



# Genwork Ltd

PART OF THE BACHE GROUP



## The sound of silence

# ABSORBING ACOUSTIC WALL

01384 636 588

[www.genworkltd.co.uk](http://www.genworkltd.co.uk)



NSFPlus



# Best in class at

System	Factor	Acoustic Performance	Durability	Maintenance	Sustainability	Installed price index by rank
Timber Absorptive	Strong	X				1
	Medium					
	Weak		X	X	X	
Metal Absorptive	Strong	X	X	X		1.5
	Medium				X	
	Weak					
Plastic Absorptive	Strong	X	X	X	X	1.3
	Medium					
	Weak					
Cycle Foam Absorptive	Strong	X	X	X	X	1
	Medium					
	Weak					

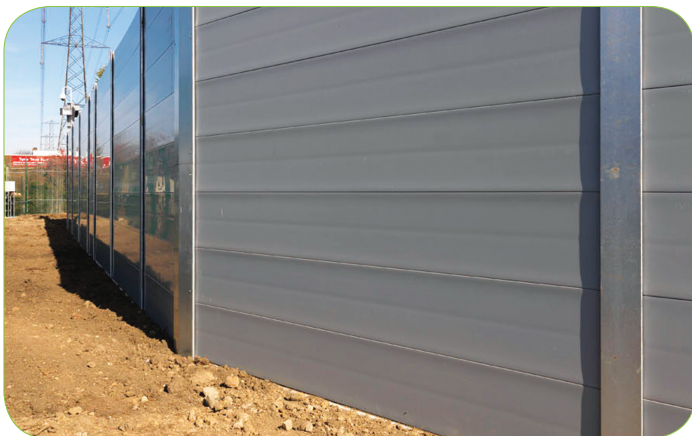


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# noise absorption

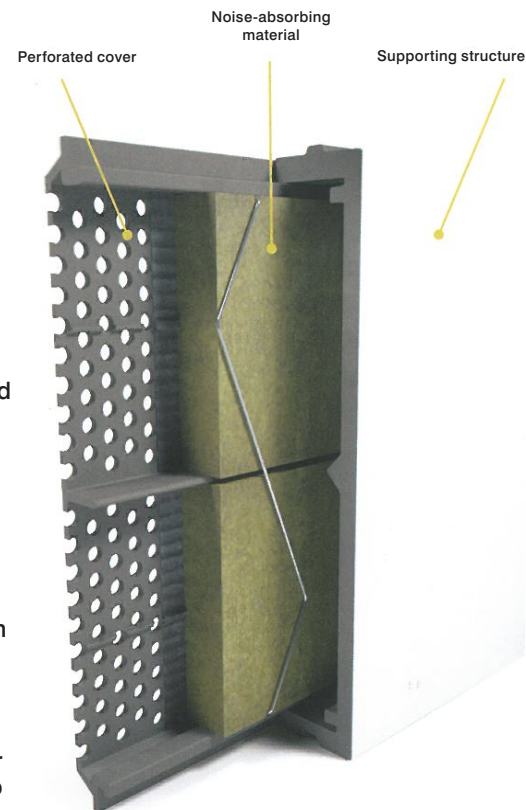
- Manufacture of 100% recycled material
- At the end of life cassettes can be totally reused
- The only 100% green option
- Minimal fitting and installation





# The Absorbing Acoustic Cassette

- With the growing requirement/demand for a quieter environment to offset noise from Road Traffic, Industry and Construction. **Cyclefoam®** provides a practical and a cost effective acoustic solution.
- Whilst noise suppression is of primary importance, we appreciate that the aesthetic appearance is very important, especially when used close to a residential setting. With that in mind, **Cyclefoam®** offers the best in class noise barrier, combined with design flexibility to harmonise with its environment.
- Extensively used throughout Europe to combat noise black spots, Cyclefoam is leading the way in technology, meeting the specification requirements of BSEN 14388 for acoustic and non-acoustic performance helping Project Designers respond to comply with new noise attenuation guidelines and more demanding legislation.
- **Cyclefoam®** absorbing acoustic wall, complies with the acoustic performance specification requirements of BSEN1793 with sound absorption levels of 8dB and 11-12dB (DL<sub>a</sub>), and airborne sound insulation levels of 31dB (DL<sub>R</sub>).
- **Cyclefoam®** absorbing acoustic wall, also complies with the non-acoustic performance specification requirements of BSEN1794 covering mechanical, structural, environmental and safety. Manufactured from raw material recovered from recycled PVC form window frames and other building materials. The panels are fully recyclable. After dismantling they can be easily pulverized for reuse in new profiles ensuring a closed cycle.
- Lowest Lifetime cost – 20+ years with minimum maintenance with a typical 40+ year operational life. The cassettes can be dismantled, resited or reconfigured to adapt to your changing requirements.
- The Cassette when assembled creates an absorbing barrier 125mm thick x 500mm high x 3 , 4 & 5m long and is erected either by stacking horizontally or vertically to Steel “I” beams upto 6m high. All Cassettes are supplied factory assembled to minimise on site time.



