

PHOMI Plant/ Warehouse Photos



PHOMI Profile

PHOMI initiated a material revolution - transforming natural soil into a new material: Modified Clay (MC/econic clay).

More new materials could be derived from modified clay, creating endless possibilities for material innovation in industries such as construction, automobile, leather, municipal road and sports.

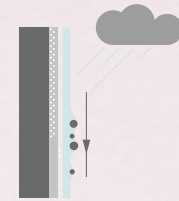
For the construction industry, MCM (Modified Clay Material) is a new generation of MC-tech-adopted cladding/decorative solution that possesses double advantage of ecology and economy. These materials endow architects and designers to render to their creations the feature of high functionality, safety, elegance and sustainability. MCM has passed a great number of application tests from equatorial regions to extremely cold areas over a dozen years and has proven to be the future material for human living environment.

As a pioneer of new material research and development, the originator and leader of the MCM industry, the constitutor of MCM national standard, PHOMI is dedicated to provide material knowledge and best application practices for business partners, benefiting people worldwide with the material.

Unique Functionality of PHOMI MCM

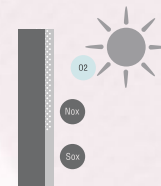
1. Self-Cleaning Function

PHOMI MCM functional products have hydrophilic surface which will help the formation of water film on the product surface. Dirt on such surface will be washed away by rain.



2. Air Purification / Pollution Resistant Function

PHOMI MCM is able to purify the air. When exposed to the sun's rays, reactive oxygens will be produced on the surface of MCM. Harmful substances will be transformed to be harmless once touching the surface.



NOx NOX

SOx SOX

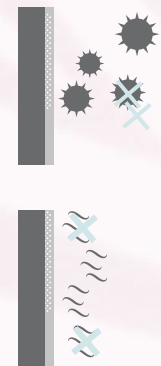
O₂ O2

150 m² of MCM products could purify the same quantity of air as a forest about the size of 4 tennis courts does and degrade the same quantity of nitrogen oxides as 11 cars simultaneously emit at 30km/h for 24 hours without stop.



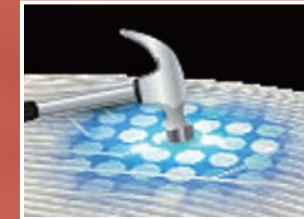
3. Bacteria Inhibition and Sterilization Functions

PHOMI MCM is bacteria-resistant in indoor applications. Bacteria will be inactivated in contact with the surface of MCM products. Unpleasant odors created by bacteria will be eliminated with the sterilization function with/without light.

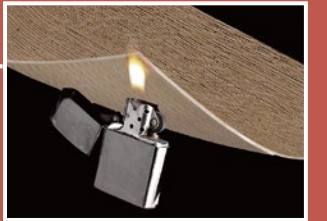


Performances of PHOMI MCM

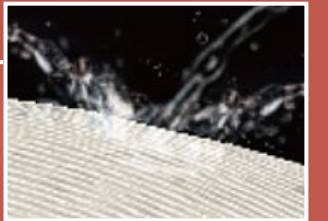
Anti-impact



Fireproof



Damp-proof/ Alkalization resistant



Freeze-thaw resistant



Aging resistant/ Colorfast



Light/Thin/Flexible



Differences between MCM and Ceramic Tiles

1. Structure

MCM is an inorganic-organic hybrid through low temperature molding while ceramic tile is a vitrified product through high temperature sintering (over 1200°C).

2. Flexibility

MCM is a flexible product with excellent bendability while ceramic tile is a product with good rigidity.

3. Self-Cleaning Mechanism

MCM of good quality generates a small amount of static electricity on its surface. Because of it the dirt can't attach strongly on the surface and it could be cleaned by rain. Ceramic tile is evenly glazed on its surface, so the dirt adheres firmly to it. Once attached with electrostatic force, the dirt is hard to be washed away in the natural conditions.

4. Water Absorption & Vapor Permeability

MCM is a diffusion-open (permeable for air and vapors) material made with natural components. Its water absorption varies between 8-14% and high permeability (similar to traditional clay) provides a superb living space comfort by regulating the humidity of the interior and taking out the excessive one in case of application on the facade in diffusion-open insulation "sandwich", providing the health and long life to the building structure and those living within. Ceramic tiles has different application and in contrast to MC materials commonly has water absorption of 0.1-3% and extremely low air permeability.

5. Raw Material

MCM adopts natural soil, rock flour/quartz, fine ore/volcanic ash, fly ash etc. as raw materials, while ceramic tile is made of clay (hydrated aluminosilicate), quartz (silicon dioxide) and feldspar.

