

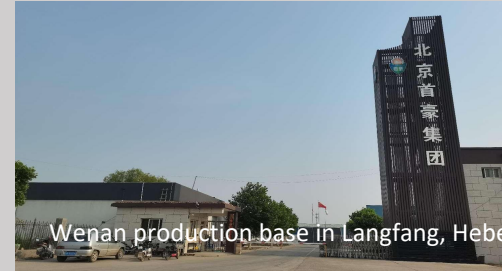
Company Introduction



Beijing Group Headquarters



Tianjin Production Base



Wenan production base in Langfang, Hebei



Dacheng production base in Langfang, Hebei

Beijing Shouhao New Building Materials Technology Group Co., Ltd. is one of the leading companies in China's energy-saving and thermal insulation industry. With over 20 years of development and growth, the group was established in 2014, with its headquarters in Beijing and production bases or branches located in Tianjin, Hebei, Northeast, East China, Central China, and other countries overseas. The group is committed to the building materials and construction fields of building engineering, industrial plants, cold storage insulation, municipal infrastructure, highways, and railways. It is an international well-known solution supplier and leading enterprise in wall structures and thermal insulation materials, as well as a pioneer in green prefabricated and energy-efficient passive house building wall solutions. The current registered address of the group is at the Daxing Biomedical Base of Beijing.

The group's business has spread all over the country, as well as exports to many countries internationally. It has won numerous honors, including the Capital Civilization Unit, Top 10 Enterprises of Light Industry, High-tech Enterprise, AAA-Level Enterprise with Credit Rating, and National Three-Star Green Building Materials Product. The group has nearly a thousand cases of material supply and construction, among which dozens of building engineering awards have been won, such as the Luban Award, National Quality Engineering Gold Award, Great Wall Cup, and Haihe Cup.

The group has world-class production equipment and a team of expert technical staff. Its research and development include: Low Internal Stress Extruded Boards (XPS/GXPS) series, Polystyrene Boards (EPS/GEP/AEPS) series, Autoclaved Aerated Concrete (ALC/AAC) products, Autoclaved Aerated Concrete Low Internal Stress Thermal Insulation Composite Wallboard, Shouhao Autoclaved Aerated Pipeling Separation Concrete Wallboard, Shouhao Smart Construction Integrated House, Shouhao Exterior Wall Panel, Thermal Insulation Integrated Structural System (built-in/external/passive house built-in), Shouhao Water Heated Brick Bed/Bed, construction accessories, and professional construction services.

- "The world looks at China, and selects Shouhao for building materials."

➤ The chairman's message



北京首豪集团
BEIJING SHOUHAO GROUP



Group Chairman: Liu Yinlou BEIJING SHOUHAO GROUP

The plastic extrusion product and equipment expert at China Plastics Processing Industry Association
The Vice President of China Building Energy Conservation Association
Director of Commerce and Trade Division at China Engineering Construction Standardization Association
Director of China City Residential Industry Council
Member of China Energy Conservation and Emission Reduction Industry Alliance.

- Humbly accepting our customers' opinions and suggestions is the first step towards our success!
- Having the opportunity to serve our customers is our honor, and providing satisfactory services to our customers is the mission of Shouhao's staff!

Development History



1993

Founded SANQIANG Company, and became one of the early companies in China to develop domestically produced centrifugal glass wool.



2004

Beijing Beipeng New Building Materials Co., Ltd. was established, beginning the production and research and development of XPS.



2009

In 2009, the company was selected by the National Environmental Protection Department to represent China and collaborate with German GTZ Technology Company and the International Chemical Industry Alliance organization to introduce world-class production lines and jointly develop extruded boards using carbon dioxide as a foaming agent.



2010

The first XPS board in China using carbon dioxide foaming technology was produced and developed by our company.



2014

In 2014, Beijing Shouhao Group was formally established, implementing a diversified business philosophy with a range of operations covering real estate, thermal insulation materials, thermal insulation construction accessories, building construction, investment management, and many other fields.

Development History



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2015
Low internal stress extruded board introduced

2015

We successfully developed the technology of "Low Internal Stress Extruded Boards (XPS)", and overcame the global problem of "unsatisfactory size stability of extruded boards".



2017
Thermal insulation integrated structure

2017

We independently developed the technology of Thermal Insulation Integrated Structural System (built-in/external/passive house built-in), and promoted its application throughout Hebei Province.



2019
New strategy of the group development

2019

We have deployed a new development strategy in four cutting-edge technology fields: building construction, cold chain logistics, prefabricated construction, and industrial intelligence.



2020
Establish prefabricated production base

2020

In 2020, the company established the Prefabricated Green Building Materials Industrial base and began the mass production of Autoclaved Aerated Concrete (AAC/ALC) products.



