



**Technical and Test Institute for
Construction Prague**
Prosecká 811/76a
190 00 Prague
Czech Republic
tel.: +420 286 019 400
eota@tzus.cz



Member of
www.eota.eu

European Technical Assessment

ETA 15/0153
of 12/05/2017

I General Part

**Technical Assessment Body issuing the
ETA and designated according to Article
29 of the Regulation (EU) No 305/2011:
Trade names of the construction product**

Technical and Test Institute for Construction
Prague

**NATURIZOL;
NATURFLAX;
DÄMM FLACHS;
Bioflachs;
EcoFlax
FACTORY-MADE INSULATION
PRODUCT MADE OF FLAX FIBRES**

**Product family to which the construction
product belongs**

Manufacturer

**JUTA .s.
Dukelská 417
544 15 Dvůr Králové nad Labem
Czech Republic**

Manufacturing plant

**JUTA a.s.,
manufacturing facility 08
Palackého 457
Turnov
Czech Republic**

**This European Technical Assessment
contains**

7 pages including 0 annex which forms an
integral part of this assessment.

**This European Technical Assessment is
issued in accordance with regulation
(EU) No 305/2011, on the basis of**

European Assessment Document(EAD) No.
040005-00-1201 for "Factory-made thermal
insulation and/or acoustic insulation
products made of vegetable or animal
fibres", June 2015

This version replaces

ETA 15/0153 of 11/04/2017

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II Specific part

1 Technical description of the product (definition of the product)

This European Technical Assessment applies to the factory-made thermal products made of vegetable fibres “**NATURIZOL; NATURFLAX; DÄMM FLACHS; Bioflachs; EcoFlax**”.

Products consist of flax fibres with the bicomponent polyester binding fibres and of a fire retardant etc..

The insulation products are manufactured in a form of mats which are not coated.

The insulation mats are made with the following dimensions:

Nominal thickness: 40 mm - 140 mm

Nominal length: adjustable according to the customer requirements (maximum 10 m)

Nominal width: maximally 2400 mm

Density: ca 32 kg/m³ ± 10 %

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

2.1 Intended use

“**NATURIZOL; NATURFLAX; DÄMM FLACHS; Bioflachs; EcoFlax**”. are intended to be used for buildings as insulation of walls, ceilings, floors, roofs, between rafters and timber work.

The insulation products are not intended to be used for external applications.

The assessment of the insulation products only applies if the products are used in structures where it will not to be exposed to precipitation, wetting or weathering and for construction elements with no contact to water and soil or in constructions with no risk that the critical moisture content will be exceeded.

The products shall be installed in accordance with the ETA holder's instructions.

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

The assessment of the intended use of the insulation products was carried out in compliance with the specific part of EAD “Factory-made thermal insulation and/or acoustic insulation products made of vegetable or animal fibres”.

3.1 Essential characteristics of the product

Table No. 1: Essential characteristic of the products

No	Essential characteristic and method of verification/assessment	Expression of product performance		
Essential Requirement 1: Mechanical resistance and stability				
Not relevant				
Essential Requirement 2: Safety in case of fire				
1	Reaction to fire (EN 13501-1 + A1)	Class E		
Essential Requirement 3: Hygiene, health and environment				
2	Content and/or release of dangerous substances	Indication of no dangerous substances ^{*)}		
3	Biological resistance (growth of mould fungus) (Annex B of EAD 040005-00-1201, EN ISO 846)	Level 1		
Essential Requirement 4: Safety in use				
Not relevant				
Essential Requirement 5: Protection against noise				
Not relevant				
Essential Requirement 6: Energy economy and heat retention				
4	Thermal conductivity (EN ISO 10456, Annex A of EAD 040005-00-1201) $\lambda_{D, 23,50}$ Category 1 [W/m.K]] $\lambda_{D, 10,dry,90/90}$ Category 1 [W/m.K]] $\lambda_{D, 23,50}$ Category 2 [W/m.K]] $\lambda_{D, dry,limit}$ Category 2 [W/m.K]] $\lambda_{10, dry}$ [W/m.K]] $\lambda_{10, dry, 90/90}$ [W/m.K]] $\lambda_{10(23,50)}$ [W/m.K]] $\lambda_{10(23,80)}$ [W/m.K]] mass-related moisture content: $U_{23,50}$ $U_{23,80}$ mass-related moisture conversion factors: $f_{u,1}$ $f_{u,2}$ moisture conversion factors: F_{m1} F_{m2}	Thickness		
		40 mm	80 mm	100 mm
		0.0370	0.0397	0.0382
		0.0363	0.0384	0.0377
		0.0365	0.0397	0.0383
		0.0358	0.0384	0.0377
		Thickness		
		40 mm	80 mm	100 mm
		0.0347	0.0367	0.0365
		0.0363	0.0384	0.0365
		0.0353	0.0379	0.0370
		0.0363	0.0391	0.0383
		0.034	0.030	0.035
		0.049	0.048	0.052
		0.53	1.10	0.41
		1.91	1.64	2.11
		1.05***		
		1.06***		

