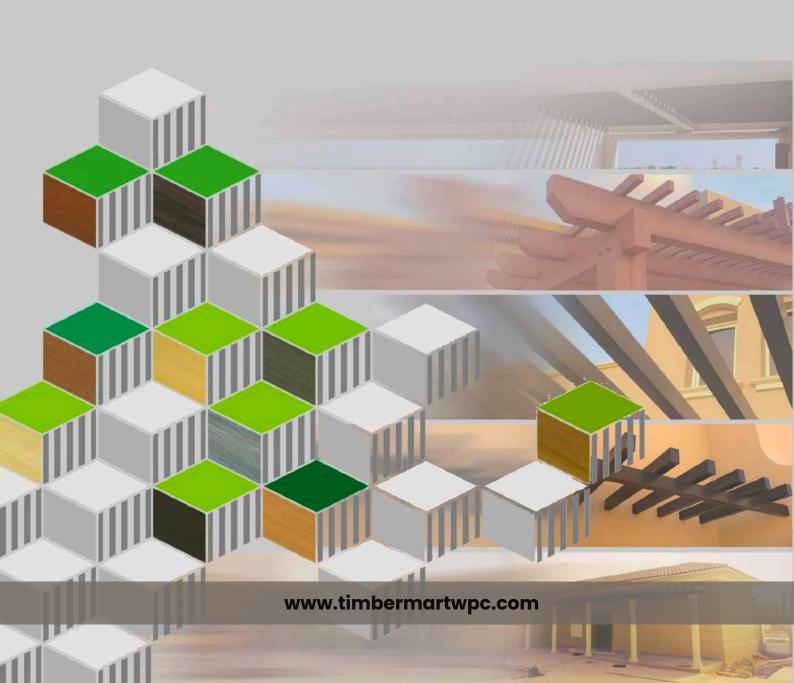


# **GREEN RESOURCE MATERIAL**

HIGH PERFORMANCE GREEN BUILDING SYSTEM

# Wood Plastic Composite, WPC

Korean Technology



### WHY CHOOSE US?

#### Green Resources Material

Going Green has never looked better, use the farm trees



WPC / Biowood Wood-Plastic Composite architectural products are a sustainable timber alternative with added benefits such as durability and strength. Best of all, our products are low maintenance and environmentally friendly meaning that you spend less time worrying about them and more time enjoying the benefits of our projects.

#### Lightweight and durable

It was either a lightweight product or a heavy, durable product that you had to choose from. Now you can have the best of both worlds. WPC/ Biowood Wood-Plastic Composite architectural products offer excellent durability without having the typically associated weight compromise.

#### Termite resistant

WPC / Biowood Wood-Plastic Composite products provide great peace of mind as they are termite resistant, offering diverse applications in any environment.

#### Fire retardant and water resistant

Fire retardant and water resistant means that you can be reassured that WPC / Biowood Wood-Plastic Composite architectural products offer great protection and can withstand whatever nature decides to throw at it, offering you peace of mind no matter what environment our products are used in.

### Mould and mildew resistant

Not only are WPC / Biowood Wood-Plastic Composite architectural products fire retardant and water resistant, they are also resistant against mould and mildew. This means that it can be used for a wide range of applications in almost any environment.

HIGH PERFORMANCE PREMIUM WPC

### An added value to your investment

WPC offers a wide range of quality products that allow you to easily improve the aesthetics of any environment and add value to your investment.

### A proven time-tested product in Australia

Testing in the harsh Australian climate environment means that not only are WPC / Biowood Wood-Plastic Composite architectural products visually appealing, they are resistant against the elements of nature and are designed to last even in the toughest conditions, making it the reliable and smart choice.

### No splinters, cracks or rot

You no longer have to worry about those unwanted splinters, cracks or rot developing as WPC/Biowood Wood-Plastic Composite architectural products are low maintenance and environmentally friendly.

#### Ideal for residential and commercial use

Innovative, industry leading Wood-Plastic Composite architectural products that have been time tested in tough Australian conditions mean that WPC / Biowood products are ideal for a wide range of applications in residential and commercial use.

### FEATURE AND BENEFITS OF WPC PRODUCTS



The ability to withstand all weather



Resistant to water



Anti-termite



No hazardous



Long life



Can be fixed with screws



Can be recycled after their use



May be applied as required



Against ignition



SAVE THE NATURAL TREE, USE THE FARM TREE



### SURFACE FINISH APPEARANCE



# Sanding Sanding Embossed **Brush Sanding**

### WPC COLOUR CHART



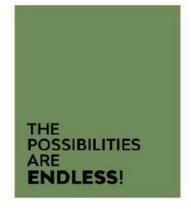
NOTE: Colour may different with actual colour. Please ask for the actual sample colour.

