

# silentcork

CORK UNDERLAYMENT SOLUTIONS

## **cork** properties

Cork is harvested from the renewable bark of the cork oak tree and is a 100% natural product.

The numerous qualities of cork can only be understood by cellular structure. A cubic centimeter of cork contains nearly 40 million cells, arranged in rows perpendicular to the cork oak trunk.

All the cells are filled with a mixture of gases similar to air. Around 60% of a plank of cork is composed of gaseous elements, which explains its extraordinary lightness. The combination of these small cushions of air make cork so remarkably compressible. At the same time, *suberin* makes the walls of the cork cells impermeable and therefore airtight. The gas they contain cannot escape, which is the reason for the elasticity of the tissue and its low thermal conductivity.

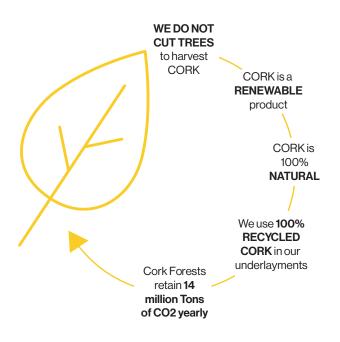
### **silent cork underlay** features

Silent Cork Underlay are made out of natural cork – an excellent raw material suitable to be installed under almost any floor covering with significant improvement at thermic and acoustic levels.

When compared to synthetic materials, cork becomes the right choice when looking for a solution that guarantees a viable performance but also the welfare of future generations.

Silent Cork Underlay provides more comfort, protection and longevity to the final floor.

- Easy to install
- Improve acoustic and thermal comfort
- Maximize the service life of joining system
- Reduce subfloor imperfections
- Avoid the diffusion of vapor
- Increase floor durability
- Prevent cracks and marks on the floor



Type of Floor	CORKSRIBAS Underlay Recommendation	Main Feature
Laminate	CR-108 Roll	100% Natural and Eco-Friendly Solution; High-Durability and Walking Comfort; Suitable for heated floors.
	CR-FLEX Roll	High Durability and Great Performance; Excellent acoustic performance and load absorption capacity; Suitable for heated-floors, Anti-slip.
	CR-PE Roll	100% Natural Agglomerated Cork; High-Durability and Walking Comfort; Includes a moisture barrier for total protection.
	CR 109 Roll	100% Natural and Eco-Friendly Solution; High-Durability and Walking Comfort; Suitable for heated floors.
	CR PU Roll	100% Natural Agglomerated Cork; 100% Recycled PU; High-Durability and Walking Comfort; Reduces sound transmission and impact sound, such as footsteps; Long-term Resilience.
	PE WAVE Roll	100% Natural Agglomerated Cork; High-Durability and Walking Comfort; Includes a moisture barrier for total protection; Anti-microbial protection.
	CR PLUS Roll	100% Natural Agglomerated Cork; Additional thermal insulation; Includes a moisture barrier for total protection; High-Durability and Walking Comfort.
Carpets	CR-12J Roll	100% Natural and Eco-Friendly Solution; Floor leveling;
LVT/LVP	CR-FLEX HD Roll	Great protection of LVT Flooring from damage to the click-system joints; Maximize the service level of the joining systems connecting the laminate boards; Anti-slip underlay with long-term physical properties and excellent load absorption capacity; Excellent for heated floors.
Ceramic	CR-108 Roll	100% Natural and Eco-Friendly Solution; High-Durability and Walking Comfort; Suitable for heated floors.
	CR-015 Roll	Excellent compensating ability on uneven surfaces and made to prevent crack suppression on ceramic; Provides cushioning underfoot as well as reducing sound transmission and impact sound, such as footsteps; Anti-slip underlay with excellent load absorption capacity; Suitable for heated floors.
Massive hardwood and wooden parquet	CR-FLEX Roll	High Durability and Great Performance; Excellent acoustic performance and load absorption capacity. Suitable for heated-floors, Anti-slip.
	CR-PE WAVE Roll	100% Natural Agglomerated Cork; High-Durability and Walking Comfort; Includes a moisture barrier for total protection; Anti-microbial protection.
	CR-PE Roll	100% Natural Agglomerated Cork; High-Durability and Walking Comfort; Includes a moisture barrier for total protection.
	CR-PLUS Roll	100% Natural Agglomerated Cork; Additional thermal insulation; Includes a moisture barrier for total protection; High-Durability and Walking Comfort.
	CR-015 Roll	Excellent compensating ability on uneven surfaces; Provides cushioning underfoot; Reduces sound transmission and impact sound, such as footsteps; Anti-slip underlay with excellent load absorption capacity; Suitable for heated floors.
	CR 105 Sheet	100% Natural and Eco-Friendly Solution; High-Durability and Walking Comfort; Includes a moisture barrier for total protection.
	CR 108 Acoustic	100% Natural and Eco-Friendly Solution; High-Durability and Walking Comfort; Higher compressibility and floor leveling; Suitable for heated floors.
Engineering flooring	CR PE Roll	100% Natural Agglomerated Cork; High-Durability and Walking Comfort; Includes a moisture barrier for total protection.
	CR PLUS Roll	100% Natural Agglomerated Cork; Additional thermal insulation; Includes a moisture barrier for total protection; High-Durability and Walking Comfort;
	PE WAVE Roll	100% Natural Agglomerated Cork; High-Durability and Walking Comfort; Includes a moisture barrier for total protection; Anti-microbial protection.