No	Essential characteristic and method of verification/assessment	Expression of product performance
5	Water vapour diffusion resistance μ^{**} (EN 12086)	≤ 2.2
6	Water absorption (EN 1609, method A)	$\leq 3 \text{ kg/m}^2$
7	Geometry^{**} - width (EN 822) - thickness (EN 823) - length	$\pm 1.5 \%$ T2 (according to EN 13171) No performance assessed <i>Note: According to EN 13171 there is no upper limit for length of mats.</i>
8	Density^{**} (EN 1602)	32 kg/m^3 tolerance: $\pm 10\%$
9	Dimensional stability under specified and humidity ^{**} (EN 1604) a)(70\pm2)$^{\circ}$C , RH (90\pm5)%, 48 hours $\Delta \mathcal{E}_i$ $\Delta \mathcal{E}_b$ $\Delta \mathcal{E}_d$ b)(70\pm2)$^{\circ}$C, 48 hours $\Delta \mathcal{E}_i$ $\Delta \mathcal{E}_b$ $\Delta \mathcal{E}_d$	$\leq 3\%$ $\leq 3\%$ $\leq 3\%$ <i>Note: According to EN 13171 level DS(70,90)3</i> $\leq 3\%$ $\leq 3\%$ $\leq 3\%$ <i>Note: According to EN 13171 level DS(70,-)3</i>
10	Tensile strength parallel to faces ^{**} (EN 1608)	$\geq 10 \text{ kPa}$

*) In addition to the specific clauses relating to dangerous substances contained in this European Technical Assessment, there may be other requirements applicable to the products falling within its scope(e.g. transposed European legislation and national laws, regulations and administrative provisions). In order to meet the provisions of the Construction Products directive, these requirements need also to be complied with, when and where they apply.

**)This characteristic also relates to BWR5.

***)This moisture conversion factor was determined without testing according to art. 2.2.9. of the EAD.

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

4.1 AVCP System

According to the decision 1999/91/EC of the European Commission as amended by Commission Decision 2001/596/EC of 08.01.2001, the AVCP **system 3** (further described in clause 1.4 of Annex V, to Regulation (EU) No 305/2011) applies.

This AVCP system is defined as follows:

System 3:

a) Tasks for the manufacturer:

- factory production control (FPC),

b) Tasks for the Notified Body:

- type testing of the product*.

*Note: *The type testing has been conducted by the Technical and Testing Institute for Construction Prague for issuing of this ETA. The results of the type testing performed as a part of the assessment for the ETA shall be used unless there are any changes in the production plant. In such cases the type testing shall be agreed with the Technical and Testing Institute for Construction Prague.*

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

In order to help the Notified Body to make an evaluation of conformity, the Technical Assessment Body issuing the ETA shall supply the information detailed below. This information shall initially be prepared or collected by the Technical Assessment Body and shall be agreed with the manufacturer. The following gives guidance on the type of information required:

1) The ETA

Where confidentiality of information is required, this ETA makes reference to the manufacturer's technical documentation which contains such information.

2) Basic manufacturing process

The basic manufacturing process is described in sufficient detail to support the proposed FPC methods.

3) Product and materials specifications

The manufacturer's documentation includes:

- detailed drawings (possibly including manufacturing tolerances),
- incoming (raw) materials specifications and declarations,
- references to European and/or international standards,
- technical data sheets.

4) Control Plan (as a part of FPC)

The manufacturer and the Technical and Test Institute for Construction Prague- branch Prague have agreed a control plan which is deposited with the Technical and Test Institute for Construction Prague – branch Prague in documentation which accompanies the ETA. The control plan specifies the type and frequency of checks/tests conducted during production and on the final product. This includes the checks conducted during manufacture on properties that cannot be inspected at a later stage and for checks on the final product.

Issued in Prague on 12.05.2017



Ing. Mária Schaan

Head of the Technical Assessment Body

A handwritten signature in blue ink is written over the text 'Head of the Technical Assessment Body'.