

Utility Solutions

Clever Underlay

Quality underlay options for all floorboards



Products included
- Underlay



Go Green !

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WHEN SOUND MATTERS!

Reflective Noise

Reflective noise is the experience when you walk on your completed flooring system. The amount of noise you hear will depend on the type of underlay you select. When installed under Laminates, Hydro, Hybrid, Engineered Timbers or Bamboo floating floors or direct stick, higher density underlays can reduce the rebound noise by up to 40%. You will enjoy a more comfortable, solid feeling and quieter floor in your home.

Disclaimer

This Acoustic test is provided as is' without any representation or guarantees, express or implied. Clever Choice "Paxwood Pty Ltd" makes no representations or guarantees in relation to this Acoustic Test or the information and materials provided herein. The information and data collected herein are based on industry accepted testing methods. It is intended as descriptive of the performance characteristic and capabilities of Clever acoustic underlays and does not certify for a specific specific project. Although all efforts are taken to include accurate up to date information, without prejudice to the generality of this paragraph, Clever Choice does not guarantee or warrant that the information in this Acoustic Test is complete, true, accurate or non misleading. This Acoustic Test was provided solely for information purposes. You should not act upon information without consulting Clever Choice or an appropriate Acoustical Consultant. Whilst these tests provide expected results, results, the performance of the product can vary depending on many variables such as but no limited to building design, floor materials and density, room layout and installation method.

Utility Solutions





Make it a Clever Choice under your floor!

Multi-Level Living Noise

Multi-level noise testing may involve your site being tested with your selected underlay and flooring system installed, depending on your body corporates guidelines. This test would involve an independent professional using a calibrated tapping machine to be placed on the installed underlay and flooring system of choice. In the room below a microphone is used to measure the noise reduction below. It would be expected each site will perform differently depending on the density and thickness of the concrete and also the construction and materials.

Building Code of Aust. 2004 (BCA) established some standardised requirements for multi-level noise. These BCA guidelines were established after much consultation, and offer the only authoritative guideline for such noise in Australia. The BCA states that multi-level noise should not exceed LnT,w of 62. Unfortunately, the standard Strata Title Act only states that “peaceful enjoyment” of adjoining lots must be provided. Such an arbitrary and vague guideline has led many Body Corporates to register special guidelines for their own building.

Please refer to these guidelines carefully when enacted. It is quite clear that floating floor systems work very well because of the inherent isolation afforded by this method of installation. It is also clear that other factors like the use of rugs and runners, soft-sole shoes and the type of use of any upper floor space will also have a profound effect on the amount of noise received downstairs.

AAAC Star R.	2	3	4	5	6
LnT,w	65	55	50	45	40
FIIC	45	55	60	65	70
Comments	Below BCA 62 Clearly Audible Audible Barely Audible Normally Audible				

For more details, please refer to the Clever Choice website
www.cleverchoice.com.au

Silver 2mm

Application

Our most basic and cost-effective underlay for general floating application with Laminate, Hydro and Oak floorboards <12mm in thickness.

Suitable for

Home renovations, single level family homes, and most single dwelling projects.

Features & Benefits

- ✓ Built-in foil barrier to protect against mould and moisture.
- ✓ Lightweight rolls to make transportation and handling easier.
- ✓ Basic acoustic, thermal, and moisture proof underlay for added temperature control and to help you save on your power consumption in your home.
- ✓ Makes floating flooring installation easy.
- ✓ The overlapping foil and tape make it easier to install for optimum performance.

Specifications	Measure
Thickness	2mm
Width x Length	1m x 25m
Roll Size	25sqm
Density	25kgs/m ³
Thermal Conductivity	0.028W/(m·K)
Water Absorption	0.09mg/cm ²
Acoustic Performance	5 to 6 star
Durability	Lifetime of flooring



Acoustic test results were conducted by Koikas Acoustics Pty Ltd. Test results are site-specific and were compared to the acoustic requirements of Part F5 of BCA (Building Codes of Australia), the standards prescribed by the Association of Australian Acoustical Consultants (AAAC) and City of Sydney Council's DCP 2012 requirements. All measurements were carried out following the guidelines and procedures outlined in AS/NZS ISO 140.7:2006 "Field measurements of impact sound insulation of floors" with the rating determined as per AS ISO 717.2-2004 "Rating of sound insulation in buildings and of building elements". Information gathered and provided by Paxwood Pty Ltd t/a Clever Choice Design Floors is given in good faith as a suggested guide in specifying Clever Choice Underlays, no guarantee or warranty is expressed or implied. No liability is accepted for any loss or damage, direct or indirect that may result from using the information and/or suggestions as actual conditions for use that are beyond our control.

