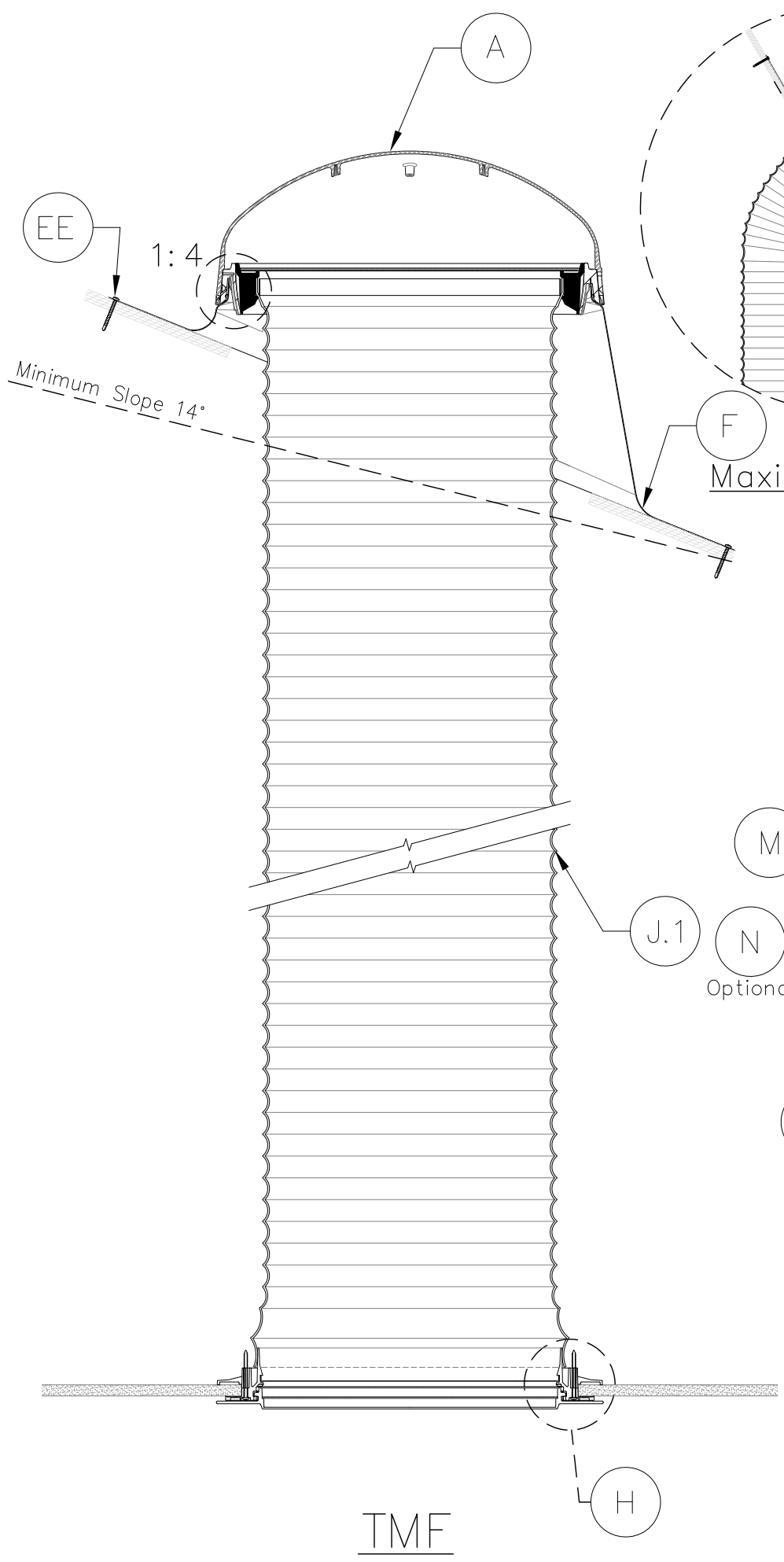


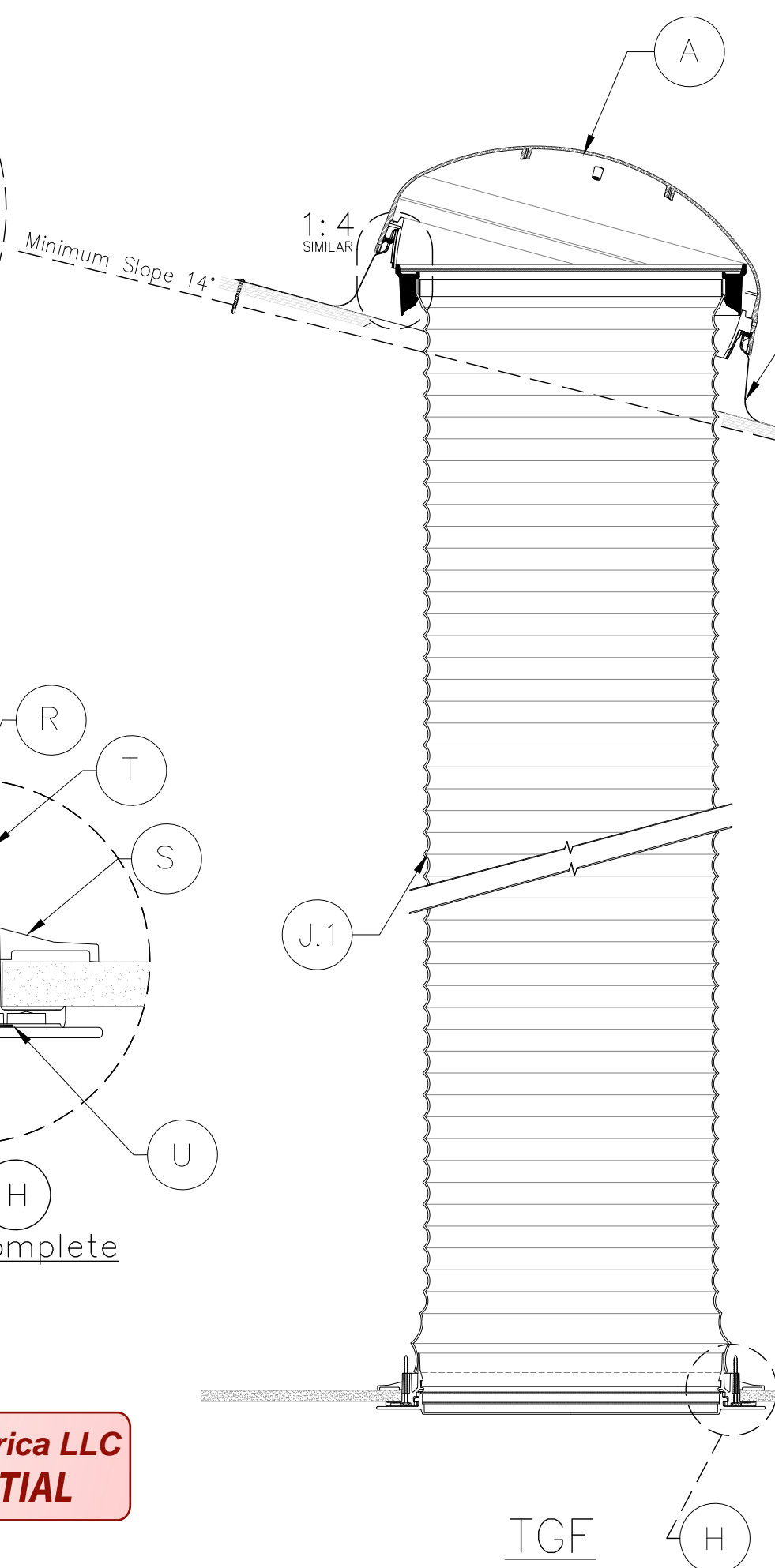
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DIMENSIONS ARE IN MM GENERAL TOLERANCES: ANGULAR: ±1 ONE PLACE DECIMAL: ±0.5	NOTE: VELUX SKY-PRM 1418 Evans Pond Road PO Box 5001 Greenwood, South Carolina 29648-5001
SPECIFICATION	Residential TG_/TM_/TH_ Sun Tunnel(10"&14")
FINISH	Product Certification
SPECIFICATION	Typical Sectional Arrangement(TGR/TMR/THR)
STANDARDS	SIZE COMMODITY NO. REV. SCALE: CKD/DRAWN/DATE MR/DH 06/24/21 D 21.304739.0A0.52 04 1:1 SHEET 1 OF 3



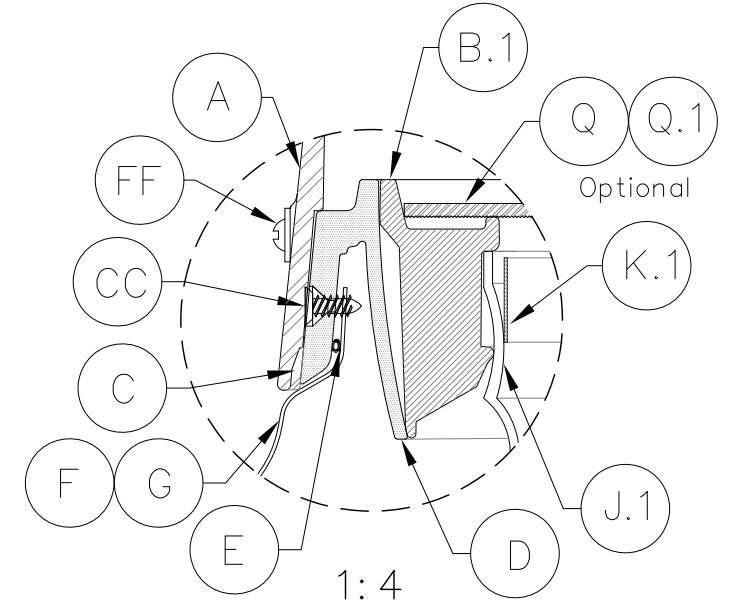
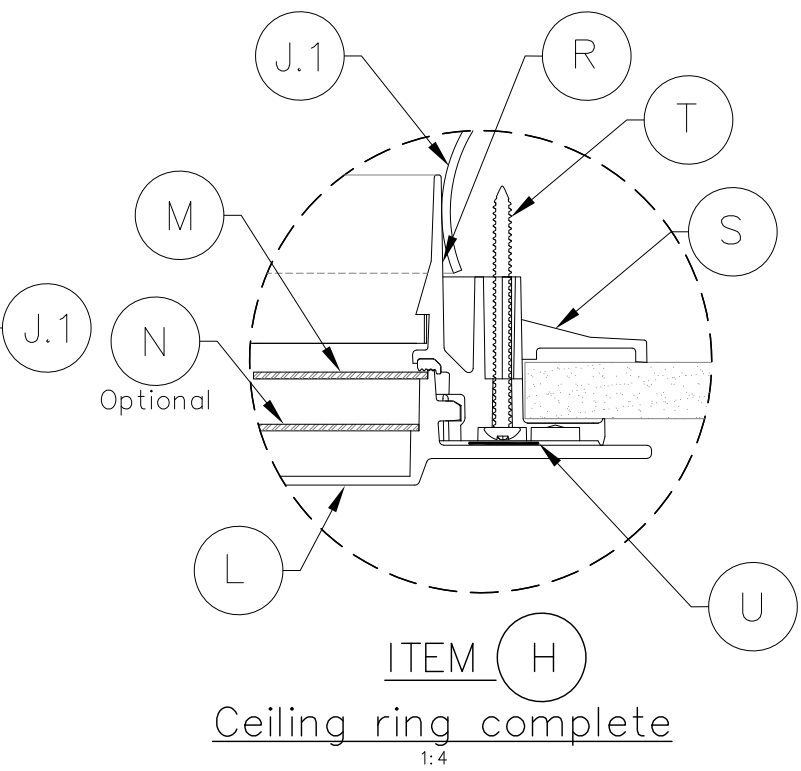
TMF
Maximum Slope
1:0.5

TMF



TGF
Maximum Slope
1:0.5

TGF



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DIMENSIONS ARE IN MM GENERAL TOLERANCES: ANGULAR: ±1 ONE PLACE DECIMAL: ±0.5	NOTE:	SKY-PRM 1418 Evans Pond Road PO Box 5001 Greenwood, South Carolina 29648-5001
MATERIAL:	Residential TG_/TM_ Sun Tunnel (14") Product Certification Typical Arrangement (TGF & TMF)	
SPECIFICATION:	FINISH:	SIZE: COMMODITY NO. 21.304737.0A0.52
SPECIFICATION:	STANDARDS:	REV. 04 SCALE: 1:1 C/D/DRAWN/DATE MR/DH 06/24/21 SHEET 2 OF 3

PART/COMPONENT SCHEDULE									
ITEM	QTY	PART/COMPONENT	COMPONENT NO.	DESCRIPTION	DRAWING NO.			COMMENTS	
					Category	Commodity No.	Rev.		
A	1	Dome	303550xx	Acrylic Dome Acrylic 309038.64	21	309038	--6402	Material Specification	
			303558xx	Polycarbonate Dome Polycarbonate 309039.64	21	303550	000007	Commodity drawing	
B	1	Pivot ring (TGR/TMR/THR)	303717xx	PP Impact polymer Color:Black	21	303717	000005	Commodity drawing	
B.1	1	Pivot ring (TGF/TMF)	303718xx	PP Impact polymer Color:Black	21	303718	000004	Commodity drawing	
C	1	Insect guard (gasket)	303594xx	Intermediate ring, foam gasket (supplied in rolls)	21	303594	000002	Commodity drawing	
					21	304230	0005105	Placement drawing	
D	1	Intermediate ring (TGF-R/TMF-R)	303546xx	Black PP co-polymer +UV	21	303546	000008	Commodity drawing	
E	1	Alignment O-ring (TGF-R/TMF-R)	303168xx	Santoprene 101-64' (black color)	21	303168	000006	Commodity drawing	
F	1	Pitched flashing (TMF/TMR)	304547xx	G-90 Steel Lacq. Steel Sheet with Al-Zn coating Cool grey powder coat	21	302139	0100011	Commodity drawing	
					21	302139	0140014	Commodity drawing	
					21	302139	0003903	Powder coating (Same as Item G)	
F.1	1	Pitched flashing (THR)	303686xx	ASA/PC blend Color: Black	21	303686	0100004	Commodity drawing	
					21	303686	0140004	Commodity drawing	
G	1	Low profile flashing (TGF/TGR)	304594xx	G-90 Steel Lacq. Steel Sheet with Al-Zn coating Cool grey powder coat	21	302141	0100010	Commodity drawing	
					21	302141	0140009	Commodity drawing	
					21	302141	0220011	Commodity drawing	
					21	302139	0003903	Powder coating (Same as Item F)	
I	2	Elbow (TGR/TMR)	304649xx	High Reflectance Material on tubular 0.020" (0.51mm)	21	304649	0100004	10" Elbow	
					21	304649	0140003	14" Elbow	
					21	304649	0105202	10" Elbow Punching	
					21	304649	0145202	14" Elbow Punching	
J	1	Tube (TGR/TMR)	304646xx	High Reflectance Material on tubular 0.016" (.41mm)	21	304646	0005204	Tube Punching (Standard w/ 1-Tube, final assembly can use additional tube lengths)	
J.1	1	Flex tubing (TGF/TMF)	30234308	8' High reflectance flexible tube	21	302343	0003102	Cutting drawing (See Note 6)	
			30234408						
K	12	Flexi loc clip (TGR/TMR/THR)	302329	302 spring tempered stainless steel (Ø1.4mm)	21	302329	0000008	Pull Clip (See Note 3, 5 & 9)	
K.1	1	Spring steel snap ring (TGF/TMF)	308655xx	Tempered spring steel AISI 301 Stainless Steel 0.025"/0.020"	21	304172	0005112	Commodity drawing	
			308656xx						
JJ	1	Pivot ring foam gasket	303519	Polyurethane foam (open-cell) with PSA	21	303519	0000003	Commodity drawing (See Note 6)	
H	1	Ceiling diffuser complete	304836xx	Ceiling diffuser complete with all parts	21	304836	0005103	Part assembly drawing	
L	1	Screw-in Diffuser	303814xx	Acrylic	21	303814	0100002	Commodity drawing	
					21	303814	0140002	Commodity drawing	
M	1	Diffuser-upper	303818xx	Acrylic - frosted	21	303815	0000006	Commodity drawing	
					21	303816	0100002	10" Ceiling Ring Commodity drawing	
R	1	Ceiling ring	303816xx	White - ABS	21	303816	0140002	14" Ceiling Ring Commodity drawing	
					21	303816	0140002	14" Ceiling Ring Commodity drawing	
S	4	Swingout	306107	White - nylon 10% glass	21	306107	0000003	Commodity drawing	
T	4	Screw	306238	#8 Phillips drive screw, 2 1/4" length, pan head, mat'l-clear zinc	--	--	--	Screw fastens swingout and flipper to ceiling ring	
U	1	Cover tape	306242	White tape strip	--	--	--	Cosmetic hide of screw head (Item T)	
*V	1	Zip tie	303824	Flexible tape with integrated gear rack & ratchet	--	--	--	Secures Item J.1 with Item H (See Note 11)	

TGR/TMR/THR Beipack (See Notes 3 & 9)									
ITEM	QTY	PART/COMPONENT	COMPONENT NO.	DESCRIPTION	DRAWING NO.			COMMENTS	
					Category	Commodity No.	Rev.		
N/A	1	Beipack	304840	ST18 T-R Beipacks	21	304840	0005204	Beipack, Assembly drawing	

TGF/TMF Beipack (See Note 4)									
ITEM	QTY	PART/COMPONENT	COMPONENT NO.	DESCRIPTION	DRAWING NO.			COMMENTS	
					Category	Commodity No.	Rev.		
N/A	1	Beipack	304841	ST13-G T-F Beipacks	21	304841	0005205	Beipack, Assembly drawing	

Residential Energy Kit (Optional for models with codes ending in E0 or E1)									
ITEM	QTY	PART/COMPONENT	COMPONENT NO.	DESCRIPTION	Category	Commodity No.	Rev.	EXPOSED	COMMENTS
N	1	Diffuser-middle	303819xx	Acrylic - crackle					
Q	1	Pivot ring lens	303821xx	Acrylic - Prismatic (US)	21	303815	0000006		Commodity drawing
Q.1	1	Pivot ring lens	303820xx	Acrylic - Clear (Canada)					

FASTENER SCHEDULE									
ITEM	QTY	PART/COMPONENT	COMPONENT NO.	DESCRIPTION	DRAWING NO.			EXPOSED	COMMENTS
					Category	Commodity No.	Rev.		
*AA	N/A	Semi-Tubular Rivet	306123	Steel, Clear Zinc Finish	21	306123	0000003		Commodity drawing (Same as Item LL)
CC	8	Screw	306096	#10x1/2" Phillips FH, Self-tapping	21	306096	0000003		Flat 82° Undercut head
DD	4	Staple	306012	10mm height x 8.8mm length	21	306015	0000018		SST flat staple
EE	14 20(THR)	Screw	306232	#8x1 modified truss T/S steel/Zinc	21	306232	0000003		Commodity drawing (See Note 3, 4 & 9)
FF	8	Screw	306119	Screw, Truss HD, #8 x 3/4 SST	21	306119	0000006		Commodity drawing (See Note 3, 4 & 9)
*HH	1	Joint tape (TGR/TMR)	30469336	Aluminum tape, 36 ft.	21	309066	--6402		For sealing all joints (See Note 3 & 9)
*II	1	Joint tape (TGF/TMF)	30469306	Aluminum tape, 6 ft.	21	309066	--6402		For sealing all joints (See Note 4)
*LL	4	Rivet (TGF/TMF)	306123	.097" rivet for Spring steel snap ring	21	306123	0000003		Commodity drawing (Same as Item AA)

V = Visible
NV = Non-Visible

GENERAL NOTES:

- xx = 10 or 14 in the Component Numbers, corresponding to product size codes 010 and 014.
- * Designates a PART/COMPONENT not shown on the Typical Arrangement cross-sections.
- Items (K), (EE), (FF), (HH) & (JJ) are packaged as components within the TGR/TMR Beipack
- Items (EE), (FF) & (II) are packaged as components within the TGF/TMF Beipack
- Item (K) has a maximum of (12) Pull clips in the cross-section configurations shown - longer tube installations will require more clips and tape.
- Items (J.1) & (J.2) are pre-assembled for TGF/TMF.
- Reference Drawings include :
21.TGR---.0A0.63.16 for "ST18 TGR 010/014, LOP" (PROPRIETARY)
21.TMR---.0A0.63.14 for "ST18 TMR 010/014, LOP" (PROPRIETARY)
21.TGF---.0A0.63.11 for "ST18 TGF 14, LOP" (PROPRIETARY)
21.TMF---.0A0.63.13 for "ST18 TMF 14, LOP" (PROPRIETARY)
21.TGF022.0A0.63.02 for "TGF 022, LOP" (PROPRIETARY)
21.THR---.0A0.63.05 for "THR 010/014, LOP" (PROPRIETARY)
21.304417.000.63.30 for "Fastner bags, List of parts" (PROPRIETARY)
- A copy of these drawings plus any other supplemental documentation regarding these skylight models will be maintained at the PRM - Product Compliance/Certification Submittals folder.
- Items (K), (FF), (HH) & (EE) are packaged as components within the THR Beipack
- Item (U) is packaged as a component within all Beipacks.
- Item (V) is packaged as a component within the TGF/TMF Beipack.

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DIMENSIONS ARE IN MM GENERAL TOLERANCES: ANGULAR: ±1 ONE PLACE DECIMAL : ±0.5	NOTE:	VELUX SKY-PRM 1418 Evans Pond Road PO Box 5001 Greenwood, South Carolina 29648-5001
REVISIONS		Residential TG_/TM_/THR Sun Tunnel Product Certification Product List of Parts
NO.	DESCRIPTION	
1	Update joint tape description	
2	Update for new ceiling ring system	
3	Update for 2018 re-certification	
STANDARDS		SIZE: COMMODITY NO. REV. SCALE: C/D/DRAWN/DATE MR/DH 1/13/23 D 21.304740.0A0.63 04 1:1 SHEET 3 OF 3

VELUX Greenwood Inc. Drawing Office - 450 Old Brickyard Road - Greenwood - South Carolina	Drawn up by: BJB	Date: 12/11/2017	Page: 1/3		
	<u>MATERIAL SPECIFICATION</u>		PRODUCT INSTRUCTION NO.		
Plastic material for injection molded tubular skylights components (domes and diffusers).	Classification: A	Cat	Commodity No.	Opr.	Ed.
	Copy to:	2 1	3 0 9 0 3 8	6 4	0 2

1. General description

1.1 Material:

An ACRYLIC with good optical clarity, brilliance and dimensional stability, such as Arkema Plexiglas HFI7 or equivalent.

1.2 Application:

The material is used to allow light to travel through the tubular skylight and prevent air and debris from entering the interior space of the room.

1.3 Applicable codes:

Exposed interior ceiling component must meet Class C requirements of ASTM E-84.

2. Properties

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2.1 Material properties:

No.	Testing	VELUX requirements	Testing acc. to
1	Ultimate Tensile Strength	> 68 MPa	ASTM D-638
2	Specific Gravity	1.17 ±.2	ASTM D-792
3	Flexural Modulus	> 3.0 GPa	ASTM D-790
4	Notched Izod Impact 23°C	> 30 J/m (.6 ft-lb/in)	ASTM D-256
5	Hardness Rockwell M	65 ± 5	ASTM D-785
6	Refractive Index N _D @ 73°C	1.49 ± 0.05	ASTM D-542
7	Light Transmission	91 ± 2 %	ATSM D-1003
8	Water Absorption after 24 h submersion	Max 0.4%	ASTM D-570
9*	Standard Rate of Burning	CC1 or CC2	ASTM D635
10*	Self-Ignition Temperature	Min 343 °C	ASTM D1929
11*	Smoke Density rating or Smoke Developed Index	Max 75 rating or Max 450 index	ASTM D2843 or ASTM E-84

*= Required for ceiling mounted components.

VELUX Greenwood Inc. Drawing Office - 450 Old Brickyard Road - Greenwood - South Carolina	Drawn up by:	Date:	Page:		
	BJB	12/11/2017	2/3		
<u>MATERIAL SPECIFICATION</u> Plastic material for injection molded tubular skylights components (domes and diffusers).	Classification:	PRODUCT INSTRUCTION NO.			
	A	Cat	Commodity No.	Opr.	Ed.
Copy to:	2 1	3 0 9 0 3 8	6 4	0 2	

2.2 Thermal Properties

	Properties	VELUX requirements	Testing acc. to
1	Softening temperature (Vicat B/50)	> 80 °C	ASTM D1525
2	Stability of shape method A (1.8 MPa)	> 80 °C	ASTM D648

2.3 Liquid resistance

No attack of the following after 1 hour of influence

- 3% aqua ammonia
- 3% acid of vinegar
- 3% chlorine water
- 3% liquid soft soap
- 100% sulphonic soap
- 98% alcohol, benzene, turpentine

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3. Technical Material Approval

The supplier must along with a sample forward documentation for the properties mentioned under point 2. Information for the supplier: The tests mentioned under point 3.1 and 3.2 are carried out by and at VELUX in accordance with the internal VELUX procedure.

3.1 Process related requirements:

It must be possible to use the product in the customer's production plant without any remarks from the customer.

3.2 Product related requirements:

No.	Testing	VELUX requirements	Testing acc. to
1	UV-resistance	Max. 50% reduction of tensile strength	1000h QUV-A. Samples according to DS/EN ISO 527-2
2	UV-resistance	Change of Color max $\Delta E^*_{ab} 7$	168h QUV-A

VELUX Greenwood Inc. Drawing Office - 450 Old Brickyard Road - Greenwood - South Carolina	Drawn up by:	Date:	Page:		
	BJB	12/11/2017	3/3		
<u>MATERIAL SPECIFICATION</u> Plastic material for injection molded tubular skylights components (domes and diffusers).	Classification:	PRODUCT INSTRUCTION NO.			
	A	Cat	Commodity No.	Opr.	Ed.
	Copy to:	2 1	3 0 9 0 3 8	6 4	0 2

4. General Requirements

4.1 Accept from Supplier:

A supplier cannot deliver to the customer before the requirements in the material specification are certified in writing as accepted.

4.2 Change of Product:

The supplier informs the customer in writing about changes in the composition of the material, including the effect of such changes.

4.3 Documentation:

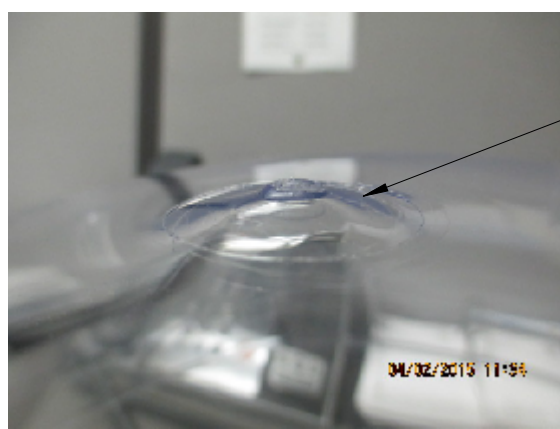
If required from the purchase department, the supplier shall be able to forward documentation for the properties of point 2 in a certificate or otherwise.

5. Delivery

Delivery per agreement with the purchasing department.

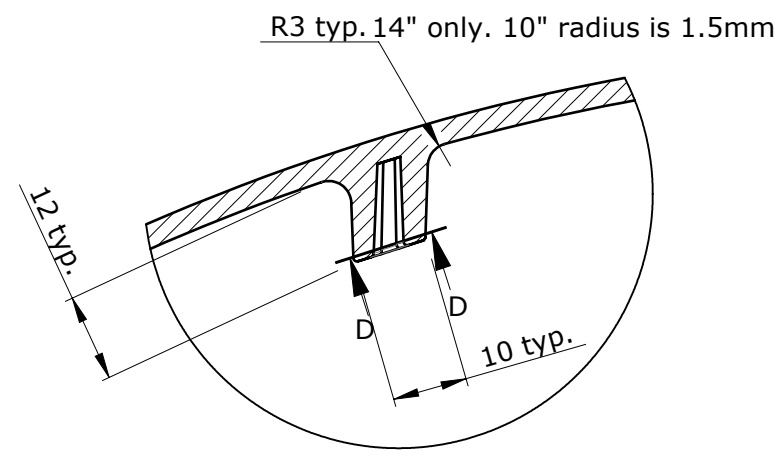
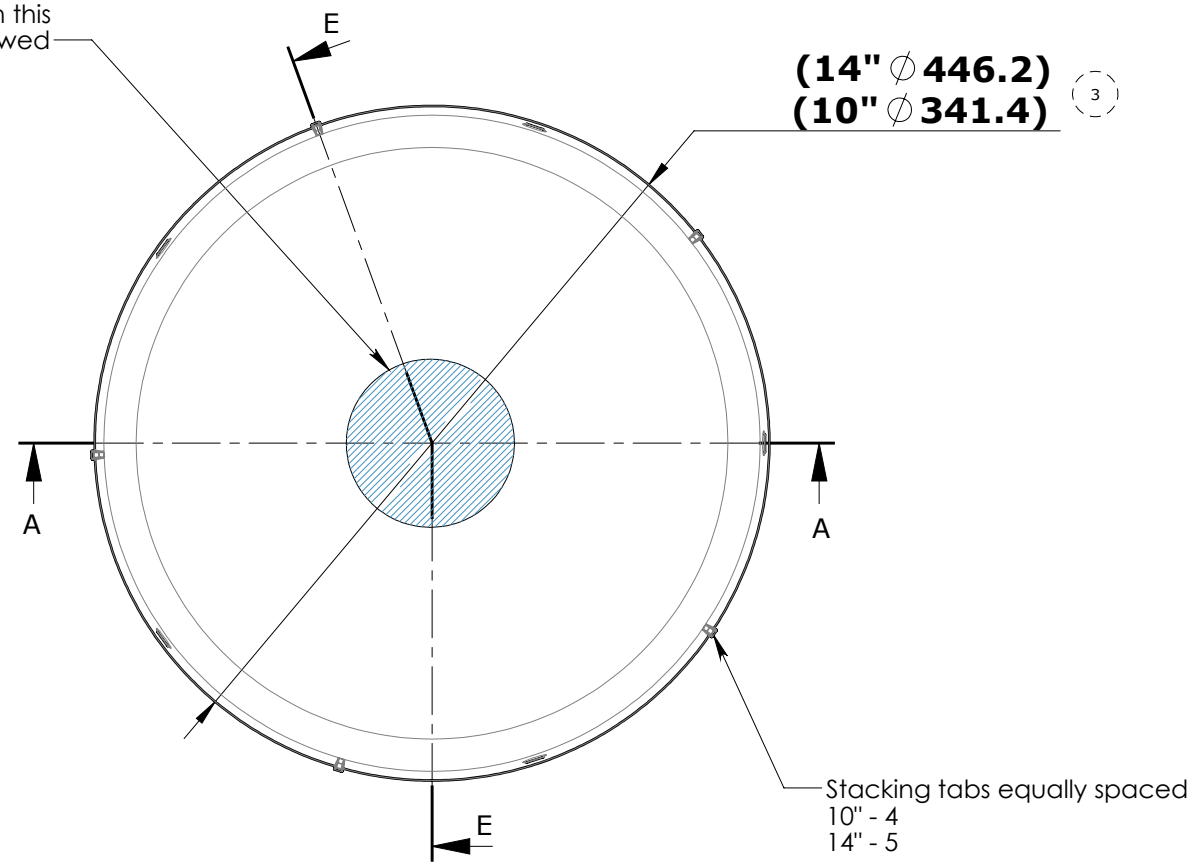
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Edition	Description of change	Date
02	Added qty. of stacking tabs	5/20/13
03	Added chamfer to lower ID	8/27/13
04	Added pictures for screw holes	1/28/14
05	Added radius dimension	4/14/14
06	Added material spec.	5/28/15
07	Removed 22in dome from drawing	7/28/15

