



Call our Expert Sales Team for more information.

First Fence Ltd | Kiln Way, Woodville, South Derbyshire, DE11 8EA  
01283 512 111 | [www.firstfence.co.uk](http://www.firstfence.co.uk) | [sales@firstfence.co.uk](mailto:sales@firstfence.co.uk)



## Natural Elegance, Acoustic Excellence

Blending natural timber aesthetics with superior acoustic engineering. Our fencing offers a sophisticated solution for noise mitigation across residential and commercial sectors. It delivers a sound barrier that enhances, rather than disrupts, the visual landscape.

EchoAbsorb acoustic screening is designed for easy installation. The 5.0m high panels are designed to work with steel posts. The post sizes on the First Fence website are suggestions only; the length should be calculated according to your site. This is a **dig-in only system** and comes as a pre-assembled panel or as a loose kit requiring on-site assembly. This product does not come with fixings.

**Bespoke post calculations can be provided for specific sites to ensure panel, post and foundation suitability with our PostPro service. Contact the First Fence team for assistance.**

The average noise reduction achieved in laboratory tests is 35dB, giving the highest rating of B3, required for highways schemes.

### Key Features

- ⦿ **EchoAbsorb Straight Timber Structure**  
(Timber structures absorb sound helping reduce levels)
- ⦿ **Conforms and Tested to BS EN 1793**  
(Highways England Requirement for noise reducing devices)
- ⦿ **Durability**  
(Wood Treated to BS 8417, incised for ground contact)
- ⦿ **Compliant with Highways Sector Scheme 2C**  
(Standard for Pre-fabrication of environmental barriers)
- ⦿ **30 Year Desired Service Life**  
(Manufacturer offers this subject to correct installation)

### Suitable For

- ⦿ Urban Noise Reduction
- ⦿ Residential Privacy
- ⦿ Commercial & Industrial Spaces
- ⦿ Schools & Educational Institutions
- ⦿ Transportation Infrastructure

### Specification

|                       |                                                       |
|-----------------------|-------------------------------------------------------|
| System Height (Total) | 5.0m                                                  |
| Bay Width             | 2.4m                                                  |
| Kit Style             | Loose Kit or<br>Pre-Assembled                         |
| Ground Installation   | Dig In Only                                           |
| Material              | Incised, pressure treated<br>timber, Tanalised to UC4 |
| Source                | Supplied by a reputable<br>UK sawmill (FSC certified) |

