Creation date : 14/04/2022
DOP reference: PEP

2. Range designation : PYRODOME EVOLUTION
Variants of the products concerned : PYRODOME EVOLUTION PNEUMATIC

4. Company name of the manufacturer :
SKYDOME SAS - Entre deux villes -- 02270 Sons et Ronchères - France - Head office & production

3. Product description

- Single leaf, pneumatic power, 155° opening, roof mounted
- Metal upstand, min. height 310 mm
- Metal upstand, min. height 170mm
- Dimensional range (high hopper) :
  - Square : length 1m to 2m ; width 1m to 2m
  - Rectangular : length 1m to 2.5 ; width 1m to 1.4m

3.1 Possible option :

- Airflow device:
  - SD : without deflector
  - AD : with deflectors
- Position switch
- Electric or pneumatic daily ventilation kit
- Fixed grille 1200 joules, Ø6 wire or 16x16 tube without influence on the aeraulics
- Opening grille with 16x16 bar 1200 joules (depending on dimensions)
- Ladder hook bar (depending on dimensions)
- Holding bar (depending on dimensions)

3.2 Intended use : ROOF

3.3 Conditions of use and implementation related to the certified performance

- Maximum permissible inclination of the unit in the roof :
  - Hinges perpendicular to the ridge :
    - Av<2m² : 25° i.e. 46, 65%
    - Av≥2m² : 20° i.e. 36,45%
  - Hinges parallel to the ridge
    - 3° i.e. 5.25%

6. Systems for assessment and verification of constancy of performance of the construction product
The notified body AFNOR CERTIFICATION N°0333 has issued a certificate of constancy of performance according to Annex ZA of EN 12101-2:2003 according to system 1 based on the initial inspection of the factory, the factory production control and the continuous surveillance of the factory production control.

7. Construction product covered by harmonised standard EN 12101-2
CE Certificate N° 0333 - CPR - 219015 Valid until 28/01/2026

9. Declared performance :

Criteria	Performances	Normative references
Useful opening area Aa	See airflow performance tables	EN 12101-2, §6, annexes B
Thermal trip temperature	93 to 183 °	EN 12101-2, § 4.1
Opening of the evacuation device	Type B	EN 12101-2, § 4.3
Reliability :	RE 1000 + (10 000 daily ventilation with optional kit)	EN 12101-2, § 7.1, annex C
Opening under load	SL250 and SL500: See table of snow loads and operating pressures	EN 12101-2, § 7.2, annex D
Low ambient temperature	T(00)	EN 12101-2, § 7.3, annex E
Wind load :	WL1500	EN 12101-2, § 7.4, annex F
Heat resistance :	B300	EN 12101-2, § 7.5, annex G
Reaction to fire :	PCA : According to filling, Consult us Steel : M0 Aluminium : M0	EN 12101-2, § 7.5.2.1 EN 1873, § 5.5
Exterior fire performance	PND	EN 1873, § 5.7
Watertightness	Success	EN 1873, § 5.3
Impact resistance : Small hard body : 1200J (Grid)	Success 1200j	EN 1873, § 5.4.3.1 EN 1873, § 5.4.3.2
Thermal Conductance: Urc	Consult us	EN 1873, § 5.9.2.1
Thermal Conductance: plate	According to filling, please consult us	EN 1873, § 5.9.2.2
Direct airborne noise insulation (plate)	According to filling, please consult us	EN 1873, §5.10
Light transmission factor plate	According to filling, please consult us	EN 1873, §5.1
Air permeability	PND	EN 1873, §5.8
Sustainability	PCA 10 : ΔA, Cu 0, Ku 0 PCA 16 : ΔD, Cu 0, Ku 0	EN 1873, § 5.2

Airflow performance table

Out of range | SD | AD

Airflow Straight and capping skirt ≥310mm

la / Lo	100	110	120	130	140	150	160	170	180	190	200
100	0,55 0,68										
110	0,63 0,75	0,66 0,82									
120	0,68 0,81		0,78 0,96								
130	0,72 0,88		0,83 1,04	0,90 1,12							
140	0,77 0,94		0,89 1,12		1,04 1,28						
150	0,81 1,00		0,97 1,20		1,10 1,38	1,18 1,45					
160	0,85 1,07		1,02 1,28		1,17 1,47		1,34 1,63				
170	0,89 1,14		1,07 1,36		1,23 1,57						
180	0,93 1,20		1,12 1,43		1,31 1,66				1,67 2,12		
190	0,96 1,27		1,17 1,51		1,37 1,76						
195											1,99 2,35
200	1,00 1,33		1,21 1,59		1,42 1,85						2,04 2,60
210			1,26 1,67								
220			1,30 1,75								
230			1,34 1,82								
240			1,37 1,90								
250			1,41 1,98								

Airflow Biaise Costière ≥310mm

la / Lo	100 haut 114 bas	110 haut 124 bas	120 haut 134 bas	130 haut 144 bas	140 haut 154 bas	150 haut 164 bas	160 haut 174 bas	170 haut 184 bas	180 haut 194 bas	190 haut 204 bas	200 haut 214 bas
100 ht	7,00										
114 bas	0,87										
110 ht	0,76	0,83									
124 bas	0,95	1,03									
120 ht	0,83		0,97								
134 bas	1,02		1,20								
130 ht	0,89		1,04	1,11							
144 bas	1,10		1,30	1,40							
140 ht	0,95		1,11		1,27						
154 bas	1,18		1,39		1,60						
150 ht	1,01		1,18		1,35	1,43					
164 bas	1,25		1,48		1,71	1,82					
160 ht	1,08		1,26		1,43		1,61				
174 bas	1,33		1,57		1,81		2,05				
170 ht	1,14		1,33		1,52						
184 bas	1,41		1,66		1,92						
180 ht	1,20		1,40		1,60				1,99		
194 bas	1,48		1,75		2,02				2,56		
190 ht	1,26		1,47		1,68						
204 bas	1,56		1,84		2,12						
195 ht											2,36
209 bas											3,70
200 ht	1,32		1,45		1,68						2,40
214 bas	1,64		1,95		2,24						3,13
210 ht			1,50								
224 bas			2,04								
220 ht			1,56								
234 bas			2,13								
230 ht			1,61								
244 bas			2,23								
240 ht			1,66								
254 bas			2,32								
250 ht			1,71								
264 bas			2,41								