2022
Undertake National task

2022

With its strength, Shouhao Group was entrusted with the National "Thirteenth Five-Year Plan" project, and independently developed Autoclaved Aerated Concrete Low Internal Stress Thermal Insulation Composite Wallboard and Shouhao Autoclaved Aerated pipeline Separation Wallboard, which will become revolutionary products in prefabricated construction.

History of Shouhao Exterior wall panel



The origin of Shouhao exterior wall panel can be traced back to Japan where the product has occupied a place in the building material market after more than 60 years of development and mature research and production technology. This type of exterior wall panel not only blends the profound foundation of Japan's material science, process design, and environmental protection concept but also continuously innovates with novel styles and excellent quality, which has won extensive recognition in the market.

Shouhao exterior wall panel integrates decorativeness and functionality, providing a system solution from external to internal decoration.



Shouhao Exterior Wall Panel



The Shouhao Exterior Wall Panel is made mainly of cement, silica materials and fibers, which are precisely molded and treated with high-temperature steaming. It is then coated with a unique 3D printing technology under computer control. It is mainly used for decoration and renovation of the exterior facades of villas, factories and houses, as well as interior wall decoration, partition walls, protective walls, lattice fences, and garden architecture modeling.



Shouhao Exterior Wall Panel offers more than 600 styles



The characters of the Shouhao Exterior Wall Panel

01、 Decoration

There are hundreds of products with different styles and designs available which can meet the requirements of various personalized building and designer needs. Some are exquisite and delicate, while others may be bold and daring. With texture and patterns that seem to be naturally formed and Shouhao's unique spraying process, the products showcase a wide range of architectural styles, blending decorativeness and functionality into one. It brings beauty to your life, creates a green, low-carbon, and livable new era of urban beauty.

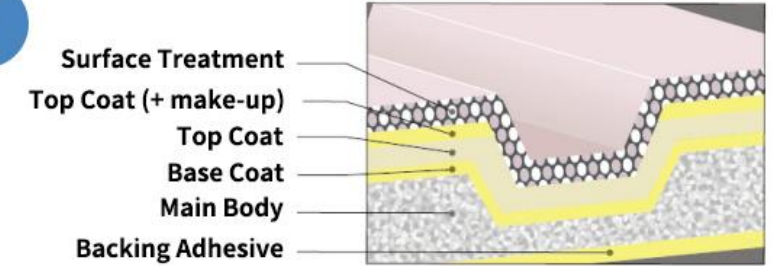


The characters of the Shouhao Exterior Wall Panel

02、 Weather Resistant

The exterior walls are exposed to harsh weather conditions such as sun light and rain. However, Shouhao exterior wall panel uses "siloxane coatings" and "acrylic amino ester coatings" with exceptional weather resistance, and by adding UV absorbers and light stabilizers in weather-resistant resins, it can maintain a long-lasting beautiful appearance, reducing maintenance costs such as re-spraying, and is environmentally friendly and green.

Spray Coating Structure

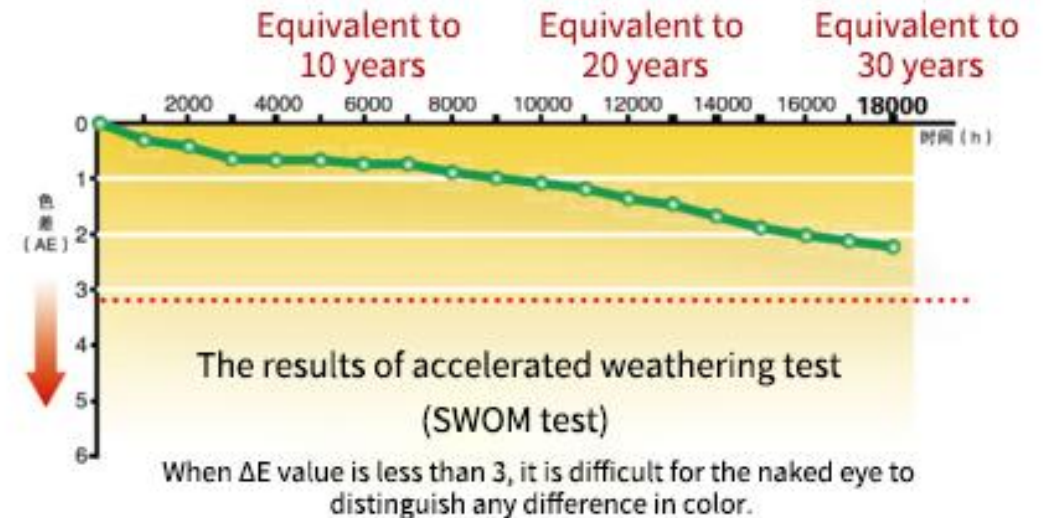


The ultra-high-grade weather-resistant coating has achieved a leap forward in weather resistance.