**Features: Sawn finish**

**How it works: Reduces noise through  
absorption**

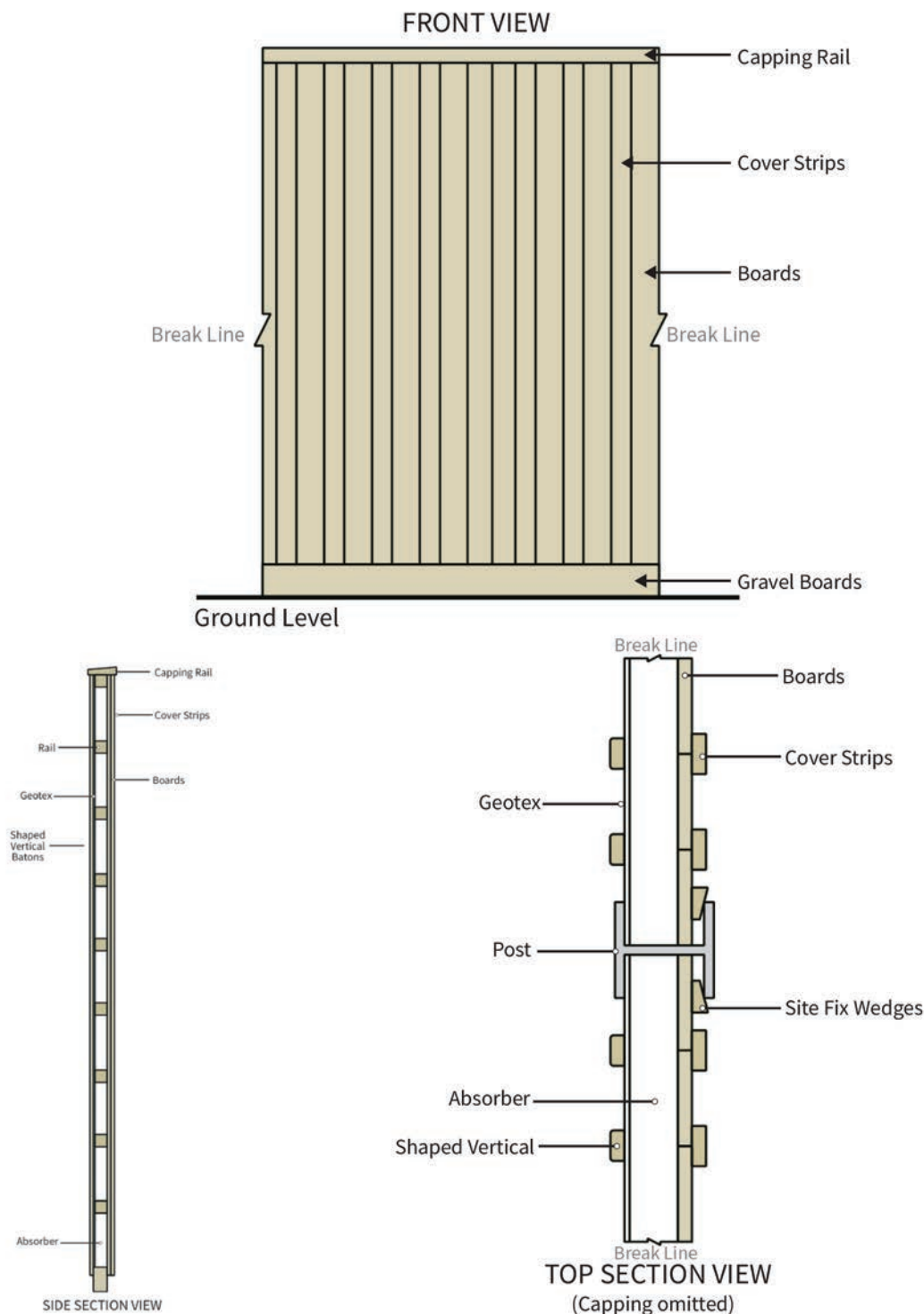


### Choose your Style

EchoAbsorb comes with loose components for constructing one bay or as a pre-assembled panel for quick installation. Works with steel posts.



Call our Expert Sales Team for more information.



Design and height to suit specific requirements.

Conforms and tested to BS EN 1793. Also tested and complies to BS EN 1794-1 and BS EN 1794-2.

Conforms with Highways Sector Scheme 2C for the prefabrication of environmental barriers.

Structural calculations available for individual site conditions.

Design in accordance with specification for Highway Works Clause 2504. Treatment to Sector Scheme 4.

Height of sound screen variable to suit specific locations. Post centres at 2.4m unless otherwise specified.

Absorbent sound screens to be fitted to steel posts.



### What's included in the loose kit:

|                                                  |     |
|--------------------------------------------------|-----|
| EchoAbsorb Straight Boards (150mm x 22mm x 4.9m) | x16 |
| Gravel Board (Timber, 150mm x 75mm x 2.4m)       | x1  |
| Capping Rail (2.4m x 175mm x 50mm > 38mm)        | x1  |
| Horizontal Rail (75mm x 75mm x 2.4m)             | x9  |
| Cover Strips (4.9m x 75mm x 22mm)                | x27 |
| Noggings, Rockwool & Membrane                    |     |