## Performance

### Protection against Graffiti

- Cellulose Paint
- Black Tar
- Fluorescent Acrylic Paints
- Synthetic Paints
- Mercurochrome
- Marker Pens

### Fire Resistance

- Class 2 rated regarding the contribution to Fire Spread NEN 6065:1997

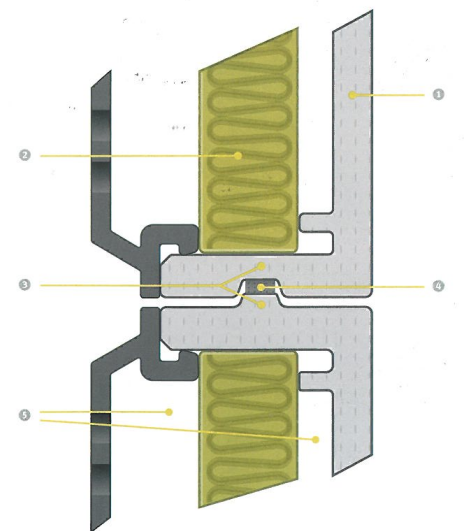
### Structurally Stable

Structurally Stable – Wind Loading in accordance with “Eurocode” guidelines

- Meets the requirements of NBN EN 1794-1
- Full and Certified Test results available on our web site

### Acoustics

- All data available on our website



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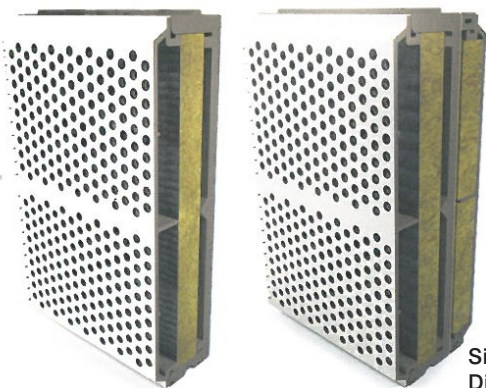


## Three Main Elements

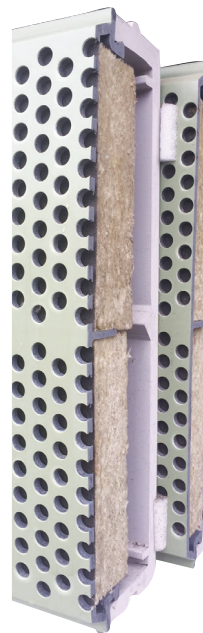
- The **Cyclefoam®** noise reduction wall panel is constructed of a combination of special panels. Each wall system consists of three main elements: the perforated cover, the noise-absorbing material, and the noise-insulating supporting structure.
- Noise-absorbing material is placed between the perforated cover and the supporting structure. Using stainless steel screws, the cover is screwed onto the supporting structure.
- The noise-absorbing material is a semi rigid sheet of rockwool (type Rockfon®). It is finished on one side with black non-woven cloth based on fibreglass. Rockfon® sheets meet the EU-standards 97/69 note Q.

## Rigid Construction

- The Optimised design and geometry of the cassette structure, when installed produces is extremely rigid and robust noise wall system – full specifications and wind-loading performance data for the installed Cyclefoam noise wall are available from our website or on request.
- The modular cassette design has tongue and groove locations at the top and bottom of each unit which provides a very positive location for stacking to form a compact and solid acoustic wall.
- The acoustic integrity of the structure is ensured with the use of Acoustic Packers, Rubber Foam Base Gasket and Post Seals.
- The Cassettes are designed to be self-draining and self-ventilating to yield the highest acoustic performance even in the worst weather conditions.



