







THE FOUNDATION OF GREAT FLOORS

est. 1986 Engineering Underlay for rigid floors since 1995 "THE FIRST – THE BEST"

THE UNDERLAY RANGE

INDEX

OUR HISTORY	3
UNDERLAY FOR FLOATING LAMINATE & ENGINEERED FLOO	RS
INTRO	5 6-7
INSTALLATION: TIMBER-BASED SUB-FLOORS	8 9
INSTALLATION: CONCRETE-BASED SUB-FLOORS 'DPM'	10 11
INSTALLATION: CONCRETE-BASED SUB-FLOORS 'VAPOUR BARRIER'	12 13 14
UNDERLAY FOR FIXED ENGINEERED & SOLID WOOD FLOO	RS
INTRO	15
SELECTION GUIDE	16-17
INSTALLATION: SLATTED GLU-THRU	18 19
INSTALLATION: ADHESIVE	20 21
INSTALLATION: ADHESIVE+ 'VAPOUR BARRIER' ACOUSTALAY® 250, 1000 ADHESIVE+DOMESTIC/COMMERCIAL to COMMERCIAL	22 23
TECHNICAL OVERVIEW	24-25

OUR HISTORY



Beacons Products, established in 1986, one of the leading stockists, distributors and converters of expanded foam products in South Wales and the West Country.







WHY ACOUSTALAY®?

Our experience and understanding of the flooring industry and the function of underlay combined with our confidence and technical knowledge has enabled us to develop our ACOUSTALAY® range. The most cost effective solution available - WHY PAY MORE FOR LESS?

The ACOUSTALAY® range has been manufactured and distributed since 1995 by Beacons Products.

Beacons have been engineering underlay for rigid floors since laminates were first introduced into the UK and Ireland in the early 1990s.

With a company focus on products that are 'fit for purpose', the high performance and long life of the **ACOUSTALAY** range has quickly established itself as the professional's choice.

Produced from a unique formula of chemical and physically cross-linked polyolefin foams, ACOUSTALAY® offers a complete, fully tested and certified range, meeting industry standards exactly. With a 10 year guarantee ACOUSTALAY® gives you underlay matched to your needs from domestic to heavy commercial grades. With products developed for acoustically sensitive areas and for use with underfloor heating and with vapour or DPM barriers, ACOUSTALAY® will meet the specific needs of your installation.





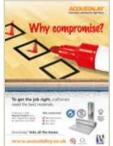
OUR ADVERTISING















O (9 description

















UNDERLAY FOR FLOATING FLOORS

If the underlay fails, the floor fails

All underlays must provide a minimum of 1.5mm layer between the floor and the sub-floor for spot levelling.



Compressive creep comparison at 2kPa (200kg) load

ACOUSTALAY® will compress no more than 10%



ACOUSTALAY® is tested so when the appropriate grade is selected for the correct application, compression is minimised with no more than 10% thickness loss over a minimum period of 10 years when under load. This gives a minimum of 1.8mm protection between the floor and the sub-floor, ensuring spot levelling and all other benefits are maintained for the life of the floor.

LOADING RANGE

2-15kPa (200-1500kg/m²)

over the life of the floor (10 years) 95 % THICKNESS 90 Low density non-X-linked foam underlays 80 (widely used for packaging) 75 1,000 5,000 10 50 100 500 10,000 200 3 months

OVERLOAD COMPRESSION

When 20% compression is exceeded cellular foams fail as the cell structure becomes damaged and can no longer recover its original thickness



All underlays must not deflect by more than 0.5mm to protect the joints from premature wear.



ACOUSTALAY® is fully tested and will take a force of a minimum of 20kPa = equivalent to 2 tonnes on the joint without exceeding the 0.5mm deflection limit, maintaining the integrity of the joints.

LOADING RANGE

20-60kPa (2000-6000kg/m²)



TIME (hours)





RANGE & SELECTION

8 underlays to choose from with easy selection. Retail (POS) display cartons, top up pallet trays or contractor Midi Rolls.

SELECTION GUIDE FOR FLOATING LAMINATE & ENGINEERED FLOORS





PERFORMANCE (COMPRESSIVE CREEP)

The value given in kPa is the maximum load which can be applied to the underlay so that the loss in thickness remains below 10% after 10 years loading time. The higher the value the greater its ability to withstand heavy furniture.