#### **CR 108 Roll** Premium Cork Underlay Ideal for laminate flooring





Shape Roll

**Dimensions** 1m x 10m 40" x 33'

**Thickness** 2mm - 10mm 5/64" - 25/64" 10 **M**<sup>2</sup>

**Description** Agglomerated Composition Cork produced with pure 100% natural granulated cork and a polyurethane binder

Specific Weight	145-220 kg/m3	ISO 7322
Tensile Strength	≥ 200 kPa	ISO 7322
Compression	20% - 50%	ISO 7322
Recovery	≥70%	ISO 7322
Noise Reduction	Up to 20 dB	ISO 140 & 717
Thermal Conductivity	0.038 W/mºK	ISO 8301
Thermal Resistance	0.053 M <sub>2</sub> °K/W	ISO 7322
Thermal Insulator Thermal Insulator Thermal Insulator Thermal Insulator Thermal Insulator Thermal Insulator		Excellent Acoustic Insulation
Walking Easy to Comfort Maintain	100% Natural, Reusable and Recyclable	Resistance and Flexibility



#### **CR 109 Roll** Eco Cork Underlay Ideal for laminate flooring





Shape Roll

**Dimensions** 1m x 10m 40" x 33'

**Thickness** 2mm - 10mm 5/64" - 25/64" 10 **M**<sup>2</sup>

**Description** Agglomerated Composition Cork produced with 100% Natural granulated cork mix and a polyurethane binder

Specific Weight	210	)-280 kg/m3	ISO 7322
Tensile Strength	≥2	200 kPa	ISO 7322
Compression	20	% - 45%	ISO 7322
Recovery	≥7	0%	ISO 7322
Noise Reduction	Up	to 20 dB	ISO 140 & 717
Thermal Conductiv	<b>ity</b> 0.0	038 W/mºK	ISO 8301
Thermal Resistance	<b>e</b> 0.0	953 M <sub>2</sub> °K/W	ISO 7322
	e, Compressibility d Recovery	Hypoallergenic	Excellent Acoustic Insulation
	Easy to Maintain	100% Natural, Reusable and Recyclable	Resistance and Flexibility



Ideal for carpet

#### **CR 12J Fine Cork Underlay** Pure Cork Underlay





Shape Roll and Sheet

**Dimensions** 1m x 10m 40" x 33'

<sup>3</sup> Thickness 2mm – 10mm 5/64" – 25/64" 10 **M**<sup>2</sup>

**Description** Agglomerated Composition Cork produced with fine 100% natural cork granules and a polyurethane binder

Specific Weight	:	175-200 kg/m3	ISO 7322
Tensile Strengt	ı	≥ 300 kPa	ISO 7322
Compression		30% - 50%	ISO 7322
Recovery		≥70%	ISO 7322
Noise Reduction	n	33 dB	iSO 140 & 717
Thermal Condu	ctivity	0.038 W/mºK	ISO 8301
Thermal Resista	ance	0.053 M <sub>2</sub> °K/W	ISO 7322
Thermal Insulator Resi	lience, Compressibili and Recovery	ity Hypoallergenic	Excellent Acoustic Insulation
Walking Comfort	Easy to Maintain	100% Natural, Reusable and Recyclable	Resistance and Flexibility



#### **CR PE Roll** Supreme Cork Underlay



Ideal for laminated and engineered flooring



Shape Roll

**Dimensions** 1m x 10m 40" x 33'

Thickness 2mm 5/64"

