

TOP 500 MANUFACTURING ENTERPRISES IN CHINA
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TIANJIN XINYU COLOR PLATE CO. LTD.



COMPANY PROFILE

TIANJIN XINYU COLOR PLATE CO. LTD.

Founded in Xiqing District, Tianjin in 2002, it is a high-tech enterprise focusing on the production, research and development, sales and service of coated steel plates. The company has a registered capital of 300 million yuan, with more than 2200 employees, three production plants, and two wholly-owned subsidiaries of YURUNDE and HAOYU CENTURY, covering an area of about 1100 mu. The company has a number of pickling units, single stand rolling mills, continuous pickling and rolling units, hot-dip galvanizing (aluminum-zinc) units and color coating units, with an annual comprehensive capacity of 3.5 million tons and a single capacity for color coated plate of 2.6 million tons. The product sales cover 34 provinces and autonomous regions in China, and are exported to 68 countries and regions in overseas markets.

At present, Xinyu's Phase IV high-end production plant is under construction. The project has invested 800 million yuan, including two aluminum-zinc lines and four color coated lines, which will be put into production soon. It will continue the operation mode of lean production and intelligent production line, and further improve its own enterprise strength and competitiveness.

Xinyu has introduced and trained high-end technical personnel, increased investment in scientific research, established a technical team led by senior engineers, and has more than 200 independent patents. It has been awarded the titles of "Tianjin Patent Pilot Enterprise" and "High-tech Enterprise", forming a good situation in which science and technology drive productivity.

Xinyu adheres to the development concept of "Taking market demands as the guide and seeking benefits by quality". For many years, it has been ranked among the top 500 manufacturing enterprises in China. It has won the honors of "National Champion of Individual Manufacturing of 2022" "Top 10 Coating Plate Enterprises in China in 2020", "Top 10 Private Building Materials Enterprises in China in 2020", "Leading Quality Enterprise in Metal Plate Industry in China in 2021 and 2022", "Leading Quality Brand in Metal Plate Industry in China". By virtue of excellent quality and quality service, we have established a marketing network system based on China and global distribution.

Over the years, Xinyu has always taken social responsibility as the cornerstone of enterprise development, actively undertaken social responsibility, carried forward the traditional virtue of helping the poor and the needy, and devoted itself to poverty alleviation and public welfare charity activities. Since 2013, Tianjin Xinyu has donated 20 million Yuan through charitable associations, donations for education.

Never forget the original intention and stick to the mission. In the future, Xinyu will abide by the quality commitment, lead the development with innovation, and constantly build the spirit, value and strength of Xinyu.



BRAND STRENGTH



XINYU

In 2005, XINYU was successfully registered. It is a middle-end product brand. After nearly 20 years of development, XINYU is trusted by the majority of users with its excellent brand strength.



TIANYU

In 2017, TIANYU, a high-end product brand, was successfully registered. TIANYU products are widely used in international and domestic high-end plate projects with their excellent performance.

PRODUCT OVERVIEW

COLOR COATED PLATE

ZN-AL-MG COATED PLATE

AL-ZN COATED PLATE

GALVANIZED PLATE

BLACK ANNEALED PLATE

COLD ROLLED PLATE

PRODUCT

Product	Galvanized	Al-Zn Coated	Zn-Al-Mg Coated	Color Coated
Grade	DC51D-DC54D,S250GD, S280GD,S320GD, S350GD,S550GD	DC51D-DC54D,S250GD, S280GD,S320GD, S350GD,S550GD	DC51D-DC52D,S280GD, S350GD,S550GD	TDC51D-TDC54D,TS250GD, TS280GD,TS320GD, TS350GD,TS550GD
Thickness (mm)	0.25-3.5	0.16-2.0	0.25-2.5	0.16-1.6
Width (mm)	750-1260	750-1260	750-1260	750-1260
ID (mm)	508/610	508/610	508/610	508/610
Coil Weight	≤25T	≤25T	≤25T	As required
Coating Mass	≤450g/m ²	≤200g/m ²	≤350g/m ²	As required

Note: please consult sales staff for other grade

STANDARD

Products		Galvanized	Al-Zn Coated	Zn-Al-Mg Coated	Color coated
Standard	American Standard	ASTM A653	ASTM A792	ASTM A1046	ASTM A755
	Japanese Standard	JIS G3302	JIS G3321	JIS G3323	JIS G3312
	European Standard	EN10346	EN10327/10326	EN 10346	EN 10169
	Australian Standard	AS1397	AS1397	AS1397	AS2728
	National Standard	GB/T 2518	GB/T 2518	YB/T 4761	GB/T 12754

COLOR COATED PLATE CLASSIFICATION

Conventional Color Coated Plate	Functional Color Coated Plate	Special Surface Color Coated Plate
PE	Animal Husbandry Series	Printing Series
SMP	Antibacterial Series	Chequer Series
	Antistatic Series	
HDP	Thermal Insulation Series	Sculptural Print Series
PVDF	Self-cleaning Series	Chameleon Series
	Writing Board Series	
FEVE	Home Appliance Series	Thermal lamination series



SHINICOLOR



SHINICOLOR adopts hot-dip 55% Al-Zn sheet or hot-dip Zn-Al-Mg sheet as substrate, combining with durable special reinforced PE paint, so that SHINICOLOR has good outdoor durability and strong chemical resistance under general climatic conditions, and can resist sunlight, rain and other natural environments.

