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

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DAkkS Deutsche Akkreditierungsstelle D-PL-17727-01-00

Certificate No. RRF - 40 16 4220

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:	1. and 2. level of 1. BImSchV of Germany LRV of Switzerland
Manufacturer:	**HWAM A/S** Nydamsvej 53, DK - 8362 Hørning
Tested product:	Roomheater **HWAM 4530c** **4530m, 4540c, 4540m, 4540c stone, 4540m stone,** **4550c, 4550m, 4560c, 4560m, 4560c stone, 4560m stone**
Nominal Heat output	**4,9 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.

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Oberhausen, 13 June 2016
(Place and date)

(Dipl.-Ing. S. Müller)
(stamp and signature of Head of Testing Laboratory)

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Harmonized technical specification		**EN 13240:2001/A2:2004/AC:2007**	
Essential characteristics		**Performance**	
Fire safety		**Pass**	
Reaction to fire		A1	
Minimum distances to combustible materials of the variant HWAM 4530c			
Position of the fireplcae in the trihedron		90 °	45 °
floor	mm	0	0
rear/ sides / ceiling	mm	100 / 590 / ---	--- / 330 / ---
In range of the inspection window	mm	1200	1200
In range of the lateral window	mm	590	330
Minimum distances to combustible materials of the variant HWAM 4540c			
Position of the fireplcae in the trihedron		90 °	45 °
floor	mm	0	0
rear/ sides / ceiling	mm	100 / 350 / ---	--- / 70 / ---
In range of the inspection window	mm	1100	1100
In range of the lateral window	mm	---	---
Minimum distances to combustible materials of the variant HWAM 4540c stone			
Position of the fireplcae in the trihedron		90 °	45 °
floor	mm	0	0
rear/ sides / ceiling	mm	100 / 400 / ---	--- / 70 / ---
In range of the inspection window	mm	1100	1100
In range of the lateral window	mm	---	---
Risk of burning fuel falling out		Pass	

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Emissions of combustion products based on 13% O_2		
Test results with test fuel		Beech logs
Mean CO-content	%	CO [0,08%]
Mean CO-content	mg/m³	1000
Particles	mg/m³	24
Mean NO_2-content	mg/m³	102
Mean OGC-content	mg/m³	94
Emissions in flue gas based on energy		
Mean CO-content	mg/MJ	752
Particles	mg/MJ	18
Mean NO_2-content	mg/MJ	77
Mean OGC-content	mg/MJ	34
Surface temperature		**Pass**
Electrical safety		**npd**
Release of hazardous substances		**npd**
Mechanical resistance (to carry a flue)		**Pass**
Thermal output/Energy efficiency		**Pass**
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
"Wertetripel" for calculating the flue according to DIN EN 13384-1 and 13384-2		
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 of room sealed appliance.		