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HINGSWood

Living a sustainable life



HINGSWood

Founded in 1987, ABS has been supplying building products in Singapore, ABS is one of the leading suppliers of Ironmongery, Signage and Flooring Product.

Re-engineering Timber

• Gaining in popularity are composite decking materials, composed primarily of a mix of recycled plastic and wood fibers. These materials are famous for their low-maintenance requirement: no sanding, refinishing staining ever.

Durability

• Composite decking is designed for maximum durability. It resists fading, staining, scratching and mold, and won't rot, crack or warp. It's also insect, proof and splinter-free, making it safer and more comfortable for families with kids and pets.

Low maintenance

• With composite decking, you never need to worry about sanding, staining or painting. Just an occasional soap- and - water cleaning is ensuring that it will all that's needed to maintain stability and beauty for decades. ABS decking even comes with a 5-year Warranty, continue to look and perform as well as it was installed.

Aesthetics

• Featuring high-definition wood grain patterns and rich, saturated colors, composite decking looks and feels more natural than ever before. In addition to the range of decking looks available, homeowners also can also can find a wide selection of composite accessories, such as railings, stairs, gates, pergolas and furniture to create a truly customized outdoor space.

Sustainability

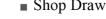
• Composite decking provides the look and feel of wood without the environmental impact. The deck boards are made using recycled content including reclaimed industrial wood scraps and recycled plastic from common items such as shopping bags and newspaper sleeves.

Why HINGSWood

- In-house installer
- Shop Drawing

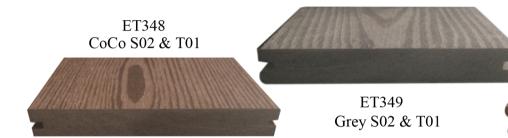
- Ex-stock
- 5-year warranty*

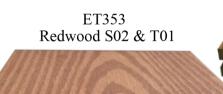






Esteem Series (Ex-stock items)





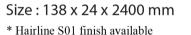


ET354 Teak S01 & T01



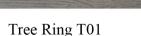






indent only

Hairline S01* Regular S02

















Technical Sheet

1 Storage in Boiling water (100°C)		
Test item	Result (5h)	Requirement
Swelling in thickness	1.10%	≤ 4.5%
Swelling in width	0.20%	≤0.8%
Swelling in length	0.10%	≤ 0.5%
Water uptake	2.20%	≤ 8%

Test method:

"Quality and Testing Specifications for Terrace Decking made from Wood-Polymer Composites (Version: 2013-01-01, "Quality Association for Wood-based Panels,registered association" Giessen, Germany)" Section 3.2 and EN 1087-1:1995 Test principles:

After 5h storage in boiling water, the test pieces are immediately submerged in cold water (20±2°C) for 15 minutes. Later, be stored at room climate for 120 minutes.

2. Cold water immersion 28days		
Test item	Result	Requirement
Swelling in thickness	0.20%	≤ 0.45%
Swelling in width	0.40%	≤1%
Swelling in length	2.90%	≤ 4.5%

Water uptake

"Quality and Testing Specifications for Terrace Decking made from Wood-Polymer Composites (Version: 2010-01-29, "Quality Association for Wood-based Panels, registered association" Giessen, Germany)" Section 3.9 and EN 317:1993 Test principles:

5.60%

The profiles are immersed in cold water (20±2 °C) during 28 days.

3. Performance under cyclic climatic str	ess
--	-----

est item	Result	Requirement
erformance under	Reduction of modulus of rupture	≤20%
cyclic climatic stress	11.4%	

"Quality and Testing Specifications for Terrace Decking made from Wood-Polymer Composites (Version: 2013-01-01, "Quality Association for Wood-based Panels,registered association" Giessen, Germany)" Section 3.5, 3.1.EN321:2001 and EN 310:1993

Test principles:

The first cycle of climatic stress:28 days storage in cold water(20±1°C)→24h freezing (-25°C)→72h drying(72±2°C),

Two further storage cycles:72h cold water storage(20±1°C)→24h freezing (-25°C)→72h drying(72±2°C).

