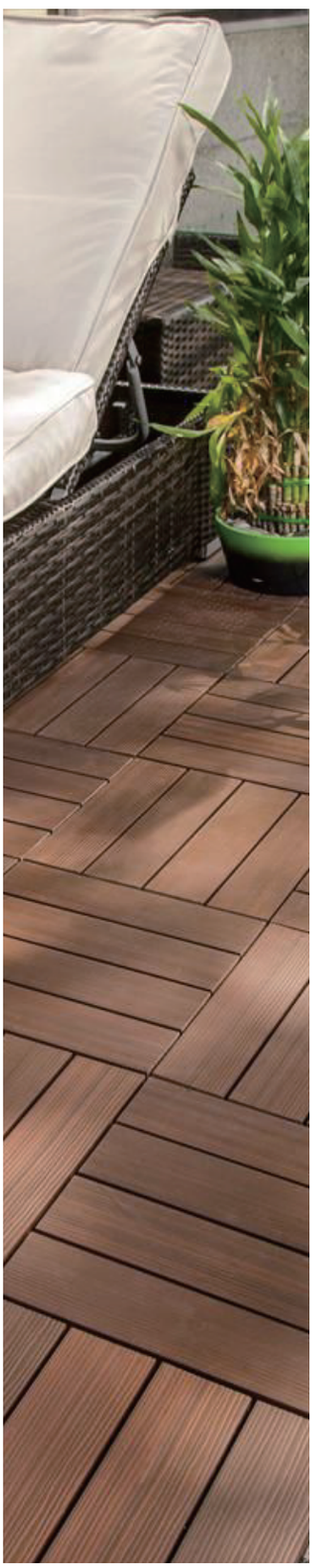
FOERSTAR ® WPC Tiles Technical Specification

PHYSICAL AND MECHANICAL PROPERTIES OF FOERSTAR TILES



Property	Test method	Typical value
Dimension	General method	Average length: 297.59mm Average width: 297.45mm Average thickness: 21.42mm
Slip resistance	EN 13893:2002	0.43
Static point load	EN 1533:2010	Max. load: 9.61kN
Reaction of chlorine water solution	Property method	No obvious change on surface
Salt spray rest(for metal part)	ASTM B117-11	No corrosion and red rust
UV test	ASTM G154-12a Cycle 1	After 72 hours, Grey scale =4-5 There was slight color change on the surface.
Freeze - Thaw test	In house method	Appearance check: no visible appearance change Falling mass impact resistance : no permanent deformation or breaks Static point load: max. load 9.28kN

FORESTAR

FOERSTAR ® Composite Fencing Technical Specification

PHYSICAL AND MECHANICAL PROPERTIES OF FOERSTAR FENCING

Property	Test method	Typical value
Wind Resistance	The guard shall resist a maximum horizontal quarter point load of 504 N/m 2 *effective area (as 10 Beaufort scale) of the system	The guardrail system resisted the load over the effective area with no failure
In - filled Load	The guard system shall be capable of satisfactorily resisting a load of 125 lbf (556 N) applied over a one - square foot (0.0929 m 2) area normal to the in - fill	The guardrail system resisted the load over a one -square foot area normal to the in - fill with no failure
Uniform Load vertically	The top of the system shall be subjected to a maximum uniform load of 125 plf (1825 N/m) applied vertically	The guardrail system resisted uniform load vertically on top with no failure
Concentrated load on top rail vertically	A 500 lbf (2224N) load shall be applied to the top rail vertically, there shall be no failure, nor any evidence of disengagement of any component, nor visible cracks in any component	The guardrail system resisted 2224N vertical concentrated load on top rail with no failure.
Concentrated load on post vertically	A 500 lbf (2224N) load shall be applied to the post vertically, there shall be no failure, nor any evidence of disengagement of any component, nor visible cracks in any component	The guardrail system resisted 2224N vertical concentrated load on post with no failure.
Effects of temperature	Exposure the whole surface to heat up to 40~50° C , keep 1h Spray the surface with water at room temperature for 10 mins; After condition, repeat In - filled load test at middle point. No any damage shall be occurred	After condition, The guardrail system resisted the load over a one - square foot area normal to the in - fill at middle point with no failure
Adhesion test (for paint or coating	ASTM D3359 - 09 ε2 modified	Grade 4B
Moisture content (for wood part)	ASTM D1037 - 12	ASTM D1037 - 12
Salt spray test	ASTM B117 - 11	No rust or corrosion after 24 hours
Weather test	ASTM G155 - 13 Cycle 1	No structural deterioration after 72h Grey scale: 4 - 5
Lead content	16 CFR, Part 1303	The lead content of coating or paint <0.002%