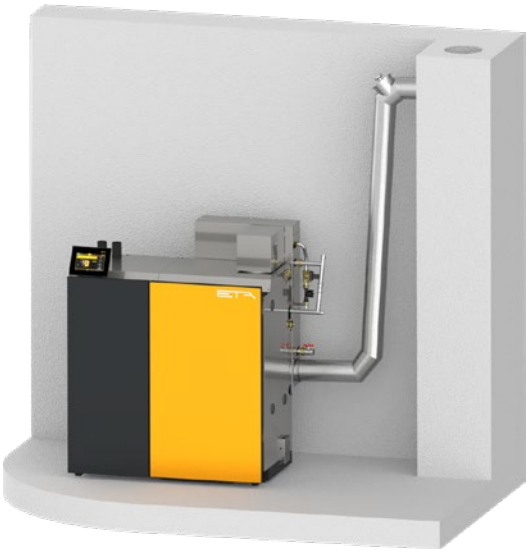
Condensing heat exchanger
ETA BW

... my heating system



A passion for perfection.

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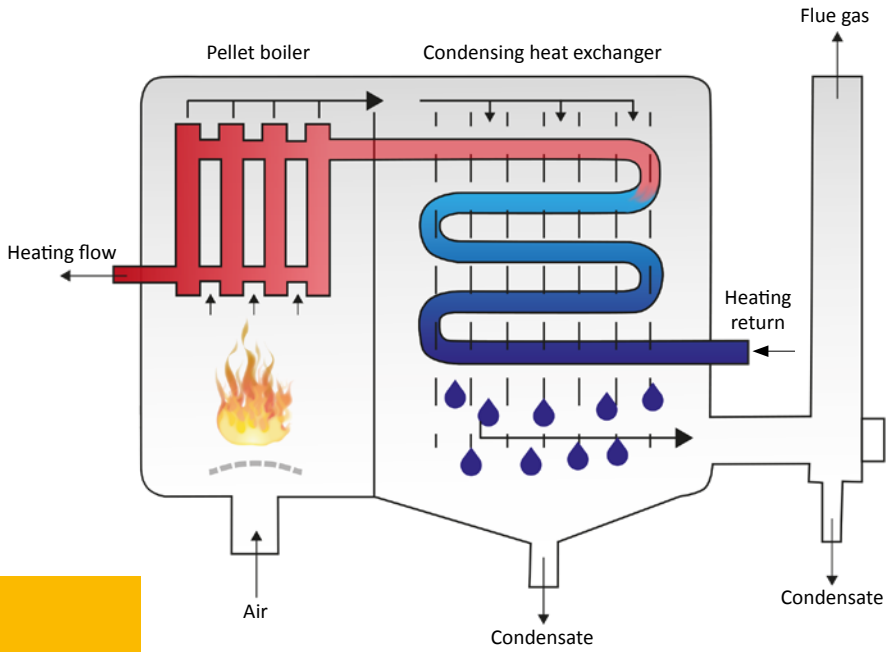
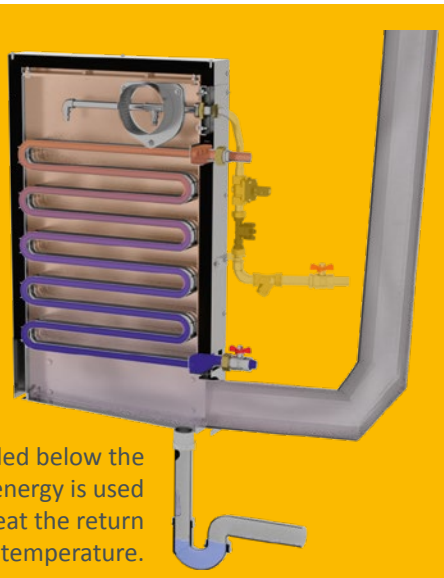
Function of the condensing heat exchanger

Lower heating costs by up to 10 %

Before the warm flue gas escapes through the chimney, the condensing system cools it down and extracts heat energy from it. The cooled return water flows through the heat exchanger of the system to the exhaust path. The water vapour condenses. This produces condensation energy. This heat is fed into the heating water system for heating and hot water.



