Acoustic Barrier 3.5m

Specification Sheet

TFS101240

24/06/24

safesite®
FACILITIES

Acoustic Barrier 3.5m

SafeSite's innovative acoustic solution addresses the challenge of environmental noise pollution arising from demolition, construction sites, and roadworks.

The SafeSite Acoustic Barrier effectively tackles noise problems at their origin by both absorbing and managing noise where it originates.

Our 3.5m Acoustic Barrier offers a swift and economical solution that not only aids in minimizing complaints from neighbouring communities but also fosters positive relations between the construction sector and the local community overall.

Easily attached to fencing

Excessive site noise can harm

Description	**Size** (mm)	**Weight** (kg)
TFS101240 - Acoustic Barrier 3.5m	H2000 x W3550 x D20	12

Key Features

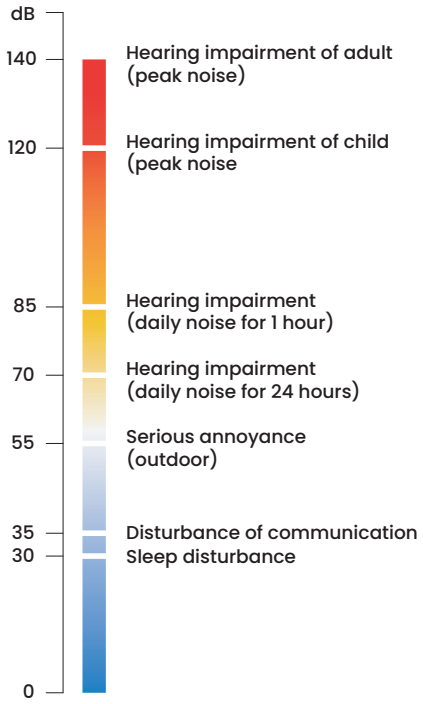
- Engineered Acoustic Performance
- Weighted Sound Reduction Index (Rw) of 16dB
- 3rd Party tested to BS EN ISO 10140-2:2021 and BS EN ISO 354:2003..
- Type B Fire Rating BS 5867
- Lightweight, flexible & easy to install
- Promotes community relations & reduces noise complaints
- Designed to work with our temporary fencing range
- Hi-vis reflective strip for enhanced visibility

Sound's Detrimental Impact

The guidelines set by the World Health Organization highlight the impact of noise levels: they classify 55dB as sufficiently loud to cause serious annoyance and suggest that even 70dB can lead to hearing impairment. Given that heavy machinery and tools often exceed 85dB on construction sites, the significance of this issue is evident.

Employing acoustic barriers can diminish noise levels near a noisy site. This effectively shield the nearby public spaces and residences from harmful noise pollution, lowering it to safer levels.

Constructed from a blend of durable acoustic-grade fabric, an absorbent core, and a flexible mass membrane, our Sound Barriers excel in both sound absorption and insulation. Their innovative design guarantees outstanding performance while also ensuring ease of rolling, handling, and storage.



Source: World Health Organisation

Barrier installation

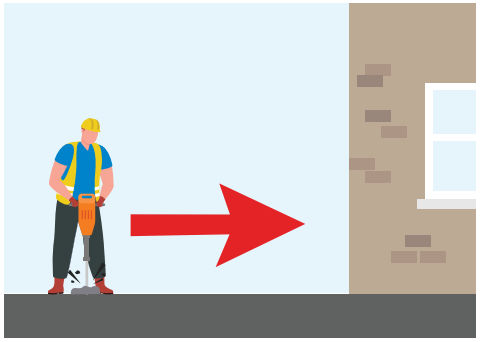
SafeSite noise control barriers can be quickly fixed to site fencing and scaffolding, allowing them to both absorb noise on site and create a barrier to the outside community.

As sound will diffract around objects, barriers should be placed in close proximity to the noise source to stop 'line of sight' to surrounding buildings and the public.

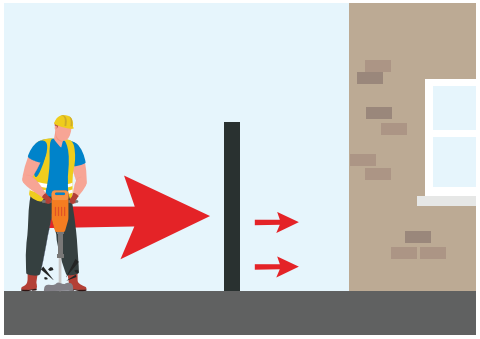
Barriers should also be overlapped by 50mm and care should be taken to avoid gaps, as this will improve the overall effectiveness and reduce 'leakage'.

'S' hooks and bungee toggles or heavy duty cable ties can be used to hang and secure the noise barrier via threading them through the strategically placed eyelets.

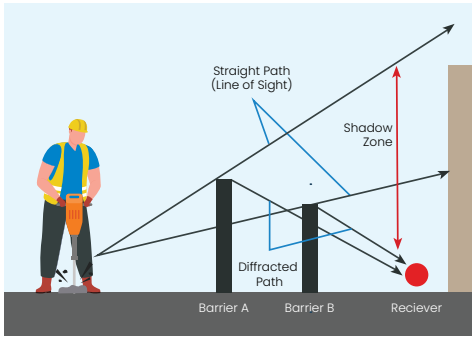
Please note that care should be taken that fence panels or supporting structures are adequately restrained in high wind conditions using all of the eyelets.



