

|  | operation when directly connected to chimney |                      |
|--|--|----------------------|
|  | HAKA 89/45Wh                                 | HAKA 89/45Wh+        |
| Energy label   | <b>A+</b>                                    | <b>A+</b>            |
| <b>Operating data</b>  |  |                      |
| Nominal heat power / Power absorbed to water                                       | 14 / 10,2 kW                                 | 22 / 15,1 kW         |
| Efficiency   | > 80 %                                       | > 80 %               |
| Consumption of wood  | 3,7 kg/h                                     | 6 kg/h               |
| Mass flow of flue gas  | 10,6 g/s                                     | 17 g/s               |
| Required chimney pressure  | 12 Pa  | 12 Pa                |
| Required amount of combustion air  | 40 m³/h                                      | 40 m³/h              |
| <b>Average flue gas temperature</b>  |  |                      |
| on the output  | 214 °C                                       | 240 °C               |
| <b>Heat distribution</b>   |  |                      |
| fireplace insert   | 9 %  | 11 %                 |
| door glass (single / double)   | 0 / 19 %                                     | 0 / 21 %             |
| water  | 72 %   | 68 %                 |
| <b>Water exchanger specifications</b>  |  |                      |
| Maximum working pressure   | 2,5 bar                                      | 2,5 bar              |
| Minimum return water temperature   | 55 °C  | 55 °C                |
| Water capacity   | 56 liter                                     | 56 liter             |
| Connection input / output  | 1 / 1 G                                      | 1 / 1 G              |
| <b>Information for builds</b>  |  |                      |
| Minimal grill area supply / outgoing (with vent. grill)                            | 300 / 350 cm²                                | 500 / 600 cm²        |
| Minimum radiant area <sup>3</sup> (without vent. grill)                            | 3 m²   | 3 m²                 |
| Minimum distance from insulated areas / floor                                      | 20 / 0 mm                                    | 40 / 0 mm            |
| Reference insulation <sup>1</sup><br>ceiling / back wall / side wall / floor       | 100 / 60 / 60 / 0 mm                         | 100 / 60 / 60 / 0 mm |
| Calciumsilicate insulation <sup>2</sup><br>ceiling / back wall / side wall / floor | 75 / 45 / 45 / 0 mm                          | 75 / 45 / 45 / 0 mm  |
| <b>General technical information</b>   |  |                      |
| Total weight / lining weight   | ca. 435 / 120 kg                             | ca. 435 / 120 kg     |
| Burning chamber dimensions (width x depth)   | 810 x 315 mm                                 |                      |
| Combustion air connection  | Ø 125 mm                                     | Ø 150 mm             |
| Use in non-ventilated accumulation builds according to craft rules                 | suitable                                     |                      |
| Tested according to  | EN 13229                                     |                      |
| Meets values   | 1. BlmSchV (Stufe2), 15a BVG                 |                      |

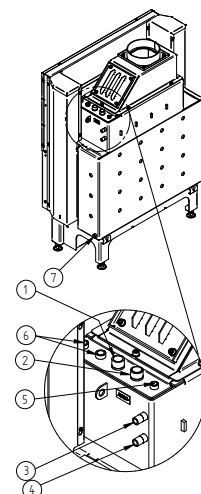
| Nr. | Thread size | Description   |
|-----|-------------|---|
| 1   | G 1" (AG)   | Water supply from heating system - min. 55°C            |
| 2   | G 1" (AG)   | Hot water supply to heating system                      |
| 3   | G 1/2" (AG) | Water supply from the waterlines into the cooling loop  |
| 4   | G 1/2" (AG) | Discharge of water from the cooling loop into the waste |
| 5   | G 3/8" (IG) | Pocket for air vent valve                               |
| 6   | G 1/2" (IG) | Pocket for thermal sensors                              |
| 7   | G 1/2" (IG) | Discharge valve   |

1 Mineral wool according to AGI-Q 132

2 Example SkamoEnclosure Board 225 kg/m³

3 Depends on accumulation period and material characteristics.

Listed values calculated with chamotte stone thickness 30 mm with radiant area 500 W/m²

