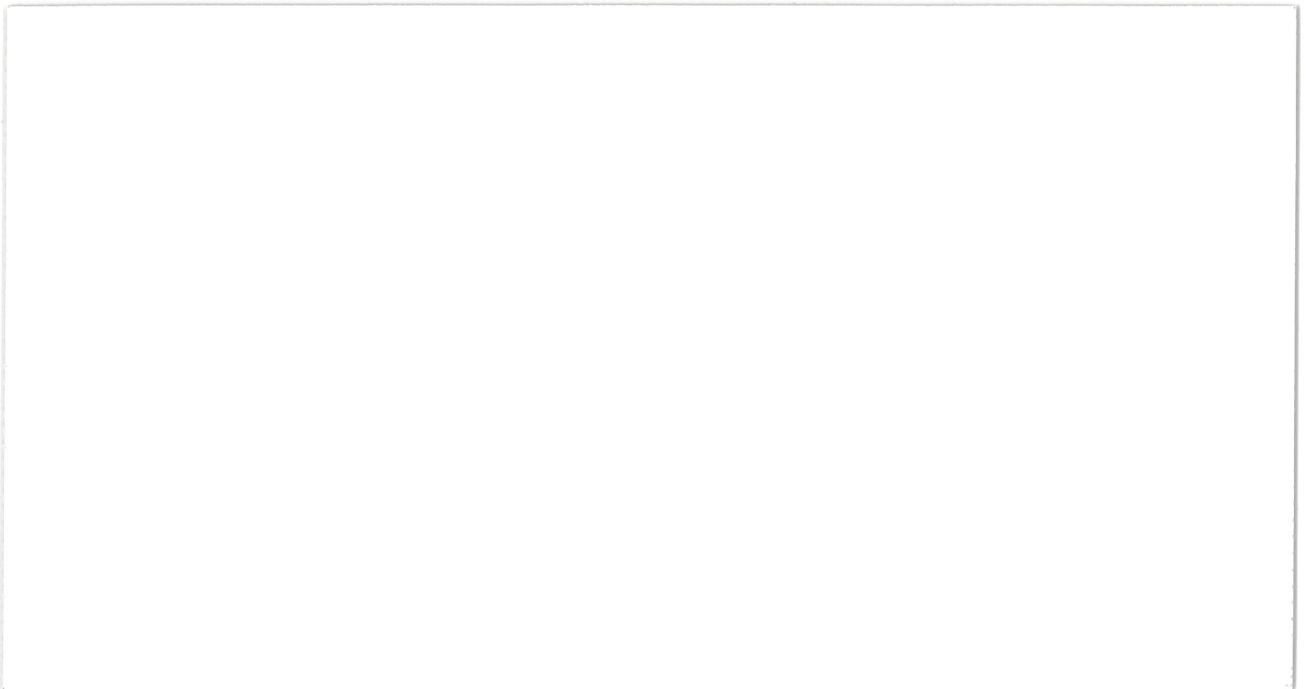


HIRAOKA HG SERIES

HEAT SHIELD



Chevron Renaissance Shopping Center
Design, Engineering & Fabrication: MakMax Australia



HG212-SHS

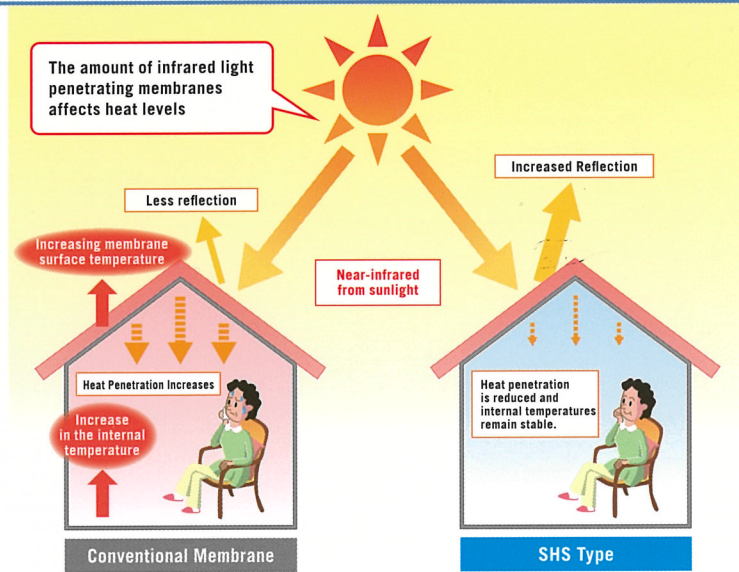


What is Heat - Shielding?

option

Heat Shield Block-out

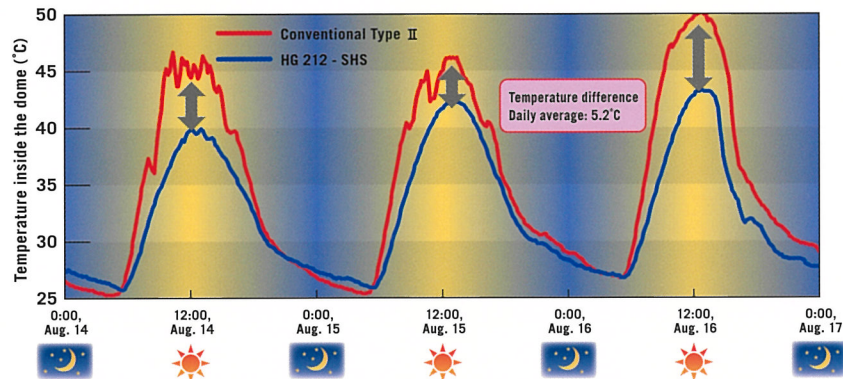
- HG102-SHS(B)
- HG212-SHS(B)
- HG313-SHS(B)
- HG412-SHS(B)



Example of Experiment Using Actual Heat-Shielding Membranes

Example

Internal temperature measurement data is used to compare SHS and conventional membrane materials.



The SHS membrane provides a higher heat-shielding effect than conventional membrane materials

Physical Properties

Test Items	Test Method	Unit	HG102-SHS	HG212-SHS	HG313-SHS	HG412-SHS
Width	ASTM D 751	mm	2040	2040	2040	2040
Total Mass	ASTM D 751	g/m ²	800	940	1080	1470
Thickness	ASTM D 751	mm	0.63	0.75	0.9	1.20
Tensile Strength (Cut Strip)	ASTM D 751	N/5cm	3100	5100	6100	8300
			2800	5200	5900	7000
Tear Strength (Trapezoid)	ASTM D 751	N	160	400	670	950
			160	400	670	900
	DIN 53363	N	300	630	1100	1300
			300	630	1000	1200
Adhesion	ASTM D 751	N/5cm	100	130	140	150
Light Transmisson	ISO 9050	%	2.7 **	2.7 **	2.7 **	2.0 **
* Infrared reflectance	ISO 9050	%	85<	85<	85<	85<
Temperature Resistance	ASTM D2136 MSAJ/M-03-2003	°C	-40/+70			
Flame Retardancy	EN13501-1		B-s2,d0	B-s2,d0	B-s2,d0	C-s2,d0
	NFPA-701		meet	meet	meet	meet
	ASTM E-84		meet	meet	meet	meet

The above data reflects average measured values.

* Measurement was made according to ISO 9050(780~2100nm). ** In case of Block-Out, the Light Transmission will be 0%.