

Premium Wood Composite



Table Of Contents

04 **Gaea**

05 **Gaea Sustainability**

07 **Premium Wood Polymer Composite**

09 **What Made us Different?**

10 **Why Choose Gaea WPC?**

12 **Indoor Product**

- Gaea Dörr (Door)
- Gaea Vägghpanel (Wall Panel)
- Gaea Innertak (Ceiling)
- Kaino Panel

32 **Outdoor Product**

- Gaea Däck (Deck)
- Gaea Räls (Railing)
- Gaea Outdörr Vägghpanel (Outdoor Wall Panel)

46 **Test Sheets & Certificates**

51 **Contact Us**



ECO-Friendly
Products

Greater Alternatives for Environmental Assuagement



Seng Liy is a committed believer in environmental sustainability. This belief acts as the main driver behind the launch of "**Gaea**". We believe that Gaea, an ancient Greek goddess, and personification of Earth, best represents our ideals and motivator to become the green building material solutions provider of choice. The Gaea brand promotes the usage of wood polymer composite in creating innovative products to protect the environment while caring for our customers' needs.

Through Gaea, Seng Liy provides quality **eco-friendly products** based on the circular economy concept of sustainable production, consumption, and recycling, delivering a zero-waste solution. Our innovative eco-friendly products include Gaea® door, wall panels, outdoor decking, wall cladding and railing series. We believe Gaea has endless possibilities in creating a lasting impact on the community by building a better and sustainable future for all.

Gaea, pronounced as "ghe-ea", which originates from ancient Greek - Gaia, the goddess of Earth, as mother of all life who represents the entire system of Planet Earth.

Gaea Sustainability

Goals to the Road of Sustainability

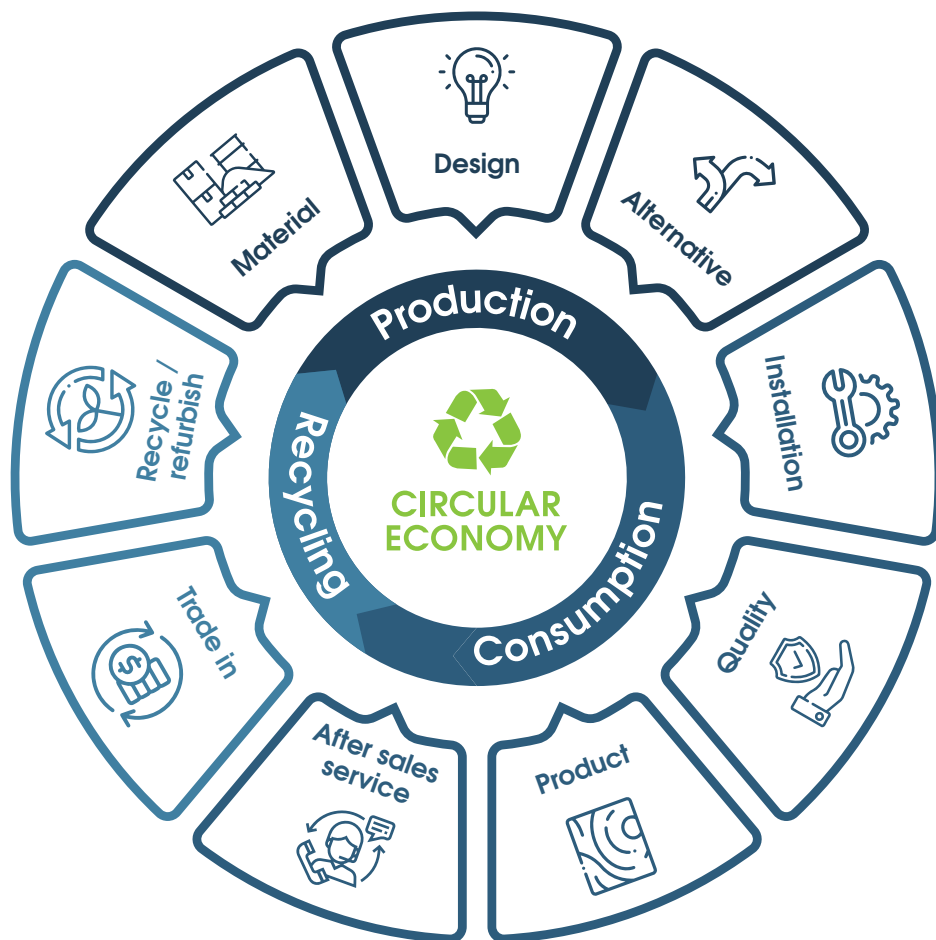
We aim to share the action we are committing in building construction industry for a **better, sustainable future world of living**.

Think of the idea on what possible to make a difference, we strive to encourage the belief of creating a sustainable world isn't an abnormality. It shall be a basic demand in creating green building solutions.

We know this could be done more, and we strive to encourage a “**zero waste**” commitment to the industry such as business partner, clients and society in taking action, step in or join us towards the road of environmental sustainability.



MAKE SUSTAINABILITY POSSIBLE, NOW AND FUTURE





Premium Wood Polymer Composite

Wood-polymer composites (WPCs) are composite materials made of **wood fiber / wood flour** and **thermoplastic**.

WPC is widely used in many applications such as door, window, railings, fences, furnitures etc.