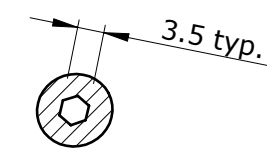


Unacceptable mold mark

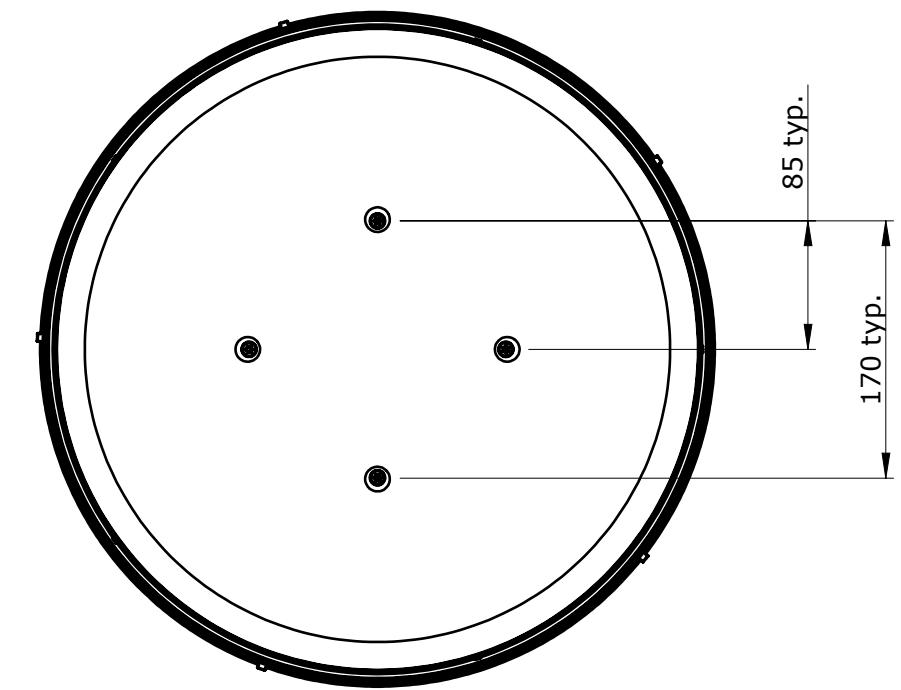
Mold marks in this area are allowed



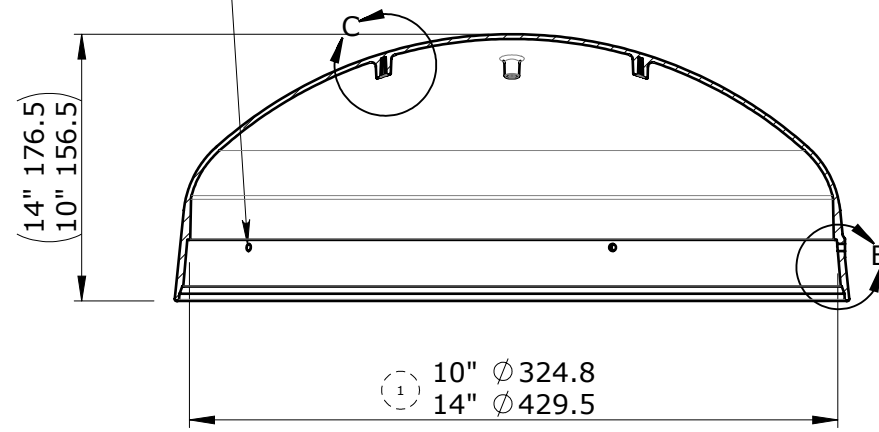
C 1:1



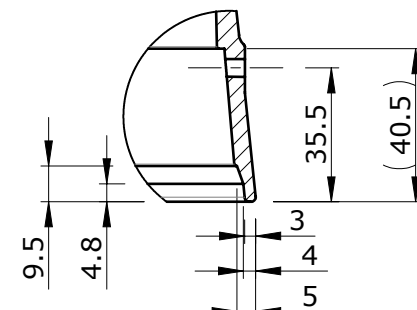
D-D 1:1



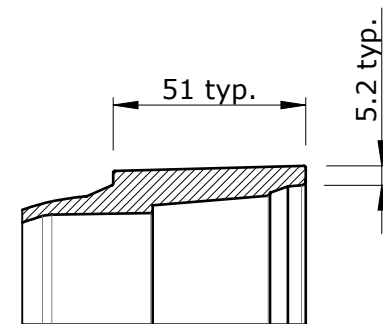
(2) \varnothing 4.5 equally spaced holes that line up to intermediate ring



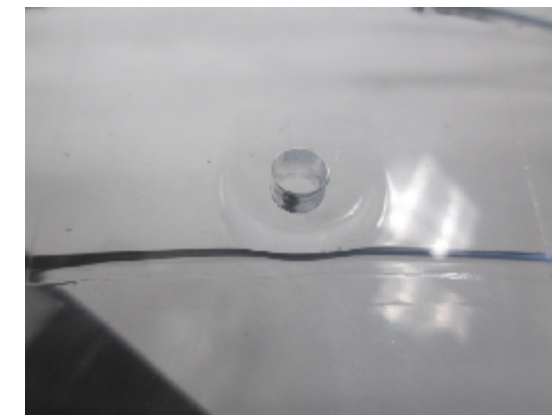
A-A



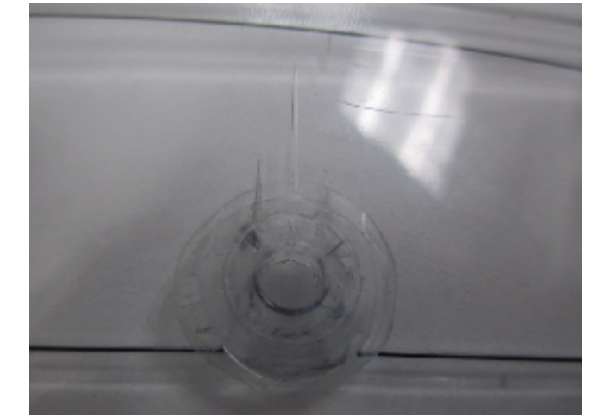
B 1:2



E-E 1:2



Acceptable screw hole



Unacceptable screw hole

Part number	Size	Material
30355010	10"	Acrylic
30355810	10"	Polycarbonate
30355014	14"	Acrylic
30355814	14"	Polycarbonate

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VELUX SKY-PRS
450 Old Brickyard Rd., Greenwood, South Carolina 29648

Approvals
TMA-A

Checked by/drawn by/date
/REC/28.07.2015

Scale: 1:5
Unspec. meas. mm
General tolerance ± 0.5
Size C

Specifications - generally			
Material for tubular skylights domes	309038.64		
Material/high impact skylight dome	309039.64		
TGR/F, TMR/F, TCR, T-C, TTK			
Dome			
Commodity drawing			
Product instructions no.			
Category	21	303550	000
Operation	00	00	07
Edition			

VELUX Greenwood Inc.

Drawing Office - 450 Old Brickyard Road - Greenwood - South Carolina

Drawn up by:

JRM

Date:

8/15/03

Page:

1/3

MATERIAL SPECIFICATION**Plastic material for high Impact tubular skylights dome**

Classification:

A

Copy to:

PRODUCT INSTRUCTION NO.

Cat

Commodity No.

Opr.

Ed.

2 1

3 0 9 0 3 9

6 4

0 1

1. General description**1.1 Material:**

A Polycarbonate with good optical clarity, brilliance, dimensional stability and Ultraviolet light inhibitors.

1.2 Application:

The material is used to allow light to travel through the opening of the tubular skylight and prevent water and debris from traveling into the opening.

**VELUX America LLC
CONFIDENTIAL****2. Properties****2.1 Material properties:**

No.	Testing	VELUX requirements	Testing acc. to
1	Ultimate Tensile Strength	> 65 MPa	ASTM D-638
2	Specific Gravity	1.19 ±.2	ASTM D-792
3	Flexural Modulus	> 2.4 GPa	ASTM D-790
4	Notched Izod Impact (23°C)	> 900 J/m	ASTM D-256
5	Hardness Rockwell R	118 ± 10	ASTM D-785
6	Refractive Index N _D @ 73°C	1.58 ± 0.05	ASTM D-542
7	Light Transmission	89 ± 1 %	ATSM D-1003
8	Coefficient of expansion -40°C to 80°C	6.8x10 ⁻⁵ mm/mm/°C	ASTM D-696
9	Water Absorption after 24 h submersion	Max 0.2%	ASTM D-570

2.2 Thermal Properties

	Properties	VELUX requirements	Testing acc. to
1	Softening temperature (Vicat B/50)	Min. 145°C	ASTM D1525
2	Stability of shape method A (1.8 MPa)	Min. 130 °C	ASTM D648

VELUX Greenwood Inc. Drawing Office - 450 Old Brickyard Road - Greenwood - South Carolina	Drawn up by:	Date:	Page:		
	JRM	8/15/03	2/3		
<u>MATERIAL SPECIFICATION</u> Plastic material for high Impact tubular skylights dome	Classification :	PRODUCT INSTRUCTION NO.			
	A	Cat	Commodity No.	Opr.	Ed.
	Copy to:	2 1	3 0 9 0 3 9	6 4	0 1

2.5 Liquid resistance

No attack of the following after 1 hour of influence

- 3% aqua ammonia
- 3% acid of vinegar
- 3% chlorine water
- 3% liquid soft soap
- 100% sulphonic soap
- 98% alcohol, benzene, turpentine

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3. Technical Material Approval

The supplier must along with a sample forward documentation for the properties mentioned under point 2. Information for the supplier: The tests mentioned under point 3.1 and 3.2 are carried out by and at VELUX in accordance with the internal VELUX procedure.

3.1 Process related requirements:

It must be possible to use the product in the customer's production plant without any remarks from the customer.

3.2 Product related requirements:

No.	Testing	VELUX requirements	Testing acc. to
1	UV-resistance (Pending)	Max. 50% reduction of tensile strength	1000h QUV-A. Samples according to DS/EN ISO 527-2
2	Salt fog test (Pending)	<u>700h Neutral</u> Max. 50% reduction of tensile strength	ASTM B 117
3	UV-resistance (Pending)	Change of Color max E* _{ab} 7	168h QUV-A

4. General Requirements

4.1 Accept from Supplier:

A supplier cannot deliver to the customer before the requirements in the material specification are certified in writing as accepted.

4.2 Change of Product:

The supplier informs the customer in writing about changes in the composition of the material, including the effect of such changes.

<p align="center">VELUX Greenwood Inc. Drawing Office - 450 Old Brickyard Road - Greenwood - South Carolina</p>	Drawn up by: JRM	Date: 8/15/03	Page: 3/3		
<p><u>MATERIAL SPECIFICATION</u> Plastic material for high Impact tubular skylights dome</p>	Classification: A	PRODUCT INSTRUCTION NO.			
	Copy to:	Cat	Commodity No.	Opr.	Ed.
	2 1	3 0 9 0 3 9	6 4	0 1	

4.3 Documentation:

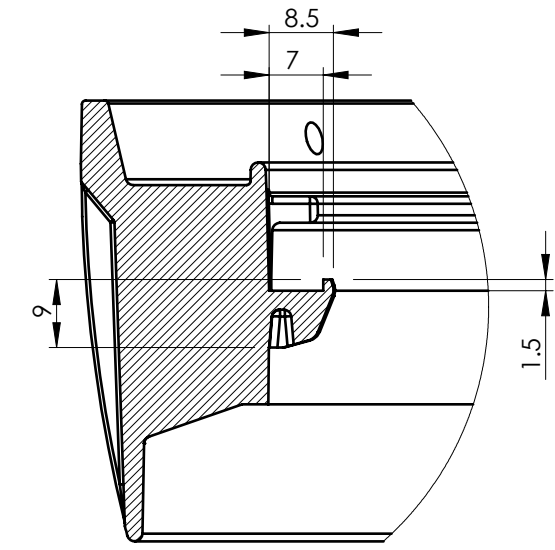
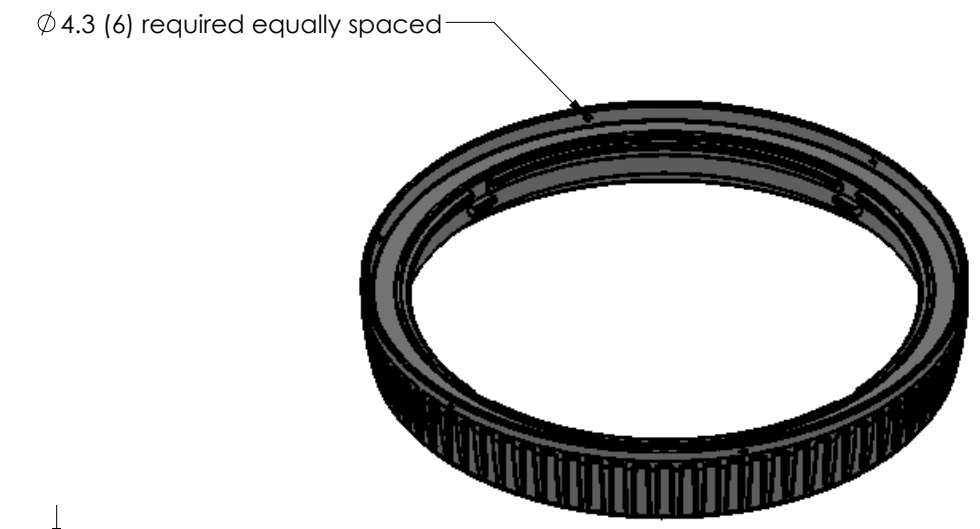
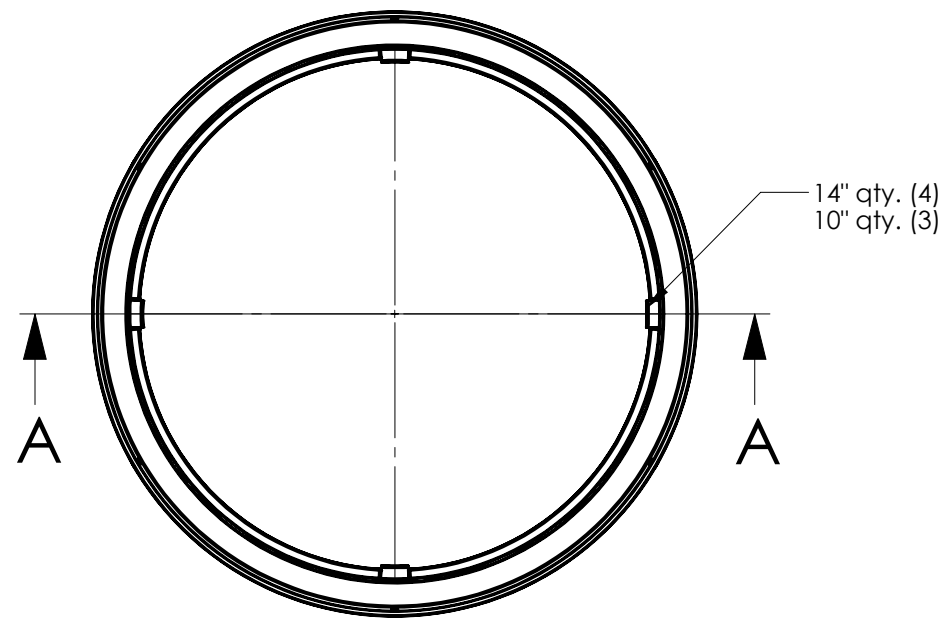
If required from the purchase department, the supplier shall be able to forward documentation for the properties of point 2., in a certificate or otherwise.

5. Delivery

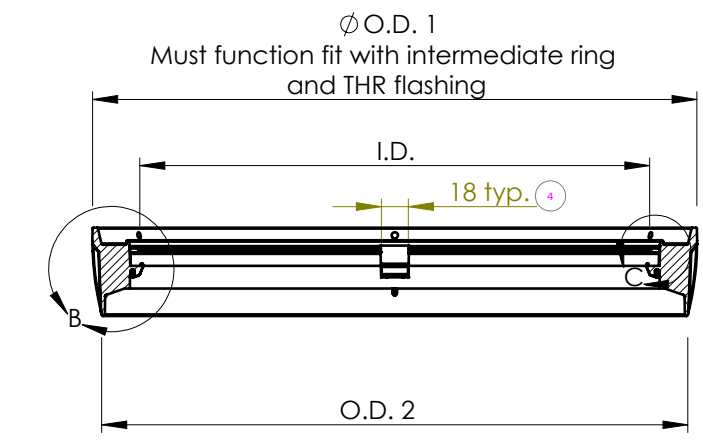
Delivery according to agreement with the purchasing department.

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Edition	drawn by/checked by/date	Description of change
03	7/27/16	Added THR part numbers
04	8/22/16	Added 22" pivot ring/ and OD1
05	MM/CBB/6/24/19	Updated inner ring on 10"&14"

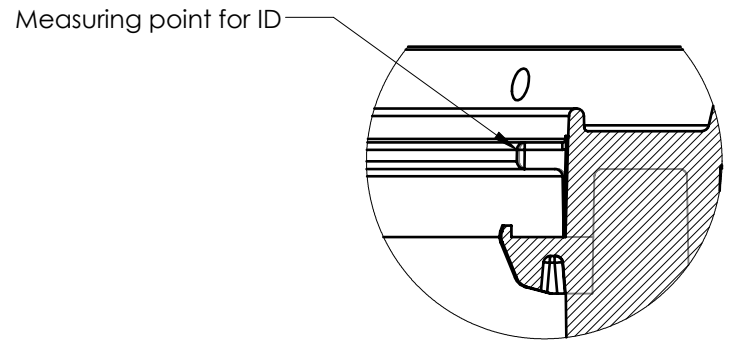


DETAIL B
SCALE 1 : 1



SECTION A-A

Dia.	I.D. (1)	O.D. 1 (2)	O.D. 2 (3)	Part number	THR part number
10"	Ø 234 ± 1	(Ø 296)	Ø 279 ± 1	30371710	30371710-THR
14"	Ø 337 ± 1	(Ø 400)	Ø 387.5 ± 1	30371714	30371714-THR
22"	Ø 535 ± 1	(Ø 601)	Ø 591 ± 1	30371722	-



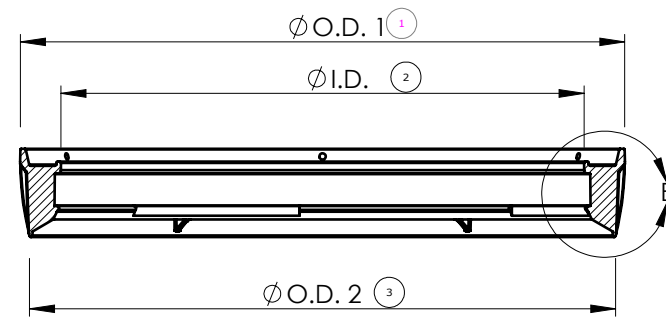
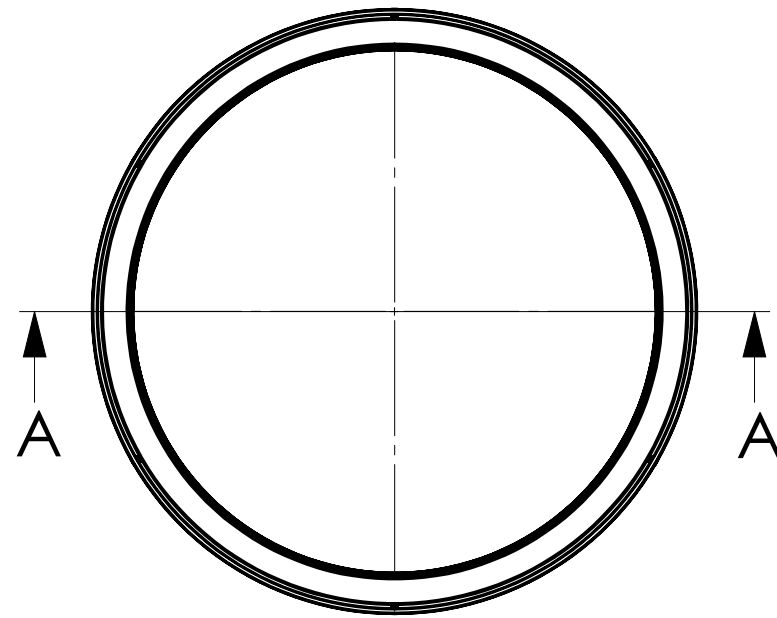
DETAIL C
SCALE 1 : 1

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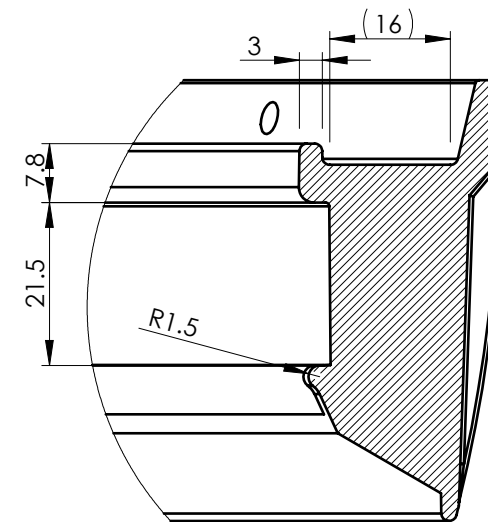
Note: Surface finish to be SPI-C3

Material				Specifications - generally			
PP impact copolymer Color: Black				Plastic material 309051.64			
VELUX SKY-PRS 450 Old Brickyard Rd., Greenwood, South Carolina 29648				T-R			
Approvals TMA-A				10", 14", 22" Rigid pivot ring Commodity drawing			
Checked by/drawn by/date /REC/22.08.2016				Product instructions no.			
Scale 1:5	Unspec. meas. mm	General tolerance ±0.5	Size B	Category 21	303717	000	00 05

Edition	Description of change	Date
02	Added 22" pivot ring	8/22/16
03	Corrected 22" ID from $\phi 535$	4/6/17
04	Corrected 14" ID from $\phi 333$	10/13/17

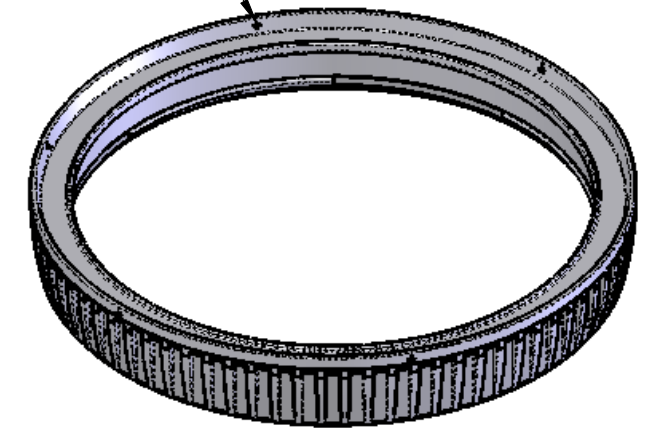


SECTION A-A



DETAIL B
SCALE 1 : 1

$\phi 4.3$ (6) required equally spaced

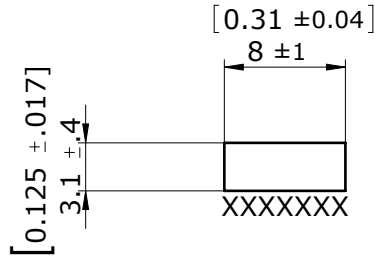


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Dia.	I.D.	O.D. 1	O.D. 2	Part number
14"	$\phi 343 \pm 1$	$\phi 400 \pm 1$	$\phi 387.5 \pm 1$	30371814
22"	$\phi 545 \pm 1$	$\phi 601 \pm 1$	$\phi 591 \pm 1$	30371822

Material				Specifications - generally					
PP Impact copolymer Color: Black				Plastic material 309051.64					
VELUX SKY-PRS 450 Old Brickyard Rd., Greenwood, South Carolina 29648				T-F 14", 22" Flex pivot ring					
Approvals TMA-A				Product instructions no.					
Checked by/drawn by/date /CBB/13.10.2017				Category	21	303718	000	00	04
Scale	Unspec. meas.	General tolerance	Size						
1:5	mm	± 0.5	B						

Edition	Description of change	Date
02	Added material description	4/28/15



***NOTE:**

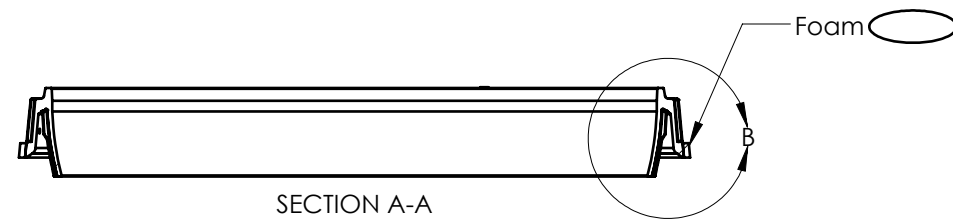
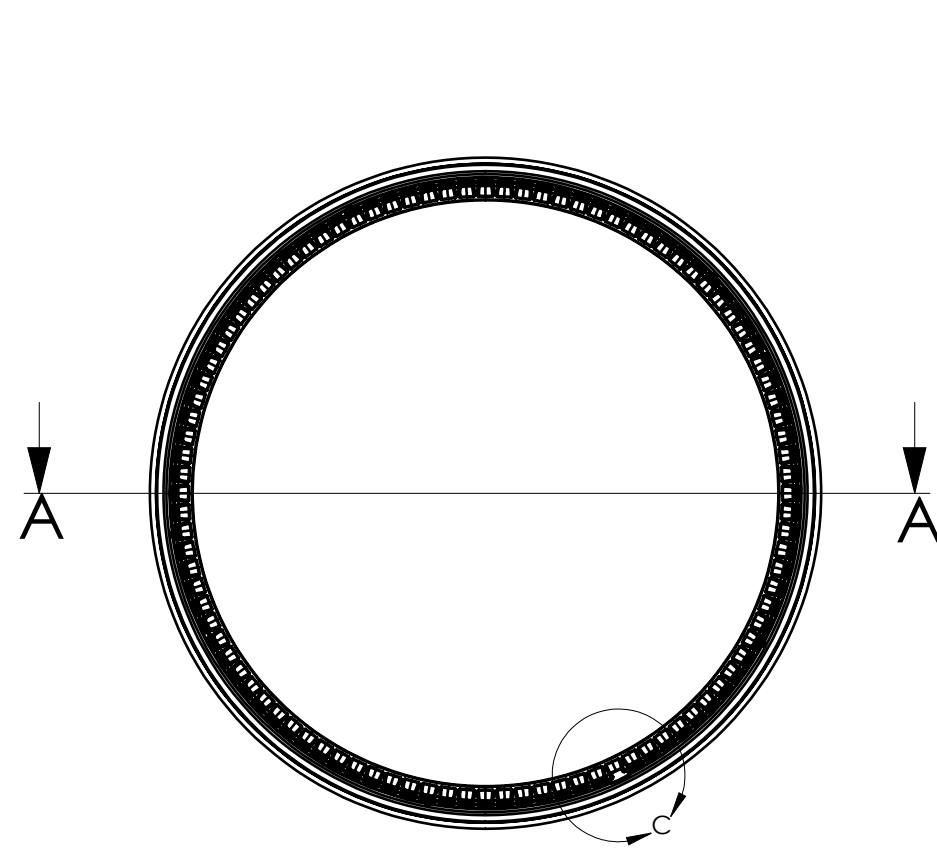
- 1.Part is supplied in rolls from supplier and cut to length in production by VELUX.
- 2.Material - 41 grade PVN (ASTM D1056 2 A1) - closed-cell expanded rubber
- 3.Adhesive - AD381 (ASTM D903 PP Min. 175 N/m)
- 4.XXXX=PSA attached.

Diameter	Length
10"	1020[40.2"]
14"	1360[53.5"]
22"	2000[78.7"]

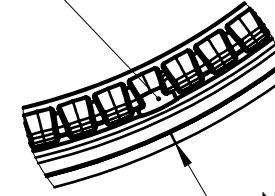
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VELUX SKY-PRS 450 Old Brickyard Rd., Greenwood, South Carolina 29648				<u>TGR/F, TMR/F and TCR</u>									
Approvals TMA-A				Insect guard foam gasket									
Checked by/drawn by/date /REC/28.04.2015				Commodity drawing									
Scale 2:1				Unspec. meas. mm				General tolerance ±1		Size A		Product instructions no.	
Category 21		303594		000		00		Edition 02					

Edition	Description of change	Date
04	Added alignment note	3/12/13
05	Removed foam part number	4/27/15

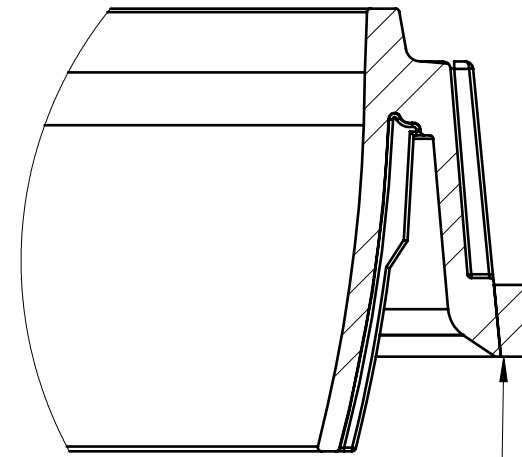


Align start of foam with alignment tab



DETAIL C
SCALE 2 : 5

No gap allowed where foam meets.
Max. 25mm overlap



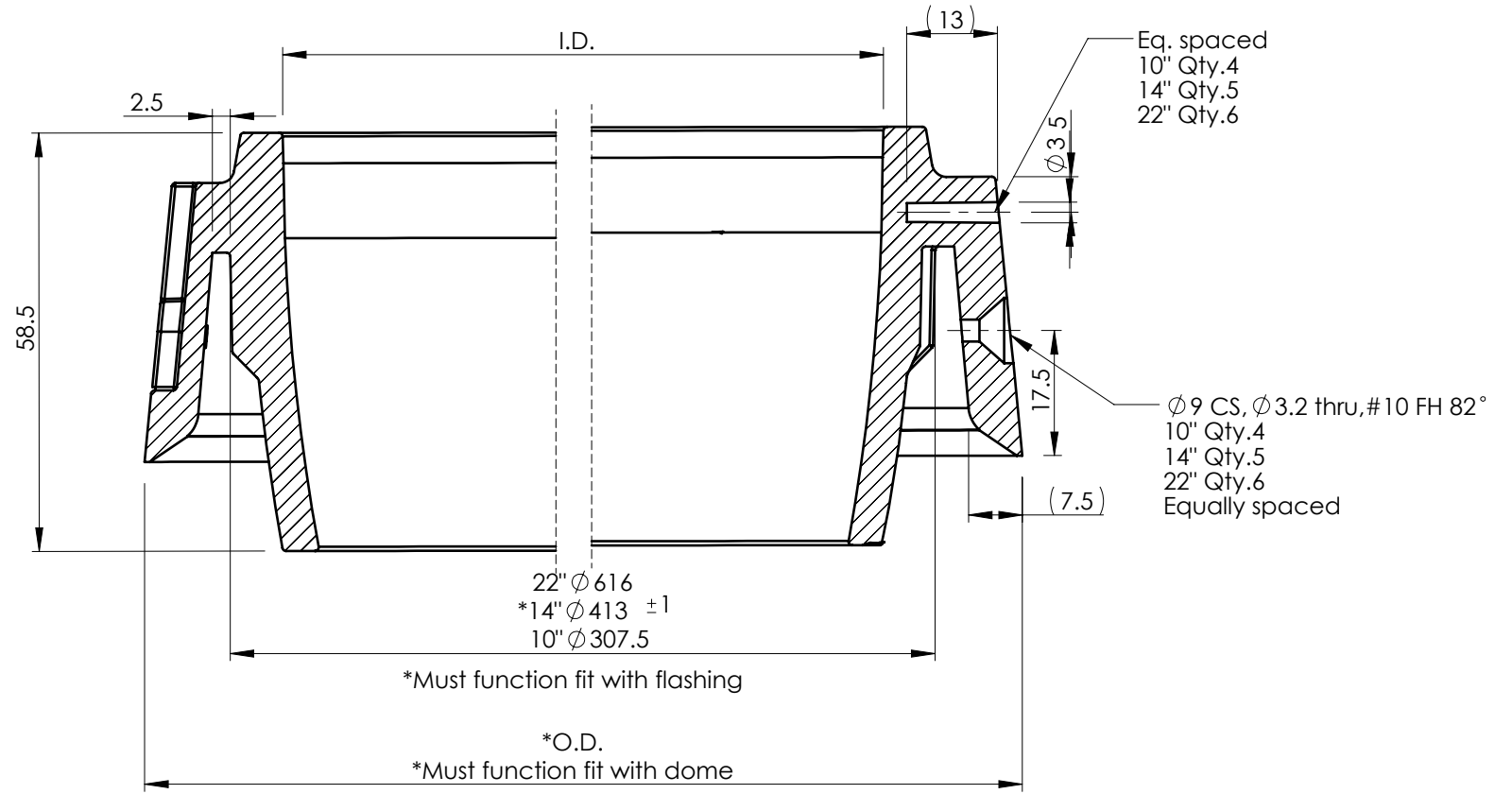
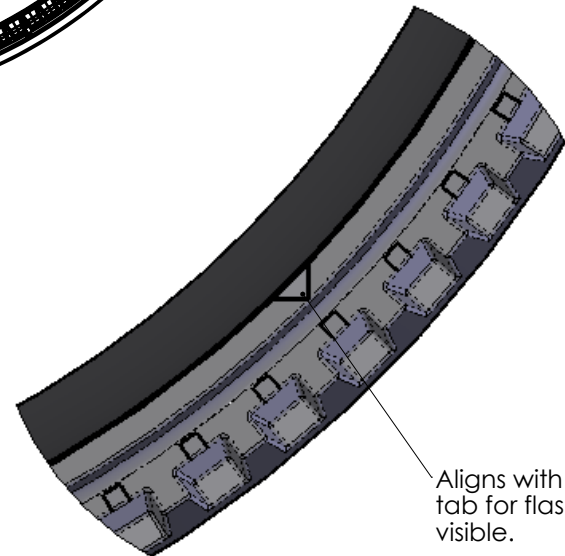
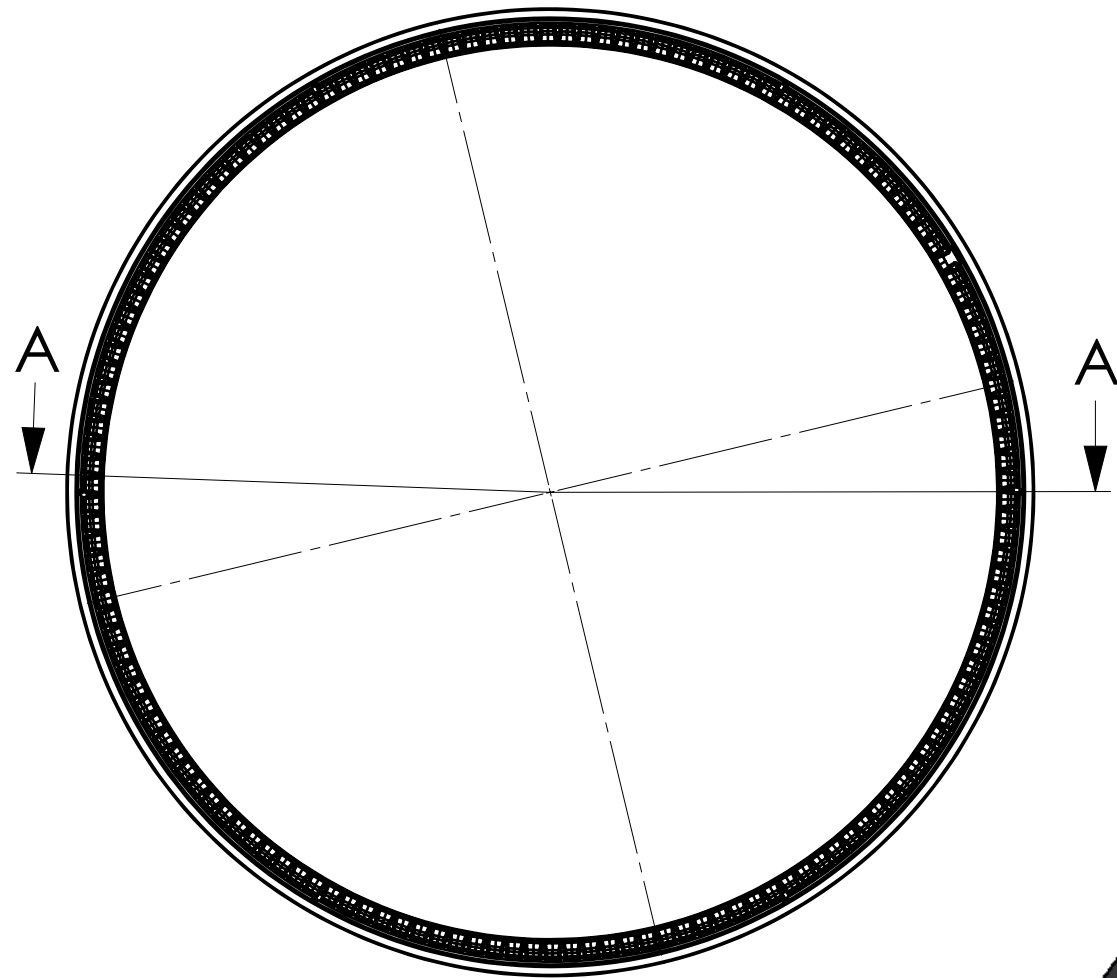
DETAIL B
SCALE 1 : 1

Edge of foam must be parallel with edge of intermediate ring within 3mm.

