

NEW

ACOUSTICORK

REINVENTING SUSTAINABLE
GREEN AND ACOUSTIC
INSULATION



Reinventing how cork engages the world



AMORIM
CORK COMPOSITES



CORK

AN EXCEPTIONAL RAW MATERIAL



cork cell microscopic view

Cork is commonly described as being the bark of the cork oak (*Quercus Suber L.*), which means that it is 100% natural plant tissue that covers its trunk and branches.

It consists of a honeycomb-like structure of microscopic cells filled with an air-like gas and coated mainly with suberin and lignin. One cubic centimetre of cork contains about 40 million cells.

Cork is also known as the “nature’s foam” due to its alveolar structure. It has a closed cell structure making it lightweight, airtight and watertight, resistant to acids, fuels and oils, and impervious to rotting.

It is sustainably harvested by specialized professionals without damaging the trunk, meaning that the tree itself lives to grow another bark layer that, in time, will be harvested once again. Over the course of its lifetime, which on average lasts 200 years, it may be stripped around 17 times meaning that cork is not only a natural material, but also a renewable and recyclable one.



Excellent Acoustic Insulation



Excellent Thermal Insulation



Good resilience, excellent compressibility and recovery



Extremely light and buoyant



100% natural, reusable and recyclable

ACOUSTICORK

REINVENTING SUSTAINABLE, GREEN AND ACOUSTIC INSULATION

ACOUSTICORK natural base materials for demanding applications

Amorim Cork Composites specific compound formulations for acoustic insulation and vibration control allow for the possibility to create highly isolative or dampening materials able to comply with a wide range of environmental conditions and chemical resistances.

The combination of cork granules with diverse polymers brings added characteristics to different compounds for use as acoustic or vibration control materials.

ACOUSTICORK maximises energy efficiency

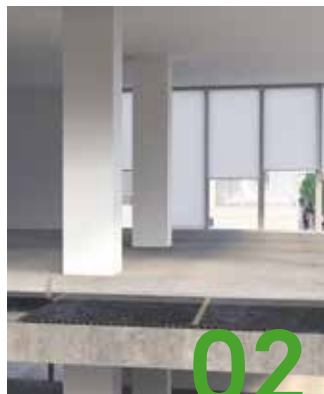
Cork absorbs energy due to its unique compressibility and recovery characteristics yielding higher loss factors that are essential for the dampening function, while its extremely low poisson ratio improves the behaviour of such materials in dynamic loading applications.

EFFICIENCY, RESILIENCE AND DURABILITY



01

UNDERLAY



02

UNDERSCREED



03

VIBRATION CONTROL



04

WALL BEARING



ITECONS ATTESTS ACOUSTICORK'S PERFORMANCE

RESEARCH

ITeCons - Institute for Research and Technological Development for Construction, Energy, Environment and Sustainability is a non-profit organization dedicated to providing a dynamic knowledge interface between the scientific community and industry. It has over 50 associate members, including businesses, municipalities and other research institutions.

TECHNICAL ASSESSMENT BODY

ITeCons has been accredited by the Portuguese Accreditation Institute to perform over 220 different tests. It operates a certified quality management system, and is a notified body - Testing Laboratory - to perform CE marking. As a Technical Assessment Body, ITeCons is also able to support industry by issuing European Technical Assessments to allow CE marking.

TECHNICAL EXPERTISE

ITeCons supports companies in their development of new materials and construction systems by helping in the conception, design, characterization and testing stages.

Expert consulting activities in construction sciences also includes the detection of construction pathologies in buildings, civil engineering structures and roads.

Another service provided by the institute is structural safety assessment and monitoring, looking to identify weaknesses and propose corrective measures to improve structural behaviour.

By establishing multiple partnerships with industry and academia, ITeCons has contributed crucially to meeting Europe's societal challenges in the fields of construction, energy, environment and sustainability.

ACOUSTICORK solutions are tested at ITECONS subjected to a highly qualified environment

ACOUSTICORK

REINVENTING SUSTAINABLE
GREEN AND ACOUSTIC
INSULATION



UNDERLAY



UNDERLAY

ACOUSTICORK has solutions for different types of final flooring.

Underlay					
		T22	T61	T66	T85
Flooring	Thickness	-	2mm	3mm	2mm
	Δ LW	-	20dB	19dB	19dB
	IIC	-	54dB	47dB	49dB
Non Glued Laminate	Thickness	-	2mm	3mm	2mm
	Δ LW	-	20dB	19dB	19dB
	IIC	-	54dB	47dB	49dB
Glued Down Wood	Thickness	3mm	3mm	3mm 3mm perforated	2mm
	Δ LW	20dB	26dB	18dB	16dB
	IIC	49dB	59dB	51dB	50dB
Ceramic (Or Natural Stone)	Thickness	-	5mm 	3mm	2mm
	Δ LW	-	16dB	16dB	12dB
	IIC	-	50dB	51dB	46dB
LVT	Thickness	-	-	3mm	1,6mm 2mm
	Δ LW	-	-	19dB	17dB -
	IIC	-	-	51dB	52dB 54dB

MATERIAL DESCRIPTION & PROPERTIES

GLUED DOWN WOOD FLOORS



$\Delta L_w = 20\text{dB}$

100% Recycled Material
Impact Noise Reduction and
Thermal Insulation Properties
High Durability and Long Term Resilience
High Performance with Reduced Thickness



PRODUCT DESCRIPTION

Agglomerated recycled rubber underlay for impact noise and thermal insulation.



THERMAL PROPERTIES

Thermal Conductivity: 0,140 W/mK⁽¹⁾

⁽¹⁾ISO 8301



PHYSICAL AND MECHANICAL PROPERTIES

Specific Weight ⁽¹⁾	Tensile Strength ⁽²⁾	Compressibility at 0,7MPa ⁽³⁾	Recovery ⁽³⁾
650 - 750 Kg/m ³	> 350 KPa	20%	> 80%

⁽¹⁾ASTM F1315 • ⁽²⁾ASTM F152 • ⁽³⁾ASTM F36



ACOUSTICAL RESULTS

Flooring	Thickness (mm)	ΔL_w (dB) ⁽¹⁾	IIC (dB) ⁽²⁾
Glued Down Wood	3	20	49

⁽¹⁾ISO 10140-1, ISO 10140-3 & ISO 10140-4 • ⁽²⁾ASTM E492-09 & ASTM E989-06



STANDARD DIMENSIONS

Thickness (mm)	3
Width (m) x Length (m)	1 x 10

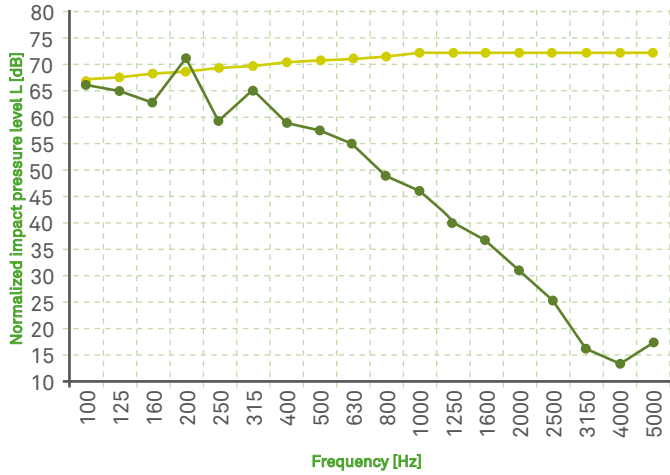
Others sizes available upon request





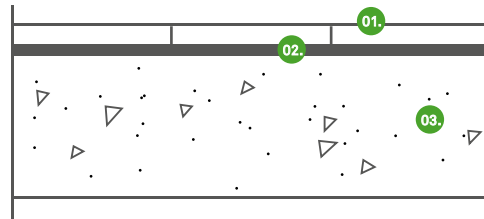
ACOUSTICAL RESULTS

Test procedure according to standards ISO 10140-1:2010; ISO 10140-3:2010; ISO 10140-4:2010 and ISO 717-2:2013



$L_{n,r,0}$ (dB)
 $L_{n,r,0}$ (dB) - 3mm

TEST APPARATUS (ΔL_w & IIC)



- 01. Floor covering composed by glued down wood
- 02. Agglomerated recycled rubber resilient layer - T22
- 03. Reinforced concrete slab of thickness 140mm

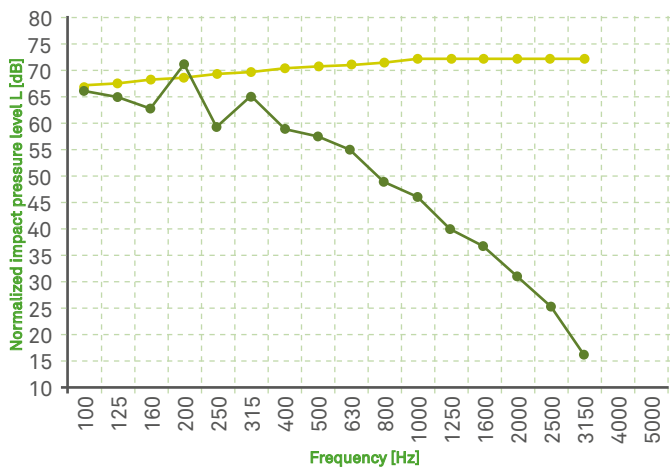
$L_{n,r}$ - Normalized impact sound pressure level of the reference floor with the floor covering under test;
 $L_{n,r,0}$ - Normalized impact sound pressure level of the Lab reference floor;
 ΔL_w - Impact sound pressure level reduction index of the covering under test, on a normalized floor;

Ref. Test Report	Thickness	Flooring	$L_{n,r,w}(C_{i,r})$	$\Delta L_w(C_{i,\Delta})$
ACU 128/10	3 mm	Glued Down Wood	58 (1) dB	20 (-12) dB



ACOUSTICAL RESULTS

Test procedure according to standards ISO 10140-1:2010; ISO 10140-3:2010; ISO 10140-4:2010. Normalized impact sound pressure level and IIC rating determined according to standards ASTM E492-09 and ASTM E989-06.



$L_{n,r,w}$ (dB)
 $L_{ref,c}$ (dB) - 3mm

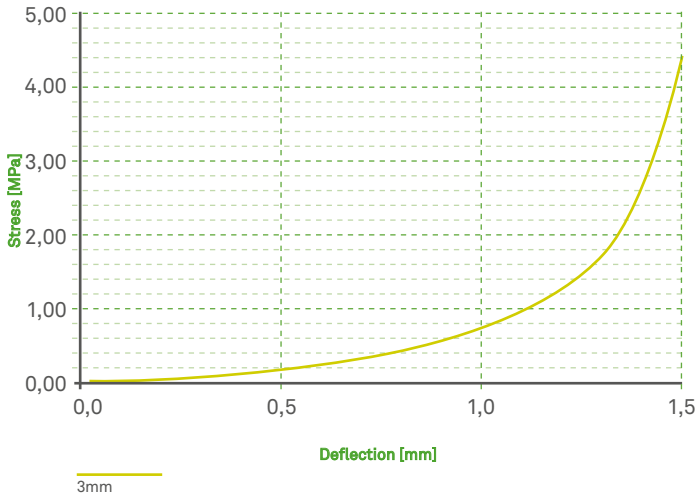
$L_{n,r}$ - Normalized impact sound pressure level of the reference floor with the floor covering under test;
 $L_{ref,c}$ - Normalized impact sound pressure level of the Lab reference floor;

Thickness	Flooring	IIC _c
3 mm	Glued Down Wood	49dB

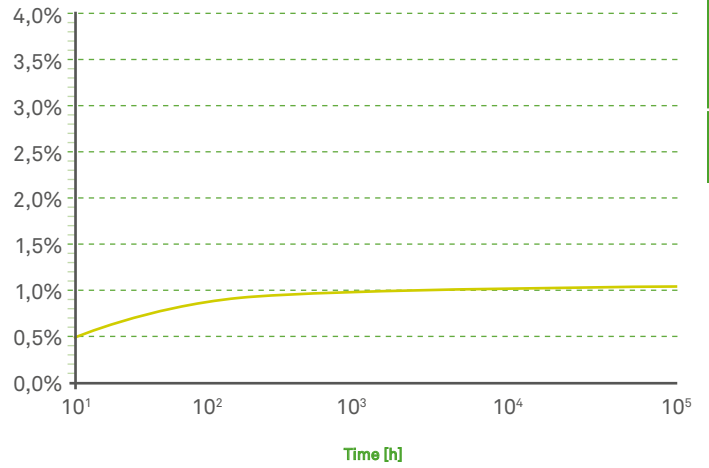


PHYSICAL AND MECHANICAL PROPERTIES

LOAD DEFLECTION



CREEP DEFLECTION @ 0,0045MPa (% OF START HEIGHT)



DYNAMIC STIFFNESS

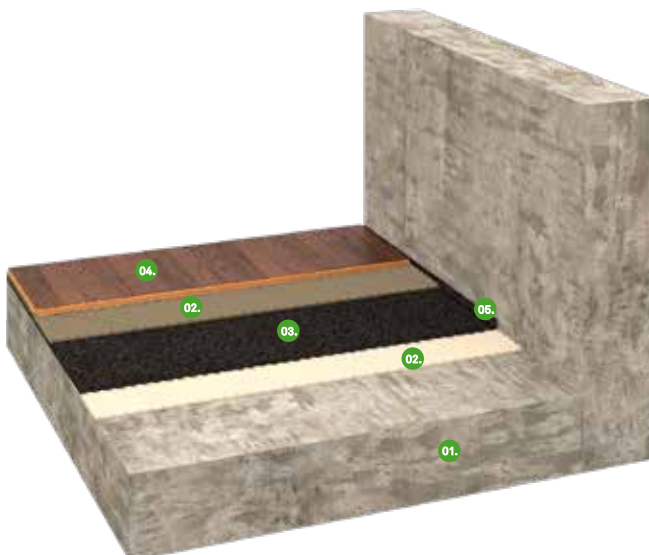
Test procedure according to standards ISO 9052-1, ISO 7626- 5

Thickness (mm)	Dynamic Stiffness (MN/m ³)
3	54



INSTALLATION

GLUED FLOORS



01.

Reinforced concrete slab

02.

Adhesive

03.

Agglomerated recycled rubber resilient layer - T22

04.

Floor covering composed by glued down wood

05.

Perimeter insulation barrier



T22

UNDERLAY

General Installation Instructions

The following installation instructions are recommended by Amorim Cork Composites, but are not intended as a definitive project specification. They are presented in an attempt to be used with recommended installation procedures of the flooring manufacturers.

Room Conditions

Temperature > 10°C / Room moisture content < 75%.

Subfloor

All subfloor work should be structurally sound, clear and level. The moisture content of the subfloor should not be more than 2.5% (CM) by weight measured on concrete subfloors.

Installation Instruction for Acousticork T22

Unpack the Acousticork T22 at least 24h before the installation and store it in the room where the installation will take place. Cut the T22 to desired length and install directly over the entire floor pulled 30mm up the walls with crown of the rolled materials up (Acousticork label side down), removing all trapped air. After completion, the T22 should cover the entire flooring area without gaps and with joints butted tight and preferably taped.

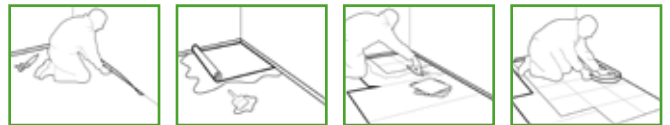
Final Flooring

Always follow manufacturers recommended installation instructions.

Recommended Adhesives

Wood floor to Acousticork: Water-Based Emulsion/ Polyurethane Glue
Acousticork to slab/screed: Water-Based Emulsion/ Acrylic Adhesives.

Application Process GLUED FLOORS:








1. Perimeter barrier application; 2. Underlay application (glued); 3. Final floor application (glued); 4. Perimeter insulation barrier cut.


Important Notes

Never mechanically fasten the Acousticork T22 to the flooring floor as this will severely diminish its acoustical value.


For detailed installation instructions, please contact us.

MATERIAL DESCRIPTION & PROPERTIES

NON GLUED LAMINATE FLOORS		$\Delta L_w = 20dB$	<p>100% Natural and Sustainable Product</p> <p>Impact Noise Reduction and Thermal Insulation Properties</p> <p>High Durability and Long Term Resilience</p> <p>High Performance with Reduced Thickness</p>
GLUED DOWN WOOD FLOORS		$\Delta L_w = 26dB$	
GLUED DOWN WOOD FLOORS PERFORATED		$\Delta L_w = 18dB$	
CERAMIC OR NATURAL STONE FLOORS		$\Delta L_w = 16dB$ 	


 **PRODUCT DESCRIPTION**
Agglomerated cork underlay for impact noise and thermal insulation.


 **THERMAL PROPERTIES**
Thermal Conductivity: 0,04 W/mK ⁽¹⁾
⁽¹⁾ISO 8301

 **PHYSICAL AND MECHANICAL PROPERTIES**


Specific Weight ⁽¹⁾	Tensile Strength ⁽¹⁾	Compression at 0,7MPa ⁽¹⁾	Recovery after 0,7MPa ⁽¹⁾
150 - 200 Kg/m ³	> 200 KPa	30%	> 70%

⁽¹⁾ISO 7322

 **ACOUSTICAL RESULTS**

Flooring	Thickness (mm)	ΔL_w (dB) ⁽¹⁾	IIC (dB) ⁽²⁾
Non Glued Laminate	2	20	54
Glued Down Wood	3	26	59
	3 perforated	18	51
Ceramic (or Natural Stone)	5 	16	50

⁽¹⁾ISO 10140-1, ISO 10140-3 & ISO 10140-4 • ⁽²⁾ASTM E492-09 & ASTM E989-06

 **STANDARD DIMENSIONS**

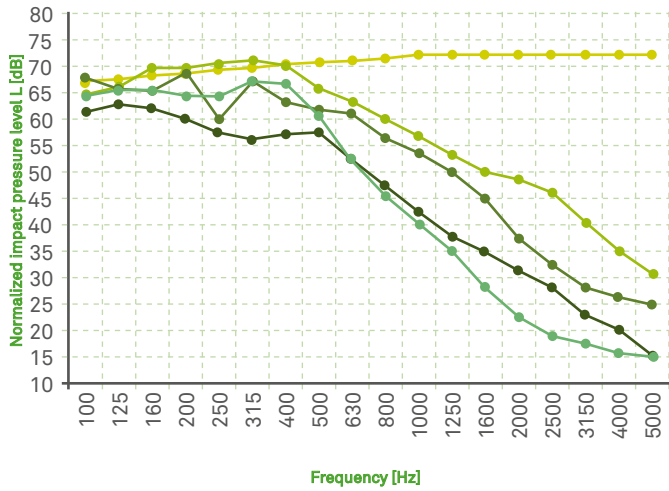
Thickness (mm)	2	3	3 perforated	5
Width (m) x Length (m)	1 x 10	1 x 10	0,5 x 10	1 x 10

Others sizes available upon request

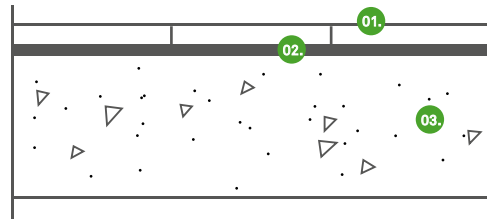


ACOUSTICAL RESULTS

Test procedure according to standards ISO 10140-1:2010; ISO 10140-3:2010; ISO 10140-4:2010 and ISO 717-2:2013



TEST APPARATUS (ΔL_w & IIC)



- 01. Floor covering composed by glued down wood, non glued laminate floor or ceramic or natural stone tiles
- 02. Agglomerated cork resilient layer - T61
- 03. Reinforced concrete slab of thickness 140mm

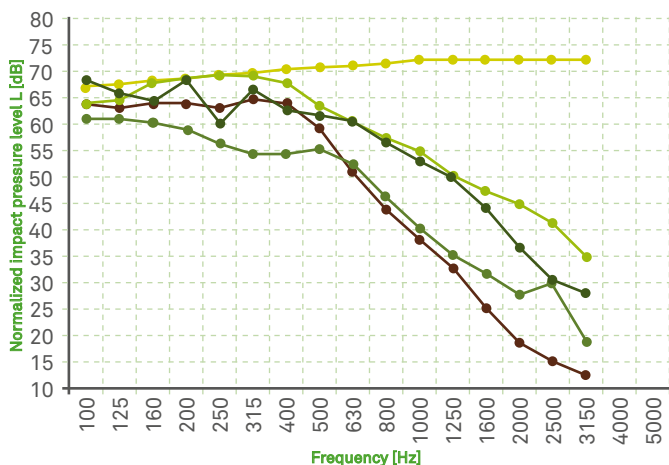
$L_{n,r}$ - Normalized impact sound pressure level of the reference floor with the floor covering under test;
 $L_{n,r,0}$ - Normalized impact sound pressure level of the Lab reference floor;
 ΔL_w - Impact sound pressure level reduction index of the covering under test, on a normalized floor;

Ref. Test Report	Thickness	Flooring	$L_{n,r,w}(C_{i,r})$	$\Delta L_w(C_{i,\Delta})$
SRLC/06/5L/3676/1a	2 mm	Non Glued Laminate	58 (0) dB	20 (-11) dB
SRLC/06/5L/3676/1a	3 mm	Glued Down Wood	52 (1) dB	26 (-12) dB
ACL034/16	3 mm perforated	Glued Down Wood	60 (0) dB	18 (-11) dB
SRLC/06/5L/3676/1a	5 mm	Ceramic (or Natural Stone)	62 (0) dB	16 (-11) dB



ACOUSTICAL RESULTS

Test procedure according to standards ISO 10140-1:2010; ISO 10140-3:2010; ISO 10140-4:2010. Normalized impact sound pressure level and IIC rating determined according to standards ASTM E492-09 and ASTM E989-06.



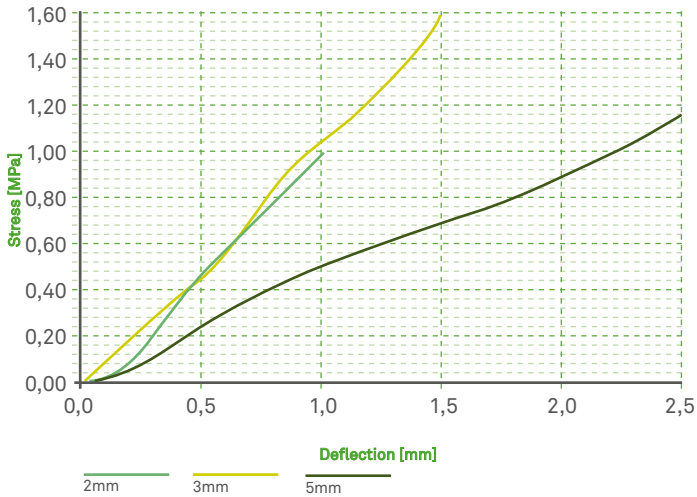
L_{ref} - Normalized impact sound pressure level of the reference floor with the floor covering under test;
 $L_{ref,c}$ - Normalized impact sound pressure level of the Lab reference floor;

Thickness	Flooring	IIC _c
2 mm	Laminate	54 dB
3 mm	Glued Down Wood	59 dB
3 mm perforated	Glued Down Wood	51 dB
5 mm	Ceramic (or Natural Stone)	50 dB

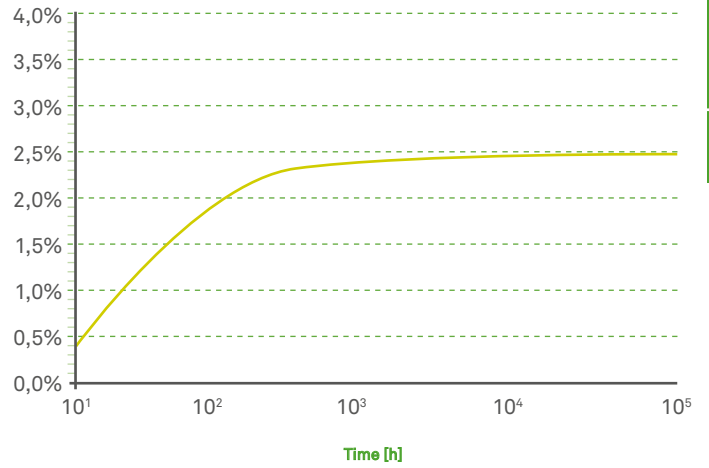


PHYSICAL AND MECHANICAL PROPERTIES

LOAD DEFLECTION



CREEP DEFLECTION @ 0,0045MPa (% OF START HEIGHT)



DYNAMIC STIFFNESS

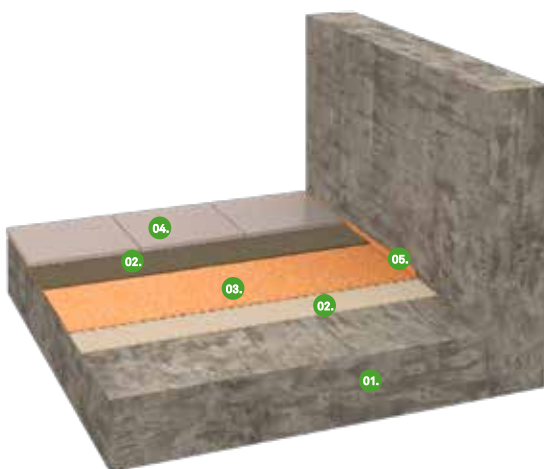
Test procedure according to standards ISO 9052-1, ISO 7626- 5

Thickness (mm)	Dynamic Stiffness (MN/m ³)
2	98
3	96
5	93

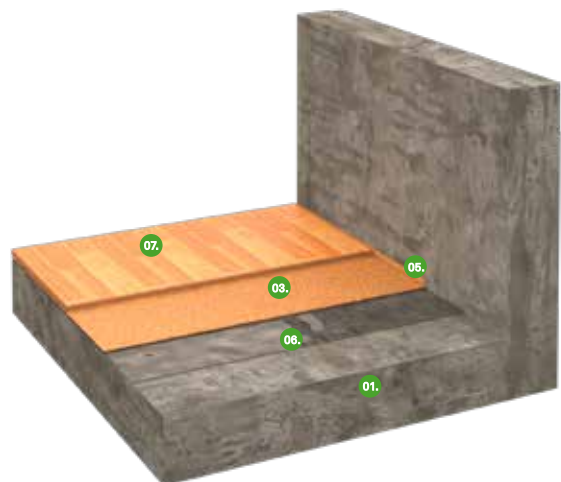


INSTALLATION

GLUED FLOORS



NON GLUED FLOORS



01.
Reinforced concrete slab

02.
Adhesive

03.
Agglomerated cork resilient layer - T61

04.
Floor covering composed by glued down wood, ceramic or nature stone

05.
Perimeter insulation barrier

06.
Vapor barrier

07.
Floor covering composed by non glued laminate floor

NON GLUED LAMINATE FLOORS		$\Delta L_w = 20\text{dB}$
GLUED DOWN WOOD FLOORS		$\Delta L_w = 26\text{dB}$
GLUED DOWN WOOD FLOORS PERFORATED		$\Delta L_w = 18\text{dB}$
CERAMIC OR NATURAL STONE FLOORS		$\Delta L_w = 16\text{dB}$ 

T61 UNDERLAY

General Installation Instructions

The following installation instructions are recommended by Amorim Cork Composites, but are not intended as a definitive project specification. They are presented in an attempt to be used with recommended installation procedures of the flooring manufacturers.

Room Conditions

Temperature > 10°C / Room moisture content < 75%.

Subfloor

All subfloor work should be structurally sound, clear and level. The moisture content of the subfloor should not be more than 2.5% (CM) by weight measured on concrete subfloors.

Vapor Insulation Barrier (only for Non Glued Floors)

PE (Polyethylene) vapor insulation barrier covering the entire flooring area, minimum 50mm wide vertically around the perimeter of the entire floor MUST be installed prior to the Acousticork T61.

Install by overlapping (minimum 100mm) the PE foil, and use an adequate tape to adhere/fix it, if necessary. After completion, PE foil should cover the entire concrete area without gaps. Never mechanically fasten the PE foil barrier with screws, nails or staples as this will severely diminish the performance of the insulation barrier.

Installation Instruction for Acousticork T61

Unpack the Acousticork T61 at least 24h before the installation and store it in the room where the installation will take place. Cut the T61 to desired length and install directly over the entire floor pulled 30mm up the walls with crown of the rolled materials up (Acousticork label side down), removing all trapped air. After completion, the T61 should cover the entire flooring area without gaps and with joints butted tight and preferably taped.

Final Flooring

Always follow manufacturers recommended installation instructions.

Recommended Adhesives:

Wood floor to Acousticork: Water-Based Emulsion/ Polyurethane Glue;

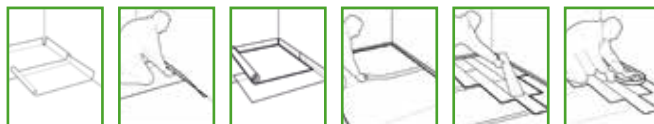
Vinyl and linoleum to Acousticork: Water-Based Emulsion/Synthetic Resin Glue;

Ceramic to Acousticork: Flexible Cement Glue;

Acousticork to slab/screed: Water-Based Emulsion/ Acrylic Adhesives;

Application Process

NON GLUED FLOORS:



1. Vapor insulation barrier application; 2. Perimeter barrier application; 3. Underlay application; 4. Tape application in joints between rolls; 5. Final floor application; 6. Perimeter insulation barrier cut.

GLUED FLOORS:



1. Perimeter barrier application; 2. Underlay application (glued); 3. Final floor application (glued); 4. Perimeter insulation barrier cut.

Important Notes

Never mechanically fasten the Acousticork T61 to the flooring floor as this will severely diminish its acoustical value.

For detailed installation instructions, please contact us.

MATERIAL DESCRIPTION & PROPERTIES

NON GLUED LAMINATE FLOORS		$\Delta L_w = 19\text{dB}$
GLUED DOWN WOOD FLOORS		$\Delta L_w = 16\text{dB}$
CERAMIC OR NATURAL STONE FLOORS		$\Delta L_w = 16\text{dB}$
LVT		$\Delta L_w = 19\text{dB}$

Produced from Recycled and Natural Materials
 Impact Noise Reduction and
 Thermal Insulation Properties
 High Durability and Long Term Resilience
 High Performance with Reduced Thickness



PRODUCT DESCRIPTION

Agglomerated cork and recycled rubber underlay for impact noise and thermal insulation.



THERMAL PROPERTIES

Thermal Conductivity: 0,08 W/mK ⁽¹⁾

⁽¹⁾ISO 8301



PHYSICAL AND MECHANICAL PROPERTIES

Specific Weight ⁽¹⁾	Tensile Strength ⁽¹⁾	Compression ⁽¹⁾	Recovery ⁽¹⁾
600 - 700 Kg/m ³	> 800 KPa	15%	> 75%

⁽¹⁾ISO 7322



ACOUSTICAL RESULTS

Flooring	Thickness (mm)	ΔL_w (dB) ⁽¹⁾	IIC (dB) ⁽²⁾
Non Glued Laminate	3	19	47
Glued Down Wood		16	50
Ceramic (or Natural Stone)		16	51
LVT		19	51

⁽¹⁾ISO 10140-1, ISO 10140-3 & ISO 10140-4 • ⁽²⁾ASTM E492-09 & ASTM E989-06



STANDARD DIMENSIONS

Thickness (mm)	3
Width (m) x Length (m)	1 x 10

Others sizes available upon request



CASTOR CHAIR RESISTANCE

Pass ⁽¹⁾

⁽¹⁾EN425-2002



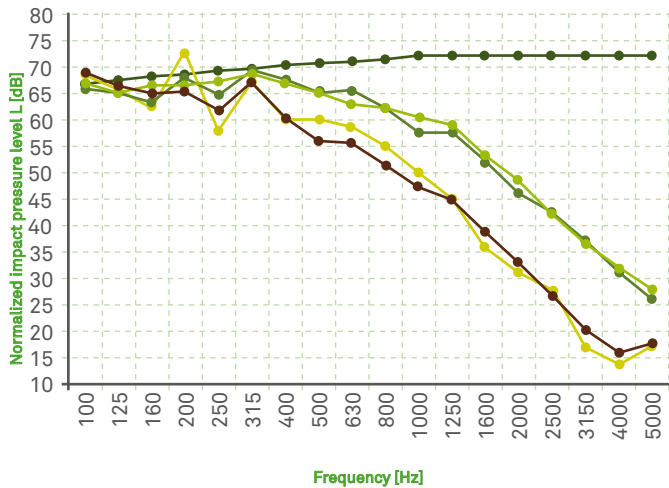
ISO 9001
 ISO 14001
 OHSAS 18001

The mark of responsible forestry

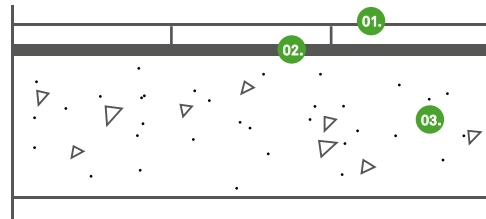


ACOUSTICAL RESULTS

Test procedure according to standards ISO 10140-1:2010; ISO 10140-3:2010; ISO 10140-4:2010 and ISO 717-2:2013



TEST APPARATUS (ΔL_w & IIC)



- 01.** Floor covering composed by glued down wood, non glued laminate floor or ceramic or natural stone tiles
- 02.** Agglomerated cork and recycled rubber resilient layer - T66
- 03.** Reinforced concrete slab of thickness 140mm

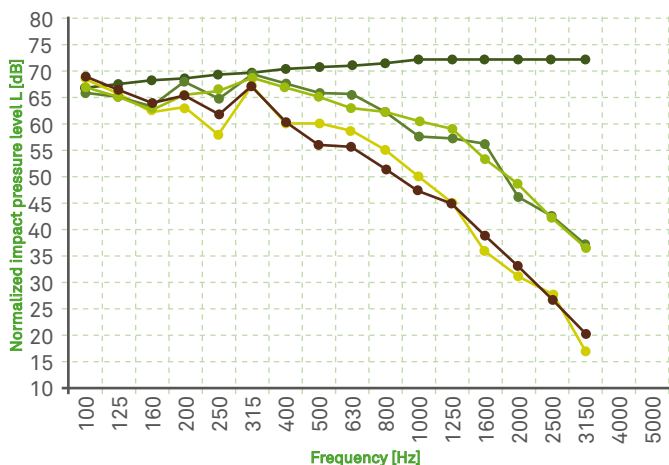
$L_{n,r}$ - Normalized impact sound pressure level of the reference floor with the floor covering under test;
 $L_{n,r,0}$ - Normalized impact sound pressure level of the Lab reference floor;
 ΔL_w - Impact sound pressure level reduction index of the covering under test, on a normalized floor;

Ref. Test Report	Thickness	Flooring	$L_{n,r,w}(C_{l,r})$	$\Delta L_w(C_{l,\Delta})$
ACU 337/11	3 mm	Non Glued Laminate	59 (2) dB	19 (-13) dB
ACL 127/15		Glued Down Wood	62 (0) dB	16 (-11) dB
ACL 203/14		Ceramic (or Natural Stone)	62 (-1) dB	16 (-10) dB
ACL 199/14		LVT	59 (0) dB	19 (-11) dB



ACOUSTICAL RESULTS

Test procedure according to standards ISO 10140-1:2010; ISO 10140-3:2010; ISO 10140-4:2010. Normalized impact sound pressure level and IIC rating determined according to standards ASTM E492-09 and ASTM E989-06.



