

TECHNICAL DATA SHEET

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Product Name: **ELMO-Flex 4K**
Robust, Single Layer Universal Waterproofing Membrane

Product Code: TN627450 (Anthracite)

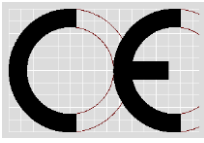
Roll Dimensions: 5.00 x 1.00 m

Weight: 5.55 kg/m²

Product description: ELMO-Flex 4K is a single layer, bituminous membrane which is saturated and coated with high percentage SBS (Styrene-Butadiene-Styrene) modified bitumen. It features high quality polyester reinforcement, a mineral finish on its upper surface and has a fleece finish on its underside. In addition, the membrane incorporates the latest graphite firewall technology within its formulation and has been fully fire tested in accordance EN 13501-5 and DD CEN/TS 1187:2012, Broof Test 4

Product use: ELMO-Flex 4K offers flexibility of installation, and can be torch-applied, bonded in Sprayfix PU Membrane Adhesive or mechanically fixed to suitable substrates. Where required, ELMO-Flex 4K can be specified as a completely flame-free waterproofing solution and it can also be used as fast-track method of overlaying existing roof coverings. In addition, the advanced formulation of ELMO-Flex 4K ensures excellent flexibility at low temperatures and a high flow resistance at elevated temperatures.

Properties	Test Method	Unit	Declared Performance
Length	DIN EN 1848-1	m	≥ 5.00
Width	DIN EN 1848-1	m	≥ 1.00
Straightness	DIN EN 1848-1	mm/10 m	≤ 20
Mass per unit area	DIN EN 1849-1	kg/m ²	≥ 5.55
Thickness	DIN EN 1849-1	mm	≥ 4.50
Water tightness	DIN EN 1928 Method B	-	passed
Tensile properties: maximum tensile force	DIN EN 12311-1	N	1000 / 1000
Tensile properties: elongation	DIN EN 12311-1	%	≥ 30 / 30
Dimensional stability	DIN EN 1107-1	%	≤ 0.3
Flexibility at low temperatures	DIN EN 1109	°C	≤ - 35
Flow resistance at elevated temperatures	DIN EN 12311-1	°C	≥ +120



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Properties	Test Method	Unit	Declared Performance
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 as certified by Warringtonfire*		
Reaction to fire	DIN EN 11925-2	-	Class E according to DIN EN 13501-1

*As outlined in Warringtonfire Classification Report Nos. 19901D & 19901H

Features & benefits:

- Universal application – torch-on / adhered / mechanically fastened to suitable substrates
- Provides a completely flame-free waterproofing solution where required
- Incorporates graphite technology, actively preventing spread of flames on roof
- Robust single layer solution
- Exceptional low temperature flexibility at -35°C
- Tested as part of a system to achieve Broof Test 4 fire classification as certified by Warringtonfire

**Safe2
Torch**
REGISTERED

warringtonfire

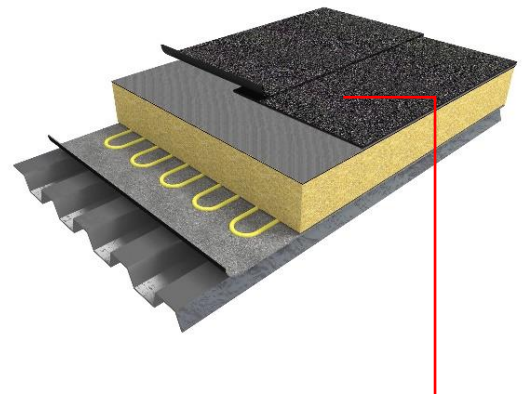
Application Overview:

ELMO-Flex 4K should be installed in accordance with manufacturer recommendations and all relevant national standards and codes of practice, including BS 8217: 2005 – the code of practice for reinforced bitumen membranes for roofing.

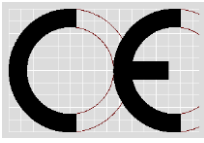
Roofing contractors should also be fully conversant with the guidelines set out in the National Federation of Roofing Contractors (NFRC) 'Safe2Torch' campaign. All operatives using torch guns or hot air guns during installation should be competent, conversant and capable of using such items in a safe and responsible manner. Care must also be taken when using torches and hot air guns in close proximity to combustible materials, decorative coatings and heat sensitive materials.

When setting out the field area, rolls should always be laid in the same direction. Side lap width should be at least 8cm with end laps of at least 10 cm. ELMO-Flex 4K can be rapidly installed using a variety of methods. Used in warm roof situations, the membrane can be torch-applied, adhered in Sprayfix PU Membrane Adhesive or mechanically fixed using appropriate fixings to suitable insulation boards. Laps can either be torched or heat welded. For detailed installation guidelines using any of these methods, please consult Technical Services.

NB: The colour of the granules may vary during their useful life due to the effect of the weather and other outside agents.



ELMO-Flex 4K



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Chemical Resistance:

ELMO-Flex 4K is water-resistant and is resistant to watery solutions of salt, diluted non-oxidising acids and bases. Aliphatic and aromatic hydrocarbons, as well as chlorine hydrocarbons, oils and greases may loosen the product and should therefore be avoided.

Storage:

Store in a cool, dry place and protect from direct sunlight

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 Technical Service Department.

Quality Assurance:

ELMO-Flex 4K is manufactured following ISO 9001: 2008 Quality Management System and Environmental Management System approved to ISO 14001: 2004.