		TYPICAL USE	PERFORMANCE	JOINT PROTECTION	THICKNESS		
	PRODUCT		(MAX LOAD)	(COMPRESSIVE STRENGTH)	(SPOT LEVELLING)	FIRE RETARDANT FOAM	
A	COUSTALAY® 200	Bedroom Spare Room Living Room	Domestic 2 kPa 200 Kg/m²	32 kPa 3200 Kg/m²	2mm (1.8mm)		
A	COUSTALAY® 250	Bedroom Spare Room Living Room	Domestic Commercial 2.5 kPa 250 Kg/m²	28 kPa 2800 Kg/m²	3mm (2.7mm)	FIRE	
A	COUSTALAY® 250 DPM	HIGH MOISTURE AREAS Kitchen Living Room	Domestic Commercial 2.5 kPa 250 Kg/m²	28 kPa 2800 Kg/m²	3mm (2.7mm)	FIRE	
A	COUSTALAY® 250 ENERGY	HIGH MOISTURE AREAS ENERGY SAVING	Domestic Commercial 2.5 kPa 250 Kg/m²	28 kPa 2800 Kg/m²	3mm (2.7mm)	FIRE	
A	COUSTALAY® 300	Living Room Kitchen Hallway	H Domestic /Commercial 3 kPa 300 Kg/m²	28 kPa 2800 Kg/m²	3mm (2.7mm)		
A	COUSTALAY® 300⊕	COARSE SURFACES Living Room Hallway	H Domestic /Commercial 3 kPa 300 Kg/m²	20 kPa 2000 Kg/m²	5mm (4.5mm)		
A	COUSTALAY® 1000	HIGH TRAFFIC AREAS Office Hotel Room	Commercial 10 kPa 1000 Kg/m²	40 kPa 4000 Kg/m²	3mm (2.7mm)		
A	COUSTALAY® 1500	ACOUSTIC + HEAVY LOADING	Heavy Commercial 15 kPa 1500 Kg/m²	60 kPa 6000 Kg/m²	2mm		

[‡]Estimated values from known test results.



JOINT PROTECTION (COMPRESSIVE STRENGTH)

A minimum value of 20kPa/2000kg/m² is advisable to prevent potential damage of the tongue and groove system (click or non-click laminate) when puncture load is applied; the higher the value the greater its resistance to tongue and groove damage (<60kPa for LVT click tiles).

THERMAL INSULATION		VAPOUR BARRIER	IN-ROOM SOUND	TRANSMITTED SOUND REDUCTION
	(UNDERFLOOR HEATING)	(MOISTURE)	(DRUM)	(IMPACT)
Low 0.059m ² K/W	Surface + Embedded	NO	**	★★★ 22 dB
Medium 0.090m²K/W	Surface + Embedded	NO	***	★ ★ 19 _{dB}
Medium 0.094m²K/W	Surface + Embedded	DPM	***	★★ 19 _{dB}
High 0.122m²K/W	Surface	DPM	***	★★ 19 _{dB}
Medium 0.088m²K/W	Surface Embedded	YES	**	★★★ 22 _{dB}
High 0.15m²K/W	Surface	YES	**	★★★ 22dB‡
Medium 0.073m²K/W	Surface + Embedded	YES	***	★ ★ 20 _{dB}
Low 0.052m²K/W	Surface + Embedded	YES	***	★★ 20 _{dB}

See pages 24-25 for Technical Overview



THICKNESS (PROTECTION/SPOT LEVELLING)

Underlay needs to be thick and elastic enough to compensate for small protruding particles found on the smoothest of floors. By doing so, it prevents the creation of undesirable sound bridges and rocking caused by the new floor coming into contact with the sub-floor.

A minimum of 1.5mm thickness is recommended for moderately smooth structural floors. Acoustalay® gives a minimum of 1.8mm for normal use.



FIRE RETARDANT FOAM

Tested to UL94, rating H-BF, HF-2, HF-1. Slow horizontal burning on a 3mm thick specimin with a burning rate less than 75mm/min or stops burning before the 125mm mark. H-B rated materials are considered "self-extinguishing".



THERMAL INSULATION

Thermal resistance to heat transfer: relevant if heat loss is important or underfloor heating is



Suitability for use with sub-floor embedded underfloor heating systems is indicated.

(See Technical Overview on page 25 for more information).



VAPOUR BARRIER (MOISTURE)

When installed as directed using waterproof tape the underlay will prevent the penetration

ACOUSTALAY® 250 DPM AND ENERGY offer a complete damp proof membrane (DPM) for use when sub-floor moisture level is greater than 4%.



IN-ROOM SOUND QUALITY (DRUM)

The perceived level of noise an action (footsteps etc.) will produce in the room.

MIN REDUCTION





TRANSMITTED SOUND REDUCTION (IMPACT)

The noise an action (footsteps etc.) will transmit to the room below.

**** MIN REDUCTION **MAX REDUCTION** dB dB



sub-floor.



INSTALLATION: TIMBER-BASED SUB-FLOORS

1 Ensure floor is clean and flat*. Unroll at 90° to the direction of the floor, covering area to be laid.

To assist laying, apply double-sided tape to the perimeter of the sub-floor.



2 Butt the edge of each roll tightly against the previous. Taping the joints between rows may assist in this process. Do not overlap the ACOUSTALAY®.



3 Lay the flooring on top of the ACOUSTALAY®, referring to the manufacturer's instructions.

If laid on a concrete sub-floor a separate vapour barrier should be used with a minimum of 20mm up all walls.



Suitable for use with underfloor heating. Always read and follow the guidelines supplied with the underfloor heating system and/or floor to

Operating temperature -50°C to 100°C.

* A flat sub-floor means deviations of less than 2mm over 2.5m.









