

www.dcs-gatar.com

Complete Cladding Solution of Exterior and Interior Design and Decoration

# Capability Statement Requirements



Committed to Excellence



Professionalism is all about conforming to the technical and ethical standards of work. It is about setting high standards, showing self-belief, making the most of opportunities and enjoying the rewards of success......

Doha Cladding Solutions Factory (DCS) is a Façade Cladding Company (GFRC, GFRG, GFRP, UHPC & Fiber Cement Board) operating in the State of Oatar, DCS has well built-up factory in New Industrial Area with semi-automatic batch plant, in addition to a high humidity curing and OA/OC Laboratory all serviced by overhead cranes. Production is split between cast elements which are compacted on vibrating tables and hand spray for the lightweight cladding elements. DCS has earned an industry-wide reputation for its ability to manage and deliver on large, fast-track construction projects.







66 Bring us your design, any shape and we will help make it a reality. ??

Yes, we offer Claddings in flats, squares and rectangles, but we also produce sweeping curves, dramatic angles, spheres, domes, waves, intricate detail and complex geometries. From avant-garde forms to intricate historical details, bring us your design, any shape and we will help make it a reality.









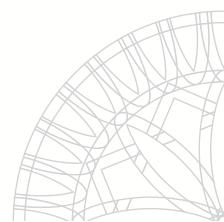


### Chairman's Message

Doha Cladding Solutions Factory W.L.L. (DCS) is recognized as a Cladding Solutions Company and aiming to be at the frontline of the leading Cladding firms operating in the State of Oatar and Middle East. DCS's staff are highly experienced for Commercial and Residential buildings and High Rise Towers Cladding Works for the past 25 years. DCS's main objective is Quality in all its endeavors. Gaining clients confidence and full trust in the Cladding Industry is our pledge and we aim to achieve it with a high degree of professional approach and quality standards. I am grateful for your interest in DCS, and I encourage you to visit our Website. I welcome any comments, questions or feedback that you may have.

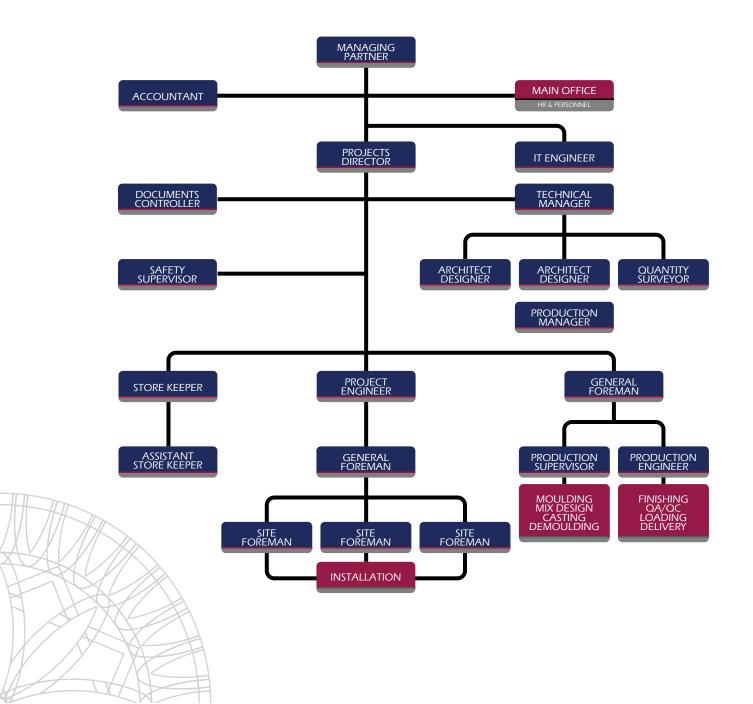
Sincerely,

Saad Ahmed Al-Mohannadi DCS Chairman





### Organizational Chart



# GFRC

GFRC is concrete that uses glass fibers for reinforcement instead of steel. It is typically cast in a thin section. Since the fibers cannot rust like steel, there is no need for a protective concrete cover thickness to prevent rusting. With the thin, hollow construction of GFRC products, they can weigh a fraction of the weight of traditional precast concrete.

