

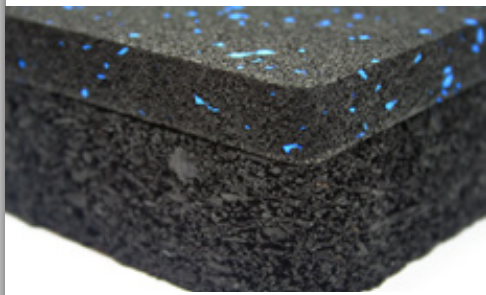
A1 RUBBER™

#1 in Rubber Upcycling



acoustic solutions





OLYMPACT™
extreme silence underpads



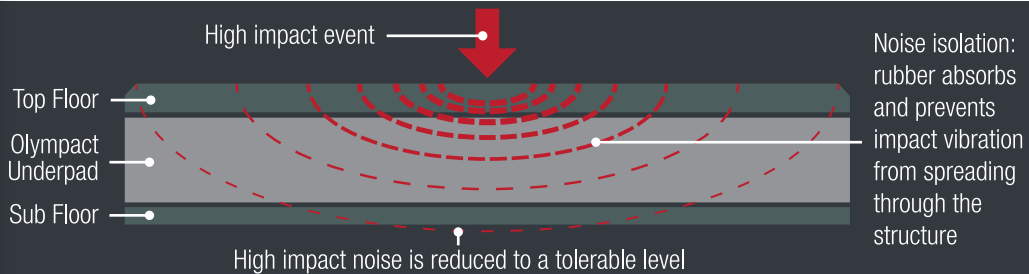
A problem on the rise: High set gyms

Olympact underpads are used in applications where it is essential that the flooring system is able to absorb severe impact and high traffic noise. The growth in gym, health and fitness clubs over the last decade has been staggering, and as a result, more and more centres are opening up in multi-level buildings which were traditionally off-limits to fitness activities due to the noise generated. Through A1 Rubber's experience in playground impact attenuation, we set out to expand our range of fitness centre flooring to include extreme impact noise attenuation. From this, Olympact extreme silence underpads were developed to compliment our gym tiles and resilient flooring surfaces and other floor coverings like carpet.

Extreme impact solutions

From these successful applications, other uses have evolved for Olympact in common office and household uses, such as absorbing impact noise created by a heavy floor use on lightly constructed buildings and floors. Olympact underpads are now available in two densities to offer the correct underfoot stability needed and thicknesses from 10-100mm to suit any top surface type and application. Olympact underpads have been extensively on-site tested in numerous centres and buildings and have successfully reduced the transmission of structure borne regenerative noise vibration from gymnasiums and heavy use activities. In specifying the right rubber requirements for each application, A1 Rubber recommends on-site personal assessment or specialist testing to ensure the right Olympact underpad thickness is determined for suitability of both the centre and the lower level occupant activities.

Superior **impact absorption** for gyms and floors with heavy workouts



JAZZ®
FLOORING RANGE
Underfoot Comfort | Australian | Green Certified

Beautiful floors with natural acoustic performance:
Jazz® rubber flooring range

Effortless noise reduction with Jazz® commercial rubber flooring

Rubber is a fantastic noise dampener, so good in fact that it's the first material choice for acoustic underlay. Effortlessly, our Jazz® resilient flooring retains its natural acoustic properties of the rubber it's made from, making it suitable for a wide range of flooring applications where acoustic performance can be an added benefit.

Jazz® works in two ways to combat vibration noise:

1. Jazz® behaves just like an acoustic underlay when dealing with noises. Vibration noise is easily absorbed by the Jazz® surface, resulting in less transfer of sound through the floor.
2. Because Jazz® is an elastic surface, its natural characteristics help to cushion the impact noise of footsteps at the source. In this case, the flooring directly attenuates the sound at the point of footfall impact, unlike ceramic tiles or timber flooring.

