









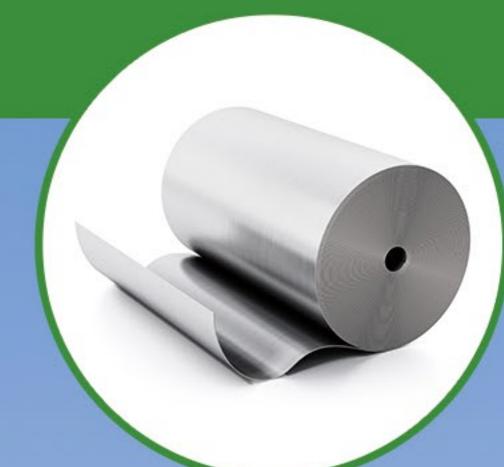
### PVDF Coating Finish Testing Report

Testing Item	Standard	Result
Finish coat thickness	ISO 2360(CS 8406)	27.6µm
Gloss	ASTM D523-99	20-45%
Pencil hardness	ASTM D3363-00	2H
Toughness	ASTM D4145-83	2T no rift
Adhesive force	ASTM D3359-97	4B
Impact resistance	ASTM D2794-93	50kg.cm
Abrasion resistance	ASTM D968-93	64.6L/mil
Mortar resistance	ASTM 605.2-91	24hrs No blister
Humidity resistance	ASTM D714-97	3000hrs No blister
Boiling-water resistance	ASTM D3359-B	Passed
Salt-spray resistance	ASTM B117-03	3000hrs No blister
Acid resistance	ASTM D1308-87	No Effect
Alkali resistance	ASTM D1308-87	Passed
Solvent resistance	ASTM D2248-73	Passed
Color retention	ASTM D2244-93	<b>▲</b> E=0.34
Chaik resistance	ASTM D4214-98	No Chalking
Gloss retention	ASTM D2244-93	84.2%

### Aluminum Decorative Building Materials







# 

China Aluminum Panel Manufacturer



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**Aluminum Composite Panel** Aluminum Honeycomb Panel **Aluminum Plate Sheet** 

Painted Aluminum Sheet Roll

### Shanghai Suntung Industry CO., Ltd

Factory Add: No.2355 Xinda Road, Nanhu District, Jiaxing City, Zhejiang Province Sales Center: No.918, Building #A, No.97 Fengpu Avenue, Nanqiao Town, Fengxian District, Shanghai



## TOP3

China ACP manufacturer

150,00

Square meters of building area

1500

Employees

20

Production lines

100

Exported countries



Alucolink is a leader in the field of domestic and international wall decoration materials integrating production, trade and service. With development of 20 years, we built a new factory (over 150,000 square meters)in 2018 and become the TOP3 of aluminum composite panel manufac-

### **Equipment & Production Lines**

A ICOmposite panel IIIK

ABOUT

ALUCOLINK

turer in China. Welcome to visit.

There are 20 production lines include automatic aluminum-plastic compositing lines and color coating lines, also several numerical control aluminum solid panel process equipment imported from Canada, and it is tested and controlled by the world-class level Japanese "Lan's" X Y full range light speed testing facility. Furthermore, Alucolink established the modern lab with entire functions and advanced testing facilities.

### **Major Products**

- Aluminum-plastic composite panels
- Colored aluminum-plastic panels
- Fire-resistant aluminum composite panels
- Aluminum-plastic panels for ad printing
- Fluorocarbon aluminum veneers
- Aluminum. Honeycomb panels
- Aluminum ceilings
- Metal veneer insulation panels
- Other products

### Certification

The company has passed ISO9001:2008 international quality management system certification, ISO14001:2004 international environmental management system certification, OHA-SA18001:2001 international occupational health and safety management system certification, products have passed CTC quality certification and EU CE certification, product quality in line with ASTM-E84, The EN13501-1 and BS-476 standards are qualified by the SGS fire rating test and reach the A2 fire rating standard.

#### Sales Network

Currently, our products export more than 100 countries all over the world. Its products are exported to Russia, Southeast Asia, the European Union, South America and other countries. The landmark buildings of many countries show you Alucolink, such as PVG airport, Hilton Hotel, German tecalor office building, Behrain central business centre, UAE high tower club, Abu Dhabi Estate Shopping Centre, Oman kahabi office building, Qatar cuyual business centre and so on .....

As the top of aluminum composite panel manufacturer in China, Alucolink is constantly improving international market layout while exploring the domestic market. With high quality, excellent service and outstanding after-sales team, Alucolink sincerely and warmly welcome you with opening heart to cooperate with us.



## Certifications





中国建材认证 China Building Material Certification

《绿色建筑选用产品导向目录》

入选证书

经评价

生产的下列产品符合 CTC 《绿色建筑选用产品技术指

上海吉祥科技 (集团)有限公司

南》的要求,同意该产品入选 CTC 《绿色建筑选用产品导

入选产品描述

铝单板、铝塑复合板

**Green Building Products** 

发证日期: 2014年11月19日

中国建材检验认证集团股份有限公司

向目录 (2014年版)》。

GB/T24001-2004 & ISO14001:2004



China Famous Brand(SHJIX®)



3C Certification of CQC

sira

CERTIFICATION

职业健康安全管理体系认证证书

上海吉祥科技 (集团) 有限公司

注册地址:中国上海市松江区石湖荡镇塔汇路 505 号 16 幢

经营地址:中国上海市松江区石湖荡镇塔汇路 505 号

GB/T28001-2011 idt OHSAS18001:2007 标准

铝塑复合板、铝单板的生产和销售

GB/T28001-2011 & OHSAS18001:2007

从证证书编号。 SSQC14210S0009R9-1

组织机构代码。 9131000079566140以

本次证书有效日期。 2018年01月17日

CNAS PEUT ETTE MANAGEMENT SYSTEM CNAS C142-M

其职业健康安全管理体系已通过 Sira Certification Service 的评审,符合







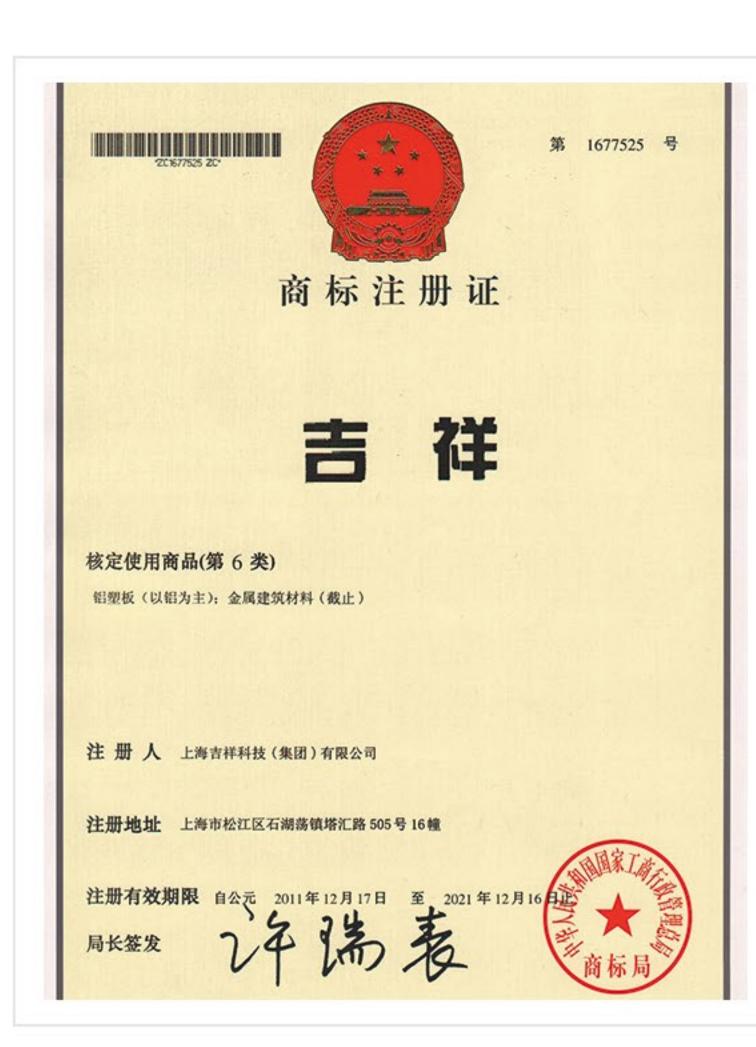
China Famous Brand(吉祥®&SHJIX®)



**Certificate of Contract Credit Rating** 



GB/T9001-2008 & IS09001:2008





2017年Duranar®区域认证客户 2017 Duranar® Regional Approved Applicator 上海吉祥科技集团 Shanghai Jixiang Technology Group 2017年1月1日-2017年12月31日 January 1,2017-December 31,2017 Senior Business Director China

Alucelink

Alucelink

**Duranar® Regional Approved Applicator** 



**CE Certification** SGS Certification



CNAS

**Beckers** 

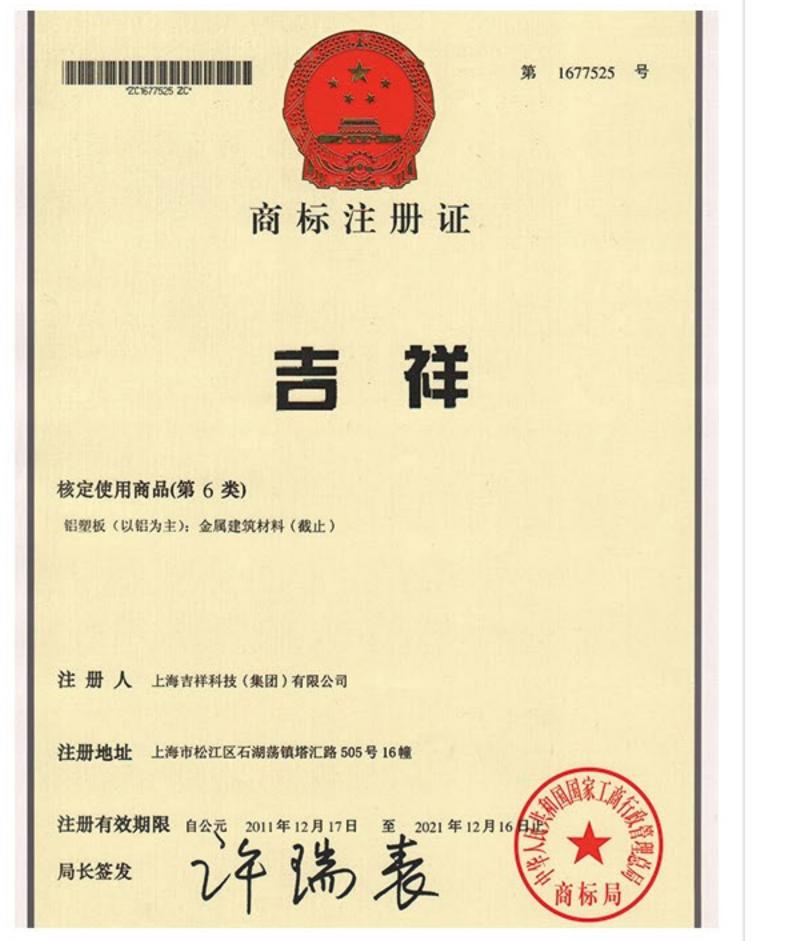
**Quality Certification of CTC** 



**Quality Certification of CNAS** 







Shanghai Famous Brand(吉祥®)





