



# Art Stone

「Redefining building materials: Customizable textures × Programmable patterns × Infinite colors.





Tel:+86 13928802403 Email:sales@phomi.com

2025.6



# Global Hub for Rare Stone Digitalization

# **PHOMI eCovering Smart Plant**





PHOMI is transforming the building envelope industry with four core innovations: low-carbon materials, pioneering aesthetics, integrated photovoltaic technology, and cost efficiency.

As a disruptor of high-carbon building materials, PHOMI's products replace natural stone, tiles, precast concrete, and synthetic resin. By combining solar power and digital technology, PHOMI creates a "triple evolution path" for building envelopes: supporting municipal renewal, zero-carbon buildings, infrastructure upgrades, and aesthetic redesign. It provides a photovoltaic building-integrated (BIPV) energy system and a digital information platform.

This dual innovation in materials and functionality transforms building envelopes into smart, energy-efficient, and information-rich systems, reshaping the construction industry's value chain.

Certified for 18 consecutive years by international authorities with on-site inspections, rigorously tested in extreme climates from polar cold to equatorial heat, our products demonstrate proven reliability across 120 countries worldwide, achieving a global application milestone with over 60 million square meters of implemented solutions.













































From the Burj Khalifa Tower to Starbucks, 237 landmarks are rewriting the oxygen formula for 300,000 m² commercial spaces with eCoverings.

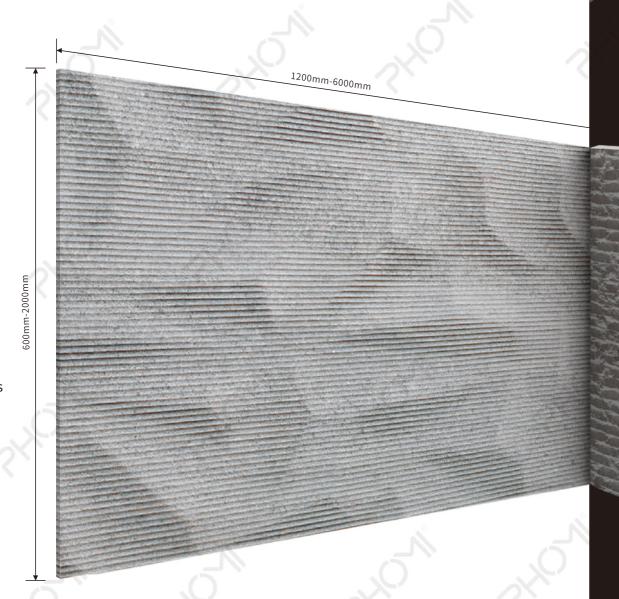
Globally rare, ultra-large 1200 x 6000mm seamless stone slabs, perfectly showcasing natural voids.



A Digital Collection of Art Stones from Across the Globe

「Masterfully crafted geological textures, perfected with millimeter precision」

Feach oversized art stones embodies the relentless pursuit of perfection ]





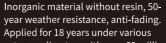
# Why PHOMI eCovereing?



Authentic modified clay, from nature. Without resin, no toxic ingredients,



A-class fireproof. mold and bacteriaresistant. (optional)



Applied for 18 years under various extreme climates, with over 60 million m<sup>2</sup> of application cases in 120+ countries/regions.



Versatile applications: salt spray resistant, freeze-thaw resistant, breathable, lightweight, and easy to install; suitable for irregular shapes, ceilings, bathrooms, and more.

> Shape It Your Way, Limitless Possibilities



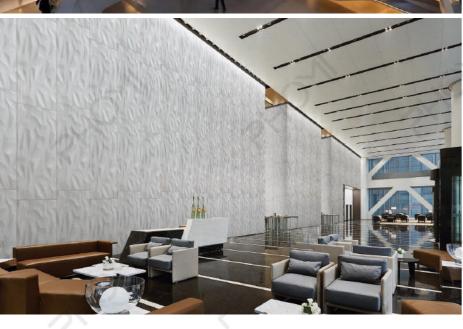


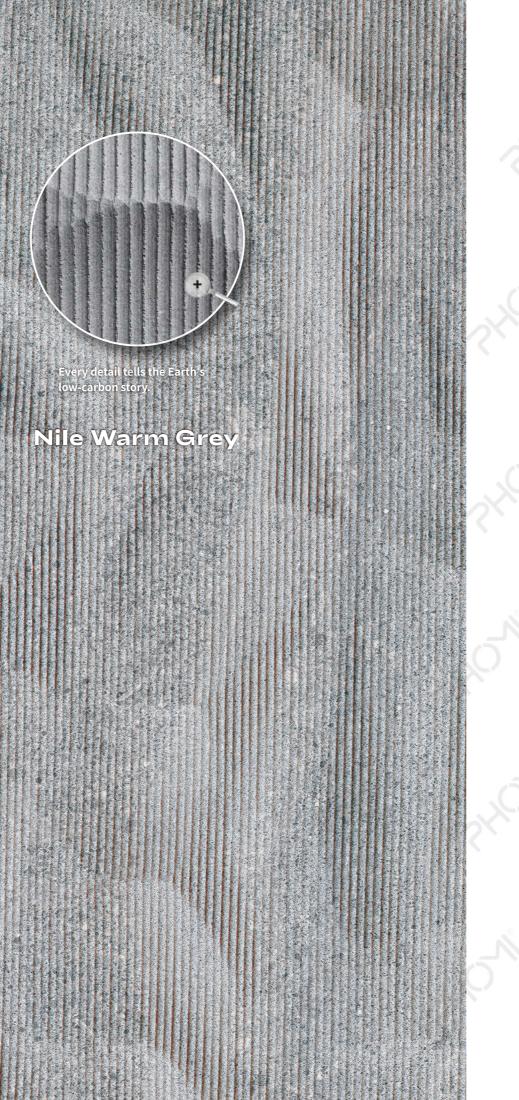




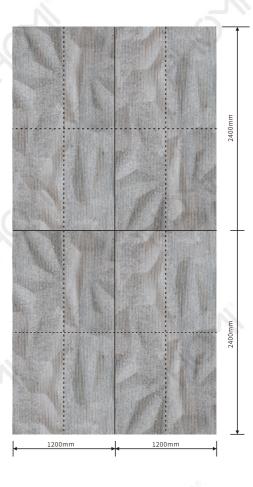












# More color options

more color opti						
Plain White	Fog	Loki Mountain Light Grey	Nile Warm Grey			
	2					
Ash Grey	Greyish Desert	Magnolia	Nile Dark Grey			
11		MARK				
Andes Yellow	Nile Light Yellow	Maca Blue	Fantasy Red			
		A CO	220			
Lion Yellow	Former Times	Nile Red	Fawn Grey			
		4132	<b>建筑</b>			
Copper Rust	Multi-Color Rust	Nuée Ardente	Ink-Dyed			

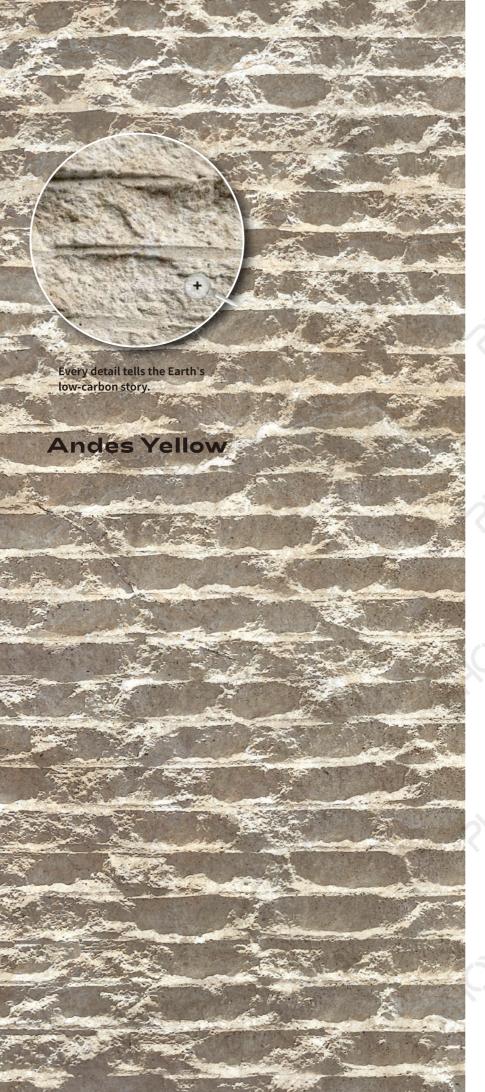
Generation	Standard Size (mm)	Thickness(mm)	Packaging(mm)	Pcs/box	Sqm/box
3.0	1200 x 600	1.0	1220x620x75	8	5.76
	2400 x 1200	1-9	Sizes above 2400x1200 are packed with wooden case as per order quantity (subject to packaging fee)		

# Chiseled Stone

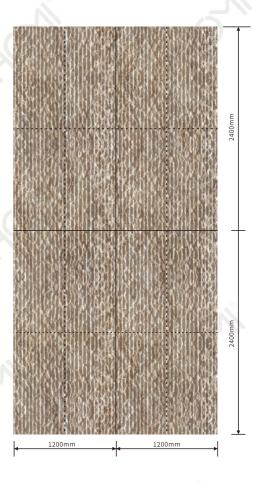




Prediction: In the next decade, all stores will be part of eCovering systems.