Jazz® exceeds NCC compliance, achieving Ln,w + Ci 61 on a 150mm concrete slab (CSIRO), meaning acoustic underlay is *unnecessary*, delivering approx 16 decibels in reduction*:

Scale of dB volume:

3dB barely noticeable	5dB clearly noticeable	10dB twice as loud	15dB three times as loud	20dB four times as loud
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* Compared to concrete CSIRO test slab



Acoustic Underlay Materials

What goes into our underlays and why we use these materials

Recycled Tyre Rubber

Rubber is an excellent material for soundproofing, noise reduction and vibration control. Its physical properties and natural characteristics of high density, regular consistency and elasticity aid in reducing sound transfer by evenly absorbing the sound across the material, rather than allowing sound to fully pass through. The thickness of the rubber is also important, as the thicker the rubber, the greater the dampening of vibration noise.

Re-Grind Rubber

Re-grind rubber is the result of re-shredding and recycling our rubber products and manufacturing off-cuts. The rubber particles retain their natural properties, even after manufacture and recycling, and as underlay never gets seen in a final installation, AcoustaMat is an excellent use for re-grind rubber. By using re-grind rubber we are ensuring no rubber ever goes to waste from our manufacturing plant and we do not contribute to landfill and burning of waste rubber.

Recycled Cork

Granulated cork bears excellent stabilising qualities that rubber lacks, as it has naturally less elastic properties. When rubber is combined with cork, it allows the AcoustaMat underlay to withstand heavier load points, limiting flexibility and therefore avoiding damaging floors that require more rigid underlays, such as directly adhered ceramics and parquetry.

GreenTag Certified - The Environmentally Conscious Choice

What it means for A1 Rubber's AcoustaMat products to be GreenTag certified

GreenTag certifies that our underlays and manufacturing processes are working towards a sustainable future by having a low impact on human health, resource depletion and ecosystem quality.

Our products and manufacturing processes have low environmental consequences in the following areas:

- raw material extraction and depletion
- emissions into the air, water and soil
- land conversion and physical modification of the natural area
- noise pollution
- land and water use
- human toxic effects
- climate change, ozone depletion and photochemical ozone creation
- ecotoxicity, eutrophication and acidification

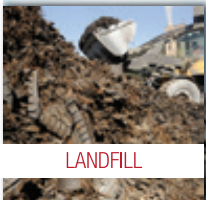


A1 Rubber's acoustic flooring products have been independently GreenTag certified. GreenTag is a green building products certification system accredited by the Green Building Council of Australia (GNCC). Extensive testing, performed independent of the manufacturer, ensures you can be confident that a GreenTag Certified product is one that you can trust.

GreenTag Certified products don't just meet the Green Building Council of Australia's requirements, they exceed them. In fact, all of A1 Rubber's surfacing products have been rated at GreenRate Level A, the highest possible level for the GNCC Green Star standards.

What happens to a tyre after it has served its purpose?

OPTION 1



LANDFILL

OPTION 2

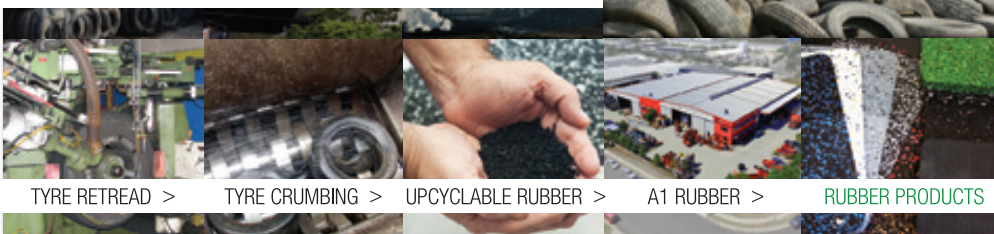


TYRE BALES >

SHIPPING >

BURNING IN CHINA

OPTION 3



TYRE RETREAD >

TYRE CRUMBING >

UPCYCLABLE RUBBER >

A1 RUBBER >

RUBBER PRODUCTS



At A1 Rubber, we upcycle approx. 17,000m³ of crumbed rubber annually, an amount we are continually striving to grow. That's roughly 270 semi trailers full of crumbed rubber per year!

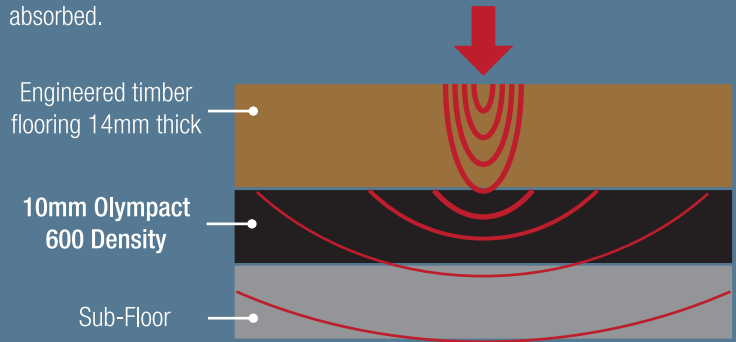
When you buy our products, this is the result you are contributing to.

