

DECLARATION OF PERFORMANCE OF SMOKE AND HEAT CONTROL SYSTEMS

1. *Unique identification code of the product-type:* **VENTILIGHT RIDGEPole OFF**
2. *Type, batch or serial number or any other element allowing identification of the construction product as required under Article 11 paragraph 4:*
Information given on the tracking label :
Order confirmation Number + Product Number + Date of production
3. *Intended use or uses of the construction product, in accordance with the applicable harmonised technical specification, as foreseen by the manufacturer :*

3.1 Product description : Natural smoke and heat exhaust ventilator with a single casement, for roof installation which opens outwards, with an external motorization. The infill can be in cellular polycarbonate, in glass or insulated double skin aluminium (thermally or acoustically).

3.2 Installation and implementation conditions in accordance with the certified performances

- Roof installation 30° to 60° with the hinges at the bottom of the slope (distance from the top: 150 to 500 mm).
- Dimensional range : (A and B are the overall dimensions of the product)
Side A parallel to the hinges : $0,85m \leq A \leq 2,2m$ Side B perpendicular to the hinges : $0,7m \leq B \leq 1,6m$
* $A_v = [side A - 0,181 m] \times [(side B \times 2) - 0,181 m]$ With $0,35 m^2 \leq A_v^* \leq 2,86 m^2$

3.3 Mode of operation : Pneumatic opening and closing

Service pressure : 10 to 20 bars
Possibility to use the NSHEV as daily ventilation unit with a pressure of 6 bars

3.4 Possible options :

Open / Close position switches
Griddle, (distance 120 mm), diameter 5 mm without influence on the aerodynamic coefficient
Thermal device release (according to the current standard)

	$700 \leq B \leq 900$	$901 \leq B \leq 1200$	$1201 \leq B \leq 1400$	$1401 \leq B \leq 1600$
1 Cylinder Ø50	c500	c800	c1000	c1200
	10,5 NI	16,7 NI	20,8 NI	22,9 NI

4. *Name, registered trade name or trade mark , in conformity with article 11, paragraph 5:*

Company name : SOUCHIER SAS
11 rue des Campanules
CS 30066
77436 MARNE LA VALLEE Cedex 2
France

Production unit : SOUCHIER SAS
11 rue du 47^{ème} R.A.
70400 HERICOURT
France

6. *7. System or systems of assessment and verification of constancy of performance of the construction product as set out in Annex V:*

The notified body TÜV Rheinland N° 0336 performed the determination of the product type on the basis of type testing, type calculation of the product, the initial inspection of the manufacturing plant and the factory production control and the continuous surveillance, assessment and evaluation of the factory production control under system 1 and issued the certificate of constancy of performance N°

9. *Declared performances:*

CE Certificate N°0336 – CPR – 10430.

	Essential characteristics	Performance
Harmonised technical specification: EN 12101-2:2003	Nominal activation conditions / sensitivity, as: Initiation device Opening mechanism Inputs and outputs	present present present
	Response delay (response time), as: Reliability Opening under (snow, wind) load Low ambient temperature Fire Performance	≤ 60 s
	Operational reliability, as: Reliability	Re 1000 (+10 000), Type B
	Effectiveness of smoke/hot gas extraction, as: Aerodynamic free area	$A_v = A_v^* \times C_v^{**}$
	Performance parameters under fire conditions, as: Resistance to heat Mechanical stability Reaction to fire	$B_{100} 30$ $\Delta A_{th,heat} < 10 \%$ Insulated panel or glass A1 Polycarbonate B-s1,d0
	Performance under environmental conditions, as: Opening under load (see tables) Low ambient temperature Stability under wind load Resistance to wind-induced vibration (where included) Resistance to heat	SL*** T(-15) WL 1500 $\omega_0 > 10Hz, \delta > 0,1$ $B_{100} 30$
	Durability, as: Response delay (response time) Operational reliability Performance parameters under fire conditions	≤ 60 s Re 1000 (+10 000) ≤ 60 s; $\Delta A_{th,heat} < 10 \%$

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Free Aerodynamic surface calculation :

$A_a = A_v^* \times C_v^{**}$ or NPD

$A_v^* = (\text{side A} - 0,181 \text{ m}) \times (\text{side B} - 0,181 \text{ m})$

C _v without windshield		Installation 30°/30°								
		Side B (mm)								
Side A (mm)	≥ 850	0,37	0,37	0,36	0,36	0,36	0,35	0,34	0,33	0,33
	≥ 900	0,37	0,37	0,36	0,36	0,36	0,35	0,34	0,33	0,33
	≥ 1000	0,38	0,38	0,37	0,37	0,36	0,35	0,34	0,33	0,33
	≥ 1100	0,38	0,38	0,37	0,37	0,36	0,35	0,34	0,33	0,32
	≥ 1200	0,38	0,38	0,37	0,37	0,36	0,35	0,34	0,33	0,32
	≥ 1300	0,39	0,39	0,38	0,38	0,37	0,35	0,34	0,32	0,32
	≥ 1400	0,39	0,39	0,38	0,38	0,37	0,35	0,34	0,31	0,31
	≥ 1500	0,39	0,39	0,38	0,38	0,37	0,35	0,34	0,31	0,31
	≥ 1600	0,40	0,40	0,39	0,39	0,38	0,36	0,34	0,31	0,31
	≥ 1700	0,40	0,40	0,39	0,39	0,38	0,36	0,34	0,31	0,30
	≥ 1800	0,40	0,40	0,39	0,39	0,38	0,36	0,34	0,31	0,30
	≥ 1900	0,41	0,41	0,40	0,40	0,39	0,37	0,34	0,31	0,30
≥ 2000	0,41	0,41	0,40	0,40	0,39	0,37	0,34	0,31	0,30	
≥ 2100	0,41	0,41	0,40	0,40	0,39	0,37	0,34	0,31	0,30	