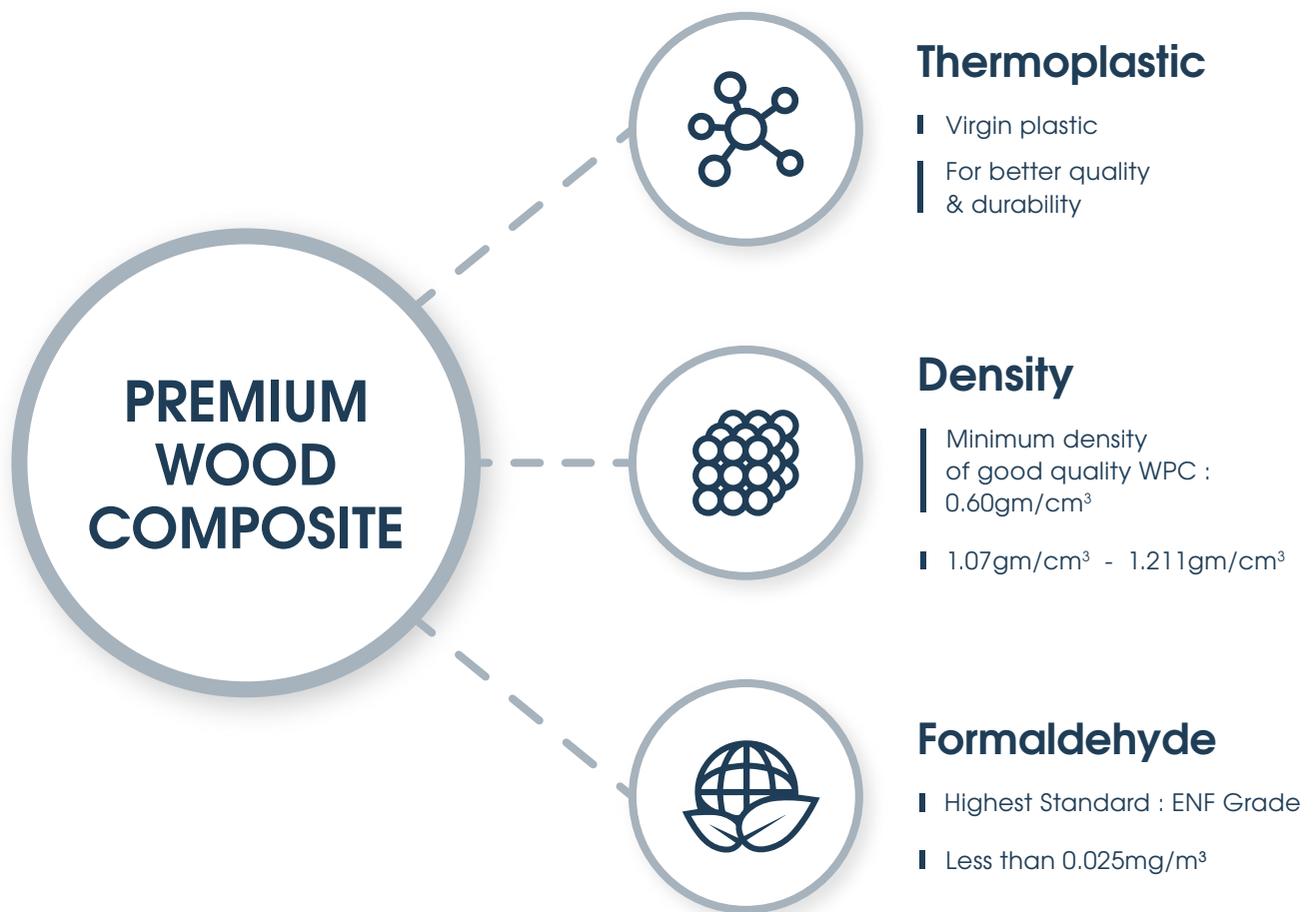
 **100%**
recyclable material



Wood Polymer Composite Production Process



What Made Us Different?



Why choose Gaea WPC?



**100%
waterproof**



Easy to clean



Chemical free



**Borer &
termite proof**



**Rot & warp
resistant**



**Long lasting &
cost effective**



**100%
recyclable**



**ECO-Friendly
Products**





INDOOR PRODUCT

| The
Eco Alternative to
Tropical Hardwood

Göda Dörr



Gaea Dörr

- First 100% waterproof wooden door in Malaysia.
- An eco-substitution to solid wooden door.
- Strength of solid wooden door with extra features.
- Design and made in a modular of easy to install package.



The Unique Benefits

- ✔ Can be installed even after plastering.
- ✔ Clean and easy installation without cement needed.
- ✔ Lifetime warranty on waterproof and termite proof.

Features



**Strong &
durable**



**Quick & easy
to install**



**Modular
system**



**Formaldehyde
free**



**Low
maintenance**



**Lifetime warranty
provided**

Terms & conditions apply.

