



## Laboratory for Fire Safety

*Classification of reaction to fire in accordance with  
EN 13501-1:2018 of NewTechWood Ultrashield Castellation Pro*

Classification report

Reportnumber Y 2971-4E-RA-002 d.d. 01 October 2024

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*Classification of reaction to fire in accordance with  
EN 13501-1:2018 of NewTechWood Ultrashield Castellation Pro*

### Classification report

Client:	Woodvision B.V. Wutang Section, 12 Tuo, Daling, Huidong, Huizhou, Guangdong 516321 China
Issued by	Peutz bv Lindenlaan 41 NL-6584 AC Molenhoek PO-box 66 NL-6585 ZH Mook The Netherlands
Notified body nr.	NB 2264
Productnaam	<b>NewTechWood Ultrashield Castellation Pro</b>
Report Number:	Y 2971-4E-RA-002
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Reference:	HL/DDe/ /Y 2971-4E-RA-002
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## 1 Introduction

On behalf of NewTechWood Corporation an investigation was performed with respect to the reaction to fire properties of NewTechWood Ultrashield Castellation Pro.

This classification report defines the reaction to fire classification of the product in accordance with the procedures described in EN 13501-1: 2018.



For performing measurements, the Laboratory for Fire Safety of Peutz bv is recognized by the Dutch Accreditation Body RvA..

The RvA is member of the **EA MLA** (European Accreditation Organisation MultiLateral Agreement). [www.european-accreditation.org](http://www.european-accreditation.org)

*EA: "Certificates and reports issued by bodies accredited by MLA and MRA members are considered to have the same degree of credibility, and are accepted in MLA and MRA countries".*

## 2 Product description

### 2.1 General

The information in this chapter is based on information provided by the client.

The product investigated is NewTechWood Ultrashield Castellation Pro, hereinafter also called 'the product'. The intended application is cladding.

### 2.2 Harmonised product standard

According to the client there was no harmonised European product standard published at the time the tests were conducted and this report was drawn up.

### 2.3 Product identification


The most important parameters for identifying the product are summarized in tables t 2.1 and t 2.2

#### t 2.1 General information of product to be tested

<b>NewTechWood Ultrashield Castellation Pro</b>		
Date of delivery	SBI test specimen 1 and Small Flame samples on 23 November 2023 and SBI test specimen 2 and 3 on 11 March 2024	
Commercial name	NewTechWood Ultrashield Castellation Pro	
Produced by	Name	NewTechWood Corporation
	Address	Wutang Section, 12 Tuo, Daling, Huidong, Huizhou, Guangdong, 516321, China
Identification	Batchnr.	Not available
Sampling	No information known	

Peutz was not involved in the selection of the test specimen (or of its materials). The laboratory cannot make any declaration about the representativeness of the provided specimen and the samples made available. The results apply to the sample as received.

t 2.2 Additional information of product to be tested

	Cladding	Hanging system
Description	Composite facade cladding made of polyethylene plastic and wood fibers	Aluminum ventilation-profile
Commercial name	NewTechWood Ultrashield Castellation Pro	Ventilation Fabric Perfo 0195 AM– 32*29*32*2,0 x 3000mm
Produced by	NewTechWood corporation	Ipex-group
Composition	60% woodfibres, 40% polyethylene plastic (PE)	Aluminium
Thickness material	4.8 mm	2 mm
Thickness profile	33 mm	33 mm
Density	15 kg/m <sup>3</sup>	
Width panel	215 mm	
Width profile	26 mm	
Fire retardant additive	Yes, type and quantity unknown	No fire retardant used
Colour	Teak, RAL 8024	Silver
Surface	Upright profile, see drawing in appendix 1	
Photo		

The values mentioned are the nominal values as given by the client, unless otherwise stated (MV, measured value).

## 3 Reports and results in support of this classification

### 3.1 Reports

The client has confirmed that the reports provided (see Table t 3.1) may be used for this classification.

#### t 3.1 Reports in support of classification

Name of laboratory	Name of client	Number and date of report	Test method Field of application rules
Peutz bv, NB 2264	NewTechWood Corporation	Y 2971-2E-RA-002; 1 October 2024	EN 13823:2020+A1:2022
Peutz bv, NB 2264	NewTechWood Corporation	Y 2971-3E-RA-002; 1 October 2024	EN-ISO 11925-2:2020

### 3.2 Results

The results obtained are summarised in Tables t 3.2 and t 3.3.

