EchoGroove Acoustic Fencing

2.5m Height Specification Sheet

SPC-ACOU-001D

Key Features

- **Tongue & Groove Timber Structure**
  (Timber structures absorb/reflect 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

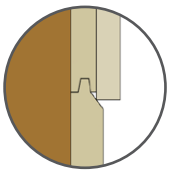
Conforms to BS EN 1793

(Also tested and complies with BS EN 1794-1 & 1794-2)

These standards measure sound insulation properties of road traffic noise reducing devices.

Long Service Life

Manufacturer gives this a 30 year desired service life, subject to correct installation.



Simple Installation

Each kit comes with loose components for constructing one bay. The tongue and groove style enables quick and effective installation. Choose a steel or timber post.

Stylish and Modern

Timber has an inviting warm look that will work well in most settings

Specification

System Height (Installed)	2.5m
Bay Width	2.4m
Kit Style	Loose Kit
Ground Installation	Dig In Only
Material	Incised, pressure treated timber, Tanalised to UC4
Source	Supplied by a reputable UK sawmill (FSC certified)

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 | sales@firstfence.co.uk

First Fence
Acoustic Fencing

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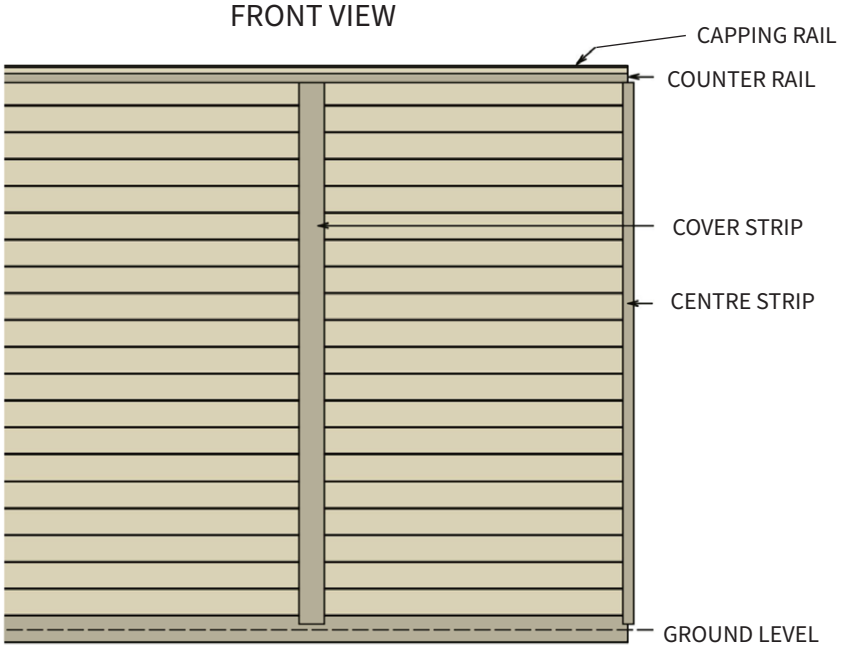
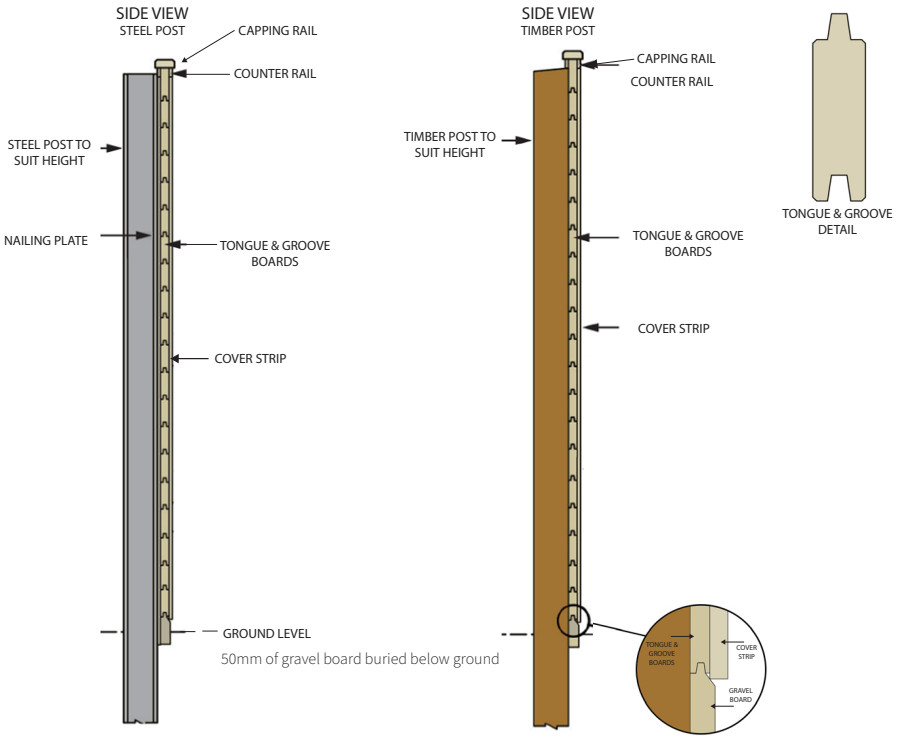
FRONT VIEW



50mm of the gravel board buried below ground



Structural calculations available for individual site conditions.

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

Reflective sound screen fitted to timber or steel posts.

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

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

Average density 30.7kg/m² (excluding posts).

