BIOWOOD USA

WOOD PLASTIC COMPOSITE

ARCHITECTURAL GREEN RESOURCE MATERIAL

- **Certified by**

ISO 9001: 2015 CERT NO.: 793555

ISO 14001 : 2015 Cert.No. : 760344

- **Member of**

• Our Product Range

Our company provides a wide range of WPC products ranging from Wood Plastic Composite Biowood pellets, flooring, decking, ceiling, louver, cladding, wall panel, screening, street furniture, and railing series. We also allow our customer to customize WPC product with their own requirements to better suit their needs, and to provide a better solutions to our customers in DIY market, Building Systems and constructions.

What Wood Plastic Composite products can do?

www.BiowoodUSA.com

. CLADDING

. INTERNAL/ EXTERNAL WALL PANEL

.CEILING

.FLOORING

.DECKING

. SCREENING/ SUN SHADES

. FACADES

.LOUVER/ BLADE

.POLE/ BEAM/ FENCE/ LATH

.FURNITURE

BioWood USA®

FEARTURE AND BENEFIT of WPC MATERIALS

"Save the natural tree, use the farm tree"

www.BiowoodUSA.com

OUR MISSION

To keep our global environment greener and minimize deforestation, by considering resource and energy use to manufacture such products, Biowood USA brands attempts to make people aware by introducing and implementing innovations and ideas such as using our Recyclable, composite wood, and raising awareness of the amount of resources and energy involved. By using our composite wood, you are contributing to sustaining resources for today's future – a perfect interaction between ecology and efficiency.

WHY CHOOSE US

- **Maintain the natural timber look**

Wood-Plastic Composite Biowood 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.

WHY CHOOSE US

- **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. Wood-Plastic Composite Biowood architectural products offer excellent durability without having the typically associated weight compromise.

WHY CHOOSE US

Fire retardant and water resistant

Fire retardant and water resistant means that you can be reassured that Wood-Plastic Composite Biowood 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.

