version: 2008.1 | date: 08-01-2008

CORK ROLLS

GRANORTE's 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.

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

- Easy to handle and install;
- Effective reduction of impact and airborne sound;
- Increases the thermal comfort of the surface floor;
- Natural product, recyclable;
- Lifetime.

References

This specification applies to all GRANORTE references of cork rolls for underlayment purposes:
- GN-R2040M180
- GN-R2040M200
- GN-R2040B180
- GN-R2040B200

Definition

Agglomerated cork made of cork granules of specified dimensions with the addition of a binder. Produced in cork cylinders with maximum dimensions of 950 (dia) x 1270 (wid) mm.

Materials

- Granulated cork: 90 %
- Polyurethane cork binder: 10%

Specification Requirements

Reference	Granules dimension / density	Density(1) (nominal)	Compression	Recuperation
	mm / Kg/m^3	EN 672 Kg/m^3	ISO 7322 %	ISO 7322 %
GN-R2040M180	2.0-4.0 / 70-80	190	≤ 35	≥ 75
GN-R2040M200	2.0-4.0 / 70-80	210	≤ 30	≥ 75
GN-R1020B180	1.0-2.0 / 45-55	190	≤ 35	≥ 75
GN-R1020B200	1.0-2.0 / 45-55	210	≤ 30	≥ 75

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

Characteristic	Requirement	Test method
Roll Length 	Nominal ± 1%	EN 426
Roll Width 	Nominal ± 0,5%	EN 426
Overall thickness 	Nominal ± 0,15 mm	EN 428
Tensile strength Direction perpendicular to compression Direction to compression	 ≥ 400 kPa ≥ 400 kPa	ISO 7322
Moisture content	≤ 8 %	EN 12105

Additional Properties

Characteristic	Requirement	Test method
Impact noise reduction  Average value for 2.0 mm thickness	17 dB	ISO 717/2
Thermal Conductivity  Thermal Resistance Thickness 2 mm 3 mm 4 mm 6 mm 8 mm	0,06 W / (m.K) $0,033\ m^2.K/W$ $0,050\ m^2.K/W$ $0,067\ m^2.K/W$ $0,100\ m^2.K/W$ $0,133\ m^2.K/W$	EN 12664

Dimensions

Cork rolls are can be delivered in rolls of any thickness (> 1 mm), width (< 1.245 m) and length.
Standard dimensions of rolls are:
Thickness: 2; 3; 4; 5; 6 mm.
Width: 0.5; 0.6; 0.915; 1; 1.2; 1.245 m.

delivering nature

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 a backing material for floating floors or as an underlay for any kind of floor covering, improving environmental comfort and reducing energy costs.

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

Supplementary information

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 the building regulations.
Test results show that the use of cork underlay can improve the weighted normalized impact sound pressure level (L'n,w) up to 18 dB for ceramic tiles, 23 dB for thick wood parquet, 25 dB for thin wood parquet and 25 dB for linoleum. The tested floors with the cork underlay achieve a DLw (chapter 5 EN ISO 717-2) up to 17 dB.

Additional technical information or maintenance and laying instructions of cork wall coverings can be obtained at our Service & Support page on our website at www.granorte.pt.

Product made on a production line certified ISO 9001.

To offer the consumer unmistakable guarantees about the quality and origin of this cork product, it holds the *Cork Mark.*