TECHNICAL DATA

REGUPOL COMFORT S1

Product

Elastic and mass-increasing leveling fill to reduce impact and air-borne sound transmission of concrete-, wood frame- and CLT-ceilings and to level uneven subfloors.
The leveling fill, consistent of REGUPOL comfort 1 binder and commercially available stone chippings, has a short curing time and proven low VOC emissions.

Material

- **REGUPOL comfort 1**: Binder on prepolymer basis
- Stone chippings, grit size 2 to 5 mm, e. g. basalt or limestone grit (from local stone chipping suppliers)

Dimensions

- **REGUPOL comfort 1**: 20 kg per bucket
- **REGUPOL comfort 1**: 1000 kg per IBC Container

Weights[1]

- Density (installed): approx. 1,550 kg/m³ +/- 10 %
- Weight (10 mm thickness): 15.5 kg/m² +/- 10 %

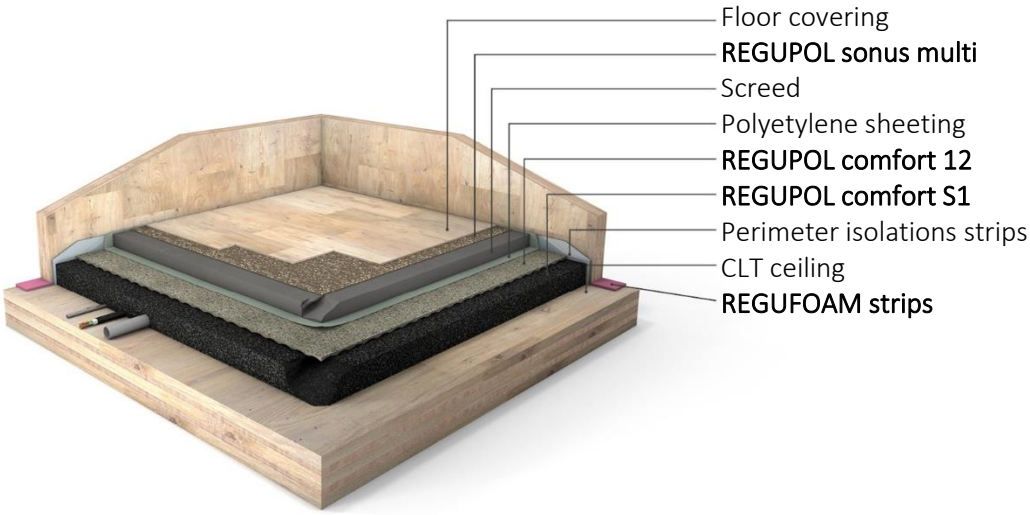
Installation

- Installation height: 15 mm to 200 mm
- Proportions: stone chippings 98 % + polyurethane binder 2 %

Applications

In floor constructions with cement screed or dry floor constructions, e. g. renovation of floors in existing and new buildings.

Floor assembly example
REGUPOL comfort S1 on CLT ceiling under cement screed



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

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Acoustical performance*	**Standard**	**Result**	**Comment**
Test reports with wood frame ceiling			
Under pre-fabricated screed:			
50 mm cement screed, **REGUPOL comfort 12**, **REGUPOL comfort S1** **(30 mm leveling fill),** 242 mm wood frame ceiling, Suspended ceiling with **REGUFOAM hangers** **QH.F 270plus** and 2 x 15 mm gypsum boards (Cavity = 80 mm)	DIN EN ISO 10140-3 DIN EN ISO 717-2 DIN EN ISO 10140-2 DIN EN ISO 717-1	$L_{n,w}$ = 29 dB $C_{I,50\text{-}2500}$ = 11 dB R_w = 80 dB $C_{50\text{-}5000}$ = -7 dB	Tested by ift Rosenheim 20004193-D05 Total system height: 444 mm
Test reports with CLT ceilings:			
Reference ceiling 160 mm CLT ceiling	DIN EN ISO 10140-3 DIN EN ISO 717-2 DIN EN ISO 10140-2 DIN EN ISO 717-1	$L_{n,w}$ (C_I) = 86 (-6) dB $C_{I,50\text{-}2500}$ = -6 dB R_w (C) = 39 (-1) dB $C_{50\text{-}5000}$ = 0 dB	Tested by MFPA Leipzig PB 4.2/16-252-24 & PB 4.2/16-252-25
Under cement screed:			
45 mm cement screed, **REGUPOL comfort 12**, **REGUPOL comfort S1** **(100mm leveling fill),** 160 mm CLT ceiling	DIN EN ISO 10140-3 DIN EN ISO 717-2 DIN EN ISO 10140-2 DIN EN ISO 717-1	$L_{n,w}$ (C_I) = 50 (-2) dB $C_{I,50\text{-}2500}$ = 3 dB R_w (C) = 70 (-2) dB $C_{50\text{-}5000}$ = -4 dB	Tested by MFPA Leipzig PB 4.2/16-252-30 & PB 4.2/16-252-31
Under OSB-sheeting:			
22 mm OSB-sheeting, **REGUPOL comfort 12**, **REGUPOL comfort S1** **(100mm leveling fill),** 160 mm CLT ceiling	DIN EN ISO 10140-3 DIN EN ISO 717-2 DIN EN ISO 10140-2 DIN EN ISO 717-1	$L_{n,w}$ (C_I) = 46 (1) dB $C_{I,50\text{-}2500}$ = 7 dB R_w (C) = 70 (-5) dB $C_{50\text{-}5000}$ = -9 dB	Tested by MFPA Leipzig PB 4.2/16-252-32 & PB 4.2/16-252-33

*Assembly from top to bottom

Material properties[1]	**Standard**	**Result**	**Comment**
Compressive strength	DIN EN 826	400 kPa	at 2 % deformation

Fire behaviour[1]	**Standard**	**Result**	**Comment**
Fire classification	DIN EN 13501-1	$A2_{fl}$-s1	not flammable

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Thermal behaviour[1]	Standard	Result	Comment
Thermal conductivity	DIN EN 12667	λ = 0,214 W/(mK)	
Thermal resistance	DIN EN 12667	R = 0,466 (m^2K)/W	at 10 cm thickness
Expansion coefficient -40°C to +80°C		30 x 10^{-6} 1/K	
Recommended storing temperature		+8°C bis +30°C	
Recommended installation temperature		+10°C bis +40°C	
Curing time		30 to 90 minutes	Depending on temperature and humidity

Health protection[1]	Result	Comment
Emissions during installation	No emissions from the products detectable.	
Emissions after installation as per German AgBB-scheme (2015)	The cured leveling fill meets the requirements of the German AgBB-scheme.	
Recyclability	LAGA Z1.1 RC1 as per EBV	No restrictions apart from groundwater protection areas due to the copper content in stone chippings

Moisture behaviour[1]	Result	Comment
Vapour diffusion	Open for vapour diffusion	
Sensitivity to moisture	Cured leveling fill is fully moisture resistant.	Information about the dryness of stone chippings in installation guidelines.

[1] Weights and properties are all related to tests with basalt stone chippings.