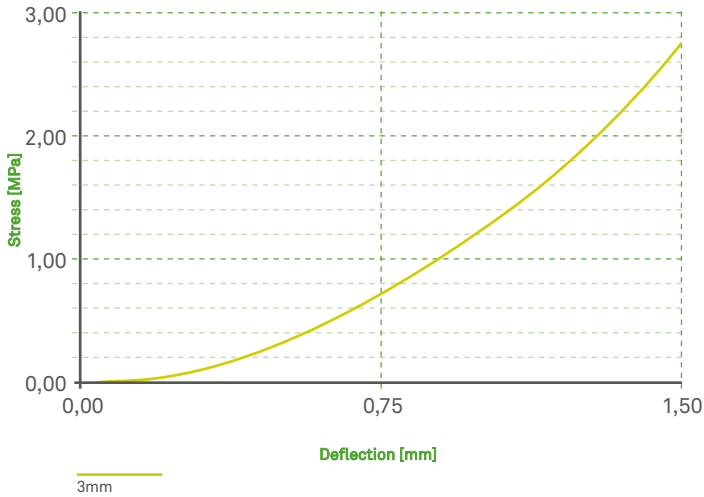
$L_{n,r}$ - Normalized impact sound pressure level of the reference floor with the floor covering under test;
 $L_{n,r,0}$ - Normalized impact sound pressure level of the Lab reference floor;

Thickness	Flooring	IIC _c
3 mm	Non Glued Laminate	47 dB
	Glued Down Wood	50 dB
	Ceramic (or Natural Stone)	51 dB
	LVT	51 dB

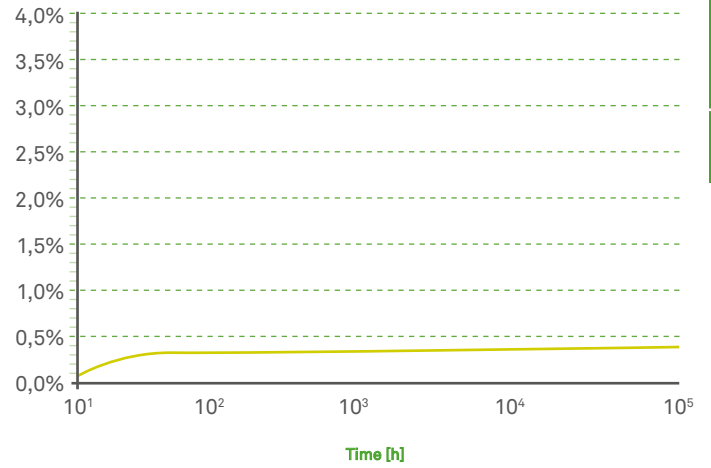


PHYSICAL AND MECHANICAL PROPERTIES

LOAD DEFLECTION



CREEP DEFLECTION @ 0,0045MPa (% OF START HEIGHT)



DYNAMIC STIFFNESS

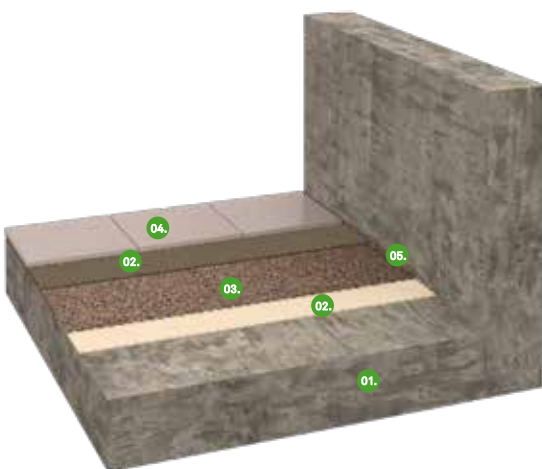
Test procedure according to standards ISO 9052-1, ISO 7626- 5

Thickness (mm)	Dynamic Stiffness (MN/m ³)
3	98

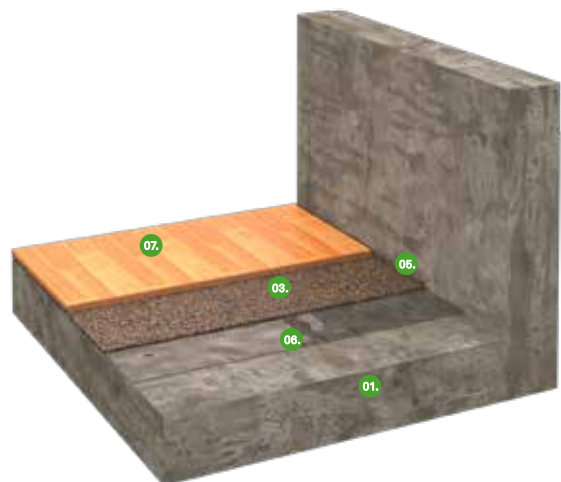


INSTALLATION

GLUED FLOORS



NON GLUED FLOORS



01.
Reinforced
concrete slab

02.
Adhesive

03.
Agglomerated
cork and recycled
rubber resilient
layer - T66

04.
Floor covering
composed by glued
down wood, ceramic
or nature stone

05.
Perimeter insulation
barrier

06.
Vapor
barrier

07.
Floor covering
composed by
non glued
laminate floor

NON GLUED LAMINATE FLOORS		$\Delta L_w = 19\text{dB}$
GLUED DOWN WOOD FLOORS		$\Delta L_w = 16\text{dB}$
CERAMIC OR NATURAL STONE FLOORS		$\Delta L_w = 16\text{dB}$
LVT		$\Delta L_w = 19\text{dB}$

T66

UNDERLAY

General Installation Instructions

The following installation instructions are recommended by Amorim Cork Composites, but are not intended as a definitive project specification. They are presented in an attempt to be used with recommended installation procedures of the flooring manufacturers.

Room Conditions

Temperature > 10°C / Room moisture content < 75%.

Subfloor

All subfloor work should be structurally sound, clear and level. The moisture content of the subfloor should not be more than 2.5% (CM) by weight measured on concrete subfloors.

Vapor Insulation Barrier (only for Non Glued Floors)

PE (Polyethylene) vapor insulation barrier covering the entire flooring area, minimum 50mm wide vertically around the perimeter of the entire floor MUST be installed prior to the Acousticork T66.

Install by overlapping (minimum 100mm) the PE foil, and use an adequate tape to adhere/fix it, if necessary. After completion, PE foil should cover the entire concrete area without gaps. Never mechanically fasten the PE foil barrier with screws, nails or staples as this will severely diminish the performance of the insulation barrier.

Installation Instruction for Acousticork T66

Unpack the Acousticork T66 at least 24h before the installation and store it in the room where the installation will take place. Cut the T66 to desired length and install directly over the entire floor pulled 30mm up the walls with crown of the rolled materials up (Acousticork label side down), removing all trapped air. After completion, the T66 should cover the entire flooring area without gaps and with joints butted tight and preferably taped.

Final Flooring

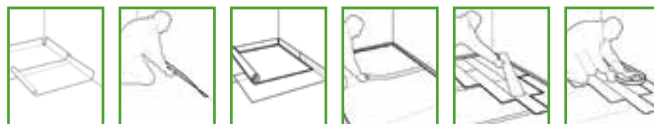
Always follow manufacturers recommended installation instructions.

Recommended Adhesives:

Wood floor to Acousticork: Water-Based Emulsion/ Polyurethane Glue;
 Vinyl and linoleum to Acousticork: Water-Based Emulsion/Synthetic Resin Glue;
 Ceramic to Acousticork: Flexible Cement Glue;
 Acousticork to slab/screed: Water-Based Emulsion/ Acrylic Adhesives;

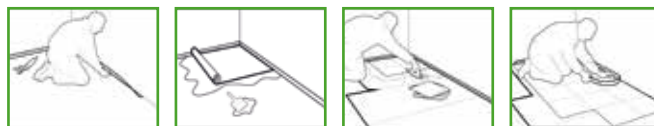
Application Process

NON GLUED FLOORS:



1. Vapor insulation barrier application; 2. Perimeter barrier application; 3. Underlay application; 4. Tape application in joints between rolls; 5. Final floor application; 6. Perimeter insulation barrier cut.

GLUED FLOORS:







1. Perimeter barrier application; 2. Underlay application (glued); 3. Final floor application (glued); 4. Perimeter insulation barrier cut.

Important Notes

Never mechanically fasten the Acousticork T66 to the flooring floor as this will severely diminish its acoustical value.

For detailed installation instructions, please contact us.

MATERIAL DESCRIPTION & PROPERTIES

NON GLUED LAMINATE FLOORS		$\Delta L_w = 19\text{dB}$
GLUED DOWN WOOD FLOORS		$\Delta L_w = 14\text{dB}$
CERAMIC OR NATURAL STONE FLOORS		$\Delta L_w = 12\text{dB}$
LVT		$\Delta L_w = 17\text{dB}$

Produced from Recycled and Natural Materials
 Impact Noise Reduction and
 Thermal Insulation Properties
 High Durability and Long Term Resilience
 High Performance with Reduced Thickness



PRODUCT DESCRIPTION

Agglomerated cork with recycled polyurethane underlay for impact noise insulation.



THERMAL PROPERTIES

Thermal Conductivity: 0,055 W/mK ⁽¹⁾

⁽¹⁾EN1946-2



PHYSICAL AND MECHANICAL PROPERTIES

Specific Weight ⁽¹⁾	Tensile Strength ⁽¹⁾	Compression ⁽¹⁾	Recovery after 0,7MPa ⁽¹⁾
230-300 kg/m ³	> 100 KPa	30%	> 70%

⁽¹⁾ISO 7322



ACOUSTICAL RESULTS

Flooring	Thickness (mm)	ΔL_w (dB) ⁽¹⁾	IIC (dB) ⁽²⁾
Non Glued Laminate		19	49
Glued Down Wood	2	14	49
Ceramic (or Natural Stone)		12	46
LVT	1,6	17	52
	2	-	54

⁽¹⁾ISO 10140-1, ISO 10140-3 & ISO 10140-4 • ⁽²⁾ASTM E492-09 & ASTM E989-06



STANDARD DIMENSIONS

Thickness (mm)	1,6	2
Width (m) x Length (m)	1 x 10	1 x 10

Others sizes available upon request



CASTOR CHAIR RESISTANCE

Pass (Ref. Test Report OMC 025/14) ⁽¹⁾

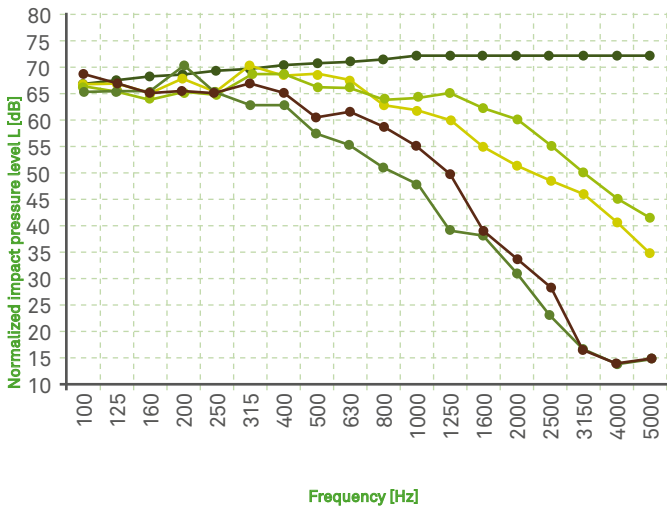
⁽¹⁾EN425-2002





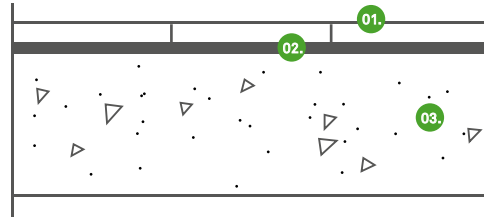
ACOUSTICAL RESULTS

Test procedure according to standards ISO 10140-1:2010; ISO 10140-3:2010; ISO 10140-4:2010 and ISO 717-2:2013



TEST APPARATUS (ΔL_w & IIC*)

*Except 2mm LVT



- 01.** Floor covering composed by glued down wood, non glued laminate floor or ceramic or natural stone tiles
- 02.** Agglomerated cork and PU resilient layer - T85
- 03.** Reinforced concrete slab of thickness 140mm

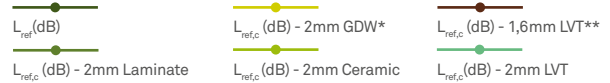
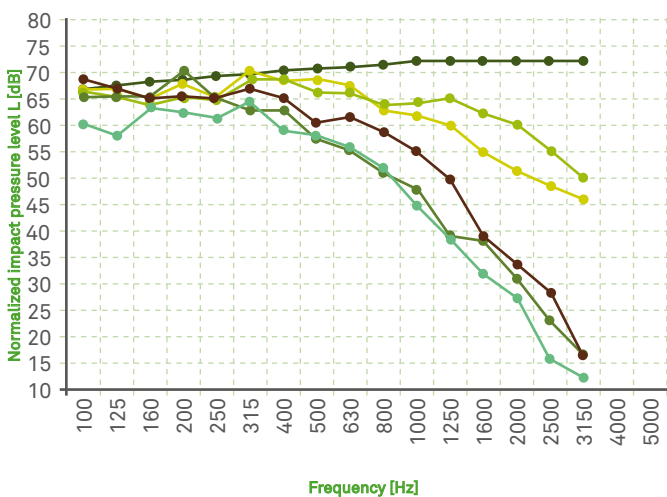
$L_{n,r}$ - Normalized impact sound pressure level of the reference floor with the floor covering under test;
 $L_{n,r,0}$ - Normalized impact sound pressure level of the Lab reference floor;
 ΔL_w - Impact sound pressure level reduction index of the covering under test, on a normalized floor;

Ref. Test Report	Thickness	Flooring	$L_{n,r,W}(C_{L,r})$	$\Delta L_w(C_{L,\Delta})$
ACL035/16		Non Glued Laminate	59 (1) dB	19 (-12) dB
ACL 169/15	2 mm	Glued Down Wood	64 (-2) dB	14 (-9) dB
ACL 125/15		Ceramic (or Natural Stone)	66 (-4) dB	12 (-7) dB
ACL036/16	1,6 mm	LVT	61 (-1) dB	17 (-10) dB



ACOUSTICAL RESULTS

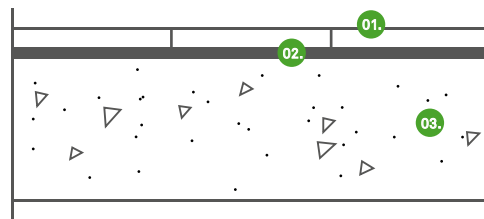
Test procedure according to standards ISO 10140-1:2010; ISO 10140-3:2010; ISO 10140-4:2010. Normalized impact sound pressure level and IIC rating determined according to standards ASTM E492-09 and ASTM E989-06.



*Glued Down Wood
 ** Test Procedure according to standards ASTM E2179-03

TEST APPARATUS (IIC*)

*Only 2mm LVT



- 01.** Floor covering composed by LVT
- 02.** Agglomerated cork and PU resilient layer - T85
- 03.** Reinforced concrete slab of thickness 203mm

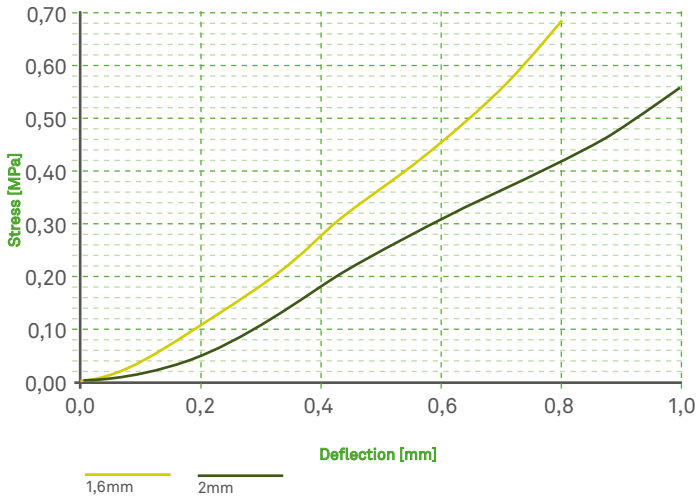
L_{ref} - Normalized impact sound pressure level of the reference floor with the floor covering under test;
 $L_{ref,c}$ - Normalized impact sound pressure level of the Lab reference floor;

Thickness	Flooring	IIC _c
	Non Glued Laminate	49 dB
2 mm	Glued Down Wood	49 dB
	Ceramic (or Natural Stone)	46 dB
1,6 mm	LVT	52 dB
2 mm	LVT	54 dB

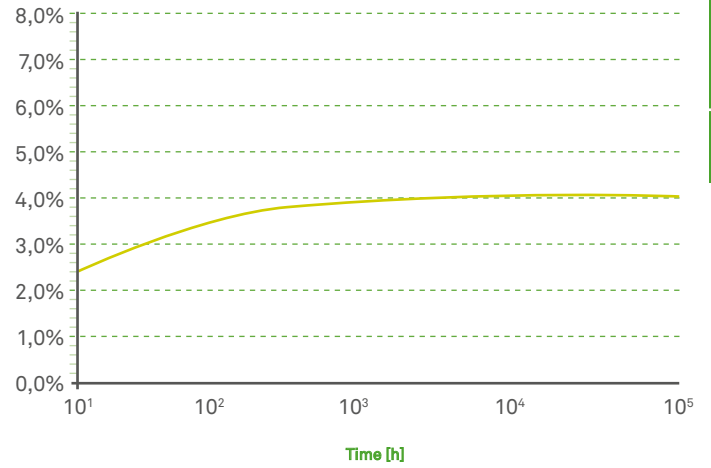


PHYSICAL AND MECHANICAL PROPERTIES

LOAD DEFLECTION



CREEP DEFLECTION @ 0,0045MPa (% OF START HEIGHT)



DYNAMIC STIFFNESS

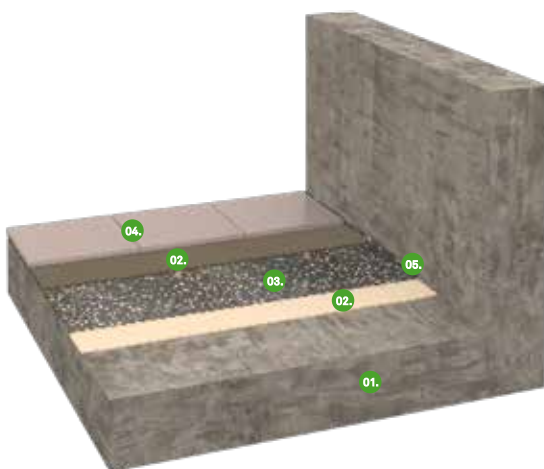
Test procedure according to standards ISO 9052-1, ISO 7626- 5

Thickness (mm)	Dynamic Stiffness (MN/m³)
1,6	114
2	105



INSTALLATION

GLUED FLOORS



NON GLUED FLOORS



01.
Reinforced
concrete slab

02.
Adhesive




03.
Agglomerated
cork and PU
resilient layer - T85

04.
Floor covering
composed by
glued
down wood,
ceramic
or nature
stone

05.
Perimeter
insulation
barrier

06.
Vapor
barrier

07.
Floor covering
composed by
non glued
laminate
floor

NON GLUED LAMINATE FLOORS		$\Delta L_w = 19\text{dB}$
GLUED DOWN WOOD FLOORS		$\Delta L_w = 14\text{dB}$
CERAMIC OR NATURAL STONE FLOORS		$\Delta L_w = 12\text{dB}$
LVT		$\Delta L_w = 17\text{dB}$

T85

UNDERLAY

General Installation Instructions

The following installation instructions are recommended by Amorim Cork Composites, but are not intended as a definitive project specification. They are presented in an attempt to be used with recommended installation procedures of the flooring manufacturers.

Room Conditions

Temperature > 10°C / Room moisture content < 75%.

Subfloor

All subfloor work should be structurally sound, clear and level. The moisture content of the subfloor should not be more than 2.5% (CM) by weight measured on concrete subfloors.

Vapor Insulation Barrier (only for Non Glued Floors)

PE (Polyethylene) vapor insulation barrier covering the entire flooring area, minimum 50mm wide vertically around the perimeter of the entire floor MUST be installed prior to the Acousticork T85.

Install by overlapping (minimum 100mm) the PE foil, and use an adequate tape to adhere/fix it, if necessary. After completion, PE foil should cover the entire concrete area without gaps. Never mechanically fasten the PE foil barrier with screws, nails or staples as this will severely diminish the performance of the insulation barrier.

Installation Instruction for Acousticork T85

Unpack the Acousticork T85 at least 24h before the installation and store it in the room where the installation will take place. Cut the T85 to desired length and install directly over the entire floor pulled 30mm up the walls with crown of the rolled materials up (Acousticork label side down), removing all trapped air. After completion, the T85 should cover the entire flooring area without gaps and with joints butted tight and preferably taped.

Final Flooring

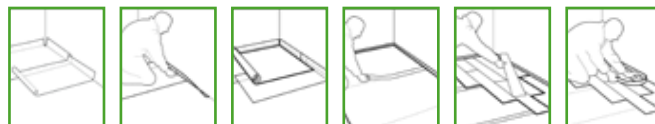
Always follow manufacturers recommended installation instructions.

Recommended Adhesives

Wood floor to Acousticork: Water-Based Emulsion/Polyurethane Glue;
 Vinyl and linoleum to Acousticork: Water-Based Emulsion/Synthetic Resin Glue;
 Ceramic to Acousticork: Flexible Cement Glue;
 Acousticork to slab/screed: Water-Based Emulsion/Acrylic Adhesives;

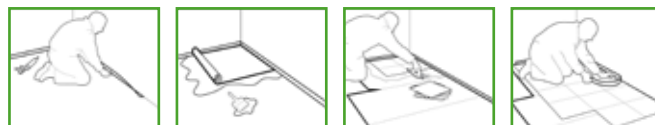
Application Process

NON GLUED FLOORS:



1. Vapor insulation barrier application; 2. Perimeter barrier application; 3. Underlay application; 4. Tape application in joints between rolls; 5. Final floor application; 6. Perimeter insulation barrier cut.

GLUED FLOORS:



1. Perimeter barrier application; 2. Underlay application (glued); 3. Final floor application (glued); 4. Perimeter insulation barrier cut.

Important Notes

Never mechanically fasten the Acousticork T85 to the flooring floor as this will severely diminish its acoustical value.

For detailed installation instructions, please contact us.

ACOUSTICORK

REINVENTING SUSTAINABLE
GREEN AND ACOUSTIC
INSULATION



UNDERSCREED

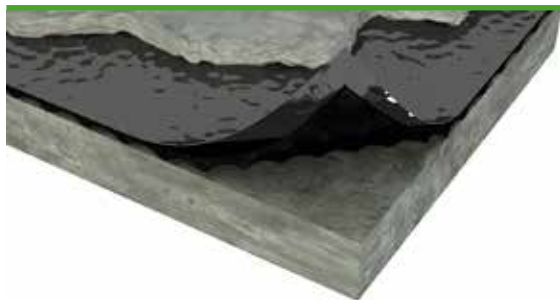


UNDERSCREED

ACOUSTICORK ensures high impact sound insulation in flooring screed application.

Underscreed		  		
		U22	U32	U85
Thickness (mm)	4	ΔLW 22dB IIC 50dB	19dB 47dB	19dB 51dB
	4/2	ΔLW - IIC -	19dB 47dB	23dB 52dB
6	6	ΔLW 22dB IIC 50dB	20dB 48dB	20dB 51dB
	6/3	ΔLW - IIC -	20dB 48dB	23dB 52dB
8	8	ΔLW 23dB IIC 51dB	- -	- -
	8/4	ΔLW 23dB IIC 51dB	21dB 42dB	- -
10	10	ΔLW 23dB IIC 51dB	20dB 50dB	- -
	10/5	ΔLW - IIC -	22dB 47dB	- -

MATERIAL DESCRIPTION & PROPERTIES



FLOATING SCREED

Impact Noise Reduction and Thermal Insulation Properties
Very Easy to Handle and Long Term Resilience
100% Recycled Material
Very Flexible



PRODUCT DESCRIPTION

Agglomerated recycled rubber resilient layer impact noise insulation of floating screed.



THERMAL PROPERTIES

Thermal Conductivity: 0,140 W/mK ⁽¹⁾

⁽¹⁾ISO 8301



PHYSICAL AND MECHANICAL PROPERTIES

Specific Weight ⁽¹⁾	Dynamic Stiffness ⁽²⁾	Tensile Strength ⁽³⁾	Recovery ⁽⁴⁾
650 - 750 Kg/m ³	20 MN/m ³	> 350 KPa	> 80%

* ⁽¹⁾ASTM F1315 • ⁽²⁾ISO 9052-1 & ISO 7626-5 • ⁽³⁾ASTM F152 • ⁽⁴⁾ASTM F36



ACOUSTICAL RESULTS

Thickness (mm)	ΔL_w (dB) ⁽¹⁾	IIC (dB) ⁽²⁾
4	22	50
4/2	-	-
6	22	50
6/3	-	-
8	23	51
8/4	23	51
10	23	51
10/5	-	-

⁽¹⁾ISO 10140-1, ISO 10140-3 & ISO 10140-4 • ⁽²⁾ASTM E492-09 & ASTM E989-06



STANDARD DIMENSIONS

Thickness (mm)	4	4/2	6	6/3	8	8/4	10	10/5
Width (m) x Length (m)	1 x 15	1 x 30	1 x 10	1 x 20	1 x 10	1 x 15	1 x 10	1 x 10

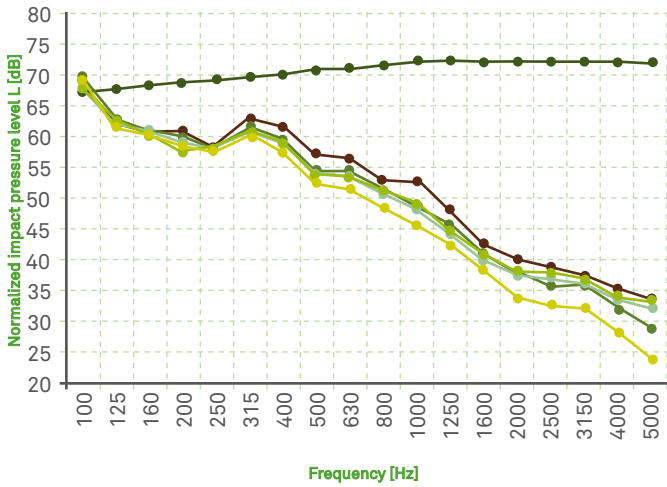
Others sizes available upon request





ACOUSTICAL RESULTS

Test procedure according to standards ISO 10140-1:2010; ISO 10140-3:2010; ISO 10140-4:2010 and ISO 717-2:2013

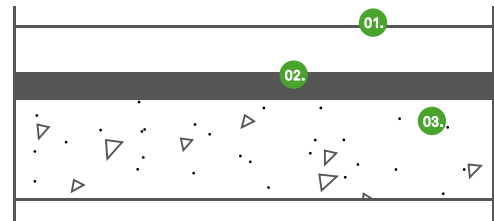


$L_{n,r}$ - Normalized impact sound pressure level of the reference floor with the floor covering under test;
 $L_{n,r,0}$ - Normalized impact sound pressure level of the Lab reference floor;
 ΔL_w - Impact sound pressure level reduction index of the covering under test, on a normalized floor;

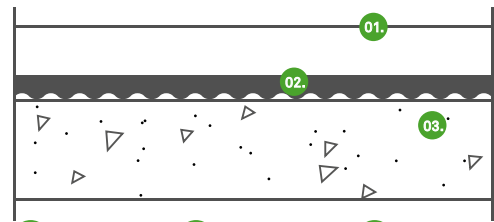
Ref. Test Report	Thickness	$L_{n,r,w}(C_{l,r})$	$\Delta L_w(C_{l,\Delta})$
ACL 102/15	4 mm	56 (2) dB	22 (-12) dB
ACL 101/15	6 mm	56 (1) dB	22 (-12) dB
ACL 100/15	8 mm	55 (1) dB	23 (-12) dB
ACL 168/15	8/4mm	55 (1) dB	23 (-12) dB
ACL 099/15	10 mm	55 (1) dB	23 (-12) dB



TEST APPARATUS (ΔL_w & IIC)



- 01. Concrete floating screed with 70mm thickness
- 02. Agglomerated recycled rubber resilient layer - U22
- 03. Reinforced concrete slab of thickness 140mm

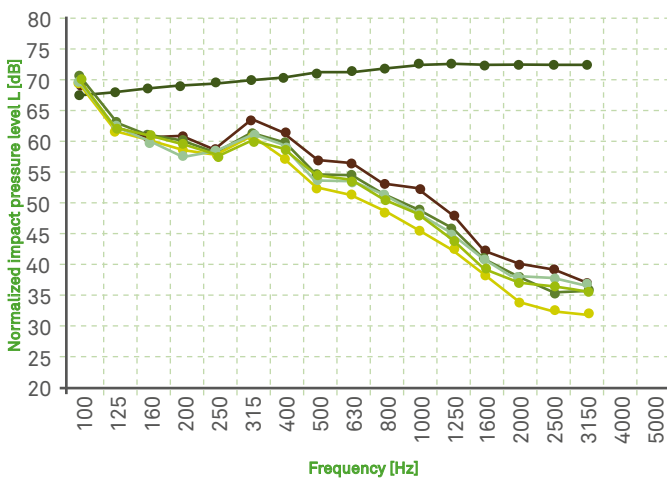


- 01. Concrete floating screed with 70mm thickness
- 02. Agglomerated recycled rubber resilient layer with one face dimpled - U22 Profile
- 03. Reinforced concrete slab of thickness 140mm



ACOUSTICAL RESULTS

Test procedure according to standards ISO 10140-1:2010; ISO 10140-3:2010; ISO 10140-4:2010. Normalized impact sound pressure level and IIC rating determined according to standards ASTM E492-09 and ASTM E989-06.



L_{ref} - Normalized impact sound pressure level of the reference floor with the floor covering under test;
 $L_{ref,c}$ - Normalized impact sound pressure level of the Lab reference floor;

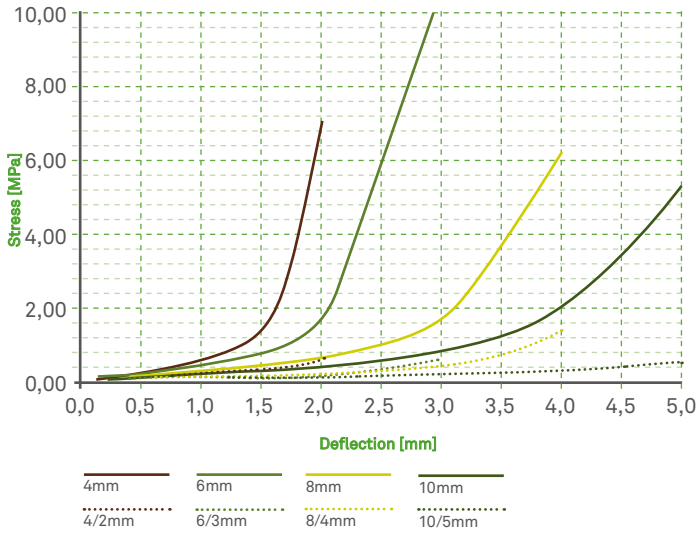


Thickness	IIC _c
4mm	50 dB
6mm	50 dB
8mm	51 dB
8/4mm	51 dB
10mm	51 dB

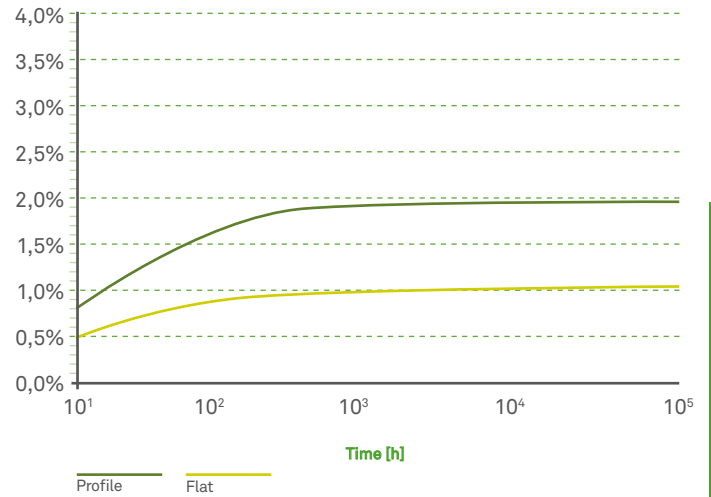


PHYSICAL AND MECHANICAL PROPERTIES

LOAD DEFLECTION



CREEP DEFLECTION @ 0,0045MPa (% OF START HEIGHT)



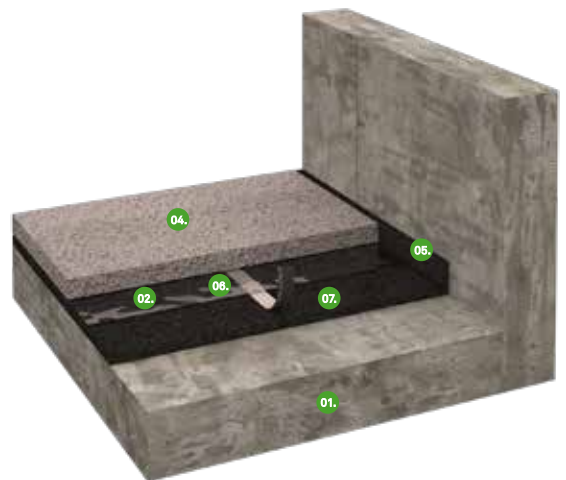
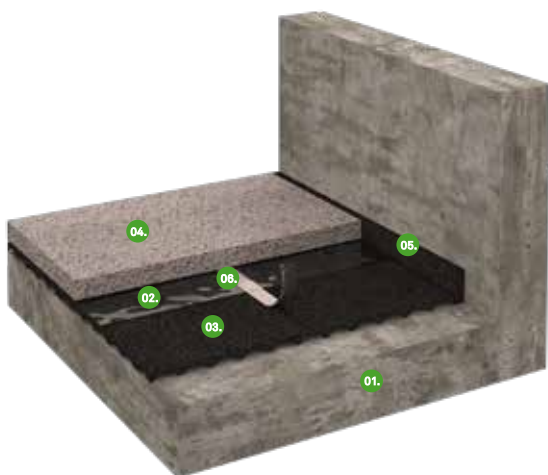
DYNAMIC STIFFNESS

Test procedure according to standards ISO 9052-1, ISO 7626- 5

Thickness	4mm	4/2mm	6mm	6/3mm	8mm	8/4mm	10mm	10/5mm
Dynamic Stiffness (MN/m ³)	52	32	44	25	38	23	37	20



INSTALLATION



01.
Reinforced concrete slab

02.
Vapor barrier

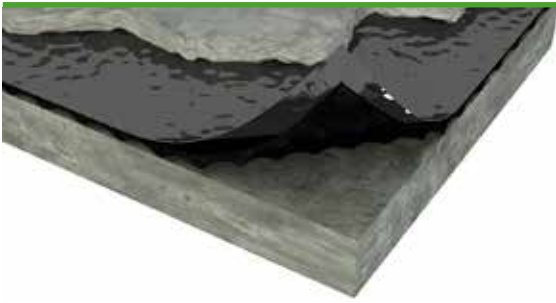
03.
Agglomerated recycled rubber resilient layer with one face dimpled - U22 Profile

04.
Concrete floating screed

05.
Perimeter insulation barrier

06.
Adhesive tape

07.
Agglomerated recycled rubber resilient layer - U22



FLOATING SCREED

U22

UNDERSCREED

General Installation Instructions

The following installation instructions are recommended by Amorim Cork Composites, but are not intended as a definitive project specification. They are presented in an attempt to be used with recommended installation procedures of the flooring manufacturers and screed.

