



CLIMAVER APTA

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 a black reinforced glass neto fabric with high mechanical resistance. Given its superior thermal and acoustic insulation, **CLIMAVER APTA** 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) 0,039 (60)	EN 12667 EN 12939
—	Reaction to fire		Euroclass	B-s1, d0	EN 13501-1 EN 15715
MU	Resistencia a la difusión de vapor de agua de la lana mineral, 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_{w0}	Acoustic absorption class	Designation code
EN 823	EN ISO 354 EN ISO 11654	UNE EN ISO 11654	EN 14303
40	0,90 ⁽¹⁾	A	MW-EN 14303-T5-MV1

Acoustic trials with plenum: CTA 140003/REV. ⁽¹⁾ Weighted acoustic absorption coefficient AW, α without plenum 0,70 (40mm thickness) CTA 140053/REV-2 and α_w without plenum 0,90 (50mm thickness) CTA 140045/REV-2.

Thickness d, mm	Frequency (Hz)					
	125	250	500	1000	2000	4000
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: $\Delta L = 1,05 \cdot \alpha_w^{1,4} \cdot \frac{P}{S}$, (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

*Disponible también en 50mm bajo consulta.

Advantages

- 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%



Certification



Installation Guide

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