

PRODUCT BROCHURE



SIGNAGE DESIGN

WISDOM METAL COMPOSITES LTD

-  www.alucosun.com
-  +86 510 86076882
-  Sales@alucosun.com



OUR EXPERTISE

ALUCOSUN®, a young brand for Aluminium Composite Panel market, but has almost 20 years experience in Aluminium Composite Panel industry.

We are ready to be the leading manufacturers with latest technology and updating service consciousness in market.

From the very beginning, ALUCOSUN® has been always keeping its eyes open for the whole way, from the adoption of the raw materials to the end products, which are all fulfilled by the quality control system -- perfectly composed of professional inspectors and advanced laboratory apparatus, assuring all the products in accordance with international standards

We invite you to put our products for testing, you will get more than you expected!

**NOT ONLY
APTITUDE,
but also attitude
determine our
altitude.**



Product Structure



ALUCOSUN® aluminium composite panel is composed of two aluminium sheets and polyethylene core that are laminated in the continuous process with high temperature.

4 KEY OF WORDS THAT WHY CHOOSE ALUCOSUN PRODUCT



EASY PEEL FILM

We have our unique easy-peel protective film which can be easily peel off whenever you use, while the panel surface would not stay any crease wherever you stop. What's more, such films' viscosity would not increase as time goes by, that would be good for your long-term stock.



PROFESSIONAL QC SYSTEM

Double inspection and tracking system for each batch order. Our international trade department especially has one professional inspection team for tracking from beginning to after shipment, in any case the quality issue happens, we can inform customer in advance and resume the same order in short time.



SHORT DELIVERY TIME

We have varied specification inventory mill coils for various clients from all over the world. Your shipment will arrive on the day if it promised.



INNOVATION

We cooperated with PPG company to develop one special PE paints that can compatible with all types of digital machines.

STANDARD COLOUR RANGE

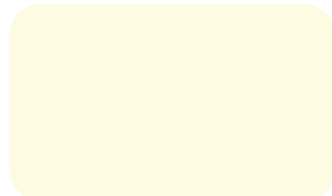
ALUCOSUN® polyester color is the ideal paints finish. Thanks to the continuous coil application which ensures consistent and long-lasting colors, the substrate can be directly used for diferent filed. Such as sign and display application, interior decoration as well.



AC3001 Ultra White



AC3002 Digital White



AC3003 Light Ivory
RAL1015



AC3004 Traffic Grey
RAL7042



AC3005 Traffic Green
RAL6024



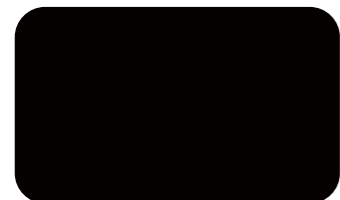
AC3006 Moss Green
RAL6005



AC3007 UltraMarine Blue
RAL5002



AC3008 Blue
RAL5022



AC3009 Jet Black
RAL9005



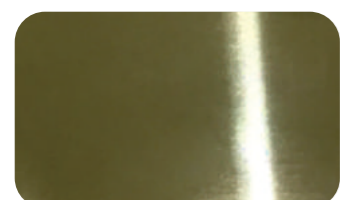
AC3010 Traffic Red
RAL3020



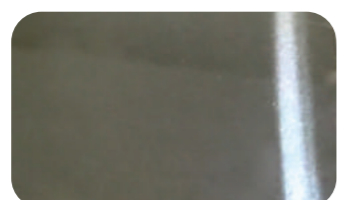
AC3011 Purple Red
RAL3004



AC3012 Traffic Yellow
RAL1023



AC0001 Gold Mirror



AC0002 Silver Mirror



AC4001 Silver Brushed



AC4002 Gold Brushed

ALUCOSUN DIGITAL PRINTING SURFACES

TOUCH AND FEEL THE DIFFERENCE!



APPLICATION

ALUCOSUN® good properties earn itself an important place in signage and displays which require basic durability and interior decorations which demand creativity and time-effectiveness.



SIGN & DISPLAY



INDOOR DECORATION



SIGN MAKING AND SHOP FITTING

Thanks to the outstanding flexibility and formability of ALUCOSUN® PE, it suits itself extremely well in the manufacture of signage, displays, exhibition stands, etc.



