

Nano (PVDF) ACP





NANO (PVDF) PANEL

Nanometer panel inherit all features of traditional PVDF panel, like antipollution, cauterization resistance, fastness and so on. Meanwhile, we apply nanometer high technology, which has superior function of self-cleaning, antipollution, acid-resistance and alkali-resistance. It is an updated decorative material.

It has a better self-cleaning function compared with traditional PVDF panel. Usually when aluminium composite panel is used for exterior wall for half a year, the surface is polluted badly by the dust and rainwater. Especially some projects use inferior silicone sealant. When it is dipped in rainwater for a long time, there will be some black marks between the seams. And it is very difficult to be cleaned. So it will badly affect the appearance of the wall. Now the Nano panel solves this problem. Because of its low coating tension, the dust is difficult to adhere on the surface of the panel. It can be easily washed away by little rain to come true its self-cleaning effect. As a result, it could save you a lot of cleaning charge.

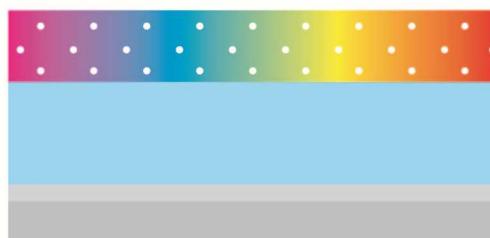
And you could write on the surface of panel with ink pen to distinguish Nano panel. If the mark could be rubbed away easily, it is proved Nano panel.

RAW MATERIAL

Basis aluminum: high-strength aluminum alloy
 Plastic core: no-toxic low density polyethylene
 Surface coating: PVDF, Nanometer paint.

NANOMETER ALUMINIUM COMPOSITE PANEL STRUCTURE

Nano principle: We coat the self-cleaning protection layer on the surface of the PVDF paint. It could insulate the dust and decompose the organic contamination to come true self-cleaning effect.

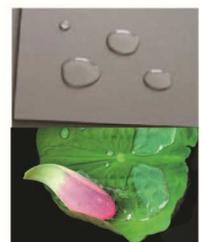


Nanometer Paint

PVDF Paint

Primer Paint

Aluminum Panel





NANO (PVDF) PHYSICAL PARAMETER OF NANO(PVDF) PANEL

Testing item		
Unit weight	ASTM D792	T4mm=5.5kg/m ²
Thermal expansion	ASTM D696	24-28
Thermal deformation temperature	ASTM D648	115°C
Thermal conduction	ASTM 976	0.102kcal/m.hr°C
Flexural rigidity	ASTM C393	14.0*10 ^{Λ5}
Impact resistance	ASTM D732	1.640 kgf
Adhesive strength	ASTM D903	0.77kg/mm
Flexural Elasticity	ASTM D790	4032kg/mm ²
Shear resistance	ASTM D732	2.7kgf/mm ²
Fire propagation	ASTM E84	QUALIFIED
Wind-pressure resistance	ASTM E330	PASSED
Properties against water	ASTM E331	PASSED

PARAMETER OF NANOMETER COATING

(PSB tests according theAAMA2605-05 standard)

Test Item	IBOND Result	AAMA2605-05 Requirement
Dry film scratch hardness	F	Minimum F (No rupture of film)
Dry adhesion	No removal of film	No removal of film
Wet adhesion	No blistering No removal of film	No blistering No removal of film
Boiling water adhesion	No blistering	No blistering
Impact resistance	No removal of film No removal of film from substrate	No removal of film No removal of film from substrate
Abrasion coefficient (litres/mil)	40	40 minimum
Muriatic acid resistance 10% (v/v)HCL	No blistering No visual change	No blistering No visual change
Mortar resistance	Mortar dislodged easily No residue No loss of film adhesion No visual change	Mortar shall dislodge easily any residue shall be removable with damp cloth any lime residue should be easily removed with 10% muriatic acid solution No loss of film adhesion No visual change
Nitric acid(70% w/w) resistance, clour change ΔE(Hunter)	1.3	Not more than 5ΔE units (Hunter)
Detergent resistance	No loss of film adhesion No blistering No significant visual change	No loss of film adhesion No blistering No significant visual change
Window cleaner resistance	No remove of film under tape No blistering No visual change	No remove of film under tape No blistering No visual change

