

Pyrotek
noise control

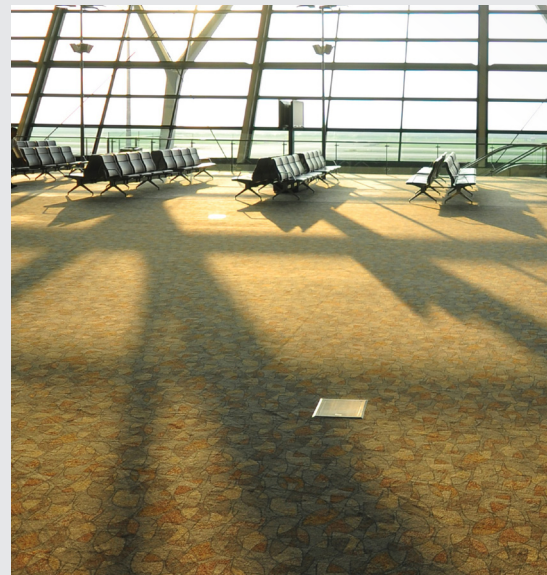
dBX carpet underlay product guide

FORMAN
BUILDING SYSTEMS



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This brochure describes the control of airborne sound using dBX carpet underlay from Pyrotek. It covers the principles, design considerations and installation methods for controlling airborne and impact sound from floor-to-floor within buildings.



Noise Problem Defined

The trend towards high-density living environments and lightweight building construction over the last decade has led to an increase in intrusive noise from neighbours and external noise sources.

When shielding a room from an external noise source, such as between floors in a multi-storey building, the product used must contain a heavy mass-loaded barrier. This will deflect the noise back towards the source, reducing it from being transmitted into the room, controlling impact and airborne noise.

Product Solution

dBX Carpet Underlay, while used in the same way as standard carpet underlay, provides excellent levels of transmission loss to assist in reducing airborne floor-to-floor noise.

- Acoustically and thermally seals gaps and cracks in flooring
- Maximum noise reduction
- Superior comfort
- Reduction of airborne and impact noise
- Helps reduce room reverberation through sound absorption
- High quality hard-wearing bonded foam
- Easy to install and fit
- Easily cut and shaped
- Non-fibrous

Product Introduction

dBX underlay products are designed for use in multi-storey buildings to control noise from floor-to-floor. dBX Carpet Underlay combines all the benefits of highgrade underlay foam with a mass loaded noise barrier, controlling impact and airborne noise.



dBX Carpet Underlay is laid using standard installation techniques



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Product Construction

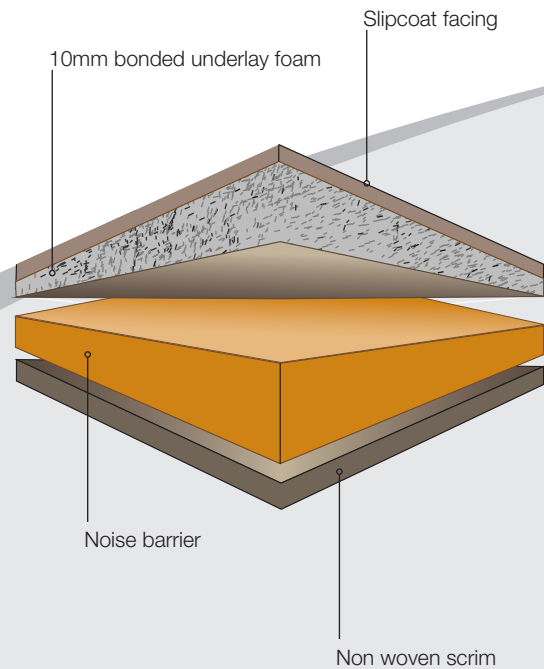
BONDED UNDERLAY FOAM - 10mm

dBX Underlay, a high grade bonded underlay, uses hydrolysis resistant polyether foam, with a supporting mesh and slip coat facing. It is manufactured to underlay thickness and is designed to maximize acoustic performance, is fibre free, easily installed and fitted.

dBX NOISE BARRIER - 5kg/m² BARRIER

The dBX noise barrier reduces noise through its unique construction. The specialist fillers create a heavy flexible mass barrier, maximizing noise reduction. dBX noise barrier allows effective, easy installation, essential in achieving a noise-tight seal.

Due to the specialist nature of each application, specifications are subject to technical assessment from the manufacturer or your local representative.



Product Application

dBX Carpet Underlay has all the benefits of a high quality underlay combined with high loss of both impact and airborne noise in industrial, domestic and commercial applications both in two-storey and high-rise buildings. Manufactured 12mm thick, it is used as normal underlay. dBX Carpet Underlay provides an acoustic seal on tongue and groove floors.



Product Properties

PRODUCT CODE

Product code	dBXUL/5
Product description	dBX Carpet Underlay, 10mm bonded underlay foam with slipcoat, 5kg/m ² noise barrier, roll length 5m, roll width 1.35m, total thickness 10mm
Maximum operating temperature	70°C

