

HAMRAH
HAMRAH



(주)함라에이원

아스팔트 싱글

CANA ASPHALT SHINGLE

www.함라에이원.com



ASTM INTERNATIONAL
ASTM D 3462 ASTM D 3161

About us

HAMRAH

Hamrah A1 Co., Ltd. is the only local asphalt shingle manufacturer in Korea.

During the past 20 years, with the warm support and teachings of our customers, we have successfully specialized Korean technology and now our products are proudly competing with overseas products.

We promise that we will devote our endless passion and hard work to customer satisfaction, and do our best to manufacture 'Cana' asphalt shingle that can represent Korea.

Thank you. Staff and executives of Hamrah Co., Ltd.



Mosaic Shadow Shingle Main Characteristics

Performance	Test Method	Performance	Comparison
Unit weight of the product	KS F4750:2016-1	4302 g/m ²	(20±2) °C (50±10)% R.H
Glass Felt of a unit mass	KS F4750:2016-1	91 g/m ²	
Per unit mass of sheathing	KS F4750:2016-1	3172 g/m ²	
Per unit mass of asphalt	KS F4750:2016-1	1168 g/m ²	
Asphalt penetration of glass felt	KS F4750:2016-1	1086%	
Asphalt penetration of the situation	KS F4750:2016-1	pass	
Tear strength-Length	KS F4750:2016-1	13 N	
Tear strength-Width	KS F4750:2016-1	9 N	
Flexural property-Length	KS F4750:2016-1	pass	
Flexural property-Width	KS F4750:2016-1	pass	
Heat resistance	KS F4750:2016-1	pass	

Wide Double layered Shingle Main Characteristics

Performance	Test Method	Performance	Comparison
Unit weight of the product	KS F4750:2016-1	8388 g/m ²	(20±2) °C (50±10)% R.H
Glass Felt of a unit mass	KS F4750:2016-1	185 g/m ²	
Per unit mass of sheathing	KS F4750:2016-1	6388 g/m ²	
Per unit mass of asphalt	KS F4750:2016-1	1818 g/m ²	
Asphalt penetration of glass felt	KS F4750:2016-1	976%	
Asphalt penetration of the situation	KS F4750:2016-1	pass	
Tear strength-Length	KS F4750:2016-1	20 N	
Tear strength-Width	KS F4750:2016-1	16 N	
Flexural property-Length	KS F4750:2016-1	pass	
Flexural property-Width	KS F4750:2016-1	pass	
Heat resistance	KS F4750:2016-1	pass	

3-Tab Shingle Main Characteristics

Joint strength	Test Method	Performance	Comparison
Indentation resistance	KS F4750:2016-1	Passed	(20±2) °C
Flexural property - Not treated-Front side (-10°C)	KS F4750:2016-1	Passed	
Flexural property - Not treated-Front side (-10°C)	KS F4750:2016-1	Passed	
Flexural property - After heating-Front side (-10°C)	KS F4750:2016-1	Passed	
Flexural property - After heating-Front side (-10°C)	KS F4750:2016-1	Passed	

CANA MOSAIC SHADOW SHINGLE

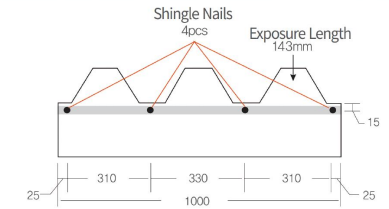
It has its own top and bottom edge processing, so there is no need to apply adhesive, making installation quick and easy. The honeycomb shape and shading make the roof stand out even more.



