


Siderise[®] Noise Barriers

**NCB Noise Control Barrier and
NRB Noise Reduction Barrier**

 SIDERISE[®]

 SIDERISE[®]
Noise Fence

 SIDERISE[®]
Noise F



Noise Control Barrier



Global experts in engineered acoustic solutions

 SIDERISE[®]
integrity in all we do

Global experts in engineered acoustic solutions

We have been serving the construction, transport, and industrial markets since 1972. Our history is rooted in acoustic solutions specifically engineered to control nuisance noise for greater acoustic comfort.

Driven by our ethos of 'integrity in all we do,' we see our role as more than just a product manufacturer. This means taking a holistic approach in understanding where and why our products are used, and how our technical services teams can continually support their proper application.



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Noise management solutions for construction sites, demolition sites, roadworks and outdoor events.

Keeping noise fenced in.



Siderise noise barriers

The Siderise range of absorptive and reflective noise barrier solutions, comprising NCB Noise Control Barrier and NRB Noise Reduction Barrier, are acoustically engineered to manage nuisance noise arising from site works, road works, outdoor events, generators, piling rigs and compressors, helping to protect neighbouring communities from noise pollution.

They offer a robust and durable, yet cost-effective flexible weather resistant mass barrier composite solution that can withstand the tough conditions of a working site, or the busy setting of a crowded venue.

Highlights

- High performance yet cost-effective.
- Bespoke branded graphic options.
- Reflective strip options available to meet DfT Chapter 8 requirements.
- Standard products held in stock for fast lead times.
- Easy to assemble for rapid deployment.
- Rollable and foldable for ease of transportation, handling and storage.
- Portable, washable and reusable.
- Reconfigurable for adaptation to changing site conditions.
- -30°C to +70°C operational temperature range.
- Third-party lab tested and field tested for acoustic performance.
- Type B flammability PVC to BS 5867-2: 2008.



Liverpool, United Kingdom

NCB Noise Control Barrier

Available in two variants, NCB MR and NCB XL, the NCB Noise Control Barrier is our most popular acoustic treatment for absorbing and controlling nuisance noise at source.

NCB MR comprises an acoustically absorbent non-woven fibre insulation core fully enclosed within a weather resistant and washable medium weight PVC outer.

NCB XL comprises the same insulation core, up to the stitch lines but uses a medium weight PVC outer facing on the front face and an acoustically transparent water repellent acoustic grade glass cloth on the rear face to enclose the insulation.

NRB Noise Reduction Barrier

NRB offers an inexpensive solution where sound absorption is less important e.g. on more open sites.

It is a composite comprising a thin polyester non woven insulation core sandwiched between a weather resistant and washable heavy weight PVC layer either side.



Acoustic performance

Designed to strike the perfect balance between mass, weight, dimension, acoustic effectiveness, and affordability, Siderise Noise barriers provide the following Weighted Sound Reduction (R_w) values:



