

ALUMINUM  
**COMPOSITE**  
PANEL

FC

## FC Aluminum Composite Panel (FC ACP)

(FC ACP) are now available in 60 standard colors. Custom colors are available upon request. The PVDF coating is applied to the aluminum coil prior to lamination into a composite panel. A continuous coil coating process is used for the aluminum coil and stoved at the temperature between 200-260°C. The quality of the coating is tested according to AAMA2604-98.

A slight color variation may occur between different products such as PVDF coating and POLYESTER coating. For exact color matching, please request actual color samples. Color / tonality variation may occur between panels originating from different batches. To ensure consistency, the total required quantity should be placed in one order.

### APPLICATION

1. Wall Curtain, Cladding and Facade.
2. Roof Edges and Parapet Wall.
3. Dado, Separation Wall and Partition.
4. Advertising Plate, Showroom and Shop Front Signage.
5. Column Covers and Beam Wraps.

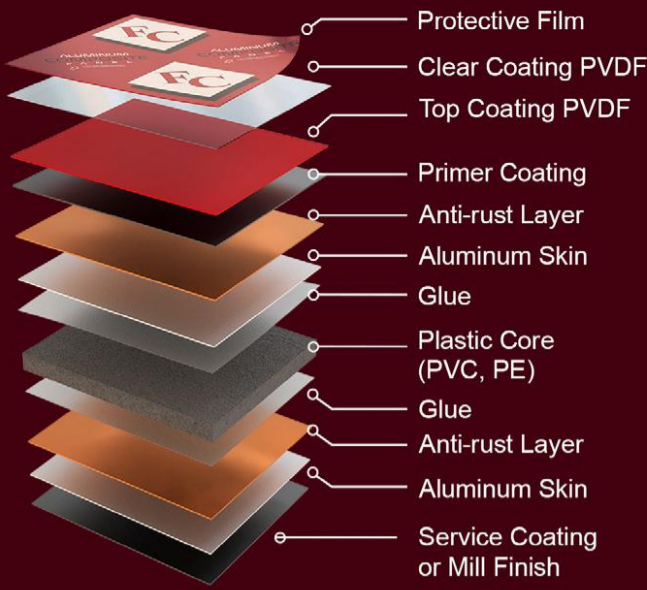
## Test Report of Exterior Panel

TEST ITEMS	STANDARD VALUE	TEST RESULT (4mm)
Coating Thickness, $\mu$ m	> 25	28
Gloss Deviation	Extreme value error < 5	3
Pencil hardness	> HB	3HB
Coating flexibility, T	<2	0
Cohesive force, grade	Grid drawing method grade 1	Grade 1
Compact resistance, 50kg.cm	No peeling, no cracks	No peeling, no cracks
Compact resistance, L/um	>5	8
Bend strength, Mpa	> 100	135.7
Bend flexibility modulus, Mpa	> $2.0 \times 10^4$	$2.9 \times 10^4$
Penetrating resistance, KN	> 9.0	10.8
Cut strength, Mpa	> 28.0	32.2
180° Peel strength, N/mm	> 7.0	7
Temperature difference resistance	No change	No change
Heat expansion coefficient, $C^{-1}$	< $4.00 \times 10^{-5}$	$3.00 \times 10^{-5}$
Heat deformation temperature, C	> 105	121.6
Acetonic acid resistance (500h)	Not less than grade 2	No change
Boiled water resistance	No change	No change
Chemical Resistance	Acid resistance	No change
	Alkali resistance	No change
	Oil resistance	No change
	Solvent resistance	No bottom appearing
	Washing resistance	> 10000 times
Artificial aging resistance 500h	Chromatic aberration CIELAB	< 3.0
	Pulveration Grade	0
	Light loss grade	Not less than grade 2
		0.52
		Non-pulverization
		No less than grade 2Not

