



CLIMAVER PLUS R

CLIMAVER Self-Supporting Ducts

High density, ISOVER rigid glass wool panel; the external facing is covered with kraft paper and glass mesh reinforced aluminium foil which acts as a vapour barrier, and the internal facing with kraft paper reinforced aluminium foil. 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 excellent acoustic properties and thermal behaviour, **CLIMAVER PLUS R** is a suitable solution 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	B-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

Thickness d, mm	Frequency (Hz)					
	125	250	500	1000	2000	4000
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: $\Delta L = 1,05 \cdot \alpha_w \cdot \frac{P}{S} \cdot \frac{1}{S}$, (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	24,99	299,88	2.399

Advantages

- CE marking as ventilation and air conditioning system (ETA 20/0122 based on EAD 360001-00-0803)
- Exceptional duct rigidity.
- Highest airtightness class.
- Some improvement in the acoustic ambient quality.
- Resistant to aggressive cleaning methods; UNE 100012.
- Easy to clean. Smooth finish interior surface.
- Unique guiding mark lines for SDM (Straight-Duct Method) cuts.
- Duct union continuity. Exclusive male/female leaning shiplaps of the panels and flanging of the inside male edge.
- No proliferation of mould and bacteria. Trials according to EN 13403
- Sustainable product. 100% recyclable. Recycled material > 50%



Certification



Installation Guide

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