HAMRAH

HAMRAH A1

HAMRAH HOUSING

A trustworthy partner who puts our customers' best interests at heart and takes responsibility
for the entire architecture cycle from start to finish with eco-friendly materials.
Committed to sustainability and innovation, we build a better future with eco-friendly, durable materials.

www.hamrah.kr

Hamrah Co., Ltd.
4232-10 Chungseo-ro, Cheongso-myeon, Boryeong-si, Chungcheongnam-do, Republic of Korea
T. +82-41-642-0077 / F. +82-41-642-8251

Hamrah A1 Co., Ltd.
991 Junghwa-ro, Moseomyeon, Sangju-si, Gyeongsangbuk-do, Republic of Korea
T. +82-54-536-8777 / F. +82-54-536-2777

Hamrah Housing Co., Ltd.
212-67 Haejeong 1-gil, Susin-myeon, Dongnam-gu, Cheonan-si, Chungcheongnam-do, Republic of Korea
T. +82-41-566-8851 / F. +82-41-566-8821

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HAMRAH HOUSING

The final touches in architecture always start with high-quality materials.

HAMRAH

We are the only domestic manufacturer of uniquely Korean asphalt shingles,
and over the past 30 years, thanks to the support and love from our customers,
we have specialized our domestic technology to confidently compete with foreign products.

1983	Hamrah Industry - Released Roof Tiles and Long Collar
1992	Established Cana Industries
1995	Established Hamrah Marble
1996	Established Hamrah Stone & Construction
1998	Established Hamrah Co., Ltd.
2005.09	Joined as a member of the Korea Standards Association
2006.02	Developed rust-resistant metal roof tiles
2010.06	Installed four asphalt storage tanks
2014.10	Established Hamrah A1 Co., Ltd.
2015.11	Signed an MOU with Sangju City, Gyeongsangbuk-do (ROK)
2016.02	Acquired patent rights
2016	Commenced operation of production lines (Production lines No. 1 to No. 5)
2017.09	Completed construction of our second factory
2021.03	Established Hamrah Housing Co., Ltd.
2021.12	Awarded as an excellent company for job creation in Gyeongsangbuk-do (ROK)
2021.12	Awarded Family-Friendly Certification
2022.10	Awarded the Certificate of Designation from the Public Procurement Service
2023.05	Certified as a strong Small and Medium-sized Enterprise by the Ministry of Employment and Labor.
2023.12	Awarded the INNO-BIZ Certificate
2024.02	Became a specialized company in materials, components, and equipment

