

PN 70 F

DOP 102

MW - EN 13162 - T4 - WS



TERMOLAN

ISOLAMENTOS TERMO-ACÚSTICOS, S.A.



DEFINITION:

Rigid slabs of uniform thickness made of stone wool fibres bonded with synthetic binder, without facing.

APPLICATIONS:

Multiple applications in various demanding constructive solutions such as thermal and acoustic insulation in interior partitions (suspended ceilings and partition walls), facade walls and tray facades in industrial buildings.

Product also designed for application under floor slabs (mechanically fixed) for fire protection.

BENEFITS:

- Easy and quick application;
- Easy adaptation to structural elements;
- High mechanical performance;
- Excellent thermal performance;
- Excellent acoustical performance;
- Fire safety;
- 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 250	1200x600

Tolerances:

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

LENGTH: ±2%

WIDTH: ±1.5%

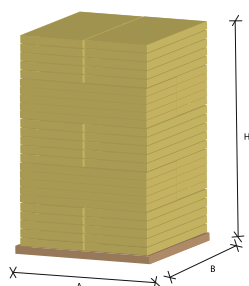
^{a)} Is valid the greatest numerical tolerance

^{b)} Is valid the lowest numerical tolerance

PACKAGING:

Packages packed in retractile plastic.

Geometry (AxBxH):



PHYSICAL PROPERTIES OF MATERIALS

NOMINAL DENSITY

70 kg/m³

THERMAL RESISTANCE, R_D

EN 12667
EN 12939

THICKNESS (mm)	30	35	40	45	50	55	60	65	70
R_D (m ² .K/W)	0.90	1.05	1.20	1.35	1.50	1.65	1.80	1.95	2.10
THICKNESS (mm)	75	80	85	90	95	100	105	110	115
R_D (m ² .K/W)	2.25	2.40	2.55	2.70	2.85	3.00	3.15	3.30	3.45
THICKNESS (mm)	120	125	130	135	140	145	150	155	160
R_D (m ² .K/W)	3.60	3.65	3.80	3.95	4.10	4.25	4.40	4.55	4.70
THICKNESS (mm)	165	170	175	180	185	190	195	200	205
R_D (m ² .K/W)	4.85	5.00	5.15	5.25	5.40	5.55	5.70	5.85	6.00
THICKNESS (mm)	210	215	220	225	230	235	240	245	250
R_D (m ² .K/W)	6.15	6.30	6.45	6.60	6.75	6.90	7.05	7.20	7.35

THERMAL CONDUCTIVITY, λ_D

EN 12667
EN 12939

Declared value: $\lambda_D = 0.033$ W/m.K (for thickness between 30 mm and 120 mm)

Declared value: $\lambda_D = 0.034$ W/m.K (for thickness between 125 mm and 250 mm)

FIRE REACTION

EN 13501-1
ISO 1182

Incombustible - **EUROCLASS A1**

WATER ABSORPTION

NP EN 1609

$WS \leq 1.00$ kg/m²

WATER VAPOUR DIFFUSION FACTOR

EN 12086

$\mu = 1$



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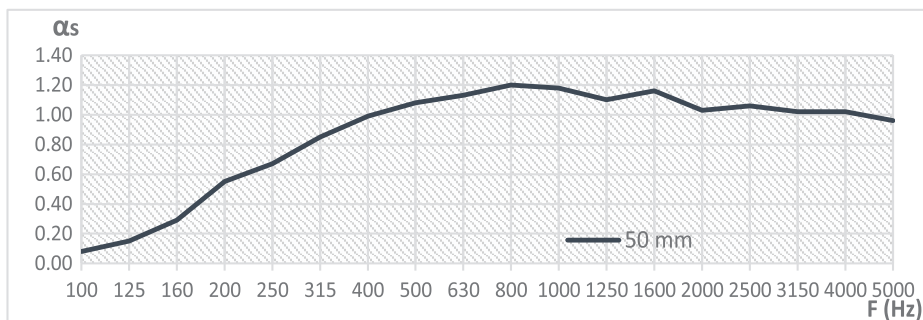


PHYSICAL PROPERTIES OF MATERIALS

ACOUSTICAL ABSORPTION COEFFICIENT, α_s

EN ISO 354

THICKNESS 50 mm	F (Hz)	100	125	160	200	250	315	400	500	630
	α_s	0.08	0.15	0.29	0.55	0.67	0.85	0.99	1.08	1.13
	F (Hz)	800	1000	1250	1600	2000	2500	3150	4000	5000
	α_s	1.20	1.18	1.10	1.16	1.03	1.06	1.02	1.02	0.96



EQUIVALENT ABSORPTION COEFFICIENT, α_w

EN ISO 11654

$\alpha_w = 1.00$ CLASS A

OTHER PROPERTIES

SQUARENESS [NP EN 824]	Deviation length / width < 5mm/m
FLATNESS [NP EN 825]	Deviation ≤ 6 mm
DIMENSIONAL STABILITY, $\Delta\epsilon$ [NP EN 1604]	23 °C / 90% HR: the relative deviation (length and width) do not exceed 0.0%
AIR FLOW RESISTIVITY [EN 29053]	AFr > 20 kPa.s/m ²

SPECIFIC APPLICATIONS

- Insulation of horizontal interior partitions (Suspended ceilings)
- Under floor insulation (mechanically fixed)
- Insulation of vertical interior partitions (Partition walls / Double ceramic sheet)
- Interior facade insulation
- Exterior insulation of facades (Ventilated facades / Curtain walls)
- Facade insulation in industrial buildings (Facades in metal trays)