WHY CHOOSE US

- **Termite resistant**

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

WHY CHOOSE US

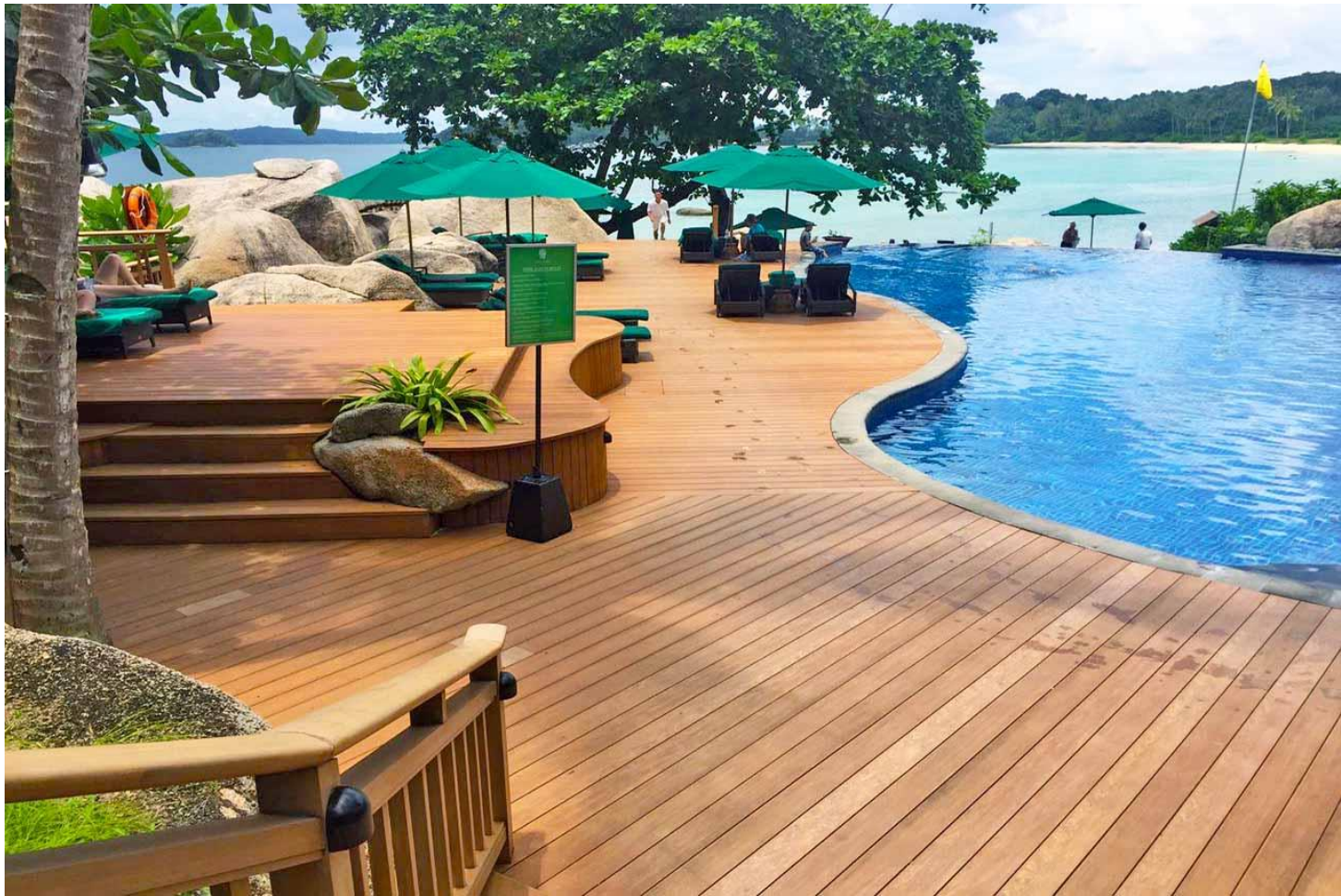
- **Mould and mildew resistant**

Not only are Wood-Plastic Composite Biowood 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.

WHY CHOOSE US

- **An added value to your investment**

Wood-Plastic Composite Biowood offers a wide range of quality products that allow you to easily improve the aesthetics of any environment and add value to your investment.



WHY CHOOSE US

- **A proven time-tested product in Australia**

Testing in the harsh Australian climate environment means that not only are Wood-Plastic Composite Biowood USA 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.

WHY CHOOSE US

- **No splinters, cracks or rot**

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

WHY CHOOSE US

- **Ideal for residential and commercial use**

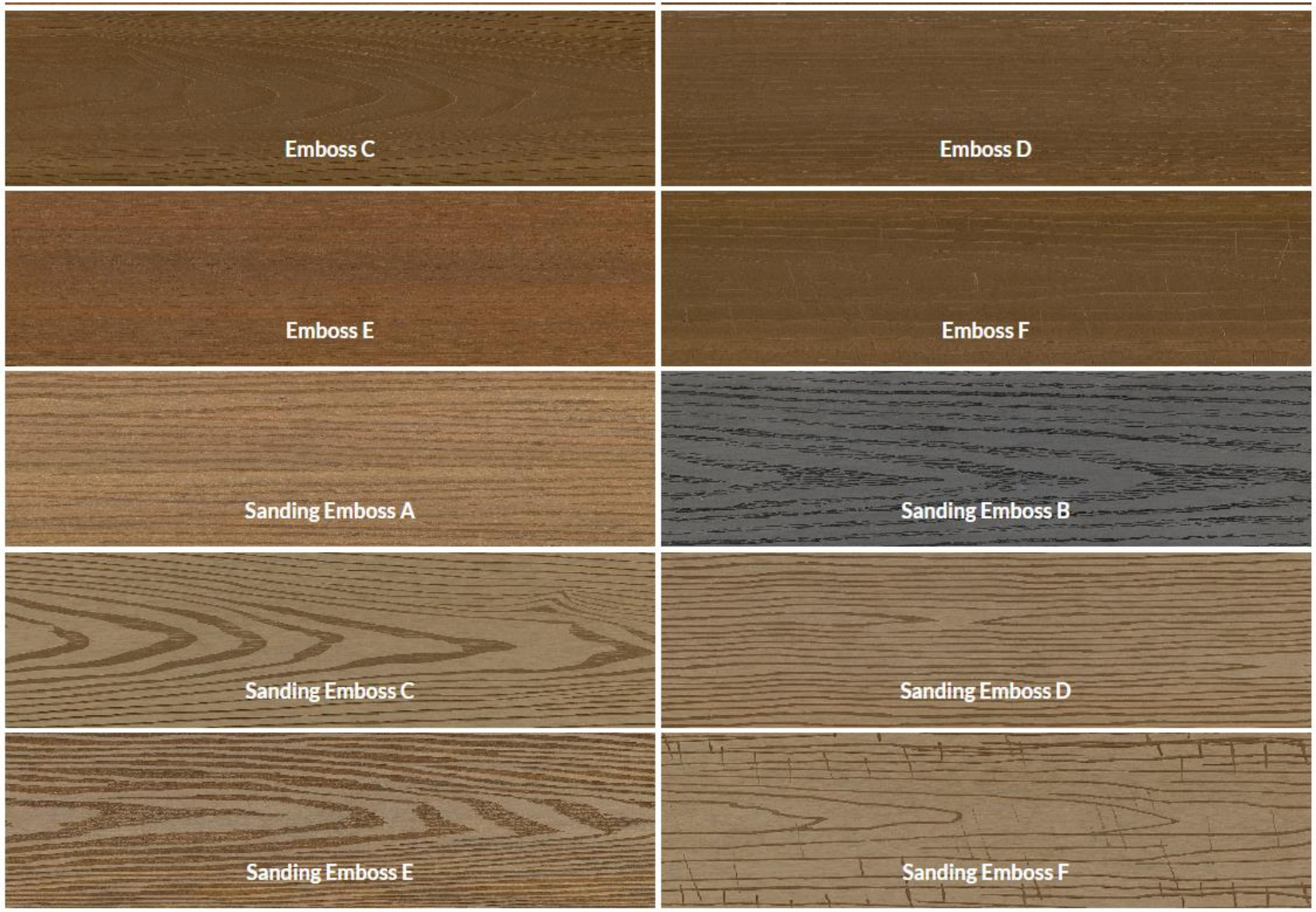
Innovative, industry leading Wood-Plastic Composite architectural products that have been time tested in tough Australian conditions mean that Biowood products are ideal for a wide range of applications in residential and commercial use.