C _v without windshield		Installation 45°/45°								
		Side B (mm)								
Side A (mm)	≥ 850	0,38	0,38	0,37	0,37	0,36	0,35	0,34	0,33	0,33
	≥ 900	0,38	0,38	0,37	0,37	0,36	0,35	0,34	0,33	0,33
	≥ 1000	0,38	0,38	0,37	0,37	0,36	0,35	0,34	0,33	0,33
	≥ 1100	0,39	0,39	0,38	0,38	0,36	0,35	0,34	0,33	0,33
	≥ 1200	0,39	0,39	0,38	0,38	0,36	0,35	0,34	0,33	0,33
	≥ 1300	0,40	0,40	0,39	0,39	0,37	0,36	0,34	0,33	0,33
	≥ 1400	0,40	0,40	0,39	0,39	0,37	0,36	0,34	0,33	0,32
	≥ 1500	0,40	0,40	0,39	0,39	0,37	0,36	0,34	0,33	0,32
	≥ 1600	0,41	0,41	0,40	0,40	0,38	0,37	0,35	0,33	0,32
	≥ 1700	0,41	0,41	0,40	0,40	0,38	0,37	0,35	0,33	0,32
	≥ 1800	0,41	0,41	0,40	0,40	0,38	0,37	0,35	0,33	0,31
	≥ 1900	0,42	0,42	0,41	0,41	0,39	0,37	0,35	0,33	0,31
≥ 2000	0,42	0,42	0,41	0,41	0,39	0,37	0,35	0,33	0,31	
≥ 2100	0,42	0,42	0,41	0,41	0,39	0,37	0,35	0,33	0,31	

C _v without wind shields		Installation 60°/60°								
		Side B (mm)								
Side A (mm)	≥ 850	0,30	0,30	0,29	0,29	0,28	0,27	0,26	0,25	0,25
	≥ 900	0,30	0,30	0,29	0,29	0,28	0,27	0,26	0,25	0,25
	≥ 1000	0,30	0,30	0,29	0,29	0,28	0,27	0,26	0,25	0,25
	≥ 1100	0,30	0,30	0,29	0,29	0,28	0,27	0,26	0,25	0,25
	≥ 1200	0,30	0,30	0,29	0,29	0,28	0,27	0,26	0,25	0,25
	≥ 1300	0,31	0,31	0,30	0,30	0,28	0,27	0,26	0,25	0,24
	≥ 1400	0,31	0,31	0,30	0,30	0,28	0,27	0,26	0,25	0,24
	≥ 1500	0,31	0,31	0,30	0,30	0,28	0,27	0,26	0,25	0,24
	≥ 1600	0,31	0,31	0,30	0,30	0,29	0,27	0,25	0,24	0,24
	≥ 1700	0,31	0,31	0,30	0,30	0,29	0,27	0,25	0,24	0,23
	≥ 1800	0,32	0,31	0,31	0,31	0,29	0,27	0,25	0,23	0,23
	≥ 1900	0,32	0,31	0,31	0,31	0,29	0,27	0,25	0,23	0,23
≥ 2000	0,32	0,31	0,31	0,31	0,29	0,27	0,25	0,23	0,23	
≥ 2100	0,32	0,31	0,31	0,31	0,29	0,27	0,25	0,23	0,23	

*****Determination of the snowload classification :**

Side A parallel to the hinges : 0,85m ≤ A ≤ 2,2m

Side B parallel to the hinges : 0,7m ≤ B ≤ 1,6m

Side A ≤ 1600 (1 cylinder)

700 ≤ Side B ≤ 900		901 ≤ Side B ≤ 1200		1201 ≤ Side B ≤ 1400		1401 ≤ Side B ≤ 1600	
A _v	Performance	A _v	Performance	A _v	Performance	A _v	Performance
0,35 to 0,60 m ²	SL 500	0,48 to 0,57 m ²	SL 1000	0,68 to 1,23 m ²	SL 500	0,82 to 1,48 m ²	SL 500
0,60 to 1,02 m ²	SL 250	0,57 to 1,03 m ²	SL 500	1,23 to 1,73 m ²	SL 250	1,48 to 2,01 m ²	SL 250
		1,03 to 1,45	SL 250				

Side A > 1600 (2 cylinders)

700 ≤ Side B ≤ 900		901 ≤ Side B ≤ 1200		1201 ≤ Side B ≤ 1400		1401 ≤ Side B ≤ 1600	
A _v	Performance	A _v	Performance	A _v	Performance	A _v	Performance
0,74 to 1,32 m ²	SL 500	1,02 to 1,25 m ²	SL 1000	1,45 to 1,49 m ²	SL 1000	1,73 to 1,78 m ²	SL 1000
1,32 to 1,45 m ²	SL 250	1,25 to 2,06 m ²	SL 500	1,49 to 2,46 m ²	SL 500	1,78 to 2,86 m ²	SL 500

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

Signed for and on behalf of the manufacturer by: **David Maillart – R&D Manager**
The 17/01/2019
In Lognes