

T 704 / 0100 FNG

# KÖSTER ECB Geomembran

Ethylene Copolymer Bitumen based waterproofing membrane with centrally embedded glass fiber mesh

DIN EN 13956 Certificate and DIN EN 13967 Certificate

#### **Product Description:**

KÖSTER ECB Membranes are made of a mixture of Ethylene Copolymer and a special bitumen.

A glass fiber mesh is embedded in the middle of the membrane to provide an especially high dimensional stability and resistance against shrinkage.

KÖSTER ECB Membranes are watertight, chemically resistant, and resistant to stress cracking.

KÖSTER ECB roof and waterproofing membranes are resistant to all materials commonly used in construction such as lime, cement, and gypsum, and against soiling common to roof surfaces such as from soot and rotting leaves. They can be applied directly to bituminous roofs.

They offer high reliability and are characterized by a fast and economical installation. KÖSTER ECB Membranes are UV-stable, resistant to aging, and microorganisms.

#### **Features:**

- Environmentally friendly
- Free of softeners and chlorine
- UV-stable
- Safe for health, water, soil, and plants
- Resistant to microorganisms
- Resistant to normal mechanical stresses
- Compatible with bitumen
- Compatible with polystyrene
- Root resistant
- Temperature and weather resistant
- Recyclable
- Aging and rot resistant
- Homogenously weldable

# **Dimensions and Packaging:**

 $20mt size \times 1,50 - 2,10 - 1,05 mt width$ 

Thickness: 1,5mm - 2,0mm - 2,5mm



#### **Field of Application:**

For waterproofing ventilated and non-ventilated flat roofs, terraces, balconies, roof gardens, wet rooms, parking garages, pitched roof valleys, landfill and waste water waterproofing, reservoirs, horticulture, (for example fish ponds), etc. The membranes can also be used in waterproofing according to the DIN 18195. Application by loose laying with ballast, mechanical fastening, or strip adhesion with KÖSTER PUR Membrane Adhesive (fleece coated membranes only).



T 704 / 0100.ENG

## **Application:**

# **Mechanical Fastening:**

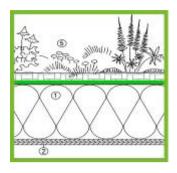
The most common method of installing ECB membranes is through mechanical fastening. The membrane is mechanically fastened to the roof structure, which can consist of either wooden sheathing, trapezoidal metal sheets, or a concrete slab. The membrane is generally fastened through the thermal insulation, which requires special fasteners. These fasteners have a large contact area which durably connect the membrane to the substrate. Overlapping the membranes over the fasteners prevent the penetration of water into the installation.



#### **Loose Laying With Ballast:**

A quick and secure way to install KÖSTER ECB Membranes is through loose laying with ballast. Ballast can consist of either gravel, paving slabs, or even green roofs. Ballast helps protect the roofing membrane against wind loads and can accommodate a wide range of architectural styles.





# Strip adhesion of KÖSTER ECB Membrane F:

Strip adhesion to the substrate offers a timesaving installation. The KÖSTER ECB F Membrane features a special fleece coating which increases the bonding of the KÖSTER PUR Membrane adhesive. This results in a high adhesive strength and creates a perfect bond to the substrate.

# Welding of joints:

The connection of the sheets is performed by hot air welding using automatic welding machines and manual welding tools. The membranes are plasticized in the overlapping area by the hot air flow and homogeneously connected by compressing with a roller. During this procedure a small weld seam is formed and material should flow slightly from the overlap. This should be kept as small as possible, but must be visible. The welding seam is an indicator of a secured and waterproof connection.



T 704 / 0100.ENG

	KÖSTER BAUCHEMİE AG
	Dieselstrasse 1-10, 26607 Aurich
	13
	RE 820
	EN 13956:2012
Boy (DIN EN 1848-2)	20 m <sup>1)</sup>
En (DIN EN 1848-2)	2,10; 1,50; 1,05; 0,75; 0,525; 0,35; 0,25 m
Efektif kalınlık (DIN EN 1849-2)	2,0 mm
	DIN EN 13956:2012
	Açıkta bırakılan veya üzeri örtülen yatay çatılar: serbest serilmiş ve mekanik olarak tespit edilmiş veya balast ile
Tanım DIN V 20000-201ve DIN V 20000-202	DE/E1-ECB-BV-E-GV-2,0
Renk	Standart : siyah
Görsel kontrol	Gözle görülen hata yoktur
Doğrusallık (DIN EN 1848-2)	≤ 50mm
Düzlük (DIN EN 1848-2)	≤ 10mm
Birim ağırlık (DIN EN 1849-2)	2010 g/m <sup>2</sup>
Su geçirimsizlik (DIN EN 1928 – Metod B)	geçirimsiz
Su dahil sıvı kimyasallara karşı tepki (DIN EN	Başarılı (Metod B)
1847)	Sugarim (mecou s)
Dışarıdan ateş etkisine karşı dayanım sınıfı	Broof(t1) 3)
DIN CETS/TS 1187; DIN 4102-7; DIN EN	
13501-5	
Yangına tepki sınıfı	Sınıf E
Doluya karşı direnç (DIN EN 13583)	
Sert zeminlerde	≥ 34 m/s
Yumuşak zeminlerde	≥ 45 m/s
Soyulma mukavemeti (bini kaynaklarının	Kopma tipi : 100% C
DIN EN 12316-2)	>kaynak noktasında kopma olmamıştır
Ek yeri dayanımı (DIN EN 12317-2)	Kopma kaynak noktasında olmamıştır
Su buharı difüzyon direnci (DIN EN 1931)	μ = 175.000 Sd=350m
Çekme direnci (DIN EN 12311-2)	≥ 6 N/mm² (Metod B)
Kopma uzaması (DIN EN 12311-2)	≥ % 600 (Metod B)
Şok yüklemelere karşı direnç (DIN EN	
12691)	
Aluminyum zemin (metod A)	≥ 900 mm
EPS zemin (metod B)	≥ 1500 mm
Statik yüklemelere karşı direnç (DIN EN 12730 metod A/B)	≥ 20 kg
Yırtılmaya karşı direnç (DIN EN 12310-2)	≥ 20 kg ≥ 250 N
Bitki köklerine karşı dayanım	Dayanımlıdır
Bitki kokierine karşı dayanım  Boyutsal kararlılık (DIN EN 1107-2)	Solution
Soğuk iklimde bükülme dayanımı (DIN EN	≤ 0,25 % < -50 °C
495-5)	_ 33 0
UV direnci-yüksek sıcaklık ve suya karşı	Dayanımlıdır : Sınıf 0
direnç (DIN EN 1297 – 1000h)	
Ozon direnci (DIN EN 1844)	Dayanımlıdır : yırtılma sınıfı 0
Bitüm ile temas direnci (DIN EN 1548)	Dayanımlıdır

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Revision Date: 17-09-2018