ı	4. Falling mass impa	ct		
	Test item	Result	Test method:	
	Performance under	No surface crack on the test pieces	None of the test pieces shall show	
	falling ball test		with a length exceeding 10mm	
ı		The maximum residual impact	The maximum residual impact	

depth shall not exceed 0.5mm

Striking ball surface radius:25mm Strike mass:1000kg

Drop height:700mm Support span:200mm

depth was 0.24mm

"Quality and Testing Specifications for Terrace Decking made from Wood-Polymer Composites (Version: 2013-01-01, "Quality Association for Wood-based Panels, registered association" Giessen, Germany)" Section 3.6 and EN 477:1995

5、 Slip resistance		
Test item	Result	Requirement
Slip Resistance	С	С

≤9%

"Quality and Testing Specifications for Terrace Decking made from Wood-Polymer Composites (Version: 2013-01-01,

"Quality Association for Wood-based Panels,registered association" Giessen, Germany)" Section 3.3 and DIN 51097:1992

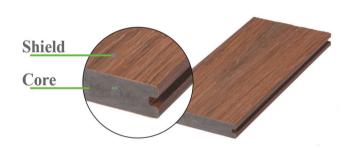
- 1	6 Coefficient of linear thermal expansion	3.5×10 /K	
	Test item	Result	Requirement
	Linear thermal expansion Coefficient	3.5×10-5/K	5×10-5/K
	(-20°C+60°C)		

"Quality and Testing Specifications for Terrace Decking made from Wood-Polymer Composites (Version: 2013-01-01, "Quality Association for Wood-based Panels,registered association" Giessen, Germany)" Section 3.7 and ISO 11357-2:1999

Composition in Hingswood Products	
Name	Percentage %
Recycled Plastic HDPE (A Grade)	30
Wood Fiber	50~60
Process Aids	5~6
Colorant	2~2.5
Mineral Filler	8~10
Remark: Process Aid Includes Lubricant, Anti-UV, Antioxidant and counling	agent. All the Material is Recycled

Shield Series

■ Additional of **impermeable layer of** protection from scratches, stains and fading.



■ Option: Fireproof (New Feature) Fire resistance decking and wall cladding available Comply with EN Standard Fire Resistance Level: Class Bfl

■ Fire resistant is ON REQUEST & Color is CUSTOMIZED

















Magic Grey

Abrasion Resistance (SGS I	EST REPORT No.: GZIN160601093-01CCM)
Test item	Result	Requirement
Abrasion Resistance	Wear index: 19mg / 1000 revolution	Specimen : 100 x 100 x 4.60mm 1 pc Type of abrasive wheel: CS-10 Load: 1000g / wheel (total 2000 g) Number of cycles: 1000

Technical Sheet of Decking (VHI)

Rotational Frequency: (5±1) r/min

2. Surface Soundness (SGS TEST	REPORT No.: GZIN160601093	-01CCM)
Test item	Result	Requirement
Surface Soundness	>0.71 MPA	Specimen: 50.0 x 50.0 x 22.6 mm Bonding Area: 1000 mm ² Testing Speed: 0.5 mm / min
Test method:		operation and the second
With reference to EN311:2002 and Clie	ent's requirement	

Test item	Result	Requirement Specimen Thickness : 22.7 mm
Rockwell Hardness	83.3R	Lab Environmental Condition: 23±2°C, 50±5% RH

Test item		Result	Test method:
Scratch Resistance	Rating1		EN438-2:2005 Section 25



Noted: Slin-resistance classification based upon the corrected mean overall acceptance apple

Rating 5 6N > 6N Rating 4 4N 6N	scratch
Rating 4 4N 6N	
Rating 3 2N 4N	
Rating 2 1N 2N	
Rating 1 - 1N	

Anti-slip property (INTERTET REPORT No.: 1	70527113GZU-003)	
Test item	Result	Requirement
Me	an overall acceptance angle :	
Slip Resistance	14.6"	DIN 51130-2014
	Slip resistance class: R10	

