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## Heat Lamination Instructions

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### Introduction

This document gives detailed heat lamination instructions for Coats Signal C502600 and C50250S heat transfers. Coats Signal retro reflective heat transfers are for all types of high visibility applications and can be easily heat applied on different fabrics. Since individual conditions may vary because of fabric type, construction, chemical treatments and equipment, it is recommended that continuous testing should be done to ensure acceptable adhesion.

### Preparation

1. Following recommendations are general guidelines for heat press lamination. Other methods such as continuous heat press or high frequency welding can also be used. For continuous press, ensure that the temperature in all zones is uniform and the belt speed is correct to meet the recommended conditions.
2. Use a flat surface where uniform heat and pressure can be applied. Do not overlap or apply on seams and stitches.
3. Pre-heat the press machine to the recommended temperature according to fabric type show in below table.
4. Below table shows recommended conditions for polyester / cotton fabric. Further testing on other substrates should be done to achieve appropriate lamination parameters. Lamination on sensitive substrates might require reduced temperature and time to prevent surface damage. Fabrics with special treatments such as water repellent or waterproof finishes may contain silicone, paraffin, fluorocarbon resin as well as flame retardant finishes may influence the lamination condition and therefore require continuous testing. Fabrics with shrinkage higher than 3% in either direction should be pre-shrunk before lamination. Care must be taken to avoid air blisters.

Fabric Type	Temperature	Time	Pressure
≤ 150 g/m <sup>2</sup>	140 °C	15 sec	5 bar
150 – 250 g/m <sup>2</sup>	150 °C	15 sec	5 bar
250 – 350 g/m <sup>2</sup>	160 °C	18 sec	5 bar

### Lamination

1. C50250S segmented heat transfer has no liner on adhesive side and has a protective liner on reflective side only. C502600 is provided with a protective liner on both sides. For heat lamination, first remove the thin liner on the adhesive side to expose the dry adhesive side, do not remove the PET liner on the reflective side at this stage.
2. Place the heat transfer on the surface with the adhesive side down facing the substrate. For heat press, the temperature and pressure should be even on the tape. A press cloth or a siliconized slip-sheet for delicate or coated substrates can be used to cover the heat transfer and substrates during lamination.

3. After lamination, allow the application to cool to room temperature and carefully remove the liner on the reflective side. To remove the liner, lift the film from one corner and pull it gently with a single motion while holding the substrate flat.

To ensure adequate adhesion to substrate, it is strongly recommended to test the application in intended care procedure for finished product prior to bulk production. Use care instructions mentioned in product data sheet.

Since conditions and applications vary considerably in the use of a product, the customer and/or user should assure herself or himself that the product meets end customer requirements and is suitable for the intended end use. Coats accepts no liability for unsuitable or improper use or application of products. Information provided above is based on current averages and should be taken only as indicative. Coats accepts no liability for the preciseness and correctness of the information provided.

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