6. Appearance

In our MCMs we pursue natural color and texture. The simple way to achieve it is to use the natural elements, combine and mold them into other natural materials through a sophisticated method. We have discovered and mastered this method using science, ultimate high-tech, automation, creative design and our passion for natural things, beauty and perfection. MCM technology allows a

wider choice of texture, color combinations and feeling of the material comparing to the ceramics.

7. Application Area

In construction field, MCM is applied primarily in exterior walls, park trails, canals, plank roads, interior walls, background walls, ceilings, bathroom, balcony, elevator lobby, ships and furniture. Ceramic tile is used mainly in indoor floor, kitchen, bathroom, balcony and elevator lobby. In consideration of safety, ceramic tile is prohibited to be used for exterior walls by governments in many places.

8. Size

For MCM, the maximum width in common is 1220mm but the width could be customized to meet different demands. The length is also adjustable according to transportation and installation requirements. Common sizes are: 2720x1200x4, 1350x1200x3.5, 1350x600x3, 1350x300x3, 1200x600x3/4/5, 600x600x3, 600x300x2.5/3/4, 420x12/15x3, 240x60x2.5/3 (mm). For traditional ceramic tile, the maximum size is 1200x1200x12. Common sizes are: 1200x600x10, 900x900x10, 600x600x9, 300x300x8, 240x240x8 (mm). Different sizes within 3000x1600x3/4/5/6 (mm) are available for contemporary ceramic sheet/slab.

9. Abrasion and Scratch Resistance

MCM is a flexible slab which could bend up to 60 degrees but could not be folded. Once installed to a base, MCM could endure impact force 100 times as ceramic tile does. However, like wood, MCM could not stand too strong scratch strong scratch from sharp objects. To take care of MCM we can use water but not solvents, like thinner or benzene solvents. Ceramic tile is a vitrified product which is fragile but more scratch-resistant. Ceramic tile is easy to clean with water and solvent-resistant.

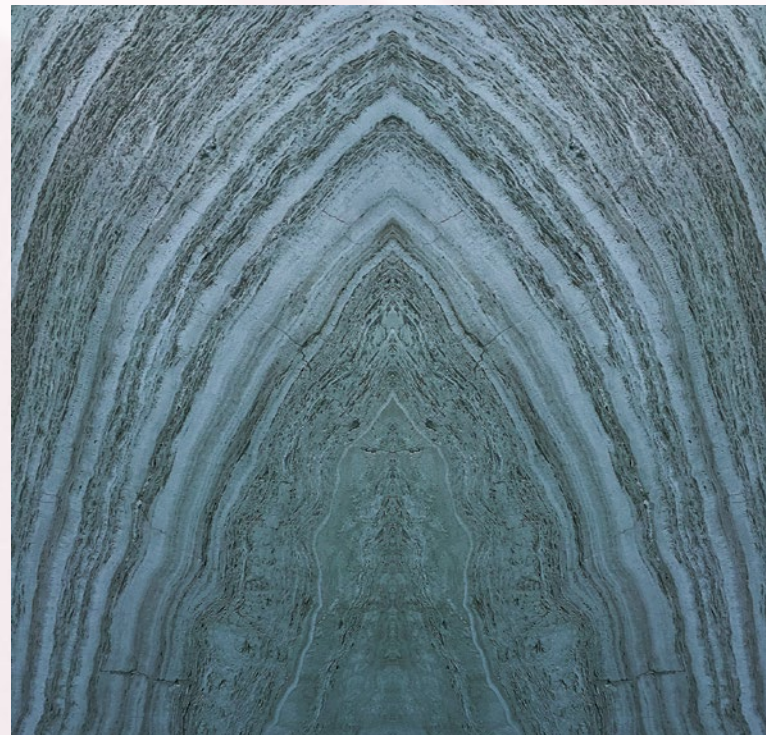
10. Installation Method

For MCM, full adhibiting method with adhesive and grouting with low-alkaline crack sealer are required for exterior walls. Either spot or full adhibiting method with cream adhesive or tapes is acceptable for interior walls. For ceramic tile, full adhibiting method with cement/tile adhesive and dry hanging are commonly used.

MCM



Excellent flexibility



Natural patterns and textures

Application Areas



Construction & decoration

Walls, floors, ceilings exteriors and interiors of the newly-created and renovated buildings.



Maritime

Lightweight and damp-proof, the best fit for wall and floor on ships.



Composite Structure Board

Be able to compound with other materials and formed into a high-performance composite surface causing no extra load.

MCM Stone

Inartificial colors with natural surface textures, MC stone products can be shaped in jumbo-size slabs with excellent flexibility and the similar life-span as the buildings they are applied on.



