

## 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.



#### Material

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

#### Applications

- Terraces
- Loggias
- Balconies
- Rooftops
- Arcades



#### Compatibility

Compatible with commercially available

- Bitumen and EPDM based membranes
- PVC membrane, if approved by the membrane manufacturer

If applicable, the thermal insulation should have a compressive strength of minimum 300 kPa.

#### Physical information

Roll width	1250mm	
Roll length	10m	
Material thickness	15mm	
Weight per roll / per m <sup>2</sup>	81kg	6.5kg/m <sup>2</sup>
Material composition	PUR-bonded composite	

Acoustical Performance*	Standard	Result	Comment
53 mm concrete tiles, loose-laid on height-adjustable pedestals, <b>REGUPOL sound and drain 22</b> , 140 mm concrete slab	DIN EN ISO 10140-3 DIN EN ISO 717-2	$\Delta L_w$ 37 dB	Tested by Müller-BBM Report M133001/01
26 mm wooden decking boards on battens, loose-laid on height-adjustable pedestals, <b>REGUPOL sound and drain 22</b> , 140 mm concrete slab	DIN EN ISO 10140-3 DIN EN ISO 717-2	$\Delta L_w$ 28 dB	Tested by Müller-BBM Report M133001/02

Acoustical Performance*	Standard	Result	Comment
20 mm ceramic tiles, loose-laid on height-adjustable pedestals, <b>REGUPOL sound and drain 22</b> , 140 mm concrete slab	DIN EN ISO 10140-3 DIN EN ISO 717-2	$\Delta L_w$ 35 dB	Tested by Müller-BBM Report M133001/05
20 mm ceramic tiles, loose-laid on aluminium joists and height-adjustable pedestals, <b>REGUPOL sound and drain 22</b> , 140 mm concrete slab	DIN EN ISO 10140-3 DIN EN ISO 717-2	$\Delta L_w$ 35 dB	Tested by Müller-BBM Report M133001/06
27 mm wooden decking boards on battens, <b>REGUPOL sound and drain 22</b> , 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	$\Delta L_w$ 30 dB	Tested by ITA Wiesbaden Report 0038.12- P 109
50 mm concrete tiles, 40 mm 2/8 mm fine stone chippings, <b>REGUPOL sound and drain 22</b> , 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	$\Delta L_w$ 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 <sup>2</sup>
Mean dynamic stiffness value	DIN EN 29052-1	$s'_t \leq 21 \text{ MN/m}^3$
Compressibility	DIN EN 12431	$c \leq 2 \text{ mm}$
Compressive stress at 10 % compression	DIN EN 826	$\sigma_{10} = 13 \text{ kPa}$

Fire behaviour	Standard	Result
Fire classification	DIN EN 13501-1	E (B roof (t1) available on request)

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

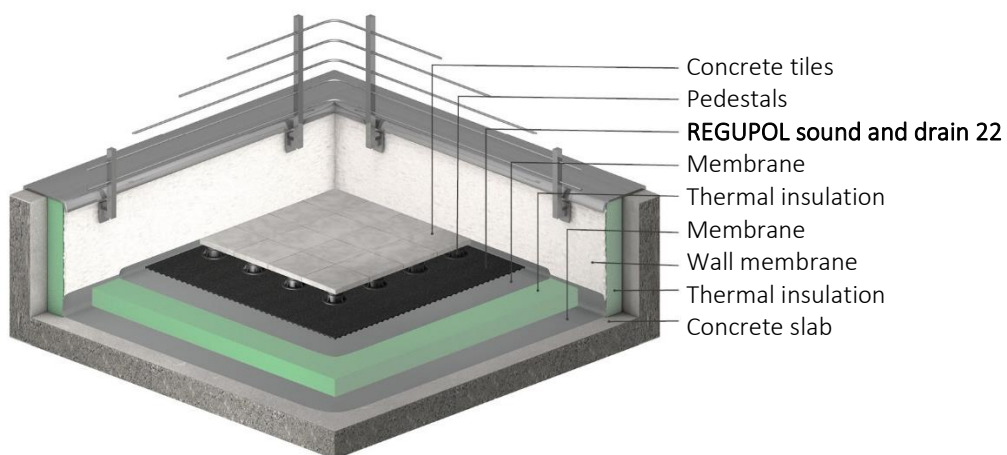
Resistance to ageing	Standard	Difference of compressive stress at 10 % compression	Difference of dynamic stiffness
Resistance to oxidation	DIN EN ISO 13438	≤ 1 kPa	≤ 3 MN/m <sup>3</sup>
Resistance to hydrolysis	DIN EN 12447	≤ 3 kPa	≤ 1 MN/m <sup>3</sup>
Ozone resistance	DIN EN 1844	≤ 3 kPa	≤ 3 MN/m 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

Moisture behaviour	Standard	Result	Comment
Water vapour permeability	DIN EN ISO 12572	$S_d = 0.05$ [m]	Diffusion equivalent air layer thickness
		$\mu = 3.1$ [-]	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