Comfort 2mm

Application

Our all-purpose high-density acoustic foam underlay, for floating application with Laminate, Hydro, Timber, Australian Timbers, and Bamboo flooring <14mm in thickness.

Suitable for

Home renovations, single, split-level, and double storey homes plus most single dwelling projects and some high-rise developments.

Features & Benefits

- ✓ Built-in plastic barrier to protect against mould and moisture.
- ✓ Lightweight rolls to make transportation and handling easier.
- ✓ Moderate acoustic, thermal, and moisture-proof underlay for added temperature control and to help you save on your power consumption in your home.
- ✓ Makes floating flooring installation easy.
- ✓ The overlapping plastic and tape make it easier to install for optimum performance.

Specifications	Measure
Thickness	2mm
Width x Length	1m x 25m
Roll Size	25sqm
Density	110kgs/m ³
Thermal Conductivity	0.039W/(m-K)
Water Absorption	0.03mg/cm ²
Acoustic Performance	5 to 6 star
Durability	Lifetime of flooring



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Application

Our all purpose high-density acoustic foam underlay for floating application with Laminate, Hydro, Timber, Australian Timber and Bamboo flooring <21mm in thickness.

Suitable for

Home renovations, single, split-level, multi-storey homes plus most to all high-rise developments, multi-dwelling projects and offices.

Features & Benefits

- ✓ Built-in foil barrier to protect against mould and moisture.
- ✓ Lightweight rolls to make transportation and handling easier.
- ✓ High acoustic, thermal, and moisture-proof underlay for added temperature control and to help you save on your power consumption in your home.
- ✓ Makes floating flooring installation easy.
- ✓ The overlapping plastic and tape make it easier to install for optimum performance.
- ✓ Suitable for underfloor heating to add warmth to your home.

Specifications	Measure
Thickness	3mm
Width x Length	1m x 20m
Roll Size	20sqm
Density	110kgs/m ³
Thermal Conductivity	0.032W/(m-K)
Water Absorption	0.04mg/cm ²
Acoustic Performance	5 to 6 star
Durability	Lifetime of flooring



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Acoustic 5mm

Application

Our all purpose high-density acoustic foam underlay for floating application with Laminate, Hydro, Timber, Australian Timber and Bamboo flooring <21mm in thickness.

Suitable for

Home renovations, single, split-level, multi-storey homes plus most to all high-rise developments, multi-dwelling projects and offices.

Features & Benefits

- ✓ Built-in foil barrier to protect against mould and moisture.
- ✓ Lightweight rolls to make transportation and handling easier.
- ✓ High acoustic, thermal, and moisture-proof underlay for added temperature control and to help you save on your power consumption in your home.
- ✓ Makes floating flooring installation easy.
- ✓ The overlapping plastic and tape make it easier to install for optimum performance.
- ✓ Suitable for underfloor heating to add warmth to your home.
- ✓ Raise levels to meet tiles and carpet areas for a seamless finish.

Specifications	Measure
Thickness	5mm
Width x Length	1m x 10m
Roll Size	10sqm
Density	110kgs/m ³
Thermal Conductivity	0.042W/(m-K)
Water Absorption	0.03mg/cm ²
Acoustic Performance	5 to 6 star
Durability	Lifetime of flooring



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Cork 3mm



Application

Our all-purpose ultimate density acoustic cork underlay for floating and direct stick application with Laminate, Hydro, Hybrid, Vinyl, Timber, Australian Timber and Bamboo <21mm in thickness.

Suitable for

Home renovations, single, split-level, and multi-storey homes plus most to all high-rise developments, multi-dwelling projects and all commercial.

Features & Benefits

- ✓ Non-toxic, natural, environmentally friendly and fire retardant
- ✓ Lightweight sheets to make transportation and handling easier.
- ✓ High acoustic, thermal, and moisture-proof underlay for added temperature control and to help you save on your power consumption in your home.
- ✓ Suitable for underfloor heating to add warmth to your home.
- ✓ Stress crack protection for floor coverings.
- ✓ Does not absorb water or support the growth of mould in moist situations.

Specifications	Measure
Thickness	3mm
Width x Length	0.915m x 0.61m
Pack Size	45pieces/25m ²
Specific Weight	22kgs/ctn
Tensile Strength	200 KPa
Acoustic Performance	5 to 6 star
Compression (0.7MPa)	30%
Recovery (0.7MPa)	> 70%
Durability	Lifetime of flooring



Acoustic test results were conducted by Koikas Acoustics Pty Ltd. Test results are site-specific and were compared to the acoustic requirements of Part F5 of BCA (Building Codes of Australia), the standards prescribed by the Association of Australian Acoustical Consultants (AAAC) and City of Sydney Council's DCP 2012 requirements. All measurements were carried out following the guidelines and procedures outlined in AS/NZS ISO 140.7:2006 "Field measurements of impact sound insulation of floors" with the rating determined as per AS ISO 717.2-2004 "Rating of sound insulation in buildings and of building elements". Information gathered and provided by Paxwood Pty Ltd t/a Clever Choice Design Floors is given in good faith as a suggested guide in specifying Clever Choice Underlays, no guarantee or warranty is expressed or implied. No liability is accepted for any loss or damage, direct or indirect that may result from using the information and/or suggestions as actual conditions for use that are beyond our control.

