



# CLIMAVER A1 APTA

## CLIMAVER Self-Supporting Ducts

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.

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
$\lambda_D$	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, $\mu$		—	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.

Espesor d (mm)	Coefficiente ponderado de absorción acústica, $AW, \alpha_w$	Clase de absorción acústica		Código de designación
EN 823	EN ISO 354 EN ISO 11654	UNE EN ISO 11654		EN 14303
40	0,90 <sup>(1)</sup>	A		MW-EN 14303-T5-MV1

Acoustic trials with plenum: CTA 140003/REV.

<sup>(1)</sup> Weighted acoustic absorption coefficient  $AW, \alpha_w$  without plenum 0,70 (40mm thickness) CTA 140053/REV-2 y  $\alpha_w$  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, $\alpha_p$ EN ISO 354 / EN ISO 11654					
40	0,40	0,70	0,85	0,85	0,90	1,00
Section, S mm <sup>2</sup>	Acoustic attenuation on a straight section, $\Delta L$ (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:  $\Delta L = 1,05 \cdot \alpha_p \cdot \frac{P}{S}$ , (P = perimeter)

For the sound power of a ventilator with a 20,000 m<sup>3</sup>/h, load loss 15mm ca.

### Presentation

Thickness d (mm)	Length l (m)	Width b (m)	m <sup>2</sup> /package	m <sup>2</sup> /pallet	m <sup>2</sup> /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](http://www.isover.es)