Travertine Series



Travertine White



Travertine White Gold

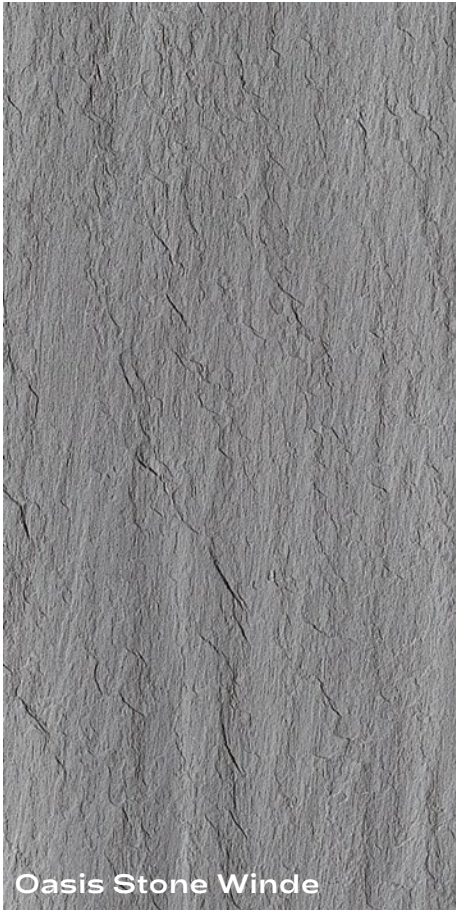


Travertine Silver Grey

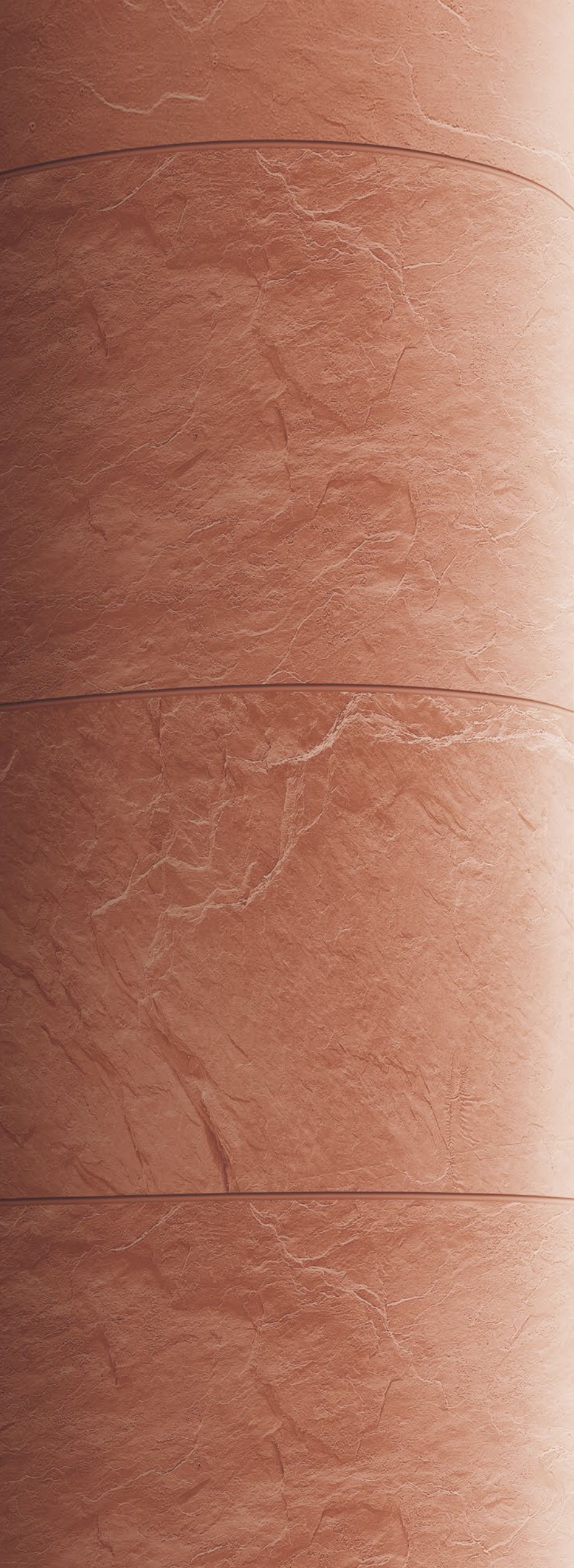
Product size, mm	Box size, mm	pcs/Box/kg	Kg/ box	m ² / box
1200x600	1230x620x65	16	51~54	11.52
600x300	620x320x90	26	23~25	4.68



