TECHNICAL DATA

REGUPOL SOUND 17

Product
Impact and airborne sound insulating underlayment for various floor structures under screed beds and floating floors with traffic loads ≥ 5 kN/m², CE certified.

Material
- Polyurethane-bonded rubber fibres
- Dimpled profile on the underside
- Laminated with sheeting on top

Weight
7.3 kg/m²

Dimensions
Length: 1,000 mm, Width: 1,200 mm, Thickness: 17 mm

Applications
Under screed beds and floating floors for both residential and commercial use ≥ 5 kN/m², e. g. floor renovations, new buildings, reconstructions.

Certification
European Technical Assessment ETA-10/0057
Cradle to Cradle Certified® is a registered trademark of the Cradle to Cradle Products Innovation Institute (C2CPII).

Acoustical Performance*	**Standard**	**Result**	**Comment**
120 mm cement screed, **REGUPOL sound 17**, 140 mm concrete slab	DIN EN ISO 10140-3 DIN EN ISO 717-2	$\Delta L_w \geq 26$ dB	According to ETA: $\Delta L_w \geq 26$ dB PB4.2/16-378-2
125 mm cement screed, **REGUPOL sound 17** (2 layers), 140 mm concrete slab	DIN EN ISO 10140-3 DIN EN ISO 717-2	$\Delta L_w \geq 31$ dB	According to ETA: $\Delta L_w \geq 30$ dB PB4.2/15-391-6

*Assembly from top to bottom

Material properties	**Standard**	**Result**	**Comment**
Maximum traffic load		50 kN/m²	
Mean dynamic stiffness value	DIN EN 29052-1	$s'_t \leq 19$ MN/m³	one layer (17 mm)
		$s'_t \leq 9$ MN/m³	two layers (2 x 17 mm)
Compressibility	DIN EN 12431	c ≤ 2 mm	one layer (17 mm)
		c ≤ 3 mm	two layers (2 x 17 mm)

Thermal behaviour	**Standard**	**Result**
Thermal conductivity	DIN EN 12667	λ = 0.08 W/(mK)
Thermal resistance	DIN EN 12667	R = 0.16 (m²K)/W

Temperature resistance	-20 to +60° C

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

Moisture behaviour	**Standard**	**Result**
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

Bedding modulus for one layer (17 mm)

Compressive stress [N/mm²]	**Settlement** [mm]	**Bedding modulus** [MN/m³]
0.0025	0	0
0.0098	1.4	7.0
0.0196	2.6	8.0
0.0343	3.9	9.0
0.0490	4.7	10.0
0.0196	3.2	6.0

Bedding modulus for two layers (2x 17 mm)

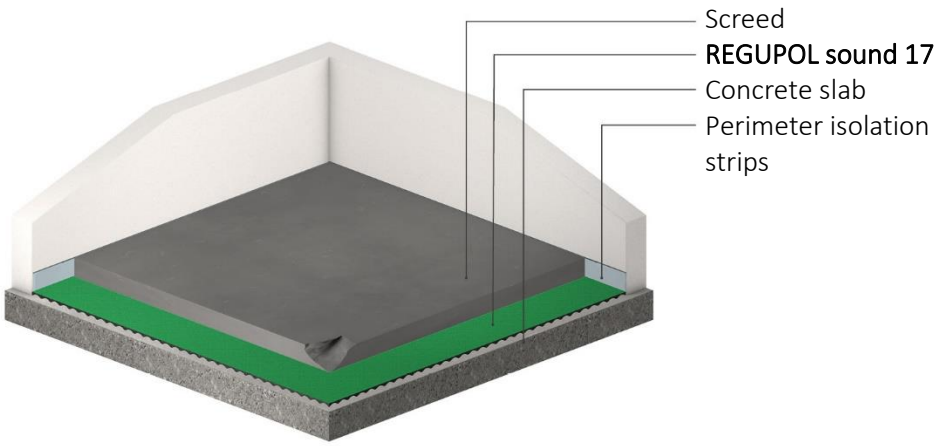
Compressive stress [N/mm²]	**Settlement** [mm]	**Bedding modulus** [MN/m³]
0.0025	1.9	1.3
0.0098	5.0	2.0
0.0196	7.5	2.6
0.0343	9.5	3.6
0.0490	11.0	4.5
0.0196	8.7	2.3

The tests have been conducted and analysed as per DIN 18134
Test specimen sizing and equipment has been set up as per DIN EN 826

