

POLYFLOR ACOUSTIC FLOORING SOLUTIONS





...we're keeping it quiet with acoustic flooring









Introduction

Sound insulation is currently higher on architects, specifiers and developers agendas than it has ever been. An example of this is the introduction in England and Wales of the new legislation in 2003 to allow for improvements to the resistance to the passage of sound (Building Regulation Part E). The purpose of this was to address the noise level suffered by occupants of multi-storey dwellings, leading to seperating floors having to be constructed to achieve certain sound insulation levels.

What is an Acoustic Floorcovering?

Achieving an acoustically effective environment is an essential requirement for many domestic and commercial interiors. The purpose of an acoustic floorcovering is to effectively assist in reducing the intensity of sound waves generated within the structure of a building, therefore dampening impact sound levels at source. As the acoustic floorcovering is a contributory factor to noise reduction, acoustic wall and ceiling panels may also be considered, along with the commission of an independent acoustician.

Where would Acoustic Floorcoverings be used?

Polyflor Acoustic floorcoverings are specifically designed for both residential and commercial areas where sound insulation is required. Such areas may include apartment blocks, educational and healthcare facilities and general public buildings.

Which product should I choose?

Polyflor offer three main acoustic flooring solutions, each tailored to meet both refurbishment and new build projects: two are 'ready-made' acoustic collections - **Gallery FX Acoustic** and **Forest FX Acoustic** - the third is **Polyflor Acoustifoam**, which can be utilised with many standard Polyflor vinyl and rubber sheet products in a combination system. In line with Building Regulation Part E, all Polyflor Acoustic collections are manufactured in accordance with EN ISO 140-8.



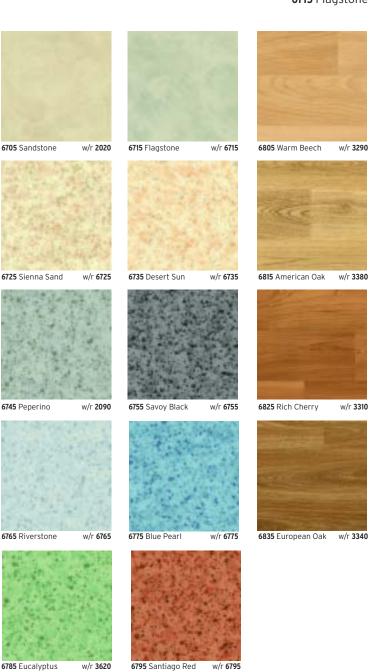


6715 Flagstone

Gallery FX Acoustic has been developed to offer three aesthetic flooring styles, incorporating clean natural stone effects, mottled granite designs in bright and stimulating colourways and popular wood replications. This closed-cell, foam-backed vinyl sheet floorcovering features a polyurethane reinforcement (PUR) that provides a polish-free maintenance regime, whilst generating significant life cycle cost savings. The collection meets the high sound reduction level of 19dB.



6805 Warm Beech



Where can it be used?

- · Residential areas such as aged-care, social housing & student accommodation.
- · Heavy Commercial areas such as corridors and classrooms within educational facilities and hospital wards.
- serving points and other locations where





6795 Santiago Red





3285 Classic Beech

Forest FX Acoustic offers a range of ten stylish wood effects. Each design is based on top selling wood specifications, developed for heavily trafficked commercial interiors. These include popular Maple, Beech, Oak, Cherry and Mahogany effects. The range not only provides an aesthetic and decorative appearance, but offers a fully functional and hard-wearing solution to demanding high footfall areas. Forest FX Acoustic is a closed-cell foam backed vinyl sheet floorcovering incorporating a polyurethane reinforcement (PUR), which provides enhanced protection and an easier maintenance regime. The collection meets the high sound reduction level of 19dB.























3335 Rustic Oak

Where can it be used?

- Very Heavy Commercial areas such as schools, universities, hospitals and general heavy footfall public buildings.
- · Ergonomically, the product is also ideal for 'workstations' – such as shops, serving points and other locations where underfoot comfort is required.

For further details on appropriate use, contact the Polyflor Customer Technical Support Team.





3385 American Oak

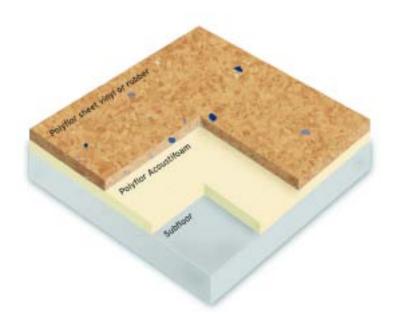
ACOUSTIFOAM

Polyflor Acoustifoam is a closed cell foambacking sheet incorporating glass-polyester reinforcement, designed to be installed beneath standard Polyflor vinyl and rubber sheet floorcoverings (minimum 2mm gauge). When used in this combination, the gained advantages are to provide standard collections with added acoustic properties at a minimum level of 18dB as well as broadening the choice of colours and styles when requiring an acoustic floorcovering.

