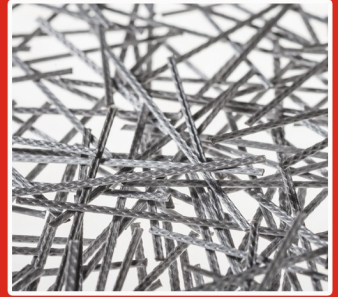




ADFIL
Construction Fibres



**Adfil Precast
Fibre Concrete
Applications**



Scan here for additional information

UK Office: Adfil Ltd 6th Floor, 9 Appold Street,
London, EC2A 2AP.

UK Customer Services & Orders

Tel: +44 (0)1482 274777 or E-mail: Orders@adfil.com

Reinforced concrete reinvented

Belgium Office: Adfil NV Industriestraat, 39 9240,
Zelee Belgium

Belgium Office Tel: +32 52 24 00 00

www.adfil.com

Synthetic Fibre Reinforced Concrete In Precast Applications



Adfil Macro & Micro Synthetic Fibre Reinforced Concrete can provide significant benefits in Precast concrete products and applications. Reducing embedded CO². Replacing expensive steel reinforcement & saving the manufacturer time and money in the product and delivery

Background

The following Precast Products have been made using Adfil fibres. All products have been proven in design, casting and Installation.

Flooring

There are many precast floor systems that are used for speedier construction on sites all-over the world. The use of Macro & Micro Synthetic fibres have been used to replace steel bar and steel mesh reinforcement, in full or as a partial replacement. This enables elements to be produced in larger casts which can span longer area's. The advantages for this application is that fibre concrete gives the producer faster casting, improved health and safety and significant cost savings. When the elements are in place they give higher impact and abrasion properties. Also Macro synthetic fibres as not susceptible to most chemical attacks so gives a perfect none corrosive



Flooring Sections



Synthetic Fibre Reinforced Concrete In Precast Applications



Headwalls

Through the finite element design criteria's, fibre reinforced concrete was able to match the required loadings, pleasures and installation values required for these units. These products are under constant attack from water and slurry passing through them. Any breach in the structure of these products would leave them susceptible to the ingress of liquid which would eventually corrade steel reinforcement and cause the concrete to fail.



Headwall Element

Pipes & Tunnels

Tunnel segments & Pipes have had fibres used as the reinforcement for many years, using Micro, Macro and Steel fibres. But the most commonly used reinforcement is steel mesh and steel bar. The advantage of Polypropylene fibres is that they are none corrosive and give advantages in segments & pipes used in underground applications where water ingress is possible. Due to the importance of the reinforcement placement in these applications the use of fibres gives the advantage of correctly placed reinforcement throughout the cast. Also production is increased which is an important factor in supplying this type of contract.



Segmental Linings

Synthetic Fibre Reinforced Concrete In Precast Applications



Walls

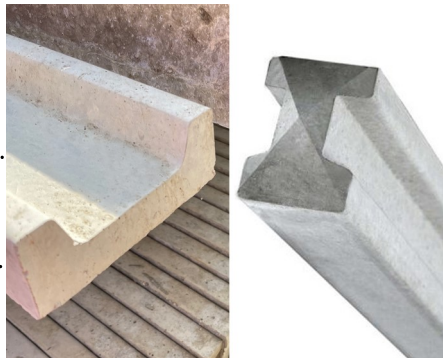
Precast walls are generally none load bearing. Most steel reinforcement is used for demoulding purposes to ensure no transportation cracks or defects. Precast walls are designed as thin as possible to reduce costs. This can lead to misplacement of the steel reinforcement which will cause further issues throughout the life of the cast. By using Macro and Micro fibres the walls benefitted from 3D reinforcement through the deep and width of the wall. There have also been testing to prove that fibre concrete can offer significant improvements in the blast and ballistic safety of fibre reinforced walls.



Prefabricated Walls

Fencing

Concrete gravel boards & posts are the preferred choice of most UK contractors and DIY experts. They are more robust against extreme weather and have a longer service life. By adding fibres to these products you can reduce reinforcement by around 50% and reduce their CO2 embedded carbon properties. Micro and fibrillated fibres can also offer impact and abrasion values so you get less transportation & installation damage.



Gravel Boards & Posts

Synthetic Fibre Reinforced Concrete In Precast Applications



Steps

Precast Steps, Fibres were used because the previous steps steel reinforcement had corroded due to them being positioned near a salt water river. The corrosion caused the concrete to crack and spall. Leaving them dangerous to walk and sit on as well as aesthetically dis-pleasing. The addition of Macro fibres ensured a none corrosive reinforcement that also gives the required structural element and gives the concrete an extended service life over the original design. Parts of this project also have acid etched element.