10 **M²** 

**Description** Agglomerated Cork Roll Underlay with included PE Moisture Barrier for impact noise and thermal insulation of floating floors. Produced with pure granulated cork and a polyurethane binder

Specific Weight	1	50-220 kg/m3	ISO 7322
Tensile Strength	≥	200kPa	ISO 7322
Compression	3	30% - 50%	ISO 7322
Recovery	≥	70%	ISO 7322
Noise Reduction	L	Jp to 20 dB	ISO 140 & 717
Thermal Conduc	<b>tivity</b> O	0.038 W/mºK	ISO 8301
Thermal Resistar	<b>nce</b> 0	0.053 M <sub>2</sub> °K/W	ISO 7322
		()	
	ence, Compressibility and Recovery	Hypoallergenic	Excellent Acoustic Insulation
	X		$\bigoplus$
Walking Comfort	Easy to Maintain	100% Natural, Reusable and Recyclable	Resistance and Flexibility



#### **CR PE WAVE Roll** Supreme Cork Underlay



Ideal for laminated and engineered flooring



Shape Roll

**Dimensions** 1m x 10m 40" x 33'

Thickness 2.5mm 3/32"

10 **M²** 

**Description** Agglomerated Cork Roll Underlay Including wave profile for increased acoustical results and included moisture and vapor barrier for impact noise and thermal insulation of floating floors

Specific Weig	jht	145-220 kg/m3	ISO 7322
Tensile Stren	gth	≥ 200 kPa	ISO 7322
Compression	l	30% - 50%	ISO 7322
Recovery		≥70%	ISO 7322
Noise Reduct	ion	Up to 20 dB	ISO 140 & 717
Thermal Cone	ductivity	0.038 W/mºK	ISO 8301
Thermal Resi	stance	0.053 M <sub>2</sub> °K/W	ISO 7322
Thermal Insulator	Resilience, Compressibili and Recovery	lity Hypoallergenic	Excellent Acoustic Insulation
Walking Comfort	Easy to Maintain	100% Natural, Reusable and Recyclable	Resistance and Flexibility



#### **CR PLUS Roll** Supreme Cork Underlay



Ideal for laminated and engineered flooring



Shape Roll

**Dimensions** 1m x 10m 40" x 33'

**Thickness** 2mm 5/64" 10 **M**<sup>2</sup>

**Description** Agglomerated Cork Roll Underlay with included PE Alu Foil for thermal insulation and impact noise of floating floors

Specific We	eight	145-220 kg/m3	ISO 7322
Tensile Stre	ength	≥200kPa	ISO 7322
Compressi	on	30% - 50%	ISO 7322
Recovery		>70%	ISO 7322
Noise Redu	iction	Up to 20 dB	ISO 140 & 717
Thermal Co	onductivity	0.0437 W/mºK	ISO 8301
Thermal Re	esistance	0.053 M <sub>2</sub> °K/W	ISO 7322
Thermal	Resilience, Compressibi	lity Hypoallergenic	Excellent Acoustic
Walking Comfort	and Recovery	100% Natural, Reusable and Recyclable	Insulation



#### **CR 015 Roll** Rubbercork Underlay

Ideal for ceramic



Shape Roll

**Dimensions** 1m x 10m 40" x 33'

**Thickness** 2mm - 8mm 5/64" - 5/16" 10 **M**<sup>2</sup>

**Description** Consists of pure natural cork granules, mixed with recycled rubber and bound together with a polymeric binder

Specific Weight	≥ 600 kg/m3	ASTM F1315
Tensile Strength	Transversal: ≥ 0.49 kPa Longitudinal: ≥ 0.78 kPa	ASTM F152
Compression	10% - 30%	ASTM F36
Recovery	≥73%	ASTM F36
Noise Reduction	20 dB	NP EN ISO 717-2:2013
Thermal Conductivity	0.089 W/ mºK	ISO 8301
Thermal Resistance	-	-
	()	
Thermal Resilience, Compre Insulator and Recover		Excellent Acoustic Insulation
		$\underbrace{+}$
Walking Easy to Comfort Maintain	100% Natural, Reusable and Recyclable	Resistance and Flexibility



#### **CR PU Roll** Natural Cork & PU Granules

Ideal for laminated flooring



Shape Roll

**Dimensions** 1m x 10m 40" x 33'

Thickness 2mm 5/64"

10 **M**<sup>2</sup>

**Description** Agglomerated Cork Rolls produced with 100% Natural granulated cork and PU Granules bound together with a polyurethane binder