- Resistant to fading
- Uniform color
- Maintain the exterior wall's long-lasting beauty

"The result of our metal weather resistance test for 2 cycles is about 1 year."

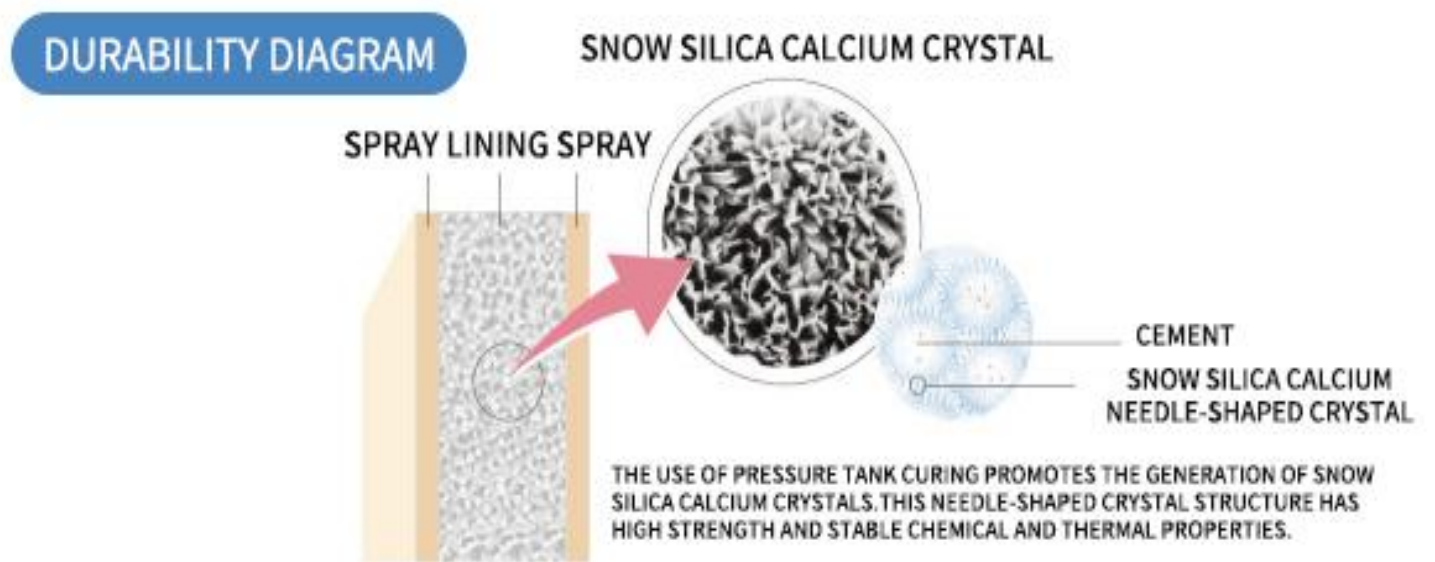
※ The actual weather resistance may vary depending on the environmental conditions of the application site.



The characters of the Shouhao Exterior Wall Panel

03、Durability

As a raw material for external wall decoration, cement requires several years to fully cure and several decades for further chemical stability. Therefore, after construction, size changes, deformation, and bending may occur. To solve this problem, Shouhao uses the "pressure tank curing" method of hardening the bottom plate of the exterior wall decoration material in a high-temperature and high-pressure furnace. This method completely reduces the shrinkage caused by drying and the expansion caused by heat, and obtains stable strength.



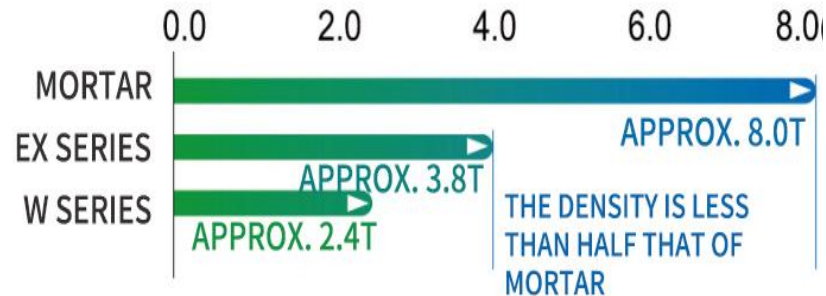
The characters of the Shouhao Exterior Wall Panel

04、 Seismic resistance

During an earthquake, the impact on residential buildings can be reduced, and the effect on the main structure of the building can be mitigated. Also, the use of metal hanging fixtures can effectively prevent the cracking and peeling of the exterior walls.

