



PHOMI®

**economic clay (MCM)**  
coverings

  
**PHOMI HOLDING**

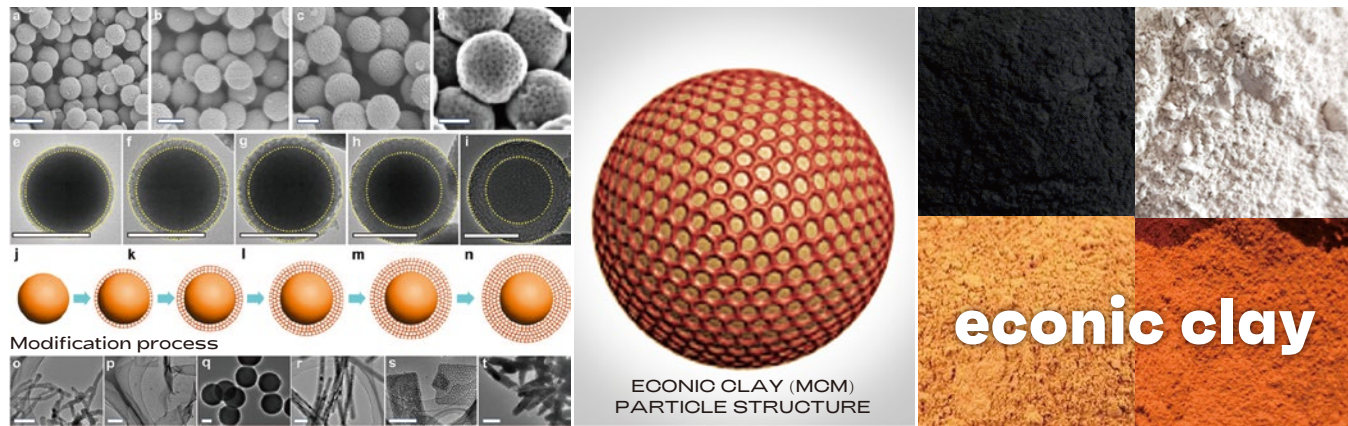
PHOMI HOLDING CO.,LTD.  
[www.phomi.com](http://www.phomi.com) [www.phomi.eu](http://www.phomi.eu)



**2021**  
**STONE/WOOD**



PHOMI initiated a material revolution by transforming natural soil into to a new material: econic clay (MCM).



## Econic clay (MCM)

Econic clay (MCM) as the basic material can become the source for more new materials, creating endless possibilities for industrial and consumer materials innovation in such areas as construction, automotive, textiles (such as eco-friendly artificial leather), urban automobile roads paving and sports.

The derived products retain all the superior properties of natural soil such as breathability, indoor temperature/humidity conditions regulation, moisture resistance, fire resistance, while carrying in its core high tech and deep concern for sustainability. Industrial products, especially plastics and coatings age and fade relatively fast influenced by UV and rain, while the derived products of econic clay are far more durable because of the molecular bonding forces of econic clay get activated with water, contributing to the long-term structure stability.

Econic clay (MCM) Stone/Wood products are derived from econic clay, a building decorative material possessing double advantage of ecology and economy. These products allow architects and designers to render to their creations the features of high functionality, safety, elegance and sustainability.

Econic clay (MCM) Stone/Wood products proved their durability and reliably fulfilled their functions during the large number of projects, functional and safety tests, as well as over a dozen of years' use in extreme conditions of hot desert and frosty-cold climate.

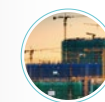
Econic clay (MCM) raw materials are derived from ordinary clay in red/yellow/white colors, fly ash, cement, slag and other by-products. Sorted by color and micronized, these particles are coated with active substances after modification with specific agent and turned into econic clay.



Econic clay (MCM) Stone/Wood products have a superb life span as construction materials.

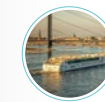


## Econic clay (MCM) Stone/Wood Application Areas



### Construction & decoration

Walls, floors, ceilings in 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

Is able to be compounded into a high-performance composite panel or surface with literally no extra load.

