

Rhein-Ruhr Feuerstätten Prüfstelle • Im Lipperfeld 34 b • 46047 Oberhausen

- ❖ Testing laboratory according to Regulation (EU) Nr. 305/2011, notified body No.: NB 1625
- ❖ Testing laboratory according to DIN EN ISO/IEC 17025:2005, DAkkS No. D-PL-17727-01-00
- ❖ Testing, monitoring and certification body according to LBO, registered No.: NRW 15
- ❖ Testing, monitoring and certification body in construction supervision licensing procedures
- ❖ DIN CERTCO testing laboratory, registered No. PL139



## Certificate No. RRF - 40 15 3932

Brief summary of the test results for the declaration of efficiency (CPR) according to regulation (EU) 305/2011

**Testing method:** EN 13240:2001/A2:2004/AC:2007  
Amendment according to Art. 15a B-VG of the Republic of Austria

**Fulfilled requirements:** BStV of the City of Munich and the City of Regensburg  
FBStVO of the City of Aachen and the City of Düsseldorf  
1. and 2. level of 1. BImSchV of Germany  
LRV of Switzerland  
Nordic Ecolabel

**Manufacturer:** HWAM A/S  
Nydamsvej 53, DK - 8362 Hørning

**Tested product:** Roomheater  
HWAM 4620m IHS  
4620c IHS, 4640c IHS, 4640m IHS, 4660c IHS, 4660m IHS,  
4680c IHS, 4680m IHS, 4620c stone IHS, 4620m stone IHS,  
4640c stone IHS, 4640m stone IHS, 4660c stone IHS,  
4660m stone IHS, 4680c stone IHS, 4680m stone IHS

**Nominal Heat output** 8,0 kW

**Test result:** The construction product fulfilled all requirements with the mentioned test fuels (p.2) of the above-named european standards and regulations.  
Test results see page 2.

Oberhausen, 17 September 2015

(Place and date)

(Stamp and signature of the deputy head of the testing laboratory)

DoP - Nr. 40 15 3932/ 17.09.2015			
Harmonized technical specification		EN 13240:2001/A2:2004/AC:2007	
Essential characteristics		performance	
<b>Fire safety</b>		<b>pass</b>	
Reaction to fire		A1	
<u>Minimum Distances to combustible materials</u>			
Position of the fireplcae in the trihedron			
Floor	mm:	90 °	45 °
		0	0
Rear/ sides / ceiling	mm:	200 / 350 / ---	--- / 120 / ---
In range of the inspection window	mm:	1150	1300
<u>Minimum distances to combustible materials of the variant 4620c with isolated flue pipe</u>			
Position of the fireplace in the trihedron			
Floor	mm:	90 °	45 ° *)
		0	---
Rear/ sides / ceiling	mm:	70 / 400 / ---	---
In range of the inspection window	mm:	1250	---
<u>Minimum distances to combustible materials of the variant 4620c stone without isolated flue pipe</u>			
Position of the fireplace in the trihedron			
Floor	mm:	90 °	45 ° **)
		0	---
Rear / sides / ceiling	mm:	200 / 450 / ---	---
In range of the inspection window	mm:	1400	---
<u>Minimum distances to combustible materials of the variant 4620c stone with isolated flue pipe</u>			
Position of the fireplace in the trihedron			
Floor	mm:	90 °	45 °
		0	0
Rear / sides / ceiling	mm:	70 / 450 / ---	--- / 150 / ---
In range of the inspection window	mm:	1400	1350
Risk of burning fuel falling out		pass	
Comments:			
<p>*) The test results of the variant 4620c without Insolated flue pipe (45° position in the trihedron) can be transferred to the variant 4620c with isolated flue pipe. The hotspot was in the area of the corpus of the fireplace and not in the area of the flue pipe.</p> <p>***) The test results of the variant 4620c stone with insolated flue pipe (45° position in the trihedron) can be transferred to the variant 4620c stone without isolated flue pipe. The hotspot was in the area of the corpus of the fireplace and not in the area of the flue pipe.</p> <p>These values are taken from the test report No. RRF - 40 15 3931 dated on 17.09.2015.</p>			



<b>Emissions of combustion products based on 13% O<sub>2</sub></b>		
Test results with test fuel		beech logs
Mean CO-content	%	CO [0,06%]
Mean CO-content	mg/m <sup>3</sup>	750
Particles	mg/m <sup>3</sup>	29
Mean NO <sub>2</sub> -content	mg/m <sup>3</sup>	108
Mean OGC-content	mg/m <sup>3</sup>	84
<u>Emissions in flue gas based on energy</u>		
Mean CO-content	mg/MJ	515
Particles	mg/MJ	19
Mean NO <sub>2</sub> -content	mg/MJ	72
Mean OGC-content	mg/MJ	49
<b>Surface temperature</b>		<b>pass</b>
<b>Electrical safety</b>		<b>npd</b>
<b>Release of hazardous substances</b>		<b>npd</b>
<b>Mechanical resistance (to carry a flue)</b>		<b>pass</b>
<b>Thermal output/Energy efficiency</b>		<b>pass</b>
Nominal heat output	kW	8,0
Total heat output (test result)	kW	8,8
Space heat output (test result)	kW	8,8
Efficiency	η [%]	81
Flue gas temperature	T [°C]	278
<u>"Wertetripel" for calculating the flue according to DIN EN 13384-1 and 13384-2</u>		
Flue gas mass flow accor. to nominal heat output	ṁ [g/s]	6,6
Flue gas temperature measured on flue spigot	t [°C]	334
Mean flue draught according to nominal heat output	p [Pa]	12
<b>Operating mode</b>		<b>intermittent burning</b>
The roomheater is suitable for installation in a shared flue system, except for room sealed appliance.		