Compared to conventional condensing systems, the ETA condensing heat exchanger sets new standards in terms of system safety. This includes the integrated volume flow sensor and the active control of the water quantity.



The flue gas is cooled below the dew point. This energy is used to preheat the return temperature.

Automatic dedusting
The water flow during cleaning is determined with an integrated volume flow sensor, thus reducing the water consumption to the bare minimum.

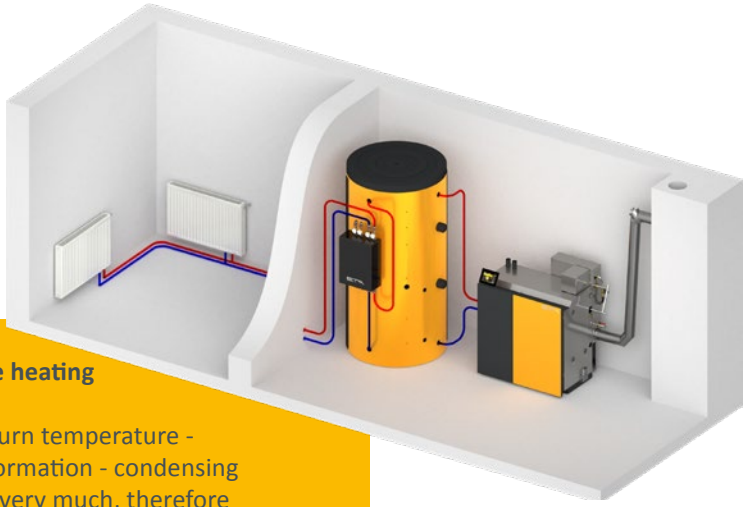
... my heating system

Condensing boiler must 'sweat'

Low return temperature - high potential savings.
The return temperature of surface heating systems (underfloor heating, wall heating, etc.) is much lower than that of radiators. Due to the increased condensate formation, the return temperature is also preheated more intensely, and efficiency is increased.

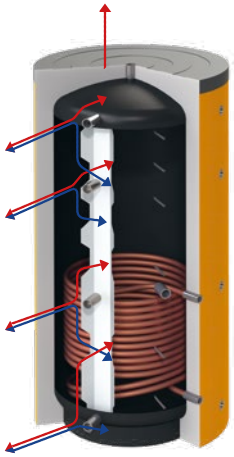
General conditions for the use of a condensing heat exchanger:

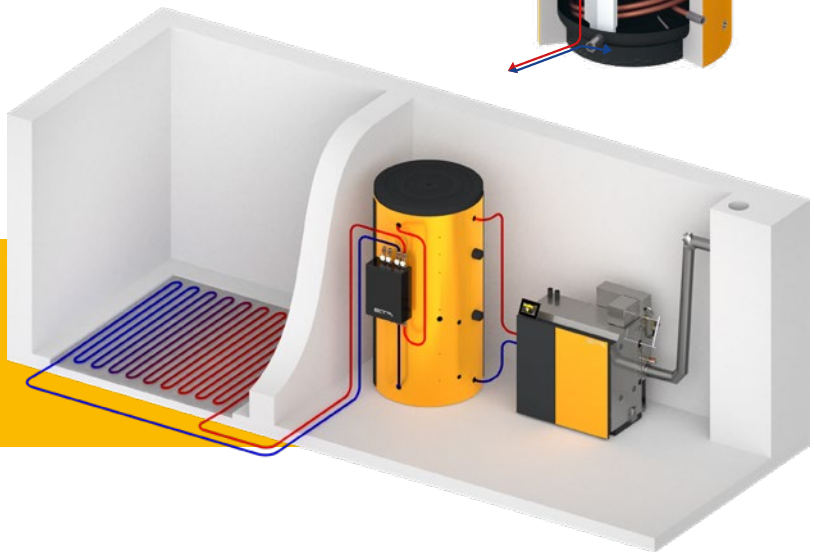
- pay attention to the suitability and approval of the chimney products
- Water and sewer connection (for condensate drainage)
- Low return temperatures



High temperature heating circuit (radiators)
relatively high return temperature - low condensate formation - condensing effect is not used very much, therefore low savings potential

The ETA stratified buffer optimises the heating system and ensures low return temperatures with the fresh water module.