Regardless of tolerance bottom of condensation groove should always be covered by foam.

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VELUX SKY-PRS 450 Old Brickyard Rd., Greenwood, South Carolina 29648				TGF/TGR/TMF/TMR			
Approvals				Intermediate ring, foam Placement drawing			
Checked by/drawn by/date /REC/27.04.2015				Product instructions no.			
Scale 1:5	Unspec. meas. mm	General tolerance ±	Size B	Category 21	304230	000	51 05



SECTION A-A
SCALE 1 : 1

Dia.	Part #	I.D.	O.D.
10"	30354610	Ø 296 ±1	Ø 331 ±1
14"	30354614	Ø 400 ±1	Ø 436 ±1
22"	30354622	Ø 601 ±1	Ø 640 ±1

Note: Surface finish to be SPI-C3

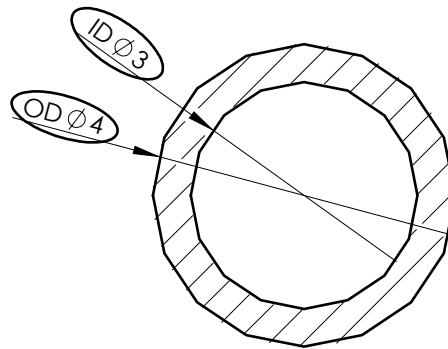
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Material			
Black PP co-polymer +UV stabilizer			
VELUX SKY-PRS		450 Old Brickyard Rd., Greenwood, South Carolina 29648	
Approvals			
TMA-A			
Checked by/drawn by/date			
/REC/27.04.2015			
Scale	Unspec. meas.	General tolerance	Size
1:5	mm	±0.5	B

Edition	Description of change	Date
02	Corrected O.D.	03/28/13
03	Changed ID and OD	04/04/13
04	Added surface finish spec.	04/15/13
05	Added view to better define 2.5mm dimension	04/25/13
06	Added function fit note, added new OD and ID measuring point	07/1/13
07	Increased depth of countersink, added visual alignment for flashing	09/18/13
08	Added the word "stabilizer" to material description	4/27/15

TGR/F/C, TMR/F/C and TCR				
Intermediate ring Commodity drawing				
Product instructions no.				
Category	21	303546	000	00
Edition				08

Edition	Description of change	Date
06	Increased ID and OD by 1mm	11/11/13



Note:
 Acceptance of O'ring is dependent upon fit with the flashing and intermediate ring.
 To obtain length, cut O'ring and measure end to end.

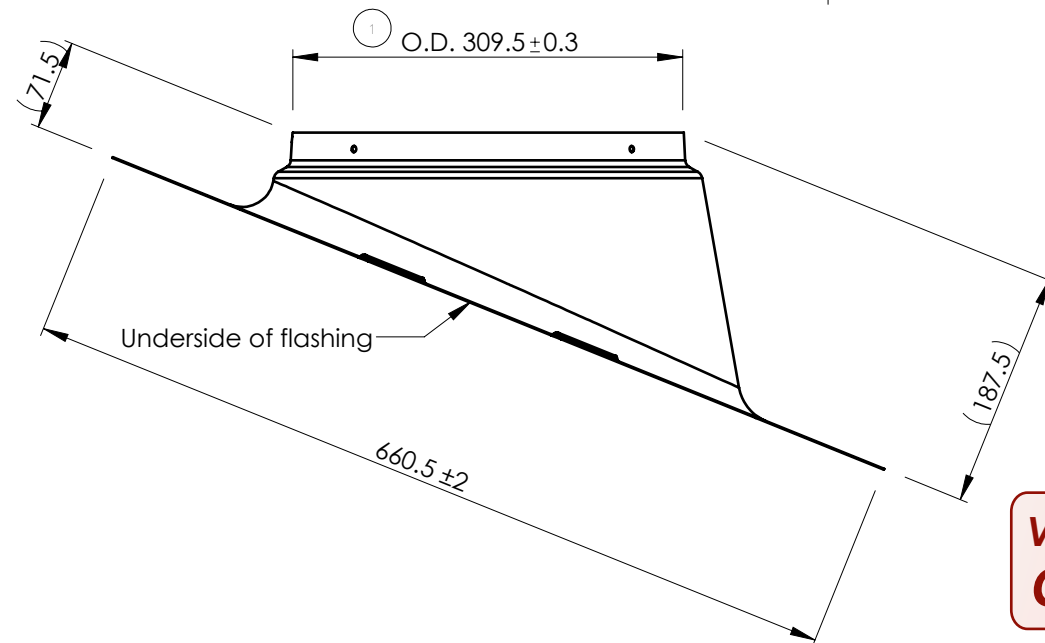
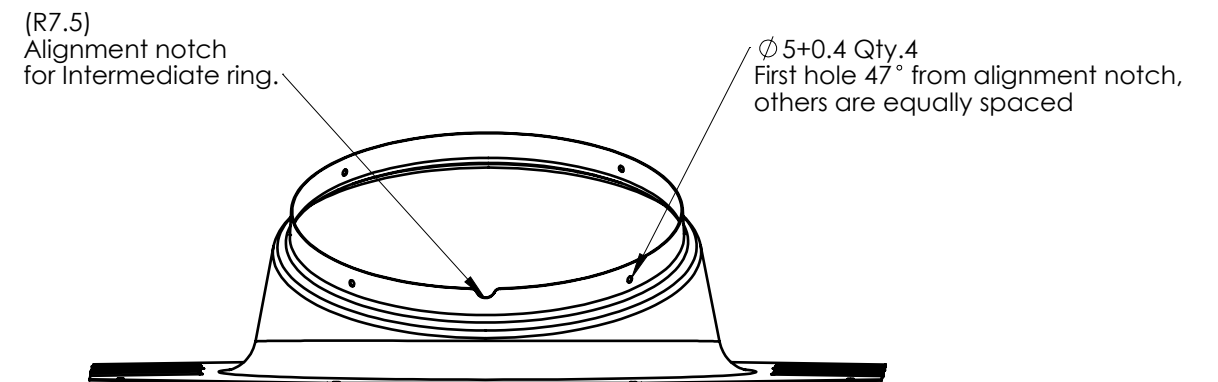
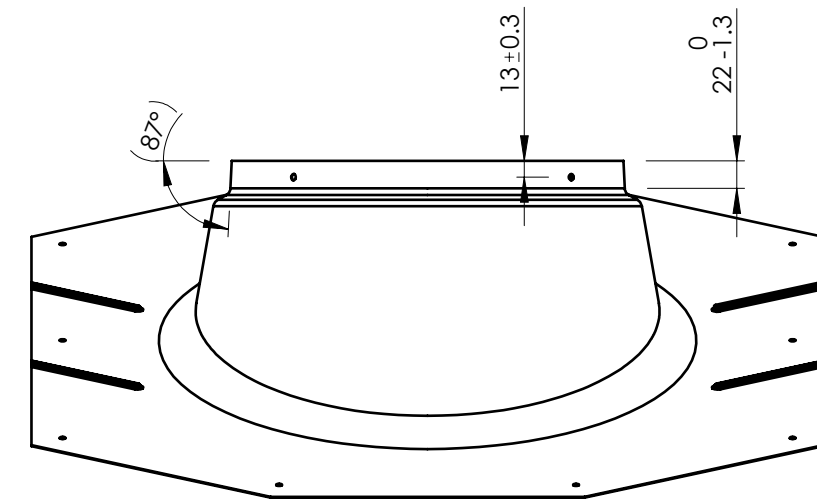
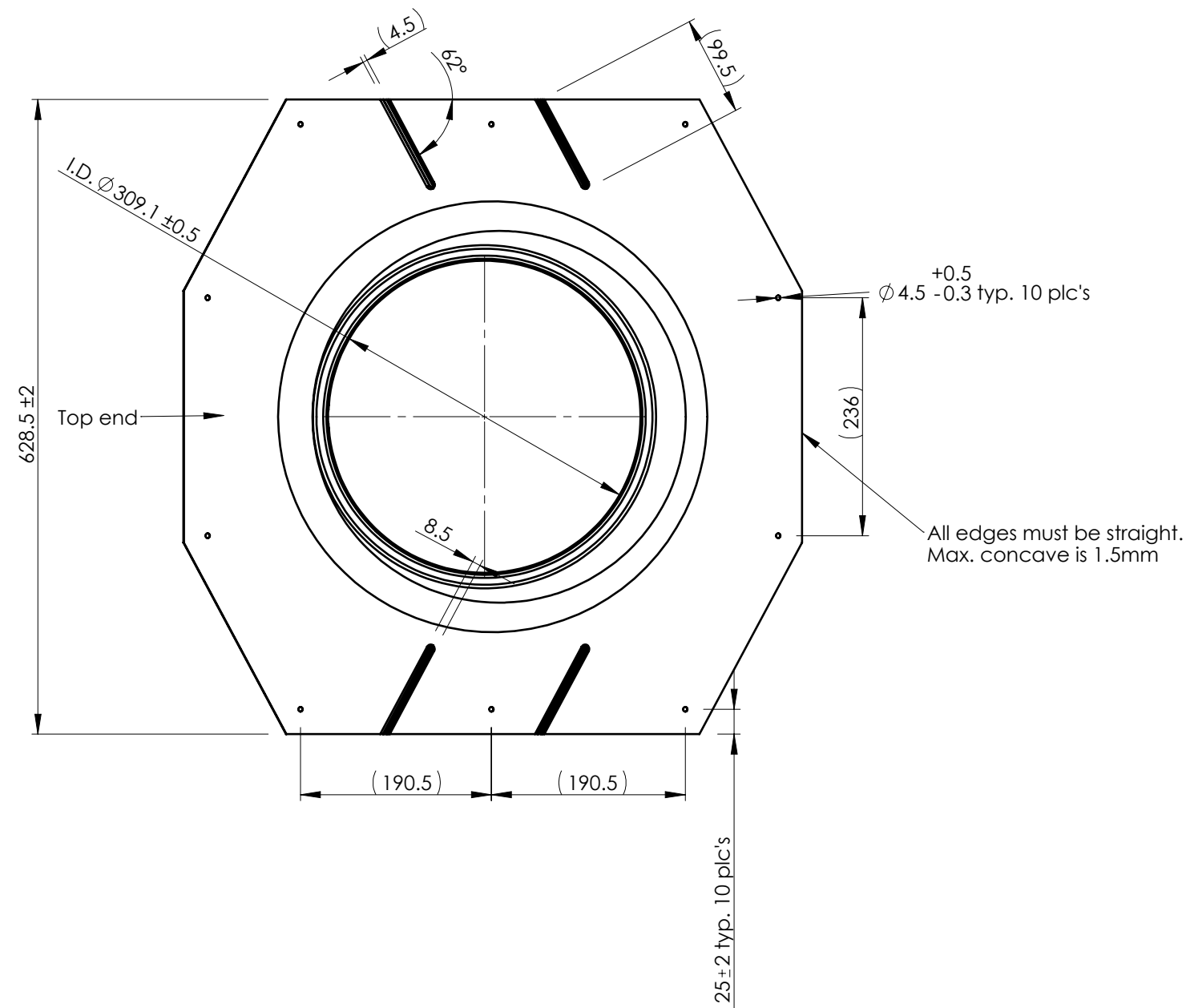
⊙
 1:1

Size	Cut length ⁺⁰ / _{-6.5}
10"	984.2
14"	1320.8
22"	1950.7

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Material				Specifications - generally					
Santoprene 101-64° (black color)				Material for TPE		309033.64			
VELUX SKY-PRS 450 Old Brickyard Rd., Greenwood, South Carolina 29648				TG-, TM-					
Approvals TMA-A				Alignment O'ring Commodity drawing					
Checked by/drawn by/date /REC/11.11.2013				Product instructions no.					
Scale 10:1	Unspec. meas. mm	General tolerance See table	Size A	Category 21	303168	000	00	06	Edition

Edition	drawn by/checked by/date	Description of change
09	MM/CBB/2/14/20	Made dwg consistant with 014
10	MM/REC/4/27/21	Added OD and Ref. dimensions
11	CBB/REC/6/3/21	Removed control measurement notes

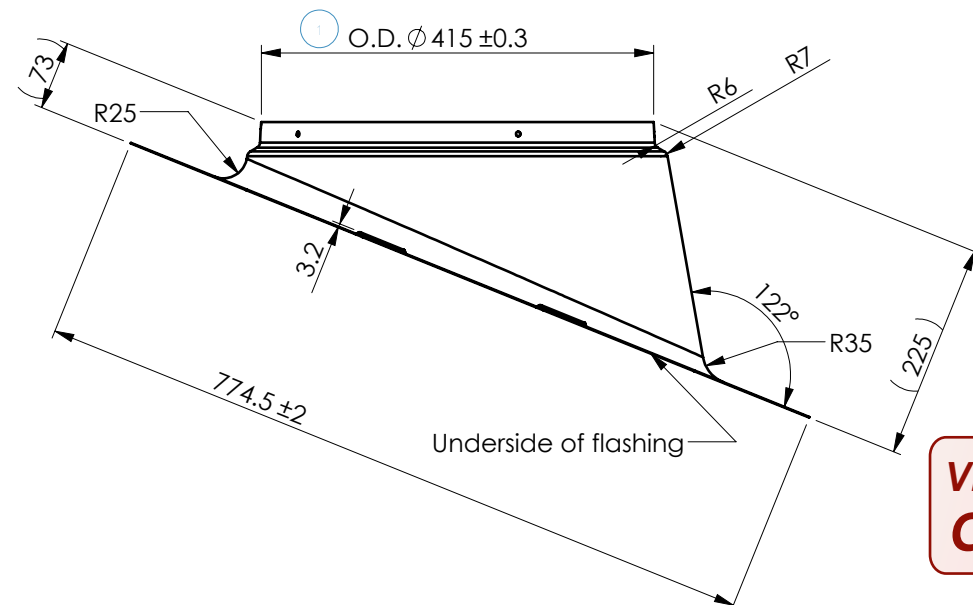
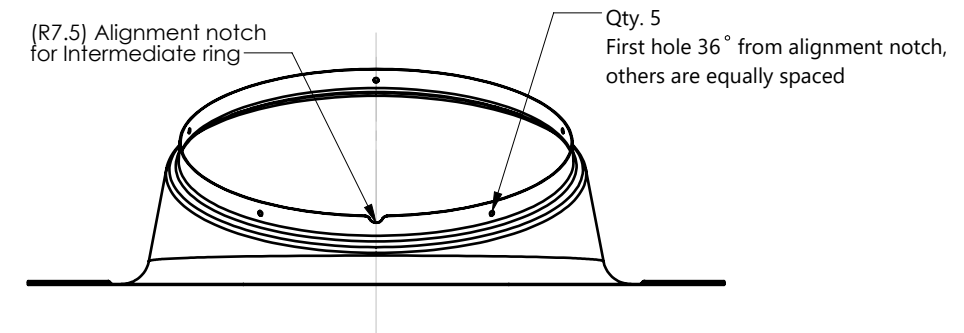
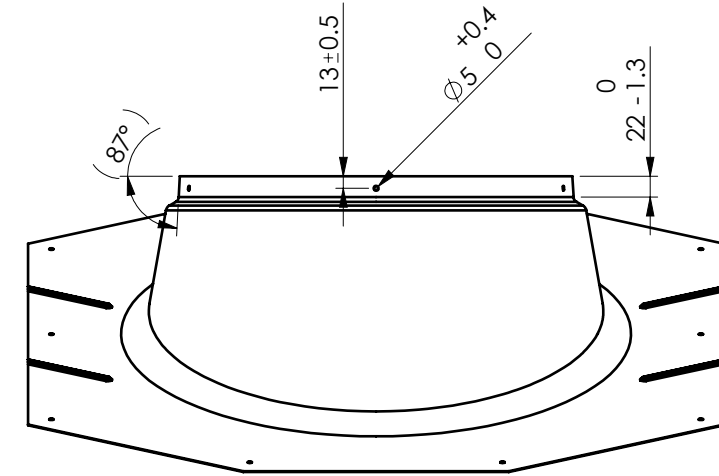
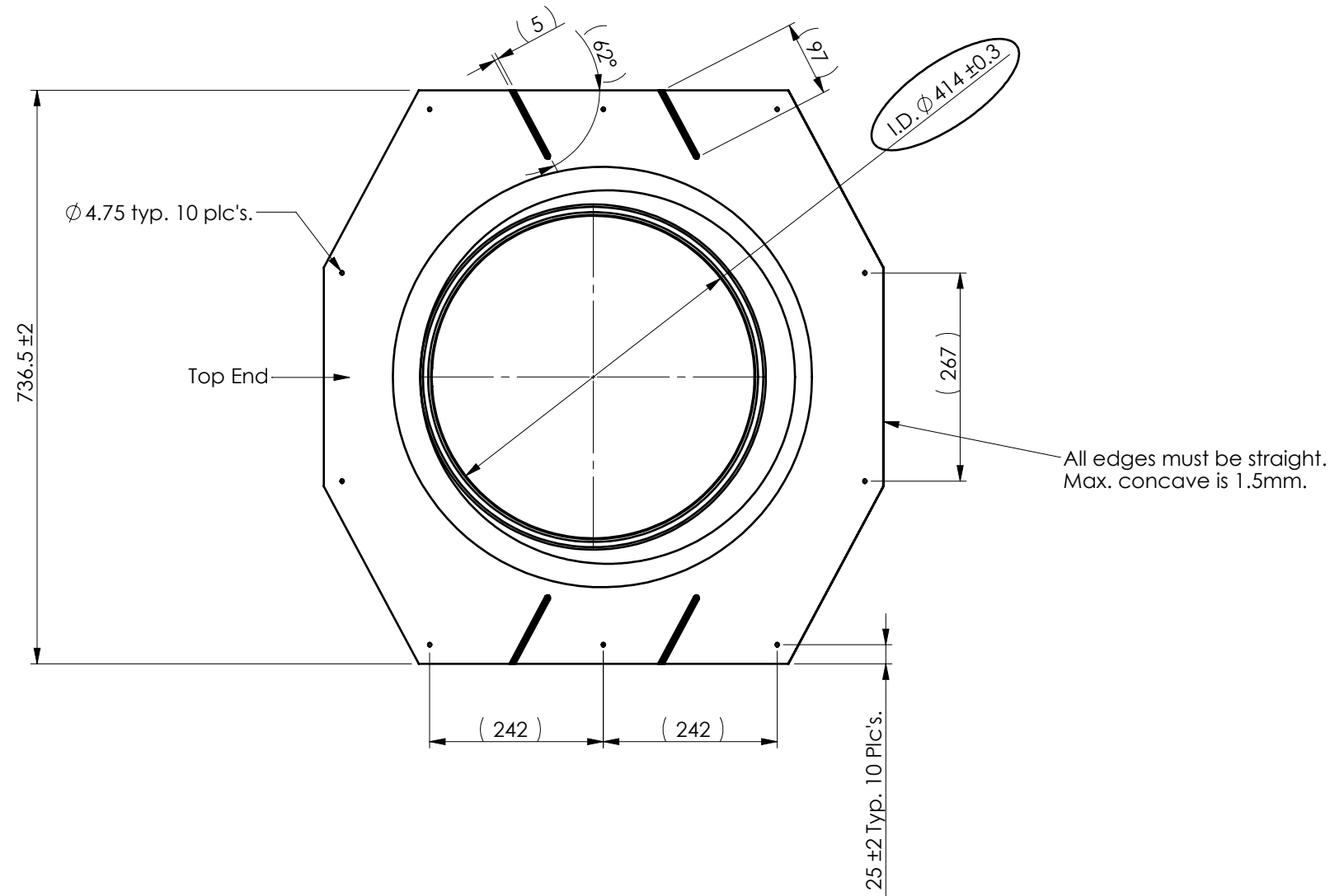


Note main inspection points:
 *Quality of paint (paint is not required on underside of flashing)
 *Fit and function between flashing, O-ring and Intermediate ring

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Material				Specifications - generally			
G90 steel (.030-.038 thick)				Lacq. Steel Sheet		309042.64	
VELUX SKY-PRS 450 Old Brickyard Rd., Greenwood, South Carolina 29648				TM- 010			
Approvals TMA-A				Pitched flashing			
Checked by/drawn by/date BBK/CBB/02.02.2018				Commodity drawing			
				Product instructions no.			
Scale	Unspec. meas.	General tolerance	Size	Category		Operation	Edition
1:6	mm	±0.5	B	21	302139	010	00 11

Edition	drawn by/checked by/date	Description of change
12	4/11/16	Removed Al-Zn from spec. description
13	MM/CBB/2/19/20	Updated tolerance on 22mm dimension
14	CBB/MM/6/3/21	Removed control measure notes & added I.D. dim

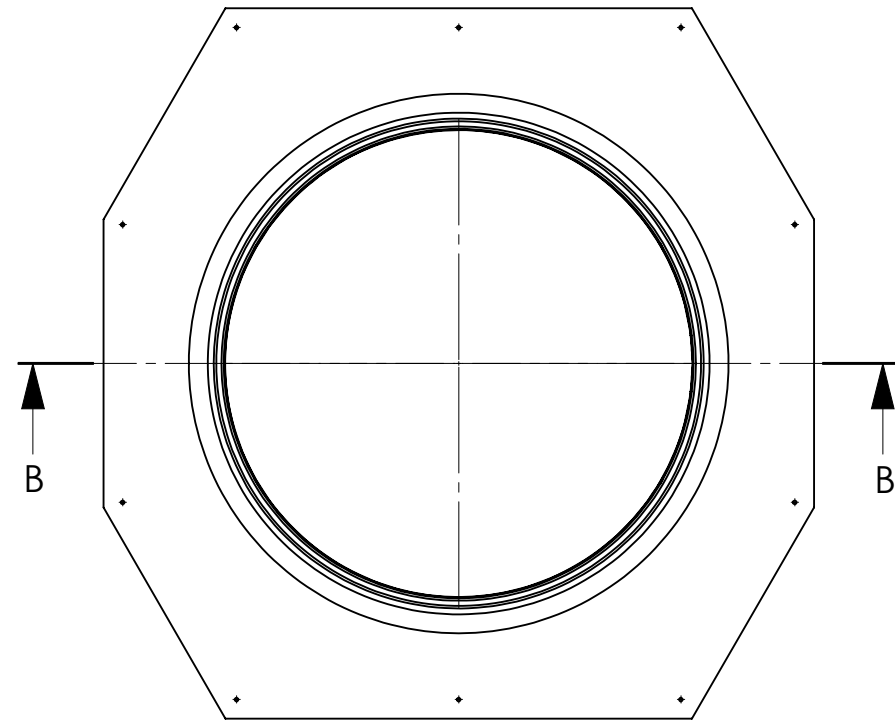


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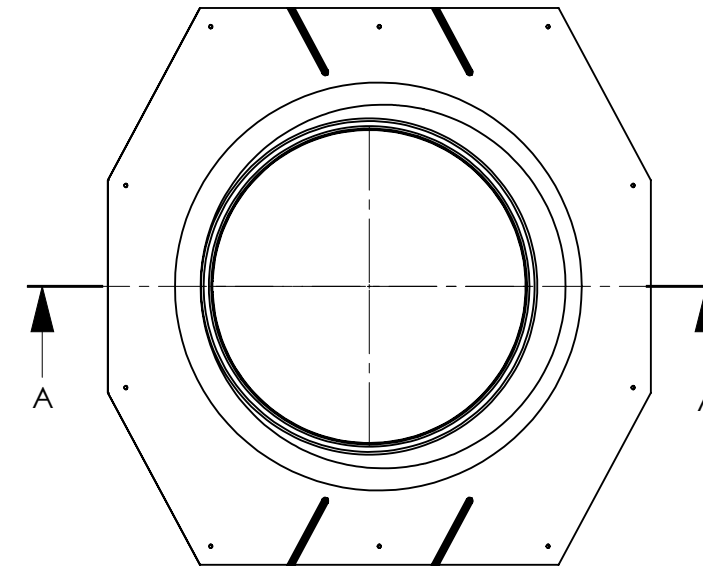
Note main inspection points:
 *Quality of paint (paint is not required on underside of flashing)
 *Fit and function between flashing, O-ring and Intermediate ring

Material				Specifications - generally			
G90 steel (.030-.038 thick)				Lacq. Steel Sheet		309042.64	
VELUX SKY-PRS 450 Old Brickyard Rd., Greenwood, South Carolina 29648				TM- 014 Pitched flashing Commodity drawing			
Approvals TMA-A				Product instructions no.			
Checked by/drawn by/date /REC/11.04.2016				Category			
Scale 1:20	Unspec. meas. mm	General tolerance ±.5	Size B	21	302139	014	00 14

Edition	Description of change	Date
03	Added photos and notes on ripples	11/20/13
02	Added additional powder coat notes	11/20/13



Low profile flashing



Pitched flashing

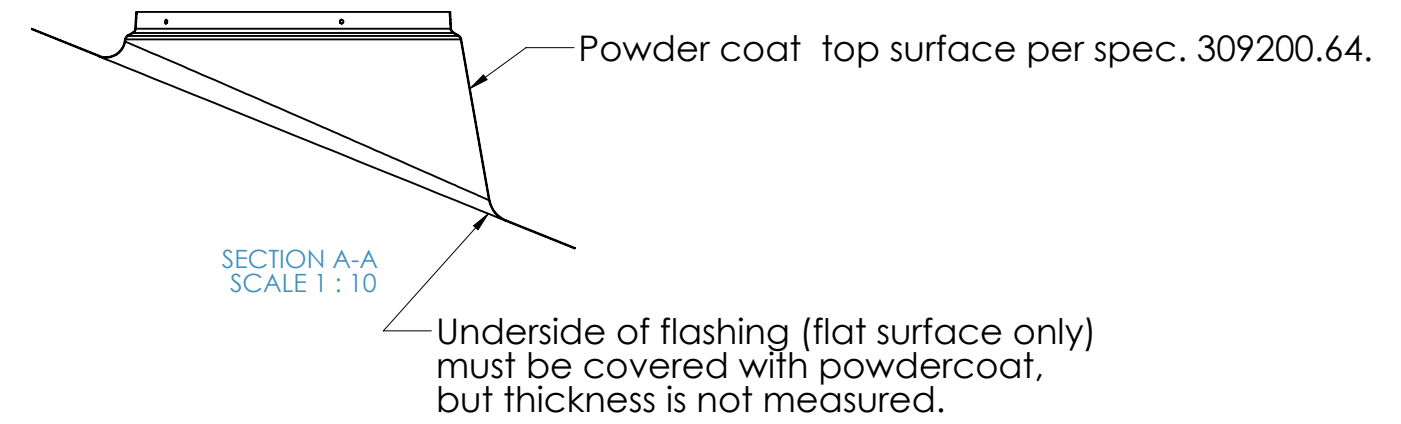
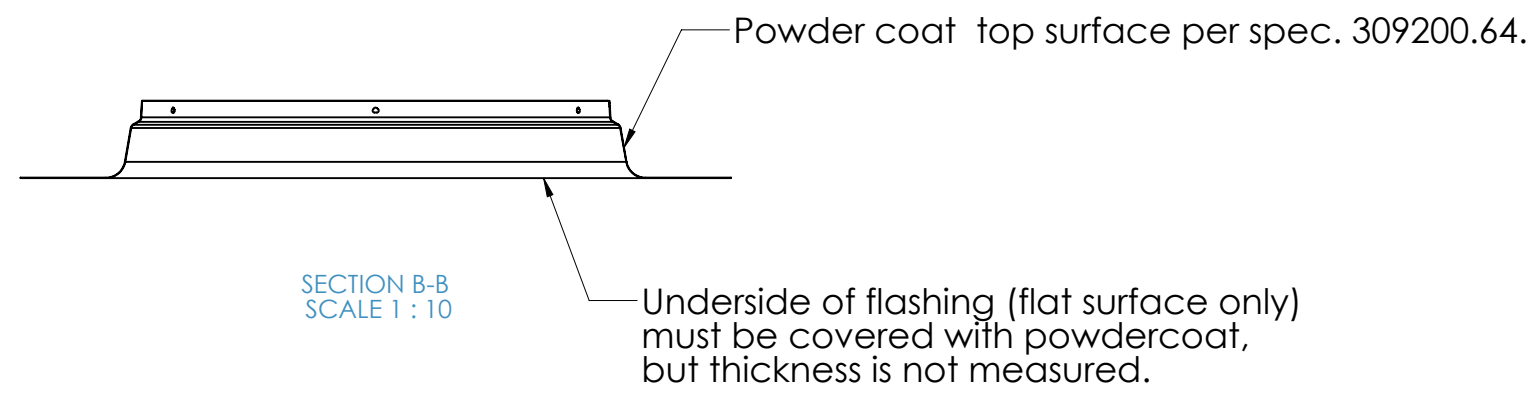


