

KIWACAL PHF SERIES  
PHOTOLUMINESCENT SHEETINGS

Contribute to your safety in wide variety of applications

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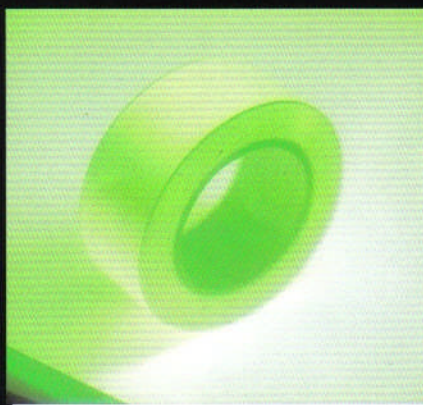
WARNING SIGNS

EXIT SIGNS

EMERGENCY SIGNS

ESCAPE ROUTES

EMBLEMS



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## PHF-SERIES

# Kiwacal Photoluminescent Sheeting

**KIWACAL PHF** Series Sheeting is a high performance photoluminescent sheeting which gets luminous in a dark place when absorbing and accumulating the light energy from the sun, electric lamps. etc.

The cycle; absorption - accumulation - luminosity, is permanent as far as any electric lamp or sunlight is available.

As **KIWACAL PHF** Series Sheeting has a special top coating to provide long outdoor durability, it will satisfactorily serve both indoor and outdoor applications for 5 years.

## TYPE

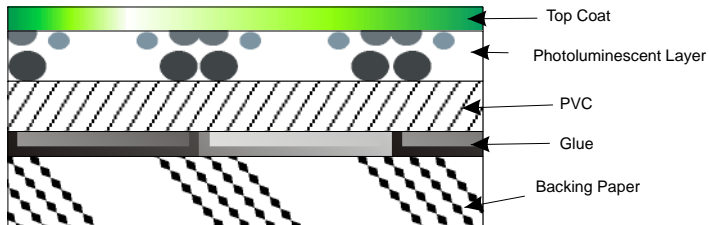
Following types are available;

TYPE	STANDARD SIZE			LUMINOSITY
PHF-P2	500mm	x	30m	241
PHF-60	500mm	x	30m	102

\*Luminosity values are measured in accordance with DIN67510 Part 1.

\*PHF-P2 complies with DIN 67510, IMO MSO 61/6/2, JIS Z 9100.

## CONSTRUCTION



## LUMINOSITY

LUMINOSITY VALUES MEASURED IN ACCORDANCE WITH DIN 67510 PART 1.

Condition	PHF-P2	PHF-60
after 1 minute	241	102
after 5 minutes	61	15
after 10 minutes	30	6.7
after 60 minutes	3.8	0.4
after 100 minutes	2.0	0.2
after 200 minutes	0.8	-
after 300 minutes	0.65	-

\*\*Light Source : D65 1000 lux, Excitation time : 5 minutes

## NON- HEALTH HAZARD

The pigment used for **KIWACAL PHF** Series Sheeting does not contain any substance of cadmium, lead, mercury, arsenic and chromium.

## PHYSICAL PROPERTIES

	PHF-P2	PHF-60
Film (microns)	145 ± 12	165 ± 12
Tensile Strength	not less than 2.5gf/cm	
Elongation	not less than 50%	
Shrinkage	not more than 0.9mm	
Adhesion strength	not less than 0.8kgf/cm	
Ball tack	No. 7	

\* Test method - Tensile strength : 15mm wide specimen  
& Elongation Speed - 200mm/min.

Shrinkage : 100mm x 100mm specimen, aging 80°C  
x 48 hours after applied to substrate.

Adhesion strength : 180° peeling, 300mm/min.

Ball Tack : J-DOW

## APPLICATIONS

**KIWACAL PHF** Series Sheeting is recommended to use for warning signs, exit signs, emergency signs or marking for escape routes in subways, tunnels, mines, elevators, stairways, public convenience and other specific areas in case of electricity power failure.