When an earthquake occurs, a heavy load on the exterior wall will burden the building itself. Shouhao exterior wall panel has a weight that only accounts for less than half of the weight of cement mortar, which effectively reduces the load on the building, thereby reducing damage and loss.

LIGHTWEIGHT PROPERTY



★ WEIGHT IS CALCULATED PER VILLA

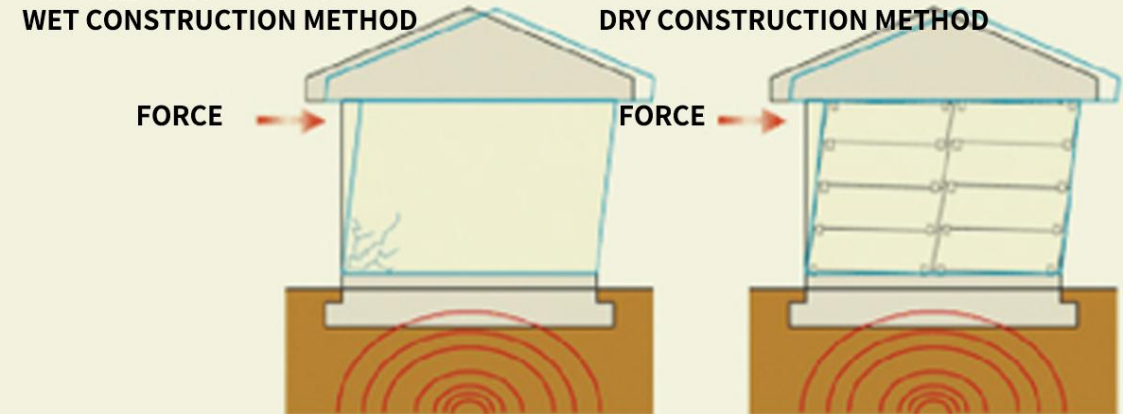
FASTNESS

THE USE OF DRY-HANGING CONSTRUCTION METHODS CAN REDUCE THE IMPACT ON THE BUILDING'S WALLS.

- TO PREVENT THE OCCURRENCE OF CRACKS IN THE WALL CORNERS
- METAL COMPONENTS CAN BE USED FOR FIXATION WHICH CAN PREVENT THE OCCURRENCE OF CRACKS AT THE WALL CORNERS.

WHEN USING THE METAL HANGER CONSTRUCTION METHOD, THE EXTERNAL WALL AND STRUCTURE ARE NOT FIXED AS A WHOLE, AND EVEN IF THE EARTHQUAKE FORCE OCCURS, IT IS DIFFICULT TO DIRECTLY TRANSMIT TO THE EXTERNAL WALL. THIS CAN PREVENT CRACKING AND DETACHMENT OF THE WALL SURFACE.

THE IMPACT OF EARTHQUAKE SHAKING ON THE EXTERNAL WALL



IF THE EXTERNAL WALL IS DIRECTLY FIXED ONTO THE STRUCTURE, EARTHQUAKE FORCES WILL CAUSE THE WALL TO DEFORM ALONG WITH THE STRUCTURE, LEADING TO CRACKING AND DETACHMENT OF THE WALL SURFACE. ON THE OTHER HAND, USING METAL HANGERS IN CONSTRUCTION CAN REDUCE THE IMPACT OF EARTHQUAKE FORCES ON THE EXTERNAL WALL, PREVENTING CRACKING AND DETACHMENT OF THE WALL.

