

Mactac TF Series

PRODUCT DESCRIPTION

Mactac TF series has been developed especially for fleet wrapping and vehicle customisation.

The series consist of vinyl products with different face materials, coated with micro-structured acrylic adhesive (except TF Velvet).

Face material

TF 700 BF Sublime: 85µm gloss. Matt and metallic polymeric stabilized calendered vinyl, cadmium-free.

TF 800 BF Stellar: 120 µm sparkling double layer cast vinyl, cadmium-free.

TF Carbon BF: 130µm polymeric stabilized calendered vinyl, cadmium-free (thickness excluding embossing structure).

TF Velvet: 170 µm cast vinyl, cadmium-free, coated with approximately 725 µm textile fibres

Adhesive:

Repositionable clear solvent based acrylic adhesive.

Liner

TF 700 BF Sublime , 800 BF Stellar, and Carbon BF: Highly stable 145 gsm white micro-embossed PE coated paper.

TF Velvet: Highly stable 135 gsm white kraft paper.

TYPICAL USE

TF Series is designed for Vehicle & Boat Hulls Wrapping (above water line), applying the product on painted metal.

The main characteristic of this series is the ease of application, thanks to the Micro-structured adhesive (except for TF Velvet).

SHELF LIFE

when stored at 15-25°C and ± 50 % relative humidity:

TF 700 BF Sublime & TF 800 BF Stellar	2 years
TF Carbon BF and Velvet	1 year
TF 738-66 & TF 778-06	9 months

PHYSICAL PROPERTIES (TYPICAL VALUES)

Average values Test method

Adhesive data, 23°C (N/25 mm)

Peel 20 min on Stainless Steel	15	FTM1
Peel 24 hours on Stainless Steel	17	

Facefilm data, 23°C

TF 700 BF Sublime, 800 BF Stellar and Carbon BF		
Tensile Strength	> 30 MPa	DIN ISO 527-3
Elongation at break	>150%	DIN ISO 527-3

TF Velvet		
Tensile Strength	> 30 MPa	DIN ISO 527-3
Elongation at break	>100%	DIN ISO 527-3

Dimensional stability

Shrinkage (48 hours at 70°C applied on aluminium)	Max. 0.5 mm	FTM 14
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Temperature ranges

Minimum application temperature	+ 10°C to + 40°C
Service temperature range of use	- 40°C to + 90°C

EXPECTED DURABILITY

TF 700 BF Sublime			
Vertical Durability			
	Zone 1	Zone 2	Zone 3
White & Black	8 years	5 years	3 years
Colours*	6 years	4 years	2 years
Metallics	4 years	2 years	1 year
Pearl	3 years	2 years	1 year
Horizontal Durability			
White & Black	4 years	3 years	6 months
Colours*	3 years	2 years	6 months
Metallics	2 years	1 years	6 months
Pearl	1.5 years	1 years	6 months

*Note: Despite being solid colours, TF 709-46 Banana yellow (EB4680001), TF 749-54 Green yellow (EB4890001) and TF 749-13 Apple green (EB4870001) have same durability of metallics

TF 800 BF Stellar			
Vertical Durability			
	Zone 1	Zone 2	Zone 3
All Colours	5 years	4 years	3 years
Horizontal Durability			
All Colours	3 years	2 years	Not recom.

TF Carbon BF			
Vertical Durability			
	Zone 1	Zone 2	Zone 3
Black	5 years	4 years	2.5 years
Graphite	4 years	3 years	2 years
Horizontal Durability			
Black	3 years	2 years	Not recom.
Graphite	2 years	1.5 year	Not recom.

TF Velvet			
Vertical Durability			
	Zone 1	Zone 2	Zone 3
Black	4 years	3 years	2 years
Colours	2.5 years	1.5 year	1 year
Horizontal Durability			
Black	2.5 years	2 years	Not recom.
Colours	1.5 year	1 year	Not recom.

This information is based on artificial aging according to modified ISO 4892-3.

Exterior boat application with Mactac Sealer: above data reduced by 30%

For more details about durability and zone classification, please refer to TB 7.5 "Outdoor Durability of Mactac Graphics - Self-adhesive films"

Exposure to severe temperatures, ultraviolet light, and/or conditions in Southern European countries, tropical, subtropical or desert regions will cause more rapid deterioration. This also applies to polluted areas, high altitude and south-facing exposure.

PROCESSING

Clean and degrease the substrate

All surfaces to which the material will be applied must be thoroughly cleaned from dust, grease or any contamination. Use soapy water to remove the dust and degrease with Mactac Cleaner (Product Code: BO7680001). Application of the product is recommended only on painted metal surfaces.

Application

on flat or slightly curved surfaces

Apply TF series with the dry application method.

on convex areas

Heat the film with a heat gun before conforming it over the convex area.

on corrugated or concave areas

If the film is stretched into a corrugation, it may result in application failure after few weeks.

It is, therefore, recommended to cut the film and to apply it in the corrugation without tension.

Application on boat

We recommend sealing the edges using Mactac Sealer (Product Code: BP2540001).

Removability

Once heated, TF series is very easy to remove, leaving almost no adhesive residue on car body.

Some adhesive residue may be expected on gel coat boat hulls after film removal. Eventual adhesive residues can be removed with Mactac Remover (Product Code: BO7710001).

REMARKS

Compatibility with paints and lacquers should be tested by the end-user, prior to use.

Due to the finish and manufacturing process of TF series, variances in colour can be visible when the material is oriented in different directions. When utilizing TF series, always keep the application direction of the film consistent with the orientation of the film when cut from the roll and applied to the vehicle.

Some slight colour shift may occur between rolls or lots, therefore, minimizing the mixing of rolls/lots on a specific vehicle is recommended.

When applying TF Carbon BF, do not overheat or over stretch the film, otherwise the structure appearance could be damaged.

Also, TF Carbon BF are sensitive to scratches and should be handled with care.

Textile fibre colour used in TF velvet may slightly vary from batch to batch. We therefore not recommend mixing lot numbers on the same job.

DISCLAIMER

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