

UNIWRAP CFF 400



Unit of measurement	Pieces/Pallet	Color/other specifications
mL	1 pcs/box	50m x 5cm / 300gr/m ²
--	--	50m x 10cm / 300gr/m ²
--	--	50m x 15cm / 300gr/m ²
--	--	50m x 20cm / 300gr/m ²



UNIWRAP CFF 400

Carbon plates for structural strengthening

FEATURES

- Prefabricated tiles that consist of 100% one-way carbon fiber, found in an epoxy resin matrix
- In combination with EPOWRAP FG - 200 forms a composite material
- Strengthening of concrete structural elements
- Allows vapor diffusion
- Ensures high tensile and flexural forces

AREA OF APPLICATION

Carbon tiles UNIWRAP CFF - 400 are used as external reinforcement, for outdoor adhesion and bonding of structural elements with the epoxy resin EPOWRAP FG - 200, for the increase of mechanical forces of beams and concrete columns, for the improvement of the connection of columns by:

- Strengthening structures with high resistances to seismic movements
- Protecting and strengthening concrete elements from corrosion.
- Increasing cargos, until the change of usage destination
- Repairing concrete structures after damage from earthquakes.

Strengthening with composite materials can be applied to concrete, wood and steel elements and retaining walls.

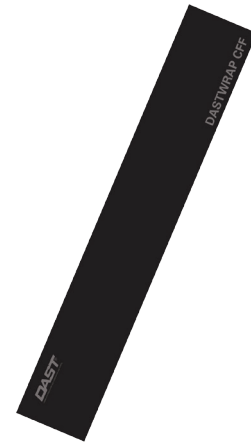
MANNER OF APPLICATION

1. Surface

The surface must be free of detached parts, plaster, paint, oil or grease. After thorough cleaning, the surface is roughened by a metallic brush.

- Existing cracks in the concrete should be repaired by injections with EPOLOT products.
- External corners must be rounded to a radius of 10 - 30 mm.
- Surface should be as flat as possible.

Any superficial defects should be repaired using EPOWRAP PRIMER.



APPLICATION

Firstly, apply EPOWRAP IM -400 on the surface which will be treated. Then, UNIWRAP CFF - 400 is put carefully on the surface. Tiles are slowly applied by a special plastic roller in order to achieve a better contact with the surface, complete impregnation and removal of air bubbles. Tile direction should follow the direction of elastic forces and its fibers should be as straight as possible.

- If more than one layer of application is needed, the above-mentioned process is repeated. In this case, the previous layer should not be completely dry; otherwise, you should roughen the surface again.
- Following that, the fabric layer is covered on the outside with EPOWRAP IM - 400 and then, quartz sand is poured on the layer, as long as it is still fresh, in order to apply later a protective, cement-based layer (plaster).
- If more than one layer of fabric is specified, repeat the above-mentioned process. In this case the previous layer should not be completely dry, otherwise rubbing is necessary before starting the new application.
- Then, the last fabric layer is brushed off from the outside with EPOWRAP IM - 400 and then quartz sand is placed on the resin layer which is still wet, so as later to apply a protective, cement-based layer (plaster).

TECHNICAL DATA

Tensile strength (MPa)	2800
Modulus of elasticity (GPa)	163
Ultimate strain (%)	1,60
Density (g/cm ³)	1,60