## More color options

Plain White	Ash Grey	Cloud White	Cloud Yellow	Former Times
Andes White	Andes Yellow	Gold Sesame	Tunguska Yellow	Kamu Red
Anna White	Pale Yellow	Maca Blue	Copper Rust	Andes Red
Starry	Magnolia	Greyish Brown	Anna Medium Grey	Fantasy Red
Dandy Grey	Multi-Color Red	Blue Grey	Roman Grey	Freespirit Blue

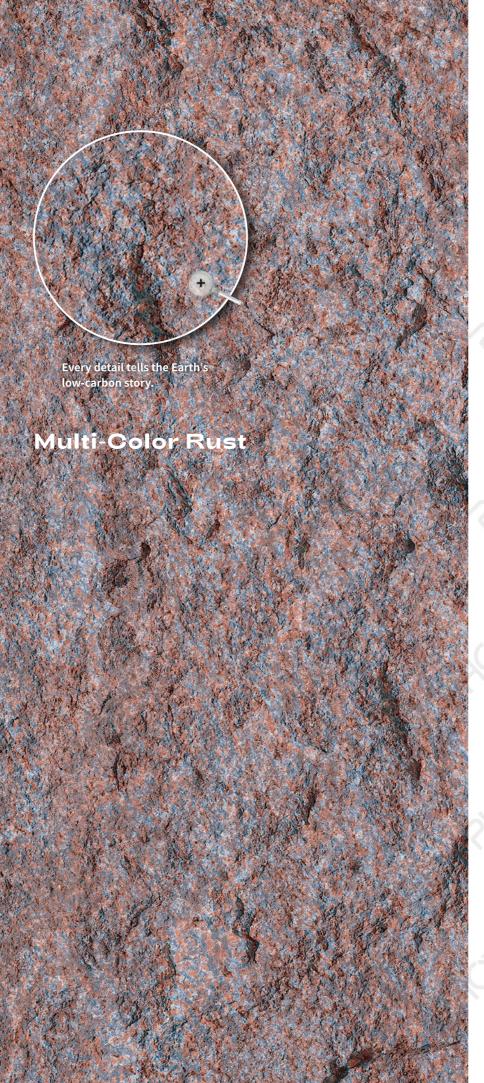
	Generation	Standard Size (mm)	Thickness(mm)	Packaging(mm)	Pcs/box	Sqm/box
	3.0	1200 x 600	1-7.5	1220 x 620 x75	8	5.76
		2400 x 1200	1-7.5	2420 x 1230 x14	2	5.76

# Devine Mushroom Stone

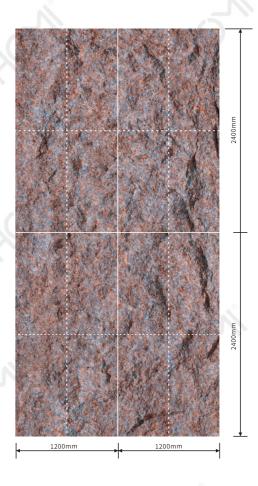




An Ecological Poem in Stone, a Zero-Carbon Sanctuary in Rock Light.







## More color options



# Specification and packaging

Generation	Standard Size (mm)	Thickness(mm)	Packaging(mm)
3.0	800x400	1-8	Sizes above 2400x1200 are packed
	1200x600	natural unevenness	with wooden case as per order quantity (subject to packaging fee)
	2400x1200	unevenness	

1





Geological Stone Collection: A Carbon Sink Story of Stone and Light.





# From Mines to Curtain Walls: **Hidden Cost Visualization Report**

For a 100,000m² project, PHOMI art stones delivers savings of:

Transportation: 533,560 USD → 373,215 USD (saving 1.5 million USD )

Packaging Loss: 525,266 USD → 82,936 USD + zero insurance claims (saving 442,329 USD)

Carbon Tax: 5.21 million euros saved (based on EU CBAM 2026 at 90 euros/ton)

Project Timeline: 3x installation efficiency, reducing capital costs by 2.9 million USD

Total Savings: 8.5 million USD in reduced costs, with IRR increasing to 22.7%

#### More color options





800X400mm



800X800mm 300x300mm

Generation	Standard Size (mm)	Thickness(mm)	Pcs/box	Sqm/box
3.0	800 x 400	1-10	72	23.04
	800 x 800	natural	40	25.6
	300 x 300	unevenness		

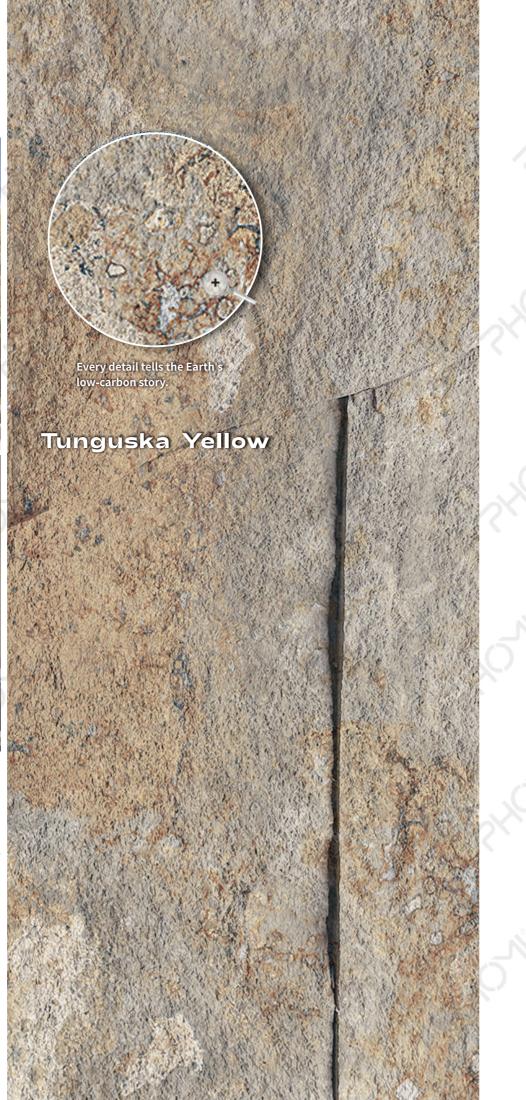








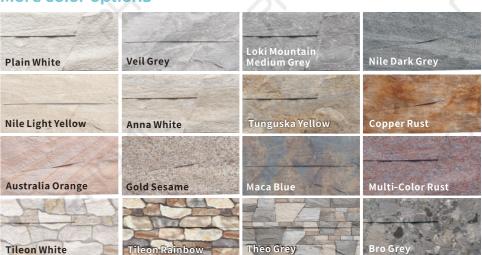
Elevating Environmental Protection from Ethics to a Technological Revolution





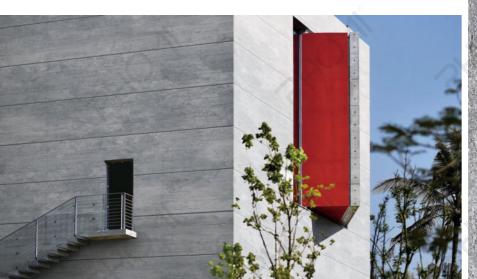


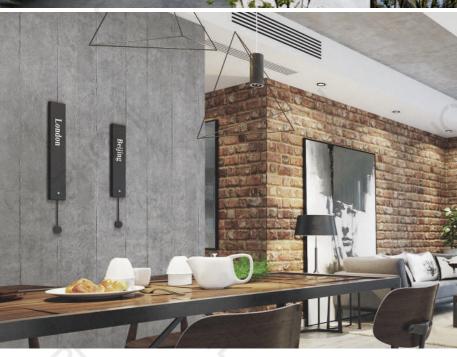
#### More color options

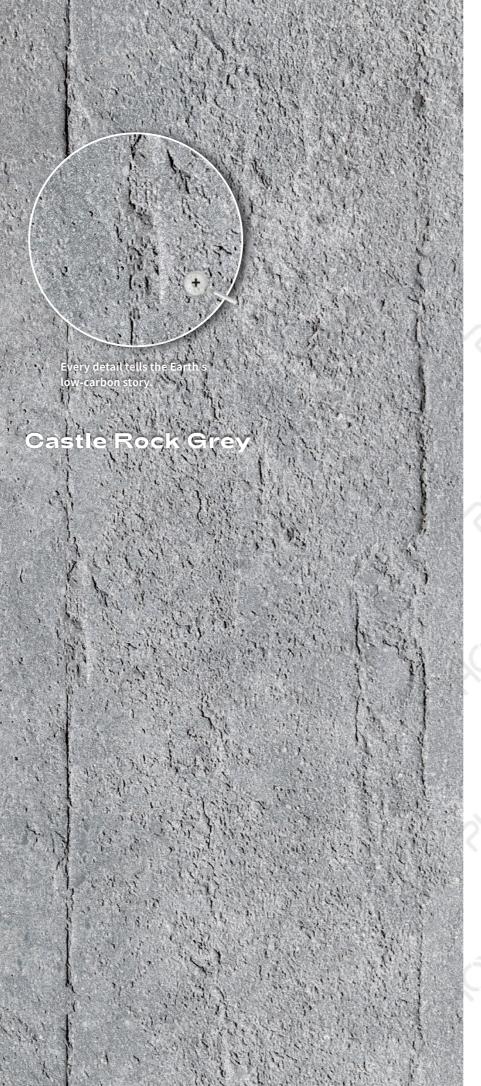


Generation	Standard Size (mm)	Thickness(mm)	Packaging(mm)	Pcs/box	Sqm/box
3.0	1200x 600	1-8 natural unevenness	1220x 620x75	8	5.76
	2400x 1200		Sizes above 2400x1200 are packed with wooden case as per order quantity (subject to packaging fee)		

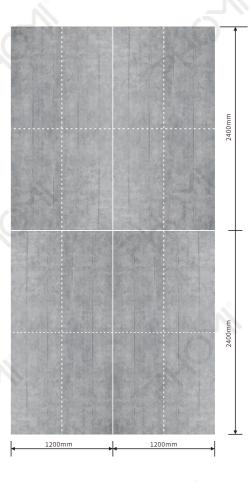
# Concrete Pouring Slab











# More color options

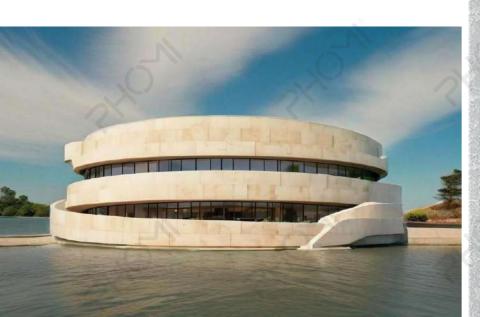


## Specification and packaging

Generation	Standard Size (mm)	Thickness(mm)	Packaging(mm)
3.0	1400 x 600	125	Sizes above 2400x1200 are packed with wooden cas
	2800 x 1200	1-3.5	as per order quantity (subject to packaging fee)

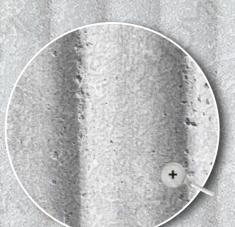
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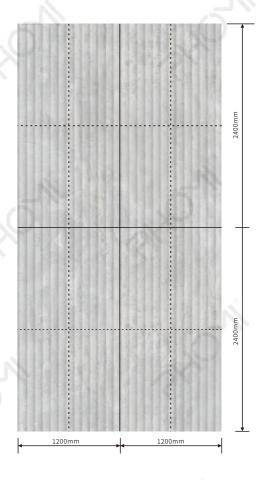
When building materials heal the Earth, humankind will understand its wounds.



Every detail tells the Earth's low-carbon story.

