

|                                                                                    | operation when directly connected to chimney                                      |                                                                                   | operation when connected accumulation mass                                          |                                                                                     |
|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                                                                    | cupola                                                                            | hot air exchanger                                                                 | cupola                                                                              | adaptor                                                                             |
| Energy label                                                                       |  |  |  |  |
| Operating data                                                                     |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| Nominal heat power                                                                 | 8 kW                                                                              | 13 kW                                                                             | ----                                                                                | ----                                                                                |
| Efficiency                                                                         | > 80 %                                                                            | > 80 %                                                                            | ----                                                                                | ----                                                                                |
| Consumption of wood                                                                | 2,5 kg/h                                                                          | 3,8 kg/h                                                                          | 6 kg                                                                                | 6 kg                                                                                |
| Total heat output of the burning chamber                                           | ----                                                                              | ----                                                                              | 23 kW                                                                               | 23 kW                                                                               |
| Mass flow of flue gas                                                              | 8,1 g/s                                                                           | 11 g/s                                                                            | 20 g/s                                                                              | 20 g/s                                                                              |
| Required chimney pressure                                                          | 12 Pa                                                                             | 12 Pa                                                                             | 12 Pa                                                                               | 15 Pa                                                                               |
| Required amount of combustion air                                                  | 30 m³/h                                                                           | 40 m³/h                                                                           | 60 m³/h                                                                             | 60 m³/h                                                                             |
| Average flue gas temperature                                                       |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| on the output                                                                      | 239 °C                                                                            | 262 °C                                                                            | 398 °C                                                                              | 407 °C                                                                              |
| past 3,6 m of ceramic accumulation system KMS 300 <sup>1</sup>                     | ----                                                                              | ----                                                                              | 182 °C                                                                              | ----                                                                                |
| past accumulation rings (5x acc. ring Ø440mm)                                      | ----                                                                              | ----                                                                              | ----                                                                                | 228 °C                                                                              |
| Heat distribution                                                                  |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| fireplace insert                                                                   | 62–72 %                                                                           | 62–72 %                                                                           | 35 %                                                                                | 30 %                                                                                |
| door glass (single / double)                                                       | 38 / 28 %                                                                         | 38 / 28 %                                                                         | 38 / 28 %                                                                           | 38 / 28 %                                                                           |
| adjoining accumulation mass                                                        | ----                                                                              | ----                                                                              | 23–37 %                                                                             | 32–42 %                                                                             |
| Information for ventilated builds                                                  |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| Minimal grill area supply / outgoing                                               | 800 / 950 cm²                                                                     | 1200 / 1450 cm²                                                                   | 1200 / 1450 cm²                                                                     | 1200 / 1450 cm²                                                                     |
| Minimum distance from insulated areas / floor                                      | 80 / 0 mm                                                                         |                                                                                   | 80 / 0 mm                                                                           |                                                                                     |
| Reference insulation <sup>2</sup><br>ceiling / back wall / side wall / floor       | 120 / 0 / 80 / 0 mm                                                               |                                                                                   | 120 / 0 / 80 / 0 mm                                                                 |                                                                                     |
| Calciumsilicate insulation <sup>3</sup><br>ceiling / back wall / side wall / floor | 90 / 0 / 60 / 0 mm                                                                |                                                                                   | 90 / 0 / 60 / 0 mm                                                                  |                                                                                     |
| Information for non-ventilated builds (closed grills)                              |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| Minimum radiant area <sup>4</sup>                                                  | 3,5 m²                                                                            |                                                                                   | 5 m²                                                                                |                                                                                     |
| Minimum distance from insulated areas / floor                                      | 80 / 20 mm                                                                        |                                                                                   | 80 / 20 mm                                                                          |                                                                                     |
| Reference insulation <sup>2</sup><br>ceiling / back wall / side wall / floor       | 160 / 0 / 100 / 20 mm                                                             |                                                                                   | 160 / 0 / 100 / 20 mm                                                               |                                                                                     |
| Calciumsilicate insulation <sup>3</sup><br>ceiling / back wall / side wall / floor | 120 / 0 / 75 / 20 mm                                                              |                                                                                   | 120 / 0 / 75 / 20 mm                                                                |                                                                                     |
| General technical information                                                      |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| Total weight / lining weight                                                       | ca. 245 / 81 kg                                                                   |                                                                                   | ca. 245 / 81 kg                                                                     |                                                                                     |
| Burning chamber dimensions (width x depth)                                         | 550 x 355 mm                                                                      |                                                                                   |                                                                                     |                                                                                     |
| Combustion air connection                                                          | Ø 125 mm                                                                          |                                                                                   |                                                                                     |                                                                                     |
| Use in non-ventilated accumulation builds according to craft rules                 | suitable                                                                          |                                                                                   |                                                                                     |                                                                                     |
| Tested according to                                                                | EN 13229                                                                          |                                                                                   |                                                                                     |                                                                                     |
| Meets values                                                                       | 1. BImSchV (Stufe2), 15a BVG                                                      |                                                                                   |                                                                                     |                                                                                     |

