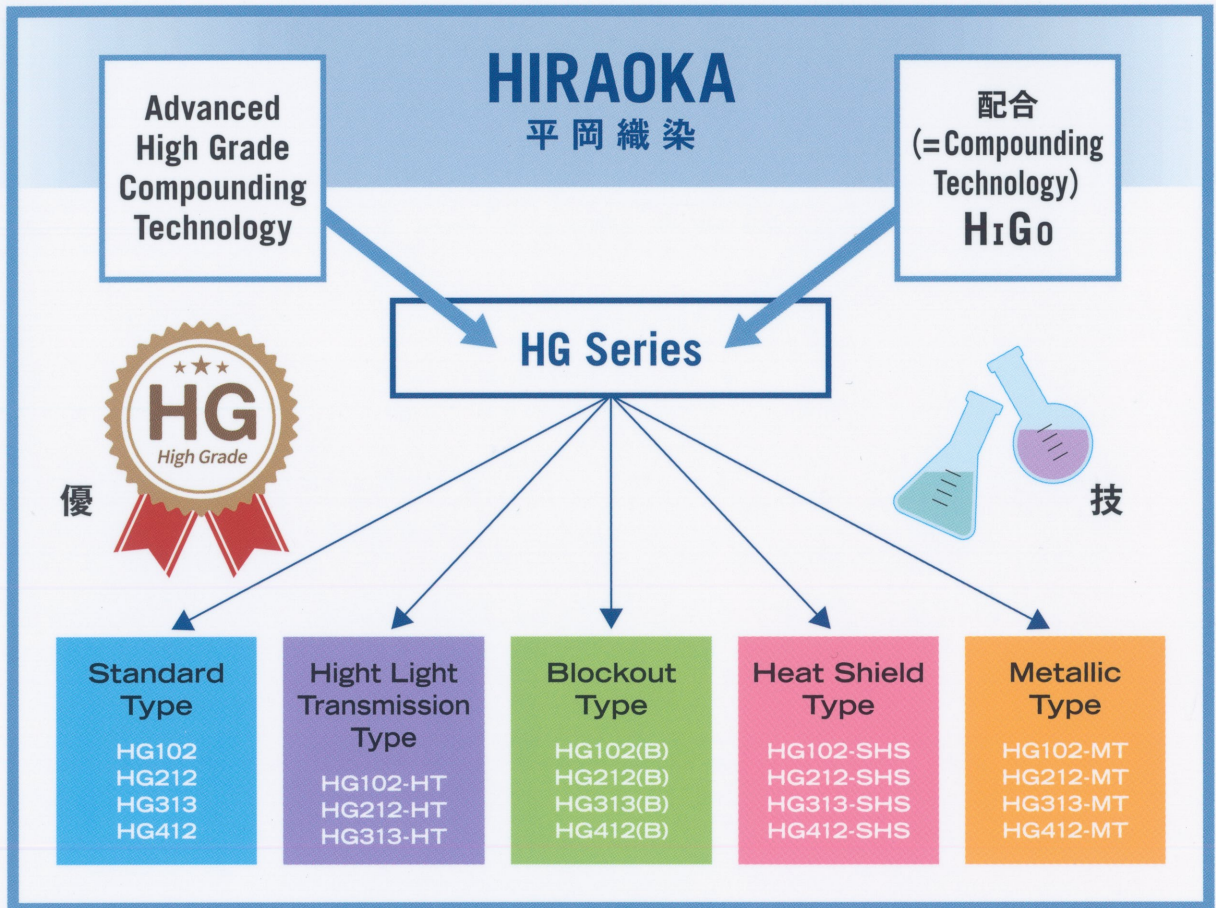




**HIRAOKA
HG
SERIES**



Superior Dirt Resistance

What causes PVC membranes to soil so quickly?