Corrected mean overall acceptance angle	Slip resistance class
6°to 10°	R9
Over 10°up to 19°	R10
Over 19°up to 27 °	R11
Over 27°up to 35°	R12
Over 35°	R13

6. Falling mass impact resistance (INTERTET REPORT No.: 170527113GZU-003)						
Test item	Test item Result					
Falling mass impact resistance	None of 10 test specimens showed a crack Maximum depth of residual indentation:0.16mm	Distance between supports of 200 mm Radius of striker: 25 mm Mass of Striker: 1 kg Falling height: 700 mm				



Comfy Series

■ Soft, Comfortable & Safe Surface of latest technology Special in any way you can imagine them to be.

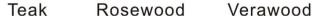




Specification					
Width	Thickness				
143 mm	23 mm				
150 mm	23 mm				
	Width 143 mm				





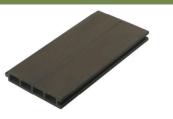


Re-engineering Timber Cladding

■ Wall cladding, wall panel and fencing boards are used for indoor and outdoor decoration that gives you a **simple** and **invisible installation**.











Wall Cladding

Wall Panel

Fencing Board







- Waterproof
- 100% recyclable
- No crack, no rot and no splinter
- Dampproof
- Insects resistance



Teak





Rose Red



Rust Red





Brown







Black

Re-engineering Timber

Re-enginnering Timber Ceiling

 Used for interior ceiling in high space. Can adjust suspened hanger to get any suitable height. Indoor WPC ceiling is developed with rich colors and natural textures to embody wood finish, can widely used in both commercial and residential space.



Indented Groove

Shallow Groove

A-Groove



H-Groove









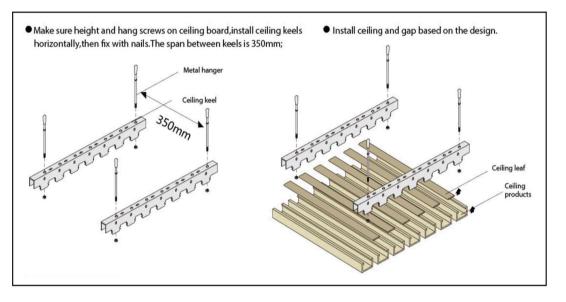
Standard Groove

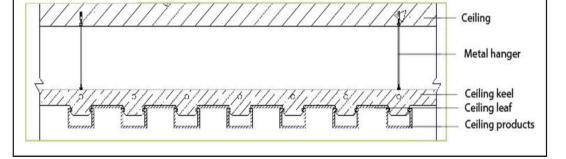












- - Easy to install
 No toxic release
- Inflaming retarding
- Natural color Water resistant Low maintenance No painting & paintable



- Esthec was founded 50 years ago. Today, Esthec is used on hundreds of cruise ships, and used in many outdoor residential and commercial **applications**. Esthec material not only looks good but also has tremendous -ly improved functional characteristics as well. Esthec is exclusively distributed by ABS in Asia.
- The material can withstand severe weather conditions and is **non** slippery. In addition, it does not absorb water, resulting in minimal growth of mosses and algae. The material is also fire retarding and highly cost-effective.





Colour for Decking











Aroma







Mood





Essence

Blanc de Blancs

Emotion

Delicate

Mystery

Fascinate

Composition

■ Liquid material consist of 25 ingredients including **natural resins**, **natural fibres**, **minerals** and colour pigments which are recyclable

Advantages

- Recyclable
- Slip Resistant (R13 rated)
- 40-year track record

- Durable
- **■** Wear and Impact Resistant
- No hazardous materials (no PVC)
- Lightweight Click System (for efficient and quick installation)
- Low maintenance, minimal bacterial growth, repellant to any liquid
- Creative Freedom. 9 fashionable colours and on-demand colours
- No fumigation procedures : zero impact on import
- Low heat co-efficiency: virtually no impact to materials in extreme temperatures

Applications

• Outdoor applications like decking at hotels and resorts, roof top gardens, high end residential balconies, pool decks etc