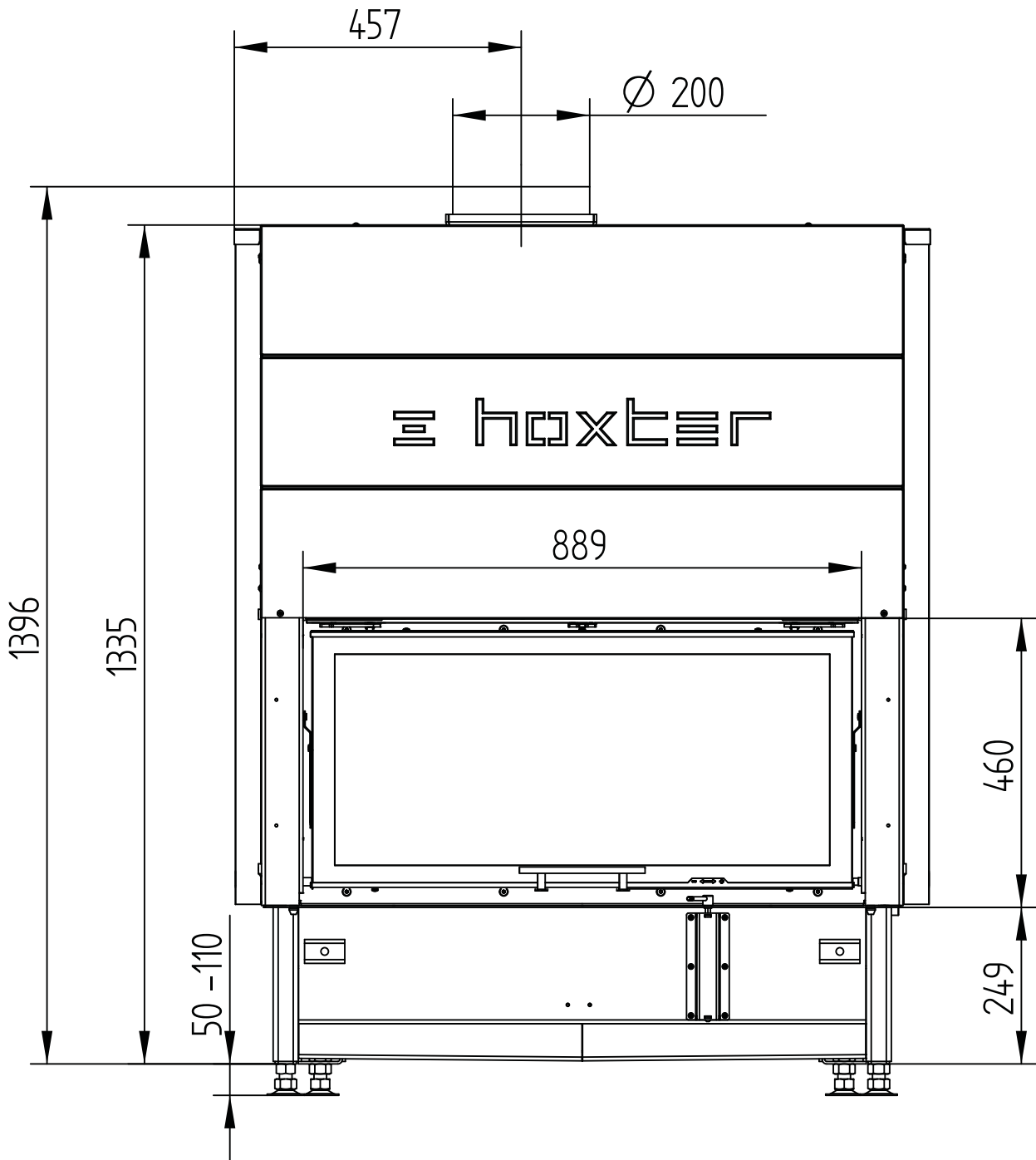


# HAKA 89/45W

Technical data  
Version 2019/08

HAKA 89/45Wh, HAKA 89/45Wh+

M 1:10

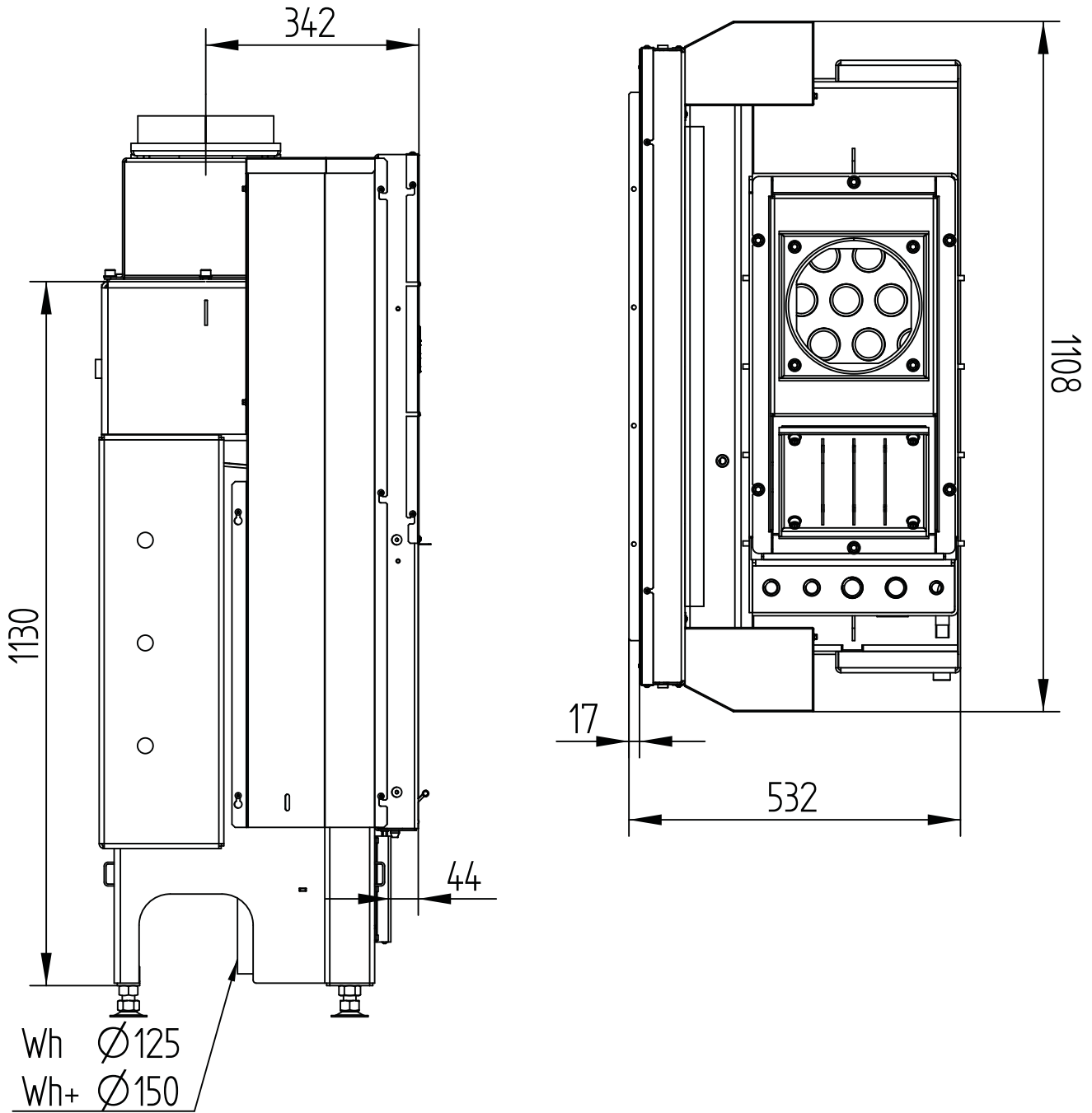