Room Conditions

Temperature > -5°C / Room moisture content < 75%.

Subfloor

All subfloor work should be structurally sound, clear and level. The moisture content of the subfloor should not be more than 2.5% (CM) by weight measured on concrete subfloors.

Perimeter Insulation Barrier

Install a perimeter insulation barrier vertically around the entire perimeter of the room with width equal to that of the floor build up. This is highly recommended in order to avoid lateral propagation of impact noise. The barrier must also be applied in the perimeter of pipes, ducts or any other component protruding from the floor. Spot adhere the strips to the wall using acrylic glue or a bead of silicone sealant.

Installation Instruction for Acousticork U22

Unpack the Acousticork U22 at least 24h before the installation and store it in the room where the installation will take place. Cut and trim the Acousticork U22 to the desired size to fit the installation. Apply directly over the subfloor. Always ensure that material is installed to fit the application avoiding the creation of waves in the material. In case of profile material, dimple side must face down.

Place the Acousticork U22 directly against the insulation perimeter barrier already installed. Proceed to cover the entire floor making sure that the joints are butted tight and use an adequate tape to fix it. After completion, the Acousticork U22 should cover the entire flooring area without gaps and with joints securely taped. A waterproof membrane (ex. Polyethylene foil) minimum 0.2mm covering the entire flooring area MUST be installed prior to the screed. Install it, minimum 150mm wide vertically and overlapping it, minimum 100mm. After completion, the insulation vapour barrier should cover the entire Acousticork U22 area without gaps. Never mechanically fasten the Acousticork U22 and/or the PE foil barrier with screws, nails or staples as this will severely diminish the performance of the insulation barrier.

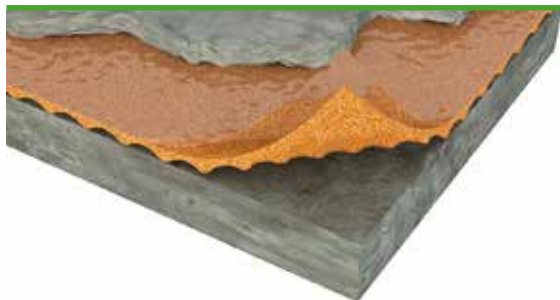
Screed and Final Flooring

Cast a suitable screed over the loose laid PE foil previously installed over the product.

Always follow manufacturers recommended installation instructions.

For detailed installation instructions, please contact us.

MATERIAL DESCRIPTION & PROPERTIES



FLOATING SCREED

Impact Noise Reduction and Thermal Insulation Properties
 Very Easy to Handle and Long Term Resilience
 100% Natural and Sustainable Product
 Very Flexible



PRODUCT DESCRIPTION

Agglomerated cork resilient layer impact noise insulation of floating screed.



THERMAL PROPERTIES

Thermal Conductivity: 0,04 W/mK ⁽¹⁾

⁽¹⁾ISO 8301



PHYSICAL AND MECHANICAL PROPERTIES

Specific Weight ⁽¹⁾	Dynamic Stiffness ⁽²⁾	Tensile Strength ⁽³⁾	Recovery ⁽⁴⁾
150 - 220 Kg/m ³	38 MN/m ³	> 200 KPa	> 70%

* ⁽¹⁾ASTM F1315 • ⁽²⁾ISO 9052-1 & ISO 7626-5 • ⁽³⁾ASTM F152 • ⁽⁴⁾ASTM F36



ACOUSTICAL RESULTS

Thickness (mm)	ΔL_w (dB) ⁽¹⁾	IIC (dB) ⁽²⁾
4	19	47
4/2	19	47
6	20	48
6/3	20	48
8	*	*
8/4	21	42
10	20	50
10/5	22	47

* Available tests soon ⁽¹⁾ISO 10140-1, ISO 10140-3 & ISO 10140-4 • ⁽²⁾ASTM E492-09 & ASTM E989-06



STANDARD DIMENSIONS

Thickness (mm)	4	4/2	6	6/3	8/4	10	10/5
Width (m) x Length (m)	1 x 20	1 x 30	1 x 20	1 x 20	1 x 15	1 x 15	1 x 10

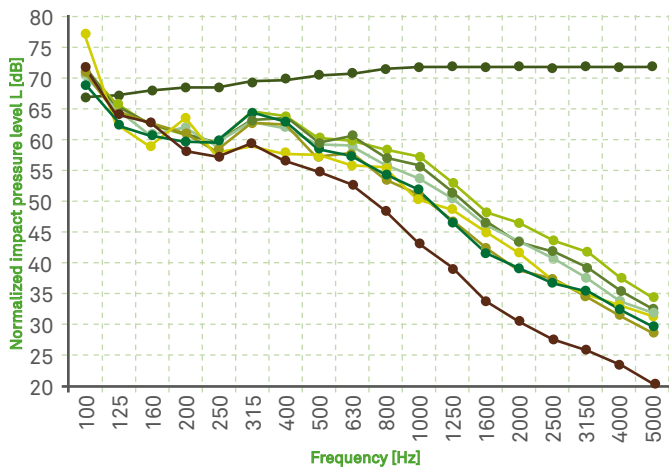
Others sizes available upon request





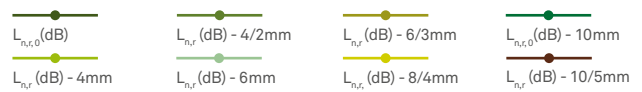
ACOUSTICAL RESULTS

Test procedure according to standards ISO 10140-1:2010; ISO 10140-3:2010; ISO 10140-4:2010 and ISO 717-2:2013

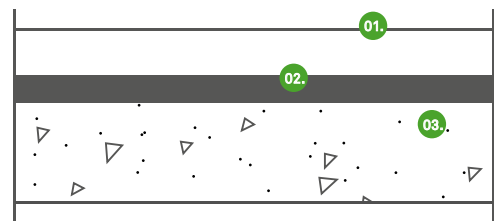


$L_{n,r}$ - Normalized impact sound pressure level of the reference floor with the floor covering under test;
 $L_{n,r,0}$ - Normalized impact sound pressure level of the Lab reference floor;
 ΔL_w - Impact sound pressure level reduction index of the covering under test, on a normalized floor;

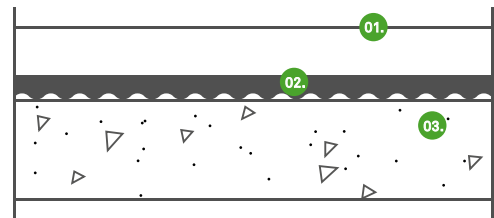
Ref. Test Report	Thickness	$L_{n,r,w}(C_{l,r})$	$\Delta L_w(C_{l,\Delta})$
ACL104/15	4 mm	59 (1) dB	19 (-12) dB
ACL041/14	4/2 mm	59 (1) dB	19 (-12) dB
ACL105/15	6 mm	58 (2) dB	20 (-13) dB
ACL042/14	6/3 mm	58 (1) dB	20 (-12) dB
ACU242/09	8/4 mm	57 (7) dB	21 (-18) dB
ACL106/15	10 mm	58 (0) dB	20 (-11) dB
ACL107/15	10/5 mm	56 (3) dB	22 (-14) dB



TEST APPARATUS (ΔL_w & IIC)



- 01. Concrete floating screed with 70mm thickness
- 02. Agglomerated cork resilient layer - U32
- 03. Reinforced concrete slab of thickness 140mm

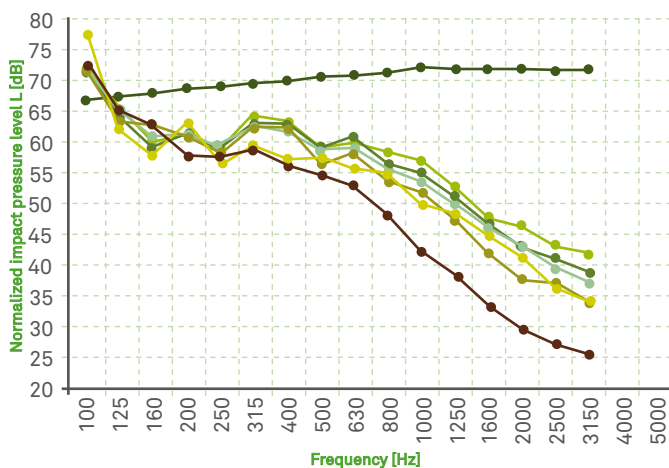


- 01. Concrete floating screed with 70mm thickness
- 02. Agglomerated cork resilient layer with one face dimpled - U32 Profile
- 03. Reinforced concrete slab of thickness 140mm



ACOUSTICAL RESULTS

Test procedure according to standards ISO 10140-1:2010; ISO 10140-3:2010; ISO 10140-4:2010. Normalized impact sound pressure level and IIC rating determined according to standards ASTM E492-09 and ASTM E989-06.



$L_{n,ref}$ - Normalized impact sound pressure level of the reference floor with the floor covering under test;
 $L_{n,ref,c}$ - Normalized impact sound pressure level of the Lab reference floor;



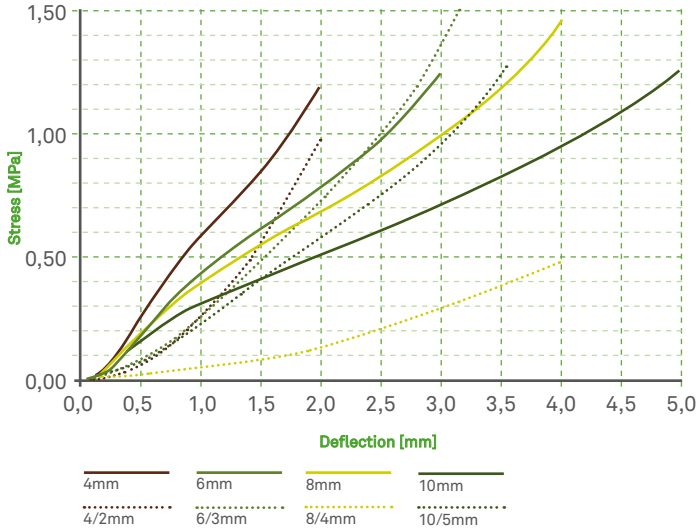
Thickness	IIC _c
4 mm	47 dB
4/2 mm	47 dB
6 mm	48 dB
6/3 mm	48 dB
8/4 mm	42 dB
10 mm	50 dB
10/5 mm	47 dB

*Improvement in impact insulation class

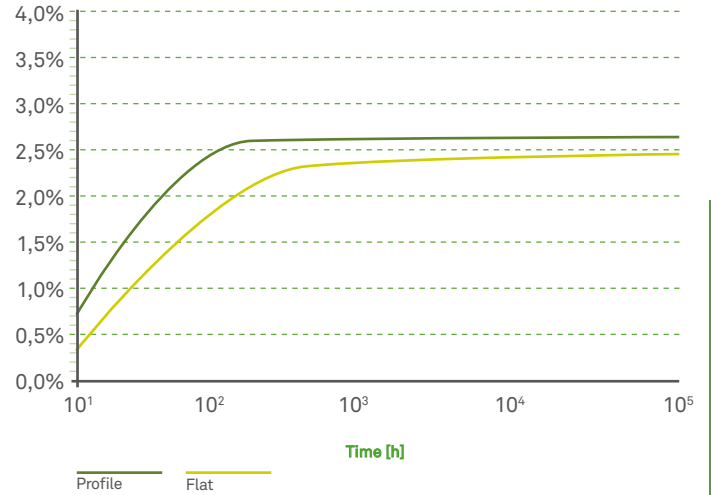


PHYSICAL AND MECHANICAL PROPERTIES

LOAD DEFLECTION



CREEP DEFLECTION @ 0,0045MPa (% OF START HEIGHT)



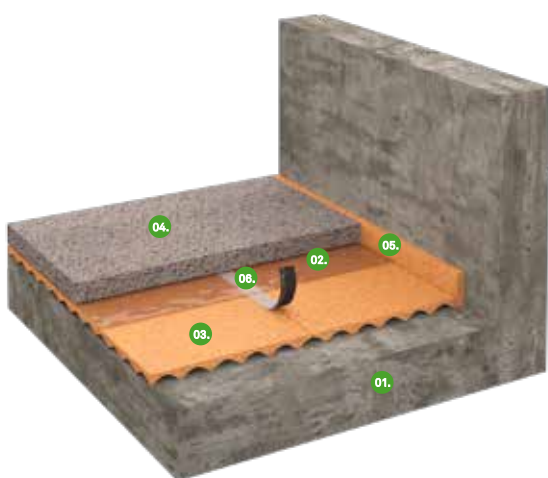
DYNAMIC STIFFNESS

Test procedure according to standards ISO 9052-1, ISO 7626- 5

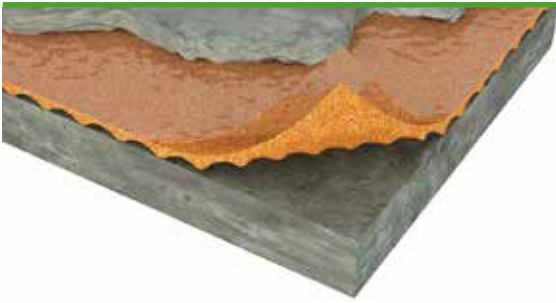
Thickness	4mm	4/2mm	6mm	6/3mm	8mm	8/4mm	10mm	10/5mm
Dynamic Stiffness (MN/m ³)	94	70	88	50	82	48	72	38



INSTALLATION



- 01.**
Reinforced concrete slab
- 02.**
Vapor barrier
- 03.**
Agglomerated cork resilient layer with one face dimpled - U32 Profile
- 04.**
Concrete floating screed
- 05.**
Perimeter insulation barrier
- 06.**
Adhesive tape
- 07.**
Agglomerated cork resilient layer - U32



FLOATING SCREED

U32

UNDERSCREED

General Installation Instructions

The following installation instructions are recommended by Amorim Cork Composites, but are not intended as a definitive project specification. They are presented in an attempt to be used with recommended installation procedures of the flooring manufacturers and screed.

Room Conditions

Temperature > -5°C / Room moisture content < 75%.

Subfloor

All subfloor work should be structurally sound, clear and level. The moisture content of the subfloor should not be more than 2.5% (CM) by weight measured on concrete subfloors.

Perimeter Insulation Barrier

Install a perimeter insulation barrier vertically around the entire perimeter of the room with width equal to that of the floor build up. This is highly recommended in order to avoid lateral propagation of impact noise. The barrier must also be applied in the perimeter of pipes, ducts or any other component protruding from the floor. Spot adhere the strips to the wall using acrylic glue or a bead of silicone sealant.

Installation Instruction for Acousticork U32

Unpack the Acousticork U32 at least 24h before the installation and store it in the room where the installation will take place. Cut and trim the Acousticork U32 to the desired size to fit the installation. Apply directly over the subfloor. Always ensure that material is installed to fit the application avoiding the creation of waves in the material. In case of profile material, dimple side must face down.

Place the Acousticork U32 directly against the insulation perimeter barrier already installed. Proceed to cover the entire floor making sure that the joints are butted tight and use an adequate tape to fix it. After completion, the Acousticork U32 should cover the entire flooring area without gaps and with joints securely taped. A waterproof membrane (ex. Polyethylene foil) minimum 0.2mm covering the entire flooring area MUST be installed prior to the screed. Install it, minimum 150mm wide vertically and overlapping it, minimum 100mm. After completion, the insulation vapour barrier should cover the entire Acousticork U32 area without gaps. Never mechanically fasten the Acousticork U32 and/or the PE foil barrier with screws, nails or staples as this will severely diminish the performance of the insulation barrier.

Screed and Final Flooring

Cast a suitable screed over the loose laid PE foil previously installed over the product.

Always follow manufacturers recommended installation instructions.

For detailed installation instructions, please contact us.

MATERIAL DESCRIPTION & PROPERTIES



FLOATING SCREED

Impact Noise Reduction and Thermal Insulation Properties
Very Easy to Handle and Long Term Resilience
Produced from Recycled and Natural Material
Very Flexible



PRODUCT DESCRIPTION

Agglomerated cork with recycled polyurethane resilient layer impact noise insulation of floating screed.



THERMAL PROPERTIES

Thermal Conductivity: 0,055 W/mK ⁽¹⁾

⁽¹⁾ISO 8301



PHYSICAL AND MECHANICAL PROPERTIES

Specific Weight ⁽¹⁾	Dynamic Stiffness ⁽²⁾	Tensile Strength ⁽³⁾	Recovery ⁽⁴⁾
230 - 300 Kg/m ³	27 MN/m ³	> 100 KPa	> 70%

* ⁽¹⁾ ASTM F1315 • ⁽²⁾ ISO 9052-1 & ISO 7626-5 • ⁽³⁾ ASTM F152 • ⁽⁴⁾ ASTM F36



ACOUSTICAL RESULTS

Thickness (mm)	ΔL_w (dB) ⁽¹⁾	IIC (dB) ⁽²⁾
4	19	51
4/2	23	52
6	20	51
6/3	23	52

⁽¹⁾ISO 10140-1, ISO 10140-3 & ISO 10140-4 • ⁽²⁾ASTM E492-09 & ASTM E989-06



STANDARD DIMENSIONS

Thickness (mm)	4	4/2	6	6/3
Width (m) x Length (m)	1 x 15	1 x 30	1 x 10	1 x 20

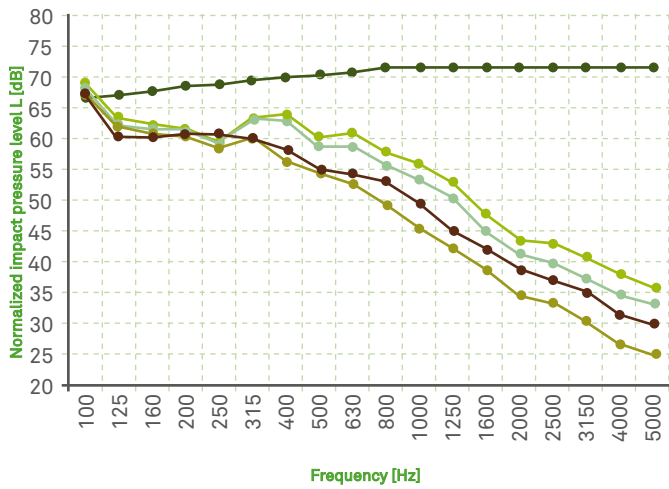
Others sizes available upon request





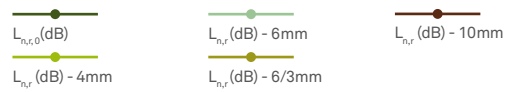
ACOUSTICAL RESULTS

Test procedure according to standards ISO 10140-1:2010; ISO 10140-3:2010; ISO 10140-4:2010 and ISO 717-2:2013

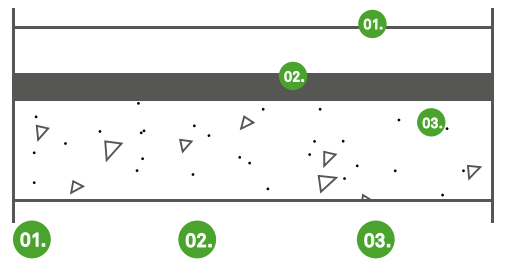


$L_{n,r}$ - Normalized impact sound pressure level of the reference floor with the floor covering under test;
 $L_{n,r,0}$ - Normalized impact sound pressure level of the Lab reference floor;
 ΔL_w - Impact sound pressure level reduction index of the covering under test, on a normalized floor;

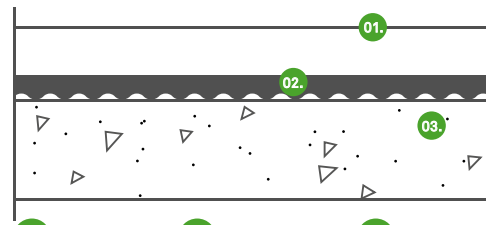
Ref. Test Report	Thickness	$L_{n,r,w}(C_{l,r})$	$\Delta L_w(C_{l,\Delta})$
ACL219/14	4 mm	59 (0) dB	19 (-11) dB
ACL311/15	4/2 mm	55 (1) dB	23 (-12) dB
ACL220/14	6 mm	58 (0) dB	20 (-11) dB
ACL171/15	6/3 mm	55 (1) dB	23 (-12) dB



TEST APPARATUS (ΔL_w & IIC)



01. Concrete floating screed with 70mm thickness
 02. Agglomerated cork and PU resilient layer - U85
 03. Reinforced concrete slab of thickness 140mm

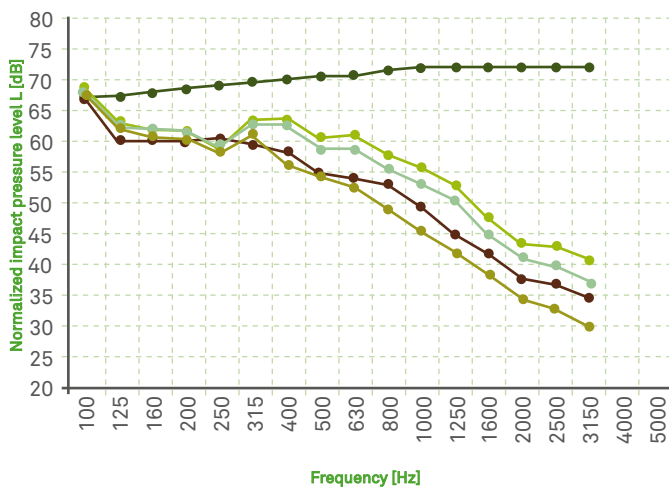


01. Concrete floating screed with 70mm thickness
 02. Agglomerated cork and PU resilient layer with one face dimpled - U85 Profile
 03. Reinforced concrete slab of thickness 140mm

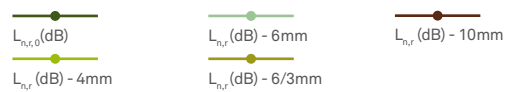


ACOUSTICAL RESULTS

Test procedure according to standards ISO 10140-1:2010; ISO 10140-3:2010; ISO 10140-4:2010. Normalized impact sound pressure level and IIC rating determined according to standards ASTM E492-09 and ASTM E989-06.



L_{ref} - Normalized impact sound pressure level of the reference floor with the floor covering under test;
 $L_{ref,c}$ - Normalized impact sound pressure level of the Lab reference floor;



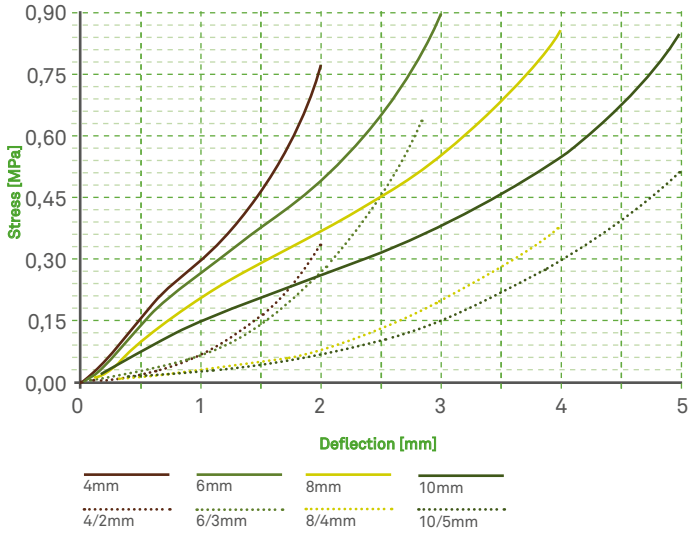
Thickness	IIC _c
4 mm	51 dB
4/2 mm	52 dB
6 mm	51 dB
6/3 mm	52 dB

*Improvement in impact insulation class

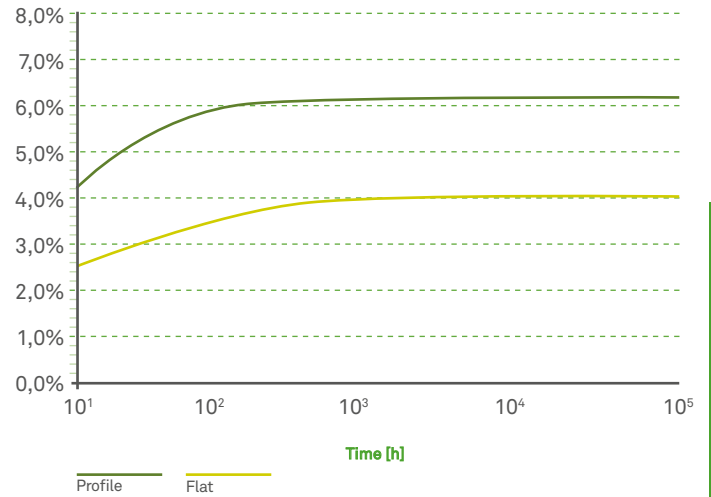


PHYSICAL AND MECHANICAL PROPERTIES

LOAD DEFLECTION



CREEP DEFLECTION @ 0,0045MPa (% OF START HEIGHT)



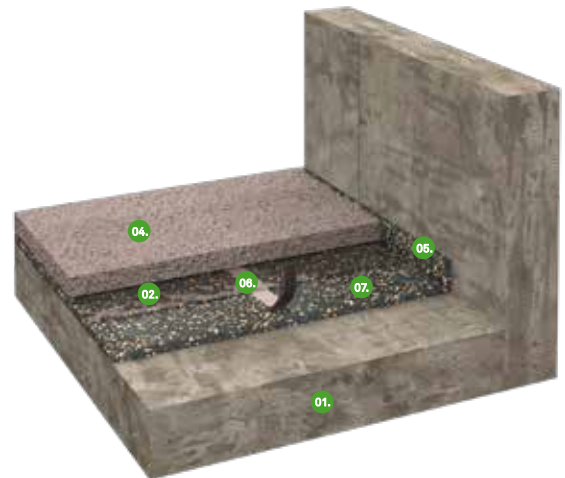
DYNAMIC STIFFNESS

Test procedure according to standards ISO 9052-1, ISO 7626- 5

Thickness	4mm	4/2mm	6mm	6/3mm	8mm	8/4mm	10mm	10/5mm
Dynamic Stiffness (MN/m ³)	85	52	82	50	72	32	60	27



INSTALLATION



01.
Reinforced
concrete slab

02.
Vapor
barrier

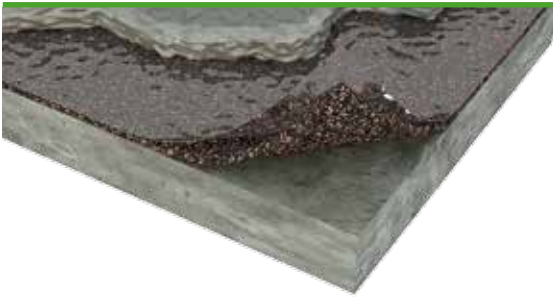
03.
Agglomerated cork
and PU resilient
layer with one face
dimpled - U85
Profile

04.
Concrete floating
screed

05.
Perimeter insulation
barrier

06.
Adhesive tape

07.
Agglomerated
cork and PU
resilient layer
- U85



FLOATING SCREED

U85

UNDERSCREED

General Installation Instructions

The following installation instructions are recommended by Amorim Cork Composites, but are not intended as a definitive project specification. They are presented in an attempt to be used with recommended installation procedures of the flooring manufacturers and screed.

Room Conditions

Temperature > -5°C / Room moisture content < 75%.

Subfloor

All subfloor work should be structurally sound, clear and level. The moisture content of the subfloor should not be more than 2.5% (CM) by weight measured on concrete subfloors.

Perimeter Insulation Barrier

Install a perimeter insulation barrier vertically around the entire perimeter of the room with width equal to that of the floor build up. This is highly recommended in order to avoid lateral propagation of impact noise. The barrier must also be applied in the perimeter of pipes, ducts or any other component protruding from the floor. Spot adhere the strips to the wall using acrylic glue or a bead of silicone sealant.

Installation Instruction for Acousticork U85

Unpack the Acousticork U85 at least 24h before the installation and store it in the room where the installation will take place. Cut and trim the Acousticork U85 to the desired size to fit the installation. Apply directly over the subfloor. Always ensure that material is installed to fit the application avoiding the creation of waves in the material. In case of profile material, dimple side must face down.

Place the Acousticork U85 directly against the insulation perimeter barrier already installed. Proceed to cover the entire floor making sure that the joints are butted tight and use an adequate tape to fix it. After completion, the Acousticork U85 should cover the entire flooring area without gaps and with joints securely taped. A waterproof membrane (ex. Polyethylene foil) minimum 0.2mm covering the entire flooring area MUST be installed prior to the screed. Install it, minimum 150mm wide vertically and overlapping it, minimum 100mm. After completion, the insulation vapour barrier should cover the entire Acousticork U85 area without gaps. Never mechanically fasten the Acousticork U85 and/or the PE foil barrier with screws, nails or staples as this will severely diminish the performance of the insulation barrier.

Screed and Final Flooring

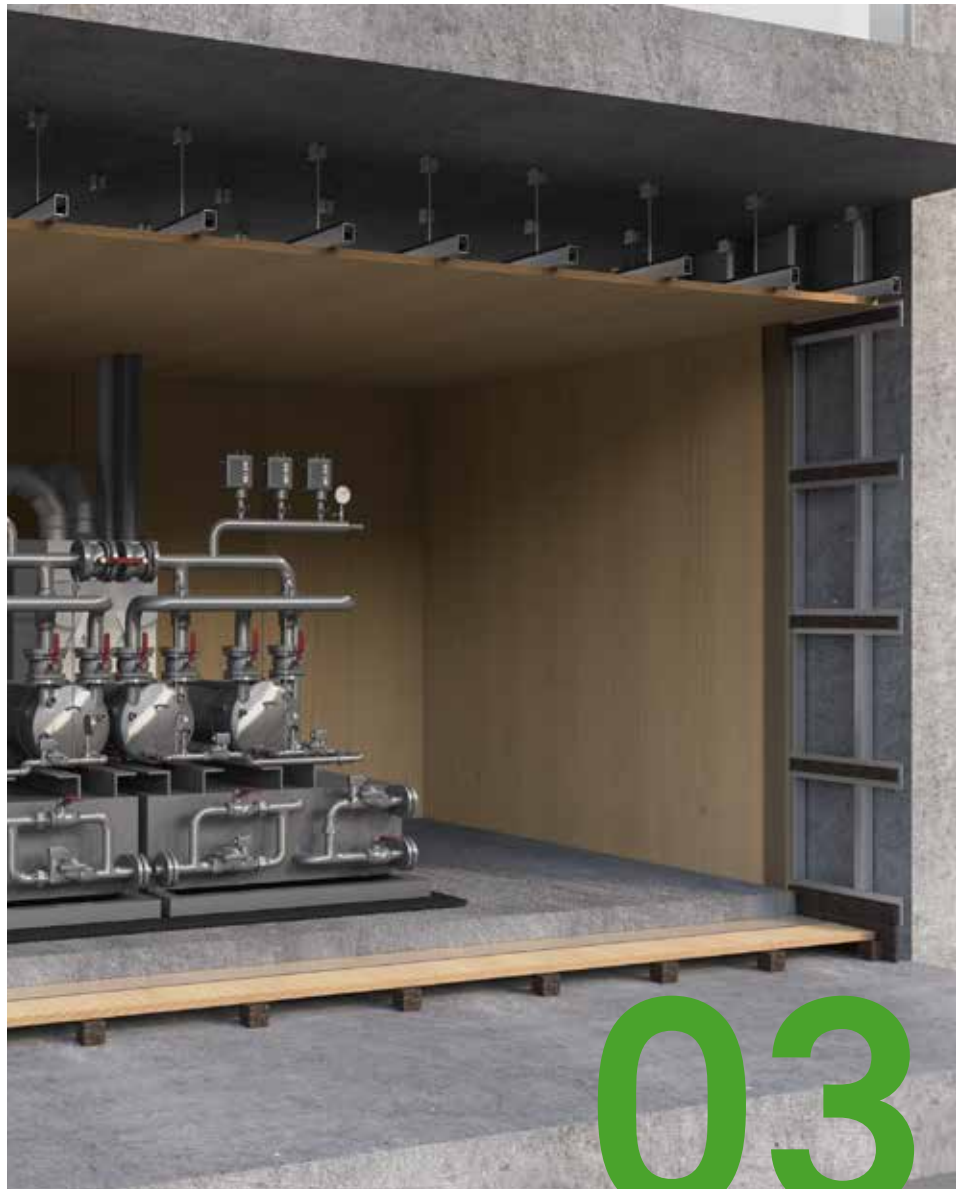
Cast a suitable screed over the loose laid PE foil previously installed over the product.

Always follow manufacturers recommended installation instructions.

For detailed installation instructions, please contact us.

ACOUSTICORK

REINVENTING SUSTAINABLE
GREEN AND ACOUSTIC
INSULATION

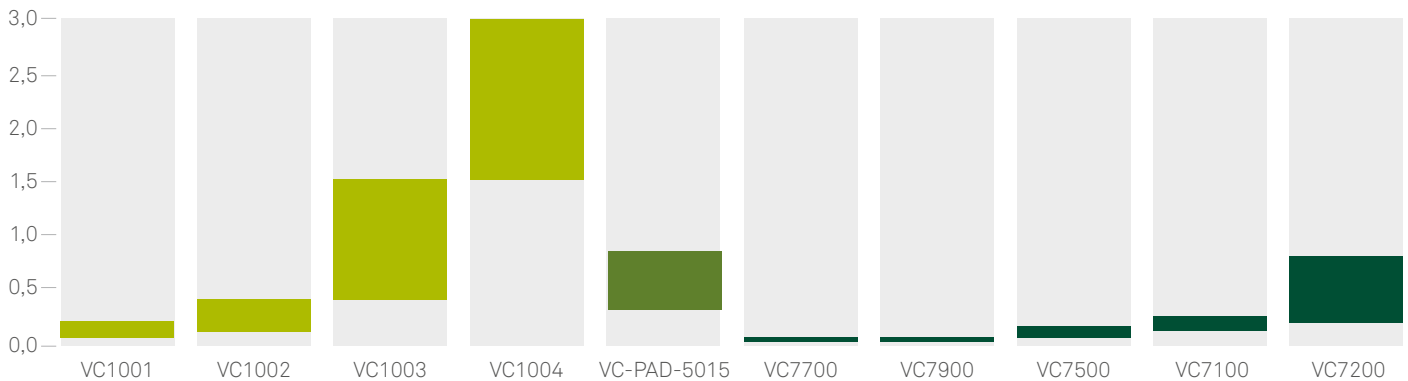




VIBRATION CONTROL

ACOUSTICORK's specific material formulations for vibration control ally performance to environmental concerns.