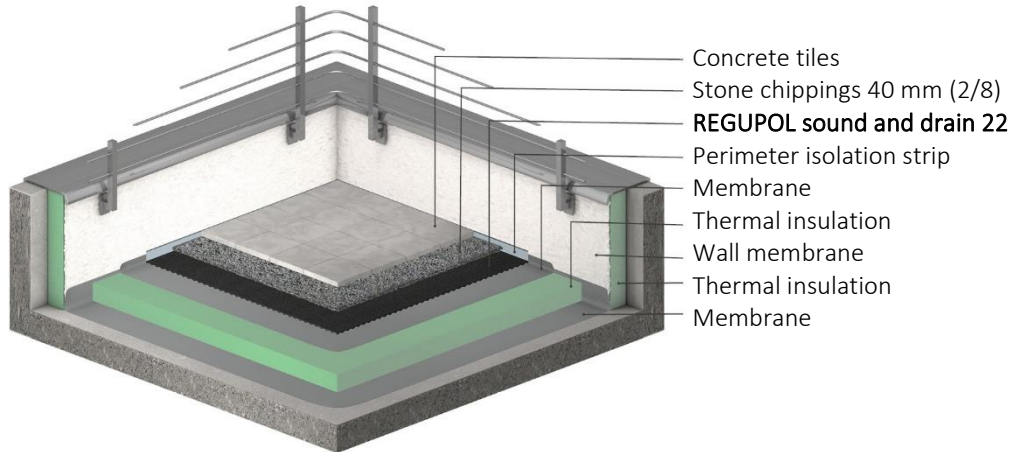
## Floor Assembly

### Concrete tiles on pedestals



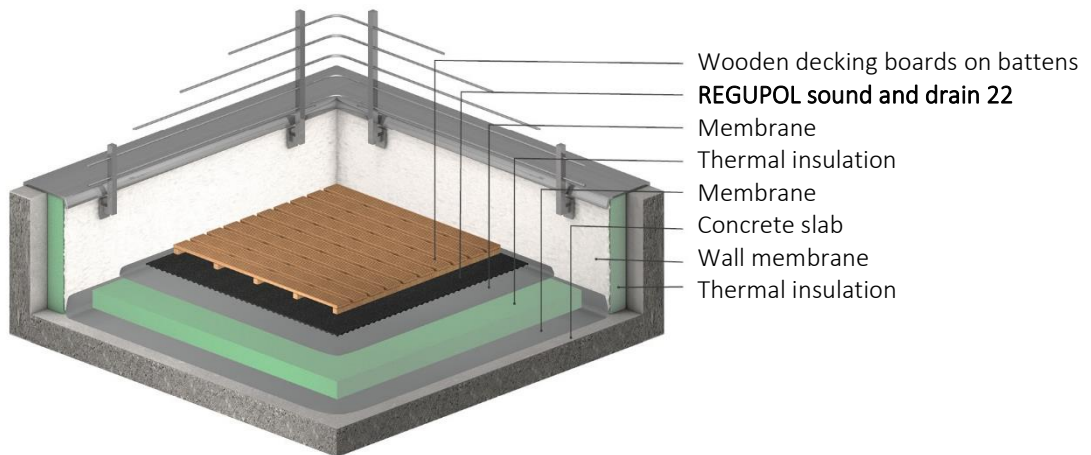
**Floor Assembly**

Concrete tiles on fine stone chippings



**Floor Assembly**

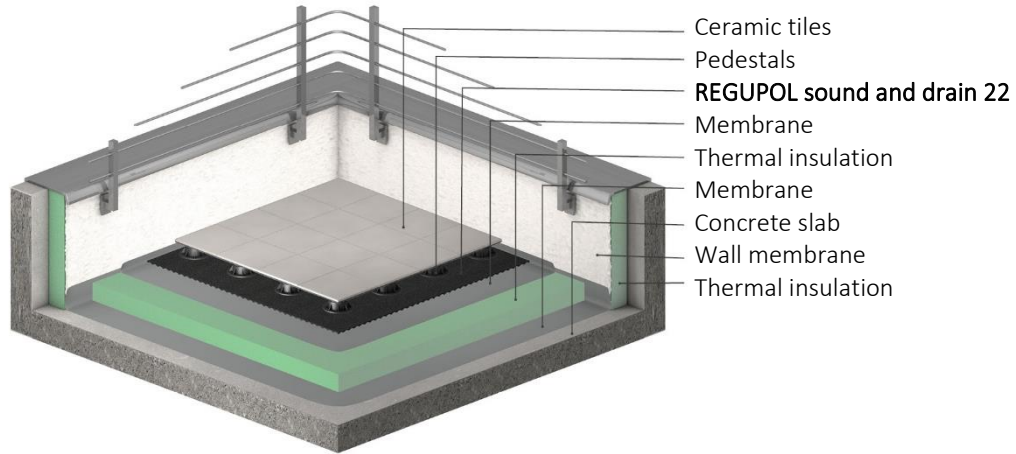
Wooden decking boards on battens



## Floor Assembly

### Ceramic tiles on pedestals

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