



TECHNICAL DATA SHEET / 01.2018

TECHNOELAST K-TMS 170/3400

Polyester based SBS Modified Universal Venting Underlay



Introduction

TECHNOELAST K-TMS 170/3400 membrane is a high performance, polyester-reinforced waterproofing material which is saturated and coated with high quality SBS (Styrene-Butadiene-Styrene) modified bitumen. The upper side is finished with fine-grained sand, whilst the underside consists of specially engineered low melt bitumen stripes with sand in between, covered by thermofusible film to prevent the roll from sticking together. The stripe technology is designed to achieve partial bonding to the substrate and to allow any trapped vapour or moisture to dissipate in all directions thus preventing blistering build up.

Product Description

TECHNOELAST K-TMS 170/3400 is a venting underlay specially designed for use in high performance built up roofing systems and meets requirements of both new build and remedial roofing applications. The product can be applied as an underlay to all suitable types of substrates and is particularly well suited to roofs with high condensation risk. In addition, **TECHNOELAST K-TMS 170/3400** may be used as part of an overlay system to existing asphalt waterproofing. The product is not recommended for use as single layer waterproofing.

Product Features

- Excellent low temperature flexibility at -20°C
- Compatible with all types of bitumen membranes
- Ideal for roofs with high condensation risk
- High puncture resistance
- High resistance to foot marking

Application

TECHNOELAST K-TMS 170/3400 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.

TECHNOELAST K-TMS 170/3400 must be bonded to the prepared substrate by using the torch-on application method. Substrates must be clear of any debris or sharp projections, and primers should be used as necessary to prepare the surface for achieving most effective waterproofing longevity (please consult TECHNONICOL Technical Services for details).

The **TECHNOELAST K-TMS 170/3400** membrane should be heated carefully, ensuring that the dispersible film completely melts as work proceeds. All lap joints must be completely sealed with 5 mm bead extrusion from laps. Side laps must be minimum 7.5 cm with end laps at minimum of 10 cm. The subsequent cap sheet layer should be offset 30 cm from the underlay in order to avoid build up of overlaps.

Chemical Resistance

TECHNOELAST K-TMS 170/3400 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.

Harmonised Standard

EN 13707:2004 + A2:2009

Storage

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

Health and 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 TECHNONICOL Technical Service Department.

Availability

Product Name	Product Code	Roll Dimensions (m)	Weight (kg/m²)
TECHNOELAST K-TMS 170/3400	TN467600	10 x 1.00	3.4 (± 0.17)

Performance and Key Properties

Properties	Test Method		Declared Performance
Length	-	m	10.00
Width	-	m	1.00
Reinforcement type and weight			Polyester, 170 g/m²
Water tightness	EN 1928	kPa	300
Tensile properties: maximum tensile force	EN 12311-1	N/50mm	700/500 (± 100)
Tensile properties: elongation	EN 12311-1	%	50/50 (± 25)
Flow resistance at elevated temperatures	EN 1110	° C	≥ 90
Flexibility at low temperatures	EN 1109	° C	≤ -20
Water vapour transmission properties	EN 1931		μ=20 000
Resistance to tearing (nail shank)	EN 12310-1	N	180/180 (± 30)
External fire performance	EN 13501-5 ENV 1187:2002, test 2*		Broof (t2)*

^{*}This material is part of a two-layer roofing system and corresponds to the Broof only in combination with a second layer of roofing system.

Quality Assurance

TECHNOELAST K-TMS 170/3400 is manufactured following ISO 9001: 2008 Quality Management System and Environmental Management System approved to ISO 14001: 2004.