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European Technical Assessment

**ETA 20/0818
of 14/ 10/ 2020**

English translation prepared by IETcc. Original version in Spanish language

General Part

Technical Assessment Body issuing the ETA and designated according to Article 29 of the Regulation (EU) N°305/2011:

Instituto de Ciencias de la Construcción Eduardo Torroja (IETcc)

Trade name of the construction product

SISTEMA ECO-WÜTERMIC®

Product family to which the construction product belongs

Factory-made thermal and/or acoustic insulation products made of cotton fibres

Manufacturer

Würth España, S.A.
Pol. Ind. Riera de Caldes - c/Joiers, 21
08184 Palau-solità i Plegamans – Barcelona.
Spain

Manufacturing plant(s)

Plant 1.

This European Technical Assessment contains

5 pages.
Annex 1. Contain confidential information and is not included in the ETA

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

European Assessment Document (EAD) N° 040005-00-1201 for “Factory-made thermal and/or acoustic insulation products made of vegetable or animal fibres”, June 2015

Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document and should be identified as such.

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SPECIFIC PARTS OF THE EUROPEAN TECHNICAL ASSESSMENT

1 Technical description of the product

This European Technical Assessment applies to the factory-made thermal products made of vegetable fibres denominated as: "SISTEMA ECO-WÜTERMIC®". It is installed in accordance with the manufacturer, design and installation instructions, deposited at IETcc⁽¹⁾. The manufacturer is ultimately responsible for the SISTEMA ECO-WÜTERMIC®, which it consisted by mats made of cotton fibres. This system is constituted by:

Characteristics	SISTEMA ECO-WÜTERMIC®	
	ECO-WÜTERMIC®	ECO-WÜTERMIC® FACADE
Vegetal fiber	Fibre of cotton (%)	
Binding agent bi-component polyester (%)	15-25	--
Binding agent Phenolic (%)	---	25-35
Facing	Aluminio	No
Thickness (mm)	30-80	10-60
Length	Per client requirements	
Width	Per client requirements	
Density (kg/m ³)	30 ± 15%	45 ± 15%

2 Specification of the intended use in accordance with the applicable EAD

The insulation products are intended to be used within buildings for insulation of walls, ceilings, floors, roofs, between rafters and timber work.

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

The insulation can be used in the in the following places:

- Insulation of interior and exterior wall cavities with wooden or metallic frame and similar structures.
- Internal insulation of external walls between elements of a supporting structure.
- Insulation between rafters and beams as well as in cavities of a supporting structure.
- Insulation of ceilings or roofs. Insulation under the supporting structure, suspended ceilings.
- Insulation of cavities between floor joints and similar lower structures.
- Insulation of floors of accessible upper floors, without being intended for any circulation.

The performance described in section 3 can only be achieved if the insulation is installed per the manufacturer's instructions and protected from precipitation, weather and humidity after installation, but also during transport, storage and implementation.

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

The identification tests and the assessment for the intended use of this thermal and acoustic insulation according to the Basis works requirements were carried out in compliance with the EAD "Factory-made thermal and/or acoustic insulation products made of vegetable or animal fibres", June 2015

3.1 Characteristics

Mechanical resistance and stability (BWR 1). No relevant.

Safety in case of fire (BWR 2). Fire reaction classification (EN 13501-1).

Products	Thickness (mm)	Density (kg/m ³)	Fire reaction classification EN 13501-1
ECO-WÜTERMIC®	-----	-----	NPA
ECO-WÜTERMIC® FACADE	10	50	B S1 d0
ECO-WÜTERMIC® FACADE	60	45	C S1 d0

(1) The technical documentation of this European Technical Assessment is deposited at the *Instituto de Ciencias de la Construcción Eduardo Torroja* (IETcc) and, as far as relevant for the tasks of the notified bodies involved in the attestation of conformity procedure, is handed over to the notified bodies.

Hygiene, health and environment (BWR 3).

Biological resistance. Growth of mould fungus (annex B). After 28 days, the growth intensity is 0. There is not any sign of fungus in any product of the system.

Safety in use (BWR 4). No relevant.

Protection against noise (BWR 5). No relevant.

Energy economy and heat retention (BWR 6)

The thermal resistance provided by this product to the support is calculated in accordance with EN ISO 6946 from the nominal value of the insulation product's thermal resistance R given.

Thermal conductivity (EN ISO 10456, Annex A).

Products	Category 1 (base on λ 10/dry,90/90)			Mass-related moisture conversion coefficient to high moisture (fu,2)	Moisture conversion factor (dry-23/50 and 23/50-23/80)	
	λ 10/dry,90/90	Moisture factor conversion (Fu,1)	λ D (23,50)		Fm1 λ 10,dry- λ 23,50	Fm2 λ 23/50- λ 23,80
ECO-WÜTERMIC®	0,0329	0,32	0,034	-0,53	1,01	0,99
ECO-WÜTERMIC® FACADE	0,0318	-0,31	0,032	0,00	0,99	1,00

Water absorption (EN 1609, method A)

SISTEMA ECO-WÜTERMIC®	
ECO-WÜTERMIC®	ECO-WÜTERMIC® FACADE
6 kg/m ²	1 kg/m ²

Water vapour diffusion resistance (EN 12086). $\mu = 1 - 4$.