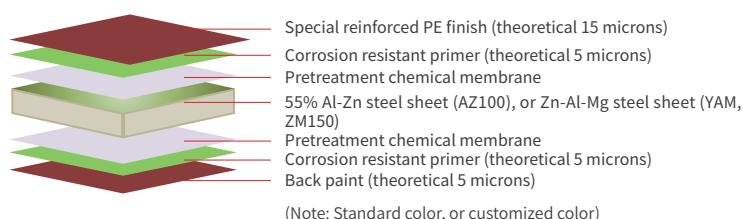
Product Advantages

- Good corrosion resistance
- Excellent chemical resistance and humidity resistance
- Excellent anti fading and anti chalking property
- Excellent flexibility and processability

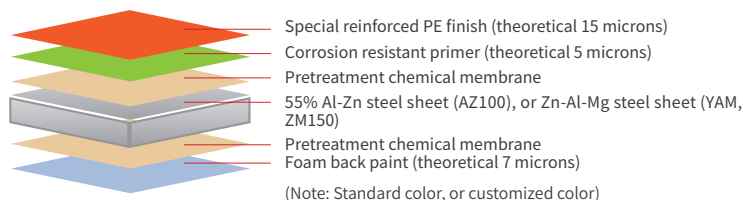
Product Application

- Roofings and wallboards of buildings in general light industrial areas, villages, suburbs and commercial areas

Single Sheet Structure



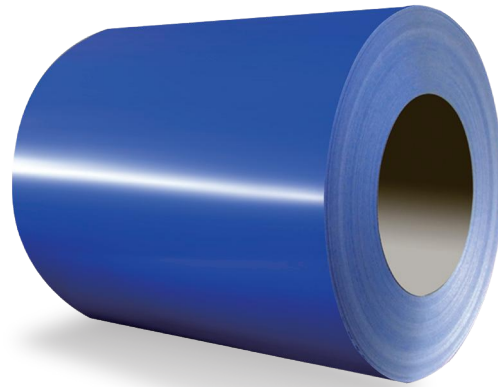
Sandwich Panel Structure



Performance Testing

Testing Content	Testing Result
Pencil hardness:ASTM D3363	F min
T bend:ASTM D4145	4T max
Cross cut test for adhesion:ASTM D3359	No peeling off
Reverse impact resistance: ASTM D2794	9J min
Chemical Reagent Resistance Testing:ASTM D1308	No fading and no blister
Humidity resistance: humidity 95%-100%, 1000 hours ASTM D2247	No peeling off
Salt Spray Test: 960 hours ASTM B117	3mm max spread over scribed line, basically no F8 bubbles
Ultraviolet Radiation Aging Testing: 600 hours ASTM G154	Chromatic Aberration: $\leq 3\Delta E$, chalking rate: <2
Immersion Test:38 C, 168 hours ASTM D870	Basically no color difference and no bubbles
Abrasion resistance:ASTM D968	Total sands: 65 $\pm$ 5 L
Insolation Test:	Painting integrity: 10 years

PURCOLOR



PURCOLOR adopts hot-dip 55% Al-Zn sheet or hot-dip Zn-Al-Mg sheet as substrate, combining with ultra durable PE coating, which has excellent performance of UV protection, chalking prevention and chemical erosion, and ensures that the construction has good outdoor durability under climatic conditions.

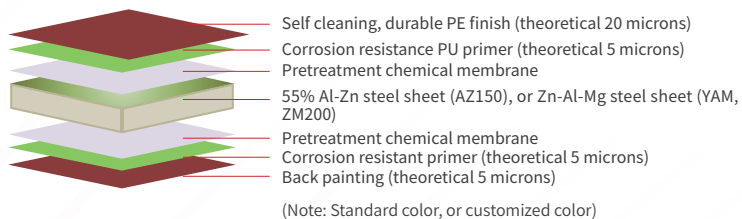
Product Advantages

- ⊙ Excellent corrosion resistance
- ⊙ Excellent anti fading and anti chalking properties
- ⊙ Excellent flexibility and process-ability
- ⊙ Unique cleaning performance and excellent stain resistance
- ⊙ Heat reflection energy-saving technology for cost saving

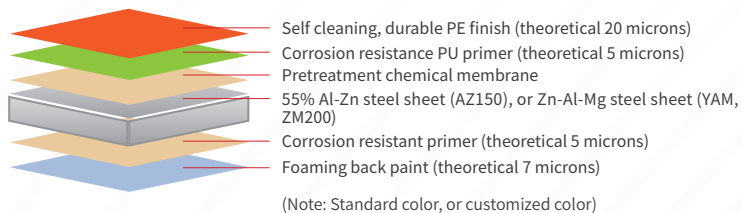
Product Application

- ⊙ Roofings and wallboards of constructions in special environment (industry, ocean, etc.)
- ⊙ Roofings and wallboards of ordinary constructions