# Monna Grey







Generation	Standard Size (mm)	Thickness(mm)	Packaging(mm)	Pcs/box	Sqm/box
3.0	1400 x 600	1-8	1420 x 620x75	12	10.08
	2800 x 1200	natural unevenness	Sizes above 2400x1200 are packed with wooden ca as per order quantity (subject to packaging fee)		

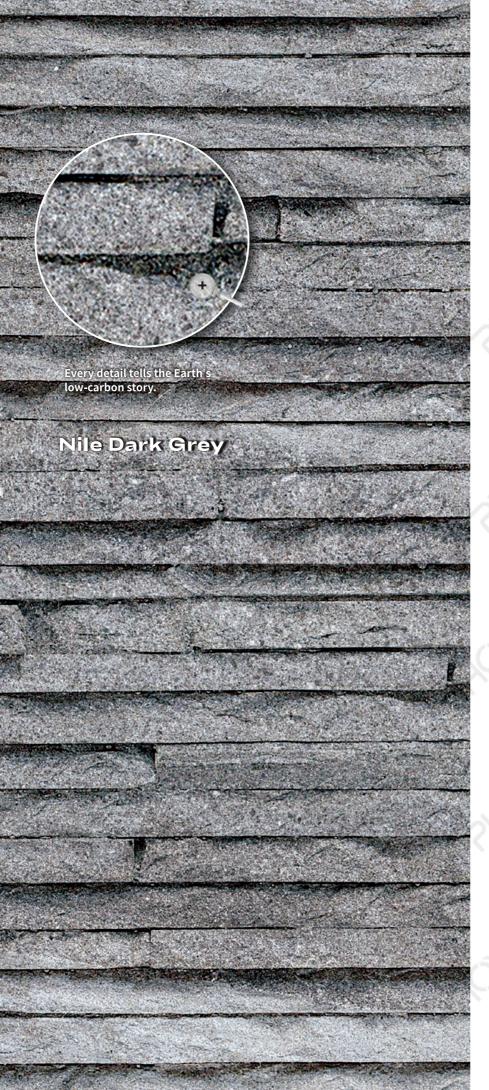




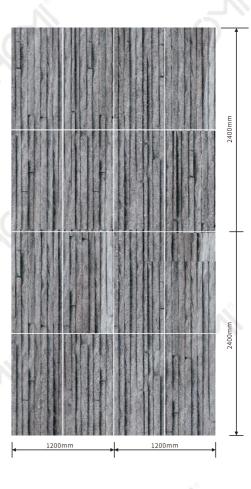




Every breath of a public building should ease the Earth's burden.







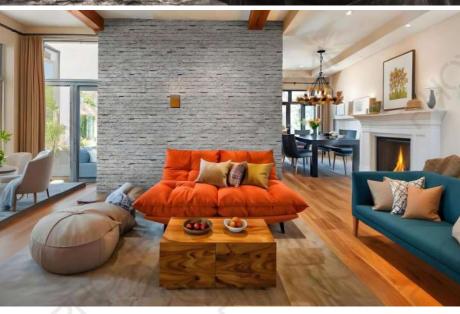
## More color options

Plain White	Ash Grey	Magnolia	Loki Mountain Light Grey
Andes Yellow	Spainish Light Yellow	Former Times	Dandy Grey
Tunguska Yellow	Copper Rust	Multi-Color Red	Fantasy Red
Gold Sesame	Theo Grey	Maca Blue	Nuée Ardente
Theo Dark Grey	Nile Dark Grey	Freespirit Blue-grey	Ink-Dyed

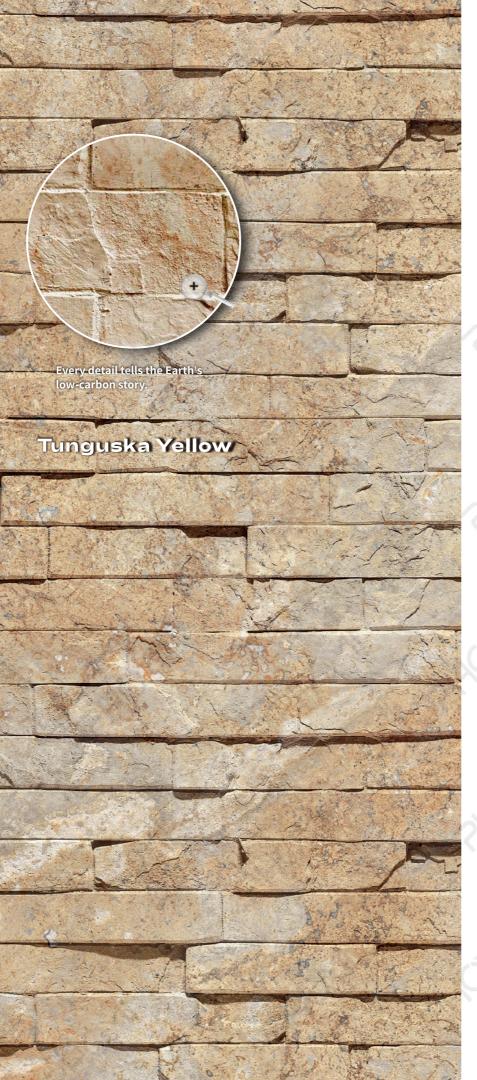
Generation	Standard Size (mm)	Thickness(mm)	Packaging(mm)	Pcs/box	Sqm/box
3.0	600 x 300	1-9 natural unevenness	620 x 320 x 90	8	1.44
	1200 x 600		1220 x 620 x 75	6	4.32

# 35 Piece Stone





When building materials heal the Earth, humankind will understand its wounds.







#### More color options



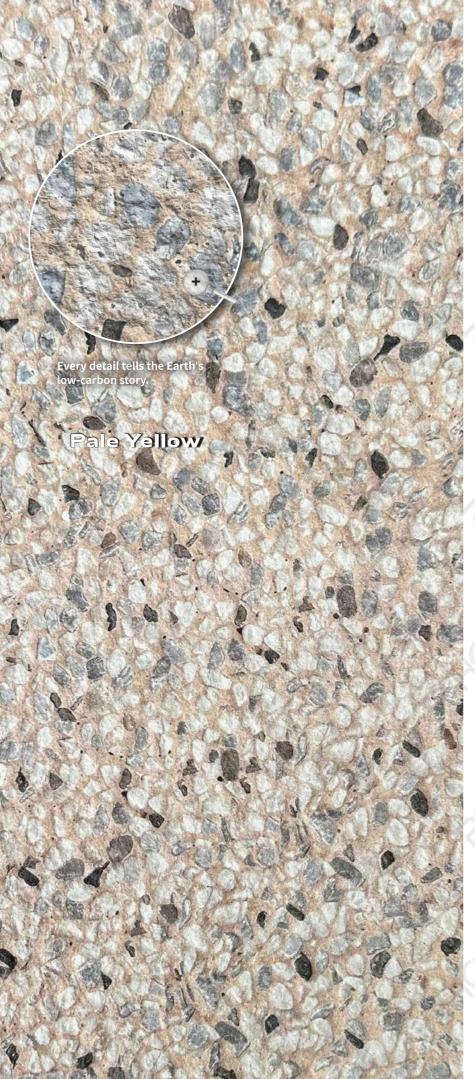
Generation	Standard Size (mm)	Thickness(mm)	Packaging(mm)	Pcs/box	Sqm/box		
3.0	600 x 300	1-9 natural unevenness	620 x320x90	10	1.8		
	1200 x 600		1220 x 620x75	8	5.76		

# **Bush Hammered**

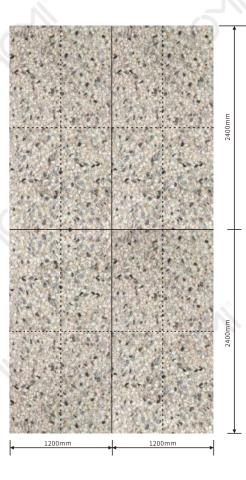




Redefining building materials: Customizable textures  $\times$  Programmable patterns  $\times$  Infinite colors.







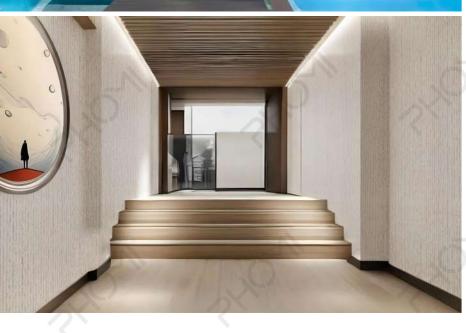
## More color options

Ash Grey	Washed-out White	Pale Yellow	Magnolia
New White Sesame	Starfy	Black Sesame	Dandy Grey
Tunguska Yellow	Gold Sesame	Copper Rust	Roman Red
Freespirit Blue-grey	Roman Grey	Multi-Color Red	Fantasy Red

Generation	Standard Size (mm)	Thickness(mm)	Packaging(mm)	Pcs/box	Sqm/box
	900 x 600		920 x 620 x 80	20	10.08
3.0	1380 x 600	1-3.5	1400 x 620 x 65	18	14.904
	2760 x 1200		Sizes above 2400x1200 as per order quantity (	are packed with subject to packa	n wooden case ging fee)
4.0	1200 x 600	1-4	1220 x 620	14	10.08

# Stone Ridged



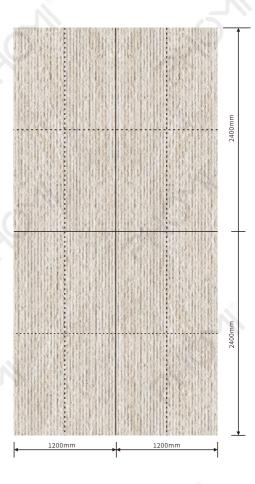


Endless materials, textures, and colors, shaping the future of architectural beauty.



Andes Yellow





## More color options

more of the second of the second of the second		
Cloud White	Andes White	Andes Yellow
New White Sesame	Nile Medium Yellow	Gold Sesame
Pale Yellow	Magnolia	Dandy Grey
Greyish Brown	Maca Blue	Multi-Color Red
Multi-Color Rust	Fantasy Red	Roman Grey
	New White Sesame Pale Yellow	New White Sesame  Nile Medium Yellow  Magnolia  Greyish Brown  Maca Blue

Generation	Standard Size (mm)	Thickness(mm)	Packaging(mm)	Pcs/box	Sqm/box
3.0	1200 x 600	1-3.5	1220 x 620 x75	16	11.52
3.0	2400 x 1200		2420 x 1230 x14	4	11.52

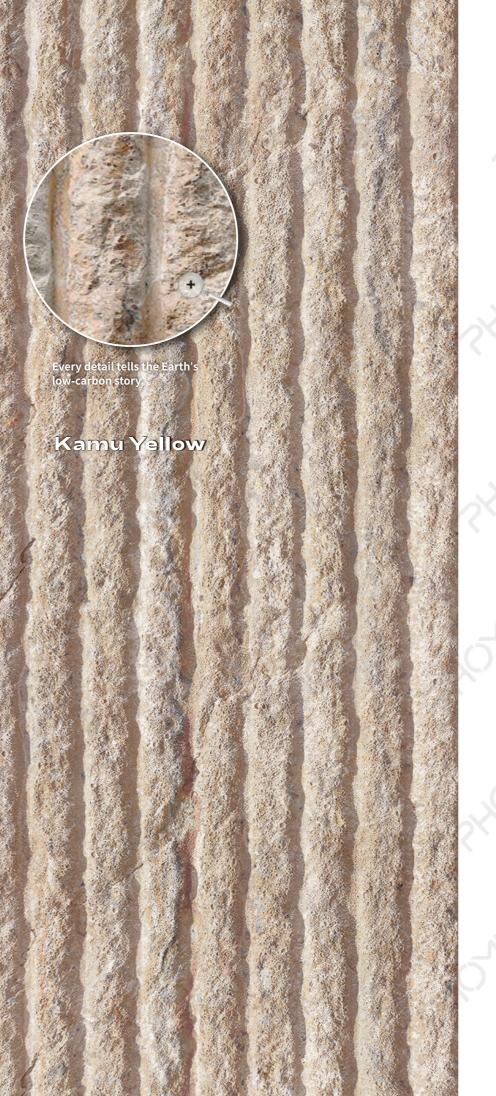


# Oman Linear Stone

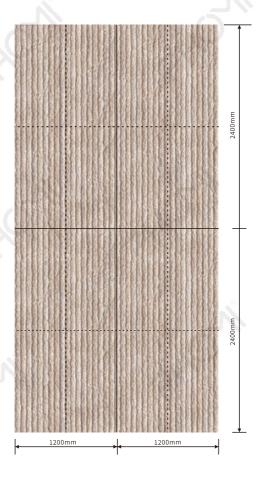




When facades become ecosystems, concrete jungles nurture the forest.







