



Technical specifications for plasma sprayed ThermoHold® for Composites Performance White™

Substrate	Composite materials such as carbon fibre or glass re-enforced plastic Suitable high temperature plastics
Bond coat	Metallised or ceramic bond coat as determined by clients requirements
Thickness of bond	Min 20µm Max 50µm
Ceramic material	Proprietary mix of zirconia based ceramics.
Ceramic thickness	100-150µm depending on customer requirements and substrate geometry
Total coating thickness	No more than 200µm unless specified
Coating mass	0.6 – 0.75 kg/m ²
Ave. coating density	~3800 - 4000 kg/m ³
Bond coat density	~2400 - 3200 kg/m ³
Ceramic density	~4500 kg/m ³
Surface texture	Rough to the touch Approximately 30-40 Ra
Colour	White to pale cream
Emissivity	~0.2
Reflectivity	~80%
Thermal conductivity	~1.4w/m ^{°K}
Electrical properties	Dielectric under normal circumstances. For non-conductive coating use ceramic based bond coat
Surface hardness	11 on modified mhos scale
Max. coating temp.	1400°C (sintering will start ~1500°C)
Porosity of ceramic	8 – 12 %
Young's modulus	28 -46 GPa
Poisson's ratio	0.24