



# ACA SERIES PRODUCTS

ACA Siding Plank

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Safe  
& Reliable



Quality  
Guaranteed



High-quality  
Board



Advanced  
Technology





# INTRODUCTION TO COMPANY

Committed to creating  
a zero-benzene,  
formaldehyde-free, safe  
and  
healthy home.

Year 2013

The company was established  
Listed on the Main Board of the  
Hong Kong Stock Exchange  
(Stock Code: 00586.HK)

2

Major main brands

Conch Venture ACA Series Products  
Silica-free Carbon-negative Board ACB Series  
Products

12+

Application fields

Widely used in external wall insulation  
and decoration, internal wall  
decoration and protection,  
flooring, and other application  
fields.

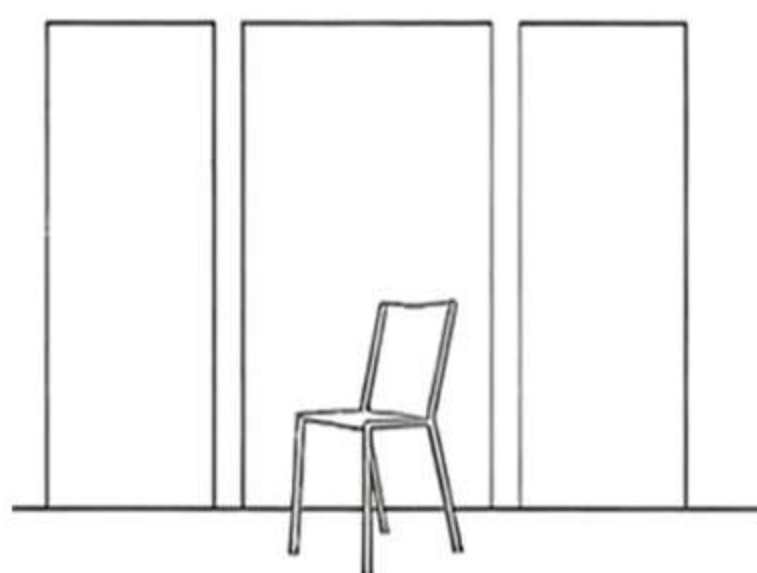
500+

Numbers of projects  
With the accumulation of more than  
500 projects, we have solidified a  
professional foundation in the fiber  
cement board field.

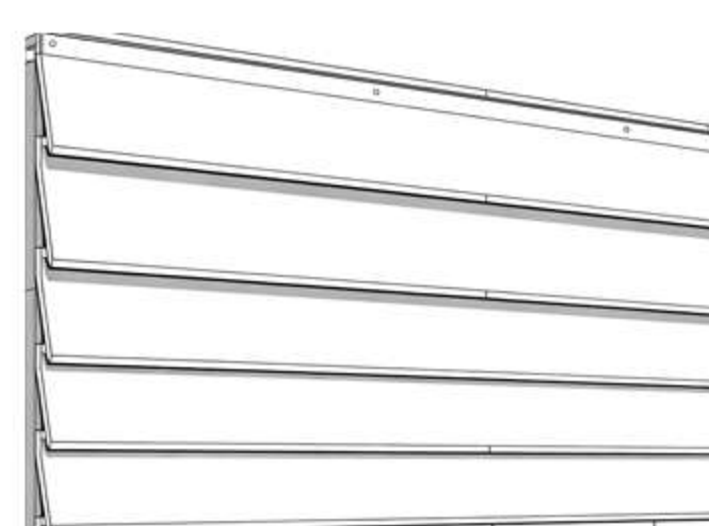


China Conch Venture Holdings Limited was listed on the Main Board of the Hong Kong Stock Exchange on December 19, 2013 (Stock Code: 00586.HK). It is a large enterprise group providing one-stop energy-saving and environmental protection solutions, with its business covering municipal solid waste incineration for power generation, new energy materials and energy storage product manufacturing, lithium-ion battery recycling and circular utilization, new building materials, port logistics, etc.