## More color options

	and the second s	TOTAL SECTION AND ADDRESS OF THE PARTY OF TH	
Andes White	Andes Yellow	Nile Medium Yellow	Kamu Yellow
Ash Grey	New White Sesame	Starry	Copper Rust
Fog	Veil Grey	Andes Red	Fantasy Red
		The Control of the Co	Conference and market place and provided
White Sesame	Loki Mountain Medium Grey	Nile Dark Grey	Multi-Color Red
Gold Sesame	Tunguska Yellow	Dandy Grey	Freespirit Blue-grey

				-	
Generation	Standard Size (mm)	Thickness(mm)	Packaging(mm)	Pcs/box	Sqm/box
	1350x600		1380 x 620 x65	8	6.48
3.0	2700x600	1-7 natural unevenness	Sizes above 2400x1200 are packed with wooden case		
	(2700-6000) x1200		as per order quantity	(subject to packa	ging fee)
4.0	1350x600	1-6.8 natural unevenness	1380 x 620 x65	8	6.48

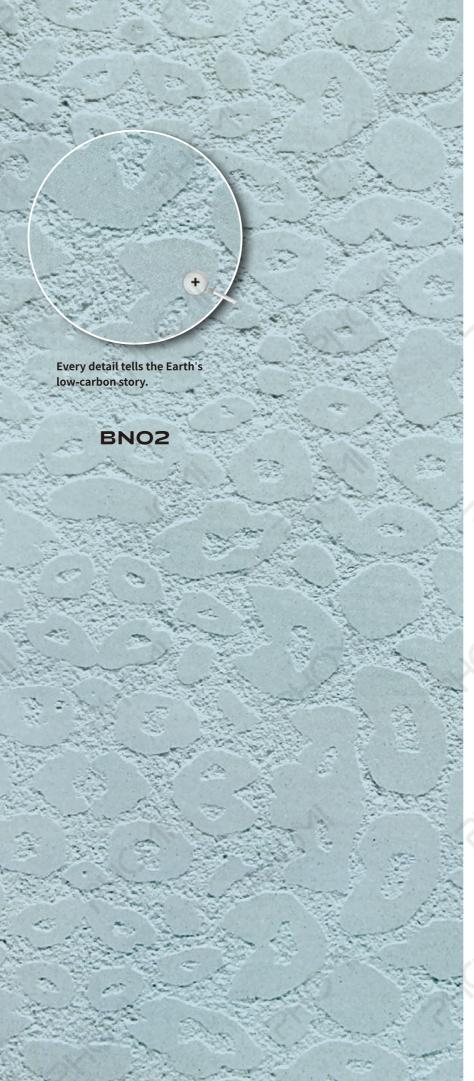


# **Butterfly Stone**

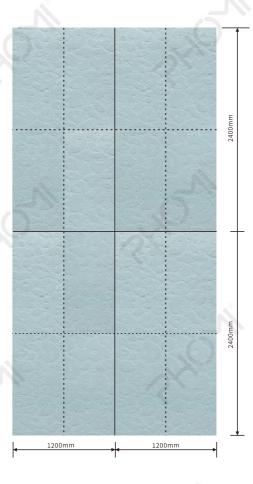




Redefining building materials: Customizable textures  $\times$  Programmable patterns  $\times$  Infinite colors.







## More color options



Generation	Standard Size (mm)	Thickness(mm)	Packaging(mm)	Pcs/box	Sqm/box	
3.0	2600 x 1200	3.5(±1)		/		

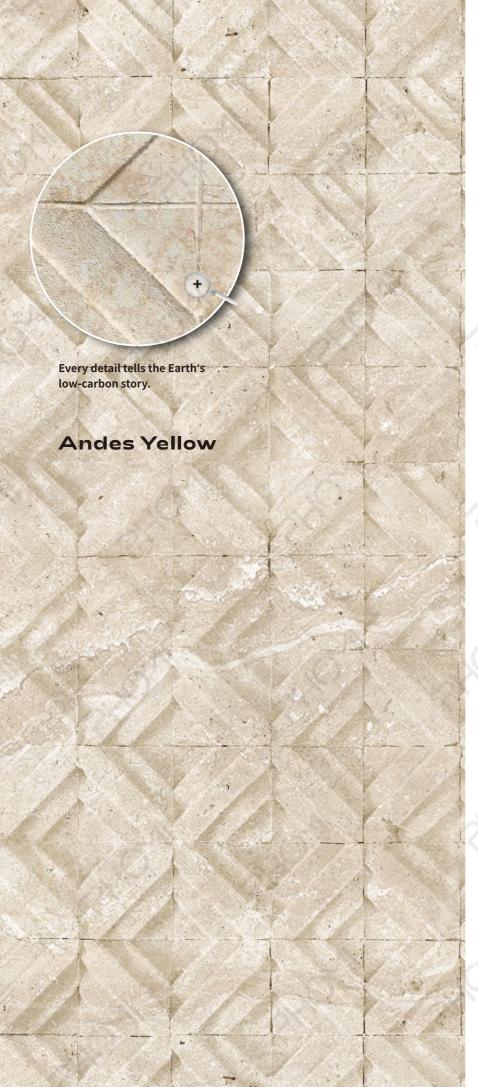


# Stackle Square

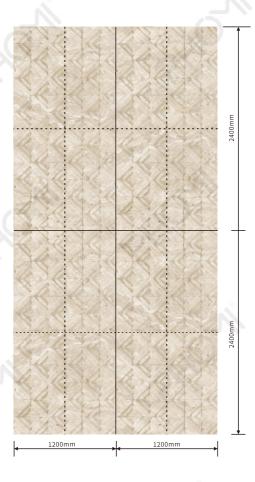




Architects' Freedom Trio: Seamless Materials + Infinite Textures + Unlimited Color Palette







## More color options



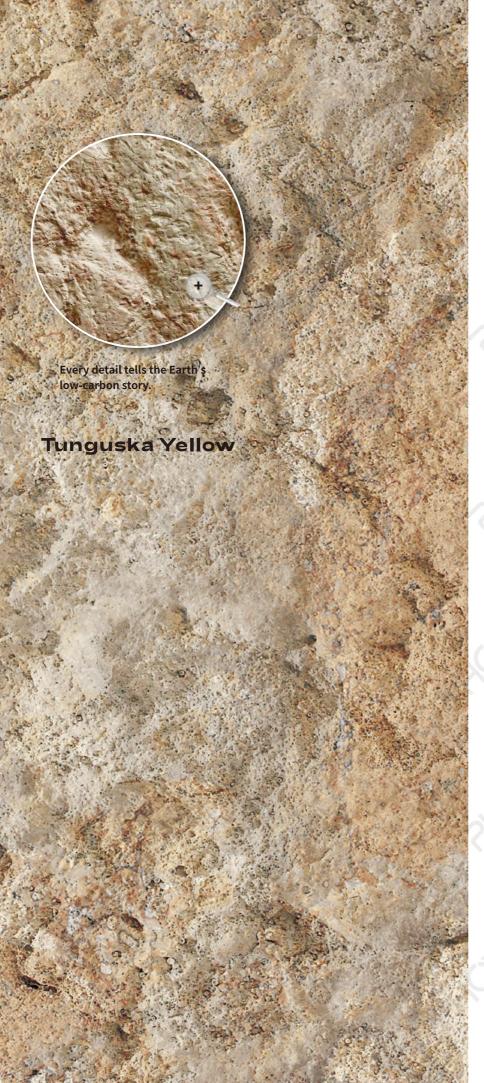
Generation	Standard Size (mm)	Thickness(mm)	Packaging(mm)	Pcs/box	Sqm/box
3.0	600 x 600		620 x 620x90	12	4.32
4.0	1200 x 600	1-7.5	1220 x 620x75	10	7.2

# Rockface Stone





"Digital precision, restoring the physical world."







## More color options

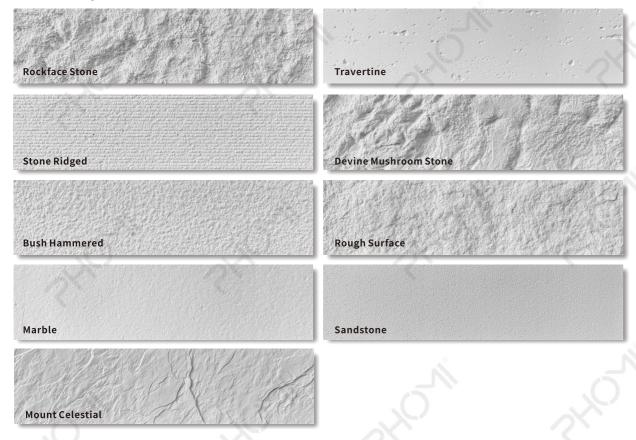
Plain White	Ash Grey	Andes Yellow	Kamu Yellow
		Live De	
		Acres of the sales	
Beauty	Tunguska Yellow	Kamu Red	Copper Rust
Stellar Grey	Nile Red	Multi-Color Rust	Roman Red
		STATE OF STATE OF	
		Toylor 1975	
Anna Light Grey	Dandy Grey	Roman Grey	Fantasy Red
A CONTRACT OF THE PARTY			
Anna Medium Grey	Blue Dark Grey	Freespirit Blue	Portoro

		1 00			
Generation	Standard Size (mm)	Thickness(mm)	Packaging(mm)	Pcs/box	Sqm/box
	1200 x 600	1-10			
3.0	1200 × 1200	natural unevenness	1220x620x75	6	4.32
	2400 x 1200	unevenness			

# Stone Strip Combo

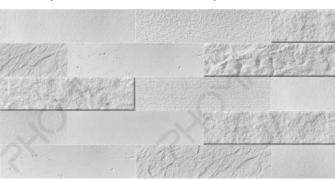
# PHOM<sup>®</sup> eCovering

#### **Texture options**

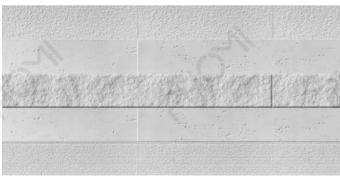


Primary colors: Plain White

#### **Example of mixed effect - partial view**



**Texture:** Marble, Rough Surface, Mount Celestial, Travertine, Rockface Stone, Stone Ridged, Bush Hammered, Sandstone, Devine Mushroom Stone.