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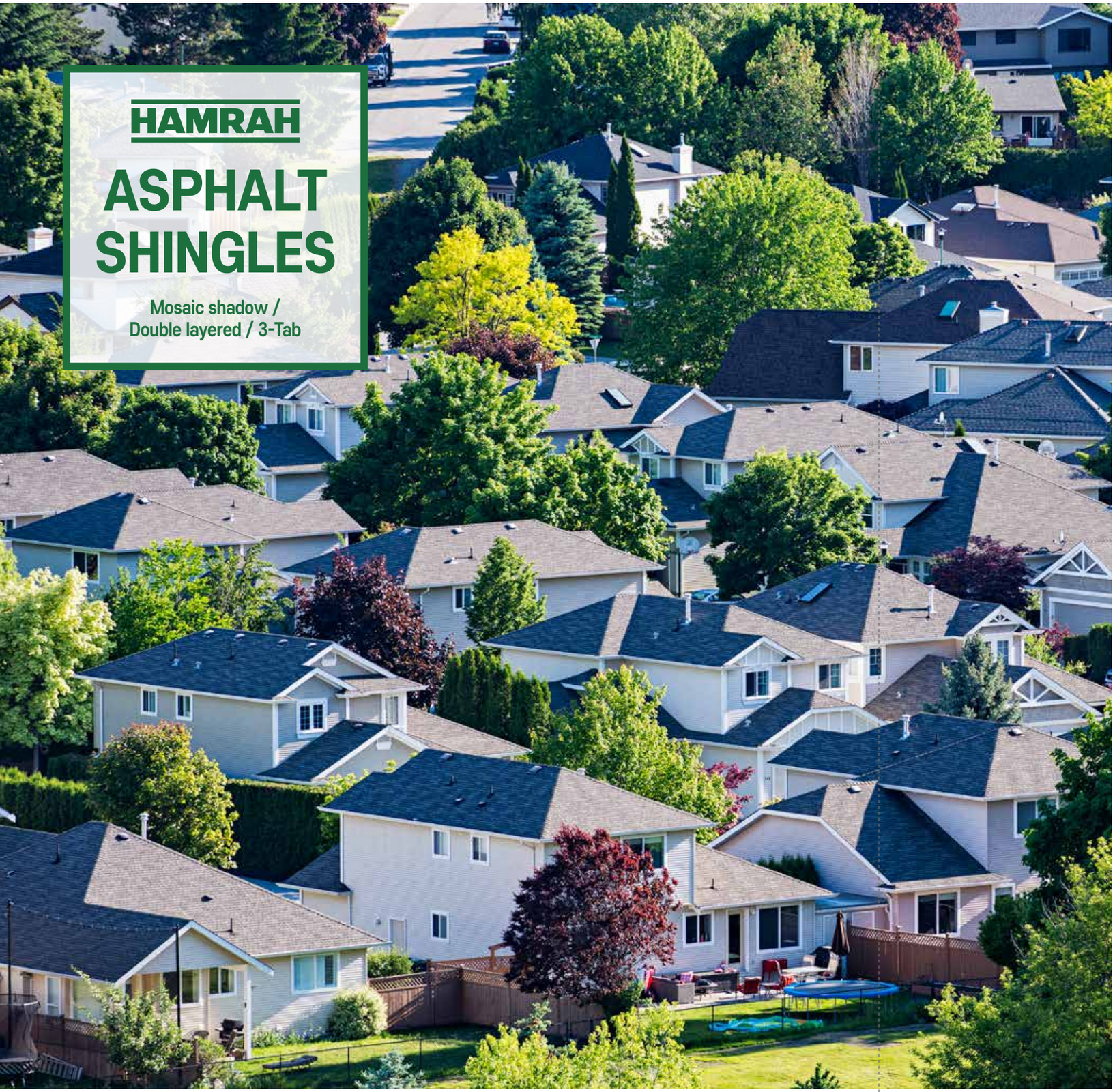

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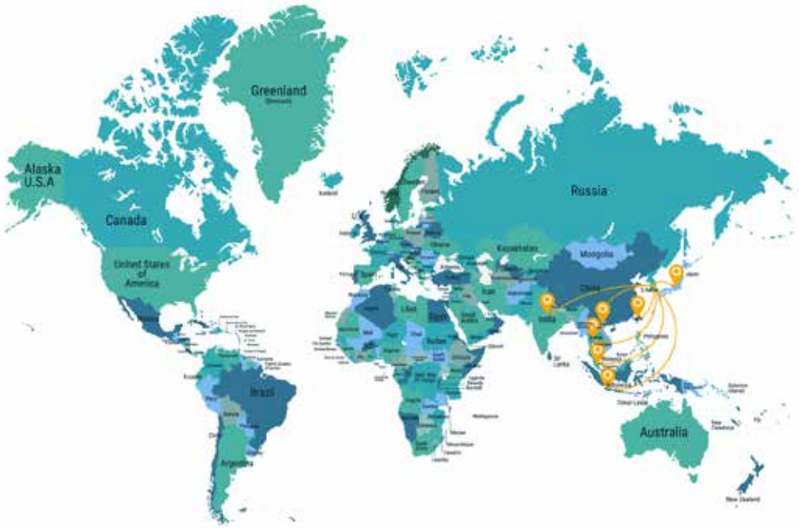
ASPHALT SHINGLES

Mosaic shadow /
Double layered / 3-Tab

Countries of Export

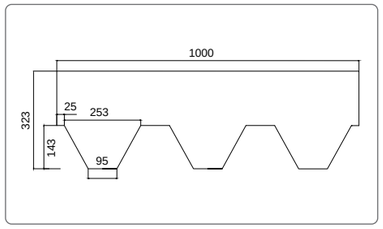
India, Thailand, Vietnam, Indonesia, Taiwan, Malaysia, Japan

