

**EXTERNAL EXPOSURE TO FIRE
CLASSIFICATION REPORT**

№ 01948.2/23/Z00NZIP-ENG (enlargement 02417.4/22/Z00NZIP-ENG)

(english version of raport no. 02417.4/22/Z00NZIP (enlargement 01519/22/Z00NZIP))

of product:

**The roofs with bitumous roofing felts
JSC MIDA LT, GEORG BÖRNER**

On behalf of

OWNERS OF CLASSIFICATION REPORT

**JSC MIDA LT
Gamyklos 19
LT-96155 Gargždai**

Contract №: 01948/23/Z00NZIP

1 Introduction

This classification report defines the classification assigned to bitumous roofing felts JSC MIDA LT, GEORG BÖRNER in accordance with the procedures given in **EN 13501-5:2016-07, method 2**.

2 Description of the roof

The roofs with bitumous roofing felts.

Layer's arrangement from the underside of the roof (layout 1):

- substrate from profiled steel,
- mineral wool 30 mm,
- vapour barriers from polyethylene foils,
- EPS boards 50 mm,
- mineral wool 20 mm,
- bituminous roofing underfelt Unifleks EPP 4,0 with thickness 3,2 mm on the basis of polyester non-woven,
- bituminous roofing felts Unifleks 5,0kg grey slates EKP with thickness 4,0 mm on the basis of polyester non-woven.

Layer's arrangement from the underside of the roof (layout 2):

- substrate from plasterboard,
- vapour barriers from polyethylene foils,
- EPS boards 50 mm,
- mineral wool 20 mm,
- bituminous roofing underfelt Unifleks EPP 4,0 with thickness 3,2 mm on the basis of polyester non-woven,
- bituminous roofing felts Unifleks 5,0kg grey slates EKP with thickness 4,0 mm on the basis of polyester non-woven.

3 Test reports and test results in support of this classification

3.1 Test reports

Name of laboratory	Name of sponsor	Test report ref. №	Test Method
Laboratorium Badań Ogniwych ITB	JSC MIDA LT Gamyklos 19 LT-96155 Gargždai	LZP01-02643/17/Z00NZP LZP02-02643/17/Z00NZP	CEN/TS 1187:2014, (method 2)

3.2 Test results (layout 1)

Parameter	Criteria		Test results					Compliance
	Average	Max	Specimen № 1	Specimen № 2	Specimen № 3	Average	Max	
The length of damaged material 2m/s – roof covering	≤ 550 mm	≤ 800 mm	180	250	260	230	260	Y
The length of damaged material 2m/s – substrate	≤ 550 mm	≤ 800 mm	0	0	0	0	0	Y
The length of damaged material 4m/s – roof covering	≤ 550 mm	≤ 800 mm	40	218	230	162,6	230	Y
The length of damaged material 4m/s – substrate	≤ 550 mm	≤ 800 mm	0	0	0	0	0	Y

Test conditions: Temperature of air: 17,3°C

Test pitch: 30°

Y – yes, N – no

3.3 Test results (layout 2)

Parameter	Criteria		Test results					Compliance
	Average	Max	Specimen № 1	Specimen № 2	Specimen № 3	Average	Max	
The length of damaged material 2m/s – roof covering	≤ 550 mm	≤ 800 mm	228	240	260	242,6	260	Y
The length of damaged material 2m/s – substrate	≤ 550 mm	≤ 800 mm	0	0	0	0	0	Y
The length of damaged material 4m/s – roof covering	≤ 550 mm	≤ 800 mm	180	255	262	232,3	262	Y
The length of damaged material 4m/s – substrate	≤ 550 mm	≤ 800 mm	0	0	0	0	0	Y

Test conditions: Temperature of air: 17,3°C

Test pitch: 30°

Y – yes, N – no

4 Classification and field of application

4.1 Reference

This classification has been carried out in accordance with **EN 13501-5:2016-07**.

4.2 Classification

The roofing system described in the section 2 in relation to its fire performance is classified:

BROOF (t2).