Single Sheet Structure



Sandwich Panel Structure



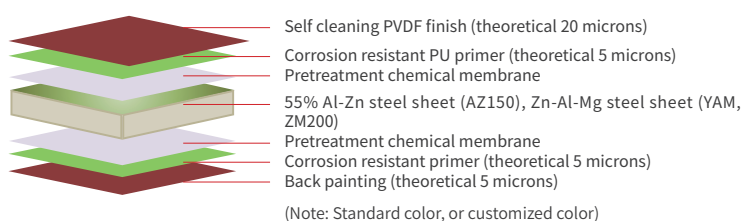
Performance Testing

Testing Content	Testing Result
Pencil Hardness:ASTM D3363	HB min
T Bend:ASTM D4145	3T max
Cross Cut Test for Adhesion:ASTM D3359	No peeling off
Reverse Impact Resistance:ASTM D2794	9J min
Water Contact Angle	≤60°
Carbon Black Test	Chromatic Aberration: ≤0.7△E
Humidity resistance: humidity 100%, 1000 hours ASTM D2247	No peeling off
Salt Spray Test: 1500 hours ASTM B117	3mm max spread over scribed line, bubbles grade F8
Ultraviolet Radiation Aging Testing: 1000 hours ASTM G154	Chromatic Aberration: ≤3△E, chalking rate: <2
Immersion Test: 38°C, 168 hours ASTM D870	Basically no color difference and no bubbles
Abrasion Resistance:ASTM D968	Total sands:35±5 L
Insolation Test: ASTM D2244 ASTM D4214	Painting integrity:20 years Color: 15 years exposure, no obvious color change or ≤7△E; Pulverization Resistance: 15 years exposure, no obvious color change or ≥ level 6 Anti dust adhesion ability: no obvious color change or dust contamination in 5 years

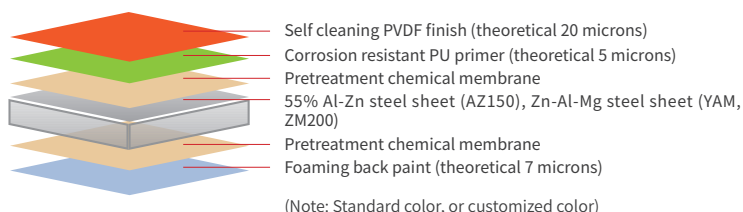


GORCOLOR

Single Sheet Structure



Sandwich Panel Structure



Performance Testing

Testing Content	Testing Result
Pencil Hardness:ASTM D3363	HB min
T Bend:ASTM D4145	3T max
Cross Cut Test for Adhesion:ASTM D3359	No peeling off
Reverse Impact Resistance:ASTM D2794	9J min
Water Contact Angle	≥60°
Carbon Black Test	Chromatic Aberration: ≤0.7△E
Humidity resistance: humidity 100%, 2000 hours ASTM D2247	No bubbles on painting
Salt Spray Test:2000 hours ASTM B117	2mm max spread over scribed line, no bubbles on surface
Ultraviolet Radiation Aging Testing: 2000 hours ASTM G154	Chromatic Aberration: ≤3△E, chalking rate: <2
Immersion Test:38°C, 168 hours ASTM D870	Basically no color difference and no bubbles
Abrasion Resistance:ASTM D968	Total sands:65±10 L
Insolation Test: ASTM D2244 ASTM D4214	Painting integrity:25 years chalking Resistance: 20 years exposure, ≥ level 8 Chromatic Aberration: 20 years, ≤5△E; Anti dust adhesion ability: 5 years, no obvious color change



GORCOLOR adopts hot-dip 55% Al-Zn sheet or hot-dip Zn-Al-Mg sheet as substrate, and with the painting made of more than 70% KYNAR® 500 or HYLAR® 5000 self cleaning PVDF. The painting has a excellent performance of anti corrosion, UV resistance, outstanding color persistence, anti chalking, and Chemical degradation resistance.

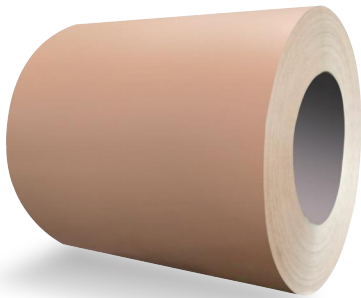
Product Advantages

- ⊙ Excellent corrosion resistance
- ⊙ Excellent anti fading, anti chalking performance, and outstanding color persistence
- ⊙ Unique self cleaning performance on steel sheet surface, excellent stain resistance and weather fastness
- ⊙ Heat reflection energy-saving technology for cost saving

Product Application

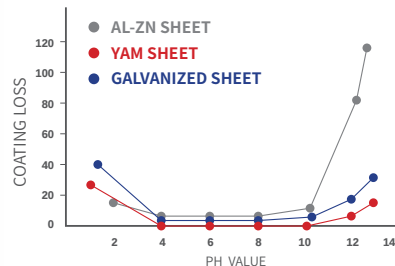
- ⊙ Roofings and wallboards of constructions under harsh environment (strong sunlight, humid air with salt, severe corrosion, etc.)
- ⊙ Roofings and wallboards of large buildings

ANIMAL HUSBANDRY PLATE



Animal Husbandry Sheet is for animal husbandry breeding environment, ensuring the long-term use of pig houses, cowsheds and other animal husbandry buildings.

