TECHNICAL DATA

# REGUPOL SOUND 15

**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 elastomers
- Dimpled profile on the underside
- Laminated with sheeting on top

**Weight**
2.9 kg/m²

**Dimensions**
Length: 1,000 mm, Width: 1,200 mm, Thickness: 12 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-17/1019
**Cradle to Cradle Certified®** is a registered trademark of the Cradle to Cradle Products Innovation Institute (C2CPII).

| **Acoustical Performance*** | **Standard** | **Result** | **Comment** |
|---|---|---|---|
| 85 mm cement screed,<br>**REGUPOL sound 15**,<br>140 mm concrete slab | DIN EN ISO 10140-3<br>DIN EN ISO 717-2 | $\Delta L_w \geq 30$ dB | According to ETA:<br>$\Delta L_w \geq 29$ dB<br><br>PB4.2/17-068-1 |

*Assembly from top to bottom

| **Material properties** | **Standard** | **Result** |
|---|---|---|
| Maximum traffic load | | 30 kN/m² |
| Mean dynamic stiffness value | DIN EN 29052-1 | $s'_t \leq 6$ MN/m³ |
| Compressibility | DIN EN 12431 | c ≤ 2 mm |

| **Thermal behaviour** | **Standard** | **Result** |
|---|---|---|
| Thermal conductivity | DIN EN 12667 | λ = 0.06 W/(mK) |
| Thermal resistance | DIN EN 12667 | R = 0.14 (m²K)/W |
| Temperature resistance | | -20 to +60° C |

TECHNICAL DATA

# REGUPOL SOUND 15

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

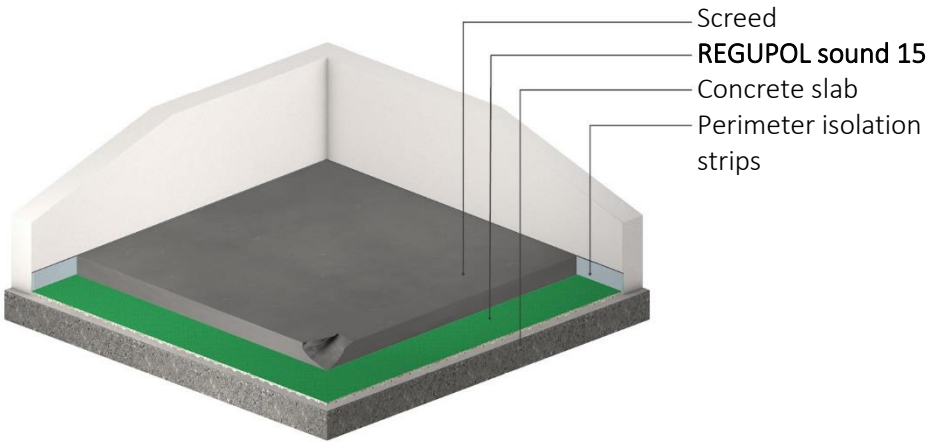
| Moisture behaviour | Standard | Result |
|---|---|---|
| Sensitivity to moisture | | To be protected from moisture during storage, transport and installation |

| 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 |

| Compressive stress [N/mm²] | Settlement [mm] | Bedding modulus [MN/m³] |
|---|---|---|
| 0.0015 | 0.7 | 2.4 |
| 0.0060 | 2.2 | 2.7 |
| 0.0120 | 3.4 | 3.6 |
| 0.0210 | 4.3 | 4.8 |
| 0.0300 | 4.9 | 6.1 |
| 0.0120 | 3.6 | 3.3 |

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




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

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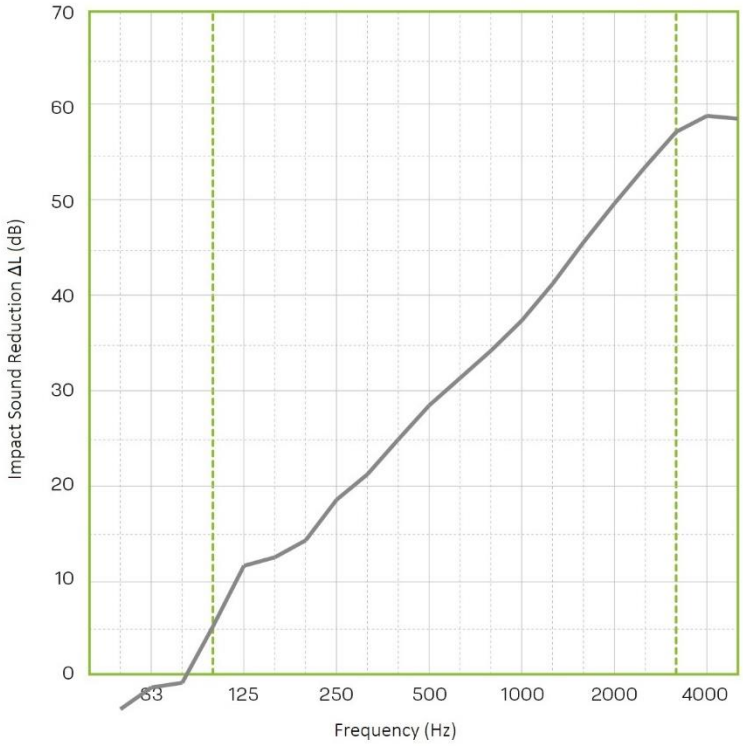
**Detailed test results for impact sound reduction**
Test report PB 4.2/17-068-1




| Assembly |
|---|
| 85 mm Cement screed CT-C25-F4, 165 kg/m² |
| 12 mm REGUFOAM sound 15 |
| 140 mm Concrete Slab |

**Test room size**
4.41 x 4.13 m = 18.20 m²

Publication of test results by MFPA Leipzig GmbH.
The full test report PB4.2/17-068-1 dtd. 28/07/2017 is available upon request.

| **Frequency** [Hz] | **$L_{n,0}$** 1/3 octave [dB] | **ΔL** 1/3 octave [dB] |
|---|---|---|
| 50 | 59.1 | -3.7 |
| 63 | 62.8 | -1.4 |
| 80 | 58.9 | -0.9 |
| 100 | 61.5 | 5.1 |
| 125 | 68.4 | 11.5 |
| 160 | 65.7 | 12.4 |
| 200 | 65.3 | 14.2 |
| 250 | 66.6 | 18.5 |
| 315 | 65.6 | 21.2 |
| 400 | 66.5 | 24.9 |
| 500 | 67.8 | 28.5 |
| 630 | 68.1 | 31.4 |
| 800 | 69.0 | 34.3 |
| 1000 | 69.4 | 37.5 |
| 1250 | 69.1 | 41.4 |
| 1600 | 69.5 | 45.8 |
| 2000 | 70.2 | 49.9 |
| 2500 | 70.5 | 53.8 |
| 3150 | 71.3 | 57.5 |
| 4000 | 70.0 | 59.2 |
| 5000 | 67.7 | 58.9 |

Impact Sound Reduction
as per ISO 717-2

$\Delta L_w$ = 30 dB

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

$C_{I,r}$ = 2 dB

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