

# FOREST AND WOOD PRODUCTS RESEARCH AND DEVELOPMENT INSTITUTE

"MEŽA UN KOKSNES PRODUKTU PĒTNIECĪBAS UN ATTĪSTĪBAS INSTITŪTS" SIA

VAT No. LV 43603022749

Dobeles iela 41, Jelgava, LV-3001, Latvia

Phone +371 63010605 \* E-mail meka@e-koks.lv \* Web www.e-koks.lv



# Classification of reaction to fire performance in accordance with EN 13501-1:2007+A1:2009

Issue number: K43/2017

Date of issue: 06.11.2017.

**Sponsor:** Van de Sande BV.

Address: Den Uitvanck 12A, 5688XG, Oirschot, Holland.

Reg. No. 819151889B01.

Owner of classification report: Van de Sande BV.

Address: Den Uitvanck 12A, 5688XG, Oirschot, Holland.

Reg. No. 819151889B01.

Manufacturer: Building Innovations Ltd.

**Prepared by**: SIA "Meža un koksnes produktu pētniecības un attīstības institūts" (Forest and Wood Products Research and Development Institute Ltd).

Product name: SANCOUSTIC\_EPS.

Laboratory involved in testing is accredited by the Latvian National Accreditation Bureau (LATAK) according to the standard LVS EN ISO/IEC 17025 under the terms of Latvian legislation with reg. No. T-316. Laboratory is a notified body with reg. No. NB 2040 under construction product regulation No. 305/2011.

Classification report refers only to these test objects. This classification report may not be reproduced otherwise than in full text, excepted with the prior written approval of the Forest and Wood Products Research and Development Institute



#### 1. Introduction

This classification report defines the reaction to fire classification assigned to building insulation system SANCOUSTIC\_EPS in accordance with the procedures given in EN 13501-1:2007+A1:2009.

# 2. Details of classified product

#### 2.1. General

SANCOUSTIC\_EPS is defined as a thermal insulation system for buildings. System is not described by harmonized European technical specification. Insulation material expanded polystyrene (EPS) is defined as Thermal insulation products for buildings - Factory made expanded polystyrene (EPS) products according standard EN 13163:2012+A2:2016. SANCOUSTIC WoodWool is defined as Thermal insulation products for buildings - Factory made wood wool (WW) products according standard EN 13168:2012+A1:2015.

#### 2.2. Product description

- Product name: SANCOUSTIC EPS.
- Manufacturer: Building Innovations Ltd.
- Materials used for manufacturing:
  - SANCOUSTIC WoodWool (Wood wool, white cement, liquid glass with product thickness 25 mm, weight 450 kg/m³ ± 10%);
  - Expanded polystyrene (EPS) insulation with 30 and 150 mm thickness, density 18 kg/m<sup>3</sup>.
- Insulation system total thickness tested: 55 and 175 mm.

## 3. Test reports and test results in support of classification

#### 3.1. Test reports

| Name of laboratory  | Name of sponsor  | Test reports | Test method           |
|---|------------------|--------------|-----------------------|
| SIA "Meža un koksnes<br>produktu pētniecības un<br>attīstības institūts" Testing<br>Laboratory  | Van de Sande BV. | 2499-1/2017  | EN 13823:2010+A1:2014 |
| SIA " Meža un koksnes<br>produktu pētniecības un<br>attīstības institūts" Testing<br>Laboratory | Van de Sande BV. | 2499-2/2017  | EN ISO 11925-2:2010   |



# 3.2. Test results

| Test method                              | Parameter                               | Number   | Results             |            |  |
|--|---|----------|---------------------|------------|--|
|  |   | of tests | Continuous          | Compliance |  |
|  |   |          | parameter mean      | parameters |  |
| EN 13823:2010+A1:2014                    | FIGRA <sub>0,2MJ</sub> (W/s)            | 4        | 41.6                | Compliant  |  |
|  | FIGRA <sub>0,4MJ</sub> (W/s)            |          | 32.3                | (-)        |  |
|  | $THR_{600s}(MJ)$                        |          | 2.9                 | Compliant  |  |
|  | LFS                                     |          | <1000 mm            | Compliant  |  |
|  | SMOGRA(m <sup>2</sup> /s <sup>2</sup> ) |          | 2.4                 | Compliant  |  |
|  | $TSP_{600s}(m^2)$                       |          | 22.3                | Compliant  |  |
|  | Flaming droplets <10s                   |          | no                  | Compliant  |  |
|  | Flaming droplets >10s                   |          | no                  | Compliant  |  |
| EN ISO 11925-2:2010  Exposure time 30 s. | Flame spread (Fs)                       | 36       | Less than 150<br>mm | Compliant  |  |
| Test duration 60 s.                      | Ignition of filter paper                |          | no                  | (-)        |  |
|  | Flaming droplets/particles              |          | no                  | (-)        |  |
| (-) not applicable                       |   |          |                     |            |  |

# 4. Classification and field of application

# 4.1. Reference of classification

This classification has been carried out in accordance with clause 11 of EN 13501-1:2007+A1:2009.

#### 4.2. Classification

SANCOUSTIC\_EPS in relation to its reaction to fire behaviour is classified:

В

The additional classification in relation to smoke production is:

**s**1

The additional classification in relation to flaming droplets/particles is:

d0

The format of the reaction to fire classification for construction product excluding floorings and linings is:

| Fire behaviour |   | Smoke production |   |   | Flaming | droplets |
|----------------|---|------------------|---|---|---------|----------|
| В              | _ | S                | 1 | , | d       | 0        |

Reaction to fire classification: B-s1-d0



## 4.3. Field of application

4.3.1 This classification is valid for the following product end use applications:

Product primary is intended to use as insulation system for buildings.

4.3.2. This classification is also valid for following product parameters:

Thickness of product:

valid only for SANCOUSTIC WoodWool panel thickness 25 mm.

Valid for EPS insulation thickness 30 mm and higher thicknesses.

Composition of product:

valid only for product composition as tested.

Structure of product:

valid only for product structure as tested.

Product density:

valid for product density within limits ±15 % as tested.

4.3.3. Classification valid for installation parameters:

Mounting:

product tested without air gap between wood wool boards and

insulation panel.

Substrates:

product performance determined with gypsum plasterboard substrate

and classification is valid for product mounting on substrates of

reaction to fire class A1 and A2-s1-d0.

Joints:

product tested with horizontal and vertical joints, and classification is

valid for any joint arrangements.

Orientation:

not applicable.

Fixings:

valid for elements fixed with metal fixings.

#### 5. Limitations.

5.1. No restrictions on the duration of validity of this classification report as long as the product specifications remain unchanged.

5.2. This document does not represent type approval or certification of the product.

pétniecibas un petniecibas un pétniecibas un pétniecibas un pétniecibas un petnie

Prepared by

(signature)

E. Bukšāns

Reviewed by

(signature)

K.Būmanis