Even in areas where added slip resistance is required, Polyflor Acoustifoam can be combined with the majority of the Polysafe safety floor collections (minimum 2mm gauge). The list on the right details which Polyflor collections are suitable for use with Acoustifoam.



Polysafe Design 4980 Kiln Flare



Polyflor collections suitable for use with Acoustifoam:

Polyflor Homogeneous Collections

Polyflor Prestige PUR
Polyflor Mystique PUR
Polyflor Classic Mystique PUR
Polyflor 2000 PUR
Polyflor XL PU
Polyflor Standard XL

Polyflor Safety Floor Collections

Polysafe Corona
Polysafe Astral
Polysafe Design
Polysafe Vogue Ultra
Polysafe Strata
Polysafe Standard

Saarfloor Rubber Collections

Saarfloor Uni Saarfloor Diamant Saarfloor Star

Note: Polyflor vinyl tile and plank ranges and Polyflor ESD ranges should not be used with Polyflor Acoustifoam.

Where can it be used?

- · When utilised with the correct Polyflor on the previous page), **Acoustifoam** can be installed in any **very heavy** commercial interior, such as schools, universities, hospitals and general heavy footfall buildings.
- · Ergonomically, the product is also ideal for 'workstations' - such as shops, serving points and other locations where

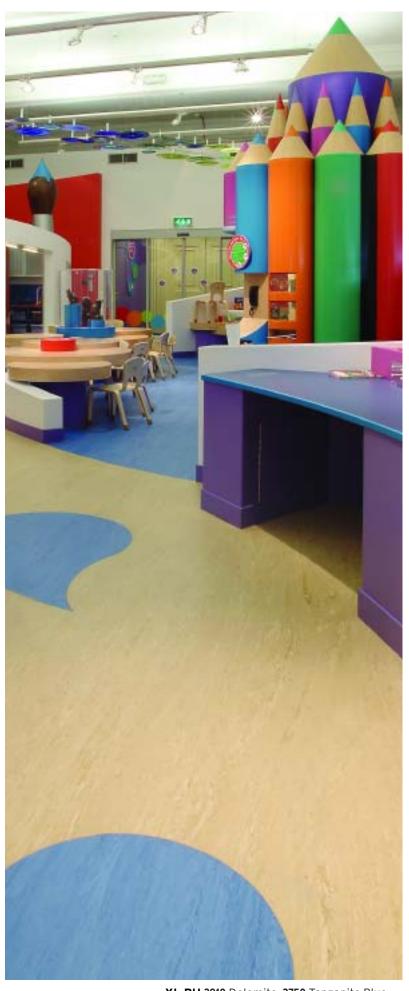
For further details on appropriate use, contact the



Mystique PUR 3460 Corallo



Mystique PUR 3550 Verde Polysafe Astral 4220 Aquarius



XL PU 3910 Dolomite, 3750 Tanzanite Blue

PRODUCT SPECIFICATIONS





The below table details the technical properties of each Polyflor Acoustic collection.

