

## TECHNICAL DATA

### REGUPOL SONUS MULTI 4.5

formerly REGUPOL 4515 Multi

#### Product

Tough and resilient acoustic underlay that has been developed to attenuate impact sound beneath a range of floor finishes, delivering exceptional acoustic performance without ageing or collapsing.



**REGUPOL sonus multi 4.5** meets the requirements of Approved Document E (England & Wales), Technical Booklet G (Northern Ireland) and Example Construction floors under Section 5 (Scotland) – See performance section for details



MADE IN GERMANY



**REGUPOL sonus multi 4.5** is also available as a fire-retardant version.

<sup>1</sup> Tested as per French VOC regulation décret n° 2011-321

#### Features and Benefits

- Suitable for a variety of floor finishes
- Offers long term performance without collapse or bottoming out under high point loads
- Resistant to ageing and deformation
- Suitable for underfloor heating
- Quick and easy to install - simply bond to the subfloor beneath the final floor finish
- Product manufactured using recycled materials and 100% recyclable
- Manufacturing facility certified to ISO 9001, ISO 45001, ISO 14001, ISO 50001

#### Applications

Widely used in developments where effective sound control is essential and interior design flexibility is a priority. These include

- Apartments
- Education
- Hotels
- Commercial
- Leisure
- Bespoke architectural projects
- Care homes

#### Physical information

Roll width	1000mm	
Roll length	18m	
Material thickness	4.5mm	
Weight per roll / per m <sup>2</sup>	44kg	2.20kg/m <sup>2</sup>
Material composition	PUR foam/Cork	

Acoustical Performance	Standard	Result	Comment
160mm Robust Detail Appendix D floor with no ceiling	BS EN ISO 140-8:1998	$\Delta L_w$ 18 dB	Test report SRL 3309
130mm concrete slab with 60mm profile deck	BS EN ISO 140-7:1998	$L'_{nT,w}$ 48 dB	Test report PJD/NC/3591
Under timber flooring:			
6mm timber flooring, <b>REGUPOL sonus multi 4.5</b> , 30mm K-screed, 225mm concrete slab	BS EN ISO 140-7:1998	$L'_{nT,w}$ 54 dB	Test report 18264/SIT1
8mm laminate flooring (non-bonded), <b>REGUPOL sonus multi 4.5</b> (non-bonded), 150mm concrete slab	AS ISO 717.2-2004 ISO 140-8: 2006 (E) ISO 140-6-2006	$\Delta L_w$ 19 dB $L_{n,w}$ 60 dB	Test report RG088 – INR216-09-1
14mm engineered timber (non-bonded), <b>REGUPOL sonus multi 4.5</b> , (non-bonded), 150mm concrete slab	AS ISO 717.2-2004 ISO 140-8: 2006 (E) ISO 140-6-2006	$\Delta L_w$ 17 dB $L_{n,w}$ 60 dB	Test report RG086 – INR210-06-01

Material properties	Standard	Result
Density		approx. 420kg/m <sup>3</sup>
Compressive stress-strain characteristic at 25% compression (CC25)	DIN EN ISO 3386-2	> 1450 kPa
Elongation at break	DIN EN ISO 1798	≥ 20 %
Tensile strength		≥ 1.0 N/mm <sup>2</sup>

Thermal behaviour	Standard	Result
Thermal conductivity	BS 4745-2005 (Two-plate)	$\lambda = 0.089$ W/(mK)
Temperature resistance		-20 to +60° C
Tog rating	BS 4745-2005 (Two-plate)	0.54

Fire behaviour	Standard	Result
Fire classification	DIN EN 13501-1	E (B <sub>f1</sub> -s1, available on request)

Health protection	Standard	Result
VOC	DIN EN 16516	compliant with EU-LCI list and German AgBB scheme; "A+" as per décret n°2011-321

**Type of screed or base - Measurement criteria**

**Screeds to receive applied flexible floorings**

BS 8203.2-m Straight edge laid in contact with the screed	Maximum gap measured with a slip gauge	
	SR1	3mm
SR2	5mm	
SR3	10mm	

**Screeds to receive toppings or in situ applied floorings**

BS 8204-1.2-m Straight edge laid in contact with the screed	Maximum gap measured with a slip gauge	
	SR1	3mm
SR2	5mm	
SR3	10mm	