## Test Report of Interior Panel

TEST ITEMS	STANDARD VALUE	TEST RESULT (4mm)
Coating Thickness, $\mu$ m	> 16	20
Gloss Deviation	Extreme value error < 5	3
Pencil hardness	> HB	3HB
Coating flexibility, T	<3	1
Cohesive force, grade	Grid drawing method grade 1	Grade 1
Compact resistance, 50kg.cm	No peeling, no cracks	No peeling, no cracks
Bend strength, Mpa	>60	83.4
Bend flexibility modulus, Mpa	> $1.5 \times 10^4$	$2.1 \times 10^4$
Penetrating resistance, KN	> 5.0	6.5
Cut strength, Mpa	> 20.0	23.2
180° Peel strength, N/mm	> 5.0	5
Temperature difference resistance	No change	No change
Heat expansion coefficient, $C^{-1}$	< $4.00 \times 10^{-5}$	$3.00 \times 10^{-5}$
Heat deformation temperature, C	> 105	119.6
Acetonic acid resistance (500h)	Not less than grade 2	No change
Boiled water resistance	No change	No change
Chemical Resistance	Acid resistance	No change
	Alkali resistance	No change
	Oil resistance	No change
	Solvent resistance	No bottom appearing
	Washing resistance	> 10000 times
Artificial aging resistance 500h	Chromatic aberration CIELAB	< 3.0
	Pulveration Grade	0
	Light loss grade	No less than grade 2Not
		0.42
		Non-pulverization
		No less than grade 2Not

# SPECIFICATIONS



- ▶ **WIDTH:**  
610 mm to 1570 mm
- ▶ **LENGTH:**  
1000 mm to 5800 mm  
Thickness: 1mm to 6 mm
- ▶ **STANDARD SIZES:**  
1220 mm x 2440 mm x 3 mm  
1220 mm x 2440 mm x 4 mm

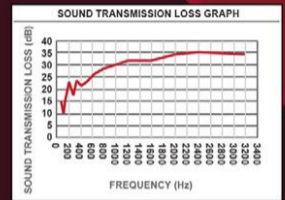
## Rigid and Lightweight

FC ACP features excellent torsion and bending strength for exterior walls. This product is lighter than solid aluminum and is highly cost effective for construction budgets.

## Outstanding Sound Insulation

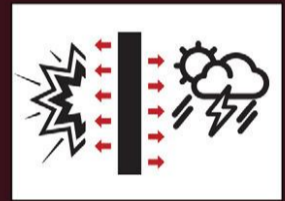
Compared to other materials of the same weight (steel, solid aluminum, tile, plywood, etc.), FC ACP has greater sound transmission loss.

RIGIDITY EJ	FC ACP		STEEL	
	THICKNESS	WEIGHT	THICKNESS	WEIGHT
0.126kNm <sup>2</sup> /m	3mm	4.5kg/m <sup>2</sup>	1.9mm	14.8kg/m <sup>2</sup>
0.126kNm <sup>2</sup> /m	4mm	5.6kg/m <sup>2</sup>	2.7mm	17.3kg/m <sup>2</sup>
0.126kNm <sup>2</sup> /m	6mm	7.3kg/m <sup>2</sup>	3.2mm	25kg/m <sup>2</sup>



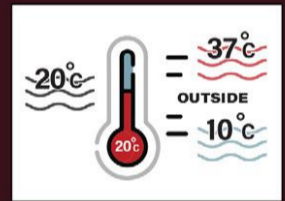
## Weather Durability and Corrosion Resistant

The FC ACP is coated with fluorocarbon (PVDF) resin, which withstands extreme weather conditions, temperature changes, and minimizes the possibility of acid, alkali and salt spray corrosion.



## Excellent Thermal Insulation

The PE or fire-rated core isolates the different exterior temperature and moisture, which allows you to save on utility bills.



## Great Impact Resistance

The core is composed of viscoelastic high molecular resin that prevents cracking or breaking yet still provides high strength, stiffness and impact resistance.



## Fireproofing Capabilities

With its fireproof ability higher than the index requirement of grade B1, it performs excellent against flame spread and smoke development.



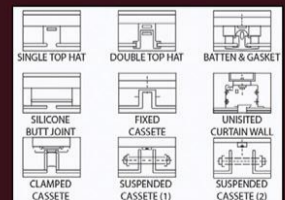
## Superior Machinability

FC ACP can be easily fixed to any type of cladding applications which consist of many different shapes and angles, curve and radius by cutting, bending, curving, folding, fastening, welding, edge jointing & close - out, etc. All processes are possible by ordinary metal and wood working machinery to shape the distinctive manifestation of your design concept.



## Cost effective and Easy to Install

FC ACP will reduce the in place cost and installation time since the system does not require additional reinforcing structure and insulation layer (to be specified by architects).