# HAKA 89/45W

Technical data  
Version 2019/08

HAKA 89/45Wh, HAKA 89/45Wh+

M 1:10

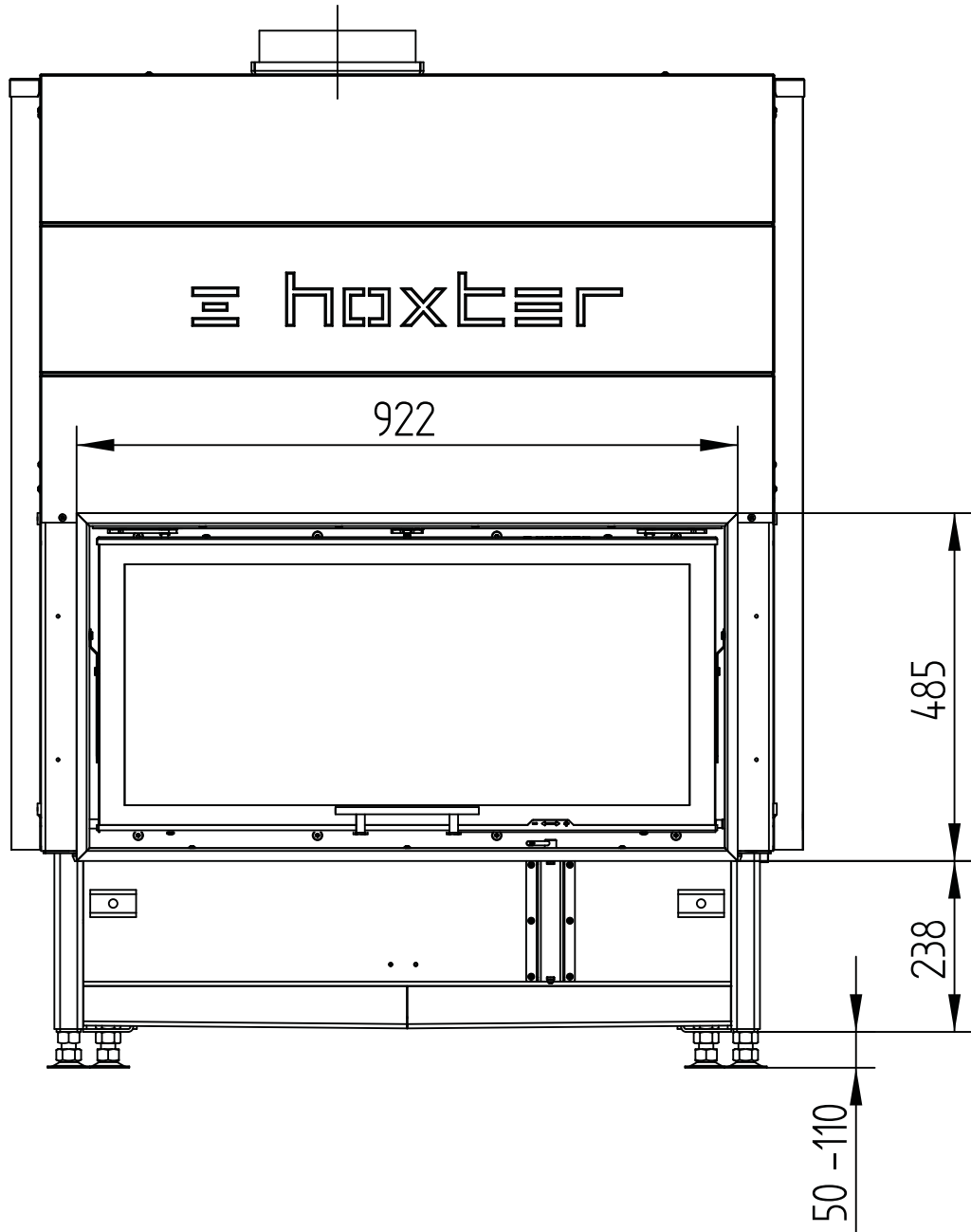