INTERIOR DECORATION

ALUCOSUN® PE, PPG guaranteed paint, with various color and gloss options, gives the ideal solution for interior decorations.



LED/ UV DIGITAL PRINTING

ALUCOSUN® offers both UV digital printing and LED printing. It can compatible for all types of printing machines, the panel surface also capable for LED digital printing. For sure, the LED printing technology can save 50% energy. The LED light cost can be use for 4000 hours, also environment-friendly, more stable, easy operation. It should be the trend for printing industry.



DIGITAL PRINTING



QUALITY ASSURANCE

Good products reply on good raw materials, while the matured quality control system for production is also the key for products. Our mission is offering reliable products and services of exceptional value which help our customers get competitive advantages in markets.

Pre-Production Inspection

Before mass production, the lab need to test and simulate production. We test the chemical properties, physical properties, solvent properties and UV testing of the aluminium coil and paint to make sure it in good condition to make for real production.



During Production Inspection

We selected our workers who are well trained with more than 5 years experience for online tracking and inspections. They track and test online production every 30 minutes. From the paints performance, the dimension, weight tolerance and the peel-off strength testing, we kept on-site ACP samples every one hours for next step tracking purpose.



After Production Inspection

All production batch ACP samples are kept under sun exposure for 30 days, and ALUCOSUN® inspectors test the samples every week to monitor the peel-off strength data if stable.

All above testing samples and technical data kept in data room for 10-15 years based on our guarantee times. All purpose for tracking and inspection is to limit the risk of any de-lamination possibilities in future and trace after production .



Panel Dimensions

Item	Range	Standard Size
Panel Thickness(mm)	2-8mm	2mm, 3mm, 4mm, 6mm
Aluminium Skin Thickness(mm)	0.1-0.5mm	0.1mm, 0.15mm, 0.21mm, 0.3mm
Width	1000-2000mm	1000mm, 1220mm, 1250mm, 1500mm, 1525mm, 2000mm
Length	≥1000mm	2440mm, 3050mm, 3660mm, 4050mm

Surface Properties

Paint Thickness (micron)	18-20μm
Pencil Hardness	2H
Toughness of Coating	3T
Temperature Resistance	-40°C~+80°C
Impact Strength (Kg/cm2)	50kg/cm2
Boiling Water Resistance	2hrs, no change
Acid Resistance	2% HCL, 24hrs no change
Alkali Resistance	2% NaOH, 24hrs no change
Oil Resistance	20# engine oil, no change
Solvent Resistance	200 times by MEK
Cleaning Resistance	>1000 times without change
Peel Strength 180°	>5 Newton/mm

Dimensional Tolerances

Thickness (mm)	-0 + 0.2
Width (mm)	± 2
Length (mm)	± 3
Diagonal (mm)	± 5
Bow Maximum(mm)	≤5
Squareness Maximum(mm)	≤5

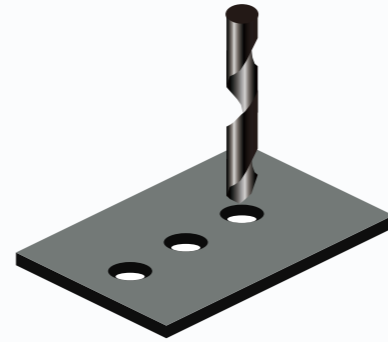
WARRANTY

All ALUCOSUN® finishes come for 5 years warranty for external use. The brushed and mirror finishes with different procedure are not guaranteed for outside application. for exact color guarantee kindly contact us for detail.

PRODUCT PROCESSING

AUCOSUN PRODUCT PROCESSING DETAILS

Drilling



ALUCOSUN® is easily drilled - For best results, use drill bits specifically designed for drilling aluminium and plastic. For large holes, a drill bit with a locating point is required.

