



Noise Barriers



Summary

Kedel Noise Barriers are a functional and effective solution for reducing noise pollution near highways and the city environment.

Made to Last

- UV Resistant
- Never Rots
- Waterproof
- Graffiti Resistant
- Long lifespan

Lifetime Performance

- Superb Noise Insulation
- Easy-to-Install
- Maintenance-free
- Low Lifetime Costs
- Eco-friendly



1 tonne of Kedel Barrier helps save...

1.66 tonnes of CO²

98 million KJ of energy

262 litres of oil

23m³ of land fill space

Best Practise in Road Construction: Estonia's Largest Highway (E263)

Case Study

Opened in November 2013, the Kose-Aruvalla section of Tallinn - Tartu Highway (E263) sets the standard for safety and quality for future road constructions in Estonia.

Kedel's Noise Barriers, used extensively on over 2000 metres of the total constructed roadside, will shield the noises from the busy road for the local residents for decades.

With its long lifespan, the Kedel Noise Barriers will most likely outlast the asphalt on the road itself, while requiring no additional maintenance or costs.

The low lifetime costs are an important factor to consider in choosing the right solution.



240 tons of plastic used in Kedel Noise Barriers is equivalent to...

12 Million plastic bags

48 Million yoghurt containers

These maintenance-free Kedel Noise Barriers guarantee very low lifetime costs

Features

Made to Last

Kedel Noise Barrier is an excellent noise insulator, at the same time it is very durable and impervious to various weathering effects such as UV rays, rain & freezing temperatures.



UV Resistant

Minimal colour fade over time.



Corrosion Safe

Protected against cold and salt



Waterproof

100% impervious to water



Shatterproof

With enhanced durability



Graffiti Proof

Easy-to-clean



Long Life

At least 50 years expected

Contact us for more information on the key features of our Noise Barrier profiles.

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Lifetime Performance

Features

In addition to the inherent durability of Kedel Noise Barriers, they offer great performance over competing barrier technologies, in terms of simplicity of installation and maintenance.

