

WOODCOMPLAST

PREMIUM WOOD PLASTIC COMPOSITE PRODUCT



WOODCOMPLAST

WPC DECK BUILDING SPECIALISTS

WOODCOMPLAST

Complete Architectural Product Catalogue & Technical Data

COEXTRUSION MARINE EDITION

Product Overview

WOODCOMPLAST is an advanced Wood-Plastic Composite (WPC) building material engineered to replicate the natural aesthetic of timber while completely eliminating the heavy maintenance overhead, splintering and structural hazards associated with traditional wood.

Composition: 55% premium crude timber/bamboo fibers, 45% virgin/recycled High-Density Polyethylene (HDPE) or polymer blend, combined with 10% performance-enhancing additives including UV stabilizers, antioxidants, lubricants, and colorants.

Intended Applications: Outdoor residential and commercial Decking for marine and high moisture environments, fluted wall cladding, pergolas and architectural screening.

Physical & Mechanical Properties

Property / Test Parameter	Standard Metric Value	Testing / Compliance Reference
Density	1.35 g/cm³ – 1.40 g/cm³	ASTM D792
Flexural Strength (Modulus of Rupture)	≥25 MPa	EN 310 / ASTM D7032
Flexural Modulus (Stiffness)	≥3,000 MPa	EN 310
Water Absorption Rate	≤1.5% (after 24-hour full immersion)	ASTM D1037
Linear Thermal Expansion Coefficient	$3.0 \times 10^{-5} \text{ }^{\circ}\text{C}^{-1}$ – $4.0 \times 10^{-5} \text{ }^{\circ}\text{C}^{-1}$ (0.3% – 0.5% linear change)	ASTM D696
Resistance to Termites & Insect Attack	Highly Resistant / No Structural Damage	AWPA E1-13 Compliance
Formaldehyde Emission	Class E1 Certification (Negligible trace emissions)	EN 717-1

Dimensions & Profiles

- **Decking Boards:** Width: 140 mm – 145 mm | Thickness: 22 mm – 25 mm | Standard Lengths: 2,200 mm, 2,900 mm, or Custom lengths available upon project request
- **Wall Cladding Profiles:** Width: 140 mm – 157 mm | Thickness: 21 mm with interlocking lock-in groove profiles.
- **Accessories:** Joists/Batons (50 × 50 mm or 40 × 25 mm), Skirting boards, L-Corner flashings, and starter clips.

COEXTRUSION MARINE EDITION

Marine WPC Decking

Engineered for high-moisture coastal environments, marine docks, and pool surrounds.

- **Composition:** Co-extruded WPC with UV armor
- **Slip Resistance:** R11 wet safety rating
- **Durability:** Rot, split, and splinter proof

WPC Decking Profile



↔ Width: 140 mm | Thickness: 25 mm ↔

- **Tolerances:** ±0.5 mm (W) | ±0.3 mm (T)
- **Core:** Solid layout optimized for high structural rigidity

FINISHING TRIMS & ACCESSORIES

WPC Decking Skirts & Trims

Seamless structural finishing profiles designed for perimeter closure, stair risers, fascia boards, and clean edge aesthetics with matching wood-grain textures.

- **Thermal Stability:** Low expansion coefficient for exterior resilience
- **Application:** Perimeter framing, step nosing, and clean corner finishes

WALL CLADDING & ARCHITECTURAL ELEMENTS

Fluted Wall Cladding

Modern interior and exterior architectural wall panels delivering striking visual depth.

- **Finish:** Deep embossed natural timber tactile grains
- **Installation:** Interlocking clip system for invisible joints
- **Maintenance:** Zero painting or oiling required

WPC Pergolas & Structures

Robust structural beams and louvers combining natural warmth with engineering strength.

- **Comparison:** Superior warp resistance versus standard GRP
- **Core Strength:** Reinforced structural inner profiles
- **Weathering:** Exceptional color retention in harsh climates

Complete WPC Solutions

Curated architectural showrooms showcasing integrated indoor and outdoor displays. Designed for seamless trade distribution across global supply corridors including Europe and GCC markets.

- **Bundle Pallets:** Secure export-grade packaging optimized for international container shipping.
- **Logistics:** Multi-modal freight compatibility via land bridge and maritime routes.

WOODCOMPLAST — Sustainable Innovation, Engineered Durability, and Timeless Architectural Elegance.

Essential Installation Guidelines

- **Acclimatization:** Unpack and rest terrace sections at the installation site for a minimum of 72 hours prior to installation. Do not install at ambient temperatures below 0°C.
- **Substructure & Ventilation:** Ensure a solid, compacted concrete base with a minimum 1% to 1.25% slope for water drainage. Maintain a strict clearance gap of at least 25 mm between the ground/sub-grade and the substructure to ensure continuous airflow; unventilated or closed wet environments void product warranties.

Thermal Expansion Spacing

As WPC materials experience a linear thermal expansion rate of roughly 0.3% to 0.5%, expansion gaps are mandatory

- Leave a minimum 03 mm clearance margin against fixed walls or permanent vertical obstacles.
- Leave at least 04 mm to 05 mm spacing between cross-cut butt ends depending on weather and temperature.
- Space underlying support joists at a maximum of 350 mm centers.

Maintenance Protocol

- Regular cleaning requires only simple sweeping and washing with warm soapy water and a stiff-bristle brush.
- High-pressure washers can be utilized cautiously at low pressures and a safe distance (>30 cm).
- Stubborn marks, oils, or localized scratches can be cleared using fine-grade steel wool or light sandpaper matched to the grain direction.
- No routine painting, staining, or chemical sealing is required over the product lifecycle.