

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.

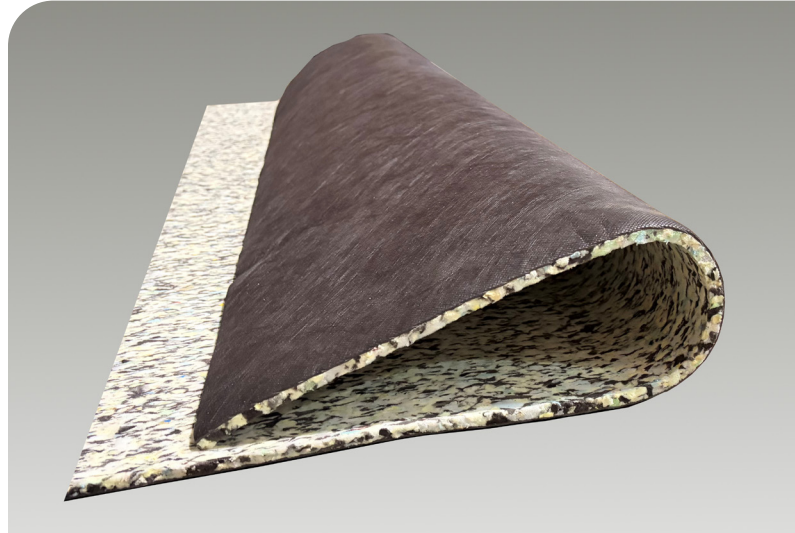
Silentstep Premium products are environmentally safe, contain no ozone-depleting substances and comply with European and Australian standards for Volatile Organic Compound emissions.

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: 15 to 20 ft Standard roll width: 4.5 ft Standard thickness: 0.45 to 0.55 in Available barrier weight: 1 or 2 lb/ft ²
	Custom sizes and/or thicknesses available depending on MOQ



applications

- Multistorey living areas constructed from lightweight materials to lay carpet
- 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 (lb/ft ²)	Total Weight (lb/ft ²)	Standard Thickness (in)	Standard Roll Length (ft)	Standard Roll Width (ft)	Standard Roll Weight (lb)	Operating Temperature (°F)
1	1.2	0.45	20	4.5	108	-40 to 212 continuous -40 to 248 intermittent
2	2.2	0.55	15	4.5	149	

Tolerances: Length -0/+2 in; Width: -0/+2 in; Thickness ±0.02 in; Weight: ±5%

MATERIAL PROPERTIES

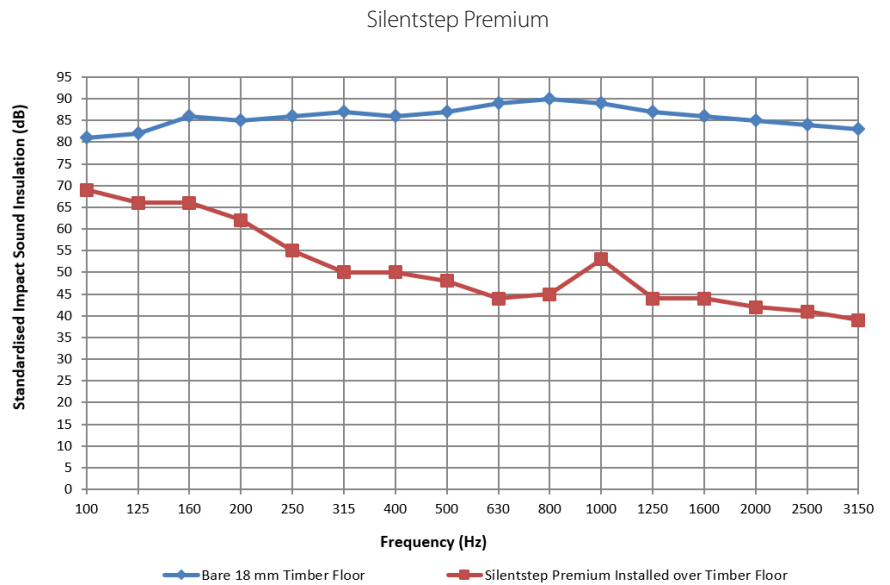
Test method	Property	Results
FMVSS 302	Flammability of interior materials	Self-extinguishing