**Texture:** Rough Surface, Stone Ridged, Bush Hammered, Travertine



**Texture:** Marble, Rough Surface, Mount Celestial, Travertine, Rockface Stone, Stone Ridged, Bush Hammered, Sandstone, Devine Mushroom Stone.



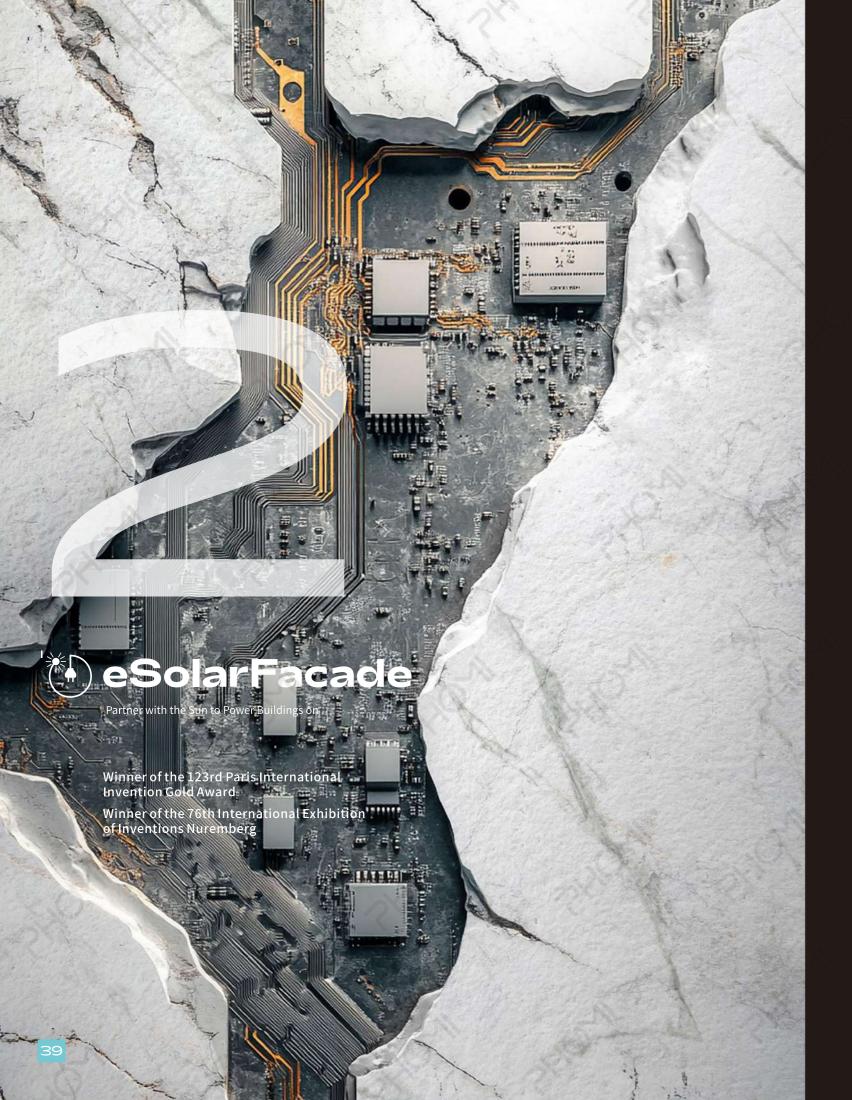
Texture: Marble, Rough Surface





From limits to infinite possibilities.

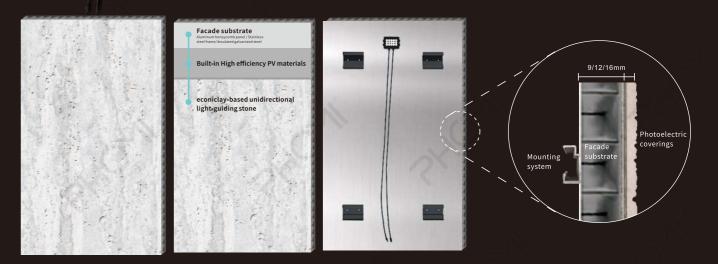
-						
Texture	Generation	Standard Size (mm)	Thickness(mm)	Packaging(mm)	Pcs/box	Sqm/box
Rockface Stone	3.0	480x120	1-10		A	
ROCKIACE Stolle	3.0	960x120	natural unevenness		3 /.	
Tonocontino	2.0	480x120	/!->			
Travertine	3.0	960x120	3.3(±1)			
Ctarra Didaad	2.0	480x120	125			
Stone Ridged	3.0	960x120	1-3.5			
Devine		480x120	1-8 natural unevenness			
Aushroom Stone 3.0	3.0	960x 120				
Bush	3.0	480x120				
Hammered	3.0	960x120	1-3.5			
Davide Confess	20	480x120	1-6 natural			
Rough Surface	3.0	960x120	unevenness			
Marble	3.0	480x120	2.8(±1)			
Marble	5.0	960x120	2.0(±1)			
Sandstone	3.0	480x120	2.8(±1)			
Sanustone	3.0	960x120	2.0(=1)			
Mount Celestial	30	480x120	1-4			
mount Celestial	3.0	960x120	1-4			





#### Energy Efficiency Comparison:

Power Efficiency: 60% HIGHER than glass BIPV with 60% transmittance (CQC/TUV certification) Carbon Emissions: 54.6% lower than glass BIPV (BV certification)



# eSolarFacade technical specifications

ELECTRICAL SPECIFICATIONS		I-V CURVES
Test Conditions	STC	
Maximum Power (Pmax)	59.23 ~ 166.62 W	
Maximum Power Voltage (Vpmax)	20.70 ~ 29.22 V	8
Maximum Power Current (Ipmax)	2.86 ~ 5.70 A	Irradiances - 1900 Wery
Open Circuit Voltage (Voc)	24.18 ~ 35.52 V	S 4 Temperature
Short Circuit Current (Isc)	3.15 ~ 6.17 A	24 = 15 = 15 = 15 = 15 = 15 = 15 = 15 = 1
Module Efficiency	9.12% ~17.63%	0 2 = # ·
Maximum System Voltage (VDC)	1500 V (TUV/CE/CB/CQC/UKCA)	0 10 20 30 40 50 0 10 20 30 40 Voltage (V)
Series Fuse Rating	25 A	voitage (v)
Power & Other Electrical Specification Tolerance	5%	

C: Standard Test Conditions 1000 W/m2 - AM 1.5 - Temperature 25°C

MECHANICAL PROPERTIES	
Module Weight	15.28kg/㎡ (variable for different texture)
Dimensions (L x W x T)	1140x570x30mm, 1200x600x30mm, 1254x751x30mm, 1260x746x30mm
Maximum Surface Load (Wind / Snow)	2400 Pa rear & front
Hail Impact Resistance	ø 25mm @ 23.0 m/s
Fire Rating	A
Glass	No
Back support	Aluminium honeycomb composite panel
Cables & Connectors	300mm, 1000mm, 1200mm, 4mm <sup>2</sup>
Front layer	econiclay Coverings (High durability, UV resistant)
Backsheet	econiclay Coverings (High durability, UV resistant)
Bypass Diodes	2 diodes
Junction Box	Ip68 rated, TUV certified

TEMPERATURE RATINGS		WARRANTY	
Temperature Coefficient Isc	0.036% /°C		100% 98.5%
Temperature Coefficient Voc	-0.25% /°C	Product Warranty: 25 years Perfomance Warranty:	ency
Temperature Coefficient Pmax	-0.30% /°C	fi ≥ 98% end of 1st year fi ≥ 90% end of 12th year	99
Nominal Module Operating Temperature	42 ± 3°C	fi ≥ 80% end of 12th year	80% BOX BOX
Operating Temperature	-40°C ~ +85°C		1 12 25 End of Year

Certifications













# Partner with the Sun to Power Buildings On

Stone, Reinvented with Photosynthesis

— A Sustainable Choice for 237 Iconic Landmarks Worldwide





# PHOMI eSolarFacade (econiclay Building Integrated Photovoltaics)



Glass BIPV
(Building Integrated Photovoltaics)



#### Compared to glass BIPV

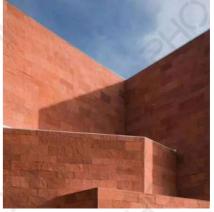
Efficiency: eSolarFacade vs. glass BIPV (60% light transmittance) — 60% higher power output (CQC/TUV certification).

Carbon Emissions: Reduced by 54.6% (BV certification).

## **Application Scenarios:**

Ideal for non-glass facade decorations for stations, airports, sports venues, road sides, bridge piers, and fences, offering both decoration and green energy solutions.







# eSolarFacade advantages

#### **Unlimited Material Expressiveness:**

Achieves the same effect as natural materials like stone, wood, and brick, seamlessly blending with the facade.

#### **Breaking Traditional Photovoltaic Limits:**

Over 95% of buildings use non-glass curtain walls, while regular BIPV is limited to glass facades and windows. eSolarFacade breaks this barrier, enabling flexible use in various architectural styles, expanding photovoltaic technology in the building sector.

#### **Higher Efficiency, Lower Carbon Emissions:**

eSolarFacade offers over 60% higher power conversion efficiency than glass BIPV with 60% transmittance, reducing carbon emissions by over 54.6%.

#### **More Customization Options:**

Beyond power generation, eSolarFacade can be tailored for advertising, insulation, negative ion release, and more, enhancing building performance and comfort







"When photovoltaics become the most versatile building material, its texture, finish, and color can all be customized."

### "Green Calculations for Government Projects"

For a 100,000 m<sup>2</sup> public building, achieve a net carbon reduction of 8,452 tons annually (equivalent to planting 470,000 fir trees over 30 years).