### Mount Lion Series



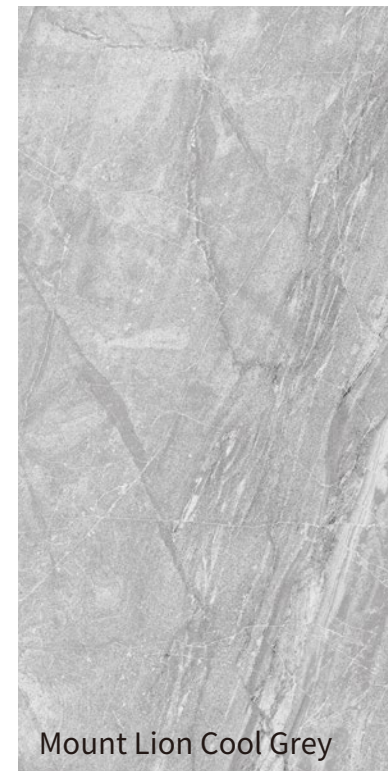
Mount Lion White



Mount Lion Yellow



Mount Lion Reddish Brown



Mount Lion Cool Grey



Mount Lion Warm Grey



Mount Lion Dark Brown



Product size, mm

1200x600, 600x300



3D-TECH

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economic clay (MCM)  
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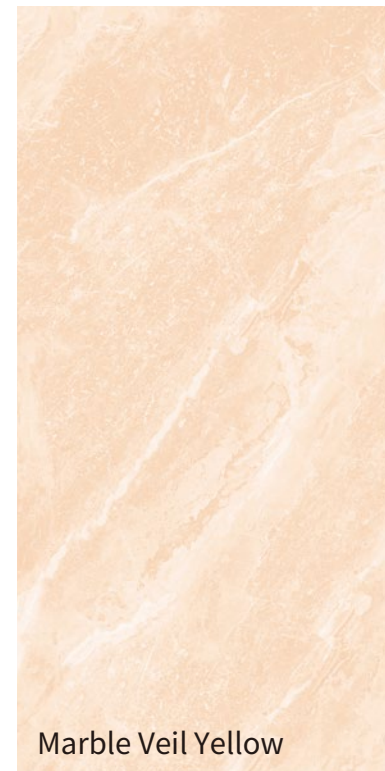
## Marble Veil Series



