

TECHNICAL DATA SHEET

SUPER SILENT HL is a high-performance foil faced mass-loaded vinyl noise barrier, offering superior acoustic transmission loss and upgraded fire resistance.

With a fire-resistant foil facing, SUPER SILENT HL was developed by Vizyon to meet stringent fire safety requirements in the marine, building and transport sectors.

The upgraded fire safety provided by SUPER SILENT HL is offered without reducing the strength, tear resistance or flexibility offered by the SUPER SILENT HL product range.

Stiff lightweight panel constructions, such as plasterboard, drywall, plywood and hollow core doors, typically have coincidence dip resonance which allows noise to transmit through a construction. The coincidence dip is dependent on the material's stiffness and thickness and occurs at the point where the sound transmitted through the structure matches the natural frequency of the panel. SUPER SILENT HL shifts the coincidence dip to frequencies limiting its impact, thereby maintaining the performance of the product.

The thin, dense mass barrier reflects and absorbs the energy, resulting in the reduction of transmission of sound through walls, ceilings and floors, therefore reducing the noise generated from sources such as mechanical equipment, engine noise and electronic devices.

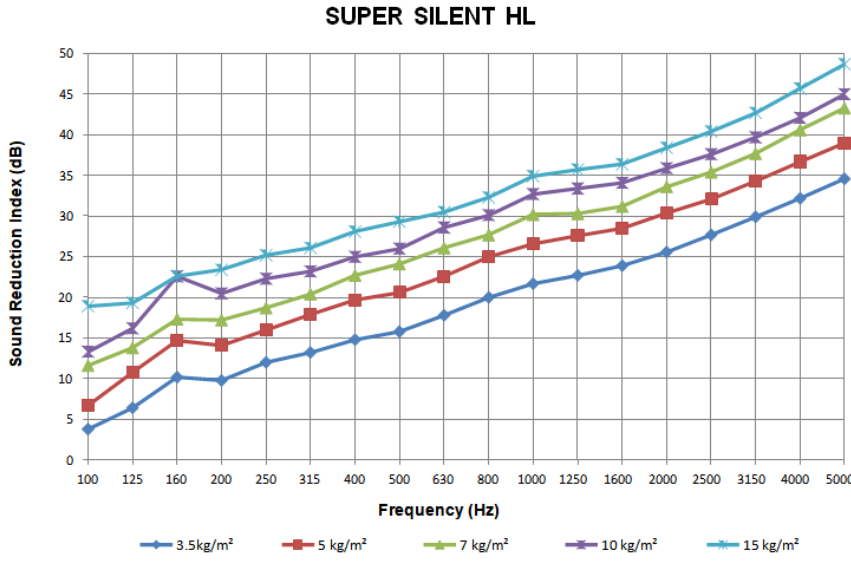
Applications

- Applied in marine engine rooms & deckheads to reduce noise transmission
- Rail carriages for under floor insulation to reduce track and brake noise
- Inside cavities or over lightweight wall, ceiling and floor constructions
- Around the outside of metal air ducts to reduce noise breakout
- Wrapped around noise emitting pipes, i.e. fluid or gas pulsation in chemical, petrochemical and waste water treatment plants

Barrier weight (kg/m ²)	Thickness (mm)	Thermal conductivity k value (Wm ⁻¹ K ⁻¹)	Sheet			Operating temp. range (°C)
			Width (mm)	Length (m)	Weight (kg)	
3.5	1.7	0.47	1200	2	7	-40 to 100 (Continuous) -40 to 120 (Intermittent)
5	2.5			2	10	
7	3.5			2.50	17.5	
10	5			2	20	

ACOUSTIC PERFORMANCE

Frequency (Hz)	3.5 kg/m ² (dB)	5 kg/m ² (dB)	7 kg/m ² (dB)	10 kg/m ² (dB)	15 kg/m ² (dB)
100	3.8	6.7	11.6	13.3	18.9
125	6.4	10.8	13.8	16.2	19.3
160	10.2	14.7	17.3	22.6	22.6
200	9.8	14.1	17.2	20.5	23.4
250	12.0	16.0	18.7	22.3	25.2
315	13.2	17.9	20.4	23.2	26.1
400	14.8	19.7	22.7	25.0	28.1
500	15.8	20.6	24.1	26.0	29.3
630	17.8	22.6	26.1	28.6	30.5
800	20.0	25.0	27.7	30.1	32.3
1000	21.7	26.6	30.2	32.7	34.9
1250	22.7	27.6	30.3	33.4	35.7
1600	23.9	28.5	31.2	34.1	36.4
2000	25.6	30.4	33.6	35.9	38.4
2500	27.7	32.1	35.4	37.6	40.4
3150	29.9	34.3	37.7	39.7	42.7
4000	32.2	36.7	40.6	42.1	45.7



Production and General Center

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SILENCE FOR SAFETY AND COMFORT