WORK LOAD RANGE (MPa)



CORK & NATURAL RUBBER ENGINEERED COMPOUND



FEATURES:

- Dynamic-to-static stiffness ratio (1,5 – 2,5)
- Low Damping
- Low Creep
- Low Water Absorption
- High Poisson Ratio (Shape Factor Dependency)
- UV/Ozone upon request

BENEFITS:

- High Vibration Isolation
- Low Resonance Frequency
- Long Term Durability
- Can be used in Strips or Pads

RESIN BONDED CORK & RECYCLED RUBBER



FEATURES:

- Dynamic-to-static stiffness ratio (2 – 3,5)
- High Damping
- Low Poisson Ratio (No Shape Factor Dependency)
- Recycled Products

BENEFITS:

- High Vibration Isolation
- Lower Amplification at Resonance
- Long Term Durability
- Good Quality/Value Ratio
- Can be used in Mats, Strips or Pads

RESIN BONDED RECYCLED RUBBER



FEATURES:

- Dynamic-to-static stiffness ratio (2 – 3)
- Low Damping
- Fatigue Resistance
- Low Poisson Ratio (No Shape Factor Dependency)
- Recycled Products

BENEFITS:

- High Vibration Isolation
- Long Term Durability
- Good Quality/Value Ratio
- Can be used in Mats and Strips

MATERIAL DESCRIPTION & PROPERTIES



VC1001 Vibration Control material is an engineered compound with Cork and Natural Rubber.

This product is suitable for vibration control applications in need of very high isolation levels, used as discrete isolators (pads/strips) with a low resonance frequency and low load.

LOAD RANGE

- **STATIC** 0,05 - 0,20 MPa (7 - 29 psi)
- **TOTAL** 0,25 MPa (36 psi)
- **OCCASIONAL** 0,60 MPa (87 psi)

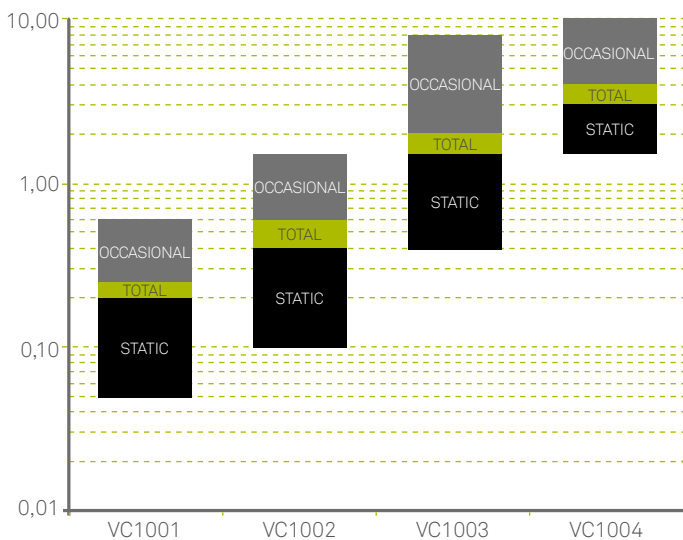
E-MODULE (@ stable load)

- **STATIC** 0,8 - 1,5 MPa (116 - 217 psi)
- **DYNAMIC** 1,2 - 3,6 MPa (174 - 522 psi)

TEMPERATURE

- **RANGE** -10 / +100°C (+14 / 212 °F)

WORK LOAD RANGE [MPa]



FEATURES

- Long term durability
- Low natural frequency / High vibration isolation
- Low water absorption
- Low creep rate

Density (kg/m ³) ⁽¹⁾	500 (31 lb/ft ³)
Shore hardness (Shore A) ⁽²⁾	20 - 35
Elongation at break (%) ⁽³⁾	> 80
Tensile strength (MPa) ⁽³⁾	> 0,25 (>36 psi)
Compression set 50%/23°C/70h (%) ⁽⁴⁾	< 20
Compressibility at 0,7 MPa (%) ⁽⁵⁾	45 - 60
Recovery at 0,7MPa (%) ⁽⁵⁾	> 85

(1) ASTM D297
(2) ASTM D2240
(3) ASTM F152

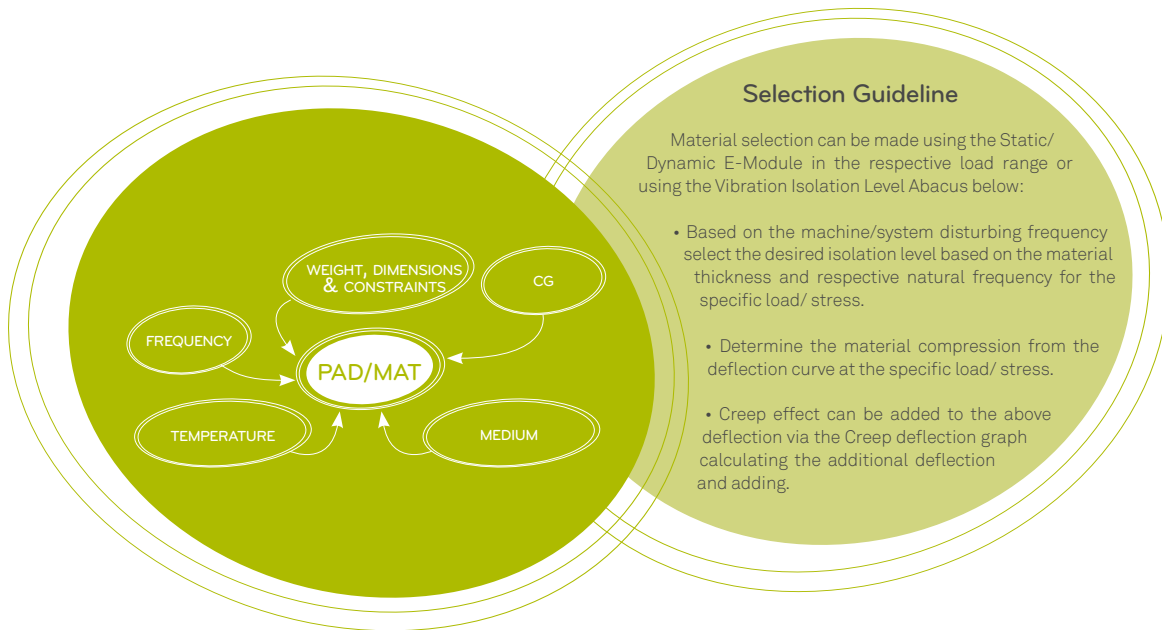
(4) DIN EN ISO 1856
(5) ASTM F36



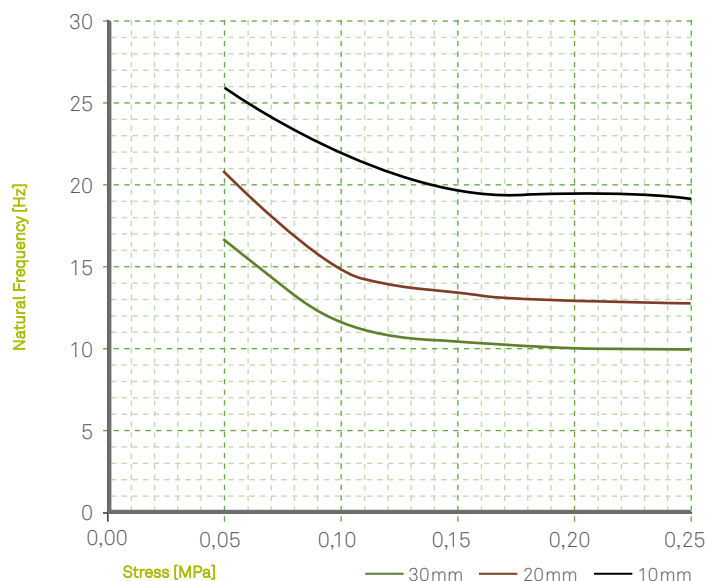
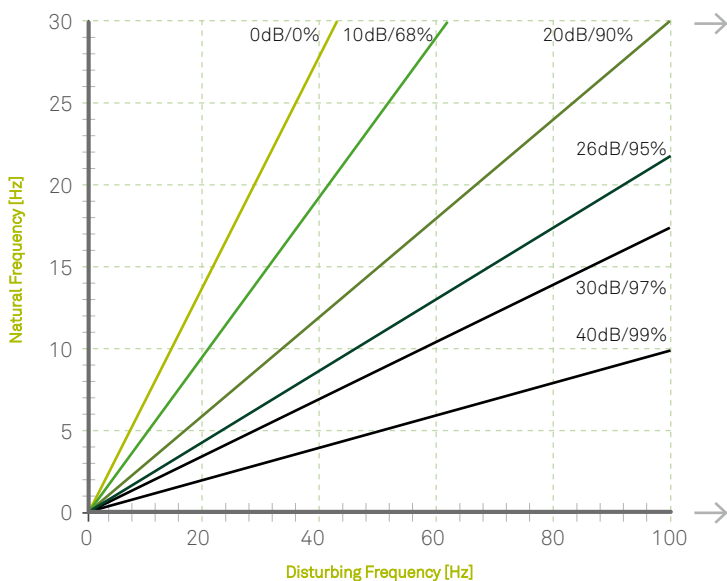
ISO 9001
ISO 14001
OHSAS 18001



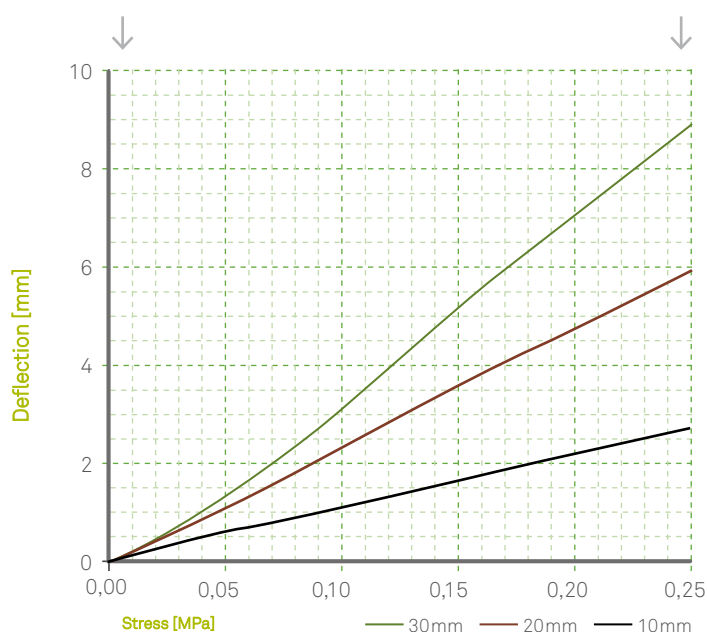
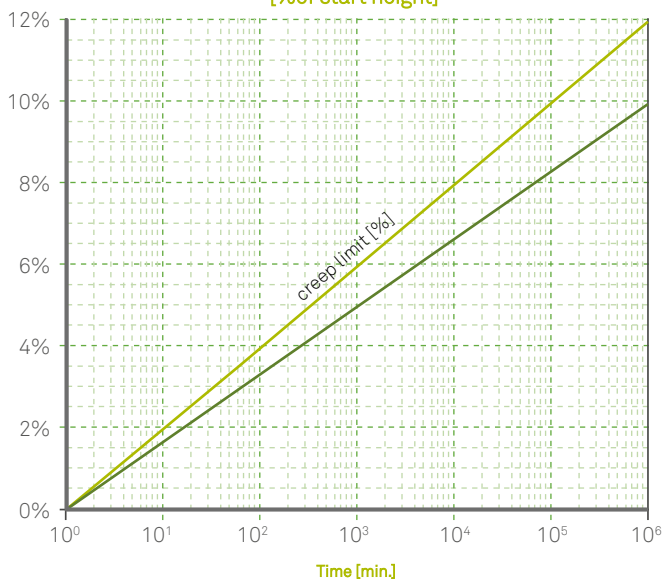
RoHS Compliant
AMORIM CORK COMPOSITES



Vibration Isolation Level



Creep Deflection @ 0.25 MPa [% of start height]



MATERIAL DESCRIPTION & PROPERTIES



VC1002 Vibration Control material is an engineered compound with Cork and Natural Rubber.

This product is suitable for vibration control applications in need of very high isolation levels, used as discrete isolators (pads/strips) with a low resonance frequency and medium low load.

LOAD RANGE

- **STATIC** 0,10 - 0,40 MPa (14 - 58 psi)
- **TOTAL** 0,60 MPa (87 psi)
- **OCCASIONAL** 1,50 MPa (218 psi)

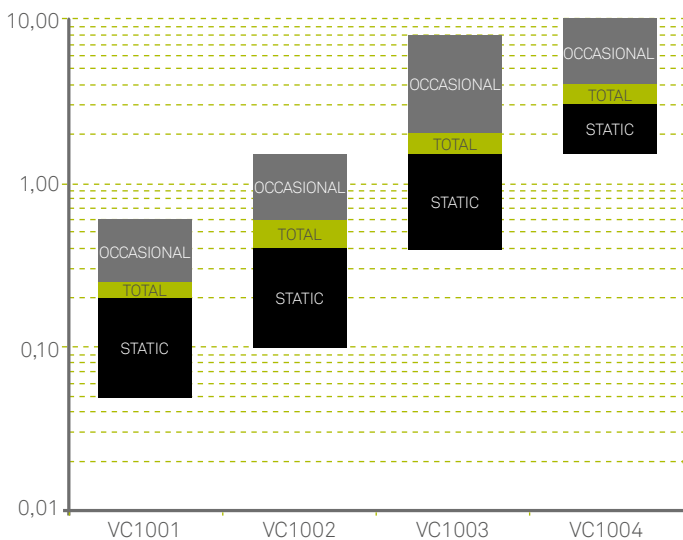
E-MODULE (@ stable load)

- **STATIC** 1,6 - 4,0 MPa (232 - 580 psi)
- **DYNAMIC** 3,5 - 8,0 MPa (507 - 1160 psi)

TEMPERATURE

- **RANGE** -10 / +100°C (+14 / 212 °F)

WORK LOAD RANGE [MPa]



FEATURES

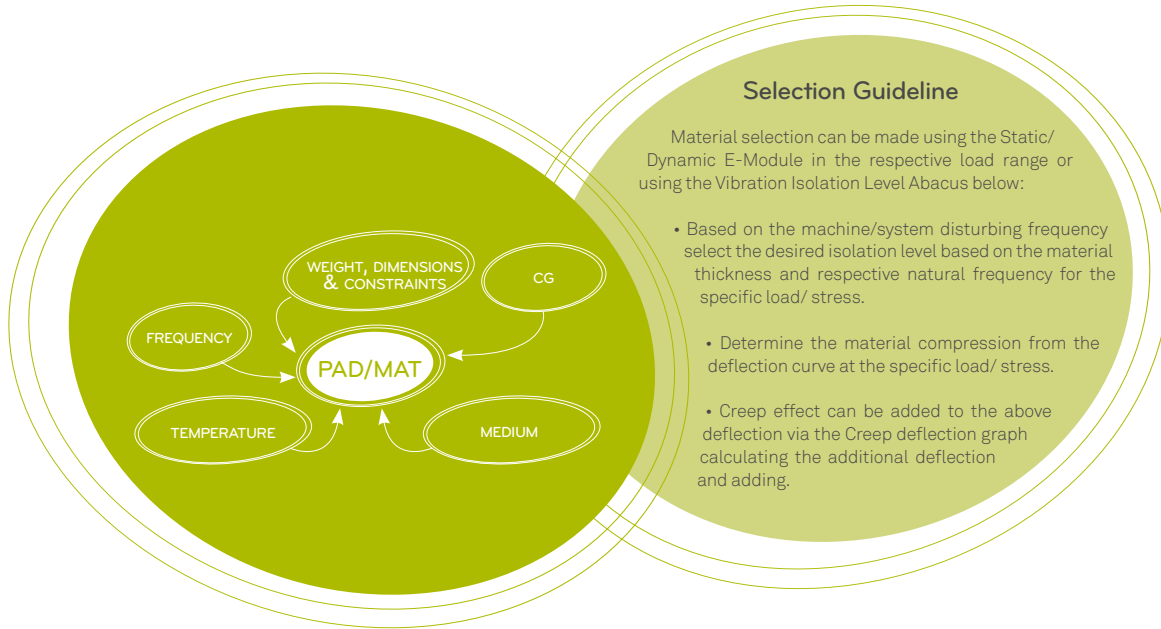
- Long term durability
- Low natural frequency / High vibration isolation
- Low water absorption
- Low creep rate

Density (kg/m ³) ⁽¹⁾	700 (44 lb/ft ³)
Shore hardness (Shore A) ⁽²⁾	35 - 50
Elongation at break (%) ⁽³⁾	> 200
Tensile strength (MPa) ⁽³⁾	> 2,0 (>290 psi)
Compression set 50%/23°C/70h (%) ⁽⁴⁾	< 15
Compressibility at 0,7 MPa (%) ⁽⁵⁾	55 - 65
Recovery at 0,7MPa (%) ⁽⁵⁾	> 90

(1) ASTM D297
(2) ASTM D2240
(3) ASTM F152

(4) DIN EN ISO 1856
(5) ASTM F36



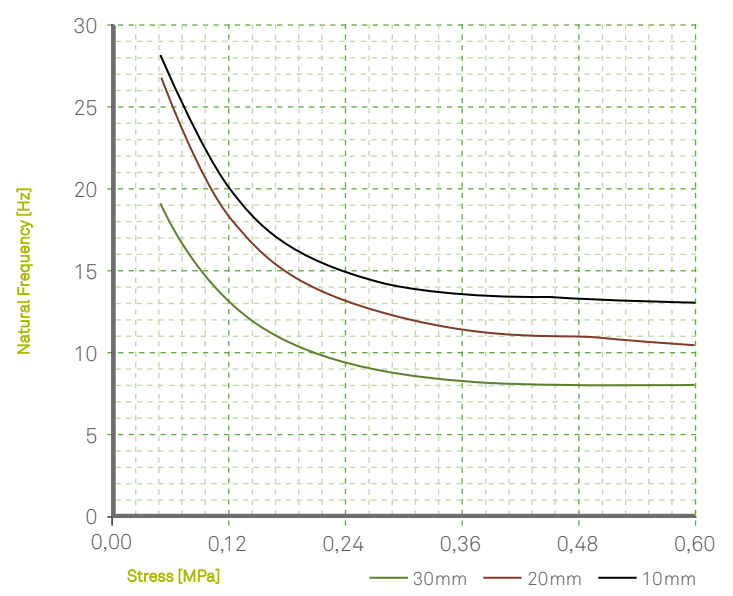
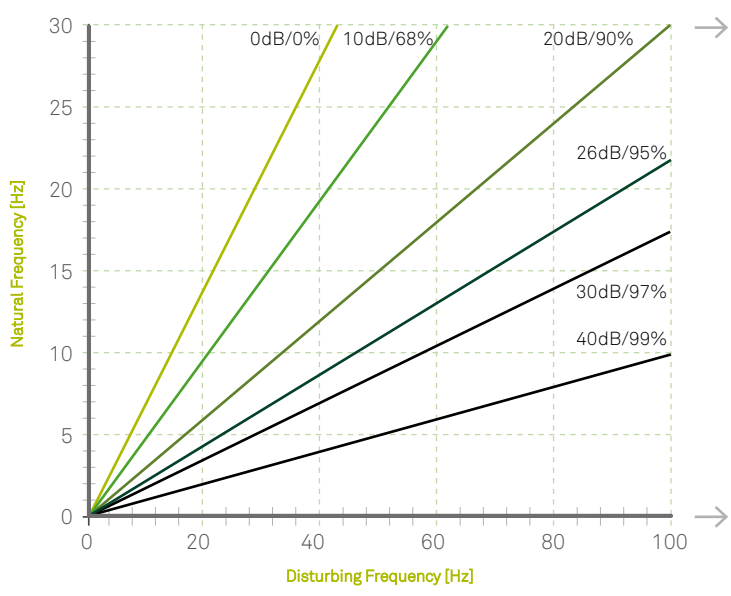


Selection Guideline

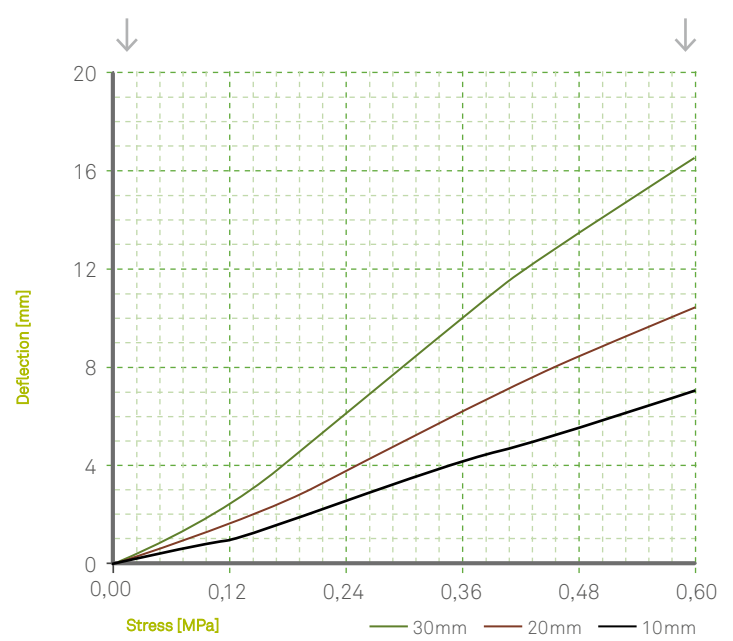
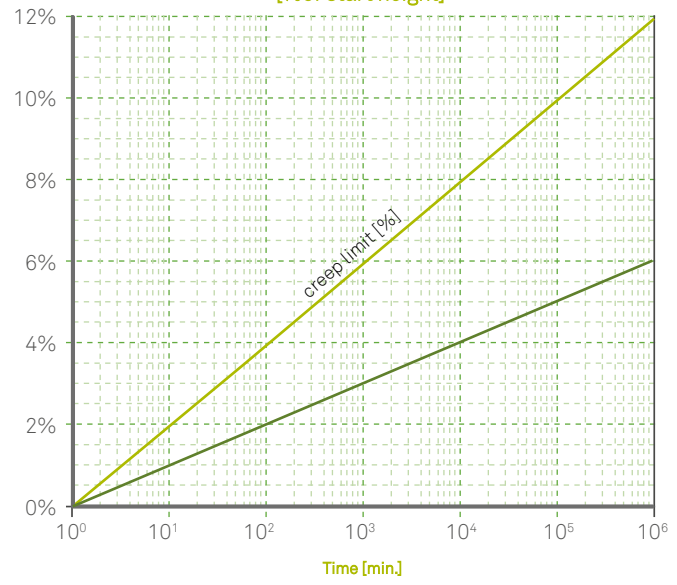
Material selection can be made using the Static/ Dynamic E-Module in the respective load range or using the Vibration Isolation Level Abacus below:

- Based on the machine/system disturbing frequency select the desired isolation level based on the material thickness and respective natural frequency for the specific load/ stress.
- Determine the material compression from the deflection curve at the specific load/ stress.
- Creep effect can be added to the above deflection via the Creep deflection graph calculating the additional deflection and adding.

Vibration Isolation Level



Creep Deflection @ 0.4 MPa [%of start height]

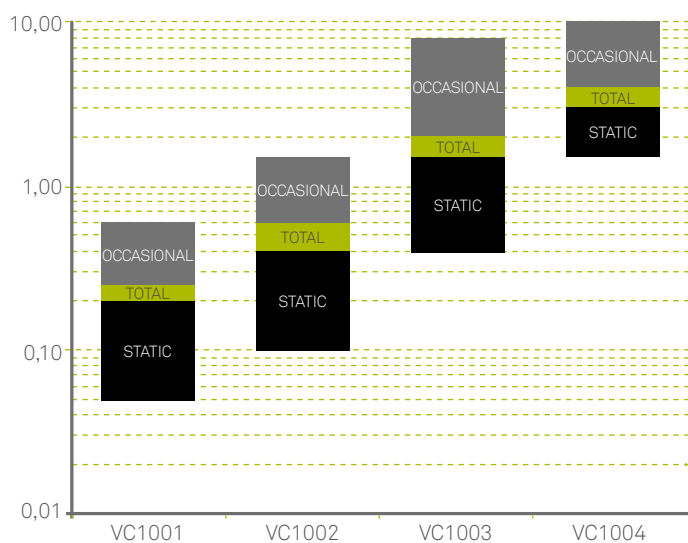


The data provided in this Material Data Sheet represents typical values. This information is not intended to be used as a purchasing specification and does not imply suitability for use in a specific application. Failure to select the proper product may result in either equipments damage or personal injury. Please contact Amorim Cork Composites regarding specific application recommendations. Amorim Cork Composites expressly disclaims all warranties, including any implied warranties or merchantability or of fitness for a particular purpose. Amorim Cork Composites is not liable for any indirect special, incidental, consequential, or punitive damages as a result of using the information listed in this MDS. Any of its material specification sheets, its products or any future use or re-use of them by any person or entity.

MATERIAL DESCRIPTION & PROPERTIES



WORK LOAD RANGE [MPa]



FEATURES

- Long term durability
- Low natural frequency / High vibration isolation
- Low water absorption
- Low creep rate

VC1003 Vibration Control material is an engineered compound with Cork and Natural Rubber.

This product is suitable for vibration control applications in need of very high isolation levels, used as discrete isolators (pads/strips) with a low resonance frequency and medium load.

LOAD RANGE

- **STATIC** 0,40 - 1,50 MPa (58 - 218 psi)
- **TOTAL** 2,0 MPa (290 psi)
- **OCCASIONAL** 8,0 MPa (1160 psi)

E-MODULE (@ stable load)

- **STATIC** 5,0 - 13,0 MPa (725 - 1885 psi)
- **DYNAMIC** 10,0 - 33,0 MPa (1450- 4785 psi)

TEMPERATURE

- **RANGE** -10 / +100°C (+14 / 212 °F)

Density (kg/m ³) ⁽¹⁾	1100 (68 lb/ft ³)
Shore hardness (Shore A) ⁽²⁾	45 - 60
Elongation at break (%) ⁽³⁾	> 300
Tensile strength (MPa) ⁽³⁾	> 5,0 (>725 psi)
Compression set 50%/23°C/70h (%) ⁽⁴⁾	< 15
Compressibility at 0,7 MPa (%) ⁽⁵⁾	40 - 60
Recovery at 0,7MPa (%) ⁽⁵⁾	> 90

(1) ASTM D297

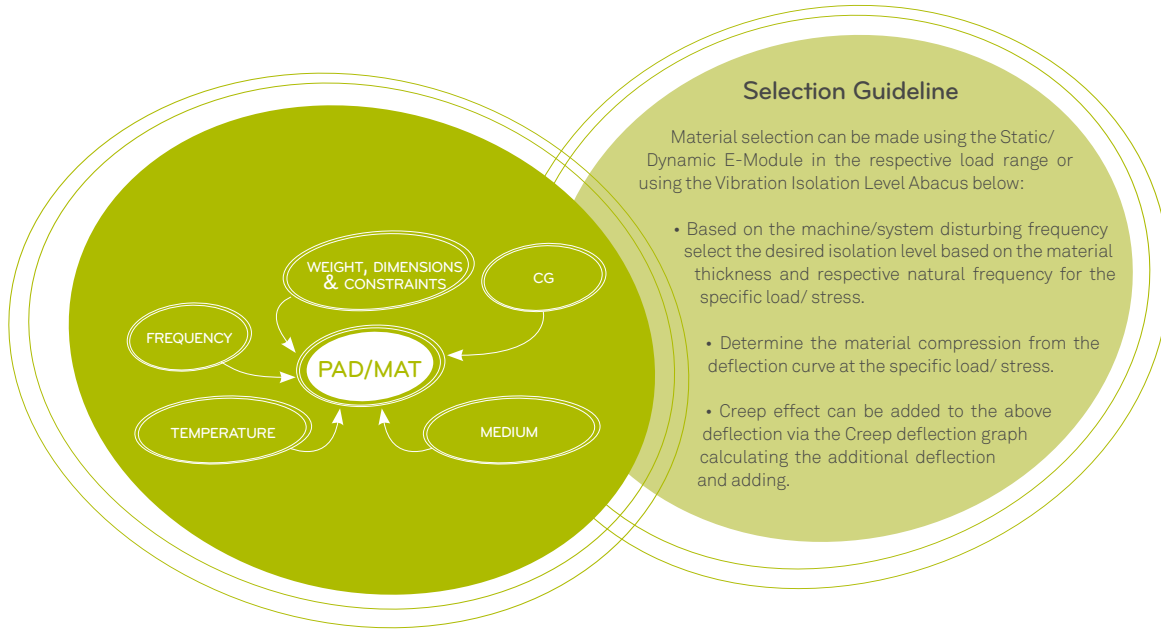
(2) ASTM D2240

(3) ASTM F152

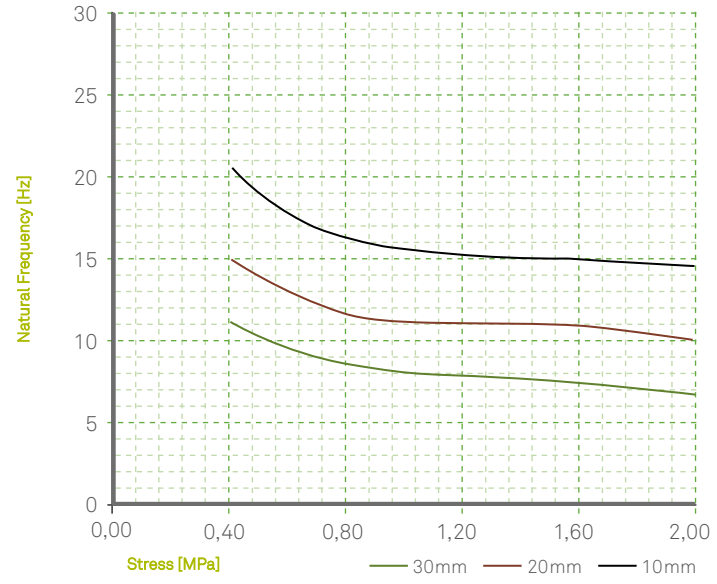
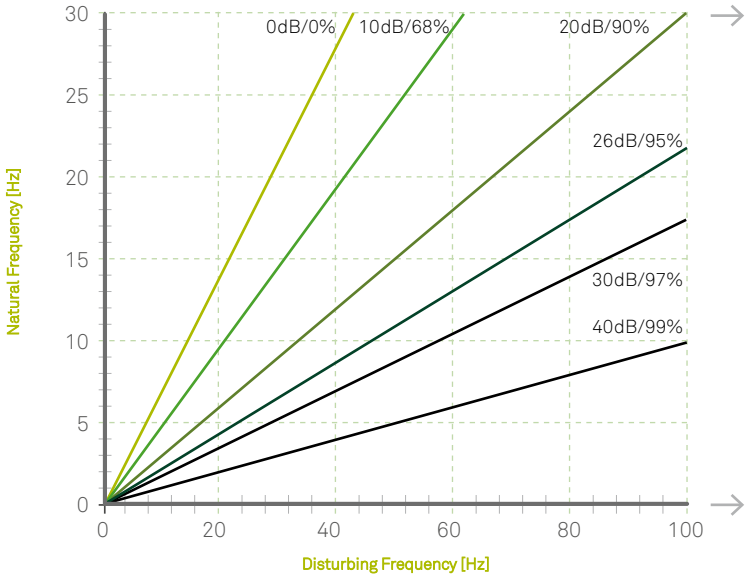
(4) DIN EN ISO 1856

(5) ASTM F36

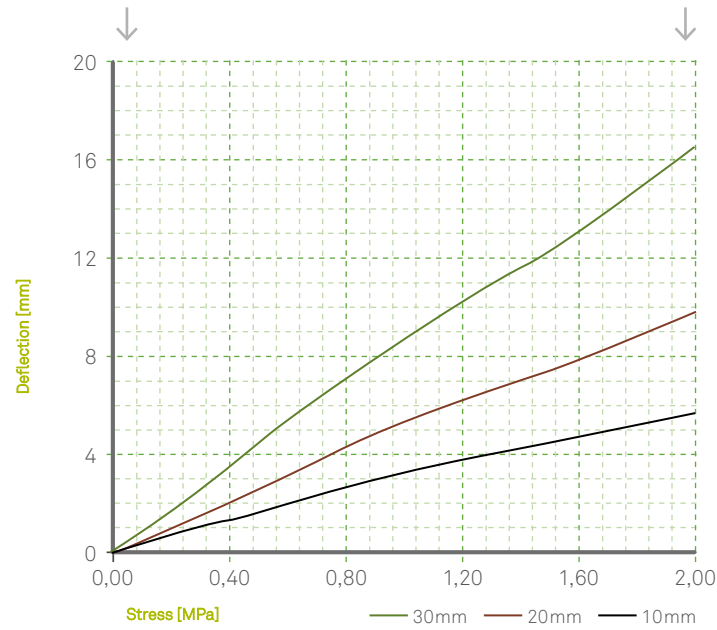
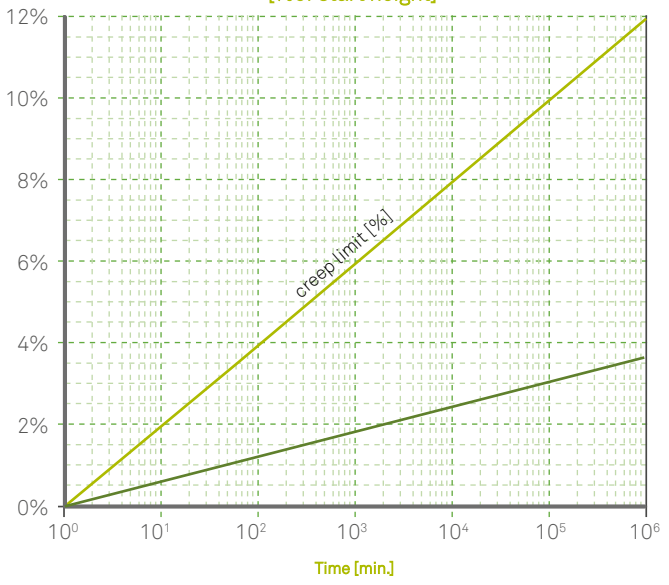




Vibration Isolation Level



Creep Deflection @ 1,5MPa [%of start height]



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MATERIAL DESCRIPTION & PROPERTIES



VC1004 Vibration Control material is an engineered compound with Cork and Natural Rubber.

