

Decoration & Energy-Saving Integration System for External Wall

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Part 1

The Brief Analysis for Traditional System Problems

- **1. Coating Plastering System**
- **2. Curtain Wall System**

Introduction of Decoration & Energy-saving System on External Wall

Coating Plastering System



Introduction of Decoration & Energy-saving System on External Wall

Aluminum Curtain Wall System



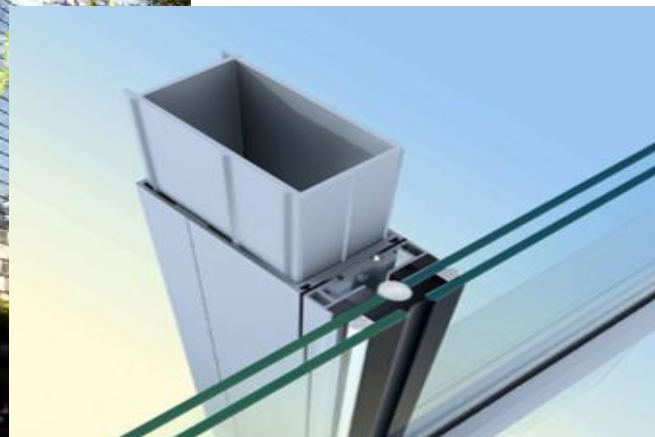
Introduction of Decoration & Energy-saving System on External Wall

Stone Curtain Wall System



Introduction of Decoration & Energy-saving System on External Wall

Glass Curtain Wall System



Introduction of Decoration & Energy-saving System on External Wall

Glass Curtain Wall System



Self-explosion

Introduction of Decoration & Energy-saving System on External Wall

Glass Curtain Wall System

Falling off



Summary of Problems of Traditional External Wall System

Coating Thin Plastering System: Poor Weather Resistance, Too Many Structural Layers, Poor Compatibility, and the Failure of Bonding

Aluminum Panel Curtain Wall System: Cavity structure, Easy to Deform, Poor Stain Resistance, Vertical Flow Pollution.

Stone Curtain Wall System: Rigid Connection, Poor Impact Resistance, Stone Rupture, Falling off

Glass Curtain Wall System: Self-explosion, Falling off

Key Points of External Wall System





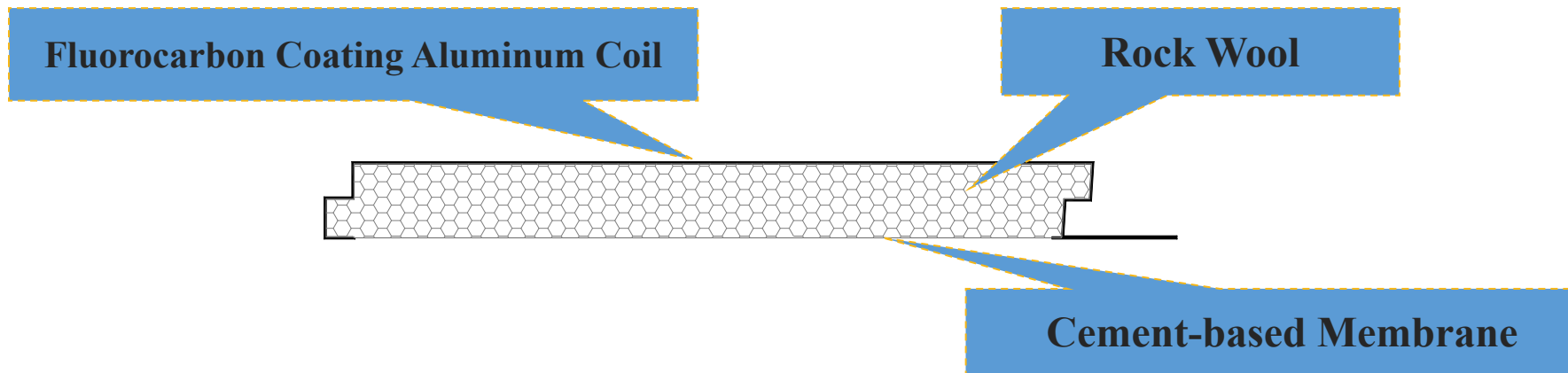
Part 2

Material Introduction for Aluminum Surface Decoration & Energy-saving Integration Panel

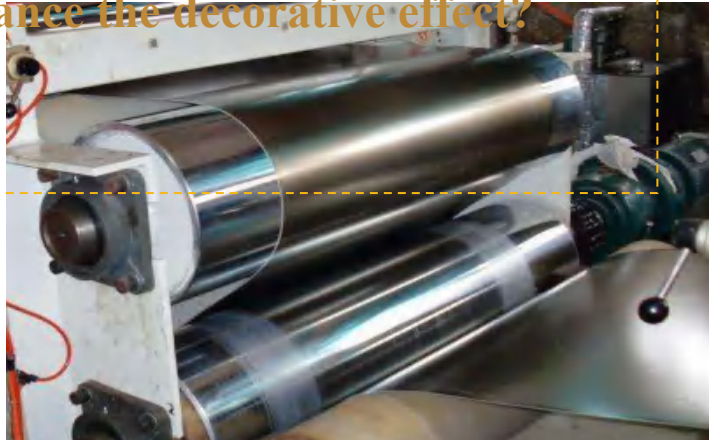


Introduction of Panel

Aluminum Surface Rock Wool Decoration & Energy-saving Integration Panel uses Fluorocarbon Coating Aluminum Panel as decorative surface, Rock Wool as insulation core material, and Glass Fiber reinforced cement-based membrane as the backing layer, produced by hot pressing technology.



Fluorocarbon Roller Coating on Surface



What is the unique technology of Joaboa Tech Aluminum Surface Decoration and Energy-saving Integration System which can greatly enhance the decorative effect?

Flatness

Glossiness

Hardness

Self-clean

Curtain Wall Single Panel

Fluorocarbon Roller Coating

Comparison of Outdoor Exposure Experiments

Weatherability

Comparison of Gloss Retention between Polyester Paint and Fluorocarbon Paint-South Florida Exposure Experiment

Unexposed part

Fluorocarbon coating will not fade away for 40 years; no chalking issue

Exposure part: chalking on the surface without washing

Exposure part: lightly washed, to remove the pulverization layer

10 years of Florida (flat) exposure, at least equal to 40 years (outside wall) exposure in the general area.

