ECOTECH GROUP

Eco-friendly & low maintenance

PRODUCT CERTIFICATION AND SPECIFICATIONS

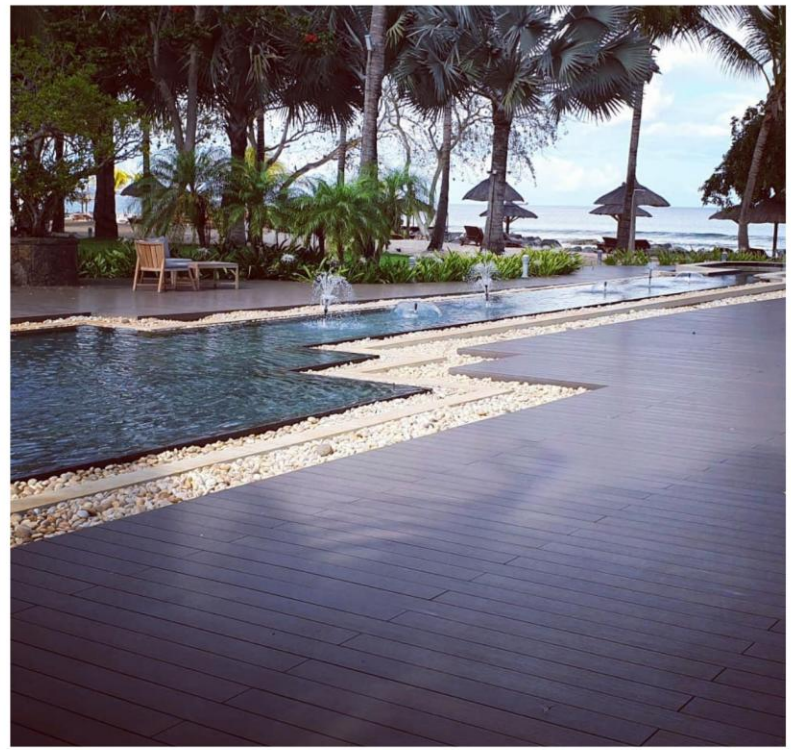
About Us

We specialize in synthetic decking, pergolas, screens, and handrails, boasting over 25 years of experience in our industry.

Our team of experienced professionals is dedicated to delivering high-quality craftsmanship and exceptional customer service.

We pride ourselves on using sustainable materials that not only enhance the beauty of your outdoor spaces but also contribute to environmental conservation.

Choose us for your next project and experience the perfect blend of innovation, durability, and style.



Our passion for outdoor design is reflected in each project we undertake, ensuring that every detail meets the highest standards of quality and aesthetics.

By prioritizing customer satisfaction, we tailor our solutions to fit your unique vision and lifestyle.

Whether you're planning a small upgrade or a comprehensive outdoor renovation, our commitment to excellence ensures that your project will be completed on time and within budget.

Product specifications & certifications

Positive properties	Plastic	Wood	Metal	Concrete	our product
Strong		✓	✓	✓	✓
Flexible	✓		✓		✓
UV resistant		✓	✓	✓	✓
Low thermal conductivity					✓
No electrical conductivity	✓	✓		✓	✓
Can be easily process	✓	✓	✓		✓
Saves raw natural materials					✓
Environmentally friendly					✓
Made from 100% recycled waste material					✓

Negative properties	Plastic	Wood	Metal	Concrete	our product
Susceptible to cracking	×	×		×	
Susceptible to rotting	×	×			
Susceptible to rusting			×		
Susceptible to splintering		×			
Susceptible to termites	×	×			
Susceptible to weathering	×	×	×	×	
Can leach chemicals	×	×			
Requires natural resources	×	×	×	×	
Contributes to landfill	×	×	×	×	

