

SOLATUBE INTERNATIONAL

IMPACT 160 DS (10") & 290 DS (14") TUBULAR DAYLIGHT DEVICE

INSTALLATION ANCHORAGE DETAILS

GENERAL NOTES:

1. THE PRODUCT ANCHORAGE SHOWN HEREIN IS DESIGNED TO COMPLY WITH THE CURRENT EDITION OF THE FLORIDA BUILDING CODE (FBC) REQUIREMENTS, INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ) AT THE DESIGN PRESSURES STATED HEREIN.
2. THE PRODUCT DETAILS CONTAINED HEREIN ARE BASED UPON SIGNED AND SEALED TEST REPORT ATI85320.01-301-18 AND ASSOCIATED LABORATORY STAMPED DRAWINGS.
3. THE PRODUCT HAS BEEN TESTED TO TAS 201, TAS 202 AND TAS203 (ATI TEST REPORT ATI 85320.01-301-18) AND FOUND TO BE IN CONFORMANCE WITH THE CURRENT EDITION OF THE FLORIDA BUILDING CODE (FBC) INCLUDING HIGH VELOCITY HURRICANE ZONE. THE DESIGN PRESSURES SHOWN IN DESIGN PRESSURE RATING TABLE ON SHEET 1 OF THIS DRAWING ARE BASED ON THE RESULTS OF TEST REPORT NO. ATI 85320.01-301-18 DIVIDED BY A FACTOR OF SAFETY OF 2 WHERE APPLICABLE.
4. PLASTIC COMPONENTS OF THE SOLATUBE TUBULAR DAYLIGHT DEVICE HAVE BEEN EVALUATED TO THE REQUIREMENTS OF THE CURRENT EDITION OF THE FLORIDA BUILDING CODE INCLUDING THE HIGH VELOCITY ZONE AND ARE IN COMPLIANCE AS DOCUMENTED IN PRODUCT EVALUATION REPORT NO. 1971, BY ROBERT J. AMORUSO, P.E.
5. ADEQUACY OF THE EXISTING STRUCTURAL ROOF SHEATHING AND SUPPORTING 2X FRAMING AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING AND TRANSFERRING APPLIED PRODUCT LOADS TO THE FOUNDATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
6. THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.
7. THIS PRODUCT EVALUATION DOCUMENT ADDRESSES THE STRUCTURAL ATTACHMENT OF THE SKYLIGHT/TUBULAR DAYLIGHT DEVICE TO THE ROOF SHEATHING ONLY. PREPARATION OF THE ROOF SHEATHING AND ROOF COVERING(S) TO RECEIVE THE SKYLIGHT/TUBULAR DAYLIGHT DEVICE SHALL BE PER THE MANUFACTURER'S INSTRUCTIONS AND COMPLIANT WITH CHAPTER 15 OF THE CURRENT EDITION OF THE FLORIDA BUILDING CODE AND CHAPTER 9 OF THE CURRENT EDITION OF THE FLORIDA RESIDENTIAL CODE.
8. IN ACCORDANCE WITH THE CURRENT EDITION FBC DISSIMILAR METALS INCLUDING FASTENERS THAT MAY COME INTO CONTACT WITH ALUMINUM SKYLIGHT FRAMING SHALL HAVE BEEN PROTECTED.

INSTALLATION NOTES:

1. ONE (1) #10 INSTALLATION ANCHOR IS REQUIRED AT EACH ANCHOR LOCATION SHOWN ON SHEETS 3, 4 AND 5.
2. THE NUMBER OF INSTALLATION ANCHORS DEPICTED IS THE MINIMUM NUMBER OF ANCHORS TO BE USED FOR PRODUCT INSTALLATION. ALL UNITS REQUIRE EIGHT (8) ANCHORS MINIMUM LOCATED AT ALL CORNERS. ANCHOR ENGINEERING BASED ON ENGAGEMENT INTO ROOF SHEATHING AND NOT 2X ROOF FRAMING.

2.1. INSTALLATION SHALL BE INTO 7/16" MINIMUM THICKNESS ROOF SHEATHING (SEE NOTE 6 BELOW).

2.2. IF TDD INSTALLATION LOCATION REQUIRES ANCHORS TO ENGAGE INTO 2X FRAMING, THAT IS ACCEPTABLE.
3. ANCHOR REQUIREMENTS - ROOF SHEATHING

3.1. FOR INSTALLATION INTO 7/16" MINIMUM THICKNESS ROOF SHEATHING (SEE NOTE 6 BELOW), USE A #10 TYPE AB PAN HEAD, ROUND HEAD OR TRUSS HEAD TAPPING SCREWS MEETING ASME/ANSI B18.6.4 OF SUFFICIENT LENGTH TO ENSURE PROTRUDING SCREW THREADS AT LEAST 1/2" BEYOND THE INTERIOR SURFACE OF ROOF SHEATHING. EDGE DISTANCE FROM CENTERLINE OF SCREW TO EDGE OF SHEATHING SHALL BE AT LEAST 3/4 INCH.

3.2. FOR INSTALLATION THROUGH ROOF SHEATHING INTO 2X WOOD ROOF FRAMING (SEE NOTE 6 BELOW), USE A #10 TYPE AB PAN HEAD, ROUND HEAD OR TRUSS HEAD TAPPING SCREWS MEETING ASME/ANSI B18.6.4 OF THE SAME LENGTH AS REQUIRED IN NOTE 3.1 ABOVE. EDGE DISTANCE FROM CENTERLINE OF SCREW TO EDGE OF SHEATHING SHALL BE AT LEAST 3/4 INCH.
4. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDE ROOF FINISHES.
5. INSTALLATION ANCHORS MUST BE MADE OF CORROSION RESISTANT MATERIAL OR HAVE A CORROSION RESISTANT COATING.
6. INSTALLATION ANCHOR CAPACITIES FOR PRODUCTS HEREIN ARE BASED ON SUBSTRATE MATERIALS WITH THE FOLLOWING PROPERTIES. ROOF SHEATHING THICKNESS, GROUP OR GRADE MAY BE MANDATED BY JURISDICTION REQUIREMENTS, THEREFORE THICKNESS AND GROUP/GRADE SHOWN BELOW WILL BE CONSIDERED MINIMUM.

6.1. 7/16" THICK PLYWOOD - SPECIES GROUP 1 OR 2 (APA VOLUNTARY PRODUCT STANDARD PS 1) MINIMUM.

6.2. 7/16" OSB - SHEATHING GRADE (APA VOLUNTARY PRODUCT STANDARD PS 2) MINIMUM.
7. INSTALLATION/MOUNTING CONDITIONS AND LIMITATIONS OF USE AS REQUIRED BY THE FOLLOWING SECTIONS OF THE CURRENT EDITION OF THE FLORIDA BUILDING CODE (FBC) AND FLORIDA RESIDENTIAL CODE (FRC) SHALL BE MET.

7.1. FBC, SECTION 2405, SLOPED GLAZING AND SKYLIGHTS

7.2. FBC, SECTION 2610, LIGHT-TRANSMITTING PLASTIC SKYLIGHT GLAZING

7.3. FRC, SECTION R308, SKYLIGHTS AND SLOPED GLAZING
8. A CURB CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS FOR THE TYPE OF CONSTRUCTION CLASSIFICATION, BUT AT LEAST 4 INCHES ABOVE THE PLANE OF THE ROOF BY OTHERS IS ALLOWED. ADDITIONAL INSTALLATION DETAILING AND ENGINEERED INSTALLATION EVALUATION BY A LICENSED DESIGN PROFESSIONAL WILL BE REQUIRED FOR SUBMITTAL IN ADDITION TO THIS PRODUCT EVALUATION DOCUMENT.