Image A



Image B

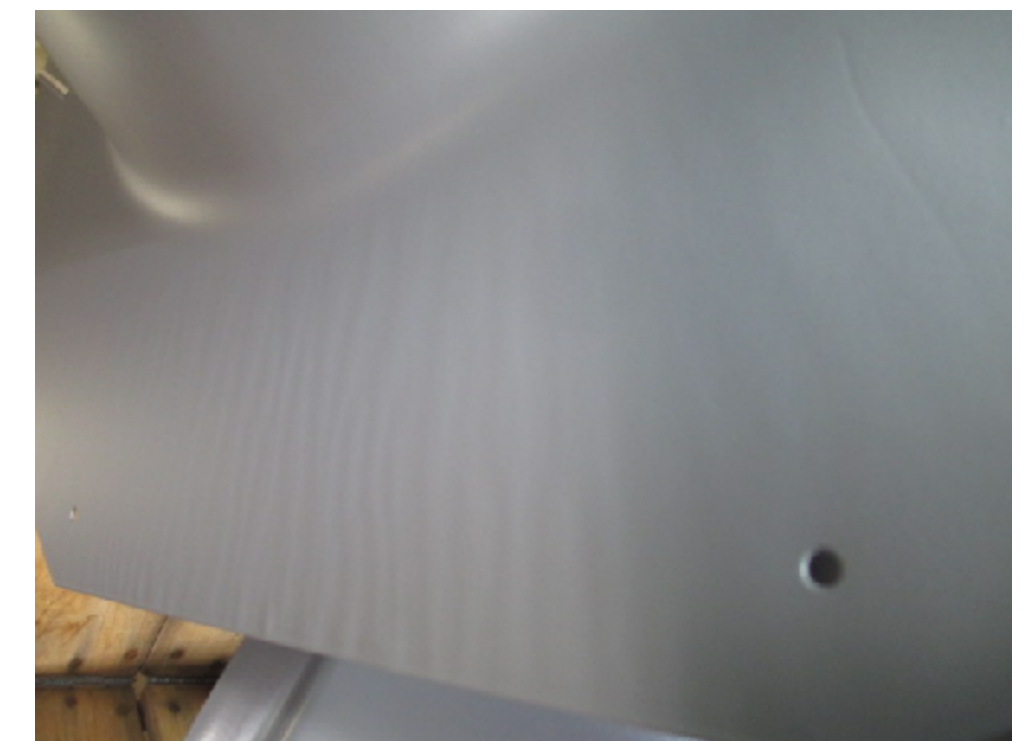


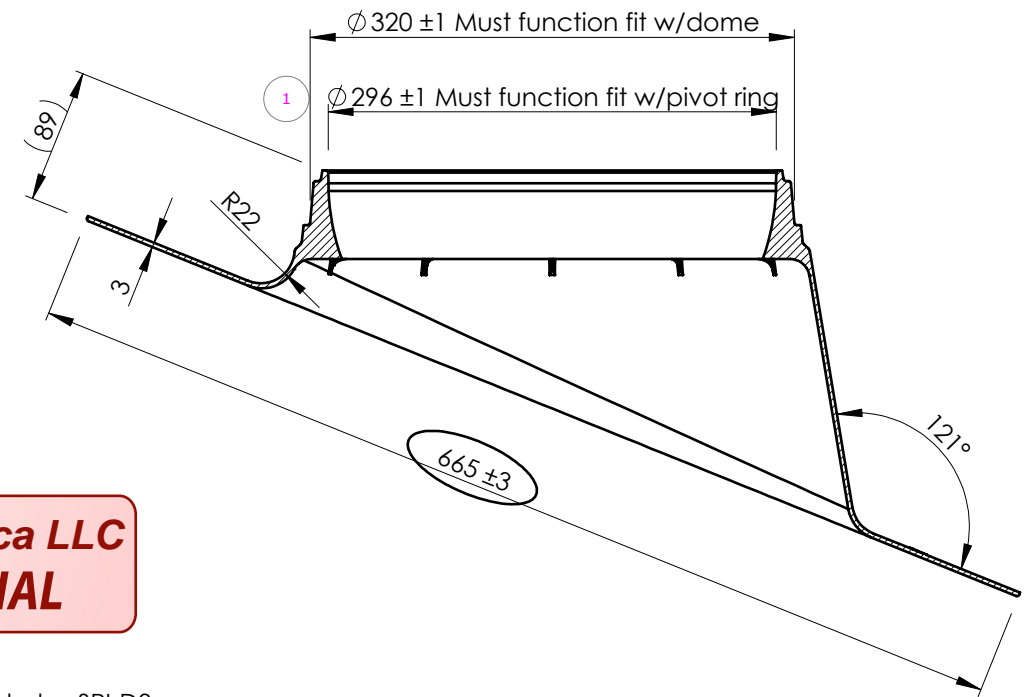
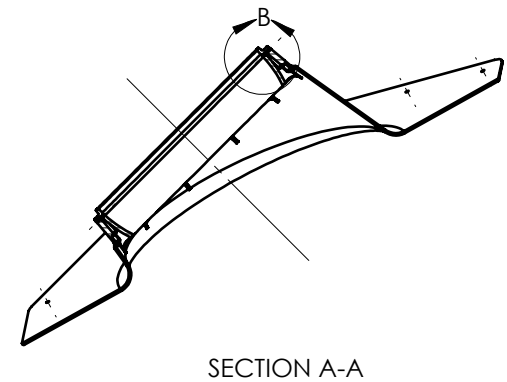
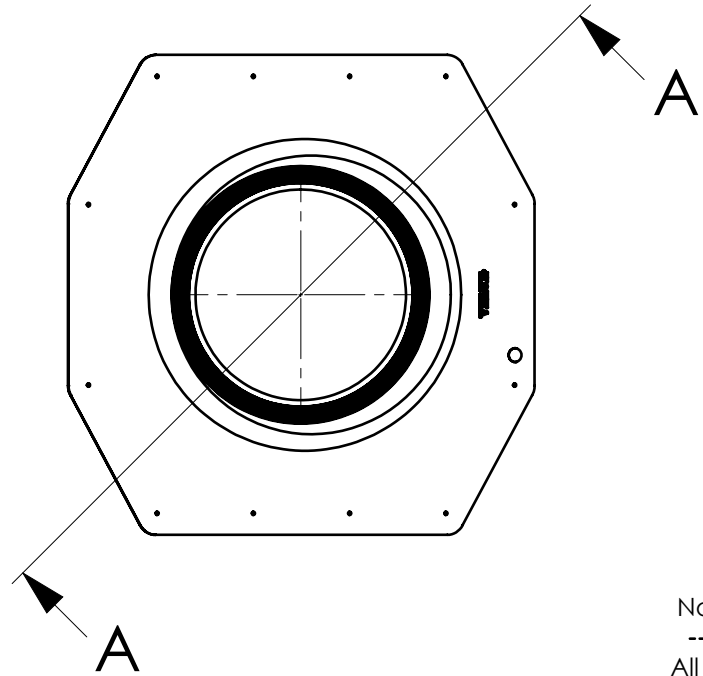
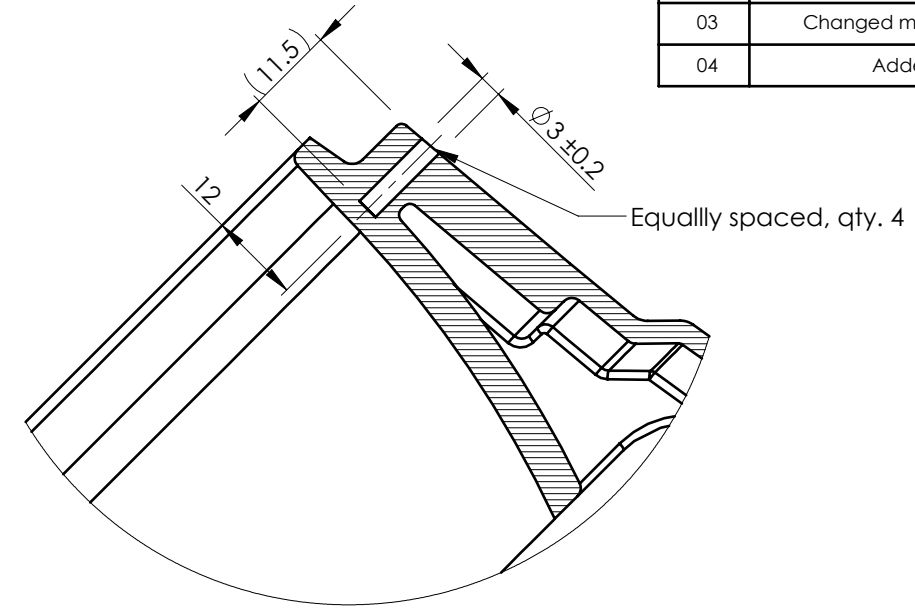
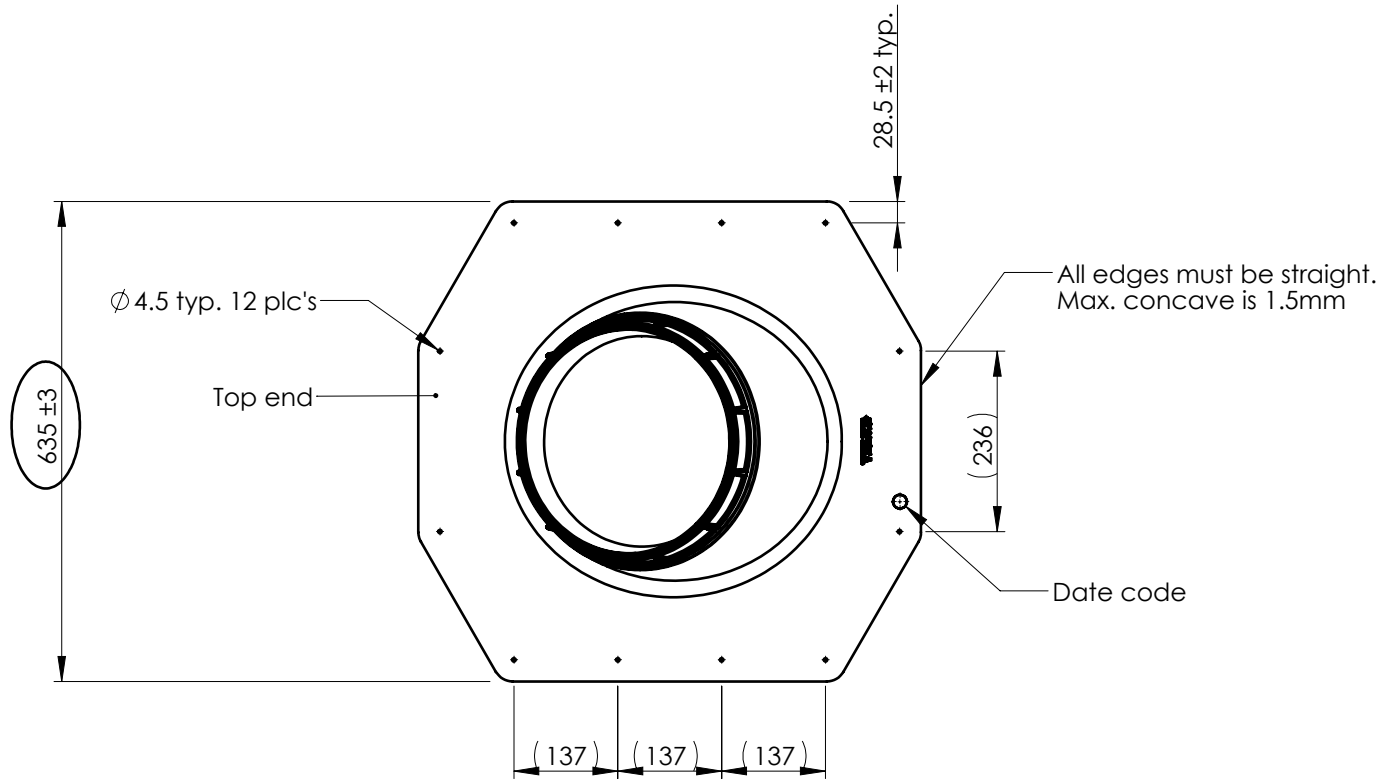
Image C

NOTE:
Image A is unacceptable ripples on flashing. Image B and C are acceptable.

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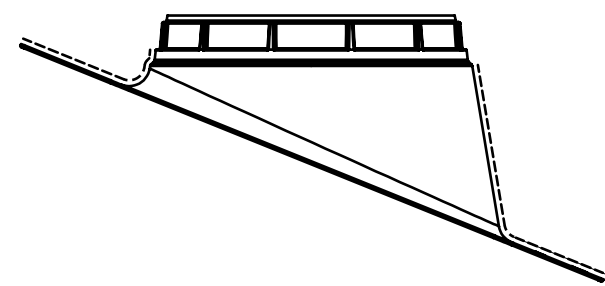
Material				Specifications - generally			
G-90 steel				Powder coat 309200.64			
VELUX SKY-PRS 450 Old Brickyard Rd., Greenwood, South Carolina 29648				TGF/TGR, TMF/TMR			
Approvals				Powder coating			
Checked by/drawn by/date /CBB/22.05.2018				Product instructions no.			
Scale	Unspec. meas.	General tolerance	Size	Category		Operation	Edition
1:10	mm	±	C	21	302139	000	39 03

Edition	Description of change	Date
02	Changed dimensions and added finish detail	8/18/16
03	Changed material from ASA/PC blend	10/19/17
04	Added new material spec.	11/20/17



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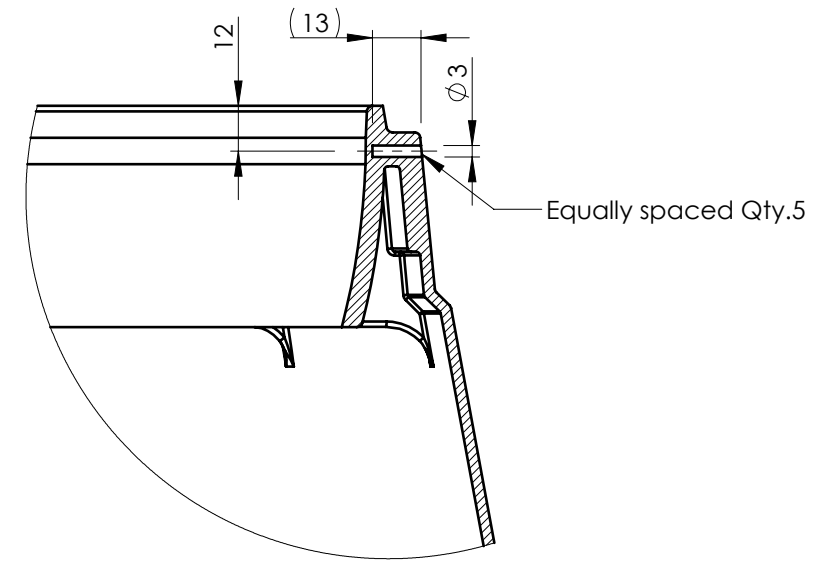
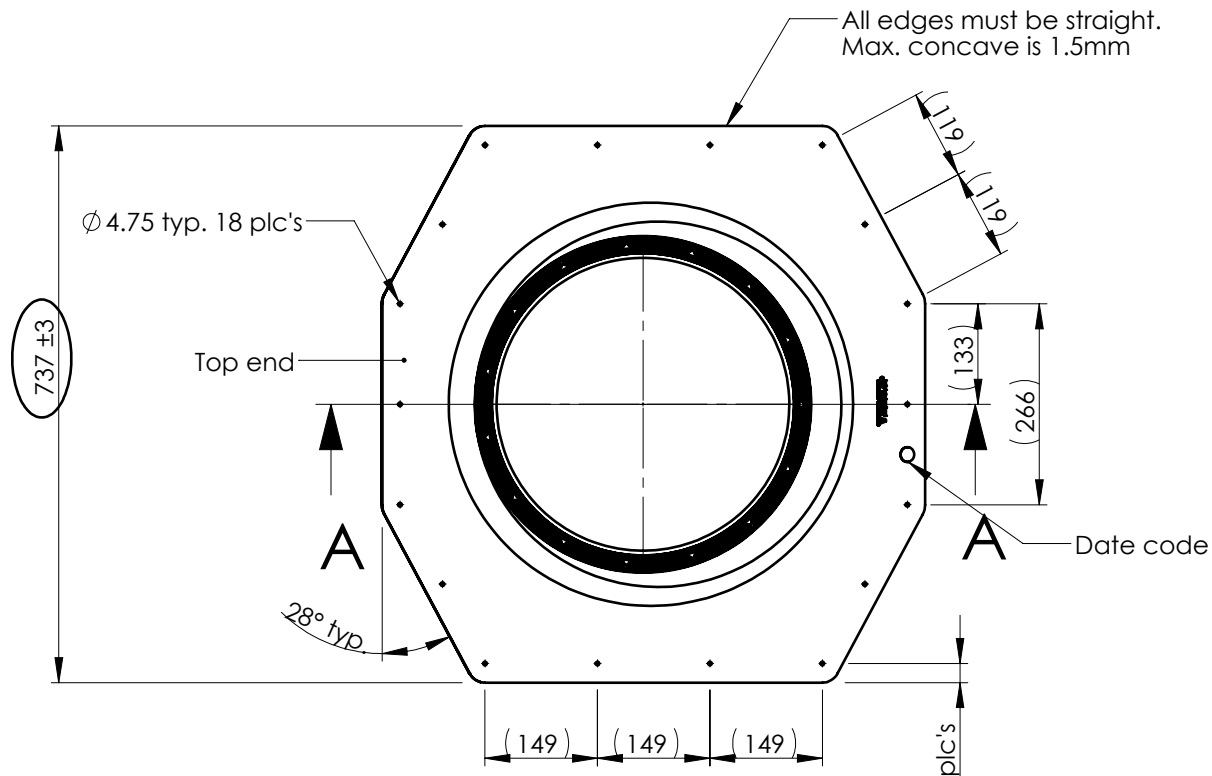
Notes:
----- = finish MT-11090
All other surface finish to be SPI-D3



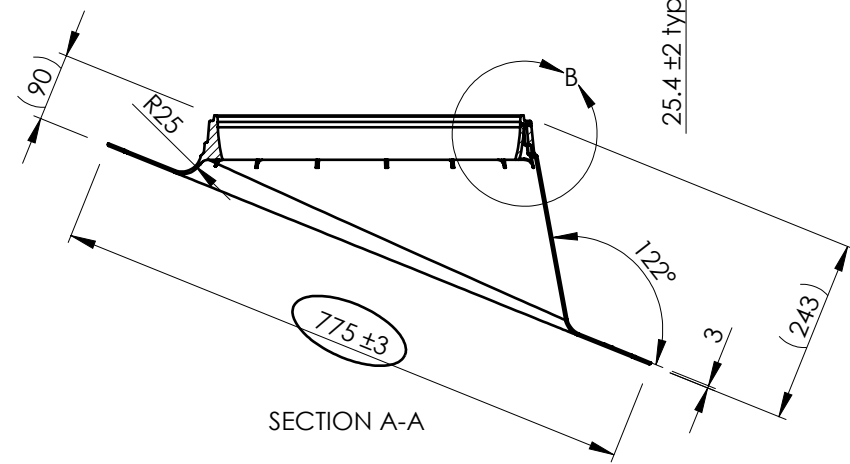
Note: Surface finish to be SPI-D3

Material				Specifications - generally			
Polypropylene copolymer blend		Color: Black		Polypropylene blend for THR flashing		309229.64	
VELUX SKY-PRS 450 Old Brickyard Rd., Greenwood, South Carolina 29648				THR 10"			
Approvals TMA-A				Flashing			
Checked by/drawn by/date /RC/20.11.2017				Commodity drawing			
Scale 1:10				Product instructions no.			
Unspec. meas. mm	General tolerance ±0.5	Size B	Category 21	303686	010	00	04

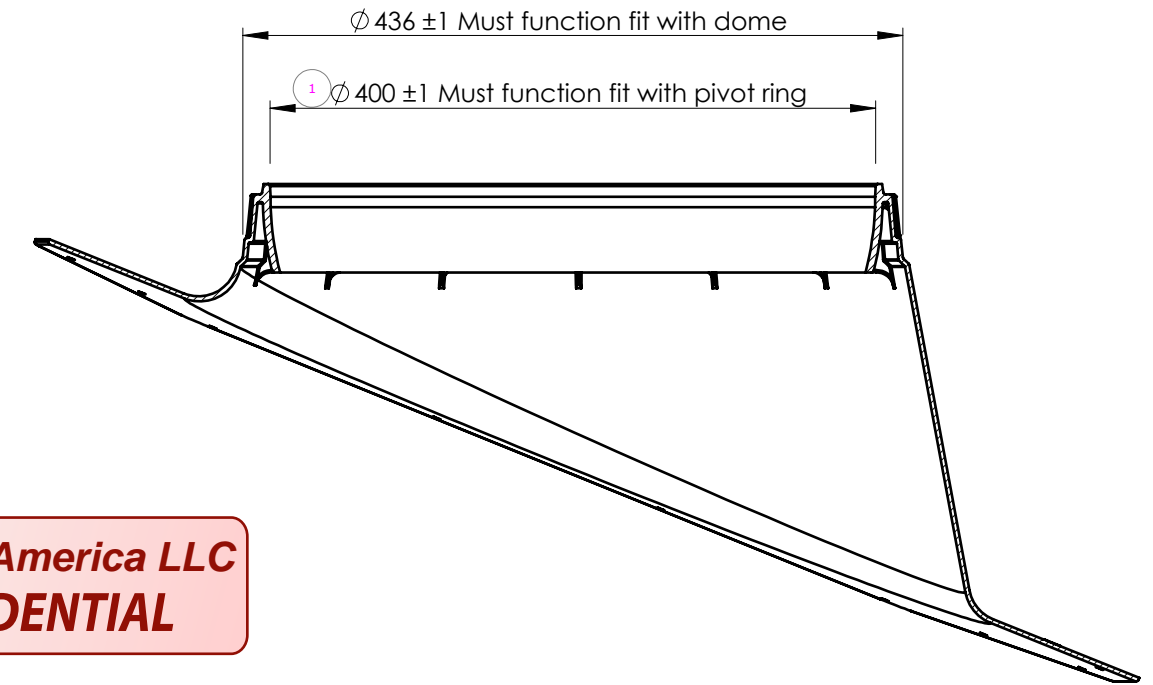
Edition	Description of change	Date
02	Added surface finish detail	8/18/16
03	Changed material from ASA/PC blend	10/19/17
04	Added new material spec.	11/20/17



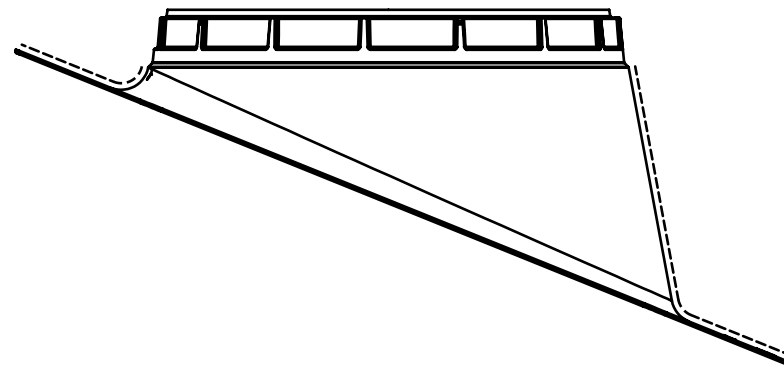
DETAIL B
SCALE 1 : 2



SECTION A-A

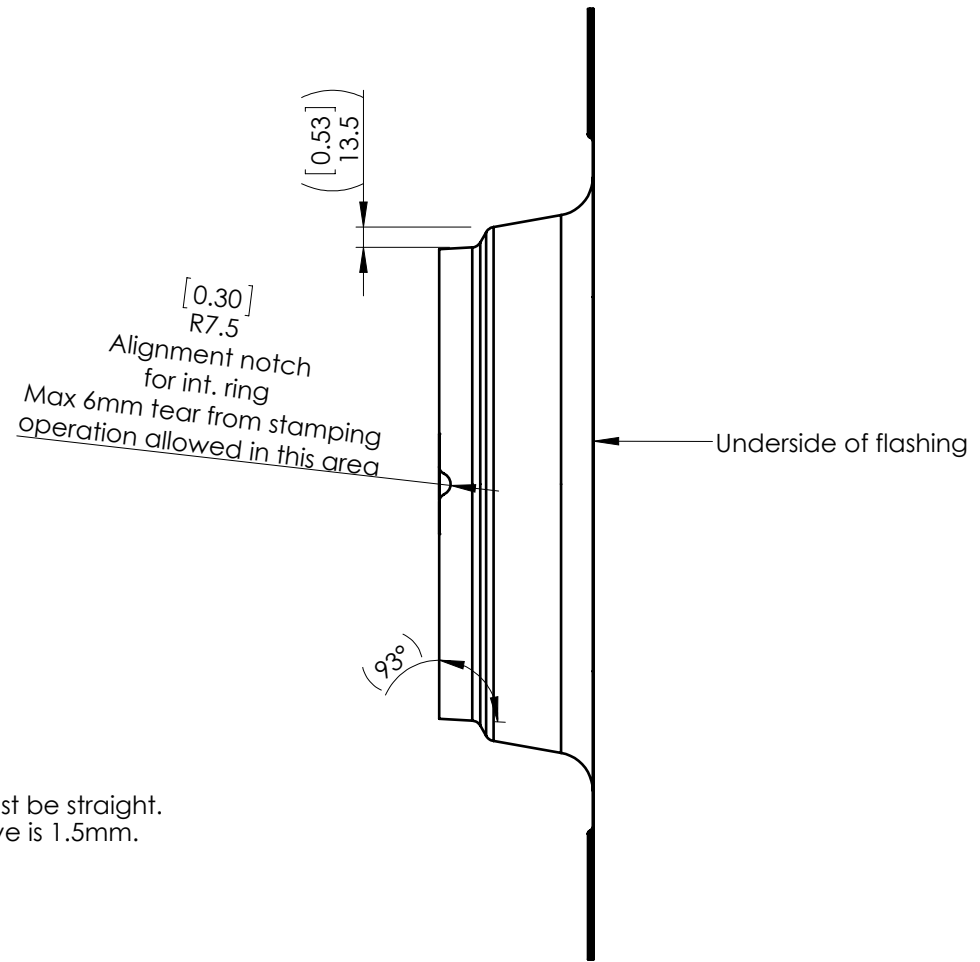
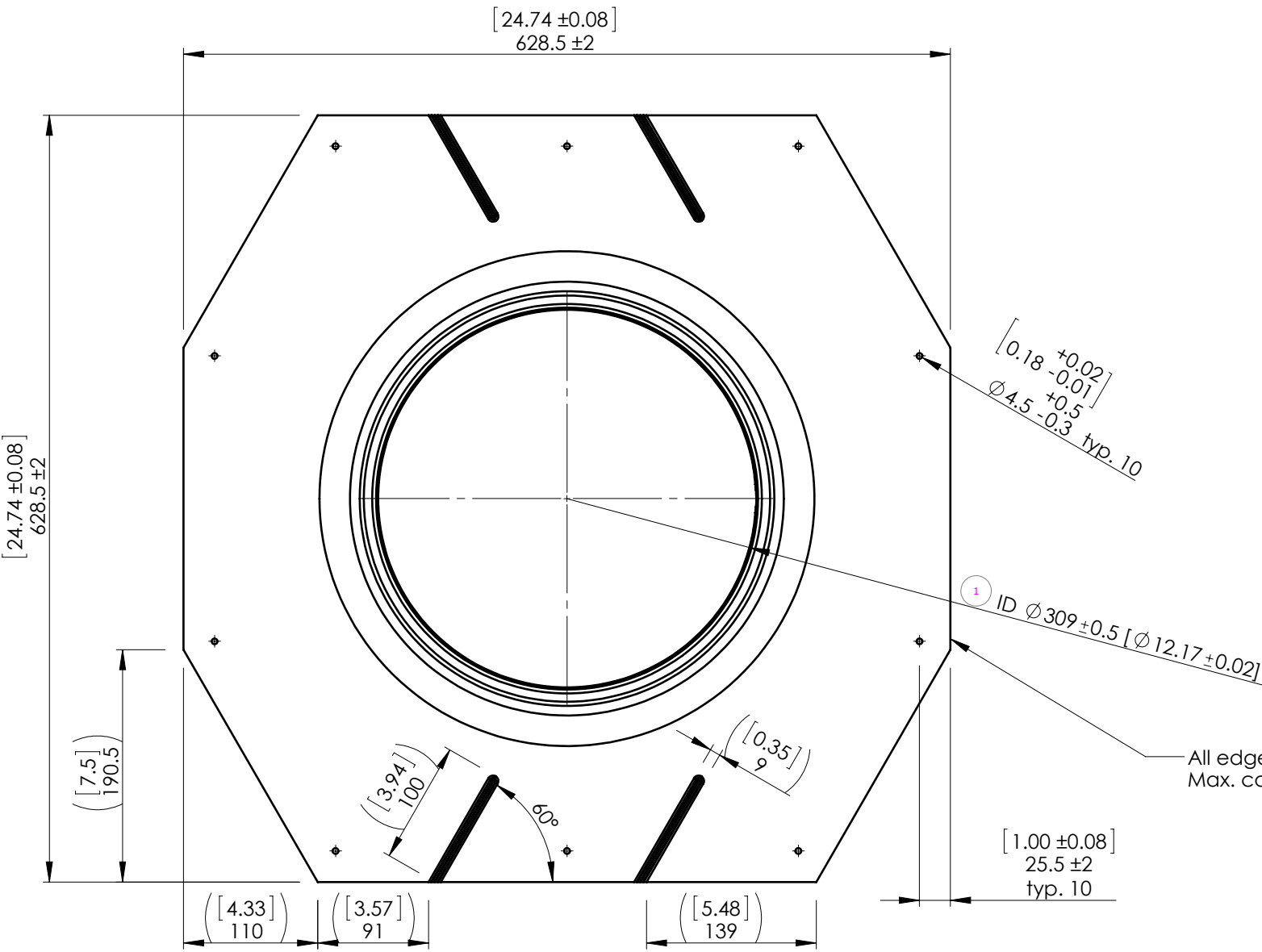


Notes:
 ----- = finish MT-11090
 All other surface finish to be SPI-D3

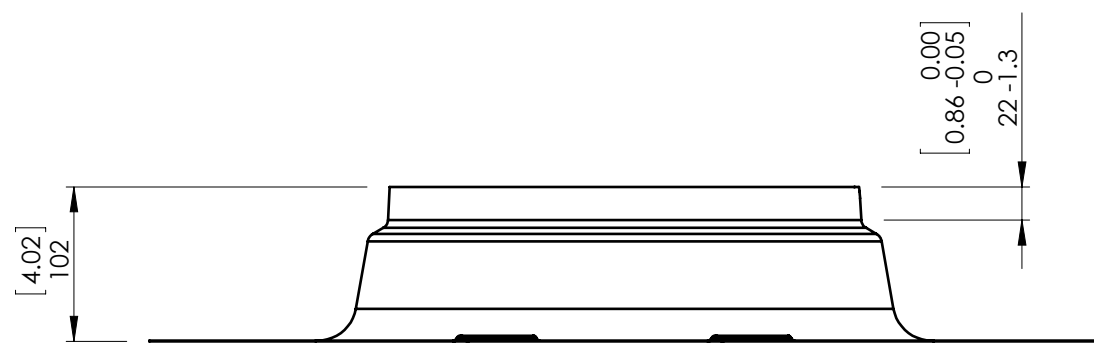


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Material				Specifications - generally			
Polypropylene copolymer blend		Color: Black		Polypropylene blend for THR flashing		309229.64	
VELUX SKY-PRS 450 Old Brickyard Rd., Greenwood, South Carolina 29648				THR 14"			
Approvals TMA-A				Flashing			
Checked by/drawn by/date /RC/20.11.2017				Commodity drawing			
				Product instructions no.			
Scale	Unspec. meas.	General tolerance	Size	Category		Operation	Edition
1:10	mm	±0.5	B	21	303686	014	00 04



All edges must be straight. Max. concave is 1.5mm.

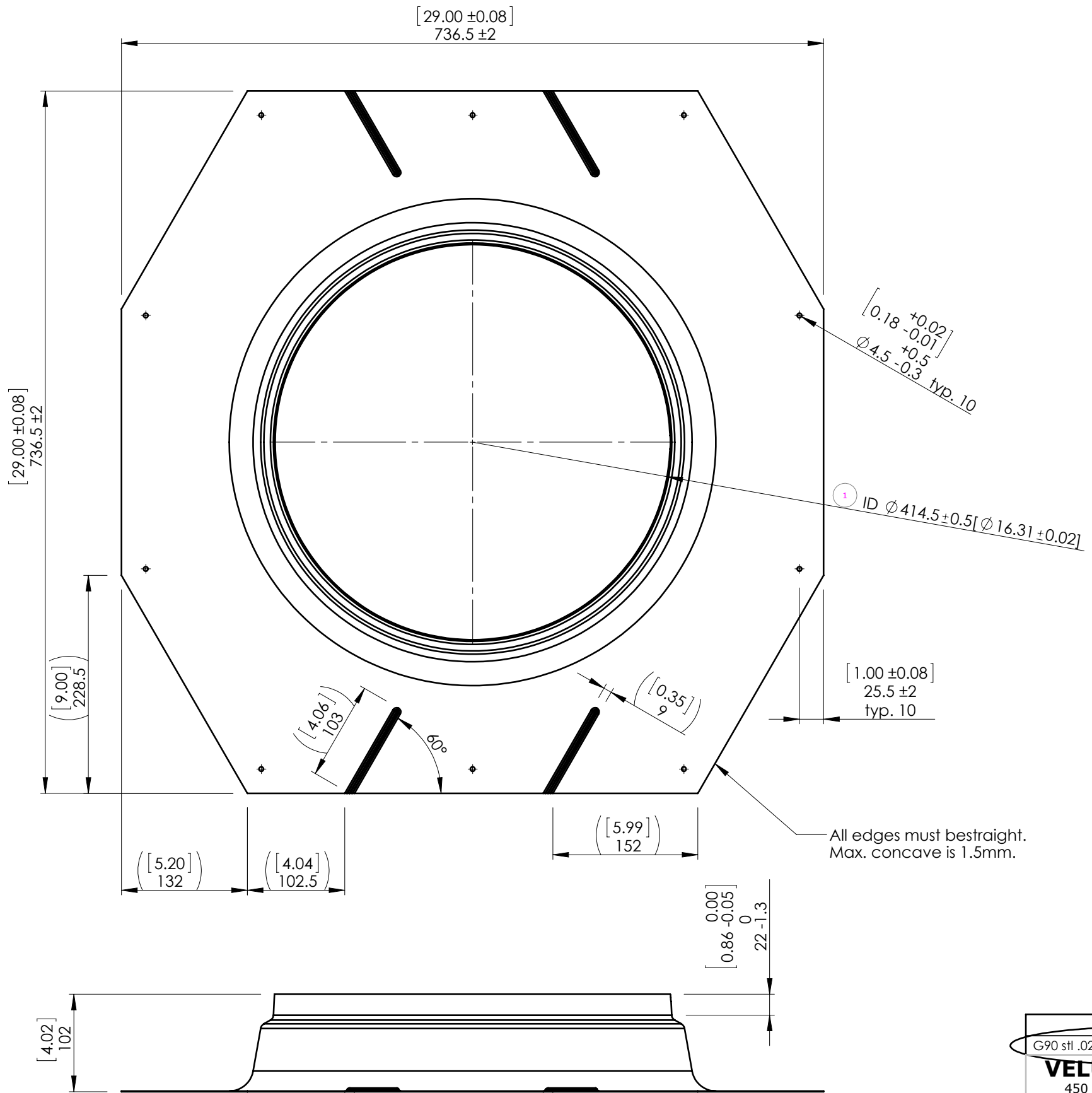


Note main inspection points:
 *Underside of flashing (flat surfaces only) must be covered with powdercoat, but thickness is not measured.
 *Fit and function between flashing, O'ring and intermediate ring.

