

FutureWrap

Structural™

High Temperature

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

The technical specification is based on the qualification requirements of **ISO 24817**.

Repair System	Structural HT
Applications	Structural components, tanks and vessels
Defects	Internal, external, through wall
Fibre Type	Carbon - quad-axial stitched cloth (0°/45°/-45°/90°)
Resin Type	Epoxy resin (two part) – Post Cure
Maximum Design Temperature (°C)	260
Maximum Design Pressure (Through Wall Defect) (bar)	50
Maximum Design Pressure (Non-through Wall Defect) (bar)	350
Modulus (0°) (GPa)	34.4
Modulus (90°) (GPa)	34.4
Poissons Ratio (0°)	0.35
Poissons Ratio (90°)	0.35
Shear Modulus (Gpa)	2
Thermal Expansion Coefficient (0°) (mm/mm/°C*10 ⁻⁶)	18
Thermal Expansion Coefficient (90°) (mm/mm/°C*10 ⁻⁶)	18
Design Allowable Strain (0°) (mm/mm)	0.004
Design Allowable Strain (90°) (mm/mm)	0.004
Energy Release Rate (J/m ²)	223
Cure Time (hrs)	24
Chemical Resistance	3<pH<10