TECHNICAL DATA

REGUPOL SOUND AND DRAIN 22

Product
Impact sound reducing underlayment for various floor structures on terraces, loggias and balconies, serving simultaneously as rainwater drainage and membrane protection, CE certified

Material
- Polyurethane elastomer composite
- Dimpled profile on the underside
- Geotextile-laminated on top (160g, GRK 4)

Weight
81 kg/roll – 6.5 kg/m²

Dimensions
Length: 10,000 mm, Width: 1,250 mm, Thickness: 15 mm

Applications
Terraces, Loggias, Balconies, Rooftops, Arcades

Compatibility
Compatible with commercially available bitumen and EPDM based membranes
Compatible with PVC membrane, if approved by the membrane manufacturer
If applicable, the thermal insulation should have a compressive strength of minimum 300 kPa.

Certification
European Technical Assessment ETA-18/0239

Acoustical Performance*	Standard	Result	Comment
53 mm concrete tiles, loose-laid on height-adjustable Buzon pedestals, **REGUPOL sound and drain 22**, 140 mm concrete slab	DIN EN ISO 10140-3 DIN EN ISO 717-2	ΔL_w 37 dB	Tested by Müller-BBM Report M133001/01
26 mm wooden decking boards on battens, loose-laid on height-adjustable Buzon pedestals, **REGUPOL sound and drain 22**, 140 mm concrete slab	DIN EN ISO 10140-3 DIN EN ISO 717-2	ΔL_w 28 dB	Tested by Müller-BBM Report M133001/02
20 mm ceramic tiles, loose-laid on height-adjustable Buzon pedestals, **REGUPOL sound and drain 22**, 140 mm concrete slab	DIN EN ISO 10140-3 DIN EN ISO 717-2	ΔL_w 35 dB	Tested by Müller-BBM Report M133001/05

*Assembly from top to bottom

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Acoustical Performance*	Standard	Result	Comment
20 mm ceramic tiles, loose-laid on Buzon aluminium joists and height-adjustable Buzon pedestals, **REGUPOL sound and drain 22**, 140 mm concrete slab	DIN EN ISO 10140-3 DIN EN ISO 717-2	ΔL_w 35 dB	Tested by Müller-BBM Report M133001/06
27 mm wooden decking boards on battens, **REGUPOL sound and drain 22**, 2 layers bitumen membrane, 120 mm foam glass thermal insulation, bitumen underlay, 150 mm concrete slab	DIN EN ISO 10140-3 DIN EN ISO 717-2	ΔL_w 30 dB	Tested by ITA Wiesbaden Report 0038.12- P 109
50 mm concrete tiles, 40 mm 2/8 mm fine stone chippings, **REGUPOL sound and drain 22**, 2 layers of bitumen membrane, 120 mm foam glass thermal insulation, bitumen underlay, 150 mm concrete slab	DIN EN ISO 10140-3 DIN EN ISO 717-2	ΔL_w 35 dB	Tested by ITA Wiesbaden Report 0039.12- P 109 (test surface for walk-on tests are recommended)

* Assembly from top to bottom

Material properties	Standard	Result
Maximum traffic load		50 kN/m^2
Mean dynamic stiffness value	DIN EN 29052-1	$s'_t \leq 21$ MN/m^3
Compressibility	DIN EN 12431	$c \leq 2$ mm
Compressive stress at 10 % compression	DIN EN 826	$\sigma 10 = 13$ kPa

Fire behaviour	Standard	Result
Fire classification	DIN EN 13501-1	E

Thermal behaviour	Standard	Result
Thermal conductivity	DIN EN 12667	$\lambda = 0.075$ W/(mK)
Thermal resistance	DIN EN 12667	R = 0.229 (m^{2}K)/W
Temperature resistance		-20 to +60° C