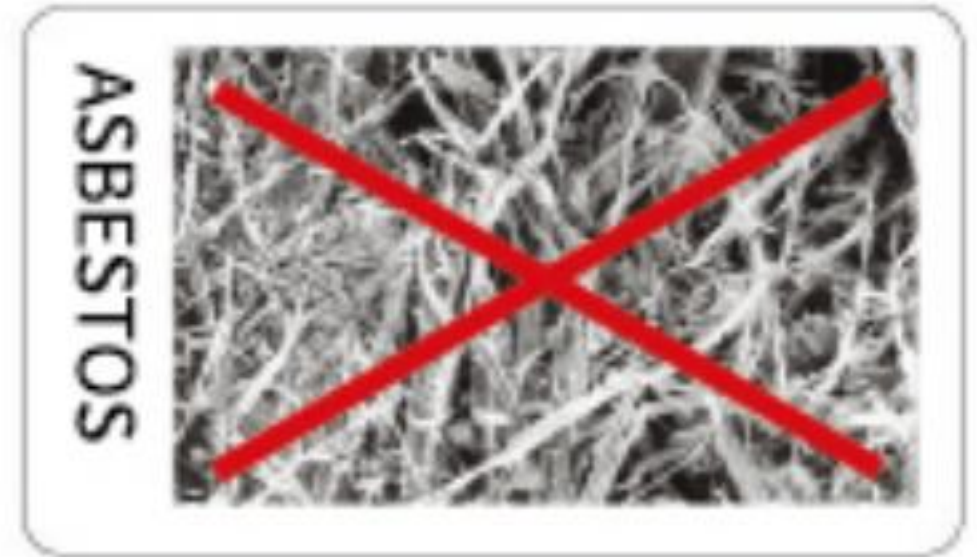
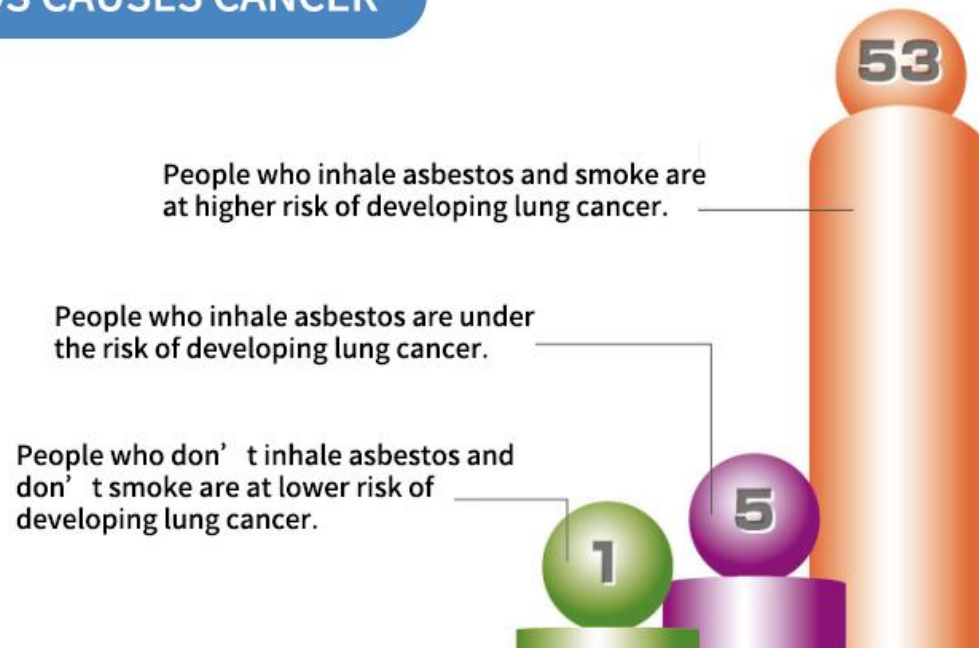


05、 Safety 100% asbestos-free environmentally friendly

The asbestos used in decoration and insulation materials is a natural fibrous mineral. Asbestos floating in the air can be inhaled into the lungs and may cause lung cancer. Therefore, Shouhao exterior wall panel has developed an asbestos-free product, and all products are now asbestos-free.

Shouhao exterior wall panel is environmentally friendly, non-radioactive, and focuses on waste utilization, leading the way in new era, environmentally friendly building materials!

ASBESTOS CAUSES CANCER





The characters of the Shouhao Exterior Wall Panel

06、 Fire retardancy

It is non-combustible Class A fire rated. During a fire, the panels will not catch fire and will not produce toxic smoke.

During a fire, not only the area where the fire started will be affected, but also the surrounding areas. To minimize the damage and protect your house from the spread of fire, the fire-retardant performance of the exterior wall is extremely important. Shouhao exterior wall panel has excellent fire retardancy and will not cause explosion, detachment, or cracking during a fire.



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国家建筑工程质量监督检验中心检验报告
TEST REPORT OF NATIONAL CENTER FOR QUALITY SUPERVISION AND TEST OF BUILDING ENGINEERING

报告编号(No. of Report): BETC-NH-2013-2984 共1页 第1页(Page 1 of 1)

