

INTRODUCTION

OptiPlan-MF21/42 is a polyester reinforced, multi-component, synthetic roof waterproofing membrane made from premium-quality plasticized polyvinyl chloride (PVC-P). The upper light layer offers exceptional resistance to weather and UV rays, while the black underside layer is puncture resistant. OptiPlan-MF21/42 also contains added flame retardants and provides enhanced flexibility, making the installation process easier at lower temperatures.

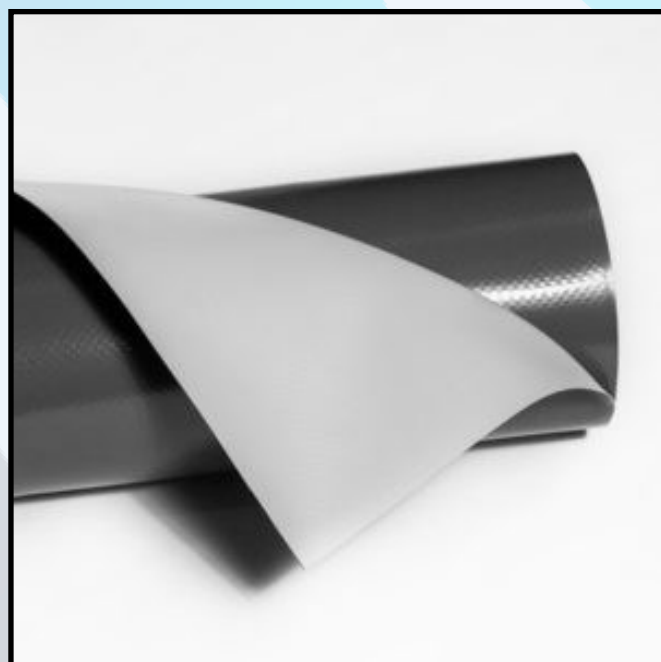
PRODUCT DESCRIPTION

OptiPlan-MF21/42 is a single ply waterproofing membrane designed for use on mechanically fastened flat roof applications. It is particularly well suited to projects requiring high levels of fire resistance as well as those situated in cold climates.

PRODUCT FEATURES

- Manufactured using an advanced automated co-extrusion method, ensuring reliable material uniformity
- Independently tested by the British Board of Agreement, BBA certificate number 18/5529
- Tested as part of a system to achieve Broof Test 4 fire classification
- Outstanding resistance to weathering and UV radiation
- High tensile strength and impact / puncture resistance
- Excellent weldability and excellent flexibility in cold temperatures
- High water vapour permeability
- Recyclable
- Full range of system accessories available

Technical Data		
PROPERTIES	TEST METHOD	VALUE
Length	EN 1848-2	≥ 20m (-0/+5%)
Width	EN 1848-2	≥ 1.05m / ≥ 2.10m (-0.5/+1%)
Mass per Unit Area	EN 1849-2	1.9kg/m ² (-0/+10%)
Thickness	EN 1849-2	1.5mm (-0/+10%)
Straightness	EN 1849-2	≤ 30mm / ≤ 10m
Flatness	EN 1849-2	≤ 10mm
Water Tightness	EN 1928 Method B	Pass
External Fire Performance	Fire tested as part of a system in accordance with EN 13501-5 and DD CEN/TS 1187:2012, Broof Test 4	
Reaction to Fire	EN 13501-1	Class E
Tensile Properties: Maximum Tensile Force	EN 12311-2	≥ 1100 N/50mm / ≥ 900 N/50mm
Tensile Properties: Elongation	EN 12311-2	≥ 18%
Tear Resistance	EN 12310-2	≥ 180 N
Joint Peel Resistance	EN 12316-2	≥ 300 N/50mm
Joint Shear Resistance	EN 12317-2	≥ 600 N/50mm
Resistance to Impact, Rigid Substrate / Soft Substrate	DIN EN 1107-1	≥ 500Mm / ≥ 700Mm
Hail Resistance, Rigid Substrate / Soft Substrate	EN 13583	≥ 17m/s / ≥ 25m/s
Resistance to Static Load	EN 12730-B	≥ 20kg
Flexibility at Low Temperatures	EN 495-5	≤ - 30°C
UV Exposure	EN 1297	Pass



APPLICATION

The OptiPlan-MF21/42 roof waterproofing membrane is installed by mechanical fastening with hot air welded seam overlaps. Additional mechanical fixing on roof perimeter areas is mandatory.

Welding: Overlap seams are welded using electric hot air welding equipment, such as manual hot air welding machines and pressure rollers, or automatic hot air welding machines with controlled hot air temperature.

Welding parameters depend on ambient weather conditions and should be defined immediately prior to welding. Welding seam width should not be less than 30mm.

Laying temperature restrictions: Air temperature -20oC min / +50oC max.

Application of chemical accessories, such as OptiPlan-C Adhesive or OptiPlan-Cleaner, should only be carried out at temperatures of 5oC or higher. Please refer to the Application Manual before applying any of these products.

STORAGE

Rolls should be stored horizontally on pallets in original packaging in a cool, dry place and protected from direct sunlight. Rolls must be stored in no more than 3 rows by height and no less than 1 metre away from any heating appliances. Rolls must be used within 18 months from date of manufacture in order to remain within their warranty period. After this length of time, rolls should be verified by OptiTec in order to ensure compliance with the requirements of EN 13956.

HEALTH & SAFETY

Health and Safety should be observed at all times in accordance with HSE and industry guidance. Specific Risk Assessments and Method Statements should be produced by contractors where necessary to ensure Working at Heights, Fire Safety and Manual Handling rules are compliant with current law and regulations. Health and safety data sheets are available for all materials on request from OptiTec Technical Department.

In case of any indoor welding, appropriate blowing ventilation must be implemented.

QUALITY ASSURANCE

OptiPlan-FB32 is manufactured following ISO 9001: 2008 Quality Management System and Environmental Management System approved to ISO 14001: 2004.

TECHNICAL & OTHER PRODUCTS

Specialist advice and information on other compatible products can be found at www.optitec.group

