

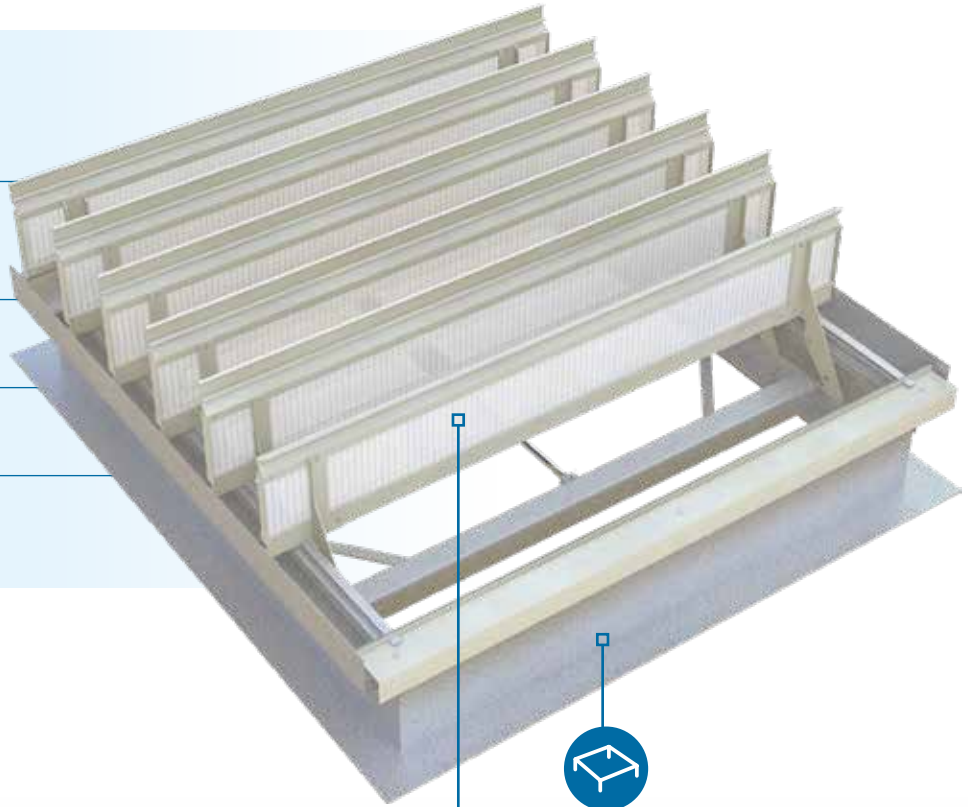


ORIGIN'

ARCALAM[®] ÉVOLUPNEU

THE ADVANTAGES

- + **Pneumatic smoke evacuation and/or ventilation function**
- + **Low energy consumption**
- + **Wide range of sizes**
- + **Easy to install**



CONTROL

- Pneumatic opening/closing
- Built-in mechanism within the volume of the steel or aluminium kerb



GLAZING

- 10 mm opal multi-wall structured polycarbonate, $U_g = 2.7 \text{ W/m}^2\cdot\text{K}$
- M0 aluminium slat, raw or RAL powder-coated
 - Insulated aluminium slat - panel on 2 sides, raw or RAL powder-coated



KERB

- **STEEL VERSION:**
 - Straight kerb
 - 12/10th galvanised steel
 - 300 mm high with 15 mm bitumen surfaced insulation
- **ALUMINIUM VERSION:**
 - Straight kerb
 - 200 mm high with heel

OPTIONS

Glazing	Control	Kerb	Deflectors
• Opal IR S.PC 10 • Grey S.PC 10 • Transparent S.PC 10 • S.PC 10 + 	• Position contactor	• Specific adaptation for aluminium adapter plate version • Powder-coating on inside (standard RAL colours) • Panel colaminated at the top for PVC sealing • Panel galvanised at the top for PVC sealing • Bare insulation for PVC sealing	• Straight steel kerb: steel deflectors • Straight aluminium kerb: aluminium deflectors

ADAPTER PLATE

- Straight galvanised steel adaptor kerb 300 mm high with 84 mm heel and 40 mm apron
- Straight aluminium adaptor kerb 200 mm high with 70 mm heel and 50 mm apron



— GLAZING PERFORMANCES

Other glazing: see “Glazing” technical data sheet

Types of glazing	Heat transfer coefficient Ug (W/m ² .K)		TL D65 ⁽²⁾	FS or g ⁽²⁾	Reaction to fire	R_w $R_A = R_w + C$ $R_{A,Tr} = R_w + C_{Tr}$ (dB) ⁽³⁾
	U _{hor} ⁽¹⁾	U _{vert} ⁽¹⁾				
Opal 4-wall S.PC 10	2.7	2.5	57%	60%	B,s1,d0	R _w =17 dB
33/2 laminated glass	ND	ND	>85%	ND	M0	ND
Aluminium slat	ND	ND	0%	0%	M0	ND
Insulated aluminium slat	ND	ND	0%	0%	ND	ND

⁽¹⁾ Relative to the horizontal, according to §2.31 of the Th-Bat. rules.

