

Fiberglass, fibreglass, FRP, GRP or FGRP?

Definition please: Is it called fiberglass, fibreglass, FRP, GRP or FGRP?

Answer: All of it!

Correct me if I'm wrong, any time. Until that happens my state of knowledge says this:

The difference between fibreglass, FRP and GRP? None.

Fiberglass is a common name for GRP, used just as frequently in talks.

Fiberglass is the term used in British English, Fiberglass expresses the same in US English.

FRP stands for **F**iber (**f**ibre) **R**einforced **P**olymeres – and again means the same thing.

GRP (GFRP) stands for glass-(fiber / fibre-) reinforced plastics. It is identical to the above too, also to

GFK which just is the abbreviation of the German term for it, *Glasfaserverstärkter Kunststoff*, often informally used, too.

So what exactly *is* that thing with far too many names?

Here is a general description, [quoted from Wikipedia](#) (on 20 September 2014):

“Fibreglass is a fibre reinforced polymer made of plastic reinforced by glass fibres, commonly woven into a mat. The plastic may be a thermosetting plastic- most often epoxy, polyester- or vinyl-ester or a thermoplastic. The glass fibres are made of various types of glass depending upon the fibreglass use. These glasses all contain silica or silicate, with varying amounts of oxides of calcium, magnesium, and sometimes boron. Boron-containing fibreglasses consume half the global production of boron minerals, and are the largest commercial consumer of the element....

fibreglass is a strong lightweight material and is used for many products. Although it's not as strong and stiff as carbon fibre, it is less brittle, and its raw materials are much cheaper. Its bulk strength and weight are also better than many metals, and it can be more readily moulded into complex shapes. ”

But – let's also hear [FPR, the New Zealand based agent for ECO-Wolf, Inc.](#):

“GRP / FRP Poly**ester** and Vinyle**ster** products should not be confused with the term Plastics as the ester resins in GRP / FRP do not break down as quickly as PVA and PVC Plastics hence are more environmentally friendly and sustainable. When Plastics degrade / break down this often results in the surface becoming dry, brittle and powdery and this powder ultimately disperses into the local environment if the Plastic product is used outdoors. GRP / FRP Polyester and Vinylester products will usually have a service life of more than 50 years and some suggest longevity of 100+ years thus a greener, more cost effective product.”

For those not yet overloaded – why not have a look at the [difference between fibreglass and carbon fibre](#)? Fear not, it's quick and simple!



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