**Screeds to receive adhesive fixed rigid tile applied floorings**

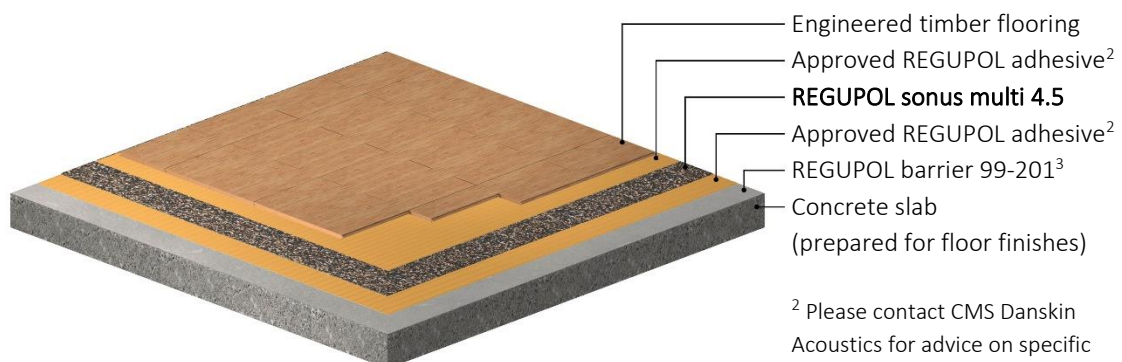
BS 5385-3.2-m Straight edge laid in contact with the screed	Maximum gap measured with a slip gauge	
	SR1	3mm
SR2	5mm	
SR3	10mm	

**Screeds to receive timber flooring**

BS 8201 Localised variations in level should not exceed +/- 3mm from the mean when measured over a 2m-distance using a straight edge	Maximum gap measured with a slip gauge	
	SR1	3mm
SR2	5mm	
SR3	10mm	

**Floor assembly**

**Engineered wood**

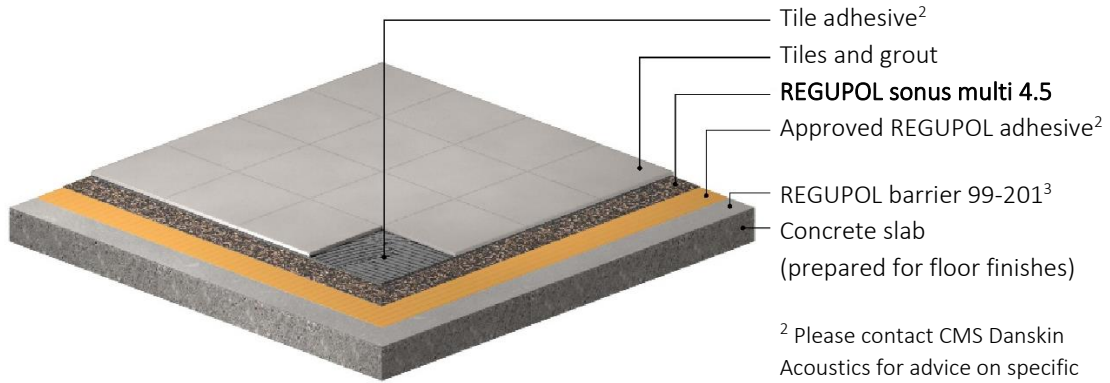


<sup>2</sup> Please contact CMS Danskin Acoustics for advice on specific adhesive type.

<sup>3</sup> If moisture exceeds required levels

**Floor assembly**

Tile finishes



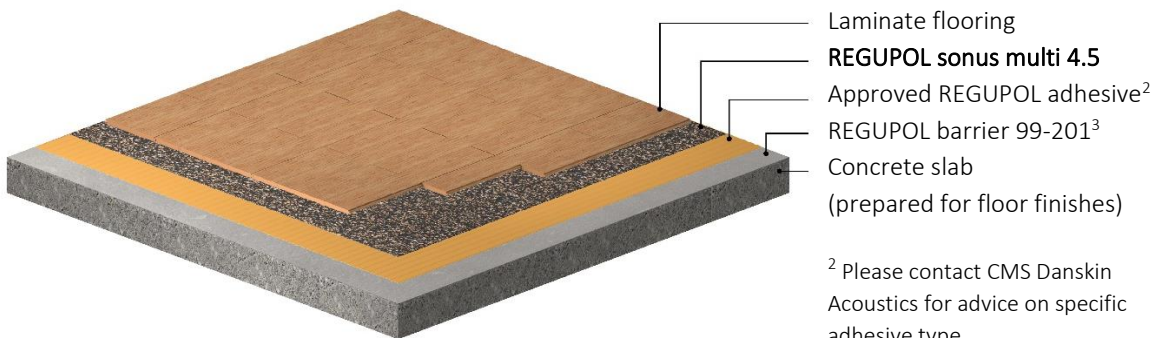
- Tile adhesive<sup>2</sup>
- Tiles and grout
- REGUPOL sonus multi 4.5**
- Approved REGUPOL adhesive<sup>2</sup>
- REGUPOL barrier 99-201<sup>3</sup>
- Concrete slab  
(prepared for floor finishes)

