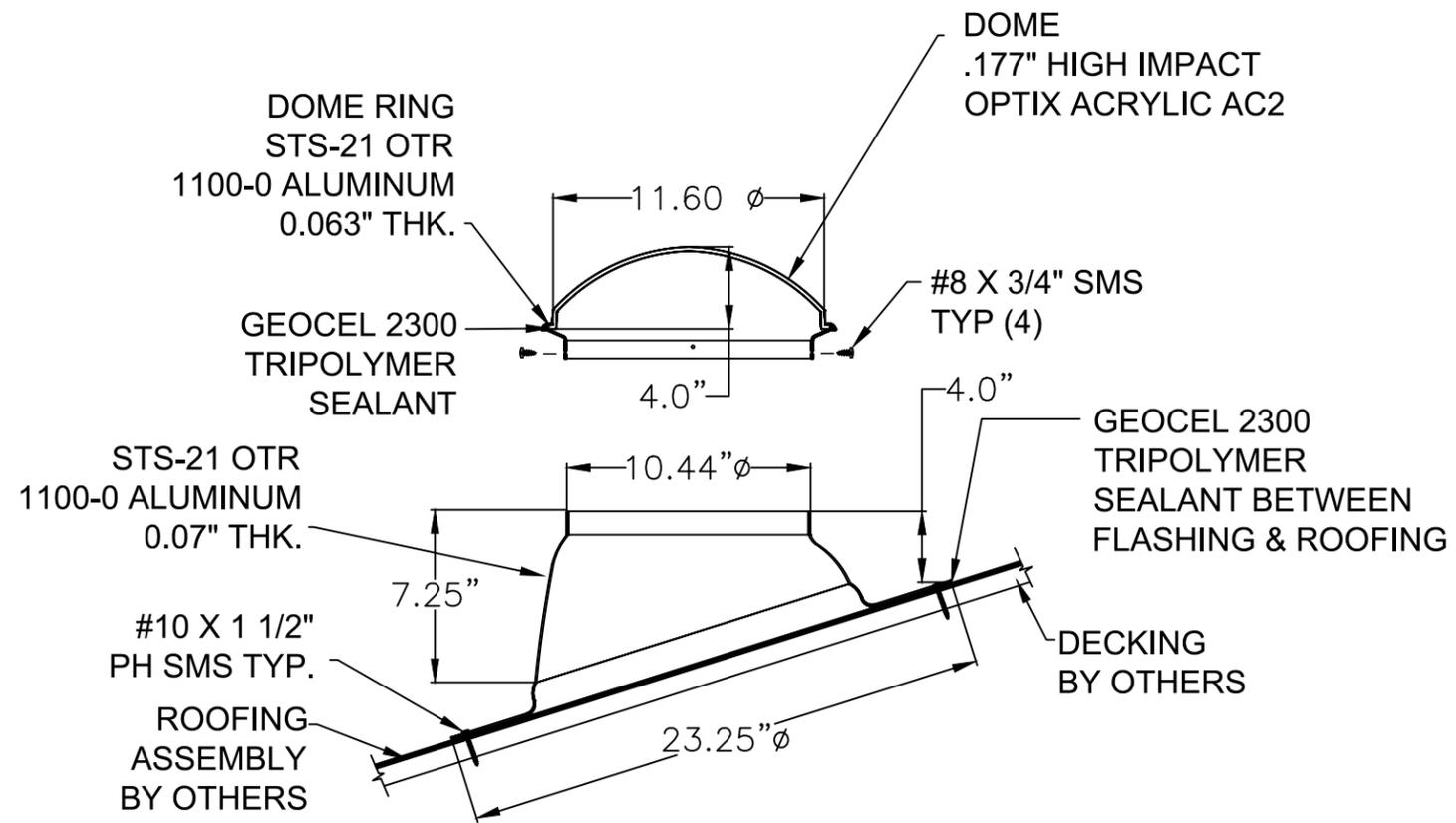
DRAWN BY: RJA
SCALE: N.T.S.
REV: C

PTE
PTC Product Design Group, LLC
P.O. Box 520775
Longwood, FL 32752-0775
Phone: 321.690.1788
Fax: 321.690.1789
Email: info@ptc-corp.com