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
IIC	18	54

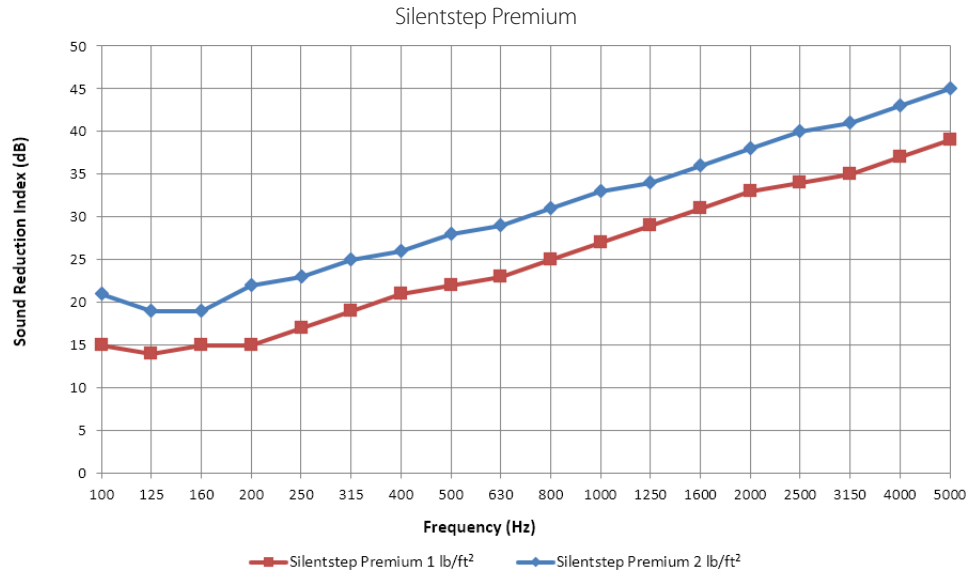
Tested to ISO 140-7:1998 | Report Number: nss21031-RevB

*Result for Silentstep Premium 1 lb/ft²



ACOUSTIC PERFORMANCE - AIRBORNE SOUND INSULATION

Frequency (Hz)	Silentstep Premium 1 lb/ft ²	Silentstep Premium 2 lb/ft ²
100	15	21
125	14	19
160	15	19
200	15	22
250	17	23
315	19	25
400	21	26
500	22	28
630	23	29
800	25	31
1000	27	33
1250	29	34
1600	31	36
2000	33	38
2500	34	40
3150	35	41
4000	37	43
5000	39	45
STC	26	30



Tested to ASTM E90-09 at Riverbank Acoustical Laboratories, USA
Report Number: TL18-642 & TL18-644

For further information and contact details, please visit our website pyroteknc.com

Caveats: Specifications are subject to change without notice. The data in this document is typical of average values based on tests by independent laboratories or by the manufacturer and are indicative only. Materials must be tested under intended service conditions to determine their suitability for purpose. The conclusions drawn from acoustic test results are as interpreted by qualified independent testing authorities. Nothing here releases the purchaser/user from responsibility to determine the suitability of the product for their project needs. Always seek the opinion of your acoustic, mechanical and fire engineer on data presented by the manufacturer. Due to the wide variety of individual projects, Pyrotek is not responsible for differing outcomes from using their products. Pyrotek disclaims any liability for damages or consequential loss as a result of reliance solely on the information presented. No warranty is made that the use of this information or of the products, processes or equipment to which this Information Page refers will not infringe any third party's patents or rights. DISCLAIMER: This document is covered by Pyrotek standard Disclaimer, Warranty and © Copyright clauses. See pyroteknc.com/disclaimer.