SURFACE FINISH APPEARANCE

- Distinct surface finish appearance that we are able to produce as required on your choice of WPC Biowood USA Products.

SURFACE FINISH APPEARANCE

- Distinct surface finish appearance that we are able to produce as required on your choice of WPC Biowood USA Products.



TEXTURE RANGE

- Realistic textures to beautify and upgrade your space to suit your needs and budget.

TEXTURE RANGE

- Realistic textures to beautify and upgrade your space to suit your needs and budget.

SPECIFICATION OF WPC BIOWOOD

PROPERTIES	STANDARD	RESULTS
Density	ASTM D2395 : 2014	1178 kg/m³
Izod Impact Strength (With Notched)	ASTM D256 : 2010e1	14.2 J/m
Shore D Hardness	ASTM D2240 : 2015	68
Water Absorption	ASTM D1037 : 2012 Section 23 Method A	A) After 2 hours 0.08 %
		B) After 24 hours 0.47 %
Moisture Content	ASTM D1037-06a Section 6	0.27 %
Flexural Properties	ASTM D6109 : 2013	A) Flexural Strength 23.6 N/mm²
		B) Flexural Modulus 2251 N/mm²
Tensile Properties	ASTM D1037 : 2012	A) Maximum Tensile Strength 6.1 MPa
		B) Tensile Modulus 1110 MPa
		C) Elongation at Break 1.2 %
Compressive Properties	ASTM D695 : 2015	24.6 N/mm²
Coefficient of Thermal Expansion	ASTM E831 : 2014	A) α1 (40 to 70 °C) 23.6 µm/m°C
		B) α2 (95 to 105 °C) 81.4 µm/m°C
Linear Coefficient of Thermal Expansion	ASTM D6341 : 2016	27.7 µm/m°C
Vicat Softening Temperature	ASTM D1525	A) At 1 kg Weight 84°C

SPECIFICATION OF WPC BIOWOOD

Vicat Softening Temperature	ASTM D1525	A) At 1 kg Weight 84°C
		B) At 5 kg Weight 69°C
Screw Withdrawal	ASTM D6117 : 2016	A) Vertical Withdrawal 2490 N
		B) Horizontal Withdrawal 1634 N
Nail Pull Resistance	ASTM D1037 : 2006 Section 14	276 N
Nail Withdrawal	ASTM D6117 : 2016	A) Vertical Withdrawal 446 N
		B) Horizontal Withdrawal 349 N
Impact Resistance	ASTM D4495-00 : 2005	47 J
7 Days Emission Test	ASTM D5116 : 10,	
	a) Total Volatile Organic Compounds (TVOC)	1. Emission Rate 0.14 mg/m³ (Pass)
		2. Concentration 0.07 mg (Pass)
	b) Formaldehyde Emission	1. Emission Rate <0.01 mg/m²/h (Pass)
		2. Concentration <0.01 mg/m³ (Pass)
	c) 4-Phenylcyclohexene	<0.002 mg/m²/h (Pass)
	d) Total Phthalates	<0.005 mg/m³ (Pass)
Analysis Halogenated Solvent & Aromatic Solvent	HS-GC-MSD	Not Detected

