

Approval body for construction products  
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and  
Laender Governments



## European Technical Assessment

ETA-18/0321  
of 21 September 2018

English translation prepared by DIBt - Original version in German language

### General Part

Technical Assessment Body issuing the  
European Technical Assessment:

Deutsches Institut für Bautechnik

Trade name of the construction product

Skytech Pro XL, Nest

Product family  
to which the construction product belongs

Thermal insulation products for buildings with radiant heat  
reflective components

Manufacturer

WINCO TECHNOLOGIES  
5 Rue Sophie Germain  
22440 PLOUFRAGAN  
FRANKREICH

Manufacturing plant

WINCO TECHNOLOGIES  
5 Rue Sophie Germain  
22440 PLOUFRAGAN  
FRANKREICH

This European Technical Assessment  
contains

6 pages which form an integral part of this assessment

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

EAD 040007-00-1201

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## Specific part

### 1 Technical description of the product

This European Technical Assessment applies to the thermal insulation products with radiant heat reflective components "Skytech Pro XL" and "Nest", hereafter referred to as thermal insulation mat.

The thermal insulation multi-layer composite mats are made of pure aluminium foils and glass fibres.

The thermal insulation mats are made with the following dimensions:

Nominal length:	18000 mm	("Skytech Pro XL")
	25000 mm	("Nest")
Nominal width:	1120 mm	("Skytech Pro XL")
	1000 mm	("Nest")
Nominal thickness:	13 mm	("Skytech Pro XL")
	7 mm	("Nest")

The European Technical Assessment has been issued for the product on the basis of agreed data/ information, deposited with Deutsches Institut für Bautechnik, which identifies the product that has been assessed. The European Technical Assessment applies only to products corresponding to this agreed data/information.

### 2 Specification of the intended use in accordance with the applicable European Assessment Document

The thermal insulation mats are used for the thermal insulation of walls, ceilings and roofs in buildings as follows.

- Skytech Pro XL: thermal insulation of walls and roofs
- Nest: internal thermal insulation of walls and ceilings

The performance according to section 3 only applies if the undamaged thermal insulation mat is installed according to the manufacture's installation instructions and if it is protected from precipitation, wetting or weathering in built-in state and during transport, storage and installation.

The verifications and assessment methods on which this European Technical Assessment is based lead to the assumption of a working life of the thermal insulation mats of at least 25 years. The indications given on the working life cannot be interpreted as a guarantee given by the producer, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.

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

For sampling, conditioning and testing the provisions of the EAD No 040007-00-1201 "Thermal insulation products for buildings with radiant heat reflective components" apply.

#### 3.1 Mechanical resistance and stability (BWR 1)

Not applicable.

#### 3.2 Safety in case of fire (BWR 2)

Essential characteristic	Performance
Reaction to fire test acc. to EN 13823:2010 + A1:2014 NEST  SKYTECH PRO XL	Class A1 acc. to EN 13501-1:2007 + A1:2009 Class A2-s1, d0 * acc. to EN 13501-1:2007 + A1:2009
* The given classification is valid for the following conditions regarding the use of the thermal insulation product: Mechanically fixed on wood cleats with an airgap $\geq 40$ mm to substrates with density $\geq 600$ kg/m <sup>3</sup> , A1 or A2-s1, d0 acc. to EN 13501-1. Overlaying of seals with double-face adhesive coated stripes.	

#### 3.3 Hygiene, health and the environment (BWR 3)

Not applicable.

#### 3.4 Safety and accessibility (BWR 4)

Not applicable.

#### 3.5 Protection against noise (BWR 5)

Not applicable.

#### 3.6 Energy economy and heat retention (BWR 6)

Essential characteristic	Performance
Thermal core resistance test acc. to EN 16012:2012 + A1:2015 NEST  SKYTECH PRO XL	thermal core resistance value <sup>a)</sup>  $R_D = 0.25$ m <sup>2</sup> KW *  $R_D = 0.45$ m <sup>2</sup> KW *
Durability of thermal resistance against ageing/ degradation	No performance assessed.
Emissivity test acc. to EN 16012:2012 + A1:2015 NEST  SKYTECH PRO XL	emissivity value <sup>b)</sup>  $\epsilon_{D,1} = 0.05$ $\epsilon_{D,2} = 0.05$  $\epsilon_{D,1} = 0.05$ $\epsilon_{D,2} = 0.07$
Water vapour diffusion resistance	

Essential characteristic	Performance
test acc. to EN ISO 12572:2001 NEST  SKYTECH PRO XL	No performance assessed.  $S_d = 0.05 \text{ m}$
Water absorption	No performance assessed.
Watertightness test acc. to EN 13859-1:2014 NEST  SKYTECH PRO XL	No performance assessed.  Class W1 acc. to EN 13859-1:2014
Geometry	No performance assessed.
Apparent density/Mass per unit area	No performance assessed.
Squareness	No performance assessed.
Compressive stress or strength for products exposed to compression loads	No performance assessed.
Dimensional stability	No performance assessed.
Tensile strength parallel to faces	No performance assessed.
Tensile strength perpendicular to faces	No performance assessed.
Resistance to tearing (nail shank) test acc. to EN 12310-1:1999 NEST  SKYTECH PRO XL	maximum tensile strength  No performance assessed.  240 N
Peel Strength or mechanical resistance of adhesive tape	No performance assessed.
Compressive creep for products exposed to compression load	No performance assessed.
Behaviour under point load for products exposed to compression load	No performance assessed.
a) Declared value of core-thermal resistance, representative for at least 90 % of the production with a confidence level of 90 %, based on the smallest thickness (nominal thickness or measured thickness). b) Declared value of emissivity, representative for at least 90 % of the production with a confidence level of 90 %. * NOTE: The thermal resistance of the structural assembly (including possible adjacent airspaces) can be determined in accordance with EN ISO 6946 taking into account respective national regulations.	

### 3.7 Sustainable use of natural resources (BWR 7)

For the sustainable use of natural resources no performance was investigated for this product.

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

In accordance with the European Assessment Document No 040007-00-1201 "Thermal insulation products for buildings with radiant heat reflective components" the legal basis is:

Commission Decision 1999/91/EC

The system to be applied is: system 3

In addition, with regard to reaction to fire for products covered by this EAD the applicable European legal act is:

Commission Decision 2001/596/EC

The systems to be applied is: system 1

**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 with Deutsches Institut für Bautechnik.

Issued in Berlin on 21 September 2018 by Deutsches Institut für Bautechnik

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*beglaubigt:*  
Getzlaff