

„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

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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 – ECHO.

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 – ECHO in accordance with the procedures given in EN 13501-1:2018.

2. Details of classified product

2.1. General

Keflico Design Panels – ECHO is defined as a fire retardant-treated birch plywood lamella panelling system for buildings. The product is not described by European harmonised specification standards.

2.2. Product description

- Product name: Keflico Design Panels – ECHO.
- Manufacturer: Keflico A/S.
- Materials used for manufacturing:
 - 12 mm fire retardant birch plywood veneered with pine;
 - 12 mm fire retardant birch plywood veneered with alpi veneer;
 - 18/32 mm random design lamellas with an opening degree of 26.4%;
 - sound dew 75 g/m².
- Fire retardant lacquering systems variations:
 - Fire Retardant lacquering system MAS1;
 - Fire Retardant lacquering system MAS2;
 - Fire Retardant lacquering system TEK1.
- Tested thickness: 12 mm.
- Tested colour: black, white, red (Fire Retardant lacquering system MAS2).

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	9157-1/2024	EN 13823:2020+A1:2022
SIA „ Meža un koksnes produktu pētniecības un attīstības institūts” Testing Laboratory	Keflico A/S	9157-2/2024	EN ISO 11925-2:2020
SIA „ Meža un koksnes produktu pētniecības un attīstības institūts” Testing Laboratory	Keflico A/S	10163-1-5	EN 13823:2020+A1:2022
SIA „ Meža un koksnes produktu pētniecības un attīstības institūts” Testing Laboratory	Keflico A/S	10163-1-6	EN 13823:2020+A1:2022
SIA „ Meža un koksnes produktu pētniecības un attīstības institūts” Testing Laboratory	Keflico A/S	10163-1-7	EN 13823:2020+A1:2022
SIA „ Meža un koksnes produktu pētniecības un attīstības institūts” Testing Laboratory	Keflico A/S	10163-1-8	EN 13823:2020+A1:2022

Sampling for 10163-1-5, 10163-1-6, 10163-1-7, 10163-1-8 reaction to fire tests was done by DNV Business Assurance Denmark A/S (notified body NB 0527) at Keflico A/S, Denmark on 05.11.2024.

3.3. Test results

Test method	Parameter	Number of tests	Results	
			Continuous parameter mean	Compliance parameters
EN 13823:2020+A1:2022	FIGRA _{0,2MJ} (W/s)	5	23	(-)
	FIGRA _{0,4MJ} (W/s)		23	(-)
	THR _{600s} (MJ)		3.2	(-)
	LFS < edge of specimen		yes	Compliant
	SMOGRA(m ² /s ²)		3	(-)
	TSP _{600s} (m ²)		45	(-)
	Flaming droplets <10s Flaming droplets >10s		(-) (-)	Compliant Compliant
EN ISO 11925-2:2020 Exposure time 30 s. Test duration 60 s.	Flame spread (Fs) ≤ 150mm	30	yes	Compliant
	Ignition of filter paper		no	Compliant
	Flaming droplets/particles		no	Compliant
(-) not applicable				

Test results and specimen identification for additional tested variables:

Specimen No.	10163-1-5	10163-1-6	10163-1-7	10163-1-8
FIGRA _{0,2MJ} , W/s	24.7	27.3	32.9	40.7
FIGRA _{0,4MJ} , W/s	24.7	27.3	32.9	40.7
THR _{600s} , MJ	2.3	3.4	3.8	4.0
SMOGRA, m ² /s ²	3.0	3.3	2.6	3.2
TSP _{600s} , m ²	35.3	44.5	36.5	40.5
Tested variable	in black colour	in red colour	with Alpi veneer	in white colour
Lacquering system	MAS2	MAS2	MAS2	MAS2

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.

4.2. Classification

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

B

The additional classification in relation to smoke production is:

s1

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	
B	-	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 be used as panelling in buildings for application in walls.

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

- valid for product composition as tested;
- valid only for fire retardant lacquering systems as tested;
- valid for product mounting directly on substrates of reaction to fire class A1 and A2-s1,d0 having density at least 30 kg/m³ and thickness 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 only for vertical arrangements in walls;
- valid for all colours with fire retardant lacquering system MAS2.

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



E. Bukšāns

(signature and name)

Reviewed by



K. Būmanis

(signature and name)

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