

COBERLAN N50F B50F

DOP 29

DOP 30

MW - EN 13162 - T5 - CS(10)60 - PL(5)550 - WS



TERMOLAN

ISOLAMENTOS TERMO-ACÚSTICOS, S.A.



DEFINITION:

Rigid and high density slabs of uniform thickness made of stone wool crimped fibres bonded with synthetic binder, without facing (N50F) or impregnated with bitumen (B50F).

APPLICATIONS:

Thermal and acoustic insulation solutions recommended for inaccessible flat roofs (steel decking and concrete) specially designed to function as a waterproofing support with class of compressibility type B. Product not recommended for application of solar panel systems.

BENEFITS:

- Easy and quick application;
- High insulation performances;
- Excellent mechanical behaviour:
 - High compressive traction strength resistance;
 - Very good perpendicular traction strength behaviour;
 - High resistance to rupture (excellent support for steel profiles with big gaps);
- 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 145	1200x1000

Tolerances:

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

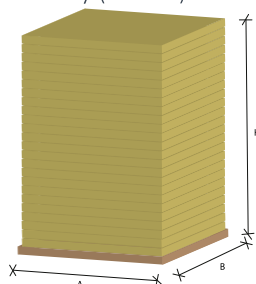
LENGTH: ±2 %

WIDTH: ±1.5 %

^{a)} Is valid the greatest numerical tolerance

PACKAGING:

Slabs over pallets packed in retractile plastic. Geometry (AxBxH):



PHYSICAL PROPERTIES OF MATERIALS

NOMINAL DENSITY

≈ 150 kg/m³

THERMAL RESISTANCE, R_D

EN 12667
EN 12939

THICKNESS (mm)	30	35	40	45	50	55	60	65
R_D (m ² .K/W)	0.75	0.90	1.05	1.15	1.30	1.40	1.55	1.70
THICKNESS (mm)	70	75	80	85	90	95	100	105
R_D (m ² .K/W)	1.80	1.95	2.10	2.20	2.35	2.50	2.60	2.75
THICKNESS (mm)	110	115	120	125	130	135	140	145
R_D (m ² .K/W)	2.85	3.00	3.15	3.25	3.40	3.55	3.65	3.80

THERMAL CONDUCTIVITY, λ_D

EN 12667
EN 12939

Declared value: $\lambda_D = 0.038 \text{ W/m.K}$

FIRE REACTION

EN 13501-1
ISO 1182

COBERLAN N50F Incombustible - **EUROCLASS A1**

COBERLAN B50F Not determined - **NPD**

WATER ABSORPTION

NP EN 1609

$WS \leq 0.50 \text{ kg/m}^2$



PHYSICAL PROPERTIES OF MATERIALS

WATER VAPOUR DIFFUSION FACTOR

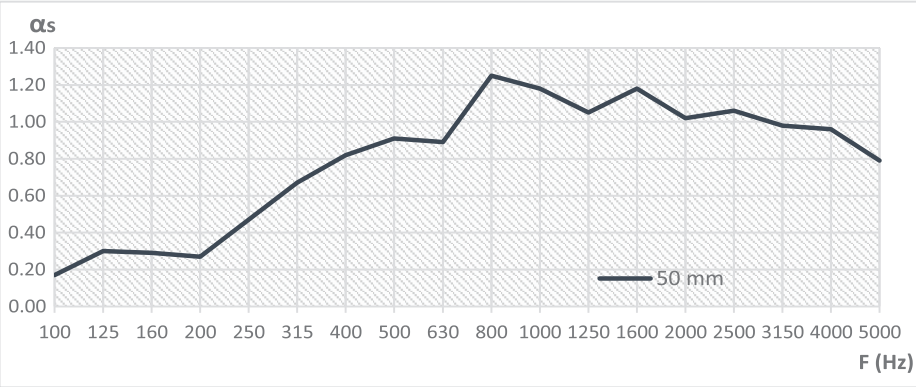
EN 12086

$\mu = 1$

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	0.30	0.29	0.27	0.47	0.67	0.82	0.91	0.89
	F (Hz)	800	1000	1250	1600	2000	2500	3150	4000	5000
	α_s	1.25	1.18	1.05	1.18	1.02	1.06	0.98	0.96	0.79



EQUIVALENT ABSORPTION COEFFICIENT, α_w

EN ISO 11654

$\alpha_w = 0.75$ (MH) CLASS C

OTHER PROPERTIES

SQUARENESS [NP EN 824]	Deviation length / width < 3mm / slab
FLATNESS [NP EN 825]	Deviation ≤ 6 mm
DIMENSIONAL STABILITY, $\Delta\epsilon$ [NP EN 1604]	23 °C / 90% HR: the relative deviation (length and width) doesn't exceed 0.0%
TENSILE STRENGTH PERPENDICULAR TO FACES [NP EN 1607]	≥ 15 kPa
COMPRESSIVE STRENGTH, σ_{10} [NP EN 826]	≥ 60 kPa
POINT LOAD [EN 12430]	≥ 550 N
CLASS OF COMPRESSIBILITY [Guide UEATC]	Class B 