## IMAGINE WHAT WPC COMPOSITE **PRODUCTS CAN DO**



Cladding Internal/External Wall Panel Ceiling Flooring

Screening/Sun Shades Facades Louver/Blade Pole/Beam/Fence/Lath **Furniture** 





























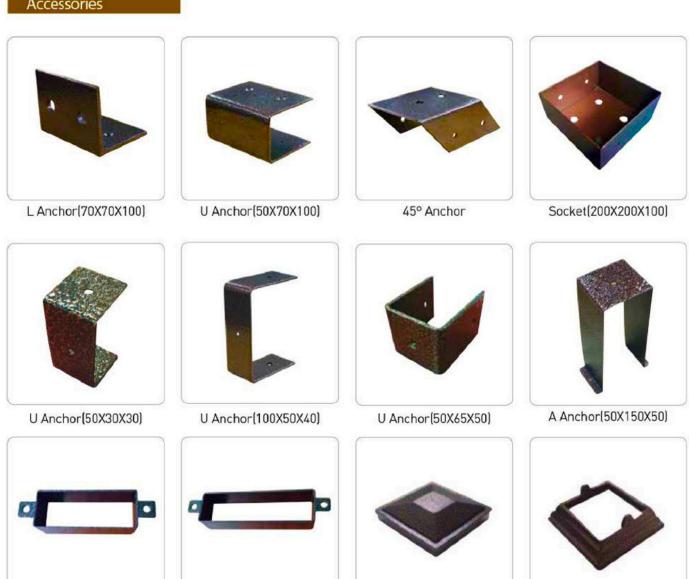




### **Smart Louver**

Socket(50X150X50)

#### Accessories



Pillar Cap

Pillar Bottom Bracket

Socket(50X200X50)



### **Smart Louver**

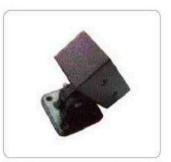
### Accessories



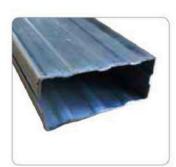
Horizontal Handrail Bracket



Vertical Handrail Bracket



Horizontal Handrail Movable Bracket



Reinforcement Steel (75X33)



Reinforcement Steel [75X75]



Reinforcement Steel [34.5X46.5]

As giving a geometric pattern change under moderation, it provides visual pleasure in the urban space, and as the wood exterior gives cozy and warm feeling, the architecture apace direction is excellent. Because of the wood feeling surface color without destroying green landscape, it is suitable for construction at the place where is many trees like park.

## **SPECIFICATION OF WPC BIOWOOD**

PROPERTY	STANDARD	RESULTS
Density(kg/m³)	ASTM D6117 : 2016	1178 kg/m³
Shore D Hardness, median	ASTM D6117 : 2016	68
Water Absorption (%)	ASTM D6117 : 2016	After 2 Hours - 0.08%
	ASTM D6117 : 2016	After 24 Hours - 0.47%
Nail Pull Resistance	ASTM D6117 : 2016	276N
Maximum Tensile Strength (Mpa)	ASTM D6117 : 2016	6.1 Mpa
Modulus of Elasticity (Mpa)	ASTM D6117 : 2016	1110 Mpa
Elongation at break (%)	ASTM D6117 : 2016	1.2%
Flexural Strength (Mpa)	ASTM D6117 : 2016	23.6 Mpa
• Modulus of Elasticity (Mpa)	ASTM D6117 : 2016	2251 Mpa
Maximum Compressive Strength (Mpa)	ASTM D695 : 2002a	193 Mpa
Coefficient of Thermal Expansion	ASTM D6117 : 2016	A) After a1 (40 to 70° C): 53.7 μm/m°C
	ASTM D6117 : 2016	B) a2(95 to 105°C) 81.4 μm/m°C
Izod Impact Strength (With Notched), avarage	ASTM D6117 : 2016	14.2 J/m
Nail Withdrawal, Verticle Withdrawal	ASTM D6117 : 2016	446 N
Nail Withdrawal, Horizontal Withdrawal	ASTM D6117 : 2016	349 N
Screw Withdrawal, Verticle Withdrawal	ASTM D6117 : 2016	2490 N
Screw Withdrawal, Horizontal Withdrawal	ASTM D6117 : 2016	1634 N
Fire Test	A) British Standard 476 : Part 6 : 1989	Class 2
	B) British Standard 476 : Part 7 : 1997	Class 2
	C) ASTM E84 : 2009c	Class B
Formaldehyde	ENV 717-1:2004	Pass

<sup>\*</sup>Lead (Pb), Cadmium (Cd), Chromium Hexavalent (Cr<sup>6+</sup>), Chromium (Cr), Mercury (Hg)

<sup>\*\*</sup>Halogenated Solvent, Aromatic Solvent

<sup>\*\*\*</sup> ND - Not Detectable

## **SPECIFICATION OF WPC BIOWOOD**

PROPERTY	STANDARD	RESULTS
Heavy Metal*	HS-GC-MSD	N.D***
Solvent**	HS-GC-MSD	N.D***
Linear Thermal Expansion Coefficient	ASTM D6117 : 2016	27.7μm/m.°C
Compression Strength (at 50% deformation)	ASTM D695-08	181
Compressive Strength	ASTM D6117 : 2016	24.6 Mpa
Vicat Softening temperature	ASTM D6117 : 2016	84°C
Mechanical fastener holding test	ASTM D1037-06a Section 16	777.0N
Impact resistance	ASTM D4495-00(2005)	471
Specific gravity	ASTM D2395-07a Method A	0.7415
Moisture content	ASTM D1037-06a section 6	0.27%
Total Volatile Organic Compounds Emissions	ASTM D5116-06	Pass
Formaldehyde Emission Rate	ASTM D5116-06	Pass
Phenylcyclohexene Emission Rate	ASTM D5116-06	Pass
Total Phthalates Emission	ASTM D5116-06	Pass
Total Particles Emission	ASTM D5116-06	Pass
Ignitability	AS / NZS 1530.3:1999	13/20
Spread of Flame	AS / NZS 1530.3:1999	0/10
Heat Evolved	AS / NZS 1530.3:1999	1/10
Smoke Developed	AS / NZS 1530.3:1999	7/10
Against Subterranean Termite	ASTM D3345-08	PASS







# Wood Plastic Composite, WPC

