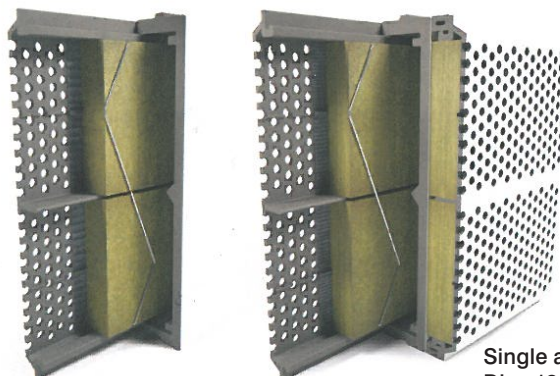
Single and double sided  
 $Di\alpha=8db$   
 $Dir=31db$



All Cassettes are 500mm high

## Recycling

- **Cyclefoam®** panels are manufactured from recycled PVC construction materials. The PVC is recycled from Window Frames, Doors, Facias and Guttering.
- Moreover, after use, the panels are 100% recyclable into new **Cyclefoam®** panels. When the noise reduction wall is replaced or removed, it is processed and the material is used for a new noise reduction wall.



Single and double sided  
 $Di\alpha=12db$   
 $Dir=31db$



## Widest Range of Applications

- The **Cyclefoam®** Acoustic system has been designed to offer excellent design potential making it suitable for internal applications, cladding existing structures as well as many other applications including: Leisure, Sports, Construction Sites, Highways and Railways.
- Because of its excellent electrical insulation qualities, and its ability to attenuate noise for low frequency bands, the noise reduction wall are used for high-voltage transformers, railways and metro systems. There is no need to install ground loops.
- Tunnels naturally amplify noise. **Cyclefoam®** elements are ideal as wall cladding and double sided elements can act as a sound screen between the two directions.

## Manageable & Safe

- The panels weigh less than 30 kilos per square meter. Because of the design format (height 50 cm; width 12.5 or 18.5 cm; length 3, 4 or 5 meters) cassettes can be transported and managed easily. Even in difficult places like along motorways and on bridges, the **Cyclefoam®** noise reduction wall can be constructed quickly and without the use of heavy cranes minimising on site time, disruption and labour cost.
- **Cyclefoam®** has a high fire safety factor, and because of its self-extinguishing characteristics, the material will contain the fire and it will extinguish as soon as the external source is removed. There is no lateral spreading of flame and fire on the **Cyclefoam®** noise reduction wall.

## Design – many combination possibilities

- The panels can be combined in various ways. Each panel can be placed either vertically or horizontally and comes in one or two colours. For bicoloured panels, the colour design can be either diagonal or tangential. This gives architects every chance to be creative.
- The **Cyclefoam®** panels also come with transparent inserts. These arches made from PMMA or Polycarbonate form a viewing pane which integrates elegantly in to the acoustic wall.
- Panels are available with a Decoroc coating, the standard range of colours which includes 20 shades with additional wood grain finishes.

## Weather Resistant

- Thanks to the dirt repellent characteristics of Decoroc, the noise reduction wall will stay clean for a longer period of time and will not need frequent cleaning. The coated surface prevents dirt from sticking to it. Some graffiti can be removed from the surface of the panels using ecologically friendly products and without damaging the coating. See technical sheet.
- Thanks to very high chemical and biological resistance, **Cyclefoam®** panels are non-corrosive. Even at temperatures to -20°C they are wind chipping and salt resistant.



● General Industry



● Highways & Roads



● Industrial Cooling



● Sports & Leisure



● Railways



● Gates



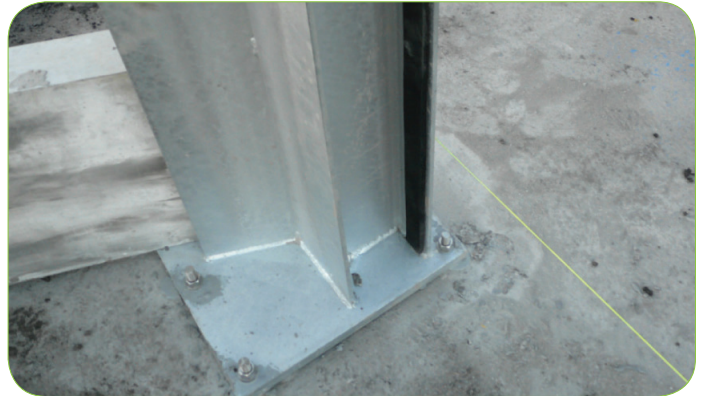
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# Assembly of an Acoustic Barrier



● Concrete Plinth to establish level.