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SHEET	DESCRIPTION
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4	160 DS (10”) FLASHING OPTIONS
5	INSTALLATION DETAILS AND SECTIONS
6	OPTIONAL DIFFUSER DETAILS

DESIGN PRESSURE RATING (PSF)			IMPACT RATING
UNIT	WHERE WATER INFILTRATION TEST IS REQUIRED	WHERE WATER INFILTRATION TEST IS NOT REQUIRED	LARGE MISSLE IMPACT
10" & 14" SOLATUBE	±70.0	±70.0	

PROJECT NUMBER: 417-0603		UPDATE DRAWING FOR NEW INTERIOR OPTIONS	10/17/17	RJA
		UPDATED TO 5TH EDITION (2014) FBC	5/11/15	JBH
		REVISED ELEVATIONS & INSTALLATION SECTS	04/30/15	JBH
		REVISED ANCHORAGE	4/14/14	RJA
		UPDATE TO 2010 FBC	12/15/11	TJH
REV	DESCRIPTION	DATE	BY	

SOLATUBE INTERNATIONAL

2210 OAK RIDGE WAY
VISTA, CA 92081-9341

TITLE:

IMPACT 160 DS (10”) & 290 DS (14”) TUBULAR DAYLIGHT DEVICE
GENERAL AND INSTALLATION NOTES

PREPARED BY:

DRAWN BY: SMC

SCALE: N.T.S.

REV: E

DATE: 10/08/08

DRAWING NO: SOLA0004

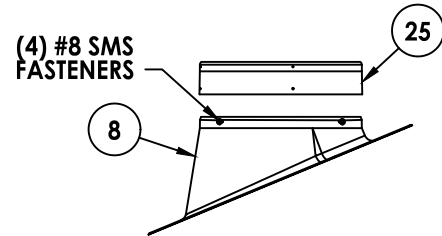
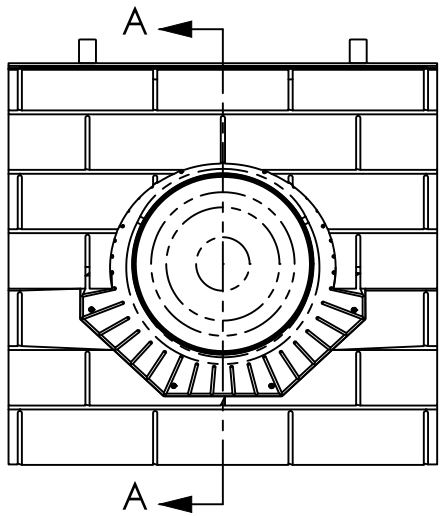
SHEET: 1 OF 6



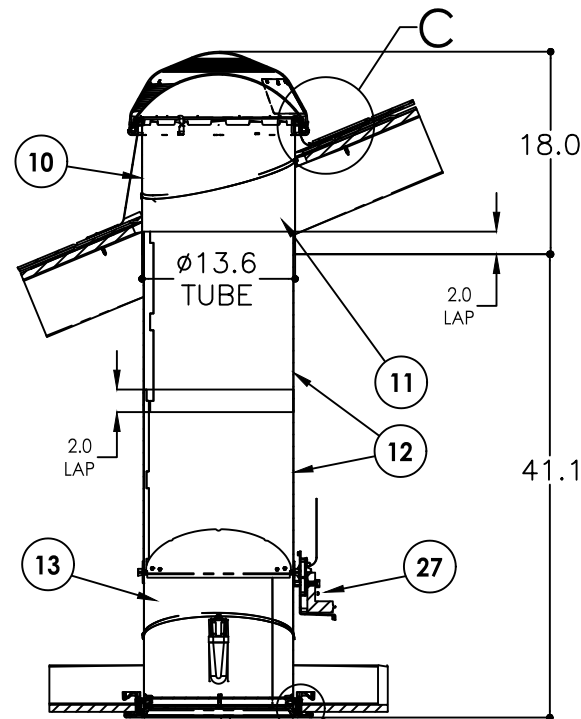
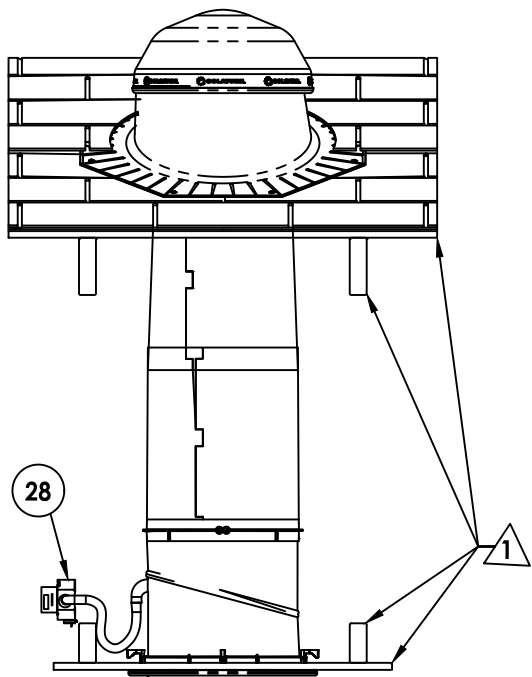
PTC PRODUCT DESIGN GROUP, LLC
PO BOX 520775
LONGWOOD, FLORIDA 32752
FBPE C.A. NO. 25935

Phone: 321.690.1788
Fax: 321.690.1789
Email: info@ptc-corp.com

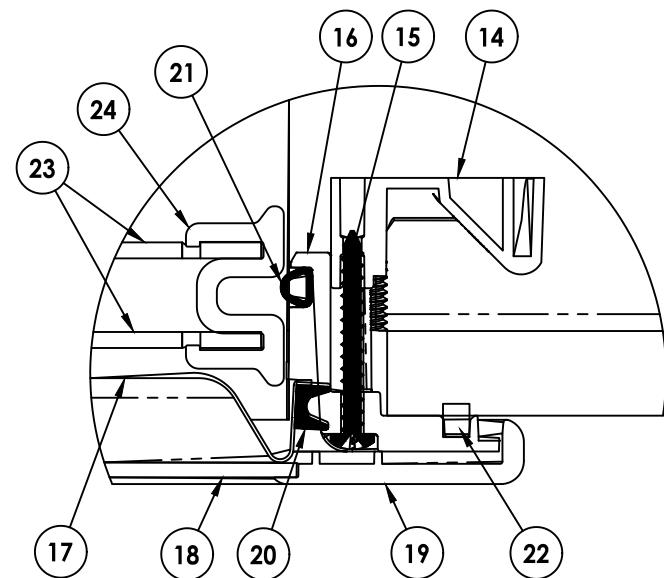
Robert J. Amoruso, P.E.
FL P.E. No. 49752