#### Double Carbon Reduction vs. Glass BIPV

 $\checkmark$  Improved Power Generation: 67% efficiency increase  $\rightarrow$  3.4 million kWh of clean energy  $\rightarrow$  2,132 tons  $CO_2$  saved

 $\checkmark$  Lower Production Emissions: 50% reduction in carbon intensity per watt  $\rightarrow$  1,120 tons  $CO_2$  saved

#### Revolutionizing Building Materials vs. Natural Stone

 $\checkmark$  Material Innovation: 66.7% lower carbon footprint per unit area → 5,200 tons CO<sub>2</sub> saved across the building

## Calculation of Carbon Reduction for 100,000 m<sup>2</sup> Building:

Carbon reduction path	Formula	Results
More carbon reduction through power generation	100,000m²x4%x1,000kWh/m²x0.627kg/kWh	→2,132 tons
Less carbon emission in production	(0.52-0.26)kg/Wpx10,000kWp	→1,120 tons
Carbon reduction through material substitution	(78-26)kg/m²x100,000m²	→5,200 tons
Total net carbon reduction	2,132+1,120 +5,200	8,452 tons

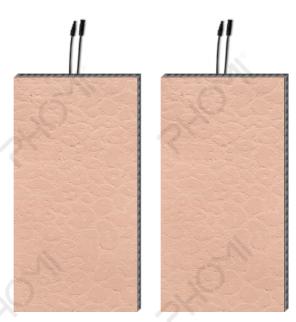
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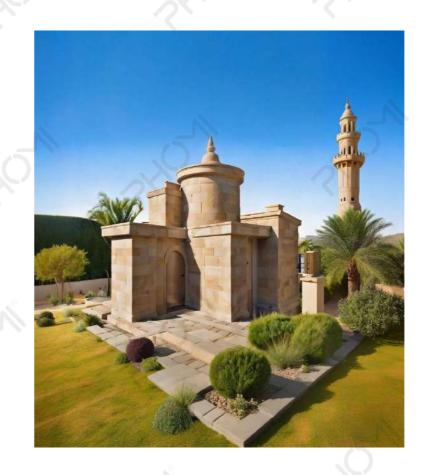




Photovoltaic stone facades, energizing curtain walls—every inch of building texture becomes a reservior of light energy.



eSolarFacade Butterfly Stone ONO2 1140mmX570mm 50W/m² -120W/m²



Stone Aesthetics, Redefined

60% more efficient than transparent glass BIPV, with no compromise on the pure stone look.



eSolarFacade Bush Hammered Tunguska Yellow/Ash Grey

1140mmX570mm 50W/m² -120W/m²

#### [10,000 m<sup>2</sup> Curtain Wall = Vertical Power Plant + Carbon Sink Forest]

#### Carbon Reduction Efficiency

- → 58% lower lifecycle carbon footprint compared to Glass BIPV (0.26 kgCO₂e/Wp vs. industry average of 0.62 kgCO₂e/Wp)
- $\rightarrow$  63% reduction in carbon emissions compared to Stone Curtain Walls (Stone Curtain Wall: 74 kgCO<sub>2</sub>e/m<sup>2</sup> vs. e-solarfacade: 26 kgCO<sub>2</sub>e/m<sup>2</sup>)

#### Economic Value

Energy Generation: 1.8 million kWh annually (based on 1200 hours of equivalent generation) ~ Electricity cost savings of 144,000 USD (0.08 USD/kWh)

Carbon Assets: Annual CO₂e reduction of 1,440 tons (coal replacement) ~ Carbon revenue of 11,520 USD (2025 carbon price: 8 USD/ton)

#### **Ecological Contribution**

Equivalent to the carbon sequestration of 144,000 trees per year = Offsetting the annual exhaust emissions of 1,000 fuel-powered vehicles.

# The Silent Money Printer for Villa Facades

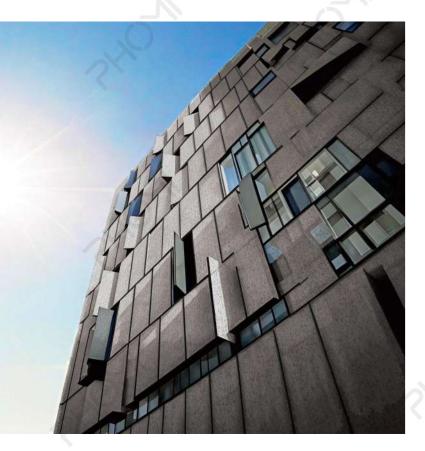
A 200m<sup>2</sup> facade generates 2,400 kWh annually—60% more efficient than 60 % transparent glass BIPV, covering over 70% of household energy consumption.

## **Building Facade Asset Formula**

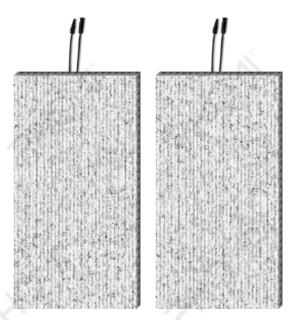
Choose PHOMI's eSolarFacade solution over glass BIPV — 60% more efficient per sqm, earning an extra 12.5 million USD in 25 years for every 100,000 m<sup>2</sup>.



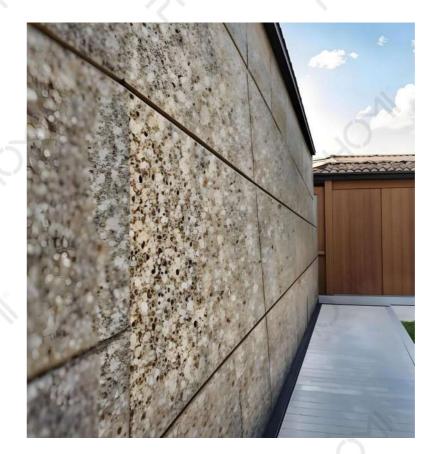




Photovoltaic stone facades, energizing curtain walls—every inch of building texture becomes a source of light.



eSolarFacade Stone Ridged Ash Grey 2300mmX570mm (customized size) 50W/m² -120W/m²



Photovoltaic stone facades, energizing curtain walls—every inch of building texture becomes a reservior of light energy.



eSolarFacade Bush Hammered Pale Yellow 1140mmX570mm 50W/m² -120W/m²

# PHOMI eSolarFacade | Carbon Neutral Facade System Solution

#### 6,000m<sup>2</sup> Curtain Wall with Dual-Effect Value

- · Annual Power Generation: 600,000 kWh (0.6 MW capacity  $\times$  1,000 hours)
- · Lifecycle Carbon Footprint: 0.26 kgCO<sub>2</sub>e/Wp (BV certification)

#### Carbon Reduction Comparison

- · Glass BIPV: eSolarFacade is 58% lower carbon footprint (vs. 0.62 kgCO<sub>2</sub>e/Wp for glass BIPV)
- · Stone Curtain Wall: eSolarFacade is 65% lower carbon emissions (vs. 74 CO<sub>2</sub>e/m<sup>2</sup> for stone)

#### Economic Value

- · Electricity Bill Annual Savings: 48,000 USD (0.08 USD/kWh electricity rate)
- · Carbon Trading Revenue: 6,912 USD (8 USD/ton carbon price × 864 tons)

#### **Ecological Contribution**

- · Carbon Sequestration: Equivalent to 48,000 trees
- · Carbon Offset: Equivalent to 340 vehicles' annual emissions.

# PHOMI eSolarFacade | Carbon Neutral Solution for Small & Micro Buildings

#### [1,000m<sup>2</sup> Curtain Wall with Dual-Effect Value]

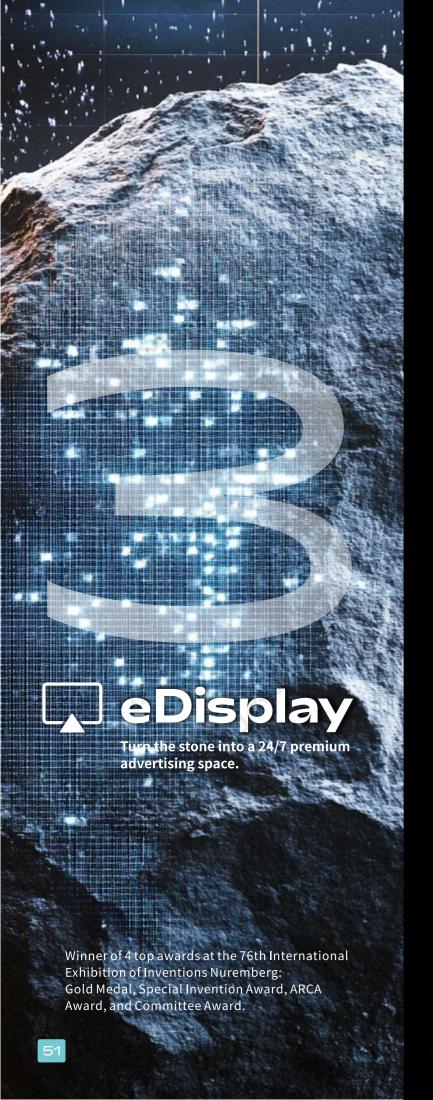
- $\cdot$  Annual Power Generation: 120,000 kWh (0.10 MW capacity  $\times$  1,200 hours of equivalent generation)
- · Lifecycle Carbon Footprint: 0.26 kg CO<sub>2</sub>e/Wp (BV Certification)

#### Full-Cycle Economic Benefits

- · Annual Electricity Savings: 9,600 USD (at industrial/commercial rate of 0.08 USD/kWh)
- · Carbon Trading Revenue: 115.2 USD (2025 carbon price: 8 USD/ton × 14.4 tons)

#### **Ecological Impact**

- · Carbon Sequestration Equivalent: 9,600 trees' annual absorption.
- · Equivalent to 87 National VI Fuel Vehicles' Annual Emissions.



# **Technical Principles**

Phomi invented a covering material with one-way light guiding capability for display purpose - eDisplay. The core of this technology lies in precise manipulation of the microstructure of the covering material to achieve efficient unidirectional transmission of light. Through state-of-the-art technology, a specific optical channel network is constructed at the microscopic level, allowing the light generated by optoelectronic materials to propagate along a predetermined path and ultimately exit through specific areas of the covering material, forming a clear and coherent video signal

In addition to technological innovation, eDisplay also incorporates aesthetic design to simulate the natural texture of stone, the warm texture of wood or the rustic look of terracotta bricks through surface treatment, which is virtually unaffected by light conduction, ensuring that the eDisplay system can still present a pleasing visual effect while displaying video content. Moreover, eDisplay has a lower carbon footprint during its life cycle, which meets the requirements of green and sustainable development.

eDisplay is expected to become the mainstream choice in the field of display in the future, widely used in architectural decoration, information display and other fields, opening a new chapter in display technology.

#### Core Values

#### 1. Architectural Revolution

a. Seamless Material-Display Fusion: Instantly convert stone, wood, or brick facades into 4K displays—disappearing when powered off. Interior surfaces such as walls, ceilings, and floors become interactive displays.

b. Invisible design: integrated display units with the building material, zero-exposure design, replacing traditional external LED screens.

