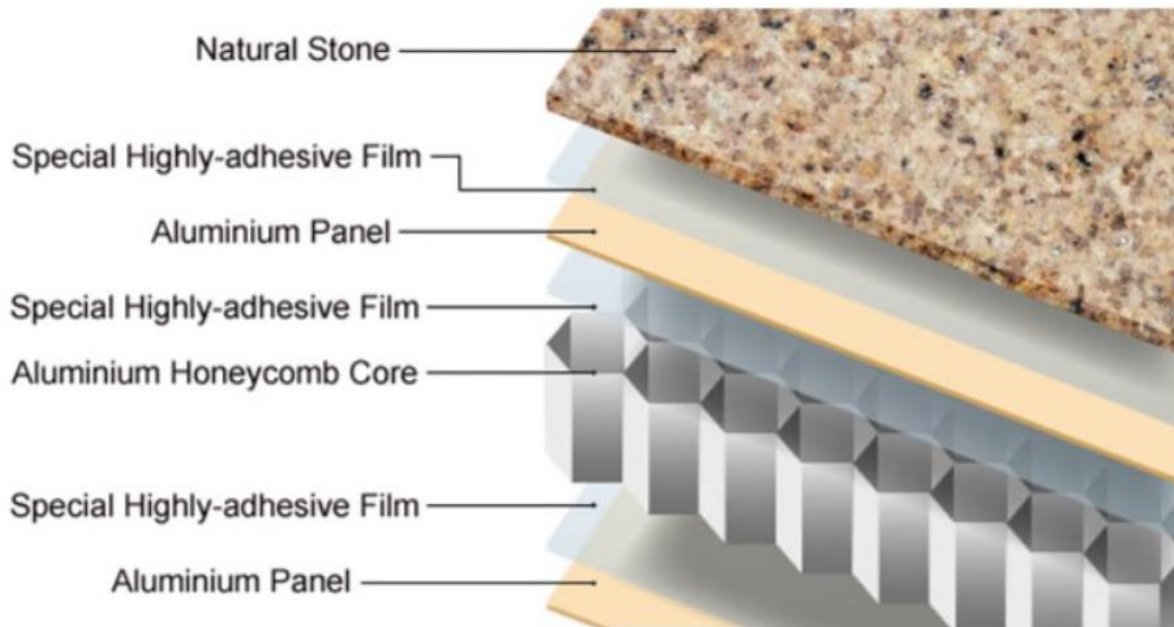


Introduction of Stone Honeycomb Panels

Stone honeycomb composite panel consists of a natural and super-thin Stone veneer (4mm-8mm) and an aluminum honeycomb panel, tightly bounded together by highly adhesive film. This kind of product maintains the beauty of nature marbles and granite while overcome their disadvantages of fragility and heavy weight. Puts an aluminum sheet between the stone veneer and aluminum honeycomb so that the products have good impact resistance and flexural strength.



Specification of stone honeycomb panels:

Panels Thickness	6mm-600mm
Stone Thickness	3mm, 5mm, 6mm, 8mm, 10mm, etc
Stone surface treatment	Brushed, polished, chiselled, honed, flamed, grooved, rubbing, etc.
Width:	300mm-1200mm
Length	300mm-2000mm
Max Size	1500mmx6000mm

1. For interior wall: 15-20mm (stone: 5mm/6mm); mostly use marble & travertine; surface treatment: polished/matt surface
2. For exterior wall: 20mm to 30mm (stone: 7mm/8mm); mostly use granite & marble with dark color; surface treatment: polished/matt surface for marble

Features:

- (1) Light weight, the standard stone granite marble honeycomb panel weights 16kg per square meter, which is 1/5 of that of the pure stone panel.
- (2) High intensity and high capability of anti strike; its intensity is 10 times of that of the 75px-thick-granite.
- (3) Good quality of sound insulation and heat insulation.
- (4) Convenient to construction, easy to installation.
- (5) Low weight, lower burden to the building, increase building life span.
- (6) Good weather and corrosion resistance.
- (7) Can be made to flat shape, arc shape and sphere shape etc; wide optional colour , good decoration effect;
- (8) Environmental friendly, super pollution resistance , easy to clean and quick to fit and can be recycled.

