

# CLASSIFICATION REPORT

## REACTION TO FIRE

### according to PN-EN 13501-1+A1:2010

Contract №: 1101/16/Z00NP

<b>Customer:</b>	<b>CKM EXTRUSION Sp. z o.o.</b> <b>ul. Kanałowa 2</b> <b>98-220 Zduńska Wola</b>
<b>Prepared by:</b>	<b>Fire Research Department</b> <b>Building Research Institute</b> <b>1 Filtrowa Str.</b> <b>00-611 Warszawa</b>
<b>Product name:</b>	<b><i>PVC profiles for windows and doors</i></b>
<b>Classification report №:</b>	<b>1101/16/Z00NPE (English version of 1439/15/Z00NP)</b>
<b>Issue nr: 1</b>	<b>Copy № 1</b>
<b>Date of issue:</b>	<b>2016-03-22</b>

This classification report consists of three pages and may only be used or reproduced in its entirety.

#### 1. Introduction

This classification report defines the classification assigned to **PVC profiles for windows and doors** in accordance with procedures given in PN-EN 13501-1+A1:2010.

#### 2. Details of classified product

##### 2.1. General

**PVC profiles for windows and doors** are unleaded PVC profiles for windows and doors for use in public buildings and other buildings.

##### 2.2 Product description

The product is described below.

Unleaded PVC profiles for windows and doors are made from unplasticized poly(vinyl chloride) with an addition of chalk, modifiers, stabilisers, titanium white and pigments. The maximum mass of profiles: 2,229 kg/mb.

The laboratory was informed about the quantitative composition of the PVC compound which is reserved by the client.

PVC profiles for windows and doors are produced by the company CKM EXTRUSION Sp. z o.o., ul. Kanałowa 2, 98-220 Zduńska Wola.

### 3. Test reports and test results as a basis of the classification

#### 3.1. Test reports

Laboratory	Customer	Test report nr	Test method
Fire Research Laboratory ITB	CKM EXTRUSION Sp. z o.o.	LP01-01439/15/Z00NP	PN-EN 13823:2010
		LP03-01439/15/Z00NP	PN-EN ISO 11925-2:2010

#### 3.2. Test results

Test method	Parameter	Number of tests	Results	
			Continuous parameter – mean (m)	Compliance with the parameter
PN-EN ISO 11925-2:2010 surface and edge 30 s exposure	Flame spread $F_s \leq 150$ mm	6	(-)	Y
	Flaming droplets/debris		(-)	N
PN-EN 13823:2010	FIGRA <sub>0,2MJ</sub> [W/s]	3	51.1	(-)
	FIGRA <sub>0,4MJ</sub> [W/s]		50.3	(-)
	LFS < edge		(-)	Y
	THR <sub>600s</sub> [MJ]		4.6	(-)
	SMOGRA [m <sup>2</sup> /s <sup>2</sup> ]		34.2	(-)
	TSP <sub>600s</sub> [m <sup>2</sup> ]		318.2	(-)
	Flaming droplets/debris		(-)	N

(-) – not applicable, Y – YES, N – NO

### 4. Classification and the field of application

#### 4.1. Reference of the classification

The classification has been carried out in accordance with PN-EN 13501-1+A1:2010.

#### 4.2. Classification

PVC profiles for windows and doors in relation to their reaction to fire behaviour is classified:

**B**

The additional classification in relation to smoke production is:

**s3**

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

**d0**

The format of the reaction to fire classification for construction products excluding floorings and linear pipe thermal insulation products is:

Fire behaviour		Smoke production				Flaming droplets	
<b>B</b>	-	<b>s</b>	<b>3</b>	,	<b>d</b>	<b>0</b>	

i.e.: **B-s3,d0**

## Reaction to fire classification: B-s3,d0

### 4.3 Field of application

This classification is valid for the product described in section 2.

This classification is valid for the following end-use applications:

- **PVC profiles for windows and doors** of each colour
- **PVC profiles for windows and doors** mounted directly or with various distances from substrates and elements with a reaction to fire class at least A2-s3,d0 according to PN-EN 13501-1.

### 5. Limitations

This classification will be valid until:

- The test method remains unchanged,
- Product standard or technical approval remains unchanged,
- Constructional or material modifications do not exceed limits of the field of application defined in 4.3.

This classification report has been issued in three copies. Additional approved copies can be issued by Fire Research Department – Building Research Institute under the request of the report's owner only.

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

**Signed**

Katarzyna Kaczorek-Chrobak MPhil Eng.

**Approved**

Kierownik  
Zakładu Badań Ogniwych  
dr inż. Paweł Sulik

Head of Fire Development  
and Material Testing Division

Bartłomiej K. Papis, Ph.D. Eng.