委托单位(Client)		北京首豪新型建材科技集团有限公司			
地址(ADD)		电话(Tel)	010-56428987		
样品 (Sample)	名称(Name)	S系列纤维增强水泥板	状态(State)	完好	
	商标(Brand)	首豪	规格型号 (Type/Model)	18*455*3030mm	
生产单位(Manufacturer)				北京首豪新型建材科技集团有限公司	
送样日期(Date of delivery)		2013.12.04.	地点(Place)		
工程名称 (Name of engineering)					
检验 (Test)	项目(Items)	燃烧性能(A1)	数量(Quantity)	1组	
	地点(Place)	试验室	日期(Date)	2013.12.06. - 2013.12.07.	
	依据 (Reference)	GB8624-2012, GB/T5464-2010, ISO1182-2010, GB/T14402-2007, ISO1716-2010			
	设备 (Equipment)	不燃性试验仪, 氧弹量热计, 电子天平等			
检验结论 (Conclusion)					
序号	检验项目	检验条件 (试验标准)	技术要求	检验结果	单项评定
1	炉内平均温升, °C	GB/T5464-2010 ISO1182-2010	GB8624-2012: ≤30	5	合格
2	试样平均质量损失率, %	GB/T5464-2010 ISO1182-2010	GB8624-2012: ≤50	18.6	合格
3	试样平均持续燃烧时间, s	GB/T5464-2010 ISO1182-2010	GB8624-2012: =0	129	不合格
4	总燃烧热值PCS, MJ/kg	GB/T14402-2007 ISO1716-2010	GB8624-2012: ≤2.0	1.97	合格
根据GB8624-2012的判定条件, 判定所送样品的燃烧性能不能达到A1级。 (本页以下无正文)					
批准(Approval)	审核(Verification)	主检(Chief tester)	联系电话(Tel)	报告日期(Date)	
			010-64517759	2013/12/08	

The characters of the Shouhao Exterior Wall Panel

07、 Thermal insulation

Shouhao exterior wall panel has a low thermal conductivity, and its excellent thermal insulation performance can effectively improve the insulation effect of the wall panel, making it an ideal energy-saving and environmentally friendly material.

Thermal conductivity coefficients for various wall structures

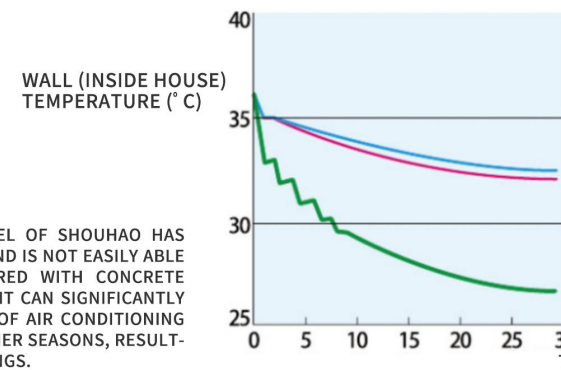
Wall structure (mm)	Thermal conductivity coefficient (W/m ² .K)
Concrete (thermal conductivity coefficient: 1.6 W/mK) wall (thickness: 20 mm mortar + 100 mm concrete + 20 mm mortar)	11.236
Brick (thermal conductivity coefficient: 0.62 W/mK) wall (thickness: 20 mm mortar + 115mm brick + 20 mm mortar)	2.762
Shouhao Wall Panel (thermal conductivity coefficient: 0.21 W/mK) wall (thickness: 16 mm wall panel + 50mm Residential glass wool insulation material 16k + 12.5 mm plaster)	0.806

The heat transfer coefficient of walls made with Shouhao exterior wall panel is low, and its insulation performance is better than that of concrete walls and brick walls.

THERMAL INSULATION EFFECT

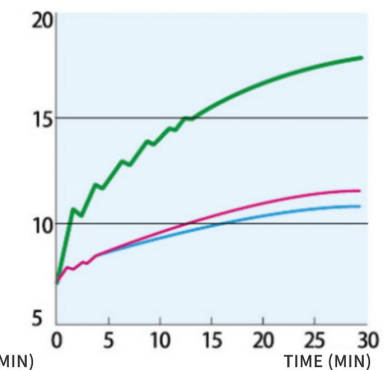
HEAT INSULATION EFFECT

(TEMPERATURE 30° C WALL
TEMPERATURE 36° C AIR
CONDITIONING SETTING 25° C)



INSULATION EFFECT

(TEMPERATURE 4° C WALL
TEMPERATURE 7° C HEATING
SETTING AT 20° C)



THE EXTERIOR WALL PANEL OF SHOUHAO HAS LOW THERMAL CAPACITY AND IS NOT EASILY ABLE TO STORE HEAT. COMPARED WITH CONCRETE WALLS AND BRICK WALLS, IT CAN SIGNIFICANTLY IMPROVE THE EFFICIENCY OF AIR CONDITIONING DURING WINTER AND SUMMER SEASONS, RESULTING IN CLEAR ENERGY SAVINGS.

— CONCRETE WALL — BRICK WALL — EXTERIOR WALL PANEL WALL

The characters of the Shouhao Exterior Wall Panel

08、 Sound insulation

Shouhao exterior wall panel has sound insulation performance comparable to double-layer glass in high-rise buildings. It can greatly reduce the noise produced by airplanes, trams, highways, and various residential environments. Its excellent performance is particularly evident in the frequency range of 250-1000 Hz, which is most sensitive to human ears, creating a comfortable living environment.