# HAKA 89/45W

Technical data  
Version 2019/08

HAKA 89/45Wh, HAKA 89/45Wh+

M 1:10

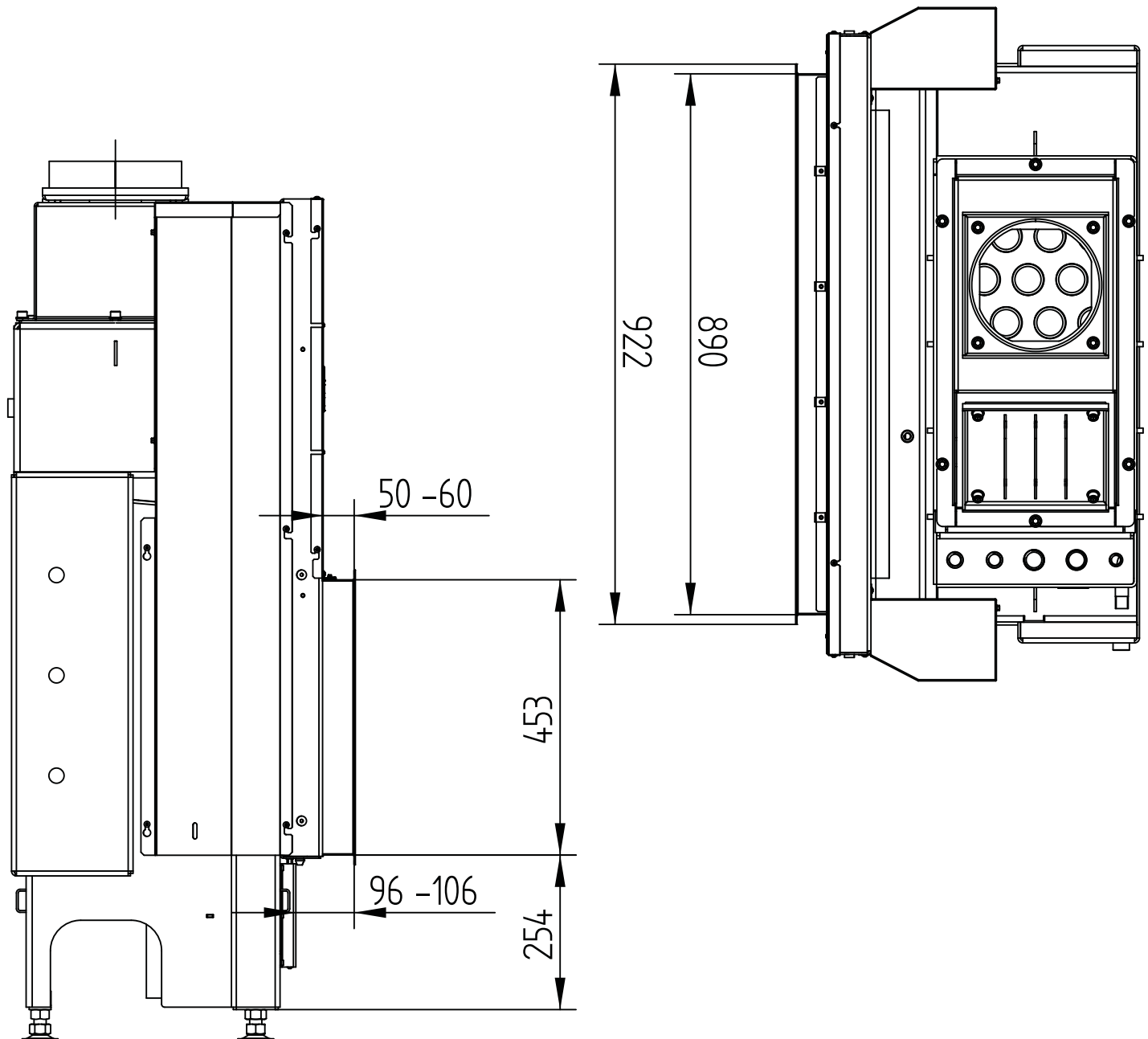


# HAKA 89/45W

Technical data  