Acid and Alkali Resistance Test

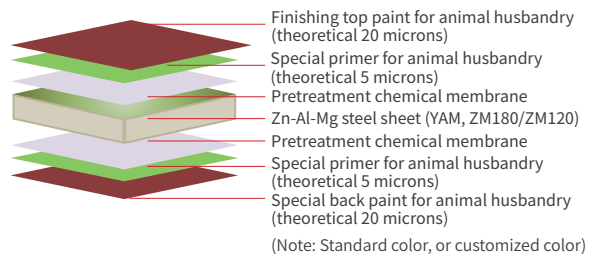


PH of animal husbandry buildings is generally 9-14, which depends on the design, ventilation and cleaning of buildings

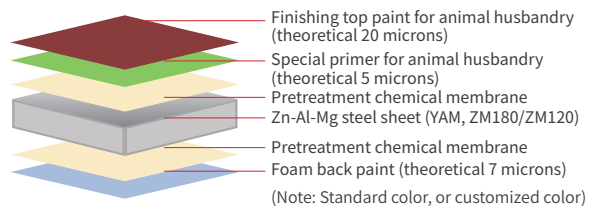
Performance Testing

Testing Content	Testing Result
Pencil Hardness:ASTM D3363	HB min
T Bend:ASTM D4145	4T max
Cross Cut Test for Adhesion:ASTM D3359	No peeling off
NaOH/H2SO4 Resistance Test	No fading and bubbles
Humidity resistance: humidity 95% - 100%, 1000 hours ASTM D2247	No peeling off
Salt Spray Test:2000 hours ASTM B117	3mm max spread over scribed line, basically no F8 bubbles
Ultraviolet Radiation Aging Testing: 1000 hours ASTM G154	Chromatic Aberration: $\leq 3\Delta E$, chalking rate: <2
Immersion Test:38°C, 168 hours ASTM D870	Basically no color difference and no bubbles
Abrasion Resistance:ASTM D968	Total sands:35±5 L

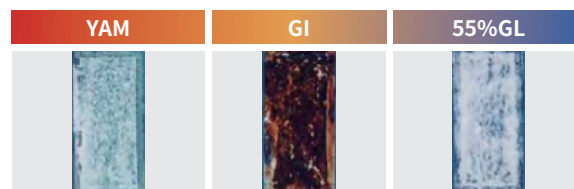
Single Sheet Structure



Sandwich Panel Structure



Salt Spray Corrosion Resistance Test (2500 hours)



TEST CONCLUSION:

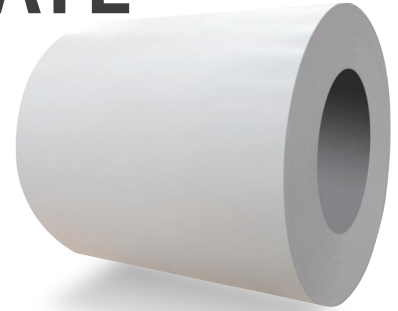
The performance of YAM is obviously better than that of GI and 55% GL

Product Advantages

- With high corrosion-resistant Zn-Al-Mg steel sheet as substrate, it has excellent performance of corrosion resistance and chemical resistance.
- The coating is for the animal husbandry industry with resistance to ammonia, common acid and alkali, strong oxidizing detergent and disinfectant, meanwhile it owns extraordinary humidity resistance and suits for the high temperature and humidity environment of animal husbandry.



ANTI BACTERIAL PLATE

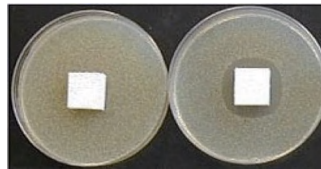


Performance Testing

Testing Content	Testing Result
Pencil Hardness:ASTM D3363	F min
T Bend:ASTM D4145	4T max
Cross Cut Test for Adhesion:ASTM D3359	No peeling off
Reverse Impact Resistance:ASTM D2794	9J min
Chemical Reagent Resistance Testing:ASTM D1308	No fading and bubbles
Humidity resistance: humidity 95% - 100%, 1000 hours ASTM D2247	No peeling off
Salt Spray Test:960 hours ASTM B117	3mm max spread over scribed line, basically no F8 bubbles
Ultraviolet Radiation Aging Testing: 600 hours ASTM G154	Chromatic Aberration: $\leq 3\Delta E$, chalking rate: < 2
Immersion Test:38°C, 168 hours ASTM D870	Basically no color difference and no bubbles

Bacteriostatic Experiment

Standard:
according to JIS Z2801:2000



Xinyu's Antibacterial Sheet adopts the advanced antibacterial technology, with antibacterial agent added to painting, which effectively kills and inhibits the breeding of bacteria and creates a clean and hygienic environment.

