

„MEŽA UN KOKSNES PRODUKTU PĒTNIECĪBAS UN ATTĪSTĪBAS INSTITŪTS” SIA

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Classification of reaction to fire in accordance with EN 13501-1:2018

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Customer: Thermory AS.

Customer's address: Lõõtsa 1A, 11415 Tallinn, Estonia.

Reg. No. EE100328886.

Manufacturer and owner of classification report: Thermory AS.

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: Thermally modified wood cladding system.

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 laboratory is a notified body with reg. No. NB 2040 under construction product regulation No. 305/2011.

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 thermally modified wood cladding system in accordance with the procedures given in EN 13501-1:2018.

2. Details of classified product

2.1. General

Thermally modified wood cladding system is defined as solid wood panelling and cladding. Solid wood cladding boards can be defined as solid wood cladding according to the product standard EN 14915:2013.

2.2. Product description

- Product name: Thermally modified wood claddings system
- Manufacturer: Thermory AS.
- Materials used for manufacturing:
 - thermally modified radiata pine (*Pinus radiata*) wood claddings with a density 430 – 470 kg/m³ and boards in dimension 138 x 20 mm;
 - thermally modified ash (*Fraxinus spp.*) wood claddings with a density 620 – 670 kg/m³ and boards in dimensions 150 x 20 mm.
 - 18 mm GRAD Start rail aluminium battens with polyoxymethylene clips shown in Figure 1.
- Profile type: special for GRAD Start rail system.
- Tested thickness: 20 mm.

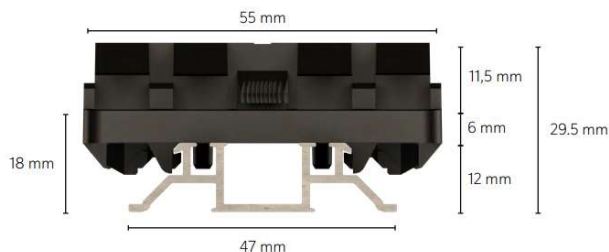


Fig 1. GRAD Start rail aluminium battens with polyoxymethylene clips.

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	Thermory AS	9747-1/2024	EN 13823:2020+A1:2022
SIA „Meža un koksnes produktu pētniecības un attīstības institūts” Testing Laboratory	Thermory AS	9747-2/2024	EN ISO 11925-2:2020

3.3. Test results

Test method	Parameter	Number of tests	Results	
			Continuous parameter mean	Compliance parameters
EN 13823:2020+A1:2022	<i>FIGRA</i> _{0,2MJ} (W/s)	5	534	(-)
	<i>FIGRA</i> _{0,4MJ} (W/s)		534	(-)
	<i>THR</i> _{600s} (MJ)		40.6	(-)
	<i>LFS</i> < edge of specimen		no	Compliant
	<i>SMOGRA</i> (m ² /s ²)		7	(-)
	<i>TSP</i> _{600s} (m ²)		57	(-)
	Flaming droplets <10s Flaming droplets >10s		no no	Compliant Compliant
EN ISO 11925-2:2020	Flame spread (Fs) ≤ 150mm	12	yes	Compliant
Exposure time 30 s.	Ignition of filter paper		no	Compliant
Test duration 60 s.	Flaming droplets/particles		no	Compliant
(-) 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 13501-1:2018.

4.2. Classification

Thermally modified wood cladding system in relation to their reaction to fire behaviour is classified:

D

The additional classification in relation to smoke production is:

s2

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	
D	-	s	2	,	d	0

Reaction to fire classification: D-s2, 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 exterior wood claddings in buildings.

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

- valid for radiata pine and ash wood claddings board with a thickness as tested and larger thickness;
- valid only for thermally modified wood species as tested;
- valid for special cladding profile type as tested;
- valid only for product and rail system as tested mounted directly on substrates;
- valid without additional coatings;
- mounted with a ventilated or non-ventilated air gap to the substrate of any A1 or A2-s1,d0 with a minimum density of 525 kg/m³ and thickness at least 12 mm, and with the air gap constructed by 18 mm GRAD Start rail aluminium battens with polyoxymethylene clips.
- valid for vertical and horizontal cladding board arrangements.

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 a type approval or certification of the product.

5.3. The classification assigned to the product in this report is appropriate to a declaration of conformity by the manufacturer within the context of system 3 attestation of conformity and CE marking under the Construction Products Regulation. The manufacturer has made a declaration, which is held on file. This confirms that the product's design requires no specific processes, procedures or stages (e.g. no addition of flame-retardants, limitation of organic content, or addition of fillers) that are aimed at enhancing the fire performance in order to obtain the classification achieved. As a consequence the manufacturer has concluded that system 3 attestation is appropriate. The test laboratory has, therefore, played no part in sampling the product for the test, although it holds appropriate references, supplied by the manufacturer, to provide for traceability of the samples tested.

Prepared by



E. Bukšāns

(signature and name)

Reviewed by



K. Būmanis

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