

How our Glass Fibre Composite Bins will keep your streets tidy for the next 20 years



Do you know what's frustrating?

Buying an outdoor bin, just to quickly find out it's already wearing away and collecting damages.

The last thing you want to be worrying about is a high-maintenance bin.

And when you find the right one, you're not asking for the world. We know you want something that looks good with amazing durability.

Our glass fibre composite (GFC) Wybone bins are built exactly with this in mind.

[Read on to find out how.](#)

What is Glass Fibre Composite?

GFC (runs off the tongue well when you say it like that, doesn't it?) is, as FibreGlassDirect put it in [their insightful article](#), a reinforced plastic material composed of a woven material embedded with glass fibres. These fibres are layered together to produce various products. You'll often find glass fibre being used in industries like construction, manufacturing (that's us!) and aerospace to name a few.

Types of Glass Fibre

In case you're interested, there isn't just one type of glass fibre. And each type is used for different reasons. Here are some of the commonly used types of glass fibres:

- E-Glass, also known as electrical glass, is the most popular type of glass fibre. It's widely used for electrical equipment due to its strong electrical insulation properties.
- C-Glass (chemical-resistant glass) is, as the name suggests, chemical corrosion-resistant. This is an ideal material for products that are frequently exposed to harsh chemicals and acids. You'd most likely find this in
- AR-Glass (alkali-resistant glass) is prominent in glass fibre-reinforced concrete (GFRC) applications like countertops.
- S-Glass, otherwise known as structural glass, is defined by its high-strength qualities, often used in sporting goods and the aerospace industry.
- D-Glass (dielectric glass) is used for low electrical insulation purposes, perfect for items like microwaves and radios.
- ECR-Glass (electrical/chemical-resistant glass) combines the properties of electrical glass and chemical-resistant glass, ideal for industrial equipment and electric insulation.

Okay, but what are its advantages?

Glass fibre composite is popular for its [well-defined benefits](#). These include...

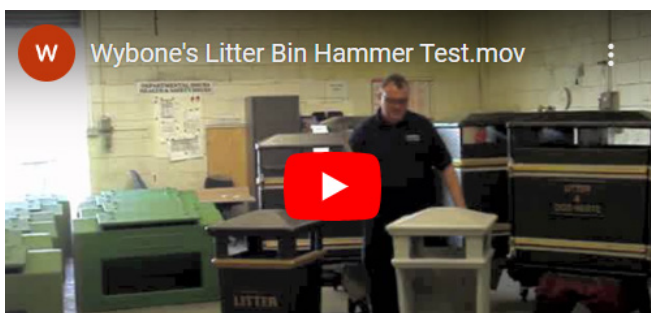
1. Damage resistant

Glass fibre has strength you couldn't quite believe. Their high tensile strength means it's much harder to damage a GFC product by stretching. Their flexibility allows the fibres to bend without damage when subjected to stress or impact.

Even in 2011, we were big on wanting to demonstrate just how tough our GFC bins are. And what tool is naturally known for breaking and dismantling objects?

You guessed it (well, we gave you a hint). A hammer.

Watch Paul demonstrate, as professionally as he can with a hammer in hand, just how sturdy they are:



Perhaps we could remake the video using something different to show off the toughness of our GFC bins. Does anyone know anyone who has a bull that we could borrow?

2. Not too heavy

Glass fibre weighs less than other materials like concrete or metal. This means that glass fibre products make the process easier from manufacturing to installation. Their light load makes it much easier to use, handle and transport. You can never say no to improved efficiency!

3. Great for the environment

Thanks to the durability and flexibility of glass fibre, the longevity and lifespan of products that are made up of this material are impressive.

So impressive, it allows you to reduce your carbon footprint.

If we think about glass fibre composite bins, their resistance to damage means these styles of bins can be around for a long time. This reduces the demand for factories to use this material on replacement products on a regular basis, meaning fewer resources are used.

Producing glass fibre also means that fewer raw materials are used – something that's crucial if you're a bit of a sustainability guru!

We've mentioned their reduced weight and how it makes transporting GFC units easier – this is because more GFC-related products can fit into transportation vehicles compared to concrete or metal products that weigh more. This allows for reduced carbon emissions.

This is why we love it

We've been manufacturing GFC bins since 1982. And we know GFC does what it says on the tin because many of our Wybone GFC bins that were placed on site over 20 years ago are still there today, looking better than ever!

But when it comes to manufacturing our GFC bins, [we do things a bit differently...](#)

At Wybone, we use an exclusive technique when manufacturing our GFC products, whereby a core material is encapsulated using fire-retardant glass fibre polyester resins. We then spray the glass fibre onto a wooden carcass – this acts as a 'second defense' for the bin, improving the strength of our GFC products just that little bit more.