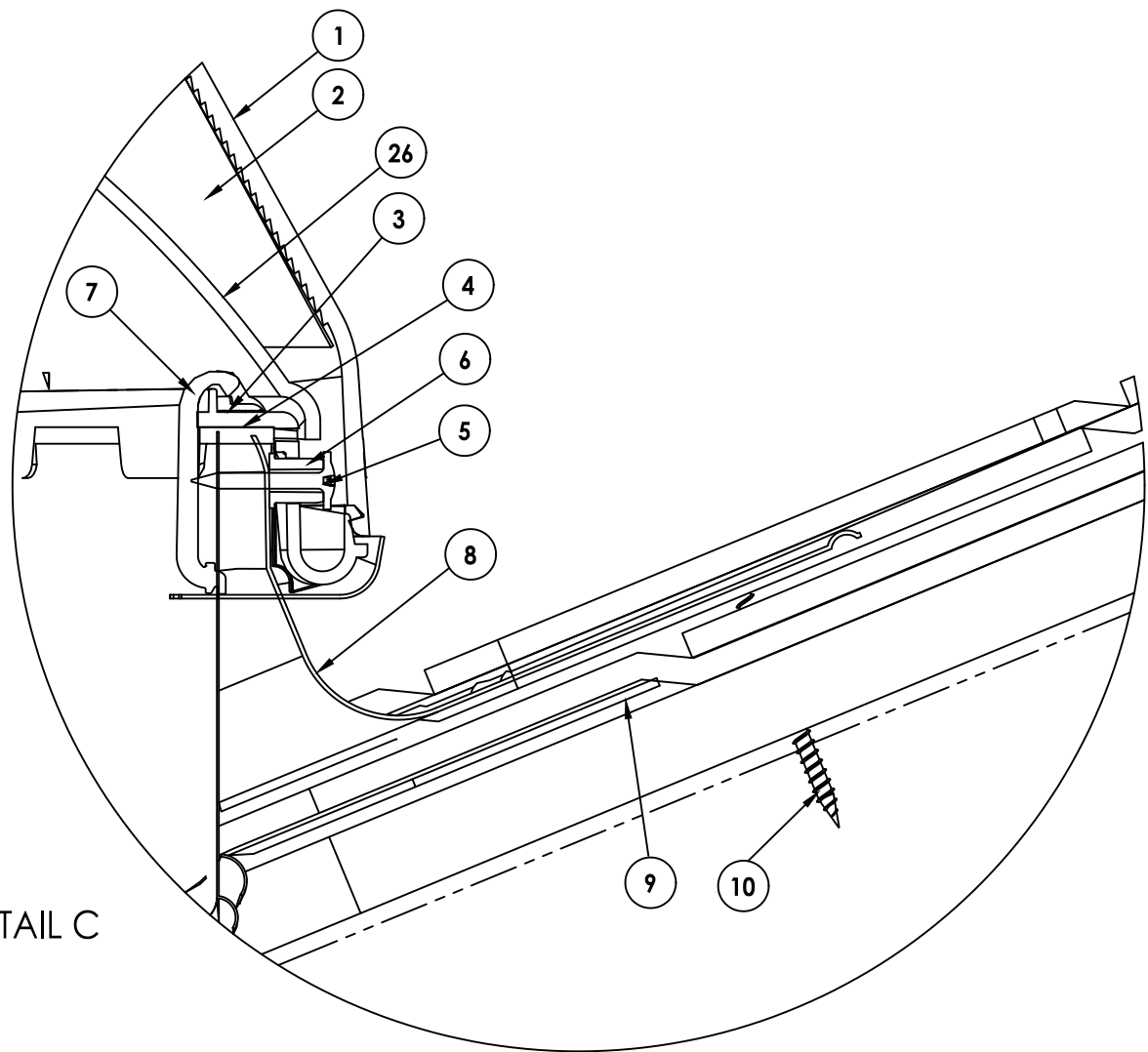
FLASHING SHOWN WITH OPTIONAL
2"-48" TALL TURRET EXTENSION



SECTION A-A



DETAIL B



DETAIL C

- NOTES:
1. STRUCTURAL ELEMENTS (PLYWOOD, RAFTERS, DRYWALL ETC.) BY OTHERS & SHOWN FOR REFERENCE ONLY
 2. ALL TUBE JOINTS & SEAMS TAPED WITH 2" FOIL TAPE (NOT SHOWN)
 3. SEE PAGE 6 FOR ALTERNATE DIFFUSER CONFIGURATIONS
 4. ITEM #22; RECTANGULAR FOAM OR SEALANT BEAD

ITEM NO.	QTY.	PART NO.	DESCRIPTION	MATERIAL
1	1	410820	DOVE 290 DS	PMMA
2	1	410830	LIGHTTRACKER RELECTOR 290 DS	ALUMINUM LAMINATE
3	1	410660	DOVE RING 290 DS	PMMA
4	1	600610	FOAM SEAL RECTANGULAR 1/8" X 9/16"	FOAM (VARIOUS)
5	4	700240	SCREW #8 X 1" SMS	STEEL
6	4	410730	DOVE RING SPACER	POLYAMIDE
7	3	410750	TOP TUBE CLIP	PMMA
8	1	VARIES*	FLASHING	STEEL
9	1	700280/700300	SEALANT	URETHANE
10	8	700480	SCREW #10 X 2" SMS	STEEL
11	1	302240	TOP TUBE 290 DS	ALUMINUM LAMINATE
12	1	301800/301830	EXT. TUBE 16"/24" 290 DS	ALUMINUM LAMINATE
13	1	302120	BOTTOM TUBE 290 DS	ALUMINUM LAMINATE
14	4	410220	CLAMP	POLYAMIDE
15	4	700450	SCREW #8 x 1.5" SMS	STEEL
16	1	410415	CEILING RING 290 DS	PMMA
17	1	421345	290 DS NATURAL EFFECT LENS	PET
18	1	410,530,420,080	290 DS DIFFUSER PANEL	PMMA, PC
19	1	410520	DRESS RING 290 DS	PMMA
20	1	600290	290 DS DIFFUSER SEAL	EPDM FOAM
21	1	600445	D-SEAL HOLLOW	EPDM FOAM
22	1	600620	FOAM SEAL RECTANGULAR 3/16" X 1/4"	CLOSED CELL FOAM
	1	-	ALTERNATE (PROVIDED BY USER)	ACRYLIC SEALANT (VARIOUS)

OPTIONAL COMPONENTS				
ITEM NO.	QTY.	PART NO.	DESCRIPTION	MATERIAL
23	2	420260	290 DS INSULATION PANEL (NOT SHOWN)	PMMA
24	4	420270	INSULATION PANEL CLIP (NOT SHOWN)	PMMA
25	1	VARIES**	TURRET EXTENSION	STEEL
26	1	410810	290 DS DOVE SHOCK INNER	PMMA
27	1	570002	290 DS DAYLIGHT DIMMER	
28	1	510000, 501100	LIGHT KIT (SBCFL, 4-pin)	

* PNS 200760, 200581, 230445, 230630
** PNS 230760, 230540, 230550, 230560, 230570

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E	NEW INTERIOR OPTIONS	UPDATED TO 5TH	5/11/15	JBH
D	EDITION (2014) FBC	REVISED ELEVATIONS & INSTALLATION SECTS.	04/30/15	JBH
C	REVISED ANCHORAGE	UPDATE TO 2010 FBC	4/14/14	RJA
B			12/15/11	TJH
A				BY
REV	DESCRIPTION	DATE		

SOLATUBE INTERNATIONAL

2210 OAK RIDGE WAY
VISTA, CA 92081-9341

TITLE:

IMPACT 160 DS (10") & 290 DS (14")
TUBULAR DAYLIGHT DEVICE
ELEVATION, ANCHORING, SECTIONS, DETAILS AND B.O.M.

PREPARED BY:

DATE: 10/08/08

DRAWN BY:

SCALE: N.T.S.