Marble Veil White



Marble Veil Grey



Marble Veil Yellow



Marble Veil Red

Product size, mm

1200x600, 600x300

3D-TECH

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coverings

## Marble Castol Series



Marble Castol Blue



Marble Castol Grey



Marble Castol White



Marble Castol Yellow

Product size, mm

1200x600, 600x300



## Marble Andes Series



Marble Andes White



Marble Andes Yellow



Marble Andes Gold



Marble Andes Light Brown



Marble Andes Grey



Marble Andes Red

Product size, mm

1200x600, 600x300





## Marble Cloud Series



Marble Cloud White



Marble Cloud Grey



Marble Cloud Yellow



Marble Cloud Orange

Product size, mm

1200x600, 600x300





### Marble Desert Series



Marble Great Desert



Marble Greyish Desert

### Marble Portoro



Marble Portoro

Product size, mm 1200x600, 600x300





3D-TECH



econic clay (MCM)  
coverings

## Travertine Andes Series



Travertine Andes White



Travertine Andes Yellow



Travertine Andes Gold



Travertine Andes Light Brown



Travertine Andes Grey



Travertine Andes Red

Product size, mm

1200x600, 600x300



3D-TECH



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## Travertine Cloud Series



Travertine Cloud White



Travertine Cloud Grey



Travertine Cloud Yellow



Travertine Cloud Orange

Product size, mm

1200x600, 600x300

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## Sandstone Australia



Product size, mm

1200x600, 600x300



## Sandstone Nile Series



Sandstone Nile Light Yellow



Sandstone Nile Medium Yellow



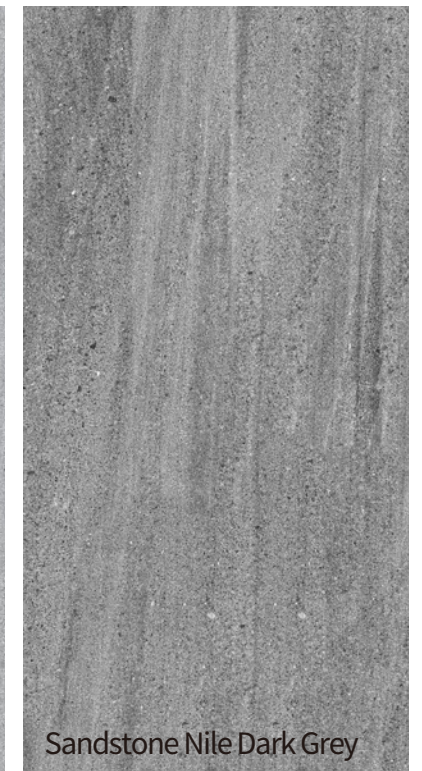
Sandstone Nile Red



Sandstone Nile Warm Grey



Sandstone Nile Cool Grey



Sandstone Nile Dark Grey

Product size, mm

1200x600, 600x300



## Fair-Faced Concrete Series



Fair-Faced Concrete Cloud



Fair-Faced Concrete Fog



Fair-Faced Concrete  
Medium Grey



Fair-Faced Concrete  
Dark Brown

### Granite Flat Series



Granite Flat Snow Flake Red



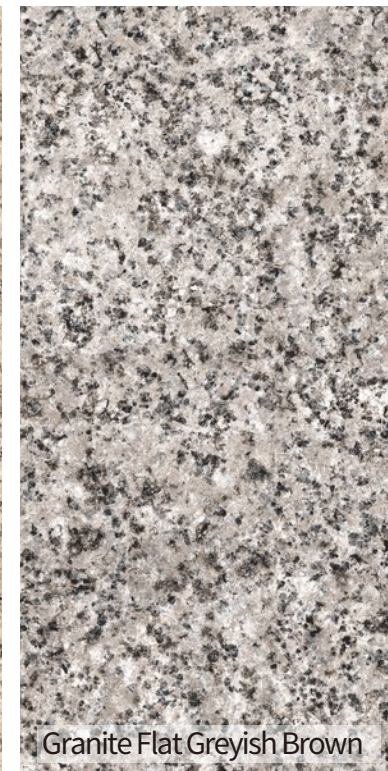
Granite Flat Black Sesame



Granite Flat White Sesame



Granite Flat Beauty



Granite Flat Greyish Brown



Granite Flat Pency

Product size, mm

1200x600, 600x300



3D-TECH

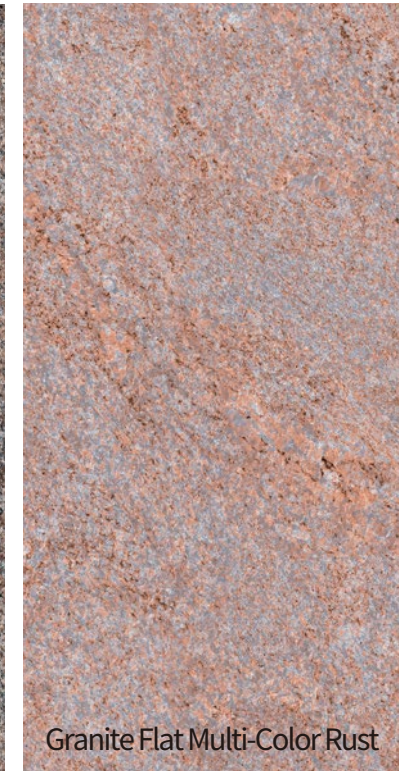
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## Granite Flat Series



