

TECHNICAL DATA

REGUPOL COMFORT 12



Product

Impact sound insulating underlayment for various floor structures under screed beds and floating floors with a maximum traffic load $\leq 5 \text{ kN/m}^2$, CE certified.



Material

- PUR-bonded elastomers
- Dimpled profile on the underside

Weight

36.5 kg/roll – 3 kg/m²



Dimensions

Length: 9,300 mm, Width: 1,150 mm, Thickness: 12 mm

Applications

Under screed beds and floating floors for both residential and commercial use, traffic load $< 5 \text{ kN/m}^2$, e. g. floor renovations, new buildings, reconstructions of apartments, commercial buildings or hotels.

Certification

European Technical Assessment ETA-17/1030

Acoustical Performance*	Standard	Result	Comment
Under prefabricated cement screed:			
50 mm cement screed, REGUPOL comfort 12 ,	DIN EN ISO 10140-3	$L_{n,w} = 29 \text{ dB}$	Test report
REGUPOL comfort S1	DIN EN ISO 717-2	$C_{1,50-2500} = 11 \text{ dB}$	20004193-D05
(30 mm levelling fill),	DIN EN ISO 10140-2	$R_w = 80 \text{ dB}$	Total thickness:
242 mm wood frame ceiling,	DIN EN ISO 717-1	$C_{50-5000} = -7 \text{ dB}$	444 mm
Suspended ceiling with REGUFOAM hangers QH.F 270plus and 2 x 15 mm gypsum boards (Suspension height = 80 mm)			
Reference ceiling:			
263 mm C1 wood frame ceiling	DIN EN ISO 10140-3	$L_{n,w} (C_1) = 72 (-1) \text{ dB}$	Test report
as per ISO 10140-5	DIN EN ISO 717-2	$C_{1,50-2500} = 0 \text{ dB}$	PB 4.2/16-252-2 &
	DIN EN ISO 10140-2	$R_w (C) = 49 (-2) \text{ dB}$	PB 4.2/16-252-3
	DIN EN ISO 717-1	$C_{50-5000} = -3 \text{ dB}$	
Under cement screed:			
50 mm cement screed, REGUPOL comfort 12 ,	DIN EN ISO 10140-3	$L_{n,w} (C_1) = 47 (1) \text{ dB}$	Test report
REGUPOL comfort S1	DIN EN ISO 717-2	$C_{1,50-2500} = 12 \text{ dB}$	PB 4.2/16-252-14 &
(40mm levelling fill),	DIN EN ISO 10140-2	$R_w (C) = 69 (-6) \text{ dB}$	PB 4.2/16-252-15
263 mm C1 Wood frame ceiling	DIN EN ISO 717-1	$C_{50-5000} = -10 \text{ dB}$	

*Assembly from top to bottom

TECHNICAL DATA

REGUPOL COMFORT 12



Acoustical Performance*	Standard	Result	Comment
Under cement screed:			
50 mm cement screed, REGUPOL comfort 12 , REGUPOL comfort S1 (40mm levelling fill), 263 mm C1 Wood frame ceiling	DIN EN ISO 10140-3 DIN EN ISO 717-2	$L_{n,w}(C_l) = 30 (3) \text{ dB}$ $C_{l,50-2500} = 17 \text{ dB}$	Test report PB 4.2/16-252-12 &
Suspended ceiling with REGUFOAM hangers CH.R-50 400plus and 2 x 12,5 mm gypsum boards	DIN EN ISO 10140-2 DIN EN ISO 717-1	$R_w (C) = 81 (-3) \text{ dB}$ $C_{50-5000} = -12 \text{ dB}$	PB 4.2/16-252-13
Under OSB sheeting:			
2 x 12.5 mm OSB sheeting, REGUPOL comfort 12 , REGUPOL comfort S1 (40mm levelling fill), 263 mm C1 wood frame ceiling	DIN EN ISO 10140-3 DIN EN ISO 717-2	$L_{n,w}(C_l) = 49 (3) \text{ dB}$ $C_{l,50-2500} = 10 \text{ dB}$	Test report PB 4.2/16-252-16 &
	DIN EN ISO 10140-2 DIN EN ISO 717-1	$R_w (C) = 67 (-6) \text{ dB}$ $C_{50-5000} = -10 \text{ dB}$	PB 4.2/16-252-17
2 x 22 mm OSB sheeting, REGUPOL comfort 12 , 45mm Glascofloor (leveling fill)	DIN EN ISO 10140-3 DIN EN ISO 717-2	$L_{n,w}(C_l) = 38 (1) \text{ dB}$ $C_{l,50-2500} = 11 \text{ dB}$	Test report PB 4.2/16-252-8 &
263 mm C1 wood frame ceiling Suspended ceiling with REGUFOAM hangers CH.R-50 400plus	DIN EN ISO 10140-2 DIN EN ISO 717-1	$R_w (C) = 79 (-5) \text{ dB}$ $C_{50-5000} = -12 \text{ dB}$	PB 4.2/16-252-9
Under RenoScreed®:			
40 mm RenoScreed®, REGUPOL comfort 12 , 45mm Glascofloor (leveling fill)	DIN EN ISO 10140-3 DIN EN ISO 717-2	$L_{n,w}(C_l) = 53 (0) \text{ dB}$ $C_{l,50-2500} = 7 \text{ dB}$	Test report PB 4.2/16-252-2 &
263 mm C1 wood frame ceiling	DIN EN ISO 10140-2 DIN EN ISO 717-1	$R_w (C) = 66 (-3) \text{ dB}$ $C_{50-5000} = -8 \text{ dB}$	PB 4.2/16-252-3
40 mm RenoScreed®, REGUPOL comfort 12 , 45mm Glascofloor (leveling fill)	DIN EN ISO 10140-3 DIN EN ISO 717-2	$L_{n,w}(C_l) = 38 (2) \text{ dB}$ $C_{l,50-2500} = 10 \text{ dB}$	Test report PB 4.2/16-252-6 &
263 mm C1 wood frame ceiling Suspended ceiling with REGUFOAM hangers CH.R-50 400plus	DIN EN ISO 10140-2 DIN EN ISO 717-1	$R_w (C) = 80 (-5) \text{ dB}$ $C_{50-5000} = -11 \text{ dB}$	PB 4.2/16-252-7