PERFORMANCE **DOMESTIC**



TYPICAL USE Bedroom Spare Room Living Room



PERFORMANCE



JOINT PROTECTION



THICKNESS 2mm



THERMAL INSULATION



VAPOUR BARRIER (MOISTURE)



IN-ROOM SOUND QUALITY (DRUM)



TRANSMITTED SOUND REDUCTION (IMPACT)

PERFORMANCE DOMESTIC/COMMERCIAL





PERFORMANCE



JOINT PROTECTION



THICKNESS 3mm nm spot levelli



THERMAL INSULATION Medium 0.090m² K/W



VAPOUR BARRIER (MOISTURE) NO



IN-ROOM SOUND QUALITY (DRUM)



TRANSMITTED SOUND REDUCTION (IMPACT)





as an insulating/spot leveling layer between the floor to be laid and the sub-floor



SUITED FOR USE IN AREAS WITH HIGH MOISTURE (ABOVE 4% VOLUME).

INSTALLATION: CONCRETE-BASED SUB-FLOORS 'DPM'

- 1 Ensure floor is clean and flat*. Unroll at 90° to the direction of the floor, covering area to be laid. To assist laying, apply double-sided tape to the perimeter of the sub-floor.
 - If laid on a concrete sub-floor so the ACOUSTALAY® is to be used as a damp proof membrane, then the first row should be laid with a minimum of 20mm up the walls.
- 2 Butt the next row edge tightly to the first, ensuring that they do not overlap. Carefully tape the joints using a waterproof tape. All rows, including the last, should also be laid with a minimum of 20mm up the wall. This will be concealed behind the new or refitted skirtings. scotia/trim once the floor is laid.
 - If overlap option selected. The first row of Acoustalay® should be laid with the DPM overlap up the wall trimmed back to 20mm (minimum). Butt the next row of Acoustalay® tightly against the first, overlapping the 200mm DPM overlap and using the integral adhesive strip (recommended for a complete seal). All rows, including the last, should be laid with a minimum of 20mm up the wall. This will be concealed behind the new or refitted skirtings once the floor is laid.
- **3** Lay the flooring on top of the ACOUSTALAY®, referring to the manufacturer's instructions.









Suitable for use with underfloor heating. Always read and follow the guidelines supplied with the underfloor heating system and/or floor to

Operating temperature -50°C to 100°C.

- * A flat sub-floor means deviations of less than 2mm over 2.5m.
- § Where new skirting is to be fitted, lay the ACOUSTALAY® 50mm up the walls on all room edges and conceal with newly fitted skirting.









PERFORMANCE DOMESTIC/COMMERCIAL





PERFORMANCE



JOINT PROTECTION



THICKNESS 3_{mm}



THERMAL INSULATION Medium 0.094m² K/W



VAPOUR BARRIER (MOISTURE) YES (DPM)



IN-ROOM SOUND QUALITY (DRUM)



TRANSMITTED SOUND REDUCTION (IMPACT) **★★ 19dB**

PERFORMANCE DOMESTIC/COMMERCIAL









THICKNESS 3mm ım spot leve



THERMAL INSULATION



VAPOUR BARRIER (MOISTURE) YES (DPM)





TRANSMITTED SOUND REDUCTION (IMPACT) **★★ 19dB**

VAPOUR BARRIER



as an insulating/spot leveling layer between the floor to be laid and the sub-floor



INSTALLATION: CONCRETE-BASED SUB-FLOORS 'VAPOUR BARRIER'

- 1 Ensure floor is clean and flat*. Unroll at 90° to the direction of the floor, covering area to be laid. To assist laying, apply double-sided tape to the perimeter of the sub-floor.
 - If laid on a concrete sub-floor so the ACOUSTALAY® is to be used as a vapour barrier, then the first row should be laid with a minimum of 20mm up the walls.
- 2 Butt the next row edge tightly to the first, ensuring that they do not overlap. Carefully tape the joints using a waterproof tape. All rows, including the last, should also be laid with a minimum of 20mm up the wall. This will be concealed behind the new or refitted skirting, scotia/trim once the floor is laid.
- 3 Lay the flooring on top of the ACOUSTALAY®, referring to the manufacturer's instructions.







Suitable for use with underfloor heating. Always read and follow the guidelines supplied with the underfloor heating system and/or floor to

Operating temperature -50°C to 100°C.

- * A flat sub-floor means deviations of less than 2mm over 2.5m.
- ‡ Estimated values from known test results.