SHEET: 2 OF 6

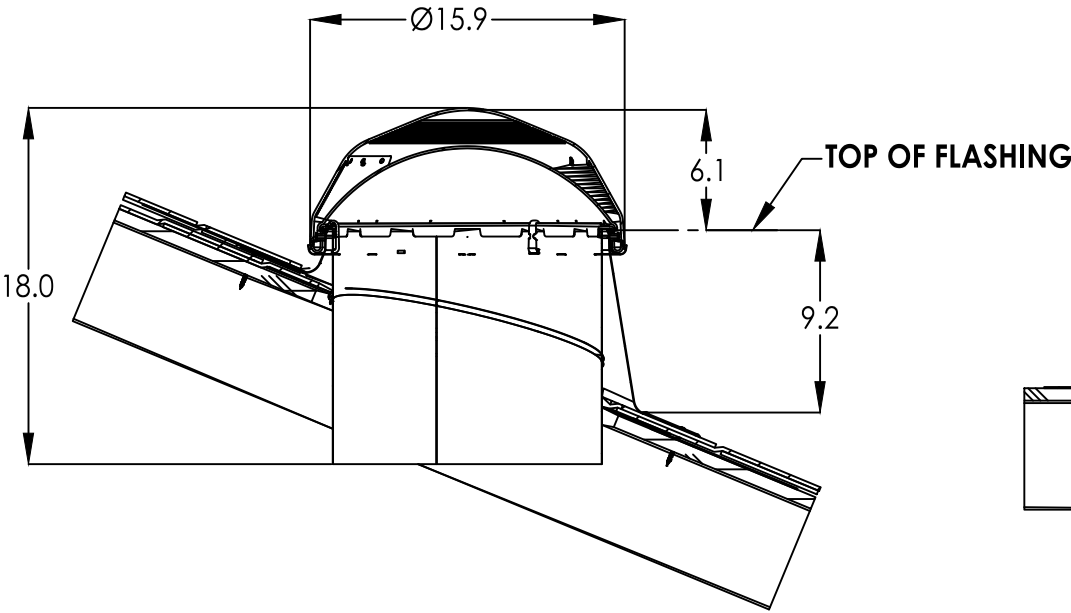
REV: E

PTC PRODUCT DESIGN GROUP, LLC
PO BOX 52075
LONGWOOD, FLORIDA 32752
FBPE C.A. NO. 25935

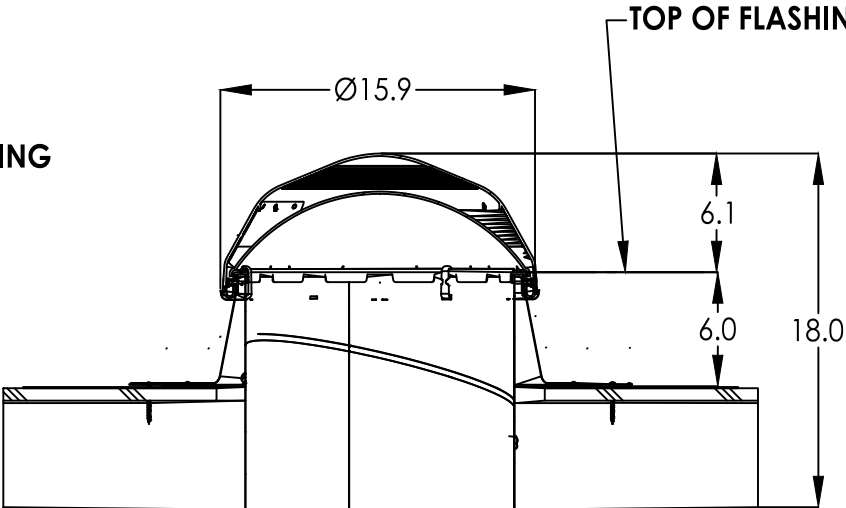
Phone: 321.690.1788
Fax: 321.690.1789
Email: info@ptc-corp.com

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

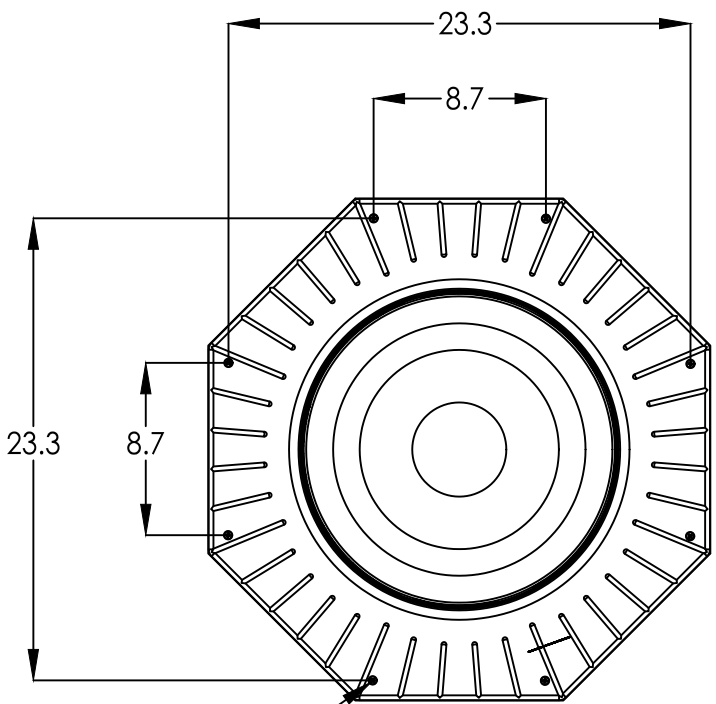
290 DS (14") FLASHING OPTIONS



PITCHED

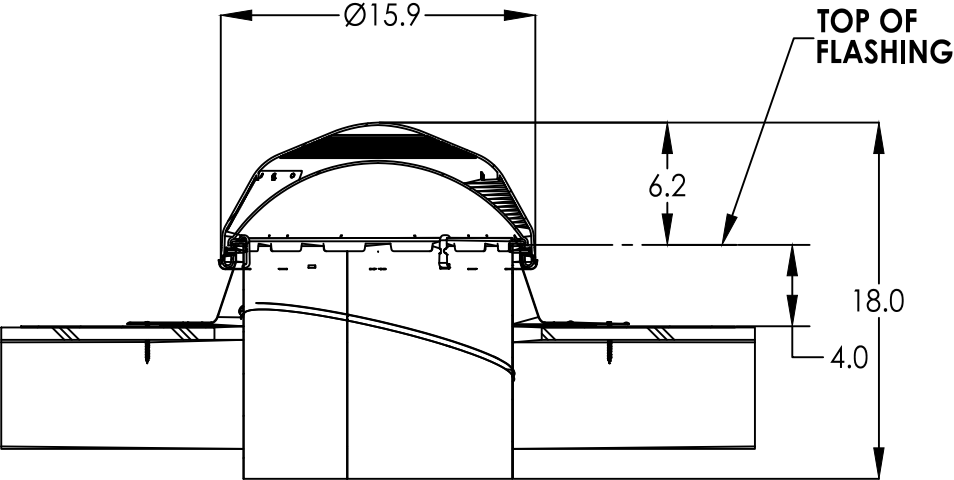


FLAT 6"

