

WindAcoustic WindAcoustic

40 70
DOP 26 DOP 27

MW - EN 13162 - T4 - WS

RI
SE
Research Institutes
of Sweden



TERMOLAN

ISOLAMENTOS TERMO-ACÚSTICOS, S.A.



DEFINITION:

Slabs of uniform thickness made of stone wool fibres, bonded with synthetic binder, faced with an anti-disintegrating fiberglass veil of high resistance to vibrations.

APPLICATIONS:

Slabs specially designed for:

- thermal insulation and acoustic correction of places where high levels of noise are produced, being, by excellence, a suitable product for sound absorption solutions.
- Thermal, acoustic and fire protection insulation under floor slabs (mechanically fixed) and over perforated false ceilings;
- Thermal, acoustic and protection against fire insulation in ventilated facades.

BENEFITS:

- Easy and quick application;
- Correction, absorption and noise reduction;
- Excellent acoustical insulation;
- Very good thermal insulation;
- Very good mechanical performance;
- Safety in case of fire;
- Excellent water behaviour;
- Inert product respecting the environment (CFC and HCFC free).

PRESENTATION:

Slabs. Options:

THICKNESS (mm) [NP EN 823]	DIMENSIONS (mm) [NP EN 822]
30 to 100	1200x600

Tolerances:

THICKNESS (CLASS T4): -3 % OR -3 mm ^{a)} TO +5 % OR +5 mm ^{b)}

LENGTH: ±2 %

WIDTH: ±1.5 %

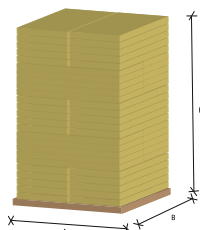
^{a)} Is valid the greatest numerical tolerance

^{b)} Is valid the lowest numerical tolerance

PACKAGING:

Packages packed in retractile plastic.

Geometry (AxBxH):



PHYSICAL PROPERTIES OF MATERIALS

NOMINAL DENSITY

WindAcoustic 40

40 kg/m³

WindAcoustic 70

70 kg/m³

MAXIMUM SERVICE TEMPERATURE

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ST(+) = 250 °C

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ST(+) = 400 °C

EN 14706
ASTM C447

SPECIFIC HEAT FACTOR

c = 0.84 kJ/kg.°C

THERMAL RESISTANCE, R_D

EN 12667
EN 12939

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THICKNESS (mm)	40	50	60	80	100
R_D (m ² .K/W)	1.10	1.40	1.70	2.25	2.85

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THICKNESS (mm)	30	40	50	60	80	100
R_D (m ² .K/W)	0.90	1.20	1.50	1.80	2.40	3.00

THERMAL CONDUCTIVITY, λ_D

EN 12667
EN 12939

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Declared value: $\lambda_D = 0.035$ W/m.K

MEAN TEMPERATURE (°C)	10	50	100	150	200	250
λ (W/m.K)	0.035	0.043	0.053	0.068	0.085	0.106
λ (kcal/h.m.K)	0.030	0.037	0.046	0.058	0.073	0.091

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Declared value: $\lambda_D = 0.033$ W/m.K

MEAN TEMPERATURE (°C)	10	50	100	150	200	250	300	350	400
λ (W/m.K)	0.033	0.039	0.046	0.055	0.066	0.078	0.093	0.109	0.128
λ (kcal/h.m.K)	0.028	0.034	0.040	0.047	0.057	0.067	0.080	0.094	0.110



PROPRIEDADES FÍSICAS DOS MATERIAIS

FIRE REACTION

Incombustible - **EUROCLASS A1**

EN 13501-1
ISO 1182

WATER ABSORPTION

$WS \leq 1.00 \text{ kg/m}^2$

NP EN 1609

WATER VAPOUR DIFFUSION FACTOR

$\mu = 1.30$

EN 12086

ACOUSTICAL ABSORPTION COEFFICIENT, α_s

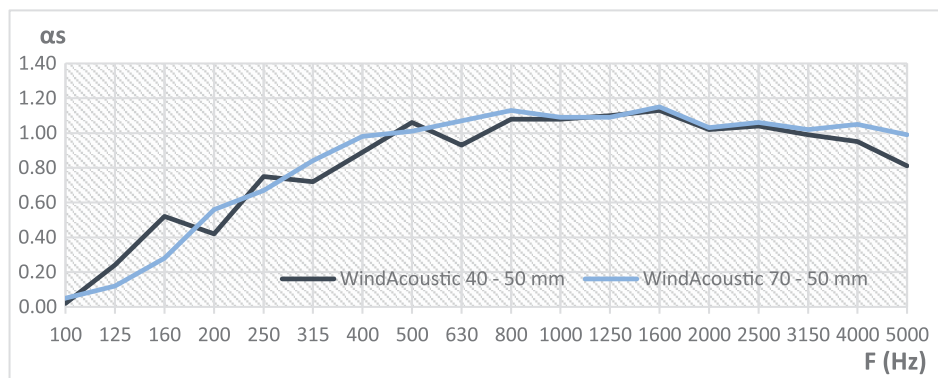
EN ISO 354

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THICKNESS 50 mm	F (Hz)	100	125	160	200	250	315	400	500	630
	α_s	0.02	0.24	0.52	0.42	0.75	0.72	0.89	1.06	0.93
	F (Hz)	800	1000	1250	1600	2000	2500	3150	4000	5000
	α_s	1.08	1.08	1.10	1.13	1.02	1.04	0.99	0.95	0.81

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THICKNESS 50 mm	F (Hz)	100	125	160	200	250	315	400	500	630
	α_s	0.05	0.12	0.28	0.56	0.67	0.84	0.98	1.01	1.07
	F (Hz)	800	1000	1250	1600	2000	2500	3150	4000	5000
	α_s	1.13	1.09	1.09	1.15	1.03	1.06	1.02	1.05	0.99



EQUIVALENT ABSORPTION COEFFICIENT, α_w

EN ISO 11654

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$\alpha_w = 0.95$ (MH) CLASS A

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$\alpha_w = 1.00$ CLASS A

OTHER PROPERTIES

SQUARENESS [NP EN 824]

Deviation lenght / width < 5 mm/m

DIMENSIONAL STABILITY, $\Delta\epsilon$ [NP EN 1604]

23 °C / 90% HR: the relative deviaton (length and width) does not exceed 0.0%