SPECIFICATION OF WPC BIOWOOD

PROPERTIES	STANDARD	RESULTS
Analysis Heavy Metal	ICP-AES,	
	1. Mercury, HG	Not Detected
	2. Lead, PB	Not Detected
	3. Cadmium, Cd	Not Detected
	4. Chromium, CR^6	Not Detected
Analysis of Hexavalent Chromium	UV-Vis Spectrometer	Not Detected
Analysis of Tin (Including Organic Tin Catalyst or Stabilizers)	ICP-AES & GC-MSD	Not Detected
Analysis of Organotin	GC-MSD	Not Detected
Analysis of Pentachlorophenol (PCP)	GC-MSD or HPLC	Not Detected
Analysis of Tar Oils	GC-MSD or HPLC	Not Detected
Analysis of Analine Based Amines	GC-MSD or HPLC	Not Detected

SPECIFICATION OF WPC BIOWOOD

PROPERTIES	STANDARD	RESULTS
Analysis of Aziridine or Polyaziridines	GC-MSD or HPLC	Not Detected
Analysis of Phthalates	GC-MSD or HPLC,	
	1. Extractable Bis (2-Ethylhexyl) Phthalate, DEHP	Not Detected
	2. Extractable Dibutyl Phthalate, DBP	Not Detected
	3. Extractable Diallyl Phthalate, DAP	Not Detected
	4. Extractable Butyl Benzyl Phthalate, BBP	Not Detected
Analysis of Flame Retardant	GC-MSD or HPLC,	
	1. Polybrominated Diphenyl Ethers (Mono-Deca)	Not Detected
	2. Extractable Monobromo Diphenyl Ethers	Not Detected
	3. Extractable Dibromo Diphenyl Ethers	Not Detected
	4. Extractable Tribromo Diphenyl Ethers	Not Detected
	5. Extractable Tetrabro Diphenyl Ethers	Not Detected
	6. Extractable Pentabromo Diphenyl Ethers	Not Detected
	7. Extractable Hexabromo Diphenyl Ethers	Not Detected
	8. Extractable Heptabromo Diphenyl Ethers	Not Detected
	9. Extractable Octabromo Diphenyl Ethers	Not Detected
	10. Extractable Nonabromo Diphenyl Ethers	Not Detected
	11. Extractable Decabromo Diphenyl Ethers	Not Detected
	12. Short-chained Chlorinated Organic Flame Retardants	Not Detected

SPECIFICATION OF WPC BIOWOOD

PROPERTIES	STANDARD	RESULTS
Analysis of Formaldehyde	UV-Vis Spectrometer	Not Detected
Formaldehyde	ENV 717-1 : 2004	Pass
Asbestos	NIOSH 9002 - Asbestos (bulk)	Not Detected
Fungi Test	ASTM G21 : 15 (28 Days)	0 (No Growth)
Subterranean Termite	ASTM D3345-08	Pass
Fire Test	1. ASTM D 635-14	HB
	2. ASTM E 84 : 2009c	Class B
	3. BS 476 : Part 6 : 1989 + A1 : 2009	Class 2
	4. BS 476 : Part 7 : 1997	Class 2
	5. AS 3959 : 2009	Pass / BAL-29
	6. AS 3837 : 1998	Group 3
	7. AS 1530.3 : 1999	a. Ignitability : 13/20
		b. Spread of Flame : 0/10
		c. Heat Evolved : 1/10
		d. Smoke Developed : 7/10

R&D DEPARTMENT

HS-GC-MSD Heavy Metal Content Test	**ASTM D2395:2014** Specific Gravity Test	**ASTM D1037:2012** Nail Pull Resistance Test	**ASTM D695:2015** Compressive Properties Test	**ASTM D1525:2009** Vicat Softening Point Test
EN717-3 Formaldehyde Contents Test	**ASTM D2240:2015** Shore D Hardness Test	**ASTM D638:2003** Tensile Properties Test	**ASTM E831:2014** Coefficient of Thermal Expansion Test	**ASTM D4495-00:2005** Impact Resistance Test
EN717-1:2004 Formaldehyde Emission Test	**ASTM D1037:2012 SECTION 23 METHOD A** Water Absorption Test	**ASTM D6109:2013** Flexural Properties Test	**ASTM D6341:2016** Linear Coefficient of Thermal Expansion Test	**ASTM E84:2009C** Fire Performance Test

- Our R&D department continues to develop and test our innovative products to meet our client's international standard requirements. Below are some of the tests that we have done.
- All tests are either done in TUV – PSB Singapore, Sucofindo-Indonesia, SGS-China, Sirim Malaysia, CSIRO Australia etc. Contact our sales representative for our more detailed test reports.