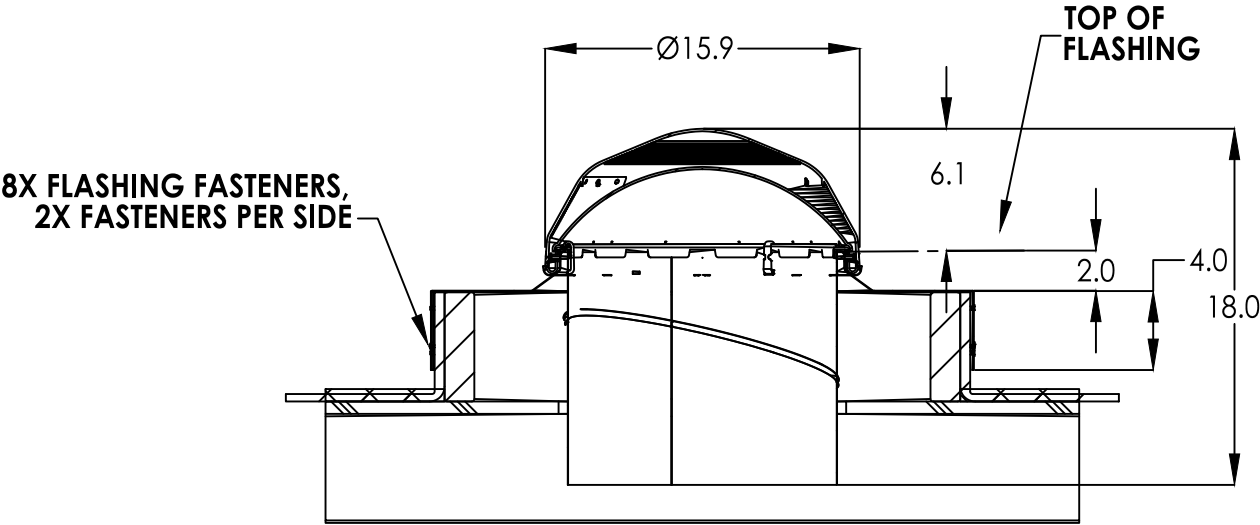


8X FLASHING FASTENERS

FLASHING FASTENER SPACING
FLAT 4", FLAT 6" & PITCHED



FLAT 4"



CURB

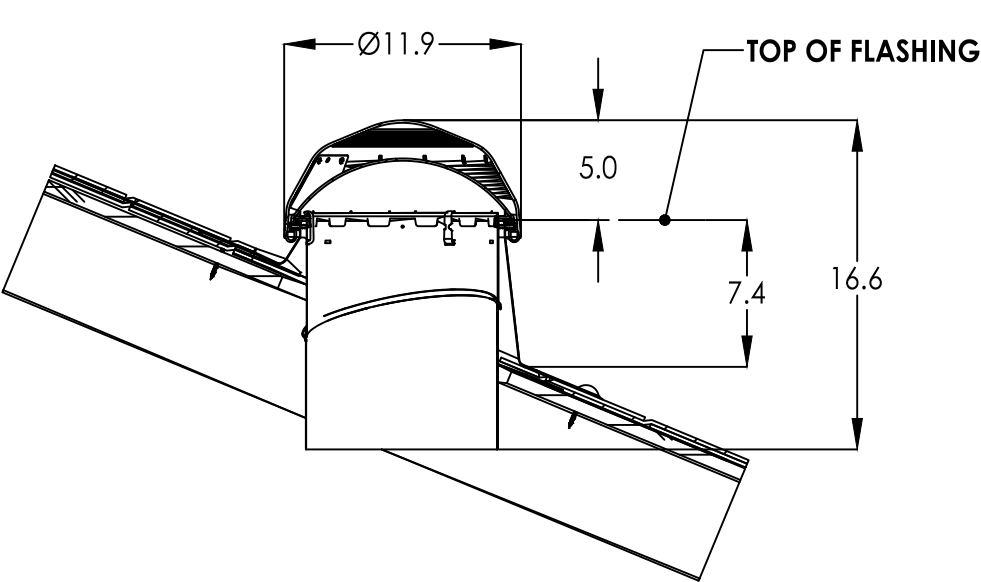
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E	D	UPDATED TO 5TH EDITION (2014) FBC	5/11/15	JBH
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	A	UPDATE TO 2010 FBC	12/15/11	TJH
REV		DESCRIPTION	DATE	BY

SOLATUBE INTERNATIONAL		2210 OAK RIDGE WAY		VISTA, CA 92081-9341	
TITLE:		IMPACT 160 DS (10") & 290 DS (14") TUBULAR DAYLIGHT DEVICE		290 DS (14") FLASHING OPTIONS	
PREPARED BY:		DRAWN BY: SMC		DATE: 10/08/08	
		SCALE: N.T.S.		DRAWING NO: SOLA0004	
		REV: E		SHEET: 3 OF 6	

