

# MFT TECH

Compound  
**MFT**  
Multi-Flex-Technology

## CHARACTERISTICS

MFT TECH is an innovative range of multi-coating bituminous membranes made with the MFT Multi-Flex Technology, another result of the constant Copernit research, combining in one product the advantages of both APP and SBS membranes.

MFT technology exceeds the traditional coating processes and gives the possibility to design the bituminous membrane by choosing three different bituminous compounds layers into the same product, depending on the final destination of use and required performances.

MFT TECH, in fact, is composed by the following three coats:

- Upper face: highly modified bituminous compound with selected poly-olefins and copolymers (APAO), giving an outstanding resistance to high temperatures and UV ageing
- Lower face: superior elastomeric compound made of distilled bitumen modified with SBS (Styrene-Butadiene-Styrene) polymers, which ensures extreme elasticity, ease of application and superior bonding and tightness of all joints and overlaps. The special SBS technology compound, highly modified with polymers, ensures MFT TECH with high performances and lower unit weight compared to MFT EVO version with same thickness.
- Reinforcement impregnation: special modified compound, made on purpose for the best pliability and resistance to mechanical stresses and perforation

MFT TECH is a membrane range of un-compromising quality, designed for use by professionals for professional applications. The use of low specific weight components, in fact, ensures the following advantages to MFT TECH:

- ease of rolls handling, with installation yield improvement;
- enhanced compound adhesion, with reduced need for torching and therefore faster application;
- cost-saving application: less working time and less consumption of gas.

## CARRIER

MFT TECH is reinforced with a spunbond polyester stabilised with longitudinal glass yarns that combine superior dimensional stability with good tensile strength and elongation values and high mechanical properties in general.

## INTENDED USE ACCORDING "CE" MARK STANDARDS

Underlayer or top layer in multi-layer system for roof waterproofing also under ballast or other heavy protection finish (EN 13707) – Foundations and ground waterproofing (EN 13969)	<b>MFT TECH</b> 4,0 mm
Underlayer or top layer in multi-layer system for roof waterproofing under ballast or other heavy protection finish (EN 13707) – Foundations and ground waterproofing (EN 13969)	<b>MFT TECH QUADRA</b> 4,0 mm
Top layer in multi-layer system for roof waterproofing (EN 13707)	<b>MFT TECH MINERAL</b> 4,0 mm

## AVAILABLE SURFACE FINISHES

Upper surface MFT TECH: TEX (non-woven polypropylene "ready-to-paint" film) allows MFT TECH to be painted immediately after installation.  
MFT TECH QUADRA: special square patterned PE torch film is designed to speed up the alignment and overlapping of adjacent rolls, for fast and intuitively accurate work  
MFT TECH MINERAL: self-protection by means of slate flakes available in standard grey or other various colours upon request.

Lower surface Polyethylene fast burning film. For cold applications by means of adhesive the use of TEX finishing on the lower surface is recommended.

## USE & APPLICATION

MFT TECH and MFT TECH QUADRA are indicated as a base or cap sheet layer in multi-layer waterproofing systems, also under ballast or other heavy protection finish.

In case of direct exposure to weathering agents, MFT TECH shall be protected with reflective paint or by a layer of self-protected (mineralised) membrane.

MFT TECH QUADRA membranes must always be protected either by a torch applied cap sheet membrane or by screed or other heavy duty protection (the use of reflective paint is not recommended for this type of membranes). Direct exposure to UV should be avoided.

MFT TECH MINERAL is recommended as a waterproofing cap sheet layer for applications without other types of protection.

Subject to the type of substrate MFT TECH membranes shall be installed by means of a propane gas torch, approved adhesives or by mechanical fixing. In any case it is recommended to prepare substrate with fixative bituminous PRIMER W (water base) or PRIMER S (solvent base).

For cold applications on primed concrete surfaces MFT TECH membranes shall be installed using COPERGLUE BASE (over horizontal areas) or COPERGLUE VERTICAL (parapets and elevations) bituminous adhesives. Side laps, head joints and small repairs shall be made using COPERGLUE JOINT adhesive. For cold applications over insulation board (Polystyrene, PUR or PIR) CPERMAST bituminous mastic shall be used.

For correct installation refer to information provided by Copernit Technical Department.

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Properties	Test Method	Unit	MFT TECH	MFT TECH QUADRA	MFT TECH MINERAL	Tol.
Length	EN 1848-1	m	8 (-1%)	8 (-1%)	8 (-1%)	≥
Width	EN 1848-1	m	1,0 (-1%)	1,0 (-1%)	1,0 (-1%)	≥
Thickness	EN 1849-1	mm	4,0	4,0	4,0	±5%
Tensile strength (at break) L/T	EN 12311-1	N/5 cm	600/500	600/500	600/500	±20%
Elongation (at break) L/T	EN 12311-1	%	35/35	35/35	35/35	±15
Tear resistance (nail test) L/T	EN 12310-1	N	150/150	150/150	150/150	±30%
Resistance to static loading	EN 12730 (A)	kg	15	15	15	≥
Impact resistance	EN 12691	mm	900	900	900	≥
Dimensional stability	EN 1107-1	%	±0,3	±0,3	±0,3	≤
Flexibility at low temperature - upper surface	EN 1109	°C	-20	-20	-20	≤
Flexibility at low temperature - lower surface	EN 1109	°C	-20	-20	-20	≤
Flow resistance at elevated temperature - upper surface	EN 1110	°C	140	140	140	≥
Flow resistance at elevated temperature - lower surface	EN 1110	°C	100	100	100	≥
Watertightness (method A)	EN 1928	kPa	60	60	60	≥
Resistance to water vapor diffusion (μ)	EN1931	--	20.000	20.000	20.000	--
Reaction to fire	EN 13501-1	Class	E	E	E	--
Resistance to external fire	EN 13501-5	Class	F <sub>ROOF</sub>	F <sub>ROOF</sub>	F <sub>ROOF</sub>	--

For complete product information and correct installation, refer to the "MFT MULTI-FLEX TECHNOLOGY" catalogue provided by Copernit.