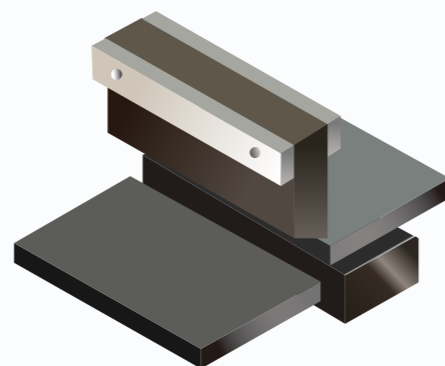
Cutting angle: 100° - 140° **Helix angle :** 30° - 50°

Cutting Speed: 50 - 300 m/min

Feed Speed: 0.02 - 0.5mm / Revolution

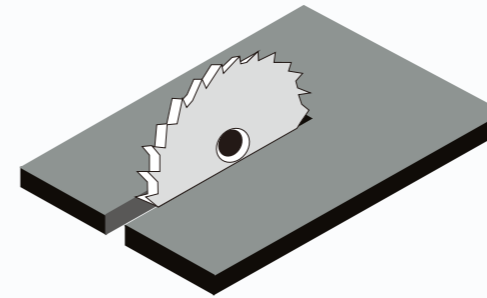
Hole Size: Screw width + 2mm

Shearing



Use a standard guillotine for this purpose. Ensure the top cover sheet is inserted properly.

Sawing and Cutting



Circular Saw: Trapezoidal / Flat tooth blade. Flat teeth chamfered at 45°, Carbide tipped.

Saw blade diameter: 300mm

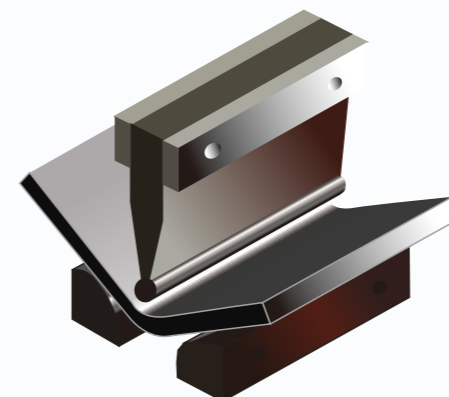
Number of teeth: 72 for cutting up to 5 panels
96 for single cuts avoiding burrs

Saw blade diameter: 250mm

Number of teeth:
60 for cutting up to 5 panels
80 for single cuts avoiding burrs,

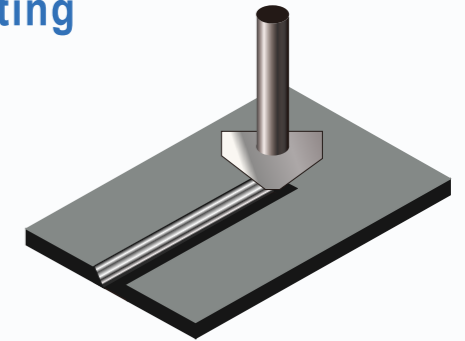
Tooth Thickness: 3.2mm
Clearance Angle: 15°
Rake Angle: 10° positive

Bending with a Panel Folder



Use a folding table. Min inside radius $r=40t$ (t =panel thickness).

Routing



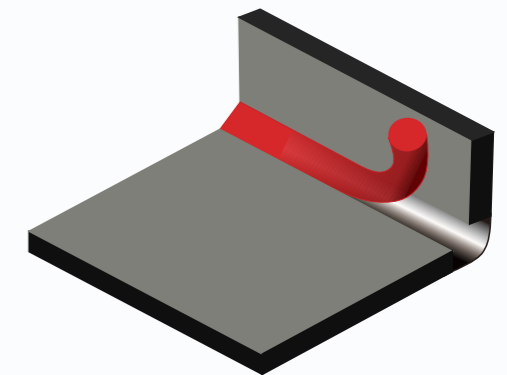
ALUCOSUN® can easily be folded by hand if a "V" shaped groove is milled on the rear of the panel. This can be done using a conventional router (available from your local DIY store) or CNC milling machine. A minimum of 0.30mm Polyethylene should be left on the back layer when routing to avoid sharp corners or paint chipping.

Sharp tools must be used in order to avoid damaging the edge of the material.

Cutting Speed: 3000 - 5000 m/min

Feed Speed: 25 - 30 m/min

Hot Air Welding



A polyethylene welding rod is available for use with an electric hot air welding set.