Color for Profile















Biscuit



Honey



Truffle





Saddle Chocolate Smoke

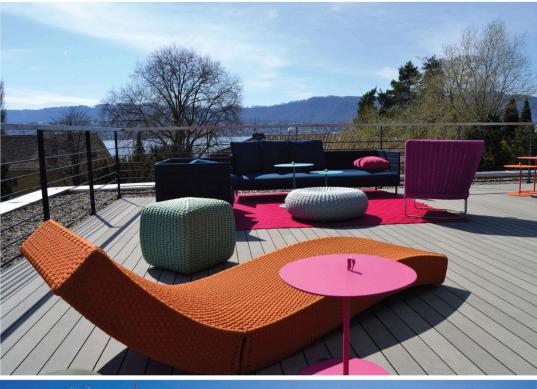








Blanc de Platinum Champagne









HINGS Wood FRC

Fibre Cement Decorative Decking

- *HINGSWOOD FRC* is Fibre Cement Decorative Decking carried by ABS. It is eco-friendly wood replacement product, combines strength of concrete and beauty of wood.
- HINGSWOOD FRC is suitable for indoor flooring, outdoor and poolside decking etc.

Composition

■ Portland Cement, Cellulose Fibre from Recycled Paper, Calcium Carbonate and Additives

Installation Method

- Adhesive cement (Lay-on)
- Framing support (with Batten/ Substructure)

Advantages

- Termite Free
- Rot Free
- Fungus and Algae Free
- Low Maintenance
- Weather Resistant
- Non Combustible
- Asbestos Free
- No batten required







