

TECNOFLEX



Nature of product

Bitumen-polymer elastomer waterproofing membranes (SBS). The TECNOFLEX prefabricated membranes are produced in the black version, TECNOFLEX NT, 4 mm thick, and TECNOFLEX ARD, self-protected with slate flakes, mass per unit area 4.5 kg/m² (ARD/S version) or 4 mm thick + slate (ARD/HS version). They are provided with a non-woven polyester reinforcement of continuous filament; both sides of the black membranes are coated with the thermo-fusible film TERMOTENE, in the slate ones, only the lower one.

The specific formulation of the bitumen-polymer elastomer compound guarantees good mechanical performance, flexibility at low temperatures (-20°C), resistance to fatigue and breakage elongation of the compound above 1000%. The membranes of the TECNOFLEX series are produced in rolls, taped and accompanied by a Quality Control Certificate. They comply with the requirements for CE marking where required. They do not contain asbestos, tar or other dangerous substances.

Intended use

TECNOFLEX membranes are suitable for the creation of waterproofing works of various types. In particular, TECNOFLEX membranes are specifically used in harsh climates or during cold seasons. Moreover, compared to the use on roofs and in foundations, the different versions can be used with reference to the following diagram ⁽¹⁾.

For clarification on the systems that can be created, consult the Technical Services of IMPER ITALIA srl.

PRODUCTS	FIELDS OF USE ⁽¹⁾								
	Roofing (EN 13707)						Under-tile (EN 13859-1)	Steam control (EN 13970)	Foundations (EN 13969)
	Exposed			Roof gardens	Under heavy-duty protection				Multi-ply
	Single-ply	Multi-ply		Root-resistant	Single-ply	Multi-ply			
		Upper	Lower						
TECNOFLEX NT 4			•		•	•			•
TECNOFLEX ARD/S 4.5 kg/m ²		•					•		
TECNOFLEX ARD/HS 4 mm + slates		•					•		

⁽¹⁾ In compliance with the applicable AISPEC/SITEB-MBP Guidelines.

Application procedure

TECNOFLEX membranes are flame-installed before priming with a suitable primer or, only for versions with polyester reinforcement, with mechanical fixing. The application methods are a determining factor capable of characterising the performance of the waterproof covering itself. In general terms, the TECNOFLEX Series membranes must be applied using a propane gas flame. Particular care must be given to performing of sealing between the sheets always laid with staggered joints; the lateral joints must be installed with overlap of 8 ÷ 10 cm and the end joints with overlapping of 12 ÷ 15 cm. The bitumen-polymer elastomer compounds have poor resistance to U.V. Therefore, when heavy protection is not provided, the exposed membrane must be of the self-protected type. For correct and detailed documentation, as well as to identify the most effective intervention solutions in all circumstances, we recommend consulting the Technical Services of IMPER ITALIA srl which are in any case available for the consultation of particular problems as well as to provide all the assistance necessary for the best use of these materials.

TECHNICAL SPECIFICATIONS ⁽¹⁾

Specifications	EN Standards	Unit of Measure	Tolerances ⁽¹⁾	TECNOFLEX		
				NT4	ARD/S	ARD/HS ⁽²⁾
Roll dimensions	1848-1	m	≥	10 x 1		8 x 1
Thickness	1849-1	mm	±5%	4	-	4 + slates
Mass per unit area	1849-1	kg/m²	±10%	-	4.5	-
Watertightness	1928-B	kPa	≥	60		
Cold flexibility	1109	°C	≤	-20		
Flow resistance at elevated temperature	1110	°C	≥	+100		
L/T tensile strength	12311-1	N/5cm	±20%	650 / 500		
L/T tensile elongation	12311-1	%	±15 ⁽³⁾	40 / 40		
L/T dimensional stability	1107-1	%	≤	0.5		
Static puncture	12730	kg	≥	NDP ⁽⁴⁾		
Dynamic puncture	12691-B	mm	≥	NDP ⁽⁴⁾		
L/T tear resistance	12310-1	N	±30%	150 / 160		
Joint peel resistance	12316-1	N/5cm	±20 N	-		
Joint cut resistance	12317-1	N/5cm	±20%	-		
Durability after aging:						
• Cold flexibility	1296-1109	°C	+15°C	-5		
• Flow resistance at elevated temperature	1296-1110	°C	-10°C	+100		
• UV Ageing	1297	-	-	NDP ⁽⁴⁾	Supera	
• Watertightness	1296-1928	kPa	≥	60		
• Chemical resistance	-	-	-	NDP ⁽⁴⁾		
• L/T tensile strength	12311-1	N/5cm	±20%	550 / 400		
• L/T tensile elongation	12311-1	%	±15 ⁽³⁾	35 / 35		
Steam permeability	1931	μ	≥	20,000		
Root resistance	13948		-	NDP ⁽⁴⁾		
External fire behaviour	13501-5	EC ⁽⁵⁾	-	Froof		
Fire reaction	13501-1	EC ⁽⁵⁾	-	F		

Notes: ⁽¹⁾ In compliance with the applicable AISPECSITEB-MBP Guidelines.

⁽²⁾ Upper finish in slate flakes standard colour Natural grey.

Other colours upon request Red, Green, White, White Reflecta (SRI = 81%).

⁽³⁾ ±2 for Glass Mat reinforcements.

⁽⁴⁾ Characteristic not determined because it is not relevant for use.

⁽⁵⁾ Euroclass.

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Considerando le diverse situazioni d'impiego dei prodotti e l'intervento di fattori da noi non dipendenti (supporti, condizioni di esercizio, in osservanza delle prescrizioni, ecc.), non è possibile alla IMPER ITALIA srl assumere responsabilità in merito ai risultati ottenuti. Il progresso unito alla costante ricerca dei massimi livelli prestazionali possono apportare - nel tempo - modificazioni alle informazioni contenute in questo stampato, senza che la IMPER ITALIA srl debba darne preavviso a tutti gli interessati.