⁽²⁾ Regular light transmission factor TL D65 and total solar transmission factor FS (TST or g) according to EN 410.

⁽³⁾ Glazing insulation to airborne noise R_w, pink noise R_A (neighbourhood, airport and industrial activities) and road noise R_{A,Tr} measured in the laboratory according to NF EN ISO 140.

— GEOMETRIC SURFACE AREAS Av (m²)

Number of slats	Length (cm)	Width (cm)												
		1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
6	1107	1.11	1.22	1.33	1.44	1.55	1.66	1.77	1.88	1.99	2.10	2.21	2.32	2.44
7	1269	1.27	1.40	1.52	1.65	1.78	1.90	2.03	2.16	2.28	2.41	2.54	2.66	2.79
8	1431	1.43	1.57	1.72	1.86	2.00	2.15	2.29	2.43	2.58	2.72	2.86	3.01	3.15
9	1593	1.59	1.75	1.91	2.07	2.23	2.39	2.55	2.71	2.87	3.03	3.19	3.35	3.50
10	1755	1.76	1.93	2.11	2.28	2.46	2.63	2.81	2.98	3.16	3.33	3.51	3.69	3.86
11	1917	1.92	2.11	2.30	2.49	2.68	2.88	3.07	3.26	3.45	3.64	3.83	4.03	4.22
12	2079	2.08	2.29	2.49	2.70	2.91	3.12	3.33	3.53	3.74	3.95	4.16	4.37	4.57
13	2241	2.24	2.47	2.69	2.91	3.14	3.36	3.59	3.81	4.03	4.26	4.48	4.71	4.93
14	2403	2.40	2.64	2.88	3.12	3.36	3.60	3.84	4.09	4.33	4.57	4.81	5.05	5.29
15	2565	2.57	2.82	3.08	3.33	3.59	3.85	4.10	4.36	4.62	4.87	5.13	5.39	5.64
16	2727	2.73	3.00	3.27	3.55	3.82	4.09	4.36	4.64	4.91	5.18	5.45	5.73	6.00
17	2889	2.89	3.18	3.47	3.76	4.04	4.33	4.62	4.91	5.20	5.49	5.78	6.07	6.36
18	3051	3.05	3.36	3.66	3.97	4.27	4.58	4.88	5.19	5.49	5.80	6.10	6.41	6.71

— CONFORMITY AND IMPLEMENTATION

CE-certified natural smoke and heat exhaust ventilator system compliant with standard **NF EN 12101-2 (product certification no. 0333 CPR 219054)**.

Fastening and sealing must comply with the requirements set out in French legislation (DTU) series 40 and 43 currently in force.

Maximum insulation height: the minimum height of the waterproofing upstand to comply with according to French legislation (DTU) is 150 mm.

The waterproofing complex (substrate, vapour barrier, insulation and two-layer sealing) cannot be more than 40 mm for an inner kerb height of 200 mm or more than 140 mm for an inner kerb height of 300 mm.

