

GRINWOOD®

DECORATIVE
HOLLOW
SOLID
GLADING
2020
DECKING
FENCE
WPC
LATHS
GW
BETTER
FUTURE

GRINWOOD®

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Grinwood WPC is a superior alternative to traditional lumber and plastic decking products. It mixes recycled PE plastics with cellulose fiber and extrudes them into a variety of profiles, including decking, fencing, wall cladding, etc.

Established in 2010, Grinwood has been developed a lot, due to customers' trust and support, and also Grinwood team's great effort.

Mission statement: To build our business with high quality team members who value honesty and great customer satisfaction along with pride in a job well done, and to treat our team members with integrity and respect.

To enhance the environment in which we live, work and enjoy life through our premium products.

Vision: To be the preferred supplier through productions innovation, performance and service. Our products will become an affordable and more desirable solutions to natural products, which will serve to preserve our environment.

Value: Think for customers and beyond customers' expectation. Always stand from the point of customers' view and listen to their feedback, which helps us to finish the work beyond customers' satisfaction.

Company profile

Wood plastic decking

Co-extrusion decking 05

3D embossing decking 11

Traditional decking 15





Co-extrusion WPC

Product definition

The co-extruded wood plastic decking is produced by extrusion molding technology, and the shield of the wood-plastic decking evenly and firmly covers the co-extruded core layer.



which means it has an advanced premium shield encasing all sides around its inner core. The shield and core are extruded together under a very high temperature mold simultaneously, so there are no adhesives or chemicals that are harmful to the environment.



The shield uses an advanced polymer layer as a protection layer, which gives the boards against fading, staining, mold/mildew, and scratching.



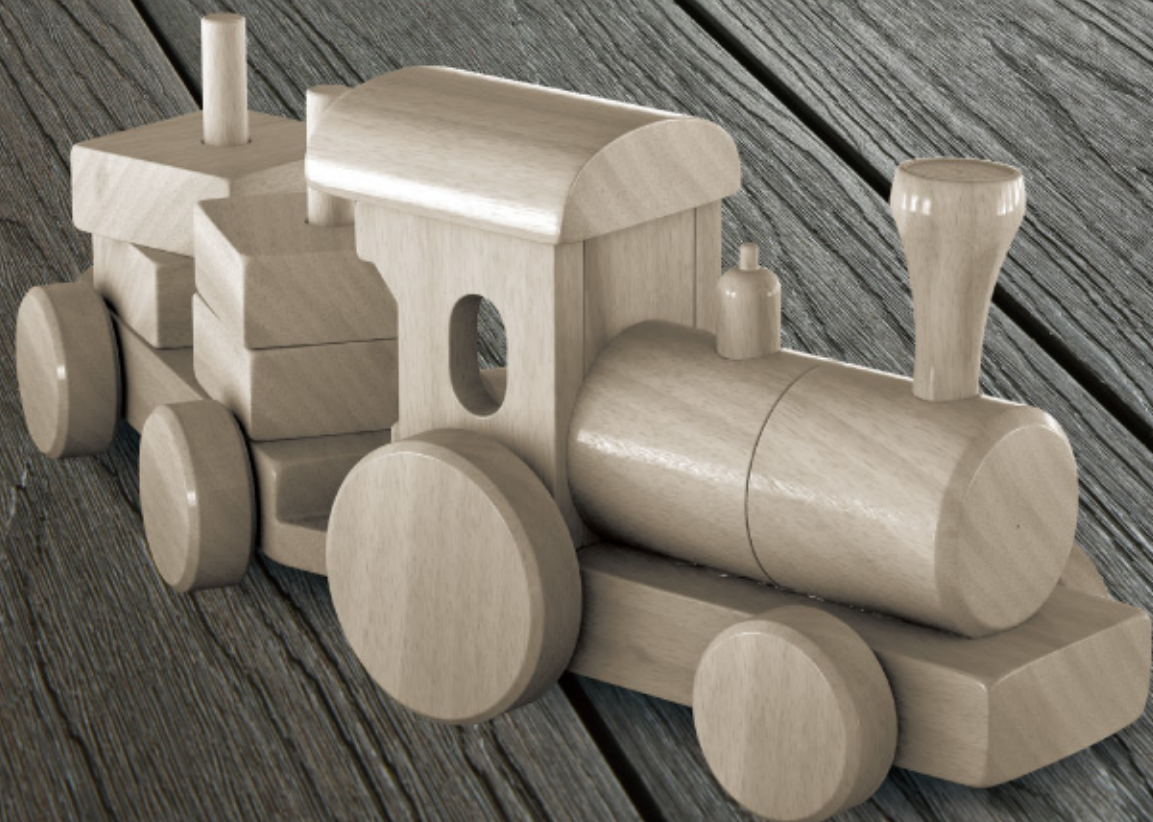
The core is made from recycled plastic and high dense recycled wood fiber that allow for greater strength and durability.

It retains the advantages of traditional wood-plastic like mildew and insect resistant, abrasion resistant, scratch resistant, stain resistant and weather proof. Some properties are even better. The experimental data proves that the wear resistance and scratch resistance of the co-extruded wood-plastic decking are more than five times stronger than that of the first-generation plastic wood, which can effectively prevent the damage caused by the hard object scratching.

In addition, the solid outer layer of the co-extruded wood plastic decking is effective against the penetration of colored liquids and oil-containing liquids, making the surface of the board very easy to clean. This outer layer can improve the resistance of composite decking to sunlight, rain, snow, acid rain and sea water, so that the decking has an extremely long service life.