Shanghai Famous and High Quality







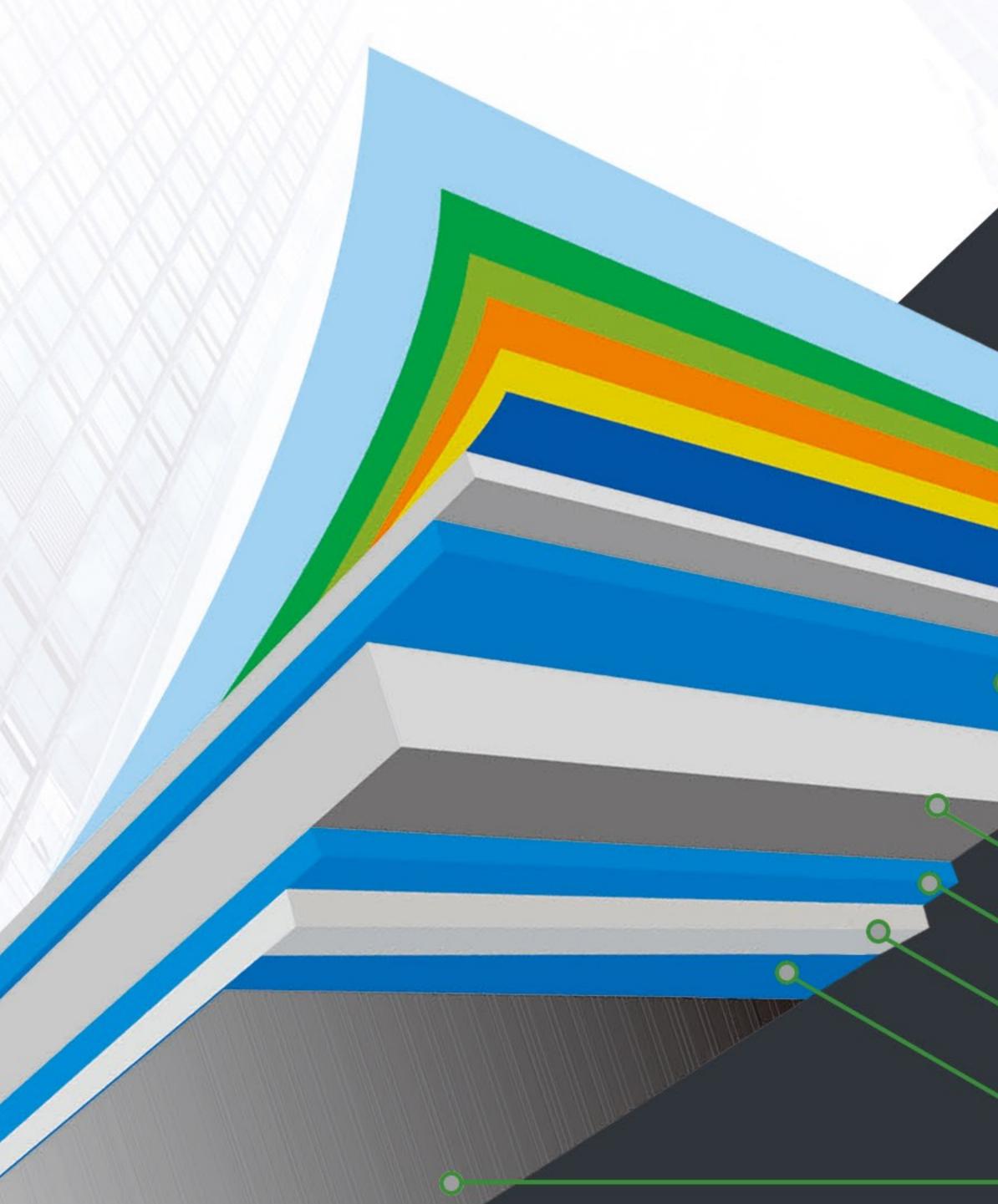
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## Aluminum Composite Panel

General Notes

- B Protective film
- 12 PVDF clear coating
- III PVDF top coating
- 10 PVDF primer
- 9 Chromate treatment
- 8 Aluminum skin
- 7 Chromate treatment
- 6 Bounding lamination layer
- Optional product Fire-Retardant (FR) Standard product PE Core (Non Toxic)
- 4 Chromate treatment
- 3 Aluminum skin
- 2 Chromate treatment
- Service coating (optional)



Aluminum Composite Panel Structure

#### Standard Specification

1220 x 2440 x 3mm

1220 x 2440 x 4mm

1220 x 2440 x 5mm

#### **Standard Color**

108 kinds

Many kinds meet your request

#### Special size

Thickness: 2mm.6mm

Width: 1000mm. 1250mm. 1550mm. 2000mm

Length: < 6000mm

#### Application

1. wall curtain

2. repaired building

3. dado separation wall

4. advertising plate, signage, show plate form

### Product Features



### **Excellent torsion strength**

With varieties of advanced equipment and strict control, Alucolink brand panel features high strength with excellent torsion strength and bending strength under heavy loads, and also excellent weather resistance.



#### Easy to maintain

Alucolink brand panel, it performs well in its pollute resistance. It is seriously polluted in China, The panel needs to maintain and clean after serveral years use. Only neutral cleanser and water needed for its self-clean performance, It looks like before after cleaning



#### Easy processing and installation

Alucolink panel is easy to process for its light weight (3.5-5.5kg/sqm). All cutting, milling, planning, slotting, side-folding and curving can be easily fulfilled by simple tools used for processing timber and metal. Both indoor and outdoor decoration can be implemented simultaneously so as to raise working efficiency and short working time



#### **Excellent impact resistance**

It features good impact resistance, toughness bending rigidity, it will not be damaged when it's suffering from sand blown by wind





#### **Excellent weather resistance**

Alucolink panel coated with fluoro-carbon(PVDF) resin, it features good lightness, strong adhesion, and alkali resistance, powdering resistance of ultraviolet light



#### Even coating & various color

Dealing with the surface of aluminum material, and with the application of Henkel technology, it makes the paint and panel stamped with a very strong even force, and various color for your choice

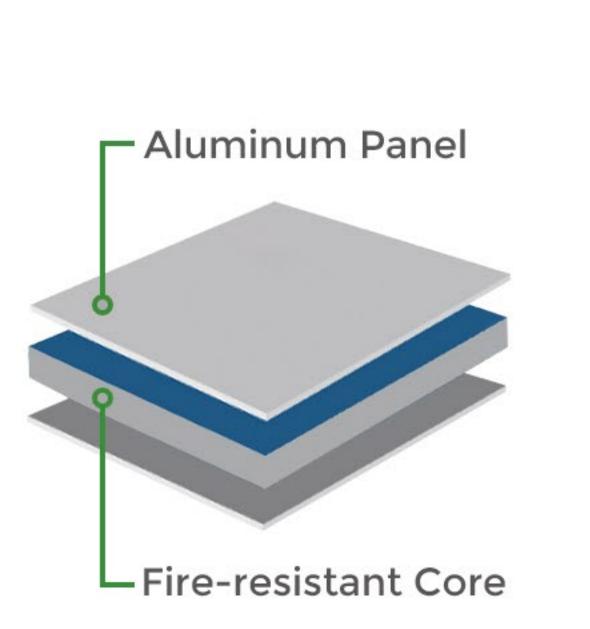


### Outstanding characteristics of fireproofing

Alucolink brand fireproof aluminum composite panel (option) fulfils the requirement of fireproof due to the usage of modified polyvinyl plastic inter-layer in between without toxicity and covering of uninflammable aluminum layer at two sides, It is a safe fireproof material and fully meets the fireproofing requirement specified in building code

### Fire-Resistance ACP General Notes







### Specification

Thickness: 3mm, 4mm Standard size: 1220\*2440mm (A2 FR ACP max length: 3000mm)

### Introduction

Alucolink Fire-resistance ACP is advanced Fire-resistance interior and exterior wall decoration material which is composed by aluminum and fire-resistance core. It is rated to 3 fire-resistance levels of B1+, A2\* and A2. Alucolink Fire-resistance ACP is tested by SGS abd INTERTEK and the product meet the standard of GB 8624 (GradeB, GradeA2), ASTM E119(2 hours Fire-resistance), NFPA 285(Qualified), EN 13501-1(Grade B, Grade A2), BS 476 Section 6 and 7 (Grade 0&1).