ECO-WÜTERMIC® can be considered watertight to the vapour diffusion due to the aluminium coat.

Geometry (EN 822, 823)

Characteristics	SISTEMA ECO-WÜTERMIC®	
	ECO-WÜTERMIC®	ECO-WÜTERMIC® FACADE
Thickness	T1 (15%)	
Length	Valor Nominal \pm 2,0 %	
Width	Valor Nominal \pm 1,5 %	

Density (EN 1602)

SISTEMA ECO-WÜTERMIC®	
ECO-WÜTERMIC®	ECO-WÜTERMIC® FACADE
34 kg/m ³	40 kg/m ³

Dimensional stability under specified temperature and humidity

Conditions	SISTEMA ECO-WÜTERMIC®	
	ECO-WÜTERMIC®	ECO-WÜTERMIC® FACADE
70°C 48h ($\Delta\epsilon$ l, $\Delta\epsilon$ b, $\Delta\epsilon$ d)	0,0,3 DS (70,-)3	0,0,1 DS (70,-)1
70°C/ 90%HR 48h ($\Delta\epsilon$ l, $\Delta\epsilon$ b, $\Delta\epsilon$ d)	0,0,3 DS (70,-)3	0,0,2 DS(70,90)2

Tensile strength (parallel) (EN 1608). Requeriment \geq 10 kPa

SISTEMA ECO-WÜTERMIC®	
ECO-WÜTERMIC®	ECO-WÜTERMIC® FACADE
10 kPa	95 kPa

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

System of attestation of conformity. According to the decision 1999/91/EC of the European Commission⁽²⁾ amended by 2001/596/EC⁽³⁾ the system of assessment and verification of constancy of performance (see Annex V to Regulation (EU) n° 305/2011) given in the following table applies.

Product	Intended uses	Level or Classes	System
ECO-WÜTERMIC®	Factory-made thermal and/or acoustic insulation products made of cotton fibres	Any	3

According to this decision, system 3 of Attestation of Conformity also applies with regard to external fire performance. The system 3 provides: Tasks for the manufacturer: Factory production control and Tasks for the notified body: Initial type-testing of the product.

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

The ETA is issued for this product on the basis of agreed data/information, deposited at IETcc, which identifies SISTEMA ECO-WÜTERMIC® that has been assessed and judged. It is the manufacturer's responsibility to make sure that all those who use the kit are appropriately informed of specific conditions according to sections 1, 2, 4 and 5 including the annexes of this ETA. Changes to the product or the components or their production process, which could result in this deposited data/information being incorrect should be notified to the IETcc before the changes are introduced. IETcc will decide whether or not such changes affect the ETA and if so whether further assessment or alterations to the ETA shall be necessary.

5.1 Tasks of the manufacturer

Factory production control. The manufacturer shall exercise permanent internal control of production. All the elements, requirements and provisions adopted by the manufacturer shall be documented in a systematic manner in the form of written policies and procedures, including records of results performed. This production control system shall ensure that the product is in conformity with this ETA.

The manufacturer may only use components stated in the technical documentation of this ETA including Control Plan. The incoming raw material is subjected to verifications by the manufacturer before acceptance.

The factory production control shall be in accordance with the Control Plan⁽⁴⁾ which is part of the Technical Documentation of this ETA. The Control Plan has been agreed between the manufacturer and the IETcc and is laid down in the context of the factory production control system operated by the manufacturer and deposited at the IETcc. The results of factory production control shall be recorded and evaluated in accordance with the provisions of the Control Plan.

Other tasks of the manufacturer. The manufacturer shall, on the basis of a contract, involve a body which is notified for the tasks referred to in section 4 in order to undertake the actions laid down in this clause. For this purpose, the control plan shall be handed over by the manufacturer to the notified bodies involved.

For initial type – testing, the results of the tests performed, as part of the assessment for the ETA shall be used unless there are changes in the production line or plant. In such cases the necessary initial type- testing has to be agreed with the IETcc.

The manufacturer shall make a declaration of conformity, stating that the construction product is in conformity with the provisions of this ETA.

5.2 Tasks of notified bodies. The notified body shall perform

Initial type-testing of the product. The initial type-testing have been conducted by the IETcc to issued this ETA in accordance with chapter 2 of the EAD 040005-00-1201 "Factory-made thermal and/or acoustic insulation products made of vegetable or animal fibres". The verifications underlying this ETA have been furnished on samples from the current production; these will replace the initial type-testing carried out by the manufacturer.

(2) Official Journal of the European Communities L229/14 of 20.08.1997

(3) Official Journal of the European Communities L209/33 of 02.08.2001

(4) The control plan is a confidential part of this European Technical Assessment and only handed over to the notified body involved in the procedure of attestation of conformity. See section 3.2.2.

The IETcc has assessed the results of these tests in accordance with chapter 2 of this EAD, as part of the ETA issuing procedure.

Issued in Madrid on 14/ 10/ 2020
by



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