

#### What we do

BFG Architecture harnesses the superior qualities of composites such as Fibre Reinforced Plastics (FRP), Glass Reinforced Concrete (GRC), and Ultra High-Performance Concrete (UHPC) to produce a wide array of beautiful and long-lasting interior and exterior elements.

While each of the materials we use have individually unique benefits, they all reduce overall project costs, help you achieve quicker construction due to prefabricated parts and parts consolidation, eliminate most secondary aluminium framing and mechanical fasteners, allow architects to create designs that are impossible or impractical with traditional materials, improve thermal performance and energy efficiency, and meet building code requirements.

Our highly-skilled team of experts can help you choose the best material for your project based on your budgetary, aesthetic, and functional requirements.

# **Complex Formwork**

BFG Architecture provides a wide range of formwork solutions using GRC, UHPC, and FRP. Composite formwork enables architects to push the envelope, allowing a design flexibility which traditional formwork materials such as wood and steel are unable to offer. Complex geometric patterns and double curvatures can easily be created, offering an unsurpassed creative freedom for commercial and residential projects.

# **Shading Elements and Screens/ Mashrabiyas**

BFG Architecture produces a wide range of beautiful structural and decorative screens, lattice work, and shading elements using GRC, UHPC, and FRP. Lattice panels and Mashrabiyas are a popular choice when it comes to shading. Their design provides a decorative element and sense of privacy while still allowing natural light in, which makes them ideal as a form of screening additions to windows. When made using composite materials, many patterns and formats can be achieved, from geometric to organic. The screens or shading elements are prefabricated and easily installed onsite, allowing for quicker construction. Composite materials are also resistant to adverse weather conditions (UV radiation or acid rain), are fully recyclable, and easily maintained.

### **Domes and Cupolas**

BFG Architecture's domes are the crowning glory of some of the world's most iconic buildings, including the historic <u>Al-Fateh mosque in Bahrain</u> and the <u>Istighfar mosque in Singapore</u>. Composite materials offer design flexibility and can be moulded into complex shapes such as curved, corrugated, ribbed, or contoured in a variety of ways with varying thickness. Decorative details, mouldings, columns, and brackets can also be added. Further, a traditional look such as stone, marble, copper, gold, or chrome, can be achieved at a fraction of the cost. Our eye-catching domes are flame resistant, can stand up to weather extremes, and are resistant to rot, rust and corrosion. This means they have a longer life expectancy than others made with traditional materials.



#### Interior Architectural Elements

BFG Architecture can produce various items to compliment contemporary interior decors, including benches, tables, decorative panels, kitchens, bathrooms, floor tiles, fireplaces, and planters using GRC, UHPC, and FRP. Thanks to the versatility of the materials, BFG can create unique, practical, and cost-effective designs in a wide variety of finishes that mimic natural materialsSpecialised liners in the precast moulds are used to create effects such as crocodile or lizard skin, wood grain or a perfect, polished look.

## **Structural Bridge Beams**

BFG Architecture's bridge beams stand out due to our high-performance materials, GRC, UHPC, and FRP. Lightweight yet highly durable and weather proof, they require little to no maintenance once in place. Our facility is capable of casting a variety of different sized bridge beams, as well as one-off shapes, if requested by a client. Composite bridge beams are ideal for projects where the cost of traditional methods is prohibitive and where construction speed and minimising disruption is crucial.

### **Urban Furniture**

BFG Architecture can produce a range of items to complement public or outdoor areas, including benches, decorative panels, bollards, planters, garden furniture, and street furniture, using GRC, UHPC, and FRP. Thanks to the versatility of the materials, BFG can create unique, practical, and cost-effective designs in a wide variety of finishes. The materials' combination of properties provides functionality, durability, aesthetics and a wide range of coloured or textured options. Weather resistant, durable and low maintenance, they offer an excellent alternative to traditional materials such as steel, cast iron, aluminium, plastic, or wood.

### **Suspended Ceilings**

BFG International leverages the lightweight, high strength, and superior characteristics of materials such as GRC, UHPC, and FRP, to build innovative next generation suspended ceilings, which offer unsurpassed design creativity and free the architect's imagination. Our suspended ceilings offer an incomparable combination of desirable properties, including shatterproof toughness, rigidity, durability, and low thermal expansion. They can be used to produce sound-absorbing ceilings, and may also be used in applications where there are demands on low particle emission and where occasional wet wiping or disinfection is required, such as laboratories, pharmaceutical, and electronics industries. Further, their low thermal conductivity helps to maintain the indoor air temperature, creating a more environmentally-friendly building.

## **Primary Structural Roofs and Ceilings**

Due to their light weight and high strength and stiffness, composites are an ideal choice for primary structural roofing systems. Their low thermal conductivity also helps to maintain the indoor temperature and create a more environmentally-friendly building. Our range of roofing tiles is functional and stylish. They can reduce cleaning and maintenance costs due to material durability, they are weather resistant, and can be easily installed in finishes like slate, terracotta tile, stone, and wood. BFG Architecture's innovative, lightweight ceiling tiles can be tailor-made to meet fire and smoke toxicity requirements, or acoustic performance, making them the perfect choice for your next project. Whether you're looking for something functional, decorative, ornate or simple, we offer a wide range of GRC, UHPC, and FRP ceiling and roofing solutions.