This product is suitable for vibration control applications in need of very high isolation levels, used as discrete isolators (pads/strips) with a low resonance frequency and medium high load.

LOAD RANGE

- **STATIC** 1,5 - 3,0 MPa (217 - 435 psi)
- **TOTAL** 4,0 MPa (580 psi)
- **OCCASIONAL** 10,0 MPa (1450 psi)

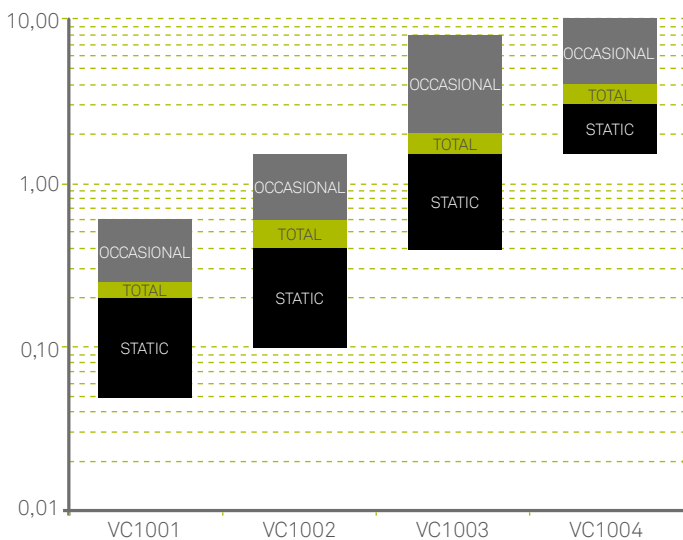
E-MODULE (@ stable load)

- **STATIC** 8,0 - 20,0 MPa (1160 - 2900 psi)
- **DYNAMIC** 16,0 - 50,0 MPa (2320 - 7251 psi)

TEMPERATURE

- **RANGE** -10 / +100°C (+14 / 212 °F)

WORK LOAD RANGE [MPa]



FEATURES

- Long term durability
- Low natural frequency / High vibration isolation
- Low water absorption
- Low creep rate

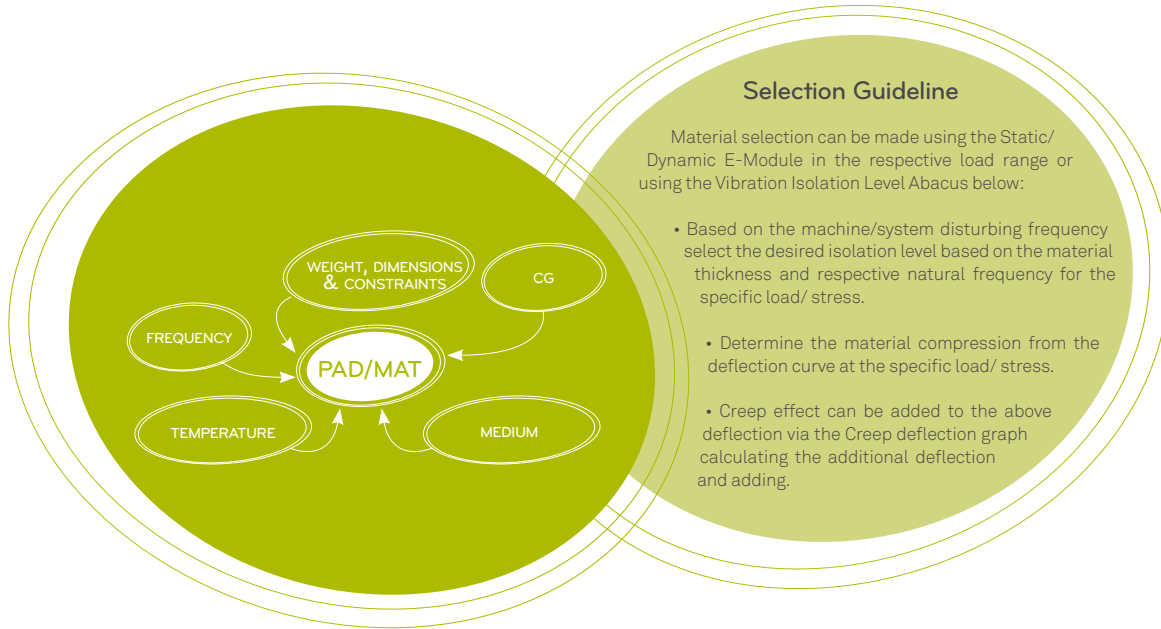
Density (kg/m ³) ⁽¹⁾	1125 (70 lb/ft ³)
Shore hardness (Shore A) ⁽²⁾	60 - 80
Elongation at break (%) ⁽³⁾	> 100
Tensile strength (MPa) ⁽³⁾	> 6,0 (<870 psi)
Compression set 50%/23°C/70h (%) ⁽⁴⁾	< 15
Compressibility at 0,7 MPa (%) ⁽⁵⁾	40 - 60
Recovery at 0,7MPa (%) ⁽⁵⁾	> 85

(1) ASTM D297
(2) ASTM D2240
(3) ASTM F152

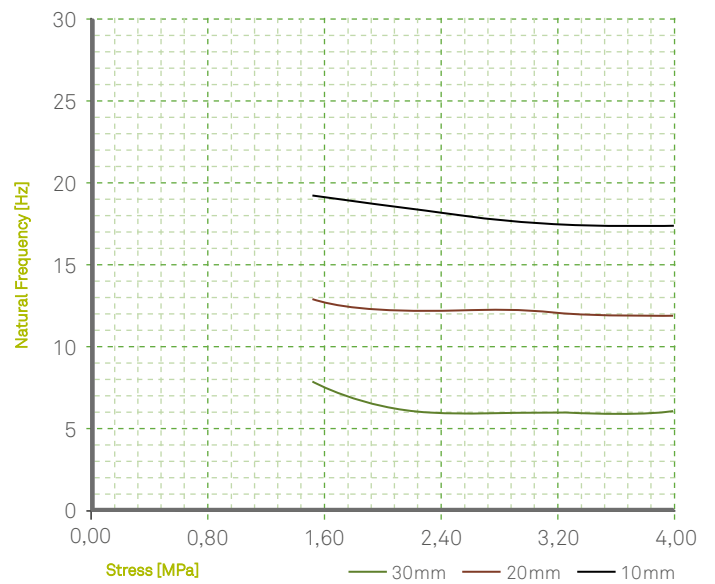
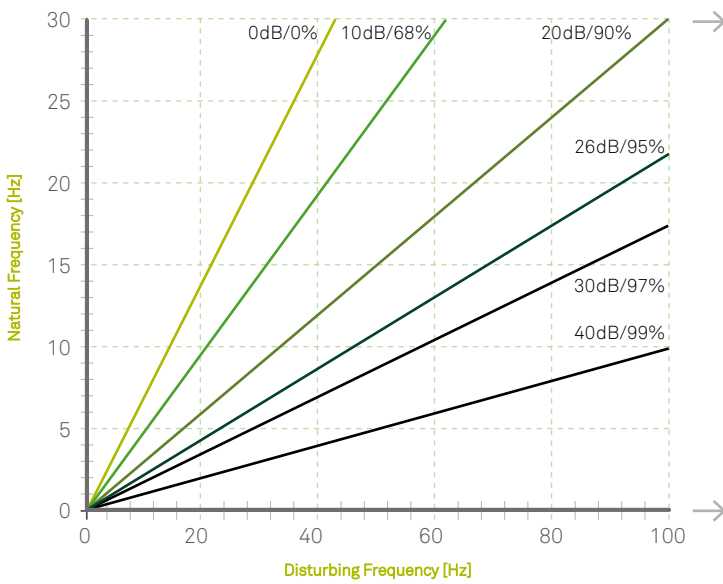
(4) DIN EN ISO 1856
(5) ASTM F36



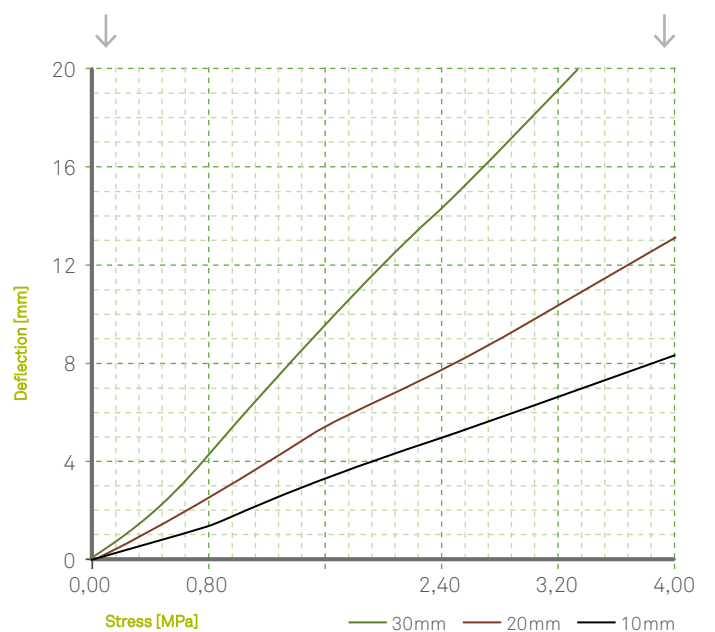
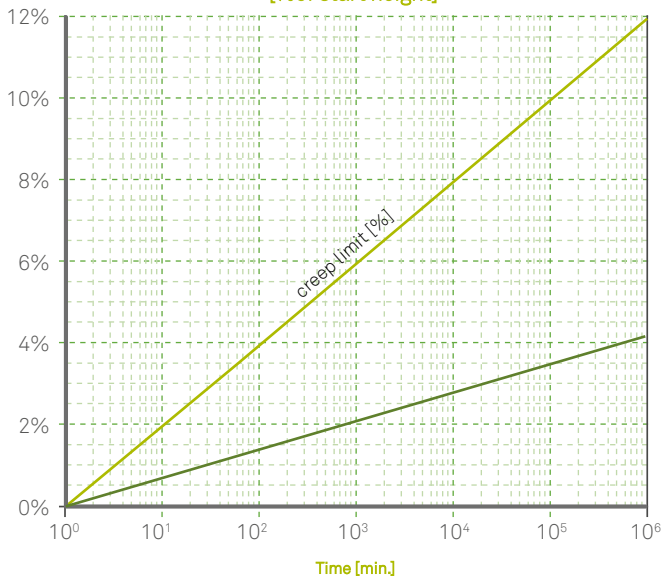
RoHS Compliant
AMORIM CORK COMPOSITES



Vibration Isolation Level



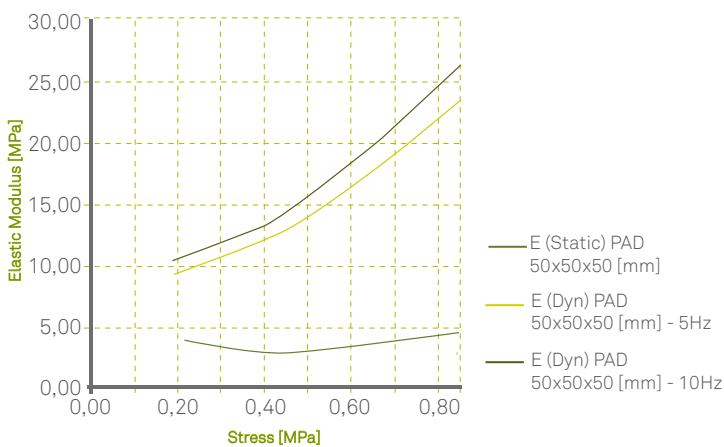
Creep Deflection @ 3 MPa [% of start height]



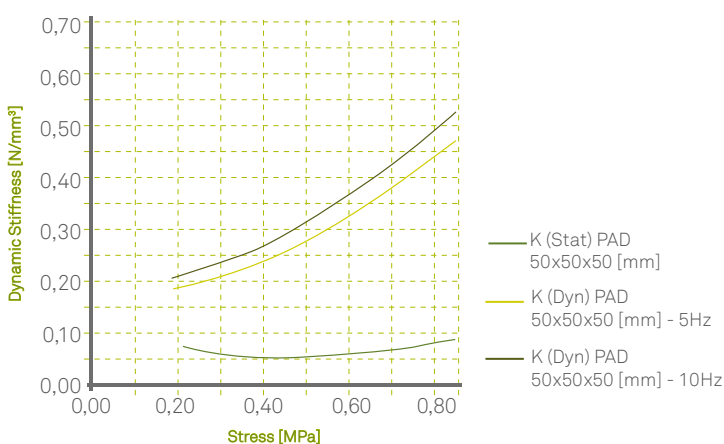
MATERIAL DESCRIPTION & PROPERTIES



MODULUS OF ELASTICITY [MPa]



DYNAMIC STIFFNESS [N/MM³]



VC-PAD-5015 is an engineered composite with Cork and polymeric matrix structure.

This product is suitable for vibration control in construction, used in the form of a cube, as discrete isolators in the decoupling of floating floors.

LOAD RANGE

- **STATIC** 0,30 - 0,85 MPa (43 - 123 psi)

E-MODULE (@ stable load)

- **STATIC** 2,9 - 4,4 MPa (420 - 640 psi)
- **DYNAMIC** 13 - 27 MPa (1885 - 3920 psi)

TEMPERATURE

- **RANGE** -10 / +100°C (+14 / 212 °F)

Density (kg/m ³) ⁽¹⁾	600 (40 lb/ft ³)
Shore hardness (Shore A) ⁽²⁾	60 - 70
Elongation at break (%) ⁽³⁾	> 15
Tensile strength (MPa) ⁽³⁾	> 0,7 (>102 psi)
Compression set 50%/23°C/70h (%) ⁽⁴⁾	< 15
Compressibility at 0,7 MPa (%) ⁽⁵⁾	35 - 50
Recovery at 0,7MPa (%) ⁽⁵⁾	> 70

(1) ASTM D297

(2) ASTM D2240

(3) ASTM F152

(4) DIN 53572

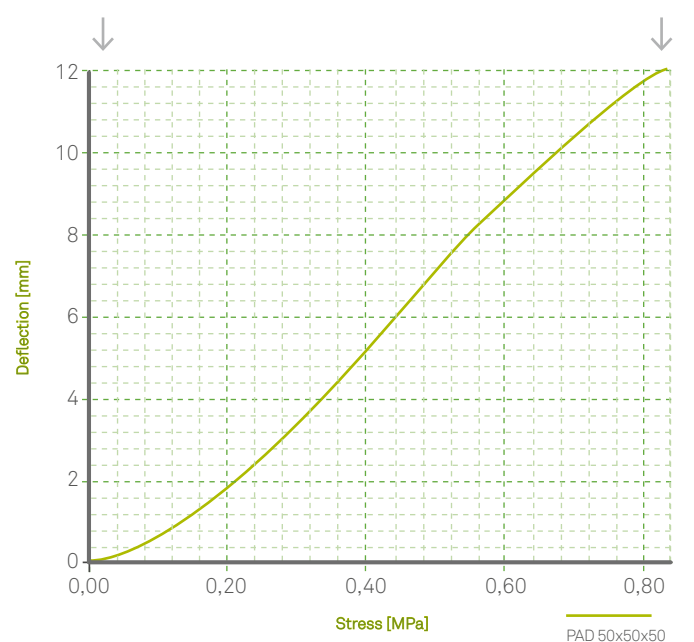
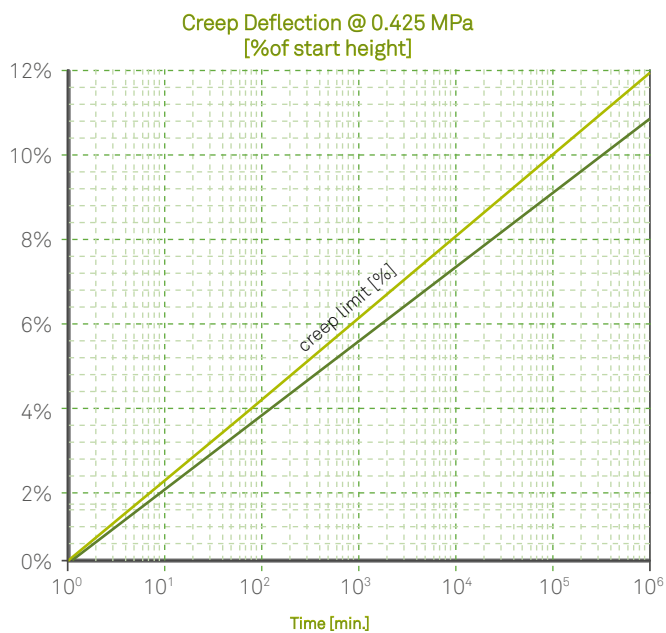
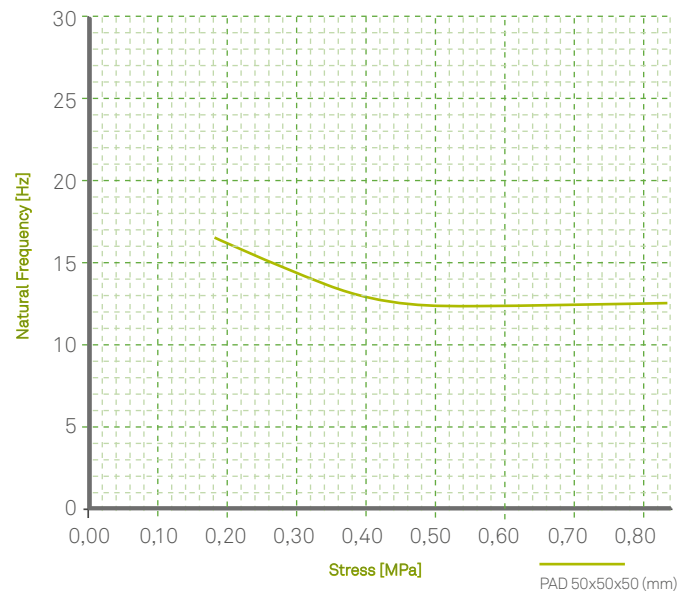
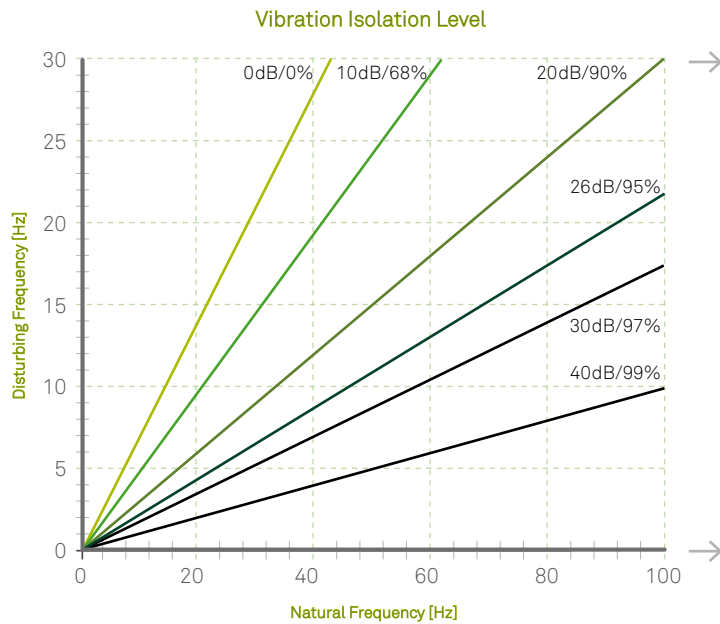
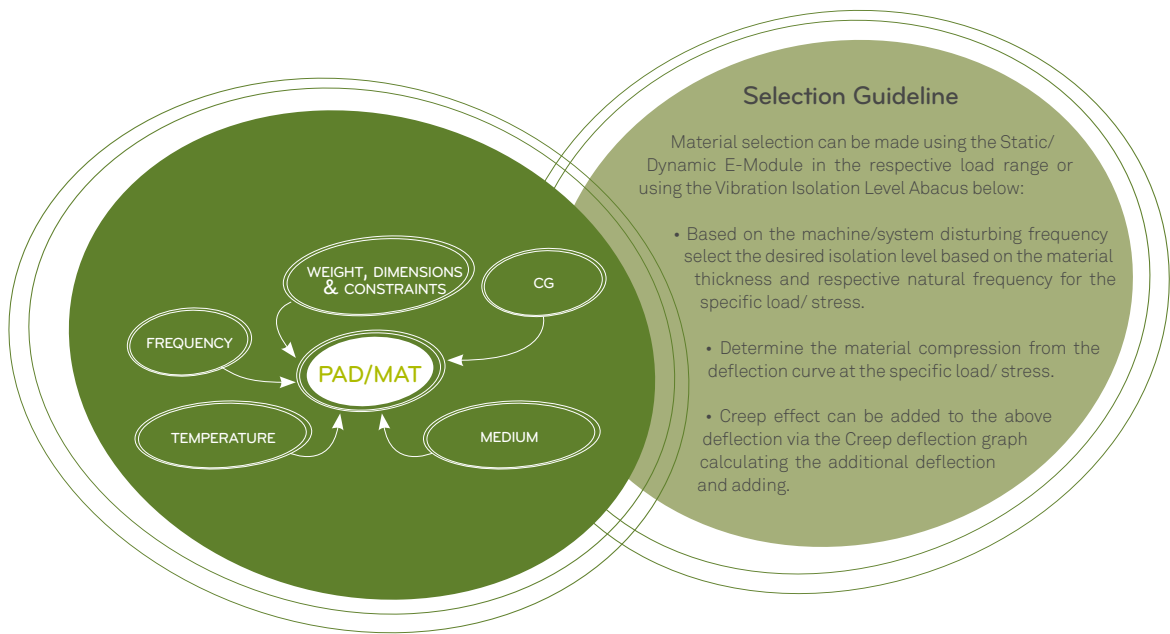
(5) ASTM F36

FEATURES

- Long term durability
- Low natural frequency / High vibration isolation
- Low water absorption
- Low creep rate



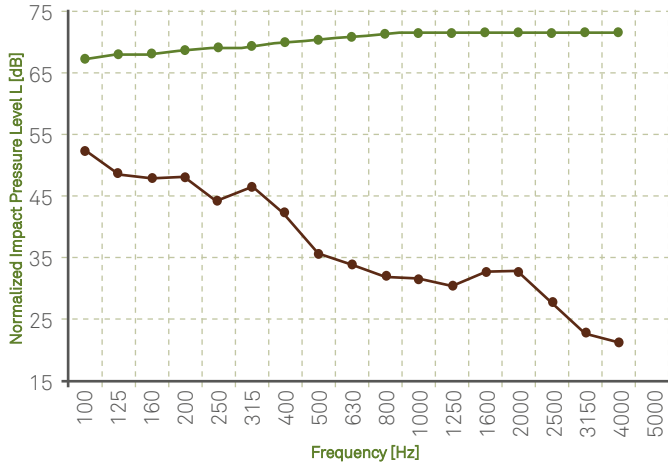
RoHS Compliant
AMORIM CORK COMPOSITES





ACOUSTICAL RESULTS

Test procedure according to standards ISO 10140-1:2010; ISO 10140-3:2010; ISO 10140-4:2010 and ISO 717-2:2013

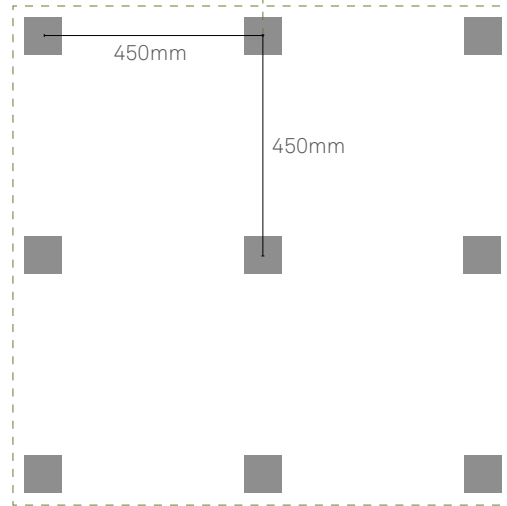
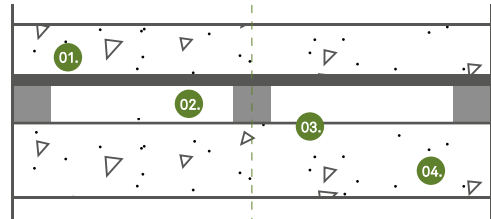


$L_{n,r}$ - Normalized impact sound pressure level of the reference floor with the floor covering under test;
 $L_{n,r,0}$ - Normalized impact sound pressure level of the Lab reference floor;
 ΔL_w - Impact sound pressure level reduction index of the covering under test, on a normalized floor;

Ref. Test Report	Dimensions	$L_{n,r,w}(C_{l,r})$	$\Delta L_w(C_{l,\Delta})$
A15-177	50x50x50 (mm)	42 (5) dB	36 (-5) dB

$L_{n,r,0}$ (dB)
 $L_{n,r,w}$ (dB) - 50x50x50mm

TEST APPARATUS [ΔL_w & IIC]



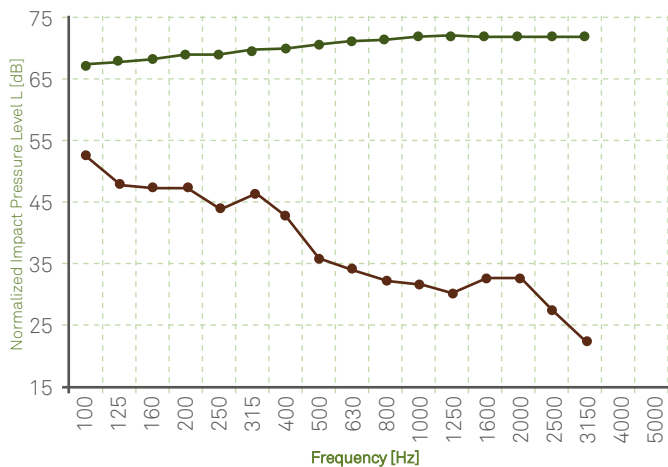
- 01. Concrete floating screed with 100mm thickness
- 02. Blackboard with 16mm
- 03. Agglomerated cork and recycled rubber pad - VC-PAD-5015
- 04. Reinforced concrete slab of thickness 120mm

L_{ref} (dB)
 $L_{ref,c}$ (dB) - 50x50x50mm



ACOUSTICAL RESULTS

Test procedure according to standards ISO 10140-1:2010; ISO 10140-3:2010; ISO 10140-4:2010. Normalized impact sound pressure level and IIC rating determined according to standards ASTM E492-09 and ASTM E989-06.

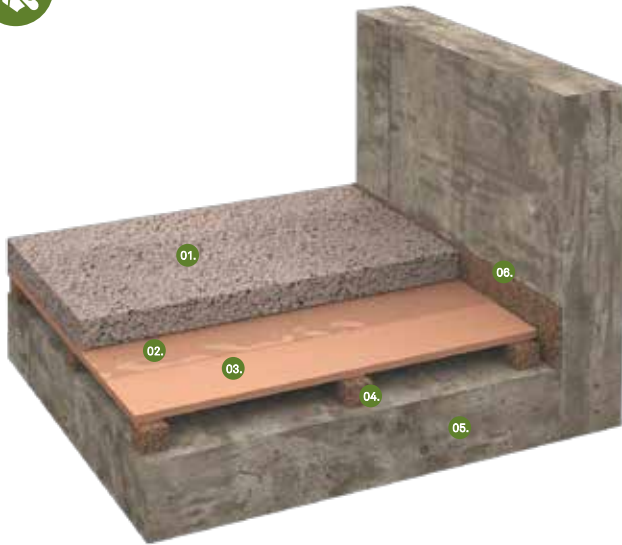


L_{ref} - Normalized impact sound pressure level of the reference floor with the floor covering under test;
 $L_{ref,c}$ - Normalized impact sound pressure level of the Lab reference floor;

Dimensions	IIC _c
50x50x50 (mm)	67dB



INSTALLATION



01.

Concrete floating screed

02.

Polyethylene foil

03.

Blackboard

04.

Agglomerated cork and recycled rubber pad VC-PAD-5015

05.

Reinforced concrete slab

06.

Perimeter insulation barrier

General Installation Instructions

The following installation instructions are recommended by Amorim Cork Composites, but are not intended as a definitive project specification. They are presented in an attempt to be used with recommended installation procedures of the flooring manufacturers and screed.

Room Conditions

Temperature > -5°C / Room moisture content < 75%.

Subfloor

All subfloor work should be structurally sound, clear and level. The moisture content of the subfloor should not be more than 2.5% (CM) by weight measured on concrete subfloors.

Installation Instruction for Acousticork VC-PAD 5015

Unpack the Acousticork VC-PAD-5015 at least 24h before the installation and store it in the room where the application will take place.

Loosely place the product according with the placement and distances defined in the project specifications ensuring the correct distribution of loads.

Lay the blackboard panels on top of the pads, making

sure that their position doesn't change with this operation, and that the joints of the panels are butted tight.

Install polyethylene foil (PE) over the blackboard panels and perimeter insulation barrier in order to make sure that no concrete water can penetrate the system. It is recommended to install this foil with sufficient overlaps.

Perimeter Insulation Barrier

Install a perimeter insulation barrier vertically around the entire room perimeter. It should have enough width to decouple the screed from the walls and consequently reduce the transmission of marginal noise. The barrier must also be applied around the surface of pipes and ducts or other element protruding from the floor. Spot adhere the strips to the wall using acrylic glue on a bead of silicon sealant.

Screed and final flooring

Cast a suitable screed over the loose laid PE foil previously installed over the blackboard.

Always follow manufacturers recommended installation instructions.

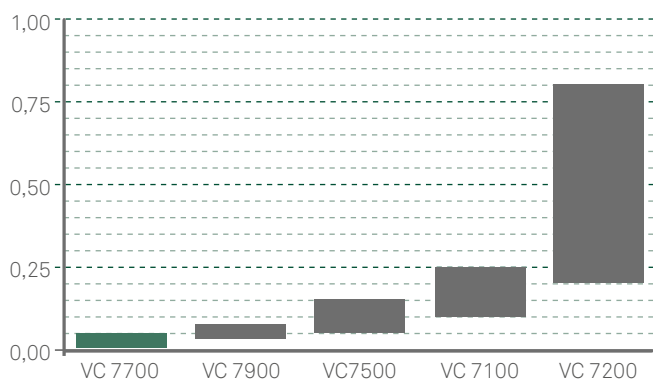
For detailed installation instructions, please contact us.

ACOUSTICORK

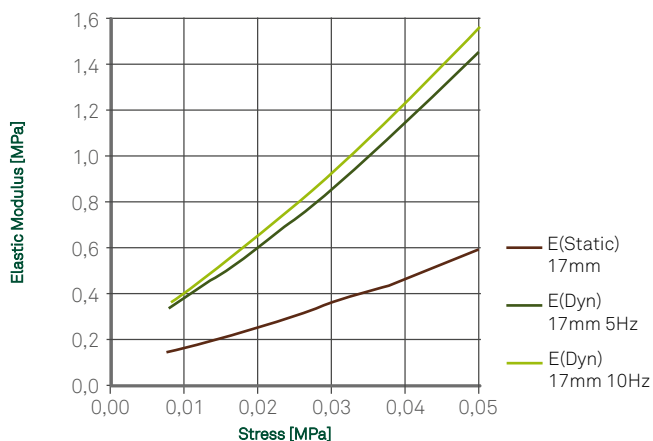
VC7700 MATERIAL DATA SHEET

MATERIAL DESCRIPTION & PROPERTIES

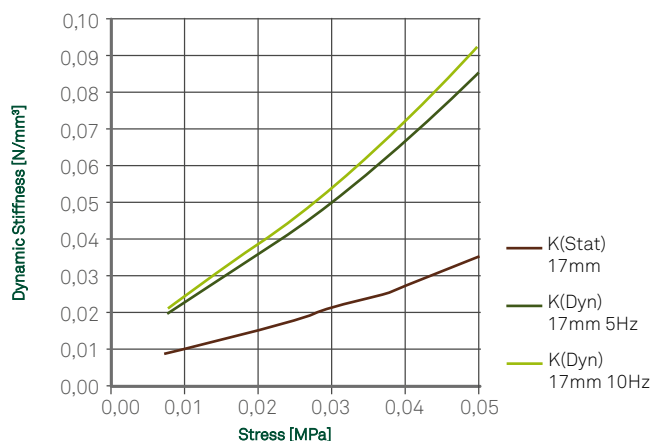
WORK LOAD RANGE [MPa]



ELASTIC MODULUS [MPa]



DYNAMIC STIFFNESS [N/mm³]



VC 7700 is an engineered polyurethane-bound recycled rubber-granulate material with a profiled surface.

This product is suitable for vibration control in construction, used as a mat or strip for ultra low loads, to reduce vibration, absorb shock and structural borne noise.

