

SILENTSTEP PREMIUM

high-performance soundproofing carpet underlay

Silentstep Premium 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 Premium 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 an impact such as footfall.

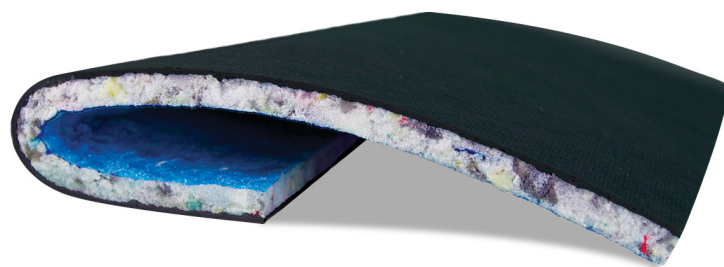
Silentstep Premium products are environmentally safe, contain no ozone-depleting substances and comply with European and Australian standards for Volatile Organic Compound emissions.

VOC, ODP, HEALTH AND SAFETY

Silentstep Premium is non-toxic and safe to handle by methods prescribed in the Safety Data Sheet. No ozone depleting substances are used by Pyrotek during the manufacture of Silentstep Premium.

SPECIFICATIONS

Colour	Black (Facing) Blue backing with various colours (foam)
Available	Standard roll length: 5 m (16.4 ft) Standard roll width: 1350 mm (53.15 in) Standard thickness: 11 mm (0.43 in) Barrier weight: 4 kg/m ² (0.82 lb/ft ²)
	Custom sizes, colours and/or thicknesses available depending on MOQ



applications

- Multistorey living areas constructed from lightweight materials to lay carpet
- Placed under solid timber or parquet flooring using Pyrotek's flooring systems
- Marine vessels to stop engine noise travelling into staterooms, salons, VIP cabins etc
- Transport industry: 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 form, sheet form or custom made (minimum order quantities apply)



PRODUCT SPECIFICATIONS

Barrier weight	Total weight	Standard thickness	Standard roll length	Standard roll width	Standard roll weight	Operating temperature
4 kg/m ² (0.82 lb/ft ²)	5 kg/m ² (1.02 lb/ft ²)	11 mm (0.43 in)	1350 mm (53.15 in)	5 m (16.4 ft)	34 kg (75 lbs)	-40 to 100 °C (-40 to 121 °F) Continuous -40 to 120 °C (-40 to 248 °F) Intermittent

Tolerances: Length: -0/+50 mm (2 in); Width: -0/+5 mm (0.2 in); Thickness: ±0.5 mm (0.02 in); Weight: ±5%

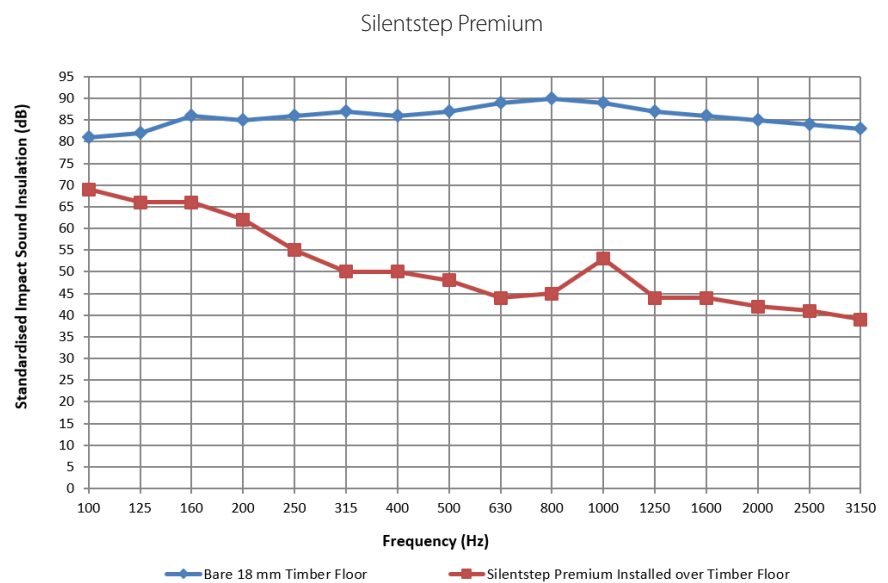
MATERIAL PROPERTIES

Test method	Property	Results
FMVSS 302	Flammability of interior materials	Self-extinguishing

ACOUSTIC PERFORMANCE - IMPACT SOUND INSULATION

Frequency (Hz)	Bare 18 mm Timber Floor	Installed over Timber Floor
100	81	69
125	82	66
160	86	66
200	85	62
250	86	55
315	87	50
400	86	50
500	87	48
630	89	44
800	90	45
1000	89	53
1250	87	44
1600	86	44
2000	85	42
2500	84	41
3150	83	39
Ln,Tw + CI	84	57
Ln,w	92	56
CI	-8.4	1.3
IIC	18	54

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



ACOUSTIC PERFORMANCE - AIRBORNE SOUND INSULATION

Frequency (Hz)	Silentstep Premium
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

