

Engineered Adhesive Solutions

For the Smart Card & Identification Industry

Thermofilm® G160 & G161

With its **Thermofilm®** range, Scapa offers consumers an approved choice of adhesive solutions of heat-activated films for various applications for the Smart Card & Identification Industry.

Thermofilm® products provide extremely high bond strengths and excellent plasticizer resistance. In addition, they adhere well to a wide variety of surfaces while keeping high conformability and softness to ensure flexibility of the assembled devices.

Thermofilm® G160 & G161 are specifically designed for plastic card and passport lamination.

Typical applications for Scapa Thermofilm® G160 & G161 include:

- Layer lamination of dissimilar materials like plastic and paper used to make the cover of passports
- Layer lamination for dual, contactless and multifunctional cards
- Plastic material assembly



Thermofilm® - key features and benefits

Thermofilm® G160 **NEW**

- Is a heat reactive adhesive transfer thermoplastic polyurethane film
- Is a 20µm thick clear PU resin
- Supplied on a 130 g/m² white Kraft paper release liner
- Exhibits extremely high bond performance on PVC, ABS, PC, TESLIN, paper, PET-G, polyimide, etc. and fair adhesion on PET-F and metals
- Provides soft and flexible bonding due to its chemical and unique formulation

- Low bonding temperature (+70°C) allows use on temperature sensitive substrates
- Scentless when activated

Thermofilm® G161 **NEW**

- Has same construction and performance than G160 but with a 27µm thick white pigmented PU resin
- Specifically used to hide electronic devices or other components thanks to the high opacity of its white adhesive mass

Thermofilm® - product process conditions and performance

Application to primary substrate:

Unwind G160 or G161 product and combine the adhesive side to the surface of the substrate that will be laminated. This should be done by using a heated squeeze roll or other heated method which ensures firm pressure and intimate contact of the adhesive film and the substrate.

Minimum temperature of 80°C during few seconds is recommended for lamination.

Peel strength and holding power will vary according to the quality of the substrates (thickness and material), temperature, dwell time and pressure.

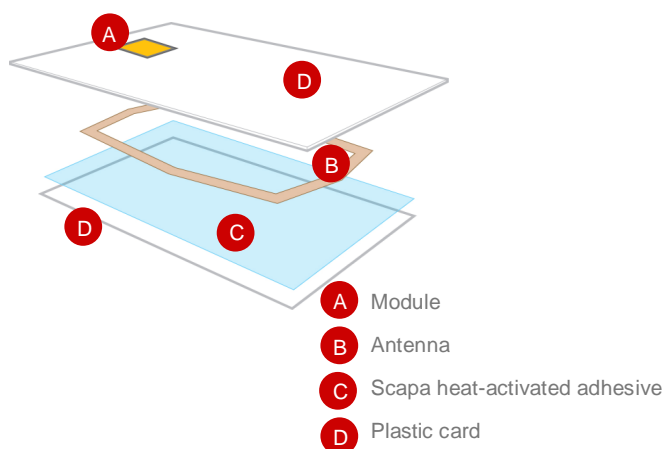
Minimum temperature of 120°C during 30 seconds is recommended for bonding.

Product will exhibit good performance as soon as cooled at room temperature. However, maximum adhesion values are met after 48 hours of full crystallisation.

Application to secondary substrate:

Peel off the protective release liner and apply the adhesive side to the desired surface using heat and pressure.

Layer lamination for dual card



Layer lamination for E-passport



Thermofilm® - heat-activated films

Product Code	Carrier	Adhesive Type	Thickness (µm)	Operating Temperature	Application	Special Features
Thermofilm® G160 NEW	Clear transfer	Polyurethane	20	-15°C to +60°C	<ul style="list-style-type: none"> • Passport • Plastic card 	<ul style="list-style-type: none"> • Low temperature activation (70°C) • High bond strength • Soft and flexible bond
Thermofilm® G161 NEW	White transfer	Polyurethane	27	-15°C to +60°C	<ul style="list-style-type: none"> • Passport • Plastic card 	<ul style="list-style-type: none"> • Low temperature activation (80°C) • High bond strength • Soft and flexible bond • High opacity

Scapa develops solutions to meet customers' demands - a selection of products in our standard range is shown here. If, however, you do not find the right product for your specific requirements, please contact us to research the best solution.

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Thermofilm® is a registered trademark of Scapa Group Plc.

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