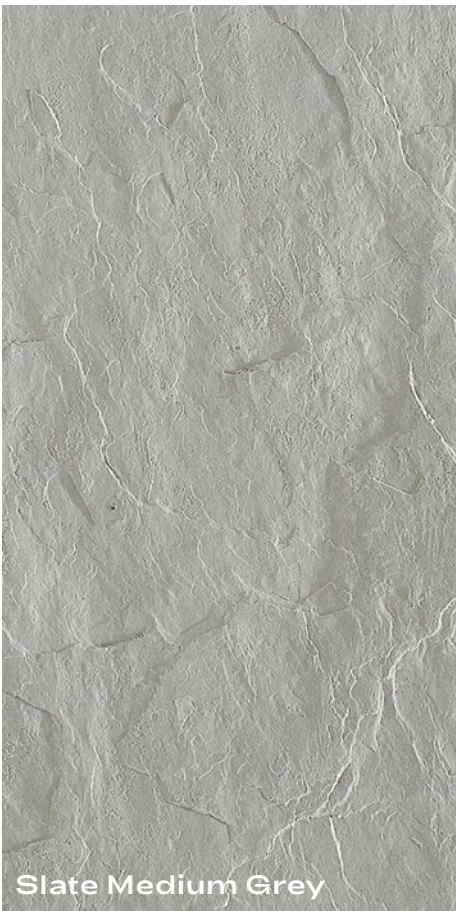
Oasis Stone Series



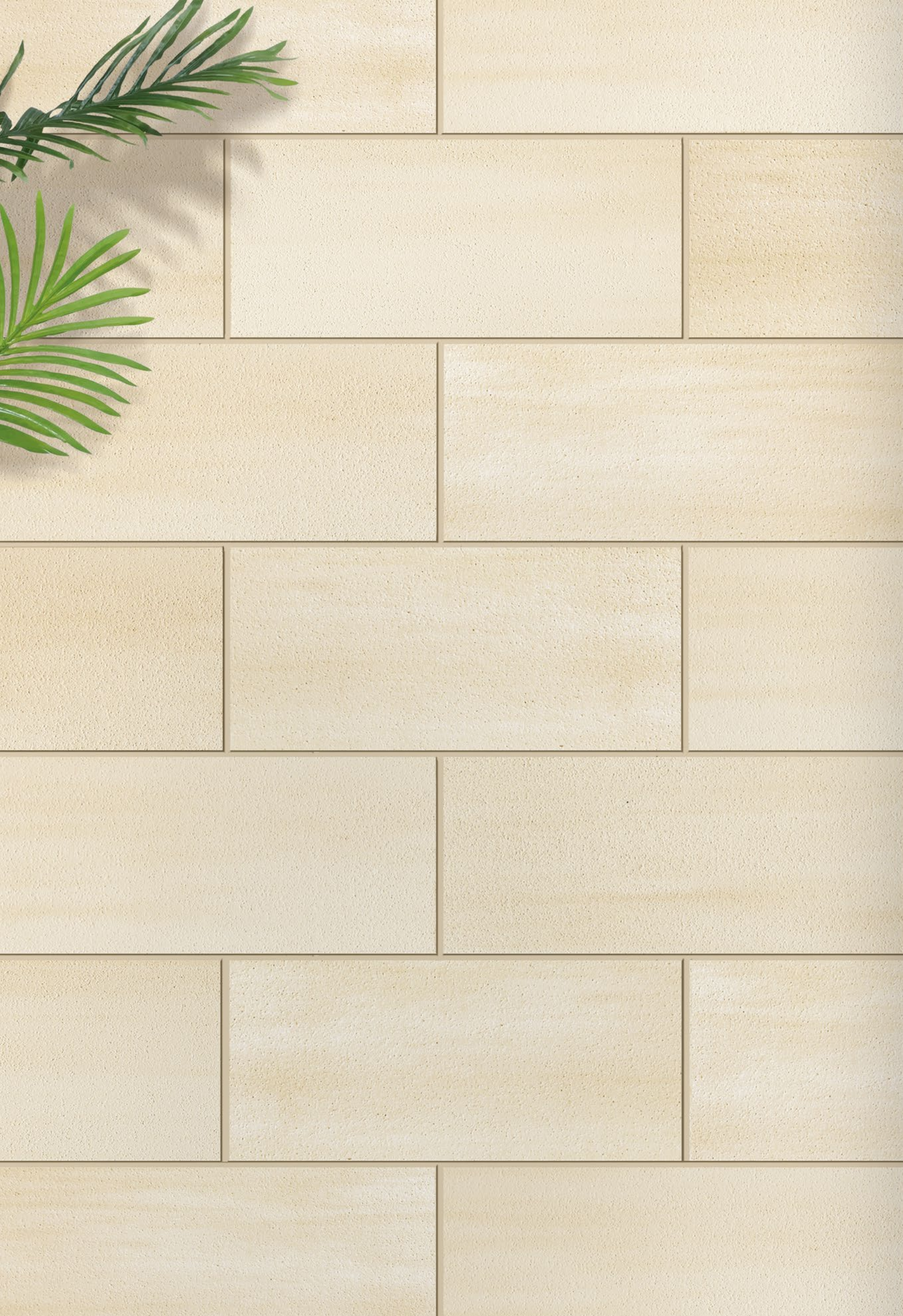
Product size, mm	Box size, mm	pcs/Box/kg	Kg/ box	m ² /box
1200x600	1230x620x65	16	39~42	11.52
600x300	620x320x90	26	19~21	4.68



