

# Application Instructions for 3M<sup>™</sup> Diamond Grade<sup>™</sup> DG<sup>3</sup> Sheeting for Emergency Service Vehicles

#### **Tools**

- 3M Applicator PA-1 (blue or gold)
- 3M Low Friction Sleeve SA-1 (used on the plastic applicator to minimise surface scratching)
- Industrial heat gun with a temperature range of approximately 250-400°C
- Lint free cloth
- 3M Surface Preparation System
- 3M Application Tape
- Infrared thermometer



### 1. Application Temperature

3M<sup>™</sup> Diamond Grade<sup>™</sup> DG<sup>3</sup> Sheeting should be applied when the ambient and application surface temperatures are between 15°C and 38°C.





a) Check the temperature of the kit and vehicle using an infrared thermometer. Check the temperature on multiple parts of the bodywork

- If the substrate temperature is below 15°C the surface may be heated using a heat gun, heat lamps, hot water or steam. Ensure the surface is thoroughly dry before application.
- In addition, when the outside temperature is below 15°C, the kit must also be heated using an industrial heat gun. The heat gun should be held 20-30 cm from the panel to avoid burning, melting or distorting the kit.

## 2. Surface Preparation

All surfaces must be cleaned prior to application.



a) Wash the vehicle surface with detergent and water to remove dirt and road film.



b) Wipe using a clean lint free cloth saturated with 3M Surface Preparation System (isopropyl alcohol) to remove grease or other surface contaminants.

If possible allow a cleaned vehicle to stand overnight prior to application of any kit or use a heat gun to dry out retained solvent.

#### **Caution:**

To ensure the kit is not distorted, applied heat should be regulated so that the kit surface is comfortable to the touch.

Following the heat treatment, the kit should be re-squeegeed and left inside for a minimum of 12 hours to assured adequate adhesion in cold temperatures. Note 1 Application to rusted or corroded metal, severely pitted, loose or chalking paint, bolts, support plates or within 3mm of door hinges, exterior posts, weld joints is not recommended. Note 2 Ensure any glass surfaces are sufficiently clean before attempting to fit the kit, if using a glass cleaner such as Nano-Ex, ensure that it is wiped clean with 3M Surface Preparation System before the kit is fitted.

## **3. Application**

#### Checklist:

- Wash hands prior to application
- Do not touch the adhesive with your hand
- Inspect the contents of the livery kit to ensure all parts of the kit have been received



a) Position all of the panels on the vehicle. Do not position over curves or complex shapes. Secure using 3M Application Tape.

• Check the condition of materials. Panels should not be bent, distorted and the rear liner should be intact. Remove any shards from the material.



**b)** Apply the kit no closer than 3mm to door hinges, door hardware, ends of the vehicle or weld joints. Use butt joints for adjacent panels, do not overlap.



**c)** Do not apply the kit beyond panel edges where moisture and dirt can get to the adhesive.



 $\mbox{d})$  Secure the top edge of the panels, using the hinge technique, with 3M Application Tape.



e) Firmly hold the kit in position against the surface with one hand and slowly remove the liner with your other hand by pulling down gently. Do not lose alignment. Removing the liner from the kit before alignment will cause pre-adhesion and misalignment.



**g)** Using a PA-1 applicator with a cotton/low friction sleeve, press the kit to the surface using firm, overlapping strokes. A firm felt squeegee can be used during initial application, followed up with the PA-1 applicator and sleeve.



f) Gently apply pressure to hold in position.



h) Firmly adhere all edges and parts of the kit where surface adhesion is minimal. This is very important to reduce failures. Pay particular attention to the outside edge of each panel.



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