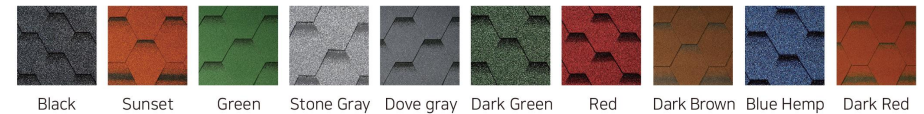
Shingle Specifications

Dimension : 320mm x 1000mm
Exposure Length : 143mm
Number of Pieces : 21pcs/bd
Operation Area : 3m²/bd
Weight : 23kg/bd

Shingle Detail Drawing



Production Color (color consultation available)



CANA WIDE DOUBLE LAYERED SHINGLE

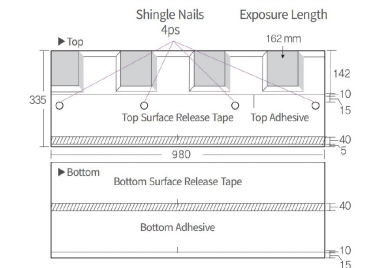
By using top and bottom bonding, it not only possesses strong durability and wind resistance, but also creates a beautiful roof through a three-dimensional shadow effect



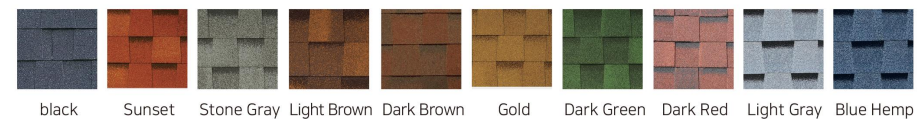
Shingle Specifications

Dimension : 335mm x 980mm
Exposure Length : 142mm
Number of Pieces : 16pcs/bd
Operation Area : 2.3m²/bd
Weight : 27kg/bd

Shingle Detail Drawing



Production Color (color consultation available)



CANA 3-TAB SHINGLE

With its own top and bottom bonding, there is no need to apply adhesive, making installation quick and easy.



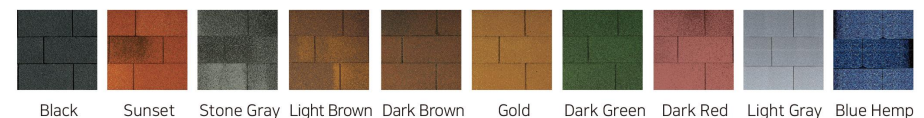
Shingle Specifications

Dimension : 335mm x 1000mm
Exposure Length : 143mm
Number of Pieces : 22pcs/bd
Operation Area : 3.2m²/bd
Weight : 32kg/bd

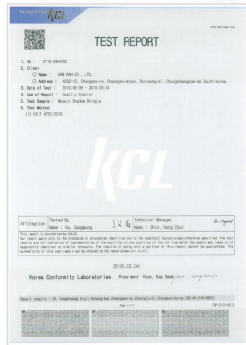
Shingle Detail Drawing



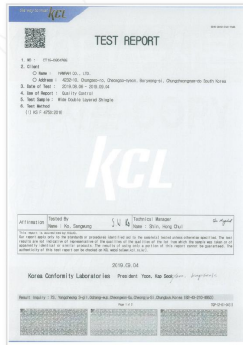
Production Color (color consultation available)



DATA SHEET



CANA MOSAIC SHADOW SHINGLE



CANA WIDE DOUBLE LAYERED SHINGLE

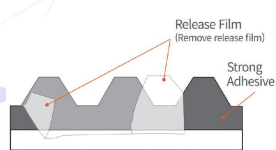


CANA 3-TAB SHINGLE

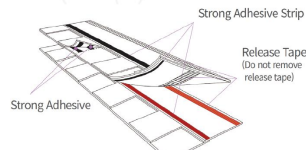
Product Technical Data

Product Characteristics	Performance
Warranty Period	30 years
Base (Substrate)	Glass Fiber
Type of Asphalt	Oxidized Modified Asphalt (Bitumen)
Flow Resistance at High Temperature (°C)	100°C
Thickness per Layer(mm)	2.8mm ± 0.2
Weight per Bundle(kg)	28
Weight per Square Meter(kg/m ²)	11.2
Coverage per Bundle(m ²)	2.5
Quantity per Pallet(m ²)	150

