

FutureWrap

Structural™

UD Carbon/LT

Designed and manufactured in Aberdeen, UK; Futurewrap UD Carbon/LT was developed for the repair of structural components (beams, struts, CHS etc.) and is based on a carbon cloth and a two-part ambient cure epoxy resin. Due to its excellent adhesion strength, Futurewrap UD Carbon/LT can re-instate the integrity of the damaged/corroded components.

The technical specification is based on the qualification requirements of **ISO 248171**.

Repair System	UD Carbon/LT
Applications	Structural components
Defects	External
Fibre Type	Carbon – uni-axial stitched cloth (0°)
Resin Type	Epoxy resin (two part) – Ambient cure
Maximum Design Temperature (°C)	110
Maximum Design Pressure (non-through Wall Defect) (bar)	350
Modulus (0°) (GPa)	103
Modulus (90°) (GPa)	8.7
Poissons Ratio (0°)	0.24
Poissons Ratio (90°)	0.02
Shear Modulus (Gpa)	2
Thermal Expansion Coefficient (0°) (mm/mm/°C*10 ⁻⁶)	-6.7
Thermal Expansion Coefficient (90°) (mm/mm/°C*10 ⁻⁶)	50
Design Allowable Strain (0°) (mm/mm)	0.004
Design Allowable Strain (90°) (mm/mm)	0.004
Cure Time (hrs)	24
Chemical Resistance	3<pH<10