



QualibondTM Metal Composites

NON-COMBUSTIBLE
PRE-FINISHED
ALUMINIUM PANELS

www.qualibondacp.com

NON-COMBUSTIBLE ALUMINIUM PANELS

Qualibond solid aluminium panels set a new standard in high-performance, quality facades.

With its exceptional fire performance, this is a non-combustible solution designed to last. Offered in an extensive range of colours, these pre-painted panels are suited to a range of applications from high-rise and education to health care and residential developments.

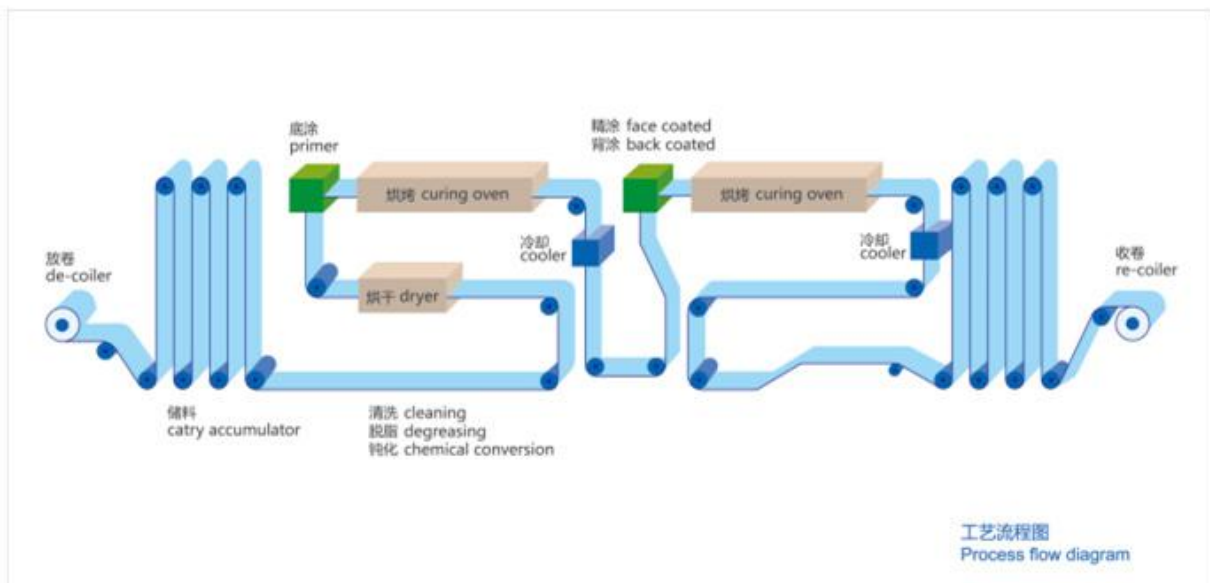
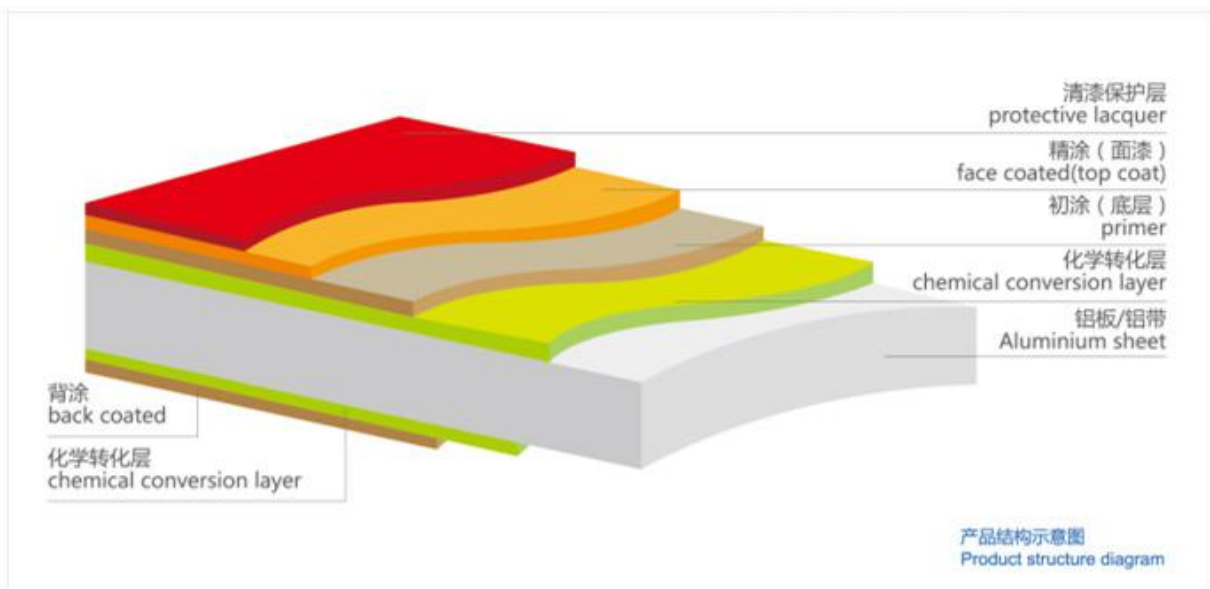
A product of enduring style

Qualibond's wide range of finishes and sizes means that even the most complex architectural designs can be achieved. Stocked in numerous colours and sizes, Feiteng also offers custom colours and measurements on request.

