COPERSOUND P

PROPERTIES

COPERSOUND P is a rolled multi-layer product for acoustic insulation of floorings, composed by a bitumen polymer membrane with green fabric surface finishing coupled on the lower face to a sound resistant non-woven white polyester layer; the polyester side is provided with a 5 cm longitudinal selvedge in order to make easy the overlapping of rolls during the application.
The sound insulating bituminous membrane ensures watertightness, resistance to water vapor diffusion and, at the same time, improves acoustic insulation performance by acting as a continuous barrier against noise transmissions. Moreover, during the screed construction, the bituminous layer avoids the cement mortar to be absorbed by the sound resistant non-woven polyester fabric, since this would result in a decrease of its stretch properties with subsequent loss of its capacity to reduce the transmission of the impact noise vibrations.
The bitumen polymer membrane makes COPERSOUND P resistant to static loading and dynamic impact: as a consequence it will be resistant to substrate roughness, screed weight and work site handlings during the application.
The sound resistant layer consists of stretch needle felt polyester fibers acting as a "spring" in the physical "mass-spring" system, since it allows a proper dynamic stiffness as well as a vibration deadening: this results in optimum acoustic insulation properties. Furthermore, the elasticity of the non-woven polyester allows to fit and perfectly adhere to the substrate.
COPERSOUND P is the right solution of problems arising from impact noise insulation of floorings, balconies and false ceilings, in which this product also functions as an effective barrier against vapor and humidity.
COPERSOUND P can also be used as anti-condensation layer in wooden roofs.

For correct installation refer to COPERSOUND guideline provided by Copernit Technical Department upon request.

ADVANTAGES

- Excellent acoustic performance: optimum ratio between dynamic stiffness and compressibility;
- Low thickness: the product does not require modifications to the flooring level dimensions;
- Ease of application;
- Watertight and rot proof;
- High resistance to walkability, static loading and dynamic impact, tearing: the product does not allow perforation and tearing caused by work site operations;
- High flexibility, ease of cutting: COPERSOUND P fits to any kind of surface.

Properties	Test Method	Unit	COPERSOUND P 200	Tol.
Unit weight	EN 1849-1	kg/m²	2,0	±10%
Total thickness *(indicative value)*	EN 1849-1	mm	7,5	±10%
Polyester mat thickness *(indicative value)*	EN 1849-1	mm	6,0	±10%
Bitumen-polymer layer thickness	EN 1848-1	mm	1,5	±10%
Length	EN 1848-1	m	10 (-1%)	≥
Polyester mat width	EN 1848-1	m	0,95	±0,02
Bitumen-polymer layer width	EN 1848-1	m	1,0 (-1%)	≥
Longitudinal selvedge width	EN 1848-1	cm	5,0	±2
Heat conductivity - Polyester fiber mat (λ) - Bitumen-polymer layer (λ)	ISO 8302	W/mk	0,045 0,17	--
Watertightness	EN 1928	kPa	60	≥
Resistance to water vapor diffusion	EN 1931	μ	100.000	--
IMPACT NOISE SOUND INSULATION VALUES				
Evaluation index for impact noise sound pressure level, ΔL_W (REPORT CSI n° 0032-A/DC/ACU/06)	UNI EN ISO 140-6 UNI EN ISO 717-2	dB	28,5	--
Apparent average dynamic stiffness, s'_t (REPORT ISTITUTO GIORDANO n° 268322)	UNI EN 29052-1	MN/m³	11	--
Average dynamic stiffness, media s' (REPORT ISTITUTO GIORDANO n° 268322)	UNI EN 29052-1	MN/m³	40	--
Compressibility	UNI EN 12431	mm	≤2	--

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