Product Advantages

- ① Innovative antibacterial formula, protecting the surface of steel sheet from bacterial pollution
- ② The antibacterial performance will not be reduced due to scrubbing or service life
- ③ Excellent stain resistance, safe and environment friendly
- ④ Effectively kills *Staphylococcus aureus*, *Escherichia coli*, *Pseudomonas aeruginosa* and other common pathogenic bacteria

Product Application

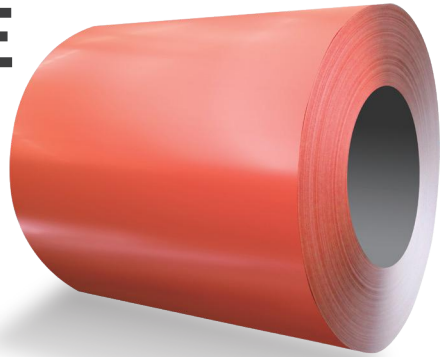
- ① Food production and storage workshop
- ② Refrigeration warehouse and logistics warehouse
- ③ Drug R&D, production and storage workshop
- ④ Hospital interior decoration

Test for Antibacterial Effect

Bacterial amount obtained in different hours					
Bacteria	Inoculum concentration	Sample	0 hour	24 hours	Antibacterial activity
<i>Staphylococcus aureus</i>	4.8×10^5	Antibacterial sheet Conventional sheet	1.9×10^5	2.0×10^2 7.6×10^2	3.58
<i>Escherichia coli</i>	5.5×10^5	Antibacterial sheet Conventional sheet	2.8×10^5	1.6×10^2 7.0×10^2	3.64
<i>P. Aeruginosa</i>	1.5×10^5	Antibacterial sheet Conventional shee	1.0×10^5	1.3×10^2 3.5×10^2	3.43

Note: if the antibacterial activity is greater than 2.0, it indicates that it has antibacterial effect.

ANTI STATIC PLATE



Performance Testing

Impedance test (GB / T 1410-2006): paint surface impedance 10^6 - $10^9\Omega$



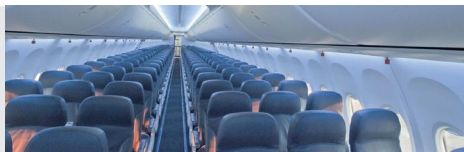
PRINTING



ELECTRICAL APPLIANCE



AVIATION



Xinyu's Anti Static Sheet can effectively eliminate static electricity and reduce the harm and potential safety hazards. The principle of Tianyu antistatic sheet is to add special conductive materials into the non-conductive paint coating to make the paint coating become a semi conductor, and cooperate with the installation of the grounding wire of the color coating sheet to make the static electricity generated by air convection and clothing friction on the surface of the color coating board disappear into the ground.

Product Application

- ① Sandwich panels and purification panels for high-end building interiors
- ② Plants with anti-static requirements such as electronics, electrical appliances, aviation, chemical industry
- ③ Computer room and server room



THERMAL INSULATION PLATE



Thermal insulation experiment

Experimental equipment: 150W outdoor special spotlight

Indoor initial temperature: 25-30 °C

Experimental time: 30 minutes

In order to save energy, reduce the cost increase caused by indoor use of air conditioning and reduce environmental pollution, Xinyu has developed Tianyu thermal insulation sheet, which adopts cold roof thermal insulation materials with high reflectivity to enhance the reflection ability of finish coating to ultraviolet and other sunlight energy, so as to improve the solar reflectivity of roof and wall and reduce the absorption of solar heat, which can not only reduce indoor temperature, save energy and reduce energy consumption cost, It also helps to alleviate the urban heat island effect.

Experiment results

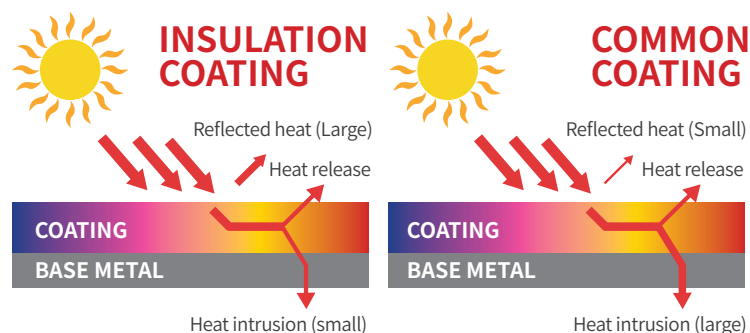
Grey series	Regular sheet	Insulation sheet
Back steel sheet temperature (°C)	80°C	75°C
Internal space temperature (°C)	55°C	51°C

Green series	Regular sheet	Insulation sheet
Back steel sheet temperature (°C)	83°C	78°C
Internal space temperature (°C)	58°C	53°C

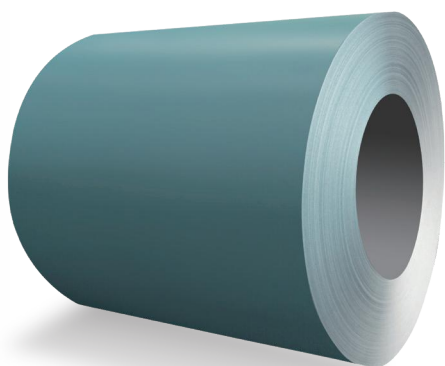
Product Application

- ① Metal building external sheet in tropical, subtropical and other hot areas
- ② Plant with demand of energy cost saving