Qualibond aluminum panel is non-combustible, and can be easily fabricated into cassettes. This combination of low maintenance, high level safety and durability means that architects, designers, developers, builders and contractors can specify confidently without compromising design. The superior PVDF architectural paint finish of Qualibond also ensures UV stability and colour retention, so that architectural designs will stand the test of time.

A non-combustible solution that is designed to last

Qualibond offers exceptional quality and fire performance. It is categorically non-combustible, in accordance with GB8624 standards, which sets it apart from many other market offerings. The high-quality paint finish provides modern colour options with durable UV resistance and gloss retention.



BENEFITS

100% Non-combustible to GB8624

Custom sizes, colors and finishes

15-year warranty

PVDF finish

Superior long lasting finish, no cracking when fabricated.

High quality aluminium

Designed to be corrosion resistance

Easy to fabricate

When Folding, routing and cutting.

Manufacturer by our own workshop,so short lead times for delivery.

Expert advice

A team of experts with strong industry and technical knowledge is available to assist in enquirers.

Competitively priced

market priced in line with current industry climate, making it an affordable high-quality option.

Qualibond solid aluminum panel is an excellent choice to enhance the sustainability of buildings due to its exceptional corrosion resistance and recyclability. Our solid aluminium panels are 100% recyclable offering an eco-friendly solution. Up to 95% less energy is required in the recycling of aluminium in comparison to other primary metals leading a reduction in emissions.



CLEANING INFORMATION

To maintain the appearance of the Qualibond solid aluminum panels we strongly recommend regular cleaning with appropriate mild detergents ensuring that the detergent is thoroughly rinsed off the facade.

Never use cleaning products that are highly

alkaline or acidic and avoid abrasive materials and paint dissolving solvents.

Facades that are located near a marine or industrial environment may need more frequent cleaning periods.

TECHNICAL DATA SHEET

Properties	Units	Values
Alloy		3003/5005
Temper		H24
Standard thickness	mm	3
Painted weight	kg/m ²	8.2
Raw density	kg/m ³	2680
Indicative minimum radius	mm	4.5
Tensile strength	MPa	215-265
0.2% Proof stress	MPa	>160
Elongation	%	7
Linear thermal expansion		2.4mm/m at 100° temperature difference
Melting range	°c	607-650
Modulus of elasticity - Tension	GPa	69.3 @ 20°c
Modulus of elasticity - Torsion	GPa	25.9 @ 20°c
Modulus of elasticity - Compression	GPa	70.7 @ 20°c
Thermal conductivity	W/m.k	138 @ 25°c
Electrical resistivity	micro-ohm.m	70.7 @ 20°c
Electrical conductivity - Equal volume	MS/m	20 @ 20°c
Electrical conductivity - Equal weight	MS/m	67 @ 20°c
Sound adsorbtion factor	NCR	0.05
Sound reflection	%	95

FIRE PERFORMANCE

Qualibond solid aluminium panels are non-combustible when tested to EN13501

Test standard	Result		
EN13501	Non-combustible		
GB8624	Pass	Ignitability index	0
	Pass	Heat evolved	0
	Pass	Spread of flame	0
	Pass	Smoke developed	2

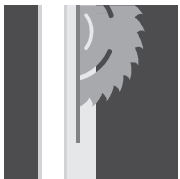
FABRICATION

Qualibond solid aluminum panel can be fabricated into panels using various techniques.



Circular Saw

For best results, a track guided circular saw is recommended. It is important to discuss blade selection with manufacturer. Hand folding is generally achievable without the need for bending equipment. A depth gauge roller suitable for 3mm thickness may be required.



Vertical Panel Saw

This type of saw can cut and route the panel. Existing vertical saws can be retro fitted with a variable speed driver controller and lubricant misting equipment. When creating a V groove for folding, the minimum thickness left in the bottom of the groove should be 0.7mm



CNC Router

This equipment can be used for straight and contour cutting along with V Grooving for folding. When establishing a V groove for folding, the minimum thickness left in the bottom of the groove should be 0.7mm. The spindle rotation speeds and feed rates are machine dependent and should be discussed with the manufacturer. In some circumstances, a lubricant mister may be required with this type of machinery. Please consult the manufacturer.



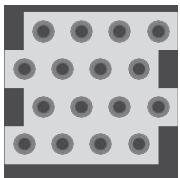
Folding

After the V groove has been formed, fold the return leg back in one movement. It is recommended that a portable folding tool be used for small panels and a folding machine/bed for larger format panels. The initial folded angle should slightly more than the final angle required.



Shearing

Can be guillotined to the required size. Ensure the cut material is captured to prevent damage.



Perforating

can be perforated by punching, drilling or milling. Contact Qualibond to discuss the pattern and open area you are seeking to achieve.

It is strongly recommended that you consult with machinery manufacturers and tool suppliers to secure the best fabrication result. We suggest that you conduct preliminary tests and trials prior to commencing the production of panels.