Slate Series



Product size, mm	Box size, mm	pcs/Box/kg	Kg/ box	m ² / box
1200x600	1230x620x65	16	39~41	11.52
600x300	620x320x90	26	15~17	4.68



Sandstone Series



Sandstone Pearl



Sandstone Cloude

Product size, mm	Box size, mm	pcs/Box/kg	Kg / box	m ² / box
1200x600	1230x620x65	20	47~49	14.4
600x300	620x320x90	30	22~24	5.4



Granite Series



Granite Off-White



Granite Medium Grey



Granite Blue Black

Product size, mm	Box size, mm	pcs/Box/kg	Kg/ box	m ² / box
1200x600	1230x620x65	8	39~41	5.76
600x300	620x320x90	14	16~18	2.52



Infiniti Series



Product size, mm	Box size, mm	pcs/Box/kg	Kg/ box	m ³ / box
1200x600	1230x620x65	6	39~41	4.32
1200x300	1230x620x65	12	39~41	4.32
600x300	620x320x90	10	18~20	1.628



Cut Stone Series



Cut Stone Off-White



Cut Stone Beige



Cut Stone Medium Grey

Product size, mm	Box size, mm	pcs/Box/kg	Kg / box	m ² / box
1200x600	1230x620x65	13	39~41	9.36
600x300	620x320x90	26	19~21	4.68