Anhui Conch Venture New Energy-saving Building Materials Co., Ltd. is a wholly-owned enterprise invested and established by China Conch Venture Holdings Limited, and has established Bozhou Conch Venture New Energy-saving Building Materials Co., Ltd. in Bozhou City. It specializes in the production of Conch Venture ACA and Silica-free Carbon-negative board ACB series products, which are widely used in external wall insulation and decoration, internal wall decoration and protection, flooring, table tops, wall material linings, ceilings, floor slabs, billboards, cabin partitions, fireproof boards, furniture partitions, as well as post-processing fields such as coating, perforation, and embossing.



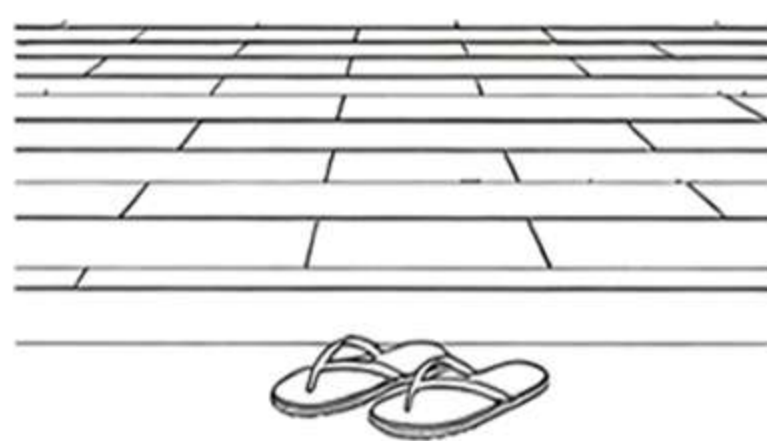
Formaldehyde-free  
Inorganic  
Decorative Panel



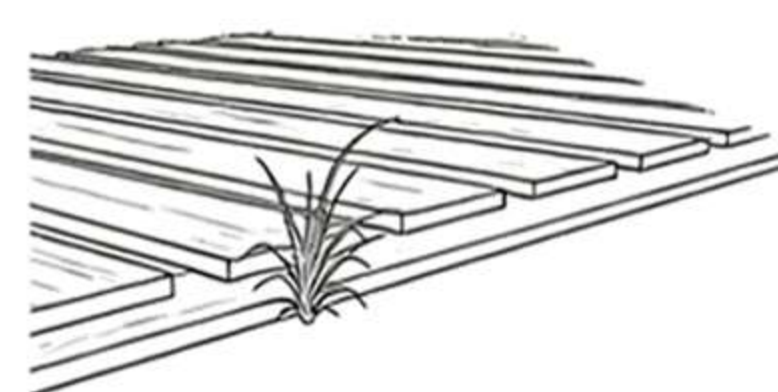
Siding Planks



Through-colored Board



Flooring



Outdoor Decking



# PRODUCT INTRODUCTION

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Formaldehyde-free
- 

Non-combustible
- 

Weather Resistance
- 

Moisture-proof
- 

Long Service Life
- 

Easy & Quick Installation

Specification: 192-240mm\*2400/3050mm\*(8/9/12)mm

The ACA Siding Plank Application System is an exterior curtain wall building system with a cedar wood grain surface, high strength, and low water absorption. It has good impact resistance, can withstand a certain degree of external impact without cracking easily, is not affected by humid or dry environments, and is not prone to deformation, cracking, or rotting. Compared with traditional building materials such as brick walls and concrete walls, the Siding Plank system is lighter in weight, quick to install, and easy to construct. It is widely used in the decoration of exterior walls of villas, schools, wooden houses in tourist attractions, low-rise buildings, or special parts of building interiors.