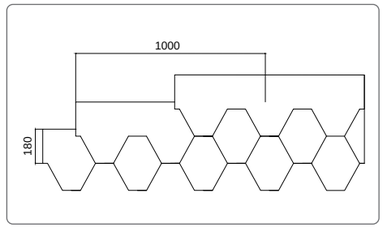


Aesthetic | Weatherability | Fire Protection | Wind Resistance | Warranty | Moss Prevention

01 Mosaic shadow

Specifications





Color Chart


Sunset


Red


Dark Green


Blue Hemp


Dark Brown


Stone Gray


Black

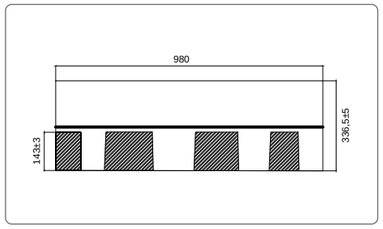
Features

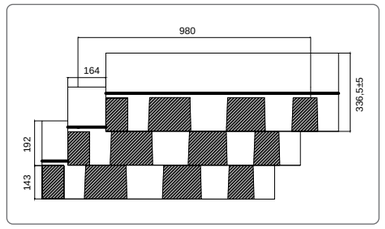
Properties	Testing method	Performance	Comparison
Mass per unit area (kg/m2)	KS F4750:2016-1	4656 g/m2	(20±2) ℃ (50±10)% R.H
Asphalt penetration	KS F4750:2016-1	Uniform penetration	
Tensile strength - Length	KS F4750:2016-1	14 N	
Tensile strength - Width	KS F4750:2016-1	11 N	
Flexural performance - Length	KS F4750:2016-1	No cracking	
Flexural performance - Width	KS F4750:2016-1	No cracking	
Tensile properties : Maximum tensile strength L/T,N/50mm	KS F4750:2016-1	600±200	
Tear resistance L/T,N	KS F4750:2016-1	500±100	
Heat resistance performance	KS F4750:2016-1	Coating material detaches by more than 5mm	
		Heaving absorption, foaming	
		No asphalt seepage	
Floor protection	–	Silica, PET film, asphalt	

As the back has a bonding treatment applied,
there is no need to apply further adhesive,
making construction quick and easy.
The honeycomb shape and distinct shading enhance
the appearance of the roof.

