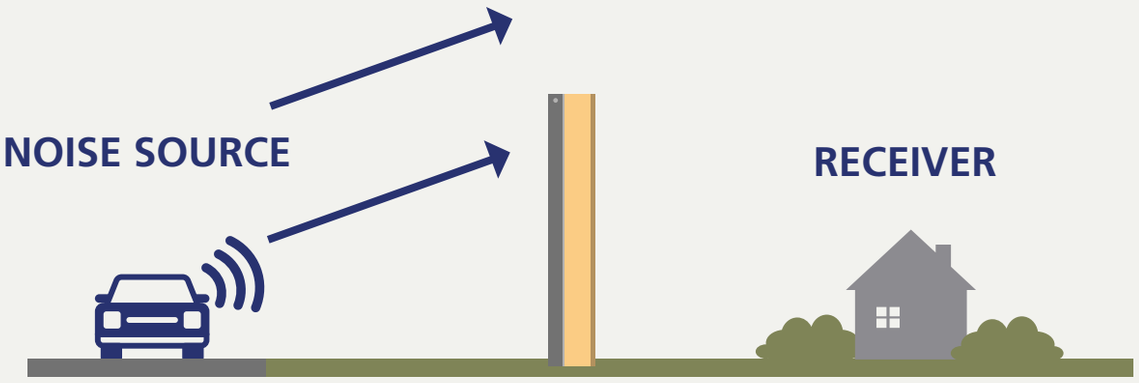
What's the Difference Between Reflective and Absorptive Noise Barriers?

HOW ACOUSTIC NOISE BARRIERS WORK

Acoustic barriers are designed to either reflect or absorb sound, causing sound waves take longer paths around them. This process, known as diffraction, reduces the amount of sound that reaches the receiver.



THE EFFECTIVENESS OF ANY ACOUSTIC BARRIER IS DEPENDENT ON A NUMBER OF KEY FACTORS

- Material density
- Barrier construction
- Barrier height
- Distance between noise source and receiver
- Relative height of source and receiver
- Nearby surfaces that could reflect sound

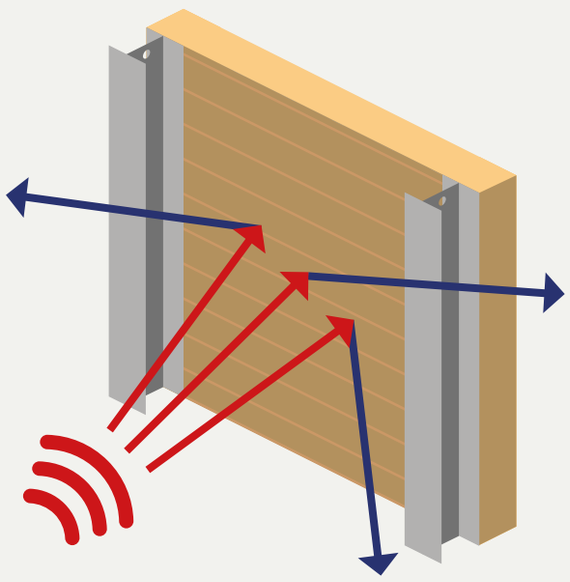
Taking these factors into consideration, no two projects will achieve the same quality and level of noise reduction using the same acoustic product.

REFLECTIVE VS ABSORPTIVE

There are two types of timber acoustic barriers that deal with unwanted noise: reflective and absorptive.

REFLECTIVE ACOUSTIC BARRIERS

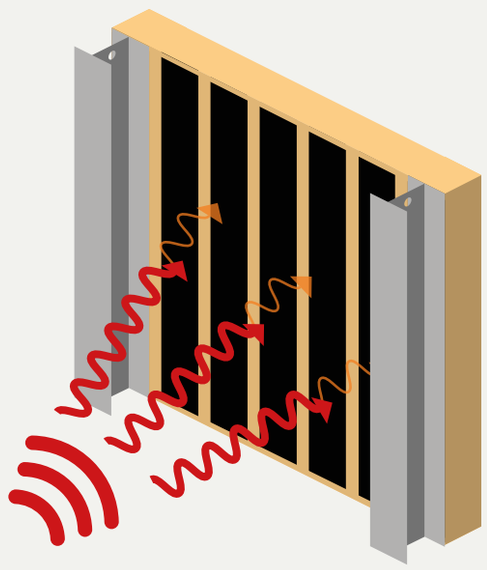
Reflective barriers are the most commonly used barrier, which redirect sound waves away from the protected area upon contact.



- Deep V interlocking timber boards
- Reflective on both sides of the barrier
- Installed on timber tuning fork posts or steel I-beams
- Can be CE/UKCA marked for road noise
- 25 year guarantee
- Noise reduction of up to **28dB**

ABSORPTIVE ACOUSTIC BARRIERS

Absorptive barriers trap and break down sound frequencies, completely diffusing sound waves instead of reflecting them.



- Deep V interlocking timber boards
- Reflective on one side and absorptive membrane on the other
- Installed on timber tuning fork posts or steel I-beams
- Can be CE/UKCA marked for road noise
- 25 year guarantee
- Noise reduction of up to **32dB**

There is no single “best” sound barrier; reflective and absorptive systems each suit different site conditions and project requirements. We recommend consulting a qualified acoustician before specifying a product and considering what is best for your specific needs; they can then assess your site and provide tailored recommendations.

Jacksons Fencing