R&D DEPARTMENT

ASTM D696:2008 Thermal Expansion Test	**ASTM D6117:1997** Nail Withdrawal Test	**ASTM D570:1998** Water Absorption Test	**ASTM G21:2015** Fungi Test	**AS/NZS 3837:1998** Bush Attack Level 25kW/m² Test
ASTM D256:2010E1 Izod Impact Test	**ASTM D792:2000** Specific Gravity & Density Test	**ASTM D5116:2010** 7 Days Organic Emissions Test	**ASTM D3345-08** Subterranean Termite Test	**AS/NZS 3959:2009** Bush Attack Level 29 kW/m² Test
ASTM D6117:2016 Screw & Nail Withdrawal Test	**ASTM D635:2014** Flame Test	**ASTM D1894:2001** Coefficients of Friction Test	**AS/NZS 1530.3:1999** Fire Test	**AS/NZS 4856:2004** Coefficients of Friction with Intergrain Ultradeck with Ultra Grip Coating Test

- Our R&D department continues to develop and test our innovative products to meet our client's international standard requirements. Below are some of the tests that we have done.
- All tests are either done in TUV – PSB Singapore, Sucofindo-Indonesia, SGS-China, Sirim Malaysia, CSIRO Australia etc. Contact our sales representative for our more detailed test reports.

R&D DEPARTMENT

AS/NZS 3837:1998

Bush Attack Level 25 kW/m² Test

BS 476 PART 6 : 1989 + A1 : 2009

Fire Propagation Test

BS 476 PART 7 : 1997

Spread Of Flame Test

SGBC GREEN STANDARD

Analysis of Hazardous Substances

NIOSH 9002

Asbestos Test

TUV SG IN-HOUSE LAB TEST METHOD

Measurement of Gamma Radiation

TUV SG IN-HOUSE LAB TEST METHOD

Selenium Test

TUV SG IN-HOUSE LAB TEST METHOD

Gamma Radionuclide Test

- Our R&D department continues to develop and test our innovative products to meet our client's international standard requirements. Below are some of the tests that we have done.
- All tests are either done in TUV – PSB Singapore, Sucofindo-Indonesia, SGS-China, Sirim Malaysia, CSIRO Australia etc. Contact our sales representative for our more detailed test reports.