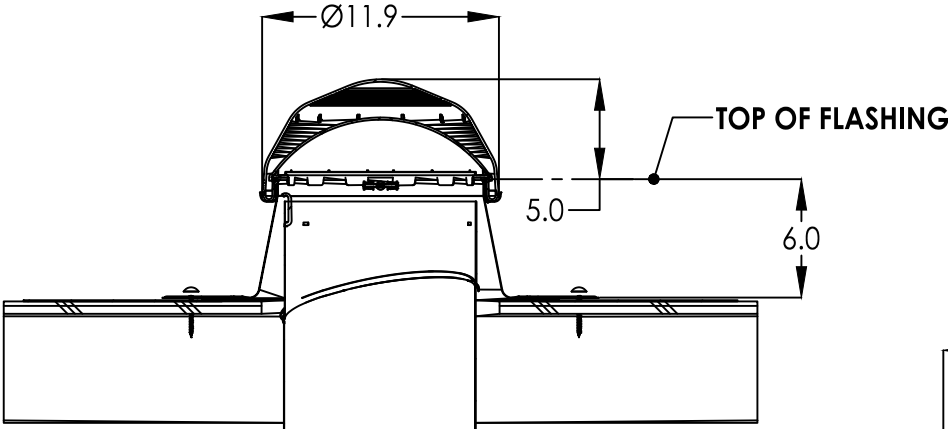


Robert J. Amoruso, P.E.
FL P.E. No. 49752

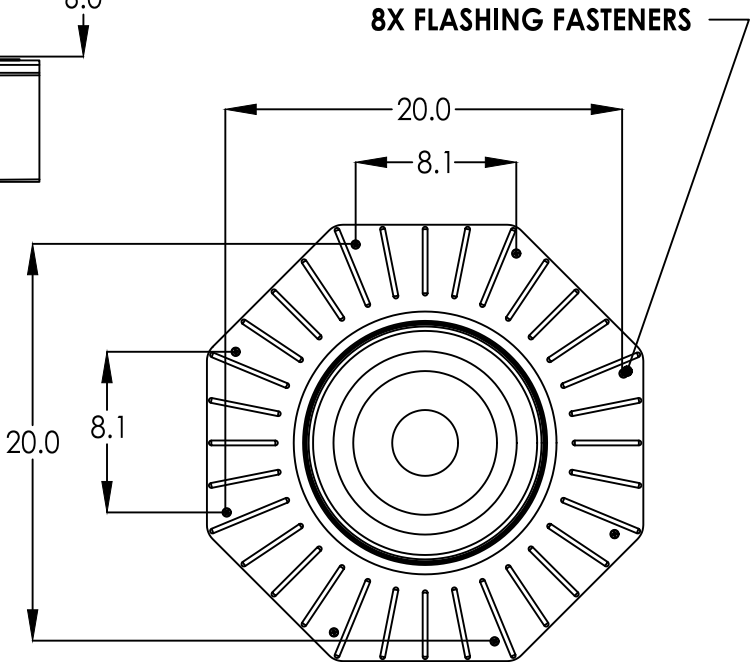
160 DS (10") FLASHING OPTIONS



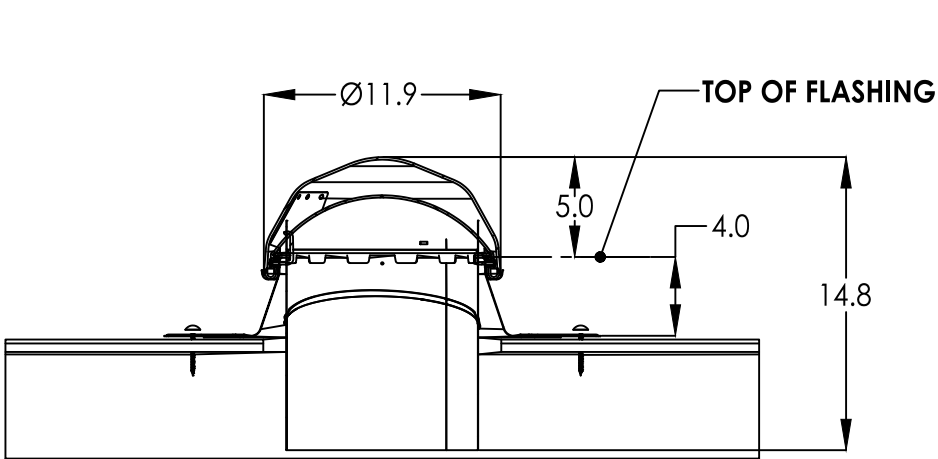
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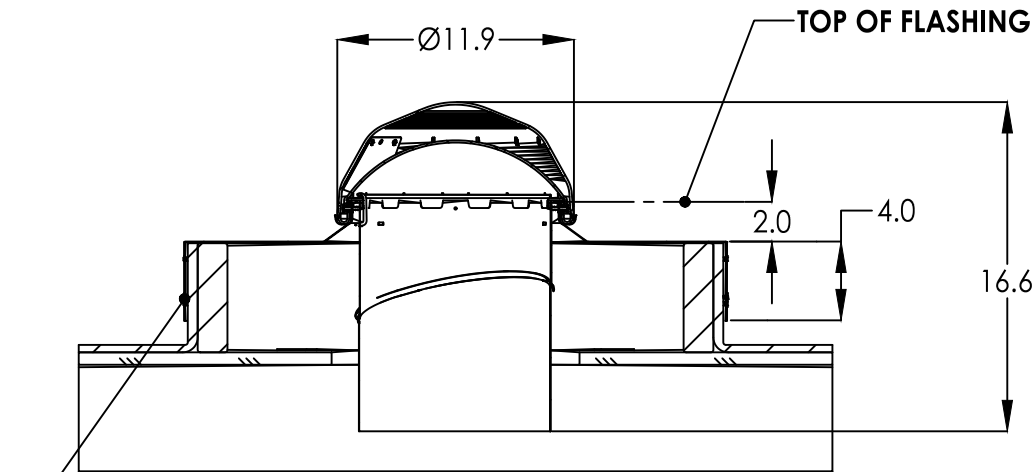
FLAT 6"



FLASHING FASTENER SPACING
FLAT 4", FLAT 6" & PITCHED



FLAT 4"



CURB

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REV		DESCRIPTION	12/15/11	TJH
		DATE		BY

SOLATUBE INTERNATIONAL

2210 OAK RIDGE WAY
VISTA, CA 92081-9341

TITLE:

IMPACT 160 DS (10") & 290 DS (14")
TUBULAR DAYLIGHT DEVICE
160 DS (10") FLASHING OPTIONS

PREPARED BY:

DATE: 10/08/08

DRAWN BY:

SCALE: N.T.S.

DATE: 10/08/08

DRAWING NO: SOLA0004

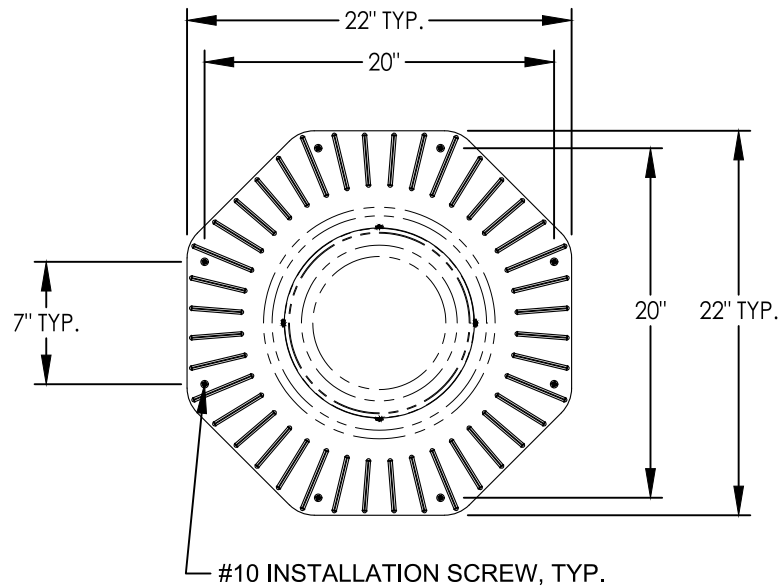
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SHEET: 4 OF 6

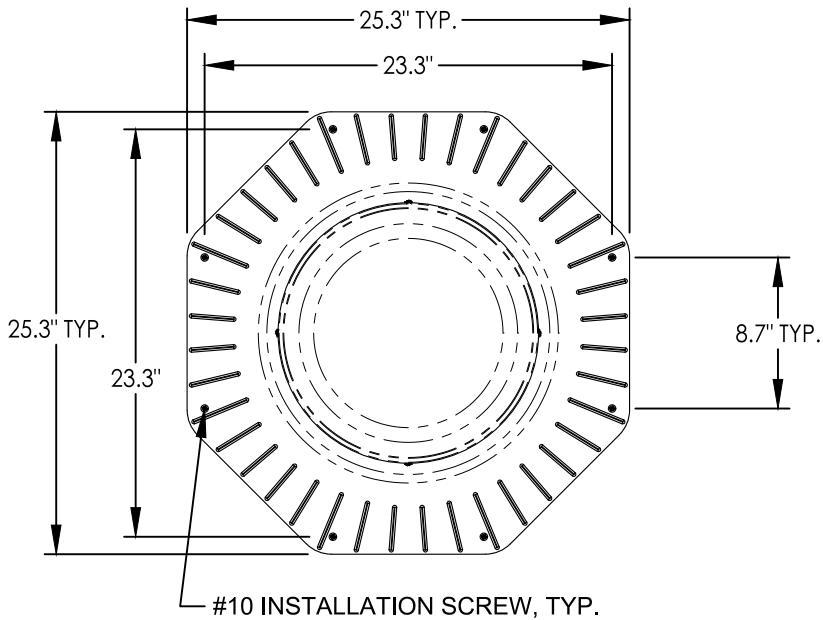
PTC PRODUCT DESIGN GROUP, LLC
PO BOX 520775
LONGWOOD, FLORIDA 32752
FBPE C.A. NO. 25935

