

Product Data

Epoxy Film Systems



Epoxy film adhesive for bonding applications

RF-550

Applications

- Sandwich structures
- Metal bonding
- Plastic bonding





Introduction

RF-550 adhesive film is a 120°C cure modified epoxy film that can be supplied supported (moisture-resistant polyester carrier) or unsupported. Standard areal weights are 200, 250 and 300g/m². 150, 400 and 450g/m² films are also available on demand.

The film is designed for the manufacture of sandwich structures from a variety of skins and cores and for bonding a wide range of substrates (metals, plastics, reinforced plastics and composites structure, marble, etc.).

it is also extensively used as a surfacing film on composite parts and drastically reduces time-consuming sanding and filling operations.

Main Features

- Excellent balance between high peel strength and high shear strength in the range of -55°C to 110°C service temperature
- Co-curable with all 120°C PRF prepregs
- Available in several areal weights, supported or unsupported
- Very flexible conditions of cure temperature (100°C to 160°C) and processing methods (press, oven or autoclave)

RF-550 adhesive film is wound into rolls of 80 or 55 running metres on a 3 inch inner diameter cardboard core and protected by a blue polyethylene film and a release paper.

Standard width is 1270mm.

REFERENCE	AREAL WEIGHT	SUPPORT	QTY PER ROLL
RF550U-01501270	150 g/m ² +/- 20		101.60 m ²
RF550S701501270	150 g/m ² +/- 20	17 g/m ² polyester mat	101.60 m ²
RF550U-02001270	200 g/m ² +/- 25		101.60 m ²
RF550S702001270	200 g/m ² +/- 25	17 g/m ² polyester mat	101.60 m ²
RF550S702501270	250 g/m ² +/- 30	17 g/m ² polyester mat	101.60 m ²
RF550U-03001270	300 g/m ² +/- 30		101.60 m ²
RF550S703001270	300 g/m ² +/- 30	17 g/m ² polyester mat	101.60 m ²
RF550S704001270	400 g/m ² +/- 40	17 g/m ² polyester mat	69.85 m ²
RF550U-04501270	450 g/m ² +/- 45		69.85 m ²



Processing Handling

The adhesive should be removed from cold storage and allowed to warm to room temperature (20-25°C), in original packaging. Bonding surface should be clean, dry and properly prepared. For optimum surface preparation, consult our specialists. Cut the film to the shape and size required. Remove the release paper and position the adhesive on the prepared bonding surface. Remove the blue polyethylene film, complete the joint assembly and apply pressure while the adhesive is being cured.

Curing

Standard cure cycle is 60 min at 120°C; alternative cure cycles are given below. For cycles shorter than standard, enough time should be allowed for heat to reach corresponding temperature inside the adhesive before starting the timing. Cool down to 70°C or below before releasing the pressure and removing from mould.

Cure temperature	150°C	140°C	130°C	120°C	110°C	100°C
Curing time (minutes)	10	20	40	60	150	300

Properties

Typical values measured on RF-550 film supported or unsupported

Test	Test temp.	g/m ²					
		150	200	250	300	400	450
Lap shear strength	23°C	40 MPa	40 MPa	40 MPa	40 MPa	40 MPa	40 MPa
With 2024 T3 bare	70°C	35 MPa	35 MPa	35 MPa	35 MPa	35 MPa	35 MPa
Sulfochromic etching	120°C	10 MPa	10 MPa	10 MPa	10 MPa	10 MPa	10 MPa
Climbing drum peel	23°C	30 Nm/m	30 Nm/m	45 Nm/m	60 Nm/m	60 Nm/m	60 Nm/m
With aluminium	70°C	40 Nm/m	40 Nm/m	55 Nm/m	65 Nm/m	65 Nm/m	65 Nm/m
honeycomb 5056-6-85	120°C	45 Nm/m	45 Nm/m	60 Nm/m	70 Nm/m	70 Nm/m	70 Nm/m

Dry Tg onset	100-105°C
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PRF Composite Materials

3 Upton Road

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Dorset BH17 7AA

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