

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



Rhein-Ruhr Feuerstätten Prüfstelle



Certificate No. RRF - 40 15 3931

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 4620c
4620m, 4640c, 4640m, 4660c, 4660m, 4680c, 4680m,
4620c stone, 4620m stone, 4640c stone, 4640m stone,
4660c stone, 4660m stone, 4680c stone, 4680m stone

Nominal Heat output 7,0 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.



Rhein-Ruhr Feuerstätten Prüfstelle

(C. Droll)

Oberhausen, 17 September 2015

(Place and date)

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

| DoP - Nr. 40 15 3931/ 17.09.2015 | |
|---|--|
| Harmonized technical specification | EN 13240:2001/A2:2004/AC:2007 |
| Essential characteristics | performance |
| Fire safety | pass |
| Reaction to fire | A1 |
| <u>Minimum distances to combustible materials of the variant 4620c without isolated flue pipe</u> | |
| Position of the fireplace in the trihedron | 90 ° 45 ° |
| Floor | mm: 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 | 90 ° 45 ° *) |
| Floor | mm: 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 | 90 ° 45 ° **) |
| Floor | mm: 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 | 90 ° 45 ° |
| Floor | mm: 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: | |
| *) 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. | |
| **) 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. | |



| Emissions of combustion products based on 13% O₂ | | |
|--|-------------------|----------------------|
| Test results with test fuel | | beech logs |
| Mean CO-content | % | CO [0,08%] |
| Mean CO-content | mg/m ³ | 1000 |
| Particles | mg/m ³ | 28 |
| Mean NO ₂ -content | mg/m ³ | 100 |
| Mean OGC-content | mg/m ³ | 82 |
| <u>Emissions in flue gas based on energy</u> | | |
| Mean CO-content | mg/MJ | 659 |
| Particles | mg/MJ | 19 |
| Mean NO ₂ -content | mg/MJ | 66 |
| Mean OGC-content | mg/MJ | 49 |
| 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 | 7,0 |
| Theoretical heat output | kW | 7,2 |
| Space heat output (test result) | kW | 6,7 |
| Efficiency | η [%] | 80 |
| Flue gas temperature | T [°C] | 267 |
| <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] | 5,9 |
| Flue gas temperature measured on flue spigot | t [°C] | 320 |
| 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 appliance. | | |