More color options

Co-extrusion WPC



Four patterns



CE01



CE02



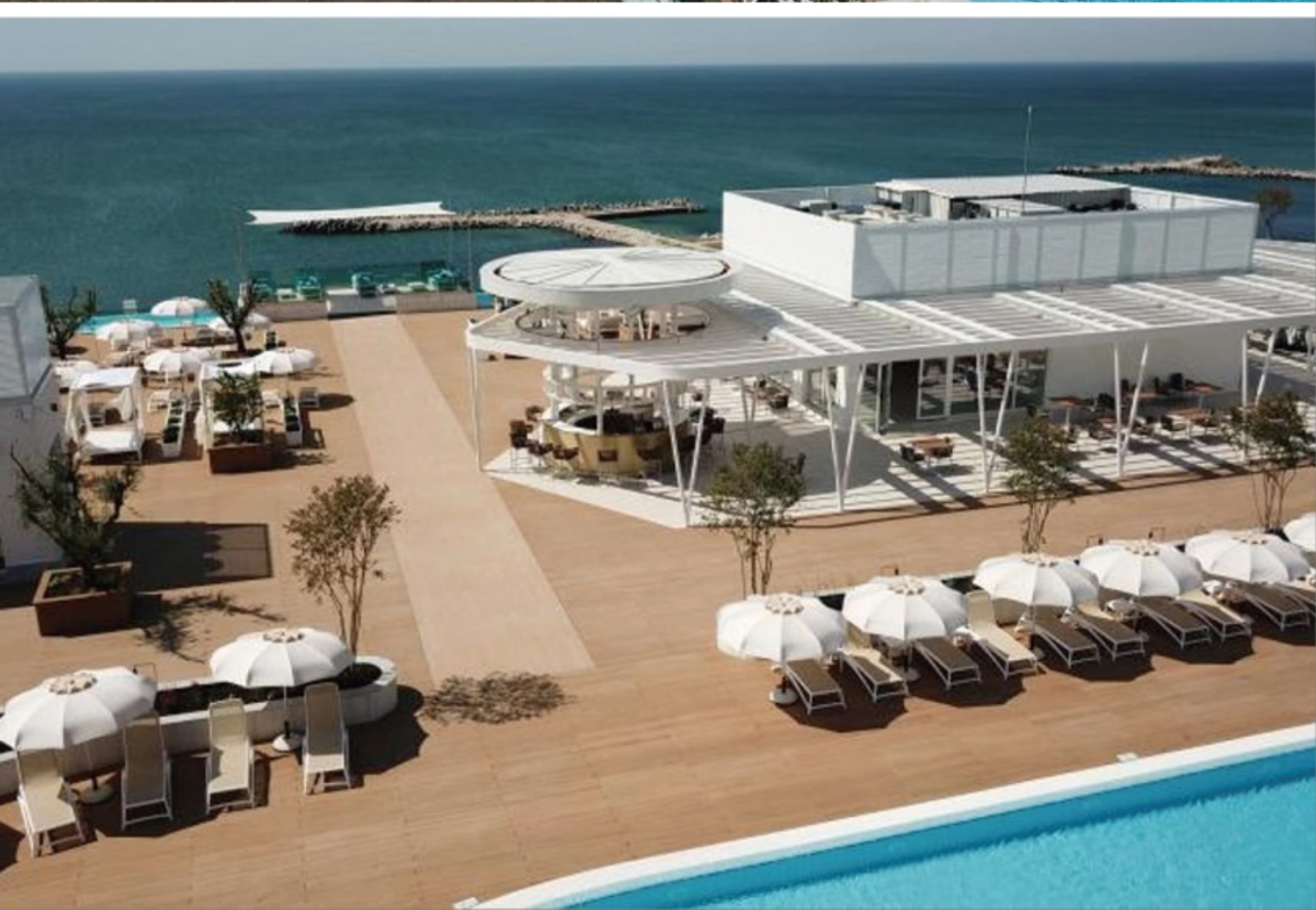
CE03



CE04



07/08



Product Specification



GW901

Hollow 138*23mm



GW902

Solid 138*23mm



GW903

Solid 100*12mm



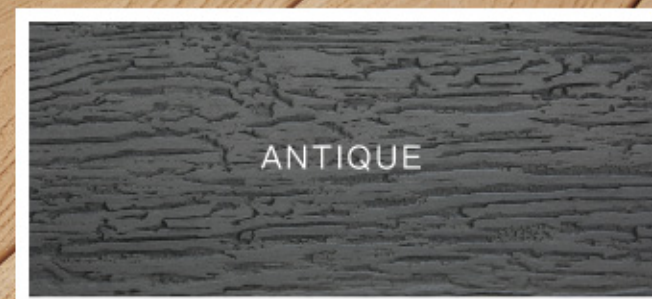
Online embossing

If you like the wood grain,
then 3D online embossing will
let you enjoy it forever



Pattern options

Online-embossing



GW009
140x20mm



GW801
140x25mm



GW802
160x22mm



GW006A
140x25mm



GW803
140x20mm

Traditional decking

Surface treatment

& Product advantages

smooth sanding

stripe sanding

embossing (1)

embossing (2)

steel brushing

mixed color

1. Low maintenance

There's a built-in resistance to staining, fading, mold & mildew. Grinwood is your "GREEN" choice if you want to save precious time and money.

2. Water proof

High density composite material provides lower water absorption than wood and other composite products. No rotting or decaying.

3. Environmentally friendly

Made from 90% recycled materials. No toxic materials or preservatives.

4. Insect and termite resistant

Grinwood WPC is unaffected by insects such as termites or beetles.

5. Lightweight

Grinwood's hollow core makes it lightweight while providing uncommon strength.

6. Easy installation

If you are used to working with wood, you already know how to work with our deck.

7. Various colors

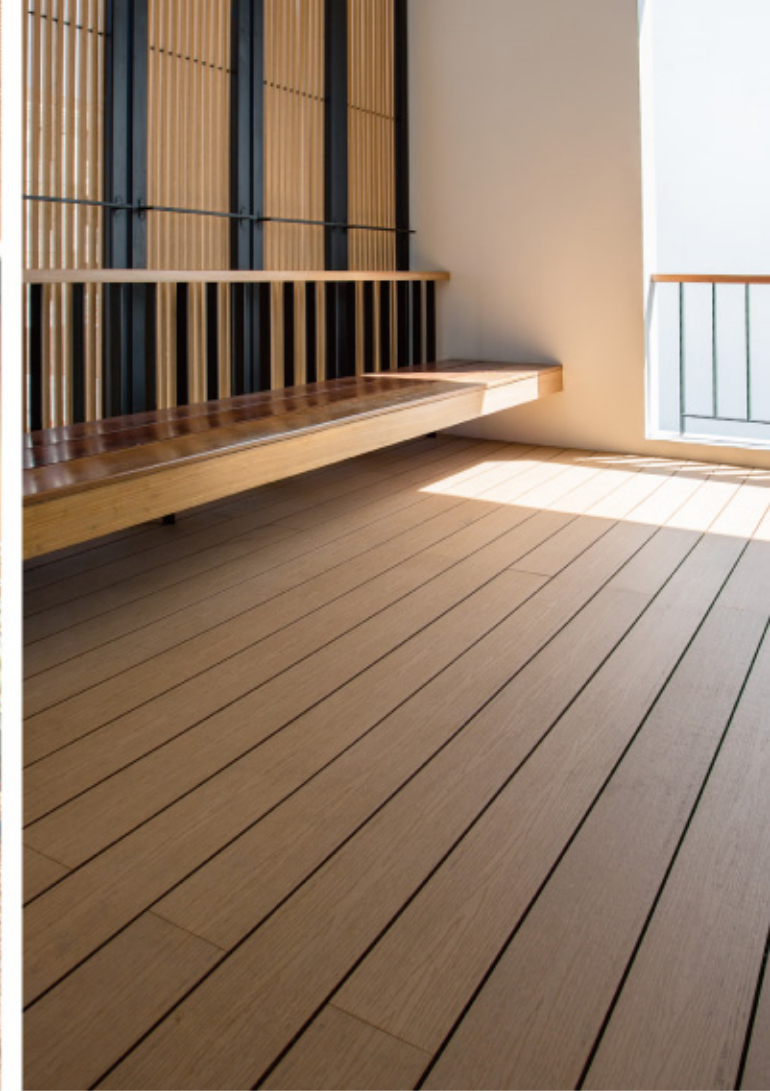
Kinds of natural & beautiful colors available and also can be customized.

8. Safe for your family

No splinter, No formaldehyde.

9. Long life span

Get used to enjoying a beautiful deck year after year.