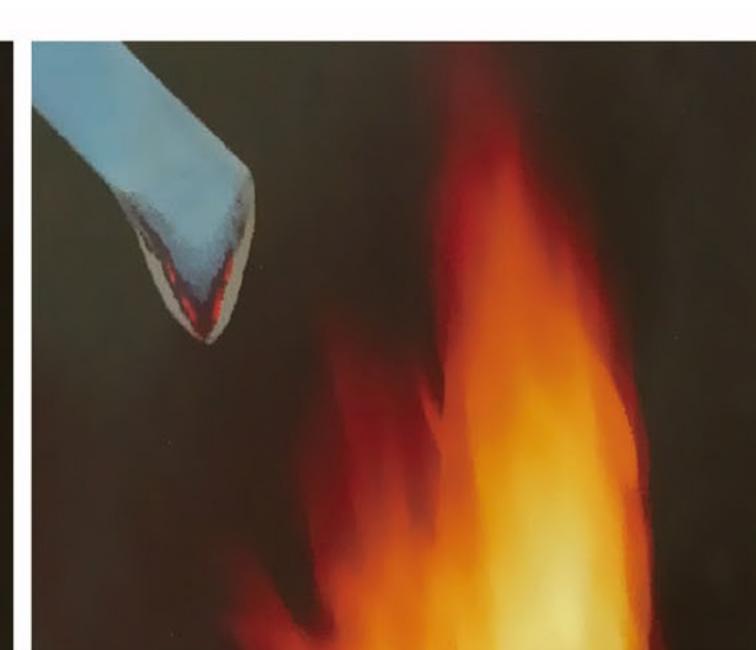
### Characteristics and Usages

Compared with solid aluminum, Alucolink FR ACP has advantages of lower price, lighter weight, high strength, flatter surface, better coating quality ,better insulation effect and easier processing., ect. It is the replacement of traditional solid aluminum panel product and fits for high FR required curtain wall, indoor and outdoor decoration.

The following is contrast Fire-resistance tests among Grade A2 ACP , Grade B ACP and normal PE core ACP (move out after 30 seconds ignition)

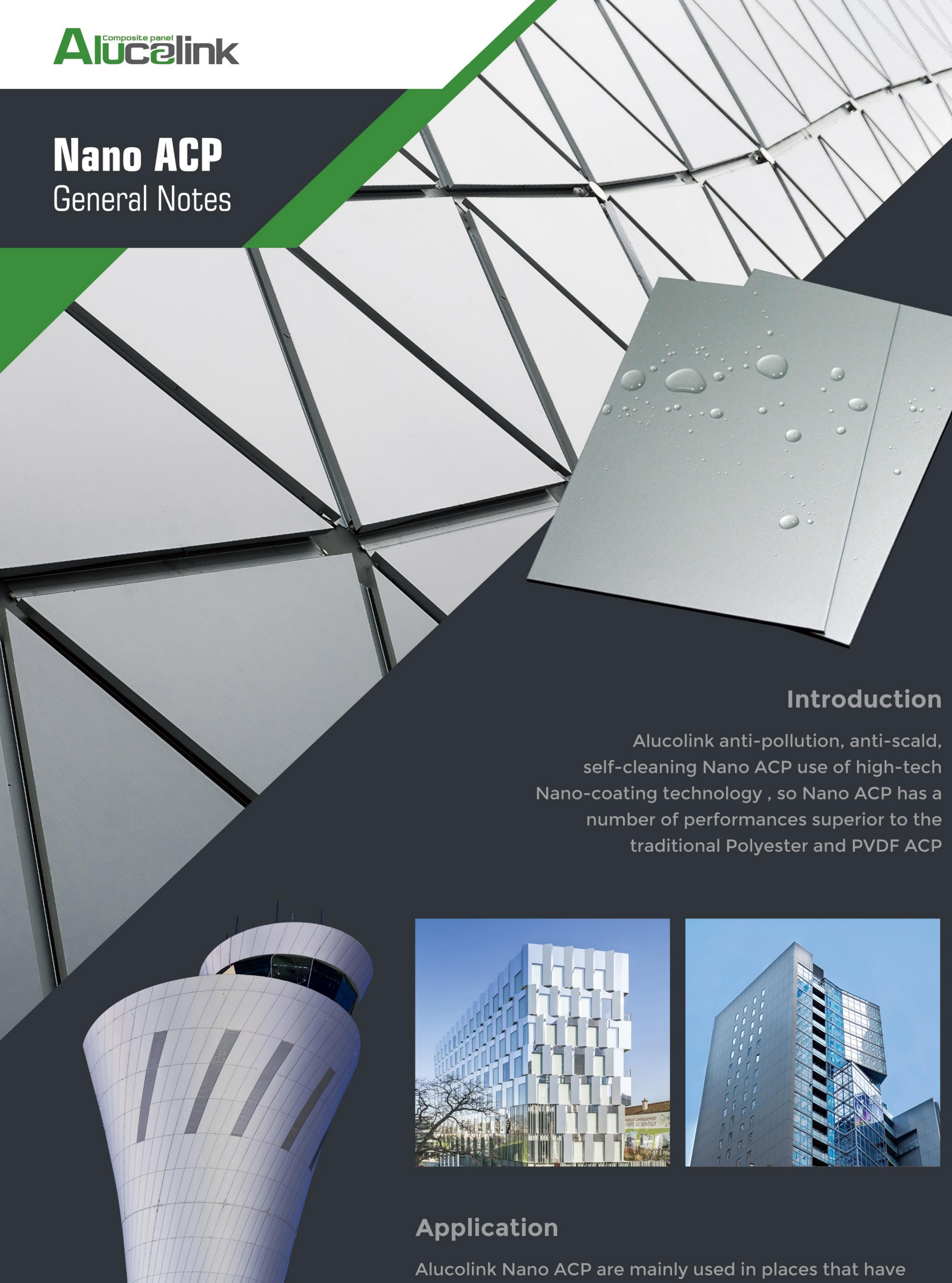


Class A2 no influence no flame





Class B flame has generated Normal PE core ACP(combustible)



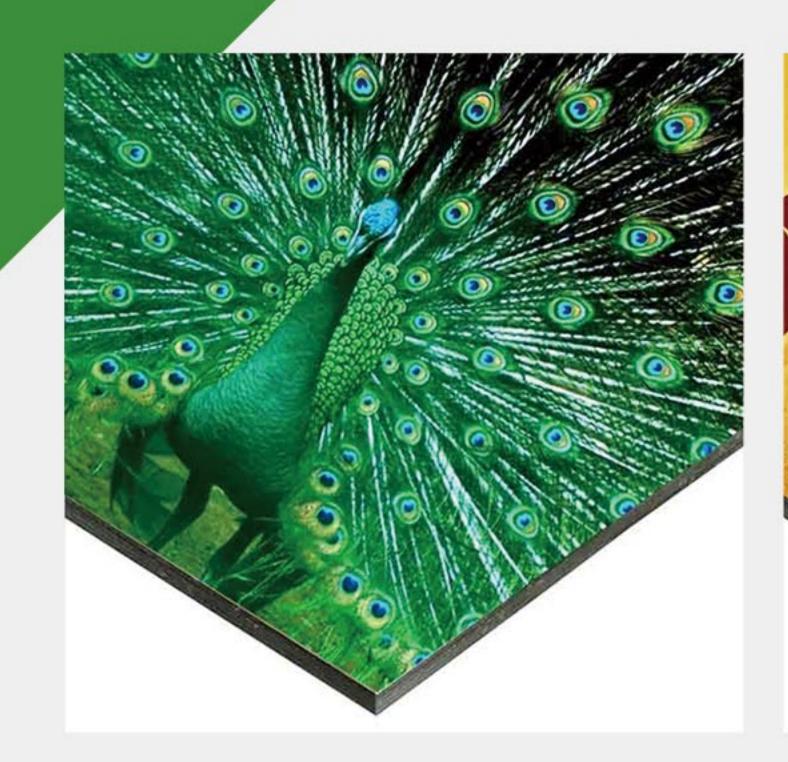
higher requirements to climate and environment protection,

such as high-grade building curtain walls, exhibition centers,

star-rated hotels,airports,gas stations .,etc.

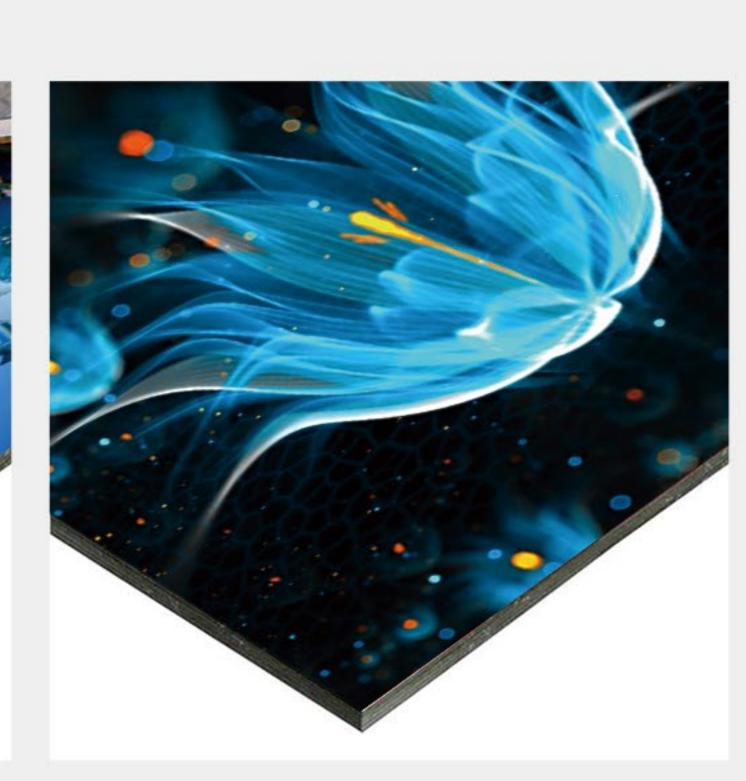
### Adverstisement ACP

General Notes









### Technical Parameter of the Advertisement ACP

Project	Standard Specification and Parameter		
Aluminum skin thickness	0.12mm-0.50mm		
Aluminum panel thickness	2mm-6mm		
Panel Width	1000mm,1220mm (regular), 1250mm,1300mm,1500mm,1550mm, 1575mm, 2000mm (maximum)		
Length	Up to 6500mm		
Standard size	1220mm(Width) ×2440mm(Length)		
Surface Treatment	PVDF coating and PE coating		
Aluminum Source	South West Aluminum Factory		
PE core Material	Non-toxicand low-density Polyethylene		
More Service	OEM, Samples free(samples will be sent in one day time)		



#### Introduction

Alucolink Adverstisement ACP is a kind of bran-new advertising material, there are many advantages, such as Full HD printing, smooth and high gloss surface, and compare to the traditional advertising board material, the digital printing acp, the color can keep longer.