<sup>1</sup> Listed value from testing. For accurate results is evaluation of each system in the Ortnr / KOV program necessary.

<sup>2</sup> Mineral wool according to AGI-Q 132

<sup>3</sup> Example SkamoEnclosure Board 225 kg/m³

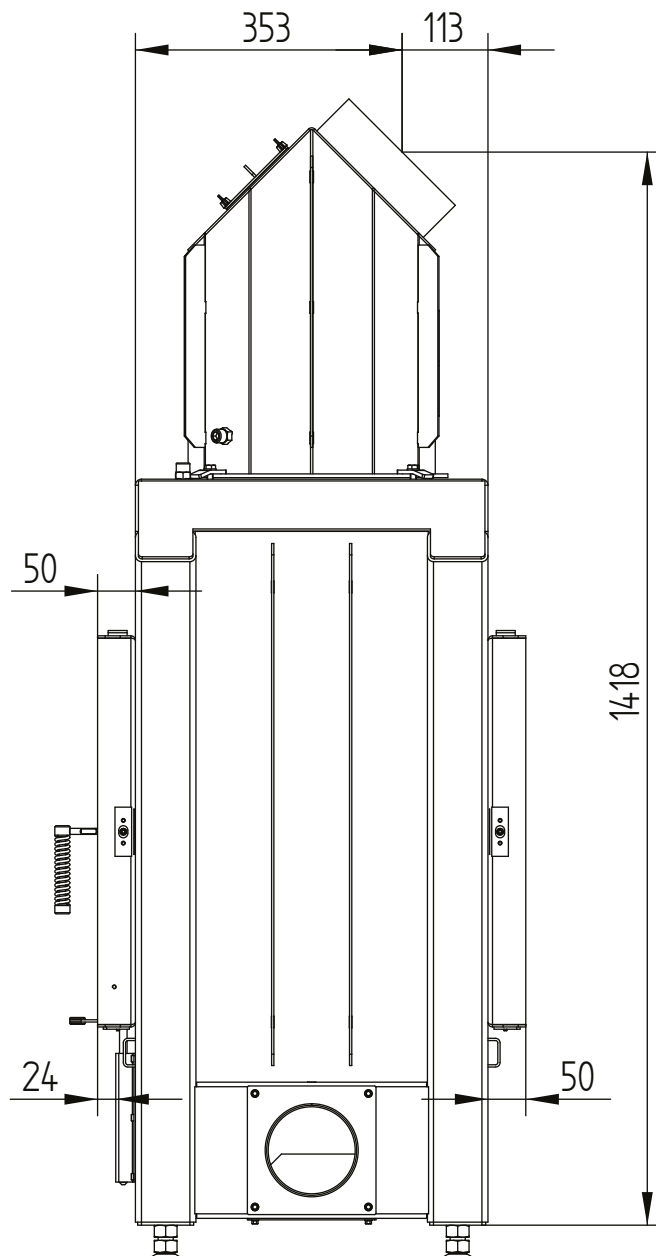
<sup>4</sup> Depends on accumulation period and material characteristics. Listed values calculated with chamotte stone thickness 30 mm with radiant area 500 W/m²