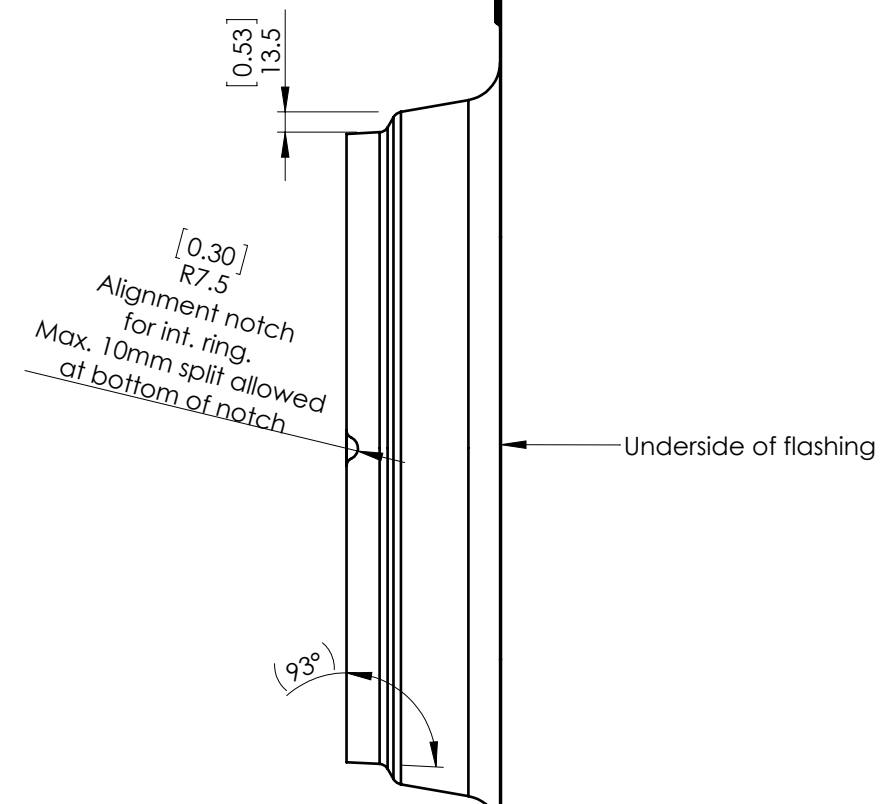
Edition	Description of change	Date
09	Revised powdercoat note	11/21/13
10	Added material thickness	6/4/14

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Material				Specifications - generally			
G-90 steel 0.23"(.6mm) +/- .006"(.15mm) thk.				Lacq. Steel Sheet with Al-Zn Coating		309042.64	
VELUX SKY-PRS 450 Old Brickyard Rd., Greenwood, South Carolina 29648				TGR 010			
Approvals TMA-A				Low-profile flashing Commodity drawing			
Checked by/drawn by/date /REC/04.06.2014				Product instructions no.			
Scale 1:5	Unspec. meas. mm	General tolerance ±0.5	Size B	Category 21	302141	010	00 10



Edition	Description of change	Date
08	Revised powdercoat note	11/21/13
09	Added material thickness	6/4/14



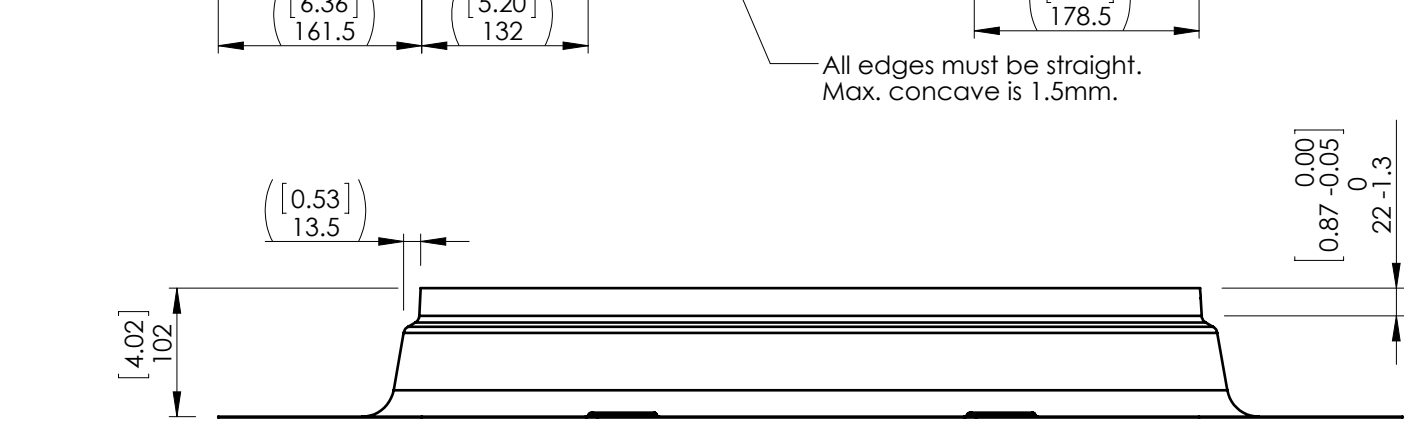
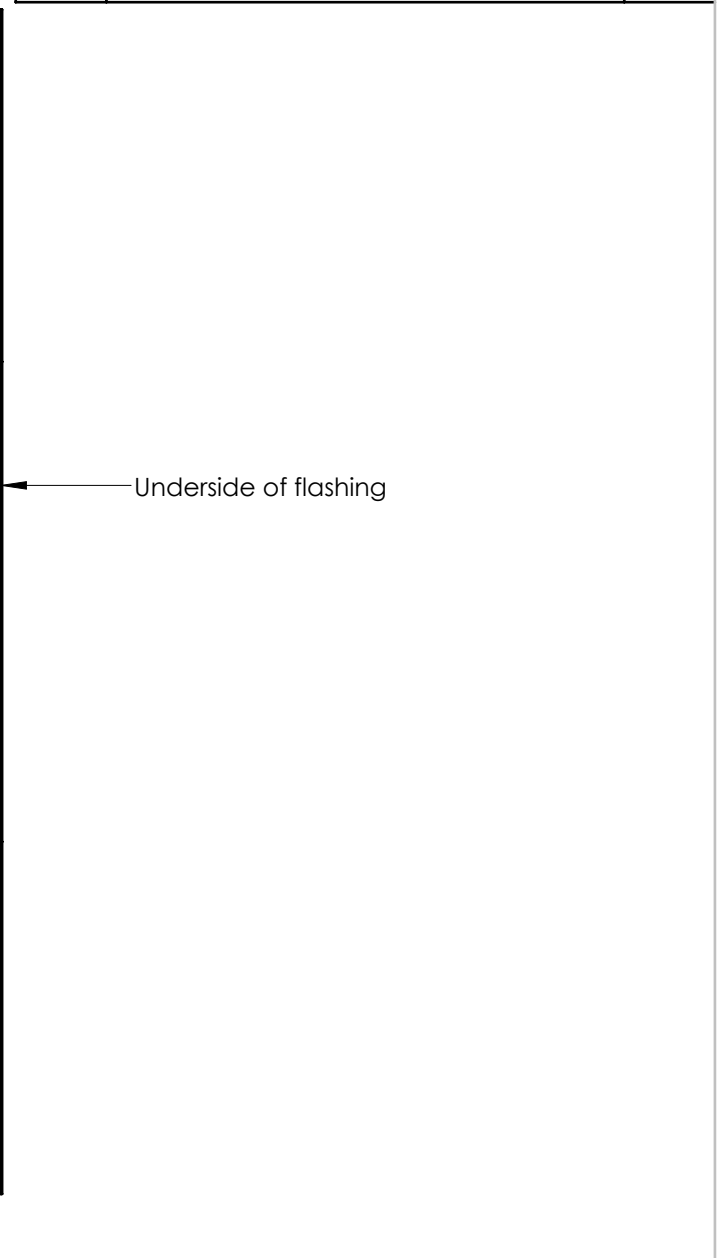
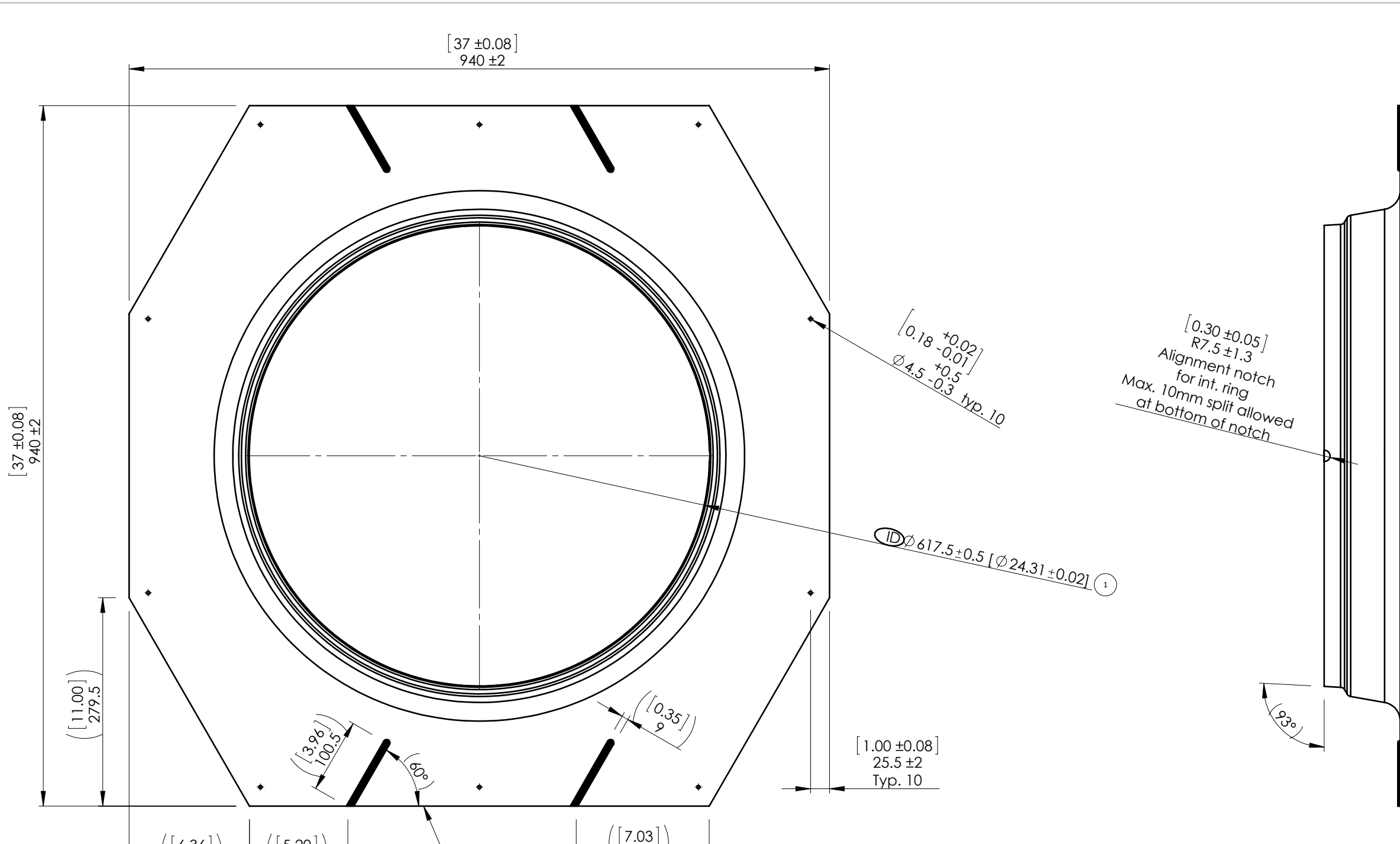
Underside of flashing

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Note main inspection points:
 *Underside of flashing (flat surfaces only) must be covered with powdercoat, but thickness is not measured.
 *Fit and function between flashing, O'ring and intermediate ring.

Material				Specifications - generally			
G90 stl .023"(.6mm) +/- .006"(.15mm) thk.				Lacq. Steel Sheet with Al-Zn Coating		309042.64	
VELUX SKY-PRS 450 Old Brickyard Rd., Greenwood, South Carolina 29648				TGF/TGR 014			
Approvals TMA-A				Low-profile flashing Commodity drawing			
Checked by/drawn by/date /REC/04.06.2014				Product instructions no.			
Scale 1:5	Unspec. meas. mm	General tolerance ±0.5	Size B	Category 21	302141	014	00 09

Edition	Description of change	Date
11	Added ID to the $\varnothing 617.5$ dimension	11/12/13



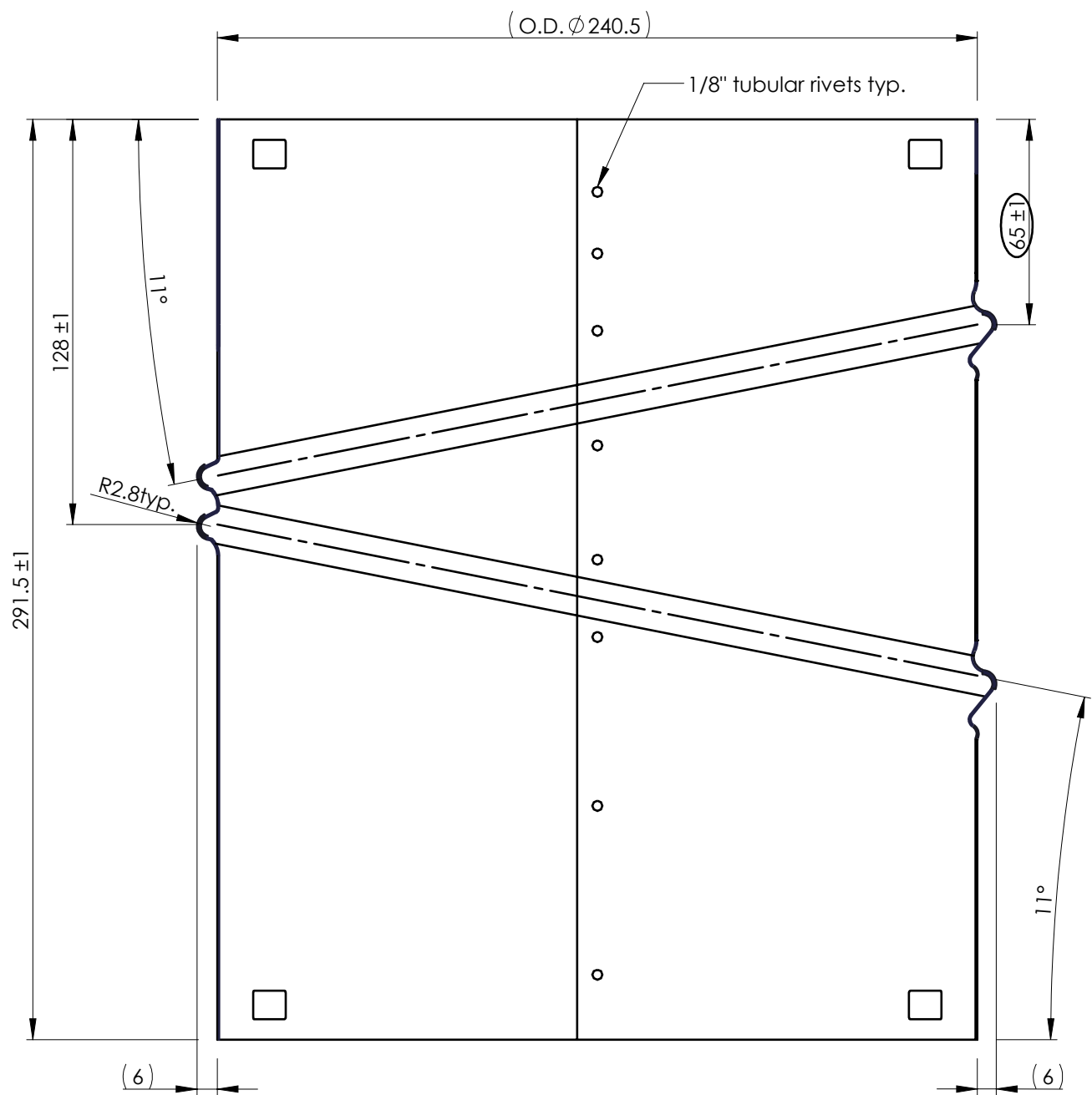
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Note main inspection points:
 *Underside of flashing (flat surfaces only) must be covered with powdercoat, but thickness is not measured.
 *Fit and function between flashing, O'ring and intermediate ring.

Material				Specifications - generally			
G90 stl .023"(.6mm) +/- .006"(.15mm) thk.				Lacq. Steel Sheet with Al-Zn Coating		309042.64	
VELUX SKY-PRS 450 Old Brickyard Rd., Greenwood, South Carolina 29648				TGF 022			
Approvals TMA-A				Low-profile flashing Commodity drawing			
Checked by/drawn by/date /REC/12.11.2013				Product instructions no.			
Scale 1:6	Unspec. meas. mm	General tolerance ±0.5	Size B	Category 21	302141	022	00
				Edition 11			

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Edition	Description of change	Date
02	Added O.D. to diameter dimension	4/8/13
03	Added TMA/SI approvals	8/6/13
04	Changed 31mm to 65mm	1/20/14

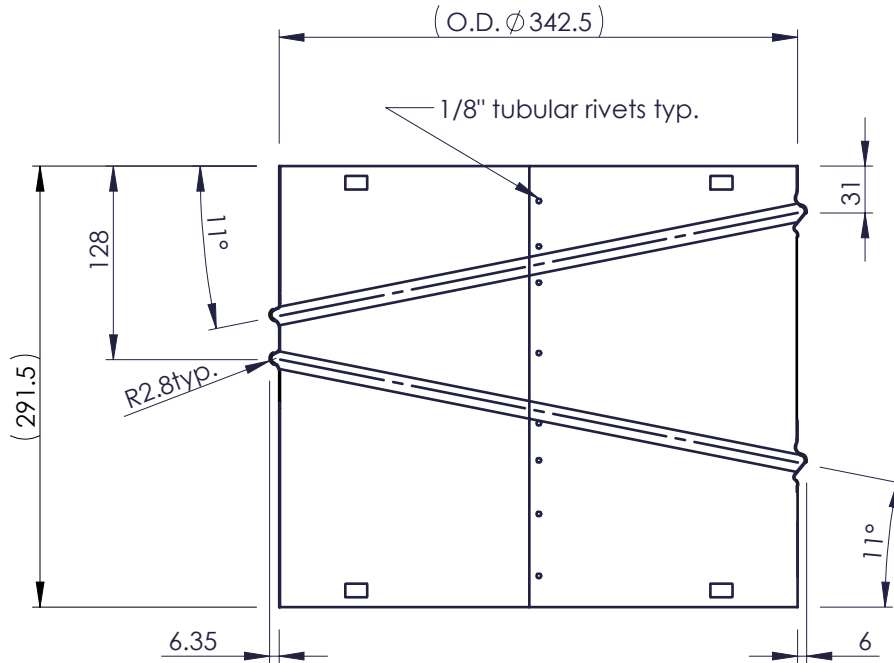


Notes:
1. Elbow must be able to rotate and not easliy pull apart.

VELUX SKY-PRS 450 Old Brickyard Rd., Greenwood, South Carolina 29648				TGR, TMR, TSR			
Approvals TMA/SI				10" Elbow			
Checked by/drawn by/date /REC/20.01.2014				Product instructions no.			
Scale 1:2	Unspec. meas. mm	General tolerance ± 0.5	Size A	Category 21	304649	010	00 04

A21

Edition	Description of change	Date
02	Made O.D. a reference dimension	4/8/13
03	Added TMA-A/SI to approvals	8/6/13



Notes:

1. Elbow must be able to rotate and not easily pull apart.
2. Gore detail is determined by tooling provided by supplier.

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VELUX SKY-PRS 450 Old Brickyard Rd., Greenwood, South Carolina 29648				TGR, TMR, TSR, TTK			
Approvals TMA-A/SI				14" Elbow			
Checked by/drawn by/date /REC/28.08.2013				Product instructions no.			
Scale 1:5	Unspec. meas. mm	General tolerance ±0.5	Size A	Category 21	304649	014	00 03

Edition	Description of change	Date
02	revised dimensions to match vendor supplied part	1/21/13



Strip width = 12.19"

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VELUX SKY-PRS
450 Old Brickyard Rd., Greenwood, South Carolina 29648

Approvals
TMA-A

Checked by/drawn by/date
/REC/28.08.2013

Scale	Unspec. meas.	General tolerance	Size
1:5	mm	±0.5	B

Specifications - generally

High Reflectance Material for tubular	309048.64
TGR, TMR, TSR	

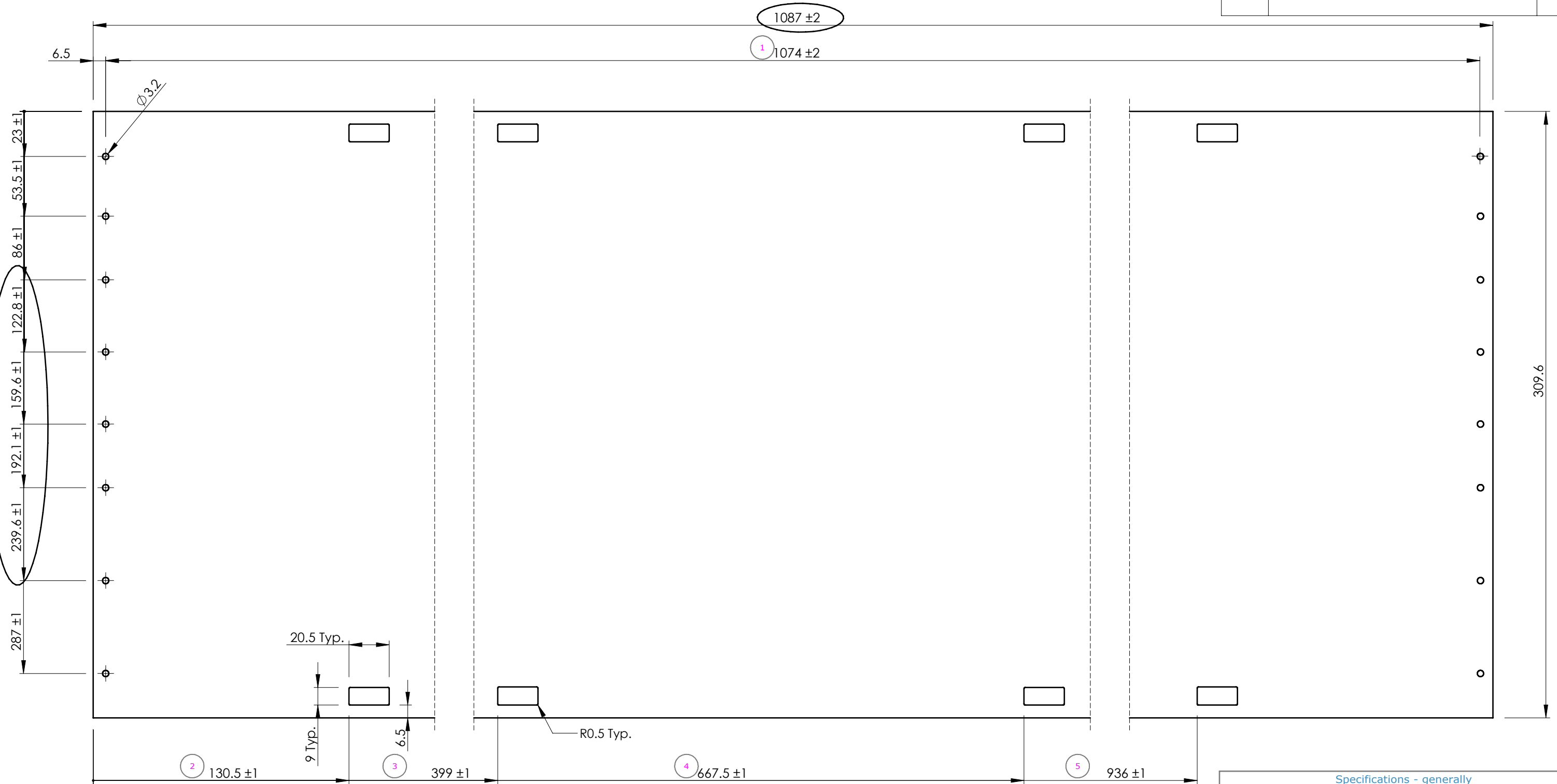
10" Elbow
Punching

Product instructions no.

Category					
21	304649	010	52	02	

Edition	Description of change	Date
02	revised dimensions to match vendor supplied part	1/21/13

A21



Strip width = 12.19"

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VELUX SKY-PRS
450 Old Brickyard Rd., Greenwood, South Carolina 29648

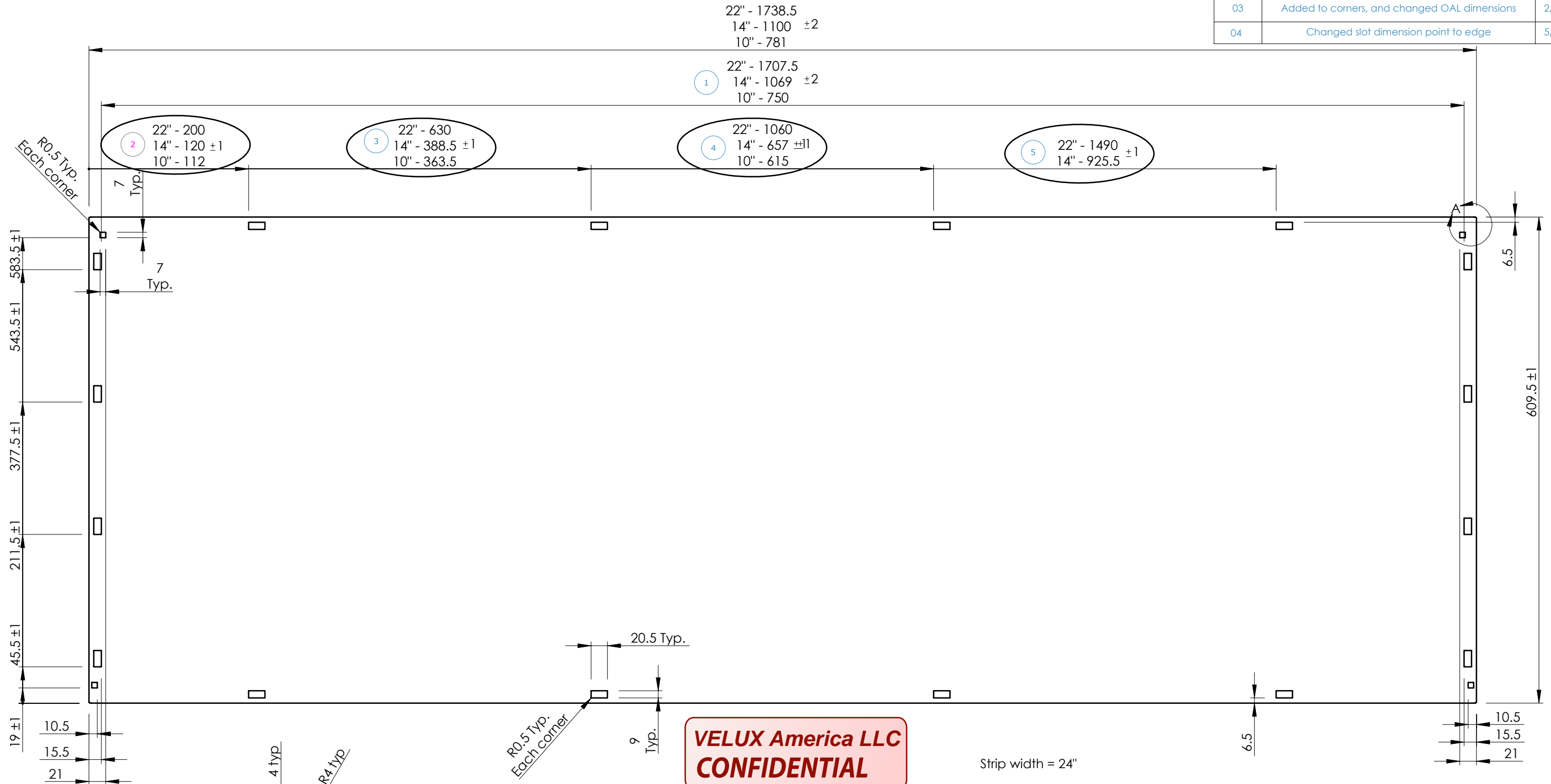
Approvals
TMA-A

Checked by/drawn by/date
/REC/28.08.2013

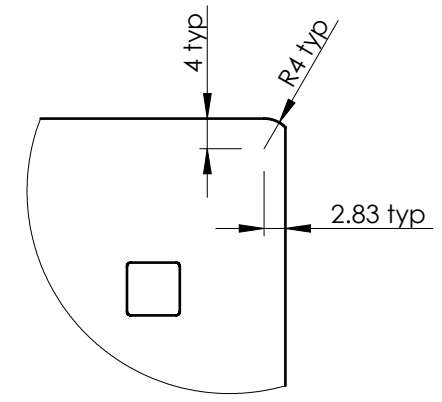
Scale 1:5	Unspec. meas. mm	General tolerance ±0.5	Size B
--------------	---------------------	---------------------------	-----------

Specifications - generally				
High Reflectance Material for tubular	309048.64			
TGR, TMR, TSR, TTK				
14" Elbow Punching				
Product instructions no.				
Category	21	304649	014	52
Operation	52	02		
Edition				

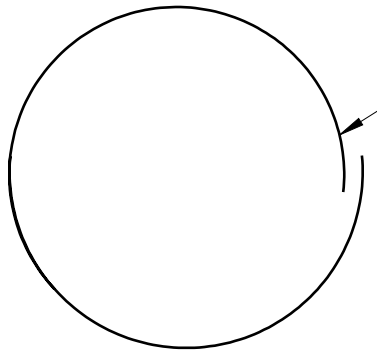
Edition	Description of change	Date
02	Added rolled radius dimensions	1/16/13
03	Added to corners, and changed OAL dimensions	2/4/13
04	Changed slot dimension point to edge	5/9/18



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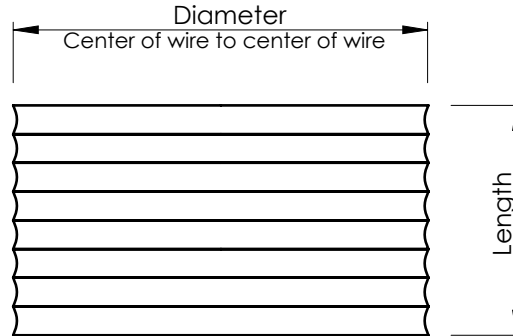
DETAIL A
SCALE 1 : 1



Roll to radius
R122mm 10"
R173mm 14"
R274mm 22"

Material				Specifications - generally			
.016" (.41mm) Aluminum				High Reflectance Material for tubular		309048.64	
VELUX SKY-PRS 450 Old Brickyard Rd., Greenwood, South Carolina 29648				TMR, TGR, TLR, TSR			
Approvals TMA-A				Tube Punching			
Checked by/drawn by/date /REC/09.05.2018				Product instructions no.			
Scale 1:5	Unspec. meas. mm	General tolerance ±0.5	Size B	Category 21	304646	000	52 04

Edition	Description of change	Date
02	Replaced 30234463 with 30234408	8/6/13



Part number	Diameter	Length
30234325	352.5mm(13.88")	25'
30234308	352.5mm(13.88")	8.33'
30234310	352.5mm(13.88")	12.5'
30234425	555.7mm(21.88")	25'
30234408	555.7mm(21.88")	8.33'
30234412	555.7mm(21.88")	12.5'
30234402	555.7mm(21.88")	2'
30207621	522mm(20.55")	25'
30210021	522mm(20.55")	6.25'
3021002112	522mm(20.55")	12.5'

