

## CORK ROLLS WITH MICROBAN<sup>®</sup> ANTIBACTERIAL PROTECTION TECHNICAL SPECIFICATION

#### CORK ROLLS WITH MICROBAN® ANTIBACTERIAL PROTECTION

Cork underlay is a cost effective solution for reducing airborne and impact noise problems.

Due to the unique 40 million cells per cubic centimetre honeycomb structure of cork and the special nature of the resin binder, it performs outstandingly under floating and laminated floors, wooden floors, ceramic tiles, natural stone, linoleum and vinyl floors.

During the cork agglomeration process an antibacterial additive  $({\rm Microban}^{\circledast})$  is added to deliver continuous antibacterial and antifungal protection.

Cork underlay can be used in domestic and commercial applications and contribute significantly to the acoustic performance of floors improving environmental comfort.

#### Advantages of Cork Underlay with Microban®

- Safe and easy to handle and install;
- Effective reduction of impact and airborne sound;
- Increases the thermal comfort of the surface floor;
- Persistence of characteristics along time (lifetime);
- High fire resistance, without the release of toxic gases;
- Odourless;
- No harmful chemicals;
- Enhanced built-in lifetime antibacterial protection;
- Meets "Green building" requirements;
- Contains 90% (by weight) of post-industrial recycled content;
- Natural product, recyclable.

This specification applies to all references of cork rolls with Microban® for underlayment purposes

- GN-R2040M180
- GN-R2040M200
- GN-R0520M180
- GN-R0520M200
- GN-R1020B180
- GN-R1020B200

#### Definition

Agglomerated cork made of cork granules of specified dimensions with the addition of a binder. During the cork agglomeration process an antibacterial additive (Microban<sup>®</sup>) is added to deliver embedded continuous antibacterial and antifungal protection.

Produced in agglomerated cork cylinders, with maximum dimensions of 950 mm (diameter) per 1270 mm (height), that are sliced in the required thickness and cut into rolls of the required dimension.

#### Materials

- Granulated cork.
- Polyurethane cork binder.
- Microban<sup>®</sup> additive.



# CORK ROLLS WITH MICROBAN® ANTIBACTERIAL PROTECTION TECHNICAL SPECIFICATION

### **Product Requirements**

Reference	Granules dimension / density	Density <sup>(1)</sup>	
	mm / Kg/m <sup>3</sup>	EN 672 Kg/m <sup>3</sup>	
GN-RM2040M180	2,0-4,0 / 70-80	190	
GN-RM2040M200	2,0-4,0 / 70-80	210	
GN-RM0520M180	0,5-2,0 / 70-80	190	
GN-RM0520M200	0,5-2,0 / 70-80	210	
GN-RM1020B180	1,0-2,0 / 45-55	190	
GN-RM1020B200	1,0-2,0 / 45-55	210	

(1) Average density is not less than the nominal. Individual values are not below 95% the nominal.

### **Specification Requirements**

Characteristic		Requirement	Test method
Roll Length		Nominal ± 1%	EN 426
Roll Width		Nominal $\pm$ 0,5%	EN 426
Overall thickness		Nominal $\pm$ 0,15 mm	EN 428
Mass per unit area	<sup>و</sup> ی	Nominal $\pm$ 10%	EN 430
Flexibility	57	PASS	EN 435 / A
Tensile strength			
Direction perpendicular to compression		≥ 350 kPa	ISO 7322
Direction to compression		≥ 250 kPa	
Moisture content		≤ 8 %	EN 12105
Impact noise reduction Average value		DLw (chapter 5 EN ISO 717-2) 2.0 mm thickness - 18 dB 4.0 mm thickness - 19 dB	ISO 717-2



## CORK ROLLS WITH MICROBAN<sup>®</sup> ANTIBACTERIAL PROTECTION TECHNICAL SPECIFICATION

#### **Additional Properties**

Characteristic	Requirement	Test method
Thermal Conductivity Thermal Resistance	Conductivity 0,05 W / (m.K) Resistance Thickness 2 mm - 0,04 m <sup>2</sup> .K/W 3 mm - 0,06 m <sup>2</sup> .K/W 4 mm - 0,08 m <sup>2</sup> .K/W 6 mm - 0,12 m <sup>2</sup> .K/W 8 mm - 0,16 m <sup>2</sup> .K/W	EN 12664
Formaldehyde	Formaldehyde has not been added	
Compression	≤ <b>35</b> %	ISO 7322
Recuperation	≥ 75 %	ISO 7322
Resistance to boiling water	Does not disintegrate	ISO 7322
Durability	Lifetime	

#### Dimensions

Cork rolls are can be delivered in rolls of any thickness (> 1 mm), width (< 1.245 m) and length. (Standard thickness: 2; 3; 4; 5; 6 mm; standard width: 0.5; 0.6; 1; 1.2 m).

#### Packing

Composition cork rolls shall be dispatched in packages that provide suitable protection, and which are sufficiently watertight to keep the moisture content of the cork as specified under normal storage conditions.

Packages shall be marked with identifying information by a label and/or inkjet printing. Packages shall be stored shielded from direct sunlight and humidity.

#### Typical uses

Due to the low thermal conductivity levels and effective sound insulation of cork, cork rolls are commonly used as an underlay for floating floors, wooden floors, ceramic tiles, natural stone, linoleum and vinyl floors.

Cork rolls can be used in domestic and commercial applications contributing significantly to the acoustic and thermal performance of buildings, improving environmental comfort and reducing energy costs.

The use of a natural and renewable raw-material and the possibility of total recycling of the product for other uses, make the agglomerated cork rolls a reference in terms of ecology and environmental sustainability.



## CORK ROLLS WITH MICROBAN $^{\! \mathrm{B}}$ ANTIBACTERIAL PROTECTION TECHNICAL SPECIFICATION

### Compliance with the building regulations

The sound insulation of floors is a necessary requirement of the Building Regulations. When used with appropriate structural floor and ceiling constructions, cork underlay can meet the performance requirements for sound insulation of most of the National Building Regulations.

#### Normative references

EN 12103	Resilient floor coverings – Agglomerated cork underlays. Specification
EN 426	Resilient floor coverings – Determination of the width, length, flatness and straightness of sheet material.
EN 428	Resilient floor coverings – Determination of the overall thickness
EN 430	Resilient floor coverings – Determination of mass per unit area.
EN 435	Resilient floor coverings – Determination of flexibility
EN 672	Resilient floor coverings – Determination of apparent density of agglomerated cork
EN 12105	Resilient floor coverings – Determination of moisture content of agglomerated cork
EN 12664	Thermal performance of building materials and products - Determination of thermal resistance by means of guarded hot plate and heat flow meter methods.
EN ISO 717-2	Acoustics – Rating of sound insulation in buildings and of building elements – Part 2: Impact sound insulation.
ISO 7322	Cork – Composition cork – Test methods

#### **FSC Certification**

Agglomerated cork rolls can be delivered certified FSC Controlled Wood - SA-CW-002408.

#### Supplementary information