Version 2019/08

HAKA 89/45Wh, HAKA 89/45Wh+

M 1:10

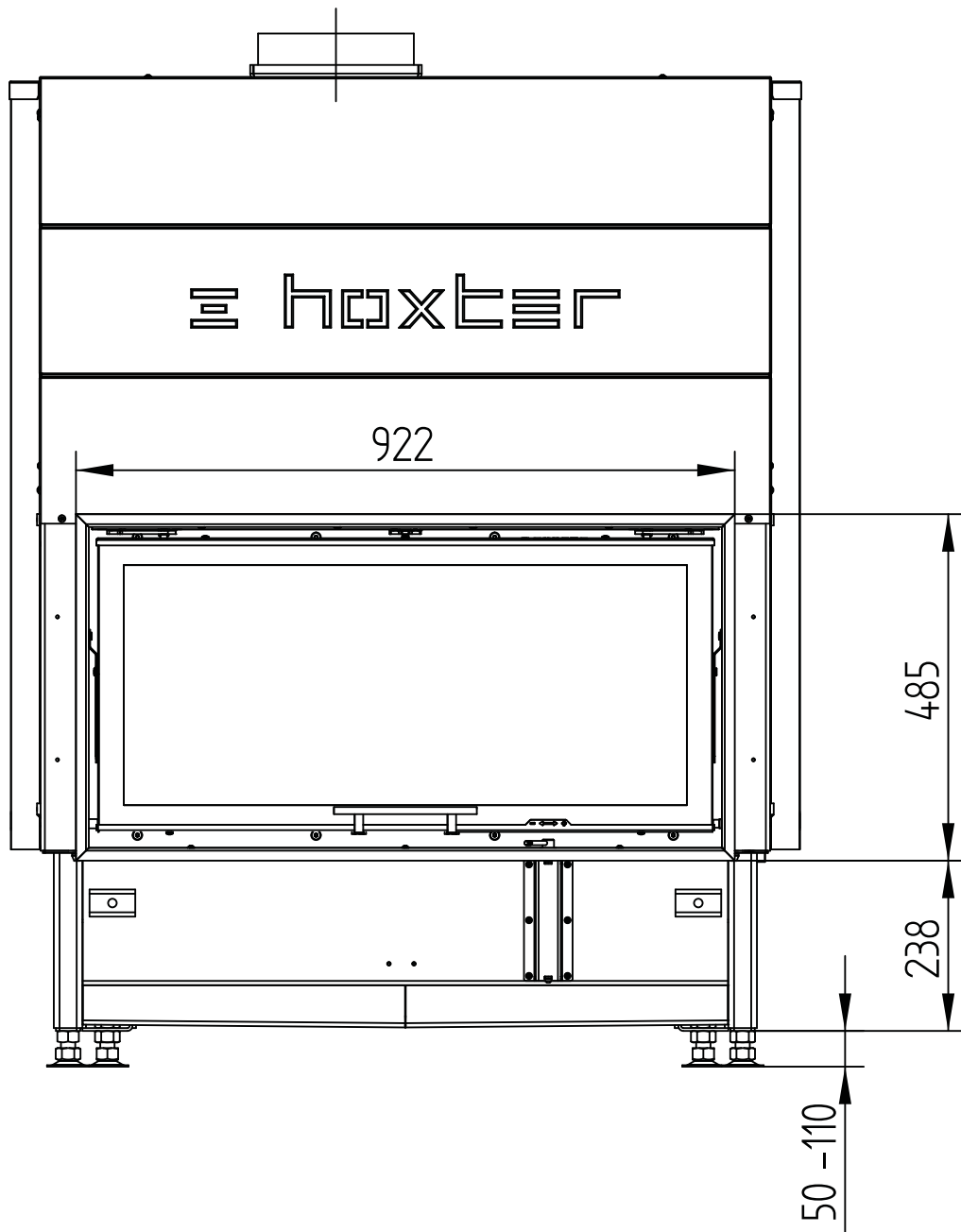


# HAKA 89/45W

Technical data  
Version 2019/08