Color options

COLORADO BROWN

EXOTIC BROWN

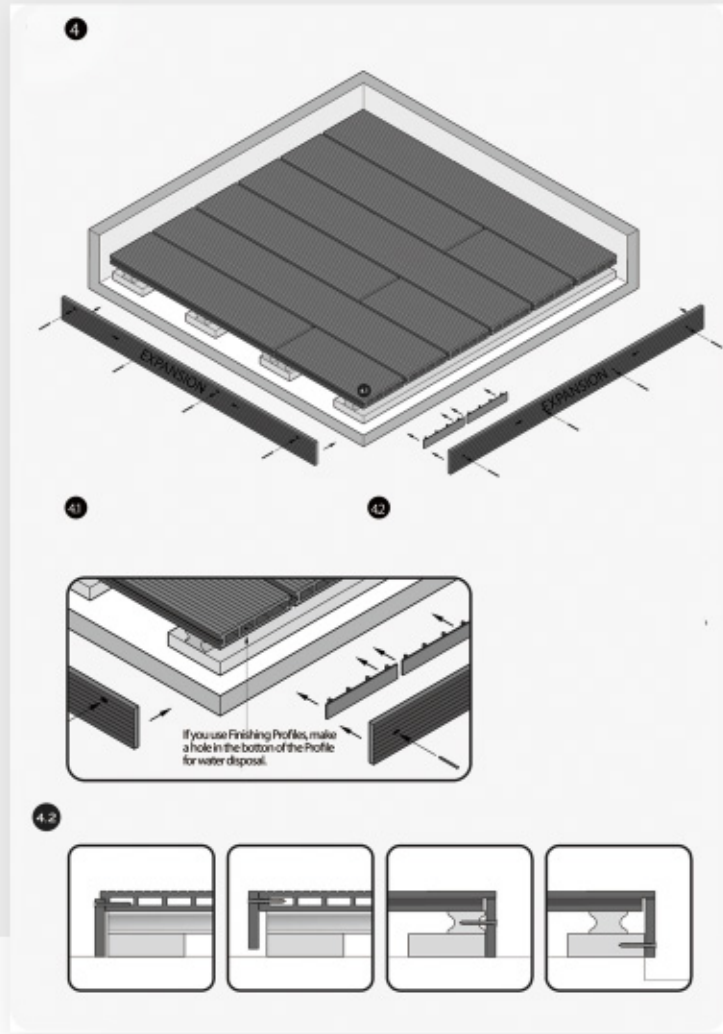
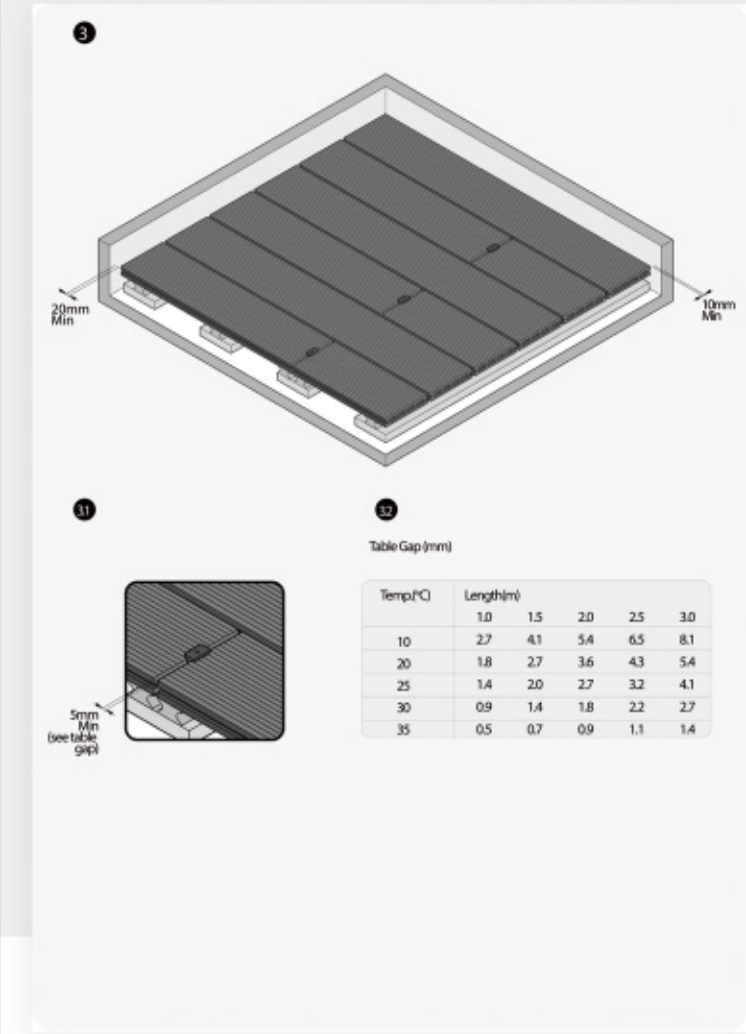
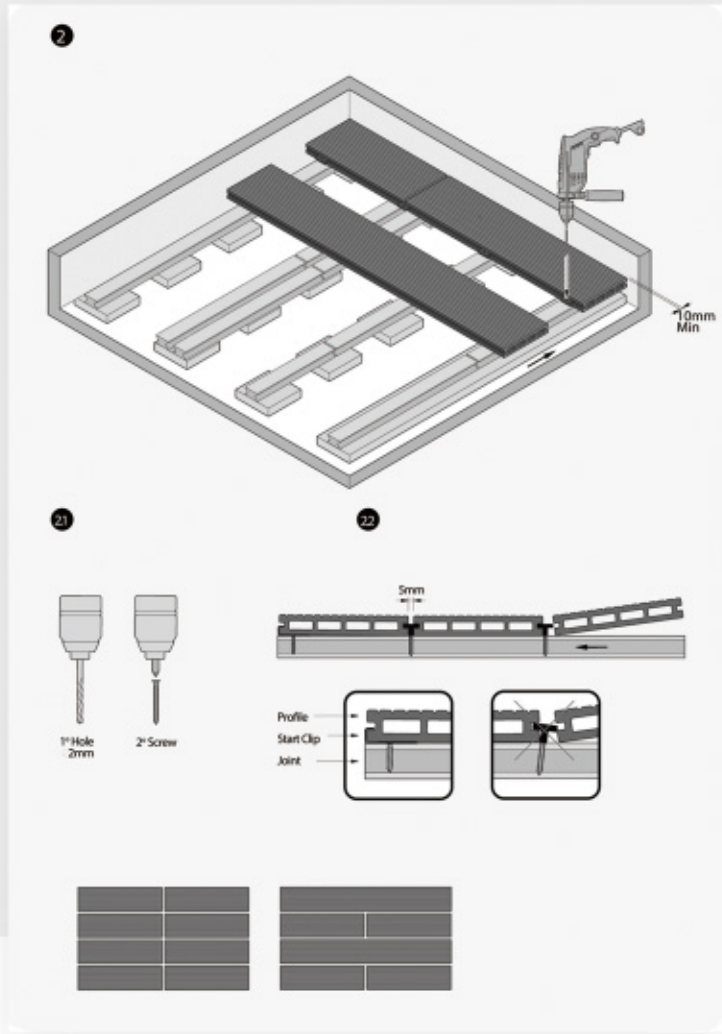
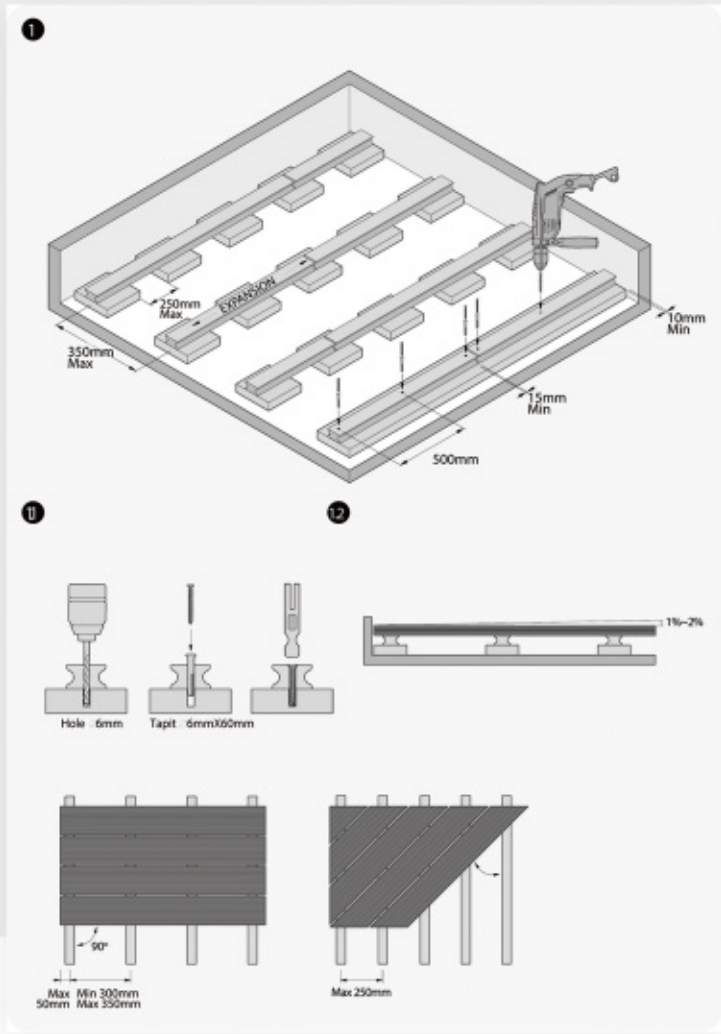
IVORY

