



Instytut Techniki Budowlanej

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EXTERNAL EXPOSURE TO FIRE CLASSIFICATION REPORT

of product:

The roofs with bitumous roofing felts TechnoNIKOL

01463/22/Z00NZZP-ENG (extension 01066/21/Z00NZZP)

(english version of raport no. 01463/22/Z00NZZP (extension 01066/21/Z00NZZP))

on behalf of

OWNER OF CLASSIFICATION REPORT

**Ribotos atsakomybės bendrovės "TehnоNIKOL-Stroitelnye Sistemy"
atstovybė Lietuvos Respublikoje
Gamyklos 19
LT-96155 Gargždai**

Contract №: 01463/22/Z00NZZP

1 Introduction

This classification report defines the classification assigned to bitumous roofing felts TechnoNIKOL in accordance with the procedures given in PN-EN 13501-5:2016-07 method 1.

2 Description of the roof

The roof covering with waterproofing

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

- substrate from profiled steel,
- mineral wool 50 mm,
- vapour barriers from polyethylene foils,
- EPS boards 50 mm,
- mineral wool 50 mm,
- bitumous roofing underfelt Unifleks EPP 4,0 with thickness 3,2 mm on the basis of polyester non-woven,
- bitumous 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,
- bitumous shingle Technonicol 01,
- bitumous roofing underfelt Unifleks EPP 4,0 with thickness 3,2 mm on the basis of polyester non-woven,
- bitumous 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
Fire Research Laboratory of ITB	Ribotos atsakomybės bendrovės "TehnNIKOL-Stroitelnye Sistemy" atstovybė Lietuvos Respublikoje Gamyklos 19 LT-96155 Gargždai	LZP01-02656/17/Z00NZIP LZP02-02656/17/Z00NZIP	CEN/TS 1187:2014, (method 1)

3.2 Test results for roof with bitumous roofing felt Unifleks 5,0kg grey slates EKP with thermal insulation from EPS boards and mineral wool

Test report: LZP01-02656/17/Z00NZIP

Parameter	Criteria	Test results				Compliance
		1	2	3	4	
Internal fire spread upwards	< 0,700 m	0,0	0,0	0,0	0,0	Yes
External fire spread upwards	< 0,700 m	0,055	0,043	0,090	0,0	Yes
Internal fire spread downwards	< 0,600 m	0,0	0,0	0,0	0,0	Yes
External fire spread downwards	< 0,600 m	0,095	0,168	0,340	0,520	Yes
Maximum burned length internal	< 0,800 m	0,0	0,0	0,0	0,0	Yes
Maximum burned length external	< 0,800 m	0,095	0,168	0,340	0,520	Yes
Burning, droplets/debris falling from expose side	No	N	N	N	N	Yes
Burning, glowing particles penetrating the roof	No	N	N	N	N	Yes
Single through opening	< 25 mm ²	0,0	0,0	0,0	0,0	Yes
Sum of all through openings	< 4500 mm ²	0,0	0,0	0,0	0,0	Yes
Lateral fire spread	< edge*	N	N	N	N	Yes
Internal glowing combustion	No	N	N	N	N	Yes
Radius of fire spread (horizontal roof)	< 0,200 m	-	-	-	-	not applicable

N – no

Y – yes

Test conditions: Temperature of air: 18,3°C (Test pitch: 15°)
substrate from profiled steel

3.3 Test results for roof with bitumous roofing felt Unifleks 5,0kg grey slates EKP without thermal insulation.

Test report: LZP02-02656/17/Z00NZIP

Parameter	Criteria	Test results				Compliance
		1	2	3	4	
Internal fire spread upwards	< 0,700 m	0,0	0,0	0,0	0,0	Yes
External fire spread upwards	< 0,700 m	0,0	0,020	0,0	0,0	Yes
Internal fire spread downwards	< 0,600 m	0,0	0,0	0,0	0,0	Yes
External fire spread downwards	< 0,600 m	0,040	0,160	0,056	0,280	Yes
Maximum burned length internal	< 0,800 m	0,0	0,0	0,0	0,0	Yes
Maximum burned length external	< 0,800 m	0,040	0,160	0,056	0,280	Yes
Burning, droplets/debris falling from expose side	No	N	N	N	N	Yes
Burning, glowing particles penetrating the roof	No	N	N	N	N	Yes
Single through opening	< 25 mm ²	0,0	0,0	0,0	0,0	Yes
Sum of all through openings	< 4500 mm ²	0,0	0,0	0,0	0,0	Yes
Lateral fire spread	< edge*	N	N	N	N	Yes
Internal glowing combustion	No	N	N	N	N	Yes
Radius of fire spread (horizontal roof)	< 0,200 m	-	-	-	-	not applicable

N – no

Y – yes

Test conditions: Temperature of air: 18,3°C (Test pitch: 15°)
substrate from plasterboard