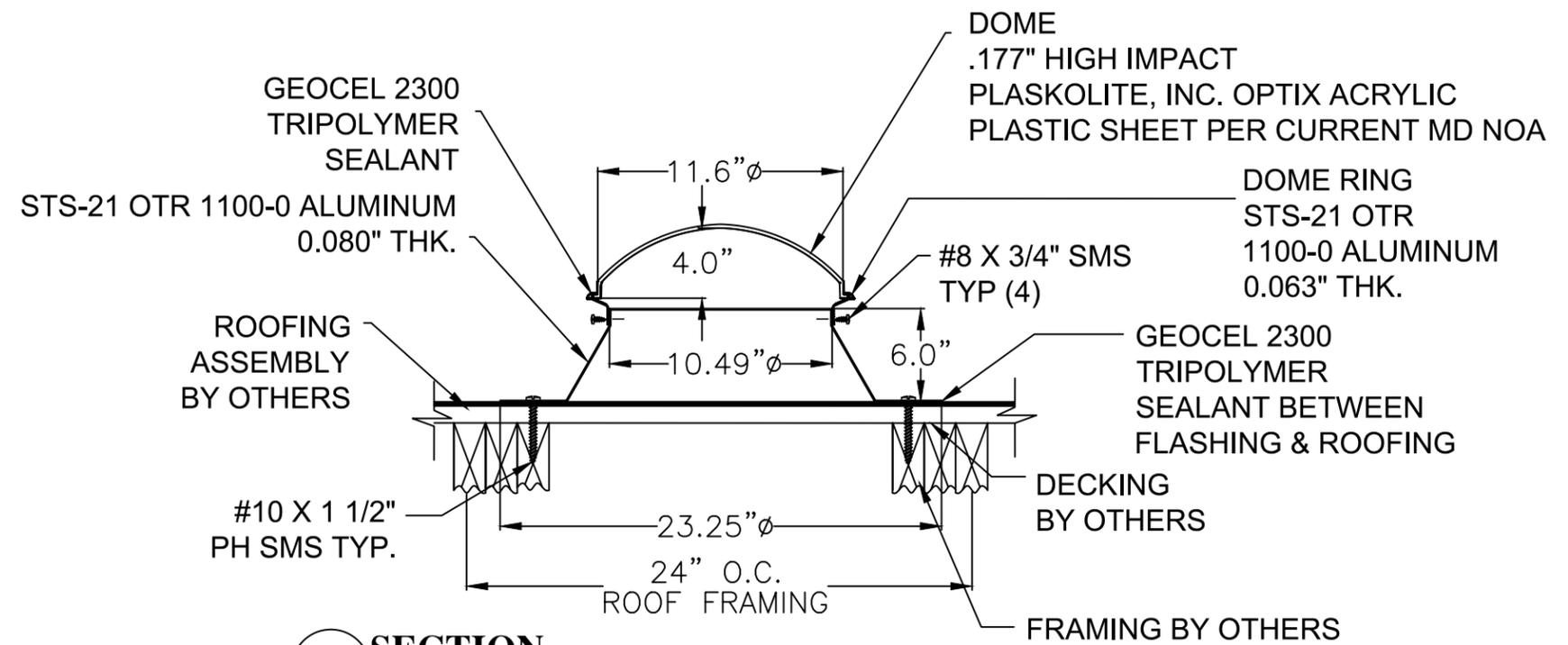
Robert J. Amoruso, P.E.
Florida P.E. No. 49752



NATURAL LIGHT 10" ELEVATION & ANCHOR LAYOUT
EXTERIOR VIEW



SECTION F 10" SLOPED ROOF FLASHING



SECTION G 10" FLAT ROOF FLASHING

PROJECT #417-1014		RJA	12/5/17	JBH	RJA	BY
UPDATED TO 6TH EDITION (2017) FBC	UPDATED TO 5TH EDITION (2014) FBC	DATE				
C	B	A	06/29/15	01/31/12	DESCRIPTION	
NATURAL LIGHT ENERGY SYSTEMS 10821 N. 23RD AVENUE PHOENIX, AZ 85029		DRAWN BY: RJA	DATE: 05/01/11	DRAWING NO: NLS0007	REV: C	5 OF 5
TITLE: SELF FLASHING - SINGLE GLAZED TUBULAR SKYLIGHTS 10" ANCHOR ELEVATIONS AND CROSS SECTIONS		SCALE: N.T.S.				
PREPARED BY: PTC Product Design Group, LLC P.O. Box 520775 Longwood, FL 32752-4775 FBPE C.A. NO. 25535						

Robert J. Amoruso, P.E.
Florida P.E. No. 49752