We don't like to be biased, but we also think that our exclusive technique used to manufacture our GFC bins plays a big part in ensuring they stay in top shape for a long time.



How we make our GFC bins

Manufacturing our Wybone GFC bins is like making art to us.

We know it sounds a bit dramatic. But when we make them, we do so with an abundance of focus and care. How else do you create something if you don't believe in what it is you're creating?

We could bore you with every single process we take to manufacture one of these, but we won't do that. Instead, enjoy a step-by-step video of bringing our Glass Fibre Composite bins to life.

We promise it'll be the most satisfying 3 minutes you'll have today.



How we make our GFC bins

We won't lie, wooden products look great. Just [look at some of our wooden bins here](#) for example. The benefits of having wooden bins are definitely worth bragging about.

But when there are advantages, there are disadvantages.

Kindly covered in Trimlite's article that [you can read here](#), here are just a few notable comparisons between the two materials:

- Wood is very durable. But wood and water don't mix well. Mixing water with GFC? No problem!
- Glass fibre can withstand UV radiation. Wood doesn't have that same compatibility.
- Wooden products, like bins, require some regular upkeep to leave them looking new. GFC bins can be left for prolonged periods of time without any upkeep.
- If a wooden bin needs repairs, there's no guarantee it won't be costly. With our GFC bins in particular, they can be refurbished at half the cost of a new unit.

Yep, you heard that right. Refurbished at half the cost of a new unit.

And for all you sustainability lovers and avid fans of litter bin production (we know there are a few of you!), this is our quick and easy refurbishing process:

1. The process of refurbishing a GFC bin starts by steam cleaning inside and out and allowing the bin to dry properly.
2. We then remove all parts from the bin (doors, locks, etc).
3. The bin is ground down to remove any loose particles or worn edges, then any cracks or worn areas are bonded and filled.
4. The bin is then re-sprayed with glass fibre inside and out.
5. The glass fibre is smoothed down to achieve an even finish.
6. Next, new hinges and a new lock are attached, along with a new door (if needed). Otherwise, the old door is reattached after being cleaned and repaired. We also add a new Litter plate at this stage.
7. The bin is then sprayed and repainted back to its original colour. Any areas that have a different colour are then masked up, and ready to be painted.

Voila!



Why GFC is a better option compared to Steel

Steel is a popular choice in the waste management industry. Its sheer strength allows for a bin that's durable and reliable.

Steel is stronger than glass fibre, an interesting discussion that you can read in Real Homes' article. And while that certainly has its advantages, especially when it comes to bins, here are some comparisons that show GFC as the superior material:

- Although steel is stronger than GFC, it's more prone to corrosion. If you remember, GFC doesn't have this problem!
- Glass fibre may not be as strong as steel on paper, but glass fibre's strength-to-weight ratio is higher than that of steel because of its reduced weight and sturdy design.

And while we're talking about customisation, you can get personal with our GFC range...

We've made sure that customers have plenty of options to choose from when they order one of our GFC bins.

Why not have a look for yourself?

Customise your own bin

Where's the best place to put a glass fibre bin?

Every bin has a specific home where it belongs. And for our Wybone GFC bins in particular, they're ideal in coastal towns where you need a bin that's resistant to sea corrosion. Their vintage, Victorian finish makes them a great choice for heritage sites, too. And last but not least, town centres. In busy, public spaces, you'll need a bin that can withstand excessive use for years to come.



Our LBV/20 Transparent Glass Fibre Litter Bin at The National History Museum.

It's not just us that love these bins

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North Tyneside Council

Here's a short snippet of our North Tyneside Council case study:

In 2015, we received word from North Tyneside Council that they needed an innovative way of encouraging more recycling in the region. The Recyclo wheelie bin cover was adapted to include bespoke modifications including a solar-powered sensor to speak to users when they deposited litter in the bin.

You can [read more about this story here](#). The Council's Regulatory Manager also left some kind words about Wybone and the project itself!



Bourne Leisure

Rewind to 2013, when we helped Haven Holiday Parks in Wales to encourage their visitors to recycle on the go, instead of just recycling inside their accommodation. Introducing our stylish RLA range to Haven for the 'Recycle on the Go' scheme was a memory we're proud of.

You can [read the full story here](#), which includes some very generous testimonials if we do say so ourselves!



If you've made it this far, I take it that you've liked finding out more about glass fibres' extraordinary capabilities!

If glass fibre has piqued your curiosity, why not take a look at our range of GFC bins to see how we use this unique material to create widely-loved products that our customers love?

Browse our GFC bins



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