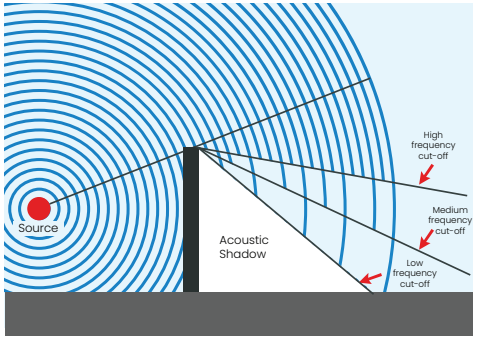
Noise impact without noise control barriers



Noise impact reduction noise control barriers



Noise distribution with barriers installed



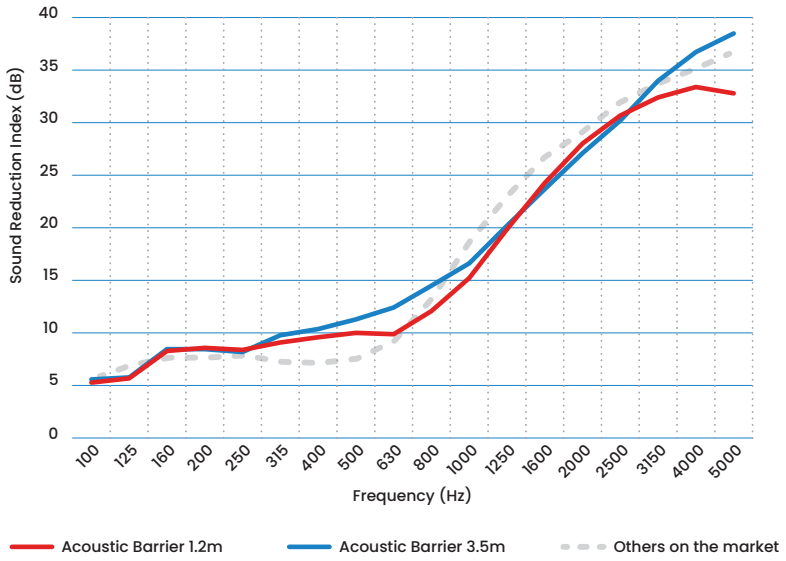
Noise frequency cut-off with barriers installed

Acoustic performance

The British standard BS EN ISO 717-1:2020 specifies a single number rating system for sound reduction products. This number is known as “Weighted Sound Reduction Index” or Rw for short. It is used to compare how effective different products are at sound reduction. The larger the number the better at reducing decibels from a sound source.

The reason we use a single Rw value to rate our products is that acoustic barriers can reduce sound differently across the human hearing spectrum. For example some might be better blocking sounds that are higher pitch than lower pitch and vice versa. To allow us to compare different noise reduction products we do not use a maximum reduction value but instead we use the Rw value as if it is a average across the spectrum. This way we get a true picture of how that product will perform.

The SafeSite noise control barriers are designed to strike the perfect balance between weight, acoustic effectiveness, and affordability. These barriers undergo rigorous third-party testing and certification, ensuring they provide noise reduction Rw value of 16dB.



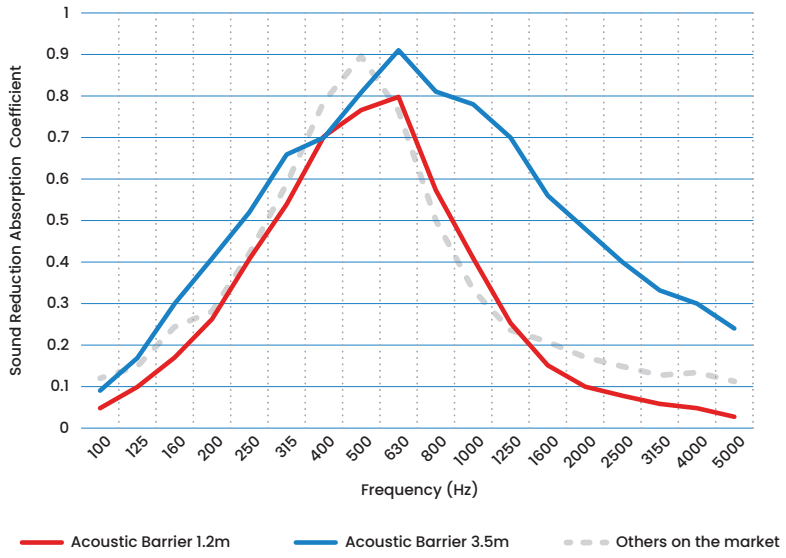
Acoustic Barrier design

The SafeSite Acoustic Barrier is constructed from weather resistant and washable medium weight PVC outer fabric and a acoustically absorbent fibre isolation inner core. This composite of flexible materials makes it ideal for storage as it can be folded or rolled with ease.

The outer PVC fabric layers are rated Type B Flammability based on British Standard BS 5867-2 as well as having an operational temperature range of -30°C to +70°C meaning it can be used in all weather conditions.

Designed and developed with superior performance and user-friendliness in mind. It is Engineered with premium materials and excels in both absorption and Weighed Sound Reduction Index (Rw), yet is easy to use, store, and install.

Product	Rw to ISO 717 Sound Reduction	α_w to ISO 1165 Sound Absorption
TFS101235 - Acoustic Barrier 1.2m	16dB	0.2(LM)
TFS101240 - Acoustic Barrier 3.5m	17dB	0.5(LM)



Installation parts

Acoustic Barrier 3.5m - Measurements in mm

Accessory parts: The following accessories kits are used when attaching to a standard temporay fence.

1 **GSFS0081 Cable ties - black**
Quantity: 100 per bag

Size (mm)	**Weight** (kg)
W550 x D9	-