

PermaFlex[®] Self-Adhesive Acoustic Underlay

Benefits of PermaFlex[®] Acoustic Underlay

PermaFlex[®] self-adhesive underlay is an innovative, patented flooring installation system that streamlines sub-floor preparation and eliminates the need for adhesives. This results in a quick, clean, and straightforward installation process. PermaFlex[®] underlay enhances comfort and sound absorption, significantly improving the performance of floor coverings in various settings, including private homes, hospitality, commercial space, retail, healthcare, multi-family housing, and educational facilities.

Unlike traditional foam and textile underlays, PermaFlex[®] underlay is manufactured from recycled rubber crumb granules bonded together to form an outstanding cushioned layer. These granules provide excellent cushioning when compressed and return to their original shape when pressure is released. This ensures long-lasting performance without degradation over time. Additionally, PermaFlex[®] underlay offers superior acoustic properties, making it an ideal choice for a wide range of flooring applications.



Acoustic Performance of PermaFlex[®] Acoustic Underlay

Floor Covering	Underlay	Acoustic Performance ΔLw
Woven Carpet (2689gsm)	PermaFlex 50	41dB
Woven Carpet (2689gsm)	PermaFlex 30	40dB
Tufted Carpet (1480gsm)	PermaFlex 50	36dB
Tufted Carpet (1480gsm)	PermaFlex 30	30dB
Carpet Tile (Bitumen-backed)	PermaFlex 30	29dB
LVT (3mm)	PermaFlex 30	63 (IIC)
Bolon Woven Vinyl Tile (3mm)	PermaFlex 30	21dB / 53 (IIC)
Laminate (7mm)	PermaFlex 30	59 (FIC)
Bamboo (10mm)	PermaFlex 30	60 (IIC)
Engineered Wood (14mm)	PermaFlex 30	18dB / 57 (FIC)
Solid Wood (21mm)	PermaFlex 30	57 (FIC)
LVT (2.5mm)	PermaFlex 25	18dB / 50 (IIC)
Ceramic Tile (10mm)	PermaFlex 25	19dB / 51 (IIC)

"Powering the future with **sustainable solutions**"

VAN DYCK

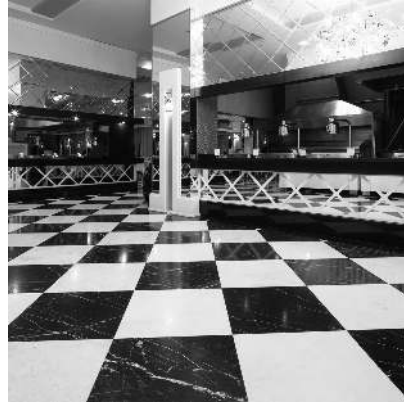
Application of PermaFlex® Acoustic Underlay



Broadloom



Laminate



Ceramic & Stone Tiles



Carpet Tile



Wood



LVT

Product Range

PermaFlex® 25 hg (high grab)

2.5mm underlay features a permanent self-adhesive bond, making it ideal for various flooring types. It is particularly suited for:

- Luxury Vinyl Tiles (LVTs): Designed for dryback installation, providing a secure and lasting bond.
- Woven Tiles: Suitable for dryback tiles with a thickness of greater than 2.5mm.
- Ceramic, Porcelain, and Natural Stone Tiles: Ensures stability and adhesion for these heavier, more robust flooring options.

PermaFlex® 30 hg (high grab)

3mm underlay features a permanent self-adhesive bond, ensuring a strong and durable installation. It is ideal for:

- Luxury Vinyl Tiles (LVTs): Designed for dryback installation, providing a secure fit for tiles thicker than 3mm.
- Woven Vinyl Tiles: Suitable for dryback tiles with thickness greater than 3mm.
- Solid/Engineered Wood: Perfect for tongue and groove installations, offering stability and longevity.
- Broadloom Carpet: Ensures a smooth, professional finish for broadloom carpet installations.

PermaFlex® 30 lg (low grab)

3mm underlay features a non-permanent self-adhesive bond, making it ideal for:

- Carpet Tiles: Provides a stable yet removable bond, perfect for modular flooring solutions.
- Luxury Vinyl Tiles (LVTs): Suitable for click joint installations with tiles thicker than 3mm.
- Engineered Wood: Ideal for click joint engineered wood flooring, ensuring ease of installation and stability.
- Laminate Flooring: Perfect for click joint laminate installations, offering a secure and flexible bond.