Thermal insulation and energy saving function diagram



SELF-CLEANING PLATE

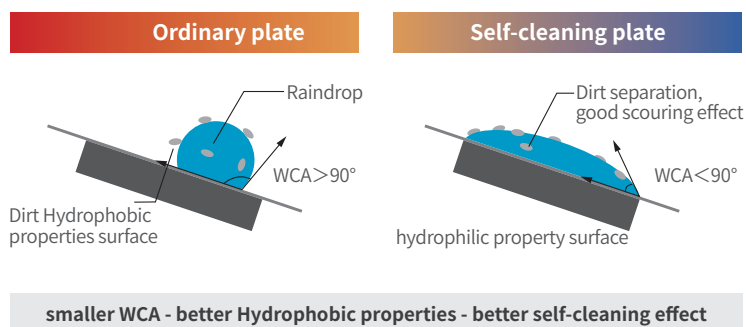


Through the unique self-cleaning coating system, the self-cleaning sheet uses the coating with self-cleaning hydrophilic function, and uses the scouring effect of natural precipitation to separate dust and other pollutants from the building surface, so as to ensure the conventional performance and make the building appearance clean and fresh for a long time.

Hydrophilicity test

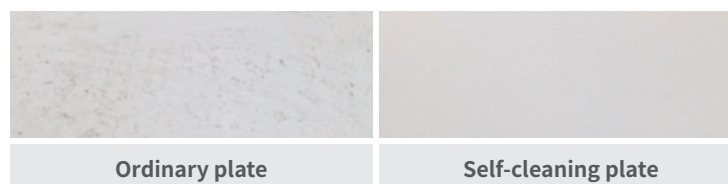
Product Application

- External sheet of high-end industrial plants, convention and exhibition centers, sports venues and other buildings
- External sheet of high-end houses, shopping malls and other buildings



Self cleaning experiment

The experiment lasted for 6 months

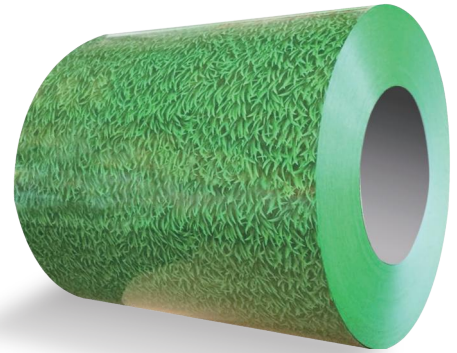


Performance testing

Test content	Experimental result
Carbon black resistance test	Chromatic Aberration: $\leq 1.0 \Delta E$
Contact angle test	Up to 60°

09

PRINTING SERIES



Product features

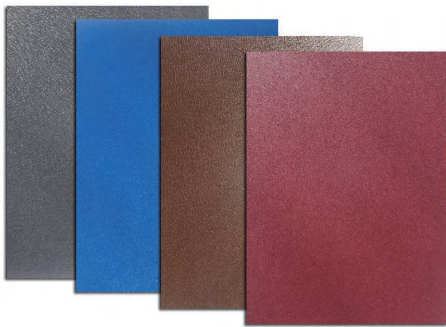
- The surface is printed with beautiful patterns, which has strong applicability and decoration;
- Bright colors and various patterns, such as marble, camouflage, wood and other printing;
- Excellent anti fading, anti-aging and anti-corrosion performance.

Product Application

- High end building plate;
- Decoration industry, home appliance industry, furniture industry, office supplies and conventional industry.

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CHEQUER SERIES

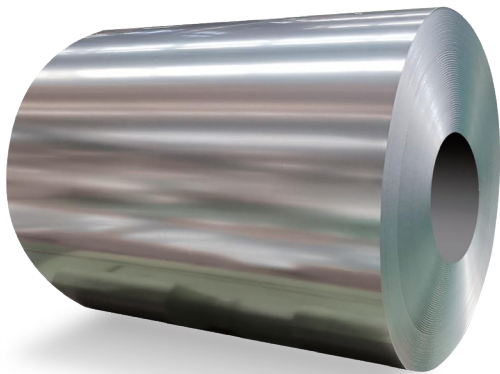


Product features

- Used in civil buildings, villas and other color steel antique tiles

Product Application

- Three dimensional appearance, silk like texture effect;
- The coating surface has high cross linking density, low gloss and good scratch resistance;
- Excellent weather resistance, acid and alkali resistance and chemical resistance;
- Compared with ordinary color board, closer to nature.

