

## TECHNICAL DATA

### REGUPOL SONUS MULTI 545

#### 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 545** 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

#### Certification

- Manufacturer EPD available upon request.

#### Features and Benefits

- Recommended for Vinyl sheeting, LVT and tiled floor finishes including ceramic, granite, stone and marble tiles. Compliant to CoR for light duty applications such as domestic dwelling floors. \*
- 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
- Rolls supplied without cardboard cores
- Manufactured using post-consumer recycled materials. **Material Content: @ 90% Recyclate @ 10% PU binder ref: EPD-REG-20230194-IBC1-EN as per ISO 14025 and EN 15804+A2**
- 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 (†Approximate Values)

|                                      |          |                        |
|--------------------------------------|----------|------------------------|
| Roll width                           | 1150mm   |                        |
| Roll length                          | 12m      |                        |
| Material thickness                   | 4.5mm    |                        |
| Weight per roll / per m <sup>2</sup> | †32.5kg  | †2.25kg/m <sup>2</sup> |
| Material composition                 | PUR foam |                        |

\*CoR (Coefficient of Restitution) for Light Duty Floors (0.55) to comply with the requirements of TTA document entitled 'Ceramic and Natural Stone Flooring to Acoustic Systems to meet the requirements of the Building Regulations Approved Document E Resistance to the passage of sound.'

| Acoustical Performance*                                                                                           | Standard                               | Result             | Comment                |
|-------------------------------------------------------------------------------------------------------------------|----------------------------------------|--------------------|------------------------|
| Under vinyl planks:                                                                                               |                                        |                    |                        |
| 2.5mm vinyl planks (LVT),<br><b>REGUPOL sonus multi 500 series,</b><br>140 mm concrete slab                       | DIN EN ISO 10140-3<br>DIN EN ISO 717-2 | $\Delta L_w$ 18 dB | Test report<br>0018.25 |
| 3.8mm Click vinyl planks (LVT),<br>(non-bonded),<br><b>REGUPOL sonus multi 500 series,</b><br>140mm concrete slab | DIN EN ISO 10140-3<br>DIN EN ISO 717-2 | $\Delta L_w$ 22 dB | Test report<br>0017.25 |
| Under sheet vinyl:                                                                                                |                                        |                    |                        |
| 2mm sheet vinyl,<br><b>REGUPOL sonus multi 500 series,</b><br>140mm concrete slab                                 | DIN EN ISO 10140-3<br>DIN EN ISO 717-2 | $\Delta L_w$ 18 dB | Test report<br>0019.25 |
| Under laminate:                                                                                                   |                                        |                    |                        |
| 7mm laminate flooring<br>(non-bonded),<br><b>REGUPOL sonus multi 500 series,</b><br>140 mm concrete slab          | DIN EN ISO 10140-3<br>DIN EN ISO 717-2 | $\Delta L_w$ 19 dB | Test report<br>0020.25 |
| Under engineered timber:                                                                                          |                                        |                    |                        |
| 10.5mm engineered timber,<br><b>REGUPOL sonus multi 500 series,</b><br>140 mm concrete slab                       | DIN EN ISO 10140-3<br>DIN EN ISO 717-2 | $\Delta L_w$ 19 dB | Test report<br>0021.25 |
| Under carpet:                                                                                                     |                                        |                    |                        |
| 5mm carpet tiles<br><b>REGUPOL sonus multi 500 series,</b><br>140 mm concrete slab                                | DIN EN ISO 10140-3<br>DIN EN ISO 717-2 | $\Delta L_w$ 22 dB | Test report<br>0022.25 |
| 13mm roll carpet<br><b>REGUPOL sonus multi 500 series,</b><br>140 mm concrete slab                                | DIN EN ISO 10140-3<br>DIN EN ISO 717-2 | $\Delta L_w$ 28 dB | Test report<br>0023.25 |

\*all results are based on testing with REGUPOL sonus multi 530 and therefore represent a minimum value of acoustical performance.

| Material properties                                                      | Standard          | Result                       |
|--------------------------------------------------------------------------|-------------------|------------------------------|
| Density                                                                  |                   | approx. 470kg/m <sup>3</sup> |
| Compressive stress-strain<br>characteristic at 25%<br>compression (CC25) | DIN EN ISO 3386-2 | > 950 kPa                    |
| Elongation at break                                                      | DIN EN ISO 1798   | ≥ 20 %                       |
| Tensile strength                                                         |                   | ≥ 0.4 N/mm <sup>2</sup>      |

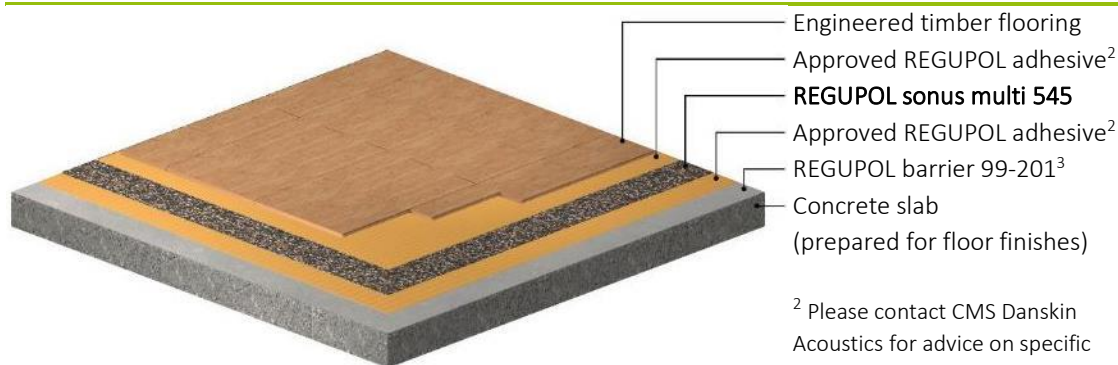
| Thermal behaviour      | Standard                 | Result        |
|------------------------|--------------------------|---------------|
| Thermal conductivity   | BS 4745-2005 (Two-plate) | TBC           |
| Temperature resistance |                          | -20 to +60° C |
| Tog rating             | BS 4745-2005 (Two-plate) | TBC           |