### Special Advantages

Customizable design and material:offer customers much more options, can be applied to most of the scenes, indoor, outdoor, outdoor mobile advertising, already meet most target customers' requirements.
 Thin but solid: As the new type building material, it's security features will make it much suitable to place in crowded places.

### Aluminum Honeycomb Panel

General Notes

Aluminum Alloy Plate

Introduction

The alveolate aluminum panel is a sandwich which is composed by high temperature and high pressure, the surface and the basal surface of the alveolate aluminum panel is fluorin painted aluminum alloy plate, which has superior weather resistance and Hi-impact, meanwhile the mid-layer of the alveolate aluminum panel is alveolate aluminum interlayer.

### Technical Parameter of the Alveolate Aluminum Sheet

Aluminum Honeycomb Core

Project	Standard Specification and Parameter
	Overall Thickness:10, 12, 15, 20, 25 mm
Specification	Width ≤ 1500 mm ( Other width can be negotiated)
	Length ≤ 10000 mm ( Other width can be negotiated)
Front Panel	Material: High grade aluminum alloy (3003,5005, 5754, AA1100)
Front Panel	Thickness ≥ 1.0 mm(curtain wall panel's standard); ≥ 0.7 mm(nonstandard)
Core Materials	Material : High grade anticorrosive aluminum honeycomb core material
Core iviateriais	Aluminum foils' thickness: 6mm
Back Panel	Material : High grade aluminum alloy (3003,5005, 5754)
Dack Parier	Thickness $\geq$ 0.7 mm(standard); $\geq$ 0.5 mm(standard)
Binder	Two-component high-temperature curing polyurethane adhesive of fuller /hot melt adhesive membrane.
Treatment	Roller coating/ Anodized oxidation/ Powder coating/ PVDF coating
Color	Plain colored, metallic color, pearl etc
Density	5.0-7.5 kg/ m2
Fireproof Performance	A2 (GB8624-2012)

#### **Features**

- 1. Energy saving, green material: Good thermal and sound insulation & sound insulation, fire resistance.
- 2. High windload resistance: High strength & rigidness and stable structure of honeycomb core.
- 3. Easy installation & low labor cost: Light weight
- 4. Good decoration: Excellent flatness & wide color selection.

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### Painted Aluminum Sheet Roll

General Notes





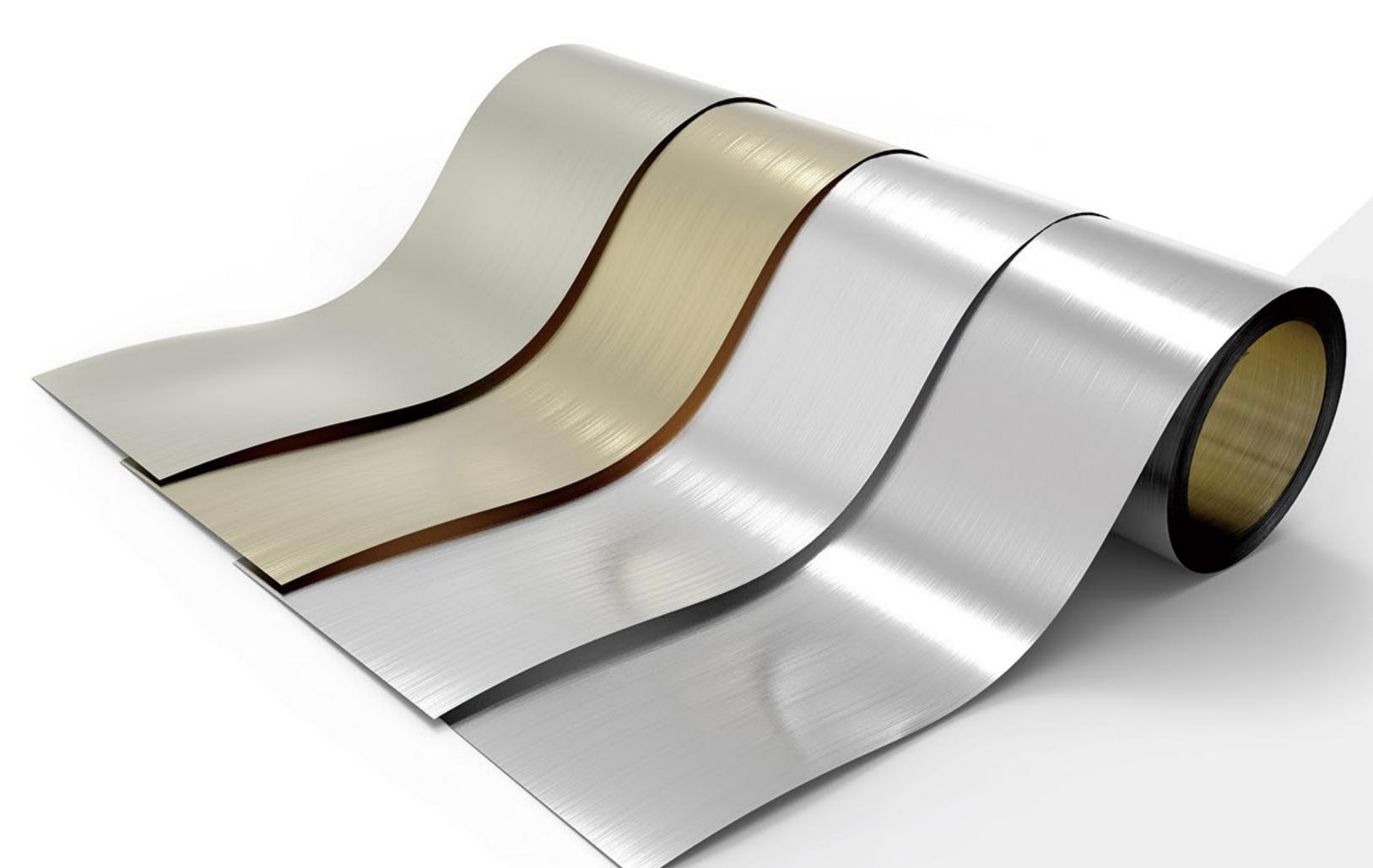


### Introduction

We introduced the more color-coated aluminum coils production lines, which used the latest spray rinse machine, multi-dry multi-coating technology. It can produce color coated aluminum coll, color coated aluminum foil for food package, color coated metal coil, the annual production is 20,000 ton (The aluminum thickness is as following: 0.8mm--0.5mm--0.2mm--0.022mm, width is smaller than1620mm). There are assorted production lines such as embossed aluminum production line, quarto platen press, slitting machine, cutting machine and so on.

20,000 ton

the annual production of aluminum coil



#### What We Also Produce

Draw bench Color coated aluminum coil
Skid-proof color coated aluminum coil
Stainless color coated aluminum coil
Punching color coated aluminum coil
Wooden and granite coated aluminum coils









Product Name	Color Coated Aluminum Coil	Product Name	Color Coated Aluminum Coil	
Alloy	1060,1100,3003,3004,5052	Color	RAL or Customized	
Temper	H18,H26,H16,H14,H24,H22,O	Gloss	10-90%(EN ISO-2813:1994)	
Thickness	From 0.14mm to 1.2mm	Coating Thickness	PE: more than15 micron	
Width	Not more than 1300mm		PVDF: more than20micron	
Diameter	Interior dia:508mm	Coating Hardness	More than 2h	
Weight	2.0-3.0 Tons/coil	Coating Adhesion	Bending test more than 3T	
Coating	PVDF, PE, AC or FEVE	Impact Resistance	No peeling or cracking	
Surface Embossed	Mill finish, coated	illipact Resistance	(50 kg/cm,ASTMD-2794:1993)	

### **Aluminium Base**

We adopt the aluminium base as follows:

1100H18; 1100H16; 1050H14; 1050H16; 1050H18; 3003H24; 3004; 3A21; 5052H39; 5052H32; 5005 and so on.

The pretreatment potion we used is made by the well-known Henkel and Chemetall GmbH,

and the coating is made by American PPG, Sweden BECKER and American Valspar.

There is PVDF coating, Nano self-clean PVDF coating, PE coating, Acrylic coating.

07



General Notes



As a new type of building materials, the fluorine-carbon aluminum panel strews gracefully in all spaces of buildings of different styles on all corners of the world. It can be processed into different shapes easily.

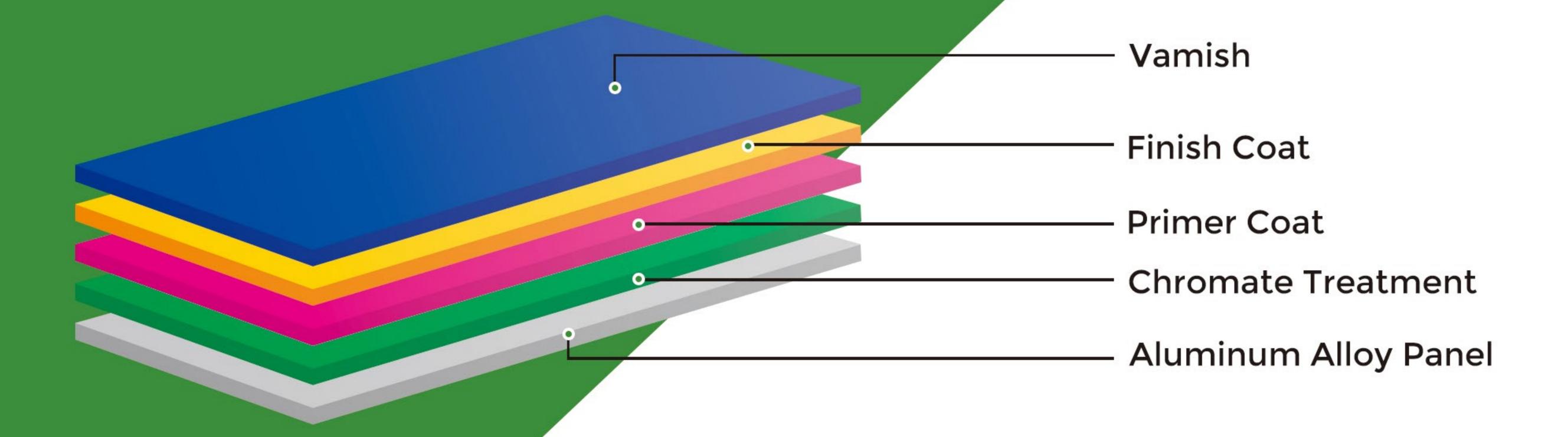
The base plate adopts the high-quality and high-strength aluminum alloy plate whose thickness includes different specifications like 2.0mm, 2.5mm, 3.0mm and 4.0mm. It mainly consists of such parts as panel, strengthening rib and decoder. The maximum size of the finished piece can reach 8000mmx1800mm (LxW).



