

CEPS 1058

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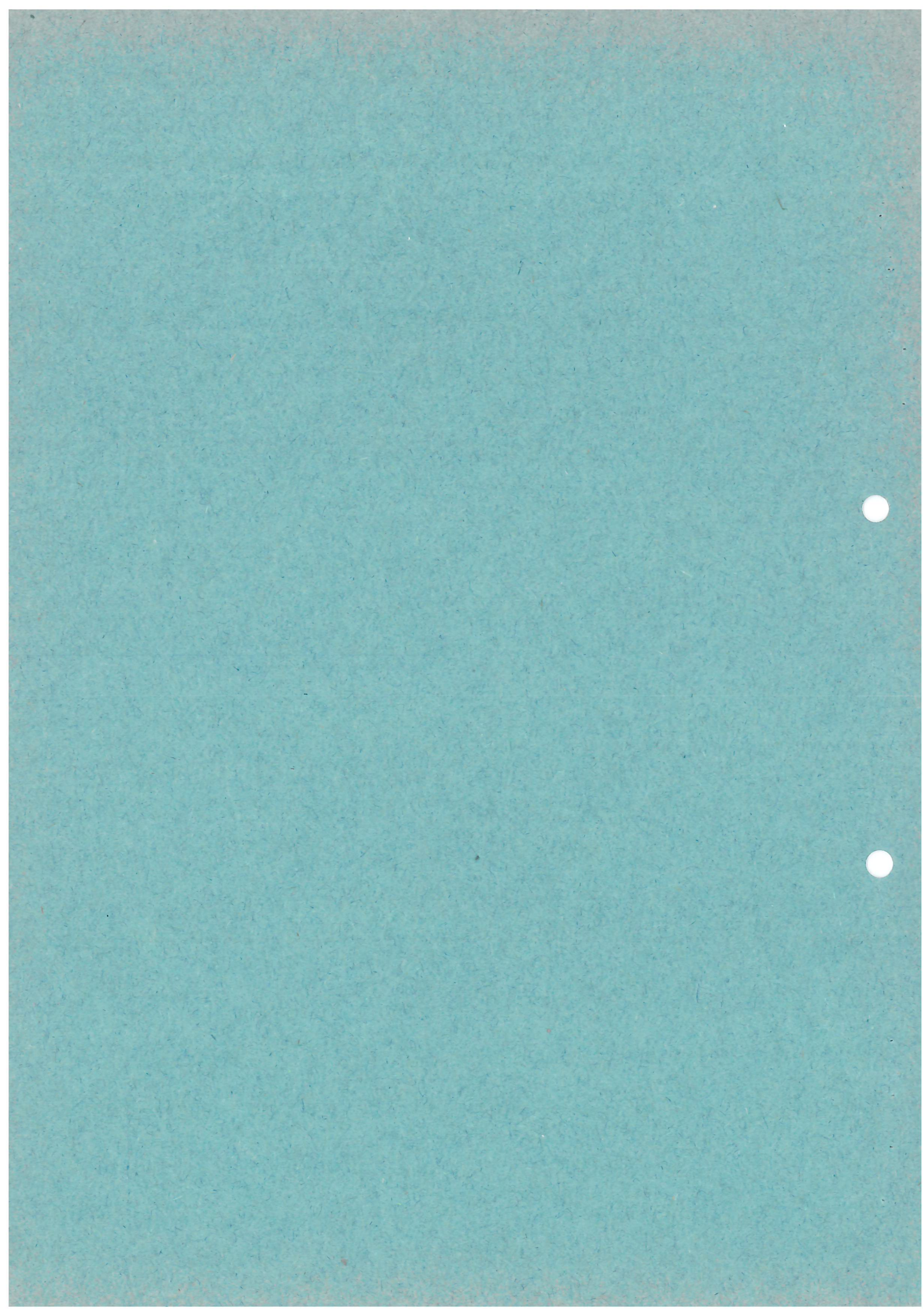
# British Railways Board

Mechanical & Electrical Engineer's Department

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**BONDING OF MOQUETTE TO PLYWOOD & METAL**





BONDING OF MOQUETTE TO PLYWOOD AND METAL

PASSENGER ROLLING STOCK

1. GENERAL

To maintain the fire retardant characteristics of items covered with moquette used in Passenger Rolling Stock interiors, the adhesive bonding the moquette to the substrate shall be 'Swifts S87A' supplied by Swift Chemical Company, Industrial Adhesive Division, Ashford, Middlesex. No other adhesive may be used without written consent of the Chief Mechanical and Electrical Engineer, British Railways Board, Railway Technical Centre, Derby.

2. DESCRIPTION

The adhesive is a Plasticised Styrene - Butadiene Rubber type in flammable solvents. It has a low viscosity (approx. 1-2 poise) to ensure good sprayability, and is highly fire retardant in the dry state.

3. APPLICATION

Immediately before use the adhesive must be very thoroughly mixed to ensure even dispersion of the fire retardant chemicals throughout the adhesive. The adhesive must be spray applied to the substrate only, giving a generous coating at a rate of approximately 3 sq m/litre or 150 sq ft/gallon. A standard paint spray gun using low pressure air is suitable.

The moquette and substrate must be brought together whilst the adhesive is still in a soft tacky state, to enable the adhesive to just penetrate the rear surface of the moquette without soaking through, and tacky enough to hold it to the substrate. The surface of the moquette must be left exposed in a flame free environment during the drying time of approximately 8 hours at 65<sup>o</sup>F to allow the solvents to evaporate.

For clean up Swifts 'Solvent B' should be used.

4. SAFETY

The solvents contained in this adhesive are Acetone and Hexane and are highly flammable with a flash point below 73<sup>o</sup>F. They have a combined Threshold Limit Value (TLV) of 100 ppm.

The adhesive must be used and stored in restricted NO SMOKING, flameproof areas, and applied in a booth which has adequate and suitable fume extraction plant, as should the drying area. The fumes are non-toxic but ingestion of the adhesive or its solvents should be avoided, and the consumption and storage of food or drink should be prohibited when it is handled or used. Contact with skin/eyes must be avoided, and it is recommended that suitable goggles, gloves and barrier cream be used. If skin contact does occur, solvents should not be used to remove it from the skin.



5. SHELF LIFE

When stored in sealed containers at normal temperatures, Swifts S87A adhesive has a shelf life of approximately 6 months.



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AMENDMENTS.

DATE

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AMENDMENT

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Chief Mechanical and Electrical Engineer  
British Railways Board  
Railway Technical Centre  
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