STONE GERY

TEAK

GRANITE BLACK

Installation guide



Accessories



GWA001



GWA004



GWA008



GWA009



GW010



GWA011



GWA014



GWA203-1

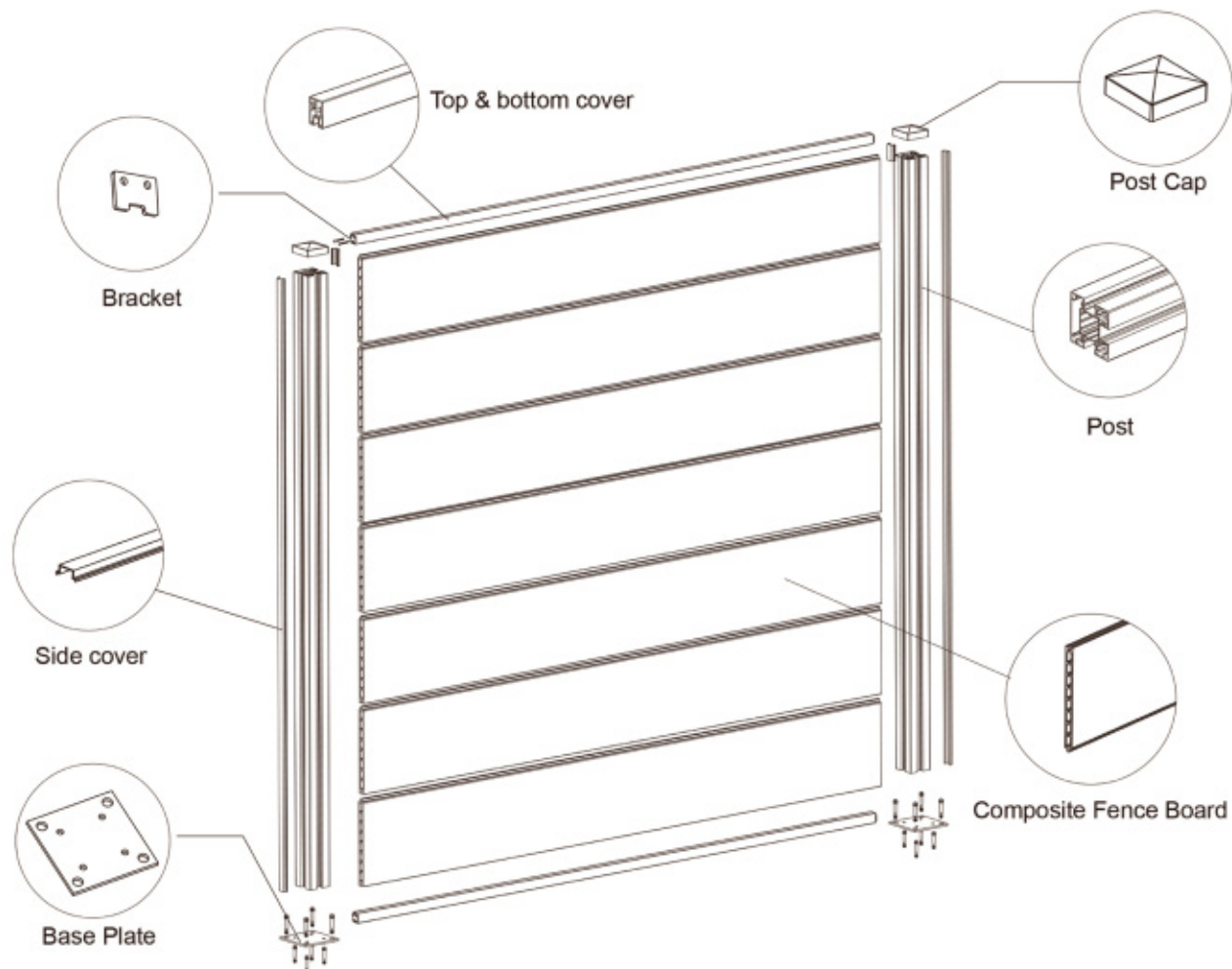
Fence



Natural advantage

Dual advantages of natural wood and plastic profiles
Non-corrosive, low deformation, low fading, no cracking, waterproof,
insect proof, mildew proof, low maintenance