LOAD RANGE

- PERMANENT STATIC 0,01-0,05 MPa (1,5 - 7,3 psi)

E-MODULE

- STATIC⁽¹⁾ 0,17-0,60 MPa (25- 87 psi)
- DYNAMIC⁽²⁾ 0,35-1,6 MPa (51 - 232 psi)

(1) DIN 53513 (ADAPTED) - TANGENTIAL MODULUS
(2) DIN 53513 (ADAPTED) - DEPENDING ON LOAD AND FREQUENCY

Compression Set (%) ⁽¹⁾	6,2
Tensile Strength (MPa) ⁽²⁾	> 0,25 (36 psi)
Elongation at break (%) ⁽²⁾	> 60
Tear- Resistance (N/mm) ⁽³⁾	> 3,217
Flammability ⁽⁴⁾	*B2

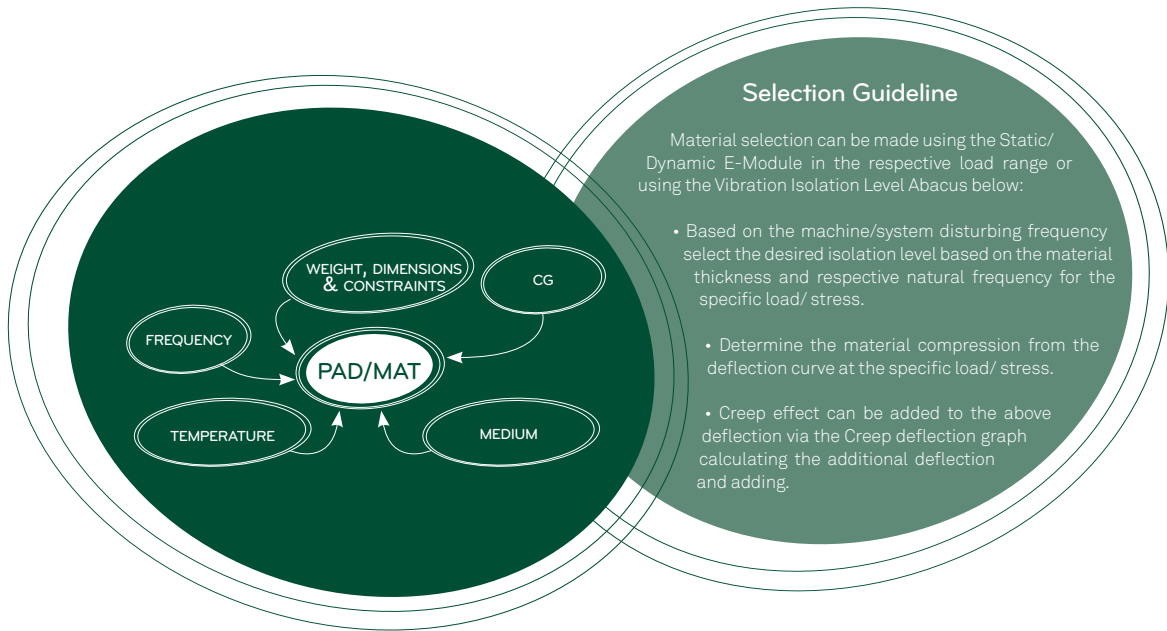
(1) DIN 53572 - MEASURED 30MIN AFTER DECOMPRESSION WITH 50% DEFORMATION / 23°C AFTER 72H
(2) DIN 53571
(3) DIN 53515
(4) DIN 4102
* B2 = NORMAL FLAMMABLE

FEATURES

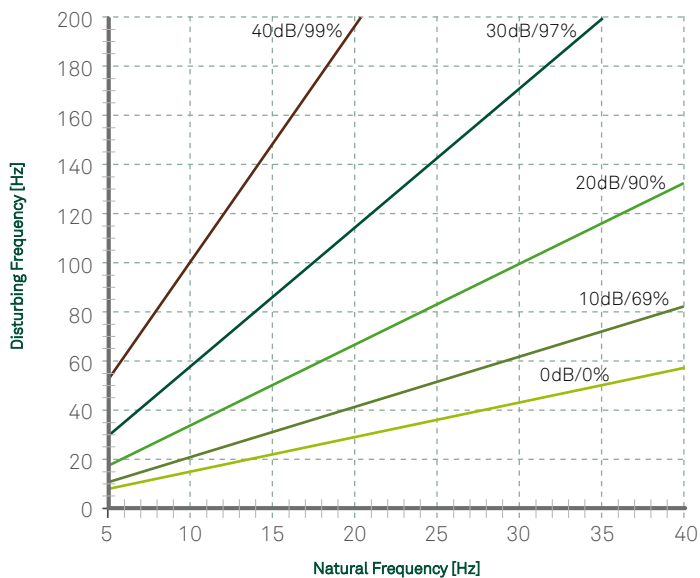
- Revalorised product
- Supplied in rolls, sheets or strips
- Available in a max. width of 1250mm and up to a length of 10m.



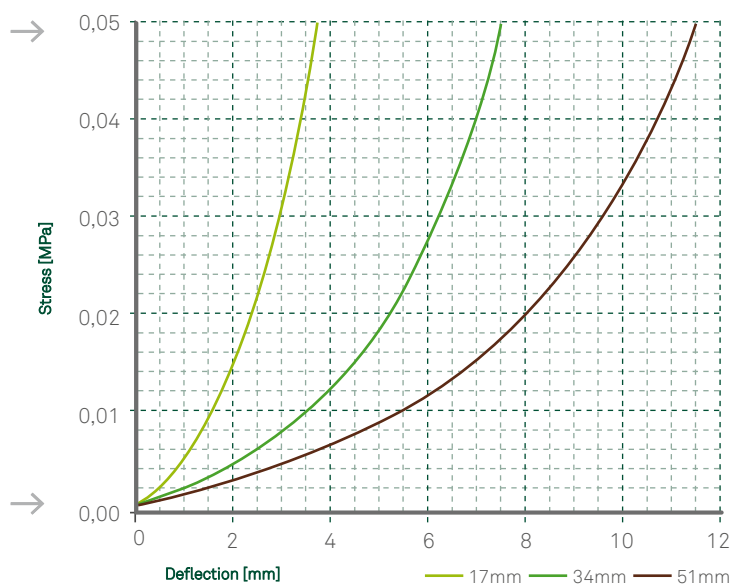
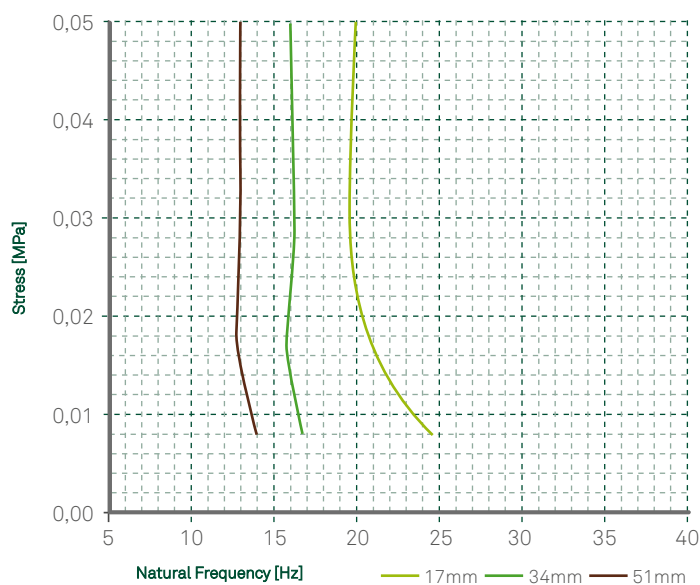
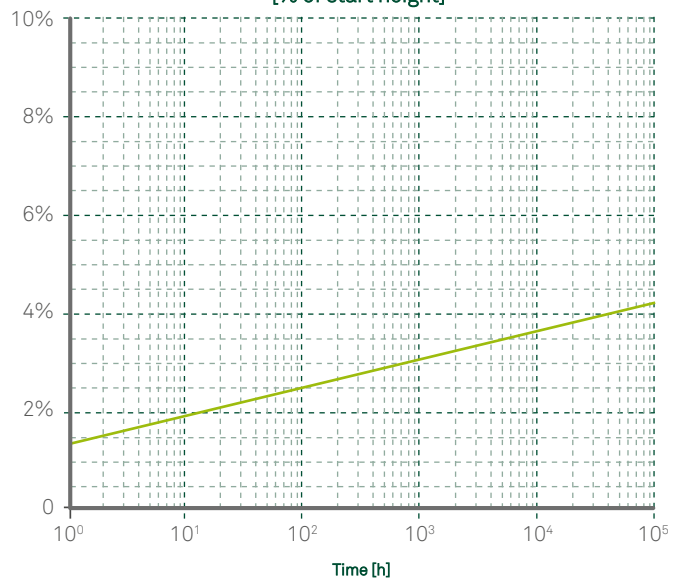
RoHS Compliant
AMORIM CORK COMPOSITES



Vibration Isolation



**Creep Deflection @ 0.125 MPa
[% of start height]**

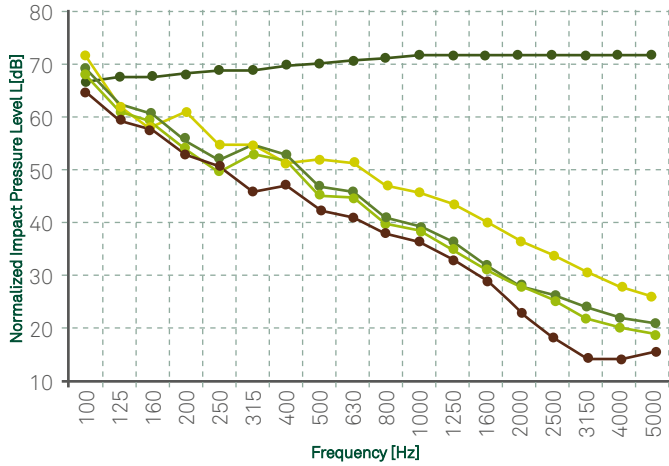


Note: 34mm and 51mm thickness achieved through stacking 17mm (profile) thickness layers.



ACOUSTICAL RESULTS

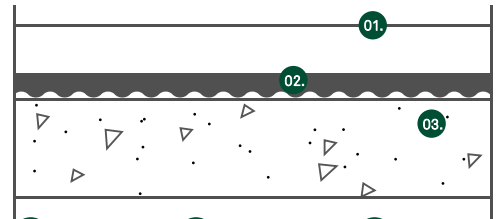
Test procedure according to standards ISO 10140-1:2010; ISO 10140-3:2010; ISO 10140-4:2010 and ISO 717-2:2013



$L_{n,r}$ - Normalized impact sound pressure level of the reference floor with the floor covering under test;
 $L_{n,r,0}$ - Normalized impact sound pressure level of the Lab reference floor;
 ΔL_w - Impact sound pressure level reduction index of the covering under test, on a normalized floor;



TEST APPARATUS [ΔL_w & IIC]



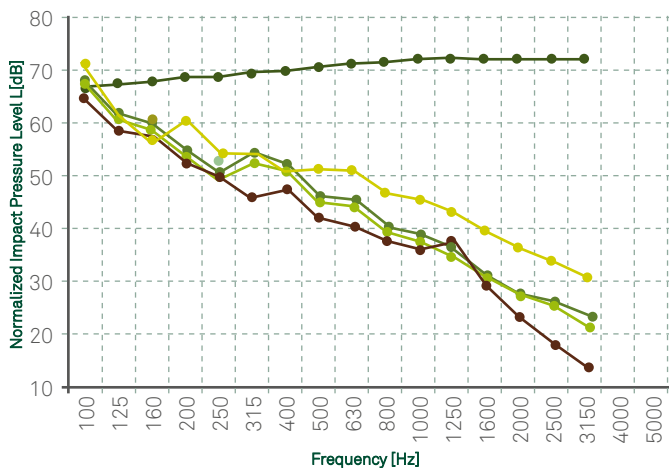
- 01. Concrete floating screed with 70mm thickness
- 02. Agglomerated recycled rubber resilient layer with one face dimpled - VC 7700
- 03. Reinforced concrete slab of thickness 140mm

Ref. Test Report	Thickness	$L_{n,r,w}(C_{l,r})$	$\Delta L_w(C_{l,\Delta'})$
ACU 118/09	8/4mm	54 (4) dB	24 (-15) dB
ACL 002/13	10/5mm	53 (3) dB	25 (-14) dB
ACL 019/13	12/6mm	51 (4) dB	27 (-15) dB
ACL 009/15	17/9mm	49 (3) dB	29 (-14) dB

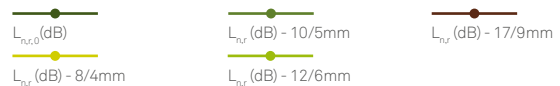


ACOUSTICAL RESULTS

Test procedure according to standards ISO 10140-1:2010; ISO 10140-3:2010; ISO 10140-4:2010. Normalized impact sound pressure level and IIC rating determined according to standards ASTM E492-09 and ASTM E989-06.



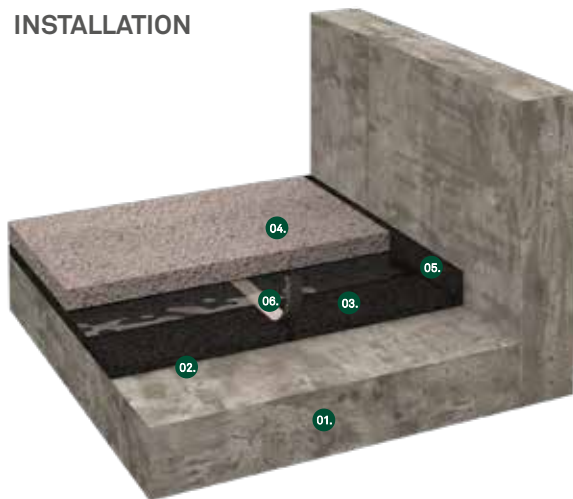
L_{ref} - Normalized impact sound pressure level of the reference floor with the floor covering under test;
 $L_{ref,c}$ - Normalized impact sound pressure level of the Lab reference floor;



Thickness	IIC _c
8/4 mm	48 dB
10/5 mm	50 dB
12/6 mm	52 dB
17/9 mm	55 dB



INSTALLATION



01.

Reinforced
concrete slab

02.

Vapor
barrier

03.

Agglomerated recycled rubber
resilient layer - VC 7700

04.

Concrete floating
screed

05.

Perimeter insulation
barrier

06.

Adhesive
tape

General Installation Instructions

The following installation instructions are recommended by Amorim Cork Composites, but are not intended as a definitive project specification. They are presented in an attempt to be used with recommended installation procedures of the flooring manufacturers and screed.

Room Conditions

Temperature > -5°C / Room moisture content < 75%.

Subfloor

All subfloor work should be structurally sound, clear and level. The moisture content of the subfloor should not be more than 2.5% (CM) by weight measured on concrete subfloors.

Perimeter Insulation Barrier

Install a perimeter insulation barrier vertically around the entire perimeter of the room with width equal to that of the floor build up. This is highly recommended in order to avoid lateral propagation of impact noise. The barrier must also be applied in the perimeter of pipes, ducts or any other component protruding from the floor. Spot adhere the strips to the wall using acrylic glue or a bead of silicone sealant.

Installation Instruction for Acousticork VC7700

Unpack the Acousticork VC7700 at least 24h before the installation and store it in the room where the installation will take place. Cut and trim the Acousticork VC 7700 to the desired size to fit the installation. Apply directly over the subfloor. Always ensure that material is installed to fit the application avoiding the creation of waves in the material.

Place the Acousticork VC7700 directly against the insulation perimeter barrier already installed. Proceed to cover the entire floor making sure that the joints are butted tight and use an adequate tape to fix it. After completion, the Acousticork VC7700 should cover the entire flooring area without gaps and with joints securely taped. An waterproof membrane (ex. Polyethylene foil) minimum 0.2mm covering the entire flooring area MUST be installed prior to the screed. Install it, minimum 150mm wide vertically and overlapping it, minimum 100mm. After completion, the insulation vapour barrier should cover the entire Acousticork VC7700 area without gaps. Never mechanically fasten the Acousticork VC7700 and/or the PE foil barrier with screws, nails or staples as this will severely diminish the performance of the insulation barrier.

Screed and Final Flooring

Cast a suitable screed over the loose laid PE foil previously installed over the product.

Always follow manufacturers recommended installation instructions.

For detailed installation instructions, please contact us.



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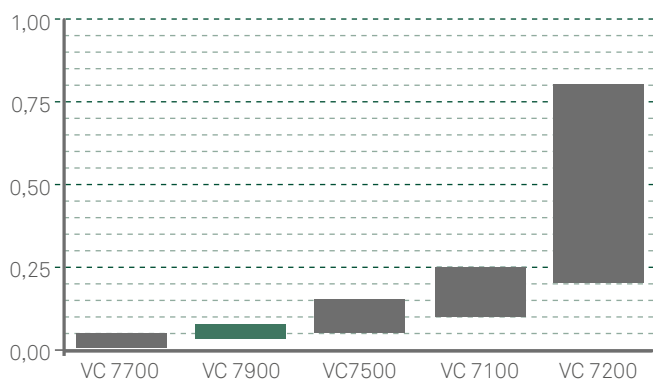
The data provided in this Material Data Sheet represents typical values. This information is not intended to be used as a purchasing specification and does not imply suitability for use in a specific application. Failure to select the proper product may result in either equipments damage or personal injury. Please contact Amorim Cork Composites regarding specific application recommendations. Amorim Cork Composites expressly disclaims all warranties, including any implied warranties or merchantability or of fitness for a particular purpose. Amorim Cork Composites is not liable for any indirect special, incidental, consequential, or punitive damages as a result of using the information listed in this MDS. Any of its material specification sheets, its products or any future use or re-use of them by any person or entity.

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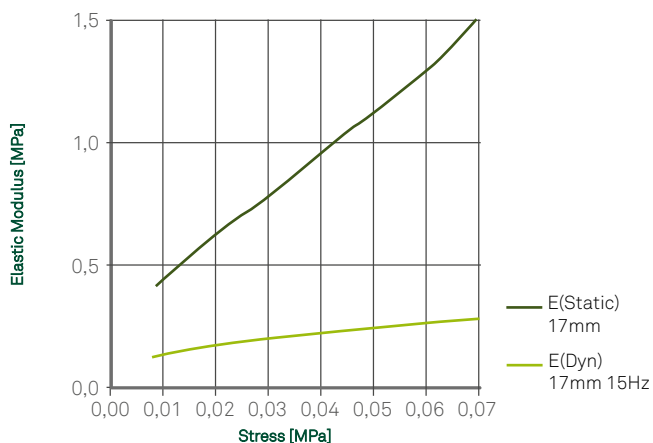
ACC.208 | EN

MATERIAL DESCRIPTION & PROPERTIES

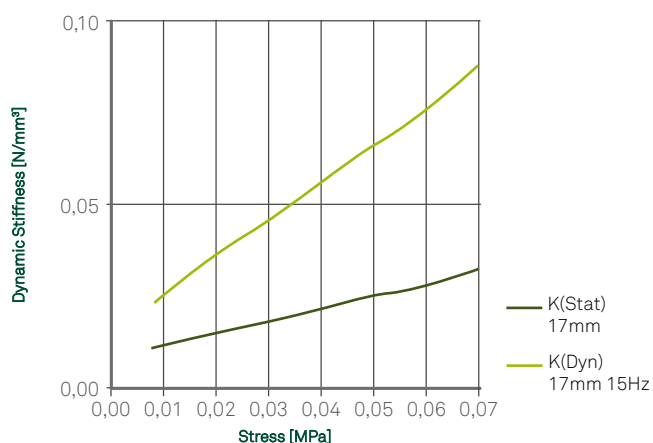
WORK LOAD RANGE [MPa]



ELASTIC MODULUS [MPa]



DYNAMIC STIFFNESS [N/mm³]



VC 7900 is an engineered polyurethane-bound recycled rubber-granulate material with a profiled surface.

This product is suitable for vibration control in construction, used as a mat or strip for ultra low loads, to reduce vibration, absorb shock and structural borne noise.

LOAD RANGE

- PERMANENT STATIC 0,025-0,070 MPa (3,6 - 10,2 psi)

E-MODULE

- STATIC⁽¹⁾ 0,04-0,25 MPa (6 - 36 psi)
- DYNAMIC⁽²⁾ 0,27-1,60 MPa (39 - 232 psi)

(1) DIN 53513 (ADAPTED) - TANGENTIAL MODULUS
 (2) DIN 53513 (ADAPTED) - DEPENDING ON LOAD AND FREQUENCY

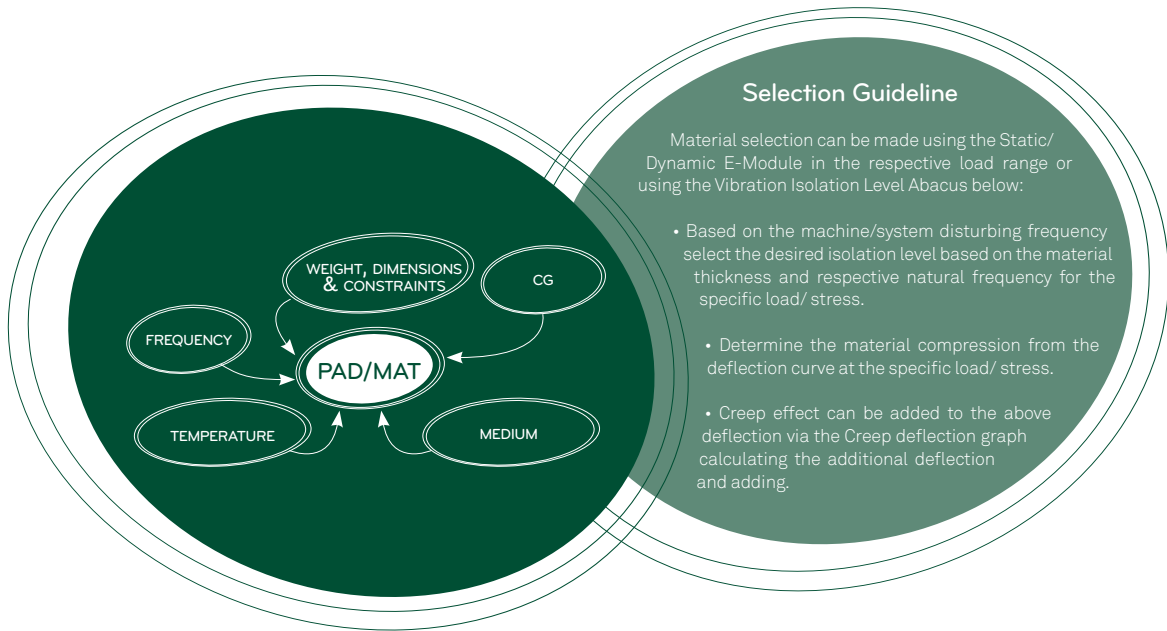
Compression Set (%) ⁽¹⁾	0,068
Tensile Strength (MPa) ⁽²⁾	>0,35 (51 psi)
Elongation at break (%) ⁽²⁾	>75
Tear- Resistance (N/mm) ⁽³⁾	>6,497
Flammability ⁽⁴⁾	*B2

(1) DIN 53572 - MEASURED 30MIN AFTER DECOMPRESSION WITH 50% DEFORMATION / 23°C AFTER 72H
 (2) DIN 53571
 (3) DIN 53515
 (4) DIN 4102
 * B2 = NORMAL FLAMMABLE

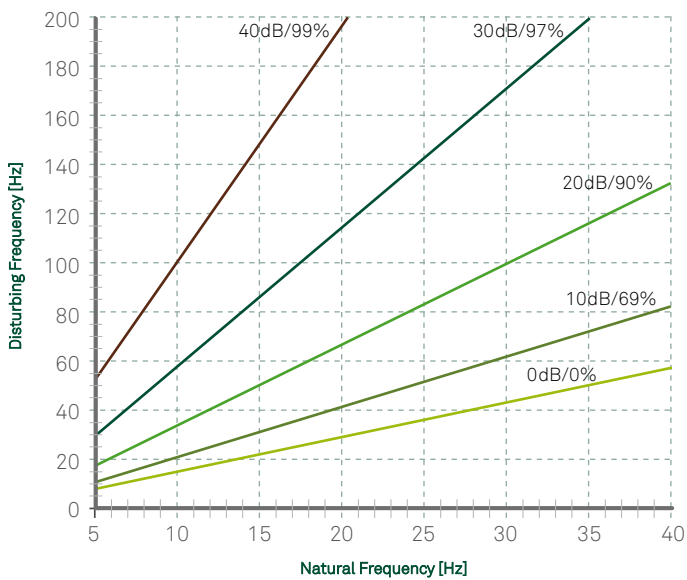
FEATURES

- Revalorised product
- Supplied in rolls, sheets or strips
- Available in a max. width of 1250mm and up to a length of 10m.

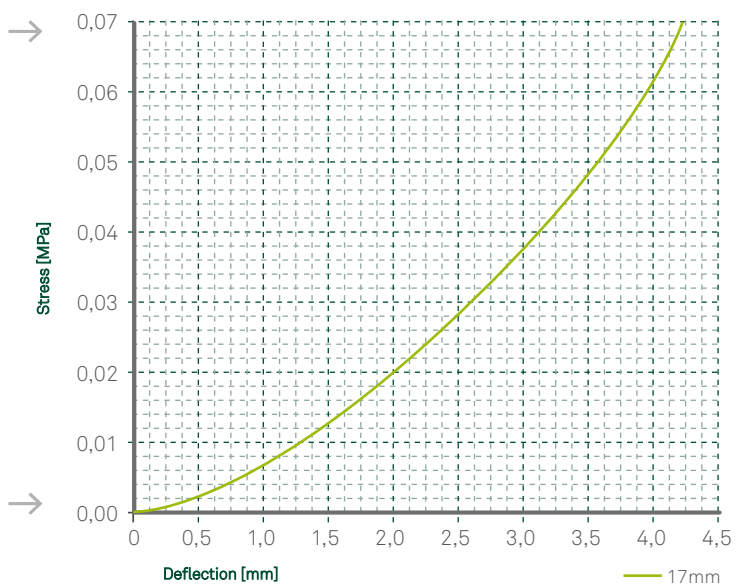
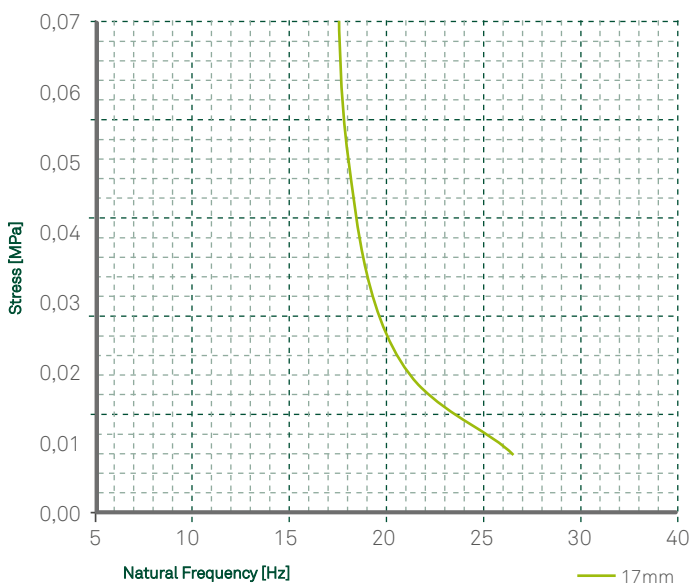
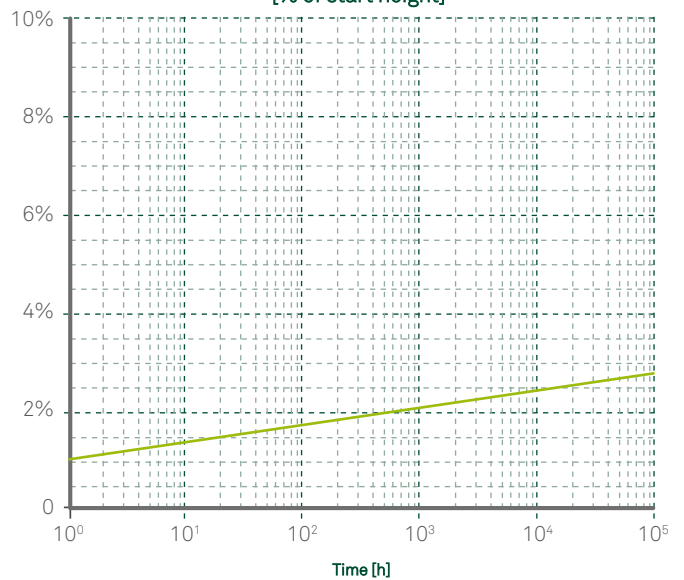




Vibration Isolation



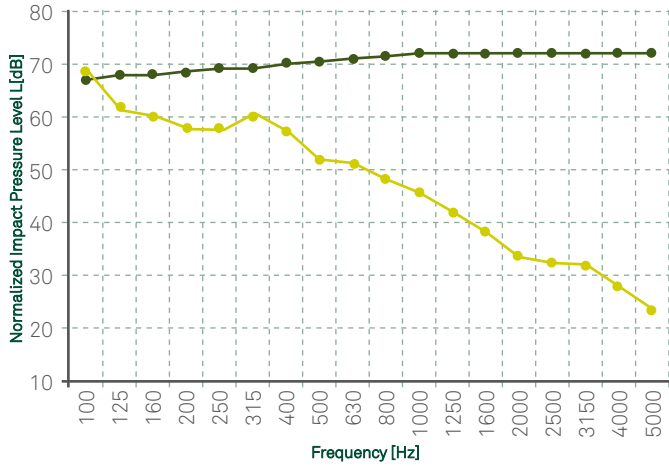
**Creep Deflection @ 0.035 MPa
[% of start height]**





ACOUSTICAL RESULTS

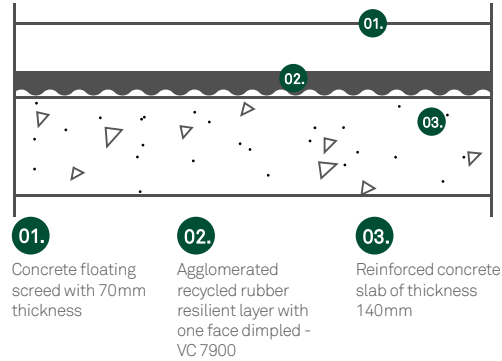
Test procedure according to standards ISO 10140-1:2010; ISO 10140-3:2010; ISO 10140-4:2010 and ISO 717-2:2013



$L_{n,r}$ - Normalized impact sound pressure level of the reference floor with the floor covering under test;
 $L_{n,r,0}$ - Normalized impact sound pressure level of the Lab reference floor;
 ΔL_w - Impact sound pressure level reduction index of the covering under test, on a normalized floor;

$L_{n,r,0}$ (dB)
 $L_{n,r}$ (dB) - 8/4mm

TEST APPARATUS [ΔL_w & IIC]

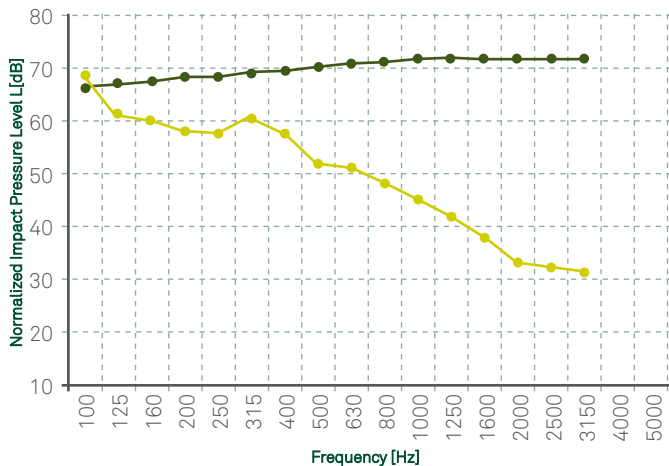


Ref. Test Report	Thickness	$L_{n,r,w}(C_{l,r})$	$\Delta L_w(C_{l,\Delta'})$
ACL168/15	8/4mm	55 (1) dB	23 (-12) dB



ACOUSTICAL RESULTS

Test procedure according to standards ISO 10140-1:2010; ISO 10140-3:2010; ISO 10140-4:2010. Normalized impact sound pressure level and IIC rating determined according to standards ASTM E492-09 and ASTM E989-06.



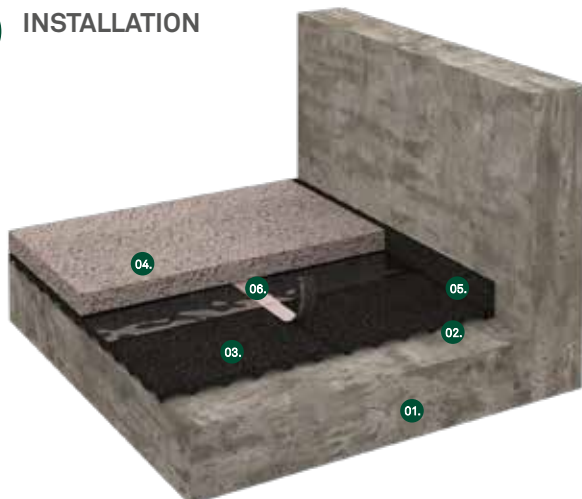
L_{ref} - Normalized impact sound pressure level of the reference floor with the floor covering under test;
 $L_{ref,c}$ - Normalized impact sound pressure level of the Lab reference floor;

L_{ref} (dB)
 $L_{ref,c}$ (dB) - 8/4 mm

Thickness	IIC _c
8/4 mm	51 dB



INSTALLATION



01.

Reinforced
concrete slab

02.

Vapor
barrier

03.

Agglomerated recycled rubber
resilient layer with one face
dimpled - VC 7900

04.

Concrete floating
screed

05.

Perimeter insulation
barrier

06.

Adhesive
tape

General Installation Instructions

The following installation instructions are recommended by Amorim Cork Composites, but are not intended as a definitive project specification. They are presented in an attempt to be used with recommended installation procedures of the flooring manufacturers and screed.

Room Conditions

Temperature > -5°C / Room moisture content < 75%.

Subfloor

All subfloor work should be structurally sound, clear and level. The moisture content of the subfloor should not be more than 2.5% (CM) by weight measured on concrete subfloors.

Perimeter Insulation Barrier

Install a perimeter insulation barrier vertically around the entire perimeter of the room with width equal to that of the floor build up. This is highly recommended in order to avoid lateral propagation of impact noise. The barrier must also be applied in the perimeter of pipes, ducts or any other component protruding from the floor. Spot adhere the strips to the wall using acrylic glue or a bead of silicone sealant.

Installation Instruction for Acousticork VC7900

Unpack the Acousticork VC7900 at least 24h before the installation and store it in the room where the installation will take place. Cut and trim the Acousticork VC7900 to the desired size to fit the installation. Apply directly over the subfloor. Always ensure that material is installed to fit the application avoiding the creation of waves in the material. Dimple side must face down.

Place the Acousticork VC7900 directly against the insulation perimeter barrier already installed. Proceed to cover the entire floor making sure that the joints are butted tight and use an adequate tape to fix it. After completion, the Acousticork VC7900 should cover the entire flooring area without gaps and with joints securely taped. An waterproof membrane (ex. Polyethylene foil) minimum 0.2mm covering the entire flooring area MUST be installed prior to the screed. Install it, minimum 150mm wide vertically and overlapping it, minimum 100mm. After completion, the insulation vapour barrier should cover the entire Acousticork VC7900 area without gaps. Never mechanically fasten the Acousticork VC7900 and/or the PE foil barrier with screws, nails or staples as this will severely diminish the performance of the insulation barrier.

Screed and Final Flooring

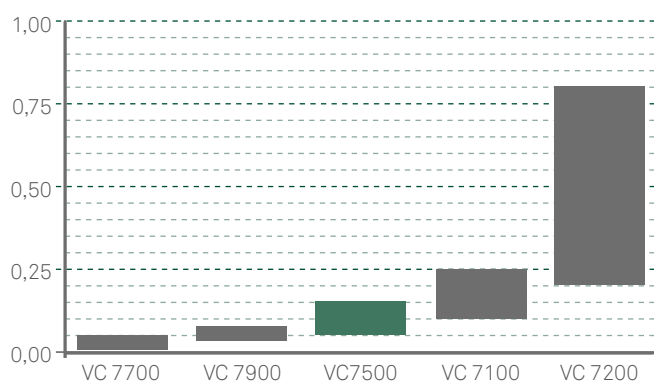
Cast a suitable screed over the loose laid PE foil previously installed over the product.

Always follow manufacturers recommended installation instructions.

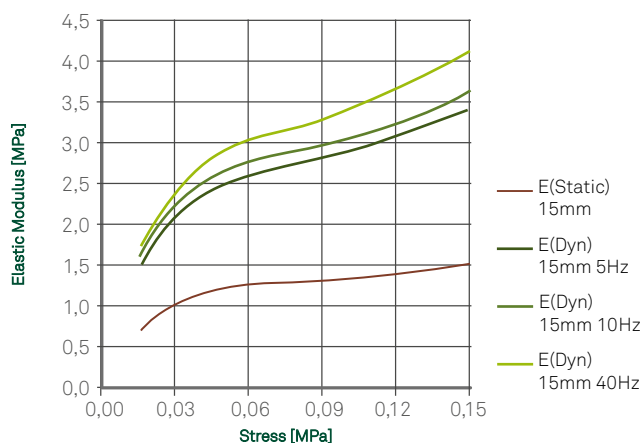
For detailed installation instructions, please contact us.