02 Double layered

Specifications





Color Chart


Sunset


Red


Dark Green


Blue Hemp

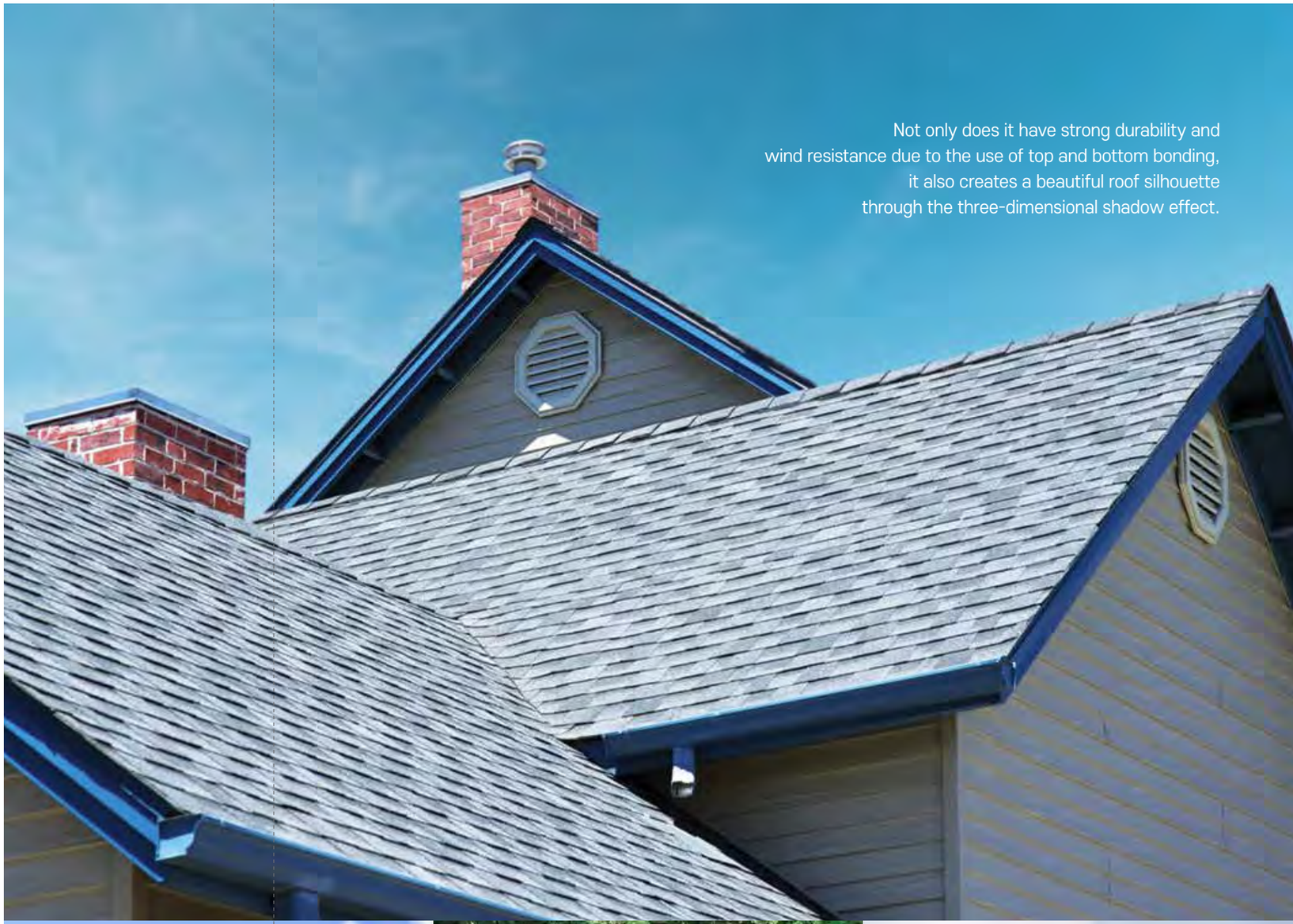

Dark Brown


Stone Gray


Black

Features

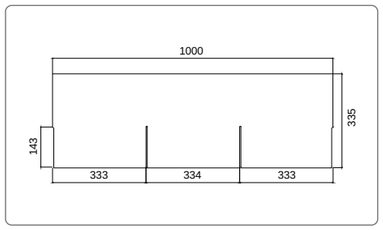
Properties	Testing method	Performance	Comparison
Mass per unit area (kg/m2)	KS F4750:2016-1	8492 g/m2	(20±2) ℃ (50±10)% R.H
Asphalt penetration	KS F4750:2016-1	Uniform penetration	
Tensile strength - Length	KS F4750:2016-1	27 N	
Tensile strength - Width	KS F4750:2016-1	15 N	
Flexural performance - Length	KS F4750:2016-1	No cracking	
Flexural performance - Width	KS F4750:2016-1	No cracking	
Tensile properties : Maximum tensile strength L/T,N/50mm	KS F4750:2016-1	600±200	
Tear resistance L/T,N	KS F4750:2016-1	500±100	
Heat resistance performance	KS F4750:2016-1	Coating material detaches by more than 5mm	
		Heaving absorption, foaming	
		No asphalt seepage	
Floor protection	—	Silica, PET film, asphalt	

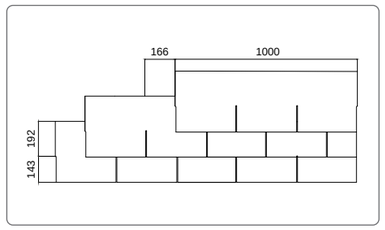


Not only does it have strong durability and wind resistance due to the use of top and bottom bonding, it also creates a beautiful roof silhouette through the three-dimensional shadow effect.

03 3-Tab

Specifications





Color Chart


Sunset


Red


Dark Green


Blue Hemp


Dark Brown


Stone Gray


Black

Features

Properties	Testing method	Performance	Comparison
Mass per unit area (kg/m2)	KS F4750:2016-1	4500 g/m2	(20±2) ℃ (50±10)% R.H
Asphalt penetration	KS F4750:2016-1	Uniform penetration	
Tensile strength - Length	KS F4750:2016-1	15 N	
Tensile strength - Width	KS F4750:2016-1	11 N	
Flexural performance - Length	KS F4750:2016-1	No cracking	
Flexural performance - Width	KS F4750:2016-1	No cracking	
Tensile properties : Maximum tensile strength L/T,N/50mm	KS F4750:2016-1	600±200	
Tear resistance L/T,N	KS F4750:2016-1	500±100	
Heat resistance performance	KS F4750:2016-1	Coating material detaches by more than 5mm	
		Heaving absorption, foaming	
		No asphalt seepage	
Floor protection	—	Silica, PET film, asphalt	

As the back has a bonding treatment applied,
there is no need to apply further adhesive,
making construction quick and easy.