Tanalised™ TIMBER

What's included in this kit

Acoustic Tongue & Groove Boards (2.4m x 150mm x 38mm)	**x20**
Gravel Board (Timber, 2.4m x 150mm x 38mm	**x1**
Capping Rail (2.4m x 125mm x 38mm)	**x1**
Counter Rail (2.4m x 75mm x 38mm)	**x2**
Cover Strip (2.5m x 125mm x 38mm)	**x1**
Centre Strip (2.5m x 75mm x 38mm)	**x2**

FirstFence® HIRE & SALES

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EchoGroove Reflective Acoustic Fencing

BS EN 1793 -1: 1998

Acoustics - Road Traffic Noise Reducing Devices

Test Method for determining the acoustic performance

SIZE: 8.64m²

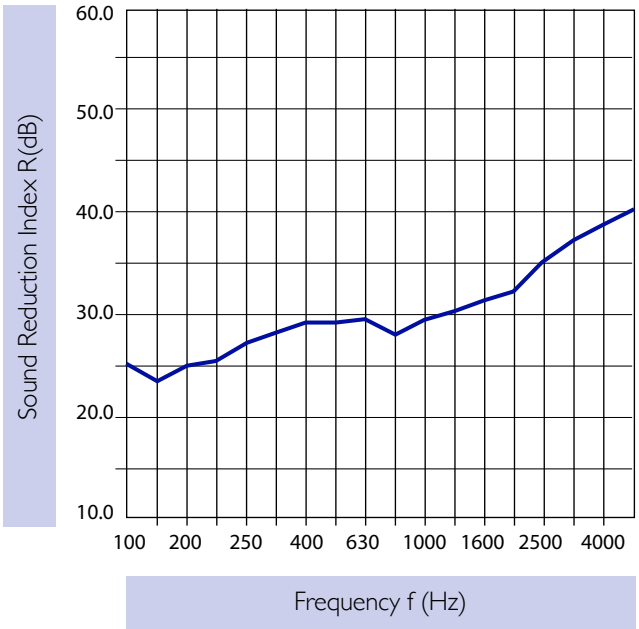
SOURCE ROOM		RECEIVING ROOM	
Volume:	136m²	Volume:	220m²
Condition:	clean	Condition:	clean
Type:	small reverberation room	Type:	large reverberation room
Location:	acoustic transmission suite	Location:	acoustic transmission suite

TEMPERATURE: 18.8°C

HUMIDITY: 43.1%

DL_R: 29 CATEGORY: B3

FREQUENCY HZ	α_S
100	25.7
125	23.8
160	25.0
200	25.6
250	27.3
315	28.2
400	29.3
500	29.1
630	29.5
800	28.0
1000	29.5
1250	30.4
1600	31.4
2000	32.3
2500	35.4
3150	37.4
4000	38.9
5000	40.5



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

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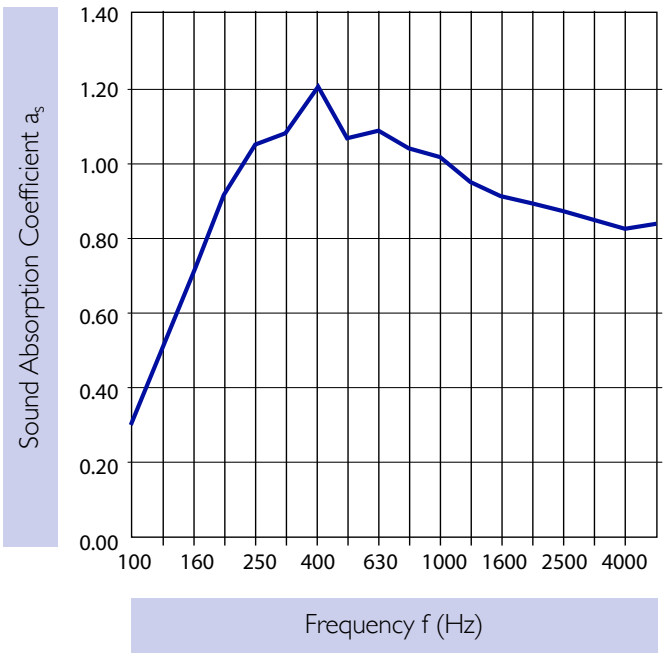
Volume:	136m^2	Volume:	220m^2
Condition:	clean	Condition:	clean
Type:	small reverberation room	Type:	large reverberation room
Location:	acoustic transmission suite	Location:	acoustic transmission suite

SAMPLE OUT:	Temperature 20.1°	Humidity: 42.4%
SAMPLE IN:	Temperature 19.0°	Humidity: 42.2%
DL_a:	15	CATEGORY: A4

FREQUENCY HZ	α_S
100	0.30
125	0.51
160	0.71
200	0.91
250	1.04
315	1.07
400	1.20
500	1.06
630	1.08
800	1.02
1000	1.01
1250	0.95
1600	0.92
2000	0.91
2500	0.86
3150	0.84
4000	0.81
5000	0.83



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Installation Guide

Follow the installation guide for your EchoGroove 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.

Step 3

Face fit the gravel boards onto the posts using 64mm A" stainless steel nails along the bottom of the barrier. Ensure they are buried 50mm into the ground. Use a nail gun and 64mm stainless steel nails for timber posts or self-tapping screws for steel posts (do not use galvanised nails).

Step 4

Fit the horizontal tongue & groove acoustic boards to the posts and build up to required height by interlocking them together. The top board will have no tongue on to leave a flat finish.

Step 5

Fix the counter rails onto the front and back of the fencing, then the cover strips over the joints of where the tongue & groove boards butt up together, using stainless steel nails.

Step 6

Fix the centre strip front and back of the bay in the centre of each bay.

Step 7

Finally, attach the capping rail with nails to the top of the fence to provide a neat finish and allow water to shed in the direction of the post.

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.

Call our Expert Sales Team for more information.

First Fence Ltd | Kiln Way, Woodville, South Derbyshire, DE11 8EA
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