## Absorbent Sound Screen Fitted Into Steel Posts

BS EN 1793-1: 1998

Acoustics - Road Traffic Noise Reducing Devices

Test Method for determining the acoustic performance

SIZE 12m<sup>2</sup>

RECEIVING ROOM

Volume: 220m<sup>2</sup>

Condition: clean

Type: large reverberation room

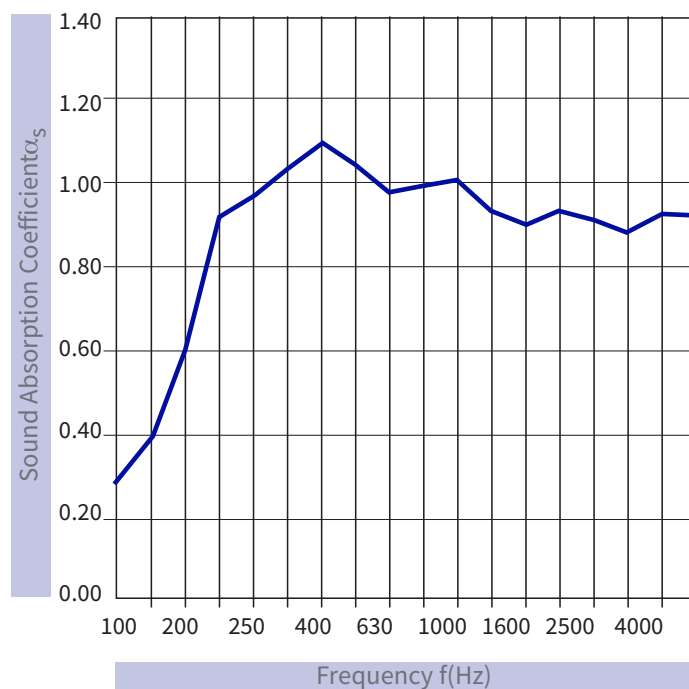
Location: acoustic transmission suite

SAMPLE OUT: TEMPERATURE: 20.1°C HUMIDITY: 48.5%

SAMPLE IN: TEMPERATURE: 22.4°C HUMIDITY: 51.7%

**DL<sub>α</sub>**: 12 CATEGORY: A4

| FREQUENCY<br>HZ | $\alpha_s$ |
|-----------------|------------|
| 100             | 0.27       |
| 125             | 0.40       |
| 160             | 0.62       |
| 200             | 0.90       |
| 250             | 0.94       |
| 315             | 1.03       |
| 400             | 1.10       |
| 500             | 1.06       |
| 630             | 0.97       |
| 800             | 0.99       |
| 1000            | 1.00       |
| 1250            | 0.90       |
| 1600            | 0.89       |
| 2000            | 0.92       |
| 2500            | 0.90       |
| 3150            | 0.87       |
| 4000            | 0.92       |
| 5000            | 0.91       |



Test results for HALES SAWMILLS LTD – REFLECTIVE SOUND SCREEN, issued by: University of Salford  
(Acoustics Test Laboratory) UKAS accredited test laboratory No. 1262

Design and Height to suit specific requirements.

Conforms and tested to BS EN 1793. Also tested and complies to BS EN 1794-1 and BS EN 1794-2.

Complies with Highways Sector Scheme 2C for the prefabrication of environmental barriers.

Structural calculations available for individual site conditions.

Design in accordance with specification for Highway Works Clause 2504. Treatment to Sector Scheme 4.

Height of sound screen variable to suit specific locations. Post centres at 2.4m unless otherwise specified.

Absorbent sound screen fitted to steel posts.

Average density 71kg/m<sup>2</sup> (excluding posts).



### Absorbent Sound Screen Fitted Into Steel Posts

BS EN 1793-1: 1998

Acoustics - Road Traffic Noise Reducing Devices

Test Method for determining the acoustic performance

|                   |                             |                |                             |
|-------------------|-----------------------------|----------------|-----------------------------|
| SIZE              | 8.64m <sup>2</sup>          |                |                             |
| SOURCE ROOM       |                             | RECEIVING ROOM |                             |
| Volume:           | 136m <sup>2</sup>           | Volume:        | 220m <sup>2</sup>           |
| Condition:        | clean                       | Condition:     | clean                       |
| Type:             | large reverberation room    | Type:          | large reverberation room    |
| Location:         | acoustic transmission suite | Location:      | acoustic transmission suite |
| TEMPERATURE:      | 19.2°                       |                |                             |
| HUMIDITY:         | 56.3%                       |                |                             |
| DL <sub>R</sub> : | 35                          | CATEGORY:      | B3                          |

