TFI-Report 25-000130-05

Classification

of the reaction to fire according to EN 13501-1:2018

Customer	Kvadrat AS Lundbergsvej 10 8400 Ebeltoft DK
Prepared by	TFI Aachen GmbH Charlottenburger Allee 41 52068 Aachen
Notified Body No	1658
Product	"Loux", "Looux Line", "Loux Level"

This report includes 5 pages.

Aachen, 31.10.2025

Dr. Jacqueline Lemm

The present document is provided with an advanced electronic signature.

This report only applies to the tested samples and has been established to the best of our knowledge. Only the entire report shall be reproduced. Under no circumstances, extracts shall be used. Furthermore, we apply the “General Terms and Conditions for the Execution of Contracts” of the TFI Aachen GmbH, also with regard to the order execution.

TFI Aachen GmbH is a notified testing body (NB1658) under the EU Construction Products Regulation 305/2011 for the technical specifications EN 13813:2002, EN 14041:2004/AC:2006, EN 14342:2013, EN 14904:2006 and EN 15102:2007+A1:2011 and horizontally notified for fire tests according to EN ISO 9239-1 and EN ISO 11925-2.

The test result does not include any addition or deduction for uncertainties due to measurement, sample preparation, sample collection and production tolerances.

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1 Introduction

This classification report defines the classification assigned to the product/s "Loux", "Looux Line", "Loux Level" in accordance with the procedures given in EN 13501-1:2018.

2 Details of classified product

General

The product "Loux", "Looux Line", "Loux Level" is not subject to the Construction Products Regulation (EU) No.305/2011.

3 Reports and results in support of this classification

3.1 Test reports

Name of Laboratory	Name of sponsor	Report ref.no.	Test method and date Filed of application rules and date
TFI Aachen GmbH	Kvadrat AS	25-000130-01 dated 31.10.2025	EN ISO 9239-1:2010
			EN ISO 11925-2:2020 (15 s ignition time)
TFI Aachen GmbH	Kvadrat AS	25-000130-03 dated 31.10.2025	EN ISO 9239-1:2010
			EN ISO 11925-2:2020 (15 s ignition time)
TFI Aachen GmbH	Kvadrat AS	25-000130-04 dated 31.10.2025	EN ISO 9239-1:2010
			-

3.2 Results

	Test method and test number	Parameter	No. Tests	Results	
				Continuous parameter mean (m)	Compliance with parameters
Product Loux	EN ISO 9239-1:2010	Average critical heat flux (kW/m²)	3	8.7	Compliant
		Integrated smoke value (% x min)		209	Compliant
	EN ISO 11925-2:2020	Flame tip ≤ 150 mm	6	yes	Compliant

	Test method and test number	Parameter	No. Tests	Results	
				Continuous parameter mean (m)	Compliance with parameters
Product Looux Line	EN ISO 9239-1:2010	Average critical heat flux (kW/m²)	3	8.9	Compliant
		Integrated smoke value (% x min)		47	Compliant
	EN ISO 11925-2:2020	Flame tip ≤ 150 mm	6	yes	Compliant

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	Test method and test number	Parameter	No. Tests*	Results	
				Continuous parameter mean (m)	Continuous parameter mean (m)
Product Loux Level	EN ISO 9239-1:2010	Average critical heat flux (kW/m²)	2	9.6	Compliant
		Integrated smoke value (% x min)		42	Compliant
	EN ISO 11925-2:2020	Flame tip ≤ 150 mm	-	-	-

*Worse result for the average critical heat flux and the corresponding integrated smoke value from the Radiant Panel Test with a reduced number of samples.

4 Classification and field of application

4.1 Reference of classification

The classification has been carried out in accordance with EN 13501-1:2018.

4.2 Classification

The products “Loux”, “Looux Line” and “Loux Level”, in relation to its reaction to fire behaviour are classified:

B_{fl}

The additional classification in relation to the smoke production is:

s1

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

-

The format of the reaction to fire classification for floorings is:

Fire behaviour		**Smoke production**	
B_{fl}	**-**	**s**	**1**

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Classification of the reaction to fire: B_{fl} - s1

The measurement results are evaluated without consideration of the measurement uncertainty with reference to compliance with limit values, unless otherwise specified by the test standard.

4.3 Field of application

This classification is valid for the following products:

Product	Total thickness [mm]	Thickness of the use surface [g/m²]	Mass per unit area [g/m²]	Material of the use surface
Loux	11,2	6-7*	4534	100 % Lyocell*
Looux Line	12,1	6-7*	4658	100 % Lyocell*
Loux Level	12,7	4-7*	4517	100 % Lyocell*

*Customer Information

This classification is valid for the following end use application:

Type of end use application	flooring (rug)
Substrate	noncombustible substrates (Euroclass A1 and A2-s1,d0) with a gross density ≥ 1350 kg/m³
Underlay for installation	no
Type of fixation	glued and unglued
Joint according to EN ISO 9239-1:2010	no
Laboratory spray extraction cleaning procedure according to ISO 11379:2009 (DIN EN 14041:2018)	no

Limitations

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

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 of AVCP and CE marking under the Regulation 305/2011/EU of the European Parliament and the Council of 9 March 2011 laying down harmonised conditions for the marketing of construction products.

The manufacturer has made a declaration, which is held on file. This confirms that the products 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.

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