



CLIMAVER A2 PLUS

CLIMAVER Self-Supporting Ducts

High-density, ISOVER rigid glass wool panel, both faces covered with a glass mesh reinforced aluminium foil which acts as a vapour barrier and provides high mechanical resistance. The male edge is flanged on the interior of the aluminium. It includes a glass veil on each face of the panel to ensure greater rigidity. Because of its good acoustic properties and thermal behaviour, **CLIMAVER A2 PLUS** is the best solution, capable of meeting the highest fire-safety requirements, when installing: • Networks of self-supporting air-distribution ducts in thermal installations within air-conditioning systems in buildings.

Technical Properties

Symbol	Parameter	Icon	Units	Value	Standard
λ_D	Thermal conductivity declared as a function of temperature		W/m·K (°C)	0,032 (10) 0,033 (20) 0,036 (40) 0,038 (60)	EN 12667 EN 12939
—	Reaction to fire		Euroclass	A2-s1, d0	EN 13501-1 EN 15715
MU	Mineral wool: water-vapour diffusion resistance, μ		—	1	EN 12086
Z	Facing: water-vapour diffusion resistance		$m^2 \cdot h \cdot Pa / mg$	> 140	EN 12086
MV	The vapour diffusion-equivalent air layer thickness, S_d		m	100	EN 12086
DS	Dimensional stability, $\Delta\epsilon$		%	< 1	EN 1604
—	Airtightness		Class	D	UNE-EN 13403 EN 12237
—	Pressure resistance		Pa	800	UNE-EN 13403

Working conditions: Air speed up to 18 m/s and circulating air temperature up to 90°C.

Thickness d (mm)	Weighted acoustic absorption coefficient, AW, α_w	Acoustic absorption class	Designation code
EN 823	EN ISO 354 EN ISO 11654	UNE EN ISO 11654	EN 14303
25	0,35	D	MW-EN 14303-T5-MV1

Acoustic trials with plenum: AC3-D1-99 I.

	Frequency (Hz)					
	125	250	500	1000	2000	4000
Thickness d, mm	Practical acoustic absorption coefficient, α_p EN ISO 354 / EN ISO 11654					
25	0,20	0,20	0,20	0,60	0,50	0,40
Section, S mm ²	Acoustic attenuation, in a straight duct, ΔL (DB/m)*					
200x200	2,21	2,21	2,21	10,27	7,96	5,82
300x400	1,29	1,29	1,29	5,99	4,64	3,40
400x500	0,99	0,99	0,99	4,62	3,58	2,62
400x700	0,87	0,87	0,87	4,04	3,13	2,29
500x1000	0,66	0,66	0,66	3,08	2,39	1,75

*Estimated by the formula: $\Delta L = 1,05 \cdot \alpha_p^{1,4} \cdot \frac{P}{S}$, (P = perimeter)
for the sound power of a ventilator with a 20,000 m³/h flow, load loss 15 mm ca.

Presentation

Thickness d (mm)	Length l (m)	Width b (m)	m ² /package	m ² /pallet	m ² /truck load
25	3,00	1,19	21,42	299,98	2.399

Advantages

- CE marking as ventilation and air conditioning system (ETA 20/0122 based on EAD 360001-00-0803).
- High thermal performance.
- Highest airtightness class.
- Optimal acoustic ambient quality and comfort class.
- Resistant to the most aggressive cleaning methods; UNE 100012.
- Unique guiding mark lines for SDM (Straight-Duct Method) cuts.
- Easy and fast installation. Maximum on-site efficiency.
- Duct union continuity, thanks to the exclusive male/female leaning shiplaps of the panels.
- No proliferation of mould and bacteria; EN 13403.
- Sustainable product. 100% recyclable. Recycled material > 50%



Certifications



Installation Guide

Consult the CLIMAVER Ducts Assembly Manual
Additional information available at: www.isover.es