# HAKA 63/51 tunnel

Technical data  
Version 2019/08

hot air exchanger 45° / air intake / feet

M 1:10

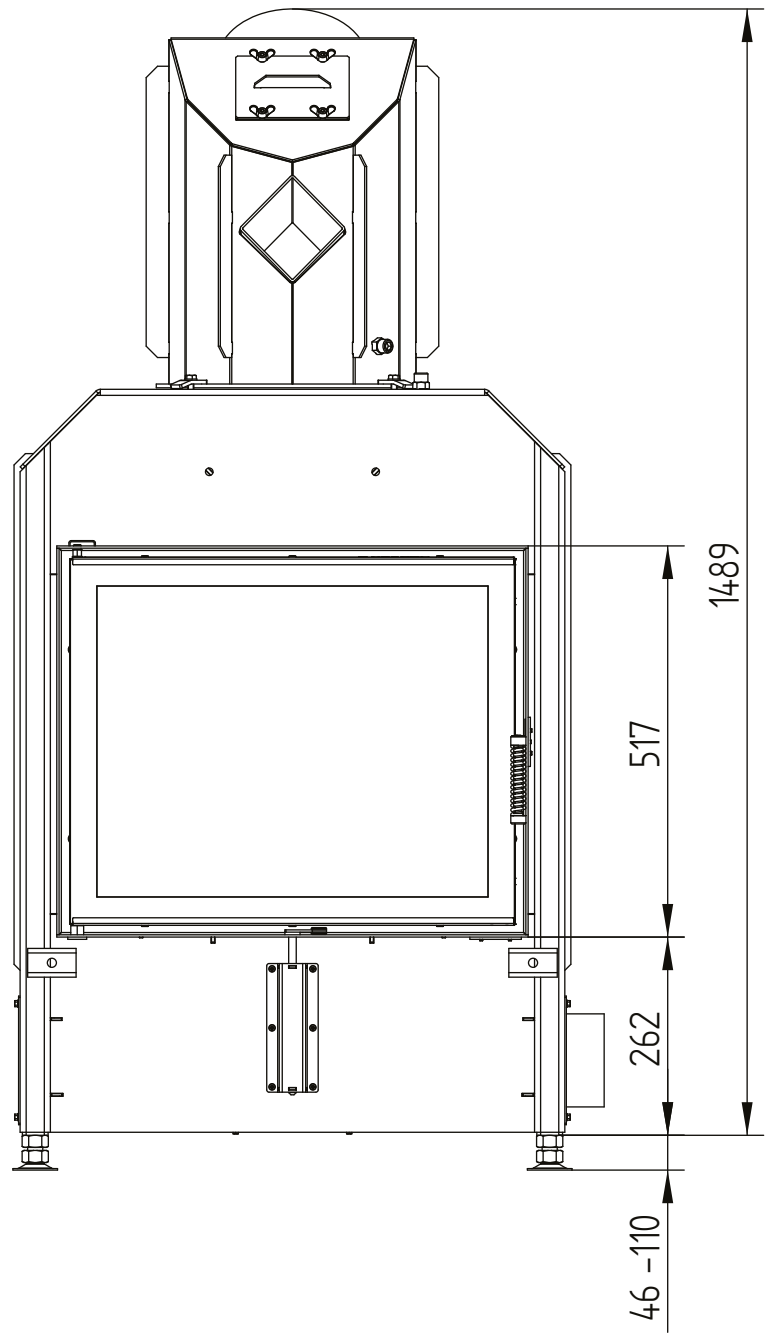


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Technical data  
Version 2019/08