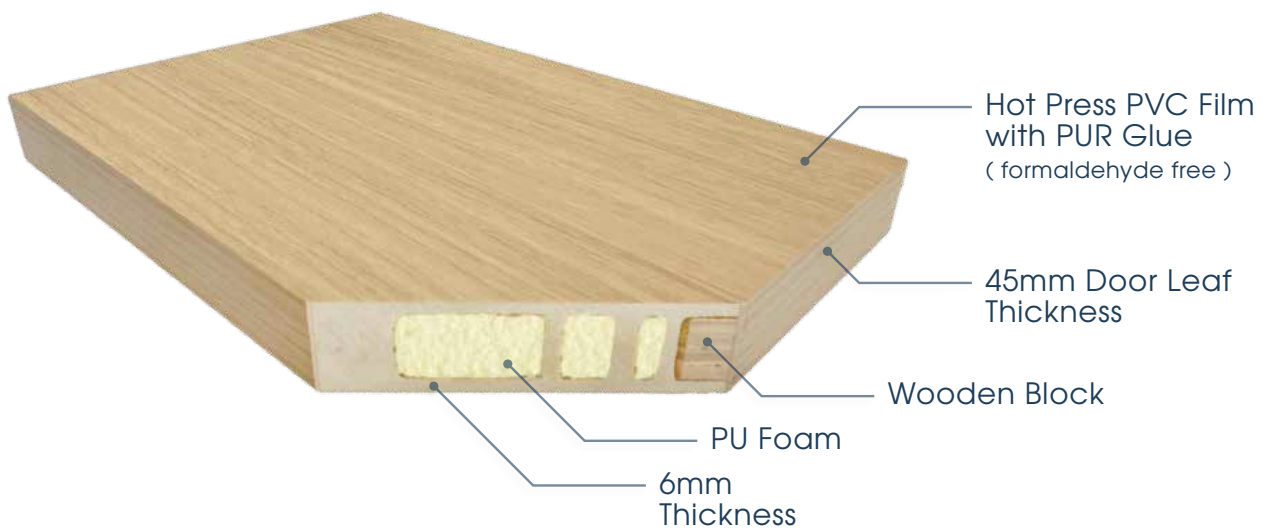


**ECO-Friendly
Products**



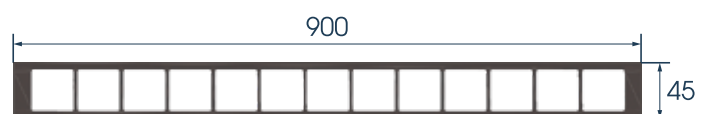
Structure - Door Leaf

Code : **GID110**



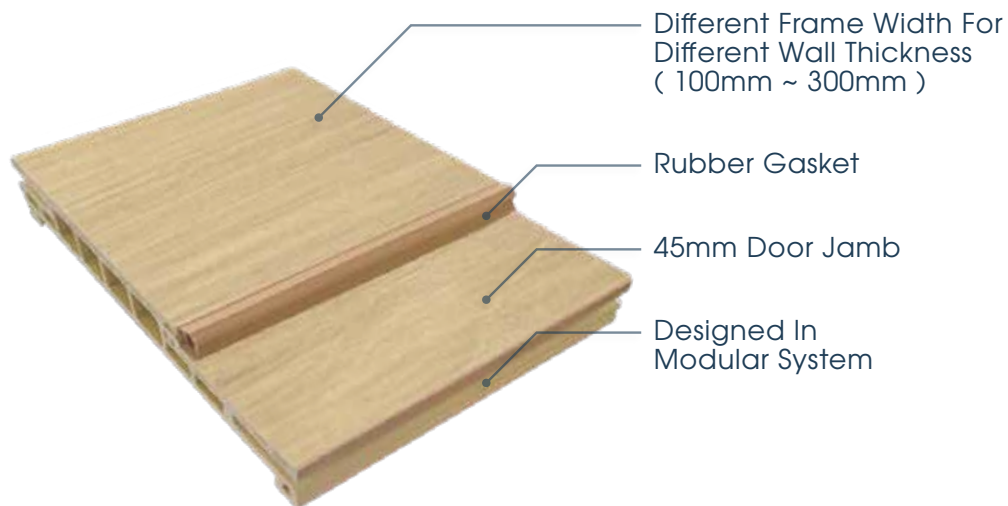
Remarks :

Width \leq 900mm
Height \leq 2400mm



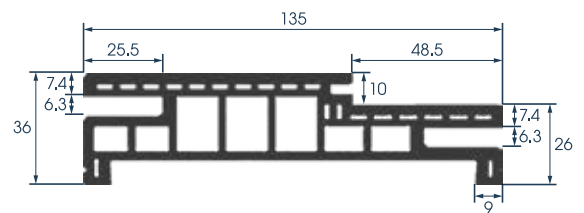
Structure - Door Frame

Code : **GID210**



Remarks :

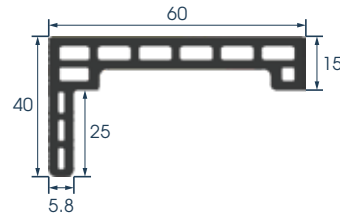
Wall Thickness Minimum Width : 100mm
Wall Thickness Maximum Width : 300mm



Profiles - Architrave

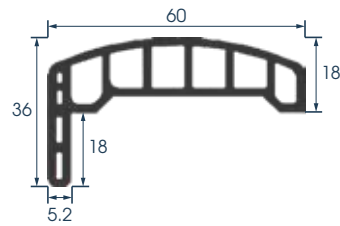
Gaea Dörr Architrave Square

Code : **GID310** (60mm W x 15mm H)



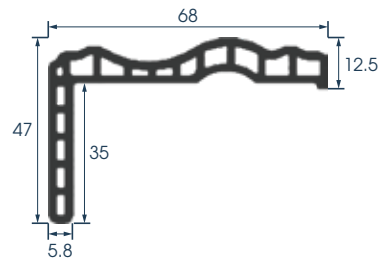
Gaea Dörr Architrave Half Rounded

Code : **GID320** (60mm W x 18mm H)



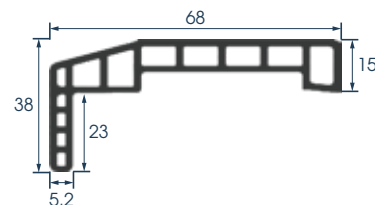
Gaea Dörr Architrave Moulded

Code : **GID330** (68mm W x 12.5mm H)



Gaea Dörr Architrave Chamfered

Code : **GID340** (68mm W x 15mm H)



Gaea Vägghpanel Gaea Innertak



Gaea Vägghpanel (Wall Panel)

Gaea Innertak (Ceiling)

- Premium, wood textured design WPC wall panel as a replacement for aesthetic look of indoor environment.
- Modern, stylish appearance, premium finishing.



The Unique Benefits

- ✔ Lifetime warranty on waterproof and termite proof.

Features



**Excellent
durability**



**Formaldehyde
free**



**Sound
insulated**



**Heat
insulated**





Structure - Gaea Vägghpanel (Wall Panel)



Hot Press PVC Film with PUR Glue
(formaldehyde free)

- Wood like texture aesthetic look
- Easy to clean

Wood Composite Based Board

- Sound and heat insulation without deformation

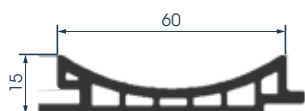
Profiles - Gaea Vägghpanel (Wall Panel)



Gaea Vägghpanel Curved

Code : **GIW301**

(60mm x 15mm x 3,000mm)



Gaea Vägghpanel Fluted

Code : **GIW222**

(180mm x 12mm x 3,000mm)



Gaea Vägghpanel Fluted

Code : **GIW212**

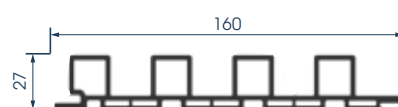
(140mm x 10mm x 3,000mm)



Gaea Vägghpanel Fluted

Code : **GIW211**

(160mm x 27mm x 3,000mm)



Gaea Vägghpanel Flat

Code : **GIW101**

(600mm x 9mm x 3,000mm)



Remarks :

All wall panels are in **3 meter (L)** standard size. Special sizes available upon request.

