

Graphene Supercrete

Graphene Composites

Concrete is one of the simplest and most versatile building materials on the planet. Strong, Durable, Abundant, and Inexpensive, it fits almost any project. But there are a few drawbacks. The weight makes it expensive to transport, reactivity to water makes premixes hard to store in humid conditions, and it can be exceptionally brittle.

The industry is due for an innovation but how do we balance between cost and value? The answer is simple: Graphene.

Graphene is a material comprised of carbon atoms arranged in layers or "sheets". Exceptionally strong, lightweight, versatile, and safe. As the strongest manmade material, graphene is expected to revolutionize materials from advanced metal applications to simple plastic additives. Even paints are beginning to incorporate graphene in their formula for increased durability, fire resistance, and lifespan.

Adding this simple material to cement, mortar, or concrete not only gives astounding results but also lowers costs for large-scale projects while increasing value.

Why Graphene Supercrete?

GSC utilizes a patented new dispersion technique to easily mix graphene into cement, concrete, or mortar.

- The strength of the concrete composite is determined by mixing graphene thoroughly and evenly.
- Dispersing graphene evenly is no small feat. Graphene is naturally hydrophobic so it doesn't mix well with water, sticks to itself, and it can be very hard to get single layers evenly mixed reliably.
- As the technology is more widely accepted, graphene will be in high demand. However, as a graphene manufacturer, we can keep prices low with a reliable supply available.
- GSC is the answer to all of these barriers. By evenly dispersing our graphene, we achieve a perfectly balanced mix every time. It requires no extra effort to achieve the desired results, no special training, and allows for safe storage or transport without worry about water contamination.





Performance Comparison ■ GSC ■ Standard Compression Strength Water Resistance **Ductility Strength** Flexural Strength

Apples to Apples

Let's compare standard concrete and concrete made with our GSC material. GSC outperforms in every way. As a minimum, we can observe:

Compression Strength – 300% Increase Tensile Strength – 25% Increase Flexural Strength – 70% Increase Ductility Strength – 70% Increase Water Permeability – 50% Reduction

GSC represents the best option for dispersing graphene into concrete, mortar, and cement mixes. The more even the mix, the better the result.

What this means for YOUR Projects

- Reduces the amount of concrete needed to achieve the same strengths
- Higher PSI concrete is available at standard concrete pricing
- Graphene is a stable carbon that qualifies for carbon credits
- Increased Flexural Strength translates to fewer stress cracks both in the short and long term

GSC is a premium product that adds tremendous value for you and the customer. Longer-lasting concrete that stays as pristine as the day it was poured over the years.