PRODUCTS

BIOWOOD USA

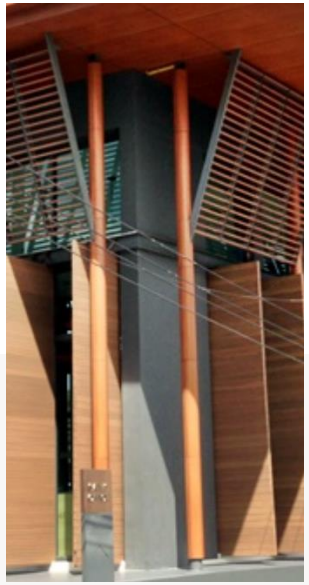
PRODUCTS

ACCESSORIES

26 PROFILES

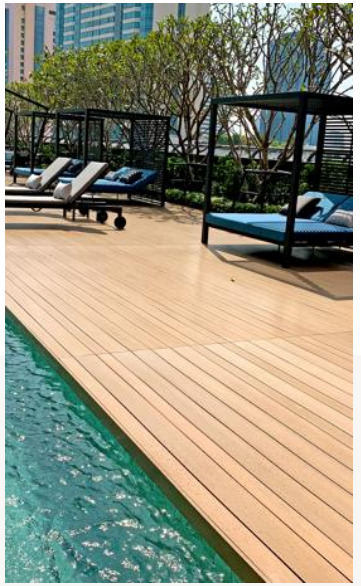
CEILING

23 PROFILES



COLUMN PANEL

13 PROFILES



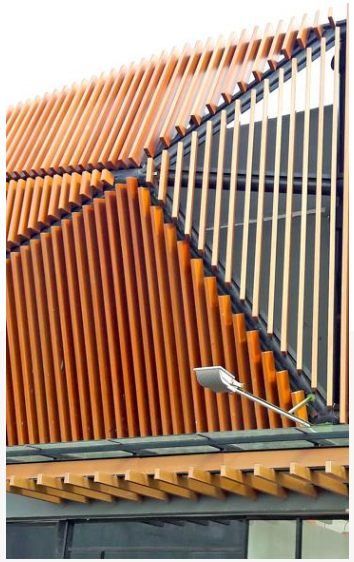
DECKING

28 PROFILES

DOOR SYSTEM

10 PROFILES

PRODUCTS



FAÇADE SCREEN

13 PROFILES

FENCING

11 PROFILES

FLOORING

16 PROFILES

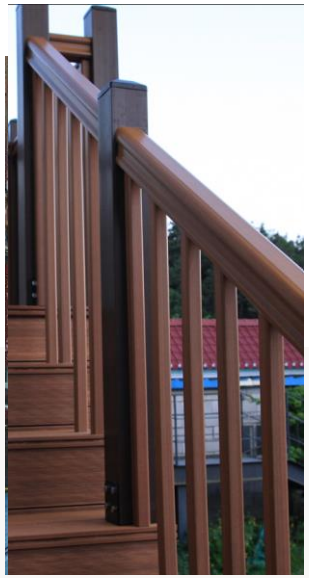
HALF LOG - INDOOR

3 PROFILES

HALF LOG - OUTDOOR

3 PROFILES

PRODUCTS

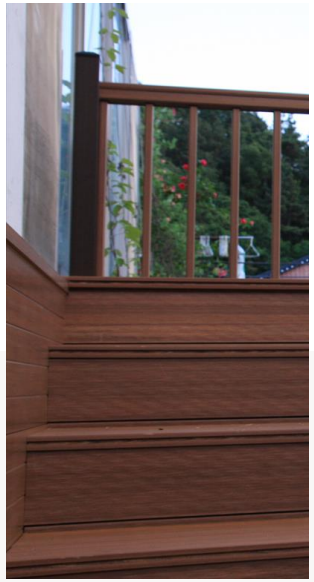


HANDRAIL &RAILING SYSTEM

14 PROFILES

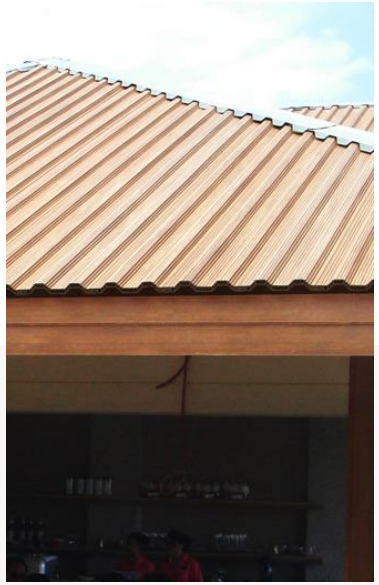
LOUVER

8 PROFILES



STAIRCASE

2 PROFILES



ROOF

3 PROFILES

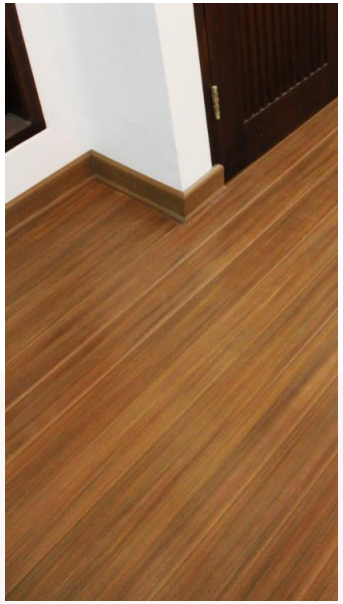
SIDE 4 SIDE - INDOOR

25 PROFILES

PRODUCTS

SIDE 4 SIDE - OUTDOOR

22 PROFILES



SKIRTING

12 PROFILES

WALL PANEL - INDOOR

23 PROFILES

WALL PANEL - MULTIPURPOSE

21 PROFILES

WALL PANEL - OUTDOOR

37 PROFILES

BIOWOOD USA

BioWood USA®

WELCOME TO WPC ARCHITECTURAL MATERIAL WORLD

We serve

Distributors in 50 states, Canada and Latin America

Owners

Architectural Firms

Interior Design Firms

Contractors

Please contact us:

hana@biowoodusa.com

Phone/Whatsapp: +1-786-685-8006

2801 NW 74th Avenue, Suite 108

Miami, Florida 33122 USA

www.biowoodUSA.com