

CLASSIFICATION PROTOCOL FOR FIRE RESISTANCE No CR-483-02/04.06.2026

in accordance with EN 13501-2:2023

Applicant:	MAKRIS SA, 6th km. Larissa- Sykourio, Larissa 41500, Greece
Prepared by:	"F plus" Ltd., st. 16 Konstantin Kostenechki Street, Kostenets, Bulgaria
Notified body No:	NB 2548
Product:	Non-load-bearing wall made of vertically mounted sandwich panels type "MW WALL COVERING PANEL 60mm - VF" with a mineral wool core and a thickness of 60 mm
The protocol contains:	5 pages

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1. Introduction

This classification protocol defines the classification for a non-load-bearing wall constructed of vertically mounted sandwich panels of type "MW WALL COVERING PANEL 60mm - VF" with a mineral wool core and a thickness of 80 mm, in accordance with the procedures described in EN 13501-2:2023.

2. Details of the classified product

2.1. General

The element, a non-load-bearing wall made of vertically mounted sandwich panels of type "MW WALL COVERING PANEL 60mm - VF" with a mineral wool core and a thickness of 60 mm, is determined to be fire-resistant.

2.2. Description

The non-load-bearing wall element made of sandwich panels of type "MW WALL COVERING PANEL 60mm - VF" with a mineral wool core is fully described below in support of the classification in point 3.1.

Sandwich panels type "MW WALL COVERING PANEL 60mm - VF" are symmetrical. They are made of two layers of steel sheet and a mineral wool core. The steel sheet is galvanized type DX51D with a thickness of 0.6 mm, manufactured by the company ARCELOR MITTAL. The outer surfaces of the galvanized sheet are covered with a polyester coating with a thickness of 25 µm. profile 0.6 mm.

The distance between the two metal sheets is 60 mm and is filled with mineral wool named Fibrango BL-50c and a volume mass of 100 kg/m³, manufactured by Fibran S.A. with an isocyanate-based binder. The wool is cut into slats 100 mm high, which are arranged so that the wool strands are perpendicular to the steel sheets. using two-component PU adhesive (polyol and isocyanate) manufactured by DOW EUROPE GMBH at an average consumption of 170 g/m². The panels are produced with a width of 1000 mm and length depending on the application.

The wall is made up of 3 vertically mounted panels. They are mounted to an L-shaped steel profile with dimensions (80x80x8) mm using self-tapping screws ø6.3x100 mm, manufactured by Ejot, located at a distance 500 mm. The L-shaped profiles are located along the two horizontal and one vertical ends of the wall. The profiles are welded on the inside of the furnace frame, which provides the possibility of fastening the test structure. The wall panels are pre-framed with a U-shaped profile, with dimensions (150x200x150) mm. The profiles are installed by means of self-tapping screws ø4.3x19 mm, production of the company Ejot, located at a distance 500 mm from each other.

The joints between the panels are symmetrical. Along the length of the two vertical joints are installed self-drilling screws ø4.3x19 mm, manufactured by the company Ejot, located at a distance of 250 mm. On the joints and the inner side of the L-shaped profiles are laid silicone type Promastop CC manufactured by the company Promat.

The wall is tested with one free edge with a size of 25 mm, which is filled with ceramic wool with a volumetric mass of 128 kg/m³, manufactured by the company LUYANG UNIFRAX.

The manufacturer of panels type "MW WALL COVERING PANEL 60mm - VF" is MAKRIS SA, 6th km Larissa - Sykourio, Larissa 41500, Greece.

The test report shall be provided for the preparation of this classification.

3. Test reports and results supporting this classification

3.1. Test reports

Includes test details.

Laboratory Name	Name of the applicant	Test and date	Test method and date
Testing and Research Laboratory "F plus"	MAKRIS SA, Greece	Test Report № TR-483-02/ 27.05.2026	EN 1364-1: 2015

3.2. Results

Test method, Number and date of the protocol	The parameter	Results
Test method, according to the requirements of the EN 1364-1:2015 Test Report No TR-483-02/27.05.2026	Mounting structure	According to the description in item 2.2.
	Loadbearing capacity R	-
	Integrity E	
	Cotton pad	94 min
	Gap gauge	94 min
	Sustained flaming	94 min
	Thermal insulation I	55 min

4. Classification and field of application

4.1. Reference to classification

This classification was carried out in accordance with point 7 of EN 13501-2:2023.

4.2. Classification

According to item 7.5.2. of EN 13501-2:2023, a non-load-bearing wall built of vertically installed sandwich panels of type "MW WALL COVERING PANEL 60mm - VF" with a mineral wool core and a thickness of 60 mm, can be classified as a partition in accordance with the following combination of presented parameters and certain classes.

R	E	I	W		t	t	M	S	C	IncSlow	sn	ef	r
-	X	-	-		9	4	-	-	-	-	-	-	-
-	X	X	-		5	5	-	-	-	-	-	-	-

Fire resistance classification E 90, EI 45

4.3. Area of direct application

The test results are directly applicable to such structures where one or more of the following permissible modifications are made:

- Reduction of height;
- Increasing the thickness of the wall;
- Increasing the thickness of the constituent materials /sheet metal, wadding/;
- Reducing the length of the panels, but not the thickness;
- Reducing the distances between fasteners;
- Increasing the number of vertical joints of the tested type;
- Increasing the width of the structure;
- Increased height of the structure to 4 m;
- Installation in solid support structures of high density, with fire resistance equal to or greater than the wall classification.

5. Limitations

This classification document does not constitute type approval or product certification.

Classification undertaken by:



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This report was issued in Bulgarian and English languages.
By established distinction between both reports the Bulgarian one is valid.