Technical Data for Hamrah Asphalt Shingles (Based on Double layered Shingles)

Items	Hamrah Products
Manufacturer's Warranty	30 years
Types of Bitumen	Oxidized bitumen (for heat resistance)
Production Standards	KS F4750
Thickness per layer (mm) (2.7 mm) Double layer	1st layer 2.8 mm, 2nd layer 5.6 mm
Total height of shingle (mm)	336 mm
Visible part height (mm)	143 mm
Total height of laminate (mm)	192 mm
Length of shingle (mm)	980 mm
Top surface protection	Serpentine granules
Height of shadow area (mm)	35 mm
Visible defects	No defects
Adhesion of granules	Loss amount 0.5
Bottom surface protection	Silica sand (back sand) + PET film + bond
Number of shingles per bundle (units)	16 PCS
Coating per bundle, 3-Tab feet of roofing	2.2 m2
Average weight per shingle (kg)	1.69 kg
Average weight per roof (kg/m2)	11.2 kg
Shingle bundle weight (kg)	27 kg
Resistance at high temperatures	100 ℃
Carrier weight (g/m2)	95
Moisture content (%)	0.5 %
Tensile strength MD/CD, N/A/50mm	978 / 600
Tear strength (N)	360
Minimum mass of asphalt compound (g/m2)	1100 and above
Basalt consumption per linear (mg)	1550
Roof effect, UV-resistant weather protection	UV protection / Heavy rain / Terrible weather
Target stone for stacking	—
Fiberglass - Quality	95 - Rating

Domestic and International Certificates of Hamrah Asphalt Shingles

Mosaic shadow
Test Report

Double layered
Test Report

3-Tab
Test Report

ASTM / ISO / JP Fire Protection Certificate

ASTM D3462

Standard test specifications for asphalt shingles made of glass felt and surface-treated with mineral granules

ASTM D3462 is a manufacturing standard that specifies the minimum and maximum values for the mass and physical performance requirements of asphalt shingles and includes several important items as follows.

- Tear strength
- Wind pressure resistance
- Class A fire resistance
- Penetration resistance of the fixture
- Granule adhesion

ASTM D3161

Wind pressure resistance test method for steep-slope roof products

ASTM D3161 is a model building code requirement that has been adopted in whole or in part in most parts of the United States. Class F: The shingles have passed tests in winds up to 110 miles per hour (approx. 177 km/h).

ASTM D3462

ASTM D3161

ISO Certificate

JP Fire Protection Certificate

01 Cana Waterproof Sheets

Product Features

This is a non-exposed waterproof sheet that allows you to complete roof waterproofing work in one go without additional work.

Advanced waterproof sheet

It is a self-adhesive type sheet that can be attached directly to the construction surface by removing the release paper on the back, allowing for easy construction.

Durability

The tensile strength, adhesive strength, and elongation are all balanced, so the product is less likely to deform over time.

Weather Resistance

It provides excellent adhesion and waterproofing in any climate conditions, including seasonal temperature changes.

It offers excellent resistance to infrared rays, UV rays, ozone, etc.

It has outstanding chemical and weather resistance and excellent adhesion, so it can be applied to all surfaces and used semi-permanently.