Aluminum Plate Spray Coating Workshop



Aluminum Panel Structure



	Techinical Specification of PVDF Aluminum Sheet (GB/T 23433-2009)					
		Item	Performance Requires	Item		Performance Requires
	Film thickness	Average	≥40µm	Chemical resistance	Hydrochloric acid resistance	No change
	I IIIII CIIICKIICSS	Min	≥34µm		Nitric acid resistance	No change ΔE≤5.0
	Gloss tolerance	Gloss value<30	±5		Mastic resistance	No change
		30≤Gloss value<70	±7		Solvent resistance	Butanone no base exposed
		70≤Gloss value	±10	Abrasion resistance		≥5L/µm
	Film adhesive		Grade 0 by gross hatch method	Salt spray resistance		No lewer than grade 1
				Humidity resistance		No lewer than grade 1
	Surface pencil hardness		≥1H	Artificial weathering	Color retention	ΔE≤3.0
	Impact resistance		50kg*cm,No peel off		Gloss retention	≥70%
					Others	No lewer than grade 0





### **Machine Introduction**

Japanese Lan's RANsRURG line ,the most advanced paint technology coating equipment ,is used to guarantee the level and zero aberration. The whole set of production line is monitored by the computer center ,the filter system of a hundred thousand grade also guarantee the particle counts is more than 0.5um in the spray area and the cleanliness is less than 25/L, which avoid the coating workpiece contaminated by the dust.

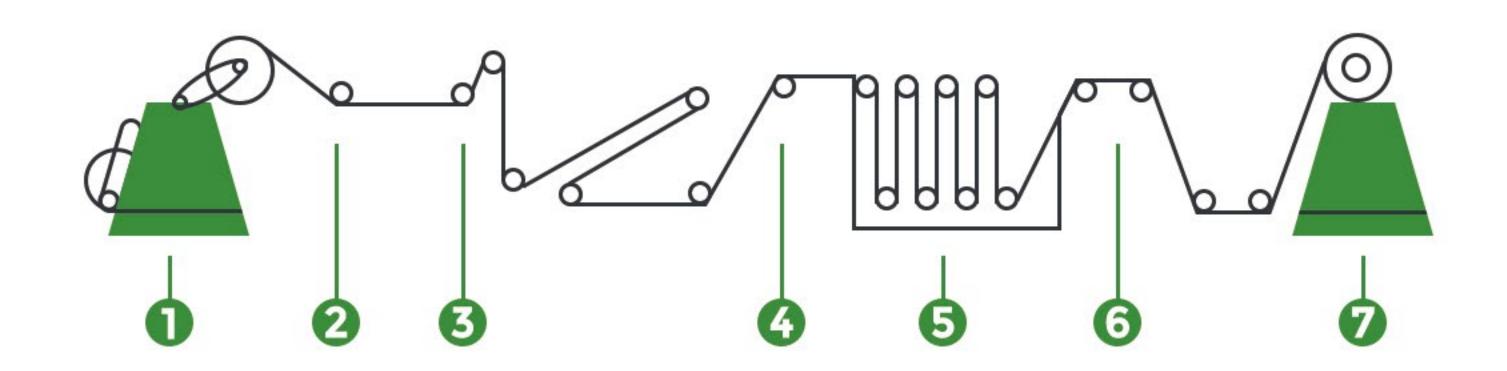
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### All Calink

### Process Of Production

General Notes

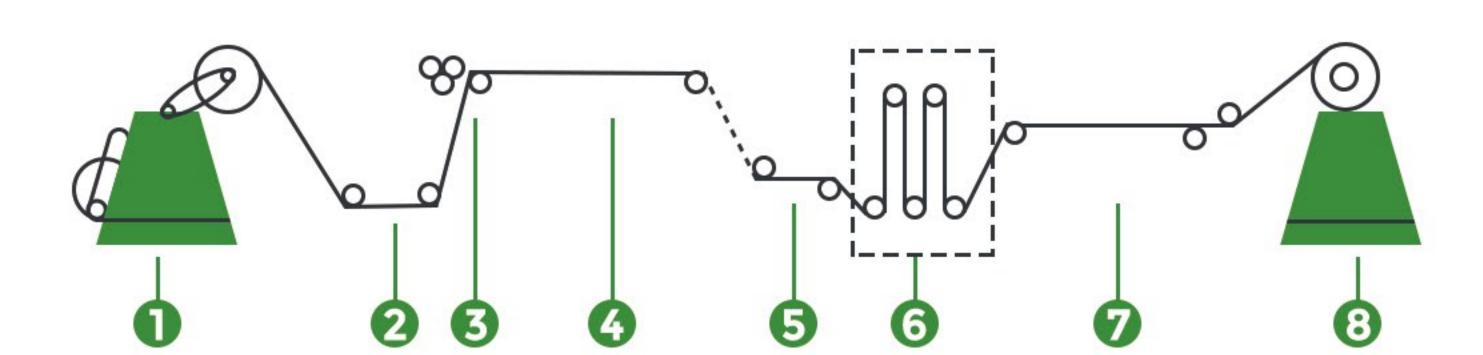
### **Chromating Line**



- 1. Unroll
- 5. Chromating
- 2. Brush Degrease
- Drying
- 3. Soak Degrease
- 7. Rolling
- 4. Neutrualization

The chromating line is to clean the lubricating grease and antioxidative grease adhesive to the surface while being rolled, and other impurities such as silicon, magnesium, iron and copper that deposit on the surface of aluminum materials. The company uses qualified industrial chemicals and advanced technology from German Henkle cp.,ltd. to have a honeycomb oxidative coating of high density, which becomes an agent to make paint and aluminum firmly adhesive with each other. This agent has very strong adhesive force.

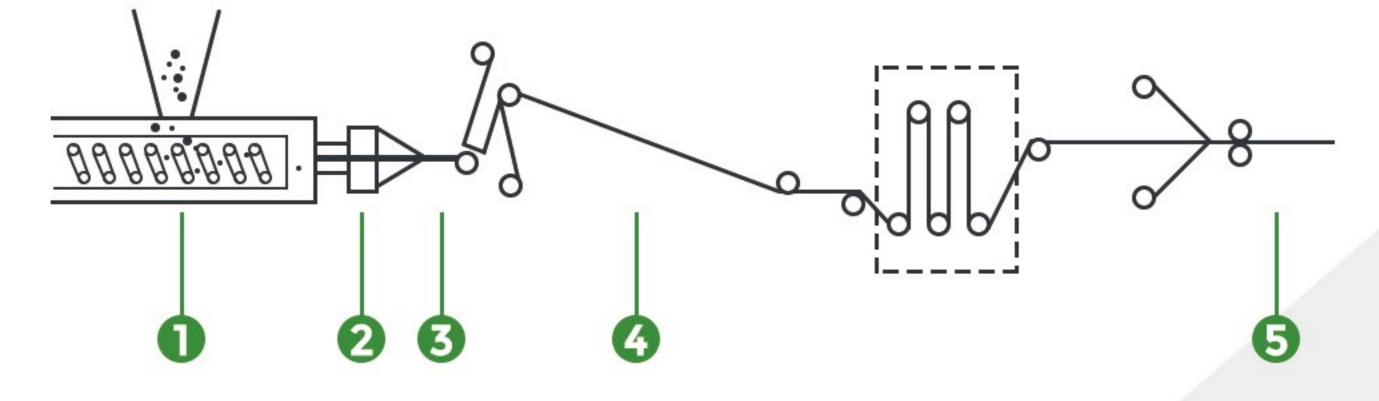
### **Precision Coating Line**



- 1. Unroll
- 5. Transfer
- 2. Drying
- 6. Storage
- 3. 3 Roller Coating
- **7.** QC
- 4. Toasting
- 8. Rolling

The precision coating line is to coat the chemisynthesized aluminum roll with various paints accoring to the needs of the customers. The company has an advanded three-roller reversal precision coating machine that can operate under sealed ,dustless condition so that the thickness of coating and its outer appearance are under proper control. The oven is divided into four temperature-controlled areas ±1°C to make the coating reach the best condition in its solvent resistance, hardness, flexibility and good glossiness, strong adhesive force and corrosin resistance.

### Continuous laminating line



1. PE Extrusion

2. Smoothing

4. Transfer

5. Laminate

- 3. Film
- This is the key equipment of producing aluminum composite panel. It can make aluminum material, PE core and adhesive polyolefine film firmly adhesive to one another under high heat and high pressure so that the panel is smooth in its surface, With imported qualified adhesive Polyolefine film, advanced equipments, perfect technology and strict quality control, we have produced the aluminum composite panel whose peel strength is two times of the national standard and superior to the quality index of imported panels.

### Processing Method

General Notes

### Introduction

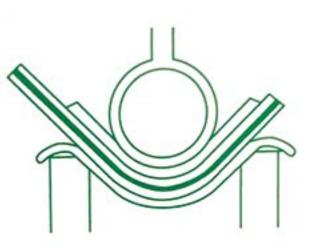
Alucolink panel is very easy to process. All cutting, milling, slotting, side-folding and curving can be easily fulfilled by simple tools used for processing timber and metal. It can be shaped into various shapes, such as curve, reserve curve, curve corner and sharp curve, according to requirements of building design. It is incomparable for other decorating materials.

Normal aluminum product processing machiniery and wood product processing machinery can be used for processing of Alucolink panel without special device.



### Bending with panel bender

When plate folder is used to finish the Alucolink panel, dies shall be placed on with appropriate radius.