hot air exchanger 45° / air intake / feet

M 1:10

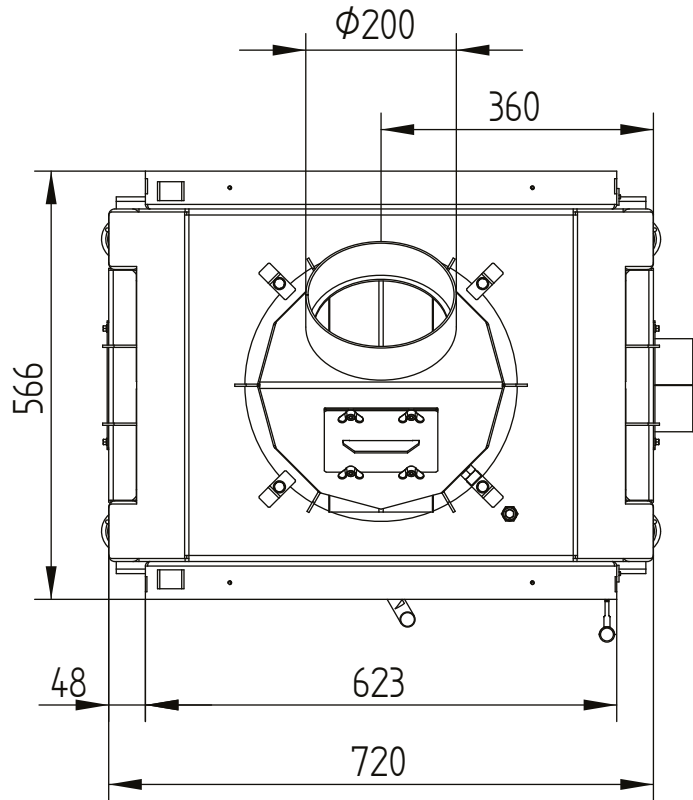
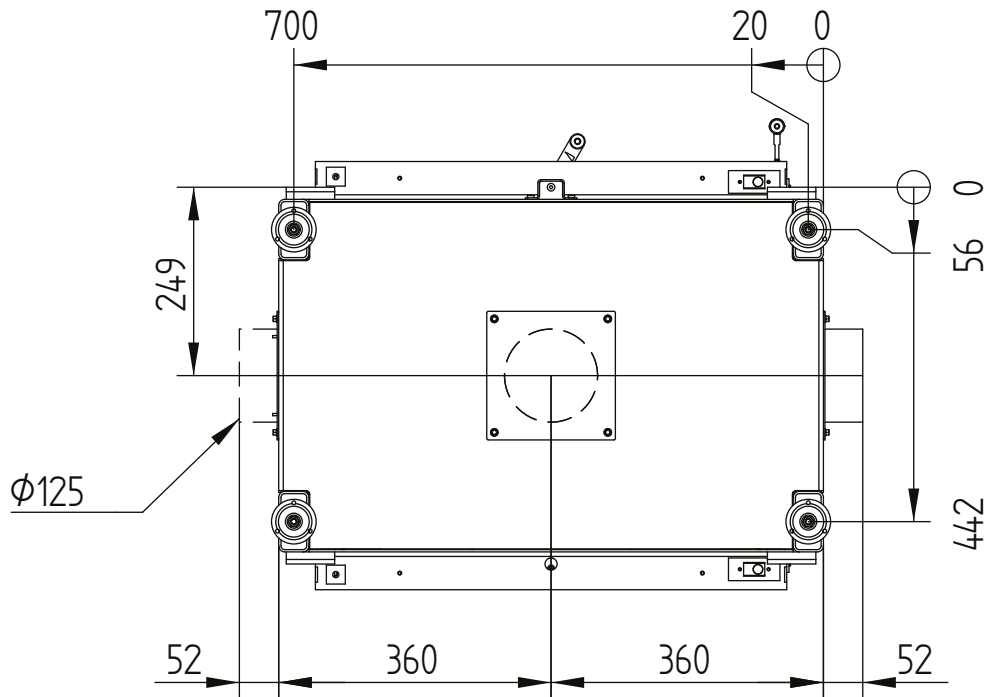


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Technical data  
Version 2019/08