Low temperature heating circuit (underfloor/wall heating)
low return temperatures - heavy condensate formation - condensing effect saves heating costs

System examples	Annual consumption	Savings potential for optimum operating mode	Savings after approx. 15 years	Amortisation with DE subsidy	Amortisation without subsidy
Single-family house PelletsUnit 15 kW	5.6 tonnes of pellets correspond to 2800 l oil	0.5 tonnes	EUR 2000	~10 years	~15 years
Apartment building PelletsCompact 32 kW	12 tonnes of pellets correspond to 6000 l oil	1.2 tonnes	EUR 4500	~6 years	~9 years
Commercial PelletsCompact 60 kW	22 tonnes of pellets correspond to 11,000 l oil	2.2 tonnes	EUR 8500	~7 years	~10 years
Commercial PelletsCompact 100 kW	37 tonnes of pellets correspond to 18,000 l oil	3.7 tonnes	EUR 14,000	~4 years	~6 years

Bafa subsidy as of 01/2021. Amortisation related to the installation of a heating system with 35% subsidy of the eligible investment costs. When replacing an oil boiler 45% subsidy.

ETA condensing heat exchanger for ETA PU 7 to 15

1 Boiler flue gas

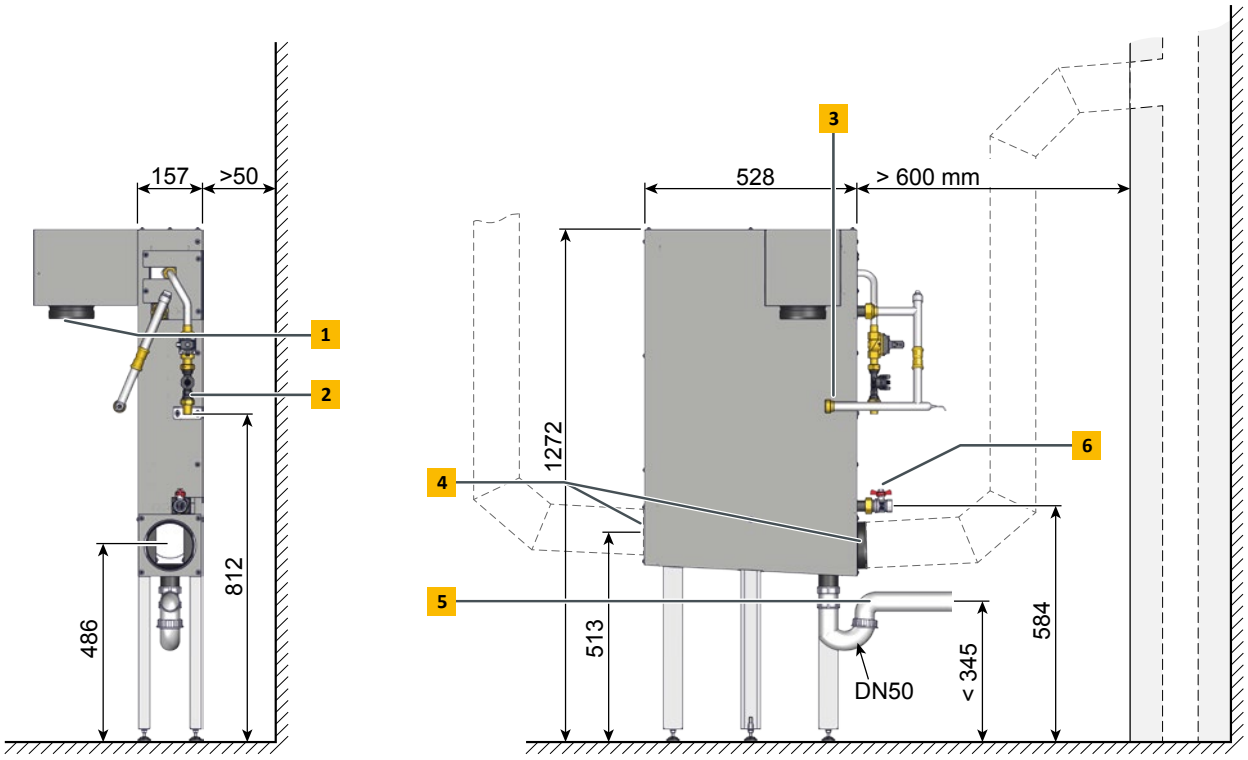
2 Domestic water connection

3 Boiler return

4 Possible flue gas connection (Sleeve 115 mm)