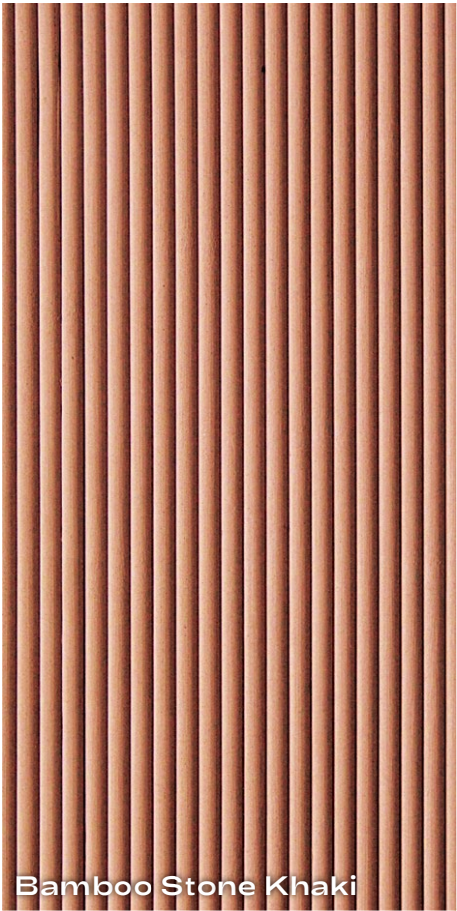
Bamboo Stone Series



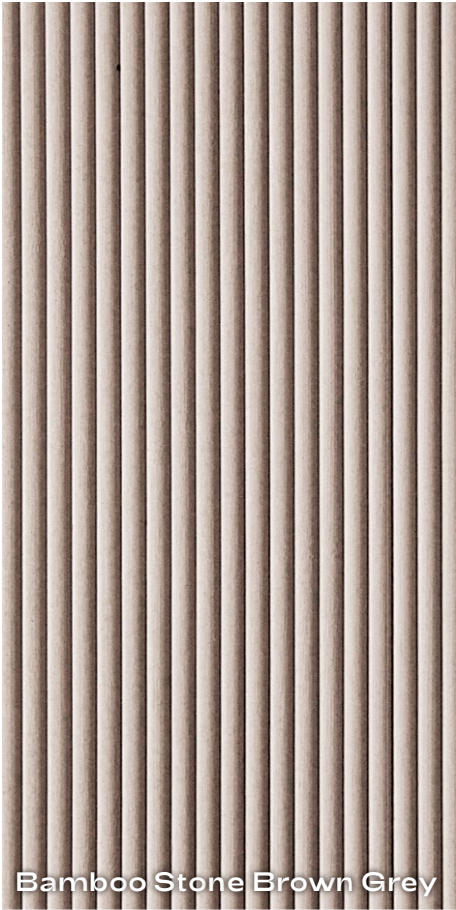
Bamboo Stone Off-White



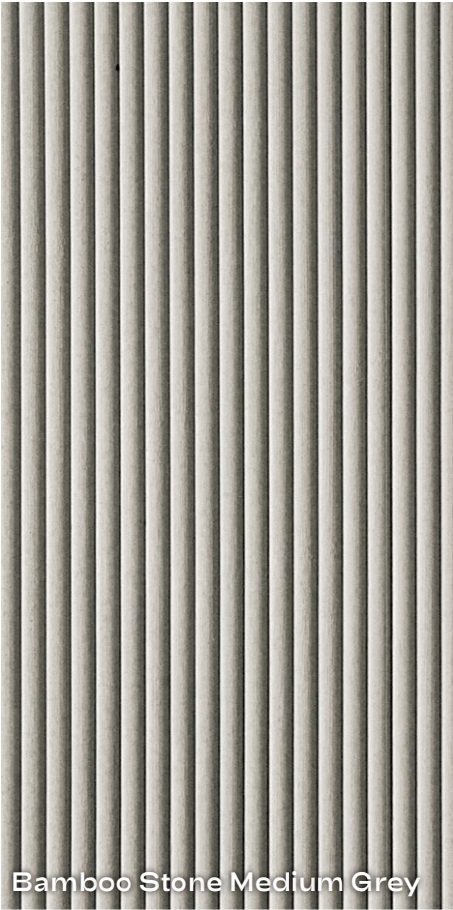
Bamboo Stone Beige



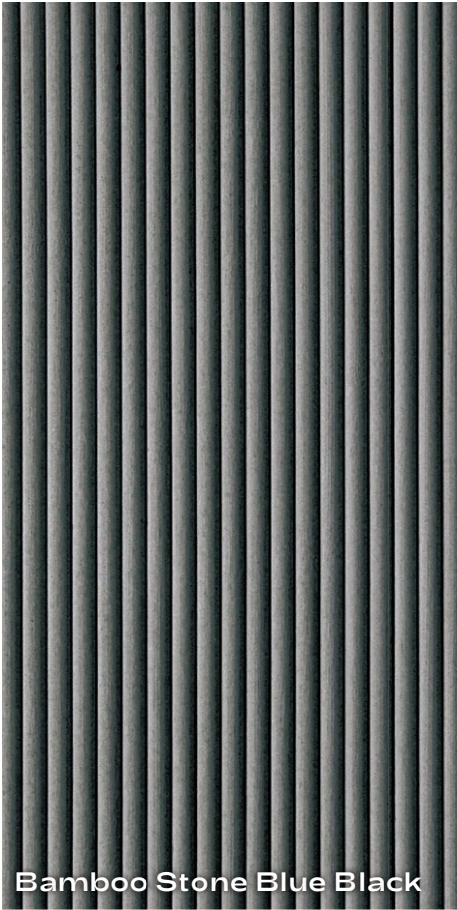
Bamboo Stone Khaki



Bamboo Stone Brown Grey



Bamboo Stone Medium Grey

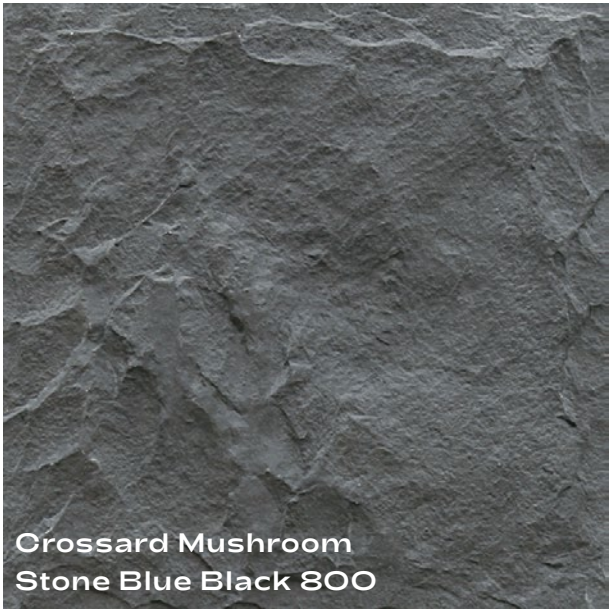
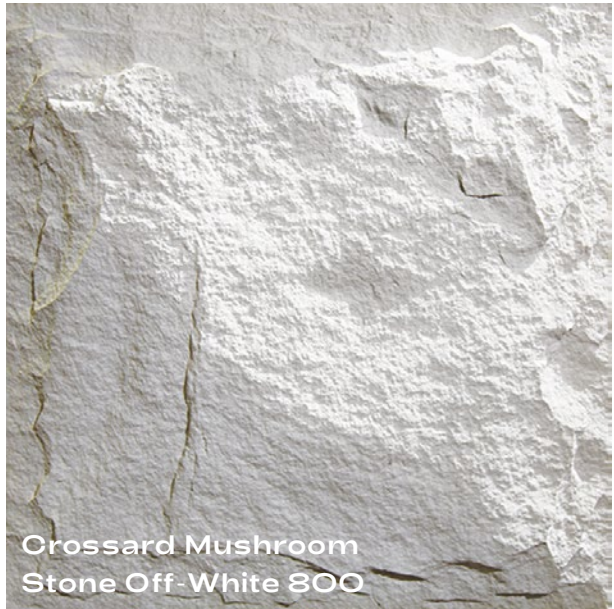


Bamboo Stone Blue Black

Product size, mm	Box size, mm	pcs/Box/kg	box/crate/kg	m ² /crate
2440x1220	2470x1250x14	2/1/~35	30/1/~1050	145.2



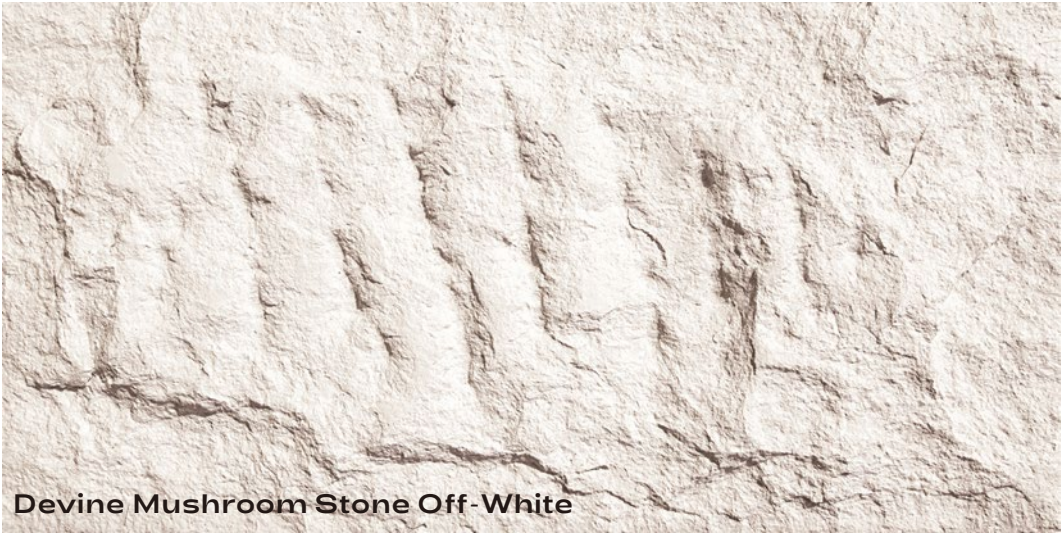
Crossard Mushroom Stone 800 Series



Product size, mm	Box size, mm
800x800	packed in customized wooden box; packaging fee is calculated separately according to the box size



Devine Mushroom Stone Series



Devine Mushroom Stone Off-White



Devine MushroomStone Blue Black

Product size, mm	Box size, mm
790x380	packed in customized wooden box; packaging fee is calculated separately according to the box size



Crossard Mushroom Stone 600 Series



Crossard Mushroom Stone Off-White 600



Crossard Mushroom Stone Medium Grey 600

Product size, mm	Box size, mm
600x300	packed in customized wooden box; packaging fee is calculated separately according to the box size

MCM Weaving

As exquisite as hand, woven products, MC weaving has the resistance to moisture, mildew, water and fire.