Profiles - Gaea Innertak (Ceiling)



Gaea Innertak (Flat)

Code : **GIW102**

(120mm x 9mm)



Gaea Innertak (Flat)

Code : **GIW103**

(150mm x 9mm)



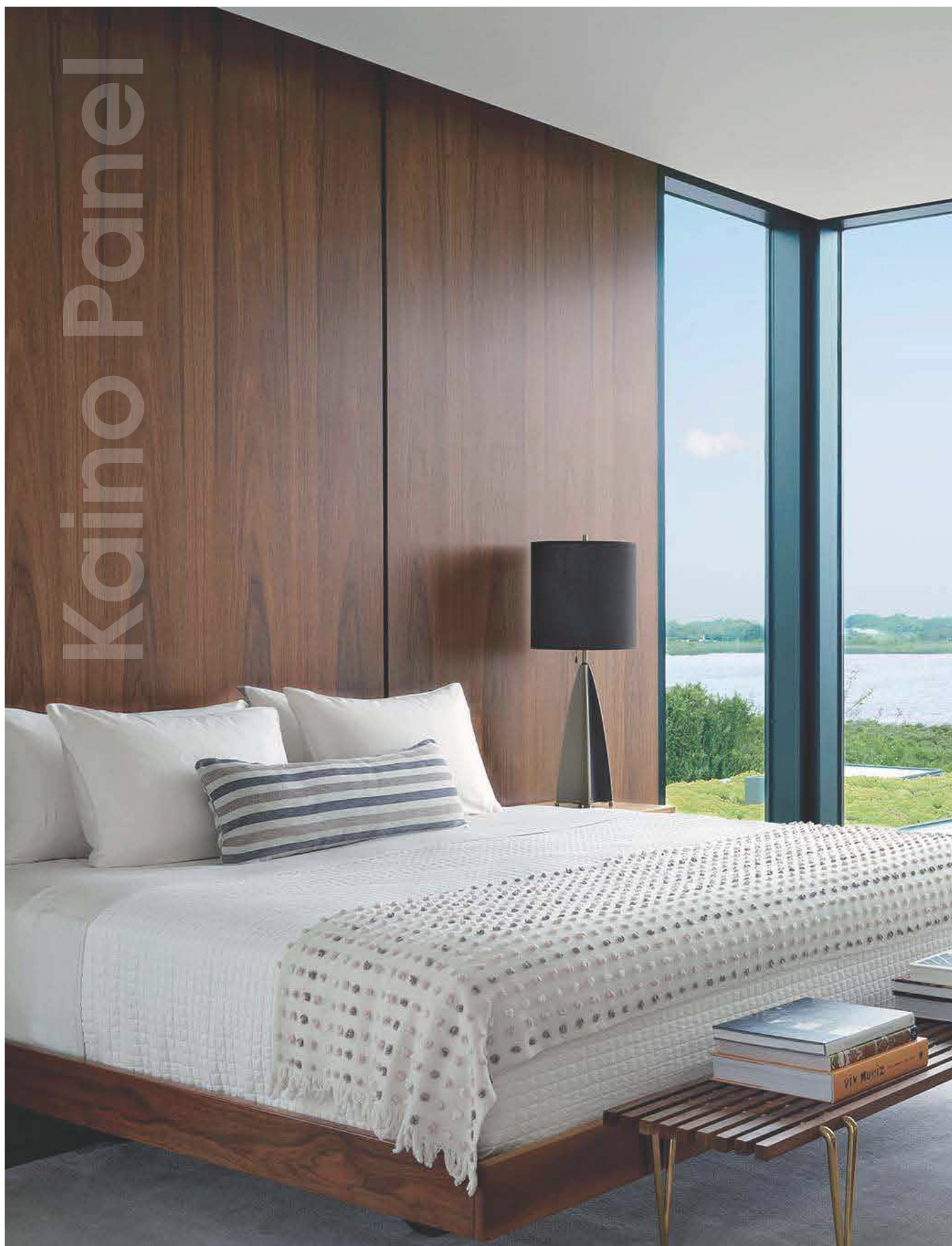
Gaea Innertak (Fluted)

Code : **GIW223**

(155mm x 9mm)



Kaino Panel



Kaino Panel

- An eco-alternative to plywood.
- Highly durable and recyclable.
- Various thickness available.
- Life cycle can be extended with **Gaea Zero-Waste Campaign**.
- Can be utilized in interior home design, walls, general projects, DIY projects, etc.



The Unique Benefits

- ▀ Able to match with various types of lamination or paints.

Features



**100%
waterproof**



**Rot & warp
resistant**



**Borer &
termite proof**



**Low
maintenance**



**ECO-Friendly
Products**





Profiles - Kaino Panel

Kaino Panel (5mm)

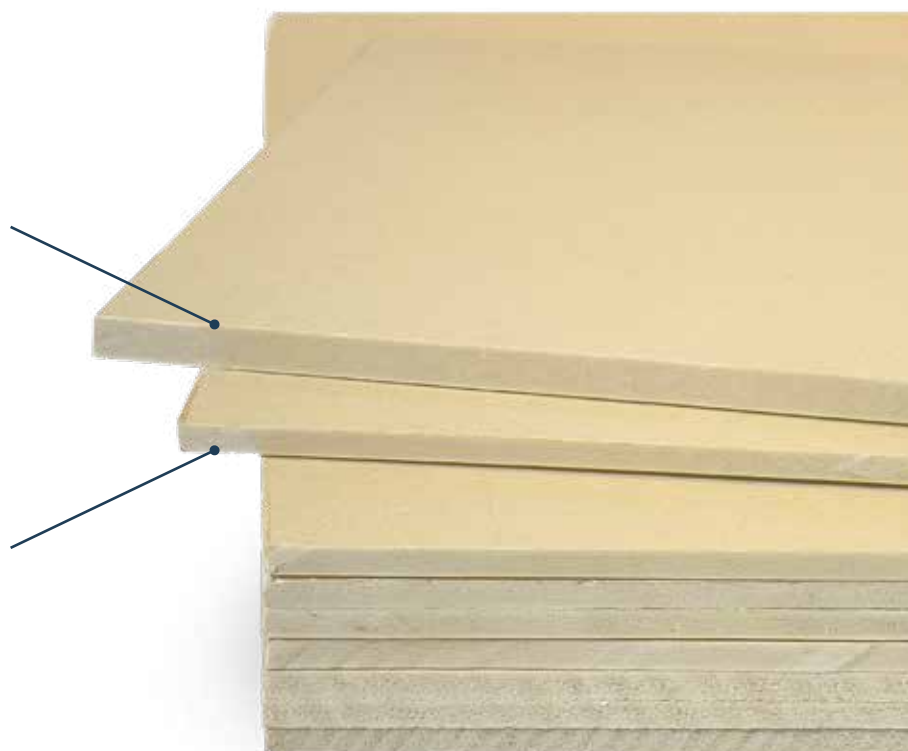
Code : **GIS120**

(1,000mm x 2,400mm x 5mm)