Olypact, The Thicker Underlay

- What Does It Achieve?

Throughout our testing, we have used the minimum thicknesses of AcoustaMat to meet NCC requirements, and as a result our underlays have proven “deemed to satisfy”. However when abnormal heavy impacts occur, the vibration may need to be combatted with more than the minimum thickness to prevent structure-borne regenerative vibration noise travelling throughout the building. Due to its elastic properties, rubber is excellent at absorbing and reducing impact vibration, flexing with and dampening structural vibration. The thicker the underlay, the more resistance it bears against vibration transfer.

Impact vibration spreads directly and effectively through solid surfaces, however the elastic properties of rubber not only reduce vibration, but distribute it throughout the material. This dampens the vibration noise from continuing throughout the structure. The thicker the rubber, the more vibration can be absorbed.



TESTING DISCLAIMER:

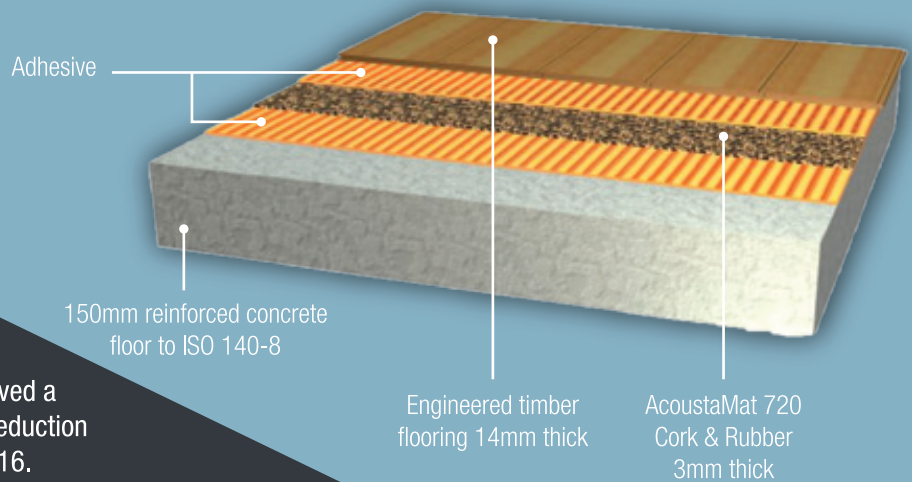
All flooring was installed to the manufacturers' specifications. All adhesives were applied to the manufacturers' specifications. All AcoustaMat was butt joined and cut to size. The source and transfer of noise from one level to another varies in accordance with each individual building construction. The information provided is given as an estimate. A1 Rubber recommends testing in situ to determine the exact performance of these systems in your project by a registered acoustic engineer. All applications of these systems are subject to change without notice.

AcoustaMat 720 Density Cork & Rubber

AcoustaMat 720 density cork and rubber is made up of a combination of recycled rubber and cork. Rubber and cork compounds are one of the oldest and most recognised acoustic products on the market, introduced over 50 years ago. As a result it has become a leading product for use in applications where timber flooring is directly adhered. Our 720 density cork and rubber is manufactured with a higher percentage of real rubber, providing better impact noise and vibration dampening performance.

TIMBER

Engineered Timber Floor Directly Adhered with 3mm AcoustaMat 720 Density Cork & Rubber



Achieved a (db) reduction ΔL_w 16.
System achieved $L_{n,w} + C_i = 61$, exceeding NCC by 1.

