FutureWrap Glass Aquasplash Technical Summary

ENGINEERED COMPOSITE SOLUTIONS

FutureWrap Aquasplash™

Repair system	Glass Aquasplash
Overview	FutureWrap Aquasplash was developed for the repair of all topside and subsea pipework, pipelines (all components), caissons and risers and is based on a glass cloth and a two-part ambient cure epoxy resin. Due to its excellent adhesion strength even in the presence of water, FutureWrap Aquasplash can seal through-wall defects and re-instate the integrity of the damaged/corroded pipework. The technical specification is based on the qualification requirements of ISO 248171.
Applications	Pipework, pipelines (All components), caissons and risers
Defects	Internal, external, through wall
Fiber type	E-glass - tri-axial stitched cloth ($0^0/45^0/-45^0$)
Resin type	Epoxy resin (two part) – Ambient Cure
Maximum design temperature (0C)	62
Maximum design pressure (through wall defect) (bar)	75
Maximum design pressure (non-through wall defect) (bar)	350
Modulus 0^0 (GPa)	21
Modulus 90^0 (GPa)	8.9
Poisson's ratio 0^0	0.5
Poisson's ratio 90^0	0.21
Shear modulus (GPa)	2
Thermal expansion coefficient 0^0 ($mm/mm/^0C * 10^{-6}$)	26
Thermal expansion coefficient 90^0 ($mm/mm/^0C * 10^{-6}$)	35
Design allowable strain 0^0 (mm/mm)	0.004
Design allowable strain 90^0 (mm/mm)	0.004
Energy release rate (J/m^2)	556.9
Cure time (hrs)	24
Chemical resistance	3<pH<10