Specific Wei	ght	230-300 kg/m3	ISO 7322
Tensile Strer	ngth	≥100kPa	ISO 7322
Compressio	n	40% - 65%	ISO 7322
Recovery		≥70%	ISO 7322
Noise Reduc	tion	19 dB	NP EN ISO 717-2:2009
Thermal Cor	nductivity	0.055 W/mºK	EN 12664
Thermal Res	istance	-	-
Thermal Insulator	Resilience, Compressibil and Recovery	lity Hypoallergenic	Excellent Acoustic Insulation
Walking	Easy to	100% Natural, Reusable	Resistance
Comfort	Maintain	and Recyclable	and Flexibility



#### **CR FLEX Roll** EVA Cork Underlay

Ideal for laminated flooring



Shape Roll

**Dimensions** 1m x 10m 40" x 33'

Thickness 2mm 5/64"

10 **M²** 

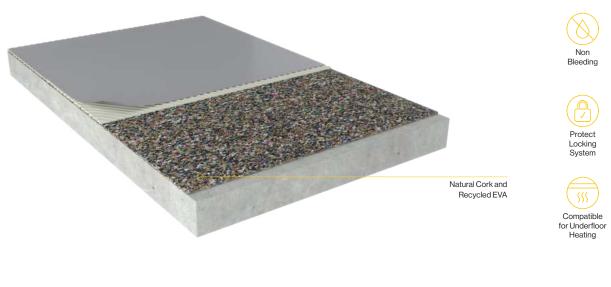
**Description** Agglomerated Composition Cork produced with pure granulated cork and recycled EVA Granules bound together with a polyurethane binder

Specific We	eight	> 240 kg/m3	ISO 7322
Tensile Stre	ength	200 kPa	ISO 7322
Compressio	on	15% - 40%	ISO 7322
Recovery		> 60%	ISO 7322
Noise Redu	ction	Up to 20 dB	ISO 140 & 717
Thermal Co	onductivity	0.0637 W/mºK	EN 12664
Thermal Re	sistance	0.3 M <sub>2</sub> °K/W	EN 12664
Thermal	Resilience, Compressibi	lity Hypoallergenic	Excellent Acoustic
Insulator	and Recovery		Insulation
Walking Comfort	Easy to Maintain	100% Natural, Reusable and Recyclable	Resistance and Flexibility



#### **CR FLEX HD Roll** EVA Cork Underlay

Ideal for LVT flooring



Shape Roll

**Dimensions** 1m x 15m 40" x 49'

Thickness 1.6mm 1/16"

10 **M²** 

**Description** Agglomerated Composition Cork produced with pure granulated cork and a polyurethane binder.

Specific W	eight	530-655 kg/m3	ASTM 7 1315
Tensile Str	ength	Longitudinal: ≥ 0.8 kPa Transversal: ≥ 0.4 kPa	ASTM 7 152
Compressi	on	10% - 20%	ASTM F36
Recovery		70%	ASTM F36
Noise Redu	uction	Up to 20 dB	ISO 140 & 717
Thermal Co	onductivity	0.1036 W/mºK	EN 12664
Thermal Re	esistance	0.23 M <sub>2</sub> ºK/W	EN 12664
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Thermal Insulator	Resilience, Compressibi and Recovery	lity Hypoallergenic	Excellent Acoustic Insulation
	X		



Other sizes or specially tailored specifications can be developed to your specific requirements. Product color variation may occur.

#### **CR 105 Sheet** Pure Cork Underlay Light Density



Ideal for massive hardwood and wooden parquet



Shape Sheet

**Dimensions** 915mm x 610mm 36" x 24" 1000mm x 500mm 40" x 20" Thickness 2mm up 5/64" up

**Description** Agglomerated Composition Cork produced with pure granulated cork and a polyurethane binder

Specific W	eight	145-180 kg/m3	ISO 7322
Tensile Str	ength	≥200kPa	ISO 7322
Compress	ion	40% - 60%	ISO 7322
Recovery		≥75%	ISO 7322
Noise Red	uction	19 dB	ISO 140 & 717
Thermal C	onductivity	0.038 W/mºK	ISO 8301
Thermal R	esistance	0.053 M <sub>2</sub> °K/W	ISO 7322
	$\begin{array}{c} \\ \uparrow \end{array}$	$(\bigcirc)$	
Thermal Insulator	Resilience, Compressibil and Recovery	lity Hypoallergenic	Excellent Acoustic Insulation
	X		
Walking Comfort	Easy to Maintain	100% Natural, Reusable and Recyclable	Resistance and Flexibility