Cana Waterproof Sheet Product Specifications

- 1m x 10m x 1.2mm, 1.5mm (Stock production) / CN020V (Vinyl sheet)
- 1m x 10m x 2.0mm, 2.5mm, 3.0mm (Made to order)

CN015 | CN015+ | CN020 | CN020V (VINYL SHEET) | 2mm | 2.5mm | 3mm

Domestic and International Performance Certificates of Cana Waterproof Sheets

Improved Asphalt Waterproof Sheet 3mm (Vinyl)
Improved Asphalt Waterproof Sheet 3mm (Non-woven)
Improved Asphalt Waterproof Sheet 2mm (Vinyl)
Improved Asphalt Waterproof Sheet 2mm (Non-woven)

Improved Asphalt Waterproof Sheet 3mm (Type A, Class 2)
Improved Asphalt Waterproof Sheet (015 PLUS)
Improved Asphalt Waterproof Sheet (020)
Improved Asphalt Waterproof Sheet (015)

02 Cana Exposure Sheets (Roll Shingles)

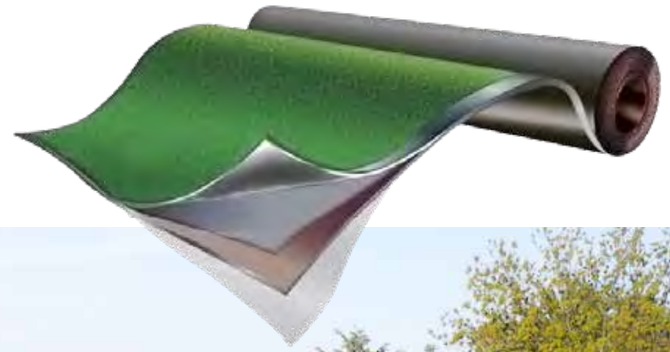
Product Features
This is an exposed waterproof sheet that allows you to complete roof waterproofing work in one go without additional work.

Durability
It has excellent physical properties such as tensile strength, elongation, and tear strength.

Work Efficiency
It has excellent fatigue resistance and high temperature resistance, so it is efficient when working with a torch.

Product Specifications

CNRS030 :
1m x 10m x 3mm (9m²)



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Hamrah Co., Ltd., a pioneer in the domestic roofing construction materials industry through production and localization of "asphalt shingles" over 30 years ago, is working to establish itself as a "prefabricated panel construction materials" manufacturing company through sandwich panel production.

Obtained EPD certification for sandwich panels for the first time in Korea


CERTIFICATE


Agreement on Certification of Environmental Product Declaration

Eco Green Panel

Eco-friendly sandwich panels using BIOMASS steel plate

What is BIOMASS?

A combination of "bio" and "mass," BIOMASS means “quantitative biological resources” and generally refers to plant resources produced through photosynthesis.

※ Carbon dioxide is generated during the process of using BIOMASS materials, but it absorbs carbon dioxide (photosynthesis) during the production process, so it has the characteristic of being carbon-neutral (Net-Zero).

BIOMASS Color Steel Plate

In response to the climate crisis, we are developing low-carbon products in line with the international community's declaration of carbon neutrality and POSCO's 2050 carbon neutrality goal. To do so, we are creating products that use or apply paint made from raw materials derived from BIOMASS (plants such as corn) rather than oil-based products.

- Reduces carbon emissions by partially replacing petroleum-based materials that emit large amounts of carbon dioxide during the manufacturing process with biomass materials.
  Able to develop existing color products through BIOMASS (equivalent physical properties, warranty)
- Matte, Solid/Metallic, Printed Steel Plate, etc.
  (However, Fluorine products are not permitted)
  BIOMASS paint is applied to the top coating, and the base and pretreatment have the same composition as the existing product.
- BIOMASS paint: Applies polyester resin synthesized using bio-based monomer

※ Produced by extracting monomers that were previously produced from fossil raw materials from biomass.

posco STEELEON

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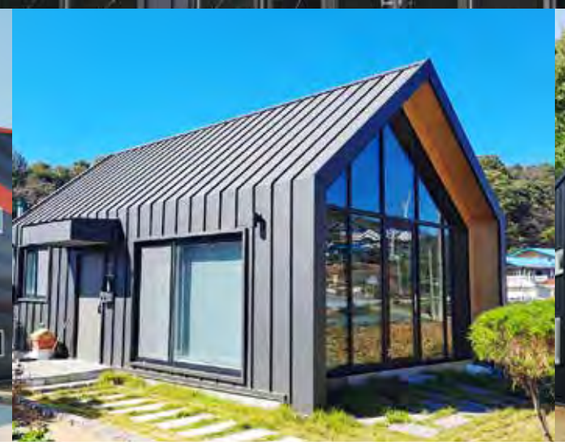
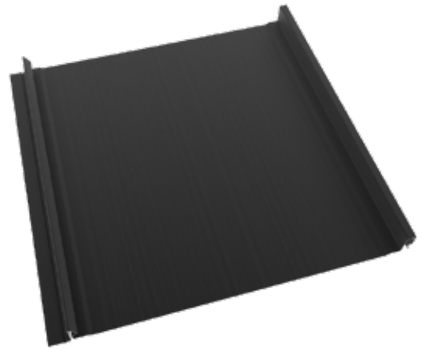
ZINC PLATE