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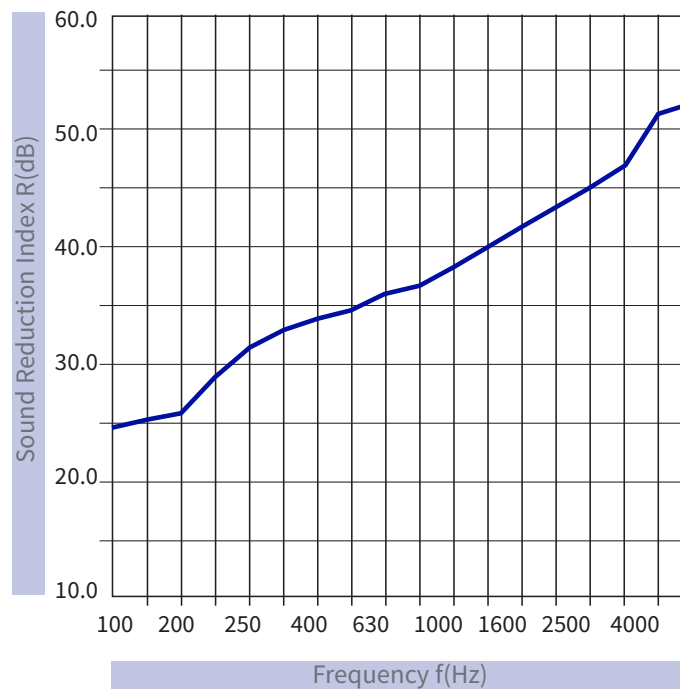
Structural calculations available for individual site conditions.

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Height of sound screen variable to suit specific locations. Post centres at 2.4m unless otherwise specified.

Absorbent sound screen fitted to steel posts.

| FREQUENCY<br>HZ | R    |
|-----------------|------|
| 100             | 24.4 |
| 125             | 25.2 |
| 160             | 25.9 |
| 200             | 28.2 |
| 250             | 31.8 |
| 315             | 32.9 |
| 400             | 33.3 |
| 500             | 34.3 |
| 630             | 36.2 |
| 800             | 36.8 |
| 1000            | 38.0 |
| 1250            | 39.6 |
| 1600            | 41.6 |
| 2000            | 43.2 |
| 2500            | 44.9 |
| 3150            | 47.1 |
| 4000            | 51.3 |
| 5000            | 52.4 |



## Follow the installation guide for your EchoAbsorb Acoustic Fencing

### Step 1

Determine how many bays and posts you require by using our product calculator.

### Step 2

Dig your post holes. Post centres are 2.4m. Ensure all posts are securely set in the ground using a suitable structural anchoring method. The foundation must be capable of supporting the weight of the acoustic panels and resisting local wind loads.

Use a taut line from one end of the fence run to the other to maintain a straight line.

Acoustic screens often act as 'sails', so the foundation must be capable of supporting the weight of the acoustic panels and resisting local wind loads.

Consult with a qualified structural engineer to ensure the installation meets local wind loading and soil requirements.

### Step 3

Face fix square rails onto the posts with 600mm gaps, using the 600mm spacers provided, allowing for the absorbent slabs to be added later.

### Step 4

On the non-absorbing side of the barrier (facing the area that you are looking to protect from the noise) attach the vertical boards to the rails using stainless steel nails (64mm A2). The boards need to be nailed onto the rails butted up to each other.

### Step 5

Cover strips then need to be attached over the joints where the panels butt up together, using stainless steel nails.

### Step 6

On the front side of the barrier (facing the noise source) infill with 1.2 x 0.6m absorbent slabs and cover over with the membrane securing with 1" stainless steel staples.

### Step 7

Fix cover strips over the membrane with 225mm spacing.

### Step 8

Finally fix the capping onto the top of the panels using stainless steel nails to allow water to shed in the direction of the post.



EchoAbsorb is to be installed with steel IPE.

The panel sits inside the IPE. First Fence steel IPEs come with a timber wedge for a perfectly tight finish.

First Fence IPEs do not come with drilled holes, please get in touch if you require pre-drilled fixing holes.

### Additional Information

These panels are suitable for painting with a breathable stain or paint. It's advised to clear vegetation where the acoustic fencing will be installed. Avoid installation in areas prone to water accumulation.

### Use our PostPro Calculation Service

Tailored Structural Reports: Site-specific reports can be provided for your height and ground conditions. Add PostPro to your order or get in touch for details of this add-on service.



Call our Expert Sales Team for more information.