PERFORMANCE HEAVY DOMESTIC /COMMERCIAL





PERFORMANCE





THICKNESS 3mm



THERMAL INSULATION Medium 0.088m² K/W



VAPOUR BARRIER (MOISTURE) YES



IN-ROOM SOUND QUALITY (DRUM)



TRANSMITTED SOUND REDUCTION (IMPACT)

PERFORMANCE HEAVY DOMESTIC /COMMERCIAL





PERFORMANCE



JOINT PROTECTION



THICKNESS 5mm nm spot leve



THERMAL INSULATION



VAPOUR BARRIER (MOISTURE) YES



IN-ROOM SOUND QUALITY (DRUM)



TRANSMITTED SOUND REDUCTION (IMPACT)



PERFORMANCE COMMERCIAL









JOINT PROTECTION 40 kPa 4000 Kg/m² compressive strength



THICKNESS

3mm
(2.7mm spot levelling)



THERMAL INSULATION Medium 0.073m² K/W



VAPOUR BARRIER (MOISTURE) YES



IN-ROOM SOUND QUALITY (DRUM)



TRANSMITTED SOUND REDUCTION (IMPACT)

** 20dB

PERFORMANCE HEAVY COMMERCIAL





PERFORMANCE
Heavy Commercial
15 kPa 1500 Kg/m²



JOINT PROTECTION 60 kPa 6000 Kg/m² compressive strength)



THICKNESS

2mm
mm spot levelling



THERMAL INSULATION Low 0.052m² K/W



VAPOUR BARRIER (MOISTURE) YES



IN-ROOM SOUND QUALITY (DRUM)



TRANSMITTED SOUND REDUCTION (IMPACT)

** 20dB

UNDERLAY FOR FIXED FLOORS

FOR SOLID WOOD AND ENGINEERED BOARDS

If the underlay fails, the floor fails

All underlays must provide a minimum of 1.5mm layer between the floor and the sub-floor for spot levelling.





ACOUSTALAY® is tested so when the appropriate grade is selected for the correct application, compression is minimised with no more than 10% thickness loss over a period of 10 years when under load. This gives a minimum of 1.8mm protection between the floor and the sub-floor, ensuring spot levelling and all other benefits are maintained for the life of the floor.

LOADING RANGE

2.5-10kPa (250 -1000kg/m²)

All underlays must minimise deflection to protect the joints from premature wear.



ACOUSTALAY® is fully tested and will take a force of a minimum of 20kPa = equivalent to 2 tonnes on the joint without exceeding 0.5mm deflection limit, maintaining the integrity of the joints.

LOADING RANGE

20-40kPa (2000-4000kg/m²)



ACOUSTALAY® offers three alternative products for use with fixed floors.

ACOUSTALAY® SLATTED

With pre-cut slots to glue the floor directly to the sub-floor



ACOUSTALAY® ADHESIVE

Easy to use method reducing installation time!

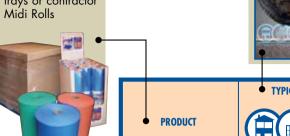


With integrated vapour barrier and easy adhesive strip eliminating the need for seperate vapour barrier when layed on concrete floor.

RANGE & SELECTION

7 underlays to choose from with easy selection. Retail (POS) display cartons, top up pallet trays or contractor

SELECTION GUIDE FOR FIXED ENGINEERED & SOLID WOOD FLOORS



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PERFORMANCE (COMPRESSIVE CREEP)

The value given in kPa is the maximum load which can be applied to the underlay so that the loss in thickness remains below 10% after 10 years loading time. The higher the value the greater its ability to withstand heavy furniture.

	TYPICAL USE	PERFORMANCE	JOINT PROTECTION	THICKNESS		
PRODUCT		(MAX LOAD)	(COMPRESSIVE STRENGTH)	(SPOT LEVELLING)	FIRE RETARDANT FOAM	
ACOUSTALAY® 250 SLATTED	Bedroom Spare Room Living Room	Domestic /Commercial 2.5 kPa 250 Kg/m²	28 kPa 2800 Kg/m²	3mm (2.7mm)	FIRE	
ACOUSTALAY® 300⊕ SLATTED	SURFACES Living Room Hallway	H Domestic /Commercial 3 kPa 300 Kg/m²	20 kPa 2000 Kg/m²	5mm (4.5mm)		
ACOUSTALAY® 1000 SLATTED	HIGH TRAFFIC AREAS Office Hotel Room	Commerical 10 kPa 1000 Kg/m²	40 kPa 4000 Kg/m²	3mm (2.7mm)		
ACOUSTALAY® 250 ADHESIVE	Living Room Kitchen Hallway	Domestic /Commercial 2.5 kPa 250 Kg/m²	28 kPa 2800 Kg/m²	3mm (2.7mm)	FIRE	
ACOUSTALAY® 1000 ADHESIVE	HIGH TRAFFIC AREAS Office Hotel Room	Commerical 10 kPa 1000 Kg/m²	40 kPa 4000 Kg/m²	3mm (2.7mm)		
ACOUSTALAY® 250 ADHESIVE母	Living Room Kitchen Hallway	Domestic /Commercial 2.5 kPa 250 Kg/m²	28 kPa 2800 Kg/m²	3mm (2.7mm)	FIRE	
ACOUSTALAY® 1000 ADHESIVE⊕	HIGH TRAFFIC AREAS Office Hotel Room	Commerical 10 kPa 1000 Kg/m²	40 kPa 4000 Kg/m²	3mm (2.7mm)		

[‡]Estimated values from known test results.