#### t 3.2 Summary of test results EN-ISO 11925-2

Flame application time 30 s		Number of tests	Results	
Parameter	Continuous parameters (average)		Compliance parameters	
Surface exposure	F <sub>s</sub> ≤ 150 mm	6	-	Y
	Ignition of filter paper		-	N
Edge exposure	F <sub>s</sub> ≤ 150 mm	6	-	Y
	Ignition of filter paper		-	N

#### t 3.3 Summary of test results EN 13823

Parameter	Number of tests	Results	
		Continuous parameters (average)	Compliance parameters
FIGRA <sub>0,2MJ</sub>	3	410	-
FIGRA <sub>0,4MJ</sub>		410	-
THR <sub>600s</sub>		49.4	-
SMOGRA		1	-
TSP <sub>600s</sub>		12	-
LFS reaching edge		-	N
Flaming droplets/particles	FDP ≤ 10 s	-	N
	FDP > 10 s	-	N

### 3.3 Classification criteria

The classification to be obtained is based on the classification criteria given in EN 13501-1. In Tables t 3.4 and t 3.5 these criteria are summarised.

### t 3.4 Classification criteria

Test	Parameter Continuous (average) or compliance	Class		
		B	C	D
EN-ISO 11925-2	Flame spread $\leq 150$ mm	Y	Y	Y
EN 13823	FIGRA <sub>0,2MJ</sub> [W/s]	$\leq 120$	-	-
	FIGRA <sub>0,4MJ</sub> [W/s]	-	$\leq 250$	$\leq 750$
	THR <sub>600s</sub> [MJ]	$\leq 7.5$	$\leq 15$	-
	LFS reaching edge	N	N	-

### t 3.5 Criteria additional classification

Test	Parameter Continuous (average) or compliance	Class				Class		
		s1	s2	s3	d0	d1	d2	
EN-ISO 11925-2	Ignition of filter paper <i>Note: ignition of filter paper leads to classification d2, irrespective of the results for FDP in EN 13823</i>	-	-	-	N	N	Y	
EN 13823	SMOGRA [m <sup>2</sup> /s <sup>2</sup> ]	$\leq 30$	$\leq 180$	not s1	-	-	-	
	TSP <sub>600s</sub> [m <sup>2</sup> ]	$\leq 50$	$\leq 200$	or s2	-	-	-	
EN 13823	Flaming droplets/particles (FDP) within 600 s							
	FDP $\leq 10$ s	-	-	-	N	Y	-	
	FDP $> 10$ s	-	-	-	N	N	not d0 or d1	

## 4 Classification and field of application

### 4.1 Reference of classification

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

### 4.2 Classification

The product, NewTechWood Ultrashield Castellation Pro, has been classified to its reaction to fire behaviour as: D. The additional classification for the smoke production is: s1, the additional classification for flaming droplets is: d0.

**Reaction to fire classification: D-s1, d0**

### 4.3 Field of application

The classification is valid for the product parameters and end use applications as stated in Tables t 4.1 and t 4.2.

#### t 4.1 Product parameters

Parameter	
Thickness cladding	4.8 mm
Profile size	215 mm ± 3.5 mm
Thickness profile	33 mm ± 0.5 mm
Thickness hanging system	2 mm
Thickness profile hanging system	33 mm
Surface weight	15 kg/m <sup>3</sup>

#### t 4.2 End-use parameters

Parameter	
Substrate	An material with a Euroclass A2-s1,d0 or better with a density of at least 637 kg/m <sup>3</sup> and a thickness of at least 9 mm.
Mounting	Mounted with the aluminium ventilation profile. The ventilation profile is directly screwed against the substrate. The cladding is directly screwed against the ventilation profile.
Orientation	Vertical
Joints	No horizontal or vertical joints are allowed
Cavity	A ventilated cavity with a depth of 30 mm needs to be present behind the specimen.
Other	Use as cladding for exterior use

## 5 Limitations

There are no limits in time on the validity of this classification document.

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



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Management

This report contains 10 pages and one appendix.

**Appendix 1**  
**Sketch test specimen**

**PEUTZ**