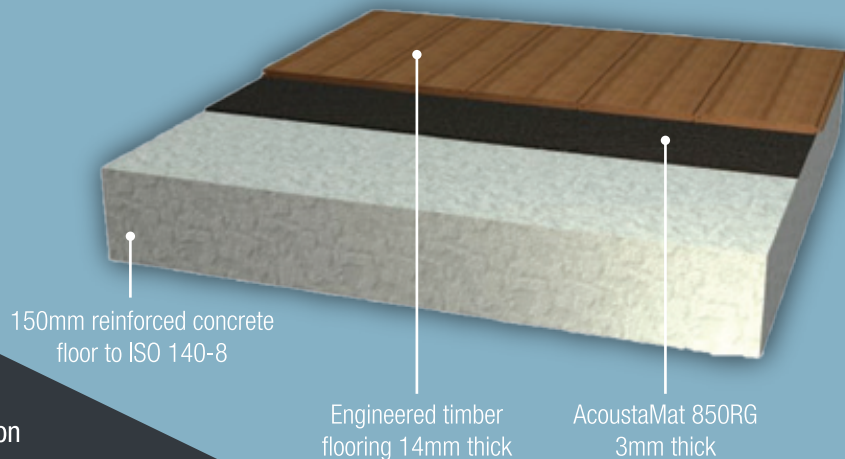
AcoustaMat 720 Cork/Rubber Specifications:

Thicknesses: 3, 4, 5mm
Width: 1.2m
Lengths: 10L/m (4, 5mm)
15L/m (3mm)

AcoustaMat 850RG Specifications:

Thicknesses: 3, 4, 5, 10mm
Width: 1.2m
Lengths: 10L/m (4, 5, 10mm)
15L/m (3mm)

Engineered Floating Timber Floor with 3mm AcoustaMat 850RG Density



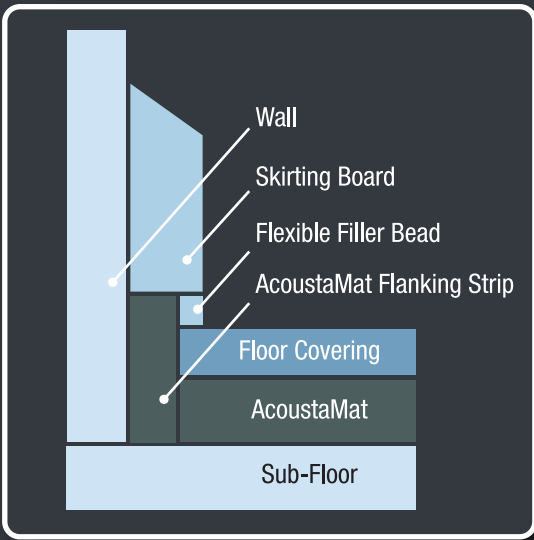
Achieved a (db) reduction ΔL_w 18.
System achieved $L_{n,w} + C_i = 59$, exceeding NCC by 3.



AcoustaMat Flanking Strip Installation

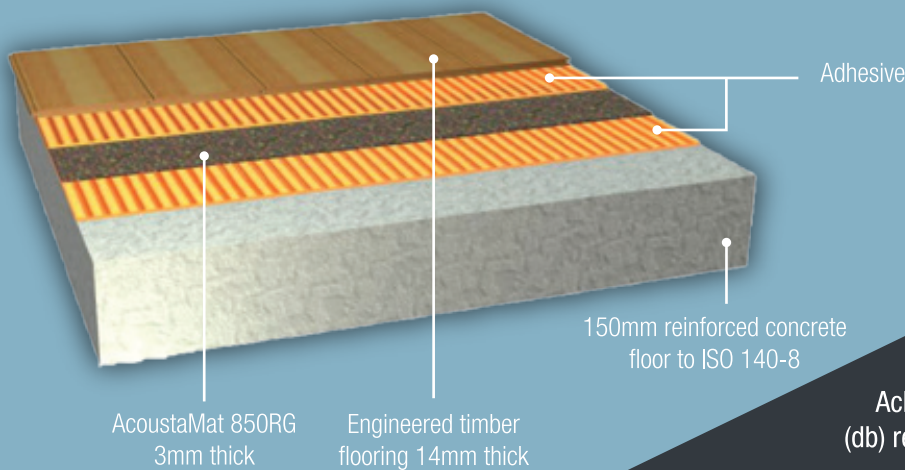
AcoustaMat flanking strips are essential in installations where acoustic underlay has been used. Without flanking strips, floor coverings will butt up to the wall or skirting board and surface vibrations created on the floor will travel through these hard surfaces and into other rooms via the structure.

