CURATED FACADE COMPANY GFRC

DATASHEET

CFC GFRC - Glass Fibre Reinforced Concrete Panel / Plank

Comprehensive overview of CFC GFRC (Glass Fibre Reinforced Concrete) specifications, properties, and applications for construction professionals.

01 PRODUCT APPEARANCE AND COLOR

Meets all requirements for architectural façades, 3D surfaces, surface texture and colors. GFRC is particularly well-suited for buildings with classical façades. Sophisticated quality achieved in the factory that cannot be achieved on-site. GFRC saves time / manpower to execute complex details.

SURFACE TEXTURE

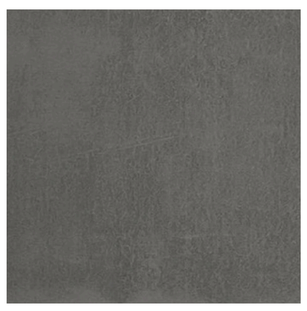
Can be produced with air voids, smooth or glossy finishes, or exposed aggregate textures to replicate architectural concrete forms.

COLOR OPTIONS

GRC panels generally maintain the natural color of the cured concrete. Pigmentation can be added in the mix or on the surface to meet project needs.

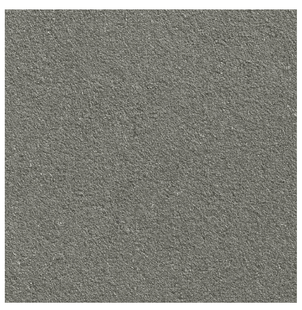
EDGE FINISH

Panels have clean-cut, square edges. Precision manufacturing ensures consistent edge quality across all panels.