PermaFlex® 50 hg (high grab)

5mm underlay features a high-grab permanent self-adhesive bond, making it ideal for:

- Solid and Engineered Wood: Perfect for tongue and groove installations, ensuring a secure and durable fit.
- Broadloom Carpet: Provides a strong, lasting bond, ensuring a smooth and professional finish.

PermaFlex® 50 lg (low grab)

Our 5mm underlay features a non-permanent self-adhesive bond, making it ideal for:

- Carpet Tiles: Offers a secure yet easily removable bond, perfect for modular flooring solutions.
- Engineered Wood: Suitable for click joint installations, providing stability and ease of installation.
- Laminate Flooring: Perfect for click joint installations, ensuring a flexible and reliable bond.



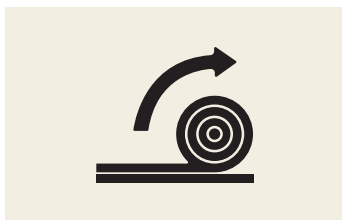
Product Information for PermaFlex[®] Acoustic Underlay

Details	PermaFlex 25	PermaFlex 30	PermaFlex 50
Compound	Minimum 80% recycled rubber crumb	Minimum 80% recycled rubber crumb	Minimum 80% recycled rubber crumb
Bonding Agent	Synthetic latex	Synthetic latex	Synthetic latex
Backing Type	Non-Woven Polypropylene	Non-Woven Polypropylene	Non-Woven Polypropylene
Thickness	2.5mm	3mm	5mm
Weight	1.13 kg/m ² / 0.23 lb/ft ²	1.3 kg/m ² / 0.27 lb/ft ²	2.0 kg/m ² / 0.41 lb/ft ²
Density	452 kg/m ³ / 28.2 lb/ft ³	443 kg/m ³ / 27.6 lb/ft ³	400 kg/m ³ / 25.0 lb/ft ³
Roll Size	1m x 10m / 3' 3" x 32' 10"	1m x 10m / 3' 3" x 32' 10"	1m x 10m / 3' 3" x 32' 10"
Area	10m ² / 107.6 ft ²	10m ² / 107.6 ft ²	10m ² / 107.6 ft ²
Roll Weight	12 kg / 26.5 lb	15 kg / 33 lb	20 kg / 44.1 lb
Thermal Resistance (BS 4745:2005 ISO 5085-1:1989)	0.43 togs	0.60 togs	0.83 togs
Measured Improvement of Impact Sound (ΔLw) (BS EN ISO 140-8:1998)	17dB *	23dB *	26dB *
Impact Insulation Class (IIC) (ASTM - E492-09)	49 *	55 *	63 **
Odour	No Objectionable Odour	No Objectionable Odour	No Objectionable Odour
Volatile Organic Compound (VOC)	-	0.029 mg/m ² /hr (low VOC emission)	-
Reaction to Fire (BS EN ISO 9239-1:2002)	-	Class CFL-s1***	-

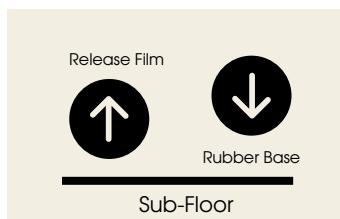
Notes:

- * Tested on 150mm / 6" concrete floor with no floor covering or ceiling system
- ** IL30hg with LVT (3mm) tested on 150mm / 6" concrete floor with drop ceiling
- *** Test performed on IL30hg with LVT

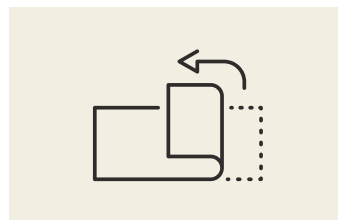
Installation procedure for PermaFlex[®] Acoustic Underlay



Loose lay the rolls of over the sub-floor



Ensure the release film is facing upwards and the rubber base faces down towards the sub-floor



Peel back the release film



Install the flooring on top of the acoustic underlay



No more adhesive



No more nails



Minimum sub-floor preparation