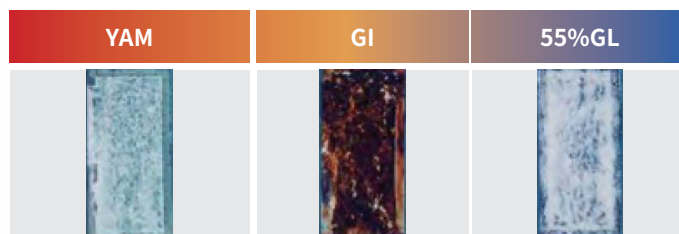


XINYU YAM



XINYUYAM

Salt Spray Corrosion Resistance Test (2500 hours)



TEST CONCLUSION:

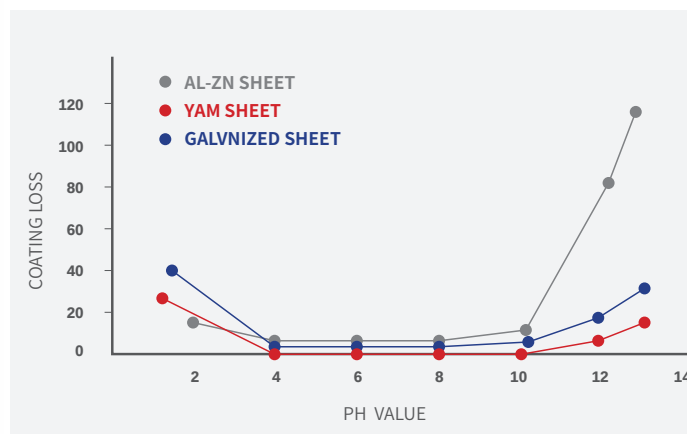
The performance of YAM is obviously better than that of GI and 55% GL

Xinyu galvanized-aluminum-magnesium plate is a new generation of revolutionary coating products, referred to as YAM. The alloy coating is formed by high-temperature solidification of zinc, aluminum (5-8%) and magnesium (2-4%), so that a dense barrier is formed on the surface of the steel plate to effectively prevent the penetration of corrosion factors. It has excellent chemical resistance, red rust resistance, self-healing corrosion resistance of the shear section and welding performance, which greatly extends the service life of the building.

Product Application

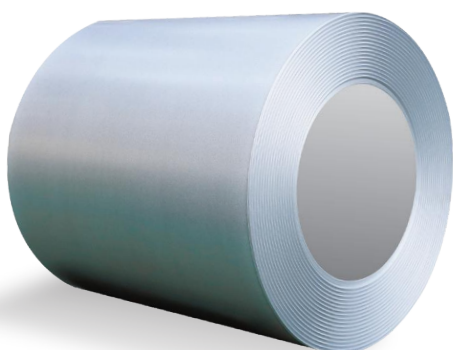
- Excellent corrosion resistance, with self-healing function
- Excellent alkali resistance
- Good processing performance, excellent wear resistance and wiping resistance

Acid and Alkali Resistance Test





AL-ZN COATED PLATE

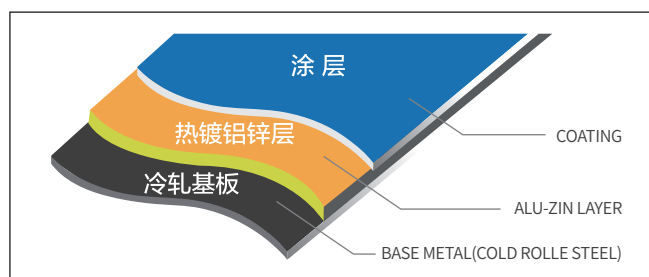


Xinyu hot-dip aluminum zinc plate is a high corrosion-resistant, high density 55% aluminum zinc silicon alloy steel plate formed by using aluminum, zinc and silicon as the main elements and adding trace elements to solidify at a high temperature of 600 °C. The surface of the steel plate has uniform and dense fine spangle. The product has excellent corrosion resistance and is widely used in many industrial fields, such as internal and external panels for construction, electrical supplies, auto parts and pipes.

Product advantages

- ① Excellent corrosion resistance, can be applied to a variety of corrosive environments with long service life.
- ② Excellent ductility, with the same weight and the same coating thickness, its extension area is more than 3% larger than that of galvanized sheet.
- ③ Good thermal reflectance, its ability to reflect heat and light is twice that of galvanized plate, and the reflectance is greater than 0.75. It is an ideal building energy-saving heat insulation material.

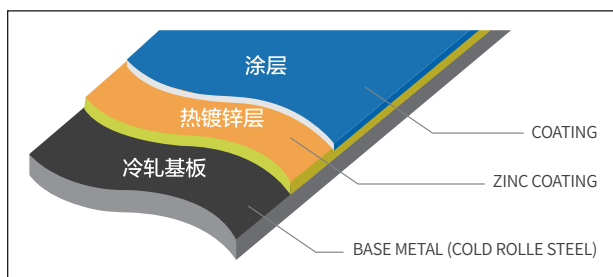
Diagram



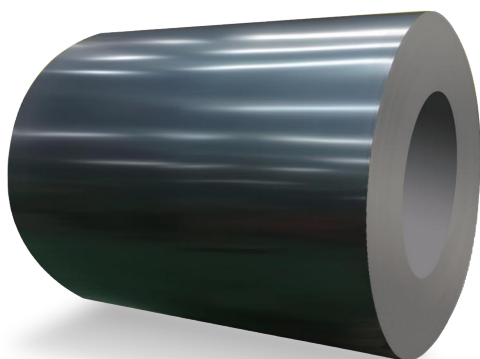
GALVANIZED PLATE

Xinyu Galvanized plate is processed by continuous hot-dip galvanizing unit with electrolytic cleaning, annealing, immersing in molten zinc solution, and then skin passed, tension leveled, chromated. The products owns excellent corrosion resistance and are widely used in construction, home appliances and automobile industries.