Archidtectural Steps

Remote Sanatory Blocks

In remote areas of the world quick and simple construction are the key to success . These toilet and sanatory units can be made in precast sections and assembled at the location they are shipped to with minimal construction tools. The fibre reinforcement also prevents corrosion from cleaning and natural chemical attack. The fibres assist in the demoulding process and give 3D reinforcement though these thinner panels



Toilet and Shower Blocks

Synthetic Fibre Reinforced Concrete In Precast Applications



Sea Defences

Sea defences are susceptible to impact and abrasion from the debris swelled up by the waves. Salt water is a danger to steel reinforcement acceleration its corrosion. By using fibres you can cast your units quicker and it gives the elements a longer service life in an aggressive environment. With the UK being an Ireland nations and with the threat of rising sea levels then fibre concrete will help defend our shores for many years to come.



Sea Defence Installation

Copings

Sometimes when you have an element that you want to make both environmentally friendly and also robust enough for the complexities of your project, you can rely on a fibre reinforced designed option to fulfil your requirements. These copings were a specially made product for a bespoke site which required fast construction and a product service life that would protect the main structure of the building. It was designed with the client and Adfil's Engineer.



Bespoke Precast Copings



UK Technical Sales

Assistance

For any assistance please contact one of the following to get appropriate technical support:

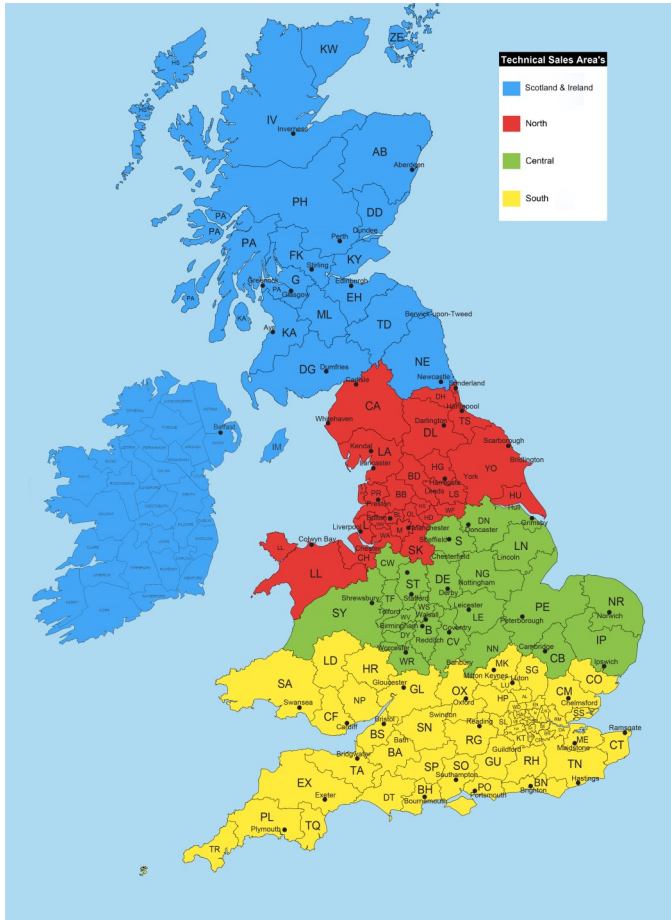
Scotland & Ireland :
+44 (0)7516506016

Northern :
+44 (0)7785616975

Central :
+44 (0)7801300966

Southern :
+44 (0)7824015717

National :
+44 (0)7801595581



Customer Service T: +44 (0) 1482 274777 E: orders@adfil.com

Reinforced concrete reinvented

The content of this promotional material is for information, illustration and marketing purposes only and is subject to change without notice. While we endeavour to keep the content of this promotional material up to date and correct, we make no guarantees, warranties or representations of any kind about the completeness, accuracy, reliability or suitability thereof. We exclude liability for any inaccuracy or error in the information or any action taken in reliance thereon by any party, whether potential purchaser or otherwise. It is your own responsibility to ensure that the information available through this promotional material meets your specific requirements. From time to time, our website may include links to third party websites. These links are provided for your convenience to provide further information. They do not signify that we endorse the websites. We accept no liability for the content of these websites. The content of our promotional material is owned by or licensed to us. This content includes, but is not limited to, design, layout, look, appearance and graphics. Reproduction is prohibited other than in accordance with the intellectual property laws of Belgium.

PC-ENG-UK-06/2022

UK Office: Adfil Ltd 6th Floor, 9 Appold Street, London, EC2A 2AP. **UK Customer Services & Orders**
Tel: **+44 (0)1482 274777** or E-mail: **Orders@adfil.com**

Belgium Office: Adfil NV Industriestraat, 39 9240, Zele, Belgium
Belgium Office Tel: +32 52 24 00 00
www.adfil.com