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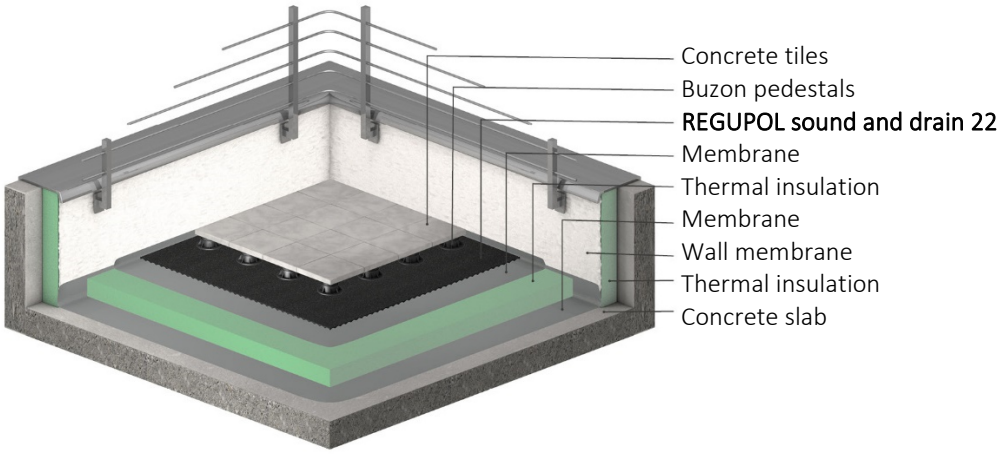
Resistance to ageing	Standard	Difference of compressive stress at 10 % compression	Difference of dynamic stiffness
Resistance to oxidation	DIN EN ISO 13438	≤ 1 kPa	≤ 3 MN/m³
Resistance to hydrolysis	DIN EN 12447	≤ 3 kPa	≤ 1 MN/m³
Ozone resistance	DIN EN 1844	≤ 3 kPa	≤ 3 MN/m³
Resistance to weather	DIN EN 12224	≤ 1 kPa	≤ 1 MN/m³

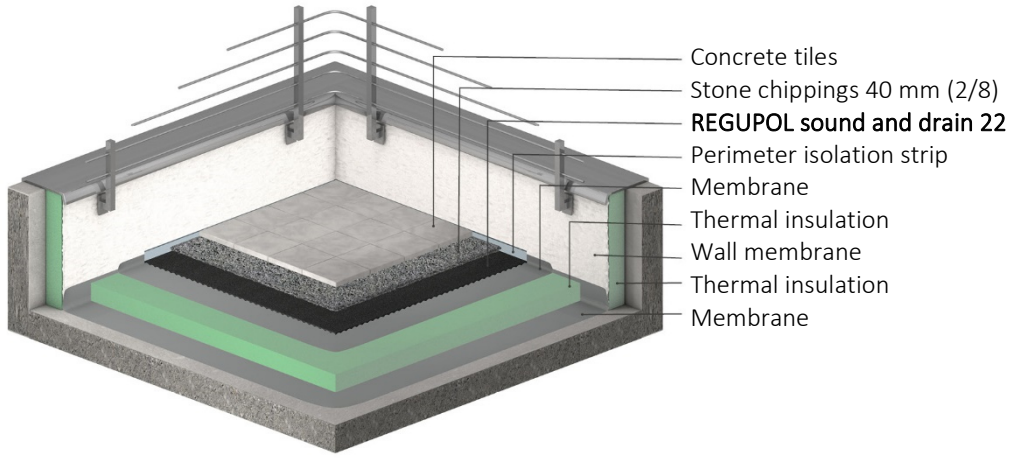
Moisture behaviour	Standard	Result	Comment
Water vapour permeability	DIN EN ISO 12572	S_d = 0.05 [m]	Diffusion equivalent air layer thickness
		μ = 3.1 [-]	Diffusion resistance factor, Material is open for diffusion
Water flow capacity	DIN EN ISO 12958	2 kPa: 0.144 l/(m·s) 10 kPa: 0.071 l/(m·s) 20 kPa: 0.025 l/(m·s)	Gradient of 1.5 %
		2 kPa: 0.109 l/(m·s) 10 kPa: 0.052 l/(m·s) 20 kPa: 0.018 l/(m·s)	Gradient of 1.0 %
Freeze/thaw resistance	DIN EN 12091		Tested according to standard