We recommend flanking strips be sandwiched between the wall and floor covering, overhanging the top of the floor covering by 5mm to be covered by skirting boards and silicon beading. Flanking strips can be pre-fabricated upon request with specific measurements, or excess AcoustaMat can be cut and used for this application.



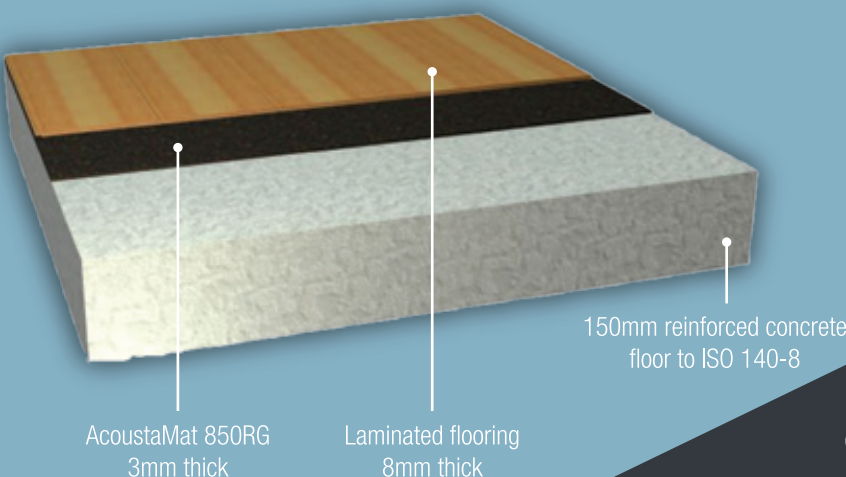
cover the area required. These tests were carried out by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) under strict laboratory conditions. Example of the performance of A1 Rubber impact sound acoustic underlays only. The results provided are not to be read as a guarantee for any specific application. The products are subject to our standard Terms and Conditions of Sale.

Engineered Timber Floor Directly Adhered with 3mm AcoustaMat 850RG Density



Achieved a (db) reduction ΔL_w 17. System achieved $L_{n,w} + C_i = 61$, exceeding NCC by 1.

Laminated Floating Flooring with 3mm AcoustaMat 850RG Density



Achieved a (db) reduction ΔL_w 18. System achieved $L_{n,w} + C_i = 59$, exceeding NCC by 3.

AcoustaMat 850RG Density

TIMBER

The "RG" in AcoustaMat 850RG stands for re-grind, a rubber by-product of the manufacturing process of our rubber products. By using a percentage (approx. 30%) of re-grind rubber in our AcoustaMat, we are ensuring no rubber ever goes to waste from our manufacturing facility. Testing has confirmed that 850 density rubber underlay is just as effective as similar cork and rubber combinations, and while cork and rubber may be more recognised by the industry, we recommend re-grind underlay where possible for greater environmental responsibility. By using our re-grind underlay, you are also supporting an A1 Rubber environmental initiative to ensure none of our products end up in landfill.

Under many variations of timber flooring, our recommendation is AcoustaMat 850RG, as an underlay with high acoustic and vibration dampening performance.

AcoustaMat 700

Density

AcoustaMat 700 density is suited for ceramic installations where a screed bed is required over the acoustic underlay. The 700 density AcoustaMat is 100% recycled tyre rubber, which bears higher elasticity at a lower density which allows for better attenuation in this application over higher density underlays.

AcoustaMat 700 Specifications:

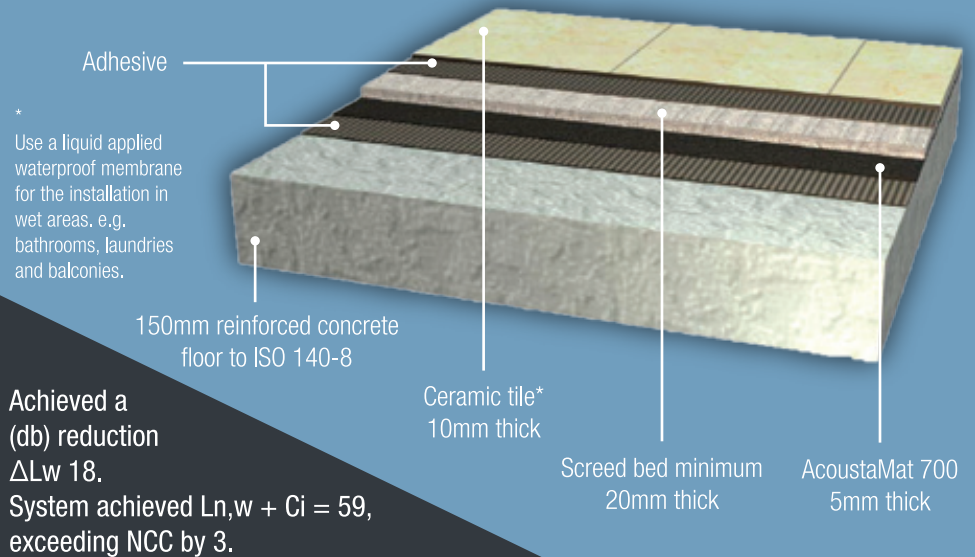
Thickness: 5mm

Width: 1.2m

Length: 10L/m

CERAMIC

Ceramic Tile Flooring Over Screed Bed with 5mm AcoustaMat 700 Density

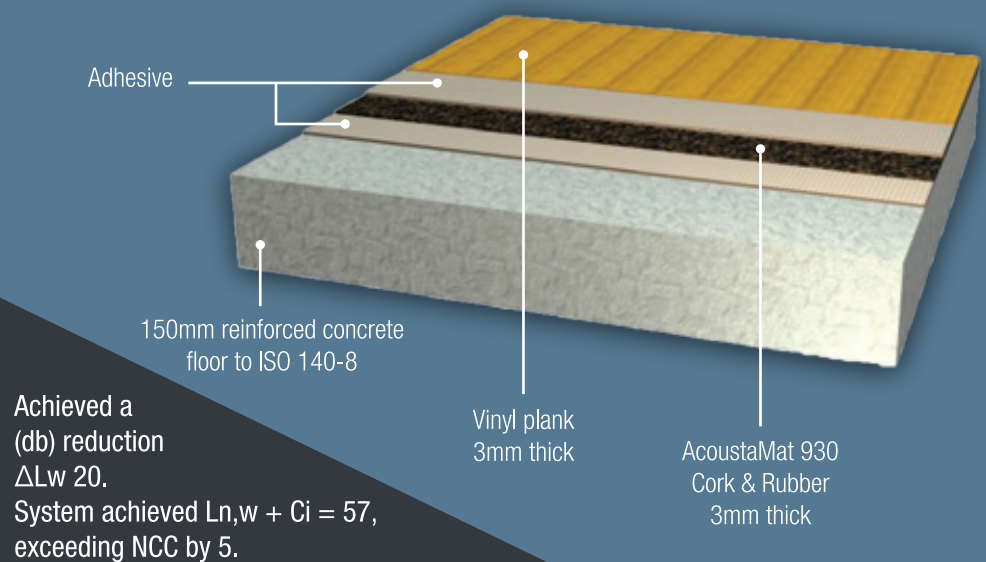


AcoustaMat 930 Density Cork & Rubber

In all vinyl applications, we recommend using AcoustaMat 930 cork and rubber for the best results, as vinyl is an impressionable surface and requires a less flexible underlay. The higher density rubber combined with cork in this underlay help to provide a stable underlay in vinyl plank applications, allowing for impression resistance against high point loading, such as high heels and chair wheel castors.

VINYL

Min. 3mm Vinyl Plank Directly Adhered with 3mm AcoustaMat 930 Density Cork & Rubber