Declaration of Performance available at www.skydome.eu

AIRFLOW PERFORMANCES

Number of slats	Length (cm)	Width (cm)												
		1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
		Effective opening area Aa (m²)												
ARCALAM® ÉVOLUPNEU - Steel kerb version for waterproofing (with deflectors)														
6	1107	0.66	0.73	0.80	0.87	0.94	1.01	1.07	1.14	1.21	1.28	1.35	1.42	1.49
7	1269	0.76	0.84	0.92	1.00	1.08	1.16	1.24	1.32	1.40	1.50	1.58	1.66	1.74
8	1431	0.86	0.95	1.04	1.13	1.22	1.31	1.42	1.51	1.60	1.69	1.78	1.87	1.96
9	1593	0.96	1.06	1.16	1.26	1.37	1.48	1.58	1.68	1.79	1.89	1.99	2.09	2.19
10	1755	1.06	1.17	1.28	1.41	1.53	1.64	1.75	1.86	1.97	2.08	2.19	2.30	2.42
11	1917	1.16	1.28	1.41	1.55	1.67	1.79	1.91	2.03	2.16	2.28	2.40	2.52	2.64
12	2079	1.26	1.39	1.55	1.68	1.81	1.94	2.08	2.21	2.34	2.47	2.60	2.74	2.87
13	2241	1.36	1.51	1.67	1.81	1.95	2.10	2.24	2.38	2.53	2.67	2.81	2.95	3.10
14	2403	1.46	1.64	1.79	1.94	2.10	2.25	2.40	2.56	2.71	2.86	3.02	3.17	3.32
15	2565	1.56	1.75	1.91	2.08	2.24	2.40	2.57	2.73	2.89	3.06	3.22	3.39	3.55
16	2727	1.66	1.86	2.04	2.21	2.38	2.56	2.73	2.91	3.08	3.25	3.43	3.60	3.78
17	2889	1.77	1.97	2.16	2.34	2.53	2.71	2.90	3.08	3.26	3.45	3.63	3.82	4.03
18	3051	1.89	2.09	2.28	2.48	2.67	2.87	3.06	3.25	3.45	3.64	3.84	4.03	4.23
ARCALAM® ÉVOLUPNEU - Adapter plate version (with deflectors)														
6	1107	0.66	0.73	0.81	0.88	0.95	1.02	1.09	1.16	1.23	1.30	1.37	1.44	1.51
7	1269	0.77	0.85	0.93	1.01	1.09	1.17	1.25	1.34	1.43	1.52	1.60	1.69	1.77
8	1431	0.87	0.96	1.05	1.15	1.24	1.33	1.44	1.54	1.63	1.72	1.82	1.91	2.00
9	1593	0.97	1.07	1.18	1.28	1.39	1.51	1.61	1.72	1.82	1.93	2.03	2.13	2.24
10	1755	1.07	1.19	1.30	1.43	1.55	1.67	1.78	1.90	2.01	2.13	2.24	2.36	2.48
11	1917	1.18	1.30	1.43	1.57	1.70	1.83	1.95	2.08	2.21	2.33	2.46	2.58	2.71
12	2079	1.28	1.42	1.57	1.71	1.85	1.99	2.12	2.26	2.40	2.53	2.67	2.81	2.95
13	2241	1.38	1.53	1.70	1.85	2.00	2.14	2.29	2.44	2.59	2.74	2.89	3.03	3.18
14	2403	1.48	1.67	1.82	1.98	2.14	2.30	2.46	2.62	2.78	2.94	3.10	3.26	3.40
15	2565	1.59	1.78	1.95	2.12	2.29	2.46	2.63	2.80	2.97	3.14	3.31	3.48	3.61
16	2727	1.69	1.90	2.08	2.26	2.44	2.62	2.80	2.98	3.17	3.35	3.53	3.71	3.82
17	2889	1.80	2.01	2.20	2.40	2.59	2.78	2.97	3.16	3.36	3.55	3.74	3.91	4.03
18	3051	1.92	2.13	2.33	2.53	2.74	2.94	3.14	3.35	3.55	3.75	3.96	4.11	4.23



— MAXIMUM PERMISSIBLE OVERLOADS SL (Pa)

Number of slats	Length (cm)	Width (cm)												
		1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
CO ₂ consumption of the ARCALAM® ÉVOLUPNEU cylinders with steel or aluminium kerb SL 250														
6	1107													
7	1269													
8	1431													
9	1593													
10	1755													
11	1917													
12	2079													
13	2241													
14	2403													
15	2565													
16	2727													
17	2889													
18	3051													
CO ₂ consumption of the ARCALAM® ÉVOLUPNEU cylinders with steel or aluminium kerb SL 500														
6	1107													
7	1269													
8	1431													
9	1593													
10	1755													
11	1917													
12	2079													
13	2241													
14	2403													
15	2565													
16	2727													
17	2889													
18	3051													