Accessories list



Installation of fencing



Method One

Method Two





GW211
100x100mm



GW211-D
100x100mm



GW053
20x19.3mm



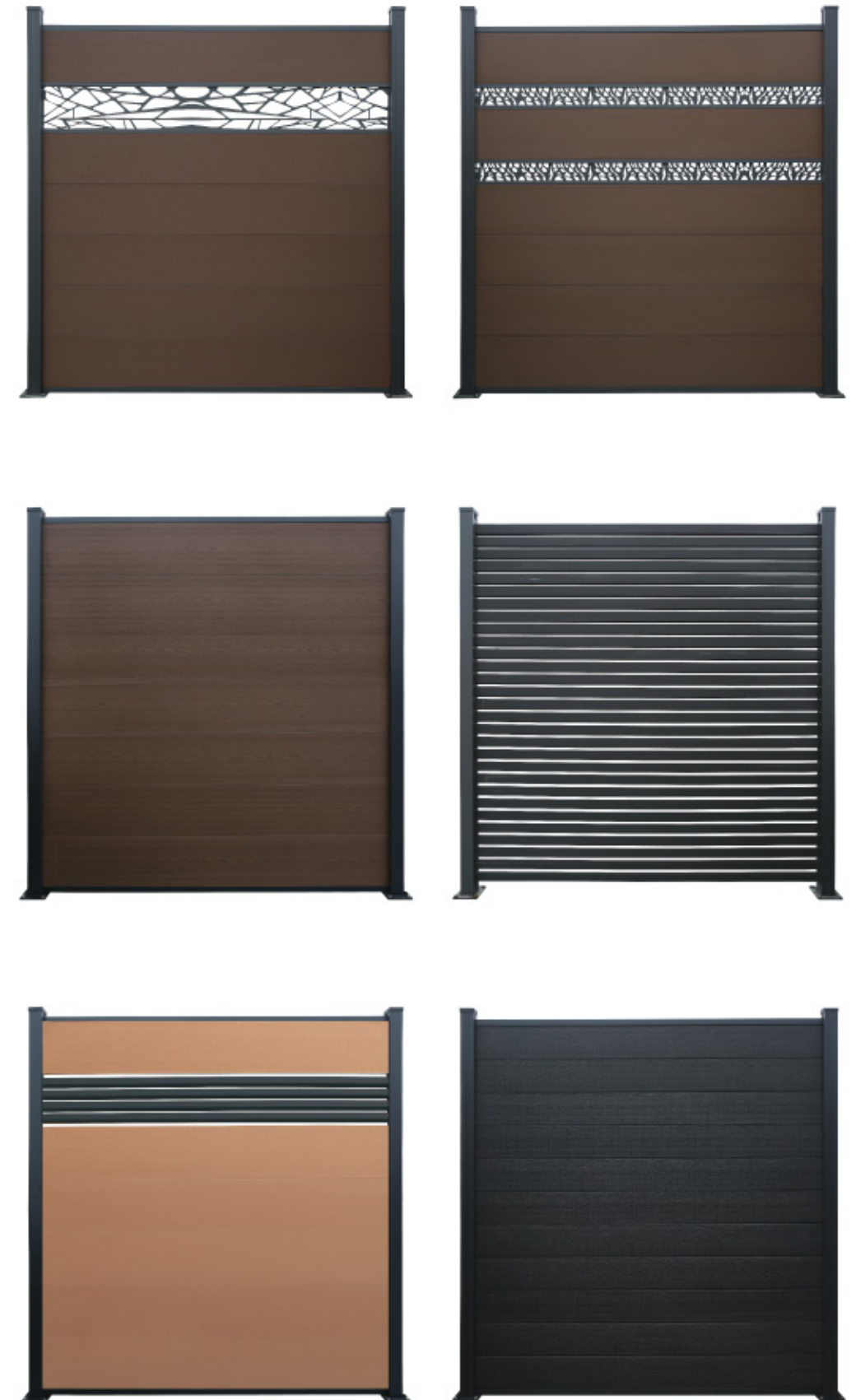
GW039
42x32mm

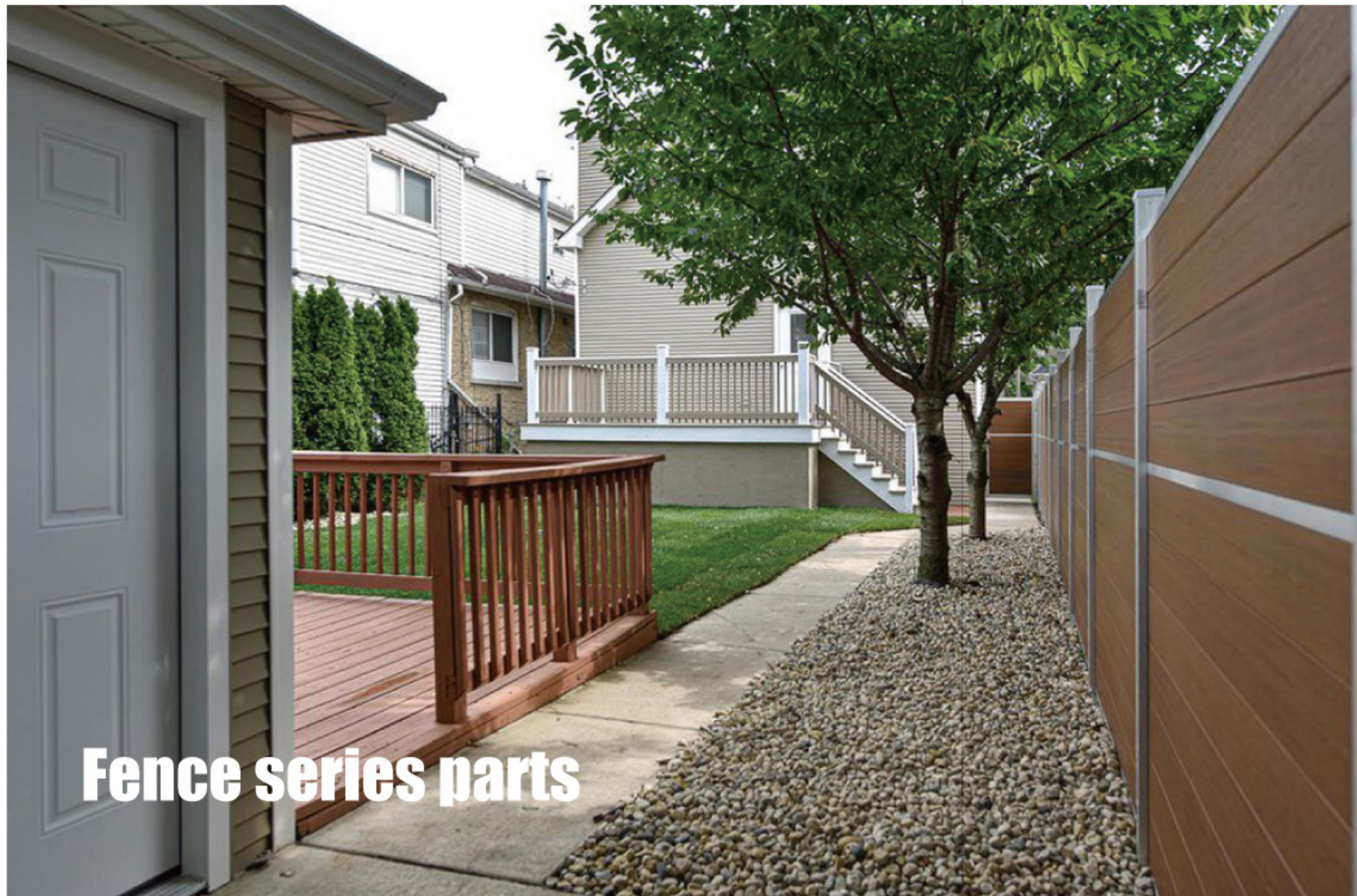


GW039-1
32x22mm

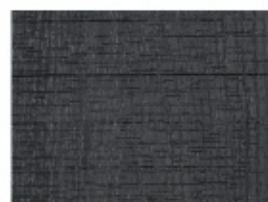
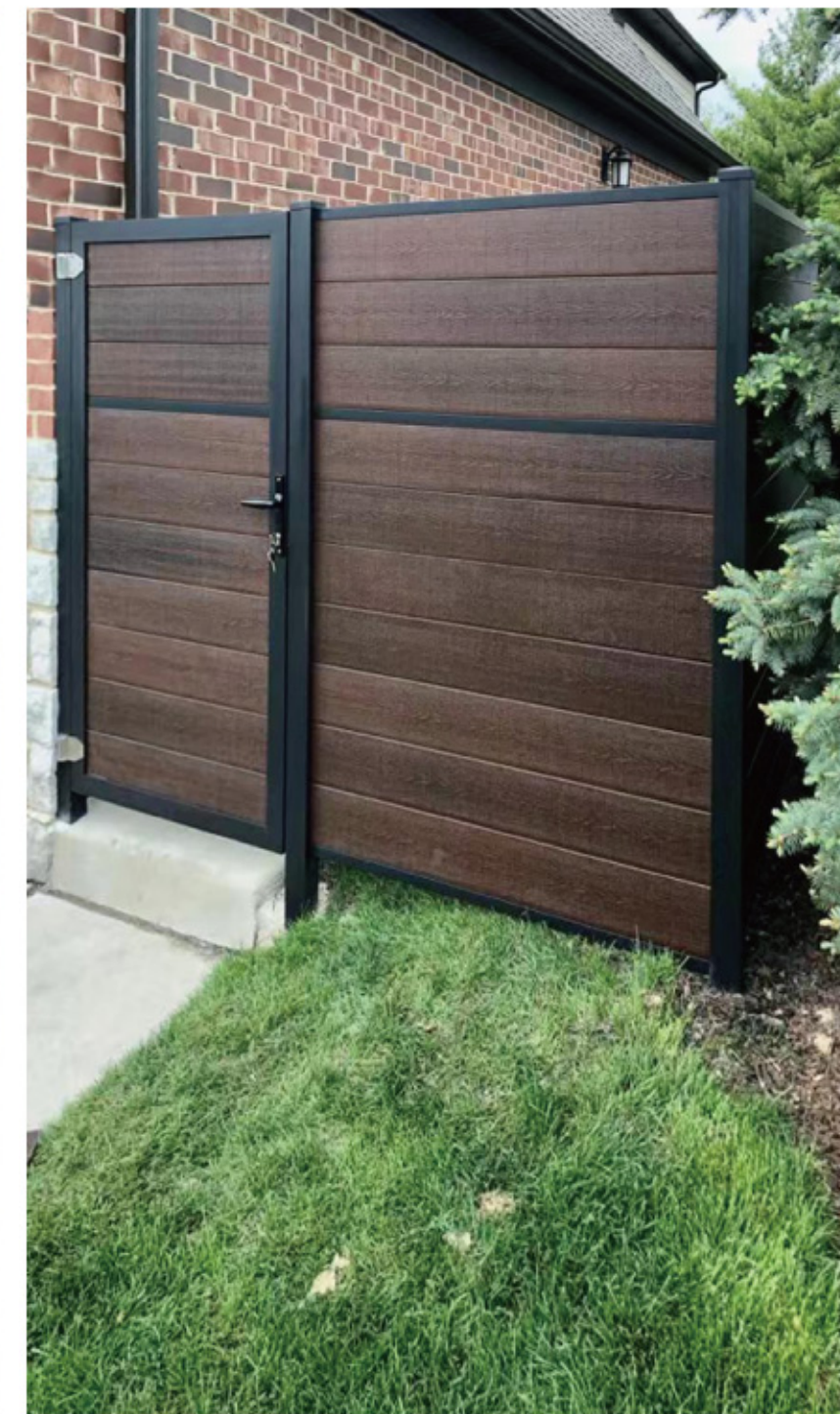


