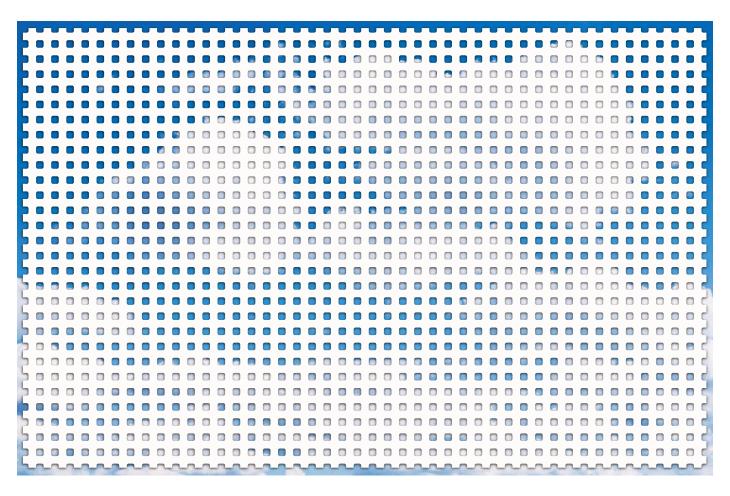


TiO2 - Coated Mesh Membrane



III PURIFY MESH 30

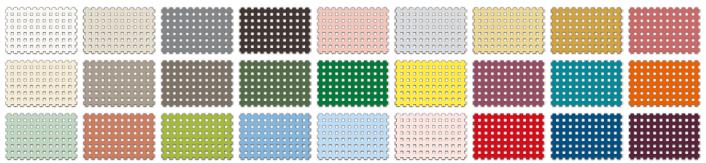
Purify Mesh 30 is the world's first PVC mesh membrane that incorporates TiO2 photocatalyst coating for building façade applications. Design stunning structures with the flexibility of membrane while simultaneously reducing the negative effects of air pollution in your area. Take environmental sustainability one step further with Purify Mesh 30. and make your iconic façade stand out.



Designability

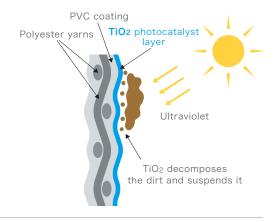
- Feature 1 Transform your building from flat to free form curvature design for building facades.
- Feature 2 Realize beautiful lighting conditions with light transmitting through the mesh openings.
- Feature 3 | Iconic visibility from the outside, while maintaining high visibility from within the building space.
- From white to dark colors, including metallic colors: the freedom to choose virtually any color to realize your perfect architectural design.

Variety of Colors

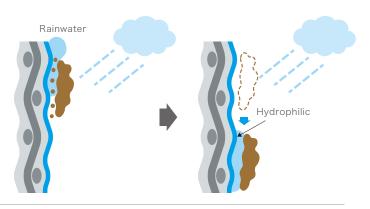


Self Cleaning

TiO₂ photocatalysis has a function of absorbing natural sunlight (UV) and decomposing organic matter. For this reason, a phenomenon occurs: when natural sunlight irradiates the membrane, stains from organic matters decompose.



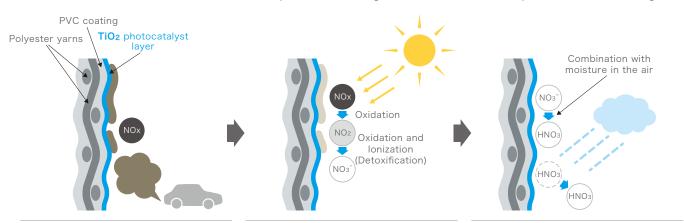
1. TiO2 decomposes the dirt



2. Rain suspends and washes away the dirt

NOx Reduction

One of the contributors to air pollution in cities are the emissions from automobiles that include nitrogen oxide NOx. TiO₂-coated membrane has a feature that decomposes NOx through oxidation reaction, and purifies the surrounding air.



1. NOx adheres to membrance surface

2. TiO₂ oxdizes NOx to NO₂, which is then ionized to harmless NO₃-.

3. NO₃⁻ reacts with moisture in the air and changes to HNO₃, which is then washed away by rainwater.

Visibility

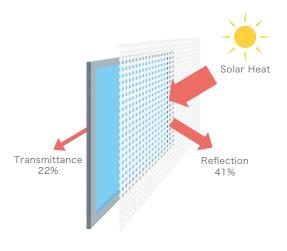
The visibility is much higher with the black side of the surface coated in black versus white.