32 mm diameter
3 normal litres at 15 bars
SL 250

40 mm diameter
4.35 normal litres at 15 bars
SL 250

50 mm diameter
6.6 normal litres at 15 bars
SL 250

63 mm diameter
9.6 normal litres at 15 bars
SL 250

80 mm diameter
15.4 normal litres at 15 bars
SL 500

40 mm diameter
4.35 normal litres at 15 bars
SL 500

50 mm diameter
6.6 normal litres at 15 bars
SL 500

63 mm diameter
9.6 normal litres at 15 bars
SL 500

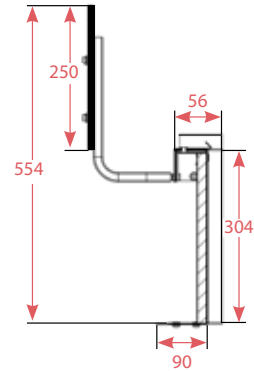
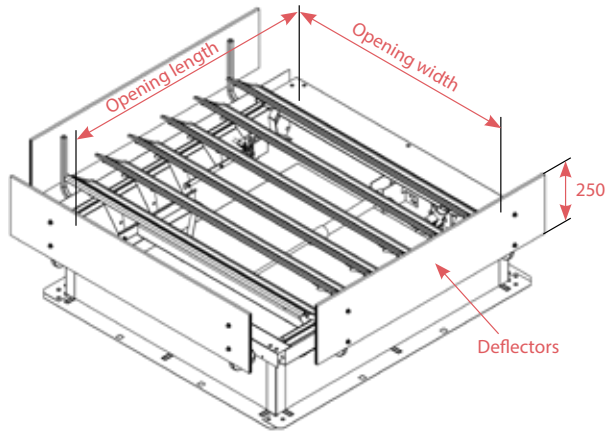
In smoke evacuation mode, a minimum pressure of 15 bars is necessary.

In ventilation mode (site compressed air), a minimum pressure of 7 bars is necessary.

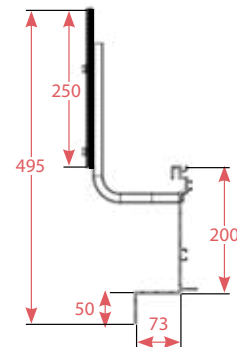
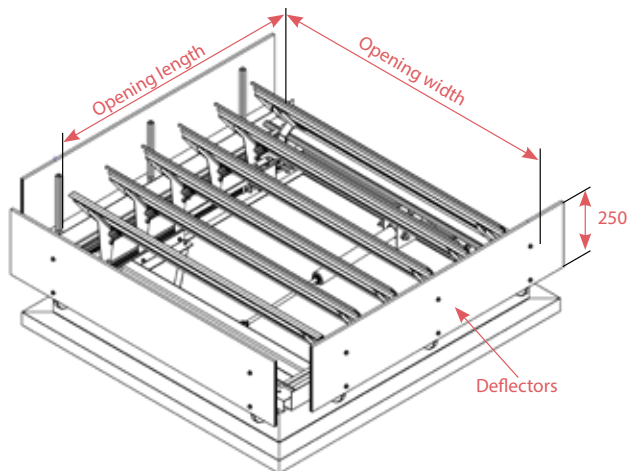
These values are identical for the aluminium and structured polycarbonate louvres (contact us for glass), in the straight kerb, edged kerb or adapter plate versions.

TECHNICAL DIAGRAMS

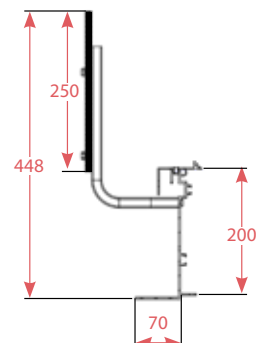
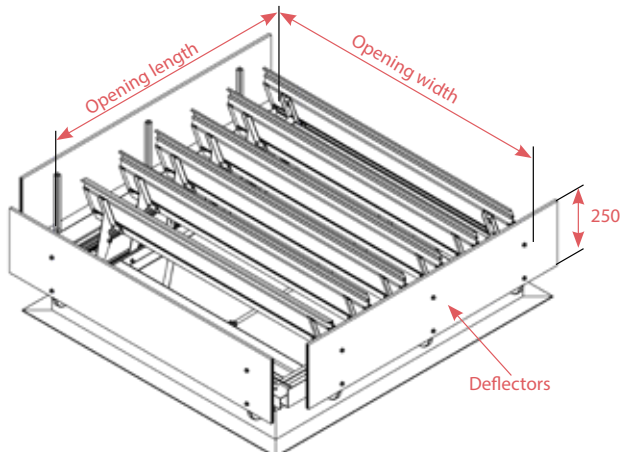
ARCALAM® ÉVOLUPNEU
Type: Galvanised Kerb with deflectors



ARCALAM® ÉVOLUPNEU
Type: Aluminium Adapter Plate with deflectors



ARCALAM® ÉVOLUPNEU
Type: Without Apron with deflectors





• NATURAL SMOKE EVACUATION
• VENTILATION

SUBSTRATE:

Watertight roof/
Existing kerb



ARCALAM[®]
ÉVOLUPNEU



www.skydome.eu

info@skydome.eu

 **SKYDÔME[®]**

Entre-Deux-Villes

02270 Sons-et-Ronchères - FRANCE

Tel.: +33 (0)3 23 21 79 90 - Fax: +33 (0)3 23 21 79 76

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