JOINT PROTECTION (COMPRESSIVE STRENGTH)

A minimum value of 20kPa/2000kg/m² is advisable to prevent potential damage of the tongue and groove system when puncture load is applied; the higher the value the greater its resistance to tongue and

THERMAL	AL INSULATION VAPO		IN-ROOM SOUND QUALITY	TRANSMITTED SOUND REDUCTION
(1)	(UNDERFLOOR HEATING)	(MOISTURE)	(DRUM)	(IMPACT)
Medium 0.090m ² K/W	Embedded	NO	***	★★ 16 _{dB} ‡
High 0.15m ² K/W	Embedded	YES	***	*** 18 _{dB} ‡
Medium 0.073m²K/W	Embedded	YES	***	★★ 16 _{dB} ‡
Medium 0.090m²K/W	Embedded	NO	***	★★ 16 _{dB} ‡
Medium 0.073m²K/W	Embedded	NO	***	★★ 16 _{dB} ‡
Medium 0.090m²K/W	Embedded	YES	***	★★ 16dB‡
Medium 0.073m²K/W	Embedded	YES	***	★★ 16 _{dB} ‡

See pages 24-25 for Technical Overview



THICKNESS (PROTECTION/SPOT LEVELLING)

Underlay needs to be thick and elastic enough to compensate for small protruding particles found on the smoothest of floors. Thereby preventing the creation of undesirable sound bridges and rocking caused by the new floor coming into contact with the sub-floor.

A minimum of 1.5mm thickness is recommended for moderately smooth structural floors, Acoustalay® gives a minimum of 1.8mm for normal use.



FIRE RETARDANT FOAM

Tested to UL94, rating H-BF, HF-2, HF-1. Slow horizontal burning on a 3mm thick specimin with a burning rate less than 75mm/min or stops burning before the 125mm mark. H-B rated materials are considered "self-extinguishing".



THERMAL INSULATION

Thermal resistance to heat transfer; relevant if heat loss is important or underfloor heating is to be used.



Suitability for use with sub-floor embedded underfloor heating systems is indicated.

(See Technical Overview on page 25 for more information).



VAPOUR BARRIER (MOISTURE)

For use on concrete based sub-floors up to 4% moisture content.

(See technical overview on page 25).



IN-ROOM SOUND QUALITY (DRUM)

The perceived level of noise an action (footsteps etc.) will produce in the room.

MIN REDUCTION





TRANSMITTED SOUND REDUCTION (IMPACT)

The noise an action (footsteps etc.) will transmit to the room below.

MIN REDUCTION

**** MAX REDUCTION dB

SLATTED

FOR USE WITH ENGINEERED & SOLID WOOD FLOORS

as an insulating/spot leveling layer between the floor to be laid and the sub-floor.

ACOUSTALA Innovative underlay for rigid floors

ACOUSTALAY® SLATTED ENABLES FLOOR TO BE GLUED DIRECTLY TO SUB-FLOOR. THE PRECUT SLOTS ENSURE MINIMUM ADHESIVE USED WHILE THE ACOUSTALAY® PROVIDES FOR PERFECT SPOT LEVELLING.

INSTALLATION: SLATTED GLU-THRU

- 1 Ensure the floor is clean and flat*. Simply unroll on to a prepared sub-floor with the precut slots perpendicular to the length of the wood. Place together edge to edge. Do not overlap. To assist laying, apply double-sided tape to the perimeter of the sub-floor and tape the joints between each row.
- 2 Apply a high strength elastic adhesive at a width of 8mm and a height of 8mm in to all precut slots to form a secure bond between wood boards and sub-floor. The nozzle should be held vertically to the substrate
- 3 Remember to leave expansion gaps in accordance with floor-fitting instructions. It is important that the first row is laid completely straight (do not assume the wall is straight). Start laying flooring along the longest wall, position wood boards carefully and firmly and press in to the adhesive until they lay taut to the previous row. The wood boards can then be positioned using a hammer and an impact block. Continue until the floor area is covered.

This system is designed for accurately cut 'tongue and groove' boards (min: 3x3mm) with a minimum board size of 300x50x12mm and a maximum board thickness of 28mm.

If laid on a concrete sub-floor ensure moisture level is below 2%.







- Suitable for use with sub-floor embedded underfloor heating.
- Always read and follow the guidelines supplied with the underfloor heating system and/or floor to

Operating temperature -50°C to 100°C.

- * A flat sub-floor means deviations of less than 2mm
- ‡ Estimated values from known test results.