MATERIAL DESCRIPTION & PROPERTIES

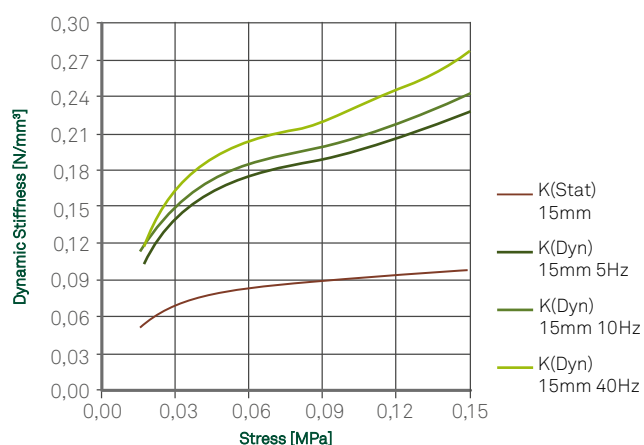
WORK LOAD RANGE [MPa]



ELASTIC MODULUS [MPa]



DYNAMIC STIFFNESS [N/mm³]



VC 7500 is an engineered polyurethane-bound recycled rubber-granulate material.

This product is suitable for vibration control in construction, rail infrastructure and industrial applications, used as a mat or strip for low loads, to reduce vibration, absorb shock and structural borne noise.

LOAD RANGE

- PERMANENT STATIC 0,05-0,15 MPa (7,3 - 21,8 psi)

E-MODULE

- STATIC⁽¹⁾ 1,20-1,50 MPa (174 - 218 psi)
- DYNAMIC⁽²⁾ 2,30-4,30 MPa (333 - 624psi)

(1) DIN 53513 (ADAPTED) - TANGENTIAL MODULUS
 (2) DIN 53513 (ADAPTED) - DEPENDING ON LOAD AND FREQUENCY

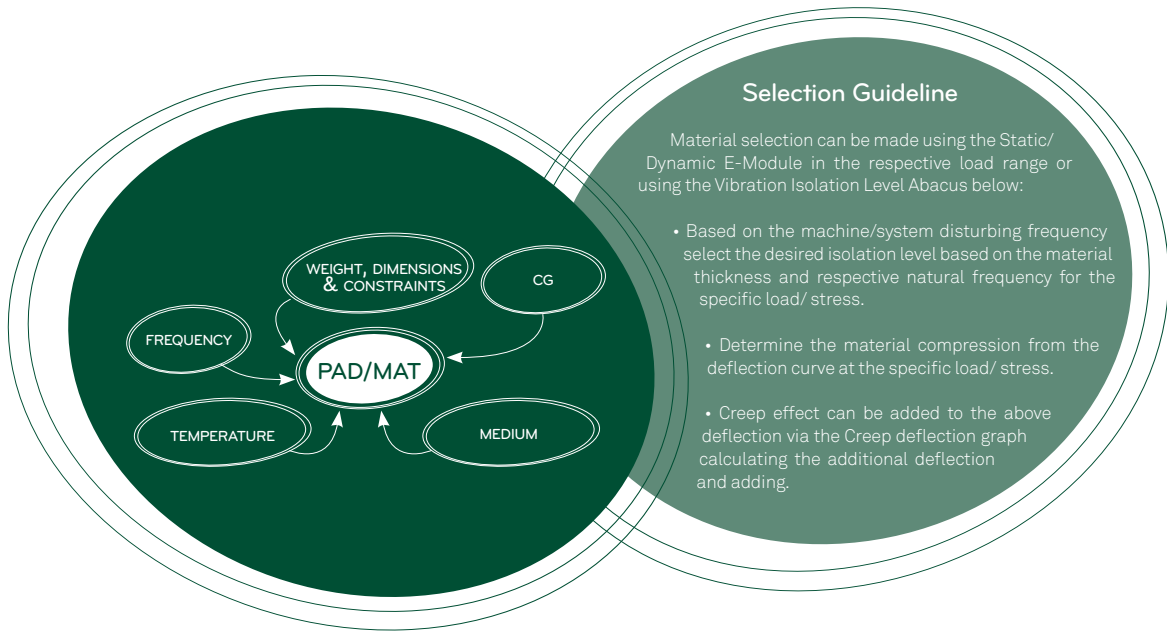
Compression Set (%) ⁽¹⁾	1,6
Tensile Strength (MPa) ⁽²⁾	>0,25 (36 psi)
Elongation at break (%) ⁽²⁾	> 60
Tear- Resistance (N/mm) ⁽³⁾	> 3,5
Flammability ⁽⁴⁾	*B2

(1) DIN 53572 - MEASURED 30MIN AFTER DECOMPRESSION WITH 50% DEFORMATION / 23°C AFTER 72H
 (2) DIN 53571
 (3) DIN 53515
 (4) DIN 4102
 * B2 = NORMAL FLAMMABLE

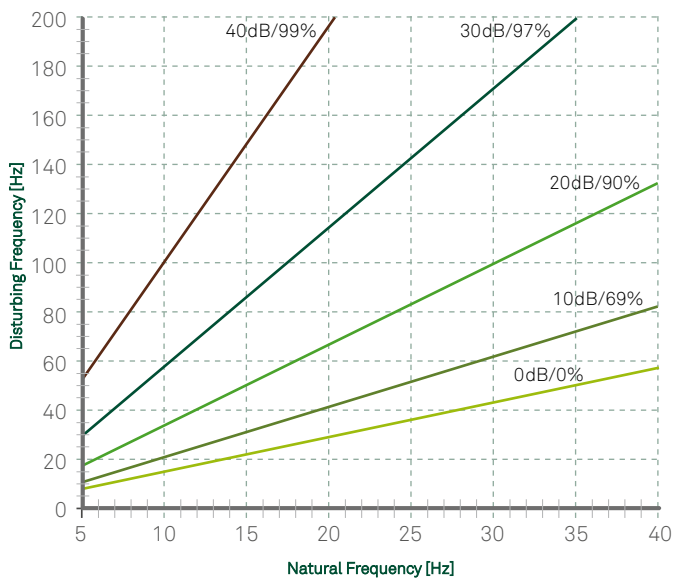
FEATURES

- Revalorised product
- Supplied in rolls, sheets or strips
- Available in a max. width of 1250mm and up to a length of 10m.

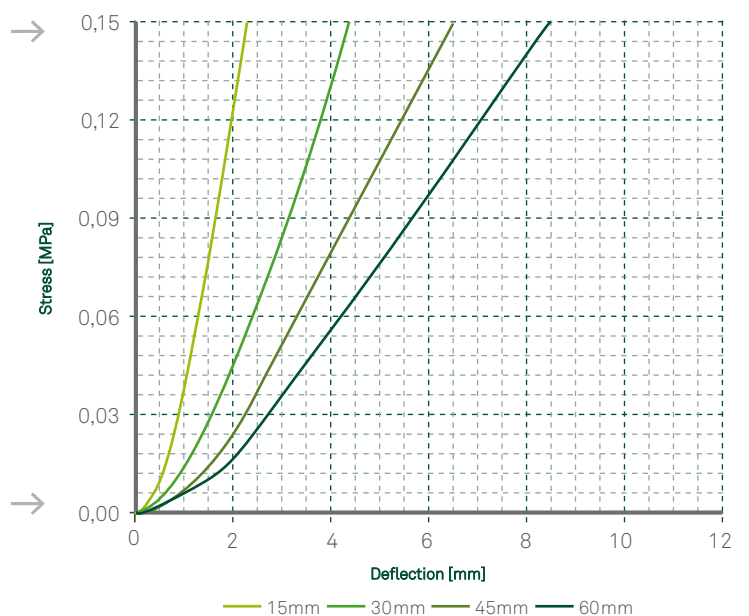
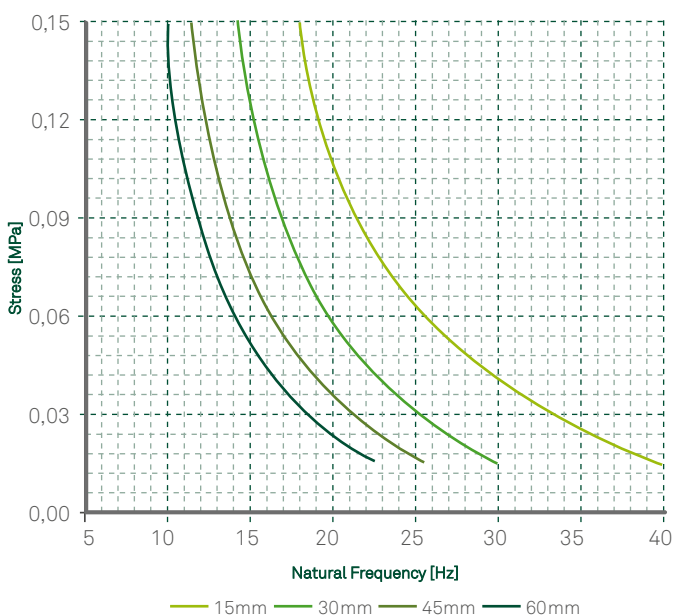
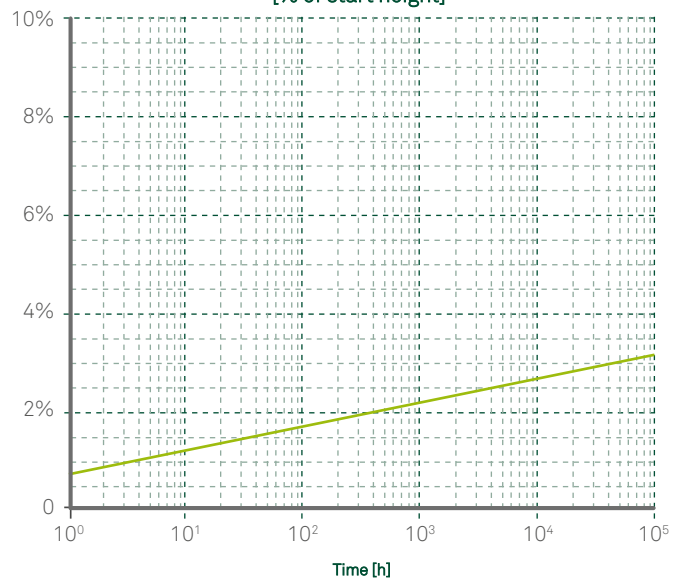




Vibration Isolation



**Creep Deflection @ 0.125 MPa
[% of start height]**

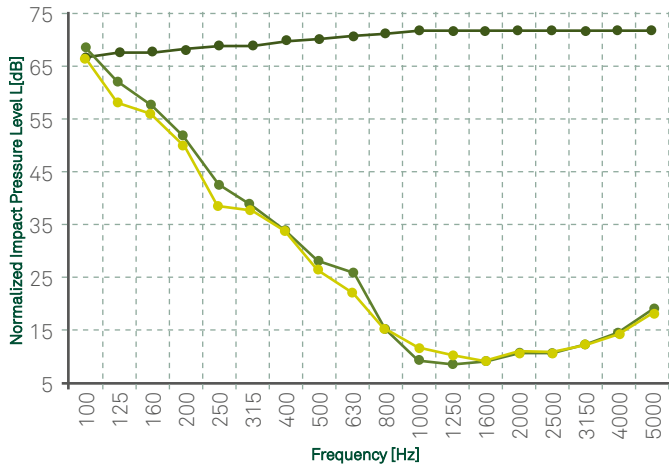


Note: 30mm, 45mm and 60mm thickness achieved through stacking 15mm (flat) thickness layers.

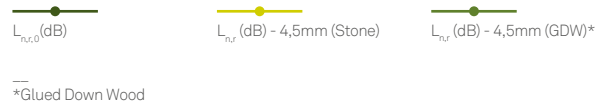


ACOUSTICAL RESULTS

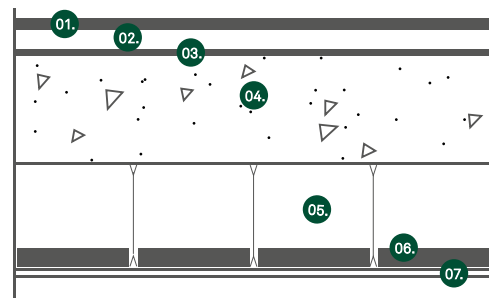
Test procedure according to standards ISO 10140-1:2010; ISO 10140-3:2010; ISO 10140-4:2010 and ISO 717-2:2013



$L_{n,r}$ - Normalized impact sound pressure level of the reference floor with the floor covering under test;
 $L_{n,r0}$ - Normalized impact sound pressure level of the Lab reference floor;
 ΔL_w - Impact sound pressure level reduction index of the covering under test, on a normalized floor;



TEST APPARATUS [ΔL_w & IIC]



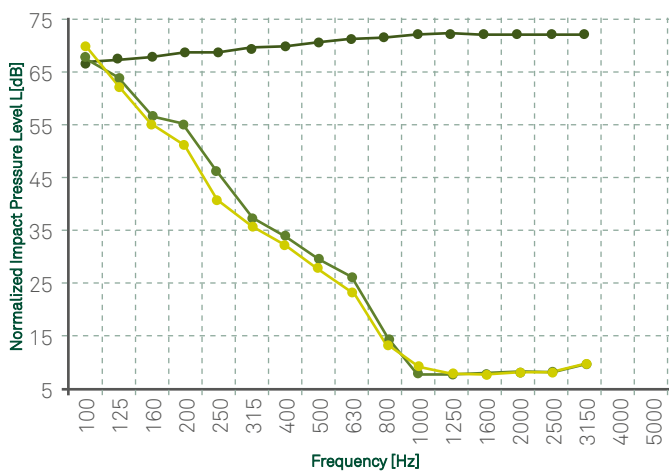
- 01.** Glued Down Wood with 21mm thickness or natural stone plates with 20mm thickness.
- 02.** Concrete Floating screed with 30mm thickness.
- 03.** Agglomerated recycled rubber resilient layer - VC 7500
- 04.** Reinforced concrete slab of thickness 140mm.
- 05.** Air gap with 150mm.
- 06.** Mineral wool with 50mm thickness and low density.
- 07.** Gypsum boards with 12mm thickness.

Ref. Test Report	Thickness	Flooring	$L_{n,r,w}(C_{l,r})$	$\Delta L_w(C_{l,\Delta})$
ACL 289/15	4,5 mm	Glue Down Wood	50 (5) dB	28 (-16) dB
ACL 283/15	4,5 mm	Stone	48 (5) dB	30 (-16) dB

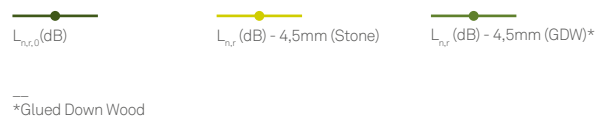


ACOUSTICAL RESULTS

Test procedure adapted from standards ASTM E2179-03; ASTM E492-04 and ASTM E989-89



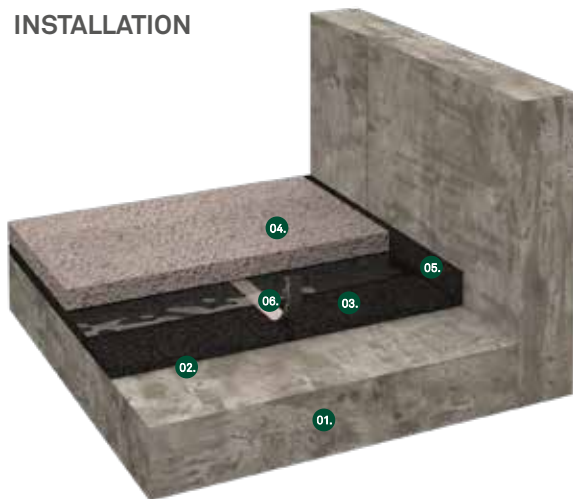
$L_{n,r}$ - Normalized impact sound pressure level of the reference floor with the floor covering under test;
 $L_{n,r0}$ - Normalized impact sound pressure level of the Lab reference floor;



Ref. Test Report	Thickness	Flooring	IIC _c
ACL 290/15	4,5 mm	Glue Down Wood	52 dB
ACL 283/15	4,5 mm	Stone	49 dB



INSTALLATION



01.

Reinforced concrete slab

02.

Vapor barrier

03.

Agglomerated recycled rubber resilient layer - VC 7500

04.

Concrete floating screed

05.

Perimeter insulation barrier

06.

Adhesive tape

General Installation Instructions

The following installation instructions are recommended by Amorim Cork Composites, but are not intended as a definitive project specification. They are presented in an attempt to be used with recommended installation procedures of the flooring manufacturers and screed.

Room Conditions

Temperature > -5°C / Room moisture content < 75%.

Subfloor

All subfloor work should be structurally sound, clear and level. The moisture content of the subfloor should not be more than 2.5% (CM) by weight measured on concrete subfloors.

Perimeter Insulation Barrier

Install a perimeter insulation barrier vertically around the entire perimeter of the room with width equal to that of the floor build up. This is highly recommended in order to avoid lateral propagation of impact noise. The barrier must also be applied in the perimeter of pipes, ducts or any other component protruding from the floor. Spot adhere the strips to the wall using acrylic glue or a bead of silicone sealant.

Installation Instruction for Acousticork VC7500

Unpack the Acousticork VC7500 at least 24h before the installation and store it in the room where the installation will take place. Cut and trim the Acousticork VC 7500 to the desired size to fit the installation. Apply directly over the subfloor. Always ensure that material is installed to fit the application avoiding the creation of waves in the material.

Place the Acousticork VC7500 directly against

the insulation perimeter barrier already installed. Proceed to cover the entire floor making sure that the joints are butted and use an adequate tape to fix it. After completion, the Acousticork VC7500 should cover the entire flooring area without gaps and with joints securely taped. An waterproof membrane (ex. Polyethylene foil) minimum 0.2mm covering the entire flooring area MUST be installed prior to the screed. Install it, minimum 150mm wide vertically and overlapping it, minimum 100mm. After completion, the insulation vapour barrier should cover the entire Acousticork VC7500 area without gaps. Never mechanically fasten the Acousticork VC7500 and/or the PE foil barrier with screws, nails or staples as this will severely diminish the performance of the insulation barrier.

Screed and Final Flooring

Cast a suitable screed over the loose laid PE foil previously installed over the product.

Always follow manufacturers recommended installation instructions.

For detailed installation instructions, please contact us.



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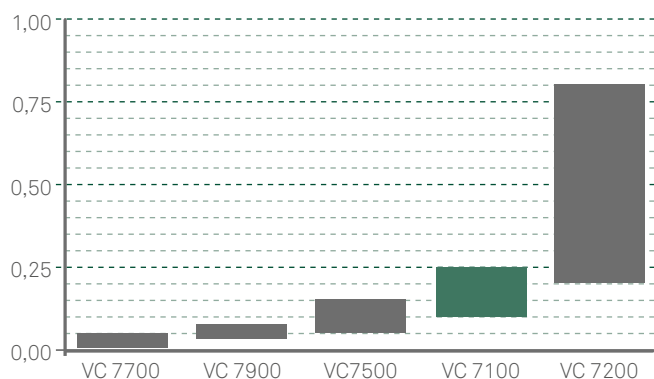
The data provided in this Material Data Sheet represents typical values. This information is not intended to be used as a purchasing specification and does not imply suitability for use in a specific application. Failure to select the proper product may result in either equipments damage or personal injury. Please contact Amorim Cork Composites regarding specific application recommendations. Amorim Cork Composites expressly disclaims all warranties, including any implied warranties or merchantability or of fitness for a particular purpose. Amorim Cork Composites is not liable for any indirect special, incidental, consequential, or punitive damages as a result of using the information listed in this MDS. Any of its material specification sheets, its products or any future use or re-use of them by any person or entity.

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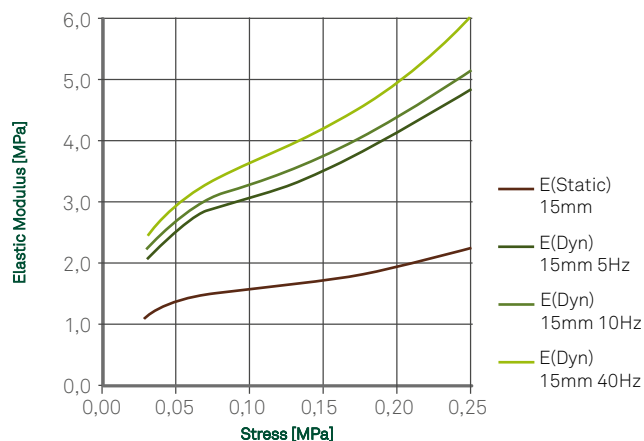
ACC.213 | EN

MATERIAL DESCRIPTION & PROPERTIES

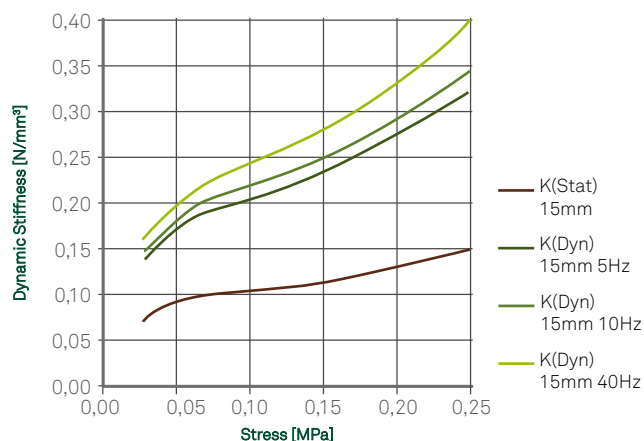
WORK LOAD RANGE [MPa]



ELASTIC MODULUS [MPa]



DYNAMIC STIFFNESS [N/mm³]



VC 7100 is an engineered polyurethane-bound recycled rubber-granulate material.

This product is suitable for vibration control in construction applications, used as a mat or strip for medium loads, to reduce vibration, absorb shock and structural borne noise.

LOAD RANGE

- PERMANENT STATIC 0,10-0,25 MPa (1,5 - 36,3 psi)

E-MODULE

- STATIC⁽¹⁾ 1,50-2,10 MPa (218 - 305 psi)
- DYNAMIC⁽²⁾ 2,00-6,00 MPa (377 - 870 psi)

(1) DIN 53513 (ADAPTED) - TANGENTIAL MODULUS
 (2) DIN 53513 (ADAPTED) - DEPENDING ON LOAD AND FREQUENCY

Compression Set (%) ⁽¹⁾	4,1
Tensile Strength (MPa) ⁽²⁾	> 0,35 (51 psi)
Elongation at break (%) ⁽²⁾	> 75
Tear- Resistance (N/mm) ⁽³⁾	> 6,5
Flammability ⁽⁴⁾	*B2

(1) DIN 53572 - MEASURED 30MIN AFTER DECOMPRESSION WITH 50% DEFORMATION / 23°C AFTER 72H

(2) DIN 53571

(3) DIN 53515

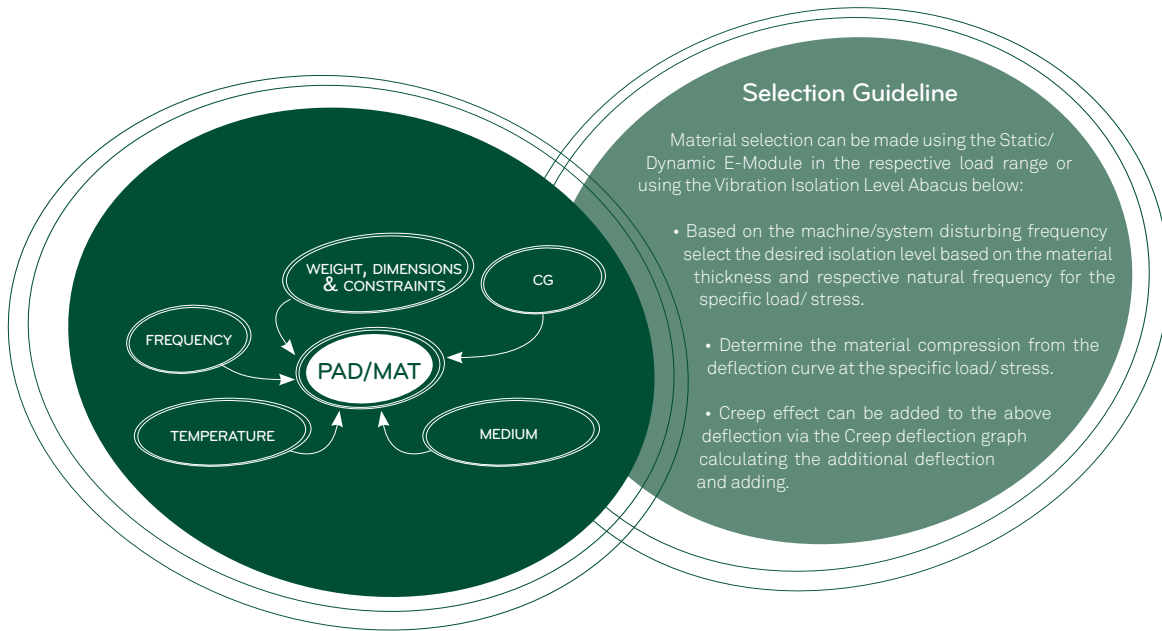
(4) DIN 4102

* B2 = NORMAL FLAMMABLE

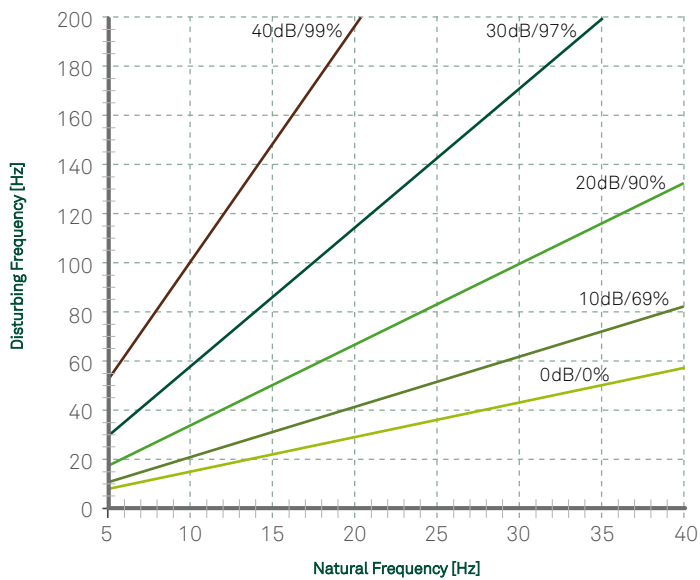
FEATURES

- Revalorised product
- Supplied in rolls, sheets or strips
- Available in a max. width of 1250mm and up to a length of 10m.

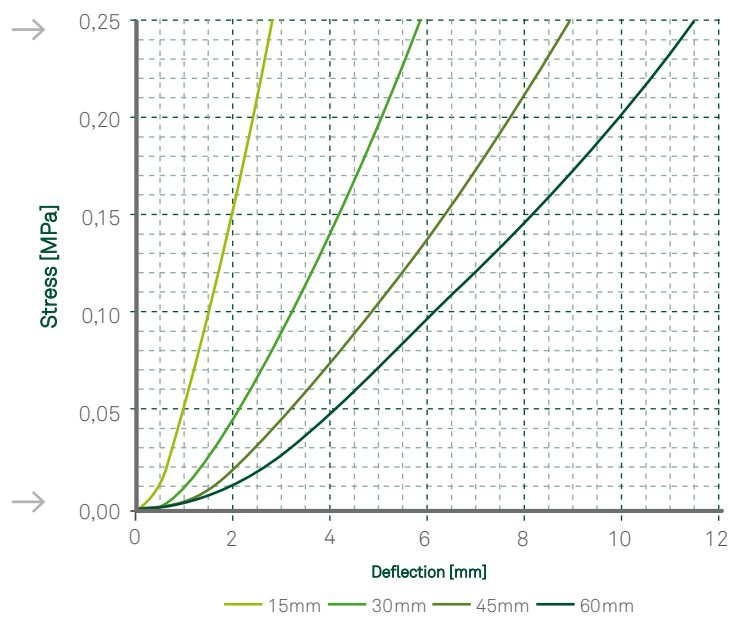
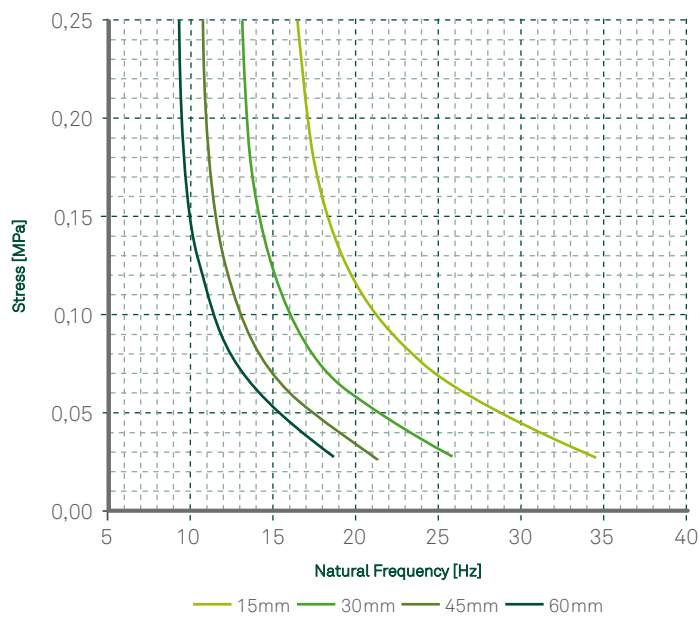
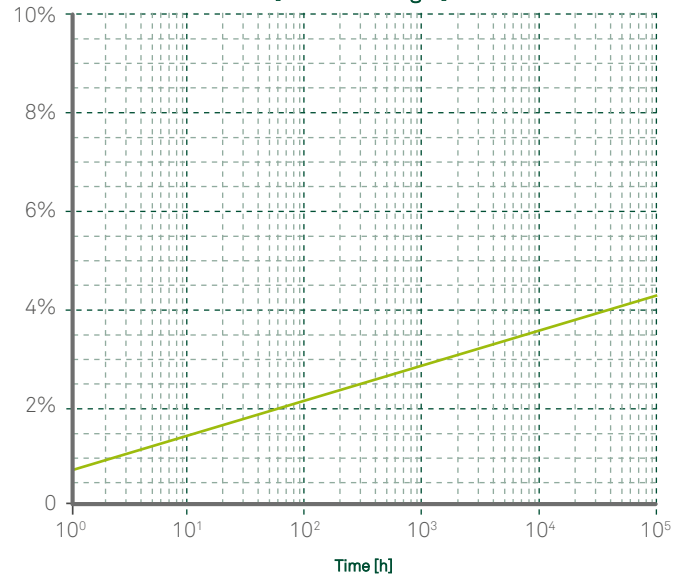




Vibration Isolation



**Creep Deflection @ 0.125 MPa
[% of start height]**

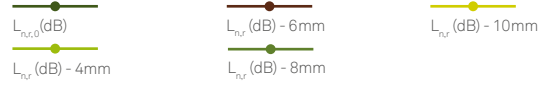
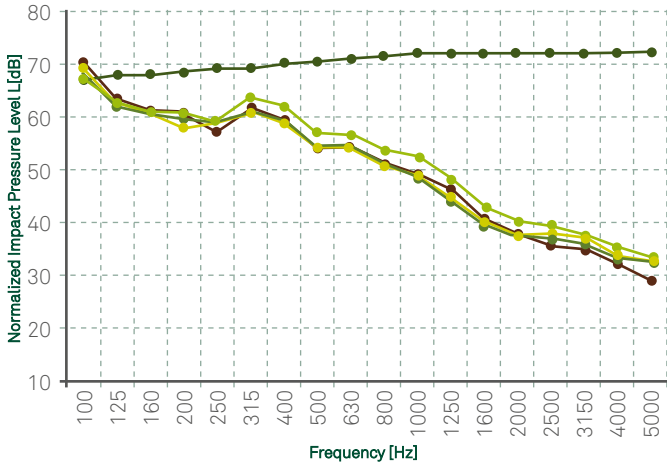


Note: 30mm, 45mm and 60mm thickness achieved through stacking 15mm (flat) thickness layers.

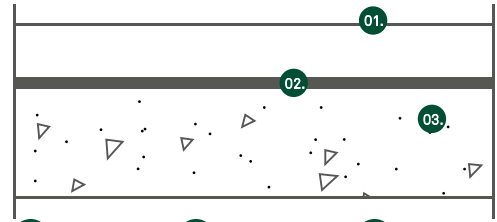


ACOUSTICAL RESULTS

Test procedure according to standards ISO 10140-1:2010; ISO 10140-3:2010; ISO 10140-4:2010 and ISO 717-2:2013



TEST APPARATUS [ΔL_w & IIC]



- 01. Concrete floating screed with 70mm thickness
- 02. Agglomerated recycled rubber resilient layer - VC 7100
- 03. Reinforced concrete slab of thickness 140mm

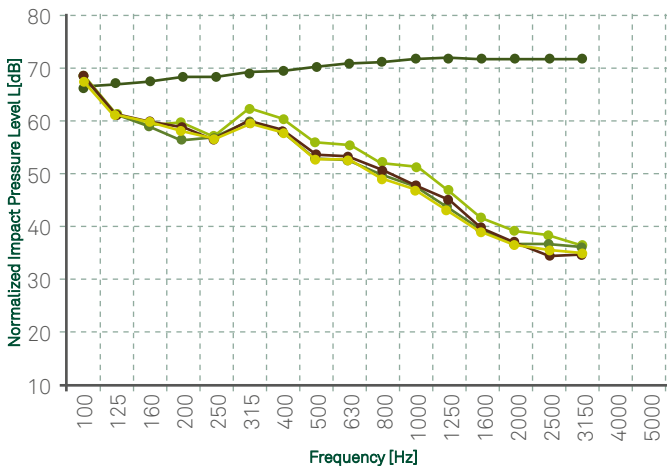
$L_{n,r}$ - Normalized impact sound pressure level of the reference floor with the floor covering under test;
 $L_{n,r,0}$ - Normalized impact sound pressure level of the Lab reference floor;
 ΔL_w - Impact sound pressure level reduction index of the covering under test, on a normalized floor;

Ref. Test Report	Thickness	$L_{n,r,w}(C_{l,r})$	$\Delta L_w(C_{l,r})$
ACL100/15	10 mm	55 (1) dB	23 (-12) dB
ACL099/15	8 mm	55 (1) dB	23 (-12) dB
ACL101/15	6 mm	56 (1) dB	22 (-12) dB
ACL102/15	4 mm	56 (2) dB	22 (-12) dB



ACOUSTICAL RESULTS

Test procedure according to standards ISO 10140-1:2010; ISO 10140-3:2010; ISO 10140-4:2010. Normalized impact sound pressure level and IIC rating determined according to standards ASTM E492-09 and ASTM E989-06.