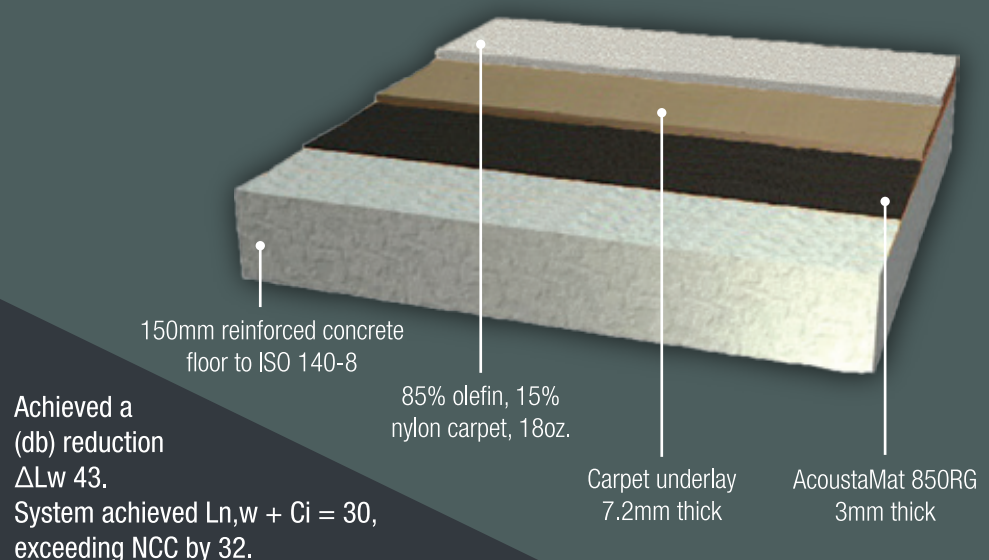


AcoustaMat 850RG Density

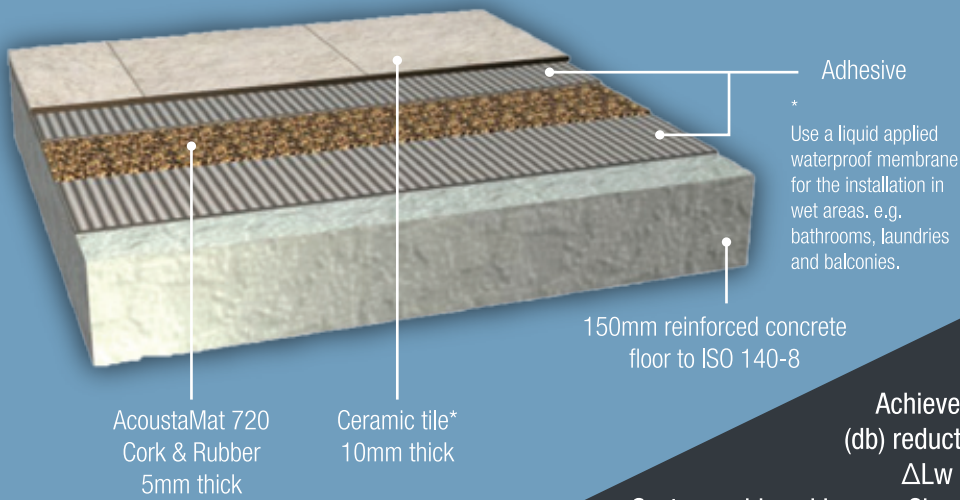
AcoustaMat 850RG is our recommended acoustic underlay for carpeted applications, and can be used in conjunction with carpet underlays where required. The higher density allows for effective acoustic results at a minimum thickness, keeping a low build height when used with carpet underlay.

CARPET

Carpet Over Carpet Underlay with 3mm AcoustaMat 850RG Density



Ceramic Tile Flooring Directly Adhered with 5mm AcoustaMat 720 Density Cork & Rubber



AcoustaMat 720
Cork & Rubber
5mm thick

Ceramic tile*
10mm thick

150mm reinforced concrete
floor to ISO 140-8

Adhesive

*
Use a liquid applied
waterproof membrane
for the installation in
wet areas. e.g.
bathrooms, laundries
and balconies.

Achieved a
(db) reduction
 ΔL_w 13.

System achieved $L_{n,w} + C_i = 62$,
which meets NCC.

