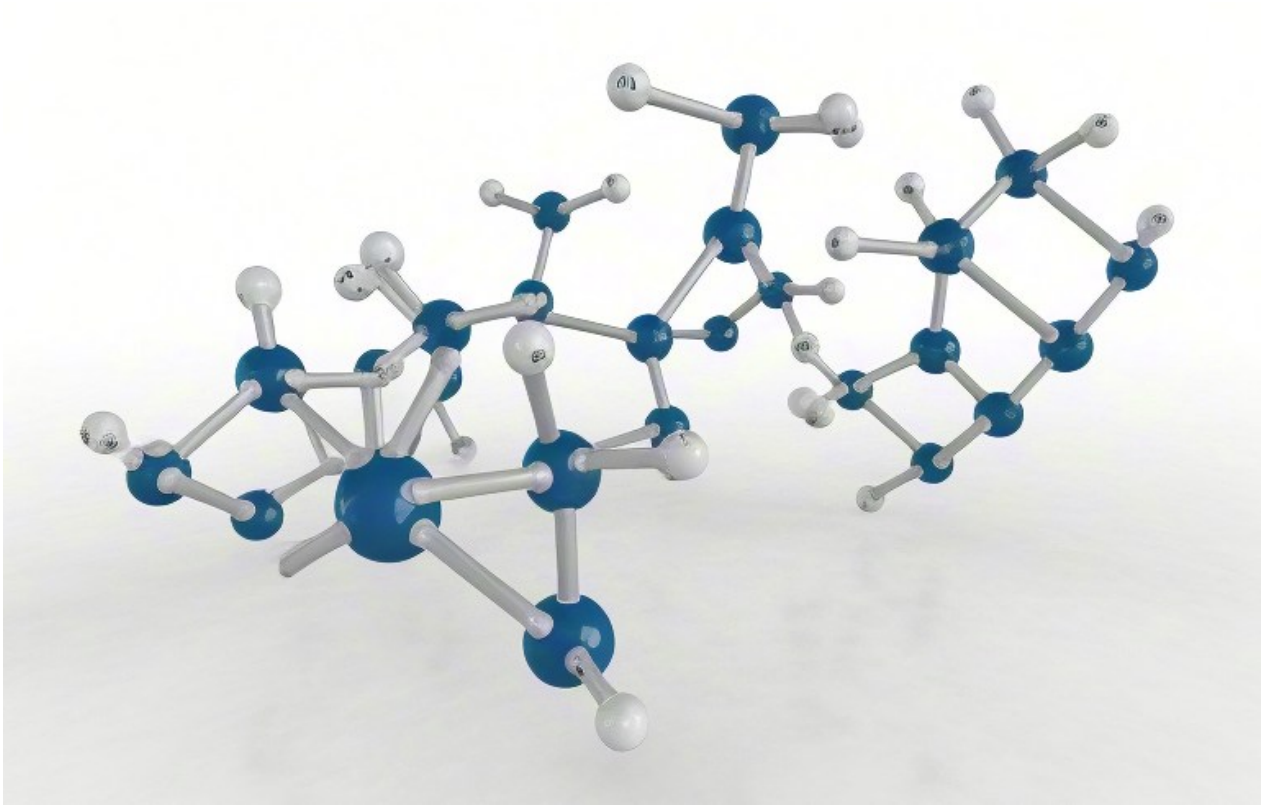
I. Material proper ties: Molecular advantages of ASA resin

1.Weather resistance essence

ASA (acrylonitrile-styrene-acrylate terpolymer) replaces the butadiene rubber in traditional ABS with double-bond-free acrylic rubber, avoiding the problem of UV-induced oxidative degradation (double bond breakage) from the molecular structure. Its weather resistance is more than 10 times that of ABS. After 1500 hours of xenon lamp aging test, the color difference $\Delta E<2$, and the impact strength retention rate>90%.

Illustration: ASA molecular structure model (acrylic chain segments wrapped around styrene/acrylonitrile core）



ASA molecular structure model

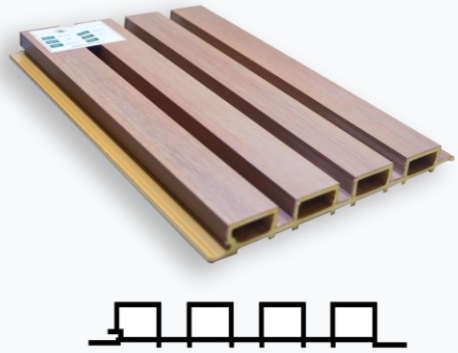
2.Environmental adaptability

Temperature range: -30℃ to 120℃ (enhanced)