Nano Self-cleaning Surface Layer



**No need to wash for 6
years**

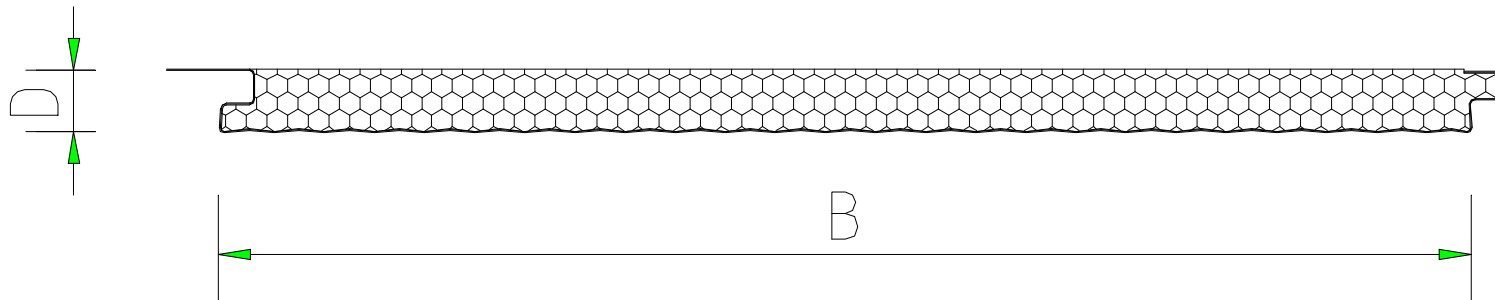


PPG Industries

1 ~ 3 μ m TiO₂ Nano coating on the surface of Alu fluorocarbon Panel;

Super oxidation and super-hydrophilicity

Panel Sizes



- **Standard Width**

400, 500, 600 and 900mm

- **Standard Thickness**

25, 30, 40, 50, 60, 80 and 100mm

- **Length**

No limit

Color of Panel

The optional colors: solid color and imitation stone color.



Insulation Core Material—Rock Wool



Thermal Conductivity: $\leq 0.045 \text{ W} / (\text{m} \cdot \text{k})$

Density: $\geq 100 \text{ Kg} / \text{m}^3$

Flammability: A level (Non-burning)

Hydrophobicity: $\geq 98\%$

Adopted **Vertical** rock wool not Horizontal Type.

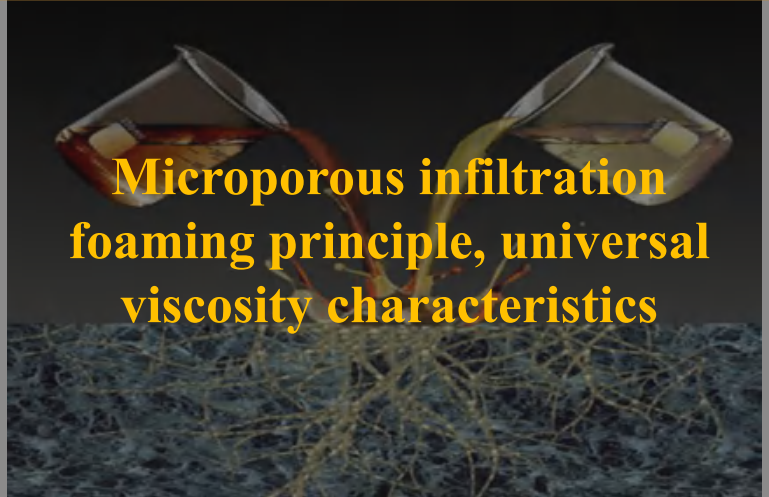
Backing Material

Glass Fiber reinforced cement-based membrane

No need of substrate treatment, and enhance the adhesion between panel and substrate wall.

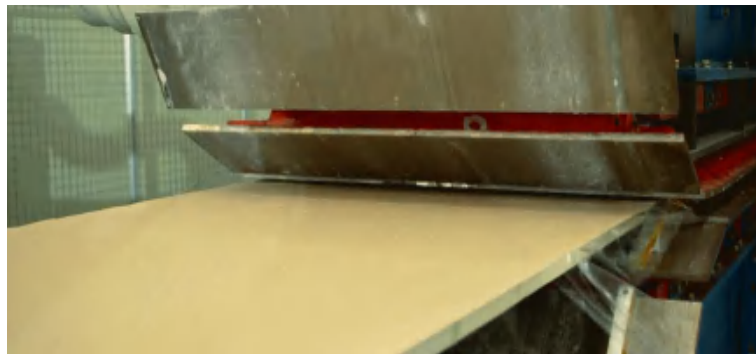


Production Technology



**Microporous infiltration
foaming principle, universal
viscosity characteristics**

**Micropore Penetrating Foam, Continuous
Foaming Process;
Hot pressing Process;
Stable Quality;
High Production Efficiency**