hot air exchanger 45° / air intake / feet

M 1:10

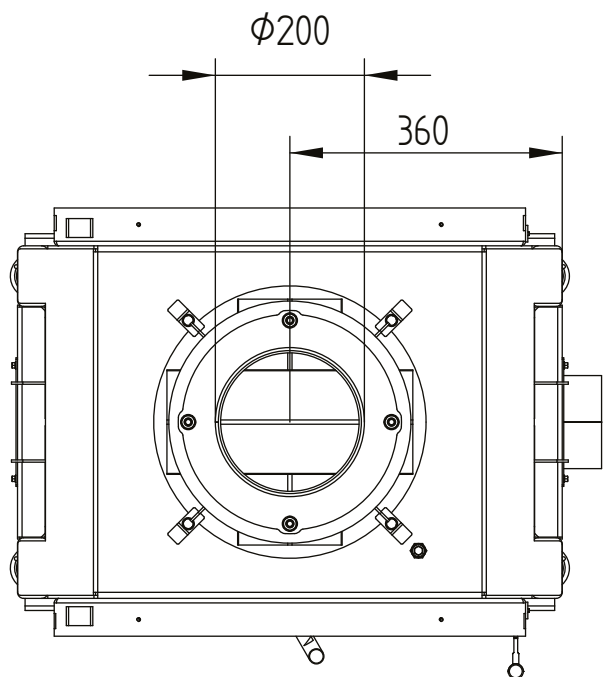
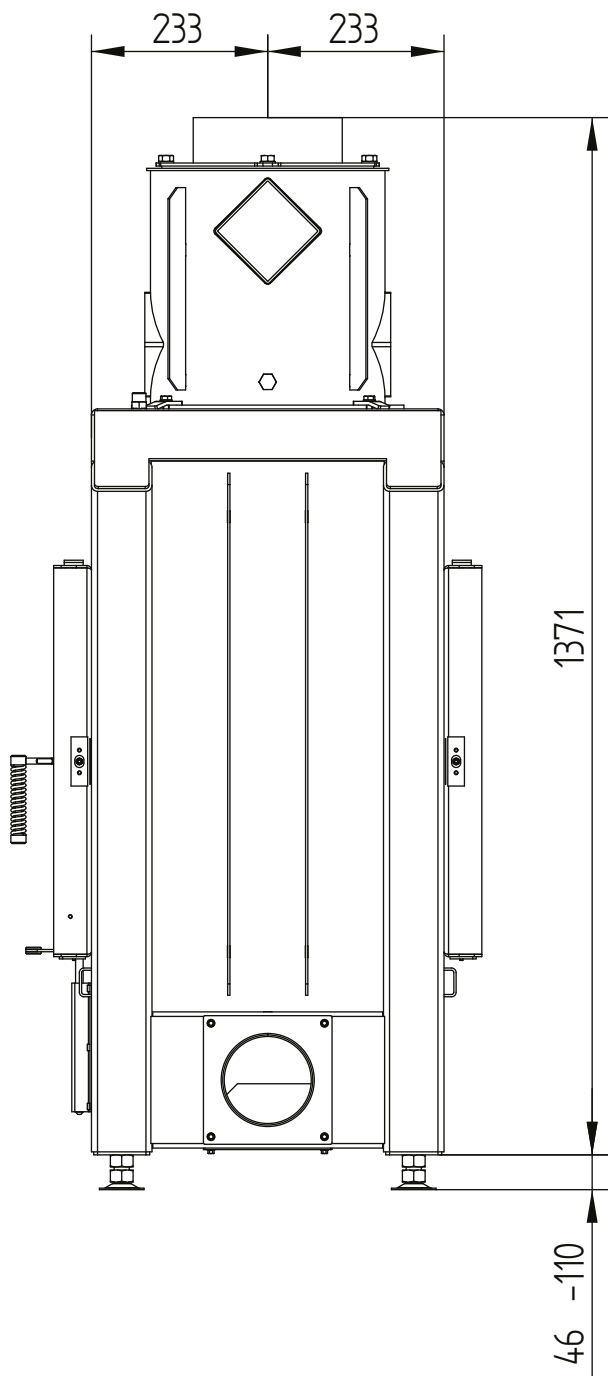