Granite Flat Multi-Color Red



Granite Flat Multi-Color Rust



Granite Flat Multi-Color Blue

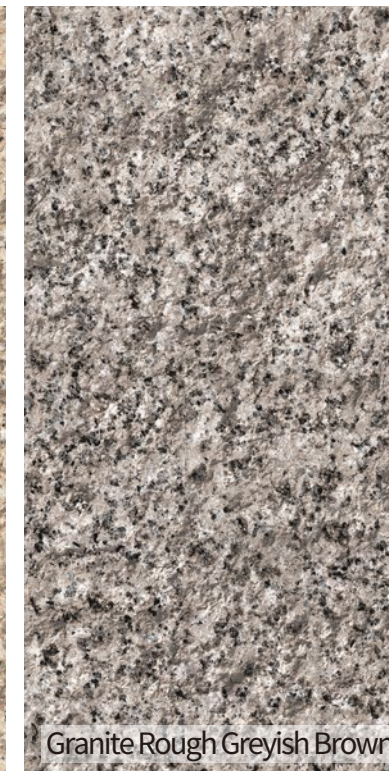


Granite Flat Multi-Color Yellow

Product size, mm

1200x600, 600x300

## Granite Rough Series



Product size, mm

1200x600, 600x300



3D-TECH

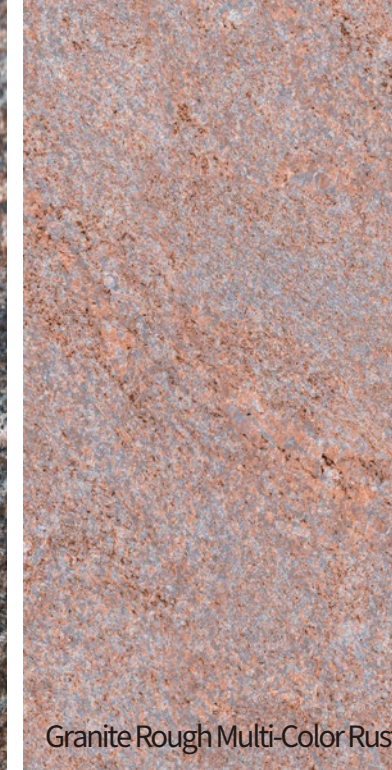
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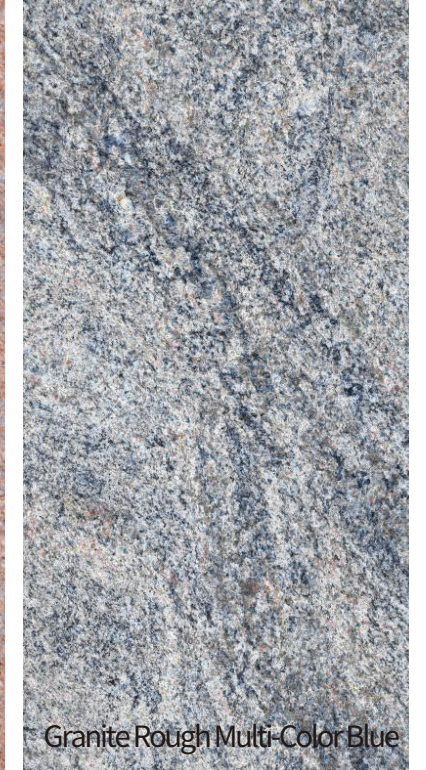
## Granite Rough Series