● Vehicle rubber gasket secured to vertical post flange.



● Base gasket secured to concrete plinth.



● Plastic Post Packers.



● Timber Post Packers.



● Ease of cutting on site



# Frontline Temporary Acoustic Fencing System

Genworks latest product development – **“Front Line Acoustics” – Temporary Absorbing Acoustic Fencing** – is a natural extension to our Permanent Acoustic Wall Product.

Our new system is the first on the market to offer a serious solution to noise pollution, particularly for the Events & Construction markets, where noise reduction is of paramount importance.

Genworks Temporary fencing system loses very little in terms of its acoustic performance when measured against its Permanent alternative and really is a significant step forward against existing products in the market which do little other than to hide the source of the noise (I guess they are based on the theory “Out of Sight Out of Mind!”). Genwork New System **“Front Line Acoustics”** ends Lip Service Solutions and delivers **Ear Service Solutions**.

All too often site contractors are limited to short working hours. When correctly deployed, the Genwork Temporary Acoustic Fencing System will enable Contractors to operate for longer whilst still meeting construction site noise limits.

Noise complaints are avoided and site work is accelerated saving everybody money.



## How it works

When noise is generated on site, the Frontline Temporary Fencing System membrane will absorb the noise and reduce the level of noise pollution. Independent testing has shown that the Frontline Temporary Fencing System can deliver significant noise reduction. These charts show how the Frontline Temporary Fencing System can reduce the decibels of noise based upon the various noise vibration frequencies (Hertz) that can be experienced on construction sites.

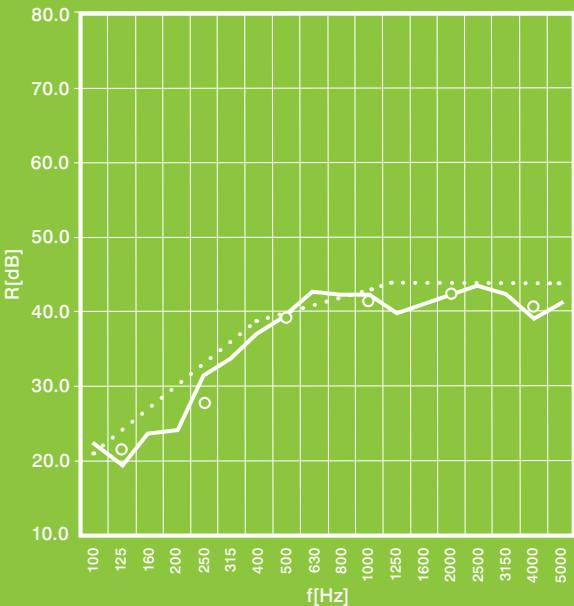
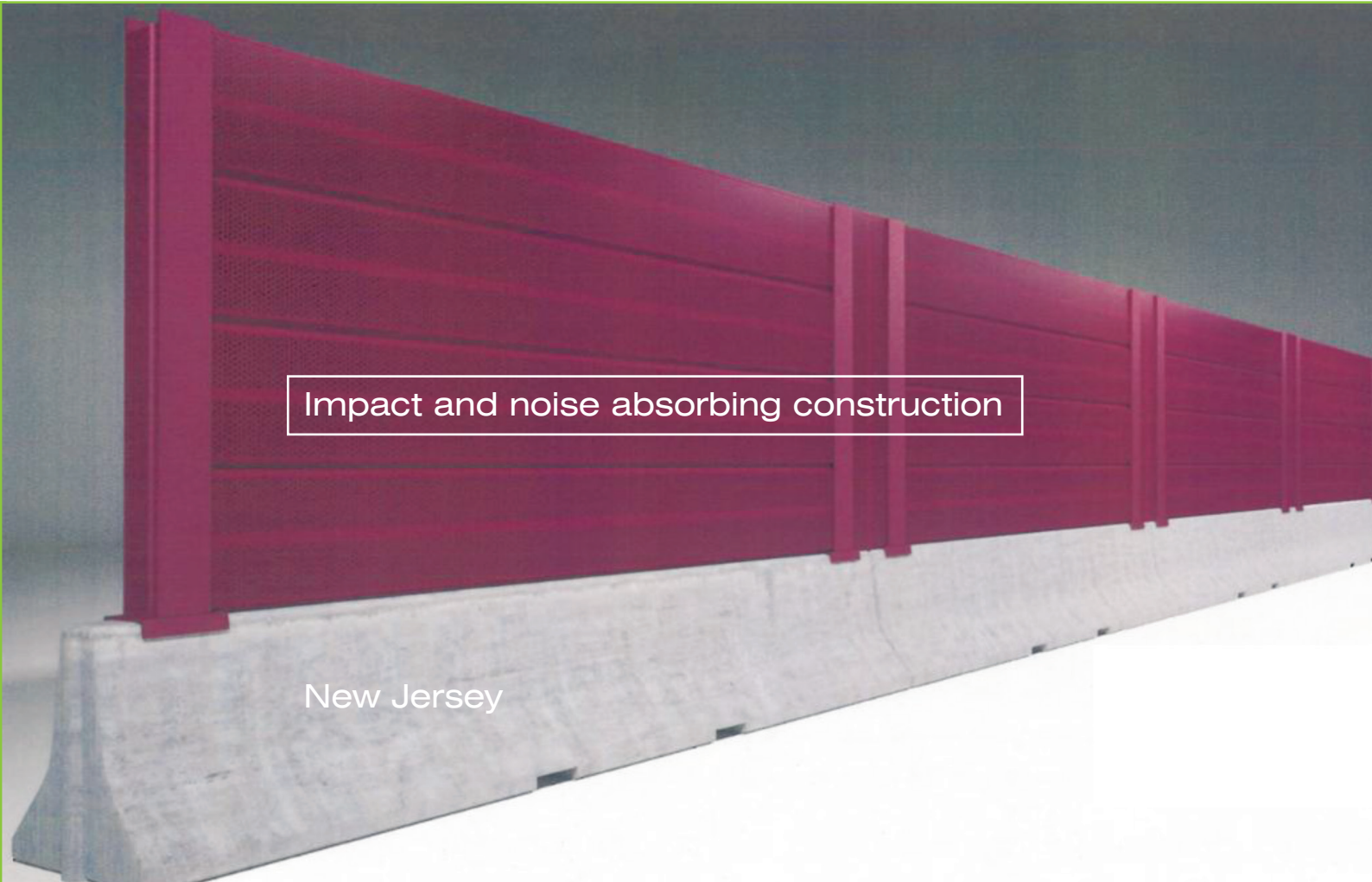