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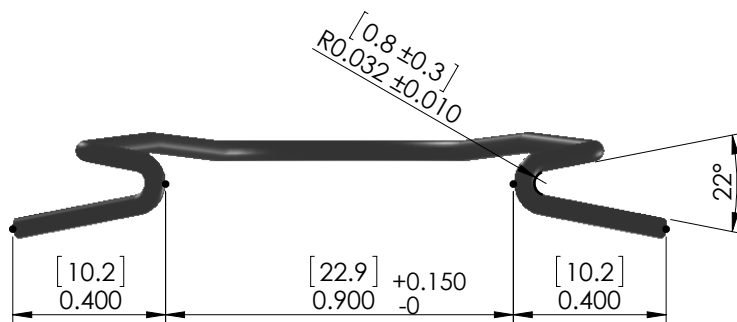
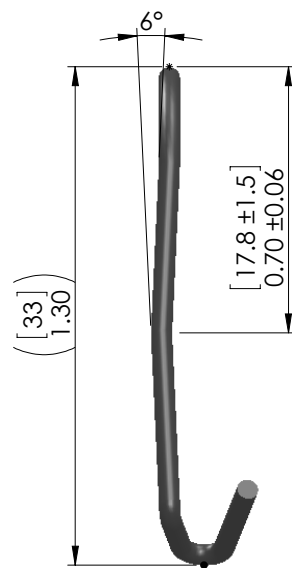
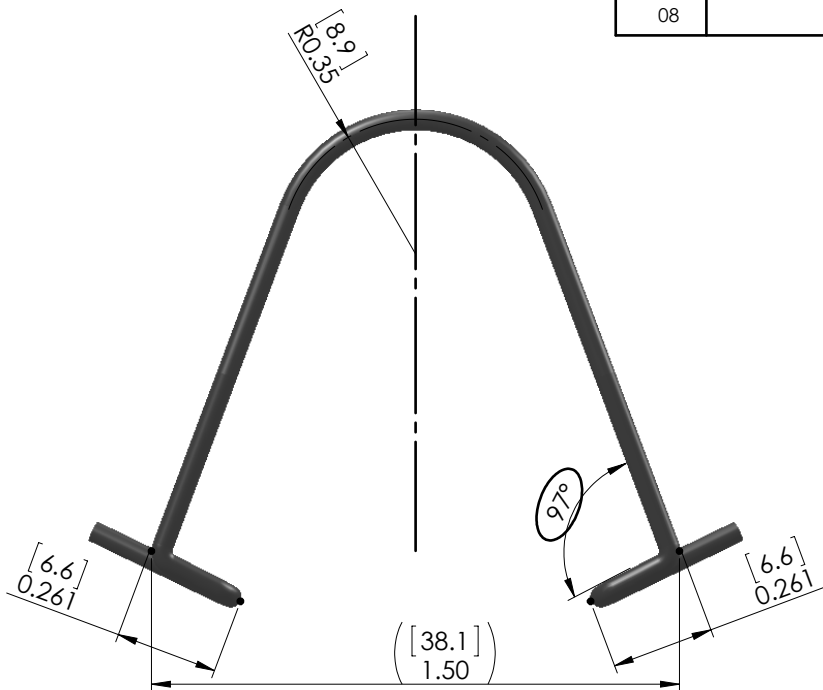
Specifications - generally			
High Reflectance Flexible Tube	309053.64		
VELUX	SKY-PRS		
450 Old Brickyard Rd., Greenwood, South Carolina 29648			
Approvals TMA-C			
Checked by/drawn by/date /REC/06.08.2013			
Scale 1:10	Unspec. meas. mm	General tolerance +2"/-3/4"	Size A

Sun tunnel

Flexible tubing
Cutting drawing

Product instructions no.				
Category		Operation	Edition	
21	302343	000	31	02

Edition	Description of change	Date
04	Added SI to the approvals	8/6/13
05	Revised tol. for .900 dim. & changed .38 to .400	11/18/13
06	Added material back to drawing	2/27/14
07	Added dual dimensions	5/21/14
08	97° angle was 90°	7/16/14



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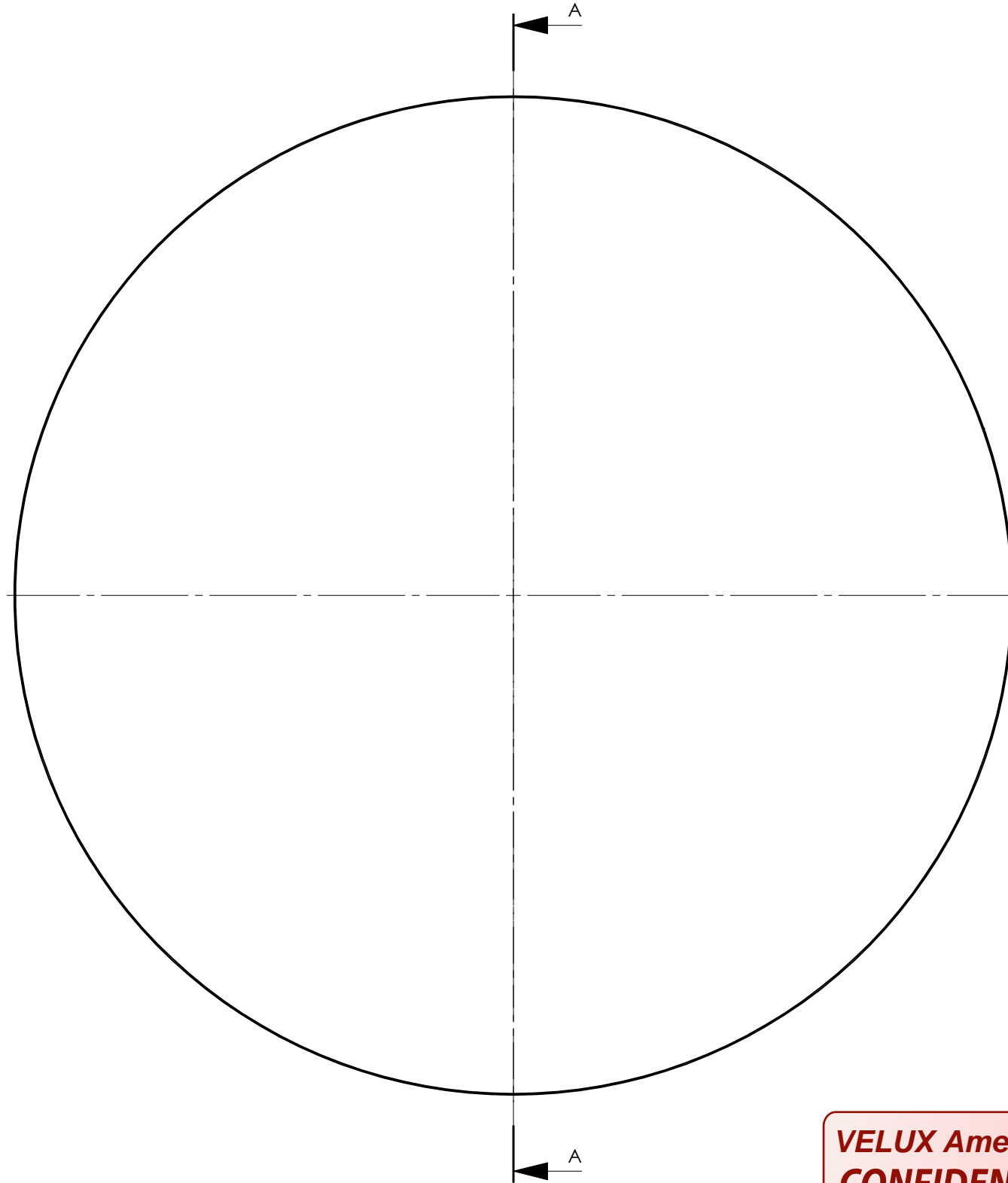
General angle tolerance $\pm 3^\circ$



Material			
302 spring tempered stainless steel (\varnothing 1.4mm)			
VELUX		SKY-PRS	
450 Old Brickyard Rd., Greenwood, South Carolina 29648			
Approvals			
TMA-A/SI			
Checked by/drawn by/date			
/REC/16.07.2014			
Scale	Unspec. meas.	General tolerance	Size
2:1	inches	$\pm .025"/.6mm$	A

TMR, TGR, TLR, TTK, ZTE, ZTR			
Pull Clip			
Product instructions no.			
Category		Operation	Edition
21	302329	000 00	08

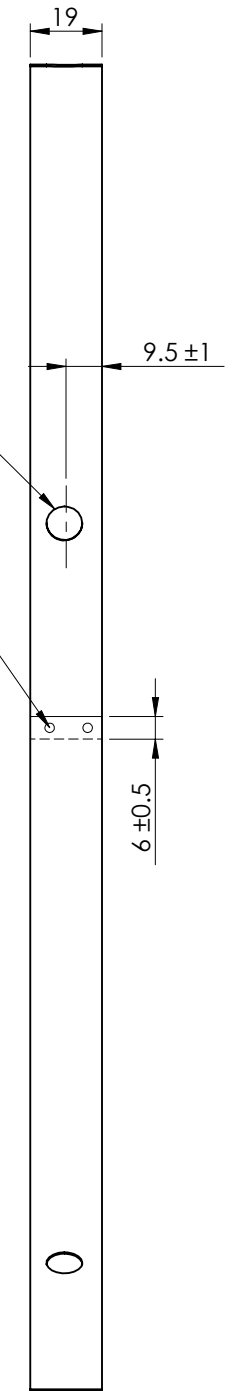
Edition	Description of change	Date
12	Added note stating holes are for P2 only	5/15/14



Ø 5mm ± 1mm hole
5 holes equally spaced

Note: holes are only used on 22" P2 spare parts

Riveted w/.097" rivets



SECTION A-A

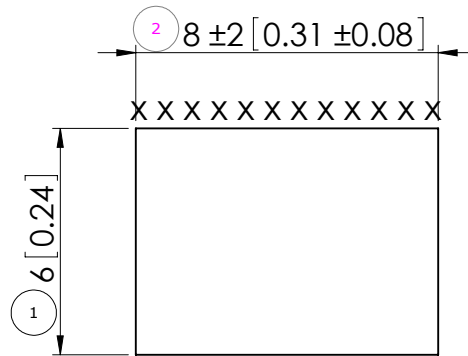
Size	Outside diameter	CTC dimension	Material thickness	P/N	Holes
14"	351 +1/-0	43-27/64" +1/8 -0	0.020"	30865514	No
22"	552 +1/-0	68-17/64" +1/8 -0	0.025"	30865622	No
22" (P2)	552 +1/-0	68-17/64" +1/8 -0	0.025"	30438722	Yes

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- Notes:
1. Part must be as close to circular as possible
 2. Diameter to be measured with a diameter tape measure.

Specifications - generally				Material			
Tempered Spring steel for Sun Tunnel		309054.64		AlSI 301 Stainless steel 0.025"/0.020"			
VELUX		SKY-PRS		<u>TMF/TGF/TCR (P2)</u>			
450 Old Brickyard Rd., Greenwood, South Carolina 29648				Snap ring Commodity drawing			
Approvals TMA-A				Product instructions no.			
Checked by/drawn by/date /REC/15.05.2014							
Scale	Unspec. meas.	General tolerance	Size	Category			
1:2	mm	±.5	B	21	304172	000	51 12

Edition	Description of change	Date
03	Changed width from 11mm to 8mm	2/1/16



Note: Maximum nominal width 1/2" or 12.7mm

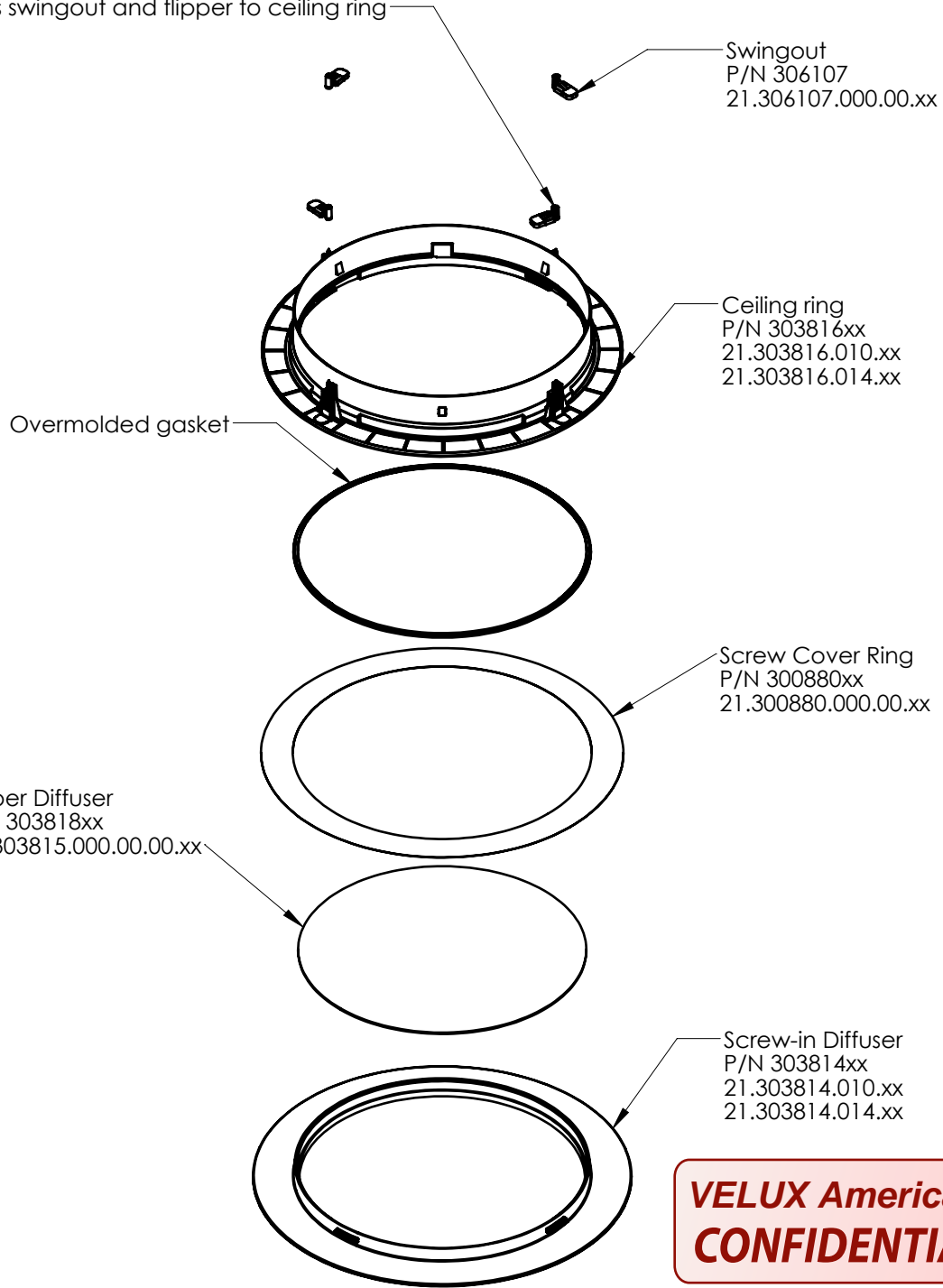
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x x x = PSA attached

Material							
Polyurethane foam (open-cell) with PSA							
VELUX		SKY-PRS		<u>T-R, T-C, & THR</u>			
450 Old Brickyard Rd., Greenwood, South Carolina 29648				Pivot ring foam gasket Commodity drawing			
Approvals TMA-A							
Checked by/drawn by/date /REC/01.02.2016				Product instructions no.			
Scale 1:10	Unspec. meas. mm	General tolerance ±1	Size A	Category 21	303519	000	00 03

Edition	drawn by/checked by/date	Description of change
02	MM/CBB/6/24/19	Added screw cover ring
03	MM/BBK/5/29/20	Updated drawing to show upper diffuser

Placement of screw
 P/N 306238
 #8 Phillips drive screw, 2 1/4" length
 pan head, mat'l - clear zinc.
 Screw fastens swingout and flipper to ceiling ring



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VELUX SKY-PRS
 450 Old Brickyard Rd., Greenwood, South Carolina 29648

ST13-G
 Ceiling diffuser complete
 Part assembly drawing

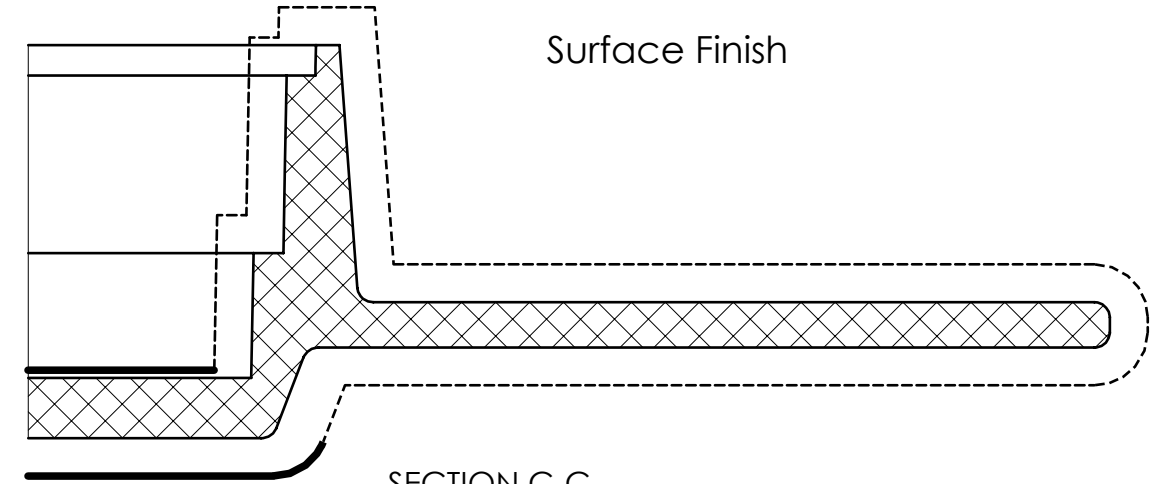
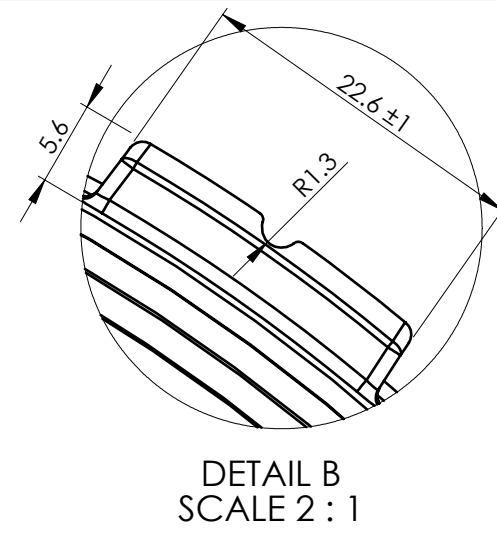
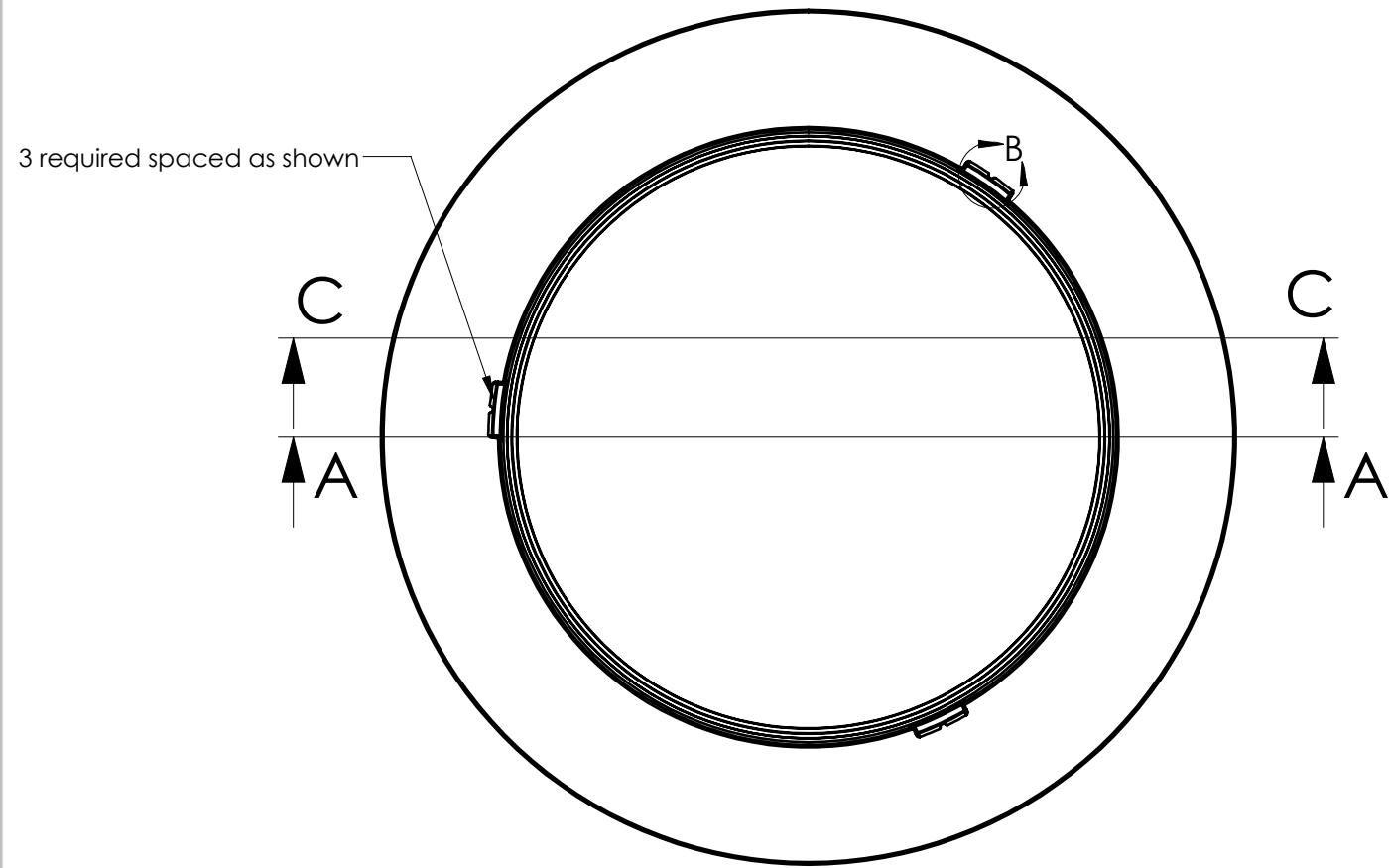
Approvals

Checked by/drawn by/date
 BBK/CBB/22.09.2017

Product instructions no.				
Category		Operation	Edition	
21	304836	000	51	03

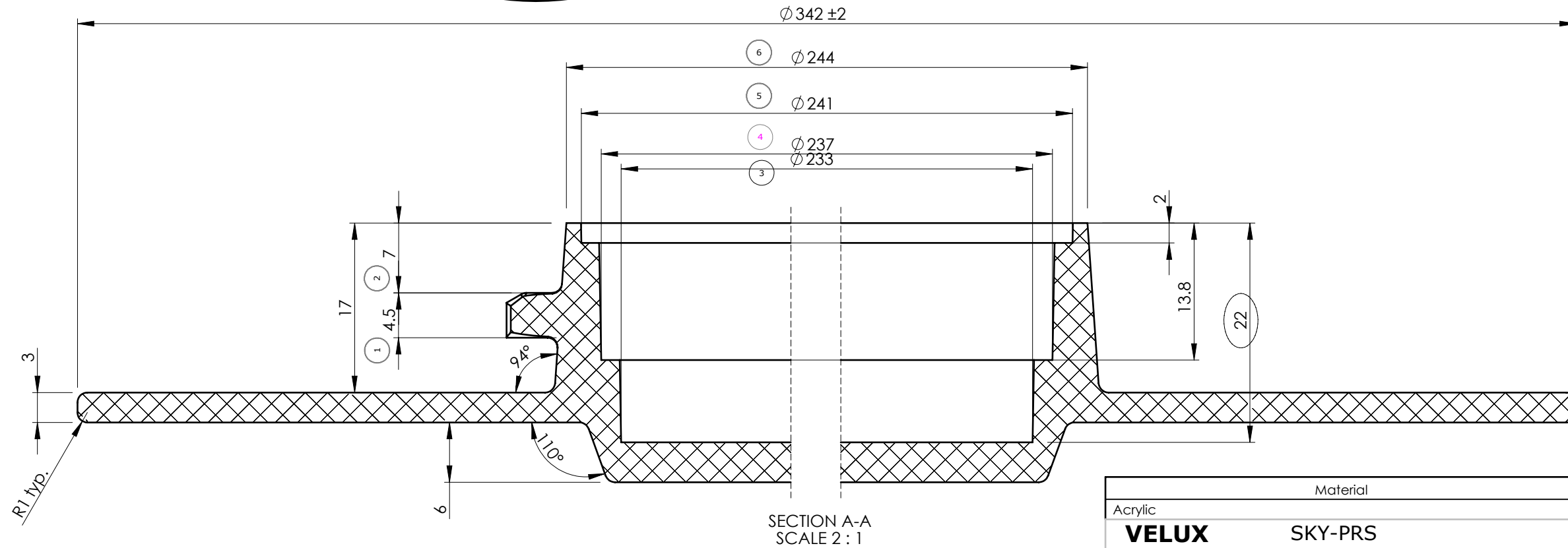
Scale	Unspec. meas.	General tolerance	Size
1:8	mm	± 0.5	A

Edition	Description of change	Date
02	Changed height and surface finish	7/17/18



SECTION C-C
SCALE 2 : 1

— = SFI A-2
- - - = MT 11006



SECTION A-A
SCALE 2 : 1

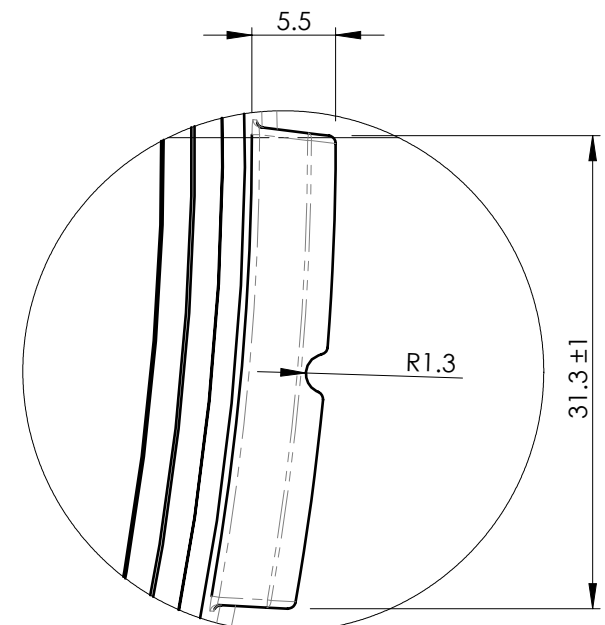
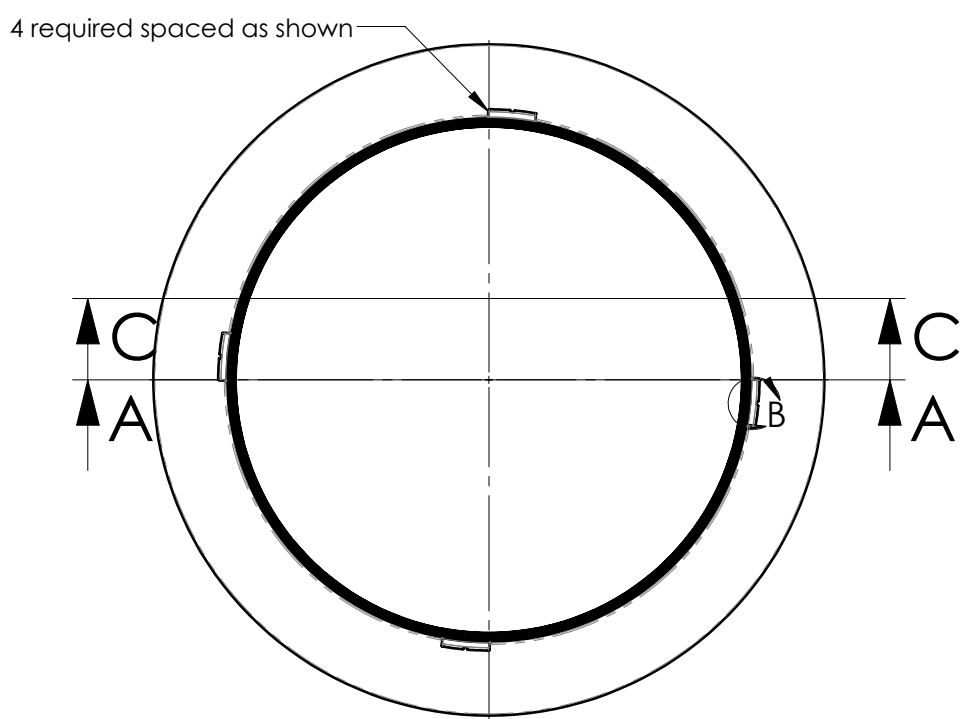
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- Notes:
 1. Manufacture of tooling is by supplied digital file from VELUX greenwood inc. 30381410.01.sldprt
 2. Acceptance of part is dependant upon fit and function with ceiling ring.

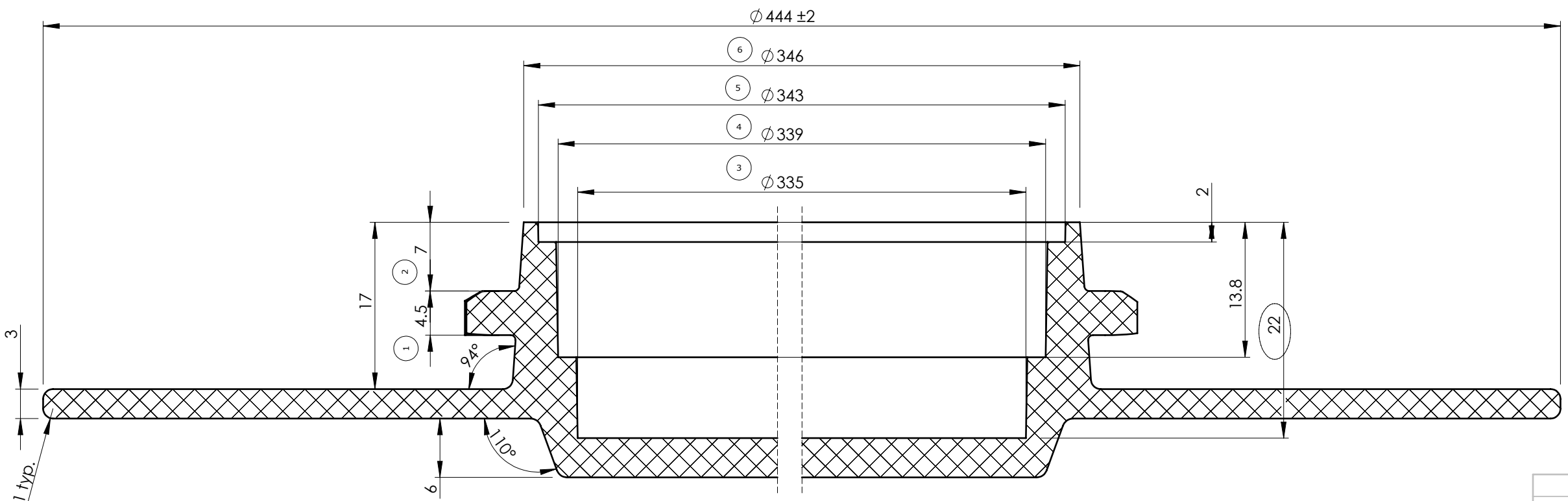
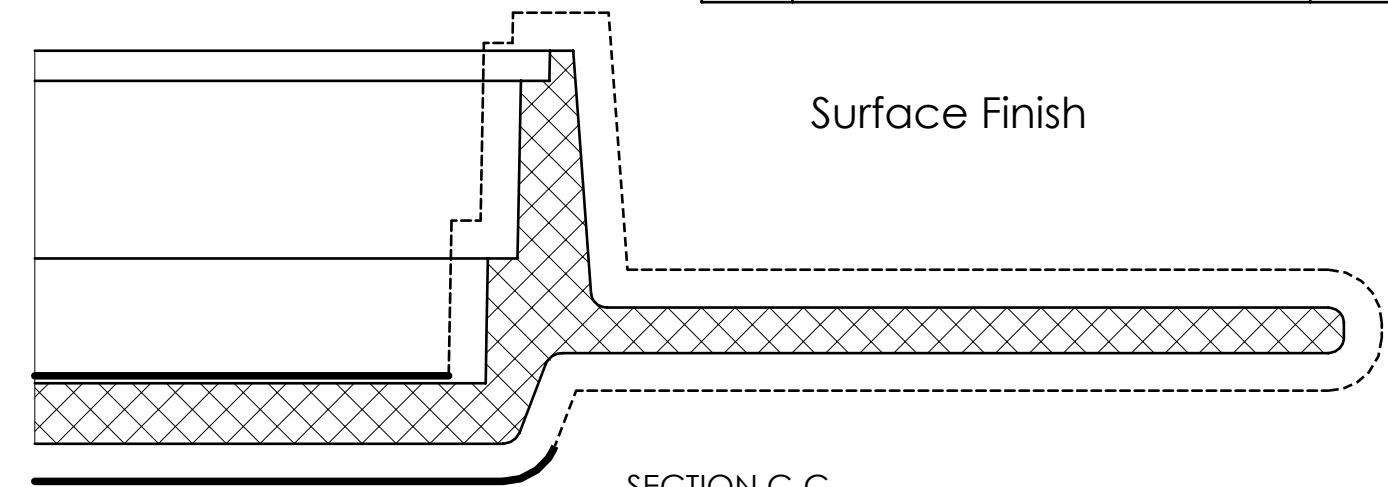
Material			
Acrylic	VELUX SKY-PRS		
450 Old Brickyard Rd., Greenwood, South Carolina 29648			
Approvals TMA-A			
Checked by/drawn by/date BBK/CBB/17.07.2018			
Scale 1:3	Unspec. meas. mm	General tolerance ± 0.5	Size B

Standards - generally				
Symbol explanations	880006.68			
Specifications - generally				
Acrylic	309038.64			
ST13-G				
10" Screw-in Diffuser Commodity drawing				
Product instructions no.				
Category	21	303814	010	00
Edition	02			

Edition	Description of change	Date
02	Changed height and surface finish	6/19/18



DETAIL B
SCALE 2 : 1



SECTION A-A
SCALE 2 : 1

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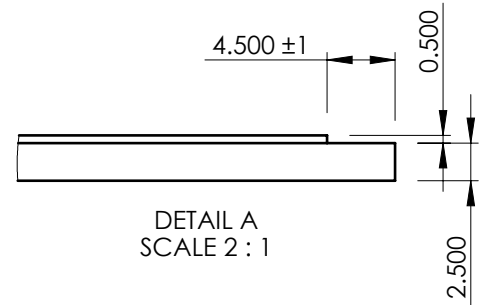
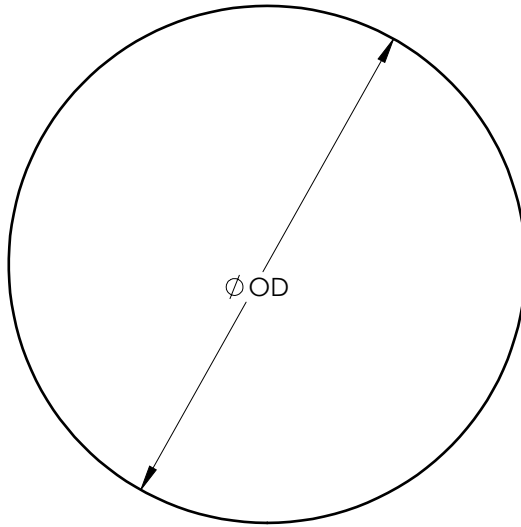
- Notes:
1. Manufacture of tooling is by supplied digital file from VELUX greenwood inc. 30381414.01.sldprt
 2. Acceptance of part is dependant upon fit and function with ceiling ring.