DOMESTIC/COMMERCIAL



TYPICAL USE Bedroom



PERFORMANCE



JOINT PROTECTION



THICKNESS 3_{mm}



THERMAL INSULATION Medium 0.090m² K/W



VAPOUR BARRIER (MOISTURE) NO



IN-ROOM SOUND QUALITY (DRUM)



TRANSMITTED SOUND REDUCTION (IMPACT) ★★ 16dB[‡]



TYPICAL USE



PERFORMANCE Domestic/Commercia 3 kPa 300 Kg/m² (max load)





THICKNESS 5mm nm spot levell



THERMAL INSULATION High 0.15m² K/W



VAPOUR BARRIER (MOISTURE) YES



IN-ROOM SOUND QUALITY (DRUM)



TRANSMITTED SOUND REDUCTION (IMPACT) **★★★**18dB‡

PERFORMANCE



TYPICAL USE Office Hotel Room



PERFORMANCE Commercial 0 kPa 1000 Kg/m



JOINT PROTECTION



THICKNESS 3_{mm}



THERMAL INSULATION Medium 0.073m² K/W



VAPOUR BARRIER (MOISTURE) YES



IN-ROOM SOUND QUALITY (DRUM)



TRANSMITTED SOUND REDUCTION (IMPACT) **★★ 16**dB

ADHESIVE

FOR USE WITH **ENGINEERED & SOLID** WOOD FLOORS

as an insulating/spot leveling layer between the floor to be laid and the wooden-based sub-floor.



EASY TO USE ACOUSTALAY® ADHESIVE (SELF ADHESIVE BACKED) SIGNFICANTLY REDUCES INSTALLATION TIME

INSTALLATION: TIMBER-BASED SUB-FLOORS

- 1 Ensure the floor is clean and flat*. To assist laying, apply double-sided tape to the perimeter of the sub-
- 2 If laid on a concrete sub-floor, then a separate vapour barrier should be used and positioned with a minimum of 20mm up all room edges. (Any surplus can be trimmed flush to the floor when installation is complete and concealed with appropriate newly fitted skirting, scotia/trim).
- 3 Unroll at 90° to the direction of the floor, with the release liner facing upward. Each row of ACOUSTALAY® should be measured to allow approximately one board width plus 100mm extra length up the wall at the leading edge.
- 4 The second row of ACOUSTALAY® should be laid so that the foam is flush to the previous row (do not overlap the foam).
- 5 Peel back the release liner from the adhesive on the extra length measured at the leading edge of all rows of ACOUSTALAY® (mentioned in point 3 above). Leaving the liner intact, trim the underlay only flush to the room edge.
 - Replace the liner to cover all exposed adhesive to ensure no contact is made with the flooring before
 - NB: As spare liner becomes available during the installation it can be re-applied to any off-cut pieces of foam, which can be retained for later use.
- 6 Fold the extra length of liner down onto the newly trimmed rows (without exposing the adhesive), giving a double layer of liner onto which the first row of boards can be laid.
- 7 Remember to leave expansion gaps in accordance with floor fitting instructions. It is important that the first row is laid completely straight (do not assume the wall is straight).
 - Carefully position the first row of boards. For engineered flooring add a couple of spots of wood glue to the board ends (optional) because of light expansion - not necessary for solid wood flooring.
- 8 Once the first row is positioned, a portion of the liner will still be visible. Grip this and gently pull back from under the boards, while retaining pressure on the flooring to keep it in place.
 - CAUTION: Once the floor contacts the adhesive it will not be possible to re-adjust its position.
- 9 For ease of installation ensure that the release liner remains underneath the last fitted row. If pulled too far at any stage simply press carefully back into place, so that no adhesive is exposed.
- 10 Install further rows by laying the flooring on top of the folded liner and, once in position, pull back the liner from the ACOUSTALAY® row by row.
- 11Trim back all exposed ACOUSTALAY® flush to the floor and conceal with the newly fitted skirting, scotia/trim.

Minimum installation temperature 5°C.



‡ Estimated values from known test results.





- Suitable for use with sub-floor embedded underfloor heating.
- Always read and follow the guidelines supplied with the underfloor heating system and/or floor to be fitted.

Operating temperature -50°C to 100°C.









DOMESTIC/COMMERCIAL





PERFORMANCE





THICKNESS 3mm nm spot level



THERMAL INSULATION Medium 0.090m² K/W



VAPOUR BARRIER (MOISTURE) NO



IN-ROOM SOUND QUALITY (DRUM)



PERFORMANCE COMMERCIAL





PERFORMANCE



JOINT PROTECTION



THICKNESS 3mm 2.7mm spot levelling)



THERMAL INSULATION Medium 0.073m² K/W



VAPOUR BARRIER (MOISTURE)



IN-ROOM SOUND QUALITY (DRUM)



TRANSMITTED SOUND REDUCTION (IMPACT)

ADHESIVE

FOR USE WITH ENGINEERED & SOLID

WOOD FLOORS

as an insulating/spot leveling layer between the floor to be laid and the concrete sub-floor - eliminating the need for a separate vapour barrier.



SELF ADHESIVE BACKED UNDERLAY WITH INTEGRATED 125mu PE FILM VAPOUR BARRIER TO EN 13984. ELIMINATES THE NEED FOR A SEPARATE VAPOUR BARRIER. SAVES INSTALLATION HASSLE, TIME & MONEY.