Corrosion resistance: resistant to pH 3-11 acid-base environment and 5% salt spray (ASTM B117 standard)

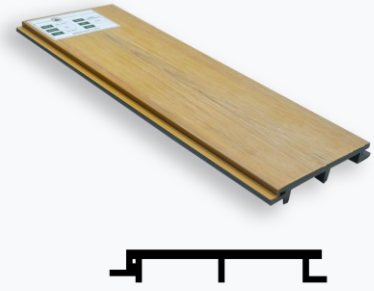
UV resistance: contains light stabilizer, no obvious fading in 20 years

Sanding Treatment:Protect the surface,scratches are not obvious.



Size 212*20*2900mm (3.91Kg/pc)

Size 180*19*2900mm (3.77Kg/pc)



Size 110*15*2900mm (2Kg/pc)

Products Ingredients & Processing

(From 1st - 5th)

1st. WPC Raw Material

2nd. ASA Coach

3rd. Protection Coach

4th. Sanding Treatment

5th. Polishing

II. Process structure: co-extrusion technology realizes functional stratification

ASA outdoor wall panels adopt a double-machine co-extrusion process to form a "functional gradient structure":

■ Surface layer: 0.5-1mm ASA high weather-resistant layer

■ Core layer: wood-plastic composite material (wood powder/PVC/bamboo fiber + mineral reinforcement)

1.Surface technology

ASA layer thickness ≥ 0.5mm, with anti-UV additives and flame retardants added24

The surface achieves "lotus effect" (dust and dirt proof) and precise embossing of imitation wood grain214

Illustration: Co-extrusion process flow chart (twin-screw synchronous extrusion melt compounding)

2.Core layer innovation

Base material: modified PVC + bamboo fiber (dehydration and degreasing treatment)

Reinforcement: mineral fiber (increases bending strength to 45MPa) 414

Foaming control: closed cell rate>95% (thermal conductivity 0.035W/m·K

III. Performance advantages compared with traditional materials

Indicators	ASA co-extruded wallboard	Ordinary plastic wood	Solid wood (pine)
Weather life	>10 years	5-8 years	3-5 years (maintenance required)
Water absorption	≤0.5%	1.5-3%	>10%
Maintenance cost	Paint-free, polishing-free	Maintenance 1-2 times per year	Maintenance 3 times+ per year
Fire rating	B1 (difficult to burn)	B2 (combustible)	Flammable
	Best Choice		

IV、Installation and application of key technologies

1.Snap-on connection system

Precise matching of the female groove and the sub-groove allows ±5mm axis deviation, and the construction efficiency is increased by 6-8 times411.

Illustration: Wall panel snap-on node profile (male and female groove bite + U-shaped card fixation)

2.Anti-deformation process

Joint treatment: grid belt caulking technology (anti-cracking)1

Expansion joint: 8mm expansion gap is reserved every 6m12

3.Applicable scenarios:

Exterior wall of high-rise building (replacement of stone)

Coastal holiday home (salt spray resistant)

Old wall renovation (direct covering installation）

V． ASA Sailing Material Certification:

1.ASA Sailing Certificate (issued by the American Sailing Association, internationally recognized)

2.Building Structure Certification: AS 4284 Australian Fire Partition Standard (used for earthquake and fire protection of exterior walls)

3.Human Contact Safety Certification: Taiwan Chi Mei Biocompatibility Test (no skin irritation report)

AWP ANGKOR WOOD PLASTICS
BEST CHOICE FOR MODERN ARCHITECT

Installation Manuals

1. Basic Properties and Use

ANGKOR WOOD is made by is ASA WPC made by (Acrylonitrile Styrene Acrylate Wood-Plastic Composite) outdoor cladding is made of a co-extruded two-layer structure, with distinct ingredients for the core and the outer "cap" layer. ANGKOR WOOD has properties similar to wood and can protect against termites and insects. ANGKOR WOOD can be cut and drilled with ordinary woodworking tools for outdoor and indoor ceiling work.

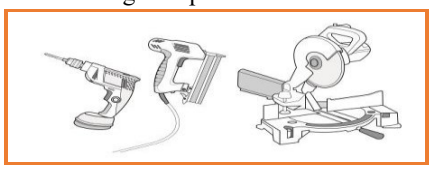
2. Transportation, Stacking and Storage

ANGKOR WOOD should be stacked and stored on flat level ground and must be kept under shade or indoors. If the user wishes to store ANGKOR WOOD outdoors, ANGKOR WOOD must be covered by materials such as waterproof canvas to block sunlight and ANGKOR WOOD must not be taken out from boxes before installation.