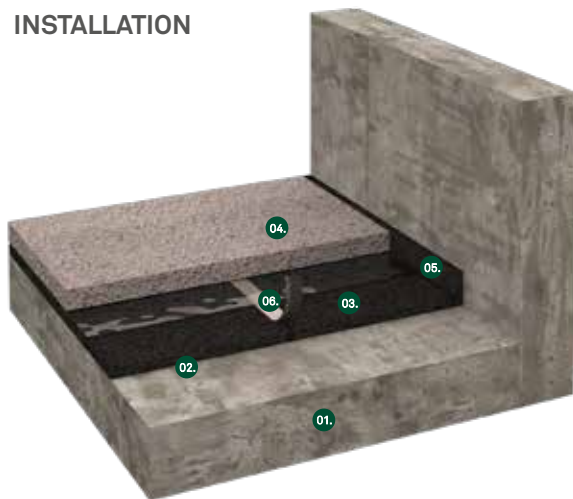


L_{ref} - Normalized impact sound pressure level of the reference floor with the floor covering under test;
 $L_{ref,c}$ - Normalized impact sound pressure level of the Lab reference floor;

Thickness	IIC _c
4 mm	50 dB
6 mm	50 dB
8 mm	51 dB
10 mm	51 dB



INSTALLATION



01.

Reinforced
concrete slab

02.

Vapor
barrier

03.

Agglomerated recycled rubber
resilient layer - VC 7100

04.

Concrete floating
screed

05.

Perimeter insulation
barrier

06.

Adhesive
tape

General Installation Instructions

The following installation instructions are recommended by Amorim Cork Composites, but are not intended as a definitive project specification. They are presented in an attempt to be used with recommended installation procedures of the flooring manufacturers and screed.

Room Conditions

Temperature > -5°C / Room moisture content < 75%.

Subfloor

All subfloor work should be structurally sound, clear and level. The moisture content of the subfloor should not be more than 2.5% (CM) by weight measured on concrete subfloors.

Perimeter Insulation Barrier

Install a perimeter insulation barrier vertically around the entire perimeter of the room with width equal to that of the floor build up. This is highly recommended in order to avoid lateral propagation of impact noise. The barrier must also be applied in the perimeter of pipes, ducts or any other component protruding from the floor. Spot adhere the strips to the wall using acrylic glue or a bead of silicone sealant.

Installation Instruction for Acousticork VC 7100

Unpack the Acousticork VC7100 at least 24h before the installation and store it in the room where the installation will take place. Cut and trim the Acousticork VC7100 to the desired size to fit the installation. Apply directly over the subfloor. Always ensure that material is installed to fit the application avoiding the creation of waves in the material.

Place the Acousticork VC7100 directly against the insulation perimeter barrier already installed. Proceed to cover the entire floor making sure that the joints are butted tight and use an adequate tape to fix it. After completion, the Acousticork VC7100 should cover the entire flooring area without gaps and with joints securely taped. An waterproof membrane (ex. Polyethylene foil) minimum 0.2mm covering the entire flooring area MUST be installed prior to the screed. Install it, minimum 150mm wide vertically and overlapping it, minimum 100mm. After completion, the insulation vapour barrier should cover the entire Acousticork VC7100 area without gaps. Never mechanically fasten the Acousticork VC7100 and/or the PE foil barrier with screws, nails or staples as this will severely diminish the performance of the insulation barrier.

Screed and Final Flooring

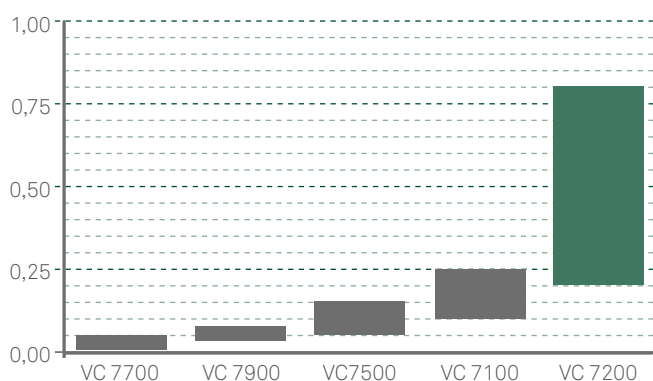
Cast a suitable screed over the loose laid PE foil previously installed over the product.

Always follow manufacturers recommended installation instructions.

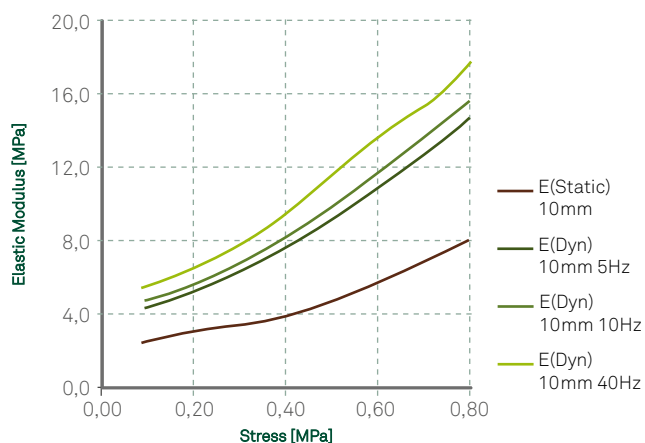
For detailed installation instructions, please contact us.

MATERIAL DESCRIPTION & PROPERTIES

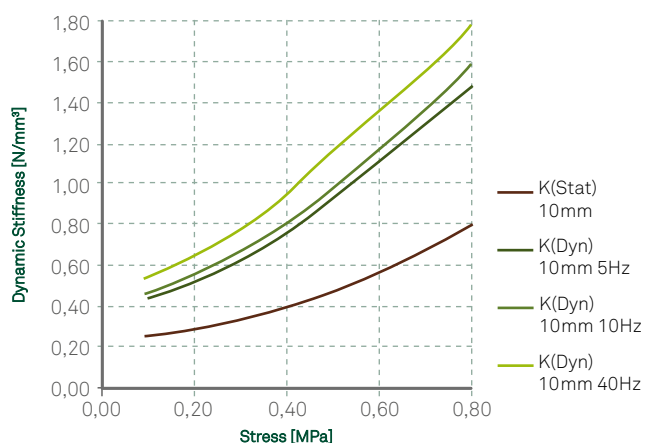
WORK LOAD RANGE [MPa]



ELASTIC MODULUS [MPa]



DYNAMIC STIFFNESS [N/mm³]



VC 7200 is an engineered polyurethane-bound recycled rubber-granulate material.

This product is suitable for vibration control in construction applications, used as a mat or strip for medium high loads, to reduce vibration, absorb shock and structural borne noise.

LOAD RANGE

- PERMANENT STATIC 0,20-0,80 MPa (29 - 116 psi)

E-MODULE

- STATIC⁽¹⁾ 3,00-8,00 MPa (435 - 1160 psi)
- DYNAMIC⁽²⁾ 5,50-18,0 MPa (798 - 2610 psi)

(1) DIN 53513 (ADAPTED) - TANGENTIAL MODULUS
 (2) DIN 53513 (ADAPTED) - DEPENDING ON LOAD AND FREQUENCY

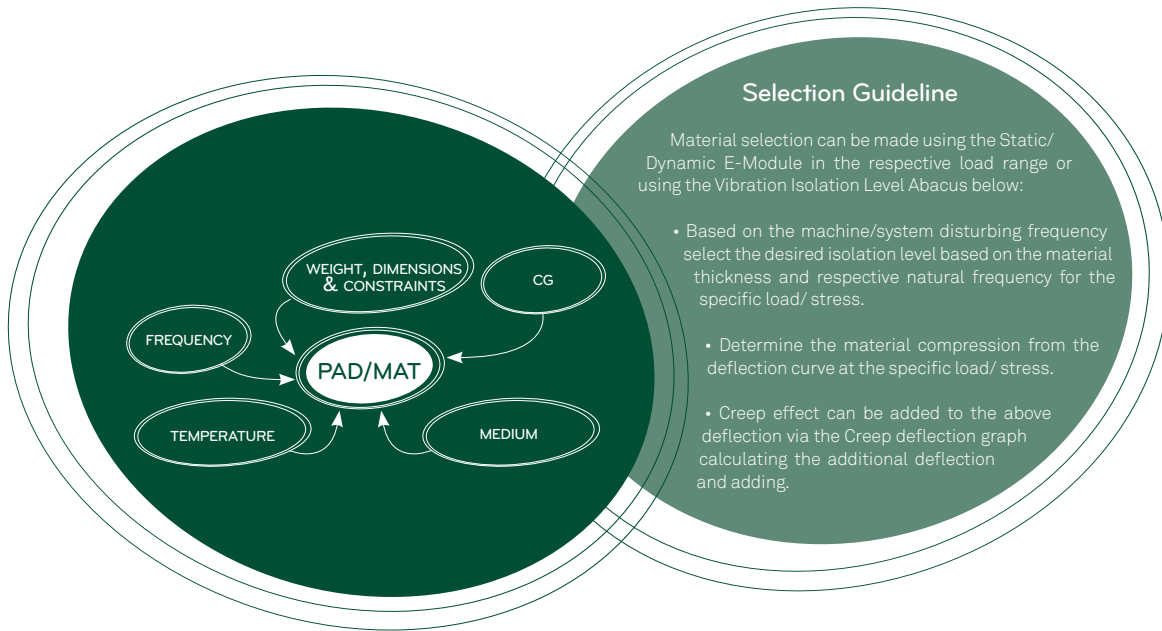
Compression Set (%) ⁽¹⁾	4,3
Tensile Strength (MPa) ⁽²⁾	> 0,5 (73 psi)
Elongation at break (%) ⁽²⁾	> 75
Tear- Resistance (N/mm) ⁽³⁾	> 5,6
Flammability ⁽⁴⁾	*B2

(1) DIN 53572 - MEASURED 30MIN AFTER DECOMPRESSION WITH 50% DEFORMATION / 23°C AFTER 72H
 (2) DIN 53571
 (3) DIN 53515
 (4) DIN 4102
 * B2 = NORMAL FLAMMABLE

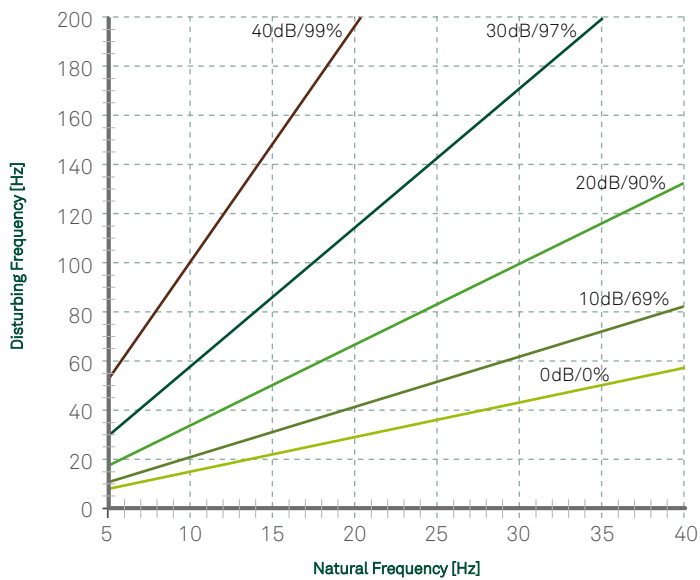
FEATURES

- Revalorised product
- Supplied in rolls, sheets or strips
- Available in a max. width of 1250mm and up to a length of 10m.

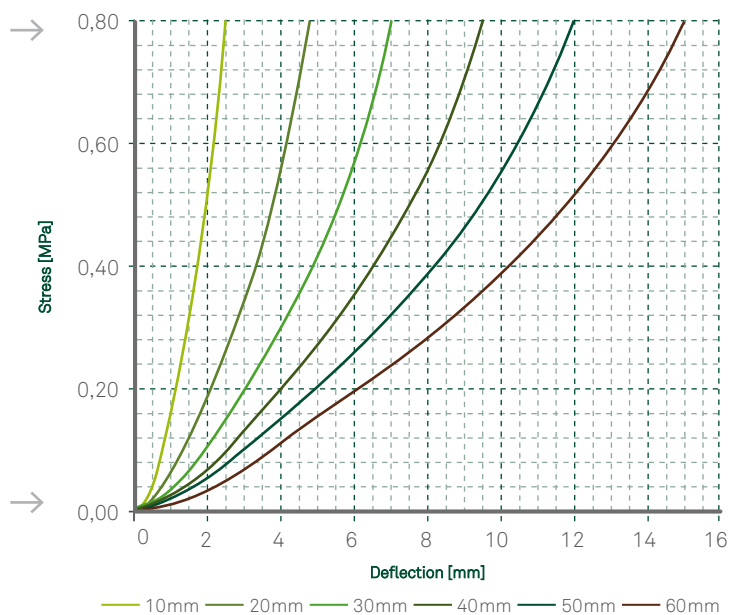
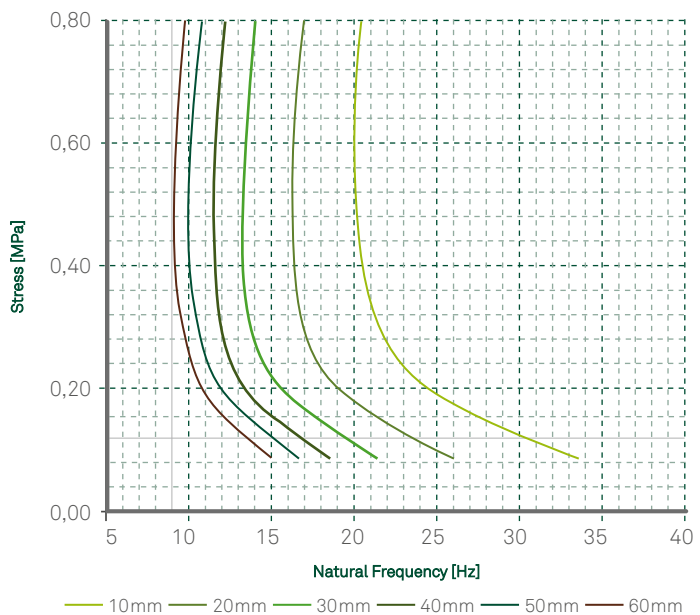
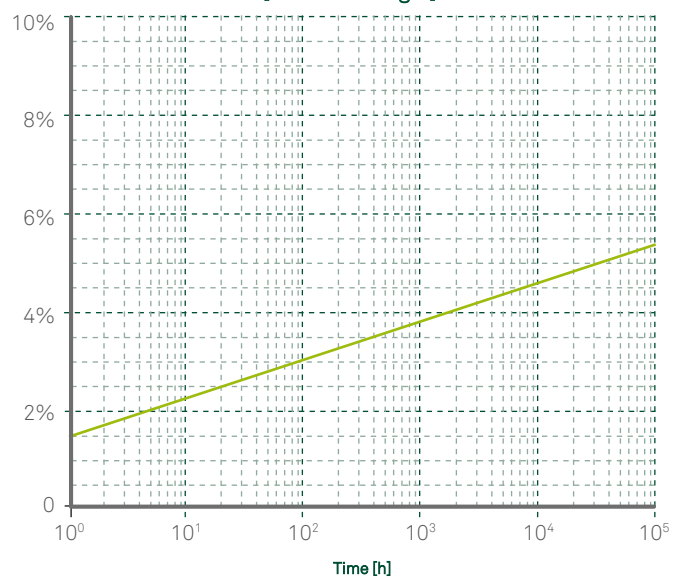




Vibration Isolation



**Creep Deflection @ 0.4 MPa
[% of start height]**

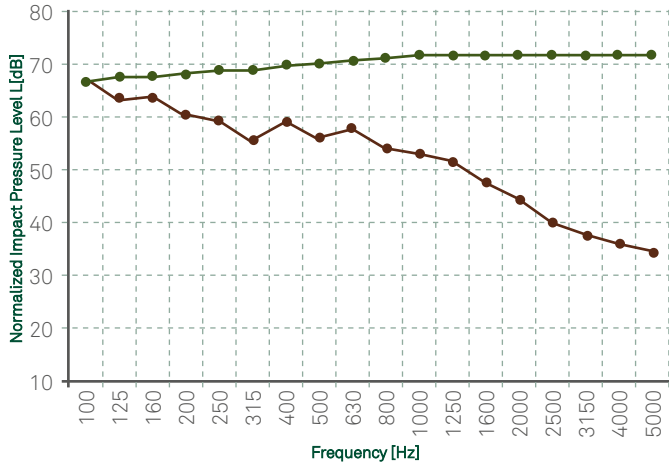


Note: 20mm, 30mm, 40mm, 50mm and 60mm thickness achieved through stacking 10mm (flat) thickness layers.



ACOUSTICAL RESULTS

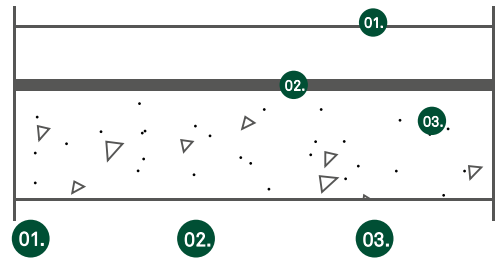
Test procedure according to standards ISO 10140-1:2010; ISO 10140-3:2010; ISO 10140-4:2010 and ISO 717-2:2013



$L_{n,r}$ - Normalized impact sound pressure level of the reference floor with the floor covering under test;
 $L_{n,r,0}$ - Normalized impact sound pressure level of the Lab reference floor;
 ΔL_w - Impact sound pressure level reduction index of the covering under test, on a normalized floor;

$L_{n,r,0}$ (dB)
 $L_{n,r}$ (dB) - 5mm

TEST APPARATUS [ΔL_w & IIC]



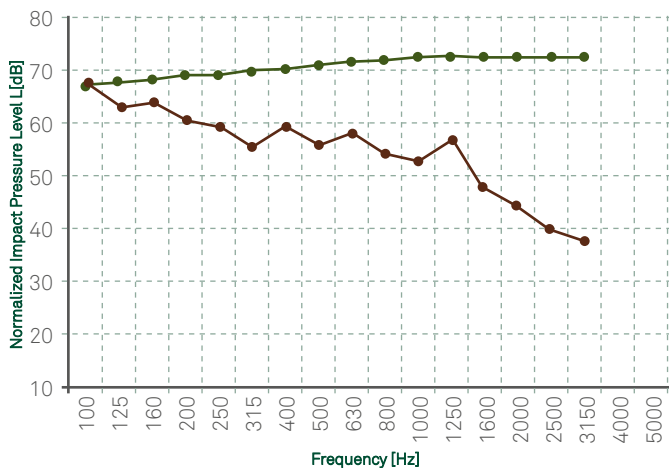
- 01. Concrete floating screed with 70mm thickness
- 02. Agglomerated recycled rubber resilient layer - VC 7200
- 03. Reinforced concrete slab of thickness 140mm

Ref. Test Report ACU102/12	Thickness 5 mm	$L_{n,r,w}(C_{l,r})$ 57 (0) dB	$\Delta L_w(C_{l,\Delta'})$ 21 (-11) dB
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ACOUSTICAL RESULTS

Test procedure according to standards ISO 10140-1:2010; ISO 10140-3:2010; ISO 10140-4:2010. Normalized impact sound pressure level and IIC rating determined according to standards ASTM E492-09 and ASTM E989-06.



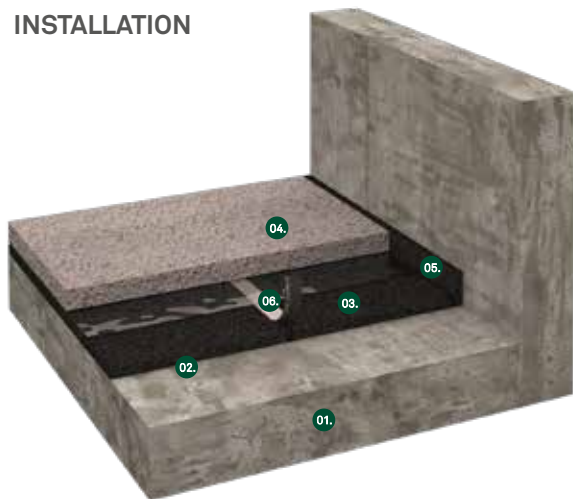
L_{ref} - Normalized impact sound pressure level of the reference floor with the floor covering under test;
 $L_{ref,c}$ - Normalized impact sound pressure level of the Lab reference floor;

$L_{n,r,0}$ (dB)
 $L_{n,r}$ (dB) - 5mm

Thickness 5 mm	IIC _c 52 dB
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INSTALLATION



01.

Reinforced concrete slab

02.

Vapor barrier

03.

Agglomerated recycled rubber resilient layer -VC 7200

04.

Concrete floating screed

05.

Perimeter insulation barrier

06.

Adhesive tape

General Installation Instructions

The following installation instructions are recommended by Amorim Cork Composites, but are not intended as a definitive project specification. They are presented in an attempt to be used with recommended installation procedures of the flooring manufacturers and screed.

Room Conditions

Temperature > -5°C / Room moisture content < 75%.

Subfloor

All subfloor work should be structurally sound, clear and level. The moisture content of the subfloor should not be more than 2.5% (CM) by weight measured on concrete subfloors.

Perimeter Insulation Barrier

Install a perimeter insulation barrier vertically around the entire perimeter of the room with width equal to that of the floor build up. This is highly recommended in order to avoid lateral propagation of impact noise. The barrier must also be applied in the perimeter of pipes, ducts or any other component protruding from the floor. Spot adhere the strips to the wall using acrylic glue or a bead of silicone sealant.

Installation Instruction for Acousticork VC 7200

Unpack the Acousticork VC7200 at least 24h before the installation and store it in the room where the installation will take place. Cut and trim the Acousticork VC7200 to the desired size to fit the installation. Apply directly over the subfloor. Always ensure that material is installed to fit the application avoiding the creation of waves in the material.

Place the Acousticork VC7200 directly against

the insulation perimeter barrier already installed. Proceed to cover the entire floor making sure that the joints are butted tight and use an adequate tape to fix it. After completion, the Acousticork VC7200 should cover the entire flooring area without gaps and with joints securely taped. An waterproof membrane (ex. Polyethylene foil) minimum 0.2mm covering the entire flooring area MUST be installed prior to the screed. Install it, minimum 150mm wide vertically and overlapping it, minimum 100mm. After completion, the insulation vapour barrier should cover the entire Acousticork VC7200 area without gaps. Never mechanically fasten the Acousticork VC7200 and/or the PE foil barrier with screws, nails or staples as this will severely diminish the performance of the insulation barrier.

Screed and Final Flooring

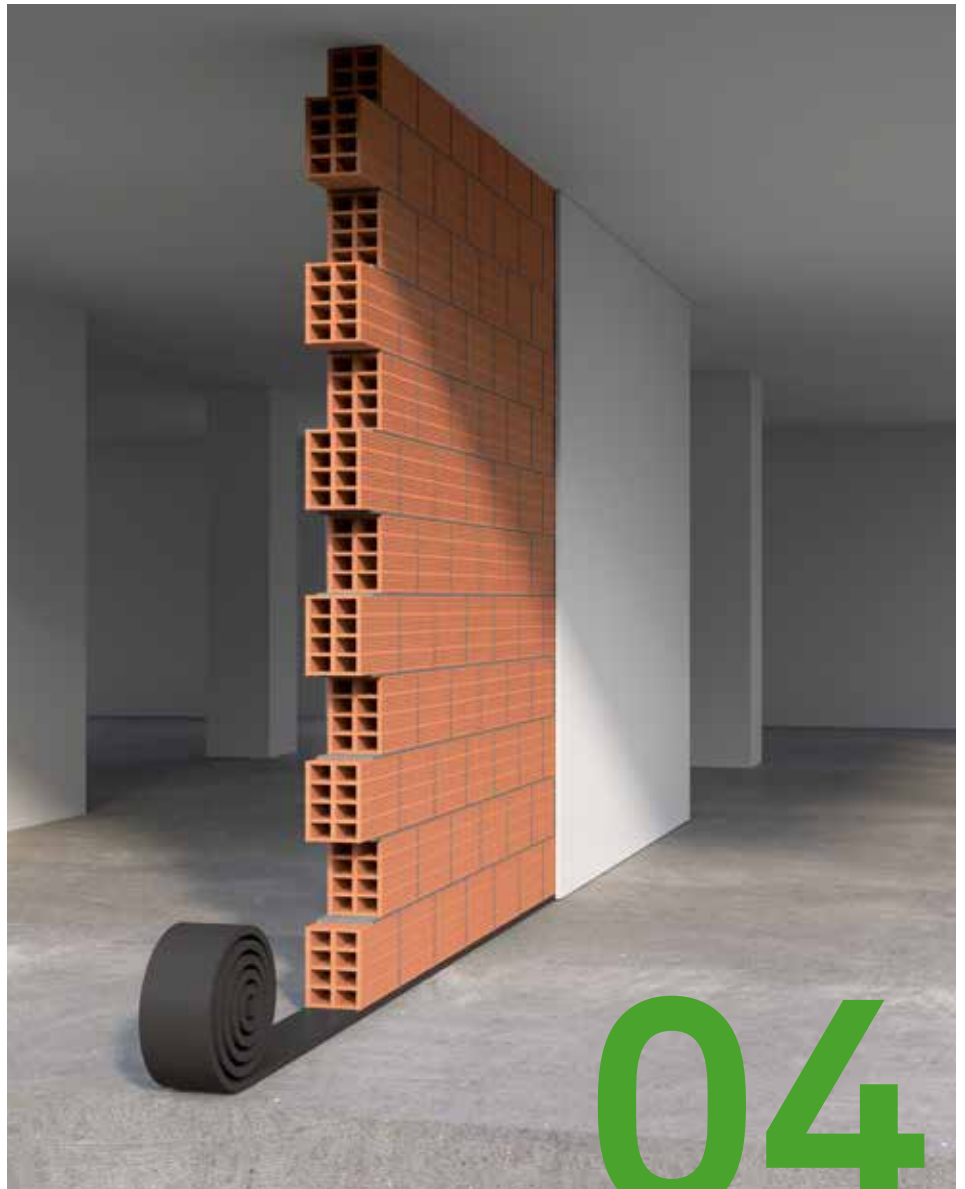
Cast a suitable screed over the loose laid PE foil previously installed over the product.

Always follow manufacturers recommended installation instructions.

For detailed installation instructions, please contact us.

ACOUSTICORK

REINVENTING SUSTAINABLE
GREEN AND ACOUSTIC
INSULATION



04

WALL BEARING



WALL BEARING

ACOUSTICORK increases the lifetime of the building decreasing the crack appearance, due to the decoupling of elements.

Standard Dimensions*	MS-R1	
	Wall Type	ΔR_w
10m x 5cm x 10mm 10m x 10cm x 10mm 10m x 15cm x 10mm 10m x 20cm x 10mm	Single Wall (60kg/m ²)	2dB
	Double Wall (85kg/m ²)	8dB

*Other dimensions available

THE SOLUTION FOR ACOUSTIC AND ANTIVIBRATIC INSULATION OF WALLS

Data sheets refer to this specific product, although, a high range of decoupling and acoustic insulation solutions are available with the Acousticork brand. The main purpose of the Acousticork range is, more than the comfort and acoustical performance, increasing the lifetime of the buildings, decreasing the crack appearance and improve the housing quality, due to the decoupling of elements.

MATERIAL DESCRIPTION & PROPERTIES



MS-R1 - a Wall Bearing material - is part of the Amorim Cork Composites range and it represents an excellent solution for acoustical and vibration issues.

MS-R1 is manufactured from recycled rubber granulate and it has been developed to effectively interrupt the transmission of footstep noise vertically through the masonry. If wall bearings are used consistently throughout a building, and other sound transmission vectors are eliminated, this can significantly improve the quality of living conditions.

The product is suitable for acoustic insulation in load-bearing and non-load-bearing walls.

MAXIMUM LOAD

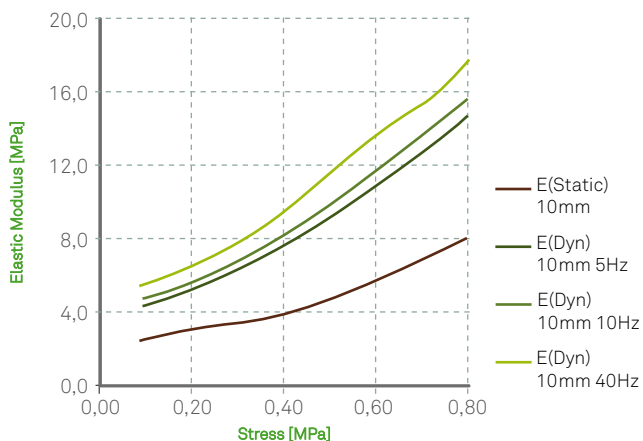
- **PERMANENT STATIC** <0,80 MPa (116 psi)*

E-MODULE

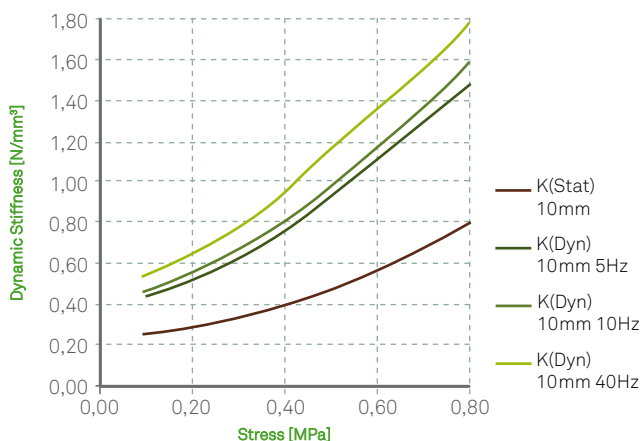
- **STATIC**⁽¹⁾ 3,00-8,00 MPa (435 - 1160 psi)
- **DYNAMIC**⁽²⁾ 5,50-18,0 MPa (798 - 2610 psi)

(1) DIN 53513 (ADAPTED) - TANGENTIAL MODULUS
 (2) DIN 53513 (ADAPTED) - DEPENDING ON LOAD AND FREQUENCY
 * AT 25% COMPRESSION

ELASTIC MODULUS [MPa]



DYNAMIC STIFFNESS [N/mm²]



Compression Set (%) ⁽¹⁾	4,3
Tensile Strength (MPa) ⁽²⁾	> 0,5 (73 psi)
Elongation at break (%) ⁽²⁾	> 75
Tear- Resistance (N/mm) ⁽³⁾	> 5,6
Flammability ⁽⁴⁾	*B2

(1) DIN 53572 - MEASURED 30MIN AFTER DECOMPRESSION WITH 50% DEFORMATION / 23°C AFTER 72H
 (2) DIN 53571
 (3) DIN 53515
 (4) DIN 4102
 * B2 = NORMAL FLAMMABLE

ADVANTAGES

- High resistance to compression
- Low dynamic stiffness
- Resistance to contact with liquids
- Sustainable and recyclable





ACOUSTICAL RESULTS

Wall type	ΔR_w
Single Wall (60kg/m ²)	2 dB
Double Wall (95kg/m ²)	8 dB



STANDARD DIMENSIONS

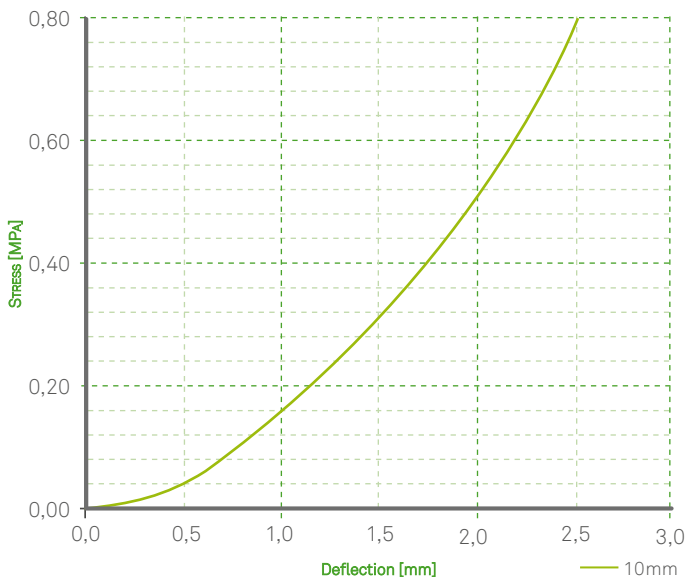
Standard Dimensions*
10m x 5cm x 10mm
10m x 10cm x 10mm
10m x 15cm x 10mm
10m x 20cm x 10mm

*Other dimensions available.

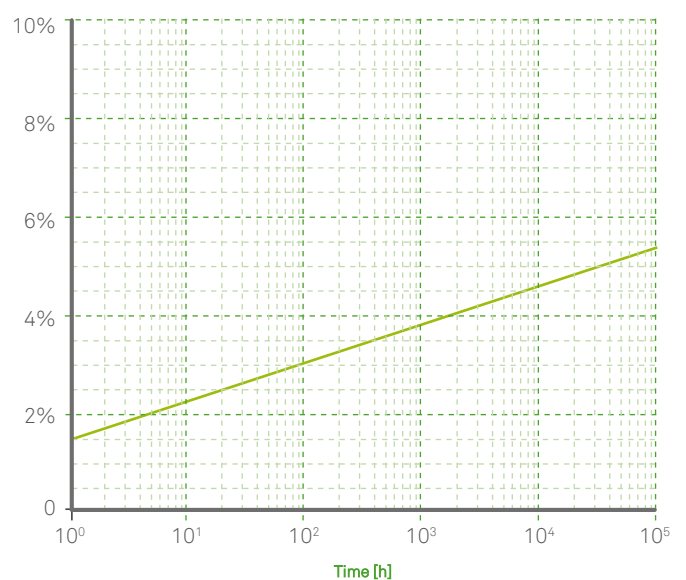


PHYSICAL AND MECHANICAL PROPERTIES

LOAD DEFLECTION



CREEP DEFLECTION @ 0,04MPa (% OF START HEIGHT)

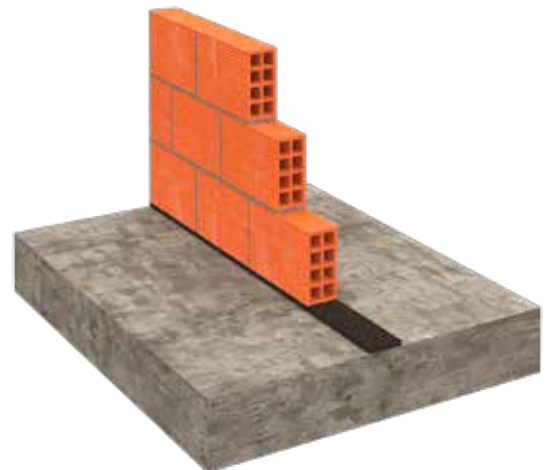


INSTALLATION

Before the MS-R1 wall bearing is installed, check the floor for surface irregularities. If it is uneven (with projections, surface roughness or similar), apply a smooth mortar layer;

After the surface layer has been allowed to dry, lay the wall bearing. Make sure that it projects by approx. 15mm on the side on which the wall is to be plastered;

Sections of wall bearing are butt-jointed together, and the joint secured with adhesive tape for concrete.





NOTES

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NOTES

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