INSTALLATION: CONCRETE-BASED SUB-FLOORS 'VAPOUR BARRIER'

- 1 Ensure the floor is clean and flat*. To assist laying, apply double-sided tape to the perimeter of the
- 2 Unroll at 90° to the direction of the floor.
- 3 The first row of ACOUSTALAY® should be laid starting on the left hand side of the room, with the release liner facing upward and vapour barrier facing downward with a minimum of 20mm up
- 4 Each row of ACOUSTALAY® should be measured to allow approximately one board width plus 100mm extra length up the wall at the leading edge.
- All rows, including the last should be laid with a minimum of 20mm of ACOUSTALAY® up all room edges. (Any surplus can be trimmed flush to the floor when installation is complete and concealed with appropriate newly fitted skirting, scotia/trim§).
- 6 The second row of ACOUSTALAY® should be laid over the underlapping vapour barrier so that the underlay is flush to the previous row (do not overlap the underlay). Once in place carefully remove the protective tape from the adhesive strip to secure the ACOUSTALAY® in position.
- 7 Peel back the release liner from the adhesive on the extra length measured at the leading edge of all rows of ACOUSTALAY® (mentioned in point 4 above).
 - Leaving the liner intact, trim the ACOUSTALAY® only, leaving a minimum of 20mm of ACOUSTALAY® up the wall to form the vapour barrier. (Any surplus can be trimmed back once the installation is complete).
 - Replace the liner to cover all exposed adhesive to ensure no contact is made with the flooring
 - NB: As spare liner becomes available during the installation it can be re-applied to any off-cut pieces of foam, which can be retained for later use.
- 8 Fold the extra length of liner down onto the newly trimmed rows (without exposing the adhesive), giving a double layer of liner onto which the first row of boards can be laid.
- Remember to leave expansion gaps in accordance with floor fitting instructions. It is important that the first row is laid completely straight (do not assume the wall is straight). Carefully position the first row of boards. For engineered flooring add a couple of spots of wood glue to the board ends (optional) because of light expansion – not necessary for solid wood flooring.
- 10 Once the first row is positioned, a portion of the liner will still be visible. Grip this and gently pull back from under the boards, while retaining pressure on the flooring to keep it in place. CAUTION: Once the floor contacts the adhesive it will not be possible to re-adjust its position.
- 11 For ease of installation ensure that the release liner remains underneath the last fitted row. If pulled too far at any stage simply press carefully back into place, so that no adhesive is exposed.
- 12 Install further rows by laying the flooring on top of the folded liner and, once in position, pull back the liner from the ACOUSTALAY® row by row.
- 13 Trim back all exposed ACOUSTALAY® flush to the floor and conceal with the newly fitted skirting, scotia/trim.

Minimum installation temperature 5°C.



Suitable for use with sub-floor embedded underfloor heating.

Always read and follow the guidelines supplied with the underfloor heating system and/or floor to

Operating temperature -50°C to 100°C.

- * A flat sub-floor means deviations of less than 2mm over 2.5m.
- § Where new skirting is to be fitted, lay the ACOUSTALAY® 50mm up the walls on all room edges and conceal with newly fitted skirting.
- ‡ Estimated values from known test results.



Fold release liner

NB: Please see Adhesive installation and images on page 20 for further details.



DOMESTIC/COMMERCIAL











THICKNESS 3mm ım spot level



THERMAL INSULATION Medium 0.090m² K/W[‡]



VAPOUR BARRIER (MOISTURE) YES



IN-ROOM SOUND QUALITY (DRUM)



PERFORMANCE **COMMERCIAL**









THICKNESS 3mm .7mm spot levelling)



THERMAL INSULATION Medium 0.073m² K/W³



VAPOUR BARRIER (MOISTURE) YES



IN-ROOM SOUND QUALITY (DRUM)



TECHNICAL OVERVIEW



INTRODUCTION

The **ACOUSTALAY®** range offers the most cost effective solution available. For home, office or commercial applications, we offer a range of solutions which are fully tested to industry standards and guaranteed for 10 years.



THICKNESS - SPOT LEVELLING

Underlay needs to be thick and elastic enough to compensate for small protruding particles found on the smoothest of floors. By doing so, it prevents the creation of undesirable sound bridges and rocking caused by the new floor

coming into contact with the sub-floor.

A minimum of 1.5mm thickness is recommended for moderately smooth structural floors. Beacons recommend a minimum of 1.8mm for normal use.

When applied correctly the **ACOUSTALAY®** range achieves a minimum of 1.8mm protection for the life of the floor.





PERFORMANCE - COMPRESSIVE CREEP

Compressive creep is measured (being equal to thickness loss over time under a specified load) according to EN1606 and EN13163.

The value given in kPa is the maximum load which can be applied to the underlay so that

the loss in thickness remains below 10% after 10 years loading time. This data is of particular importance in relation to heavy furniture.

The higher the value the greater its ability to withstand heavy furniture.

ACOUSTALAY® range: 2kPa - 35kPa (200Kg/m² - 3500Kg/m²)





JOINT PROTECTION - COMPRESSIVE STRENGTH

Compressive strength is measured at 0.5mm deformation according to acc. ISO 844 resp. EN13163.

A minimum value of 20kPa is advisable to

prevent potential damage of the click or tongue and groove systems when puncture load is applied. The higher the value the greater its resistance to tongue and groove damage.