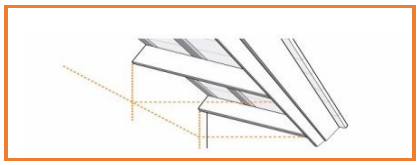
ANGKOR WOOD is ASA WPC, we can installed on exterior surfaces as ceilings, walls, porches, and more.

3. Installation Steps

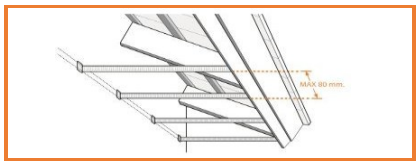
Because the material was made in imitation of real wood, each piece of ANGKOR WOOD will have different colors and specific patterns. Therefore, ANGKOR WOOD should be unpacked and stacked during installation to mix colors and patterns. Caution should be taken against potential scratches during work.



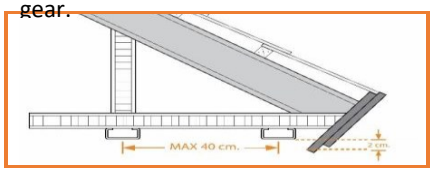
3.1 Prepare wood-working and ceiling work equipment along with protective gear.



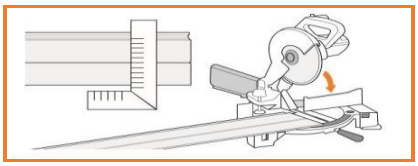
3.2 Determine the desired level of the ceiling line.



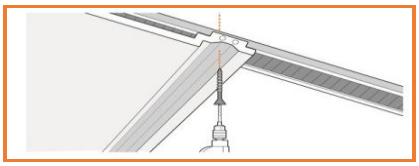
3.3 Install main frame at a distance of no more than 80 centimeters.



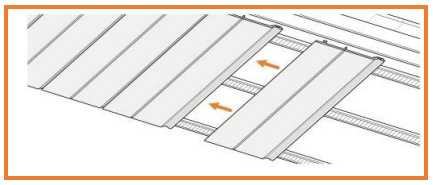
3.4 Install rear and secondary frames at distances of no more than 40 centimeters while leaving a distance of two centimeters for wood thickness.



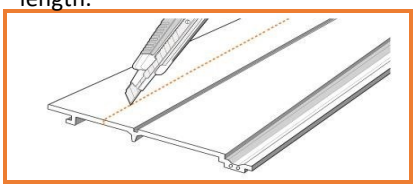
3.5 Cut the ends of every board of wood to be at a right angle and smooth in order to have smooth joints and measure board size to have even length.



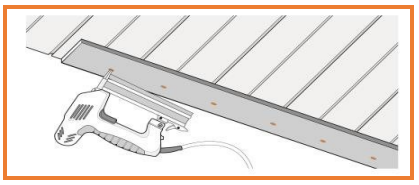
3.6 Shoot screws at prepared grooves. Shoot screws at every frame with a distance of no more than 40 centimeters.



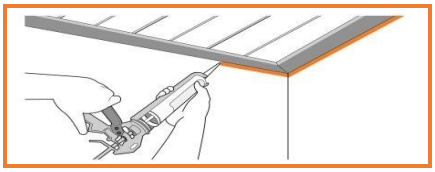
3.7 Insert the next board of wood to fit the groove and shoot screws along the work surface.



3.8 Once wood is installed up to the

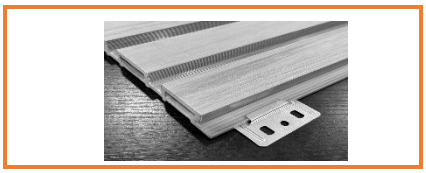


3.9 In cases where building walls do last board, the wooden board might not have a right angle and are not not be full. Cut according to size and smooth, strip-25 wood must be use clear silicone to hold the last attached to complete work by using air board. guns and clear silicone.



3.10 Clean up, seal edges and corners with silicone and appropriate paint for wall color along with cleaning the ceiling with damp clean rags or cloth.

This Clip accessories Use for ASA01-D110 & ASA02-D110 Only



This Clip accessories are Optional for ASA01-C212&ASA02-C212 (Optional)

Caution

- **The company has other new techniques depending on the actual location. Please consult our experts for more information. Thank you.**
- **Contacts: +855969547799 and +85589997754 (Telegram).**
- **Make purchase orders via** https://www.angkorwood.com