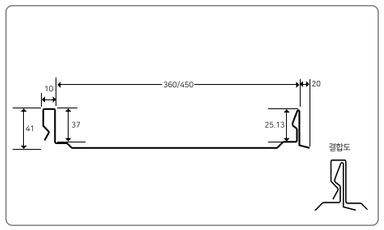
CANA ZINC SHEET



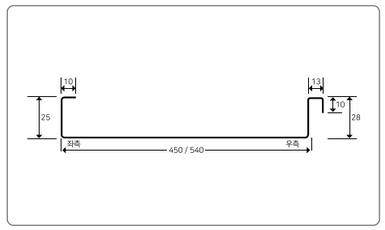
These plate can be used as a mixed material for roofs and walls, and is an exterior material that can create a luxurious and modern feel to buildings.



Specifications



Cross-section of interlocking



Cross-section of a protruding joint

- **Interlocking steel plate specs** : Thickness 0.4~0.6mm / Effective width 360 | 450 / Length 500~
- **Protruding joint steel plate specs** : Thickness 0.4~0.6mm / Effective width 450 | 540 / Length 500~

Interlocking Steel Plate Properties

- Can be applied in a variety of colors.
- Intuitive and maximized construction convenience
  - The male and female construction parts are separated and fit tightly together without the use of tools
  - Easy to install as it does not require protruding tongs and has an interlocking method, so no additional materials such as clips are required

Properties of Zinc-plated Steel Sheets with Protruding Joints

- Chamfered products : Work time is drastically reduced by processing chamfers, which are a time-consuming and difficult task during construction
- Worker-centered design implementation possible : Advanced design implementation is possible, such as curved roofs or designs where the roof and walls are connected
- Available in various colors, using POSMAC

Color Chart

Print Black | Print Dark Grey | Print Light Grey | Corten Brown | Black Stone | Unistone

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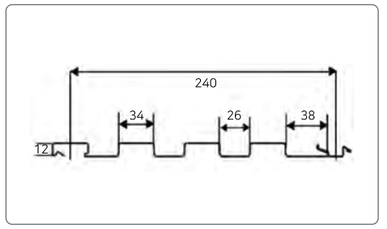
LOUVER M MAX

These louvers are widely used for applications to both exterior and interior buildings. Improve the technical capabilities of your building and finish it with an attractive and creative exterior with Hamrah A1's patented Louver steel plate.

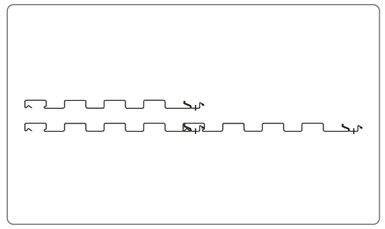
Korean Intellectual Property Office

Patent Office Application Number
10-2022-0061703

Specifications



Section



Coupling

Louver M Max specs : Thickness 0.4~0.6mm / Effective width 240 / Length 500~ / Rib height 12mm

Special combination system based on patent

- Efficient construction with just one worker is possible by joining together using a patented method embedded in the connecting part, meaning it will not easily separate from the connecting part
- Tension is strengthened by the inherent elasticity, eliminating wobbling, and does not come off after initial fixation, so there is no need to use the leveler afterwards
- Excellent waterproofing properties (water does not enter through the gaps) thanks to the patented method of joining

Rust-free premium material based on POSMAC

- 5 times higher corrosion resistance than existing galvanized steel (GI)
- Implementation of advanced design based on POSCO's technology, such as wood and carbonized wood

Emphasis on convenience based on construction site

- Long products can be produced on-site, reducing transportation costs and shortening construction periods

Color Chart

Darkwood | Lightwood | Blackstone | Unistone | Print Black | Print Dark Gray | Print Light Gray