



# 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 in accordance with EN 13501-1:2018

Issue number: K99/2025

Date of issue: 25.08.2025.

Sponsor: Keflico A/S.

Address: Juelstrupparken 24, DK 9530 Stoevring, Denmark.

Reg. No. DK23980010.

Manufacturer and owner of classification report: Keflico A/S.

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

Test performed at: SIA "Meža un koksnes produktu pētniecības un attīstības institūts" (Forest and Wood Products Research and Development Institute Ltd), "Pienavas katlu māja", Pienava, Džūkstes pagasts, Tukuma novads, LV-3147, Latvia ("Pienava heat plant", Pienava, Džūkste parish, Tukums region, LV-3147, Latvia).

**Product name:** Keflico Design Panels – SONO.

The 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.

The classification report refers only to these test objects. This classification report may not be reproduced otherwise than in full text, except 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 Keflico Design Panels – SONO in accordance with the procedures given in EN 13501-1:2018.

#### 2. Details of classified product

#### 2.1. General

Keflico Design Panels – SONO is defined as fire retardant-treated perforated pine plywood panelling for buildings. The product can be described by harmonized technical specification standard EN 13986:2004+A1:2015.

#### 2.2. Product description

• Product name: Keflico Design Panels – SONO.

• Manufacturer: Keflico A/S.

• Materials used for manufacturing:

o 12 mm fire retardant pine plywood;

o veneered with alpi veneer or without;

o perforation geometry: 

6 mm with distance cc 20 mm;

8 mm with distance cc 20 mm;
6 mm with distance cc 32 mm;
8 mm with distance cc 32 mm;
8 mm with distance cc 16 mm;
10 mm with distance cc 32 mm;

sound dew 75 g/m<sup>2</sup>;

fire retardant lacquering system MAS2.

• Tested thickness: 12 mm.

Tested colour: black, red and white.

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

3.1. Specific conditions

Not applicable

#### 3.2. Test reports

Name of laboratory	Name of sponsor	Test reports	Test method
SIA " Meža un koksnes produktu pētniecības un attīstības institūts" Testing Laboratory	Keflico A/S	9667-3/2024	EN 13823:2020+A1:2022
SIA " Meža un koksnes produktu pētniecības un attīstības institūts" Testing Laboratory	Keflico A/S	9667-4/2024	EN ISO 11925-2:2020
SIA " Meža un koksnes produktu pētniecības un attīstības institūts" Testing Laboratory	Keflico A/S	10163-1/2025	EN 13823:2020+A1:2022
SIA " Meža un koksnes produktu pētniecības un attīstības institūts" Testing Laboratory	Keflico A/S	10163-2/2025	EN ISO 11925-2:2020
SIA " Meža un koksnes produktu pētniecības un attīstības institūts" Testing Laboratory	Keflico A/S	E745/2025 (EXAP report)	EN 13823:2020+A1:2022

Sampling for fire tests was done by DNV Business Assurance Denmark A/S (notified body NB 0527) at Kelico A/S Fabriksvej 12-14 7441 Bording Denmark (Test report No. 9667-3/2024 and 9667-4/2024) and Juelstrupparken 24, DK 9530 Stoevring, Denmark (Test report No. 10163-1/2025 and 10163-2/2025, EXAP report No. E166-1/2025, EXAP report No. E745/2025).



#### 3.3. Test results

Test method	Parameter	Number	Results		
		of tests	Continuous	Compliance	
			parameter mean	parameters	
EN 13823:2020+A1:2022	FIGRA <sub>0,2MJ</sub> (W/s)	3 a)	74 <sup>a)</sup>	(-)	
		8 c)	58 <sup>c)</sup>		
				(-)	
	FIGRA <sub>0,4MJ</sub> (W/s)		74 <sup>a)</sup>		
			58 <sup>c)</sup>		
	THR <sub>600s</sub> (MJ)		4.4 a)	(-)	
			5.5 <sup>c)</sup>		
	LFS < edge of specimen		yes <sup>a; c)</sup>	Compliant	
	SMOGRA(m <sup>2</sup> /s <sup>2</sup> )		1 a)	(-)	
			3 <sup>c)</sup>		
	$TSP_{600s}(m^2)$		20 <sup>a)</sup>	(-)	
			37 <sup>c)</sup>		
	Flaming droplets <10s		(-)	Compliant	
	Flaming droplets >10s		(-)	Compliant	
EN ISO 11925-2:2020	Flame spread (Fs) ≤	6 <sup>b;d)</sup>	yes <sup>b; d)</sup>	Compliant	
	150mm		,	Compliant	
Exposure time 30 s.	Ignition of filter paper		no <sup>b; d)</sup>	Compliant	
Test duration 60 s.	Flaming		no <sup>b; d)</sup>	Compliant	
	droplets/particles				

<sup>(-)</sup> not applicable

Test results according to REACTION TO FIRE EXTENDED APPLICATION REPORT No. E166-1/2025 and E745/2025 for product composition, geometry and structure:

Specimen No.	166-1-2	166-1-3	745-1-1	745-1-3
FIGRA <sub>0,2MJ</sub> , W/s	48.3	41.1	112.3	110.9
FIGRA <sub>0,4MJ</sub> , W/s	48.3	38.4	112.3	110.9
THR <sub>600s</sub> , MJ	3.2	4.2	6.2	3.7
SMOGRA, m <sup>2</sup> /s <sup>2</sup>	Threshold not reached		2.3	1.9
TSP <sub>600s</sub> , m <sup>2</sup>	23.5	28.5	42.9	36.0
LFS< edge of specimen	yes	yes	yes	yes
Flaming droplets <10s	no	no	no	no
Flaming droplets >10s	no	no	no	no

### 4. Classification and field of application

# 4.1. Reference of classification

This classification has been carried out in accordance with clause 11 of EN 13501-1:2018.

a) Tests results from test report No. 9667-3/2024;

b) Tests results from test report No. 9667-4/2024;

c) Tests results from test report No. 10163-1/2025;

<sup>&</sup>lt;sup>d)</sup> Tests results from test report No. 10163-2/2025.



Report No. K99/2025 page 4 of 4

#### 4.2. Classification

Keflico Design Panels – SONO in relation to its reaction to fire behaviour is classified:

Р

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:

The product primary is intended to be used as panelling in buildings.

- 4.3.2. This classification is also valid for the following product parameters:
  - valid for product composition and geometry as tested;
  - valid only for fire retardant pine plywood as tested;
  - valid only for fire retardant lacquering systems as tested;
  - valid only for perforation geometry as tested;
  - valid for product mounting directly on substrates of reaction to fire class A1 and A2-s1,d0 having a density of at least 30 kg/m³ and a thickness of at least 20 mm;
  - mounted on wood battens of reaction to fire class D-s2,d0 or better and any A1 and A2-s1,d0 battens if the air gap is filled with rock-fibre wool.
  - valid for all colours.

#### 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.

Prepared by Reviewed by

E.Bukšāns K.Būmanis

(signature and name) (signature and name

THIS DOCUMENT IS SIGNED BY SECURE ELECTRONIC SIGNATURE AND CONTAINS A TIME STAMP (Signature validity can be checked: https://www.eparaksts.lv/en)