Features

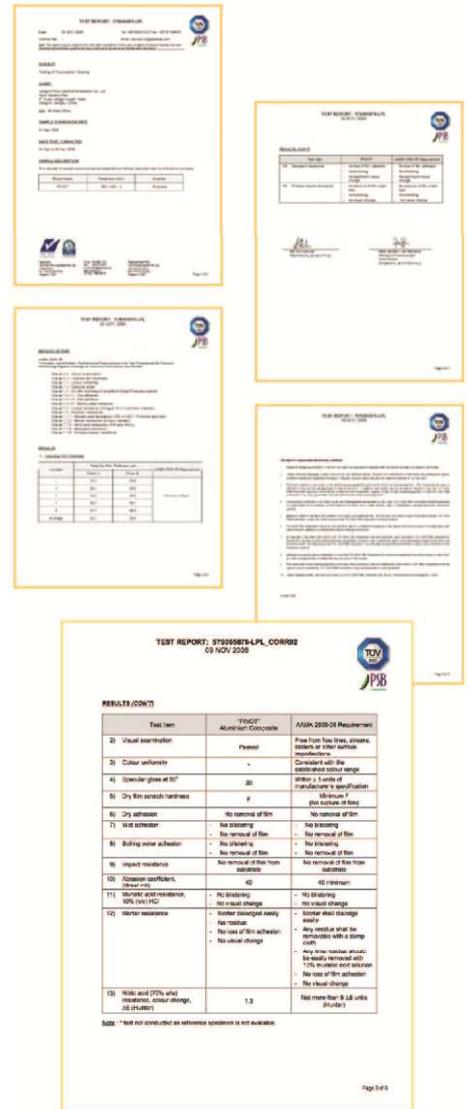
- 1.Economic: We adopt high-quality of paint.So the dust is difficult to adhibit on the surface of the panel.It can be easily rushed away by little rain to come true its self-cleaning effection.As the result, it could save you a lot of cleaning charge
- 2.environment protection: superferior aging resistance, no coating change, no pollution, anti-acid, anti-alkali, solvent resistance.
- 3.durable:It is more durable,weather resistance,temperature resistance,friction resistance,pollution resistance,aging resistance comparing with traditional PVDF panel.
- 4.recycle:we could separated aluminium and polyethylene to recycle to reduce the environment pollution.

SPECIFICATION

Thickness: 3-6mm
 recommend: 3mm、4mm
 Width: 100、0-1575mm
 recommend: 1220mm、1250mm、1500mm
 Length: maximum 5800mm
 recommend:2440mm、3050mm、4050mm

TEST REPORTS

PSB Tests according the AAMA2605-05 standard



TEST REPORT: 5750928-LPL_COR02
09 NOV 2008

Test Item	"IBOND" Actual Characteristic	AAMA 2605-05 Requirement
2) Visual appearance	Passes	Free From Free Lines, Blister, Cracks or other visible imperfections.
3) Color uniformity	±	Complies with the standard colour range within a range of manufacturer's specification
4) Specular gloss at 60°	30	Minimum 30 (at 60 degree of film thickness)
5) Dry film scratch hardness	F	Minimum F (No rupture of film)
6) Dry adhesion	No removal of film	No removal of film
7) Wet adhesion	No blistering No removal of film	No blistering No removal of film
8) Boiling water adhesion	No blistering No removal of film	No blistering No removal of film
9) Impact resistance	No removal of film from substrate	No removal of film from substrate
10) Adhesion identifier	40	40 minimum
11) Muriatic acid resistance, 10% (v/v) HCL	No blistering No visual change	No blistering No visual change
12) Mortar resistance	Mortar dislodged easily No residue No loss of film adhesion No visual change	Mortar shall dislodge easily any residue shall be removable with damp cloth any lime residue should be easily removed with 10% muriatic acid solution No loss of film adhesion No visual change
13) Nitric acid (70% w/w) resistance, colour change, ΔE (HUNTER)	1.3	Not more than 5 ΔE units (Hunter)

NOTE: * test not conducted as reference specimen is not available.

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APPLICATION & PROJECT

Top grade wall cladding for
hotel,exhibition,airport,gas station and so on .



Shell Oil Station



Japan Osaka Project



Zhesang Bank



Wuxi Gold Harbor

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