Airflow Capping skirt ≥170mm

la / Lo	100	110	120	130	140	150	160	170	180	190	200
100	0,57 0,68										
110	0,63 0,75	0,67 0,82									
120	0,68 0,81		0,77 0,97								
130	0,74 0,88		0,82 1,04	0,87 1,13							
140	0,79 0,94		0,88 1,12		0,97 1,30						
150	0,85 1,01		0,95 1,20		1,03 1,38	1,08 1,48					
160	0,90 1,07		1,02 1,27		1,10 1,47		1,18 1,67				
170	0,96 1,14		1,08 1,35		1,18 1,56						
180	1,03 1,20		1,15 1,42		1,25 1,65				1,38 2,13		
190	1,09 1,26		1,22 1,50		1,33 1,73						
195											1,54 2,43
200	1,15 1,33		1,29 1,57		1,40 1,83						1,58 2,50
210			1,36 1,65								
220			1,43 1,73								
230			1,50 1,80								
240			1,57 1,88								
250			1,64 1,95								

Table of snow loads and operating pressures

Hopper width	Ø Cylinder	Volume in l
1000	Ø56	1,7
1100		1,7
1200		1,9
1300		1,9
1400		2
1500		2
1600	Ø63	2,7
1700		2,7
1800		2,7
1900		2,7
2000		2,7

Out of range | SL250 | SL500

"SL250, SL500 snow load and working pressure
PCA10
PCA10 / PCA16 / PCA16+ / Capot 10mm opaque /Simple Dome

La / Lo	100	110	120	130	140	150	160	170	180	190	200
100	10 15										
110	10 15	10 15									
120	10 15		11 15								
130	10 15		12 16	13 17							
140	10 15		13 17		13 22						
150	10 15		13 17		15 24	17 27					
160	11 15		14 20		15 25		16 26				
170	11 15		14 20		16 27						
180	11 15		14 20		17 28				21		
190	11 15		14 20		17 29						
195											27
200	11 15		14 20		18 30						
210			17 24								
220			17 24								
230			17 24								
240			17 24								
250			17 24								

"Cartridge depending on size and overload
PCA10 / PCA16 / PCA16+ / 10mm opaque cover /Single Dome"

La / Lo	100	110	120	130	140	150	160	170	180	190	200
100	20g 80g										
110	20g 80g	20g 80g									
120	20g 80g		40g 80g								
130	20g 80g		40g 80g	80g 80g							
140	40g 80g		80g 80g		80g 80g						
150	40g 80g		80g 80g		80g 80g	80g 150g					
160	80g 80g		80g 80g		80g 150g		80g 150g				
170	80g 80g		80g 80g		80g 150g						
180	80g 80g		80g 80g		80g 150g				150g		
190	80g 80g		80g 80g		80g 150g						
195											150g
200	80g 80g		80g 80g		80g 150g						
210			80g 80g								
220			80g 80g								
230			80g 80g								
240			80g 80g								
250			80g 80g								

SL snow load and working pressure
PCA32 / PCA32+ / Double Dome / 40mm Hood / 60mm Hood / PCA10 & Dome / PCA16 & Dome

Lo \ la	100	110	120	130	140	150	160	170	180	190	200
100	10 15										
110	10 15	11 16									
120	10 15		11 15								
130	10 15			13 17							
140	10 15				14 23						
150	10 15					17 25					
160	11 15						17 28				
170	11 15										
180	11 15										
190	11 15										
195											
200	11 15										
210											
220											
230											
240											
250											

Cartridge depending on size and overload
PCA32 / PCA32+ / Double Dome / 40mm Hood / 60mm Hood / PCA10 & Dome / PCA16 & Dome

Lo \ la	100	110	120	130	140	150	160	170	180	190	200
100	20g 80g										
110	20g 80g	40g 80g									
120	20g 80g		40g 80g								
130	20g 80g			80g 80g							
140	40g 80g				80g 80g						
150	40g 80g					80g 150g					
160	80g 80g						80g 150g				
170	80g 80g										
180	80g 80g										
190	80g 80g										
195											
200	80g 80g										
210											
220											
230											
240											
250											

SL snow load and operating pressure
Pca32 & dome/Pca32+ & dome/Triple Dome/Acoustik'light

Lo \ la	100	110	120	130	140	150	160	170	180	190	200
100	15										
110	15	16									
120	15		15								
130	15			17							
140	15				23						
150	15					25					
160	15						28				
170	15										
180	15										
190	15										
195											
200	15										
210											
220											
230											
240											

Cartridge depending on size and overload
PCA32 & dome/Pca32+ & dome/Triple Dome/Acoustik'light

Lo \ la	100	110	120	130	140	150	160	170	180	190	200
100	80g										
110	80g	80g									
120	80g		80g								
130	80g			80g							
140	80g				80g						
150	80g					150g					
160	80g						150g				
170	80g										
180	80g										
190	80g										
195											
200	80g										
210											
220											
230											
240											

10. The performance of the product identified in points 1 and 2 is in conformity with the declared performance set out in point 9. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for the manufacturer and on its behalf by Thierry Badet, Managing Director, at Sons et Ronchères.
Updated on 26/07/2022