## COMPARISON OF ADVANTAGES AND DISADVANTAGES

MATERIAL NAME	FIRE PROTECTION/ ENVIRONMENTAL RATING	SERVICE LIFE	MAIN ADVANTAGES	MAIN DISADVANTAGES
ACA Siding Plank	A / ENF	Over 20 Years	Class A fire protection, zero formaldehyde, strong weather resistance, long service life, good waterproof performance, quick construction, ready to move in upon installation	The board is relatively heavy
Traditional Coating	B1	10-15 years	Rich color options, customizable, low cost, easy to repair, convenient for partial renewal	Requires frequent maintenance, poor fire performance, easy to fall off in humid environments, weak durability
Solid Wood Wall Panel	B2 / E1	15-20 years	Natural texture, high aesthetics, environmentally friendly and natural	Poor fire performance, flammable and spreads easily, high water content, easy to deform and mildew, susceptible to insect infestation, requires regular anti-corrosion treatment





■ TECHNICAL PERFORMANCE COMPARISON

ITEM	ACA SIDING PLANK	TRADITIONAL COATING	SOLID WOOD EXTERIOR WALL PANEL
Main Components	Cement, fiber and other minerals	Synthetic resin, pigment, solvent	Natural wood
Weather Resistance	No damage after 100 freeze-thaw cycles, good weather resistance	Prone to fading, chalking and cracking	Prone to aging and severe deformation in outdoor environment
Impact Strength	Good	Depends on the base layer when attached to the wall	Poor
Moisture Content	9%	The coating does not absorb water, and the base layer depends on the wall material	12-18%
Formaldehyde Emission	Not detected, conforms to ENF	E1	E1
Fire Performance	Class A non-combustible	Class B1	Class B2 combustible, burns rapidly, forms open flame and spreads easily
Firmness and Wear Resistance	Good	Poor, easily scratched	Medium, prone to wear after long-term use
Smoke Toxicity	Smokeless and non-toxic	Releases toxic gas when burning	Releases toxic gas when burning
Moisture-proof Performance	Excellent	Good, prone to falling off in long-term humidity	Poor, severely deformed and rotten when affected by moisture
Constructability	Dry operation, convenient construction, ready to move in upon installation	Convenient construction (direct brushing)	Slow, requiring professional installation

■ INSTALLATION METHOD AND PROCESS OF ACA SIDING PLANK

01.

**Base Layer Treatment:**

Clean the base wall to ensure it is clean, dust-free, flat, and free from problems such as peeling. Then, treat it according to the condition of the base layer, including repairing the wall and protecting the wall.

02.

**Installation of L-shaped Keel:**

Install steel keels according to design requirements, ensuring the gap and connection method between the Siding Plank and the wall.

03.

**Wall Panel Installation:**

Then install the Siding Plank on the galvanized steel keel frame with stainless steel self-tapping screws or stainless steel rivets.

04.

**Reinforcement and Waterproofing:**

After the plank is installed, carry out reinforcement and waterproof treatment to ensure the wall is firm and has waterproof performance.