Technical Data of stone honeycomb panels:

Items		Technical requirements	
		W	N
Contamination resistance		No visible residual contamination	
Falling ball impact resistance		No glue-off or damage	
Soft heavy object impact resistance		No glue-off or damage	
Flatwise compressive strength/Mpa		≥0.8	≥0.6
Flatwise compressive elastic modulus/Mpa		≥30	≥25
Flatwise shear compressive/Mpa		≥0.5	≥0.4
Flatwise shear compressive/Mpa		≥4.0	≥3.0
Climbing drum peel strength (N.mm/mm)	Average value	≥50	≥40
	Minimum value	≥40	≥30
Flatwise tensile adhesive strength Mpa	Average value	≥1.0	≥0.6
	Minimum value	≥0.6	≥0.4
Flexural strength(standard value) Mpa	Granite	≥8.0	-
	Sandstone,Marble,Limestone	≥4.0	
Flexural rigidity (N.mm2)	Aluminum honeycomb panel	≥1.0 x 10 ⁹	≥1.0 x 10 ⁸
	Steel honeycomb panel	≥1.0 x 10 ⁹	
	FRP honeycomb panel	≥1.5 x 10 ⁸	
Shearing rigidity/N		≥1.0 x 10 ⁵	≥1.0 x 10 ⁴
Hot water resistance	Appearance	No abnormalities	-
	Average decrease percentage of flatwise adhesive strength (%)	≤ 15	
Temperature different resistance	Appearance	No abnormalities	
	Average decrease percentage of bending strength (%)	≤ 20	
Anti-freezing	Appearance	No abnormalities	
	Average decrease percentage of flatwise adhesive strength (%)	≤ 15	
Note: The width of the sample in flexural test is 100mm.			

Comparison of Stone Honeycomb Panel and Traditional Stone Slab

	Traditional stone Slab With Junction Piece	Stone Honeycomb Panels
Weight comparison	30mm Total thickness	20mm Total thickness
	75kg/m ² (weight)	15kg/m ² (weight)
Performance comparison	Unable to bend	Bendable(pressing 30mm bent not crack or broken)

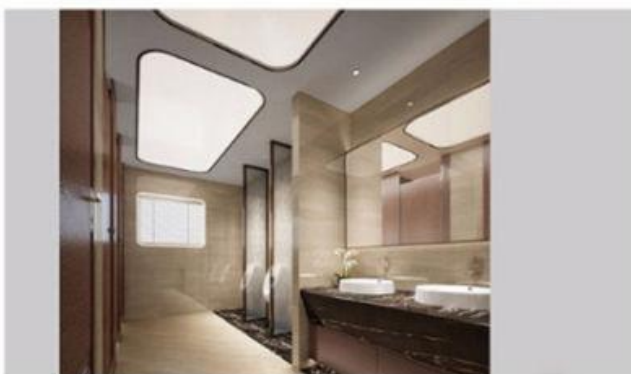
Installation	big expenditure	small expenditure
	(>\$50.00/m2)	(<\$16.00/m2)
Safety Performance	Cracking in impact-resistant test	Only with punctate cracking
Material availability (useful material output from one cubic)	28-38m ²	80-100m ²
Maximum size	≤ 600 x 600	up to 1600 x 3200

Applications:

Stone honeycomb panels can be used in :

1. Interior & exterior wall cladding, curtain wall
2. Furniture board & door
3. Bathroom,kitchen interior decoration;
4. Marine vessels interior decoration;
5. Ceiling/roofing & flooring
6. Partitions (wall partition & toilet partition)
7. Decoration material for office buildings, shopping mall, hotels, metro/subways station, train/railway station, air terminal
8. Cleaning room
9. Machine board
10. Bus, Truck, Camper, Ship, Aerospace Industry

11. Lift and Elevator decoration



Floor

Stone Aluminum Honeycomb Panel
-----Flooring Series



Floor

Stone Aluminum Honeycomb Panel
-----Furniture Series



Indoor Decoration