Floor Assembly
Concrete tiles on pedestals

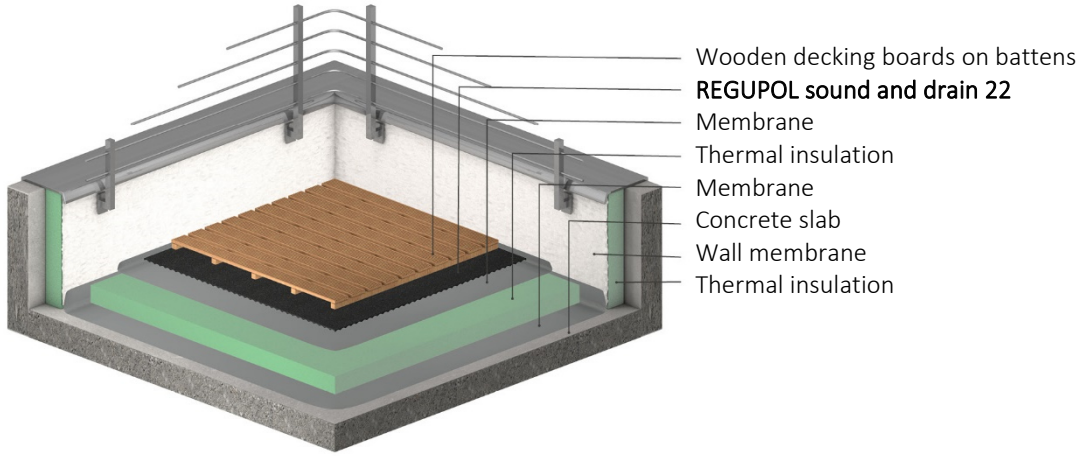


REGUPOL SOUND AND DRAIN 22

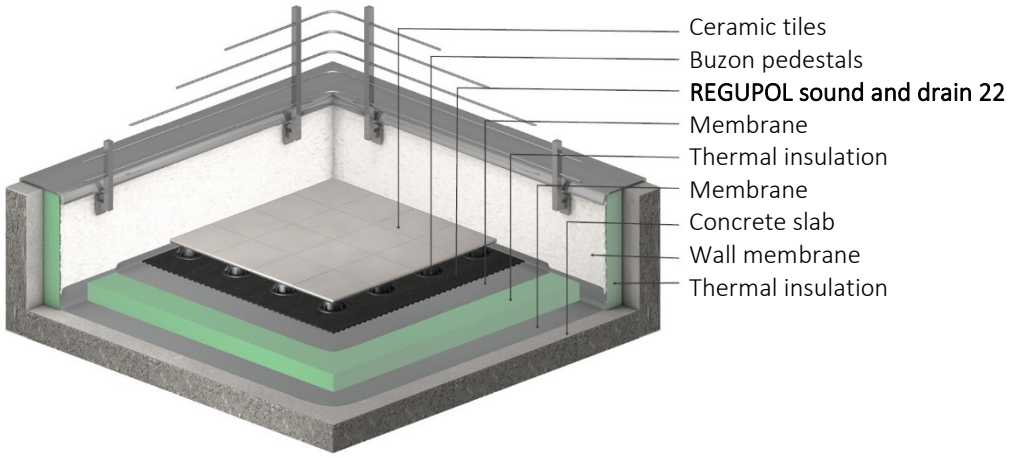
Floor Assembly
Concrete tiles on fine stone chippings



Floor Assembly
Wooden decking boards on battens



Floor Assembly
Ceramic tiles on pedestals



For more assemblies and acoustic test reports, please visit **www.regupol.com**