Wenge

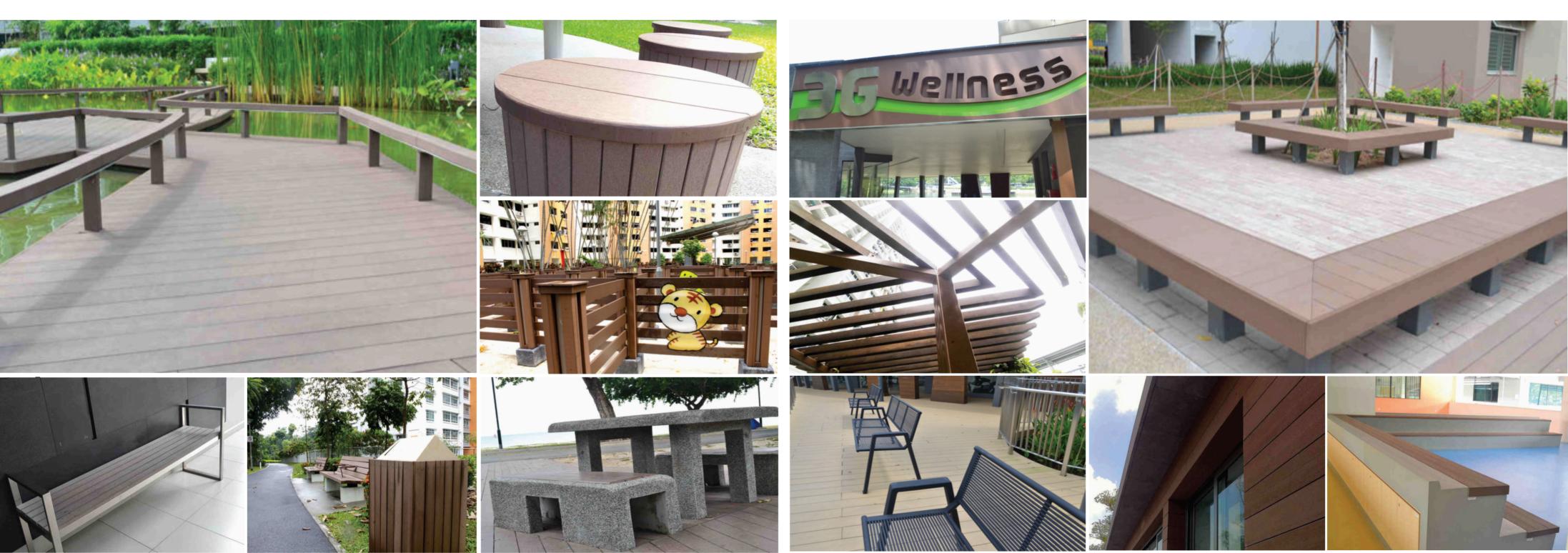
Cherry

Beige









5

HINGSWOOD FRC Fibre Cement Cladding & Ceiling

Fibre Cement Board

- This is a new generation of fiber cement material for cladding and ceiling with technology made the board gain **strength**, **durability** and **elasticity** in one time.
- Composition
- state-of-the-art composition of Elephant Portland Cement,
- Silica
- Special cellulose fiber through Autoclave process
- Application
- Designed for **cladding** and **ceiling** applications both **internal** and **external** usage.

Technical Sheet

Attributes	Test value	Standard
Water expansion rate (24	0.12%	JIS A 5420
hrs. soak)		
Density	1,260 Kg./M3	ASTM C 1185
Resistant to leakage (24 hrs.	Pass	TIS 1427-2540
water contain)		
Water absorption rate	34%	-
Tension force perpendicular	1.0 MPa	JIS A 5905
to the surface		
Modulus of Rapture (Wet	10 N/Sq.mm.	ASTM C 1185
Test)		
Heat Conductivity rate (K)	0.084 W / M c	ASTM C 117
¹ Sound Resistant (STC)	38 dB	BS 2750
Non Flammable , Non combustible	Pass	BS 476 Part 5,6 and 7
2		DG 474D 120 22
² System flame resistant	1 and 2 hrs.	BS 476 Part 20-22
Drying Shrinkage rate (60 c,	0.04%	-
24 hrs.)		
Modulus of Elasticity	4,500 N/Sq.mm.	ASTM C 1185
Bending Radius (4, 6, 8, 10 mm.)	1.0, 1.5, 2.0, 4.0 M.	-

Remarks: 1. When installing 8 mm. It is with light-weight-wall galvanized studs with no sound installation

2. When installed with Rockwool fire-insulation

- Advantages
- High impact strength
- Water-resistance and non-decay
- Termite resistance
- Flexibility for various designs
- Light weight, fast and easy to install
- Better heat resistance



HINGS Wood GFRC

GFRC Glass Fibre Reinforced Cement

- GFRC simulated timber is a product that derives the exact same textures from real wood but have none of its inherent flaws. The use of the product could save an abundance of trees from being deforested to satisfy the aesthetical requirements society demands.
- Composition
- Fine Aggreates

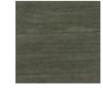
Water

Cement

- Reinforced Steel Bar
- •Alkaline Resistant Fibre
- Advantages
- For decking, cladding & ceiling Termite Free
- Fire proof

- Zero warping
- Environmental friendly
- Flexibility in color
- Low maintenance requirement & durability

Color



Antique



Rustic



Cedar



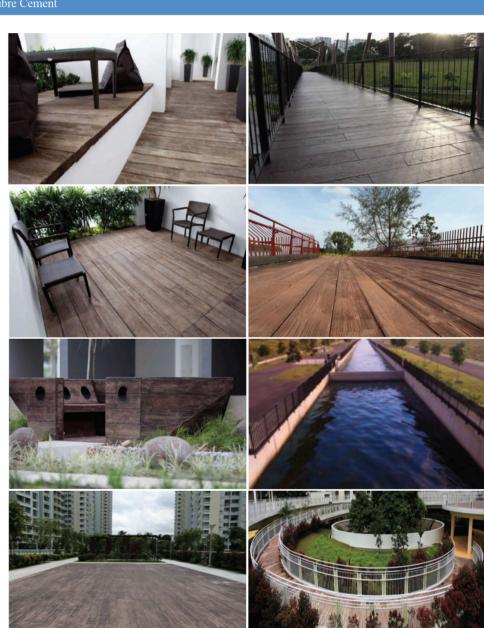
Dark Brown



Maroon

Technical Sheet

Tests	Precast	GFRC	
Compressive Strength (N/mm2)	36	38.5	
Density (Kg/m3)	1990	1970	
Modulus of Rupture (Mpa)	12.41	=	
Class O Certification	Positive	-	
General Skid Resistance Classification	LOW RISK		
*Tested and certified by Setsco & TUV	SUD. All existing reports are	e available upon request	