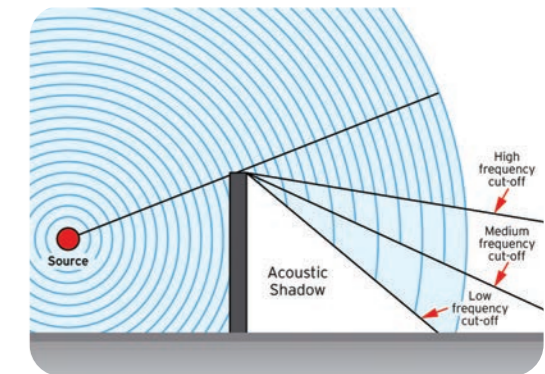
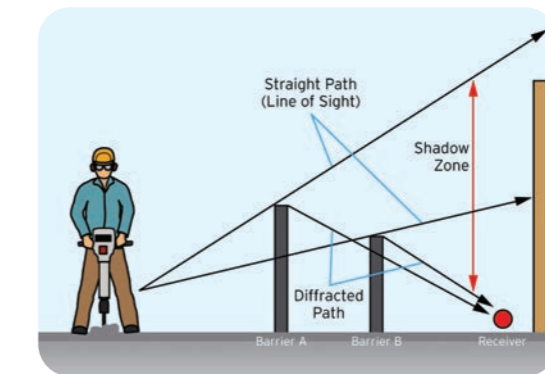
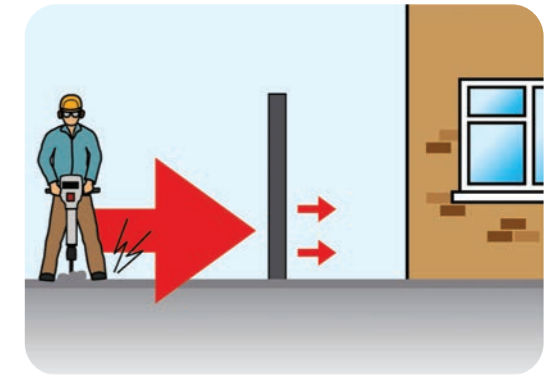
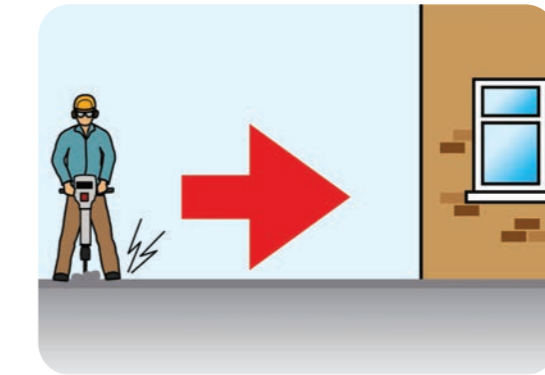
Why 'Weighted' Sound Reduction Index (R_w) value and not 'Maximum' value?

Using a Weighted Sound Reduction Index gives a true picture of how a sound reduction product performs. Different products can reduce sound differently across the human hearing spectrum; some might be better at blocking higher pitched sounds than lower pitched and vice versa.

BS EN ISO 717-1: 2020 (Acoustics - Rating of sound insulation in buildings and of building elements - Part 1: Airborne sound insulation) specifies the single number Weighted Sound Reduction Index rating system for comparing the sound reduction performance of different products - the higher the number, the better the product at reducing noise from a source.

To prevent the misapplication of acoustic treatments, it is important to understand the acoustic metric being used to claim performance when comparing products fulfilling the same function.