The characters of the Shouhao Exterior Wall Panel

09、 Self-cleaning

SELF-CLEANING FUNCTION

THE MICRO-PARTICLE PROTECTIVE LAYER ON THE SURFACE OF THE WALL PANEL HAS A STRONGER HYDROPHILICITY THAN THE ADHERING SUBSTANCE. THEREFORE, THERE IS ALWAYS A LAYER OF WATER MOLECULE FILM BETWEEN THE ADHERING SUBSTANCE AND THE OUTER WALL SURFACE, WHICH CAN PREVENT HYDROPHOBIC SUBSTANCES SUCH AS COAL SMOKE EXHAUST GAS FROM DIRECTLY ADHERING TO THE WALL PANEL. BESIDES, THE ADHERING SUBSTANCE CAN BE WASHED AWAY TOGETHER WITH RAINWATER (OR WATER SPRAY) WHEN IT ENCOUNTERS RAINWATER OR WATERING.

CONVENTIONAL
EXTERIOR WALL PANEL



THE SURFACE MAY BE STAINED WITH COAL SMOKE, EXHAUST GAS, AND OTHER POLLUTANTS



THE STAINS SPREAD OVER THE WALL SURFACE



EVEN AFTER POURING WATER, THE STAINS MIGHT STILL REMAIN ON THE WALL.

MICRO-PARTICLE PROTECTIVE
LAYER WALL PANEL



THE SURFACE MAY BE STAINED WITH COAL SMOKE, EXHAUST GAS, AND OTHER POLLUTANTS



WHEN WATER FLOWS OVER THE SURFACE, ALL THE POLLUTANTS GET CARRIED AWAY ALONG WITH THE WATER



WALL PANEL TREATED WITH THE MICRO-PARTICLE PROTECTIVE LAYER: ALL THE STAINS CAN BE WASHED AWAY COMPLETELY.