Comparison of Production Technology



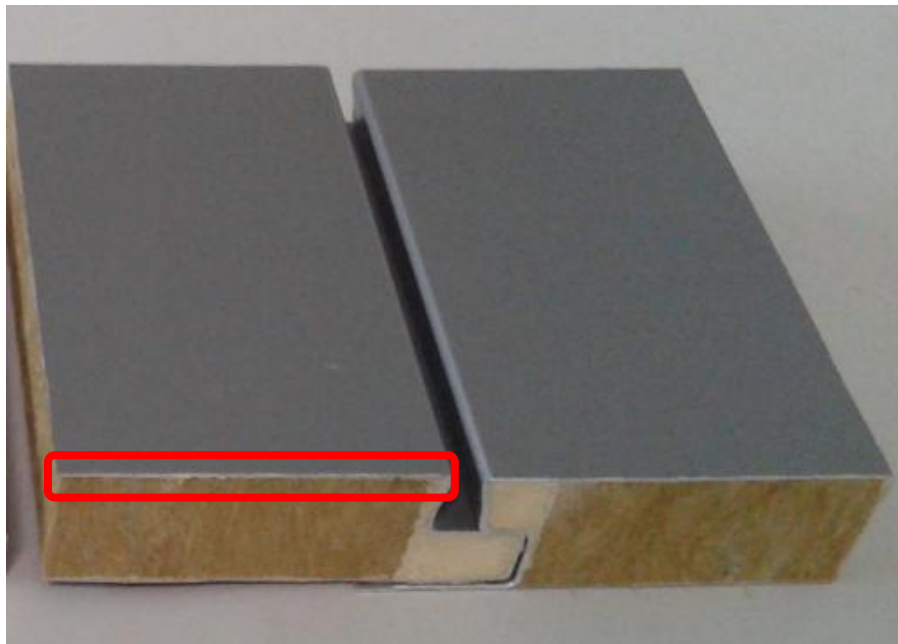
**Cold Glue
Composite**

**Hot Pressing
Process**

Product Comparison

Hot Pressing Process

Occlusal bonding, stable and reliable



Cold Glue Composite

Bonded with cold glue, with many interfaces and high risk.



Project Comparison



Optics Valley Creative Building



Hot Pressing Product

Karamay Engineering Training Basein, Xinjiang Province

Project Comparison





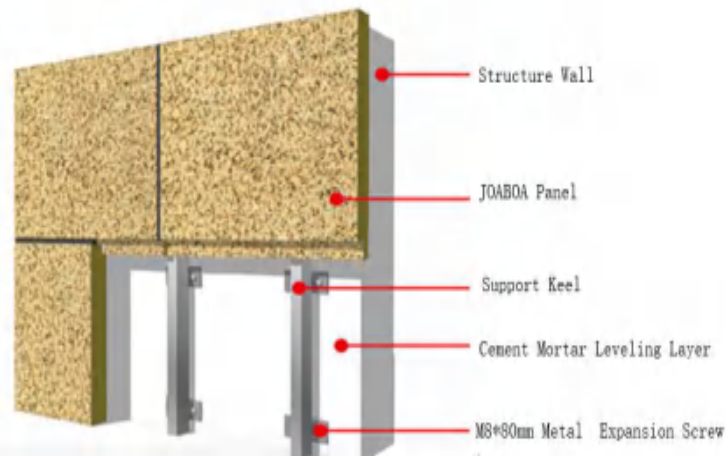
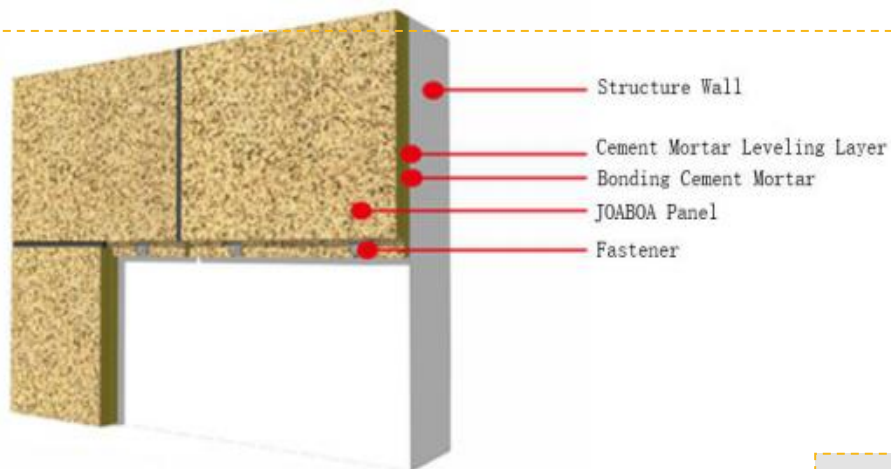
Introduction of Construction Technology



Part 3

Application Methods

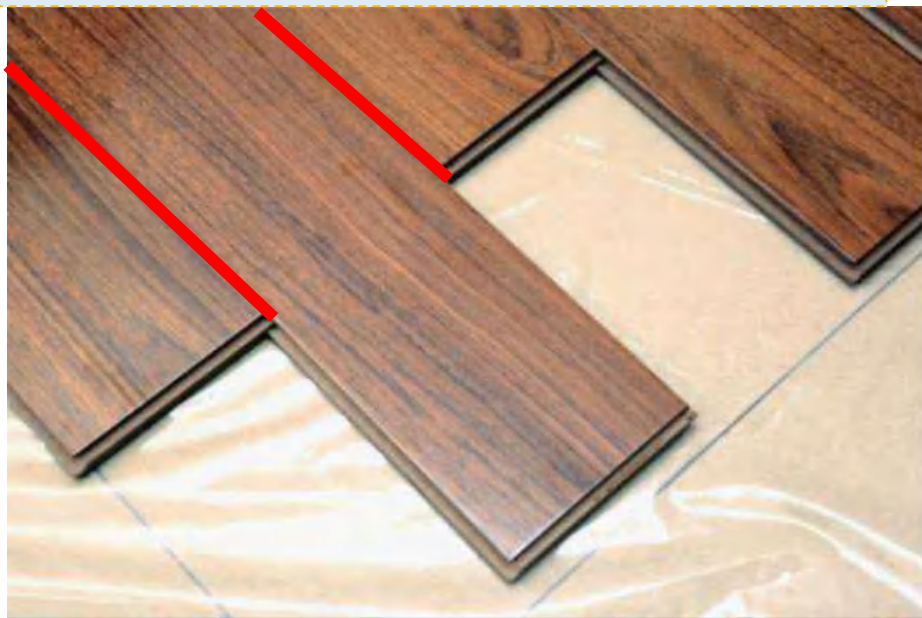
Aluminum Surface Decoration & Energy-saving Integration System consists of Alu surface rock wool decoration & insulation integration panel, connecting accessories and sealing accessories, which can be installed by **Stick & Nail Combination Installation Method** and **Keel Dry Hanging Installation Method**.



Both can be used.

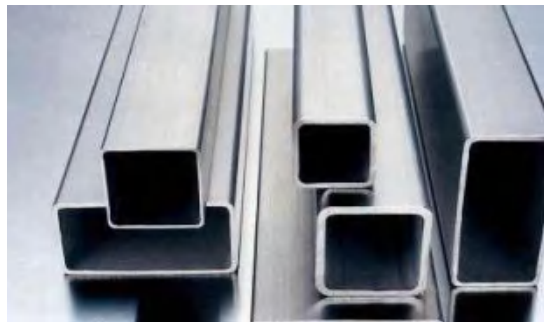
Structural Features

Interlocking of boards, to ensure its safety and reliability.