*Assembly from top to bottom

Material properties	Standard	Result
Maximum traffic load		$\leq 5 \text{ kN/m}^2$
Mean dynamic stiffness value	DIN EN 29052-1	$s'_t \leq 10 \text{ MN/m}^3$
Compressibility	DIN EN 12431	$c \leq 2 \text{ mm}$

TECHNICAL DATA

REGUPOL COMFORT 12



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

Thermal behaviour	Standard	Result	Comment
Thermal conductivity	DIN EN 12667	$\lambda = 0.06 \text{ W/(mK)}$	
Thermal resistance	DIN EN 12667	$R = 0.133 \text{ (m}^2\text{K)/W}$	
Temperature resistance		-20 to +60° C	
Deformation under specified compressive load and temperature conditions; Difference of relative deformations ϵ_1 and ϵ_2 of Level A: 23 ±5°C / 48 ±1 h Level B: 35 ±1°C / 48 ±1 h	DIN EN 1605	$\Delta \epsilon \leq 5,0 \%$	Suitable for floor heating systems

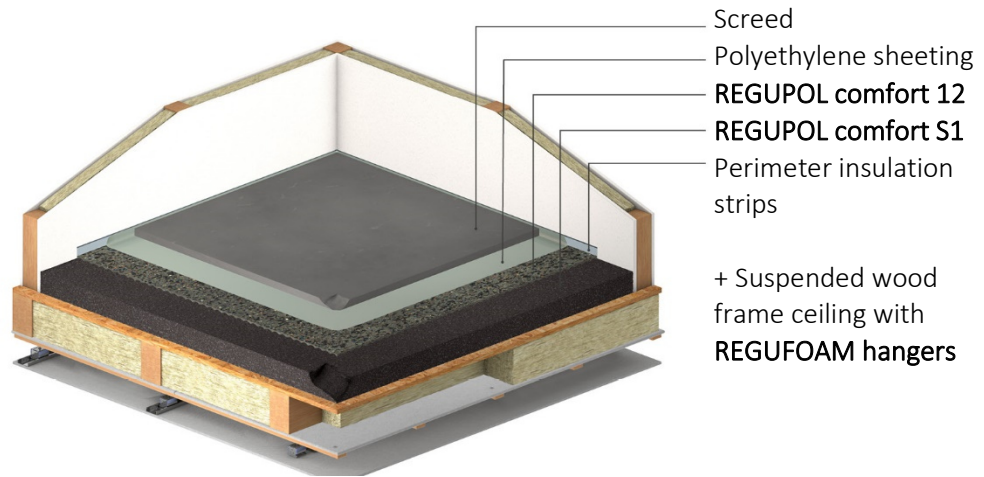
Moisture behaviour	Standard	Result	Comment
Water vapour permeability	DIN EN ISO 12572	$S_d = 0.03 \text{ [m]}$	Diffusion equivalent air layer thickness
		$\mu = 3.75 \text{ [-]}$	Diffusion resistance factor, Material is open for diffusion
Sensitivity to moisture		To be protected from moisture during storage, transport and installation	

Health protection	Standard	Result
VOC	DIN EN 16516	compliant with EU-LCI list and German AgBB scheme; "A+" as per décret n°2011-321
Nitrosamine	DIK Method	Compliant with German Model Building Regulation
PAH	DIN EN 18287	Compliant with German Model Building Regulation

TECHNICAL DATA
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Floor Assembly



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