cover frame 89/45h 4sides 80 mm 1 x 90°

M 1:10

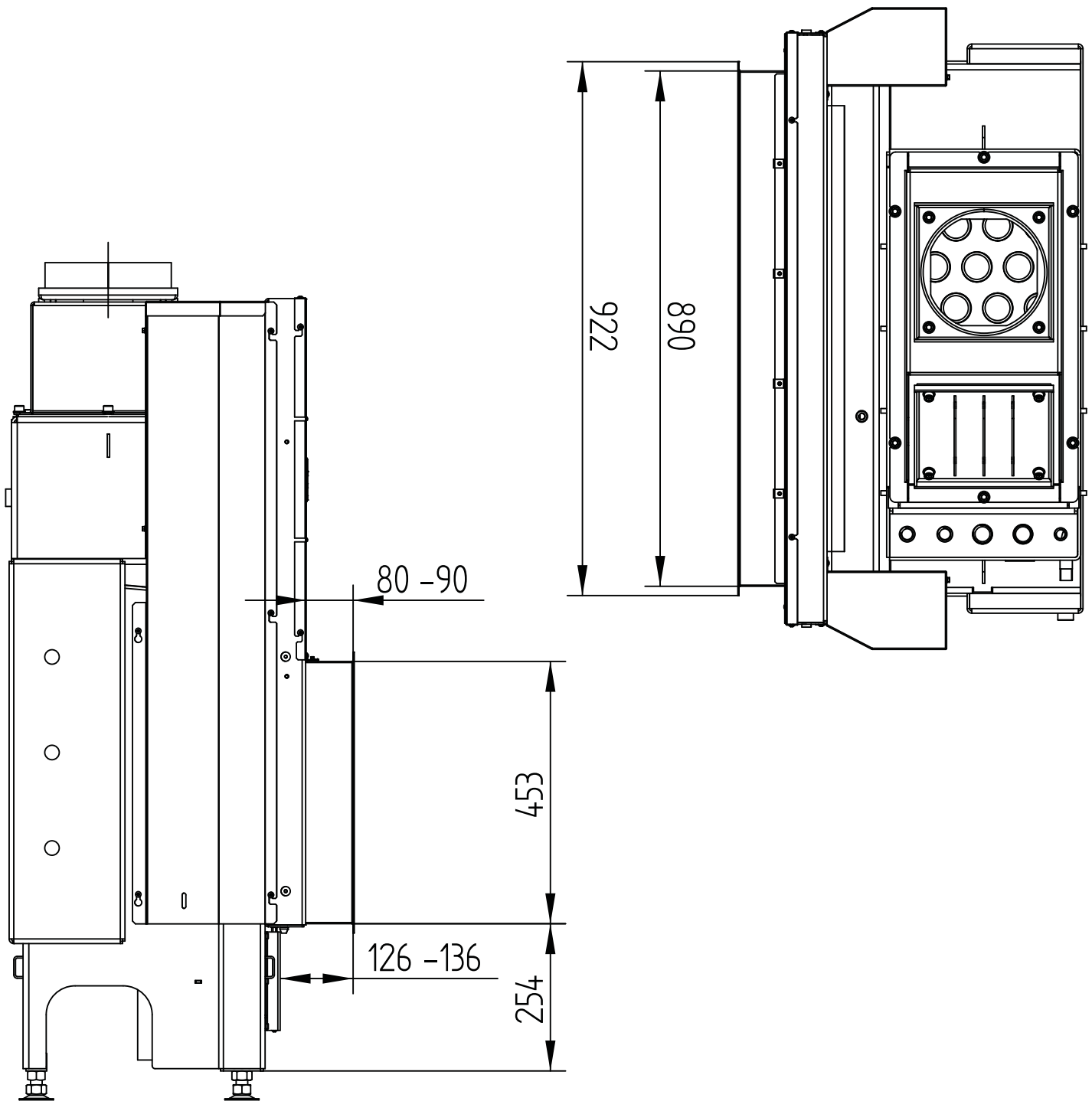


# HAKA 89/45W

Technical data  
Version 2019/08