# HAKA 63/51 tunnel

Technical data  
Version 2019/08

hot air exchanger vertical

M 1:10

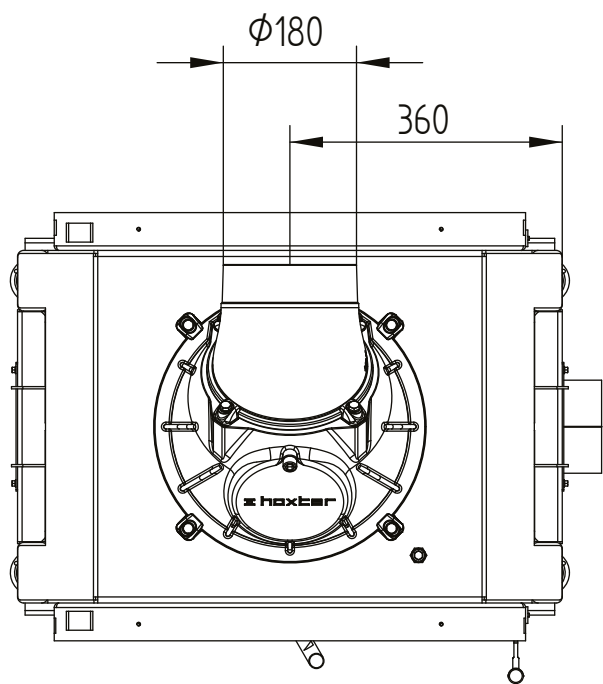
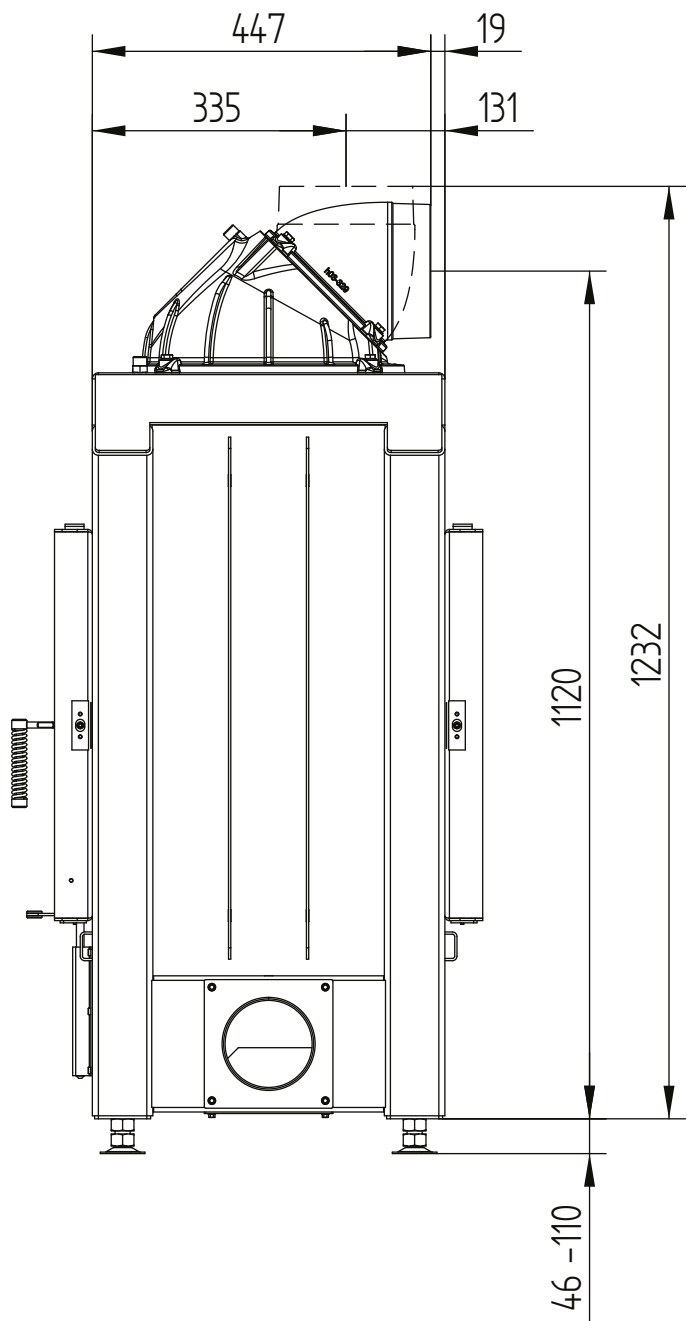


