

# Nikkalite Flexible Crystal Grade CVF microprismatic sheeting

## Introduction

Nikkalite® Flexible Crystal Grade CVF is a new more conformable and flexible Crystal grade microprismatic retroreflective sheeting designed for emergency vehicle conspicuity.

- Nikkalite Flexible Crystal Grade CVF offers very high retroreflectivity making the vehicle very conspicuous to other road users during the hours of darkness.
- Nikkalite Flexible Crystal Grade CVF complies with the PSDB High Conspicuity Livery for Police Vehicles which recommends the minimum performance for Battenburg liveries.



## Colours

Nikkalite Flexible Crystal Grade CVF is available in 24" and 48" x 50yds rolls in the following colours;

White 95602	Blue 95606	Red 95605	Green 95608
Fluorescent Yellow Green 95644	Fluorescent Orange 95647		

Narrow width rolls can be slit to order



### Expected performance life

When processed and applied in line with NCI's procedures CVF standard colours can be expected to have a useful working life of 7 years.

### Roll storage / cut kit storage

Nikkalite Flexible Crystal Grade CVF should be stored in dry clean conditions between 15°C to 27°C, 30% to 60% humidity and out of direct sunlight. Rolls should be supported through the centre after

use and not left lying on hard surface. Kits should be stored flat and adequately packed.

## Livery design

Nikkalite Flexible Crystal Grade CVF will adhere to flat, two and shallow three dimensional contoured panels providing the sheeting is not forced out of shape during application. CVF is more flexible and conformable than previous Nikkalite Crystal grade sheetings and careful livery design is important using butt joints where necessary. CVF sheeting is easy to handle but must not be stretched during application, as with other sheetings any tension introduced during incorrect application will be released within 2 to 3 days.

Kits should be professionally designed by experienced operatives to fit the vehicle correctly allowing sufficient space to the edges of body panels, handles etc. The sheeting can be edge sealed when required using ultrasonic cut and seal methods to prevent discoloration in the outer cut cells. Maximum reflectivity is obtained when Nikkalite Flexible Crystal Grade CVF is applied in a horizontal direction off the roll.



## Vehicle preparation

All surfaces to which Nikkalite Flexible Crystal Grade CVF are to be applied must be thoroughly cleaned using Isoproyl Alcohol (IPA), Ethyl Acetate or MEK with particular attention to the complete removal of surface contaminants and protective waxing agents. Recently painted panels should be left for 3 days to allow for outgassing of solvents before livery application.

## Livery application

Both the vehicle and CVF sheeting should be conditioned to the same air temperature within the range of 15°C to 30°C before application. Full adhesion normally takes place within 48 hours, and may be longer in winter temperatures. Do not expose vehicle to freezing conditions during the first 24 hours following application. Gentle heat may be used to the surface of Nikkalite Flexible Crystal Grade CVF liveries after application in low temperatures if necessary; liveries should then be resqueegeed to ensure satisfactory initial bonding.

As with all vehicle conspicuity livery kits care must be taken before removing the liner to ensure the piece can be correctly applied without introducing tension or overlaps onto adjacent pieces. If the sheeting is not applied correctly to the designed and cut shape, tension may later be released causing a wrinkle or lifting during the curing period which may not have been evident initially.

Nikkalite Flexible Crystal Grade CVF should be applied dry, we do recommend the "wet application" method. The livery should be applied using firm overlapping strokes using a fibre type squeegee or sleeved plastic squeegee to expel all air. Care should be taken during application that points of chevrons and other vulnerable areas are not bent by applying pressure against the direction of the shape. Apply firm pressure along all edges after initially applying the livery.

#### **Removal**

Warm the panel by applying gentle heat to the surface and peeling away.

#### **Cleaning**

Please read the important cleaning instructions below, failure to comply may lead to early kit degradation.

#### **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 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. Subject to paragraph two hereof, 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.

Nikkalite™ products sold in the United Kingdom are sold with a warranty subject to the Warranty Agreement between Rennicks (UK) Limited, Nippon Carbide Industries Inc., and the sheeting convertor.

## Nikkalite® Crystal grade livery cleaning instructions



### **X** INCORRECT

- Do not direct high pressure water at edges of sheeting
- Do not hold nozzle closer than 1200mm to livery
- Do not direct water at angle of less than 45 degrees to livery
- Do not use solvents, abrasive, alcohol based cleaners or vehicle under body cleaning solutions
- Do not steam clean liveries



### **✓** CORRECT

- ✓ Use fan spray of water
- ✓ Maximum 75 bar water pressure, max temp 38°C
- ✓ Maintain nozzle more than 1200mm from livery edges
- ✓ Maintain angle greater than 45 degrees to vehicle
- ✓ Use mild detergent and clean water
- ✓ Use soft brush / cloth avoid chev' tips & vulnerable areas of kit