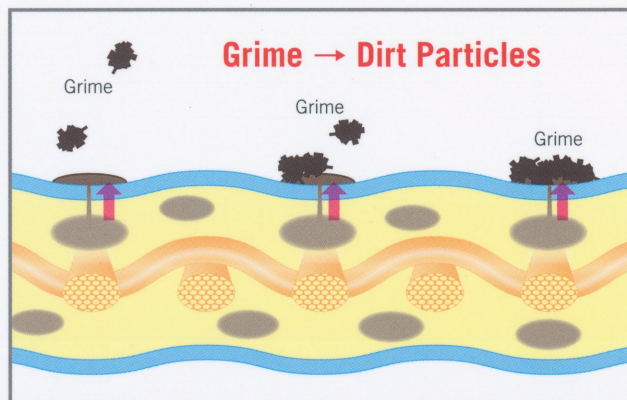
Over time, oil content (the plasticizer) contained in the PVC membrane slowly migrates to the surface.



The plasticizer on the surface attracts dirt.



Eventually the surface becomes discolored.



Base fabric
Polyvinyl chloride (PVC) resin layer

HIRAOKA HG S

Methods to make the PVC membrane more resistant to dirt and grime

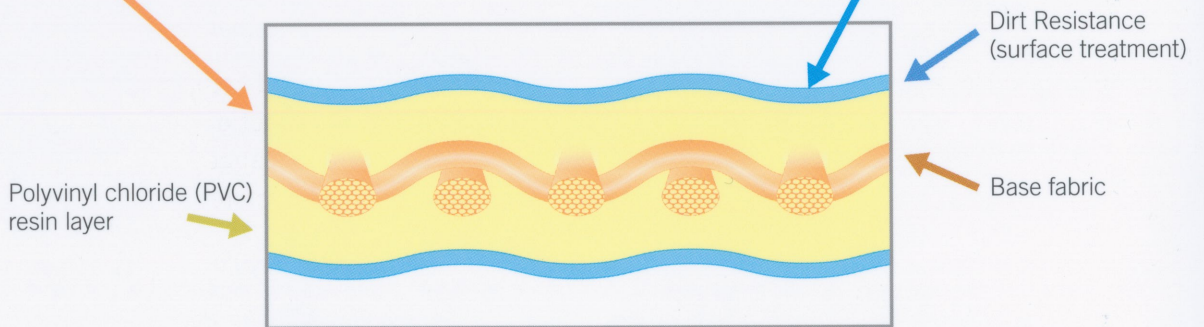
PVC compounding technique & Surface treatment technique

PVC mixing technique

Composition where plasticizer resists migration

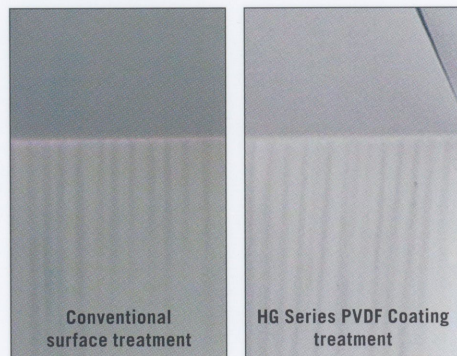
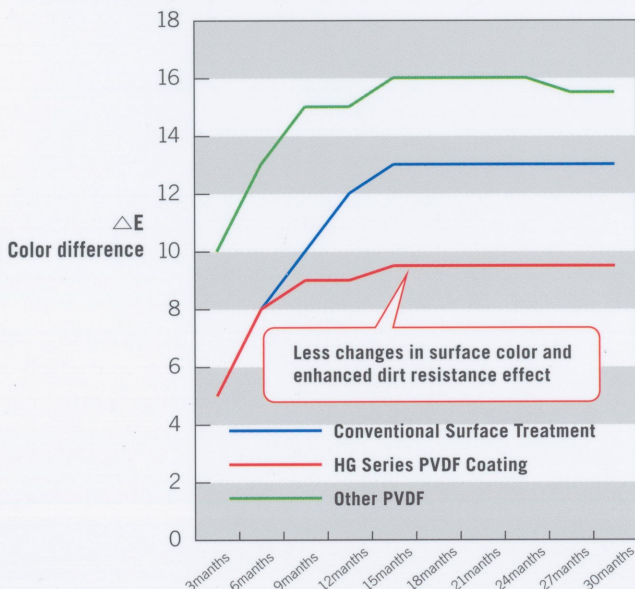
Surface treatment technique