Floor assembly

TECHNICAL DATA

REGUPOL SOUND 17

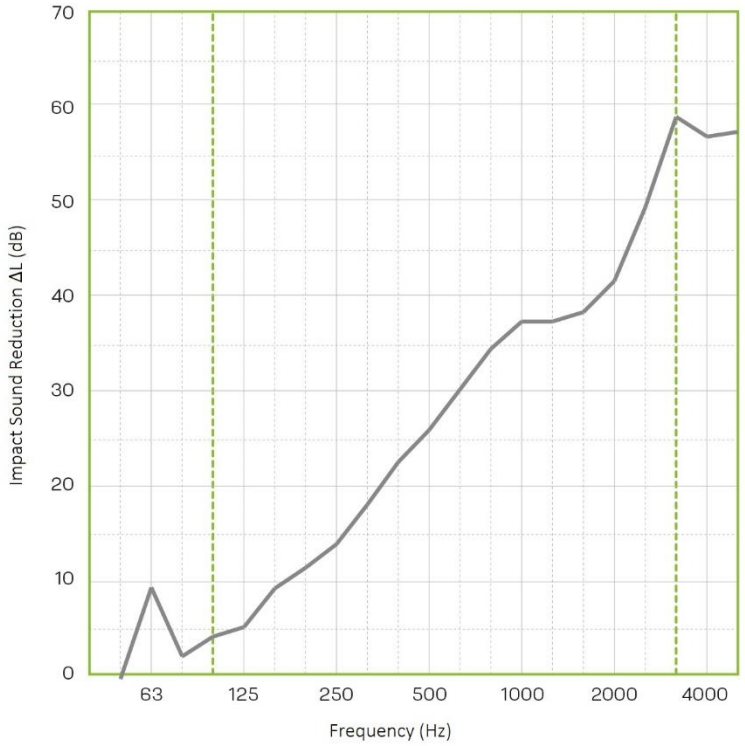


For more assemblies and test reports, please visit **www.regupol.com**

TECHNICAL DATA

REGUPOL SOUND 17

Detailed test results for impact sound reduction
Test report PB 4.2/13-444-3



Assembly
115 mm Cement screed CT-C25-F4, 220 kg/m²
17 mm REGUPOL sound 17
140 mm Concrete Slab

Test room size
4.67 x 4.30 m = 20.10 m²

Publication of test results by MFPA Leipzig GmbH.
The full test report PB4.2/13-444-3 dtd. 13/02/2014 is available upon request.

Frequency [Hz]	**$L_{n,0}$** 1/3 octave [dB]	**ΔL** 1/3 octave [dB]
50	57.5	-0.5
63	64.8	9.2
80	59.3	1.9
100	61.4	4.0
125	65.0	5.0
160	64.0	9.1
200	64.8	11.3
250	64.7	13.8
315	66.4	18.0
400	67.0	22.5
500	67.1	25.9
630	67.6	30.2
800	68.7	34.5
1000	68.8	37.4
1250	69.2	37.4
1600	69.4	38.4
2000	69.8	41.7
2500	70.3	49.5
3150	71.6	59.1
4000	70.6	57.0
5000	68.3	57.5

Impact Sound Reduction as per ISO 717-2

ΔL_w = 27 dB

$C_{I,\Delta}$ = -13 dB

$C_{I,r}$ = 2 dB

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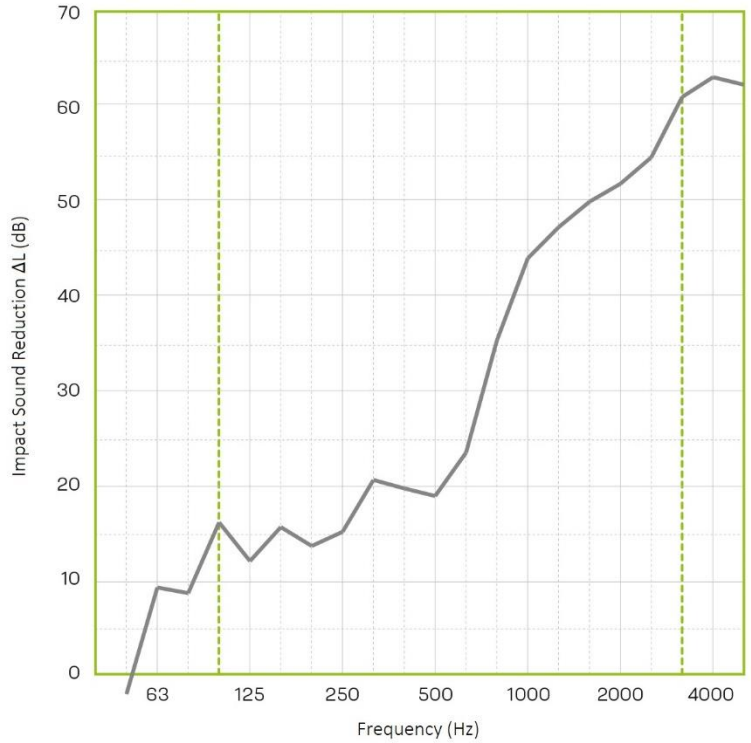
TECHNICAL DATA

REGUPOL SOUND 17

Detailed test results for impact sound reduction
Test report PB 4.2/15-391-6



Assembly
125 mm Cement screed CT-C25-F4, 249 kg/m²
2x 17 mm REGUPOL sound 17
140 mm Concrete Slab

Test room size
4.67 x 4.30 m = 20.10 m²

Publication of test results by MFPA Leipzig GmbH.
The full test report PB4.2/15-391-6 dtd. 22/02/2016 is available upon request.

Frequency [Hz]	**$L_{n,0}$** 1/3 octave [dB]	**ΔL** 1/3 octave [dB]
50	57.1	-2.1
63	64.2	9.2
80	57.9	8.6
100	64.0	16.1
125	66.1	12.0
160	65.9	15.6
200	65.9	13.6
250	63.4	15.1
315	65.5	20.6
400	66.3	19.7
500	67.2	18.9
630	67.6	23.5
800	68.2	35.4
1000	69.1	44.1
1250	69.0	47.4
1600	69.6	50.1
2000	69.9	52.0
2500	70.3	54.8
3150	71.5	61.2
4000	70.3	63.3
5000	68.1	62.5

Impact Sound Reduction
as per ISO 717-2

ΔL_w = 31 dB

$C_{I,\Delta}$ = -11 dB

$C_{I,r}$ = 0 dB

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