Adjustable Pedestral System

■ Founded in May 1999, Eurotec GmbH has been transformed into a very successful company renowned internationally. Exclusively distributed by ABS in Asia, Eurotec Adjustable Pedestal System has high load -bearing capacity which is widely used in commercial and residential projects.

Characteristics

- For timber, composite and stone decks
- Three different basic heights 5.3cm, 8.2cm and 11.7 cm
- Two extension rings 4,0 cm and 10,0 cm
- Three head-plate adapters:
- Click-Adapter- 40/60 for the time saving click-on assembly of our aluminium profiles
- L-Adapter- for classical timber joists, composite joists or any modern aluminium profiles
- Stone-Adapter-for the use with stone slabs
- For timber or composite decks, there are four types of pedestrals :
- ECO S-2,5-4,0 cm ECO L-6,5-13,0 cm
- ECO M-3,5-6,55 cm ECO XL-13,0-19,8 cm

Advantages

- High Load-Bearing Capacity of up to **8KN/foot**
- Allowance for up to 4 meter height cavity
- Quick and Easy Assembly
- Stepless Height Adjustment
- Resistant to weather, UV Exposure, insects and rot
- Easy to install and little or no maintenance
- Device accomdation slope up to 10 degree
- German factory's technical advice; number of pedestals optimized











HINGSWood

Outdoor Natural Timber

Natural Outdoor Timber

- ABS also supplies natural outdoor timber, mainly **Balau** and **Chennai** with a great variety of different sizes, to meet the design requirements of your swimming pools, gardens and other landscape areas.
- In additional to the decking, ABS also builds **trellis**, **planter box**, **fence**, **pagoda**, **roof top**, **external wall** and so on with both the natural and composite timber.





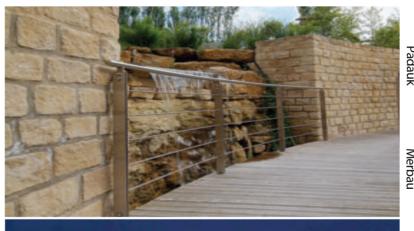




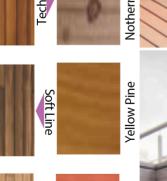


- The **Soft line system**, **invisible fixation** for decking patened in Europe and is manufactured near the Luxembourg border by the Vetedy Group. 5 Species of wood, all class 1 durable (class 4 for France): **Padauk**, **Merbau**, **Ipe**, **Teak** and **Jaya**.
- The group innovates in 2011 with its patened system Techniclic especially designed for claddings, walls and ceilings covering in wood without visible screws, with an incredible speed of installation for a precise finish recognized in numerous countries.















■ Zero Formaldehyde - Zero Formadehyde Vinyl has been specifically developed for environmentally sensitive interior applications. It is an ideal material used in the flooring industry, providing you a healthy environment.

Technical Sheet

■ Safe Indoor air quality - Good indoor air quality improves the personal well-being and health of users. We offers you a peace of mind, knowing you are providing a safe and healthy environment for the users.

■ 99% anti - bacterial

■ Real wood feel (EIR)