#### **CR 108 Acoustic Sheet** Pure Cork Underlay Medium Density



Ideal for massive hardwood and wooden parquet



Shape Sheet

**Dimensions** 940mm x 640mm 37" x 25" 1000mm x 500mm 40" x 20" Thickness 2mm up 5/64" up

**Description** Agglomerated Composition Cork produced with pure granulated cork and a polyurethane binder

Specific Weight	165-225 kg/m3	ISO 7322
Tensile Strength	≥ 300kPa	ISO 7322
Compression	25% - 50%	ISO 7322
Recovery	≥70%	ISO 7322
Noise Reduction	Up to 20 dB	ISO 140 & 717
Thermal Conductivity	0.038 W/mºK	ISO 8301
Thermal Resistance	0.053 M <sub>2</sub> °K/W	ISO 7322
Thermal Insulator Resilience, Co and Rec		Excellent Acoustic Insulation
Walking Easy Comfort Maint		Resistance and Flexibility



#### **CR 109 Sheet** Pure Cork Underlay High Density



Ideal for laminated flooring



Shape Sheet

**Dimensions** 915mm x 610mm 36" x 24" 1000mm x 500mm 40" x 20" Thickness 2mm up 5/64" up

**Description** Agglomerated Composition Cork produced with 100% Natural granulated cork mix and a polyurethane binder

Specific Weight	24	10-300 kg/m3	ISO 7322
Tensile Strength	≥€	300kPa	ISO 7322
Compression	15	% - 30%	ISO 7322
Recovery	≥(	65%	ISO 7322
Noise Reduction	U¢	o to 20 dB	ISO 140 & 717
Thermal Conducti	vity 0.0	D38 W/mºK	ISO 8301
Thermal Resistance		053 M <sub>2</sub> °K/W	ISO 7322
	ce, Compressibility	Hypoallergenic	Excellent Acoustic Insulation
Walking Comfort	Easy to Maintain	100% Natural, Reusable and Recyclable	Resistance and Flexibility



Ideal for laminated flooring

#### **CR 108 Grid** Pure Cork Professional Underlay





Shape Sheet

**Dimensions** 1000mm x 500mm 40" x 20"

Thickness 3mm 1/8"

**Description** Agglomerated Composition Cork produced with fine granulated cork and a polyurethane binder with technical perforation

Specific W	eight	200-275 kg/m3	ISO 7322
Tensile Str	ength	≥ 400 kPa	ISO 7322
Compressi	on	20% - 40%	ISO 7322
Recovery		≥75%	ISO 7322
Noise Redu	uction	Up to 20 dB	ISO 140 & 717
Thermal Co	onductivity	0.038 W/mºK	ISO 8301
Thermal Resistance		0.053 M <sub>2</sub> °K/W	ISO 7322
Thermal	Resilience, Compressibi	lity Hypoallergenic	Excellent Acoustic
Insulator	and Recovery		Insulation
Walking Comfort	Easy to Maintain	100% Natural, Reusable and Recyclable	Resistance and Flexibility



#### **Technical Comparison**

	CORK	PUR	PE Foam	Rubber	XPS
Impact Sound Insulation	••••	••000		•••00	•••00
Thermal Comfort	•••••				
Floor Durability					
Click Protection		••000	••000		••000
Compressibility		••000	••000	•••00	••000
Material Recovery		••000	••000	•••00	••000
ECO Friendly Solution	••••	••000	••000	••000	••000

	CORK	CORK + RUBBER	CORK + EVA	CORK + RECYCLED EVA
Impact Sound Insulation	26dB	19dB	18dB	21dB
Thermal Comfort (m²°K/W)	0.079	0.037	0.035	0.015
Floor Durability	•••••	••••	•••••	••••
Click Protection				•••••
Compressibility		•••••		•••••
Material Recovery	•••••	••••		
ECO Friendly Solution	••••	••••	••••	••••

Other sizes or specially tailored specifications can be developed to your specific requirements. Valuable information: storage - the product should be kept at a temperature of 20°C ± 30°C and an Environmental Humidity of 60% ± 5%); Environmental Health and Safety - if properly used, this product is not known to be environmental harmful. There are no special health danger when handling the product, however, powder filter mask and protection glasses should be used in the case of swing cut, sanding operation, etc. Variations in color, size and grain occur in all natural materials.



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