

## KIWALITE Embossing Grade Reflective Sheeting #6500 Series

### Description

KIWALITE Embossing Grade Reflective Sheeting #6500 Series is a leading-edge reflective sheeting of glass-beads technology. The sheeting meets or exceeds requirements of ISO 7591-1982 Road Vehicles Retro-reflective registration plates for motor vehicles and trailers - Specification. The sheeting has excellent visibility at wider entrance angle than conventional enclosed lens type reflective sheeting, and solvent inkjet printability. These prominent properties offer wider applications, such as fleet markings, conspicuous commercial signs, stickers or more functional safety appliances than ever.

The sheeting does not contain PVC resin and is environmentally friendly reflective material.

#6500 sheeting is available with personalized graphic designs, printed water marks and laser security marks upon request.

### Color Availability, Product code No. and Standard size

Color	Product Code No.
White	#6514
Yellow	#6544

Standard Width : 48inches

Standard Length : 45.7m (50yards)

\* Other size upon request

### Photometric performance

Minimum Coefficient of Retroreflective values of KIWALITE Embossing Grade Reflective Sheeting #6500 Series when measured in accordance with CIE Publication 54:1982 are shown in Table 1.

Table 1 : Minimum Coefficient of Retroreflective values ( $R_A$ ) ( $cd/lx/m^2$ )

Observation Angle (degree)	Entrance Angle (degree)	White	Yellow
		#6514	#6544
0.2	+5°	45	30
	+30°	18	12
	+40°	8	5
0.33	+5°	30	20
	+30°	12	8
	+40°	6	4
1.5°	+5°	3.5	2.3
	+30°	2	0.8
	+40°	0.7	0.4

## Day-time color - Specification Limits

The chromaticity co-ordinates and luminance factor of KIWALITE Embossing Grade Reflective Sheeting #6500 Series when measured in accordance with CIE Publication no.15.2 using CIE standard illumination D65 and CIE 45/0 geometry conform to Table 2.

Table 2 : Day-time color Specification Limits

Color	Specification Limits								Luminance	
	1		2		3		4		Min	Max
	x	y	x	y	x	y	x	y		
#6514 White	0.355	0.355	0.305	0.305	0.285	0.325	0.335	0.375	35	—
#6544 Yellow	0.465	0.534	0.427	0.483	0.487	0.423	0.545	0.454	27	—

## Application

KIWALITE Embossing Grade Reflective Sheeting #6500 Series is a pressure-sensitive sheeting that should be applied at room temperature (18 to 28°C) by a squeeze roll applicator.

Substrates: Flat Aluminum alloys comply with EN 12899-1, 2007 Standard are only recommended.

Always pretest your specific substrate prior to application.

Plastic substrates are not recommended.

Adhesion properties:

Adhesion --- 50.0mm --- when measured in accordance with ASTM D4956-19 clause 7.5.

## Resistance to Artificial Weathering

After the artificial weathering test by Xenon arc weathering device capabler for 1,000 hours, KIWALITE Embossing Grade Reflective Sheeting #6500 Series retains more than 50% of the reflective intensity values specified in Table-1, and also show good colorfastness and no evidence of cracking, scaling, pitting, blistering, edge lifting or curling or more than 0.8mm shrinkage or expansion.

## Other Properties

KIWALITE Embossing Grade Reflective Sheeting #6500 Series conforms to all other requirements specified in ISO 7591-1982.

## Performance Life

According to the test results by both natural outdoor exposure and artificial weathering, KIWALITE Embossing Grade Reflective Sheeting #6500 Series can be expected to provide the effective performance life of 5 years under normal and vertical outdoor conditions. However, The actual performance life will depend upon substrate selection, preparation and compliance with recommended application procedures, exposure conditions and maintenance.

## Storage and Shelf Life

KIWALITE Embossing Grade Reflective Sheeting #6500 Series should be stored in a cool, dry area, preferably at 18 - 28°C and 30 - 60% relative humidity, and should be used within one year from date of delivery. For the details of storage, see KIWALITE instruction manual "No.KM-40004 Instruction for Storage and Handling".

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**Terms and Conditions of Sales**

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