#### 2. Solar-Storage-Display System

Paired with eSolarFacade curtain walls, this system cuts external power consumption by 80%, offering a sustainable "display-generation-storage" solution.

#### 3.Smart Aesthetic Adaptation

Al-driven adjustments automatically optimize brightness and texture for seamless integration.

#### 4.Unlocking Commercial Value

Outdoor: Facades transform into 2,000-nit digital billboards, boosting ad revenue and space value.

Indoor: Retail walls instantly become immersive product displays, increasing customer stop time by 40%.



# **eDisplay Specifications**

Specifications		Outdoor (night use only)	Outdoor (day and night use)	Indoor	
Module Specification	Dimensions(mm)		1920x320/1280x320/ 1280x640/640x320 mm		1280x480/1004x754/960x320/ 960x160/640x320 mm
оресписатоп	Service	access	Re	ear	Front
Physical Parameters	Resolution		P4	P6.67	P2.5
Image Processing Image frequency Capabilities	Frame change frequency	50&60Hz	60Hz	50&60Hz	
	0 , ,	Refresh frequency	≥1920Hz	3840Hz	≤3840Hz
	Display uniformity Color		△(Cx,Cy)≤0.003		
Optics	Contrast Ratio		3000:1		
Parameters	Horizontal	100°			
	Viewing Angle	Vertical		50°	
Electrical Specifications	Power consumption		Max.≤1200W/㎡ Avg.≤750W/㎡	Max.≤520W/㎡ Avg.≤173W/㎡	Max.≤861W/㎡ Avg.≤287W/㎡
	Operating ambient temperature		-20~50°C		
	Storage ambient temperature		-20~50°C		
	Use Operating ambient humidity		10-70% RH		
Conditions Storage am		ient humidity	10-70% RH		
	Service life		100000 H		

#### Certifications





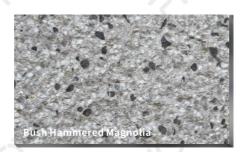








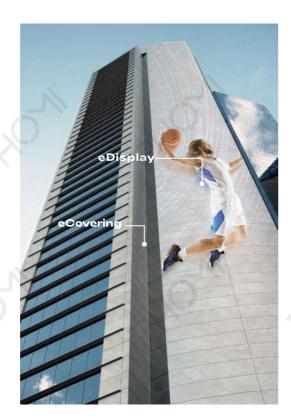




Turn your stone facade into a 2000nit digital billboard, boosting revenue and property value



「Superpowered Buildings: Powering Up by Day, Illuminating Dreams by Night」





「Transform concrete into a live show in 0.3 seconds」



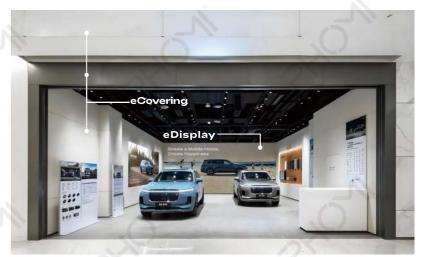




「Each stone is an 8K canvas」



「Silent as stone, dynamic as smart vision—let your space tell your brand's story」



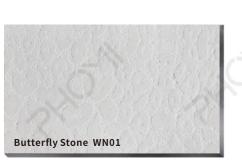








「Instantly Activated, Discreetly Hidden – Travertine Wall Becomes a Smart Info Screen」



「Transform your restaurant wall into an 8K movie experience, with a starry sky above」







「With a simple tap, the wall comes alive, showcasing the Earth's evolution as a meteor shower!

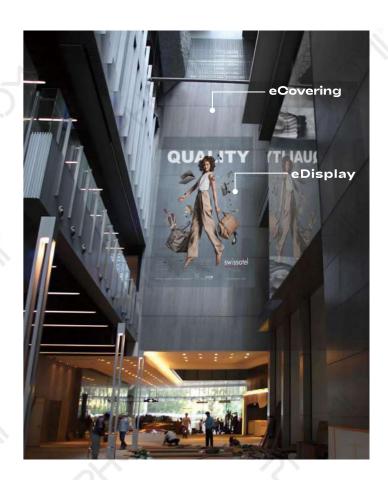




「Stone walls turn into destination screen: The Eiffel Tower emerges, with lavender star rain falling from above」



「Stone walls in commercial spaces become immersive product displays, boosting customer stop time by 40%」



# ■ eSolarFacade & eDisplay

# Standard colors

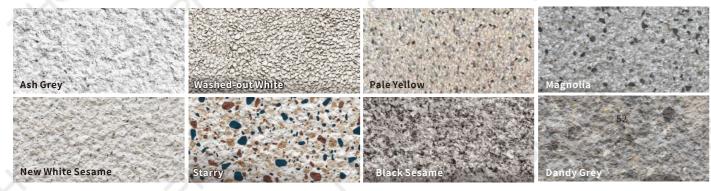


"When photovoltaics become the most versatile building material, its texture, finish, and color can all be customized."

# Stone Ridged



#### Bush Hammered



More color & specification options



# **Butterfly Stone**



#### Standard sizes

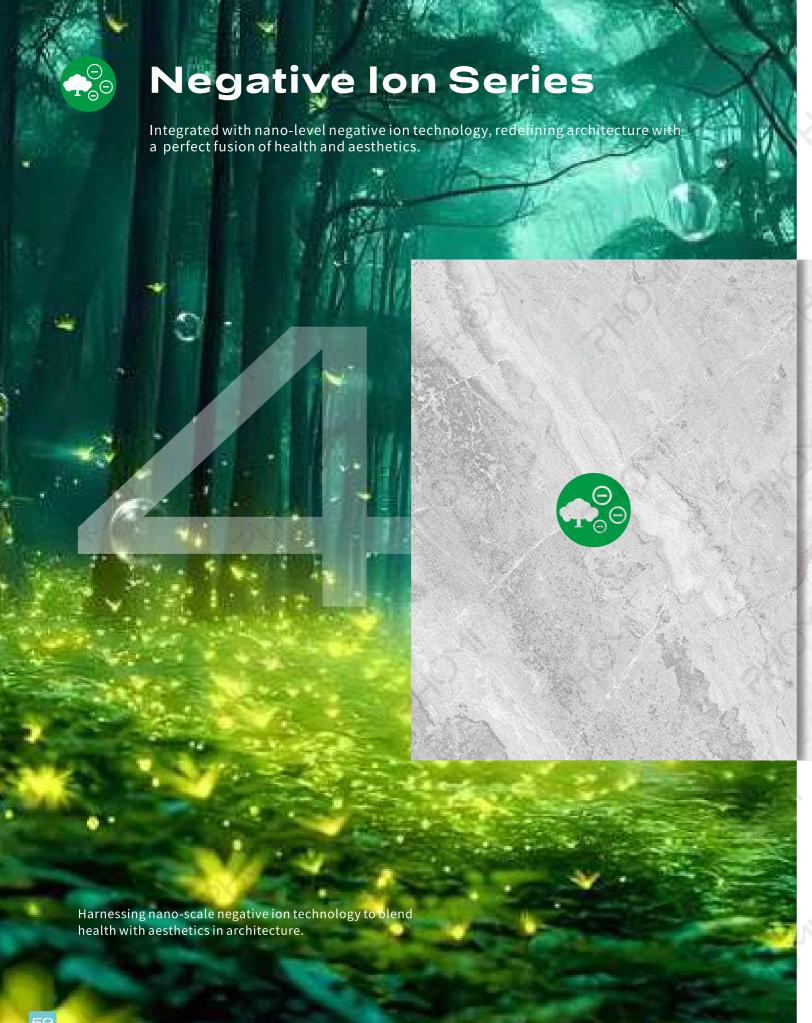
eDisplay:		eSolarFacad
1920X320mm(exterior)	1004X754mm(exterior)	1140x570 mn

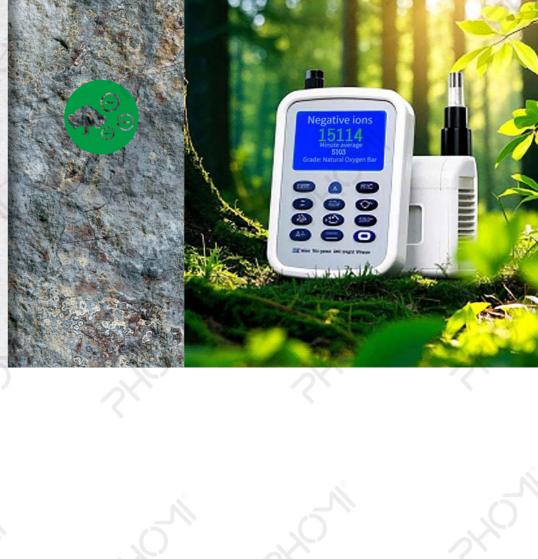
1280X640mm(exterior) 960X320mm(exterior)
1280X320mm(exterior) 960X160mm(exterior)
1280X480mm(exterior) 640X320mm(exterior & interior)



Each square meter of PHOMI stone rebuilds the harmony between architecture and nature.













## **Urban Ecological Breathing Revolution**

When a city's architecture and landscaping fully adopt PHOMI eCoverings (based on 300 million m<sup>2</sup>):

#### . Carbon Reduction

- ► Total Carbon Emission: 306 million kg CO<sub>2</sub>
- ► Reduction vs. Traditional Stone: 21.89 million tons CO<sub>2</sub> (7.2% of Shenzhen's annual carbon emissions)
- ▶ Reduction vs. Tiles: 6.52 million tons CO<sub>2</sub> (equivalent to shutting down 2.2 large coal-fired power plants)

#### 2. Urban Lung Capacity

- ► Releases 1.49 × 10<sup>15</sup> negative ions per second
- ≈The purification capacity of 46,000 hectares of Wutong Mountain Forest Park ≈Provides 18 medical-grade air purifiers per citizen

#### 3. Sustainability Impact

- Creates 2.8 times Shenzhen's natural carbon sink reserve for the Greater Bay Area
- $\bullet\, Reduces\, smog\, days\, by\, 76\%\, (based\, on\, Shenzhen's\, annual\, PM2.5\, average)$
- Cleans capacity equalitent to one-third of the Pearl River's annual runoff

#### Note: Conversion Basis

- 1) Based on Shenzhen's estimated annual carbon emissions of 300 million tons (2025 data)
- 2) Wutong Mountain National Forest Park area: 1,151 hectares, with a negative ion concentration of 2,800 ions/cm³  $\,$
- 3) 1 kg negative ions ≈ cleans 10m³ of air pollutants