GW214
120X120X15mm





Fence series parts



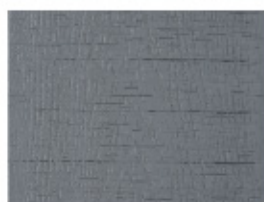
Charcoal



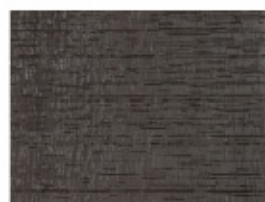
IPE



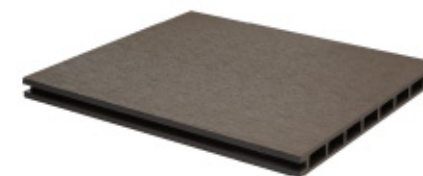
Sandy Birch



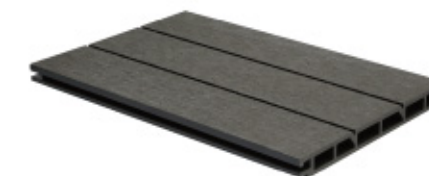
Silver Grey



Red Wood



GW303
258x20mm



GW210
205x20mm

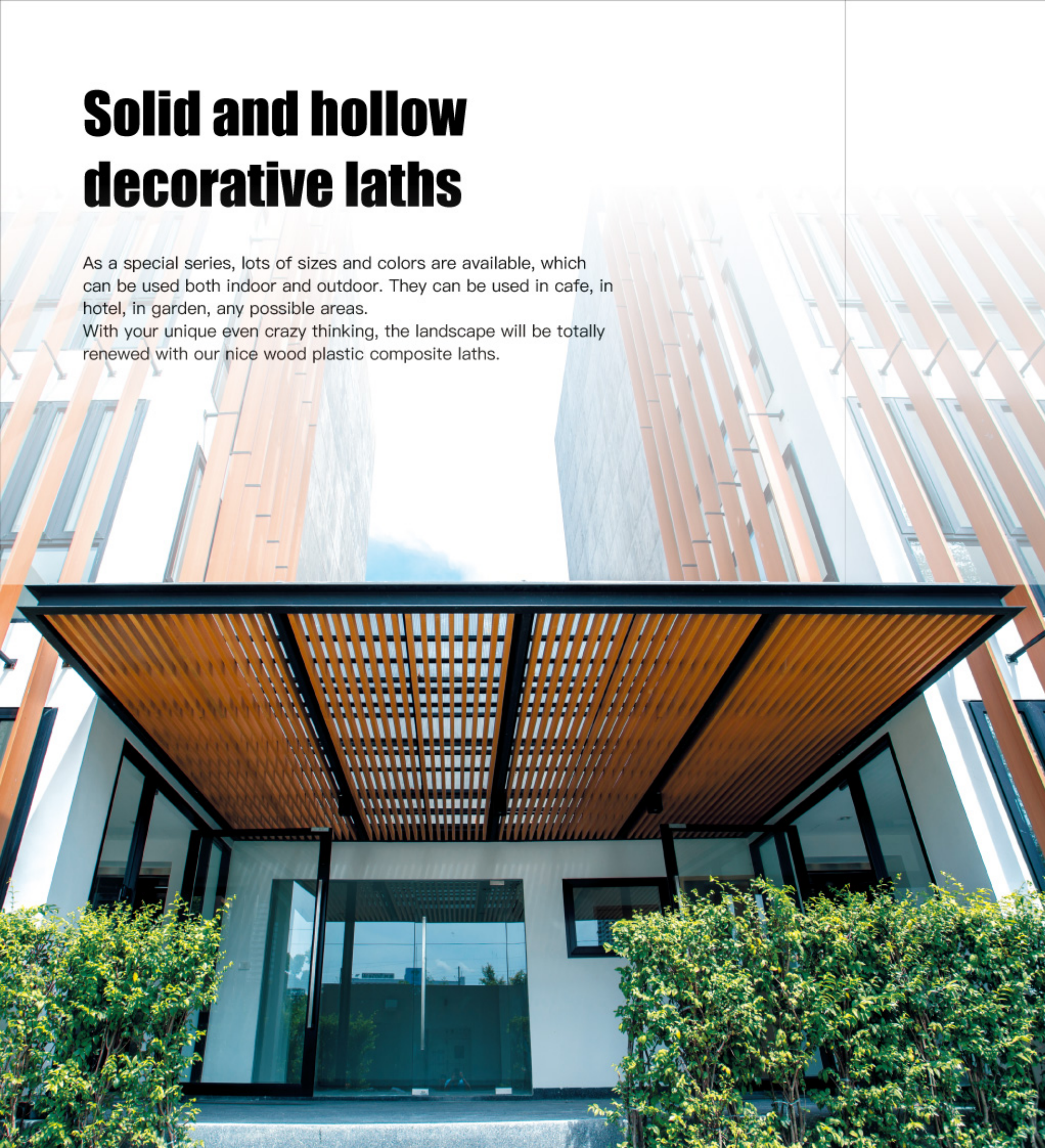


GW210-D
200x20mm

Solid and hollow decorative laths

As a special series, lots of sizes and colors are available, which can be used both indoor and outdoor. They can be used in cafe, in hotel, in garden, any possible areas.

With your unique even crazy thinking, the landscape will be totally renewed with our nice wood plastic composite laths.





Solid and hollow decorative laths



Wall cladding



Advantage analysis, user first

The perfect combination of aesthetics and practicality.

Moreover, Grinwood WPC exterior wall cladding system are designed with imaginative and customer-oriented principle. It is a perfect combination of aesthetics and practicality.

Grinwood WPC wall cladding, as a ideal choice for the majority of cladding applications, with various of colors and texture available, will definitely adds value to your offices, commercial premises, theme parks, any landscape you can think of.

Manufactured from a high performance Wood Plastic Composite (WPC), Grinwood wall cladding system compete very favorably on a life cycle cost basis versus traditional materials due to their low maintenance and long life span.



GW908
170x26mm



Quality assurance

Test report for co-extrusion hollow WPC decking via INTERTEK

| Test Items | Test Method | Test Results | Test Requirements |
|---|---|---|---|
| Slipperiness (Pendulum test) | EN 15534-1: 2014 Section 6.4.2 CEN/TS 15676:2007 | Longitudinal direction: Mean: 64 Min.: 62 Horizontal direction: Mean: 72 Min.: 70 | Pendulum value \geq 36 |
| Flexural properties | EN 15534-1: 2014 Annex A | Bending Strength: 36.8 Mpa Modulus of elasticity: 3.51 Gpa Maximum load: Mean: 6078 N Min.: 5972 N Deflection at 500N: Mean: 0.62mm Max.: 0.85mm | Flexural properties: -F ₁ max: Mean \geq 3300N Min. \geq 3000N -Deflection under a load of 500N: Mean \leq 2.0mm Max. \leq 2.5mm |
| Boiling test | EN 15534-1: 2014 Section 8.3.3 | Water absorption: Mean: 0.85% Max.: 0.90% | Water absorption: Mean \leq 7% Max. \leq 9% |
| Swelling after boiling test | EN 15534-1: 2014 Section 8.3.3 and client's requirement | Mean Swelling: 0.82% in thickness 0.10% in width 0.10% in length Max. Swelling: 0.93% in thickness 0.14% in width 0.14% in length | |
| Tensile strength perpendicular to the plane of the board after boiling test | EN 15534-1: 2014 Section 8.3.3, EN 319: 1993 and clients' s requirement | Tensile strength: 4.05 Mpa Broke in the middle of the sample | |
| Falling mass impact resistance | EN 15534-1: 2014 Section 7.1.2.1 | Hollow profile Max. Crack length (mm): No crack appeared Max. Residual Indentation (mm): 0.21mm | None of 10 test specimens shall show a failure with a crack length \geq 10mm or a depth of residual indentation \geq 0.5mm |
| Tensile strength perpendicular to the plane of the board | EN 319: 1993 | Tensile strength: 4.23 Mpa Broke in the middle of the sample | |