Kaino Panel (3mm)

Code : **GIS110**

(1,000mm x 2,400mm x 3mm)



Color Options



Stockholm Pearl



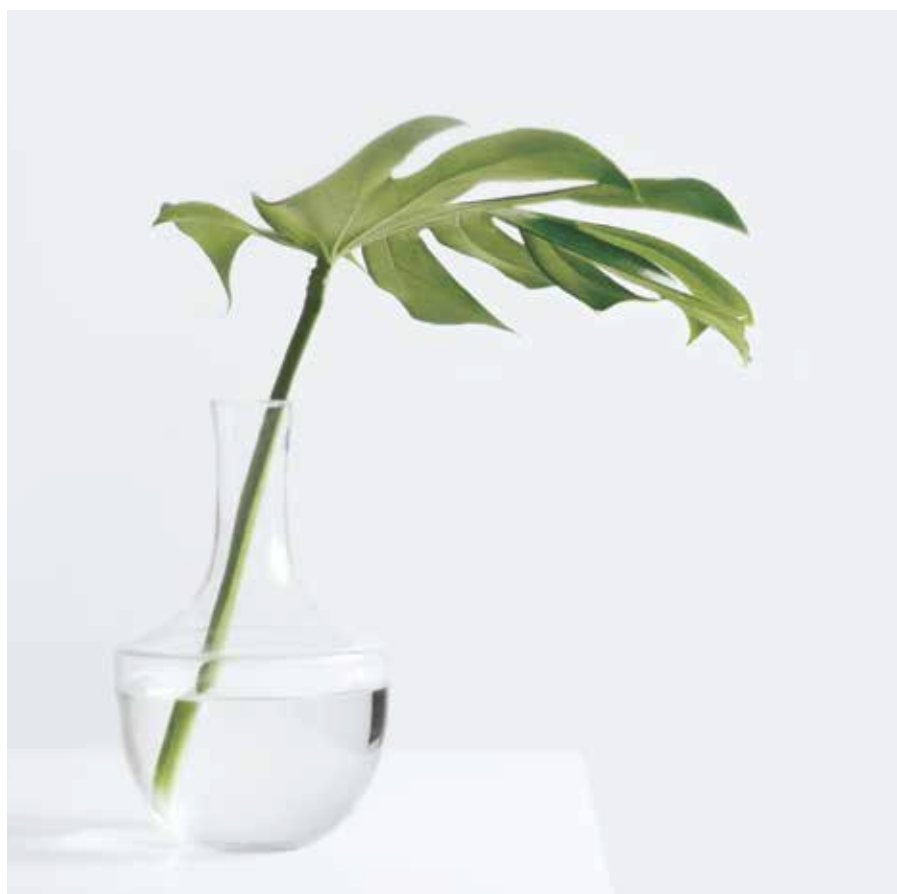
Malmö Mahogany



Malmö Maple



Malmö Walnut







OUTDOOR PRODUCT

Create
Beautiful Outdoor
Environments
That Last for
Years to Come



Gadea Döck

Gaea Däck

- Realistic wood embossing.
- High stain-resistance technology.
- Withstands harsh weather conditions .
- Able to manage high human traffic.
- Does not crack and splinter-free.



The Unique Benefits

- 10 years of residential and 5 years of commercial warranty.
- Can be cleaned by using normal detergent and water only.

Features



**Extremely
durable**



Anti-slip



**No painting or
coating required**



**Borer &
termite proof**



**100%
waterproof**



Profiles - Gaea Däck

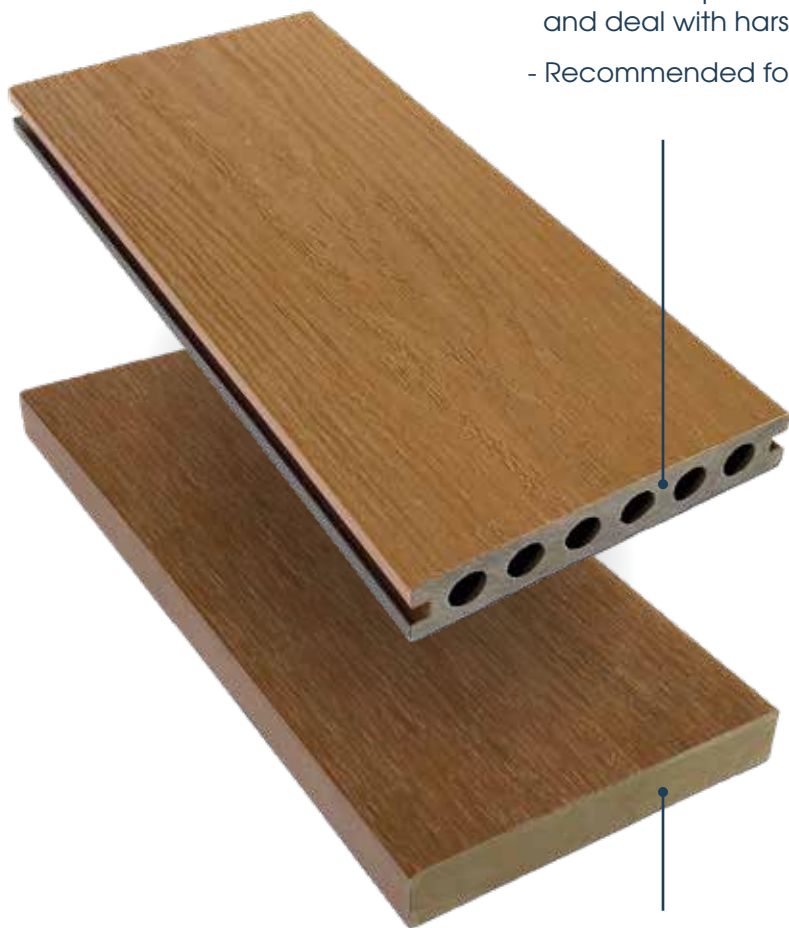
Gaea Däck

Code : GED312

(138 mm W x 23 mm H x 2,800mm L)

Circular hollow core

- Reduce the products' weight but keep the strength and durability as solid core.
- Distribute impact or shock waves evenly through round core and deal with harsh weather conditions.
- Recommended for public usage with high footfall.