This classification remains valid for end use applications as a roof „none spreading fire” in accordance with Rozporządzenie Ministra Infrastruktury z dnia 12 kwietnia 2002 r. (Dz. U. Nr 75 z 15 czerwca 2002, poz.690 z późniejszymi zmianami).

4.3 Field of application

This classification is valid for the following conditions:

- 1) any substrates from profiled or none profiled, not perforated steel and any non-combustible deck with minimum thickness 10 mm,
- 2) vapour barriers from polyethylene foils
- 3) thermal insulation from EPS 100, EPS 80, EPS 70 with thickness minimum 50 mm with minimum reaction to fire class E acc. to PN-EN 13501-1
- 4) thermal insulation from mineral wool boards with thickness minimum 20 mm with minimum reaction to fire class A2-s3,d0 acc. to PN-EN 13501-1
- 5) Bituminous roofing underfelts: Bicrost HPP, Bicroelast HPP, Bicroelast HMP, Bicroelast EPP, Bicroelast EPP 4,0, Bipol HPP, Bipol Standart HPP, Bipol EPP, Bipol Standart EPP, Bipol Standart EMP 160, Unifleks HPP, Unifleks EPP, Unifleks EPP 4,0, Unifleks EMP, Mida Balt PV S3s.
- 6) Bituminous roofing felts: Bicroelast HKP Grey slate, Bicroelast EKP Grey slate, Bipol HKP Grey slate, Bipol Standart HKP Grey slate, Bipol XL HKP Grey slate, Bipol EKP Grey slate, Bipol Standart EKP Grey slate, Bipol XL EKP Grey slate, Bipol XL EKP 180 grey slate, Unifleks HKP Grey slate, Unifleks EKP grey slate, Unifleks EKP Red slate, Unifleks green slate EKP, Unifleks EKP 5,0 Grey slate, Unifleks EKP 5,0 Red slate, Unifleks Extra EKP Grey slate, Mida Balt PV S4b.
- 7) The producer of felts is: JSC MIDA LT, Gamyklos str. 19, LT-96155 Gargzdai, Lithuania or GEORG BÖRNER Chemisches Werk für Dach- und Bautenschutz GmbH & Co.KG; Heinrich-Börner-Straße 31; D-36251 Bad Hersfeld, Germany.
- 8) The classification applies to the following systems (layer's arrangement from the top of the roof):

1. Layout
 - bituminous roofing felts
 - bituminous roofing underfelts
 - mineral wool, A1 thickness 20-50 mm
 - mineral wool thickness from 50 mm
 - vapour barriers foil 200 mk
 - mineral wool, thickness 20-50 mm
 - trapezoidal metal sheet
2. Layout
 - bituminous roofing felts
 - bituminous roofing underfelts
 - mineral wool, A1 thickness 20-50 mm
 - EPS (class E), thickness from 50 mm
 - vapour barriers foil 200 mk
 - mineral wool, thickness 20-50 mm
 - trapezoidal metal sheet

3. Layout
 - bituminous roofing felts
 - bituminous roofing underfelts
 - mineral wool, A1 thickness 20-50 mm
 - EPS (class E), thickness from 50 mm
 - vapour barriers foil 200 mk
 - concrete

4. Layout
 - bituminous roofing felts
 - bituminous roofing underfelts
 - mineral wool, A1 thickness 20-50 mm
 - mineral wool thickness from 50 mm
 - vapour barriers foil 200 mk
 - concrete

5 Limitations

5.1 Validity

This classification given remains valid till **15.03.2024 (extension)**, as long as the composition, structure and/or the production's technology remains unchanged.

5.2 Restrictions

This classification report may only be reproduced by the owner in its entirety together with attachments without comments, abbreviations and changes.

Additional signed copies can be issued by Fire Research Department of ITB on the request of the report's owner only.

5.3 Warning

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

Report	Name	Signature*
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* - For and on behalf of "Name of the organisation"