



CLIMAVER A1 APTA

CLIMAVER self-supporting ducts

Description

ISOVER glass wool panel with excellent fire resistance - does not contribute to the fire at any point. A high-density non-absorbent panel, faced with aluminium and glass mesh, which acts as a barrier to water vapour thanks to its inner lining, with strengthened black Neto glass-fibre fabric offering high mechanical resistance.

Applications

Thanks to its excellent thermal and acoustic insulation properties, **CLIMAVER A1 APTA** is the leading self-supporting duct solution on the market, satisfying the most stringent fire-resistant demands, for installation in:

- Self-supporting duct systems for the distribution of air in heating and cooling systems.

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) 0.039 (60)	EN 12667 EN 12939
	Reaction to fire		Euroclass	A1	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, Sd		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 (40mm thickness) CTA 140053/REV-2 and α_w without plenum 0,90 (50mm 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 on a straight section 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

*Estimate based on 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, load loss 15mm ca.

Presentation



Thickness d (mm)	Length l (m)	Width b (m)	m ² /package	m ² /pallet	m ² /truck
40	3.00	1.21	18.15	199.70	1,597

Advantages

- Excellent reaction to fire.
- High thermal performance.
- Maximum watertightness level.
- Optimal acoustic environment quality.
- Resistant to the most aggressive cleaning methods, UNE 100012.
- Exclusive marking out of MTR-cut guidelines.
- Fast, simple installation. Maximum on-site efficiency.
- Join continuity thanks to the exclusive panel tongue and groove system.
- No proliferation of mould or bacteria, EN 13403.
- Sustainable product. 100% recyclable. Recycled material > 50%.



Certificates



Installation guide

Check CLIMAVER duct installation manual

For further information: www.isover.es