



## FutureWrap HIDRS™

Repair system	HIDRS
Overview	<p>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.</p> <p>The technical specification is based on the qualification requirements of ISO 248171.</p>
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
Poisson's ratio 0°	0.35
Poisson's ratio 90°	0.35
Shear modulus (GPa)	2
Thermal expansion coefficient 0° (mm/mm/°C * 10 <sup>-6</sup> )	11
Thermal expansion coefficient 90° (mm/mm/°C * 10 <sup>-6</sup> )	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 <sup>2</sup> )	2000
Cure time (hrs)	24
Chemical resistance	3<pH<10