

Nikkalite® 800-90 series Ultralite construction grade retroreflective sheeting

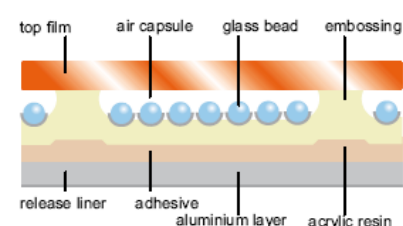
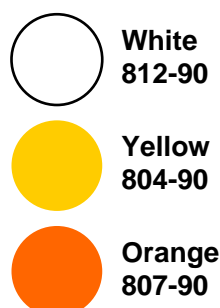
Introduction

Nikkalite® Ultralite construction grade retroreflective sheeting is a relatively inexpensive material that can be used for the manufacture of temporary road traffic signs to BS 8442, multi-colour graphics, advertising boards and similar products where a short to medium term durability is required.

These materials are not recommended for the manufacture of permanent Road Traffic Signs, they have a useful working life of at least 3 years.

Table 9 Coefficient of retroreflection R' Class Ref 2 unit: $\text{cd}\cdot\text{lx}^{-1}\cdot\text{m}^{-2}$

Geometry of measurements		Colour		
α	$\beta 1$ ($\beta^2=0$)	White	Yellow	Orange
12'	+5°	250	170	100
	+30°	150	100	60
	+40°	110	70	29
20'	+5°	180	120	65
	+30°	100	70	40
	+40°	95	60	20
2°	+5°	5	3	1,5
	+30°	2,5	1,5	1
	+40°	1,5	1,0	#



White & Yellow colours tested to the requirements of BS 8442 *Miscellaneous road traffic signs and devices*;

5.2. Visual performance

5.2.1.1 Daylight chromaticity

5.2.1.2.1.1 Glass bead

When tested in accordance with BS EN 12899-1; 2001, **5.2.1.2** the chromaticity and luminance factor of 804-90 Yellow and 812-90 White construction grade sheetings conform to the requirements of Table 5 Class R1.

5.2.2 Photometric requirements

5.2.2.1 Glass bead sign face materials

The coefficient of retroreflection of Nikkalite® Ultralite construction grade 804-90 Yellow and 812-90 White retroreflective sheetings exceed the requirements of Table 9 Class Ref 2 sheeting.

5.3 Physical performance

5.3.2 / 5.3.2.1 Resistance to impact of retroreflective sign face materials

Ultralite construction grade 804-90 Yellow and 812-90 White retroreflective sheetings comply with BS EN 12899-1; 2001 **5.3.7** Impact resistance; no damage observed when tested on 3mm aluminium plate, 3mm GRP and 1.2mm Plasticol backed steel.

5.3.3 Resistance to weathering of the sign face of retroreflective sign face materials

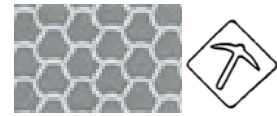
5.3.3.2 Resistance to accelerated natural weathering

5.3.3.2.1 Glass bead materials

When tested in accordance with BS EN 12899-1; 2001, **5.3.6** Ultralite construction grade 804-90 Yellow and 812-90 White retroreflective sheetings comply with the requirements' of T2; 3 year period.

Surface marking

Nikkalite® 800-90 series construction grade Ultralite sheeting is identifiable by the cell pattern and construction water mark on its surface shown right.



Application of sheeting

Nikkalite® sheetings will bond to clean smooth surfaces of tested and approved metal, coated metal, and certain plastic sheets. Please refer to separate detailed technical information [Roll Storage, Substrate Preparation & Application of sign face sheetings.](#)

Storage of rolls

Please refer to separate detailed technical information [Roll Storage, Substrate Preparation & Application of sign face sheetings.](#)

Coloured overlay films

Nikkalite® PA100 self-coloured transparent overlay films have a clear acrylic pressure sensitive adhesive and are designed to offer a simplified and efficient system of sign manufacture for various types of Road Traffic Signs manufactured to BS 8442.

Please refer to separate detailed technical information [PA100 Coloured overlay films](#)

Ultralite Health & Safety (COSHH)

Although the adhesive contains a small amount of solvent, it is almost certain that this solvent will not be emitted from the sheeting. For further information please contact Rennicks UK for a COSHH data sheet.

Screen printing

Both the Nikkalite® N3500 and N3600 types of inks are durable, highly transparent, quick drying screen printing inks, that bond strongly and permanently to Nikkalite® retroreflective sheeting.

Please refer to separate detailed technical information [Screen printing & preparation for Nikkalite inks](#)

Colour matching

When using more than one piece of reflective sheeting together, sheeting from the same roll should be used for uniform colour matching and reflectivity. Every other piece of material should be rotated by 180°, so the same roll edges come together. When required the sheeting may be overlapped by 6mm from top to bottom.

Colour matching is the responsibility of the sign manufacturer.

Graphic cutting

Friction or sprocket driven rotary plotters, flat bed plotters or craft type cutting knives are all suitable for cutting Nikkalite® construction grade materials. The sheeting should be tested to determine suitability of equipment. Off cuts of sheeting should be stored flat or tightly wound around the outside of a core diameter of 106mm or greater.

The material must be allowed to condition, out of its box and correctly supported, ideally in a room with an ambient temperature of 15°C to 25°C (59°F to 77°F).

Packaging & Storage of finished signs prior to installation

Finished signs should be adequately packaged to prevent damage during handling and transit. The sheeting liner may be used against the sign face in addition to bubble wrap and the signs should be placed face to face.

The effective performance life and guarantees may be become void by mishandling, or incorrect storage and installation techniques.

Please refer to our separate handling and storage instruction sheet.

Reliability of information

All recommendations and technical information contained herein are based on experience and tests, which the manufacturer believes to be reliable, but their accuracy and completion are not warranted.

The user is cautioned to undertake their own test/tests to determine the suitability of a particular product for the intended application.

Warranty

Nikkalite[®] products are warranted to be free from defects in materials and workmanship at the time of their sale. Nikkalite[®] products are sold without any warranty whatsoever, including warranties of merchantability or fitness for a particular purpose. The sole remedy for failure of Nikkalite[®] products to conform to said warranty is the replacement of the defective products; neither the manufacturer nor the seller shall be liable for any loss, damage or injury, direct or indirect, consequential or incidental, arising from the use of or inability to use said products.



For further information please visit www.rennicksuk.com
or contact Rennicks (UK) Ltd, Stuart Road, Manor Park, Runcorn,
Cheshire. WA7 1TS
Tel; 01928 579966 Fax; 01928 579965
Email; uksales@rennicks.com