

Table NO. 4 Properties of unidirectional fiber-reinforced composite martial

Material properties	Value	Material properties	Value
$\rho$ (kg/m <sup>3</sup> )	1570	Longitudinal tensile strength	1665(MPa)
E1	127500(MPa)	Longitudinal compressive strength	1362(MPa)
E2	9000(MPa)	Transverse tensile strength	80(MPa)
Nu12	0.28	Transverse compressive strength	232(MPa)
G12	4900(MPa)	Longitudinal shear strength	61(MPa)
G13	4900(MPa)	Transverse shear strength	61(MPa)
G23	3600(MPa)	Longitudinal tensile fracture energy	12000
		Longitudinal compressive fracture energy	10000
		Transverse tensile fracture energy	1000
		Transverse compressive fracture energy	2000