

# SILENT SHIELD

FLOORING UNDERLAY

**S C R E E D**

**NOISE ISOLATING UNDERLAY FOR  
SCREED FLOOR SYSTEMS**

**SEKISUI**

**FOAM**  
INTERNATIONAL  
Global Foam Solutions

**PHYSICALLY**  
CROSSLINKED  
SEKISUI TECHNOLOGY

# The Silent Shield Screed Solution

Silent Shield Screed is a high performance underlay made using closed cell, physically cross linked, polyolefin foam specifically designed for noise isolation in fixed floor covering systems. Installed between the sub-floor and screed, Silent Shield Screed underlay provides outstanding acoustic and thermal insulation, moisture protection and resistance to creep.



Silent Shield Screed underlay provides excellent impact sound reduction meaning that it is the ideal choice for multi-storey buildings.



With almost zero water absorption Silent Shield Screed protects your flooring against moisture and rising vapour which is particularly important in screed insulation applications.



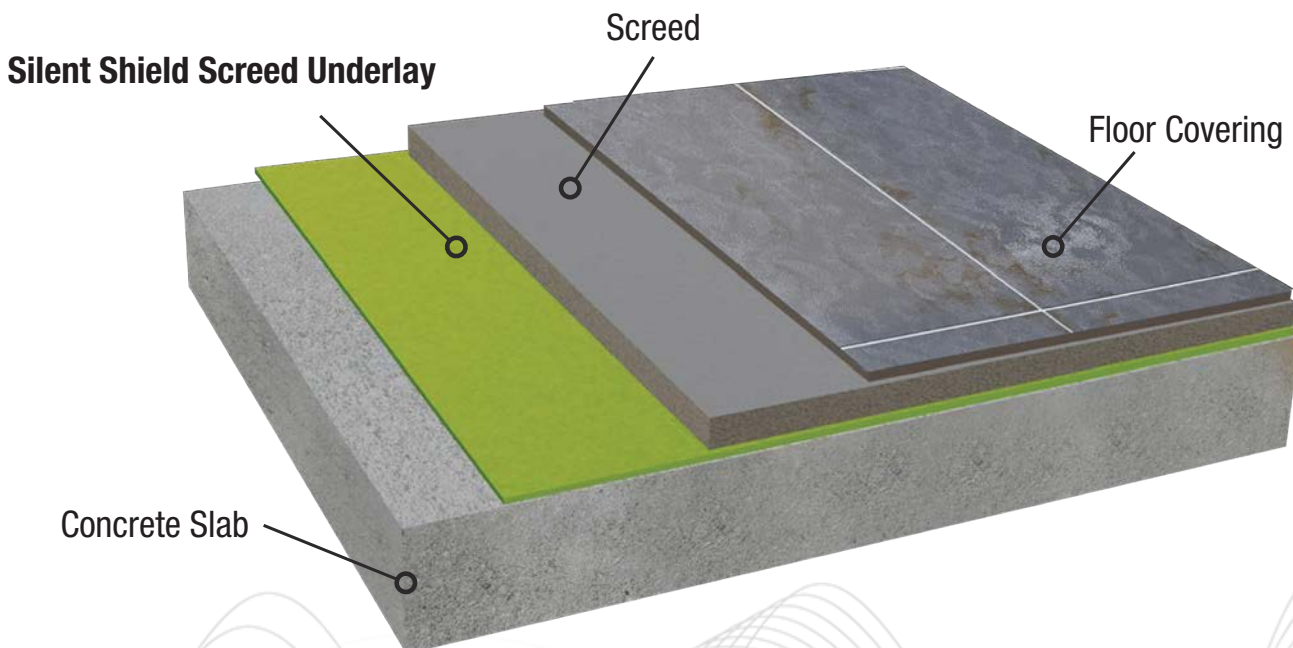
Manufactured using Sekisui's unique physically crosslinked, closed cell polyolefin foam, Silent Shield Screed maintains superior compressive strength to resist creep.



Silent Shield Screed is easy to unroll and install between the subfloor and screed and is the perfect solution for fixed floor coverings that restrict the use of underlays such as tiles, solid wood and parquet flooring.



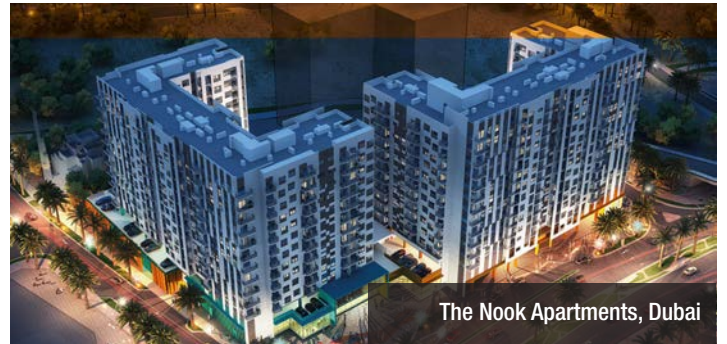
Silent Shield screed is lighter than rubber meaning that it is easier to transport, handle and install.



# Outstanding Sound Reduction

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Silent Shield Screed insulation provides up to a 29dB reduction in impact sound making it ideal for multi-storey buildings such as hotels, residential apartments, libraries and shopping centres.



