

COREFLOW

PRODUCT DESCRIPTION

COREFLOW is a stratified reinforcing glass fiber mat composed by 3 layers. 2 or 1 layers of fiber glass and 1 of synthetic fibers. This reinforcing material has been specially designed for the RTM and the RTM light processes

CONSTRUCTION

The exterior layers of fiber glass have an areal weight from 250 to 600 gr/m². To provide a good surface aspect is recommended to have 250 gr/m² as minimum in the external layers, although other values are possible with glass fibers are 50mm long.

The standard materials are the ones in the following list, but other designs are also available according to customer needs

Product	Glass fiber gr	Total dry weight/m ²
CF 300C300	600	795
CF 450C450	900	1145
CF 600C600	1200	1395
CF 300D300	600	865
CF 450D450	900	1215
CF 600D600	1200	1465
CF 300C	300	495
CF 450C	350	645
CF 600C	600	795
CF 300D	300	565
CF 450D	450	715
CF 600D	600	865

Comparing C and D we can say that for the same glass content and the same mould C option provides better resin flow, but the mechanical properties are slightly worse because the ratio glass/resin is lower.

Optionally surface veil

PRESENTATION

WIDTH: 125cm - 300 cm or sub multiple cuts

ROLL LENGTH: 50 to 60 meters according to the areal weight

PALLETS: from 300kg to 500 kg according to the areal weight

ADVANTAGES

- High degree of deformability in order to be adaptable to the mould cavities.
- Provides a very good resin flow due to the synthetic fibers layer
- Accepts variation of mould cavity thickness.
- High glass content and good compatibility with different type of resins
- Chopped strand mat layers without chemical binders

Product	Laminate thickness
CF 300C300	1,6 – 3,2
CF 450C450	2,0 - 3,8
CF 600C600	2,3 - 4,3
CF 300D300	1,9 - 3,7
CF 450D450	2,2 - 4,2
CF 600D600	2,6 - 4,8

MECHANICAL PERFORMANCE

Exemple: CF 450C450

Mechanical data			
Property	Unit	Value	Standard form
Tensile strength	MPa	122	ISO 3238
Tensile modulus	MPa	7900	ISO 3268
Elongation at break	%	2.3	ISO 3268
Flex strength	MPa	151	ISO 178
Flex Modulus	MPa	6300	ISO 178
Fibre content	wt - %	35.4	ISO 1172
Matrix	Polyester resin		

APPLICATIONS/PROCESSES

- RTM, RTM LIGHT(vacuum moulding), cold press