Noise paths, the barrier effect



Laboratory measured sound reduction

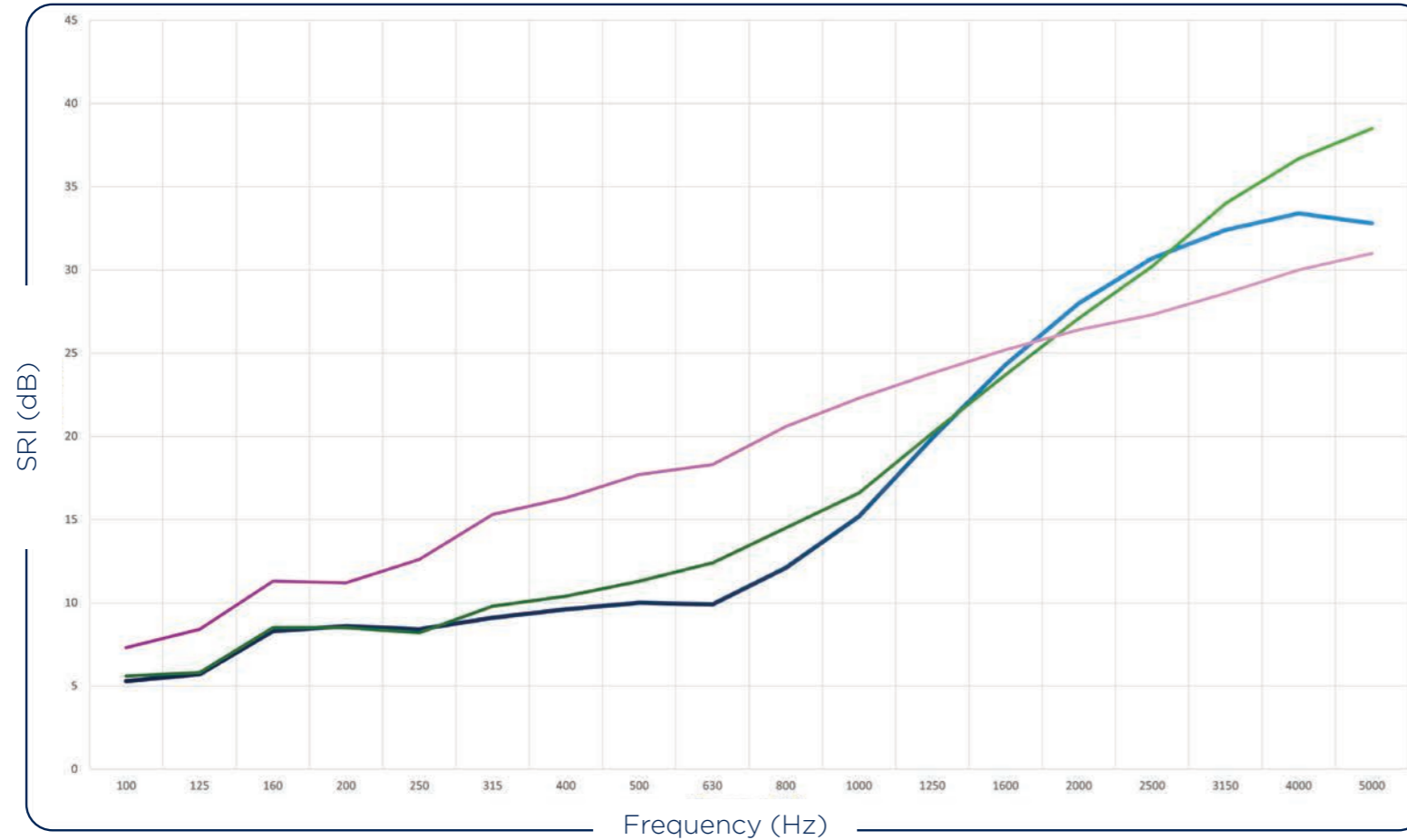


All products have been independently tested to:

BS EN ISO 10140-2: 2021
(Acoustics - Laboratory measurement of sound insulation of building elements - Part 2: Measurement of airborne sound insulation).

See technical datasheets for more details.