# Engineered to Last

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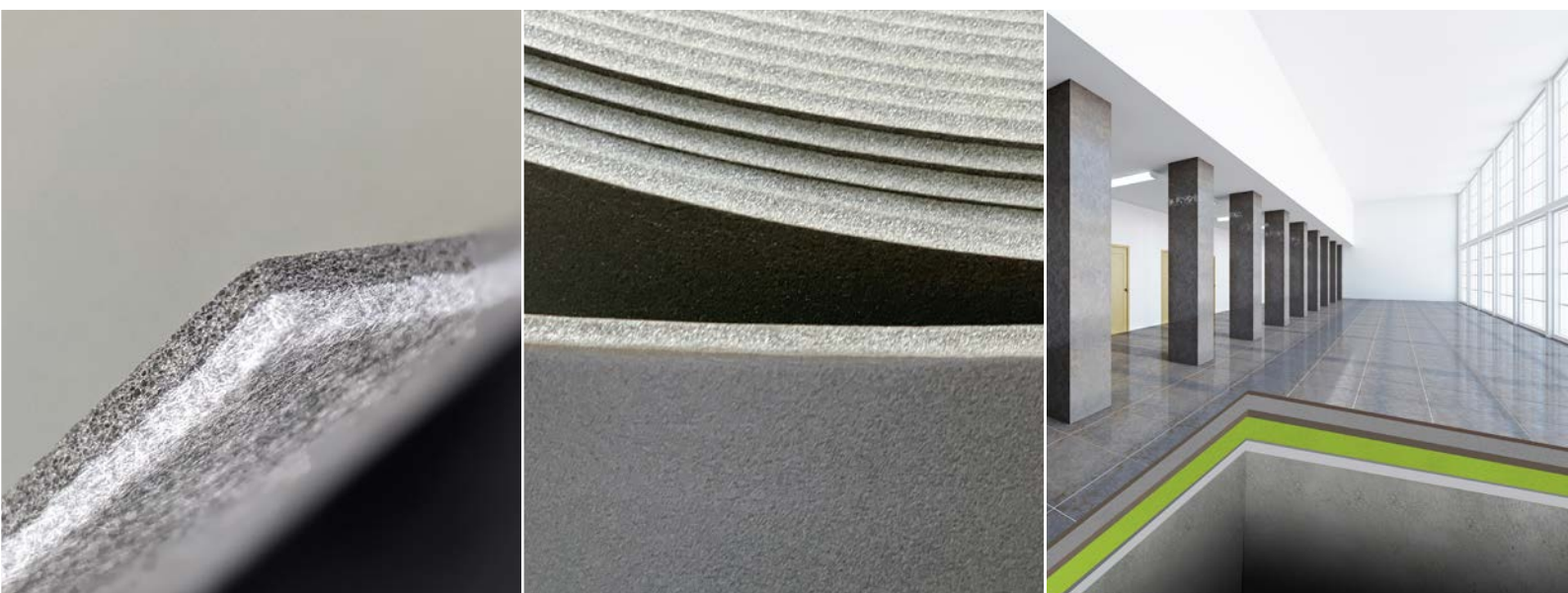
High compressive strength to resist creep, low water absorption and chemical resistance mean that Silent Shield Screed will provide outstanding performance and protection over the life of the installation.

# Health, Safety & Environmental Benefits

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Silent Shield underlays provide many health, safety and environmental benefits that other materials may not be able to achieve.

- Low VOC Emissions
- No CFCs or HCFCs
- Zero Ozone Depletion Potential
- Low GWP
- Zero PVC, Zero Formaldehyde
- Compliance to RoHS Directive
- Compliance to REACH Directive



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## Technical Specifications

Silent Shield is a light-weight and flexible underlay range designed for the floating screed system. It is designed to maximise noise impact reduction whilst providing high compression strength and maintaining long term compression resistance.

- > Silent Shield HD is a higher density underlay designed for extra heavy load applications.
- > Silent Shield FHD grade is a felt and physically crosslinked polyolefin foam composite with superior noise impact reduction.

Property	Test Method	Typical Value			
		SD	HD	FHD	
<b>Grade</b>					
<b>Thickness (nominal)</b>	Internal	3mm	5mm	6mm	6mm
<b>Impact Sound Reduction <math>\Delta L_w</math></b>	ISO 10140				
50mm concrete screed		19 dB+	19 dB+	16 dB	23 dB
70mm concrete screed		21 dB+	21 dB+	17 dB	25 dB
100mm concrete screed		24 dB	24 dB	17 dB+	29 dB+
<b>Impact Insulation Class (IIC)</b>	ASTM E989				
50mm concrete screed		51 dB+	51 dB+	48 dB	55 dB+
70mm concrete screed		53 dB+	53 dB+	49 dB	57 dB+
100mm concrete screed		59 dB	60 dB	49 dB+	64 dB
<b>Thermal Resistance</b>	ASTM C518				
23°C mean temperature		0.09 m <sup>2</sup> .°K/W	0.15 m <sup>2</sup> .°K/W	0.17 m <sup>2</sup> .°K/W	0.18 m <sup>2</sup> .°K/W
<b>Compressibility (c)</b>	EN 12431	0.11 mm	0.18 mm	0.11 mm	0.49 mm
<b>Compressibility Level</b>	EN 13162	CP2	CP2	CP2	CP3
<b>Compressive Strength</b> 25% deflection	ISO 844	40 kPa	40 kPa	60 kPa	40 kPa
<b>Maximum Design Imposed Load</b>	EN 13162				
50mm concrete screed		6.25 kPa	6.25 kPa	13.75 kPa	4.25 kPa
100mm concrete screed		5 kPa	5 kPa	12.5 kPa	3 kPa
<b>Dynamic Stiffness</b>	ISO 9052-1	109 N/m <sup>3</sup>	109 N/m <sup>3</sup>	288 N/m <sup>3</sup>	54 N/m <sup>3</sup>
<b>Permeance Resistance Factor (<math>\mu</math>)</b>	ISO 1663	>5000	>5000	>5000	>1200
<b>Water Absorption</b>	ISO 2896	<1% v/v	<1% v/v	<1% v/v	NA

\* ISO 12349 calculations based on dynamic stiffness data

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