100% recycled

Resistant to weather

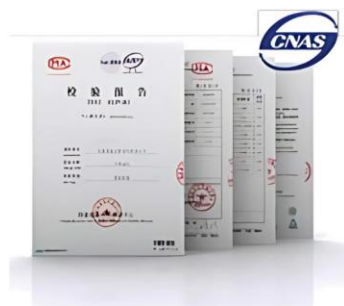
Minimal upkeep

Durable

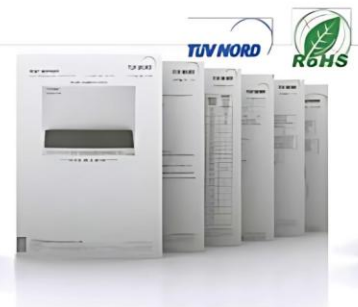
ISO9001:2008

ISO14001:2004

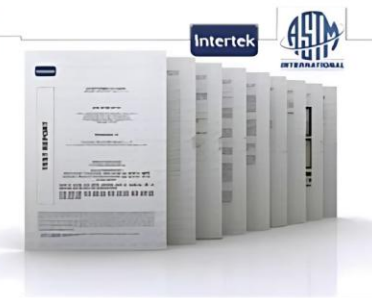
CE Certification



CNAS Testing Report



RoHS Certification from TUV



ASTM Testing report from Intertek

UV Resistance report from SGS

BSCI Audited Supplier

Technical information regarding our composite timbers

1. FLEXURAL STRENGTH: 38.0 MPa (ASTM D6109-2010)

   The flexural strength and stiffness were tested according to ASTM D6019-2010 Method A. A rectangular specimen cross-section was evaluated in flexure as a beam in a flat mode. The beam was supported at two points, with loads applied at two locations equidistant from the adjacent support points. The loading noses were positioned one-third of the way between the supports. The specimen was deflected until rupture occurred in the outer fibers.

2. TENSILE STRENGTH: 18.9 MPa (ASTM D638-2010)

   The test followed ASTM D638-2010 protocols, involving five specimens. The width and thickness of the flat specimens were measured at their center. Each specimen was placed in the grips of the testing machine with a testing speed of 5 mm/min. Tensile strength was determined by dividing the maximum load by the average original cross-sectional area within the gage length segment of the specimen.

3. IMPACT RESISTANCE: 22.4 J/m (ASTM D256-2010)

   The test was carried out per ASTM D256-2010 standards. Each specimen's impact resistance was determined under specified conditions, and the average Izod impact resistance for the group was calculated. Specimens that did not fail in the prescribed manner were excluded from the average.

4. SLIP RESISTANCE: ASTM D2394-2008

Dry Surface	= Static coefficient of friction 0.31	= Dynamic Coefficient of friction 0.23
Wet Surface	= 0.37	= 0.34

Fire ratting on our composite timbers

Based on ASTM E84-2009, our composite timbers achieved a Class B fire rating.

This rating indicates that the material has moderate flame spread and smoke development characteristics, making it suitable for various construction applications where fire safety is a consideration.

The test involved exposing the material to a controlled flame source and measuring the rate at which it ignited and burned.

Our composite timbers' performance in this test ensures they meet essential safety standards while maintaining their structural integrity and aesthetic appeal.

Method	Parameter	Result
EN ISO 9239-1:2002	Critical flux (transverse), kW/m^2	10.3
	Critical flux (longitudinal), kW/m^2	9.9
	Smoke production, % minutes	35
EN ISO 11925-2:2002 Exposure=15 s	Fs, mm	45

Note

1. This test was conducted at the external approved facility, located at Guangzhou.

1.5 CLASSIFICATION

The classification has been carried out in accordance with EN 13501-1.

Fire behaviour		Smoke production	
B_{fl}	-	s	*1*

Reaction to fire classification: B_{fl}-*s1*

FOR MOR INFORMATION

CONTACT US

Office Cell

info@ecotechgroup.co.za 010-220-5603 / 067-676-0787 www.ecotechgroup.co.za