

FutureWrap

HIDRS™

Designed and manufactured in Aberdeen, UK; FutureWrap Carbon/HIDRS was developed for the repair of decks and walkways and is based on a carbon cloth and a two-part rubber toughened ambient cure epoxy resin. Due to its excellent adhesion strength, FutureWrap Carbon/HIDRS can re-instate the integrity of the damaged/corroded components. The technical specification is based on the qualification requirements of ISO 24817.

Repair System	HIDRS
Applications	Decks
Defects	External, through wall
Fibre Type	Carbon - quad-axial stitched cloth (0°/45°/-45°/90°)
Resin Type	Epoxy resin (two part) – Ambient Cure
Maximum Design Temperature (°C)	70
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)	11
Thermal Expansion Coefficient (90°) (mm/mm/°C*10 ⁻⁶)	11
Design Allowable Strain (0°) (mm/mm)	0.004
Design Allowable Strain (90°) (mm/mm)	0.004
Energy Release Rate for Third Party Impacts (J/m ²)	2000
Cure Time (hrs)	24
Chemical Resistance	3<pH<10