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 ≤ 5 kN/m², CE certified as per European Technical Assessment



**Material**
- PUR-bonded elastomers
- Dimpled profile on the underside

**Weight**
3.0 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 kN/m², 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,<br>**REGUPOL comfort 12**,<br>**REGUPOL comfort S1**<br>**(30 mm levelling fill),**<br>242 mm wood frame ceiling,<br>Suspended ceiling with<br>**REGUFOAM hangers**<br>**QH.F 270plus** and<br>2 x 15 mm gypsum boards<br>(Suspension height = 80 mm) | DIN EN ISO 10140-3<br>DIN EN ISO 717-2<br><br>DIN EN ISO 10140-2<br>DIN EN ISO 717-1 | $L_{n,w}$ = 29 dB<br>$C_{I,50\text{-}2500}$ = 11 dB<br><br>$R_w$ = 80 dB<br>$C_{50\text{-}5000}$ = -7 dB | Test report<br>20004193-D05<br><br>Total thickness:<br>444 mm |
| Reference ceiling:<br>263 mm C1 wood frame ceiling<br>as per ISO 10140-5 | DIN EN ISO 10140-3<br>DIN EN ISO 717-2<br><br>DIN EN ISO 10140-2<br>DIN EN ISO 717-1 | $L_{n,w}$ ($C_I$) = 72 (-1) dB<br>$C_{I,50\text{-}2500}$ = 0 dB<br><br>$R_w$ (C) = 49 (-2) dB<br>$C_{50\text{-}5000}$ = -3 dB | Test report<br>PB 4.2/16-252-2 &<br><br>PB 4.2/16-252-3 |
| Under cement screed: | | | |
| 50 mm cement screed,<br>**REGUPOL comfort 12**,<br>**REGUPOL comfort S1**<br>**(40mm levelling fill),**<br>263 mm C1 Wood frame ceiling | DIN EN ISO 10140-3<br>DIN EN ISO 717-2<br><br>DIN EN ISO 10140-2<br>DIN EN ISO 717-1 | $L_{n,w}$ ($C_I$) = 47 (1) dB<br>$C_{I,50\text{-}2500}$ = 12 dB<br><br>$R_w$ (C) = 69 (-6) dB<br>$C_{50\text{-}5000}$ = -10 dB | Test report<br>PB 4.2/16-252-14 &<br><br>PB 4.2/16-252-15 |

*Assembly from top to bottom

TECHNICAL DATA

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

*Assembly from top to bottom

| Material properties | Standard | Result |
|---|---|---|
| Maximum traffic load | | ≤ 5 kN/m² |
| Mean dynamic stiffness value | DIN EN 29052-1 | $s'_t$ ≤ 10 MN/m³ |
| Compressibility | DIN EN 12431 | c ≤ 2 mm |

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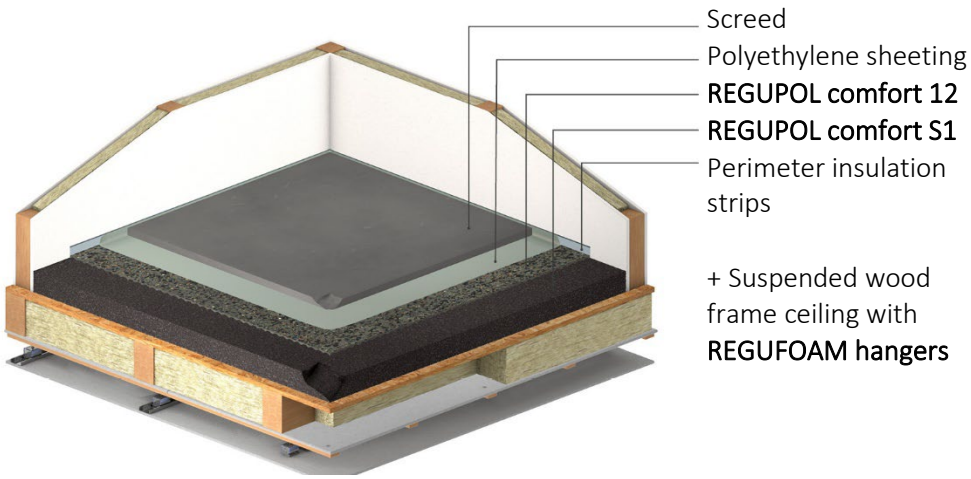
| Fire behaviour | Standard | Result |
|---|---|---|
| Fire classification | DIN EN 13501-1 | E |

| Thermal behaviour | Standard | Result | Comment |
|---|---|---|---|
| Thermal conductivity | DIN EN 12667 | λ = 0.06 W/(mK) | |
| Thermal resistance | DIN EN 12667 | R = 0.133 ($m^2$K)/W | |
| Temperature resistance | | -20 to +60° C | |
| Deformation under specified compressive load and temperature conditions; Difference of relative deformations $\varepsilon_1$ and $\varepsilon_2$ of Level A: 23 ±5°C / 48 ±1 h Level B: 35 ±1°C / 48 ±1 h | DIN EN 1605 | Δ ε ≤ 5,0 % | Suitable for floor heating systems |

| Moisture behaviour | Standard | Result | Comment |
|---|---|---|---|
| Water vapour permeability | DIN EN ISO 12572 | Sd = 0.03 [m] | Diffusion equivalent air layer thickness |
| | | μ = 3.75 [-] | 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 |

## Floor Assembly




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