



CLIMAVER A2 APTA

CLIMAVER Self-Supporting Ducts

Description

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 a black reinforced glass net fabric with high mechanical resistance.

Applications

Given its superior thermal and acoustic insulation, **CLIMAVER A2 APTA** is the ideal solution in order to meet the highest reaction to fire 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_0	Declared thermal conductivity as a function of temperature		W/m-K (°C)	0.032 (10) 0.033 (20) 0.036 (40) 0.039 (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		$m^2 \cdot h \cdot Pa / mg$	130	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
40	0.90	A	MW-EN 14303-T5-MV1

Acoustic trials with plenum: CTA 140003/REV.

⁽¹⁾ Weighted acoustic absorption coefficient AW, α_w without plenum 0.70 (40 mm thickness) CTA 140053/REV-2 and α_w without plenum 0.90 (50 mm thickness) CTA 140045/REV-2.

	Frequency (Hz)					
	125	250	500	1000	2000	4000
Thickness d, mm	Practical acoustic absorption coefficient, α_p EN ISO 354 / EN ISO 11654					
40	0.40	0.70	0.85	0.85	0.90	1.00
Section, S mm ²	Acoustic attenuation, in a straight duct, ΔL (DB/m)*					
200x200	5.82	12.75	16.73	16.73	18.12	21.00
300x400	3.40	7.43	9.76	9.76	10.57	12.25
400x700	2.29	5.01	6.57	6.57	7.12	8.25

*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
40*	3.00	1.21	18.15	199.70	1.597

*Also available in 50mm upon request.

Advantages

- High thermal performance.
- Highest airtightness class.
- Optimal acoustic ambient quality.
- 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%



Certification



Installation Guide

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