

# SILENTSTEP

## soundproofing underlay

Silentstep is a high-performance acoustic carpet underlay, comprising of a flexible mass-loaded barrier fused onto high-density premium foam underlay. The combination of these two products allows Silentstep to reduce the transmission impact-generated noise such as footfall, and airborne noise such as speech.

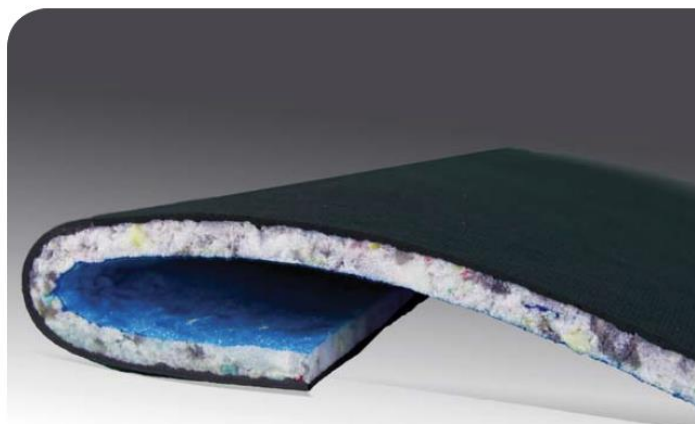
Silentstep was developed to meet market noise reduction requirements in multistorey living, commercial, automotive and marine markets. Simple to cut and lay, it offers excellent support and a firm cushioned base for all types of carpet applications. It is ideally suited for lightweight flooring constructions such as timber and marine applications, where fibreglass and composite floor panels are used.

When laying carpet over a floor constructed using lightweight timber and joists, typical standard underlay only reduces impact noise and offers little effect in reducing the transmission of airborne noise. Silentstep can significantly reduce both impact and airborne noise transfer through a floor system. This means that noise generated from speech and electronic audio technologies, such as radio and television, can be reduced along with noise generated by impact such as footfall.

Silentstep products are environmentally safe, contain no ozone-depleting substances and complies with European and Australian standards for Volatile Organic Compound emissions.

### SPECIFICATIONS

Barrier weight	4 kg/m <sup>2</sup> other weights available on request, subject to minimum order quantities
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## applications

- Multistorey living areas constructed from lightweight materials with the intention to lay carpet
- Placed under solid timber or parquetry flooring using Pyrotek's flooring systems .
- Marine vessels to stop engine noise travelling into staterooms, salons, VIP cabins etc
- Transport industry; under automotive, firewalls, wheel arches, boot mats, and transmission tunnels
- Motor homes and luxury motor coaches

## features

- Bonded foam is made from 100% recycled material
- No ozone-depleting substances are generated during manufacture
- Free from lead, odour-producing oils and bitumen
- Easily installed by quality carpet layers. No special tools or fixtures required
- Uses specially made, high density, high rebound bonded foam as the impact layer
- Long service life, will not degrade like rubber underlay
- Foam is treated with Ultra-Fresh® to resist mould, mildew, bacterial growth and dust mites
- Available in roll or sheet form, or custom made to suit (minimum order quantities apply)

PRODUCT SPECIFICATIONS

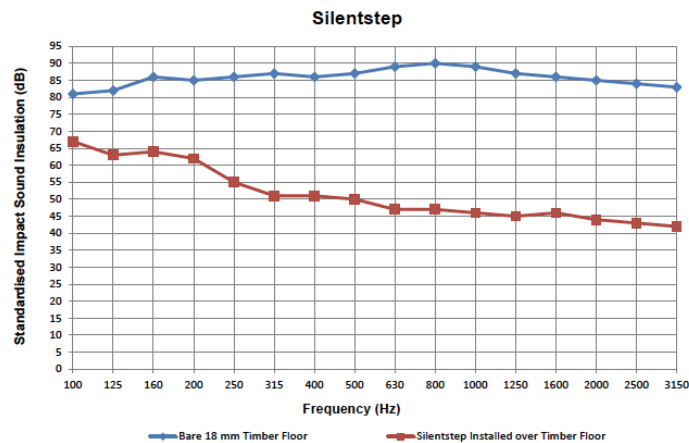
Composite weight (kg/m <sup>2</sup> )	Thickness (mm)	Roll			Flammability properties (FMVSS-302)	Operating temp. range (°C)
		Width (mm)	Length (linear m)	Weight (kg)		
5	11	1350	5	34	Self-extinguishing	-40 to 100 (Continuous) -40 to 120 (Intermittent)

Tolerances: Length: -0/+50mm; Width: -0/+5mm; Thickness: +/- 0.5mm; Weight: +/- 5%

ACOUSTIC PERFORMANCE

Impact Sound Insulation (dB)		
Frequency (Hz)	Bare 18 mm Timber Floor	Silentstep Installed Over Timber Floor
100	81	67
125	82	63
160	86	64
200	85	62
250	86	55
315	87	51
400	86	51
500	87	50
630	89	47
800	90	47
1000	89	46
1250	87	45
1600	86	46
2000	85	44
2500	84	43
3150	83	42
Ln, Tw + Cl	84	56
Ln, w	92	56
Cl	-8.4	-0.3
IIC	18	54

Tested to ISO 140-7:1998  
Report Number: nss21031-RevB



ACOUSTIC PERFORMANCE

Airborne Sound Insulation (dB)	
Frequency (Hz)	Silentstep
100	10.6
125	13.2
160	19.5
200	17.2
250	18.8
315	20.2
400	22.2
500	23.2
630	25.4
800	26.8
1000	29.7
1250	31.4
1600	31.8
2000	32.6
2500	35.1
3150	38.4
4000	41.1
5000	44.0
Rw	28
STC	28

Tested to ISO 15186-1:2003 & 10140-4:2010 at University of Canterbury, New Zealand  
Report Number: 188

