

TESTING LABORATORY

“ITEM Consult” Ltd. — Sofia 1220, 8 Istoria Slavianobulgarska Blvd

ASSESSMENT OF PERFORMANCE REPORT

№ 1837-AoP-CPR-0061A

1. Construction product:

Product name: “**SAPHIRE**”
Description: Biofuel heater (pellets)
Type, serial number (type or prototype):
Trade names:
Year of manufacture: 2026

2. Manufacturer:

Company: “**MAK ENDÜSTRİYEL ÜRETİM VE TİCARET A.Ş.**”
Address: Mimar Sinan Mah. Ankara Yolu 5. Cadde No: 33 Çorum / TÜRKİYE

3. Applicant:

Application: № CPR 332A/20.01.2026
Company: “**MAK ENDÜSTRİYEL ÜRETİM VE TİCARET A.Ş.**”
Address: Mimar Sinan Mah. Ankara Yolu 5. Cadde No: 33 Çorum / TÜRKİYE

4. This performance assessment report certifies that the performance of the above-mentioned construction product has been assessed in accordance with the harmonised standard BDS EN 16510-2-1:2023, under system 3 for the essential characteristics listed below:

Essential characteristic Clause No. – Description	Performance Level or class, unit	Basis for the assessment of performance
Protection of combustible materials – p. 4.2		
Min distance to floor; 100 mm	$\leq T_a + 65 \text{ K}$ $t^\circ\text{C} = 70.1$	Documentation; test report № CPR 528A/04.02.2026
Min distance to ceiling; > –	$\leq T_a + 65 \text{ K}$ $t^\circ\text{C} = -$	–
Minimum distance to rear – 200 mm	$\leq T_a + 65 \text{ K}$ $t^\circ\text{C} = 71.3$	Documentation; test report № CPR 528A/04.02.2026
Minimum side distance – 500 mm	$\leq T_a + 65 \text{ K}$ $t^\circ\text{C} = 71.5$	Documentation; test report № CPR 528A/04.02.2026
Minimum front distance – 1000 mm	$\leq T_a + 65 \text{ K}$ $t^\circ\text{C} = 52.2$	Documentation; test report № CPR 528A/04.02.2026
Minimum distance to side radiation area, mm – not specified	–	–
Min distance to furniture; –	–	–
Hygiene, health and environment:		
At nominal heat output:		
Carbon monoxide emissions (CO) – p. 4.3	128 mg/m ³ Threshold level at 13% O ₂ : 300 mg/m ³	Test report № CPR 528A/04.02.2026
Nitrogen oxides (NO _x) emissions – p. 4.4	168 mg/m ³	Test report № CPR

Essential characteristic Clause No. – Description	Performance Level or class, unit	Basis for the assessment of performance
	Threshold level at 13% O ₂ : 200 mg/m ³	528A/04.02.2026
Organic gaseous compounds (OGC) emissions – p. 4.5	5 mg/m ³ Threshold level at 13% O ₂ : 60 mg/m ³	Test report № CPR 528A/04.02.2026
Particulate matter (PM) emissions – p. 4.6	18 mg/m ³ Threshold level at 13% O ₂ : 20 mg/m ³	Test report № CPR 528A/04.02.2026
At part load:		
Carbon monoxide emissions (CO) – p. 4.3	–	–
Nitrogen oxides (NOx) emissions – p. 4.4	–	–
Organic gaseous compounds (OGC) emissions – p. 4.5	–	–
Particulate matter (PM) emissions – p. 4.6	–	–
Safety and accessibility in use:		
Chimney installation data at nominal heat output:		
Flue gas outlet temperature – p. 4.7.2	133 °C	Test report № CPR 528A/04.02.2026
Minimum flue draft – p. 4.7.4	13 Pa	Test report № CPR 528A/04.02.2026
Flue gas mass flow rate – p. 4.7.6	8.7 g/s	Test report № CPR 528A/04.02.2026
Chimney installation data at part load:		
Flue gas outlet temperature – p. 4.7.3	–	–
Minimum flue draft – p. 4.7.5	–	–
Flue gas mass flow rate – p. 4.7.7	–	–
Energy saving and heat preservation		
Thermal output and efficiency at nominal heat output:		
Space heat output – p. 4.8.1	10.2 kW	Test report № CPR 528A/04.02.2026
Water heat output – p. 4.8.2	–	–
Efficiency – p. 4.8.3	90 %	Test report № CPR 528A/04.02.2026
Thermal output and efficiency at part load:		
Space heat output – p. 4.8.4	–	–
Water heat output – p. 4.8.5	–	–
Efficiency – p. 4.8.6	–	–
Space heating efficiency		
Seasonal space heating efficiency at nominal heat output η _s – p. 4.8.7	80 % Requirement: > 79 %	Test report № CPR 528A/04.02.2026

Essential characteristic Clause No. – Description	Performance Level or class, unit	Basis for the assessment of performance
Energy efficiency – p. 4.8.8		
Index (EEI)	121	<i>Test report № CPR 528A/04.02.2026</i>
Energy efficiency classification	A+	<i>Test report № CPR 528A/04.02.2026</i>
Electric power consumption at nominal heat output – p. 4.8.9	–	–
Electric power consumption at part load – p. 4.8.10	–	–
Standby mode power consumption – p. 4.8.11	–	–

This performance assessment report has been prepared in accordance with GNB document NB-CPR 23/836 and covers only the above-mentioned essential characteristics. It is not an exhaustive statement of the performance of the product characteristics. The manufacturer is responsible for the declaration of performance of the product and may declare performance of other essential characteristics than those mentioned above.

This performance evaluation report is not considered a product certificate or a document that directly accompanies either the product or the declaration of performance.

This performance assessment protocol will remain applicable under the responsibility of the manufacturer as long as neither the harmonised standard, the construction product nor the AVCP methods are significantly modified.

Date: 04.02.2026

HEAD OF THE LABORATORY:

Dipl. eng. Raycho Sahatchiev

(Signature and laboratory stamp appear in the original bilingual report.)