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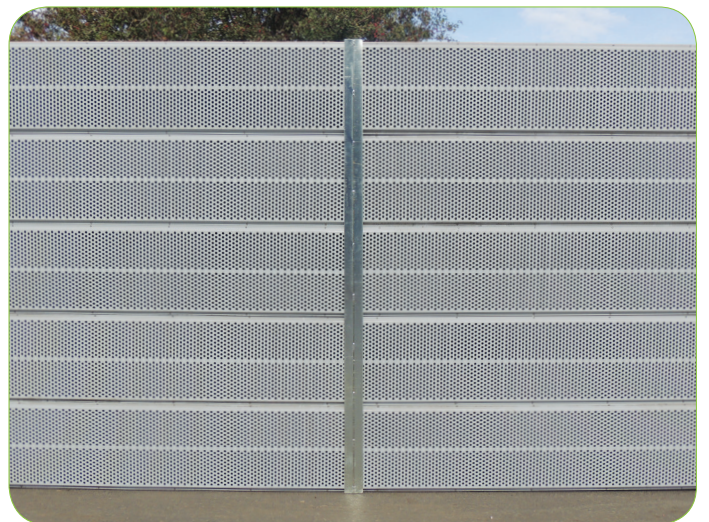
The Frontline Temporary Fencing System is a sound absorbing panel that can be attached to any compliant panel.