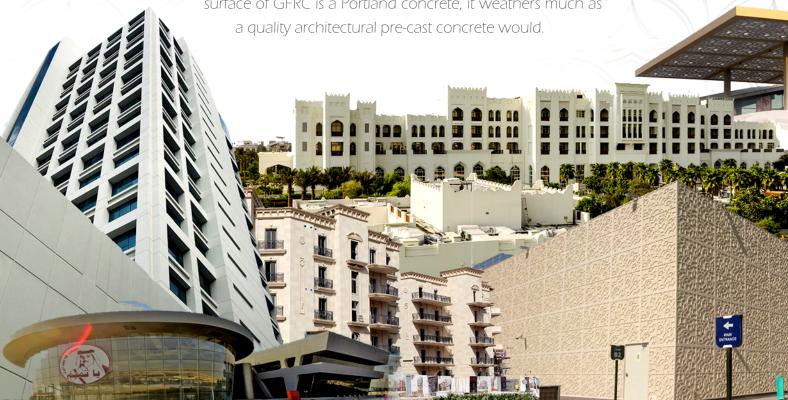
#### How can GFRC can be used?

GFRC can be used wherever a light, strong, weather resistant, attractive and fire retardant material is required.

GFRC can be used in manufacturing architectural products such as wall panels, window surrounds, column covers, soffits, cornices, brackets, quoins, railings, pilasters, copings, domes, site furnishings, planters, bollards, urns and tables.

#### GFRC Durability

Glass fiber reinforced concrete has been tested both by accelerated aging tests in the laboratory and in real life installations. GFRC can be expected to last as long as pre-cast concrete. In many environments, as when exposed to salt spray or high moisture, the GFRC can be expected to perform better, as there is no steel reinforcement to corrode. Since the surface of GFRC is a Portland concrete, it weathers much as



#### Advantages of GFRC

- Made of minerals and will not burn. In addition, the nature of concrete acts likes a thermal regulator when exposed to flame. GFRC not only will not burn, but it also protects the materials behind it from the heat of the flame.
- Relatively light in weight compared to traditional stone or terra cotta ornaments. Its installation is quick and relatively easy.
- Can be casted to virtually any shape. We supply wall panels, columns, bas relief, domes, column capitals, fireplace surrounds, moldings, medallions and all types of custom GFRC shapes.
- Available either with a cast in integral color and texture: limestone, precast, acid wash, etc. or as paint grade that is easily finished with virtually any paint

#### **Applications**

- GFRP can be used for both interior and exterior fixtures in a variety of shapes, styles, and textures; in new buildings or restorative projects.
  - Domes
  - Fountains
  - Columns
  - Balustrade
- Planters
- Panels
- Sculpture
- Entryways
- Moldings
- Facades
- Cornice
- Porticos
- Cupolas
- Signs
- Roofs



## GFRG

A new product now known as Glass Fiber Reinforced Gypsum (GFRG), also referred to as Fiberglass Reinforced Gypsum (FRG) and Glass Reinforced Gypsum (GRG). This included gypsum plaster reinforced with glass fibers to produce a thin, lightweight, yet strong material.

#### GFRG fabrication?

GFRG is primarily composed of two raw materials: high density alpha-based gypsum and glass fiber reinforcement. The gypsum plaster should be neutral or of low alkalinity to ensure its compatibility with "E" glass fibers. Additives commonly used within the plaster industry are acceptable provided they are used in accordance with the gypsum manufacturer's recommendations.

#### GFRG applications

GFRG is used where it is not subject to dampness. (Do not use where it is openly exposed to rain or for fountains, pools or wet locations. For these applications see GFRP). GFRG can be used wherever a light, strong and fire retardant material is required (hotels, theaters, residential, etc.)

- Moldings
- Columns
- Domes
- Fireplace Surrounds

- Ceilings
- Light coves
- Capitals
- © Custom shapes





## GFRP

Glass Fiber Reinforced Plastic (GFRP or GRP) Fiberglass is a type of fiber-reinforced plastic where the reinforcement fiber is specifically glass fiber. The glass fiber may be randomly arranged, flattened into a sheet (called a chopped strand mat), or woven into a fabric. The plastic matrix may be a thermosetting plastic – most often epoxy, polyester resin – or vinylester, or a thermoplastic.

GFRP - Glass Fiber Reinforced Polymer - First developed in the mid 1930's, Glass Fiber Reinforced Polymer / Plastic (GFRP) has become a staple in the building industry. Originally used merely for the construction of parts, in 1967, the architectural advantages were discovered with the attempted destruction of Disneyland's "House of the Future." Built in 7-1956, the futuristic house was built entirely of fiberglass, and when the attraction was no longer deemed necessary, it was scheduled to be destroyed in 1967. Amazingly, the wrecking ball merely bounced off the structure, and the possibilities for GFRP were recognized and began to grow. By 1994, nearly 600 million pounds of composite materials were used in the building industry. Today, Architectural provides a variety of products in GFRP to fit your building needs and aesthetic vision.

#### GFRP fabrication?

A mold is then made of fiberglass, steel, wood or rubber depending on the detail. Into this mold a carefully designed mix of polyester or epoxy resin is sprayed, along with alkali resistant glass fibers. Virtually any shape or form can be molded.







