

LF 110+

DOP 104

MW - EN 13162 - T5 - CS(10)30 - TR7,5 -
PL(5)450 - 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:

Slabs specially designed for floor applications as thermal and acoustical insulation and reduction of impact noise.

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

BENEFITS:

- Easy and quick application;
- Compatible with heating floors solutions;
- Very good thermal insulation;
- Excellent acoustical insulation and impact noise reduction;
- Very good mechanical performance;
- High insulation performances;
- Fire safety;
- Excellent water behaviour;
- Inert product respecting the environment (CFC and HCFC free).

PRESENTATION:

Slabs packed in packages. Options:

THICKNESS (mm) [NP EN 823]	DIMENSIONS (mm) [NP EN 822]
60 to 240	1200x600

Tolerances:

THICKNESS (CLASS T5): -1 % OR -1 mm ^{a)} TO +3 mm

LENGTH: ±2 %

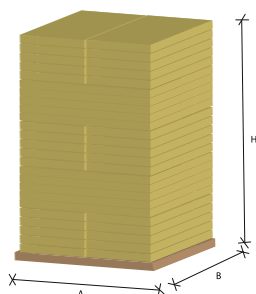
WIDTH: ±1.5 %

^{a)} Is valid the greatest numerical tolerance

PACKAGING:

Packages packed in retractile plastic.

Geometry (AxBxH):



PHYSICAL PROPERTIES OF MATERIALS

NOMINAL DENSITY

≈ 110 kg/m³

THERMAL RESISTANCE, R_D

EN 12667
EN 12939

THICKNESS (mm)	60	70	80	90	100	110	120
R_D (m ² .K/W)	1.70	2.00	2.25	2.55	2.85	3.10	3.40
THICKNESS (mm)	130	140	150	160	170	180	190
R_D (m ² .K/W)	3.70	4.00	4.25	4.55	4.85	5.10	5.40
THICKNESS (mm)	200	210	220	230	240		
R_D (m ² .K/W)	5.70	6.00	6.25	6.55	6.85		

THERMAL CONDUCTIVITY, λ_D

EN 12667
EN 12939

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

FIRE REACTION

EN 13501-1
ISO 1182

Incombustible - **EUROCLASS A1**

WATER ABSORPTION

NP EN 1609

$W_s \leq 1.00$ kg/m²

WATER VAPOUR DIFFUSION FACTOR

EN 12086

$\mu = 1$

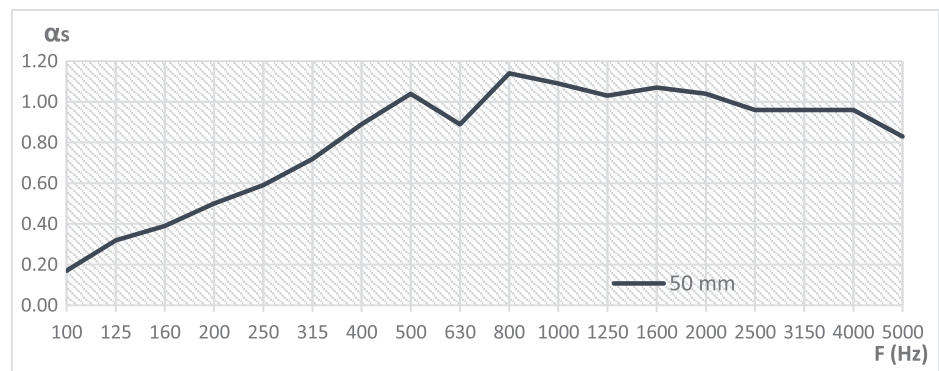


PHYSICAL PROPERTIES OF MATERIALS

ACOUSTICAL ABSORPTION COEFFICIENT, α_s

EN ISO 354

THICKNESS 50 mm	F (Hz)	100	125	160	200	250	315	400	500	630
	α_s	0.17	0.32	0.39	0.50	0.59	0.72	0.89	1.04	0.89
	F (Hz)	800	1000	1250	1600	2000	2500	3150	4000	5000
	α_s	1.14	1.09	1.03	1.07	1.04	0.96	0.96	0.96	0.83



EQUIVALENT ABSORPTION COEFFICIENT, α_w

EN ISO 11654

$\alpha_w = 0.85$ (MH) CLASS B

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]	DS70/90 (70°C / 90%HR): the relative deviation (length and width) doesn't exceed 0,0%
TENSILE STRENGTH PERPENDICULAR TO FACES [NP EN 1607]	$\geq 7,5$ KPa
COMPRESSIVE STRENGTH, σ_{10} [NP EN 826]	≥ 30 kPa
POINT LOAD [EN 12430]	≥ 450 N (Thickness ≥ 100 mm)

ACOUSTICAL INSULATION: IMPACT NOISE TRANSMISSION

- To prevent the spread of these impact noises and the receipt by air should be done an elastic cut between the soil and the structural elements;
- The best solution is to make a floating floor on stone wool slabs;
- It is essential to be avoided the floating floor contact with the structural support elements.