Noise Insulation

Massively reduces road noise

dB-

Simple Installation

Easy assemble modular design



Maintenance-free

No care needed after installation



Low Lifetime Costs

Exceptional cost performance



Eco-friendly

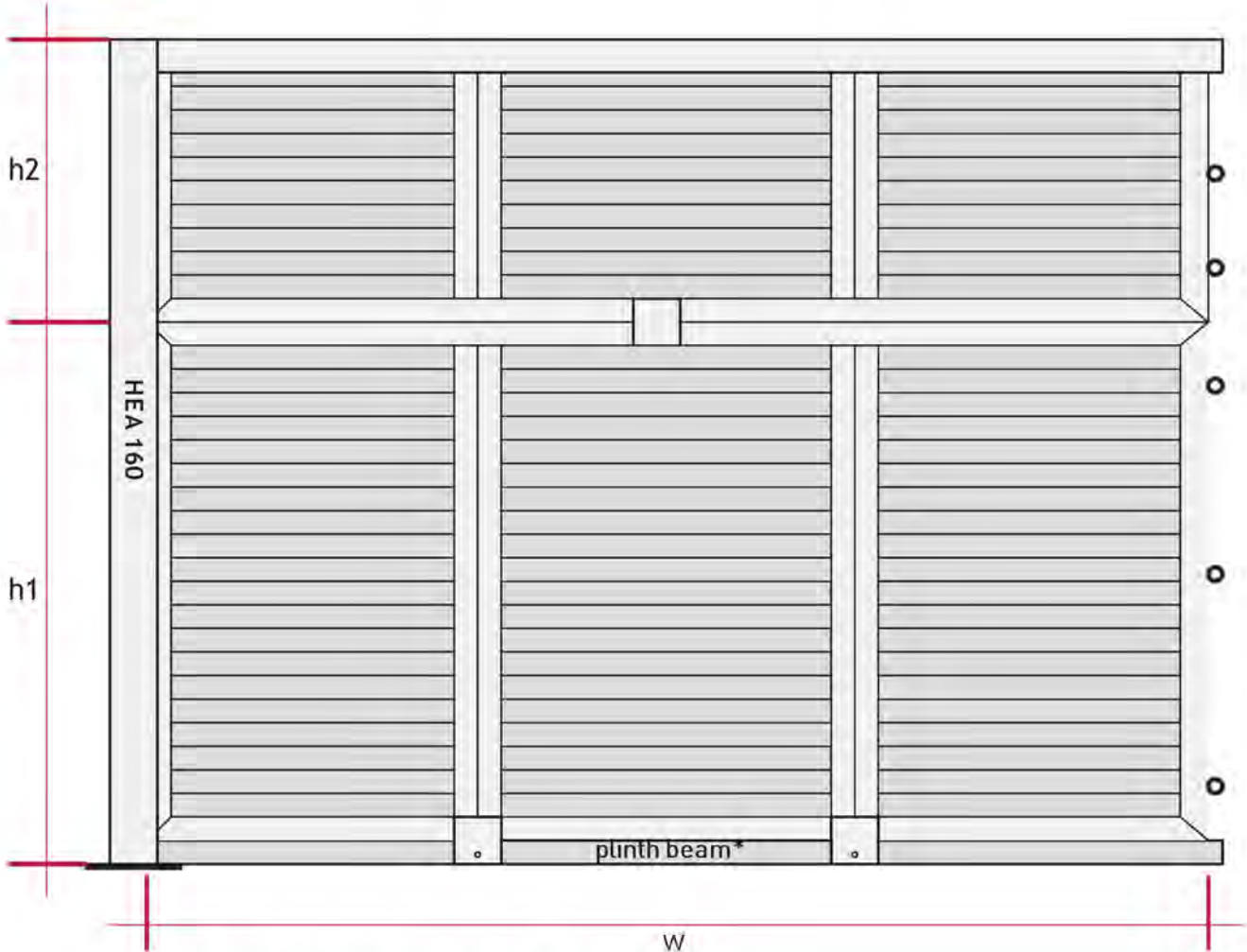
100% recycled & recyclable



Our patented manufacturing process is both environmentally friendly and produces a superior quality of recycled plastic product.

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Single Module Measurements



*used when no concrete plinth present

Standard Measurements

	Description	Height	Colour Options
h1	Base module height	2 m	black; grey;
h2	Extension module height	1m; 2 m	brown; green
w	Width	4 m	

Contact us for custom height modules.

Performance Indicators

Kedel profiles have been manufactured from recycled plastic packaging from the food industry.

The raw material is heat treated to remove any organic matter and to achieve a homogenous mixture.

Kedel Noise Barriers are composed of high and low density polyethelene, polystyrene and polypropylene.

Mechanical Properties

1 Flex	EN408	Flexural modulus (N/mm ²)	
		-50 °C	1843
		22 °C	795
		60 °C	452
2 Density		0,75 g/ cm ³	
3 Linear expansion		0,069 mm/m/ °C	
4 Flammability	ISO 13501-1	E	
5 UV stability	ASTMG154	ΔE=1,1 (excellent)	
6 Water absorption	ISO 62	0,17%	
7 Sound insulation	EN 1793-2	B3	
8 Chemical resistance	White Spirit	No damage	
	Lighter Fluids	No damage	
	Bleach	No damage	
	Hot Cooking Oil	No damage	
9 Toxicity	Non toxic		

Kedel Noise Barrier Module

Module	Components	Profile Measurements (mm)
Frame	U-profile	50x50x4
Top	U-profile	40x132x4
Plinth	Square	120x80x6
Noise insulation	T&G Board	138x38

The module and the plinth are installed between HEA160 columns. All metal components are hot-tip galvanised.