Accessories

Keel Dry Hanging



Alu Keel



Plastic Expansion Bolt

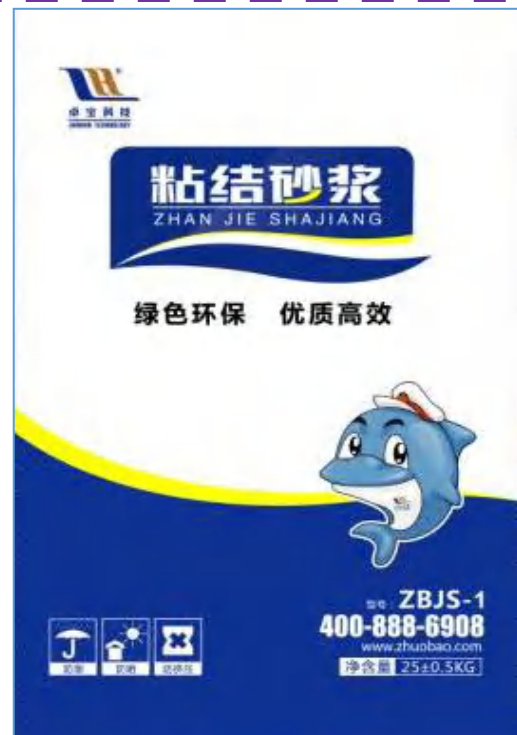


Self-tapping Screw



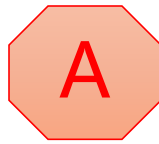
Anti-weather Sealant

Stick & Nail Combination



Adhesive Mortar

Keel Dry Hanging Construction Technology



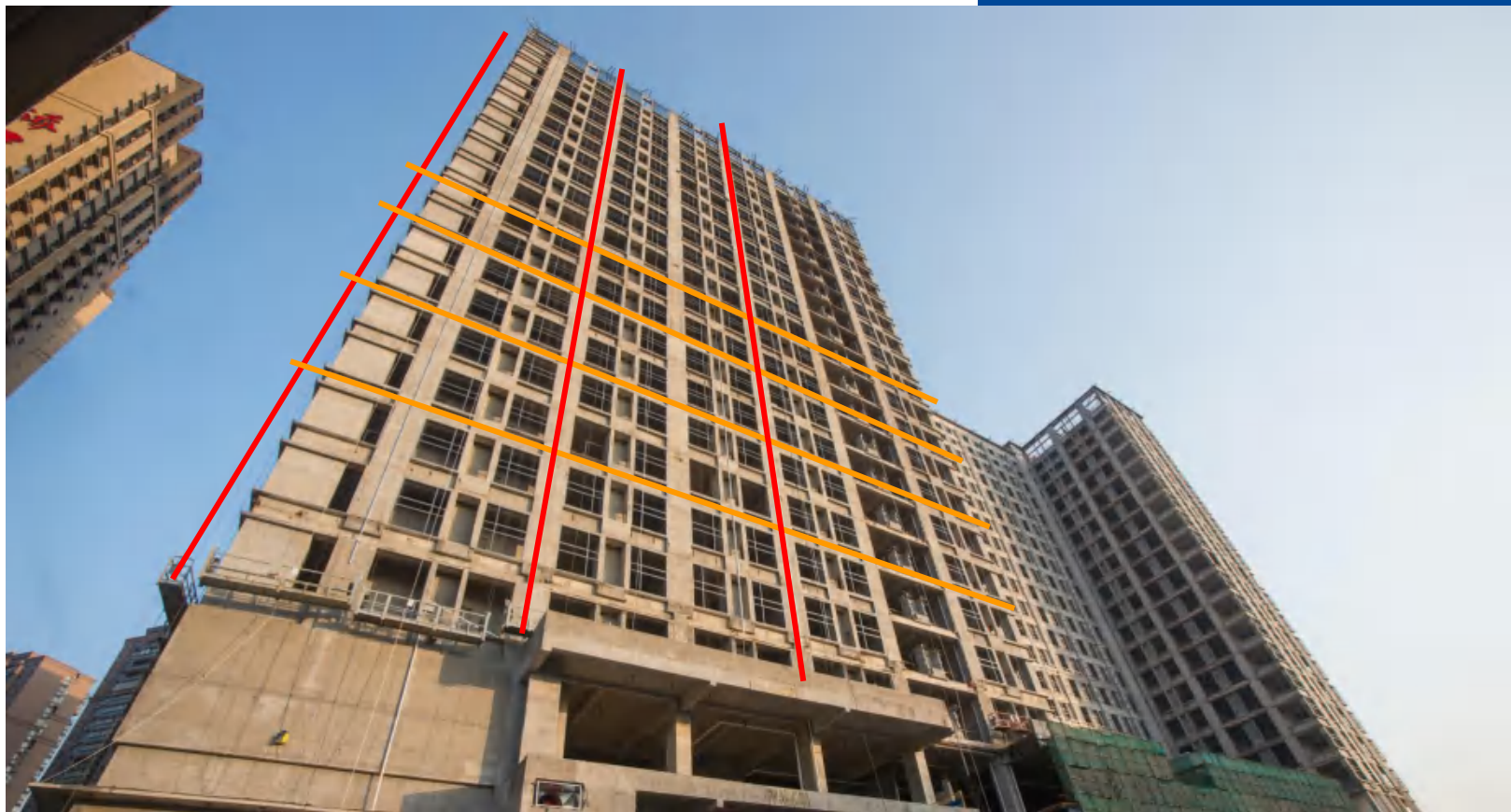
Measuring and setting out

Installing keel

Installing panel

Caulking sealing

Cleaning and acceptance





Keel Dry Hanging Construction Technology

3. Installing Panel





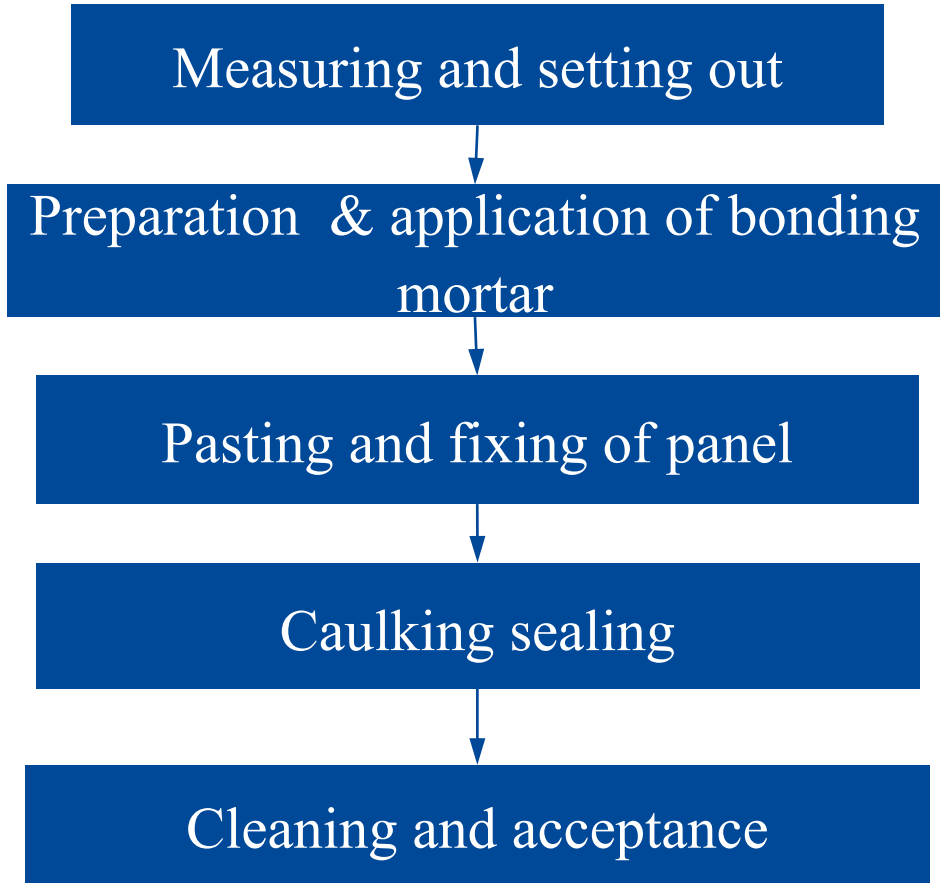