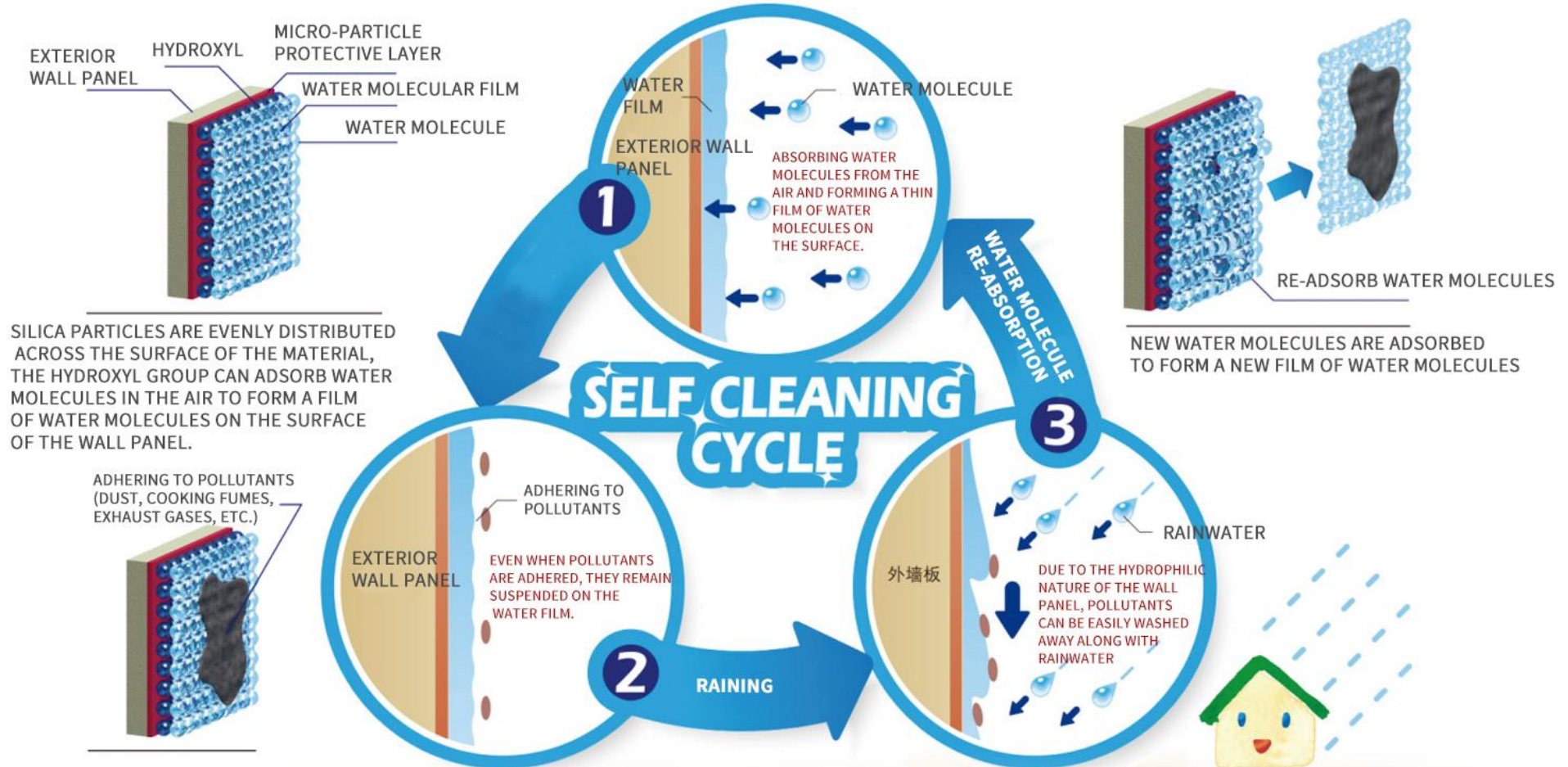


The characters of the Shouhao Exterior Wall Panel



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WHY CAN SELF-CLEANING?





Research and development of new materials and technical applications



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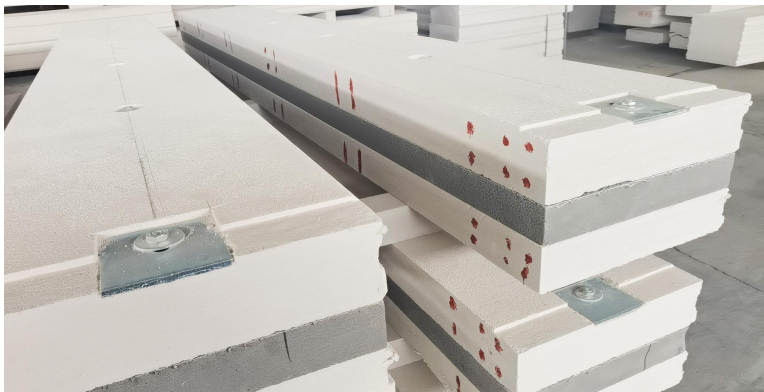
Domestic first-class construction engineers will conduct long-term development and manufacturing of the best and most economical building materials domestically and internationally to ensure that the quality and performance of our houses reach world-class standards and reduce costs for our large customer base and market.



Shouhao Low Internal Stress Dry Floor Heating System



Autoclaved Aerated pipeline Separation concrete Wallboard



Autoclaved Aerated Concrete Low Internal Stress Thermal Insulation Composite Exterior Wall Panel



Shouhao Exterior wall panel



Decorative Waterproofing Thermal Insulation Integrated Structural System



Decorative Waterproofing Thermal Insulation Integrated Structure

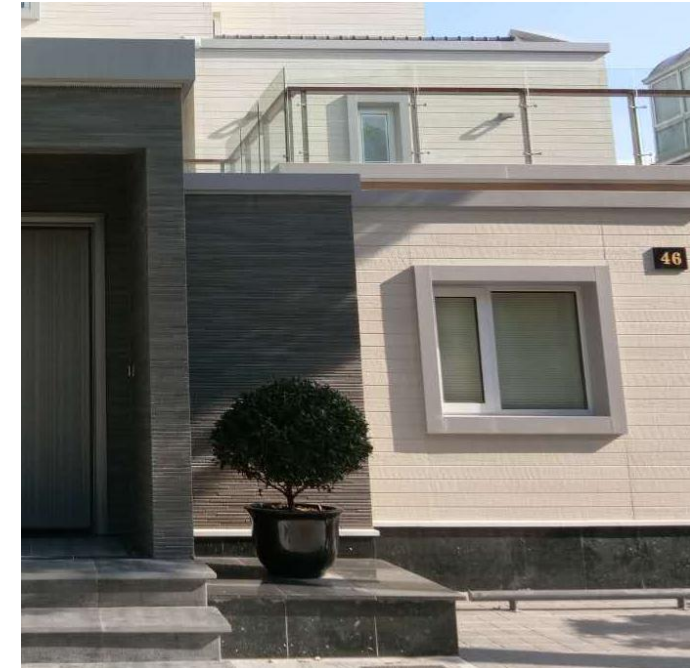


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Decorative Waterproofing Thermal Insulation Integrated Structural System

Integrated structural system for decoration, waterproofing and thermal insulation is installed with vertically oriented keel on the outer layer of sand aerated composite board, and the integrated reserved accessory installation position in the factory reduces the cost by eliminating horizontal keel. This system realizes one-time forming for thermal insulation, structural waterproofing and decoration, while ensuring green construction. Moreover, the integrated Shouhao exterior wall panel enhances the beauty and flexibility of the building, as well as provides long-term quality assurance for its durability and strength.



A variety of exterior decorative surface textures are available for selection.