■ Complies to B1 fire rating requirements ■ Up to 7mm thickness

Test Property	Test Method	Test principles/require ments	Rating/ Result	Test Property	Test Method	Test principles/require ments	Rating/ Result
Reaction to fire	EN 14041:2004 (clause 4.1)	The specimen shall be tested on one of the two standard substrates specified for floorings in EN 13238:2001 according to the intended end use. The co mposition of the product, including the presence of any fire retardant additive, shall be declared by the m anufacturer prior to type testing.	Efl Refer to Result 1 for further details	Slip resistance	EN 14041:2004 (clause 4.5)	If a claim for slip resistance is made, the floor covering intended to be used in dry and non-conta minated conditions shall have a dynamic coefficient of friction of ≥ 0,30 when tested ex-factory under dry conditions in accordance with EN 13893 and shall be declared as technical class DS. Although such floors may be subjected to occasional	Pass Class DS See Result 4
Content of pentachlorophe nol(PC P)	EN 14041:2004 (clause 4.2)	Resilient, textile and la minate floor shall not contain P C P.In case of where verification is required, if the content is less than 5pp m in the parts of the product, this require ment shall be considered to be met. For laminate floor the method CE N/T R 14823, for textile floor the method CE N/TS 14494 shall be used. For resilient floor verification is not required.	Pass See Result 2		(oldade 1.0)	guarantee the performance under these conditions. If no claim for slip resistance is made, the floor coverings for which no performance has been determined shall be declared as technical class NP D.	
Formaldehyde emission	EN 14041:2004 (clause 4.3)	When formaldehyde-containing materials have been added to the product as a part of the production process, the product shall be tested and classified into one of two classes: E1 or E2. Test For maldehyde class and Require ment Initial E N V Class R elease≤ type 717-1 E1 0.124 mg/ m3 Class R elease> E2 0.124 mg/ m3	Class E1 See Result 3	Electrical behavior (static electricity)	EN 14041:2004 (clause 4.6)	The body voltage, measured in accordance with EN 1815 for resilient and la minate floor coverings or IS O 6356 for textile floor coverings, shall not exceed 2,0 kV Static dissipative floor coverings: The vertical resistance, measured in accordance with E N 1081 for resilient and laminate floor coverings or IS O 10965 for textile floor coverings, shall not exceed 109Ω C onductive floor coverings: The vertical resistance, measured in accordance with E N 1081 for resilient and laminate floor coverings or	N A
Water-tightness	EN 14041:2004 (clause 4.4 refer to EN 13553:2002)	Cover the supporting base with the indicator paper. Place the test specimen on the paper with the use surface side upwards. Place the box over the test specimen and press the support towards the box to ensure water tightness. Fill the box with water to a level of 200 m m above the upper surface of the test specimen. This water level is m aintained for 24h after which the water is drained off. The moisture indicator and the test specimen are	Pass No sign of penetrating water.	Thermal conductivity	EN 14041:2004 (clause 4.7)	IS O 10965 for textile floor coverings, shall not exceed 106Ω When floor coverings are to be installed over an underfloor heating syste m the design thermal conductivity values given in EN 12524 shall be assu med for design calculation purposes. Alternatively, the thermal resistance measured in accordance with EN 12667 may be used.	0.0950 W/(m· K) Refer to Result 5 for further details
		exa mined for any signs of water penetrating the specimen. The test specimen is considered watertight if there is no sign of penetrating water.				Note: NA= Not applicable N C = Not conducted	



Wenge Teak Oak Beech Cotton Tree

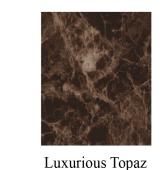
Stone Series



Cherry



Gum-kino



Sal



Aloewood



Pine

Dark Stone













Rainbow

Paint

Types	Size (mm)	Size (inches)	Thickness (mm)	Wearlayer (mm)	Material
Vinyl planks with dry back	152.4*914.4mm; 177.8*1219.2mm; 228.6*1828.8mm	6"*36", 7"*48", 9"*72"	2-3 mm	0.15 -0.5 mm	Original virgin PVC / UV coating
Valinge Click Vinyl Tile	152.4*914.4mm; 177.8*1219.2mm; 228.6*1828.8mm	6"*36" 7"*48" 9"*72" ,	4-7mm	0.15 -0.7mm	Original PVC with fiberglass / UV coating
Special Series	. 203.2*1219.2mm	6"*36", 8"*48"	3mm	0.3mm	Original Virgin PVC with CaCO3 / UV