Movement of plasticizer is suppressed



HG Series PVDF Coating

Outdoor Exposure Test results show how time affects surface colors treated with and without HG Series PVDF Coating



Comparison of surface color after 24 months of exposure

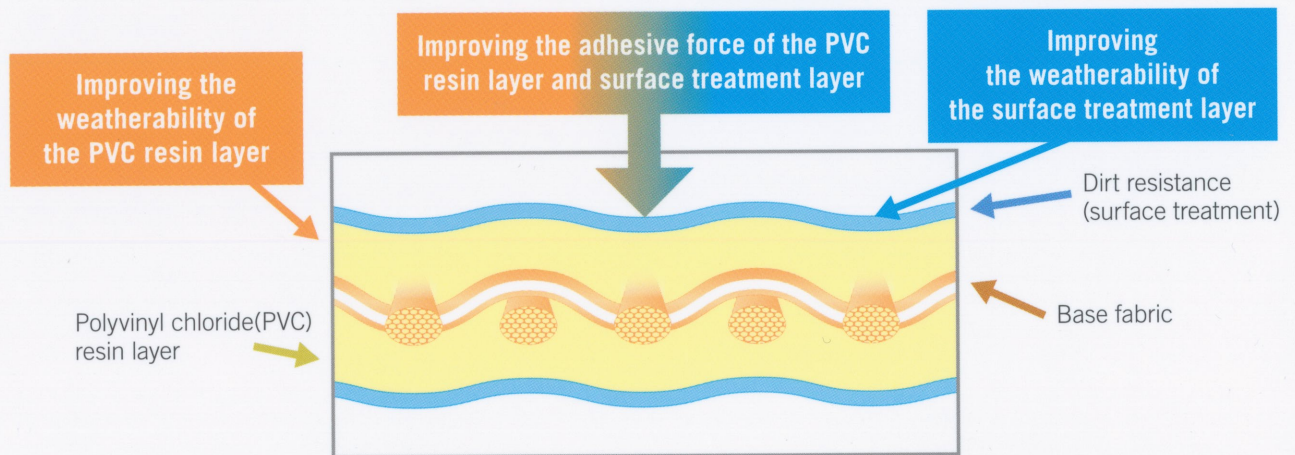
※ Test conducted in Soka-shi, Saitama.