| Moisture resistance under cyclic test conditions | EN 15534-1: 2014 Section 8.3.2 EN 321: 2001 | Bending strength: Original value: 36.8 Mpa After exposure Mean value: 35.0 Mpa Decrease: 4.90 % Minimum value: 34.4 Mpa Decrease: 6.50 % | Decrease of bending strength: Mean \leq 20% Max. \leq 30% |
| Swelling and water absorption after moisture resistance under cyclic test conditions | EN 15534-1: 2014 Section 8.3.2 and client's requirement | Mean Swelling: 0.91% in thickness 0.06% in width 0.17% in length Max. Swelling: 1.10% in thickness 0.07% in width 0.32% in length Water absorption: Mean: 1.24% Max.: 1.38% | |
| Tensile strength perpendicular to the plane of the board after moisture resistance under cyclic test conditions | EN 15534-1: 2014 Section 8.3.2, EN 319: 1993 and client's requirement | Tensile strength: 2.56 Mpa Broke in the middle of the sample | |
| Wear Resistance | ASTM D4060-14 and client's requirement | Type of wheel: CS-17 Load: 1000 g Revolutions: 1000 Mass loss: 15.5 mg | |

Test report for traditional hollow WPC decking via INTERTEK

| Test Items | Test Method | Test Results | Test Requirements |
|---|--|---|---|
| Slipperiness (Pendulum test) | EN 15534-1: 2014 Section 6.4.2 CEN/TS 15676: 2007 | Longitudinal direction: Mean: 57 Min.: 56 Horizontal direction: Mean: 65 Min.: 64 | Pendulum value \geq 36 |
| Falling mass impact resistance | EN 15534-1: 2014 Section 7.1.2.1 | Hollow profile Max. Crack Length (mm): No crack appeared Max. Residual Indentation (mm): 0.12mm | None of 10 test specimens shall show a failure with a crack length \geq 10mm or a depth of residual indentation \geq 0.5mm |
| Flexural properties | EN 15534-1: 2014 Annex A | Bending Strength: 31.3 Mpa Modulus of elasticity: 3.10 GPa Maximum load: Mean: 6080N Min.: 5844N Deflection at 500N: Mean: 0.70mm Max.: 0.78mm | Flexural properties -F ₁ max: Mean \geq 3300 N Min. \geq 3000N -Deflection under a load of 500N: Mean \leq 2.0mm Max. \leq 2.5mm |
| Boiling test | EN 15534-1: 2014 Section 8.3.3 | Water absorption: Mean: 1.91 % Max.: 1.98 % | Water absorption: Mean \leq 7% Max. \leq 9% |
| Linear thermal expansion coefficient | EN 15534-1: 2014 Section 9.2 ISO 11359-2: 1999 | 28.1 x 10 ⁻⁶ K ⁻¹ 27.6 x 10 ⁻⁶ K ⁻¹ 27.4 x 10 ⁻⁶ K ⁻¹ Mean: 27.7 x 10 ⁻⁶ K ⁻¹ | \leq 50 x 10 ⁻⁶ K ⁻¹ |
| Creep behavior | EN 15534-4: 2014 Section 4.5.3 EN 15534-1: 2014 Section 7.4.1 | Span: 300mm Mean Δ S: 1.34mm Max. Δ S: 1.68mm Mean Δ Sr: 1.02mm | Known span in use Mean Δ S \leq 10mm Max. Δ S \leq 13mm Mean Δ Sr \leq 5mm |
| Swelling and water absorption (28 days immersion) | EN 15534-1: 2014 Section 8.3.1 EN 317: 1993 | Mean Swelling: 1.74% in thickness 0.15% in width 0.13% in length Max. Swelling: 1.89% in thickness 0.18% in width 0.15% in length Water absorption: Mean: 2.42% Max.: 2.52% | Mean Swelling: \leq 4% in thickness \leq 0.8 in width \leq 0.4 in length Max. Swelling: \leq 5% in thickness \leq 1.2% in width \leq 0.6% in length Water absorption: Mean \leq 7% Max. \leq 9% |
| Moisture resistance under cyclic test conditions | EN 15534-1: 2014 Section 8.3.2 EN 321: 2001 | Bending strength: Original value: 31.30 MPa After exposure Mean value: 31.1 MPa Decrease: 0.60 % Minimum value: 30.2 MPa Decrease: 3.50% | Decrease of bending strength, Mean \leq 20% Max. \leq 30% |