### Saw Cutting

It can be easily processed with wood product processing saw and plate saw. It's recommended to use hard alloy blade



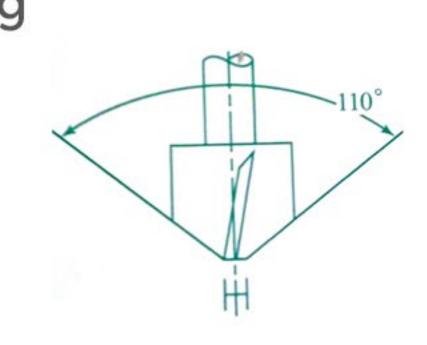
#### Riveting

Countersunk rivet can realize easy



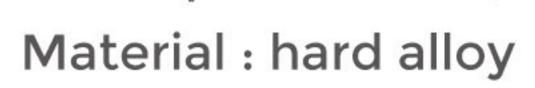
#### Slotting

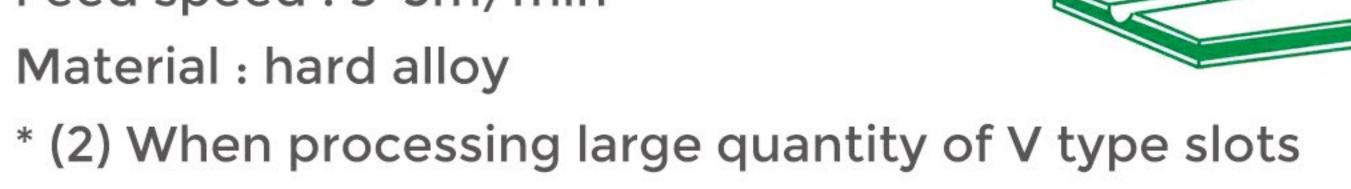
It's important to make the V type slotting process with a distance of 0.2-0.4mm from the polyethylene substrate. The recommended slot angle is 110.



\* (1) milling machine and trimmer Use the modified drill as showed in the left chart. Running speed : 20000-30000rpm

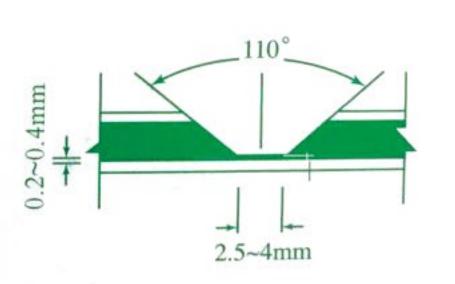
Feed speed: 3-5m/min





It's recommended to use round saw and belt saw. And the following is an example of slotter:

- \* material : hard alloy flake
- \* outer diameter : 305mm
- \* number of teeth: 24
- \* running speed : 3000-5000rpm
- \* feed speed : 5m/min



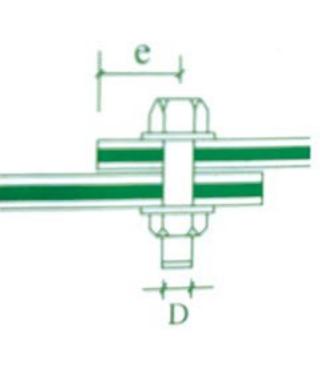
### Bending with 3-roller panel bender

3-roller panel bender is more preferable for bending of large internal diameter to plate folder



### Bolting

Considering from deformation limit, formul e>2D is the best calcalation way of aperture D and distance from hole center to plate end.



#### Bending with panel folder

It operated on the platform, bending part can be made very tidy.

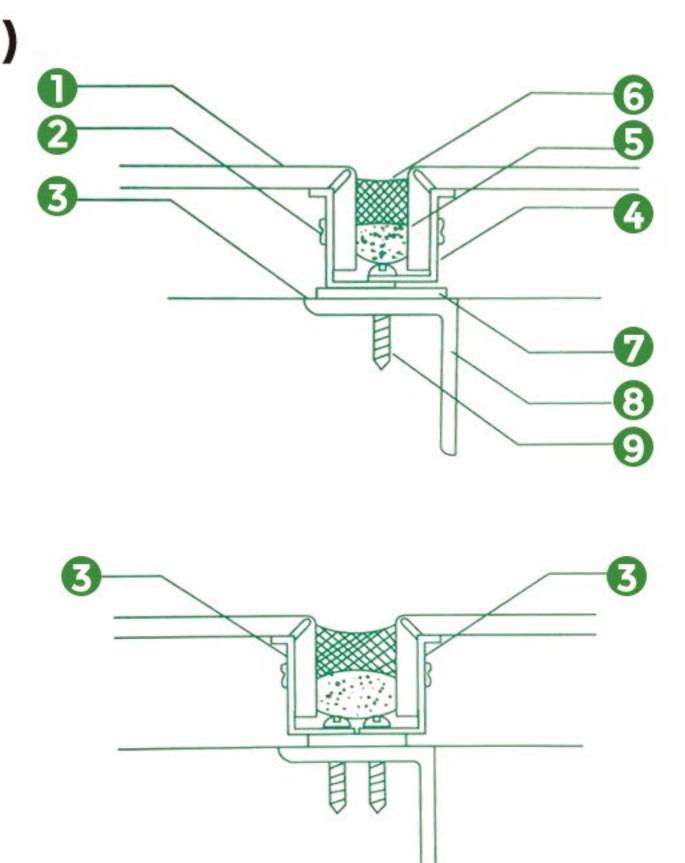


### Scheme of Instalation

### Example of panel type and joint design (A)

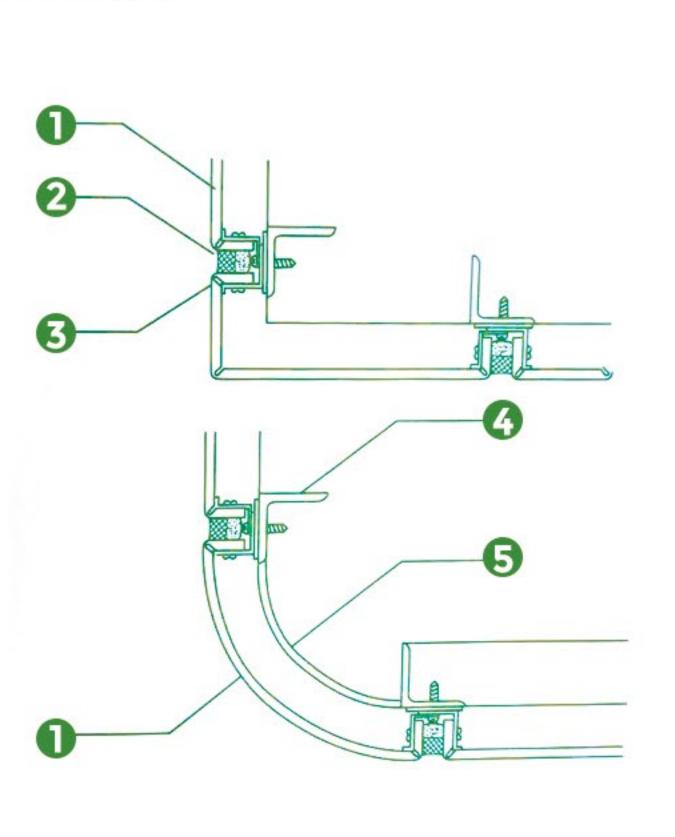
Angle aluminum and seal joint(1)

- 1. Alucolink panel
- 2. Aluminum rivet
- 3. Angle aluminum (Big)
- 4. Angle aluminum (Small)
- 5. Bach spacer
- 6. Sealing material
- 7. Spacer
- 8. Angle bar
- 9. Bullen screw



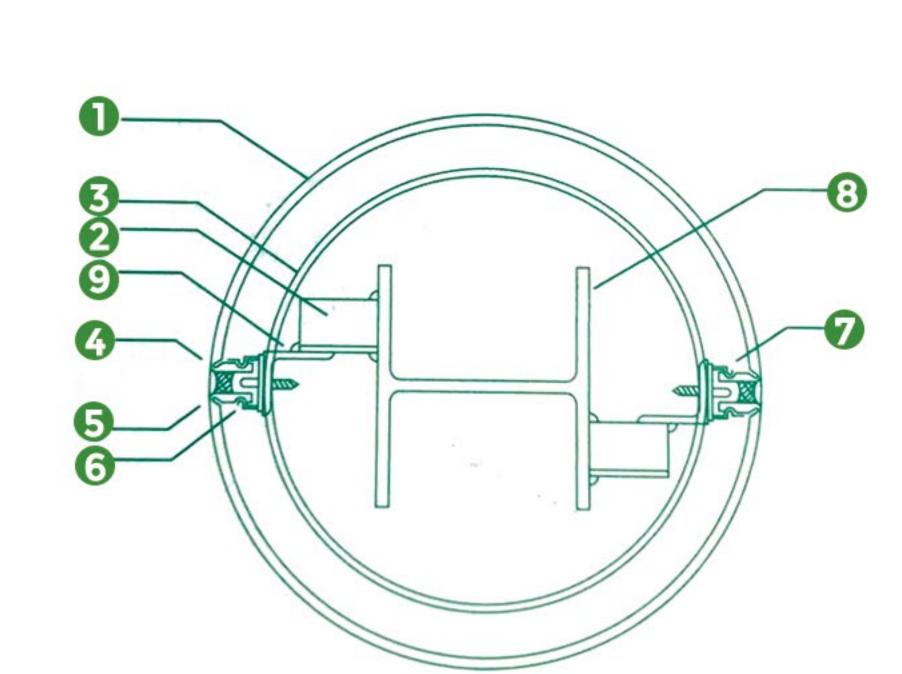
### Installation example of external corner

- 1. Alucolink panel
- 2. Sealing material
- 3. Lining material
- 4. Angle bar
- 5. Steel plate strip