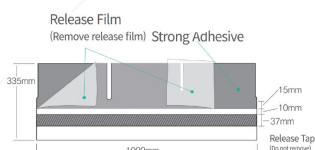
Construction method



CANA MOSAIC SHADOW SHINGLE



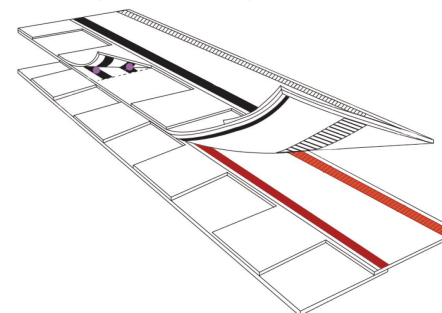
CANA WIDE DOUBLE LAYERED SHINGLE



CANA 3-TAB SHINGLE

Technical Data Sheet

	CONTENTS	HAMRAH PRODUCT
1	Manufacturer's Warranty	30 years
2	Type of Bitumen	Oxidized Bitumen (for heat resistance)
3	Production Standard	KS F4750
4	Thickness per Layer	1st layer - 2.8mm, 2nd layer - 5.6mm
5	Overall Height of Shingle(mm)	335mm
6	Visible Part Height(mm)	142mm
7	Total Height of Laminated Part(mm)	166mm
8	Length of Shingle(mm)	980mm
9	Top Surface Protection	Mineral Granules
10	Height of Shadow Part(mm)	35mm
11	Visible Defects	None
12	Adhesion	Loss of 0.5
13	Bottom Surface Protection	Fiberglass (Underlay) + PET Film + Bond
14	Height of Strip on Shingle Surface(mm)	N/A
15	Number of Shingles per Bundle	16PCS
16	Coverage per Bundle (Roofing Square Feet)	2.3m ²
17	Average Weight per Shingle	1.7kg
18	Average weight per square meter	9.5kg
19	Weight of Shingle Bundle(kg)	27kg
20	High-Temperature Resistance	100°C
21	Weight of Carrier(g/m ²)	95g/m ²
22	Moisture Absorption Rate(%)	0.5. %
23	Tensile Strength MD/CD	978/600
24	Tear Strength(N)	360 N
25	Minimum Mass of Asphalt Compound(g/m ²)	1100 or above
26	Linear Consumption of Basalt per meter	1550g
27	3D Roof Effect	UV Protection, Weather Resistance against Heavy Rain and Severe Weather
28	Target Stone for Accumulation	N/A
29	Fiberglass Quality	95



CANA DOUBLE LAYERED SHINGLE tape has excellent adhesive strength in both vertical and horizontal bonds.



특허청

INNOBIZ
기술혁신형중소기업

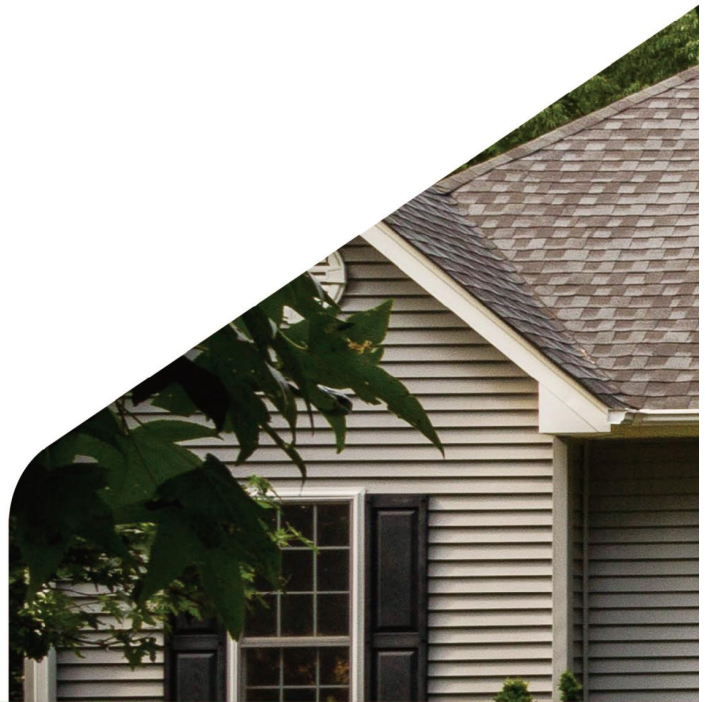


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Best Family Friendly Management

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