Cork 5mm

Application

Our all-purpose ultimate density acoustic cork underlay for floating and direct stick application with Laminate, Hydro, Hybrid, Vinyl, Timber, Australian Timber and Bamboo <21mm in thickness.

Suitable for

Home renovations, single, split-level, and multi-storey homes plus most to all high-rise developments, multi-dwelling projects and all commercial.

Features & Benefits

- ✓ Non-toxic, natural, environmentally friendly and fire retardant
- ✓ Lightweight sheets to make transportation and handling easier.
- ✓ High acoustic, thermal, and moisture-proof underlay for added temperature control and to help you save on your power consumption in your home.
- ✓ Suitable for underfloor heating to add warmth to your home.
- ✓ Stress crack protection for floor coverings.
- ✓ Does not absorb water or support the growth of mould in moist situations.

Specifications	Measure
Thickness	5mm
Width x Length	0.915m x 0.61m
Pack Size	27pieces/15m ²
Specific Weight	22kgs/ctn
Tensile Strength	200 KPa
Acoustic Performance	5 to 6 star
Compression (0.7MPa)	30%
Recovery (0.7MPa)	> 70%
Durability	Lifetime of flooring



Acoustic test results were conducted by Koikas Acoustics Pty Ltd. Test results are site-specific and were compared to the acoustic requirements of Part F5 of BCA (Building Codes of Australia), the standards prescribed by the Association of Australian Acoustical Consultants (AAAC) and City of Sydney Council's DCP 2012 requirements. All measurements were carried out following the guidelines and procedures outlined in AS/NZS ISO 140.7:2006 "Field measurements of impact sound insulation of floors" with the rating determined as per AS ISO 717.2-2004 "Rating of sound insulation in buildings and of building elements". Information gathered and provided by Paxwood Pty Ltd t/a Clever Choice Design Floors is given in good faith as a suggested guide in specifying Clever Choice Underlays, no guarantee or warranty is expressed or implied. No liability is accepted for any loss or damage, direct or indirect that may result from using the information and/or suggestions as actual conditions for use that are beyond our control.

Clever Guard Floor Protection Pro

Application

Clever Guard Floor Protection is designed to be laid over your newly installed flooring to offer protection against damage while other trades are finishing their work and furniture is moved back into place. It is recommended to lay sheets of plywood or similar over the Clever Guard if you are intending to roll or drag heavy furniture or cabinetry into place to avoid damage.

Suitable for

Home renovations, single, split-level, and multi-storey homes plus most to all high-rise developments, multi-dwelling projects and all commercial.

Features & Benefits

- ✓ Non-toxic, natural, environmentally friendly and fire retardant.
- ✓ Lightweight rolls to make transportation and handling easier.
- ✓ Does not absorb water or support the growth of mould in moist situations.
- ✓ Moisture-proof for added temperature control and floor protection
- ✓ Easily cut to the desired size for the surface you need to protect
- ✓ Lightweight and reusable, it provides superior protection in high-traffic work sit areas
- ✓ Antistatic - Sticks to the floor without any need for tapes or adhesive
- ✓ Breathable - to allow moisture and vapor to escape from curing floors.

Specifications	Measure
Thickness	2mm
Width x Length	1m x 20m
Roll Size	20sqm
Density	25Kgs/m³



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Moisture Barrier Builders Film

Application

Our all-purpose Moisture Barrier Builders Film 200µm for floating application with Laminate, Hydro, Hybrid, Timber, Australian Timber and Bamboo <21mm in thickness. It is recommended for new slabs & subfloors with suspected moisture issues, to be installed under appropriate underlay for extra protection.

Suitable for

Home renovations, single, split-level, and multi-storey homes plus most to all high-rise developments, multi-dwelling projects and all commercial.

Features & Benefits

- ✓ Quick and easy to install.
- ✓ Resistant to ageing and deformation.
- ✓ Ultimate moisture-proof barrier for added temperature control and to help you save on your power consumption in your home.
- ✓ Protects expansion joints.

Specifications	Measure
Thickness	200µm
Width x Length	2m x 50m
Roll Size	100sqm
Durability	Lifetime of flooring



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Can a 6-star rating be achieved?