ELECTRIC SAW CUTTING



MECHANICAL CUTTING



HAND SAW CUTTING



MECHANICAL CUTTING



STRETCHING OVER FORMER



PIT EXCAVATION



REFRACTION



TEAR FILM



ALUMINUM  
**COMPOSITE**  
PANEL

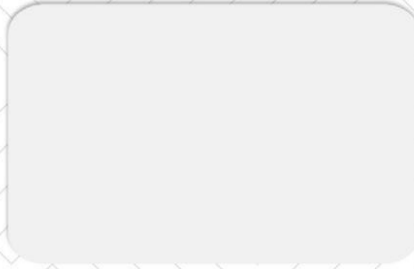


**FCP 017**



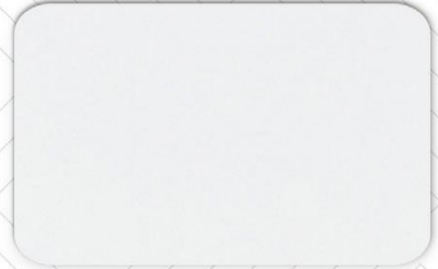
Calacatta

**FCP 361**



Glossy White

**FCP 302**



Bright White

**FCP 303**



Ivory White

**FCP 305**



Apricot

**FCP 307**



Champagne Silver

**FCP 413**



Silver Mirror

**FCP 330**



Silver Brush

**FCP 301**



Flash Silver

**FCP 414**



Gold Mirror

**FCP 329**



Gold Brush

**FCP 314**



Gold

**FCP 311**



Champagne Gold

**FCP 347**



Golden Beige

**FCP 415**



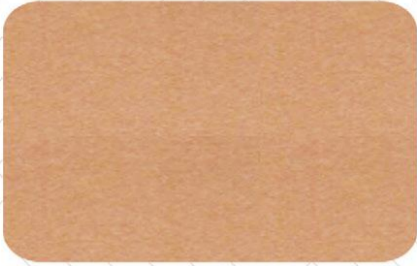
Bronze Mirror



ALUMINUM  
**COMPOSITE**  
PANEL



**FCP 313**



Palm Copper

**FCP 312**



Clay Pink

**FCP 325**



Yellow

**FCP 366**



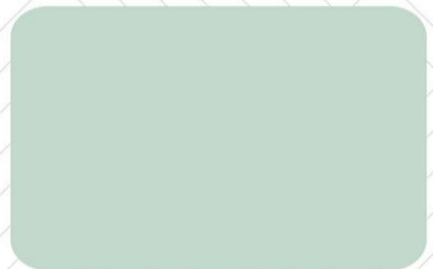
Glossy Yellow

**FCP 309**



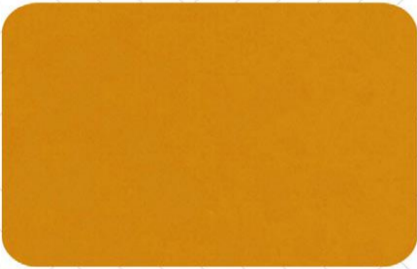
Youth White

**FCP 310**



Jade White

**FCP 328**



Chrome Yellow

**FCP 338**



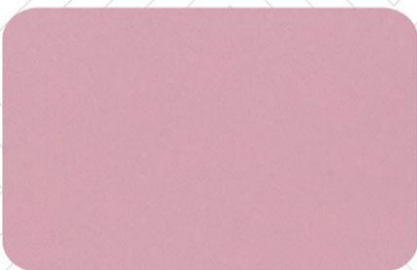
Glossy Orange

**FCP 324**



Orange

**FCP 331**



Light Pink

**FCP 327**



Red

**FCP 321**



Petroleum Red

**FCP 363**



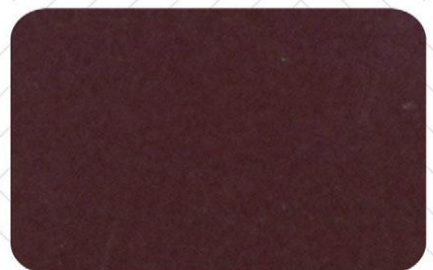
Glossy Red

**FCP 332**



Chinese Red