Material			
Acrylic			
VELUX SKY-PRS 450 Old Brickyard Rd., Greenwood, South Carolina 29648			
Approvals TMA-A			
Checked by/drawn by/date BBK/CBB/19.06.2018			
Scale 1:5	Unspec. meas. mm	General tolerance ±0.5	Size B

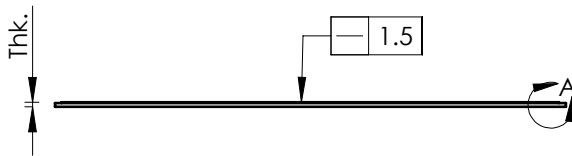
Specifications - generally				
Acrylic	309038.64			
Standards - generally				
Symbol explanations	880006.68			
ST13-G				
14" Screw-in Diffuser Commodity drawing				
Product instructions no.				
Category	21	303814	014	00
Edition	02			

Edition	drawn by/checked by/date	Description of change
04	CBB/BBK/12/10/19	Added frosted 3mm part numbers
05	CBB/BBK/01/16/20	Added new lines for 3mm thickness
05	CBB/BBK/10/01/20	Added detail on milled edges

Size	OD mm/(in)	Thk. mm/(in)	Clear(Cl) P/N	Frosted(F) 2mm P/N	Frosted(F) 3mm P/N	Crackle(Cr) P/N	Prismatic (P) P/N
10" middle	236 (9.291")	1.5 (0.059")	30381510	--	--	30381910	--
14" middle	338 (13.307")	1.5 (0.059")	30381514	--	--	30381914	--
10" upper	241 (9.488")	2 (0.079")	--	30381810	--	--	--
14" upper	342 (13.465")	2 (0.079")	--	30381814	--	--	--
10" upper	241 (9.488")	3 (0.118")	--	--	32003610	--	--
14" upper	342 (13.465")	3 (0.118")	--	--	32003614	--	--
10" pivot ring lens	243 (9.567")	1.5 (0.059")	30382010	--	--	--	30382110
14" pivot ring lens	375 (14.764")	1.5 (0.059")	30382014	--	--	--	30382114



Note:
Edges are to be milled down to 2.5mm only on 320036xx.



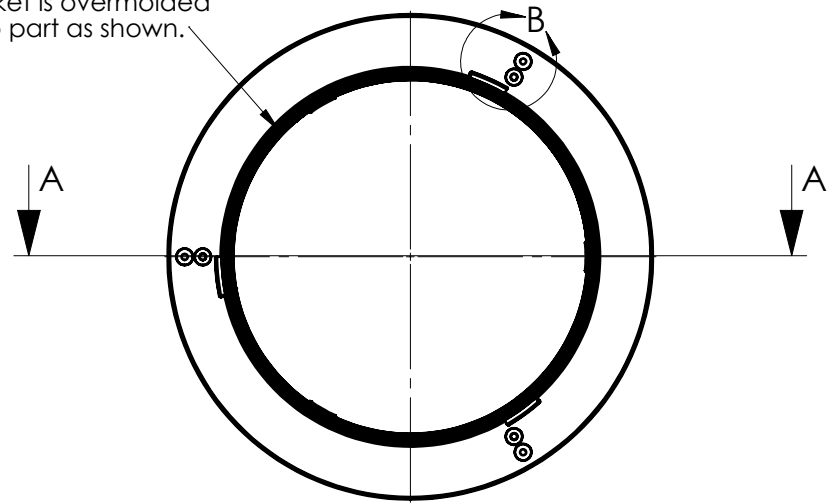
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Material			
Acrylic			
VELUX		SKY-PRS	
450 Old Brickyard Rd., Greenwood, South Carolina 29648			
Approvals TMA-A			
Checked by/drawn by/date BBK/CBB/19.04.2018			
Scale 1:5	Unspec. meas. mm	General tolerance ±0.3	Size A

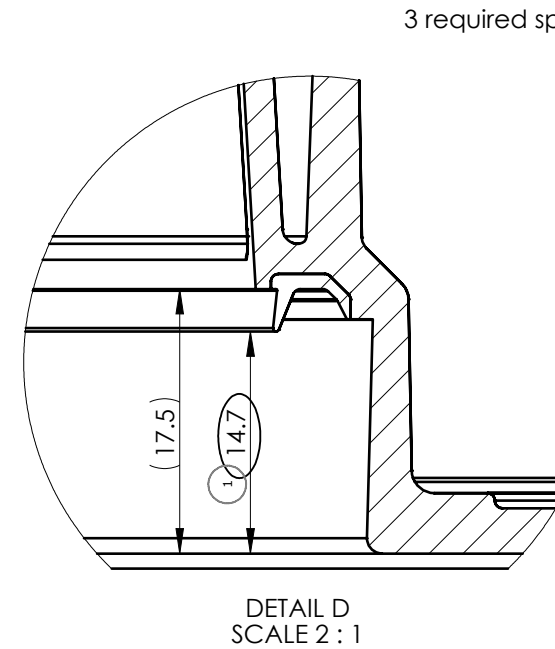
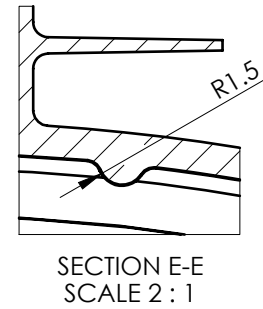
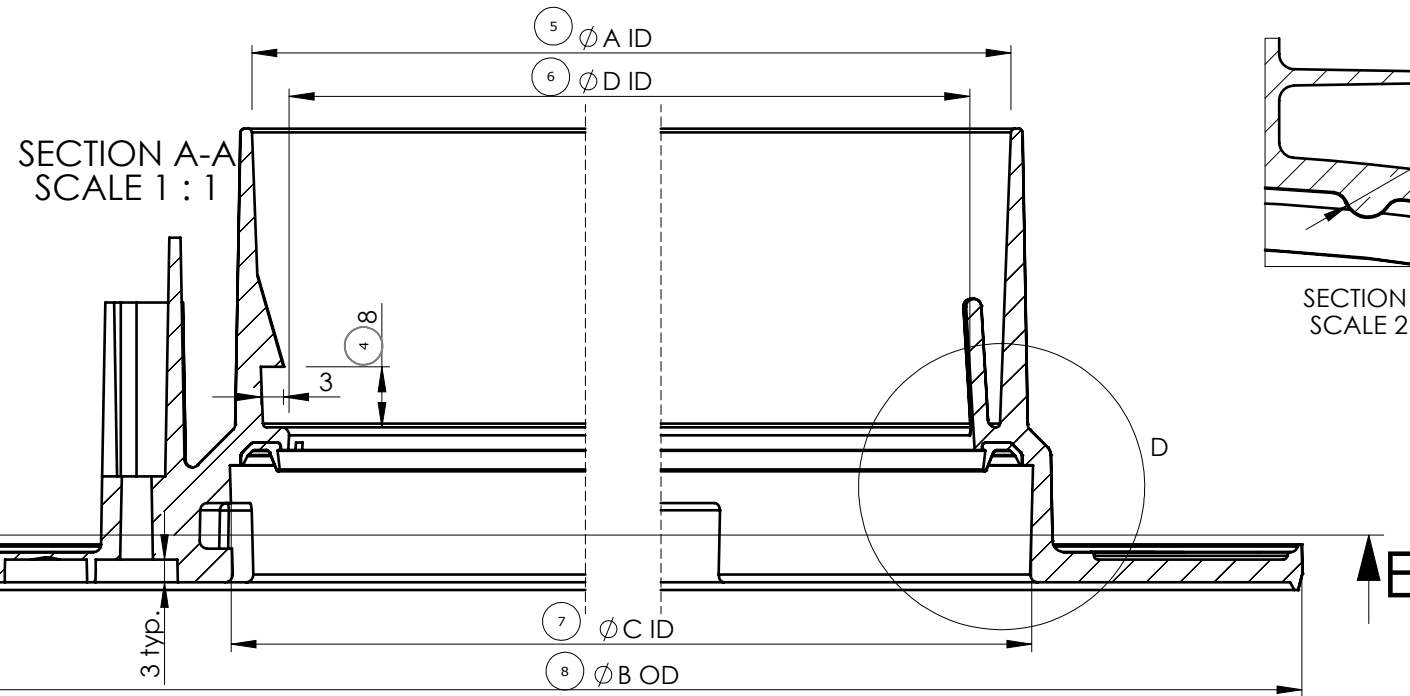
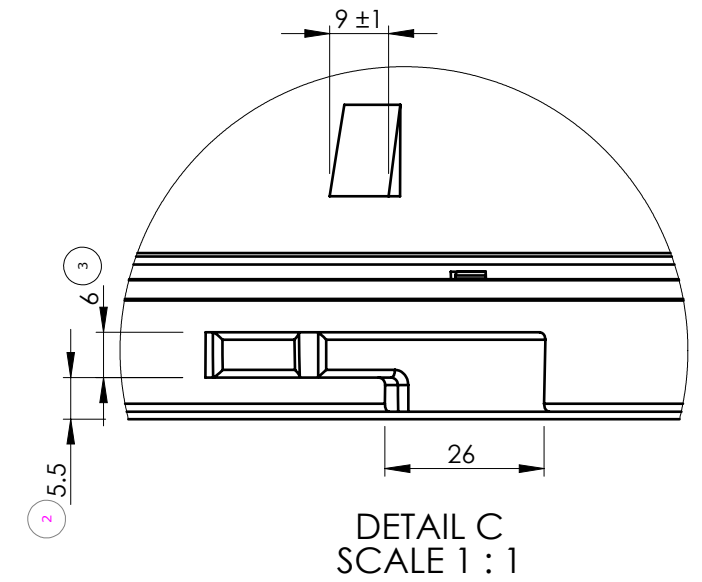
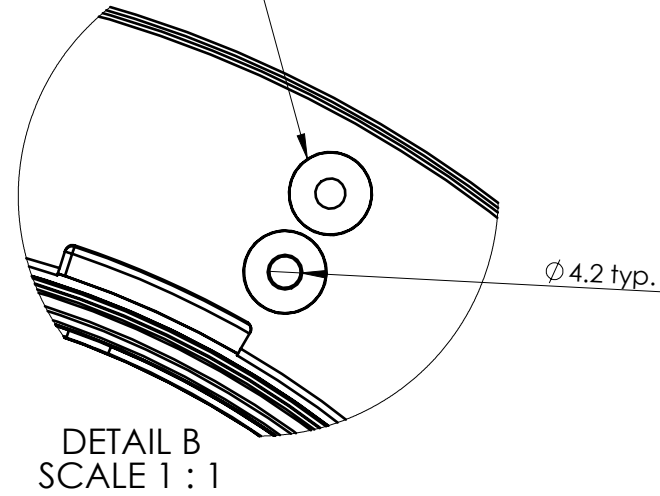
Specifications - generally					
Material for clear diffuser	309038.64				
Specifications - generally					
Material for prismatic diffuser	309050.64				
Specifications - generally					
Material for frosted diffuser	309049.64				
Standards - generally					
Symbol explanations	880006.68				
ST13-G					
Diffuser					
Commodity Drawing					
Product instructions no.					
Category	21	303815	000	00	06

Edition	drawn by/checked by/date	Description of change
02	MM/REC/2/1/22	Updated overmolded gasket detail, added Detail D

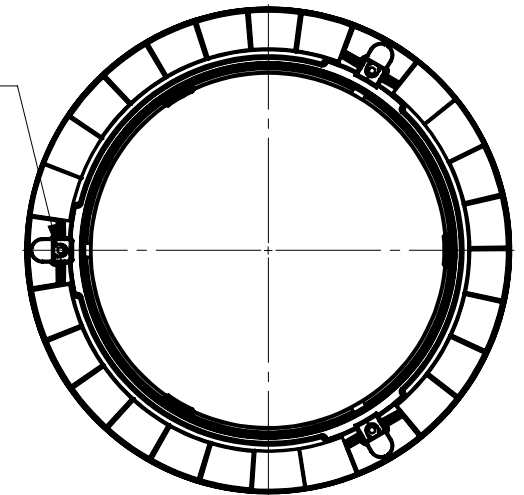
Gasket is overmolded onto part as shown.



Ø11mm 4 required spaced as shown



3 required spaced as shown



Size	Ø A ±0.5	Ø B ±0.5	Ø C ±0.3	Ø D ±0.5
10"	244	321	249.5	234

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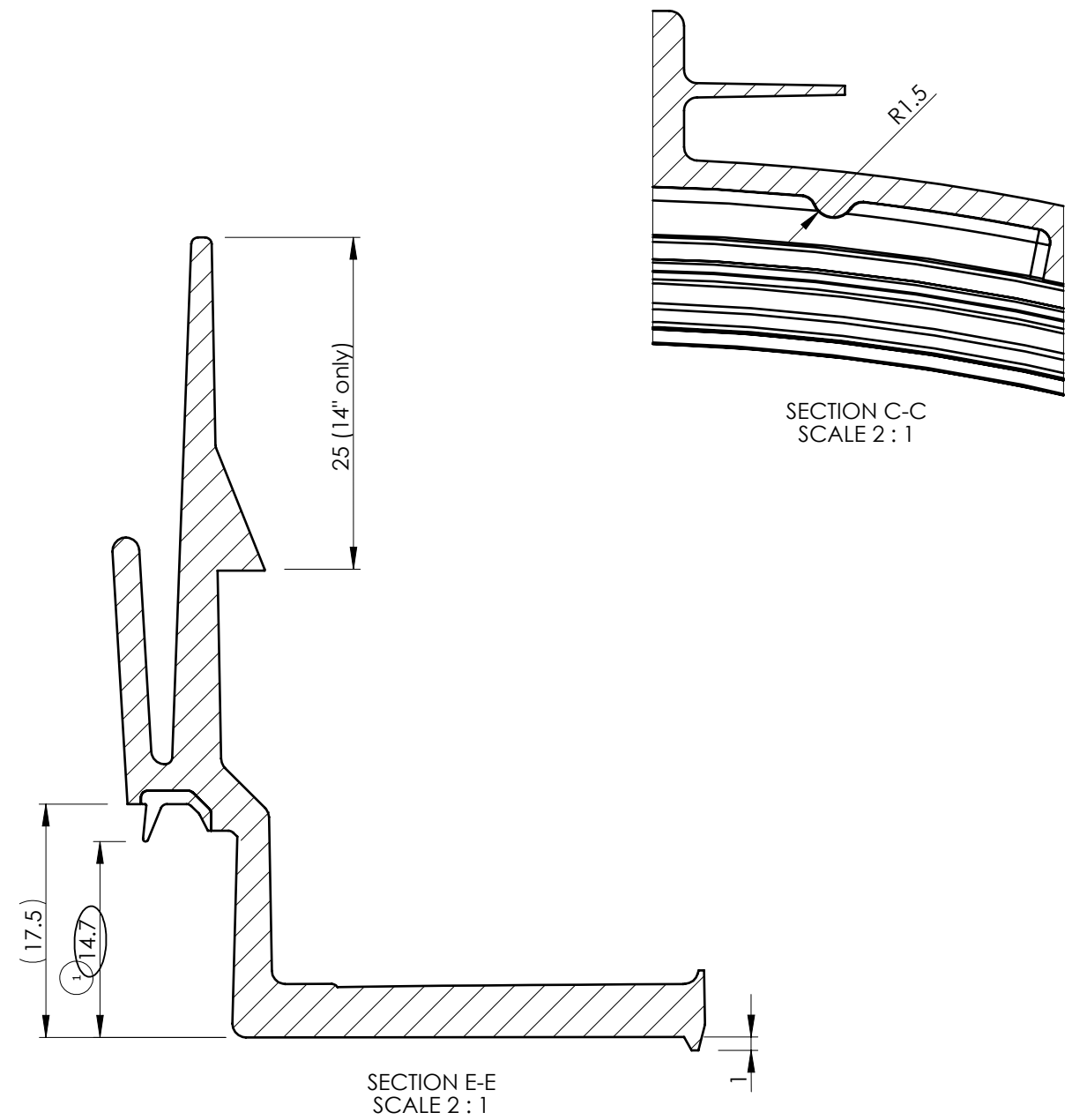
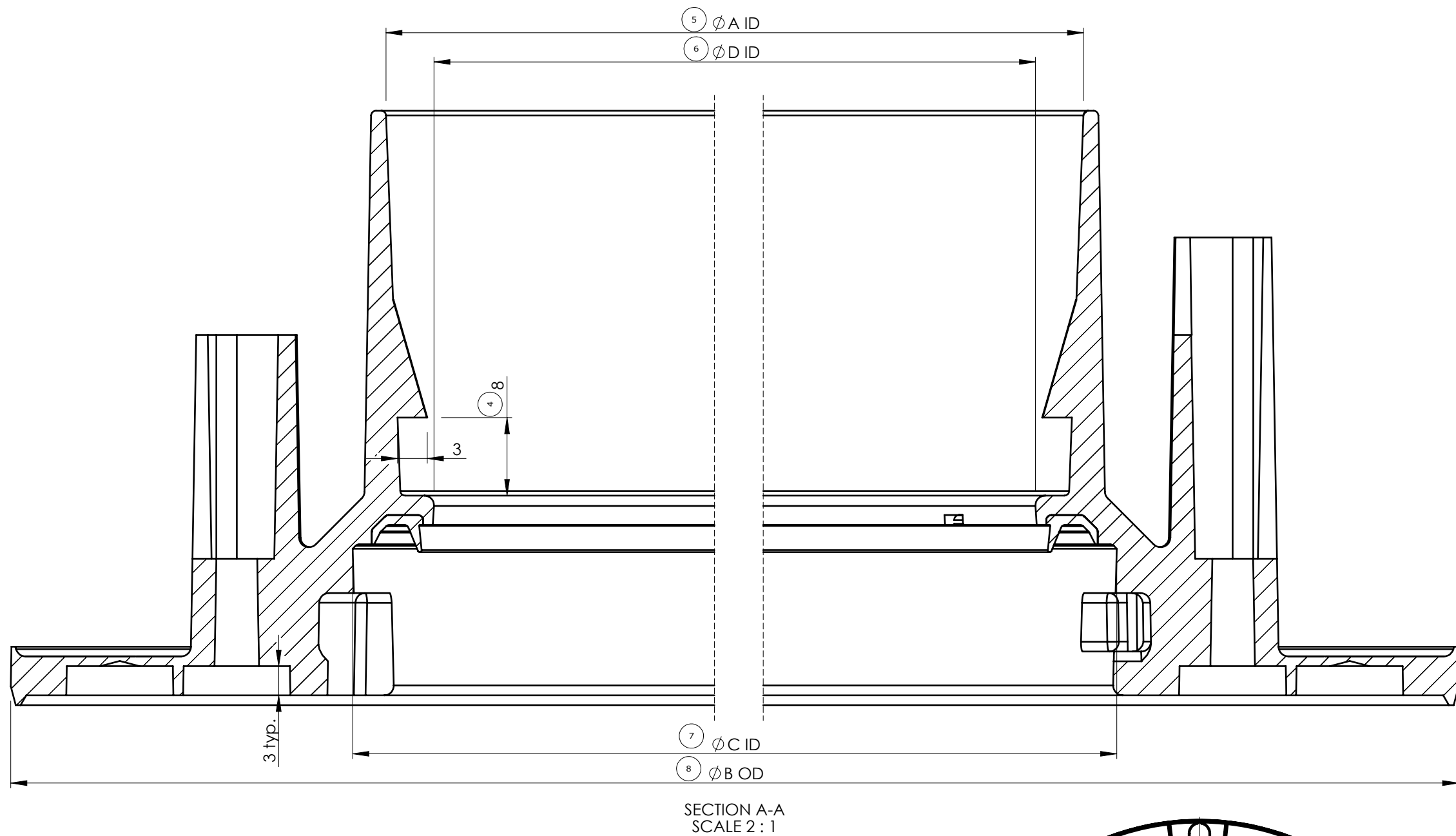
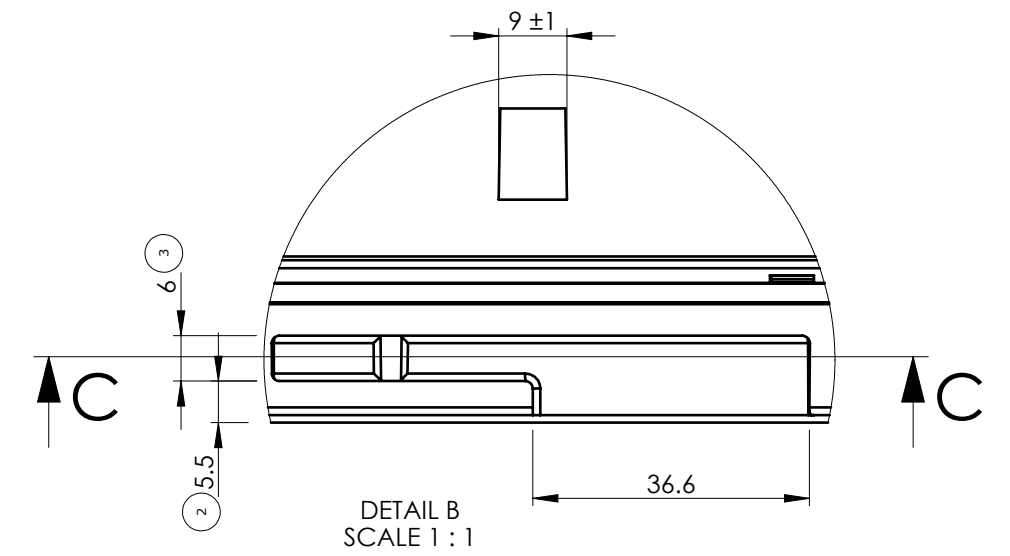
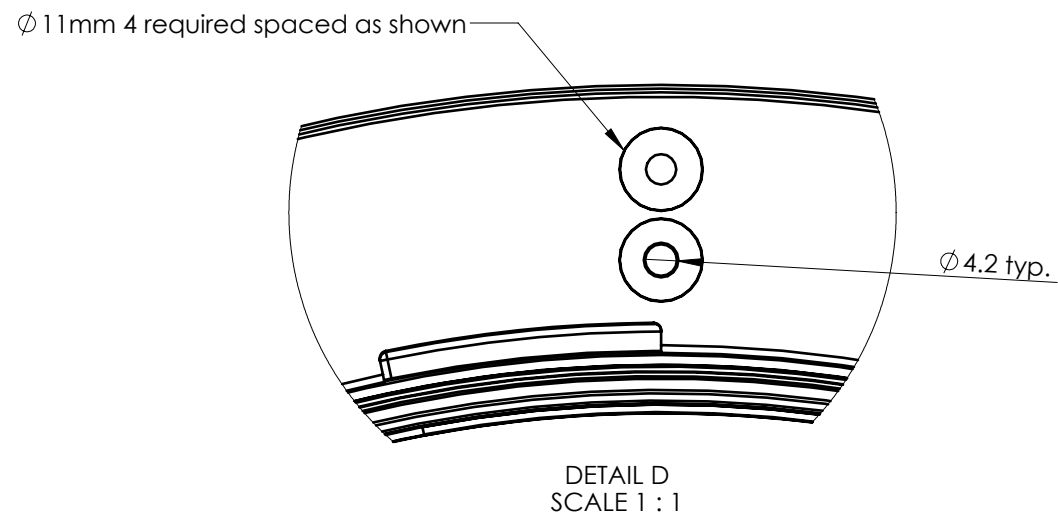
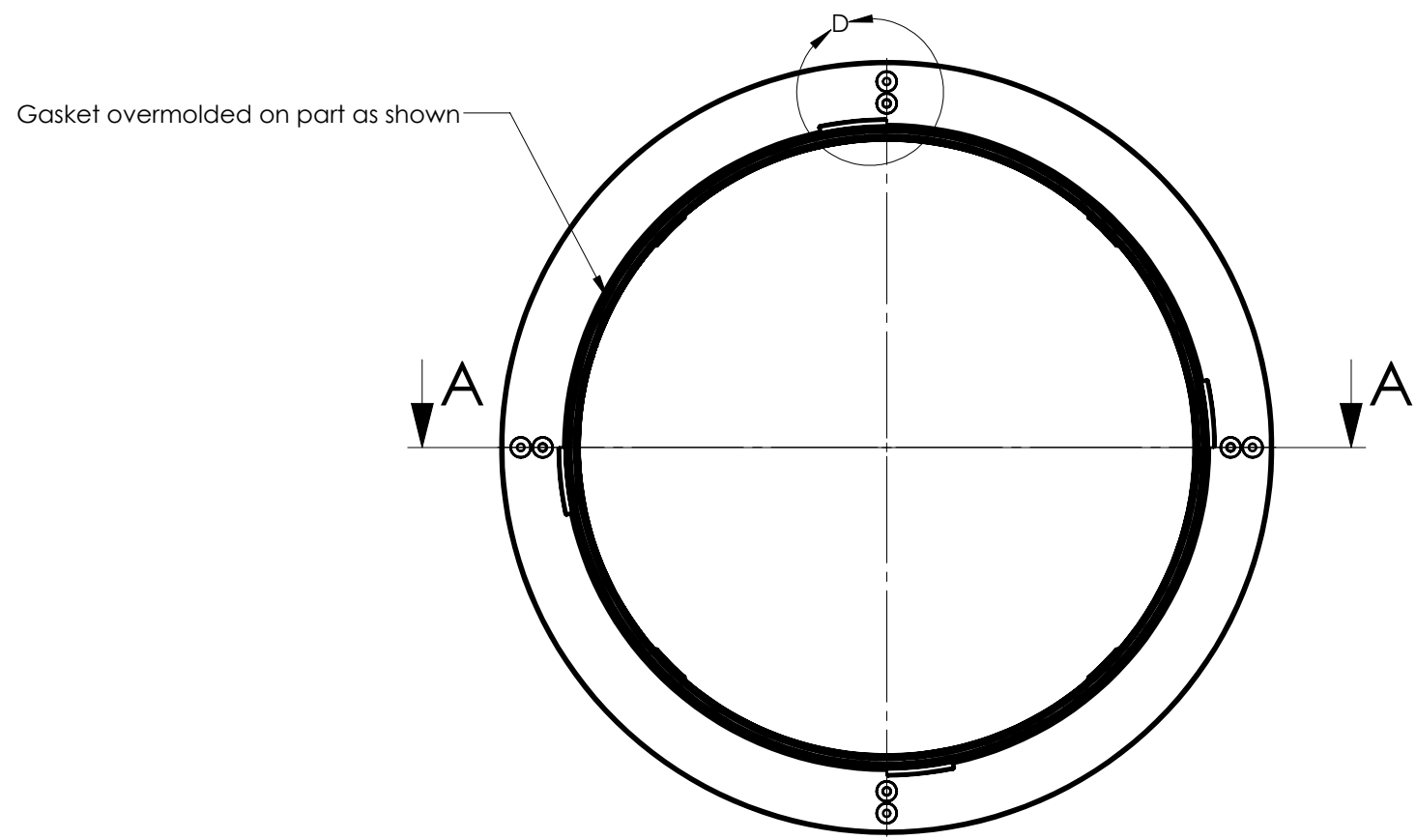
NOTES:

1. Manufacture of tooling is by supplied digital file from VELUX greenwood inc. 30381610.01.SLDPRT.
2. Surface finish to be SPI C-3
3. Acceptance of part is dependent upon fit and function with the screw-in diffuser. (30381410)

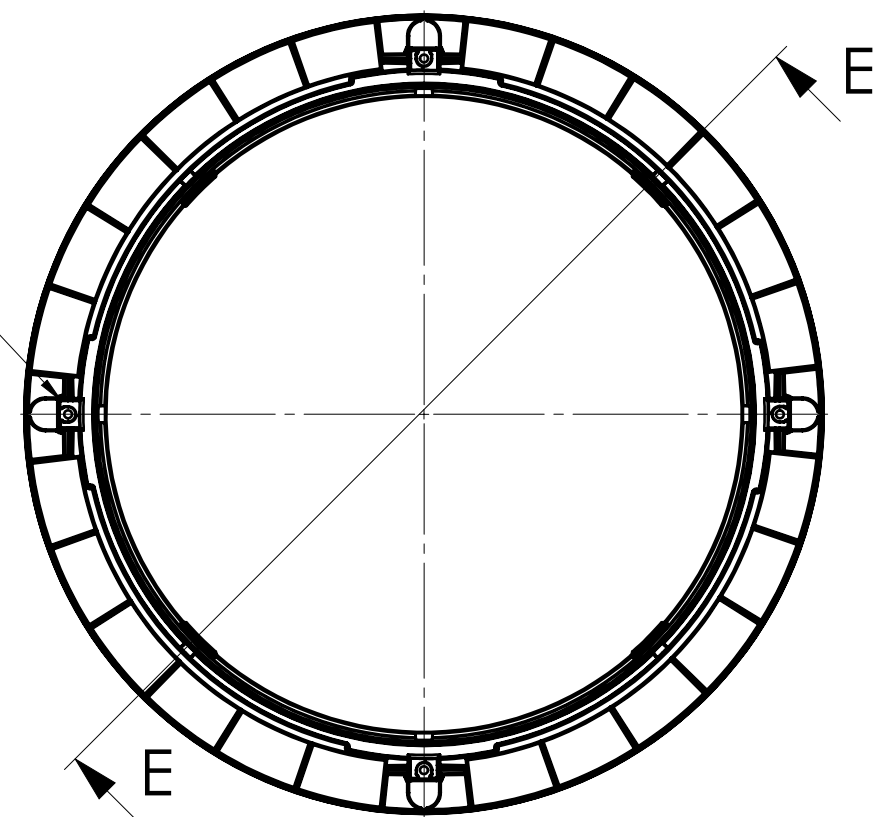
Material			
Ceiling Ring: White ABS finish to SPE/SPI A2	309043.64		
VELUX SKY-PRS 450 Old Brickyard Rd., Greenwood, South Carolina 29648			
Approvals			
TMA-A			
Checked by/drawn by/date			
BBK/CBB/02.11.2017			
Scale	Unspec. meas.	General tolerance	Size
1:5	mm	±0.5	B

Specifications - generally				
Ceiling Ring: White ABS	309043.64			
Standards-generally				
Symbol explanations	880006.68			
ST13-G				
10" Ceiling Ring				
Commodity drawing				
Product instructions no.				
Category	21	303816	010	00
Operation	00	02	02	02

Edition	drawn by/checked by/date	Description of change
02	MM/REC/2/1/22	Updated overmolded gasket detail



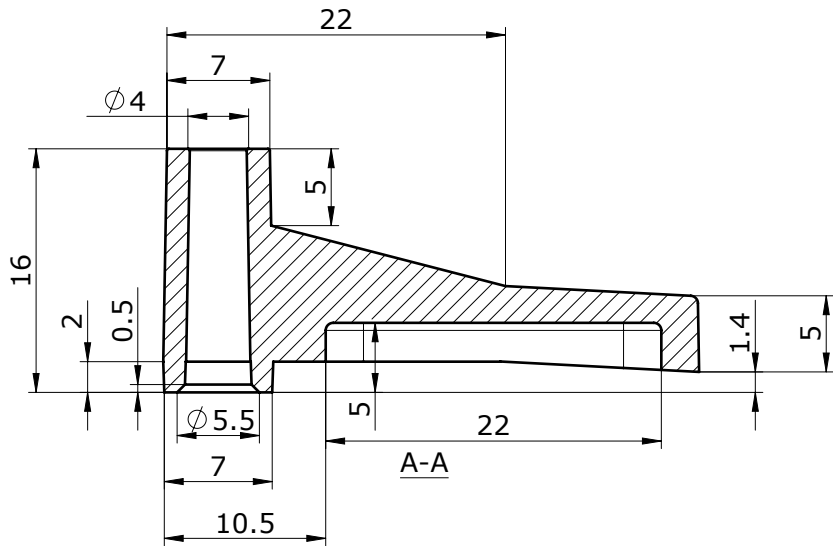
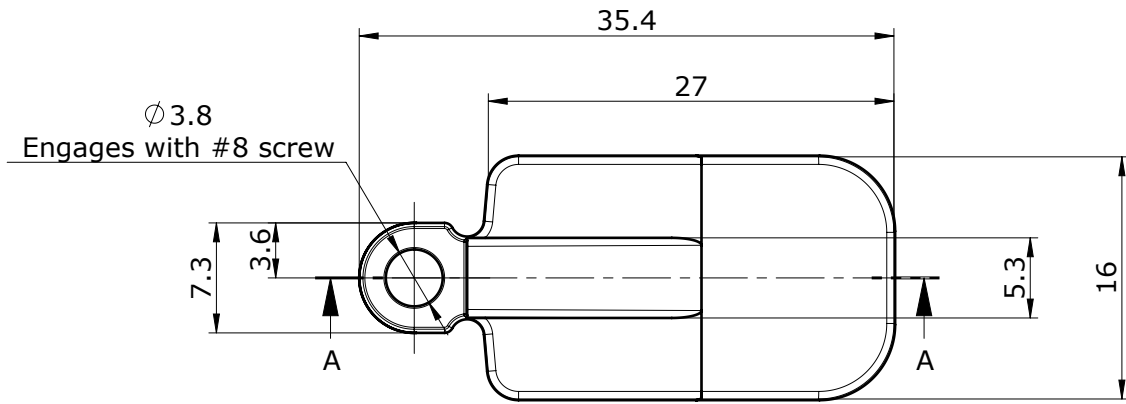
Size	Ø A ±0.5	Ø B ±0.5	Ø C ±0.3	Ø D ±0.5
14"	346	423	352.8	336