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

| Health protection | Standard     | Result |
|-------------------|--------------|--------|
| VOC               | DIN EN 16516 | TBC    |

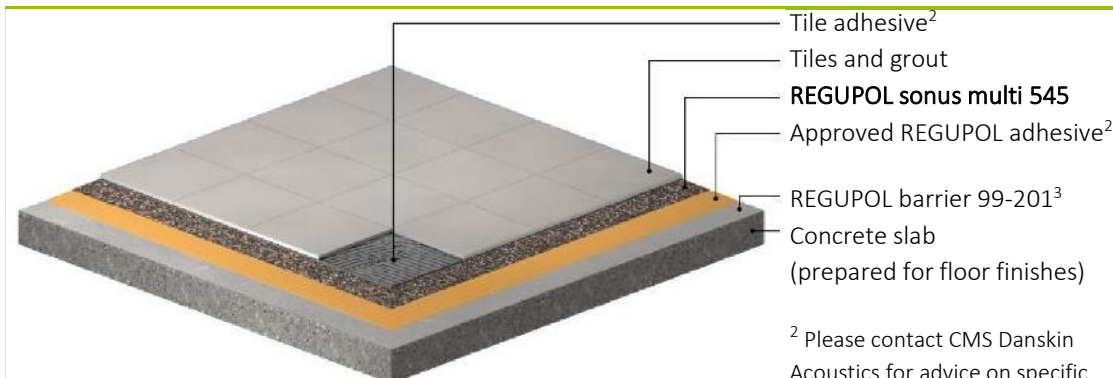
### Floor assembly Engineered wood



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

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

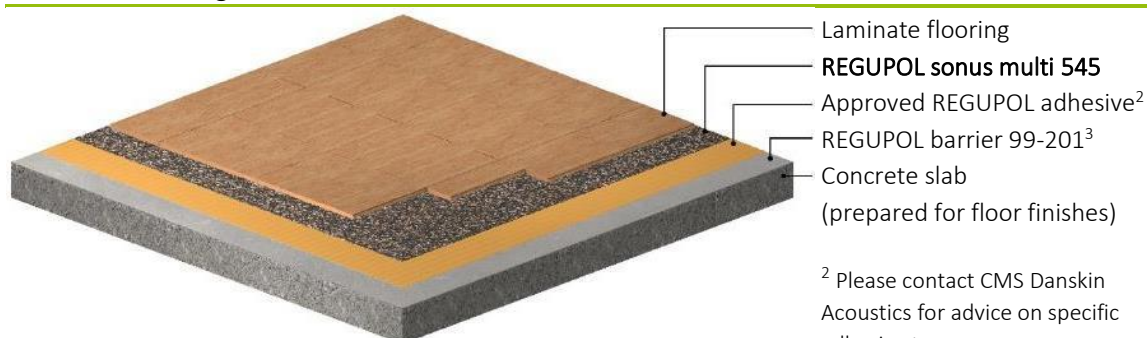
### Floor assembly Tile finishes



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

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

### Floor assembly Laminate flooring

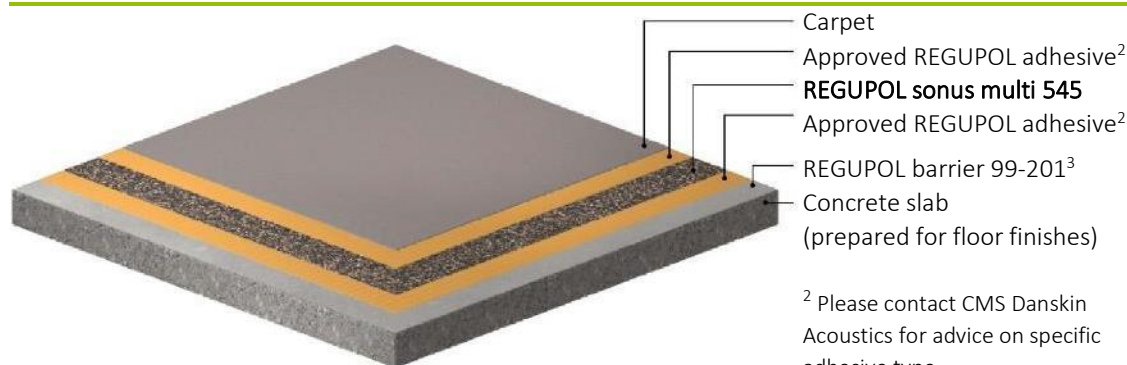


<sup>2</sup> Please contact CMS Danskin Acoustics for advice on specific adhesive type.

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

## Floor assembly

### Carpet



<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 always followed.
- 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 Notes:

1. All rolls supplied without cardboard cores.
2. Due to the nature of one of the raw materials, when exposed to UV can discolour but, this has no detriment to the physical or technical properties of the product.

**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.