	Gallery FX Acoustic	Forest FX Acoustic	Acoustifoam
Gauge	3.5mm	3.7mm	2.0mm
Wear Layer	0.5mm	0.65mm	N/A
Roll Size	2m x 20m = 40m ²	2m x 20m = 40m ²	2m x 20m = 40m ²
Weight	2550g/m ²	2800g/m ²	680g/m²
General Performance	EN 651	EN 651	N/A
Use Area Classification	23, 33, 42	23, 34, 42	**
Acoustic Impact Sound Reduction	EN ISO 140-8 ≥19dB	EN ISO 140-8 ≥19dB	EN ISO 140-8 2mm Polyflor Vinyl + Acoustifoam ≥18dB
Reaction to Fire	EN 13501-1 Class BfI-S1 EN ISO 9239-1 (5) ≥8kw/m ² EN ISO 11925-2(8)Fs ≤150mm within 20s	EN 13501-1 Class BfI-S1 EN ISO 9239-1 (5) ≥8kw/m ² EN ISO 11925-2(8)Fs ≤150mm within 20s	Classic Mystique PUR + Acoustifoam, Mystique PUR + Acoustifoam, XL PU + Acoustifoam: ASTM E648 Class 1 EN 13501-1 Class Bfl-S1 EN ISO 9239-1 ≥8kw/m ² EN ISO 11925-2 Pass
Resistance to Chemicals*	EN 423 (ASTM F 1303-99) Excellent chemical resistance	EN 423 (ASTM F 1303-99) Excellent chemical resistance	**
Light Fastness	EN 20105-B02 (Method 3) ≥6	EN 20105-B02 (Method 3) ≥6	**
Abrasion Resistance	EN 649 Group T	EN 649 Group T	**
Residual Indentation	EN 433 < 0.2mm	EN 433 <0.2mm	**
Dimensional Stability	EN 434 <0.1%	EN 434 <0.1%	**
Flexibility	EN 435 (Method A) Pass 20mm Ø	EN 435 (Method A) Pass 20mm Ø	**
VOC Emissions	ENV 13419 AgBB VOC test: Pass (Low Result)	ENV 13419 AgBB VOC test: Pass (Low Result)	**
Thermal Conductivity	Suitable for use with underfloor heating Max 27°c	Suitable for use with underfloor heating Max 27°c	Suitable for use with underfloor heating Max 27°c
Hygiene	Contains antimicrobial agents for improved hygiene protection. This product has been independently tested and results demonstrate that it inhibits the growth of MRSA. An effective cleaning regime is however, the most important defence against infection.	Contains antimicrobial agents for improved hygiene protection. This product has been independently tested and results demonstrate that it inhibits the growth of MRSA. An effective cleaning regime is however, the most important defence against infection.	**
Electrical Behaviour (body voltage)	EN1815 This product does not accumulate static charges above 2kV and is classified as 'antistatic'. For specialist applications where there is a requirement to dissipate the electrostatic charge, see the Polyflor ESD product ranges.	EN1815 This product does not accumulate static charges above ZkV and is classified as 'antistatic'. For specialist applications where there is a requirement to dissipate the electrostatic charge, see the Polyflor ESD product ranges.	**

- * For information on chemical resistance, consult the Polyflor Customer Technical Support Team (CTSD).
- ** This result is determined by the surface product being used.

TECHNICAL INFORMATION

Additional Technical Information

Noise within a building is created when sound energy is transmitted either by impact or by air. Impact sound, such as footfall or movement of furniture, is where the energy produced by the collision of solid objects is transmitted through the structure of the building. Airborne sound, such as television or vocal noise, is where the surrounding air molecules are caused to vibrate. Noise levels **transmitted through floors** can be reduced by correctly installing Polyflor Acoustic flooring products.

Installation

For full details on the installation of **Gallery FX Acoustic**, **Forest FX Acoustic** and **Acoustifoam** with recommended Polyflor products, including recommended adhesives, refer to one of the following contact points:

Technical section of the Polyflor website: www.polyflor.com
 Telephone the Polyflor Customer Technical Support Team: +44 (0)161 767 1111

Email the Polyflor Customer Technical Support Team: tech@polyflor.com

Note: Polyflor Acoustifoam is not to be installed as a subfloor isolating underlay or surface DPM.

Maintenance

Reducing maintenance costs is not difficult; what takes more skill is reducing these costs without cutting the effectiveness of the maintenance system. By tailoring the maintenance programme, real savings can be made without compromising standards of appearance, hygiene and cleanliness. A tailored maintenance programme is simple to apply, with the effort (and thus the cost), concentrated where each location demands. This produces definitive savings and considerable return on a floorcovering investment.

Certain Polyflor ranges benefit from enhanced formulations in relation to maintenance.

The PUR families (**Gallery FX Acoustic**, **Forest FX Acoustic** and various ranges suitable for use with **Acoustifoam**) or Supratec⁺ families (various Polysafe ranges) provide long term maintenance benefits. The PU family (XL PU collection suitable for use with **Acoustifoam**) facilitates a reduction in the intensity of the construction clean and provides the foundation for the ongoing maintenance regime.

For full details on the maintenance of any of the products featured within this brochure, refer to one of the following contact points:

- Polyflor website (relevant product page)
- Polyflor Customer Technical Support Team
- Polyflor Technical Information Manual this document includes detailed information on all aspects of installation and maintenance on Polyflor sheet vinyl and rubber products.







For further information on any aspect of product selection, specification, installation, performance or maintenance of any Polyflor product, then do not hesitate to contact us. Our objective is to support the customer by providing all the relevant information necessary to ensure that the maximum benefit is gained from our products in use.

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Sector specific brochures available to request from Polyflor or via the website include:

- · Healthcare Brochure
- · Education Brochure
- · High Street Retail Sector Brochure
- · Corporate Brochure
- · PUR Brochure
- · Technical Manual
- · Polyflor Design Service
- · Environmentally Sustainable Development Report 3 2006

Plus various product specific brochures

WWW.POLYFLOR.COM

Visit the Polyflor website for further details on worldwide distribution, as well as up-to-date product and technical information.