W Weaving Series



Product size, mm	Box size, mm	pcs/Box/kg	box/crate/kg	m ² /crate
2730x1220	2750x1250x14	1	54/1/~1000	88.128
1360x610	1370x620x65	12	43~45	9.72

MCM Brick

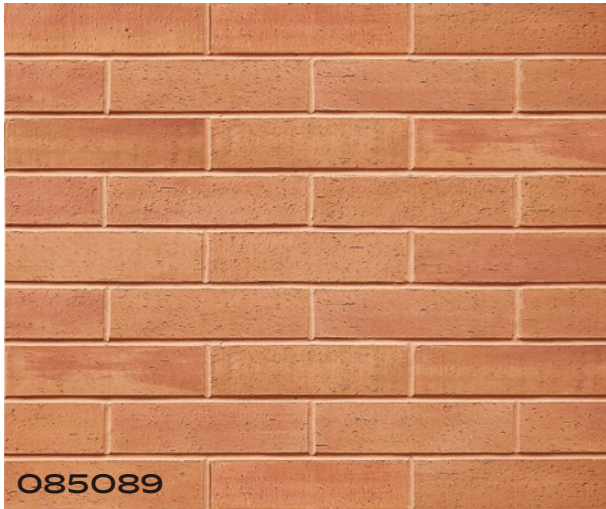
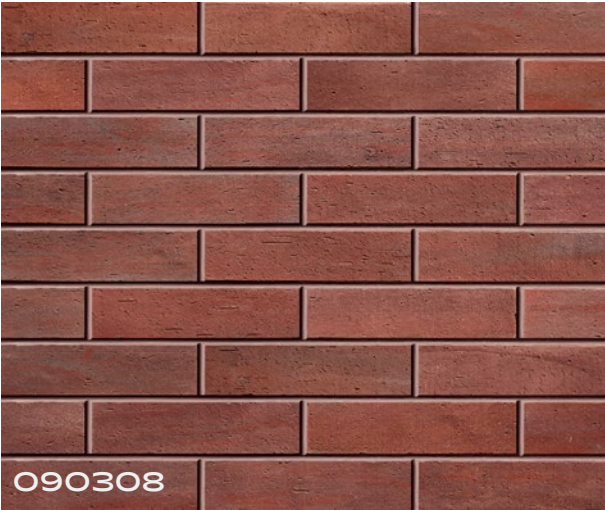
Thin and pliable in application without losing the solemnity of clay bricks, each MC brick has unique texture.



A Fambe Brick Series



single piece



Product size, mm	Box size, mm	pcs/Box	Kg / box	m ² / box
240x60	460x260x140	400	20~22	5.76



G Fambe Brick Series



single piece



Product size, mm	Box size, mm	pcs/Box	Kg/box	m ² /box
230x59	460x260x160	380	23~25	5.16



R Fambe Brick Series



single piece



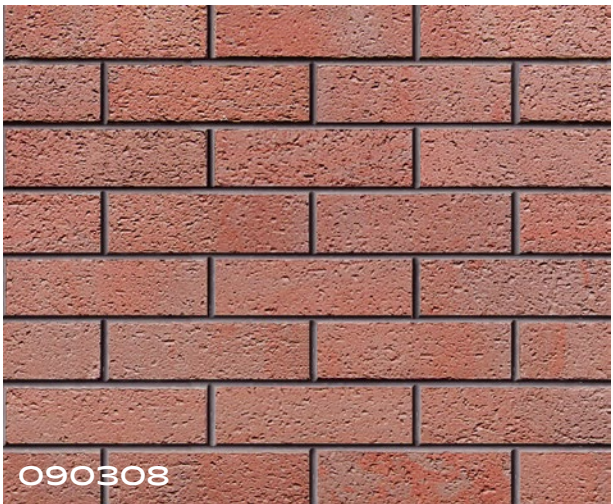
052053



054058



085089



090308



308317



031043

Product size, mm	Box size, mm	pcs/Box	Kg/box	m ² /box
220x60	460x260x160	320	15~19	4.224



K Fambe Brick Series



single piece



Product size, mm	Box size, mm	pcs/Box	Kg/box	m ² /box
225x60	460x260x160	280	14~17	3.83



**The products have passed the inspection
and certification of these international authorities**

1. UL: American Conference of Governmental Industrial
2. EU CE certification and Class A fireproof certification
3. Russia (GoST) standard certification
4. Polish Conference of Governmental Industrial
5. TPAT Customs-Trade Partnership
6. 2014/90/EU MED 96/98/ECe 2014/
7. Czech Republic fire safety A Class
8. Russia fire safety A Class
9. Malaysia fire safety A class
10. Singapore Greenable Green certification
11. Korea Green Building Material certification
12. UNIEN ISO 14021: Products contain at least 40 percent recyclable material before consumption
13. China certification and Class A fireproof certification
14. UNIEN ISO9001 National Quality Management System certification
15. China National Safety Standardization Production Certificate
16. China National Occupational Safety and Health Management System Administration
17. CCEP(China Certification for Environmental Products)
18. China 3-star Greenable Green certification