HG Series PVDF coatings are highly dirt resistant

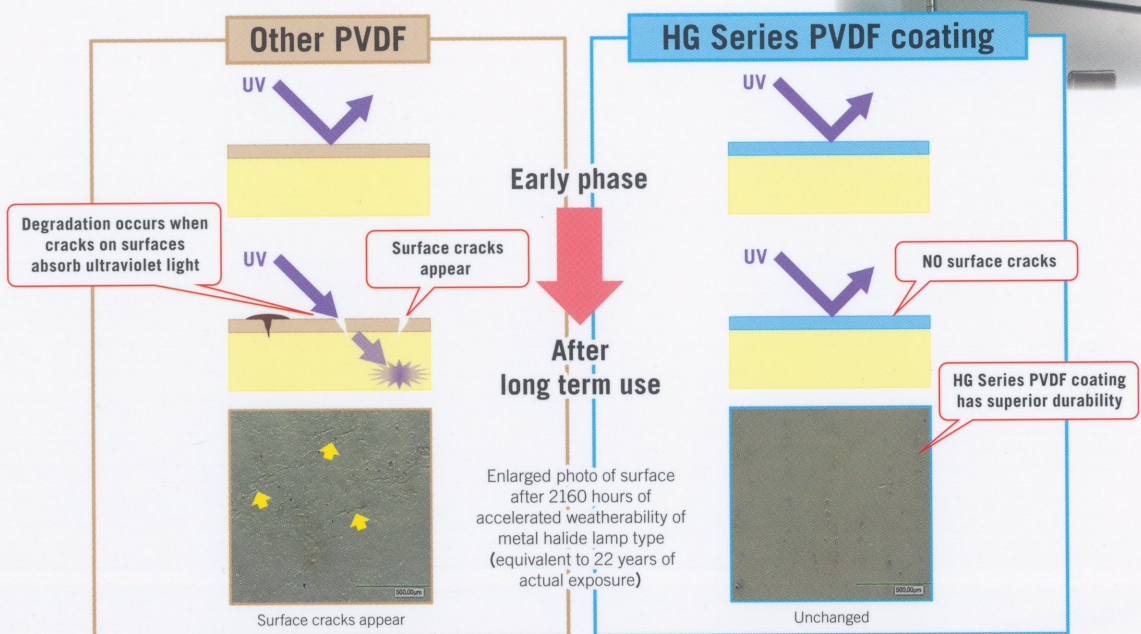
Long-term Warranty

Methods for ensuring a long-term warranty

PVC Compounding technique & Surface treatment technique



Weatherability



Strength and Durability

Tensile Strength Retention HG212

Xenon Lamp Accelerated Weathering Test after 4160 hours

Tensile Strength Retention (%)	
Warp	98.4
Weft	97.7

*These are measured, but not guaranteed, values.

As a result of 4160 hours, which is equivalent to 20 years of acceleration, almost no degradation to tensile strength occurs.



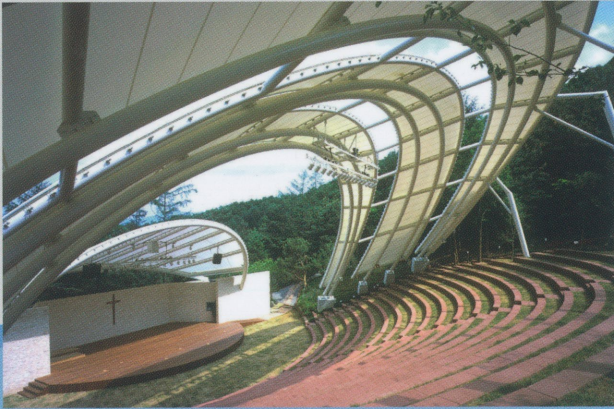
A Long-term Warranty is possible due to exceptional weatherability.

Weldable

Products with PVDF rich coatings made by other companies cannot be welded without abrading the surface.

The unique formulation HG Series PVDF coating can be welded without any abrading.

	HG Series PVDF Coating	Other's	
Coating	The unique formulation coating	The unique formulation coating	PVDF normal coating
Weldability	✓	×	✓
Abrading	Not necessary	Necessary	Not necessary



Since 1902, we have been the Pioneer of Tent Sheets

With our innovative production techniques and processing technology Hiraoka set new standards. We apply high quality polymer coatings to various textiles to produce specialized membranes for a wide range of applications. Years of experience allow us to meet the demands of our customers and society.

When Hiraoka originally commenced business in 1902, we scoured and dyed cotton and hemp products. Our mission today is to design and develop a range of products that reflect our customer's changing demands and the environments in which we live. Currently, we supply a range of creative membrane fabrics all over the world, including specialized materials for architectural structures.

ACCREDITATION

Our ISO 9001 compliant Quality Management System ensures absolute quality, consistency, and customer satisfaction. Our business system is accredited by UKAS, the United Kingdom Accreditation Service.



JQA-QMA14551



091

CERTIFICATION

We offer our clients professional services of an in-house team of registered, practicing engineers. This quality assurance ensures that our products are fully certified and meet all international standards.

SUSTAINABILITY

We proudly support numerous ecological initiatives. Our Research & Development Division continues to produce more current and greener products.



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