ACOUSTALAY® range: 20kPa - 110kPa (2000Kg/m² - 11000Kg/m²)



FIRE RETARDANT FOAM

Tested to UL94, rating H-BF, HF-2, HF-1. Slow horizontal burning on a 3mm thick specimin with a burning rate less than 75mm/min

or stops burning before the 125mm mark. H-B rated materials are considered "selfextinguishing".

VAPOUR BARRIER (MOISTURE)

Moisture content of all mineral sub-floors (cement, screed floor, ceramic and stone tilina) can vary and needs to be ascertained.

European Producers of Laminate Flooring (EPLF) Code of Practice for the installation of laminate flooring recommends the Magnesium moisture test (CM) test for measuring relative humidity.

A maximum moisture content within a cement screed sub-floor must be kept to < 2.0CM% with a relative humidity not exceeding 60% RH.

To protect floors and to minimise the risk of possible damage from rising damp, use only

ACOUSTALAY® products with an integrated vapour barrier with waterproof joint sealing tape.

ACOUSTALAY® products are tested to ISO 1663 (23°C @ 0.50% RH) for moisture barrier performance. The EPLF code of practice requires a minimum thickness of 0.2mm of PE foil which equates to an SD Value (M) of 20.

All ACOUSTALAY® products with an SD value of 20 or greater pass the EPLF requirements, eliminating the need for additional barriers.

For areas where sub-floor moisture level is >4% a damp proof membrane (DPM) should be used.

VAPOUR BARRIER (MOISTURE)



Separate barriers where applied meet the following standards:





THERMAL INSULATION - RESISTANCE

Thermal resistance is measured according to ISO 11092:BS EN 31092 and is relevant if either underfloor heating is in use, or if heat loss is an issue.

With sub-floor embedded underfloor heating the ACOUSTALAY® will lie on top of the heated floor. According to EN1264 Part 3 Floor Heating - System & Components, the thermal resistance Ru, B of all materials (underlay, laminate, wood etc.) laying on top of a heated floor should not exceed 0.150m²K/W to prevent unnecessary increase of the flow temperature of the heating system. Hence in this case the lower the value of the ACOUSTALAY® the greater the

flexibility in the choice of flooring.

In the case of surface underfloor heating (ribbon or wire type) the ACOUSTALAY® will lie between the sub-floor and the heating system. In this case, with the ACOUSTALAY® below the heating system, it will provide an insulating layer against heat loss through the sub-floor and will not offer an impediment to heat travelling upwards into the room. Similarly where underfloor heating is not in use the ACOUSTALAY® will provide an insulating layer against heat loss through the sub-floor. In either case a high thermal insulation value will be beneficial.









ACOUSTALAY® range: 0.052m²K/W - 0.15m²K/W

IN-ROOM SOUND QUALITY (DRUM)

Drum sound (also called room, emitted or reflected sound) is defined as a perceived level of noise inside a room created by footsteps, falling toys and other impact sources.

The internal test methods adopted relate

to the EPLF norm 021029-3. Within the ACOUSTALAY® range the higher the rating (four star being the highest) the better the perceived noise within the room.



TRANSMITTED SOUND REDUCTION (IMPACT)

Impact sound transmission of laminate flooring is measured according to ISO 140-8 using a tapping hammer on the floor.

Results are expressed as a single value called impact sound improvement index D Lw (dB) which basically describes the noise level in an underneath located room once with and once without the floating floor.

level in the room underneath the floor.

The higher the value the lower the noise



ACOUSTALAY® range: 16dB upwards

SALES SUPPORT & SUPPLY FLEXIBILITY

EASY SELECTION FROM OUR COMPREHENSIVE RANGE

The ACOUSTALAY® range has been carefully structured to include underlays that match all domestic and commercial applications.

SUPERIOR QUALITY AND LONG LIFE

The X-linked construction and special blend of the polyolefin formula used results in underlays that will perform as specified, protecting the floor for at least 10 years.

SUPERB VALUE

ACOUSTALAY® Offers the customer superb value when considering cost and long term performance of their floor.

CHOICE OF DELIVERY OPTIONS

- Retail 'POINT OF SALE' (POS) display cartons
- Top up 'PALLET TRAYS'
- Contractor 'MIDI ROLLS' (Normally below 25kgs and suitable for access through standard doorways)



www.acoustalay.co.uk

We have devised an easy-to-find-and-use website focussed on helping the customer choose the right product (ACOUSTALAY®) and find a local supplier.

- Easy-to-use interactive selection tool with printable product information.
- A comprehensive list of Tier One stockists with directions to their stores and links to their websites.
- Full product technical information with printable downloads.
- Latest product and promotional news and updates.
- A customer support facility providing advice and technical information.



WATERPROOF **JOINT SEALING TAPE**



ACCESSORIES



DOUBLE-SIDED POSITIONING TAPE

To assist positioning ACOUSTALAY® with easy release 'finger lift' backing liner.



ACOUSTALAY® is a registered brand of:

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