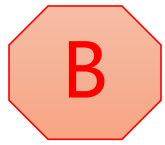
Keel Dry Hanging Construction Technology

A

按企口顺序拼接板材
并用自攻螺钉固定板材

Splicing the panels according to the tongue
and groove sequence
and fixing them with self-tapping screws

Stick and Nail Combination Construction Technology



Stick and Nail Combination Construction Technology

1. Measuring and Setting out



Stick and Nail Combination Construction Technology

2. Preparation & application of bonding mortar

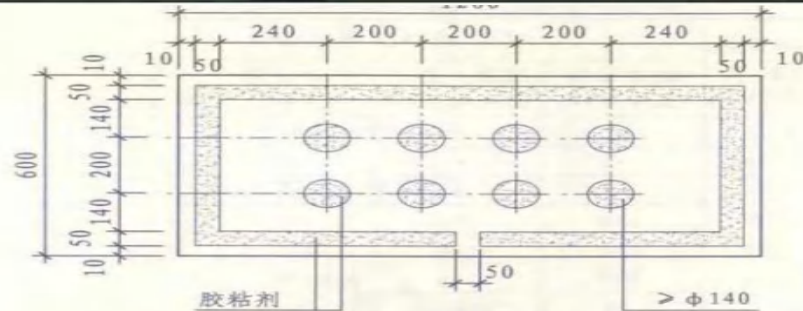
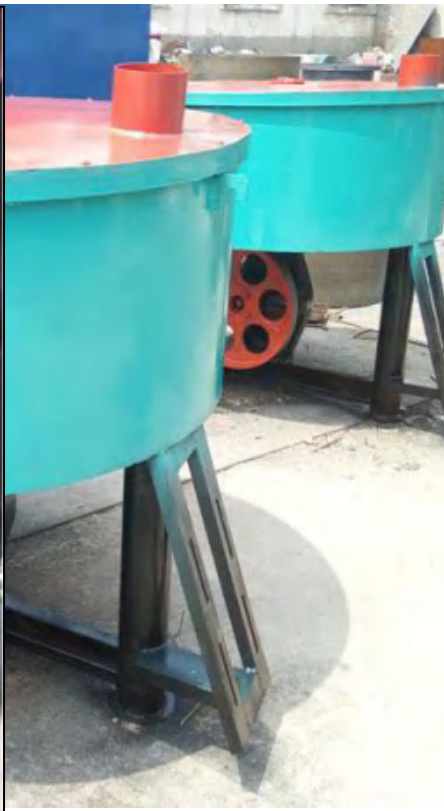