Installation

Detailed Instructions

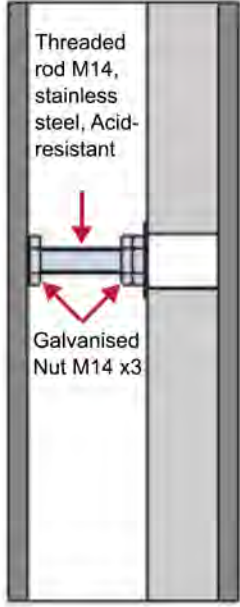


Figure 4 - Detail View

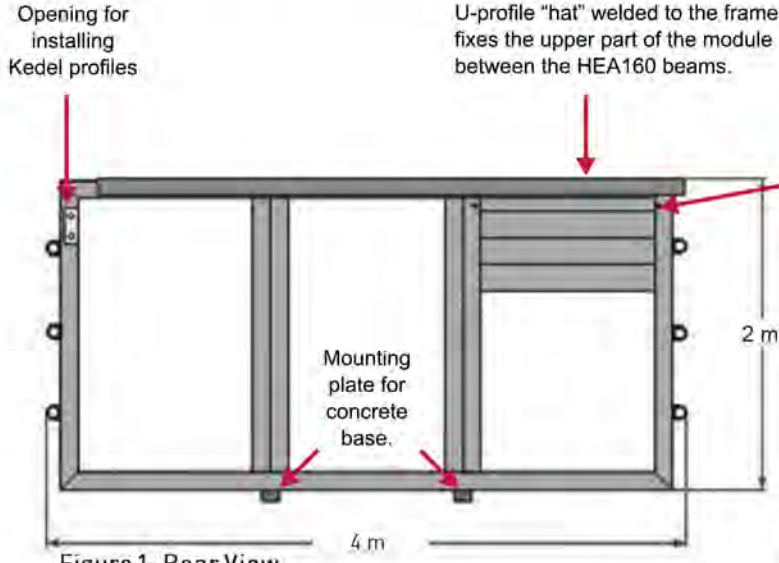


Figure 1- Rear View



Figure 2 - Top View

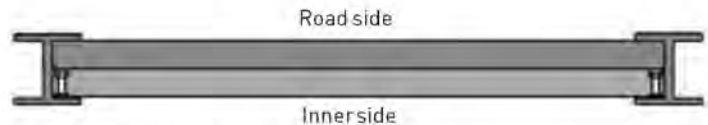


Figure 3 - Section View

The opening closed with a plate so that the Kedel profiles are left with the necessary expansion room.

Kedel Noise Barrier modules consist of two parts:

1. The metal plinth - square tube 120 x 80 x 6 (Figure 2)
2. The frame - U-profile (Figure 1)

Installation:

1. A metal plinth is placed between the HEA beams, with the plinth being carried by the HEA beam mounting base (Figure 2).
2. A seal is placed on the plinth.
3. The frame is placed on the plinth, so that the frame rests on the insides of the road side of the HEA beams (Figure 3).
4. The frame is fixed with plates (Figure 1) and bolts (Figures 3 + 4). Attention must be paid to the proper vertical alignment of the frame at all points.
5. The Kedel noise insulation materials can now be placed through the opening (Figure 1).
6. The opening should be closed with a metal plate, with the holes in the plate threaded and fixed with M6 x 10 bolts.

An Ethical Business With Eco-friendly Values

We manufacture and distribute maintenance free recycled plastic lumber and plastic wood for use in the building and construction industries as well as outdoor furniture for parks, gardens, schools and nurseries.

During manufacture, recycled plastic produces 250% less carbon dioxide (CO₂) than production of virgin plastic. CO₂ is a greenhouse gas produced by burning carbon based fossil fuels and contributes significantly to global warming and climate change.

Kedel's recycled plastic products keep many tonnes of waste plastic out of landfill sites and incinerators, and help protect the environment and wildlife from the damaging effects of discarded plastic waste.

At Kedel we use many tonnes of crushed CD cases to make our plastic wood which has the look and feel of real wood, but the durability and maintenance-free properties that have made plastic so popular.

Our products come in a variety of colours, which is added during the manufacturing process, eliminating the need for recurring painting schedules.

We have a dedicated industrial product design team enthusiastically creating new maintenance free products for outdoors, using our state of the art CNC cutting and drilling equipment.

We've designed, manufactured and distributed over 30 new products for education alone in the first 12 months of launching Kedel and are constantly searching for new applications and new business partners to make use of the mountain of waste plastic material being produced in the UK every year.

KEDEL TRADE

ECO-FRIENDLY PLASTIC PRODUCTS

Contact us for more information about our products and services...

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