# HAKA 63/51 tunnel

Technical data  
Version 2019/08

cupola

M 1:10

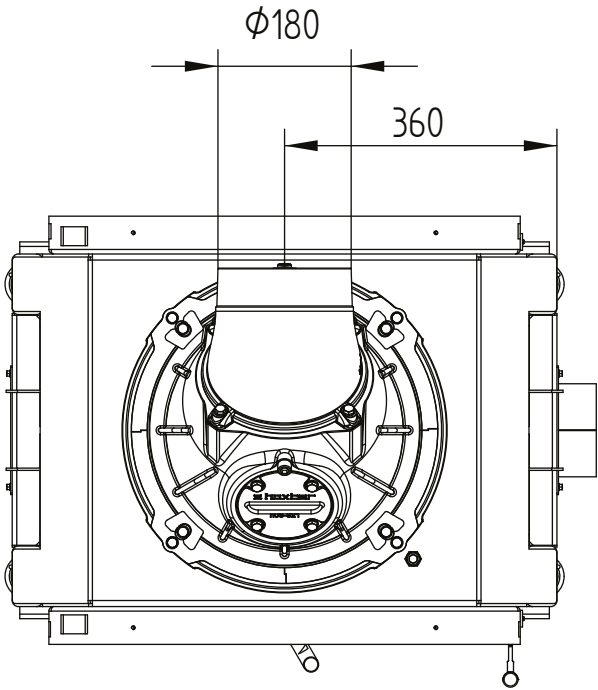
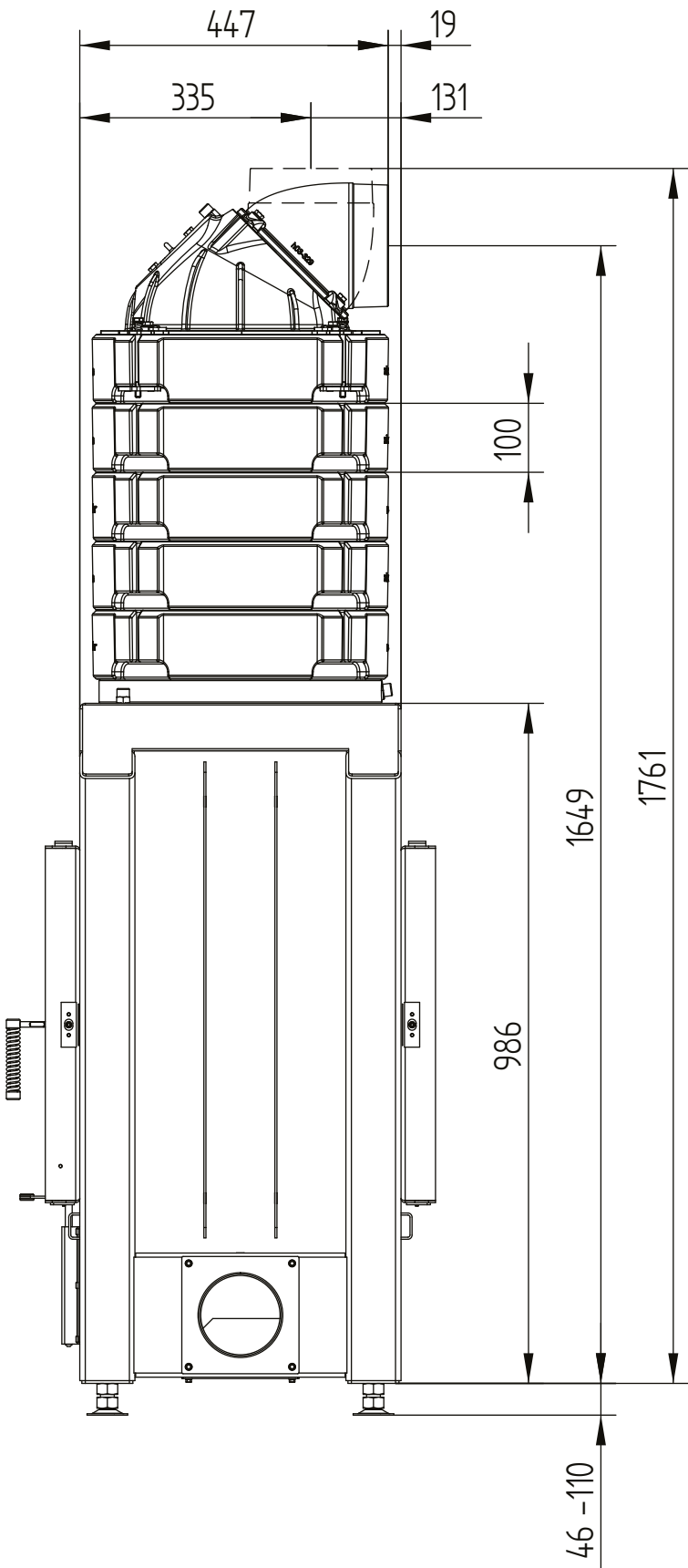