Phone: 321.690.1788
Fax: 321.690.1789
Email: info@ptc-corp.com

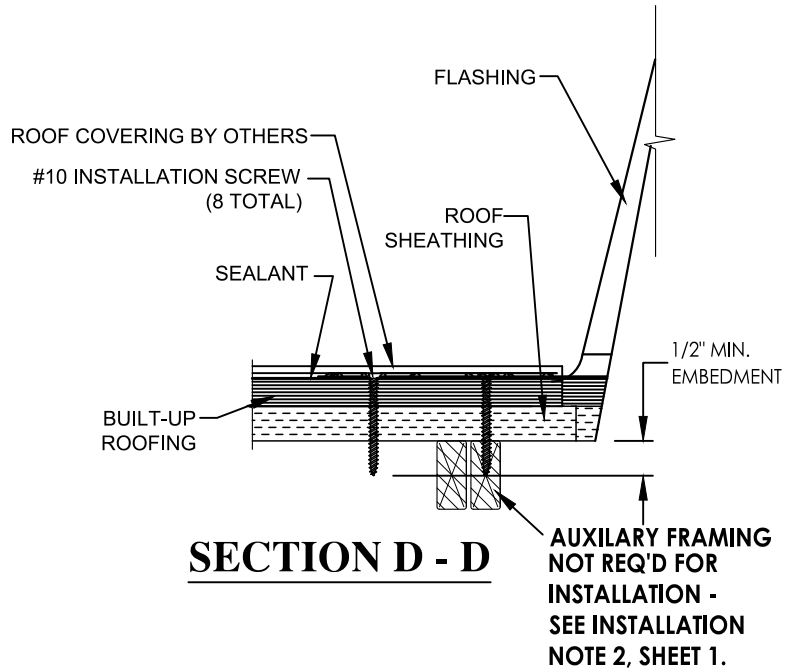
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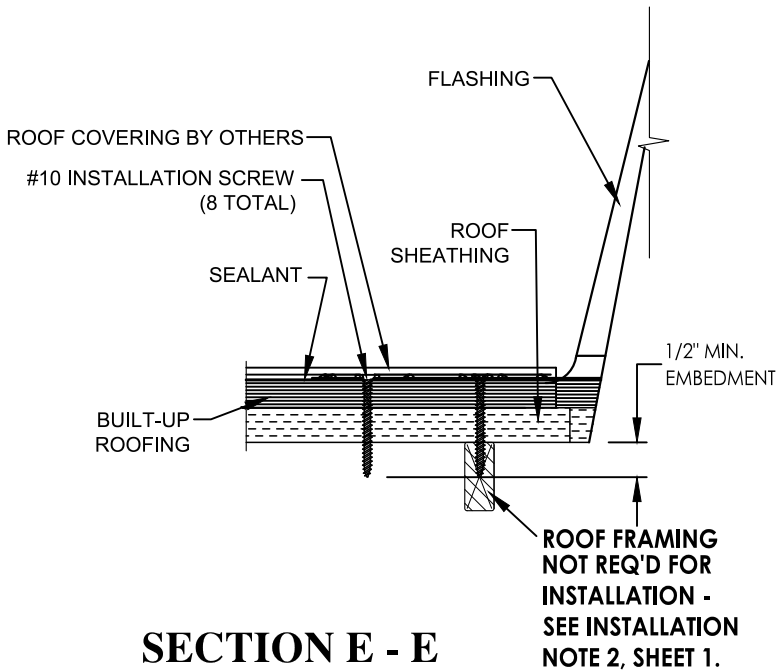
**10" 160 DS
SOLATUBE FLASHING
PLAN**



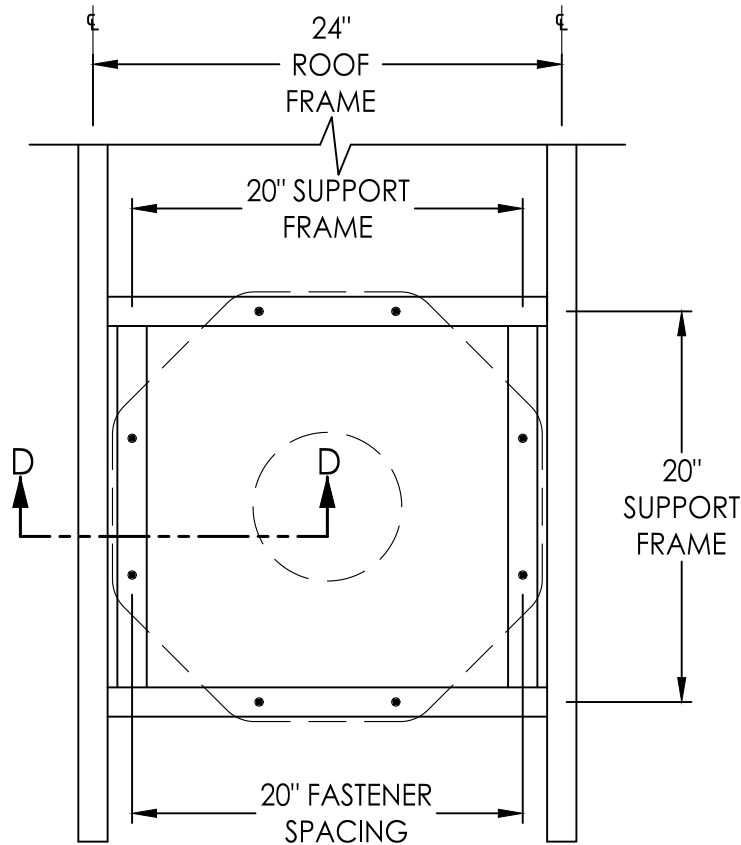
**14" 290 DS
SOLATUBE FLASHING
PLAN**



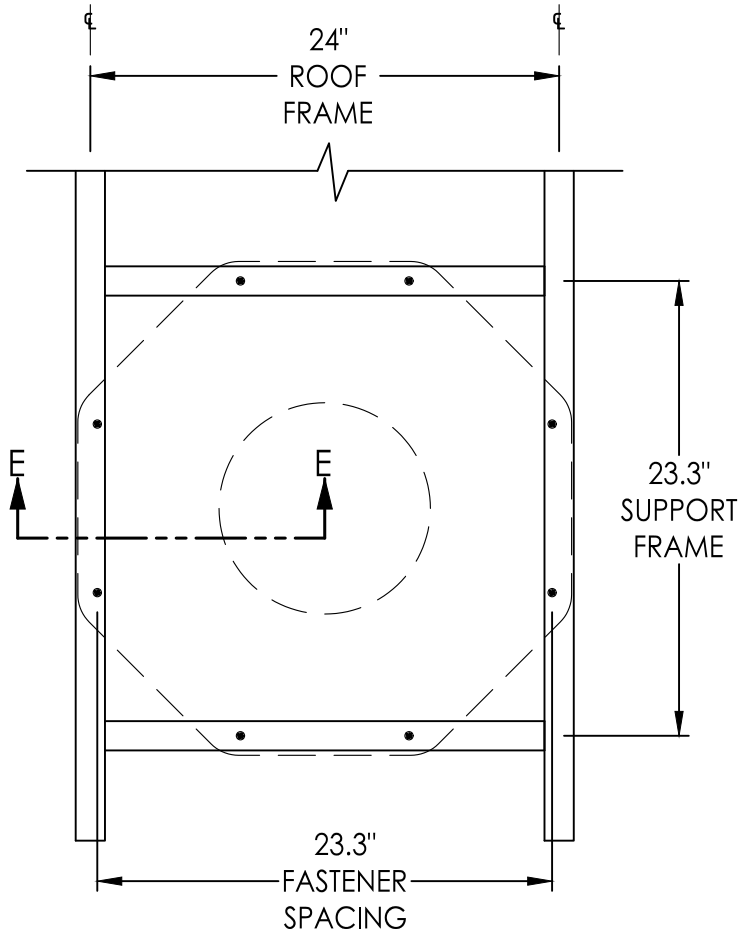
SECTION D - D



SECTION E - E



FRAMING DETAIL 10"



FRAMING DETAIL 14"

