

# What is CFCC Grid??

"CFCC Grid" is a grid type concrete reinforcement which is made of CFCC\*.

CFCC is ideal as reinforcement for concrete structure in salt water area because of its characteristics of high corrosion resistance, lightweight, and high tensile strength.

- \* "CFCC" stands for Carbon Fiber Composite Cable.
- \* CFCC U 5mm dia. is normally used for CFCC grids.
- \* CFCC U is a rod type CFRP which consists of twisted carbon fibers and a matrix resin.



## High Corrosion Resistance

CFCC is corrosion free, and has superior acid and alkali resistance. Consequently, even in the salt water areas, there is no need to make thicker concrete covers in concrete constructions.

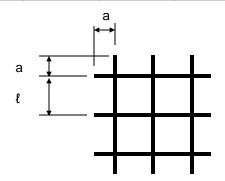
#### Lightweight

CFCC's specific gravity is 1/5 of steel. It enables workers to transport and cut CFCC easily and to carry out the construction with no effort at any field.

## High Tensile Strength

CFCC's tensile strength is double of steel reinforcement bars.

| Diameter<br>of<br>CFCC<br>d<br>mm | Spacing<br>{<br>mm  | Extension<br>a<br>mm | Cross-<br>sectional<br>area<br>of CFCC<br>mm <sup>2</sup> | Tensile<br>capacity<br>of CFCC<br>kN/pc | Modulus of<br>tensile<br>elasticity<br>of CFCC<br>kN/mm <sup>2</sup> | Unit<br>weight<br>of CFCC<br>g/m |
|-----------------------------------|---------------------|----------------------|---|---|--|----------------------------------|
| 5.0                               | Arbitrary<br>length | Arbitrary<br>length  | 15.2  | 38                                      | 167  | 30                               |

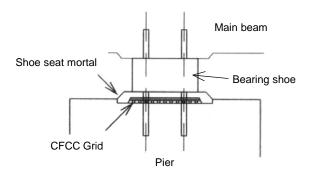


#### Example of Applications

-CFCC can be used as a shoe seat mortal reinforcement member. In the case of shoe seat mortal, it may be difficult to secure a thick concrete cover, and you may be worried about rust in future. Applying CFCC grids instead of steel grids solves this problem.

-CFCC can be used as reinforcement for the mouth of concrete structures.

To control cracks at the mouth or the corner of a concrete structure, reinforcing the concrete cover by CFCC is the best solution.



Example of Countermeasure for Salt Damages at the Shoe Seat Mortal

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