cover frame 89/45h 4sides 80 mm 1 x 90°

M 1:10

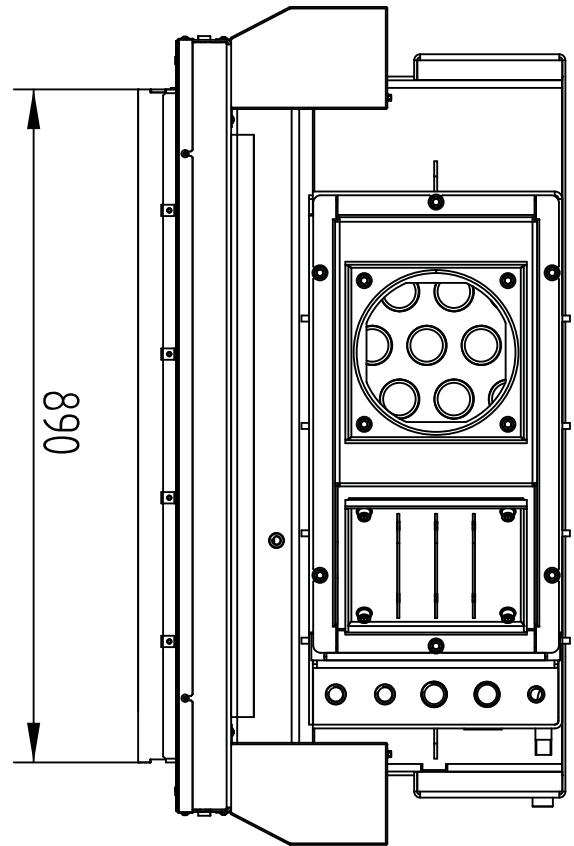
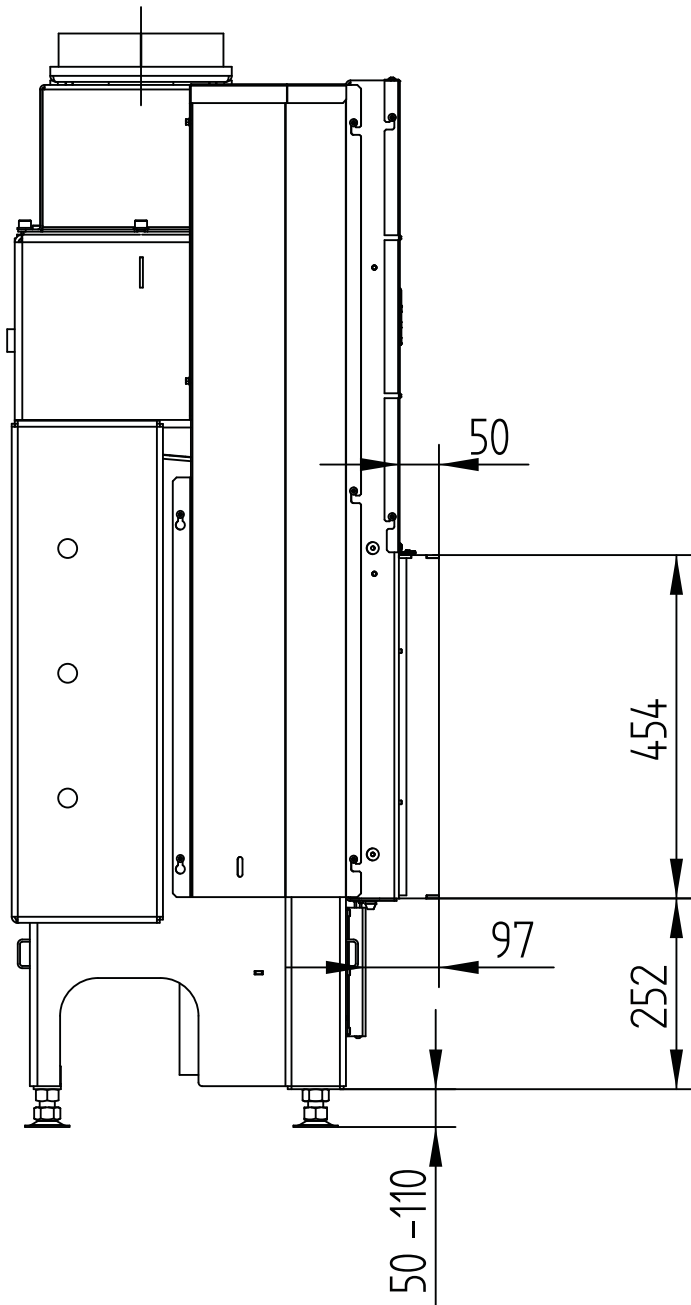


# HAKA 89/45W

Technical data  
Version 2019/08

build-on frame 89/45h 4sides 50 mm

M 1:10





# HAKA 89/45W

Technical data  
Version 2019/08

build-on frame 89/45h 4sides 80 mm

M 1:10