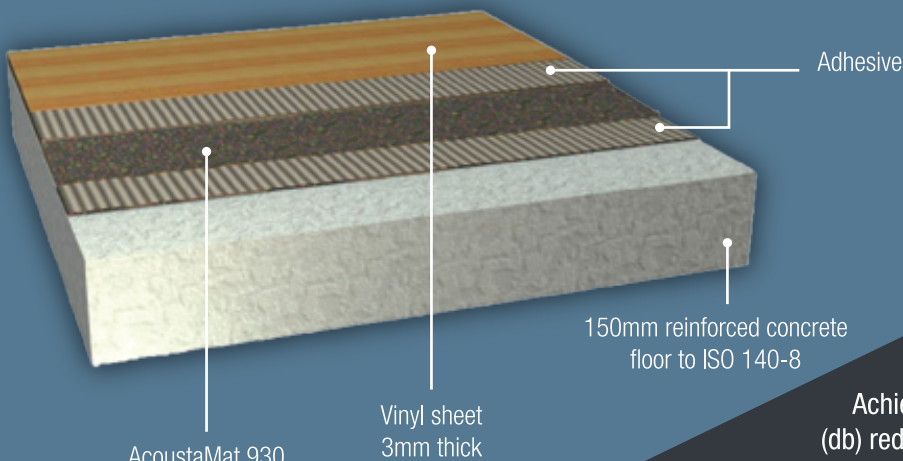
CERAMIC

AcoustaMat 720 Density Cork & Rubber

AcoustaMat 720 density cork and rubber is the only underlay that should be used in ceramic applications where the ceramics are adhered directly to the underlay. In ceramics it is paramount that there is minimal flex in the floor, which a 100% rubber underlay cannot guarantee. The cork in this underlay provides crucial stabilising piers, to ensure cracking doesn't occur.

Specifications: See previous page

Min. 3mm Vinyl Sheet Directly Adhered with 3mm AcoustaMat 930 Density Cork & Rubber



AcoustaMat 930
Cork & Rubber
3mm thick

Vinyl sheet
3mm thick

150mm reinforced concrete
floor to ISO 140-8

Adhesive

Achieved a
(db) reduction
 ΔL_w 20.

System achieved $L_{n,w} + C_i = 57$,
exceeding NCC by 5.

VINYL

AcoustaMat 930 Density Cork & Rubber

Our AcoustaMat 930 density cork and rubber is the highest density acoustic underlay on the market, and as such is seen as an innovative solution for acoustic performance and stability under vinyls.

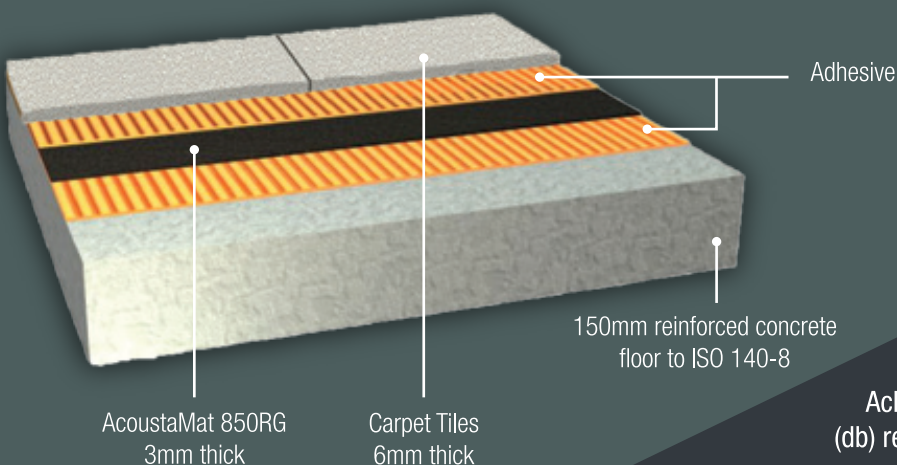
AcoustaMat 930 Cork/Rubber Specifications:

Thicknesses: 3, 4, 5mm

Width: 1.2m

Lengths: 10L/m (4, 5mm)
15L/m (3mm)

Carpet Tiles Directly Adhered with 3mm AcoustaMat 850RG Density



AcoustaMat 850RG
3mm thick

Carpet Tiles
6mm thick

150mm reinforced concrete
floor to ISO 140-8

Adhesive

Achieved a
(db) reduction
 ΔL_w 30.

System achieved $L_{n,w} + C_i = 47$,
exceeding NCC by 15.

CARPET

AcoustaMat 850RG Density

Carpet tile installations require a firm underlay, as carpet tiles are depressionable when installed over a soft underlay. AcoustaMat 850RG is our recommendation for providing the required rigidity in this application with the best acoustic results.

AcoustaMat 850RG Specifications:

Thicknesses: 3, 4, 5, 10mm

Width: 1.2m

Lengths: 10L/m (4, 5, 10mm)
15L/m (3mm)