



# **TECHNICAL DATA**

## **REGUPOL SONUS ECO 4.5**

formerly REGUPOL 4515 Eco

### **Product**

Tough, resilient and low cost acoustic underlay that has been developed to attenuate impact sound beneath a wide range of floor finishes, including carpet, wood, laminates and tiles in concrete construction. Extremely durable, flexible and sustainable, **REGUPOL sonus eco 4.5** delivers cost effective impact sound insulation and is ideal for all types of developments.



**REGUPOL sonus eco 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.



### **Features and Benefits**

- Designed for use with a wide range of floor finishes, including carpet and tiles as well as wooden based floor finishes
- Suitable for underfloor heating
- Offers long term performance without collapse or "bottoming" out under high point loads
- Resistant to ageing and deformation
- Product manufactured using recycled materials and 100% recyclable
- Manufacturing facility certified to ISO 9001, ISO 45001, ISO 14001, ISO 50001

### **Applications**

**REGUPOL sonus eco 4.5** is widely used in developments where effective sound control is essential and interior design flexibility is a priority. These include:

- Apartments
- Commercial
- Educational
- Leisure
- Hotels

### **Physical information**

Roll width	1150mm	
Roll length	12m	
Material thickness	4.5mm	
Weight per roll / per m <sup>2</sup>	36kg	2.60kg/m <sup>2</sup>
Material composition	Recycled rubber/Cork	





<b>Acoustical Performance</b>	Standard	Result		Comment	
REGUPOL sonus eco 4.5	BS EN ISO 140-8: 1998	ΔL <sub>w</sub> 18	dB	Test report	
Heavyweight Standard Floor				3319	
6.5mm parquet	BS EN ISO 140-8: 1998	$\Delta L_w \; 18$	dB	Test report	
REGUPOL sonus eco 4.5				4150A	
140mm concrete slab					
Material properties	Standard		Result		
Density			approx	. 570kg/m³	
Elongation at break	DIN EN ISO 1798	DIN EN ISO 1798		≥ 25 %	
Tensile strength	DIN EN ISO 1798	DIN EN ISO 1798		≥ 0.55 N/mm²	
Thermal behaviour	Standard		Result		
Thermal conductivity	DIN EN 12667		λ = 0.06	6 W/(mK)	
Thermal resistance	DIN EN 12667		R = 0.0	75 (m <sup>2</sup> K)/W	
Temperature resistance			-20 to -	+60° C	
Fire behaviour	Standard		Result		
Fire classification	DIN EN 13501-1		Е		





# Type of screed or base - Measurement criteria Screeds to receive applied flexible floorings

	N 4		
	Maximum gap measured with a slip gauge		
BS 8203.2-m	SR1	3mm	
Straight edge laid in contact with the screed	SR2	5mm	
	SR3	10mm	
Screeds to receive toppings or in situ applied flo	orings		
	Maximum gap measured with a slip gauge		
BS 8204-1.2-m	SR1	3mm	
Straight edge laid in contact with the screed	SR2	5mm	
	SR3	10mm	
Screeds to receive adhesive fixed rigid tile applie	ed floorings		
	Maximum gap measured with a slip gauge		
BS 5385-3.2-m Straight edge laid in contact with the screed	SR1	3mm	
	SR2	5mm	
	SR3	10mm	
Screeds to receive timber flooring			
BS 8201	Maximum gap measured with a slip gauge		
Localised variations in level should not exceed +/- 3mm from the mean when measured over a 2m-distance using a straight edge	SR1	3mm	
	SR2	5mm	
	SR3	10mm	

### Floor assembly example

Engineered wood



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

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

<sup>&</sup>lt;sup>3</sup> If moisture exceeds required levels





### Floor assembly example

Laminate flooring



Laminate flooring **REGUPOL sonus eco 4.5**Approved REGUPOL adhesive<sup>2</sup>

REGUPOL barrier 99-201<sup>3</sup>

Concrete slab

(prepared for floor finishes)

## Floor assembly example

Carpet



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

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

<sup>&</sup>lt;sup>3</sup> If moisture exceeds required levels.

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<sup>&</sup>lt;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 eco** 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 eco** 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 eco** 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 eco** must be stored indoors. At no time must the **REGUPOL sonus eco** be exposed to the elements of the weather. **REGUPOL sonus eco** 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 abligation in respect of warranty of (technical) performance, quality (specification) or suitability for any application or design. The customer must satisfy themself 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.