Gaea Däck

Code : GES351

(140mm W x 22mm H x 2,800mm L)

Solid core

- Higher load bearing capacity.
- More possibility for different design.

Accessories - Gaea Däck



Clip Set

- SUS 304 (Stainless Steel Clip)

Code : **GEA440**



Started Clip

- SUS 304 (Stainless Steel Clip)

Code : **GEA441**



Deck Joist

- Premium Wood Composite

Code : **GEA431**



Deck L-edge

- Premium Wood Composite

Code : **GEA420**



Deck Beam

- Premium Wood Composite

Code : **GEA411**

Color Options

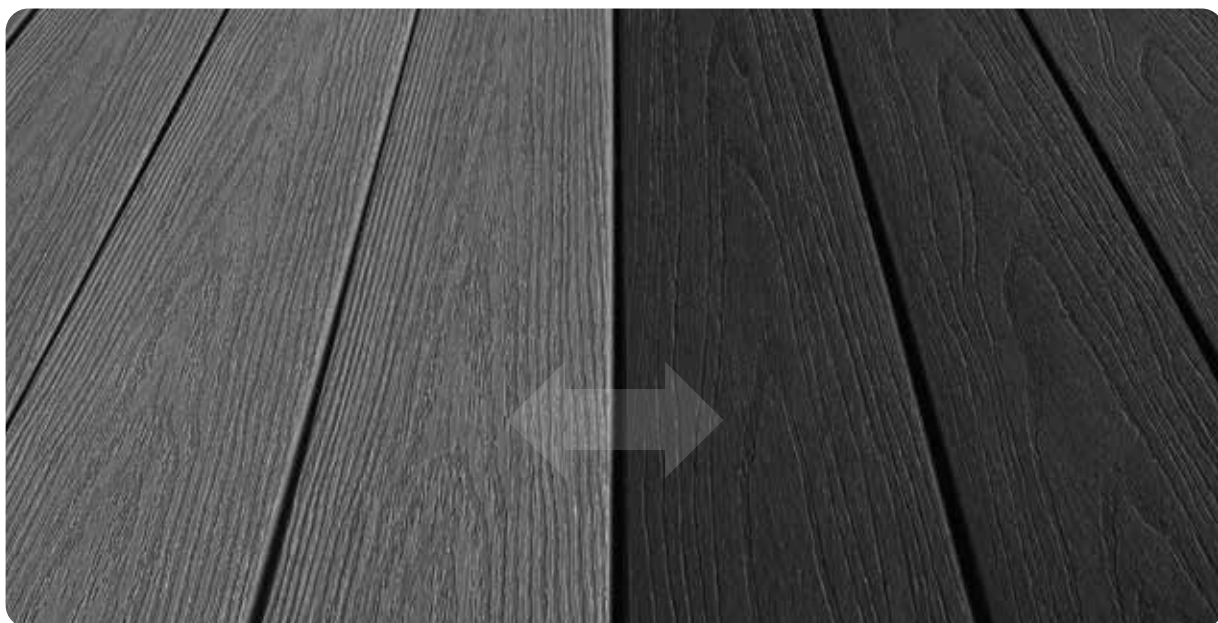
layer A
Copenhagen Teak

layer B
Copenhagen Walnut



layer A
Copenhagen Grey

layer B
Copenhagen Coal Black



Gaede Outdörr Vägghpanel Gaede Röls

Gaea Outdörr Väggpanel (Outdoor Wall Panel)

Gaea Räls (Railing)

- Realistic wood embossing.
- Does not crack and splinter-free.
- High stain-resistance technology.
- Withstands harsh weather conditions.



The Unique Benefits

- ▀ Can be cleaned by using normal detergent and water only.

Features



**Excellent
durability**



Non-swelling



**No painting or
coating required**



**Borer &
termite proof**



**100%
waterproof**

Profiles - Gaea Outdörr Vägghpanel

(Outdoor Wall Panel)

Gaea Outdörr Vägghpanel

Code : GEW311

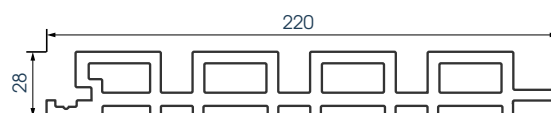
With Polymer Guard Wear Layer
(174mm W x 21mm H)



Gaea Outdörr Vägghpanel (Fluted)

Code : GEW320

With Polymer Guard Wear Layer
(220mm W x 28mm H)



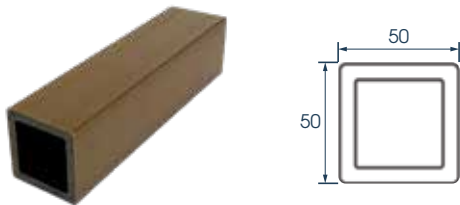


Profiles - Gaea Räls (Railing)

Gaea Räls (Beam)

Code : **GES310**

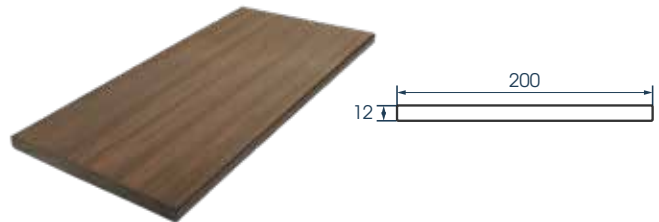
(50mm x 50mm)



Gaea Räls (Deck Board)

Code : **GES350**

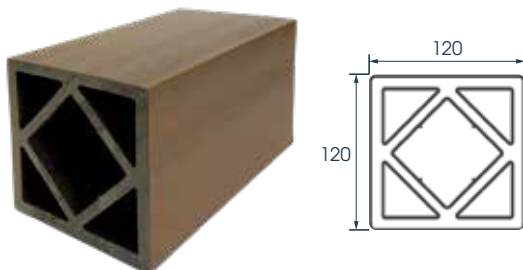
(200mm x 12mm)