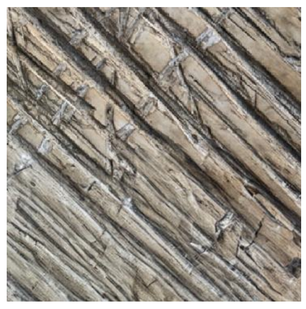


CoreMatte™

StoneForm™

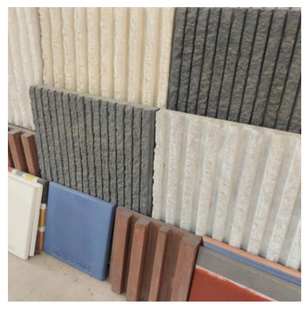


MetalSheen™



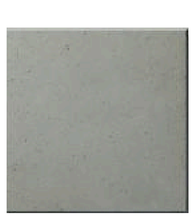
TerraKast™

MicroAggregate™



Shaped Collection™

Cool Greys
Modern & Industrial Aesthetics



Glacier Grey

Polar Mist

Granite Frost

Shadow Rock

Warm Browns & Reds
Rich, Earth-Inspired Tones for Depth & Character

Maple Stone

Copper Dust

Autumn Clay

Chestnut Glow

Earthy Beiges
Warm, Natural Tones for Comfort & Elegance

Nordic Sand

Winter Clay

Arctic Wheat

Alpine Dune

Cold Neutrals
Fresh & Elegant for Timeless Architecture

Fjord Blue

Glacial Silver

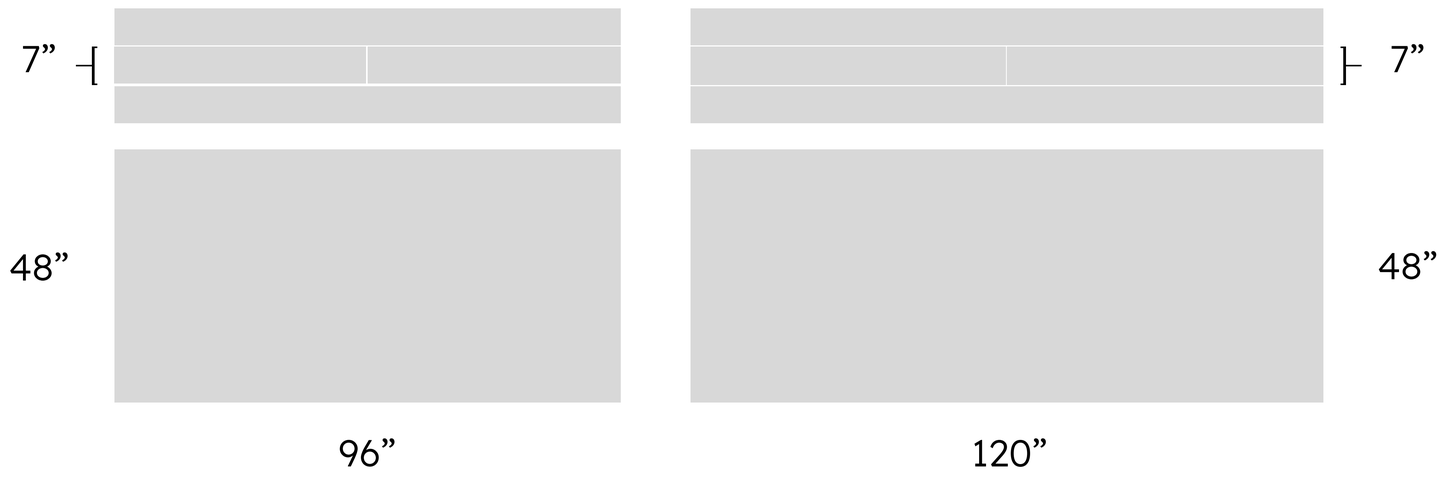
Everest Shadow

Iceberg White

02 PRODUCT COMPOSITION

STANDARD DIMENSIONS

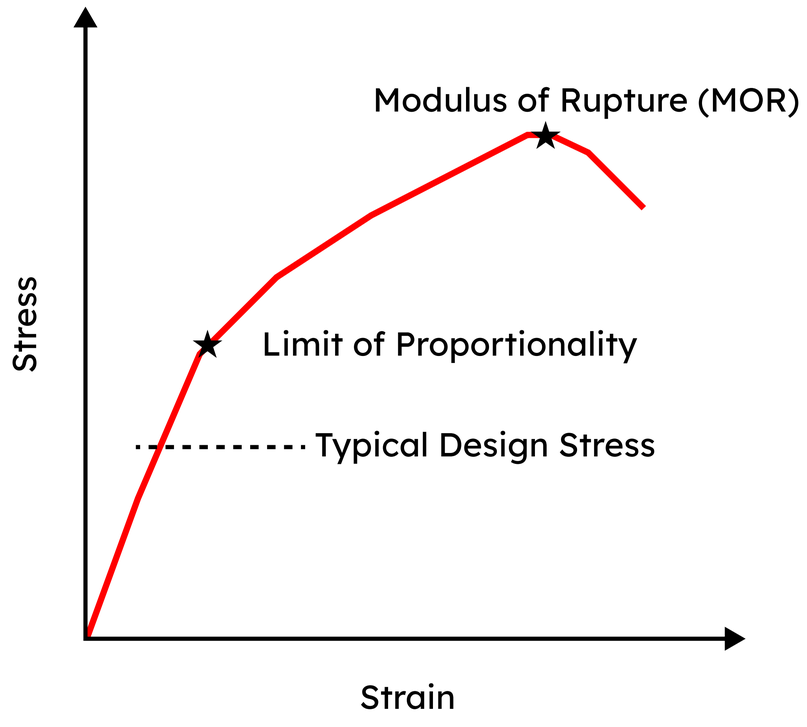
CFC GFRC is manufactured with consistent quality and uniform distribution of fibers throughout the material, contributing to the panel's exceptional strength and durability characteristics.



Dimensions 48” x 96” or 48” x 120” (Panel)
7” x 96” or 7 x 120” (Plank)

Thickness 12 mm or 15 mm

PROPERTY	GRC SPRAY-UP	GRC PREMIX
Dry Bulk Density	1900-2100 kg/m³	1800-2000 kg/m³
Compressive Strength	50-80 Mpa	40-60 Mpa
Modulus of Rupture, LOP	7-11 N/mm²	5-8 N/mm²
Modulus of Rupture, MOR	18-30 N/mm²	10-14 N/mm²
Shear strength; In Plane Shear	8-11 N/mm²	4-7 N/mm²
Shear strength; Interlaminar Shear	2-4 N/mm²	N/A
Elastic Modulus	10-20 GPa	13-18 GPa



02 PRODUCT COMPOSITION

TOLERANCES

FABRICATION TOLERANCE	PANEL SIZE	PERMISSIBLE TOLERANCE
Length and Height	< 3 m	± 3 mm
Straightness, Bow	< 3 m	± 5 mm
Thickness	Up to 50mm Wall Thick	± 2 mm
Twist At Any Corners	< 3 m	± 5 mm
Insert Locations		± 2 mm

