

- ❖ 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 - ITT 17 4661-1

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

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

**Fulfilled requirements:** 1. and 2. level of 1. BImSchV of Germany  
LRV of Switzerland  
Royal Decision No. 2010-3943 (level 1, 2 and 3) of Belgium

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

**Tested product:** Roomheater  
**HWAM 4520c**  
**4520m, 4510c, 4510m**

**Nominal Heat output** **4,9 kW (-Solid fuel wood logs)**

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

This document is a translation of the original German certificate. In case of doubts, the German version is valid.

This document replaces the Certificate No. RRF - ITT 17 4661 dated on 01 August 2017.

Oberhausen, 24 August 2017

(Place and date)

 **RRF**  
Rhein-Ruhr Feuerstätten Prüfstelle  
  
(C. Droll)

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

<b>Harmonized technical specification</b>	<b>EN 13240:2001/A2:2004/AC:2007</b>		
<b>Essential characteristics</b>	<b>Performance</b>		
<b>Fire safety</b>	<b>Pass</b>		
Reaction to fire	A1		
<b>Minimum Distances to combustible materials for the variants HWAM 4520c and HWAM 4520m</b>			
Position of the fireplcae in the trihedron	90°	90° low plinth	90° high plinth
floor mm	0 *)	0	0
rear/ sides / ceiling mm	100 / 350 / 600	100 / 350 / 600	100 / 350 / 600
In range of the inspection window mm	1100	1100	1100
sides at 45°-corner installation mm	70	70	70
Risk of burning fuel falling out	Pass		
<b>Minimum Distances to combustible materials for the variants HWAM 4510c und HWAM 4510m</b>			
Position of the fireplcae in the trihedron	90°	90° low plinth	90° high plinth
floor mm	0 *)	0	0
rear/ sides / ceiling mm	100 / 590 / 600	100 / 590 / 600	100 / 590 / 600
In range of the inspection window mm	1200	1200	1200
In range of the lateral window mm	590	590	590
sides at 45°-corner installation mm	330	330	330
Risk of burning fuel falling out	Pass		
Comments:			
*) May only be installed on non-combustible grounds.			



<b>Emissions of combustion products based on 13% O<sub>2</sub></b>		
Test results with test fuel		Beech logs
	%	CO [0,08%]
Mean CO-content	mg/m <sup>3</sup>	1000
Particles	mg/m <sup>3</sup>	24
Mean NO <sub>x</sub> -content	mg/m <sup>3</sup>	102
Mean OGC-content	mg/m <sup>3</sup>	94
<b>Emissions in flue gas based on energy</b>		
(Evaluation according to the requirements of "Art. 15a B-VG über Schutzmaßnahmen betreffend Kleinf Feuerungen" in Austria)		
Mean CO-content	mg/MJ	752
Particles	mg/MJ	18
Mean NO <sub>x</sub> -content	mg/MJ	77
Mean OGC-content	mg/MJ	34
<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	4,9
Total heat output (test result)	kW	5,3
Space heat output (test result)	kW	5,3
Efficiency	η [%]	82
Flue gas temperature	T [°C]	260
<b>"Wertetripel" for calculating the flue according to DIN EN 13384-1 and 13384-2</b>		
Flue gas mass flow accor. to nominal heat output	ṁ [g/s]	4,1
Flue gas temperature measured on flue spigot	t [°C]	312
Mean flue draught according to nominal heat output	p [Pa]	12
Operating mode		intermittent burning
The roomheater is suitable for installation in a shared flue system, except for room sealed operation.		