Special applications & installations





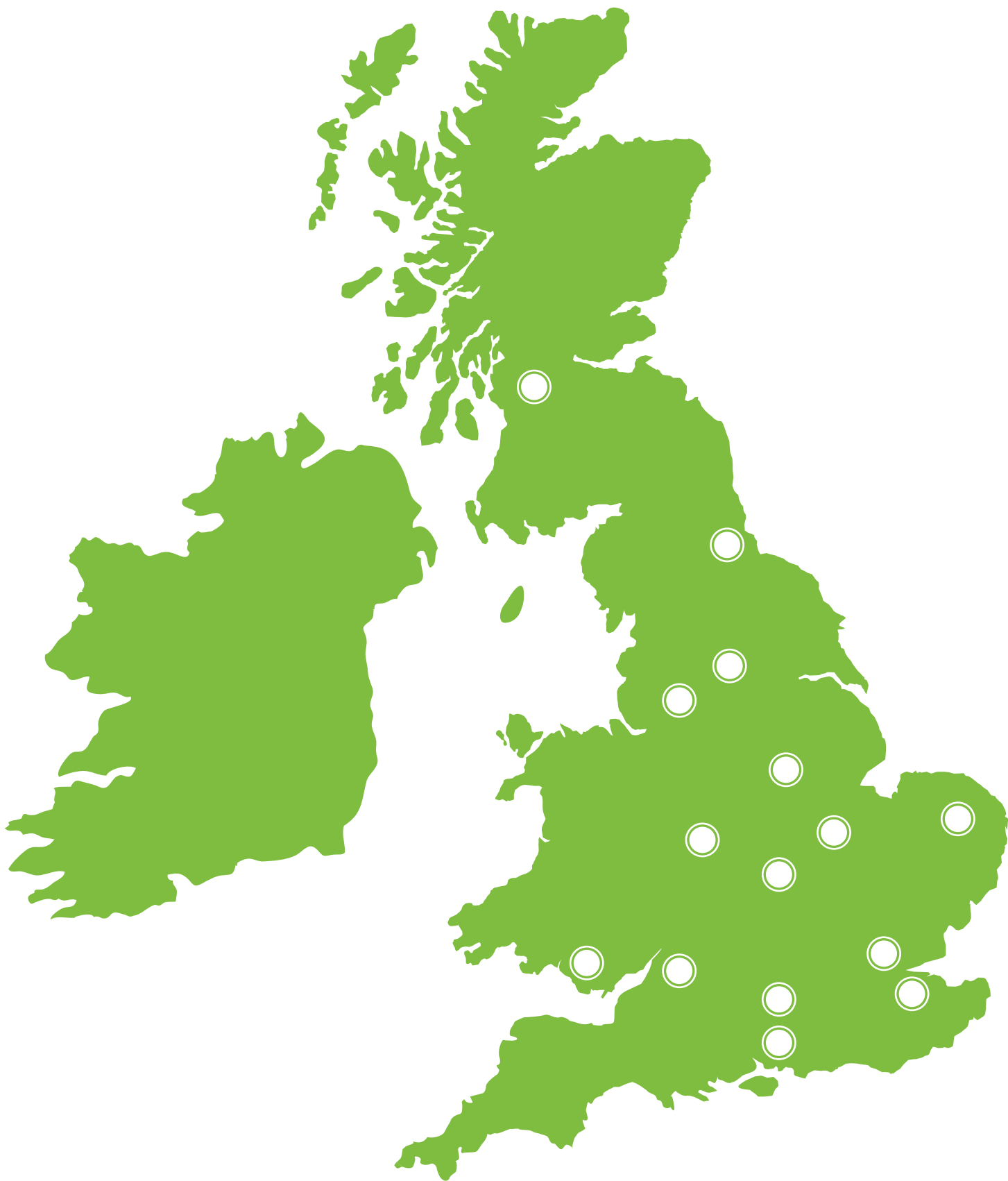
## Assembly of a Frontline Temporary Fencing System



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**Nationwide Distribution for hire or purchase**





# Cyclefoam® and its applications

## Industrial Sites and Distribution Sites

- The noisy sections of Industrial areas and vehicle shunting yards no longer need to annoy residents or other workers thanks to Cyclefoam®.
- Recycling Plants and scrap yards are very necessary but they can be hidden and unheard by deploying cyclefoam.
- Water Treatment Plants and Pumping Stations

## Leisure time and sports

- In residential areas Cyclefoam® can also be used to great effect. Young people can play without causing any nuisance to the neighbourhood or hotels might be peacefully situated right next to the motorway.

## Motorways, railroads and waterways

- Local residents are protected from the roar of passing trains, cars or boat engines thanks to Cyclefoam® panels.

## Airports

- Airports are the trickiest when it comes to noise pollution. Thanks to Cyclefoam® airport noise stays at the airport.

## Generators

- With the proliferation of generators to act as power back up to a whole range of Industry and Retailers, noise can be a major problem, Cyclefoam forms an excellent security and noise reducing device even for low frequency.

## Construction sites

- Cyclefoam® has many applications around construction sites or temporary works – the system is quick to install, can be moved around and reused from site to site, improving relationships between residents and constructors.



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