FOAM PROPERTIES

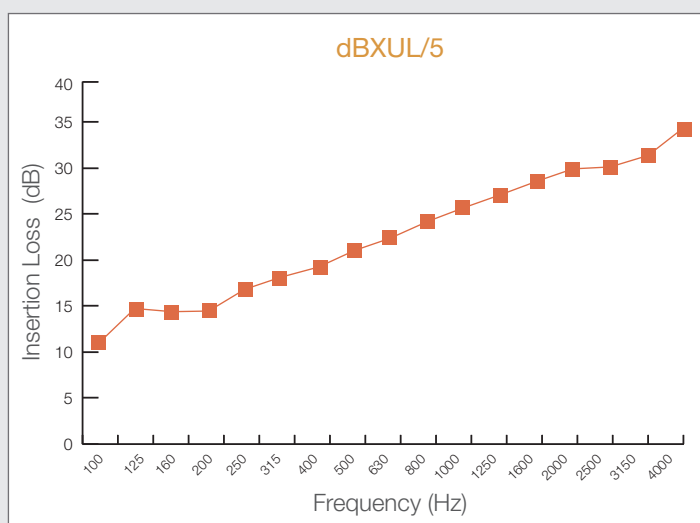
Description	Bonded polyether polyurethane foam
Density (BS 443:1969) (AS 2281)	95kg/m ²



dBX underlay used to improve floor-to-floor noise problems in refurbished buildings

Acoustic Performance

Product code	dBXUL/5
Acoustic properties	R _w 27@5kg/m ²



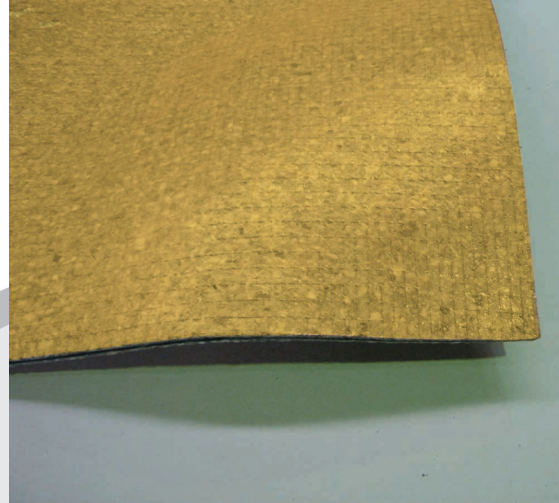
Frequency (Hz)	Transmission loss (dB)
100	10.70
125	14.70
160	14.40
200	14.60
250	17.10
315	18.30
400	19.60
500	21.30
630	22.80
800	24.80
1000	26.20
1250	27.80
1600	29.30
2000	31.70
2500	31.00
3150	32.30
4000	35.30
STC	26

Durability

dBX has excellent durability and there are no known limitations on the serviceable life of the product, provided the material is used for its designed purpose, and installed and maintained according to the specification provided by the manufacturer.

Specification Guide

The noise insulation shall be "dBX Carpet Underlay", made from dBX noise barrier with a barrier weight of 5kg/m² with a minimum R_w of 27. The absorbing layer shall be made of bonded polyether polyurethane underlay foam at 95kg/m³ with a slip coat facing.

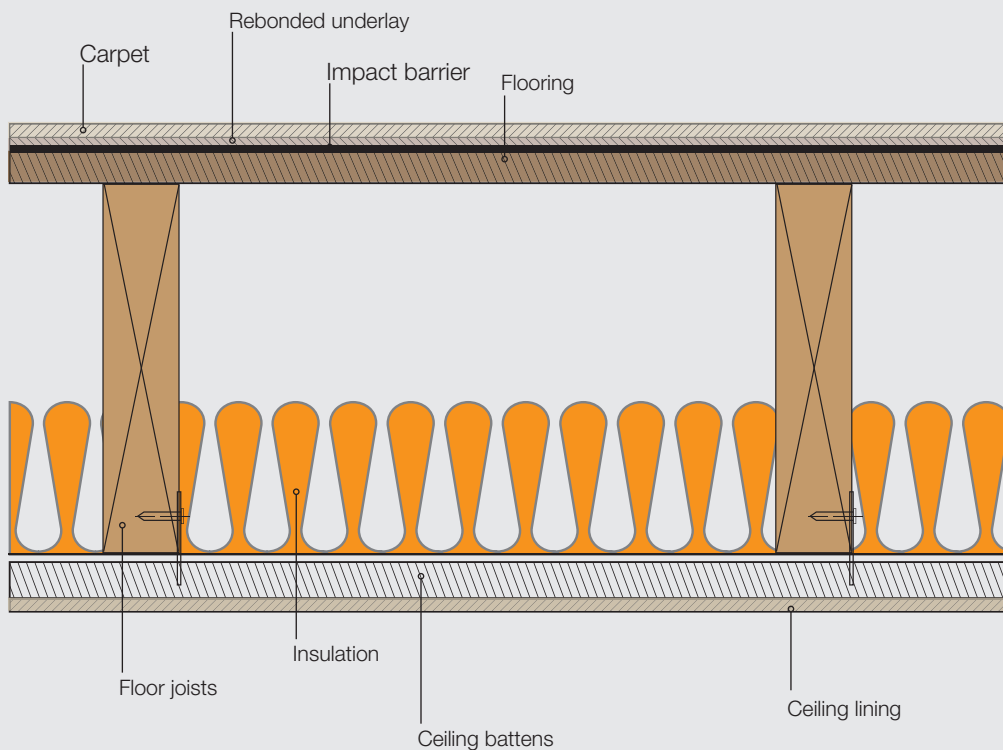


dBX Carpet Underlay slip coat covering ensures carpet can be tilted without rucking

Product Installation

dBX underlay products are simple to cut and handle, requiring only a few basic tools to install, using standard carpet laying techniques.

Note: Product is designed for loose layed carpet. If direct stick is required an alternative configuration can be ordered.



Site Handling

As dBX noise barrier products use mass weight in their noise control system, care should be taken when lifting material as rolls can weigh from 18kg - 28kg. Normal lifting safety procedures should be employed for roll lifting.

Storage

dBX Carpet Underlay should be stored in a clean and dry area protected from possible damage from impacts or abrasions. The supplied sheets of material should be stored on a flat level floor with a protective layer between the material and the floor.



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