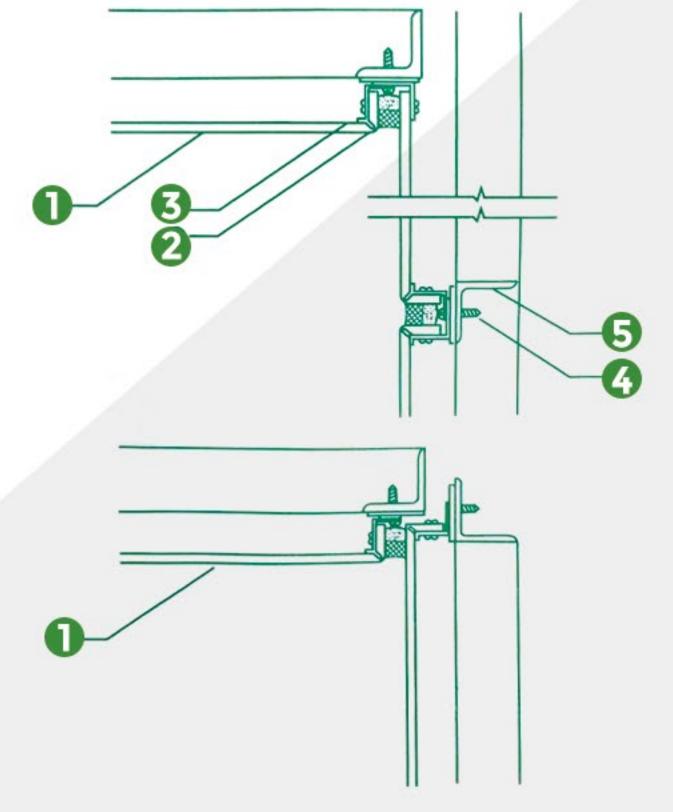
### Example of column covering

- 1. Alucolink panel
- 2. Angle support
- 3. Steel plate strip
- 4. Sealing material
- 5. Plastic lining bar
- 6. Accessories
- 7. Bullen screw
- 8. Bearing strut
- 9. Angle bar



### Installation example of internal corner

- 1. Alucolink panel
- 2. Sealing material
- 3. Lining material
- 4. Angle bar 5. Bullen screw



#### Above mentioned accessories are used for low buildings.

2-

0

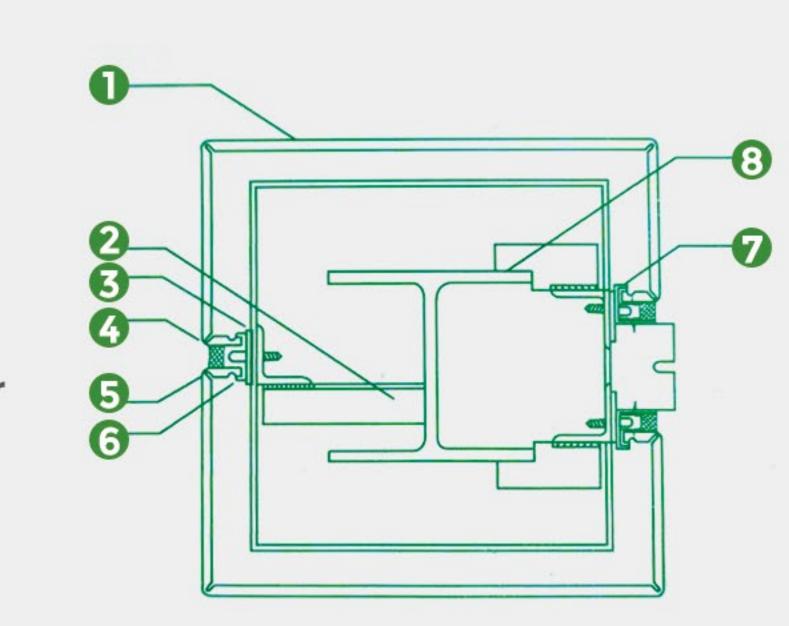
### Installation example of building top

- 1. Alucolink panel
- 2. Building top
- 3. Angle support
- 4. Angle support
- 5. Angle bar
- 6. Sealing material
- 7. Lining material
- 8. Bullen screw

Built-in anchoring or expanding bolt

### Example of strut covering

- 1. Alucolink panel
- 2. Angle support
- 3. Angle bar
- 4. Sealing material
- 5. Plastic lining bar
- 6. Accessories
- 7. Bullen screw
- 8. Bearing strut