**FCP 337**



Red Cafe



ALUMINUM  
**COMPOSITE**  
PANEL

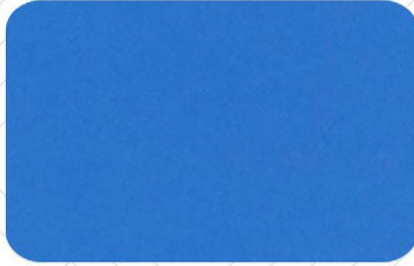


**FCP 334**



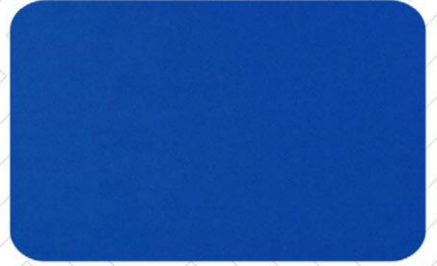
Light Blue

**FCP 322**



Lake Blue

**FCP 319**



Telecom Blue

**FCP 318**



Ocean Blue

**FCP 365**



Glossy Blue

**FCP 316**



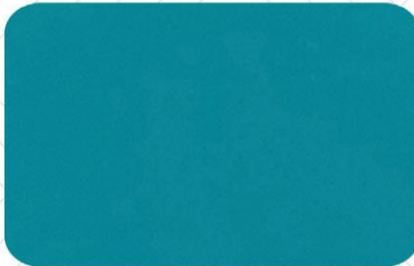
Deep Blue

**FCP 306**



Arctic Blue

**FCP 323**



Jade Green

**FCP 333**



Lime Green

**FCP 367**



Glossy Grass Green

**FCP 326**



Grass Green

**FCP 359**



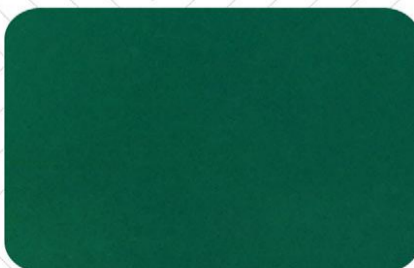
Glossy Green

**FCP 320**



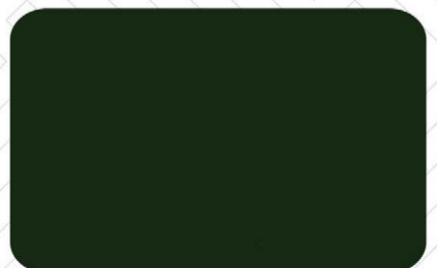
Green

**FCP 317**



Post Green

**FCP 336**



Clover Green



ALUMINUM  
**COMPOSITE**  
PANEL



**FCP 304**



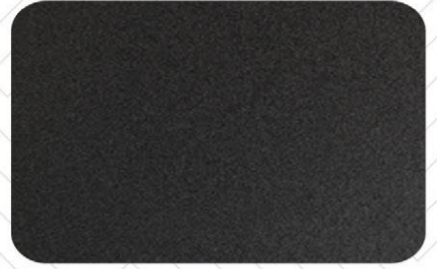
Silver Grey

**FCP 308**



Deep Grey

**FCP 339**



Mettalic Gray

**FCP 335**



Black Silver

**FCP 362**



Glossy Black

**FCP 315**



Pure Black

**FCP 096**



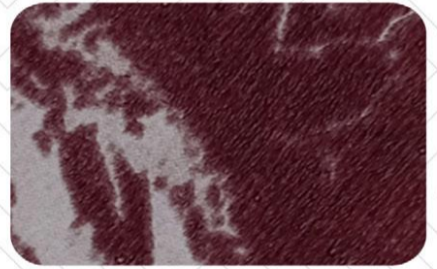
Dark Oak

**FCP 047**



Walnut

**FCP 345**



Purple Red

**FCP 049**



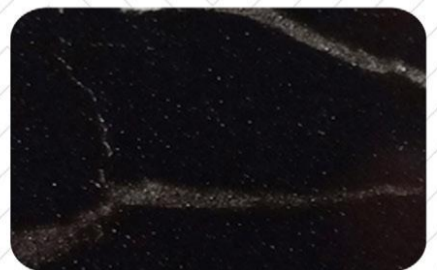
Dark Wood

**FCP 046**



Dark Chevron

**FCP 353**



B&W Root

**FCP 054**



Beige Oak

**FCP 111**



Birch Wood

**FCP 044**



Light Wood



ALUMINUM  
**COMPOSITE**  
PANEL

[floorcenter.com](http://floorcenter.com)