Granite Rough Multi-Color Red



Granite Rough Multi-Color Rust



Granite Rough Multi-Color Blue



Granite Rough Multi-Color Yellow



Granite Rough Portoro



Granite Rough Castol Blue

Product size, mm

1200x600, 600x300



## Poly Wood Series



Product size, mm 1350x300

3D-TECH

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## Poly Wood Series



Product size, mm

1350x300



### Petrified Wood Series



Petrified Wood Moonlight



Petrified Wood Caesious



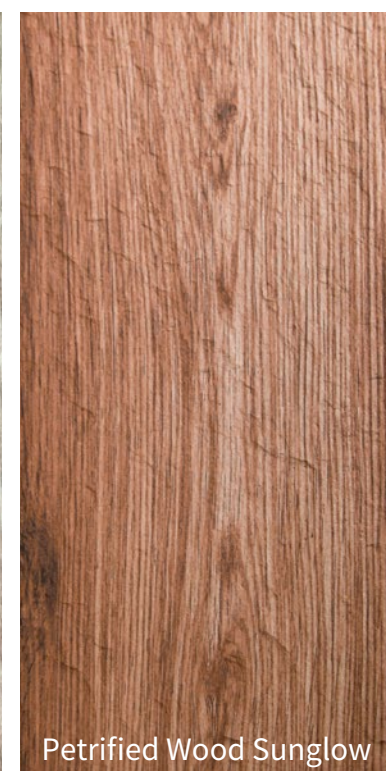
Petrified Wood Dark Brown



Petrified Wood Autumn



Petrified Wood Brownish Yellow



Petrified Wood Sun glow

Product size, mm

1200x600



# THE ORIGINAL IS ONLY ONE

## Performance Comparison Between Econic Clay (MCM) Stone/Wood and Traditional Building Decorative Materials

No./ Performance	Econic clay (MCM) Product	Ceramic Slab	Wall Cloth	Natural Stone	Coating				Wood Veneer		PVC Panel		
					Emulsion Paint	Diatom Mud	CBC Mud Paint	Inorganic painting	Wood Veneer	Artificial Wood Veneer			
1	<b>Fire Sately</b>	A Class	A Class	C Class	A Class	C Class	A Class	A Class	B Class	C Class	C Class	B Class	
2	<b>Environmental Friendliness</b>	Application	Excellent, UL certificate	Good, Environmental Labeling	Depends on quality, VOCs are typically above safe figures level	Depends on quality, Some varieties are radioactive	Poor VOCs are typically above safe figures level	Good No VOC release	Good No VOC release	Depends on quality	Depends on quality	Poor VOCs are typically above safe figures level	Depends on quality, VOCs are typically above safe figures level
		Production process	3R* principles matched Low Energy Consumption Zero Emission Zero Pollution Renewable	Fails to match 3R* principles High Energy Consumption High Emission High Pollution Non-renewable	Depends on quality	Fails to match 3R* principles High Energy Consumption High Emission High Pollution Non-renewable	Depends on quality	Fails to match 3R* principles Destroy Nature Non-renewable	3R* principles matched Low Energy Consumption Zero Emission Zero Pollution	Depends on quality	Fails to match 3R* principles Destroy Nature Non-renewable	Fails to match 3R* principles High Energy Consumption High Emission Non-renewable	Fails to match 3R* principles High Energy Consumption High Emission Non-renewable
3	<b>Moisture Absorption and Dampproof capacity</b>	Excellent in moisture proofing, Keeps structure dry in wet conditions	Non-moisture proof Condensation in wet conditions	Non-moisture proof Condensation in wet conditions	Non-moisture proof Condensation in wet conditions	Non-moisture proof Condensation in wet conditions	Excellent in moisture proofing, Keeps structure dry in wet conditions	Excellent in moisture proofing, Keeps structure dry in wet conditions	Non-moisture proof Condensation in wet conditions	Non-moisture proof Condensation in wet conditions	Non-moisture proof Condensation in wet conditions	Non-moisture proof Condensation in wet conditions	
4	<b>Moldproof</b>	Good	Good	Poor	Good	Poor	Varies in quality	Good	Varies in quality	Poor	Good	Good	
5	<b>Breathability</b>	Excellent	Poor	Poor	Excellent	Poor	Excellent	Excellent	Good	Excellent	Poor	Poor	
6	<b>Air-cleaning capacity</b>	Able to absorb and decompose formaldehyde and odor due to its catalytic UV feature.	Unable to absorb formaldehyde. Some are able to decompose formaldehyde on the surface.	No	No	No	Able to absorb and decompose formaldehyde and odor	Able to absorb and decompose formaldehyde and odor	No	No	No	No	
7	<b>Durability</b>	Durable No edge lifting Fastness Moldproof No emptying swell**	Durable No edge lifting Fastness Emptying swell**	Not durable, remains shape for 1-2 years Color fading Easy to mildew	Durable No edge lifting Fastness Emptying swell**	Not durable Fades fast, especially dark colors Easy to mildew	Not durable No peeling Softening with water Powdering	Durable No peeling Fastness Moldproof Remains hard effected by water	Durable Fastness Moldproof Remains hard effected by water	Not durable Easy to rot Easy to mildew	Not durable Easy to deform Edge lifting Color shading	Durable No edge lifting Moldproof No emptying swell**	
8	<b>Salt Spray Resistance</b>	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor	Poor	Good	
9	<b>Application/construction method complexity</b>	Simple, No anchoring required	Complex	Simple	Complex	Simple	Complex	Situation Depends	Complex	Simple	Simple	Simple	

\* 3R principles refer to reducing, reusing and recycling.  
\*\* Emptying Swell refers to an effect caused by a high air pressure created in the cavity under the low/none-air permeable cladding that causes its detachment from the surface.



Natural patterns, excellent flexibility, sustainability

# PHOMI Smart Plant

PHOMI rodution base that has spread at an area of 60.000 m<sup>2</sup> has embodied in itself ultramodern manufacturing approach that includes automatic batching systems, smart 3D printing workshop, automatic cutting and packaging systems.



## Econic clay (MCM) Stone/Wood 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