Above mentioned accessories are used for low buildings

## Project Show

China National Convention and Exhibition Center









Russia Khabarovsk Gymnasium



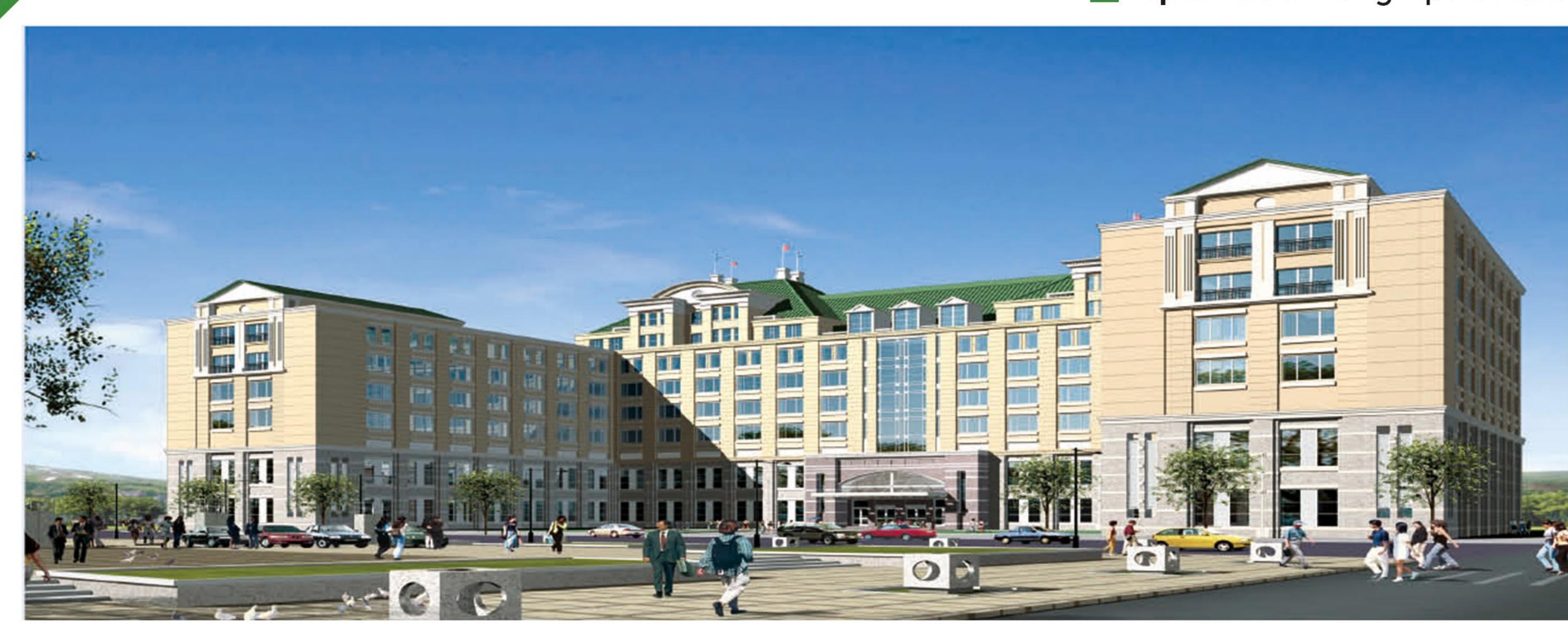
Russia Khabarovsk Petro Station



Mexico High School of Queretaro City

## Project Show

Spain Gelaimeng Apartment





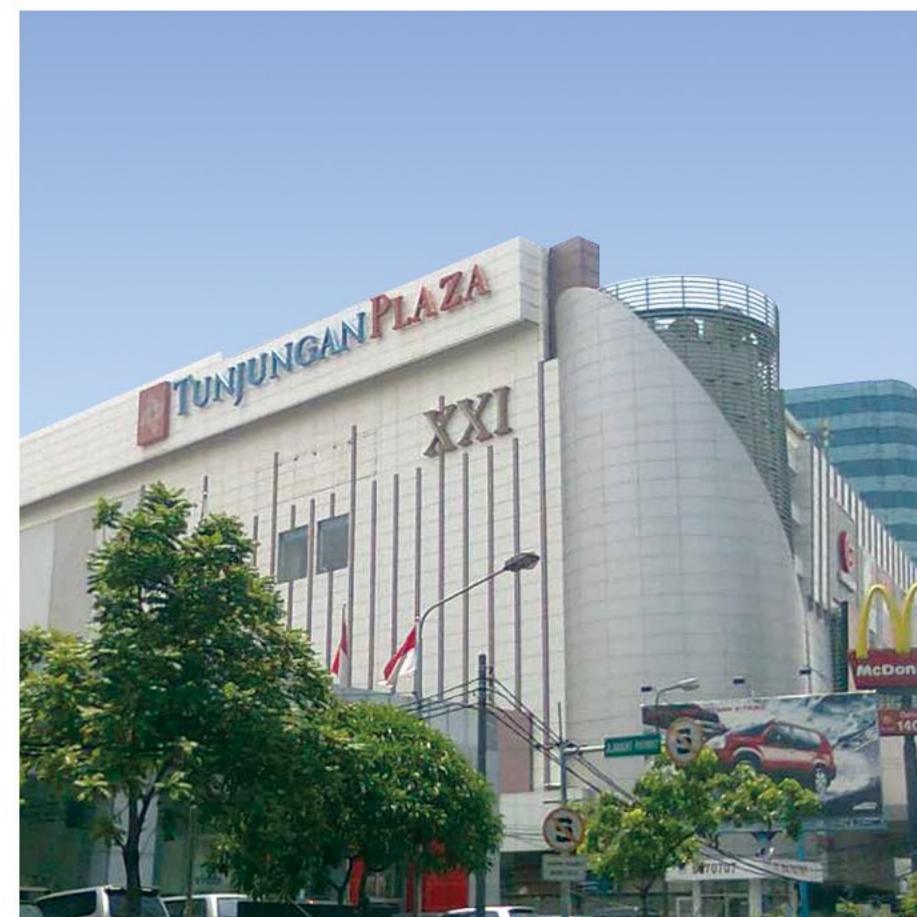
Russia Khabarovsk Opern



Italy Mierji Building



**USA PALMS Centre** 



Indonesia TUNJUNGAN PLAZA Bahrain Central Business Centre

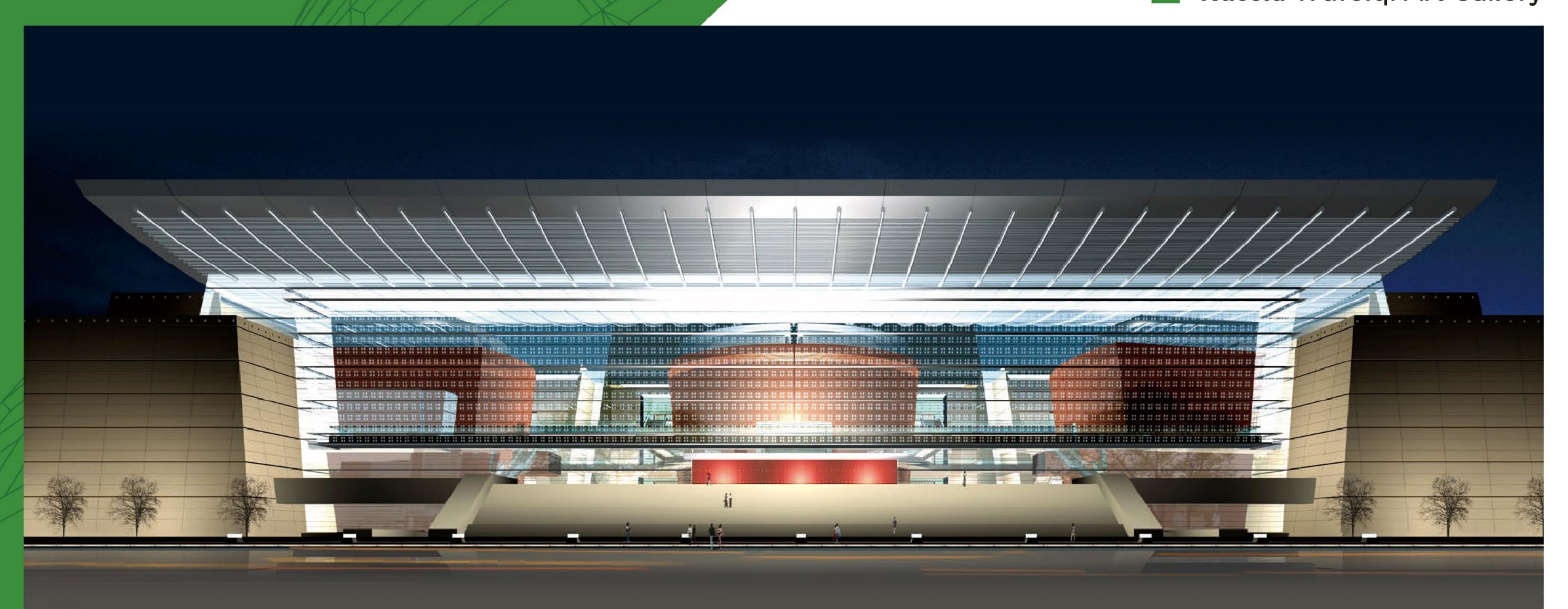


# 300

Projects Abroad

Exported Countries



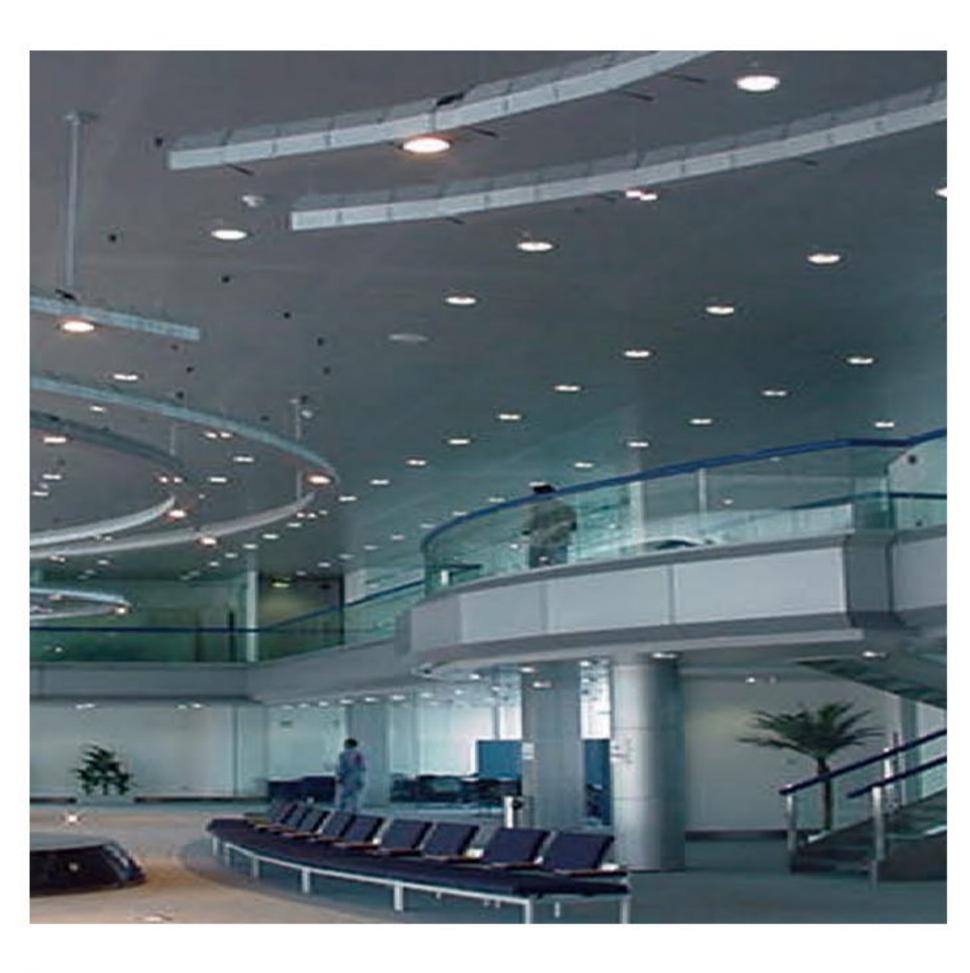




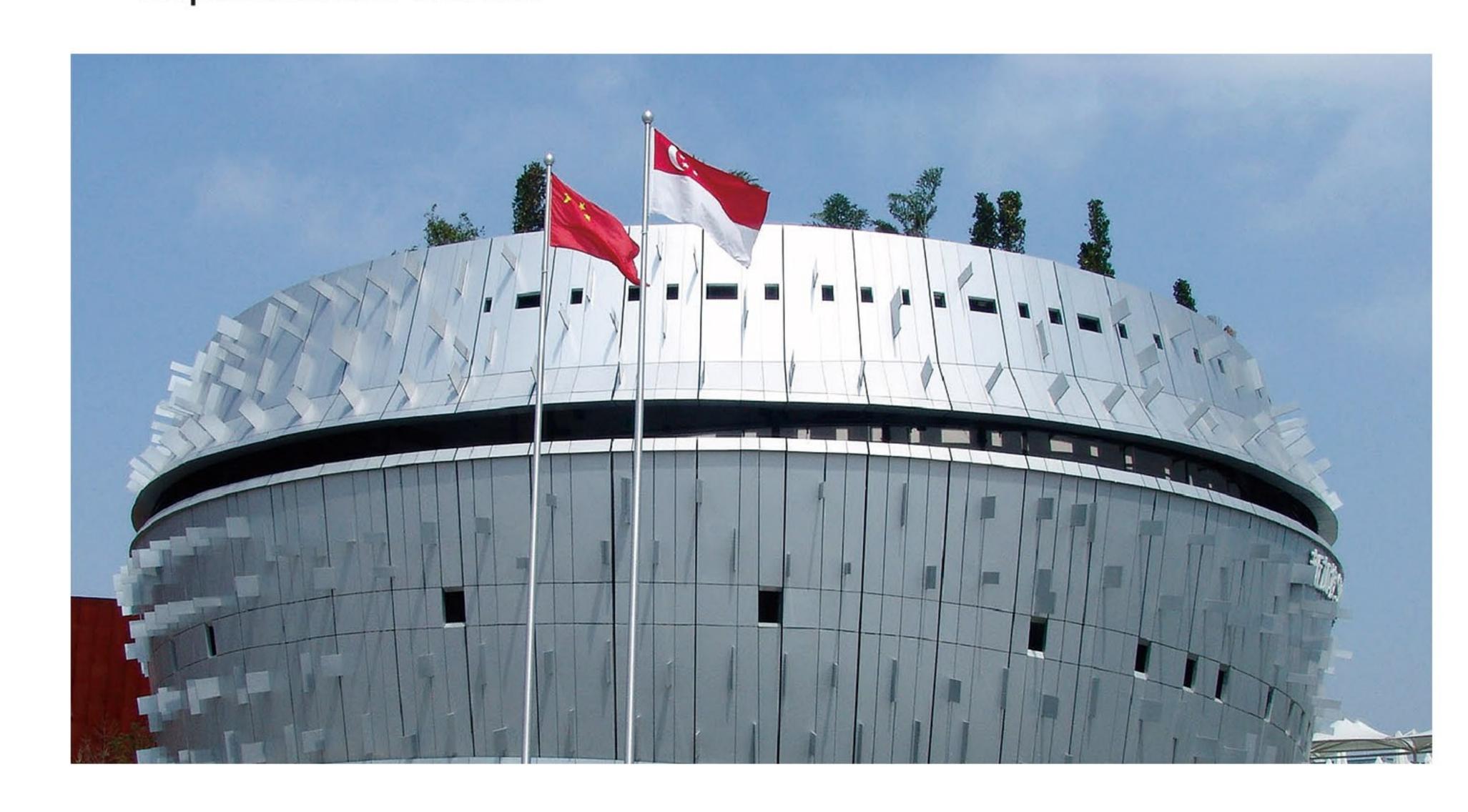
Mexico Queretaro Supermarket Centre



**UAE** high tower club



Russia Khabarovsk Environmental **Protection Office Building** 



The Sigapore Pavilion of the Shanghai World Expo