█ NCB MR
█ NCB XL
█ NRB



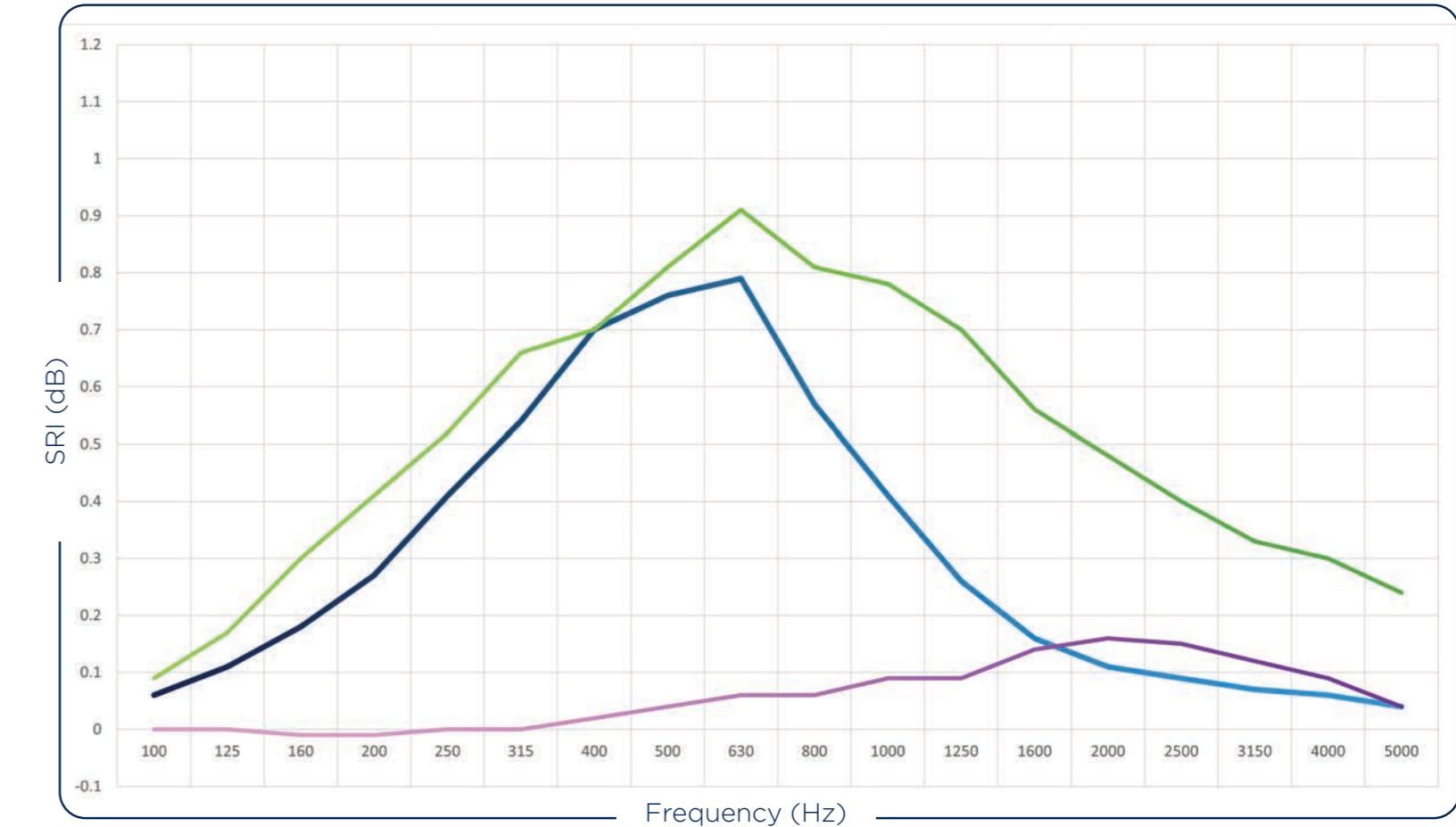
Laboratory measured sound absorption

All products have been independently tested to:

BS EN ISO 354: 2003
(Acoustics - Measurement of sound absorption in a reverberation room).

See technical datasheets for more details.

█ NCB MR
█ NCB XL
█ NRB



Installation

Siderise Noise Barriers should be positioned close to the noise source in the correct orientation (i.e. the unbranded surface facing the source), to optimise noise mitigation.

The barrier should intersect the direct path (line of sight) between the noise source and receiver completely to facilitate noise attenuation as it diffracts around the barrier - the acoustic 'shadow zone' behind the barrier is where noise levels are substantially reduced.

Overlap barriers by 50mm taking care to avoid gaps, as this will reduce sound 'leakage', improving overall effectiveness (see page 9, 'Noise paths, the barrier effect').

Reinforced metal eyelets are positioned around the perimeter edge of Siderise Noise Barriers for suspension on fence barriers and railings.

Use bungee cords, S hooks or heavy-duty cable ties to securely fix the barrier to the supporting structure by threading them through all eyelets. Do not cut or pierce the barrier to create extra fixing points.

Ensure supporting structures are adequately restrained in high wind conditions.