Gaea Räls (Column)

Code : **GES311**

(120mm x 120mm)



Gaea Räls (Deck Board)

Code : **GES352**

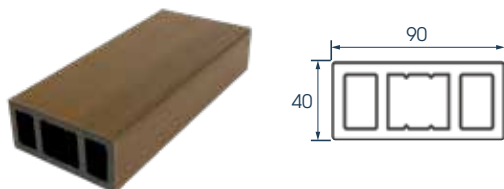
(140mm x 10mm)



Gaea Räls (Beam)

Code : **GES321**

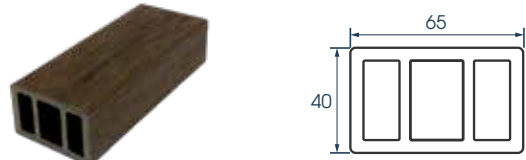
(90mm x 40mm)



Gaea Räls (Beam)

Code : **GES322**

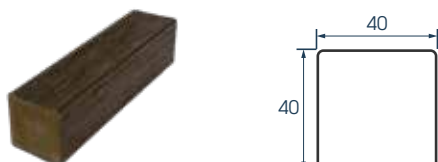
(65mm x 40mm)



Gaea Räls (Beam)

Code : **GES340**

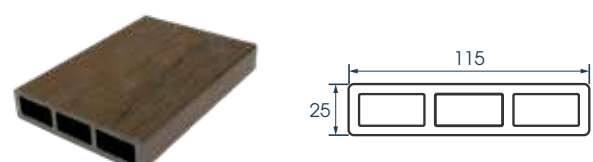
(40mm x 40mm)



Gaea Räls (Column)

Code : **GES323**

(115mm x 25mm)







TEST SHEETS & CERTIFICATES

Gaea Indoor Products Testing Fact Sheet



SGS

TEST REPORT

No. : SHN19120084588
Date : Dec 08, 2019
Page : 1 of 3

CUSTOMER NAME: SENG LY ENGINEERING (M) SDN BHD
ADDRESS: NO 28, JALAN TIRAM 14, TAMAN PERINDUSTRIAN TIRAM, JALAN SUNGAI TIRAM, 81800 ULU TIRAM, JOHOR, MALAYSIA

Sample Name : WPC door
Above information and sample(s) was/were submitted and confirmed by the client. SGS, however, assumes no responsibility to verify the accuracy, adequacy and completeness of the sample information provided by client.

SGS Ref. No. : SHN1911083860CM
IDN1911081711SC

Date of Receipt : Dec 03, 2019
Testing Start Date : Dec 03, 2019
Testing End Date : Dec 08, 2019

Test result(s) : For further details, please refer to the following page(s)
(Unless otherwise stated the results shown in this test report refer only to the sample(s) tested)

Signed for:
SGS-CSTC Standards Technical
Service (Shanghai) Co., Ltd.
Xia Hai
Xia Hai
Authorized signatory



SIRIM QAS International Sdn. Bhd.
(Company No.: 1990102781/410334-X)
No. 1, Persiaran Dato' Menteri, Section 2, P.O. Box 7035
4770 Shah Alam, Selangor Darul Ehsan, Malaysia
Tel: 03-55460300/40
Fax: 03-55460303
www.sirim-qas.com.my

TEST REPORT

REPORT NO.: 2021PC0486 PAGE : 1 OF 4

This Test Report refers only to samples submitted by the applicant to SIRIM QAS International Sdn. Bhd. and tested by SIRIM QAS International Sdn. Bhd. This Test Report shall not be reproduced, except in full and shall not be used for any purpose by any means or forms (including but not limited to advertising purposes) without written approval from the Head of Quality, Occupational Safety and Health & Environment (QOSHE), SIRIM QAS International Sdn. Bhd. Please refer the last page for Conditions Relating to the Use of Test Report.

THIS TEST REPORT IS ISSUED IN SECURED PDF SOFTCOPY

Applicant : SENG LY ENGINEERING (M) SDN BHD
No. 28, Jalan Tiram 14
Taman Perindustrian Tiram
Jalan Sungai Tiram
81800 Ulu Tiram
Johor

Manufacturer : - same as above -

Product : GAEA Premium Wood Composite Door
Model : GAEA Door
Trademark : GAEA
Type : Wood Polymer Composite (WPC) Door

Reference Standard/ Method of Test : ASTM D2240-2015 - Standard Test Method for Rubber Property - Durometer Hardness

Description of Sample : Three (3) pieces of new test specimens for sample indicated above were received on 14 July 2021. Photograph of the test specimens is shown in Appendix A.


Date Received of Complete Application : 14 July 2021

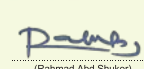
Job No. : J20211460335


Description of Test Results : The test result of the submitted test specimens is described in Page 2 of this test report.

Issued Date : 15 July 2021

Approved Signatories:


Ir. Zarina Rosmin
Principal Testing Executive


(Rahmad Aid Shukor)
Head
Plastics and Composite Materials Section
Testing Services Department





Gaea Outdoor Products Testing Fact Sheet



No Lesen : EL000230
Licence No :

LESEN PENSIJILAN EKO-LABEL

Eco-Label Licence



SIRIM QAS International Sdn. Bhd. dengan ini menganugerahkan kepada
SIRIM QAS International Sdn. Bhd. hereby grants to

SENG LIY ENGINEERING (M) SDN. BHD.
NO. 28 , JALAN TIRAM 14
TAMAN PERINDUSTRIAN TIRAM
JALAN SUNGAI TIRAM
81800 ULU TIRAM
JOHOR, MALAYSIA

Lesen untuk menggunakan Tanda Eco-Label di atas barangan
a license to use the Eco-Label Mark on

BIOFIBRE COMPOSITE CONSTRUCTION MATERIAL
Please refer to detail in the SCHEDULE

sebagai mematuhi keperluan
as complying with

SIRIM ECO 005 : 2018



Nur Fadhillah binti Muhammed
Ketua Pegawai Eksekutif
Chief Executive Officer
SIRIM QAS International Sdn. Bhd.