# HAKA 63/51 tunnel

Technical data  
Version 2019/08

accumulation rings

M 1:10

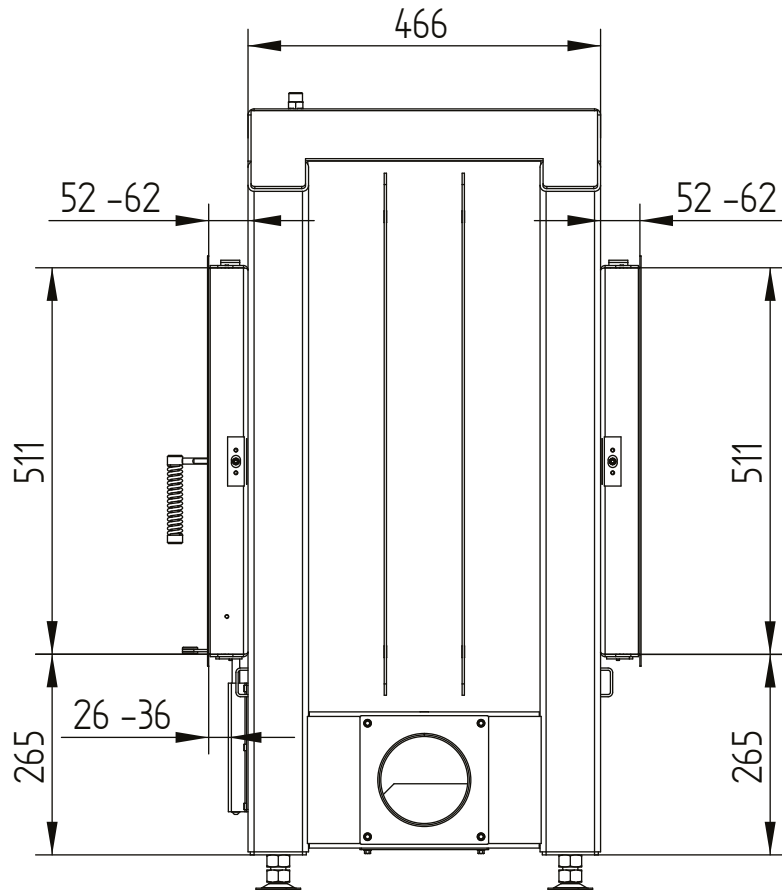


# HAKA 63/51 tunnel

Technical data  
Version 2019/08

cover frame 63/51 4sides 50 mm 1 x 90°

M 1:10



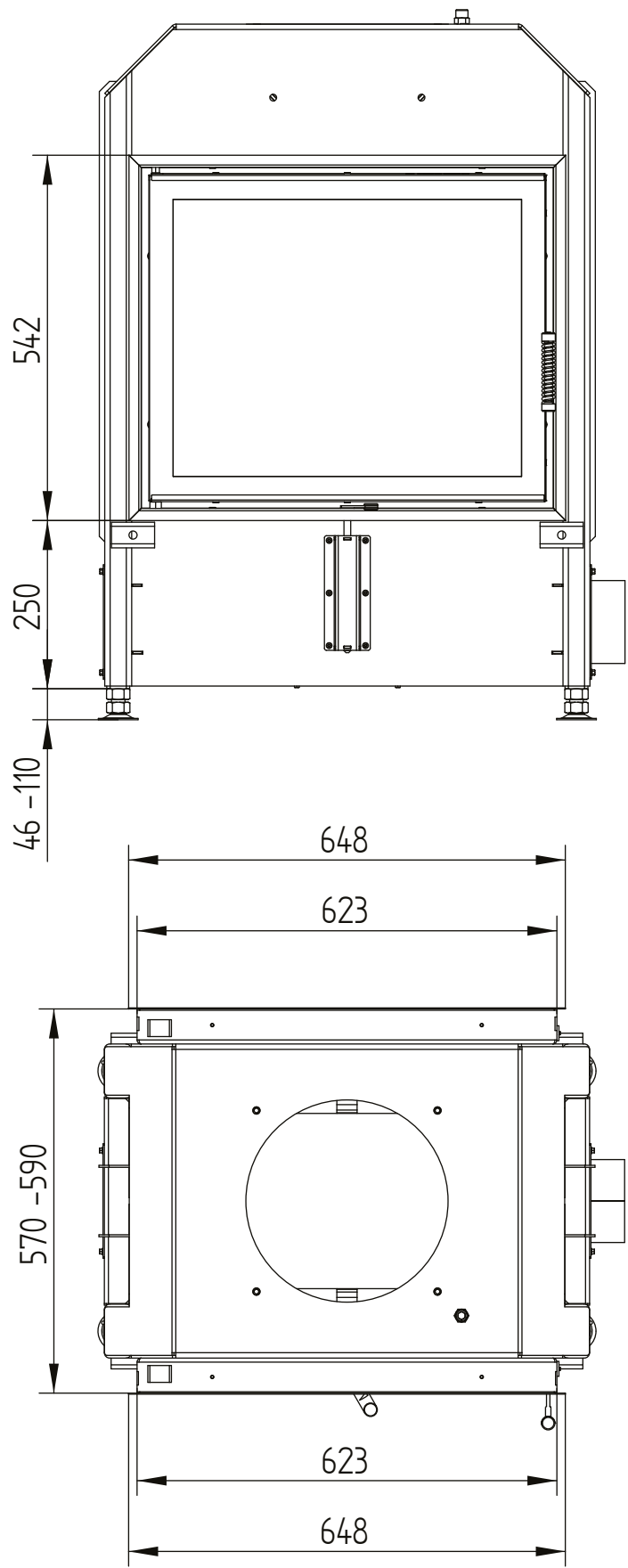


# HAKA 63/51 tunnel

Technical data  
Version 2019/08

cover frame 63/51 4sides 50 mm 1 x 90°

M 1:10



# HAKA 63/51 tunnel

Technical data  
Version 2019/08

cover frame 63/51 4sides 80 mm 2 x 45°

M 1:10