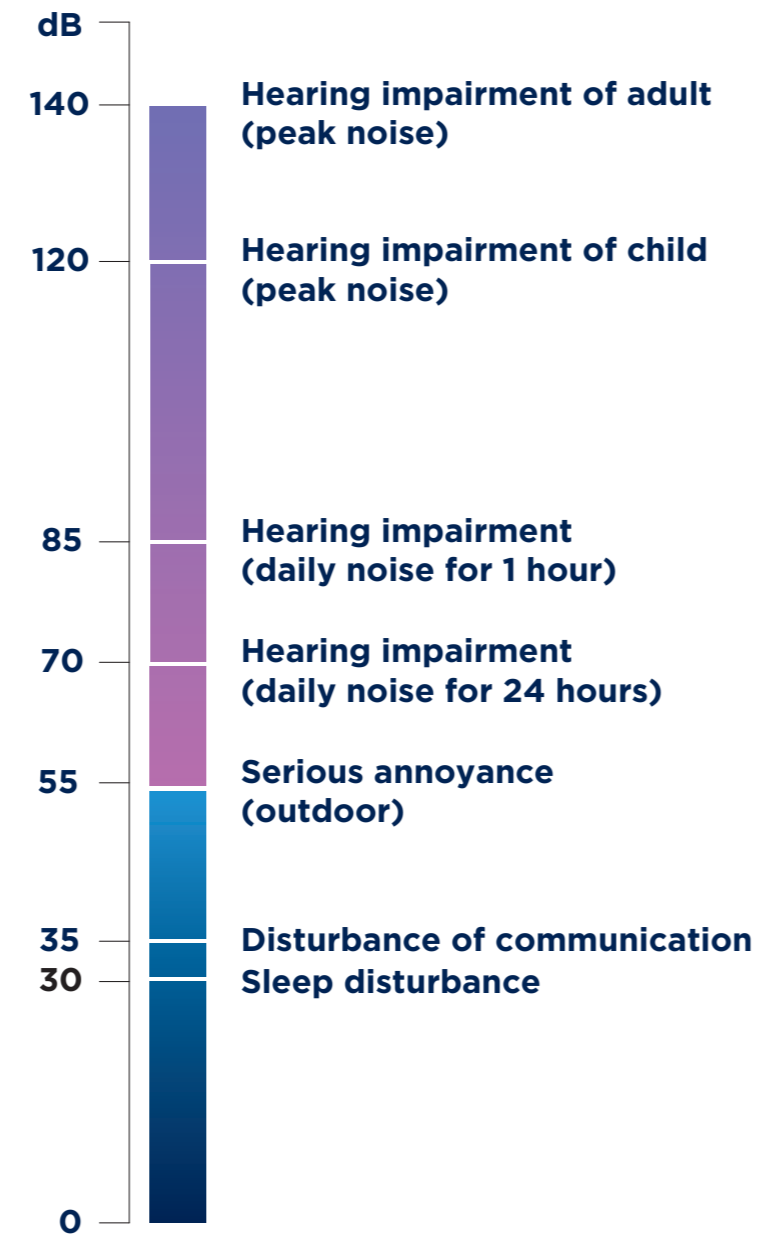
Construction sites are particularly challenging in terms of noise control. High levels of noise can result in complaints from residential areas, action from local authorities, and your site being shut down.

Mitigating the detrimental impact of excessive noise

It is well known that uncontrolled noise can be physiologically and psychologically problematic for people living, learning and working close to the source. World Health Organization (WHO) guidelines highlight the impact of noise levels, classifying 55dB as sufficiently loud to cause serious annoyance and suggesting that even 70dB can lead to hearing impairment. Given that heavy machinery and tools often exceed 85dB on construction sites, the significance of noise mitigation is evident.

Noise barriers can shield the nearby public from excessive noise pollution by lowering it to safer levels, if correctly specified and deployed. This requires careful consideration of:

- Where they are positioned in relation to the noise source.
- Their sound absorption coefficient and sound reduction index at different frequencies.
- Barrier mass, weight and dimension - height in particular.



Working with you, for you

A branch of physics and loaded with mathematics, the wider field of acoustics can sometimes appear technically challenging. This is where our team of expert acousticians can help. We are on hand to:

- Assist you with defining project specific requirements.
- Give advice on optimising noise control with our noise management solutions.
- Deliver training initiatives to improve your understanding of different applications.

Get in touch - sales.sspl@siderise.com



Siderise (Special Products)

Global experts in engineered
acoustic solutions

v1.01 November 2024

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