图2 点框粘法示意图

Stick and Nail Combination Construction Technology

3. Pasting and fixing of panel



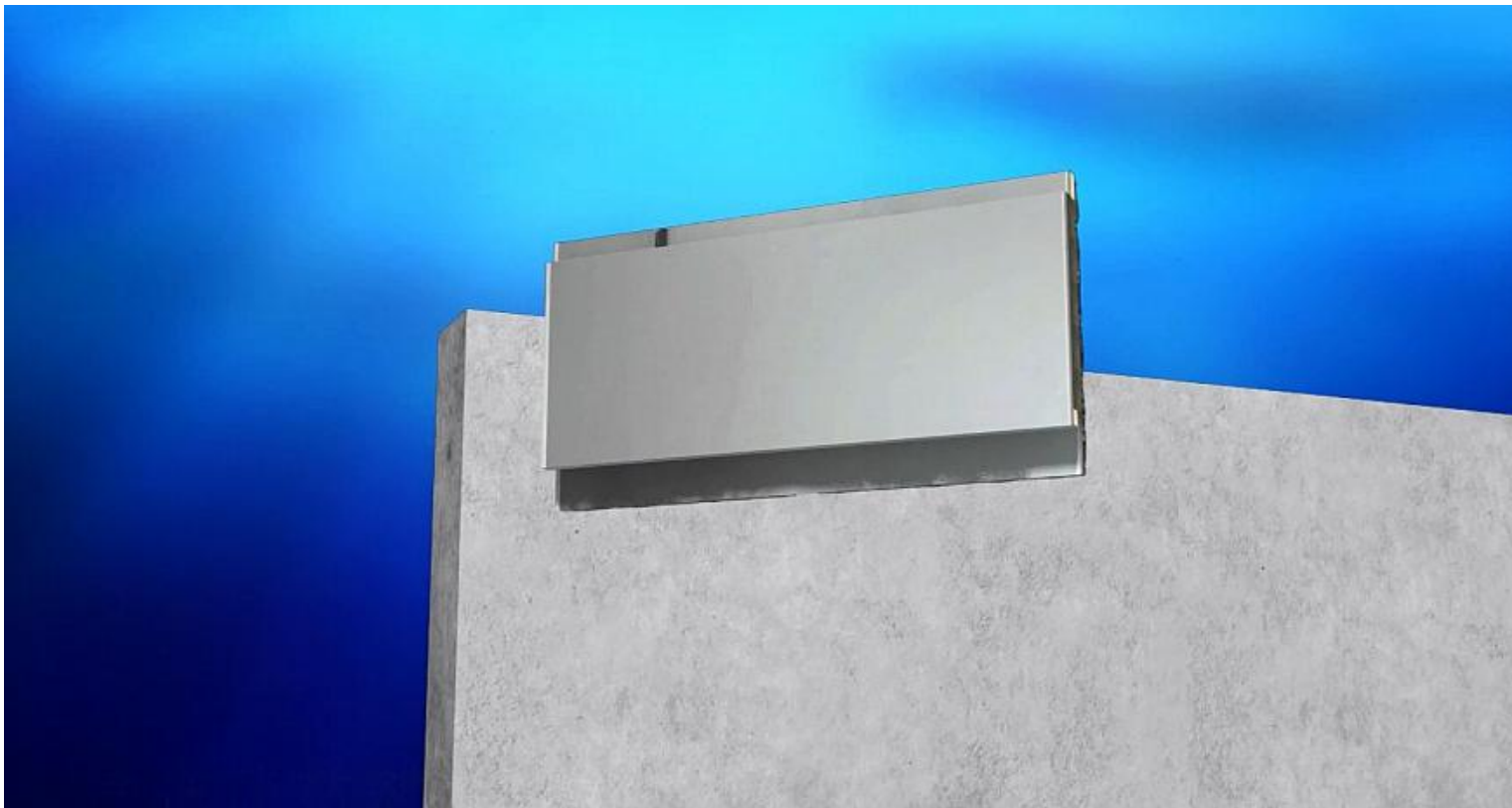
Stick and Nail Combination Construction Technology

4. Caulking Sealing



Stick and Nail Combination Construction Technology

B



Stick and Nail Combination Construction Technology


Decorative effect of
finished project



Landmark Projects and System Characteristics

Part 4

A large, triangular graphic on the right side of the slide features an aerial view of a city skyline at sunset. The sun is low on the horizon, casting a golden glow over the buildings and the sky. The city is densely packed with skyscrapers, and the water is visible in the distance. The graphic is semi-transparent, allowing the city view to be seen through it.

- Excellent Decorative Effect
 - System Security
 - Construction Convenience
 - Long Durability of Decorative surface
- 
- In the bottom-left corner, there are several overlapping blue geometric shapes, including triangles and trapezoids, in various shades of blue.

Landmark Projects



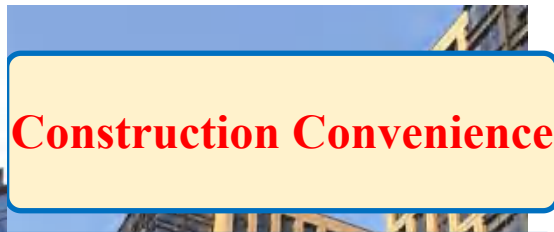
Haier International Plaza

Landmark Projects

30,000 square meters finished in one and a half months.

Construction Convenience

Excellent Decorative Effect



Landmark Projects

Hebei Baoding Maternal and Child Health Hospital



Landmark Projects

Baoding Maternal and Child Health Hospital

Hospital Landmark Project



Landmark Projects

Government Office Building

Renovation of Government Office Building



Landmark Projects



Super High-rise High Grade Residence

(height: 187m)