View from white side

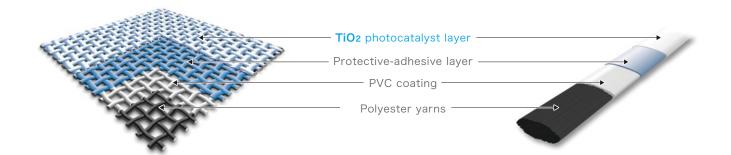
View from black side

Thermal Barrier



Float Glass 10mm + Purify Mesh 30 (White)

^{*} The values above are measured values, not guaranteed values.



Typical Membrane Properties

Property		Value	Test Method
Thickness	(mm)	1.1	JIS K 6404-2-3
Weight	(g/m²)	615	JIS K 6404-2-2
Tensile Strength(Warp X Fill)	(N/5cm)	3425 X 3355	EN ISO 1421
	(lb/in)	405 X 395	ASTM D 751
Tear Strength(Warp X Fill)	(N)	567.8 X 554.2	DIN 53363
	(lb)	11.6 X 107.5	ASTM D 751
Breaking Elongation(Warp X Fill)	(%)	28.5 X 31.0	EN ISO 1421
Flame Retandancy		M1	NFPA 701
Traine Netandancy			
Euroclass			
Light Transmittance	(%)	29	JIS R 3106

Photocatalyst Performance

Registration Number *1	2012-003	
Type of Photocatalyst	Titanium Dioxide	
Photocatalyst Processing Parts Outer Surface of Membrane Material		

Self Cleaning Effect (Stain Decompostion Performance)

Decompositon Activity Index *2 (nmo/L/min) 18.1	JIS R 1703-2
---	--------------

Air Purification Effect (Effect of Nitrogen Oxide Reduction in the Air)

······································				
Amount of Nitrogen Oxide Removal *3 (μ mol)	1.15	JIS R 1701-1		

^{*1} This product is cerified by the PIAJ.

Usable Place · Outdoors

Safety : It has been confirmed that the products satisfy the PIAJ safety standards regarding acute oral toxicity,

promary skin irritation and mutagenity.

Instructions for Use: In order to achieve the product's full effect and benefits, we recommend preventing dirt build up through

regular cleaning. Also note that the amount of nitrogen oxide reduction in an actual environment depends on the area of construction and ultraviolet irradiation strength.



登録:2012-003

*The PIAJ Mark is the certification that the Photocatalysis Industry Association of Japan, the sole photocatalyst industry organization in the country, gives to photocatalyst products for which performance is recognized as appropriate by the association based on JIS test methods. *PIAJ:Photocatalysis Industry Association of Japan

Proof of Reliable Performance

BIRDAIR, Inc.

65 Lawrence Bell Drive Suite 100 Amherst, NY 14221, USA Toll-Free: +1-800-622-2246 http://www.birdair.com

133 Lavarack Avenue, Eagle Farm QLD 4009, Australia Phone: +61-7-3633-5900 http://www.makmax.com.au

SHANGHAI TAIYO KOGYO CO.,LTD

Room 712-716. ShengYuanHengHua Build. No.200 WenDing Rd, Shanghai, P.R. CHINA 200030 Phone: +86-21-6448-4121 http://www.taiyokogyo.com.cn

MakMax Australia Pty Ltd

PIAJ Mark!

Taiyo Europe GmbH

Muehlweg 2, 82054 Sauerlach, Germany

Taiyo Middle East LLC

Waha Community Office 2002, 2nd Floor, F Block Plot No. 412-105, Nad Al Hamar Street, Dubai, UAE Phone: +971-4-239-3251 http://www.makmax.com

Phone : Muehlweg 2, 82054 Sauerlach, Germany http://www.taiyo-europe.com

Mak//ax

TAIYO KOGYO CORPORATION



^{*2} The PIAJ certification standard for the decomposition activity index is 5 or higher the value is, the greater the performance indicated.

^{*3} The PIAJ certification standard for NOx reduction is 0.50µ mol or higher. With this value, the effect of eliminating 10% of NOx emitted from vehicles can be expected. This value is equivalent to the amount of NOx that can be removed per 50cm² when subjected to ultraviolet irradation for 5 hours, and the higher this values is the greater the reduction efffect becomes

^{*} The values above are measured values, not guaranteed values.