A 6-star AAAC rating can be achieved, but there are things you need to be aware of before making your underlay selection and finalising your purchase!

- i. Where is the flooring system being installed?
- ii. What specific requirements need to be met according to the Building Code of Australia (BCA), your Strata, and/or Local Council?
- iii. What is the construction quality of the building and the rooms? Does the ceiling have an insulated cavity, have the wall junctions been installed correctly, what is the thickness of the subfloor? Basically, was the building constructed with acoustic performance in mind?
- iv. Will the underlay suit the flooring type, location, and conditions of installation?

Clever Choice has an extensive range of flooring and underlay products. Some product choices when combined with the proper installation methods on certain sites meet the strict Building Code of Aust. 2004 (BCA) standards and better, can achieve a 6-star rating subject to individual site inspection and independent testing.

Impact noise test results are great as an indication, however, they really only validate the precise condition and location where the test was conducted. The floor type and flooring underlay are only two parts of a system.

Just keep in mind that there is not one single factor that determines the acoustic result. There are so many factors and elements that will contribute to the end acoustic result.

That's Clever.



Need help selecting products to suit your purpose?

Get in touch with our Clever Choice Sales Team

07 5526 7399

Technical

UNDERLAY

	Silver 2mm	Comfort 2mm	Sound 3mm	Moisture Barrier Builders Film 50m	Cork 3mm	Cork 5mm	Clever Guard Floor Protection	Moisture Barrier Builders Film 50m
Suitable for <12mm Laminate, Hydro and Oak flooring	✓	✓	✓	✓	✓	✓	✓	✓
Suitable for <14mm Laminate, Hydro and 14mm Oak flooring	✓	✓	✓	✓	✓	✓	✓	✓
Suitable for <21mm Laminate, Hydro and 12mm Oak flooring	✓	✓	✓	✓	✓	✓	✓	✓
Can be installed using direct stick or dual bond method					✓	✓	✓	✓
Improvements to noise reduction	Basic	Moderate	High	High	Ultimate	Ultimate	-	-
Real timber sound and feel	Basic	Moderate	High	High	Ultimate	Ultimate	-	-
Thermal reduction for increased comfort	Basic	Moderate	High	High	Ultimate	Ultimate	-	-
Mould and moisture protection	Basic	Moderate	High	High	Ultimate	Ultimate	Ultimate	Ultimate
Can be installed over underfloor heating			✓	✓	✓	✓	✓	✓
Independent acoustic approval		✓	✓	✓	✓	✓		
Guaranteed for the life of the flooring	✓	✓	✓	✓	✓	✓	✓	✓

Definitions of Noise Metrics

FIIC:

Field Impact Insulation Class is a single-number rating of how well a floor system attenuates impact type sounds, such as footsteps. Calculated from third-octave band normalised impact sound pressure level data and referenced to 10 m² as described in ASTM E989. The higher the single-number rating, the better its impact insulation performance.

L'nT,w:

The Weighted Standardised Impact Sound Pressure Level when measured in situ referenced to a reverberation time (RT60) of 0.5 seconds. Used by the AAAC to determine their respective Star Rating.

Ci:

Spectrum adaption term is a low frequency correction factor. Typically for massive floors such as concrete, the values are about zero while for timber joist floors Ci is positive because of the low resonant frequencies. Considers frequency range between 100 -and 2500 Hz.

Ci(50-2500):

Same as above, but for the frequency range 50 -2500 Hz.

Ci(125-2000):

Same as above, but for the frequency range 125 -2000 Hz.

AAAC Star R.	2	3	4	5	6
L'nT,W	65	55	50	45	40
FIIC	45	55	60	65	70
Comments	Below BCA 62	Clearly Audible	Audible	Barely Audible	Normally Audible

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Users are advised to make their own determination as to the suitability of this information concerning their particular purposes and specific circumstances and obtain the most up to date information or independent testing.

AAAC Star Rating System is reproduced from the Association of Australasian Acoustical Consultants (AAAC) Guideline for Apartment and Townhouse Acoustic rating Version 1.0. The AAAC Star Rating system is designed to be complementary to the National Construction Code (formerly known as the Building Code of Australia), AS/NZS Standards, or local authority building ordinances.

Featured product images are to be used as a guide or point of reference only as colours may vary. Actual samples should be inspected at a flooring store near you before making a purchase decision. Specifications are subject to manufacturing tolerances and may be changed without prior notice. The availability of products may change at any time without notice. *

Please refer to our website www.cleverchoice.com.au for warranty terms and conditions, conditions, product installation guidelines, care and maintenance guides, or to download product test reports. These documents are also available from your place of purchase.

That's **Clever.**

cleverchoice.com.au

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