Tongue-and-Groove Flat Laying Fixing Method

Stainless Steel Screw Fixing Method

Wall

Anchor

Steel Keel

Fastener

Lap siding

Rivet Support

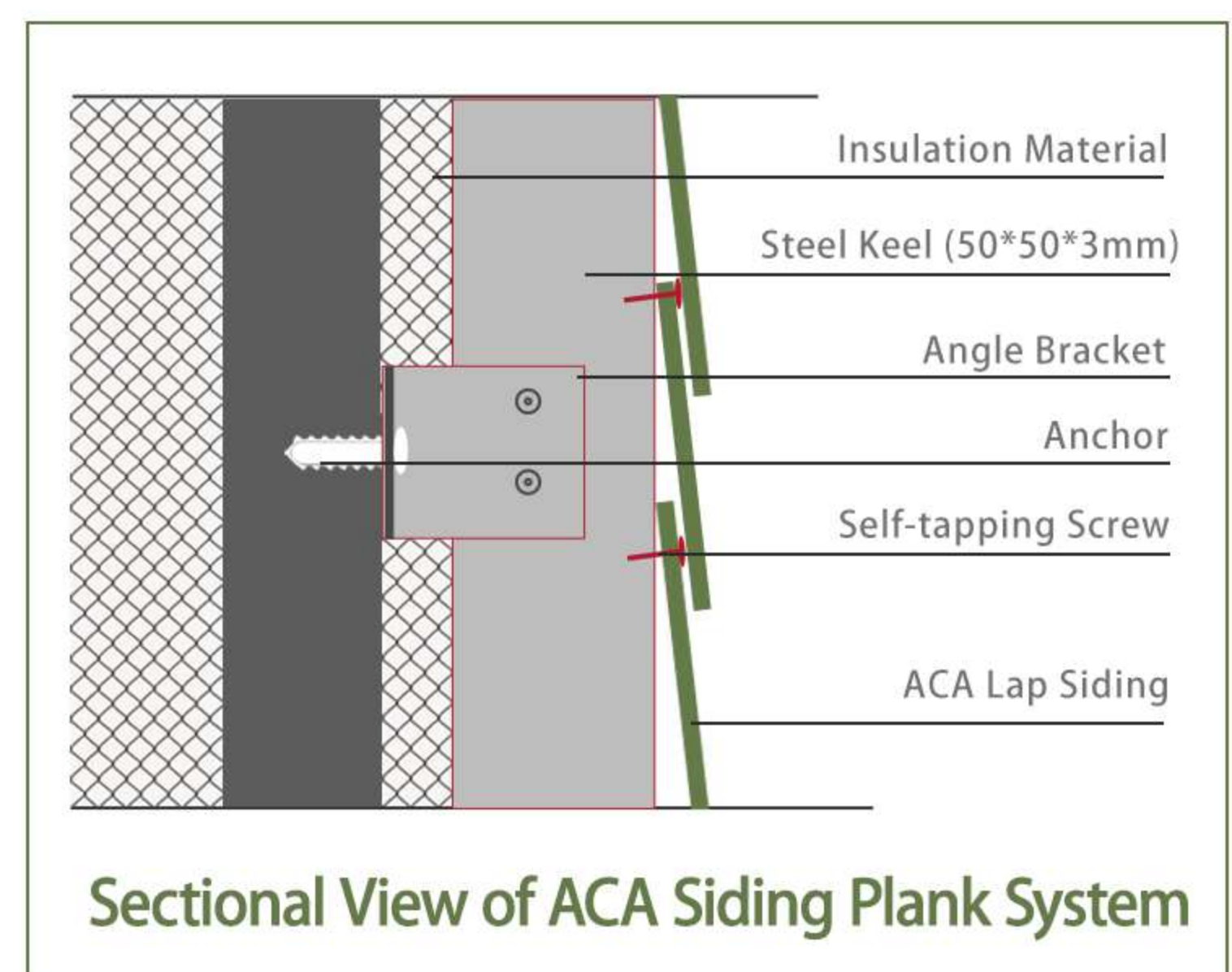
30mm-width Strip



# ACA Siding Plank Prefabricated System

The exclusive accessory system of ACA Siding Plank is a customized core partner tailored for its own boards. It not only deeply meets the practical needs of lap siding in wall decoration scenarios, such as wind load resistance, sealing and waterproofing, and weather-resistant splicing, but also takes into account architectural decoration aesthetic design to ensure the style consistency between accessories and boards. At the same time, this system has a rich and diverse range of categories and styles, which can easily adapt to various scenarios such as building exterior walls, eaves, gables, and skylights, making the overall wall decoration project both safe and stable, and showing a delicate and coordinated decorative texture.