Crystal







Eir













20



Nano-modified Waterproofing Membrane

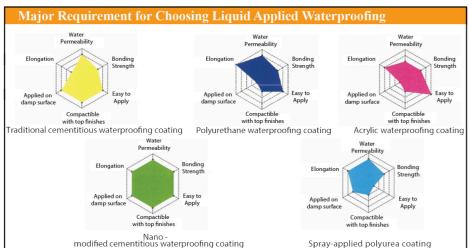
- Traditional cementitious waterproofing has low flexibility and poor bonding strength on concrete substrate.
- HINGSFLOR, with the help and technology support of Nanotechnology, a novel cementitious water proofing coating is developed to have **high flexibility** and **excellent adhesion** on the substrate. The technology is awarded the 45th **International Exhibition of Inventions of Geneva**-Silver Medal
- Nanoparticles having at least one dimension in the nanometer range can enhance the **tensile strength**, **ductility**, **adhesion** and other performance when they are efficiently incorporated into coating system with **uniform dispersion**.
- A methodology has been developed to disperse the nanoparticles in the coating in order to modify the polymer cementitious coating, achieving higher elasticity and superior waterproof performance.



Advantages

- Pre-packed, easy to mix and apply High flexibility
- Excellent adhesion on dry and damp sound substrate
- Excellent waterproofing quality:able to withstand high hydrostatic pressure
- Formation of a more solid and durable coating with **good** mechanical performance
- Suitable for coating interior and exterior against water ingress and dampness
- Low VOC, non-toxic, suitable for us in waterproofing portable water tanks
- Environmental friendly
- Application

The superior performance, easy application and cost-effective features further enable the developed coating to be easily applied to various construction waterproofing fields including basements, toilets, kitchens terraces, swimming pools, water tanks, decks and flat roofs.





The Premium Liquid Flooring

■ Bolidt uses the NCS colour system for its flooring systems. All of her flooring systems can be produced in any colour from the Natural colour System by her laboratory.

■ NCS takes colouring to the next level in any design or architecture project Each colour can be described by its degree of **similarity to the elementary colours yellow**, **red**, **blue**, **green**, **white** and **black**, which in their purest state cannot be compared to any other colour.

■ The Natural Colour System was developed through 15 years of extensive research with the usage range from colour management in product development and ensuring accurate paint production to colour design in architectural and interiors. Nowadays, Bolidt Flooring System are widely used for the general & food industry, public buildings, infrastructure application, sports ground as well as deck finishing for ship building etc.











Eco Block System

- Eco Block System is a breakthrough in the technology of sound insulation that Simple installation: Adaptable with tongue and groove joints. It dries quickly is crucial to hotel ballroom, theatre and concert hall. Unlike other building materials, it is green building material that has earned prestigious awards including Green Label.
- The main raw material is flue gas desulphurization (FGD), a by-product of power plants. Sulphur dioxide (SO2)can be removed . As a result, air pollution and acid rain can be reduced drastically.
- It also contains fiberglass which is tailor-made with wrapping plastic membrane all around the fiberglass. Since plastic membrane is both water and damp proof, it can be used in a new wall if needed.
- It demostrates the advantages of saving building materials of metal mesh, stiffner, plastering and lintel which will contribute to a friendly environment with less use of material, waste and energy.

Advantages

- Comfortable and clean
- No hazardous: Low level of radiation
- **No odour**: Due to **low** thermal conductivity and **high** water vapour permeability
- No attract dust: Low surface conductivity prevents static electricity.
- PH value and vapour diffusion: Similar to those of human skin. The dry wall surfaces hinder the growth of mould fungus.
- Alive: Due to the high marco porosity, it first absorb and then release moisture when conditions change. It brings wall to life and create a comfortable environment.
- Solid and sturdy: No more lintels, special connection angles, sub-frames or profiles to fasten wall loads. Eco Blocks sturdy and can bear heavy loads such as kitchen units and washbasins. No surface plaster is required so the free area is more providing more space.

- Outstanding Performance: Fireproof, sound proof, noise proof, Light, yet can bear heavy loads, environmentally friendly, versatile and economical.
- so the wall can be decorated shortly after it is built.