- NOTES:
1. Manufacture of tooling is by supplied digital file from VELUX greenwood inc. 30381614.01.SLDPRT.
 2. Surface finish to be SPI C-3
 3. Acceptance of part is dependent upon fit and function with the screw-in diffuser. (30381414)

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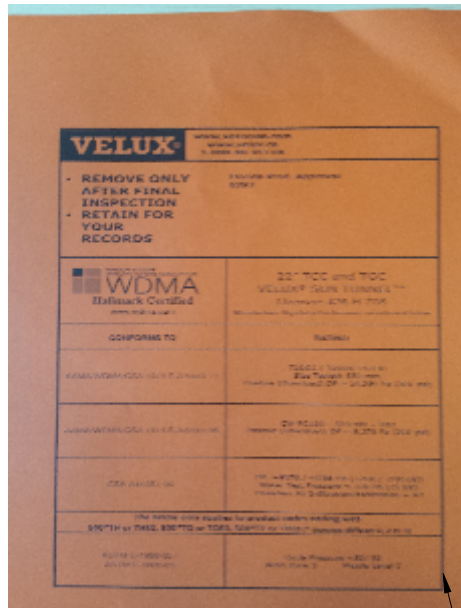
Material				Specifications - generally			
Ceiling Ring: White ABS				Ceiling Ring: White ABS			
VELUX SKY-PRS				309043.64			
450 Old Brickyard Rd., Greenwood, South Carolina 29648				Standards - generally			
Approvals				Symbol explanations			
TMA-A				880006.68			
Checked by/drawn by/date				ST13-G			
BBK/CBB/29.11.2017				14" Ceiling Ring			
Scale				Commodity drawing			
1:4	Unspec. meas.	General tolerance	Size	Product instructions no.			
mm		±0.5	C	Category	21	303816	014 00 02
This drawing must not be copied, published or used in any other way without permission				Operation Edition			
VELUX A/S reg. office: Ådalsvej 99, DK-2970 Hørsholm. CVR-no. 30003519							



Note:
Swingout must move freely inside ceiling ring

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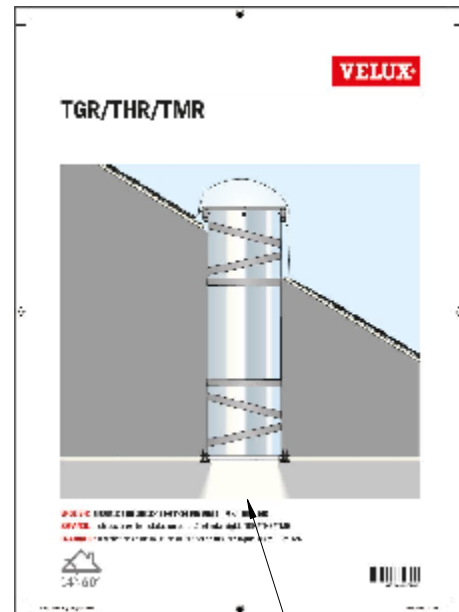
Material				TGR/TGF/TMR/TMF/TLR/TCR/TLR/TSR				
White - nylon 10% glass								
VELUX SKY-PRS 450 Old Brickyard Rd., Greenwood, South Carolina 29648				Swingout Commodity drawing				
Approvals								
Checked by/drawn by/date /REC/30.03.2011				Product instructions no.				
Scale 2:1	Unspec. meas. mm	General tolerance ±.5	Size A	Category 21	306107	000	00	03



Neon orange 8-1/2X11 paper.
W/NFRC data printed
P/N 445416



Flexi loc clips
P/N 304751
21.304417.000.63.xx



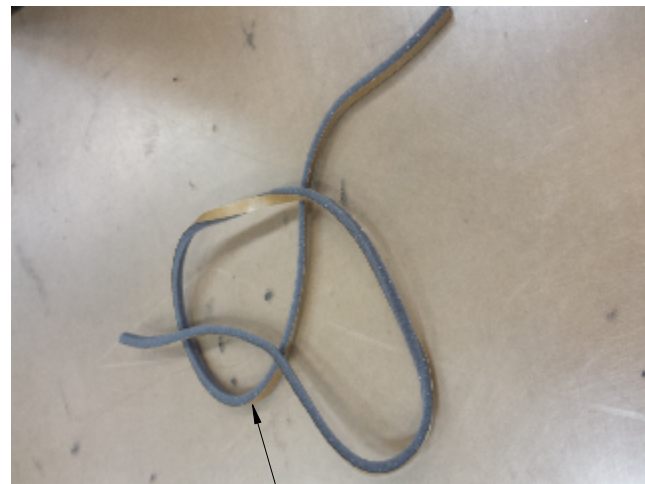
Instructions
P/N 454064
21.454064.000.00.xx



Ziplock poly bag
P/N 303404

Edition	drawn by/checked by/date	Description of change
02	7/20/18	Changed bag of dome screws to 304484
03	CBB/REC/12/13/18	Changed Al tape to 30487836 & removed THR
04	MM/CBB/6/24/19	Changed to pile gasket & removed cover tape

VCI label
P/N 445133
21.VG6530.68.xx



Pile gasket
P/N 30315314
21.303153.000.00.xx



Bag of screws for tubes/ZTB
P/N 304174
21.304417.000.63.xx



Bag of screws for stung
P/N 304420
21.304417.000.63.xx

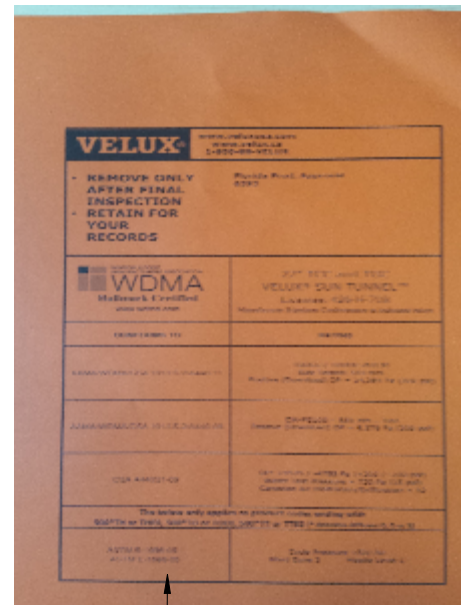


Aluminum tape
P/N 30487836
21.309066.64.xx

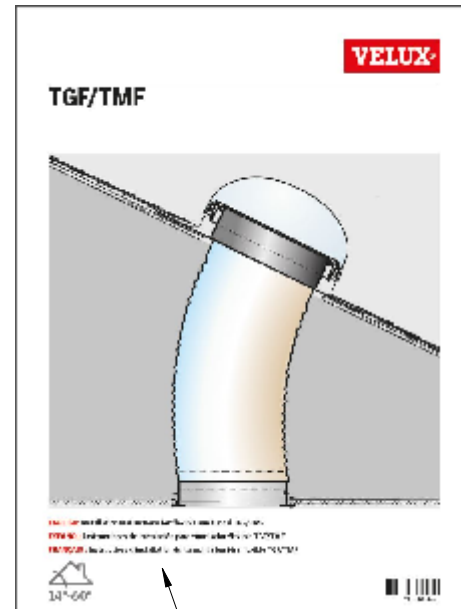
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VELUX SKY-PRS 450 Old Brickyard Rd., Greenwood, South Carolina 29648				ST13-G TGR/TMR		
Approvals				Beipack Assembly drawing		
Checked by/drawn by/date BBK/CBB/20.07.2018				Product instructions no.		
Scale 1:1	Unspec. meas. mm	General tolerance N/A	Size B	Category 21	304840	000
				Operation 52	Edition 04	

Edition	drawn by/checked by/date	Description of change
03	7/20/18	Changed bag of dome screws to 304484
04	CBB/MM/12/21/18	Changed AI tape P/N
05	MM/CBB/7/3/19	Removed cover tape P/N 306242



Neon orange 8-1/2X11 paper.
W/NFRC data printed
P/N 445416



Instructions
Part #454349
21.454349.000.00.xx



VCI label
Part #445133
21.VG6530.68.xx

Ziplock poly bag
Part #303404



Zip tie
Part #303824

Mounting fastener bag
Part #304797
21.304417.000.63.xx



Bag of dome screws
Part #304484
21.304417.000.63.xx

Bag of screws for stung
Part #304420
21.304417.000.63.xx



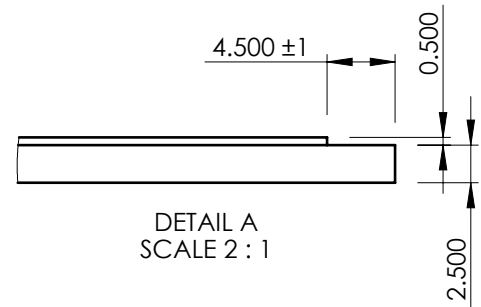
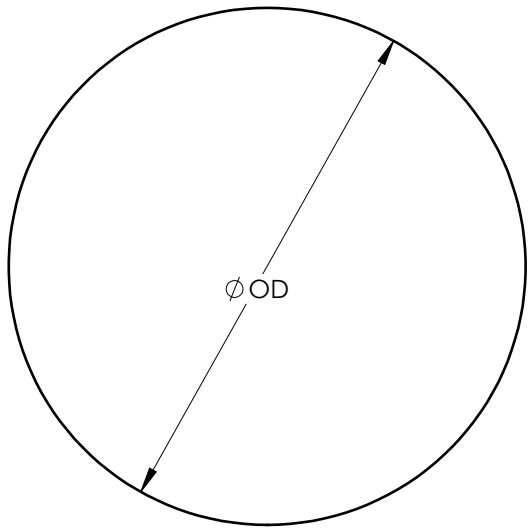
Aluminum tape
Part #30487806
21.309066.64.xx

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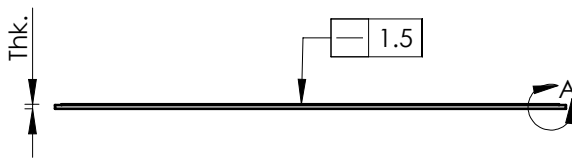
VELUX SKY-PRS 450 Old Brickyard Rd., Greenwood, South Carolina 29648				ST13-G TGF/TMF			
Approvals				Beipack Assembly drawing			
Checked by/drawn by/date BBK/CBB/20.07.2018				Product instructions no.			
Scale 1:1	Unspec. meas. mm	General tolerance N/A	Size B	Category 21	304841	000	52 05

Edition	drawn by/checked by/date	Description of change
04	CBB/BBK/12/10/19	Added frosted 3mm part numbers
05	CBB/BBK/01/16/20	Added new lines for 3mm thickness
05	CBB/BBK/10/01/20	Added detail on milled edges

Size	OD mm/(in)	Thk. mm/(in)	Clear(CI) P/N	Frosted(F) 2mm P/N	Frosted(F) 3mm P/N	Crackle(Cr) P/N	Prismatic (P) P/N
10" middle	236 (9.291")	1.5 (0.059")	30381510	--	--	30381910	--
14" middle	338 (13.307")	1.5 (0.059")	30381514	--	--	30381914	--
10" upper	241 (9.488")	2 (0.079")	--	30381810	--	--	--
14" upper	342 (13.465")	2 (0.079")	--	30381814	--	--	--
10" upper	241 (9.488")	3 (0.118")	--	--	32003610	--	--
14" upper	342 (13.465")	3 (0.118")	--	--	32003614	--	--
10" pivot ring lens	243 (9.567")	1.5 (0.059")	30382010	--	--	--	30382110
14" pivot ring lens	375 (14.764")	1.5 (0.059")	30382014	--	--	--	30382114



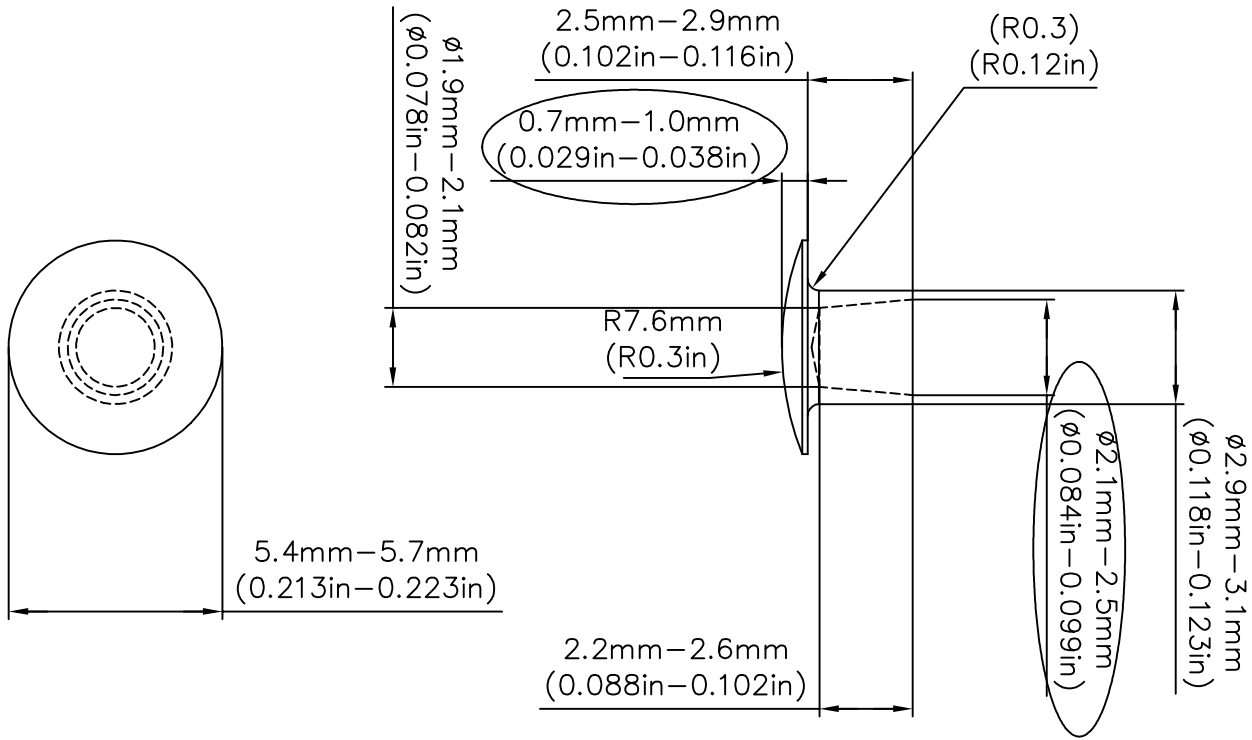
Note:
Edges are to be milled down to 2.5mm only on 320036xx.



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Material			
Acrylic			
VELUX		SKY-PRS	
450 Old Brickyard Rd., Greenwood, South Carolina 29648			
Approvals TMA-A			
Checked by/drawn by/date BBK/CBB/19.04.2018			
Scale 1:5	Unspec. meas. mm	General tolerance ±0.3	Size A

Specifications - generally					
Material for clear diffuser		309038.64			
Specifications - generally					
Material for prismatic diffuser		309050.64			
Specifications - generally					
Material for frosted diffuser		309049.64			
Standards - generally					
Symbol explanations		880006.68			
ST13-G					
Diffuser					
Commodity Drawing					
Product instructions no.					
Category				Operation	Edition
21	303815	000	00	06	



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Part Number (Manufacturer Number)	Material	Finish
306123 (R-3479-014-0.1094)	Steel	Clear Zinc

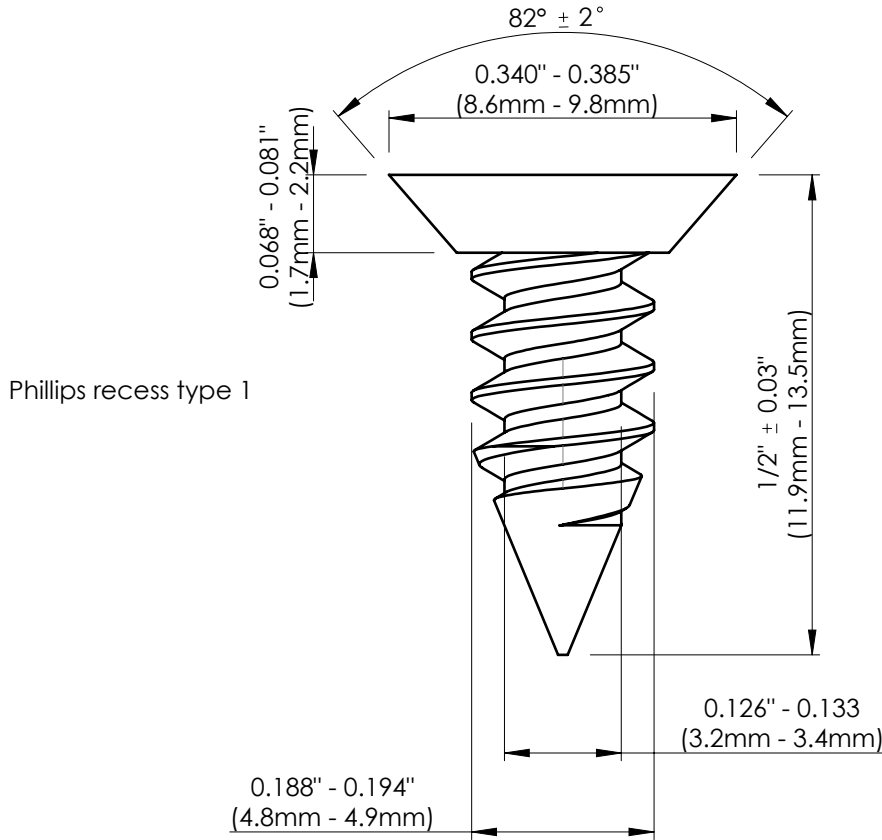
Approvals: TMA-A



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VELUX Greenwood Inc. Drawing office . 450 Old Brickyard Road . Greenwood . South Carolina		Material													
<u>Semi-Tubular Rivet</u> Commodity drawing		General tolerance					Specification								
		Size	Units	Scale	Checked by/drawn by/date										
		A	mm	5:1,1:1	REC/09.09.11										
		File No.		DRAWING NO.											
		Copy to		Category	Commodity No.				Operation	Edition					
		2	1	3	0	6	1	2	3	0	0	0	0	0	3

Edition	Description of change	Date
03	Removed chart from drawing	6/26/17



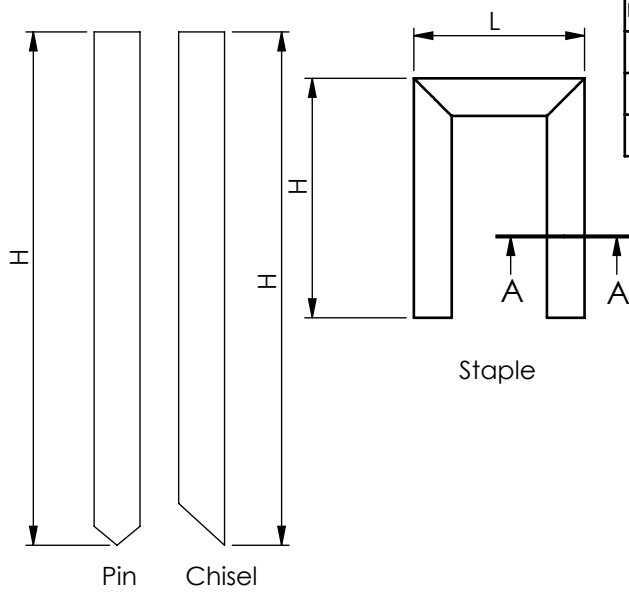
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Single lead rolled thread type A

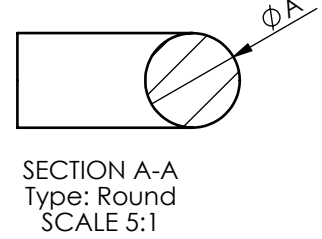
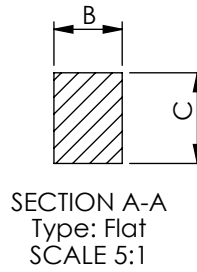
Specifications - generally	
Stainless steel screw	414010.64
Steel screw	411010.64

VELUX		SKY-PRS	
450 Old Brickyard Rd., Greenwood, South Carolina 29648			
Approvals TMA-A			
Checked by/drawn by/date /CB/26.06.2017			
Scale 5:1	Unspec. meas. mm	General tolerance ±0.5	Size A

<u>Screw</u>			
Flat 82 deg. Undercut head Self-Tapping thread #10-12			
Product instructions no.			
Category 21	306096	000	00 03



Edition	drawn by/checked by/date	Description of change
16	MM/04/22/15	Updated mat'l and class for 306236
17	RC/MM/07/17/19	Added P/N 300940
18	MM/REC/10/20/22	Added CERT-FM



Part #	H	L	Type	Point	Mat'l	Class	ØA	B	C
306015	25mm	8.8mm	Round staple	Pin	Fe-Zn	AI	1.5mm	N/A	N/A
306012	10mm	8.8mm	Flat staple	Chisel	SST	AIII	N/A	.9mm	1.2mm
306011	10mm	4.6mm	Flat staple	Pin	SST	AIII	N/A	.7mm	0.9mm
306164	18mm	9mm	Round staple	Pin	Fe-Zn	AI	1.5mm	N/A	N/A
306085	28mm	32mm	Flat staple	Chisel	Fe	BII	N/A	1mm	2mm
422019	32mm	18mm	Flat staple	Pin	Fe-Zn	BII	N/A	1mm	2mm
306014	15mm	8.9mm	Flat staple	Divergent	SST	AIII	N/A	1mm	1.3mm
422083	19mm	34mm	Flat staple	Pin	Fe	BI	N/A	2mm	1mm
421035	31.75mm	N/A	Flat pin	Pin	Fe	AII	N/A	1.1mm	0.9mm
306215	12.5mm	10.6mm	Flat staple	Pin	SST	AIII	N/A	1.1mm	1.2mm
306236	44.5mm	12.7mm	Round staple	Chisel	FE	BII	.5 mm	N/A	N/A
300940	38.1mm	12.7mm	Round staple	Chisel	SST	AIII	N/A	N/A	N/A

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VELUX SKY-PRS
450 Old Brickyard Rd., Greenwood, South Carolina 29648

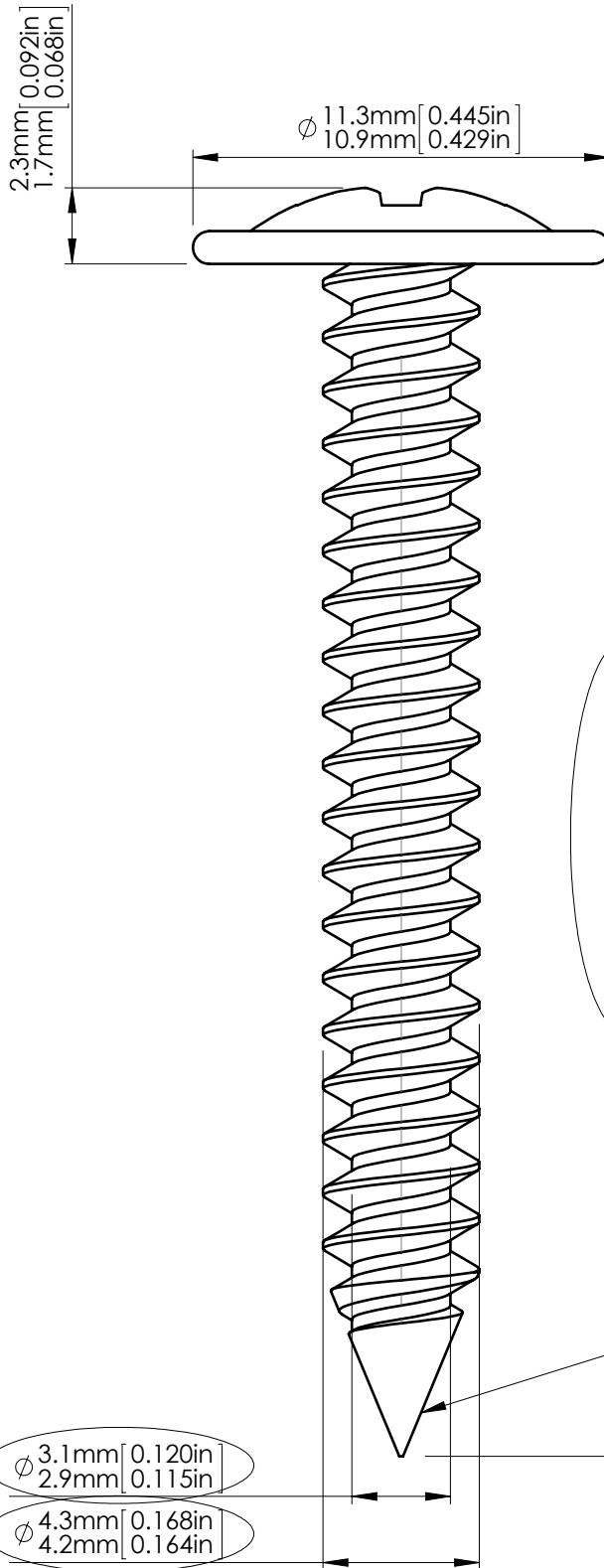
Approvals

TMA-A/CERT-FM

Checked by/drawn by/date
/MM/06.07.2017

Scale 2:1	Unspec. meas. mm	General tolerance ±0.5	Size A
--------------	---------------------	---------------------------	-----------

Standards - generally					
Description of terms for staples					880011.68
<u>Staple</u>					
Product instructions no.					
Category				Operation	Edition
21	306015	000	00	18	



Edition	Description of change	Date
02	Added SI to the approvals	7/22/16
03	Updated length, diameter, notes and title block	5/31/18

- Notes:
1. Phillips #2 drive.
 2. 8-15 type "A."
 3. Penetration gaging depth
1.9mm (.076")/ 1.5mm (.06")
 4. Wobble max of 8°.
 5. Major ϕ 4.3mm (0.168")/ 4.2mm (0.164")
Minor ϕ 3.1mm (0.120")/ 2.9mm (0.115").

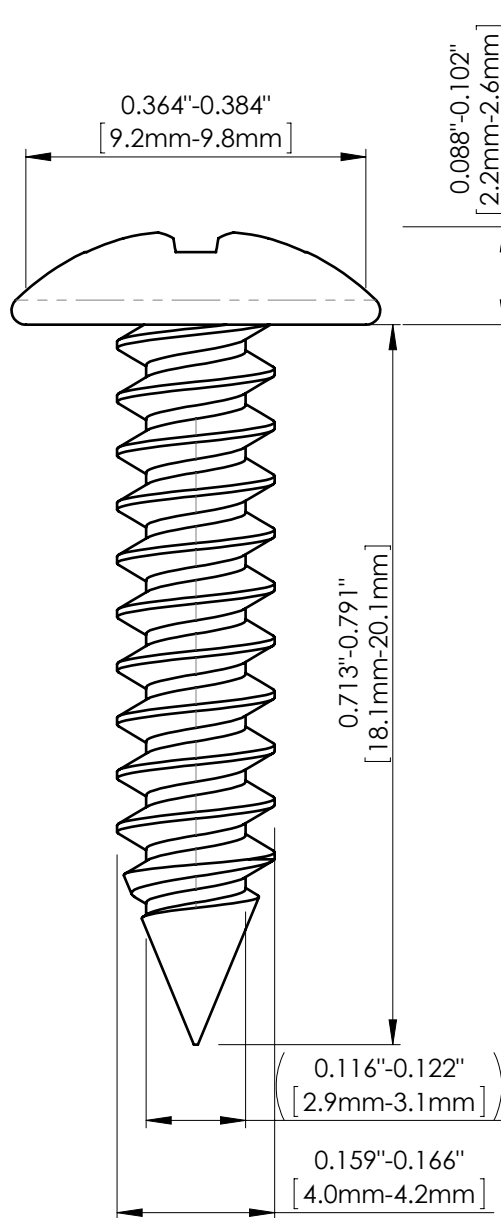
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- Note:
1. Must have sharp point.
 2. Type 17 point.

Material				Standards - generally						
300 series SST				Stainless steel screws		414010.64				
VELUX SKY-PRS 450 Old Brickyard Rd., Greenwood, South Carolina 29648				#8 x 1.25 modified truss screw						
Approvals TMA-A/SI				Type 17 point #2 Phillips						
Checked by/drawn by/date BBK/CBB/18.07.2018				Product instructions no.						
Scale 5:1	Unspec. meas. mm	General tolerance ±0.5	Size A	Category 21	306232	000	00	03	Operation 00	Edition 03

Edition	Description of change	Date
05	Added TMA-A/SI approvals	8/7/13
06	Added material specification chart	7/7/17

Phillips Redess T1 DR2



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VELUX SKY-PRS
450 Old Brickyard Rd., Greenwood, South Carolina 29648

Approvals
TMA-A/SI

Checked by/drawn by/date
/CB/07.07.2017

Scale 2:1	Unspec. meas. mm	General tolerance ±.05	Size A
--------------	---------------------	---------------------------	-----------

Specifications - generally					
Stainless Steel Screw		414010.64			
<u>Truss head screw</u>					
#8 X 3/4 1/1 SS Phillips					
Product instructions no.					
Category	21	306119	000	00	06

VELUX Greenwood Inc.

Drawing Office - 450 Old Brickyard Road - Greenwood - South Carolina

Drawn up by:

MM

Date:

04.17.20

Page:

1/2

MATERIAL SPECIFICATION

Aluminum Tape for Fixation of Skylight Tubing

Classification

A

Copy to:

Cat

2 1

PRODUCT INSTRUCTION NO.

Commodity No.

3 0 9 0 6 6

Opr.

6 4

Ed.

0 2

1. General description

1.1 Material:

Aluminium foil tape with liner.

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1.2 Application field:

The tape is used to create a seal between seams on tubing material.

2. Properties

2.1 Material properties:

No.	Properties	VELUX requirements	Testing acc. to
1	Tensile Strength	$\geq 20 \text{ N / cm}$	ASTM D 1000
2	Attachment	$\geq 3.8 \text{ N / 10-mm on SS}$	ASTM D 3330M
3	Thickness	$0.089 \text{ mm} \pm 0.03$	ASTM D 1000
4	Elongation	Max 4%	ASTM D 3715M
5	Thermal Stability	$-37^{\circ}\text{C} - 127^{\circ}\text{C}$	

The international standards mentioned are the standards valid at the time of issue of this specification.

3. Technical Material Approval

The supplier must along with a sample forward documentation for the properties mentioned under point 2. Information for the supplier: The tests mentioned under point 3.1 and 3.2 are carried out by and at VELUX in accordance with the internal VELUX procedure.

3.1 Process related requirements:

It must be possible to use the product in the customer's production plant without any remarks from the customer.

3.1.1 Application:

The tape is applied and must be able to be cut with a standard hand operated dispenser.

VELUX Greenwood Inc. Drawing Office - 450 Old Brickyard Road - Greenwood - South Carolina		Drawn up by: MM	Date: 04.17.20	Page: 2/2
<u>MATERIAL SPECIFICATION</u> Aluminum Tape for Fixation of Skylight Tubing		Classification: A	PRODUCT INSTRUCTION NO.	
		Copy to:	Cat 2 1	Commodity No. 3 0 9 0 6 6

3.2 Product requirements:

No.	Properties	VELUX requirements	Testing acc. to
1	UV (Pending)	After exposure the tape must remain intact.	Tape attached to the metal mentioned in the requirements is exposed for 4 hours to UV-B light 313 nm
2	Heat and humidity (Pending)	After exposure the tape must remain intact.	Tape attached to the metal mentioned in the requirements is exposed for 72 hours in 60°C and 50% RH
3	Cold (Pending)	After exposure the tape must remain intact.	Tape attached to the metal mentioned in the requirements is exposed for 24 h at -20°C.

4. General Requirements

4.1 Accept from Supplier:

A supplier cannot deliver to the customer before the requirements in the material specification are certified in writing as accepted.

4.2 Change of Product:

The supplier informs the customer in writing about changes in the composition of the material, including the effect of such changes.

Submission of information will in no way imply a limitation in the supplier's responsibility for any defect or deficiency of the material.

4.3 Documentation:

If required from the purchase department, the supplier shall be able to forward documentation for the properties of point 2., in a certificate or otherwise.

5. Delivery

Delivery according to agreement with the purchase department.

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