

# PassionStep®

*Ultra-high density PU Foam designed for rooms requiring a firm touch of luxury or areas with heavy footfall traffic*



**2.8 TOG**  
BS4745



**41 dB (ΔLW)**  
BS EN ISO 10140-3 Impact Sound

PassionStep®		Testing Method
Construction	PU & Viscoelastic Foams	
Density	155 kg/m <sup>3</sup>	
Thickness	9mm	
Tog Rating	2.8 TOG	BS4745
Noise Reduction	41 dB (ΔLW)	BS EN ISO 10140-3 Impact Sound
Comfort Rating	Firm Luxury	
Area Coverage	10m <sup>2</sup> (1.37m x 7.3m)	
Roll Dimensions	140 x 35 x 35 cm	
Double Stick Applications?	No	



## Recommended End Use Classifications

Class L/U	Luxury use, domestic/contract, where high energy absorption is desirable
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## Product Specifications

Top Surface	White PE backing with PassionStep® logos and installation guidelines
Bottom Surface	White PE Backing with DPM properties
Guarantee	Lifetime of initial carpet installation (when used in recommended areas)
Recommendation	Heavy domestic areas such as living rooms/bedrooms

## Environmental Credentials

Recycled Content	<b>Environmentally Friendly:</b> 100% recycled foam content, which is 100% recyclable after use.
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**All underlay joins must be bonded with our Wilsons Bonding Tape to ensure the warranty is valid. It has been manufactured to work exclusively with our underlays.**

*And now for the science-y bit...*  
This is where you wish you'd paid more attention in school!

## Technical Specifications to BS EN 14499:2015 (BS5808)

Testing	Method
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Breaking Strength (maximum force)	≥30N in each direction	BS EN ISO 13934-1:2013
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Thickness loss of static loading short term after 1 h recovery		
Fibrous underlay	≤ 40 %	ISO 3416:1986 (2012)
Non-fibrous underlay	≤ 15 %	
Combined underlay	≤ 40 %	

Thickness loss of dynamic loading		
Fibrous underlay	≤ 40 %	BS ISO 2094:1999 (2015)
Non-fibrous underlay	≤ 15 %	
Combined underlay	≤ 40 %	

Thickness	≥ 4.0 mm	ISO 1765:1986 (2012)
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Thickness deviation from max to min		ISO 1765:1986 (2012)
Fibrous or combined underlay	≤ 4 mm	
Non-fibrous underlay	≤ 3 mm	

Resistance to breaking or cracking	No cracks greater than 50 mm along the fold No cracks in backing	BS EN 14499:Annex A:2015
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Compression after dynamic loading	Minimum 2 mm, Maximum 8 mm	BS 4098:1975 (2003) and BS ISO 2094:1999 (2015)
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Work of compression after dynamic loading	Minimum 50 J/m <sup>2</sup> , Maximum 200 J/m <sup>2</sup>	BS 4098:1975 (2003) and BS ISO 2094:1999 (2015)
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Retention of original work of compression	≥40 %	BS 4098:1975 (2003) and BS ISO 2094:1999 (2015)
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## Formaldehyde Testing Results

Time Interval (Days)	Formaldehyde (µg/m <sup>3</sup> )
28	Not detected

Limit of detection for formaldehyde is 2.0 (µg/m<sup>3</sup>)

## VOC Results:

Carcinogenic compound as defined in Annex VI to Regulation (EC) No. 1272/2008

	LCI value <sup>+1</sup>	Emissions @ 28 days	R Value <sup>+2</sup> @ 28 days
Cas No.	µg/m <sup>3</sup>	µg/m <sup>3</sup>	Unitless
Not detected	Not detected	Not detected	Not detected

## VOC Results: TVOC

Cas No.	µg/m <sup>3</sup>	µg/m <sup>3</sup>	Unitless
	N/A	Not detected	Not detected

Limit of quantification for VOC - 5 µg/m<sup>3</sup> per component/  
Limit of detection for VOC - 1 µg/m<sup>3</sup> per component

The following compounds were detected below the limit of quantification - Dodecane, tetramethylbutanedinitrile, nonanal, xylene



**Indoor Air Quality Test**  
Tested to ISO 16000

Regulation or protocol	Conclusion
French VOC Regulation	A+
French CMR components	Pass
Italian CAM Edilizia	Pass
ABG/AgBB	Pass
Belgian Regulation	Pass
EMICODE	EC 1 PLUS
Indoor Air Comfort	Pass
Indoor Air Comfort GOLD	Pass
Blue Angel (DE-UZ 156)	Pass
BREEAM International	Exemplary Level
BREEAM NOR	Exemplary Level
EU Taxonomy	Pass
LEED v4.1 BETA (outside U.S.)	Pass

## Flammability Classification

Conforms to British Standards BS4790 flammability classification achieving a low radius result

# How to install PassionStep®

First,  
check...