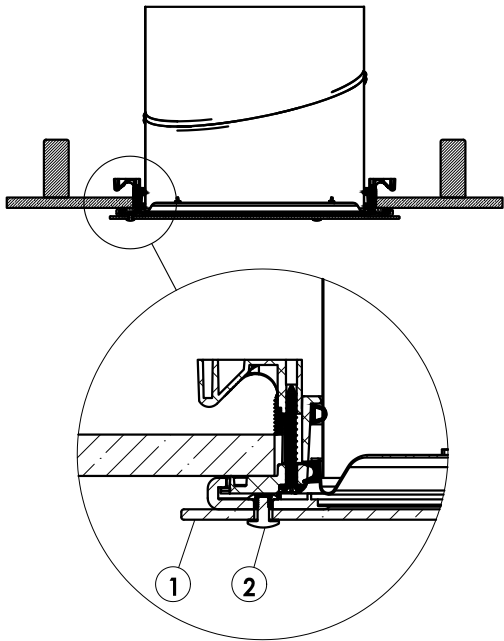
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REVISED ELEVATIONS & .INSTALLATION SECTS.	4/14/14	RJA	
REVISED ANCHORAGE	12/15/11	TJH	
UPDATE TO 2010 FBC			
REV	DESCRIPTION	DATE	BY

SOLATUBE INTERNATIONAL		2210 OAK RIDGE WAY	
		VISTA, CA 92081-9341	
TITLE:		IMPACT 160 DS (10") & 290 DS (14") TUBULAR DAYLIGHT DEVICE INSTALLATION DETAILS AND SECTION	
PREPARED BY:	DRAWN BY: SMC	DATE:	10/08/08
	SCALE: N.T.S.	DRAWING NO:	SOLA0004
	REV: E	SHEET:	5 OF 6
PTC PRODUCT DESIGN GROUP, LLC		Phone: 321.690.1788	
PO BOX 520775		Fax: 321.690.1789	
LONGWOOD, FLORIDA 32752		Email: info@ptc-corp.com	
FBPE C.A. NO. 25935			

Robert J. Amoruso, P.E.
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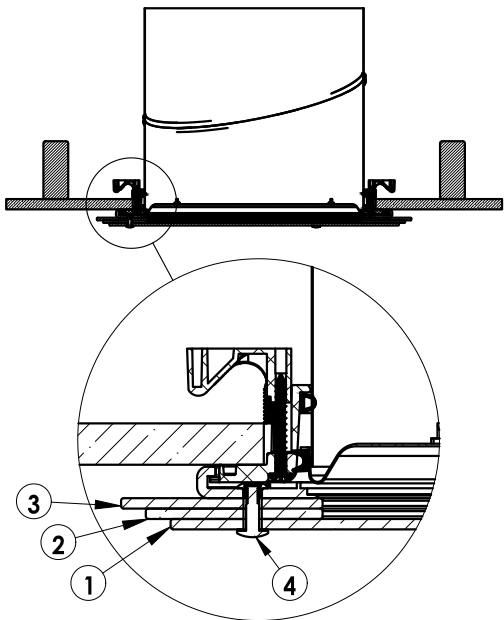
160 DS (10") AND 290 DS (14")
DECORATIVE FIXTURE OPTIONS

'JUST FROST' DECORATIVE
FIXTURE ASSEMBLY



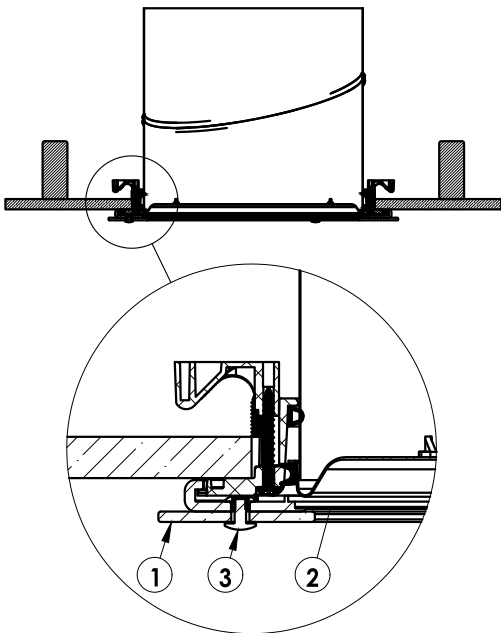
JUST FROST DIFFUSER ASSEMBLY COMPONENTS			
ITEM NO.	QTY.	DESCRIPTION	MATERIAL
1	1	ACRYLIC LENS	ACRYLIC
2	3	LENS FASTENER	STAINLESS STEEL

'TIER DROP' DECORATIVE
FIXTURE ASSEMBLY



TIER DROP DIFFUSER ASSEMBLY COMPONENTS			
ITEM NO.	QTY.	DESCRIPTION	MATERIAL
1	1	ACRYLIC LENS	ACRYLIC
2	1	ACRYLIC TRIM RING	ACRYLIC
3	1	ACRYLIC TRIM RING	ACRYLIC
4	3	LENS FASTENER	STAINLESS STEEL

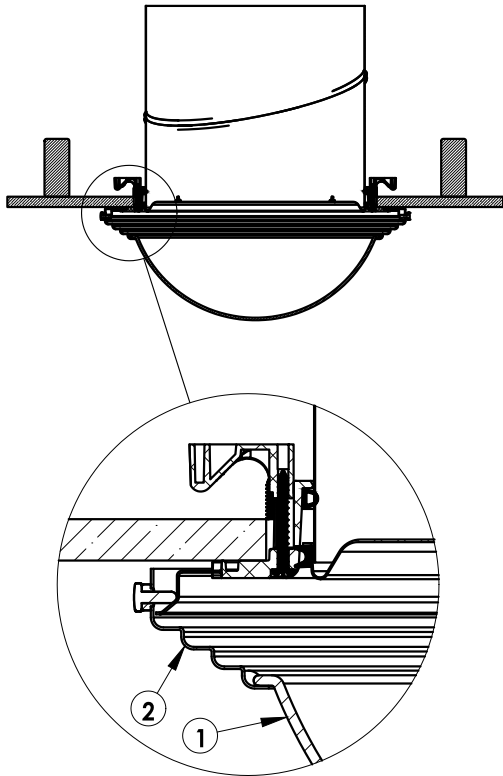
'OPTIVIEW' DECORATIVE
FIXTURE ASSEMBLY



OPTIVIEW DIFFUSER ASSEMBLY COMPONENTS			
ITEM NO.	QTY.	DESCRIPTION	MATERIAL
1	1	ACRYLIC TRIM RING	ACRYLIC
2	1	DIFFUSER PANEL OPTIVIEW	PC
3	3	LENS FASTENER	STAINLESS STEEL

290 DS (14") DECORATIVE
FIXTURE OPTIONS

'AURORA GLO' DECORATIVE
FIXTURE ASSEMBLY



AURORA GLO DIFFUSER ASSEMBLY COMPONENTS			
ITEM NO.	QTY.	DESCRIPTION	MATERIAL
1	1	GLASS LENS	SPUN GLASS
2	4	METAL TRIM RING	STEEL

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SOLATUBE INTERNATIONAL		2210 OAK RIDGE WAY VISTA, CA 92081-9341	
TITLE: IMPACT 160 DS (10") & 290 DS (14") TUBULAR DAYLIGHT DEVICE OPTIONAL DIFFUSER DETAILS		DATE: 10/08/08	
PREPARED BY: SMC		DRAWING NO: SOLA0004	
SCALE: N.T.S.		SHEET: 6 OF 6	
REV: E			
 PTC PRODUCT DESIGN GROUP, LLC PO BOX 520775 LONGWOOD FLORIDA 32752 FBPE C.A. NO. 25935 Phone: 321.690.1788 Fax: 321.690.1789 Email: info@ptc-corp.com			

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