Diagram



COLD ROLLED BLACK ANNEALED PLATE



Xinyu black annealing plate is a kind of steel plate processed by continuous annealing process.

Products Specification

Thickness	0.25 - 1.2mm
Width	750 - 1260mm
Innder Diameter	508 / 610mm
Coil weight	≤ 25T

QUALITY ASSURANCE

The world's advanced laboratory equipment and strict testing mechanism bring stable and excellent performance to the products. In 2021, XINYU integrated testing and chemical examination resources, and set up the testing center, providing supporting services for quality control and technology research and development.

There are chemical analysis room, performance analysis room, material aging room, corrosion-resistance research room, element testing room and other professional testing rooms.

The test equipment of the chemical analysis room includes Moisture Meter, Conductivity Meter, PH Meter, Automatic Potentiometric Titrator and other equipment.

The performance analysis room mainly carries out product performance, appearance and microscopic testing. The testing equipment includes Tensile Testing Machine, Digital Rockwell Hardness Tester, T-bending Machine, Color Difference Meter, Metallographic Microscope, etc., which can meet the needs of product strength, hardness, bending, color difference and metallographical tests.

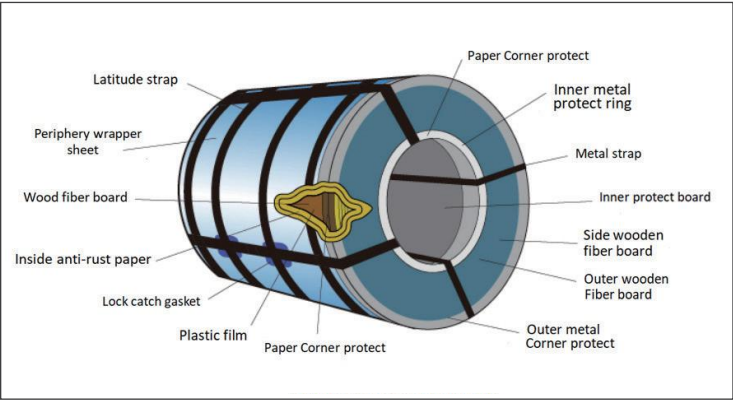
The material aging room and the corrosion resistance research room simulate the natural environment's experimental conditions such as light, rain, moisture and heat on the material, and are used to test the corrosion resistance and aging resistance of the material. The testing equipment includes neutral salt spray test chamber, high and low temperature alternating humidity and heat test chamber, xenon lamp aging test chamber, ultraviolet aging test chamber, etc. The testing objects are mainly galvanized, Al-Zn Coated steel plate and strip, color coated steel plate and steel strip.

The element detection room is responsible for detecting the element composition of metal materials such as hot rolled steel plate and zinc ingot. The detection equipment includes spark direct reading spectrometer and portable spark direct reading spectrometer, which can detect the elemental components with zinc, iron and aluminum.

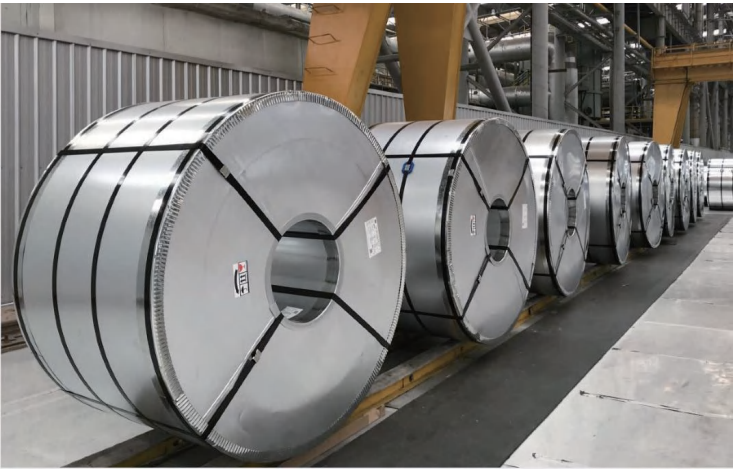


PACKAGE

Export fine packaging



Physical drawings



EXPORTING PACKAGE

PACKAGE	PALLET	FILMED	SLEEVES	APPLY TO	LABEL	LAYERS ON BORAD
VERTICAL PACKAGE	REQUIRED	OPTIONAL	METAL SLEEVES	FILMED, WRINKLE FINISHED, CR≤0.50mm, ALL PRODUCTS≤0.30	TIANYU XINYU NEUTRAL	≤ 2 LAYERS
			CARDBOARD SLEEVES	ALL PRODUCTS		
HORIZONTAL PACKAGE	OPTIONAL	OPTIONAL	METAL SLEEVES	FILMED, WRINKLE FINISHED, CR≤0.50mm, ALL PRODUCTS≤0.30		≤ 3 LAYERS
			CARDBOARD SLEEVES	ALL PRODUCTS		



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