



European Technical Assessment **ETA 18/0151** of 13/03/2018

General Part

Technical Assessment Body issuing the ETA	VTT Expert Services LTD
Trade name of the construction product	Termex loose-fill cellulose insulation
Product family to which the construction product belongs	In-situ formed loose fill thermal and/or acoustic insulation products made of vegetable fibres
Manufacturer	Termex-Fiber Sp. z o.o. ul. Królowej Jadwigi 15 78-200 Białogard Poland
Manufacturing plant	Termex-Fiber Sp. z o.o. ul. Królowej Jadwigi 15 78-200 Białogard Poland
This European Technical Assessment contains	4 pages
This European Technical Assessment is issued in accordance with regulation (EU) No 305/2011, on the basis of	European Assessment Document (EAD) 040138-00-1201, edition November 2015

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Specific Part

1 Technical description of the product

Termex in-situ formed loose fill cellulose insulation product is made of recycled paper, which is crushed mechanically. During the manufacturing process, boric acid and magnesium sulphate are added to perform as flame retardants.

Termex insulation is installed with density 30 - 60 kg/m³ using dry machine processing.

2 Specification of the intended use in accordance with the applicable European Assessment Document (hereinafter EAD)

The product is intended to be used as thermal insulation in roof cavities, walls and floors, between rafters and timber works.

The product can be used in structures where it will not be exposed to compression loads, precipitation, wetting or weathering and in construction elements with no contact to water or soil and in constructions with no risk of heavy moisture exposure.

The provisions made in this European Technical Assessment are based on an assumed intended working life of the Termex in-situ formed loose fill cellulose insulation of 50 years provided that the thermal insulation product is subject to appropriate installation.

The indication given as to the working life of the construction product cannot be interpreted as a guarantee neither given by the product manufacturer or his representative nor by the Technical Assessment Body issuing this ETA, but is regarded only as a means for expressing the expected economically reasonable working life of the product.

The completed building (the works) shall comply with the building regulations (regulations on the works) applicable in the Member States in which the building is to be constructed. The procedures foreseen in the Member State for demonstrating compliance with the building regulations shall also be followed by the entity held responsible for this act. This ETA does not amend this process in any way.

3 Performance of the product and references to the methods used for its assessment

Table 1. Basic requirements for construction works and essential characteristics

Basic requirement and essential characteristics	Performance
BWR 2. Safety in case of fire	
Reaction to fire - Density 30 - 60 kg/m ³ - Thickness ≥ 40 mm	Class E
BWR 3. Hygiene, health and the environment	
Resistance to mould fungus - Intensity of growth	0
BWR 5. Protection against noise	
Sound absorption	No performance assessed
BWR 6. Energy economy and heat retention	
Thermal conductivity - lambda declared at 23 °C and 50 % relative humidity Moisture content mass by mass - at 23 °C/50 % RH - at 23 °C/80 % RH Mass-related moisture conversion coefficient - dry to 23 °C/50 % RH - 23 °C/50 % RH to 23 °C/80 % RH Moisture conversion factor - dry to 23 °C/50 % RH - 23 °C/50 % RH to 23 °C/80 % RH	$\lambda_{D(23,50)} = 0,040 \text{ W/(m K)}$ $u_{23,50} = 0,065 \text{ kg/kg}$ $u_{23,80} = 0,120 \text{ kg/kg}$ $f_{u1} = 0,44 \text{ kg/kg}$ $f_{u2} = 0,96 \text{ kg/kg}$ $F_{m1} = 1,03$ $F_{m2} = 1,05$
Water vapour diffusion resistance	No performance assessed
Water absorption	No performance assessed
Corrosion developing capacity	Class CR
Settlement - Settling of insulation applied in ceilings, minimum density 30 kg/m ³ , maximum thickness 325 mm, s_v - Settling of insulation applied in cavities of walls and between rafters, minimum density 50 kg/m ³ , maximum thickness 240 mm, s_d	8 % SC 0
Critical moisture content	No performance assessed
Specific airflow resistivity - Density 30 kg/m ³ - Density 55 kg/m ³	3 kPa s/m ² 26 kPa s/m ²
Hygroscopic sorption properties	No performance assessed

4 Assessment and verification of constancy of performance (hereinafter AVCP) system applied, with reference to its legal base

According to the Decision 1999/91/EC of the European Commission, the system of assessment and verification of constancy of performance is:

System 3.

5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at VTT Expert Services Ltd.

Issued in Espoo on March 13, 2018

by VTT Expert Services Ltd

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