Fire rating B test for traditional WPC decking with fire retardant

| Test Method | Parameter | Test Result |
|-------------------------------------|---|-------------|
| EN ISO 9239-1:2010 | Critical flux (transverse), kW/m ² | \geq 11 |
| | Critical flux (longitudinal), kW/m ² | \geq 11 |
| | Smoke production, % minutes | 0 |
| EN ISO 11925-2:2010 Exposure=15s | F _s \leq 150 mm within 20 s | Yes |

The classification has been carried out in accordance with EN13501-1

| Fire behaviour | Smoke production |
|----------------|------------------|
| B _f | 1 |

Reaction to fire classification: B fl -s1

Product specification

DECKING WALL CLADDING
FENCE USE YOUR IMAGINATION

size:(mm)



GW001

150X25



GW001A

150X25



GW001C

150X25



GW001D

150X25



GW001H

150X25



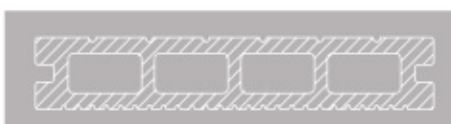
GW001T

150X25



GW002

146X31



GW003A

140X25



GW005

146X23



GW006

140X25



GW007A

135X26



GW008

150X35









DECKING

FENCE

WALL CLADDING

USE YOUR IMAGINATION

size:(mm)

| | | | | | |
|--|--|--|--|--|---|
|   |   |   |   |   |   |
| GW009 140X20 | GW009A 140X20 | GW009A-1 140X20 | GW009H 140X20 | GW010 40X25 | GW015 150X25 |
|   |   |   |   |   | |
| GW015H 150X25 | GW017 50X40 | GW030 50X30 | GW031 56X16 | GW038 200X20 | |



- DECKING
- WALL CLADDING
- FENCE
- USE YOUR IMAGINATION

size:(mm)



GW011
146X25



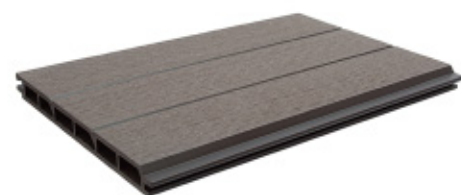
GW201
120X120



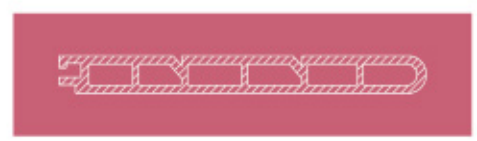
GW206
160X160



GW207
160X55



GW210
205X20



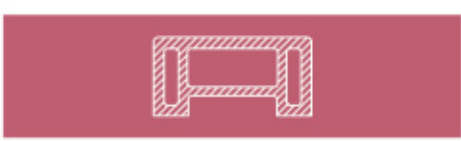
GW210-D
200X20



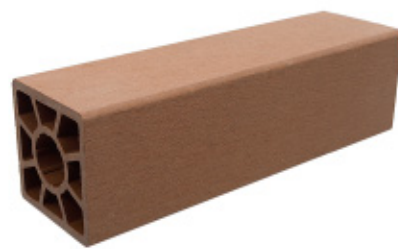
GW211
100X100



GW211-D
100X100



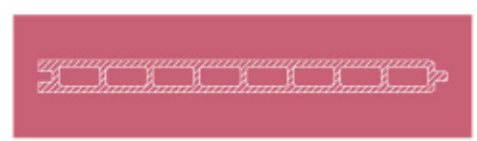
GW212
90X45



GW213
90X90



GW215
100X100

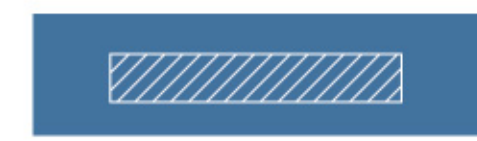
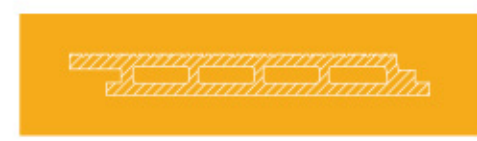


GW303
258X20



- DECKING
- WALL CLADDING
- FENCE
- USE YOUR IMAGINATION

size:(mm)



GW301
152X12

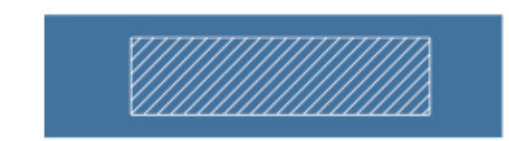
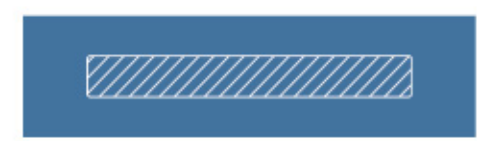
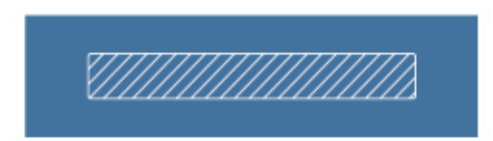
GW302
160X18

GW012
140X11

GW013
72X11

GW013-F1
73X12

GW015A
151X26



GW018
101X13

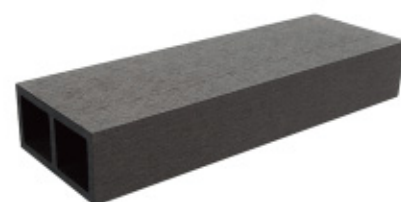
GW020
97X12

GW022
26X26

GW023
39X39

GW024
51X51

GW025
101X26



GW026

101X51



GW027

101X26



GW028

101X51



GW029

76X26



GW032

51X26



GW202

80X35



GW203

51X51



GW205

90X40



GW208

98X32



GW209

57X32



GW216

120X20



GW216T

120X20