## ACA SIDING PLANK EXTERIOR WALL SYSTEM



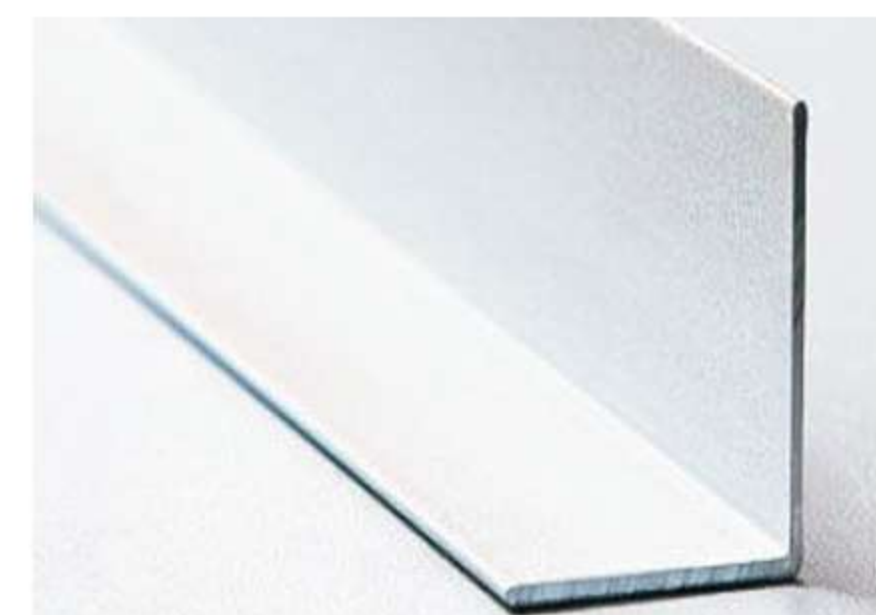
## OTHER ACCESSORIES



Anchor



Angle Bracket



L-shaped Steel Keel (Used for Edge Closing Arrangement)



Square-shaped Keel (Used for Arrangement in the Middle of Panels)



Concave-shaped Keel (Used for Arrangement at Panel Joints)



Self-tapping Screw



■ ACA SIDING PLANK PERFORMANCE PARAMETERS

ITEM	INDUSTRY STANDARD	TEST DATA
Density	$\geq 1.25\text{g/cm}^3$	$1.46\text{g/cm}^3$
Thermal Conductivity	$\leq 0.35\text{w/(m-k)}$	$0.23\text{w/(m-k)}$
Moisture Content	$\leq 10\%$	9%
Wet Expansion Rate	$\leq 0.25\%$	0.19%
Water Impermeability	Allowable wet marks on the panel after 24h test, no cracking or delamination	Compliant
Freeze Resistance	No cracking or delamination after 25 freeze-thaw cycles	Minimum temperature $-20^{\circ}\text{C}$ , no cracking or delamination after 100 freeze-thaw cycles
Flexural Strength in Saturated Water	-	13.8MPa
Impact Strength	-	$2.1\text{KJ/m}^2$
Elastic Modulus	-	2250MPa

(Implementation Standard:JC/T 412.1-2018)

■ APPLICATION FIELDS

**When designed for outdoor use:** Suitable for various types of high-end buildings with a height not exceeding 15 meters in all regions. Such as: exterior walls, eaves, gables, skylights and other building parts of detached villas, townhouses, garden buildings, park buildings, leisure resort buildings, club buildings in residential communities, and advanced craft workshop buildings.

**When designed for indoor use:** Applicable to partition walls, eave ceiling decorations, artistic wall cladding panels and base lining panels in residences, as well as other indoor decoration uses with special aesthetic requirements.







# CASE APPRECIATION







## Supreme Quality, Sincere Service



**Anhui Conch Cement Co., Ltd.**  
Stock Code :600585/HK00914

**Wuhu Conch Technology Co., Ltd.**  
Stock Code :02560

**China Conch Venture Holdings Limited**  
Stock Code :00586.HK

**Conch Venture Environmental Protection Technology Co., Ltd.**  
Stock Code : 00587.HK

**Conch (Anhui) Energy-saving Environmental Protection New material Co., Ltd.**  
Stock Code :000619



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