#### Carbon Neutral Equation for Lobby Spaces

#### [When a 1000m<sup>2</sup> office lobby adopts PHOMI eCoverings]

- ▶ Carbon Reduction: Cuts 72.98 tons of CO₂, equal to 17,000 barrels of unburned oil
- ▶ Air Purification: Releases 4.97 × 10<sup>11</sup> negative ions per second, matching the oxygen output of 4.7 fir trees per m². Formaldehyde Removal: 23.5% higher efficiency than national standards | 84.1% long-term purification

#### ▶ Dual Sustainable Gains

- ① Clean Air Impact: Purifies air for 320,000 people daily—equivalent to refreshing 0.35 Bird's Nest Stadiums
- ② Carbon Asset Value: Adds 2073 USD/year in carbon credits (based on 2025 market rates)

# **Decoding Ecological Impact**

# [When a building's facade uses 10,000m<sup>2</sup> of PHOMI stone]

#### 1. Carbon Reduction Impact

- Lifecycle carbon footprint: Only 10,200 kg CO<sub>2</sub>e
- 73,000 kg CO<sub>2</sub>e less than natural stone (equivalent to 3,317 mature trees' annual carbon absorption)
- $\bullet$  209,000 kg CO  $_2e$  less than traditional tiles (equivalent to the annual emissions of 95 SUVs)

#### 2. Ecological Breathing Value

- $\bullet$  Continuously releases 4.97  $\times$  10<sup>11</sup> negative ions per second = the purification of 17 football field-sized pine forests
- Provides a 3.2 km thick "natural air vitamin" shield for the building

#### 3. Environmental Equivalency

- Equivalent to creating 4.2 square kilometers of tropical rainforest's annual carbon absorption
- Equivalent to 1,248 commercial air purifiers running for 30 years, providing daily negative ions for 18,720 residents



# Storefront Facade · Visualized Eco-Benefits

#### [1,000m<sup>2</sup> PHOMI Stone Application]

- ► Carbon Footprint: Just 1.02 tons CO<sub>2</sub>e, cutting 19 tons of quarrying emissions—equal to planting 86 mature ginkgo trees
- ► Air Quality Boost: 47 × WHO standard in negative ions, extending customer stop time by 28%



Note: eCoverings can be customized to release negative ions.







## Home Eco Cube [250m<sup>2</sup>]

#### **Carbon Reduction**

► 255kg CO₂ lifecycle footprint ≈27 fir trees' carbon absorption for 30 years ≈ Offsets 8.3 cars' annual commute emissions

#### **Healthy Air**

► 1.24×10<sup>10</sup> negative ions/sec

≈Transforms your home into an 80m-thick pine forest oxygen zone

 $\approx$  Provides 16.5x WHO's clean air standard for a family of four

#### Impact at a Glance

✓ In a 40m<sup>2</sup> living room, every 10 minutes of breathing provides the same amount of negative ions as a 1-hour forest walk.

✓ Compared to traditional covering materials, saves 1.1KW.h A/C consumption every day for your home.

#### Eco Living, Everywhere

From kitchen countertops to balcony walls, every square meter contributes to the planet's breathing rhythm.



# Precise Carbon Reduction for Commercial Spaces

#### [1,000 m<sup>2</sup> of eCoverings used in commercial spaces]

#### **Carbon Reduction Impact:**

73 tons CO₂e saved over the lifecycle = annual carbon absorption of 322 mature camphor trees

#### Air Regeneration System:

Releases 4.97 billion negative ions per second = 0.004 mature fir trees' carbon absorption per square meter of wall

#### **Environmental Contributions:**

① Carbon Asset Growth: Annual reduction of 72.98 tons = Worth 583.84 USD/year (based on 2025 carbon price of 8 USD/ton)
② Air Quality Improvement: Purifies air for 91,000 people daily (meeting WHO standards of 30m³ per person/day)
③ Business Carbon Offset: Offsets emissions of 31 fuel-powered vehicles annually (based on national standards of 2.36 tons CO₂per vehicle/year)

# Micro-Space Eco Revolution

#### [30m<sup>2</sup> Eco-Space Impact]

#### **Air Purification**

- ▶ 1.49 billion negative ions/sec = 120m² bamboo forest
- ▶ 4.5m³ medical-grade clean air/min

#### Carbon Reduction

- ▶ 30.6kg CO<sub>2</sub> lifecycle footprint ≈ 1.5 poplar trees' annual absorption
- ▶ 2,189kg less CO<sub>2</sub> vs. stone, saving 300kg coal

#### Daily Benefits

- ✓ Offsets 7.3 fuel cars' 10km emissions
- ✓ Restores 156m² rainforest
- ✓ Equals 37 ICU air purifiers running nonstop

#### [15m<sup>2</sup> Eco-Space Impact]

A 15m² wall in a dressing room delivers 8 hours of fresh air, equivalent to a 2km walk through a pristine forest.



# A Data-Driven Green Retail Space Revolution

#### 1000m<sup>2</sup> Coverings= Advanced Eco-Tech Matrix

#### **Carbon Reduction Innovation**

- ► Carbon emission: 1.02 kg/m² (98.6% lower than stone)
- $\blacktriangleright$  Total carbon reduction: 729,800 kg CO  $_2$  = Sequestered carbon of 3,317 30-year-old camphor trees

#### **Smart Air System**

- ▶ 4.97 billion negative ions/second released continuously (1m² = equivalent to 4.2 fir trees' purification)
- ▶ Formaldehyde removal efficiency 23.5% above national standard | Longlasting purification: 84.1%

#### **Environmental Impact**

- $\cdot$  Carbon Asset: 729.8 tons of carbon reduced annually = Carbon revenue of 5949 USD (2025 carbon price 8 USD/ton)
- · Healthy Breathing Model: Provides clean air for 91,000 people daily (WHO standard: 30m³/person·day)
- · Low-carbon Impact: Equivalent to offsetting the annual emissions of 309 fuel-powered cars



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# eCovering & Negative Ion Series

## **Installation Method**

#### **DIY Series**

Only for interior dry wall and floor application

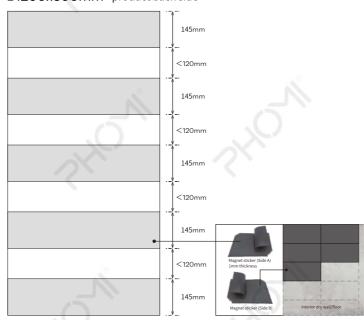
≤1200x600mm product back side



#### Magnet sticking

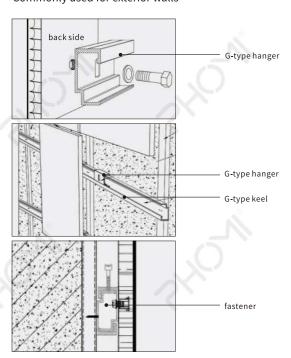
Only for interior dry wall and floor application

≤1200x600mm product back side



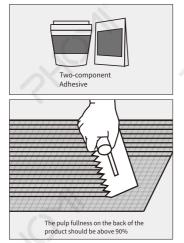
#### **Dry-hanging system**

Commonly used for exterior walls



#### Wet installation system

Suitable for both interior & exterior



Note: For interior applications in bathrooms or other wet areas, wetpasting installation is required.

# eSolarFacade & eDisplay

# **Installation Method**

Use a laser rangefinder and digital level for wall positioning. Secure the custom keel with an impact drill using mechanical anchoring. Align the panel slots with the keel for initial fixation, then fine-tune and reinforce with specialized connectors to ensure precision and efficiency.

Attach/Secure the aluminum brackets to the back of the honeycomb panel with bolts and nuts.



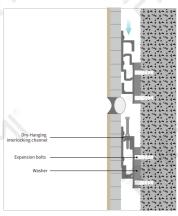
Secure the aluminum rail with expansion bolts to the solid wall. Insert the aluminum brackets of honeycomb panel into the aluminum rail on the solid wall, then secure the brackets to the rail with screws (bolts and nuts).



#### Installation and Maintenance

1. Cleaning: After acceptance, the frequency of cleaning should be determined based on the level of wall contamination, with a minimum of once a year. Use hand soap mixed with tap water, and avoid using organic solvents.

- 2. Curtain wall inspection and maintenance:
- · A comprehensive inspection of the curtain wall should be conducted every five years, including the panels, sealing strips, and sealants.
- · Tighten any loose bolts, and for corroded connectors, remove rust and repaint or replace
- · Loose or damaged panels should be repaired or replaced.
- $\cdot\,$  Sealants and sealing strips that have fallen off or are damaged should be repaired or replaced
- · Damaged components or connectors should be replaced or reinforced if the anchoring is
- · Regularly check the drainage system, and clear any blockages.
- · Any loose or damaged hardware should be replaced.



Schematic diagram of Dry-Hanging





## eSolarFacade off-grid energy storage system

Civil eSolarFacade: When purchasing civil eSolarFacade, Phomi will provide you with (extra charge) an off-grid energy storage system, including storage batteries, controllers, and inverters, based on your order quantity. Please consult your local Phomi Agency for the pricing of eSolarFacade and the energy storage system.

**Commercial eSolarFacade:** The installation of the electrical components should proceed in sync with the setup of the curtain wall, strictly following the electrical design drawings and the relevant design and construction standards.

# **Functional Model Structure**

Main category	eSolarFacade eDisplay eCovering	If it is eCovering, omit this section and proceed directly to the texture.
Texture	Rome Travertine 3.0 Rome Travertine 4.0 Oceanic Travertine 4.0 Oceanic Travertine 4.0 Marble 3.0 Marble 4.0 Sandstone 3.0 Sandstone 4.0	This code is a must for every item. If it is eDisplay and eSolarFacade generation code is not required.
Installation	SA. (Self Adhesive) MG. (Magnetic) AH. (Aluminum honeycomb. If there is a number after AH, it is the thickness of honeycomb.) AP. (Aluminum panel) SF. (Steel frame) FC. (Fibreglass cement)	This code can be null if it is by wet paste.
Extra function	<ul> <li>B. (with insulation)</li> <li>N. (with negative oxygen ion)</li> <li>M. (with anti-mold/bacteria coating)</li> <li>G. (Glossy and higher anti-stain coating)</li> </ul>	This code can be null if it is normal coating.
Technical Specification	20V. (with 20mm vacuum insulation) 30V. (with 30mm vacuum insulation) 50V. (with 50mm vacuum insulation) 50R. (with 50mm rockwool insulation) P25. (P2.5 for eDisplay) P40. (P4.0 for eDisplay) P66. (P6.6 for eDisplay)	This code can be null.
Color	Aegean White Moonlight Sunis White Australia Orange Cloud	This code is a must for every item.
	Andes White White Sesame BN02	

## Example

eCovering	Rome Travertine 3.0 Aegean White
eSolarFacade	eSolarFacade Rome Travertine AP.30V.Aegean White
eDisplay	eDisplay Rome Travertine AP.20V.P66.Aegean White
<b>Negative lon Series</b>	Rome Travertine 3.0 N.Aegean White

# material science that shapes the future