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**Floor assembly**

Laminate flooring



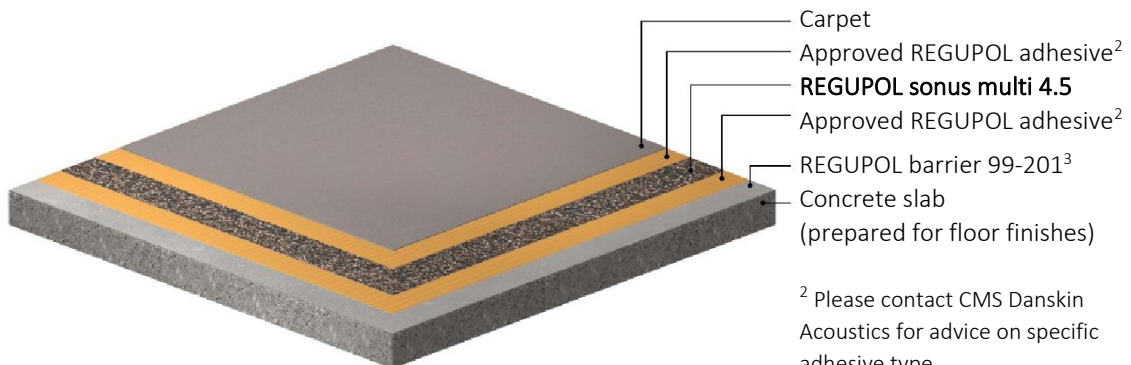
- Laminate flooring
- REGUPOL sonus multi 4.5**
- Approved REGUPOL adhesive<sup>2</sup>
- REGUPOL barrier 99-201<sup>3</sup>
- Concrete slab  
(prepared for floor finishes)

<sup>2</sup> Please contact CMS Danskin Acoustics for advice on specific adhesive type.

<sup>3</sup> If moisture exceeds required levels.

**Floor assembly**

Carpet



- Carpet
- Approved REGUPOL adhesive<sup>2</sup>
- REGUPOL sonus multi 4.5**
- Approved REGUPOL adhesive<sup>2</sup>
- REGUPOL barrier 99-201<sup>3</sup>
- Concrete slab  
(prepared for floor finishes)

<sup>2</sup> Please contact CMS Danskin Acoustics for advice on specific adhesive type.

<sup>3</sup> If moisture exceeds required levels

## Installation

Full installation guidelines are available on request. However, key points to observe are:

- Area of installation must be dry, dirt and dust free and weather tight.
- If over 75% RH, use **REGUPOL barrier 99-201**. To determine RH, please use a Hygrometer.
- **REGUPOL sonus multi** should be unwound and left for a minimum 8 hours or ideally overnight at the place where it is to be installed, to allow for any potential shrinkage.
  - The subfloor must be sound, smooth and dry. A self-levelling compound may be required to achieve the desired 'SR' value.
  - **REGUPOL sonus multi** acoustic underlays can be easily installed providing the CMS Danskin Acoustics installation guidelines are followed at all times.
  - When bonding to bare concrete a suitable concrete sealer is recommended to ensure maximum adhesive coverage and bond strength.
  - When installing timber flooring over **REGUPOL sonus multi** always use a flanking band around the perimeter to reduce impact transmissions into walls.
  - When installing ceramic tiles, stone and vinyl flooring leave at least a 3mm gap around the perimeter which should be filled with a flexible sealant.

## Storage

**REGUPOL sonus multi** must be stored indoors. At no time must the **REGUPOL sonus multi** be exposed to the elements of the weather. **REGUPOL sonus multi** must always be kept dry, otherwise moisture will build up in the material and will subsequently make bonding to the subfloor very difficult. Moisture will also cause the material to curl and ripple at the edges once unrolled. It is recommended that the polythene packaging be removed in the area where it shall be applied

*IMPORTANT: The information provided within this document is believed correct and to the best of our available knowledge at its revision date and is provided as suggestion for safe handling, storage, transportation, use and disposal. The information should not be considered obligation in respect of warranty of (technical) performance, quality (specification) or suitability for any application or design. The customer must satisfy themselves the product (or draft specification) are relevant and suitable for their need and design intent. Prospective users should test a sample of product under their own conditions to satisfy themselves of its suitability for intended purpose and that expert advice be sought where different applications are contemplated. Due to our policy of continuous improvement we reserve the right to alter or amend published specification or design without prior notice. Reproduction of any part of this publication in any manner is not permitted without our prior written consent.*