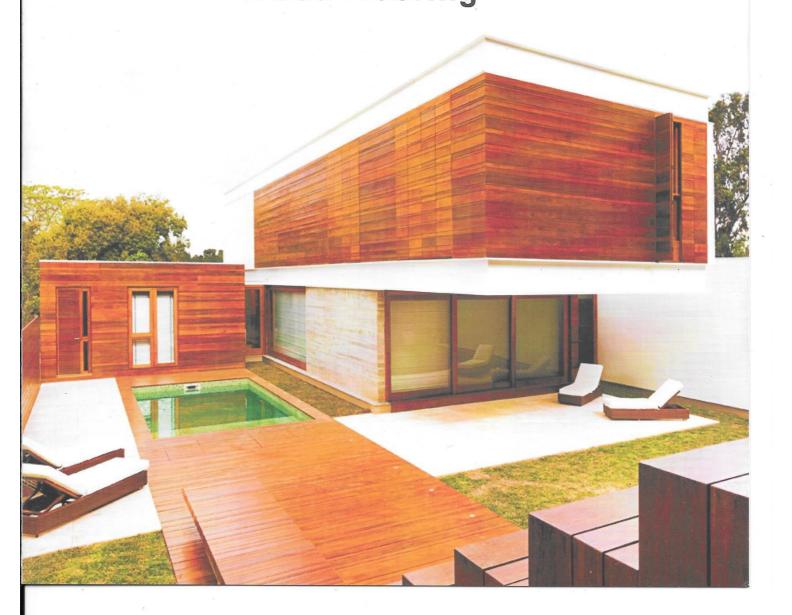
# UNI - Wood Taiwan

Innovative • Weather Proof • Recyclable

Thermoplastic Elastomer (TPE)

Wood Flooring



### **Brand New Concept**

#### Non-PVC and No Wooden Wastes

Wood Plastic Composite (WPC) and PVC have been commonly treated as a substitute to natural wood in outdoor construction and decoration for many years. Despite the various drawbacks of WPC and PVC material, there is lack of an alterative solution that is able to offer an excellent outdoor performance with outstanding physical and chemical stabilities.

All of this is about to change as UNI-Wood proudly presents UNI-Wood- an innovative macromolecule material contains ZERO wooden waste or PVC components and is 100% VOC free and 100% Thermoplastic Elastomer (TPE) Wood Flooring

UNI-Wood comes with great weather-resistant property, low density and excellent nail holding strength, which is the optimal solution for outdoor construction and decoration.



Decking Length: 2000 - 3000 mm

Decking Width: 140mm

Decking Thickness: 25mm







# UNI - Wood Demo Projects

Excellent Weatherability & Waterproof

#### **Outdoor Cafe**

140X25mm UNI-Wood Decking



#### **Terrace**

140X25mm UNI-Wood Decking





140X25mm UNI-Wood Decking









### ▼ Villa Courtyard Fencing:

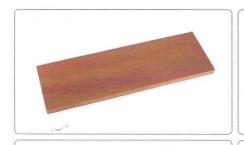
140X25mm UNI-Wood panels

#### **▼** Fountain

140X25mm UNI-Wood panels



#### **Product Display**







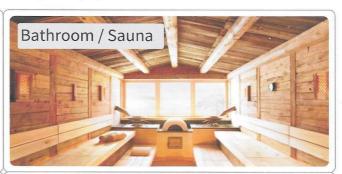






#### **Usage Environments / Applications**













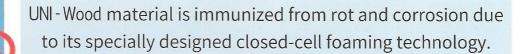
### Why UNI - Wood Better?

#### Advantages against Conventional Materials

Made from WPC/ **PVC** 

UNI-Wood is made from Thermoplastic Elastomer (TPE) materials that is 100% recyclable.

**Rot & Corrosion** Problems?



Warped & Bent due to Expansion & Contractions

UNI - Wood material offers great stability under a wide range of working temperature (-30°C ~ 70°C).

Easy Installation & Maintenance

UNI - Wood decking/flooring can be easily installed/assembled as natural wooden materials. UNI - Wood is maintenance free due to its excellent weather resistance properties.

Strength O Weakness





Properties	UNI - Wood	Natural Wood	WPC/PVC
Natural Wooden Texture	0	0	•
Low Density	0	0	
Low Thermal Conductivity	0	0	•
High Friction in Wet Cond.	0	0	•
Thermoforming / Bending	0	× •	•
Rot, Mold and Insect Resistant	0	•	•
Maintenance Free	0	•	•
Virtually Waterproof	0	•	0
Weatherability / UV Protection	0	•	0

## Thermoplastic Elastomer (TPE) Wood Flooring

#### **Technical Characteristics - Specification Clause**

Nail Withdrawal	ASTM D1037-12	(kgf) 188
Compressive Strength	ASTM D695-10	(MPa(psi)) 16.2(2354)
Izod Notched Impact	ASTM D256-10	(J/cm(ft-lb/in.) 0.139(0.260)
Flexural Strength	ASTM D790-10	(MPa(psi)) 21.02(3049)
Flexural Modulus	ASTM D790-10	(GPa(ksi)) 1.05(152)
Tensile Strength	ASTM D638-10	(MPa(psi)) 9.38(1361)
Elongation		(%) 6.53
Heat Deflection Temperature	ASTM D648-07	(°C(°F)) 79.7(175)
Coefficient of linear thermal expansion	ASTM E831-06	-30°C ~ 60°C (um/m°C) 79.4 80.91 90.66
		-22°F~140°F (um/m°F) 44.30 44.95 50.37
Resistance to Chemical Reagents	ASTM D543-06	5% Hydrochloric Acid There are no abnormal condition
		5% Sodium Hydroxide There are no abnormal condition
Thermal Conductivity	ASTM C518-10	(W/m K (Btu in./ft2 h°F)) 0.0826 (0.0119)
Flamibility Index	UL94 (1996)	
Test data is not compliant with the V-0	, V-1 and V-2 requi	rements of UL 94 20mm Verical Burning Test
UV Resistance	ASTM G154-12a	(168h) The color is obvious darken by visual check
		Delta - E Variance from Aging (△E*) (UV, 168h) 5.24
Weathering Resistance (Salt Spray)	ASTM B117 - 11	(168h) There are no abnormal condition

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