

Introduction

NOISESTOP Sound Absorptive Polyester Fibre is new health and environmental benefit product made from 100% polyester fibre raw material to replace the traditional fiberglass, rockwool or foam. Polyester Fibre is a porous material. The sound energy is direct converted into thermal energy by passing through the Polyester Fibre. Polyester is safety, no harm to human and environmental friendly. It helps create a healthy living space over the traditional fiberglass.

NOISESTOP Polyester Fibre is a high performance acoustic insulation products designed for residential and commercial buildings. It can be glued directly on surface or installed with impaling clips. Typical application includes theatres, hotels, offices, halls and various public places.



Features

NOISESTOP Polyester Fibre has various advantages: high sound absorption, stable and reliable material, low water absorption, good thermal insulation and vermin resistant. Easy installation.

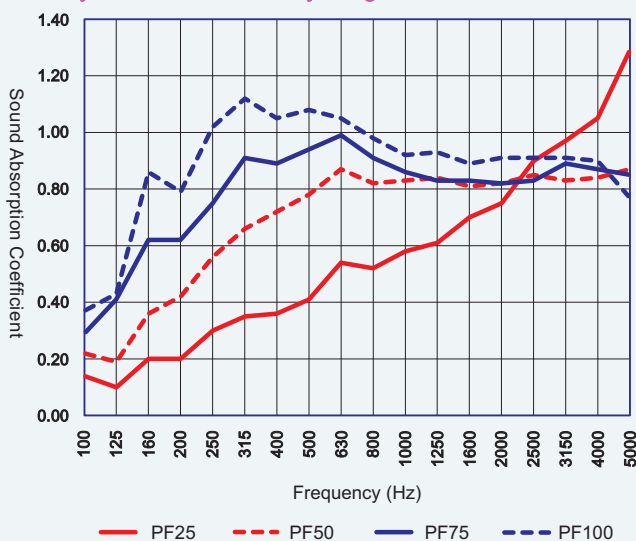
Flammability: **NOISESTOP** Polyester Fibre has been tested in National Fire Equipment Quality Testing Centre, achieving Class B₁ in building material category.

It is odourless and achieves Class E₁ in VOC test; non-irritant; no harmful to human health. It can also be recycled and has less pollution to environment.

Acoustics Performance

Testing in accordance with ASTM C423-09a Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.

PF Polyester Fibre in Density 20kg/m³



Product Specification

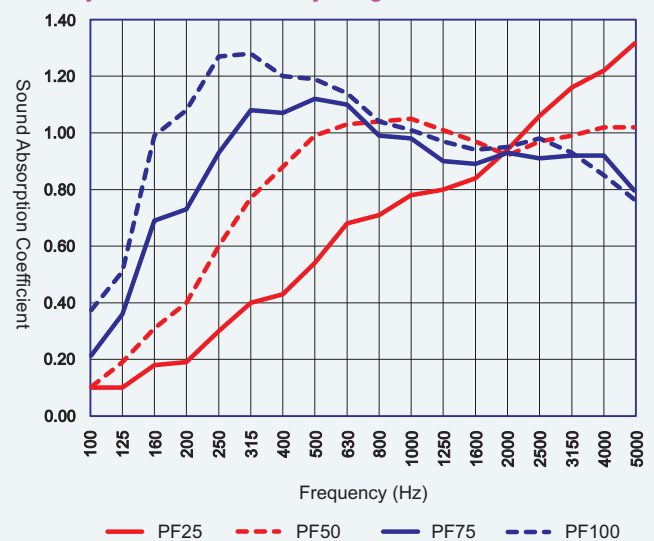
Model	Thickness	Density	Size	Colour
PF25	25mm	20-50kg/m ³	1000x2000mm	White
PF50	50mm	20-50kg/m ³	1000x2000mm	White
PF75	75mm	20-50kg/m ³	1000x2000mm	White
PF100	100mm	20-50kg/m ³	1000x2000mm	White

Mechanical Properties

Item	Test Standard	Result
Flammability	GB 8624-1997	B ₁
VOC	GB 18580-2001	E ₁
Moisture Content	Oven-Drying Method	≤0.4%