## 1. Area



Check that the area meets the requirements for a successful installation and is within the expected conditions for the end use of the carpet.

Areas should be clear of rubbish and debris; optimal ambient conditions should be within 18 > 27°C with an atmospheric RH% (Relative Humidity) level between 35 > 55%. Conditions should be maintained for a minimum of 24 hours prior to installation to allow for product acclimatisation and maintained throughout.

## 2. Subfloor



Ensure that the subfloor is in accordance with BS5325:2021.

The surface on which the underlay is to be installed should be sound, smooth, dry, and level. Any areas which may impair the installation should be rectified and made sound. Underlay can accommodate slight undulations, however unevenness within the subfloor may telegraph through. If it is deemed that there is a risk of telegraphing, additional subfloor preparation may be required. The subfloor should be checked for excessive moisture, if readings indicate that the moisture content of the subfloor exceeds 75% RH, advice should be sought and if possible, rectification should be carried out (Consult subfloor preparation manufacturers for guidance).

## 3. Underlay



Floorcovering materials should be acclimatised for a minimum of 24 hours prior to installation and stored within the area they are to be installed.

Ensure that the correct underlay has been specified for the floor covering, certain carpet manufacturers recommend specific product properties are used to ensure the performance of their products. Depending on the construction of the underlay, the installation methods may change. Wilson's foam and rubber underlays require all joins to be taped with Wilson's Bonding Tape to prevent against dirt/dust migration in accordance with BS5325:2021. Alternatively, products which are produced from recycled felt require an interlay to be incorporated into the installation. An interlay is a sheet product produced from dry felt paper, fused textile materials, or spun bonded fibres, which is placed below the underlay to help prevent against dirt/dust migration.

Next, let's install!

## Traditional/Stretch fit method: Flat area

- Underlay should be laid out leaving an **excess of between 50 > 100mm up the wall** to allow for precise trimming into the gripper. **Each run should be reverse rolled** to ensure adjoining sides match; this can be determined by the surface print appearing mirrored. The direction of the underlay should run at **90 degrees to the length of the carpet** when installed over substrates consisting of either solid or sheet materials in accordance with BS5325:2021. Alternatively, if the subfloor is constructed of floorboards, the underlay should be laid at **90 degrees to the direction of the planks**, regardless of the carpet direction to ensure joins do not coincide with those within the subfloor.
- When installing over a **timber-based subfloor, mechanical fixings i.e., staples, should only be applied around the perimeter of the area**, placed within an inch of the gripper. Mechanical fixings should not be placed along underlay joins, or in walked areas. Secure all joins with Wilson's Bonding Tape.
- Once the underlay has been laid out, ensure that when trimming in, the **underlay is abutting the back edge of the gripper**. Gaps in the underlay can impair the installation, either affecting the aesthetic overall appearance, or resulting in excessive movement and/or premature wear of the carpet.
- When installing over a solid substrate, run the underlay at 90 degrees to the length of the carpet, ensuring to reverse roll each run. **Fixing should only be incorporated around the perimeter of the area**, the use of an adhesive or double-sided tape can be used to secure the underlay (consult adhesive manufacturer for compatibility). Alternatively, laying out the carpet first, then pulling back half the area, and installing the underlay, then repeating this process on the other half, can help counter excessive movement if no adhesive fixings are being used. If this method is used, **ensure that all joins are taped**, and the underlay is trimmed tight to the gripper.

## Stairs

**Underlay should cover from gripper to gripper on stairs** to protect the carpet from premature wear. The sides of the underlay should either abut the sides of the step or be within 1cm to ensure the aesthetic appearance is not compromised. Mechanical fixings should only be applied within 1 inch of the gripper on the stair tread, and close to the gripper on the riser. **No fixings should be placed along the nose of the step.**

## Carpet installation recommendations:

Care should be taken not to damage the underlay when installing textile floorcoverings using the stretch fit method. The stretching pins on either the knee kicker and/or the powerstretcher, should not penetrate through to the underlay. Damage caused by these tools can result in dust migration.

Carpet joins should always be carried out on a solid surface. If joins are carried out in direct contact with the surface of the underlay using a heat seaming method, damage and/or distortions can occur which may impede the end result of the installation. **For adhesive recommendations consult adhesive manufacturer.**