

# DECLARATION OF PERFORMANCE

No. DoP-18-05/25

according to EN 13163:2012+A2:2016 and Regulation (EU) No. 305/2011  
laying down harmonised conditions for the marketing of construction products

1. Unique identification code of the product-type:

**GRADIPOR White EPS F**

**Wall cavity and surface insulation slabs**

**Format: 1000 x 500 x d<sub>N</sub> [mm]**

2. Type, LOT No., and Production Date/Hour:

**See product label**

3. Intended use:

**Thermal insulation product for buildings**

4. Manufacturer:

**FRAGMAT - MAK d.o.o.**

**221 str., No. 175, 1300 Kumanovo, North Macedonia**

5. Authorized representative:

**/**

6. Systems of AVCP:

**Sistem 3**

7. Harmonized standard:

**EN 13163:2012+A2:2016**

Notified body/Testing laboratory (by the European Commission):

**ID: NB 2032; NISI - Building Research Institute / PTD (CE 24)**

**ID: NB 1404; ZAG - Slovenian National Building and Civil Engineering Institute / RtF**

## 8. Declared performance:

Table 8.1

Essential characteristics	Performance					Harmonized technical specifications
	Testing performance, symbol	Method	Declaration	Unit	Tolerance	
Thermal resistance	Thermal conductivity, $\lambda_D$	EN 12667	0,036	W/m·K	/	EN 13163:2012 +A2:2016
	Thermal resistance, $R_D$	EN 12667	see table 8.2	m <sup>2</sup> ·K/W	/	
	Nominal thickness, $d_N$	EN 823	see table 8.2	mm	/	
Reaction to fire	Reaction to fire, $R_{tF}$	EN 13501-1	Euroclass E	/	/	
Durability of reaction to fire against heat, weathering, ageing / degradation	Durability characteristics		NPD		/	
Durability of thermal resistance against heat, weathering, ageing / degradation	Thermal conductivity, $\lambda_D$	EN 12667	0,036	W/m·K	/	
	Thermal resistance, $R_D$	EN 12667	see table 8.2	m <sup>2</sup> ·K/W	/	
	Durability characteristics		NPD			
Compressive strength	Compressive stress at 10% deformation, $CS(10)$	EN 826	NPD	kPa	/	
Tensile/Flexural strength	Bending strength, BS	EN 12089	NPD	kPa	/	
	Tensile strength perpendicular to faces, TR	EN 1607	TR120	kPa	≥ 120	
Durability of compressive strength against ageing / degradation	Compressive creep, $CC(i_1, i_2, y)$	EN 1606	NPD	%	/	
Water permeability	Long term water absorption by partial immersion, $WL(P)$	EN 12087	WL(P)0,1	kg/m <sup>2</sup>	≤ 0,1	
	Long term water absorption by total immersion, $WL(T)$	EN 12087	WL(T)1,5	%	≤ 1,5	
	Long term water absorption by diffusion, $WD(V)$	EN 12088	NPD	%	/	
Water vapour permeability	Water vapour diffusion resistance factor, $\mu$	EN 12086	NPD	/	/	
Impact noise transmission index (for floors)	Dynamic stiffness, $SD$	EN 29052-1	NPD	MN/m <sup>3</sup>	/	
	Thickness, $d_L$ or $d_B$	EN 12431	NPD	mm	/	
	Compressibility, $CP$	EN 1606	NPD	mm	/	
Continuous glowing combustion	Continuous glowing combustion	No method available	NPD			
Release of dangerous substances to the indoor environment	Release of dangerous substances	No method available	NPD			

Table 8.2

<b>Nominal thickness, <math>d_N</math> [mm]</b>	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
<b>Thermal resistance, <math>R_D</math> [m<sup>2</sup>·K/W]</b>	0,25	0,55	0,80	1,10	1,35	1,65	1,90	2,20	2,50	2,75	3,05	3,30	3,60	3,85	4,15
<b>Nominal thickness, <math>d_N</math> [mm]</b>	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300
<b>Thermal resistance, <math>R_D</math> [m<sup>2</sup>·K/W]</b>	4,40	4,70	5,00	5,25	5,55	5,80	6,10	6,35	6,65	6,90	7,20	7,50	7,75	8,05	8,30

Table 8.3

Other relevant characteristics	Performance				Harmonized technical specifications
	Method	Declaration	Unit	Tolerance	
Length	EN 822	NPD	mm	/	<b>EN 13163:2012 +A2:2016</b>
Width	EN 822	NPD	mm	/	
Thickness	EN 823	T2	mm	± 2	
Squareness	EN 824	NPD	mm/m	/	
Flatness	EN 825	NPD	mm	/	
Dimensional stability under normal lab conditions	EN 1603	NPD	%	/	
Dimensional stability at 70°C/48h	EN 1604	NPD	%	/	

Designation code:

**EPS-EN 13163-T2-TR120-WL(P)0,1-WL(T)1,5**

9. The performance of the product identified in point 1 is in conformity with the declared performance in point 8.

This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:

Director:

Kumanovo, 30.05.2025

Danijel Krstić