SIRIM QAS International Sdn. Bhd.
(No. Syarikat 39965337981/410334-X)
1, Pemutaran Datar Mambur
Selatany 2, Jln. Sg. Tiram 7025
40100 Shah Alam
Selangor Darul Ehsan
MALAYSIA
Tel : 03-5544 6400
Email : license@sqas.com.my
<https://www.sqas.com.my>
<https://www.malaystanetrad.com.my>

Tarikh Mula Pensijilan : 13 February 2023
Certified Since
Sah Sehingga : 13 February 2025
Valid Until
Tarikh Dikeluarkan : 13 February 2023
Issue Date
No Siri : 082406
Serial No

Lesen ini dianggotakan terutamanya kepada syarat Perjanjian Pensijilan Barangan SIRIM QAS International Sdn. Bhd.
This License is granted subject to the provisions of the Product Certification Agreement of SIRIM QAS International Sdn. Bhd.



intertek
Total Quality. Assured.

Intertek Testing Services (Shanghai) Branch
Plant 5, No. 8818 Daye Road, Songjiang District, Shanghai, China
Tel: +86 21 5108 1818 Fax: +86 21 5108 1821
Website: www.intertek.com

Test Report

Issue Date: 2022-06-25 Intertek Report No.: 2002309804F-001
Applicant: SENG LY ENGINEERING (M) SDN BHD
Address: NO. 28, JALAN TRAM 14, TAMAN PERINDUSTRIAN TRAM, JALAN SUNGAI TRAM, 81300 ULU TRAM, JOHOR, MALAYSIA
Attn: Zira
Test Type: Performance test, samples provided by the applicant.

Product Information

Product Name	CO EXTRUSION WPC	Brand	GAZA
Sample Description	Good Condition	Sample Amount	15 pcs
Sample ID	Model	Received Date	2022-05-30
S2003000004F-001-006	604/DE C3.2	Specification	13M*23mm

Test Methods And Standards

Test Standard	EN 15184-1:2014 Section 6.1, 6.5, 6.6, 7.3.2.5, 7.5, Annex A EN 15184-4:2014 Section 4.3, 4.4, 4.5.1, 4.5.2, 4.5.7 EN 15184-2:2014-A1:2017 Section 6.2 and 6.3, ISO 1285-1:2004 Method A, EN 823:1992
Specification Standard	EN 15184-4:2014
Test Conclusion	The samples were tested according to the above standards, and the results are shown in the following page.

Note:
1. This report relates specifically to the sample(s) that were drawn and provided by the applicant or their nominated third party. The reported result(s) provide no warranty or verification on the sample(s) representing any specific grade and/or different and only apply to the sample(s) as received and tested.

Report Authorized

Tiera Tan
Name: Tiera Tan
Title: Reviewer

Jackie Zhou
Name: Jackie Zhou
Title: Test Engineer

Version: 1 May 2020 Page: 1 of 12 LTA (AFAC) 047-04-126

intertek
Total Quality. Assured.

SIRIM QAS International Sdn. Bhd.
(Company No.: 1989431981) (450509-K3)
No. 1, Persiaran Damansara, PJ 02017030, Section 6,
40750 (Jalan Alam, Damansara Perdana) Petaling Jaya, Malaysia
Tel: 603-62642477
Fax: 603-62642488
www.sirim-qas.com.my

TEST REPORT

REPORT NO.: 2022CE1528 PAGE: 1 OF 4

This Test Report refers only to samples submitted to the applicant to SIRIM QAS International Sdn. Bhd. and tested by SIRIM QAS International Sdn. Bhd. This Test Report shall not be reproduced, stored in a retrieval system or used for any purpose by any means, in whole or in part, without the written approval of SIRIM QAS International Sdn. Bhd. Please refer to the last page of this Test Report for Conditions Relating to the Use of Test Report.

THIS TEST REPORT IS ISSUED IN SECURED PDF SOFTCOPY

Applicant: SENG LY ENGINEERING (M) SDN BHD
No. 28, Jalan Tram 14, Taman Perindustrian Tram,
Jalan Sungai Tram,
81300 Ulu Tram,
Johor

Manufacturer: - same as above -

Product: GAZA Premium Wood Composite Deck

Reference Standard / Method of Test: ISO 1183-1:2019 - Plastics - Methods for Determining the Density of Non-Cellular Plastics - Part 1: Immersion Method, Liquid Pycnometer Method and Titration Method

Description of sample: Two test sample indicated above was received on 21 June 2022. A photograph of the test sample is shown in Appendix A.

Date Received of Complete Application: 22 June 2022

Job No.: 202209871304

Description of Test Results: The test result of the submitted test sample is described on Page 2 of this test report.

Issued Date: 27 June 2022

Approved Signatory:

Zaira Binti Rasman
Dr. ZAIRA BINTI RASMAN
Principal Testing Executive

Hafinas Binti Mambut
(HAFINAS BINTI MAMBUS)
Head
Chemical, Polymer and Composite Section
Testing Services Department





Whatsapp. : +6010 662 8730
Website : gaea.com.my
Email : hello@gaea.com.my
Call : +607 861 2730
Fax : +607 863 2730

HEADQUARTERS

No. 28, Jalan Tiram 14,
Taman Perindustrian Tiram,
Jalan Sungai Tiram,
81800 Ulu Tiram,
Johor, Malaysia.

OFFICE (Kuala Lumpur)

B-07-09,
Gateway Corporate Suites,
Gateway Kiaramas,
No. 1, Jalan Desa Kiara,
Mont Kiara, 50480 Kuala Lumpur.

SHOWROOM

BMS MALL Unit A0106,
No. 6 Jalan Kencana Mas 2/1,
Kawasan Perindustrian Tebrau III,
81100 Johor Bahru,
Johor, Malaysia.

Certificates



Test Report



Awards



The information and illustration contained herein is for guidance only. Care has been taken to ensure all factual data and numerical values are accurate at the time of publication. However, any or all technical specification, information and dimensions are nominal and provisional; they are subject to change in accordance with market conditions. No representation is made or to be implied as to the data and information herein; Seng Liy Engineering (M) Sdn. Bhd. and its subsidiaries and associate companies shall not be responsible for any errors in or misrepresentation of the information contained in this brochure or its use. Seng Liy Engineering (M) Sdn. Bhd. and its subsidiaries and associate companies reserve the right to alter any or all specifications as deemed fit and necessary without prior notice.

SengLiy

Copyright © 2023 SENG LIY ENGINEERING (M) SDN. BHD.