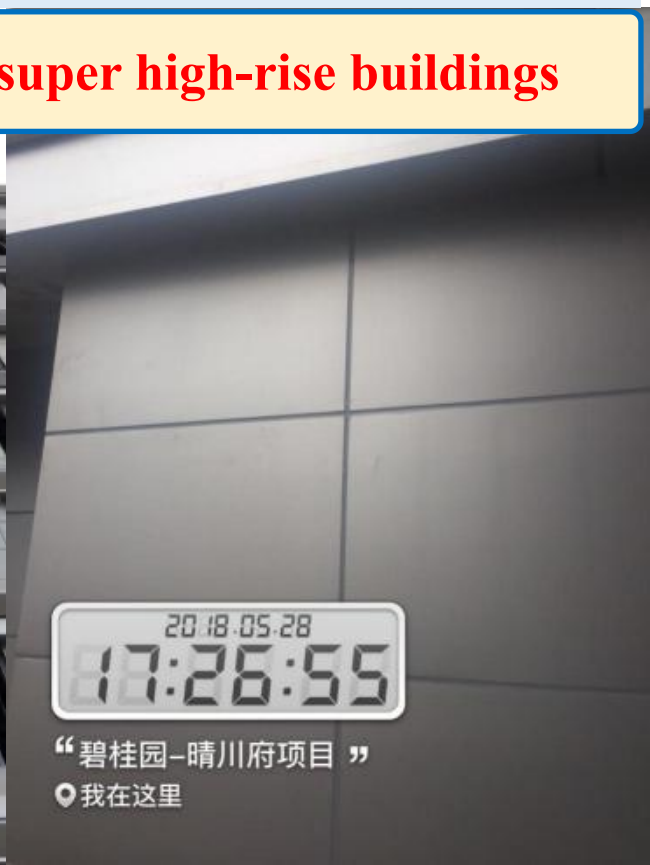
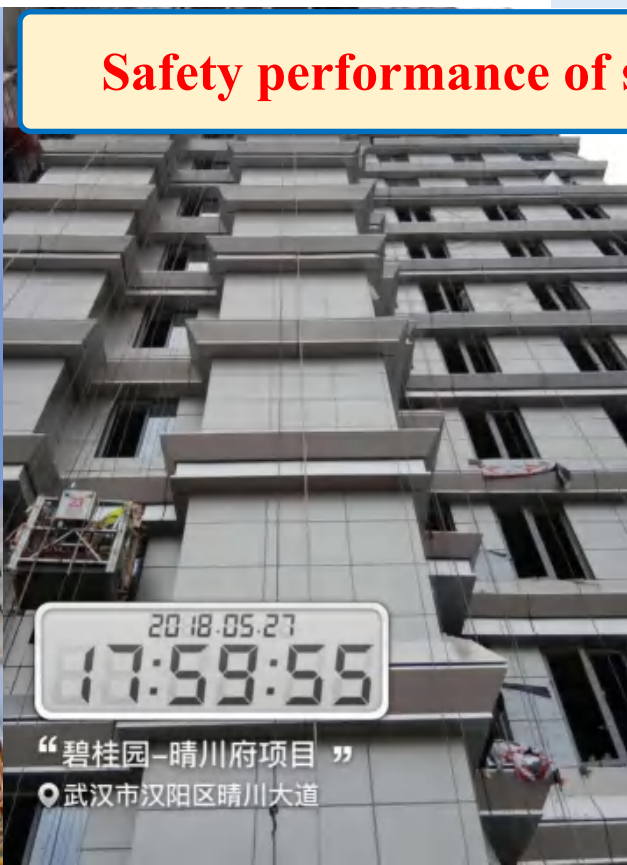
Country Garden, Qingchuan House

