

## GroovyLite Domestic Acoustic Fencing

Easy to specify and install acoustic timber fencing system for domestic environments



Significantly **reduces surrounding traffic noise** adding real value to properties

Independently tested to Highways England BS EN 1793 requirements giving **highest B3 performance rating**

Machine finished **Pine interlocking tongue and grooved panels** preventing sound leakage

Panels **1.83m** wide with a choice of heights: **900mm, 1200mm, 1500mm, 1800mm and 2000mm**

Panels incorporate **incised and treated** gravel board for ground contact

Timbers **preservative treated** to meet **Use Class 4 (ground contact)** requirements giving **Highways England 30 years desired service life and maintenance free** performance

Choice of **incised treated timber** posts or **concrete** posts

**Trellis panels** available for decorative header options

Supplied with **stainless steel fittings**

**Recommended installers** throughout the UK that can provide a professional service using GroovyLite

### What is noise?

Noise, by definition, is unwanted sound. It can be annoying, interfere with communications, affect leisure or relaxation activities and at the most extreme it can cause hearing loss and even mental health or physiological symptoms. The intensity of noise is measured in **decibels (dB)**.

Timber structures and barriers are excellent absorbers of sound helping to reduce noise levels in a wide range of applications.

### GroovyLite - Proven Noise Reduction Performance

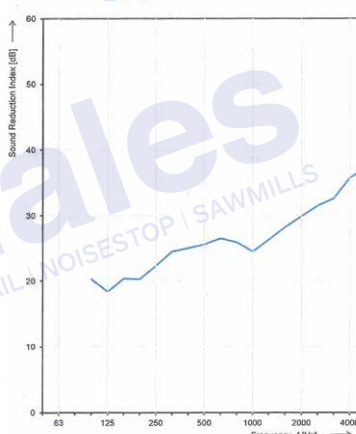
Hales Sawmills is a leading supplier of industrial acoustic fencing systems for Highways Agencies through the **NoiseStop** range. The new **GroovyLite** system incorporates all the proven technologies from NoiseStop but with a focus on a **cost effective option** for **domestic environments**.

GroovyLite has been **independently tested** by Salford University to Highways England requirements - BS EN 1793 Road Traffic Noise Reducing Devices. The average reduction achieved with the GroovyLite system in the laboratory tests was **25dB**, giving the highest rating of **B3** - the rating required for **highways schemes**.

TYPICAL SOUND LEVELS FOUND IN THE ENVIRONMENT

SOUND LEVEL	LOCATION
0 dB (A)	Threshold of hearing
20 - 30 dB (A)	Quiet bedroom at night
30 - 40 dB (A)	Living room during the day
40 - 50 dB (A)	Typical office
50 - 60 dB (A)	Inside a car
60 - 70 dB (A)	Typical high street
70 - 90 dB (A)	Inside factory
100 - 110 dB (A)	Burglar alarm at 1m away
110 - 130 dB (A)	Jet aircraft on take off
140 dB (A)	Threshold

Frequency f [Hz]	R 1/3 octave [dB]
50	-
63	-
80	-
100	20.3
125	18.4
160	20.4
200	20.3
250	22.3
315	24.5
400	25.0
500	25.6
630	26.5
800	25.9
1000	24.5
1250	26.3
1600	28.2
2000	29.9
2500	31.5
3150	32.6
4000	35.7
5000	37.3





## GroovyLite Case Study

Hales has carried out practical testing of the GroovyLite system at a private lodge property close to a busy trunk road in Shropshire.

The owners were previously unable to utilise the front garden area because of high traffic noise and also wanted to have more privacy from passing traffic. Hales designed and installed the new GroovyLite perimeter fencing at the front of property creating a private and more noise acceptable environment for everyday use.

On a typical mid-week, mid-morning, noise levels were **simultaneously recorded** both at the roadside and behind the newly erected acoustic fencing.

The noise level readings were recorded over a **15 minute period**. The results showed an **average noise reduction of 16.45 decibels** on the property side of the GroovyLite fence, meeting the B3 highways rating.

AVERAGE NOISE  
REDUCTION  
**16.45<sub>dB(A)</sub>**

## GroovyLite System

The GroovyLite system is simple to specify and install, even on uneven ground and sloping sites. The solid timber panels simply fix to the timber posts or slot into the concrete posts. Manufactured from solid interlocking Pine boards the GroovyLite panels are all **1.83m (6 feet)** in width. The height of the panels range from **900mm** up to **2000m** and there are **trellis options** when required to provide a decorative finish to the tops of the panels. The panels have gravel boards on the base designed to give premium long term performance even in ground contact situations. All GroovyLite projects are supplied with stainless steel fixings that will match the long life performance of the preservative treated timbers.

## Proven Long Term Protection

All the timbers used on the GroovyLite system are **preservative treated Pine**. They are high pressure treated within Hales own treatment facilities with latest generation **TANALITH wood preservative**, the leading choice for the long term protection of exterior timbers against the threat of wood decay and insect attack. Using Pine allows a superb penetration and distribution of the preservative into the timbers. Also the timber posts and the gravel boards are **surface incised** to provide an even more **assured performance** from these critical **ground contact** components.

This tried and tested protection against decay organisms ensures all the GroovyLite components have a **30 years desired service to Highways England standards**.



## Helping Create Better Everyday Environments

It is estimated that around 40% of the UK population is exposed to road traffic noise during the day time of about 55dB and 20% are exposed to higher levels over 65dB. The problem increases when engine speeds change, for instance on hills, at lights or at crossroads.

There is a growing body of evidence concerning the adverse effects noise can have on health and general quality of life. Current evidence indicates that prolonged exposure to high levels of noise can lead to mental health and physiological symptoms.

**The GroovyLite system is a proven and simple solution that can help home owners, house builders and local authorities manage traffic noise issues.**

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