Sound Absorption Coefficient vs Frequency

PF Polyester Fibre in Density 50kg/m³



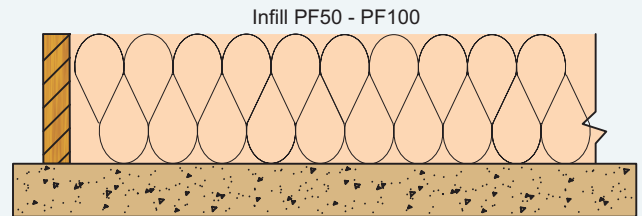
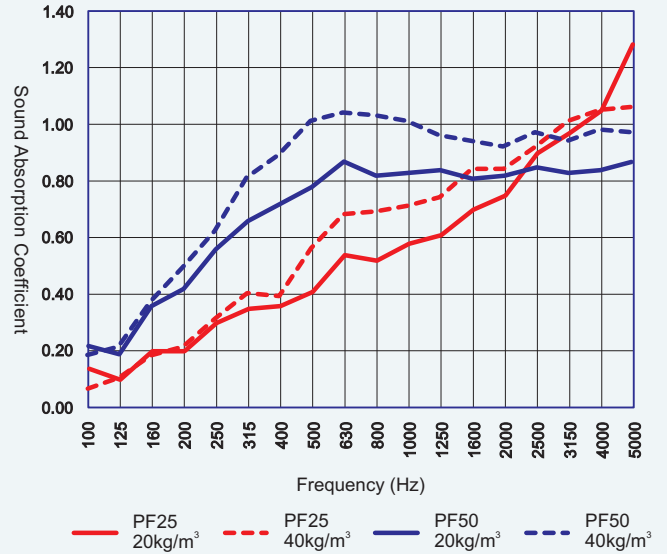
Acoustics Performance

PF25 and PF50 Sound Absorption Coefficient

1/3 Octave Band and 1/1 Octave Band Sound Absorption Coefficient						
Thick	25mm			50mm		
Density	20kg/m ³	40kg/m ³	50kg/m ³	20kg/m ³	40kg/m ³	50kg/m ³
100	0.14	0.06	0.10	0.22	0.18	0.10
125	0.10	0.15	0.10	0.19	0.25	0.20
160	0.20	0.18	0.18	0.36	0.37	0.31
200	0.20	0.21	0.19	0.42	0.49	0.40
250	0.30	0.30	0.30	0.56	0.55	0.60
315	0.35	0.40	0.40	0.66	0.81	0.77
400	0.36	0.39	0.43	0.72	0.89	0.88
500	0.41	0.45	0.55	0.78	0.80	0.95
630	0.54	0.68	0.68	0.87	1.04	1.03
800	0.52	0.69	0.71	0.82	1.03	1.04
1000	0.58	0.55	0.70	0.83	0.85	1.00
1250	0.61	0.74	0.80	0.84	0.96	1.01
1600	0.70	0.84	0.84	0.81	0.94	0.97
2000	0.75	0.80	0.85	0.82	0.85	0.95
2500	0.90	0.92	1.06	0.85	0.97	0.97
3150	0.97	1.01	1.16	0.83	0.94	0.99
4000	1.05	1.00	1.00	0.84	0.85	0.95
5000	1.29	1.06	1.32	0.87	0.97	1.02
NRC	0.50	0.60	0.65	0.75	0.90	0.90

Sound Absorption Coefficient vs Frequency

PF25 and PF50 Polyester Fibre



Test Configuration

PF75 and PF100 Sound Absorption Coefficient

1/3 Octave Band and 1/1 Octave Band Sound Absorption Coefficient						
Thick	75mm			100mm		
Density	20kg/m ³	40kg/m ³	50kg/m ³	20kg/m ³	40kg/m ³	50kg/m ³
100	0.29	0.27	0.21	0.37	0.42	0.37
125	0.41	0.45	0.36	0.43	0.55	0.65
160	0.62	0.70	0.69	0.86	0.99	0.99
200	0.62	0.70	0.73	0.79	1.06	1.08
250	0.75	0.75	0.90	1.02	1.00	1.27
315	0.91	1.09	1.08	1.12	1.31	1.28
400	0.89	1.08	1.07	1.05	1.20	1.20
500	0.94	0.95	1.00	1.08	1.00	1.19
630	0.99	1.06	1.10	1.05	1.16	1.14
800	0.91	0.97	0.99	0.98	1.08	1.04
1000	0.86	0.85	0.95	0.92	0.95	1.01
1250	0.83	0.94	0.90	0.93	0.98	0.97
1600	0.83	0.89	0.89	0.89	0.98	0.94
2000	0.82	0.85	0.90	0.91	0.90	0.95
2500	0.83	0.94	0.91	0.91	0.99	0.98
3150	0.89	0.97	0.92	0.91	0.97	0.93
4000	0.87	0.85	0.90	0.90	0.85	0.85
5000	0.85	0.83	0.79	0.77	0.77	0.76
NRC	0.85	1.00	1.00	1.00	1.10	1.10

PF75 and PF100 Polyester Fibre