Safety & Durability

Landmark Projects

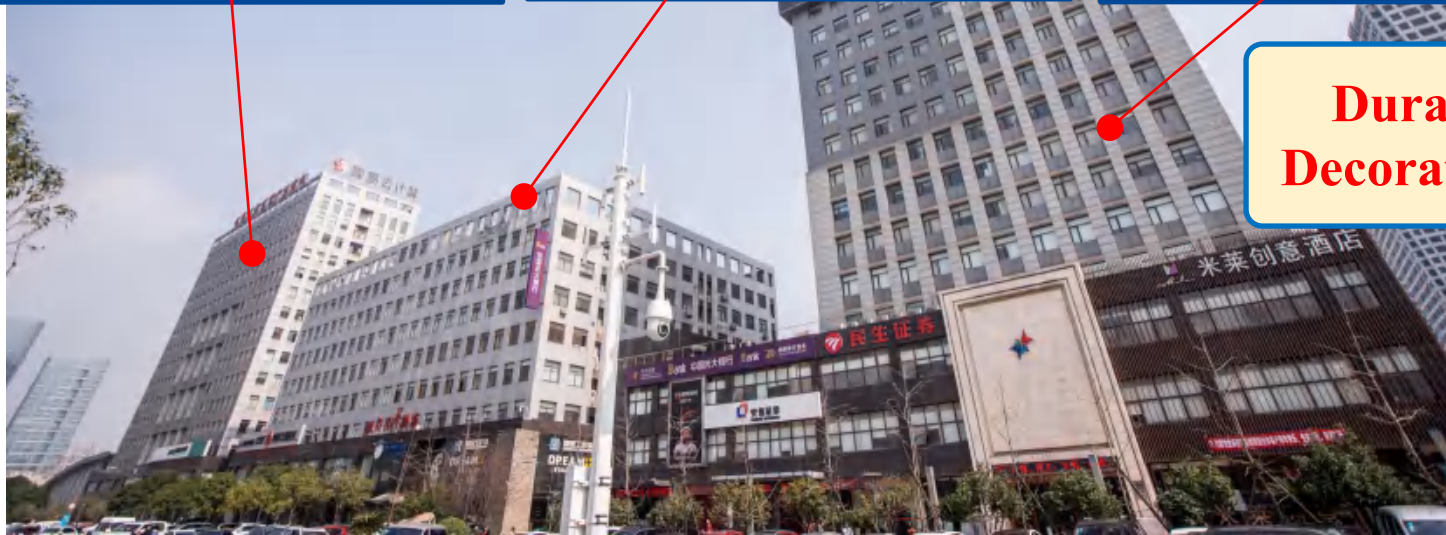
Country Garden, Qingchuan House

Safety performance of super high-rise buildings



Landmark Projects

Built in 2011



Durability of
Decorative Effect

Core Advantages

Beautiful

Fluorocarbon roller coating, self-cleaning

Convenient

Construction adaptability

Safety

Hot pressing, grooving joints

Long-lasting

Decorative surface layer; installation methods

**Simple Introduction of Other Two
External Wall Systems**

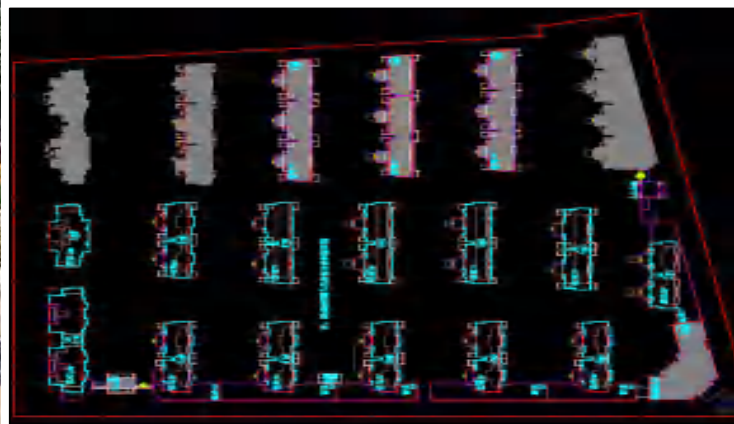
Part 5



Application of Ceramic Surface Decoration & Energy-saving Integration System

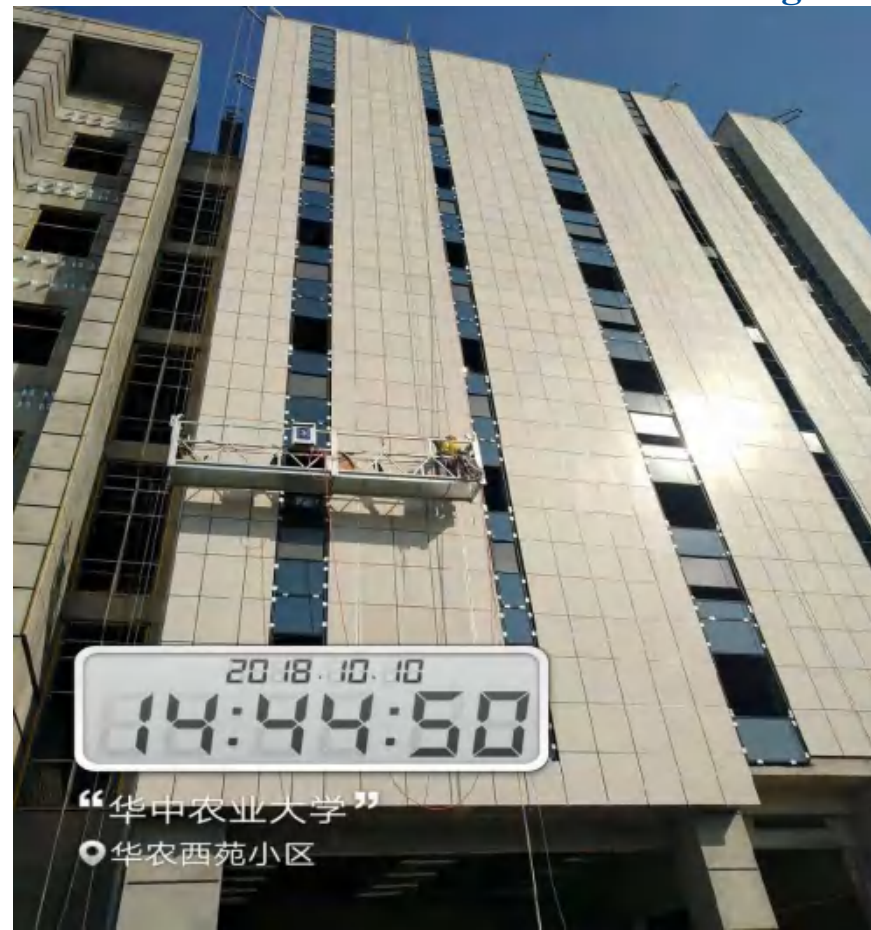
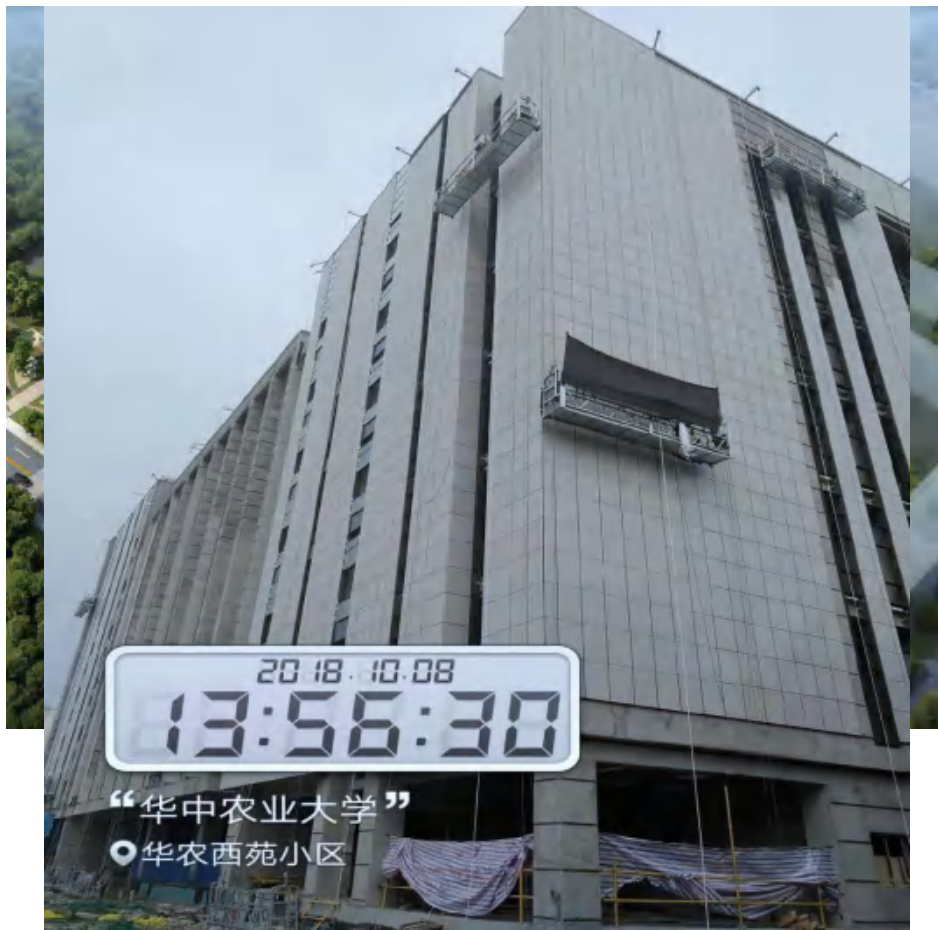


Application of Ceramic Surface Decoration & Energy-saving Integration System



Application of Stone Surface Decoration & Energy-saving Integration System

School Building



Landmark Projects



Sales Center Project



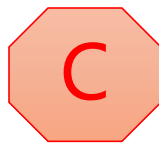
Landmark Projects



Stone Surface Decoration & Energy-saving Integration System



Stick and Nail Combination Construction Technology



Comparison of Impact Resistance







THANK YOU

Joaboa Tech Building the Splendid home
with you together!