

# AeroFilm® R250



# **Key Features**

- 250°C service temperature
- 100% ETFE construction
- Ultra-light 15 µm thickness
- Very conformable
- Excellent elongation

## **Product Description**

Aerofim® R250 Unperforated Prepreg Release Film is a high specification ETFE release film designed to offer the very best performance for autoclave and out-of-autoclave prepreg manufacturing.

In common with bagging film, the flexibility and conformability of the release film can make a significant difference to the quality of the cured laminate, especially to the prevalence of pin-holing and corner voiding.

R250 is just 15µm thick resulting in excellent elongation and conformability making it easier to ensure that the release film is down properly against the laminate, reducing corner bridging and improving consolidation, especially for sensitive out-of-autoclave processing.

As an ETFE film, R250 also offers the potential for high temperature processing (up to  $250^{\circ}\text{C}/480^{\circ}\text{F}$ ) along with excellent chemical resistance and self-release from a wide range of resins including epoxy, polyester, vinylester and phenolics.

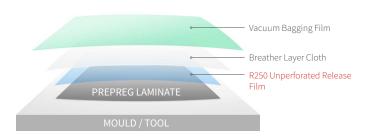
#### Recommended Uses

- Out-of-autoclave prepreg vacuum bagging
- Autoclave prepreg vacuum bagging
- High temperature applications (up to 204°C/482°F)
- Gloss finishing composite repairs

## Typical Use

Most commonly, Aerofim® R250 Unperforated Prepreg Release Film is used as a release film when vacuum bagging prepreg composites for out-of-autoclave or autoclave cure. The film is applied directly onto the back of the prepreg laminate, covering the whole surface and acts as a thin, conformable, non-stick barrier between the laminate and the breather fabric.

#### Example Stack: High Temperature Prepreg Laminating



## Specification

Property	Units	Method	Value
Material	-	-	100% ETFE
Width	mm	Internal	1220 (-0 +10%)
Format	-	-	Single Sheet
Nominal Thickness	μm	ISO 4593	15 ± 10%
Maximum Use Temperature	°C	Internal	250
Areal Weight	g/m²	Internal	26 ±5%
Tensile Strength at Break MD	N/mm²	ASTM 527-3	> 40
Tensile Strength at Break TD	N/mm²	ASTM 527-3	> 40
Elongation at Break MD	%	ASTM 527-3	> 100
Elongation at Break TD	%	ASTM 527-3	> 100
Elastic Modulus	N/mm²	ASTM 527-3	> 650 ±1%
Yield Strength	N/mm²	ASTM 527-3	> 20 ±10%
Appearance	-	-	Light Blue. Translucent.

#### Alternative Widths & Formats

This film is held in stock at the 1.22m width. Special widths (and formats) may be available for large orders, subject to a minimum order quantity.

### Handling & Storage

R250 is a stable fluoropolymer film with no special handling or storage requirements.

#### Disclaimer

This data is not to be used for specifications. Values listed are for typical properties and should not be considered minimum or maximum.

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