UHPC, or Ultra High Performance Concrete, is a class of concrete defined by its exceptionally high strength and durability. It was developed in Europe in the 1980s for specialized applications that demand superior strength and corrosion resistance – marine anchors, piers and seismic structures.

#### **UHPC** history

More recently, the use of UHPC has expanded to applications requiring its high strength in narrow profiles, such as bridge spans and building facades in which the material's strength, wear resistance, lighter weight and lower life cycle costs have been the driving determinates.

#### UHPC advantage

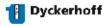
UHPC is structurally more comparable to steel than traditional concrete. As a result, far less material (%70-) is needed to achieve the same structural requirements. This leads to much lower weight, less substructure when used as a facade as well as lower shipping and installation costs.

In addition, because UHPC does not contain the capillary pores of traditional precast or glass-reinforced concrete, it does not absorb water and degrade in severe marine conditions.

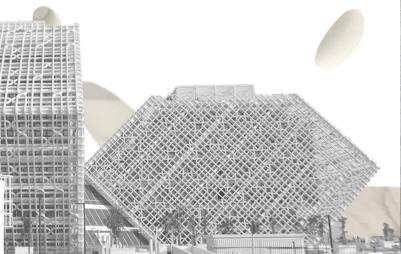
#### **UHPC** products

DCS are the pioneers' of UHPC Manufacturing in Qatar, DCS with the cooperation of Dyckerhoff (Germany) and guidelines of Durcrete Consulatnt (Germany) successfully developed the UHPC Mix Design to meet the required Specifications (180 Mpa Compressive Strength & 25 Mpa Flexural Strength).

Dyckerhoff has signed an exclusive agreement with Doha Cladding Solutions (DCS) for the export of special Nanodur to Qatar. DCS takes care of the import procedure, supervision and can easily carry out mix demonstrations to ensure an uncomplicated access to UHPC. The agreement grants DCS exclusivity for the purchase of Nanodur Compound within Qatar.



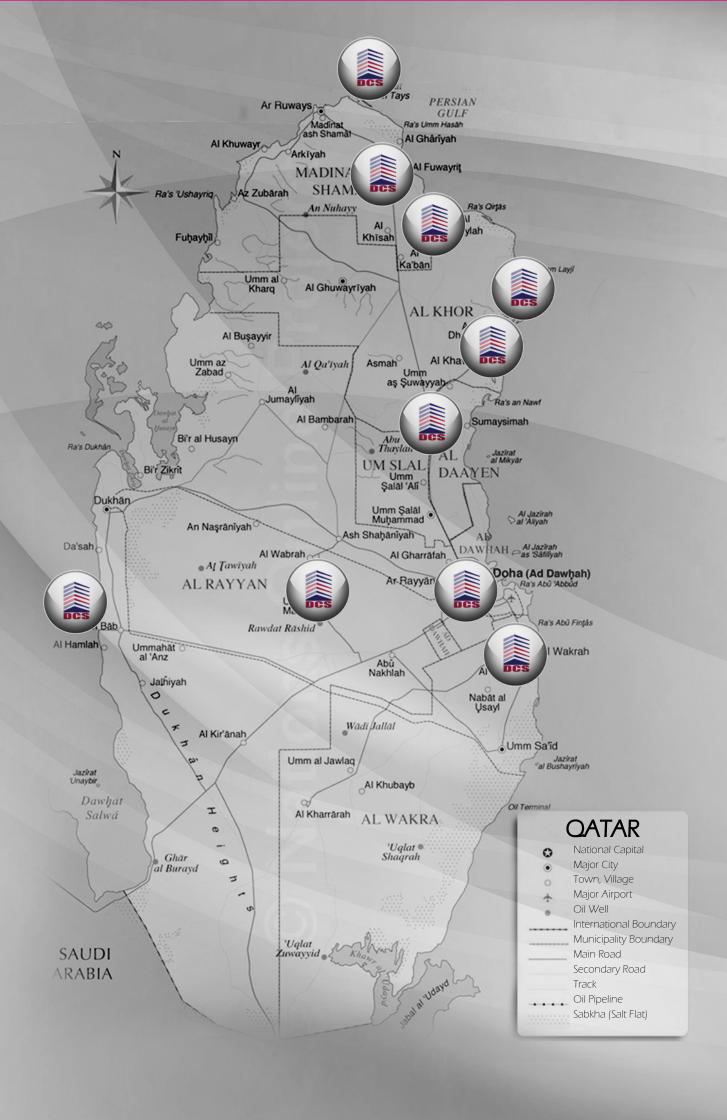




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#### CLIENTS





































#### CONSULTANTS













































































#### CONTRACTORS























