INSTALLATION TOLERANCE	PANEL SIZE	PERMISSIBLE TOLERANCE
Verticality Within A Floor	<4 m	± 2 mm
In / Out Of Building	<3 m	± 5 mm
Joints Sizes	Up to 50mm Wall Thick	± 2 mm
Joint Gaps	Hairline Joints	± 1 mm
Max Joint Expansion	15 mm	± 2 mm

PHYSICAL PROPERTIES

CFC GFRC panels are made of high-performance architectural concrete made by spraying a mix of cement, quartz powder, water, admixture, and alkali-resistant glass fibers onto molds. The result is an aesthetic, durable concrete panel that replicates both classic and modern architectural forms.

Cement	Quartz Powder	Water	Admixture	Glass Fibres
Primary binding material providing structural integrity	Enhances durability and surface finish quality	Activates cement hydration process	Improves workability and performance	Alkali-resistant glass fibres provide tensile strength and crack resistance

PHYSICAL PROPERTIES

Mold Preparation	Use custom molds to achieve desired architectural shapes and textures.
Spray Application	Spray-up method to apply GFRC to molds for precise material distribution.
Curing Process	Panels undergo controlled curing to achieve optimal strength and durability.
Transport & Assembly	Once cured, the panels are transported and assembled on-site.

03 APPLICATIONS

BUILDING TYPES & ENVIRONMENTS

The versatility of CFC GFRC panels is demonstrated by their wide range of applications across different building types and environmental conditions.

Exterior	Building façades, public structures, large complex outdoor elements
Interior	Feature walls, decorative ceilings
Additional	Ventilated façades, intricate 3D architectural detailing, classical high-finish buildings

KEY ADVANTAGES

Factory production of complex classical details allows for sophisticated quality in every corner that would be time consuming and costly to achieve in the field. Creating with CFC GFRC helps architects and developers achieves complex details in the field, without heavy time and manpower costs.

Weather-Resistant	Concrete based material, weather resistant, environmentally friendly
Structural Strength	Same strength as traditional reinforced concrete with thinner profiles
Complex 3D Shapes	Architects can create any 3D curved surfaces without traditional limits
Thin Panel Design	Glass fibre allows for 5-10mm panel thickness, reducing construction costs
Easy Maintenance	Inert water resistant material with auto-cleaning mechanism keeps facades clean*
Large Panels Available	Standard / custom sizes can be very large panels to meet any design requirements

* Inconsistencies and slight variations in color and surface material may appear on the surface of GFRC components due to natural curing reactions of concrete and environmental conditions such as temperature, humidity, during the curing process.

This creates the natural color and material of the GFRC component surface, and this color has permanent durability. However, these variations should not be visible under normal daylight conditions at a distance of approximately 5.0m for areas intended to be seen up close (e.g., entrances, corridors) and 10m for areas intended to be seen from any distance.

04 MAINTENANCE

REQUIREMENTS

Working with CFC GFRC panels requires adherence to specific health and safety protocols to ensure worker protection during installation and modification. Additionally, proper maintenance practices help ensure the longevity and continued performance of installed materials.

Basic Cleaning	Simple soap and water maintenance. Avoid abrasive cleaners that may damage surface.
Periodic Inspection	Annual examination for damage. Check fasteners and sealants for integrity.
Refinishing	Repaint or reseal as needed. Follow manufacturer guidelines for coating products.
Certification	See certifications below.

05 CERTIFICATION

STANDARDS

CFC GFRC panels carry numerous certifications and comply with relevant standards that validate their performance characteristics and suitability for various building applications. These certifications provide important assurance to designers, specifiers, and building officials regarding material quality and compliance with building codes.

STANDARD/TEST	COMPLIANCE/RATING
BS 476-4	Non-combustible
BS 476-6	Fire Propagation Class 0
BS 476-7	Surface Spread of Flame Class 1, zero spread
EN 13501-1:2007 + A1:2009	Fire Classification Class A1
Fire resistance rating	Fire Integrity 4h
CWCT TN75 and TN76	Impact Resistance Class 1
CAN/ULC S114	Yes
CAN/ULC S102	Yes

Tests indicate GFRC Grade 18P is non-combustible (BS 476-4), achieves fire propagation Class 0 (BS 476-6), surface spread of flame, class 1, zero spread (BS 476-7), providing 4 hours integrity and A1 Classification for reaction to fire performance in accordance with BS EN 13501-1:2007+A1:2009.