


# ALIGNED FORMABLE FIBRE TECHNOLOGY



AFFT™ tapes are advanced uni-directional pre-preg tapes made with highly aligned short fibres. The highly aligned fibre architecture mimics virgin continuous fibre material and it can reach similar performance as equivalent continuous fibre materials, whilst adding unique moulding and draping characteristics to speed up manual and automated lay-up procedures. Tapes with custom (reclaimed) carbon fibres can be made to create strong recycled composite tapes that can substitute continuous fibre UD material.

## OVERVIEW

Fibre type	rCF: Reclaimed standard modulus 4mm carbon fibre (Other fibre types available on request)
Fibre areal weight	Standard 35 gsm (typically within +-3 gsm) (Other gsm available on request)
Resin system	Epoxy (SHD MTC400-1)
Resin areal weight	50 gsm
Tape width	100 mm
Cured ply thickness	0.05 mm (dependent on processing method, see below)

## PROCESSING

Method	Vacuum / oven cure	Autoclave	Compression moulding
Consolidation pressure (bar)	1 bar	7 bar	30 bar+
Fibre volume fraction (%)	~23%	~30 %	~ 40 %
Cured Ply Thickness (for FAW 35 gsm)	~0.085mm	~0.065mm	~0.050 mm

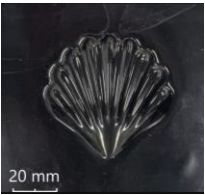

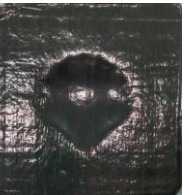


**STORE FROZEN AT -18°C**  
**Cure temperature-time\*:**  
**85°C – 16 hours**  
**100 °C – 4 hours**  
**135 °C - 1 hour**

*\*Resin TDS available on request for more detailed cure information.*


*In uncured state at elevated temperatures, AFFT tapes can stretch up to 20% strain, allowing easy draping around complex, double curved surfaces. To avoid excessive stretching behavior, use material at lower temperature (< 18°C) during manual handling and lay-up to maintain fibre alignment and prevent unwanted tape stretching.*


*Development pre-preg tapes are single-side impregnated with a resin rich side.*

*Higher consolidation pressures above 10 bar advised for maximum fibre volume fraction and best performance.*

Scan for tape info, photos & videos.



Technical Data Sheet				 <div> Lineat Composites  Unit 3 Severn Link Distribution Centre  Newhouse Farm Industrial Estate  NP16 6UN, Chepstow, UK </div>
Document number	Version	Date effective	Page	
LINEAT-MTC-TDS	7	19/09/2025	2 of 2	

## TYPICAL COMPOSITE PROPERTIES

Standard Modulus rCF/MTC400-1

Processing conditions: Compression moulding at 90 bar. Estimated FVF of 46%.

Property	Unit	Value	Standard
Tensile Modulus	GPa	89.40	ISO 524-5
Tensile Strength	MPa	722.76	ISO 524-5
Flexural Modulus	GPa	89.40	ISO 14125
Flexural Strength	MPa	967.78	ISO 14125
Compressive Modulus	GPa	92.31	ISO 14126
Compressive Strength	MPa	928.03	ISO 14126
ILSS	MPa	89.17	ISO 14130
Density	g/cm <sup>3</sup>	1.45	-

Important notice: information based on research tape assessment. Data and information provided is for indication only and must not be used for qualification.

[www.lineat.co.uk](http://www.lineat.co.uk) – [info@lineat.co.uk](mailto:info@lineat.co.uk)