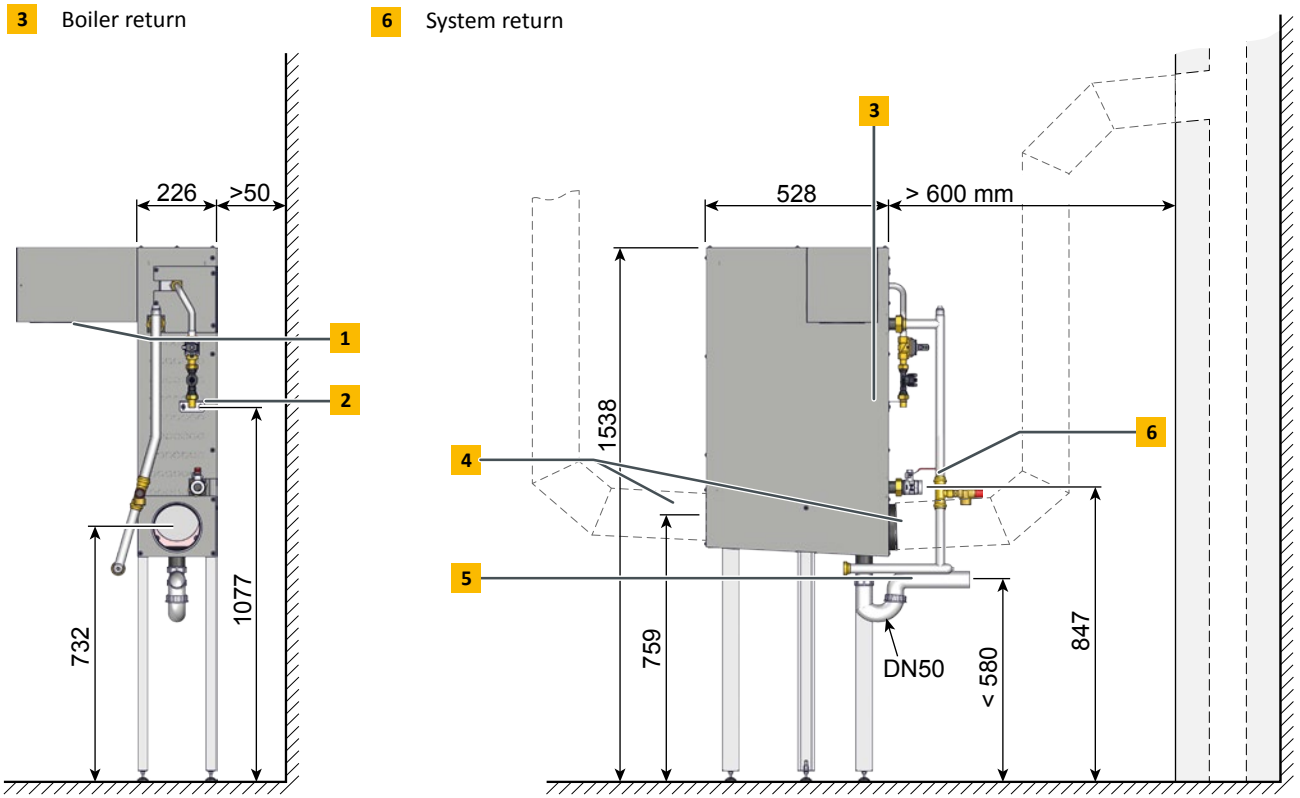
5 Drain connection DN 50

6 System return



ETA condensing heat exchanger for ETA PC 20 to 32

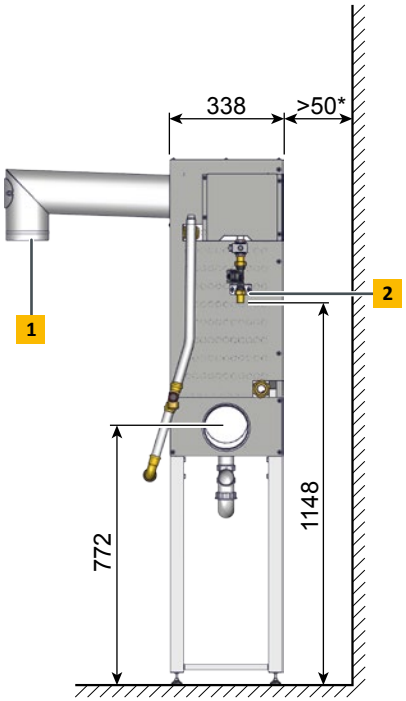
1 Boiler flue gas
2 Domestic water connection
3 Boiler return
4 Possible flue gas connection (Sleeve 130 mm)
5 Drain connection DN 50
6 System return

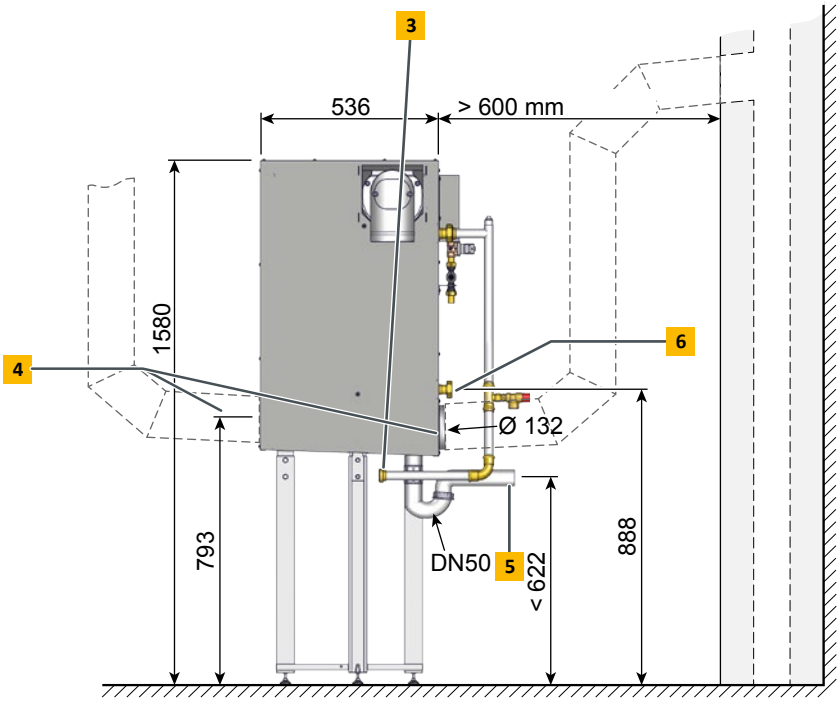


ETA condensing heat exchanger for ETA PC 40 to 50

1 Boiler flue gas
2 Domestic water connectio
3 Boiler return
4 Possible flue gas connection (Sleeve 130 mm)
5 Drain connection DN 50
6 System return

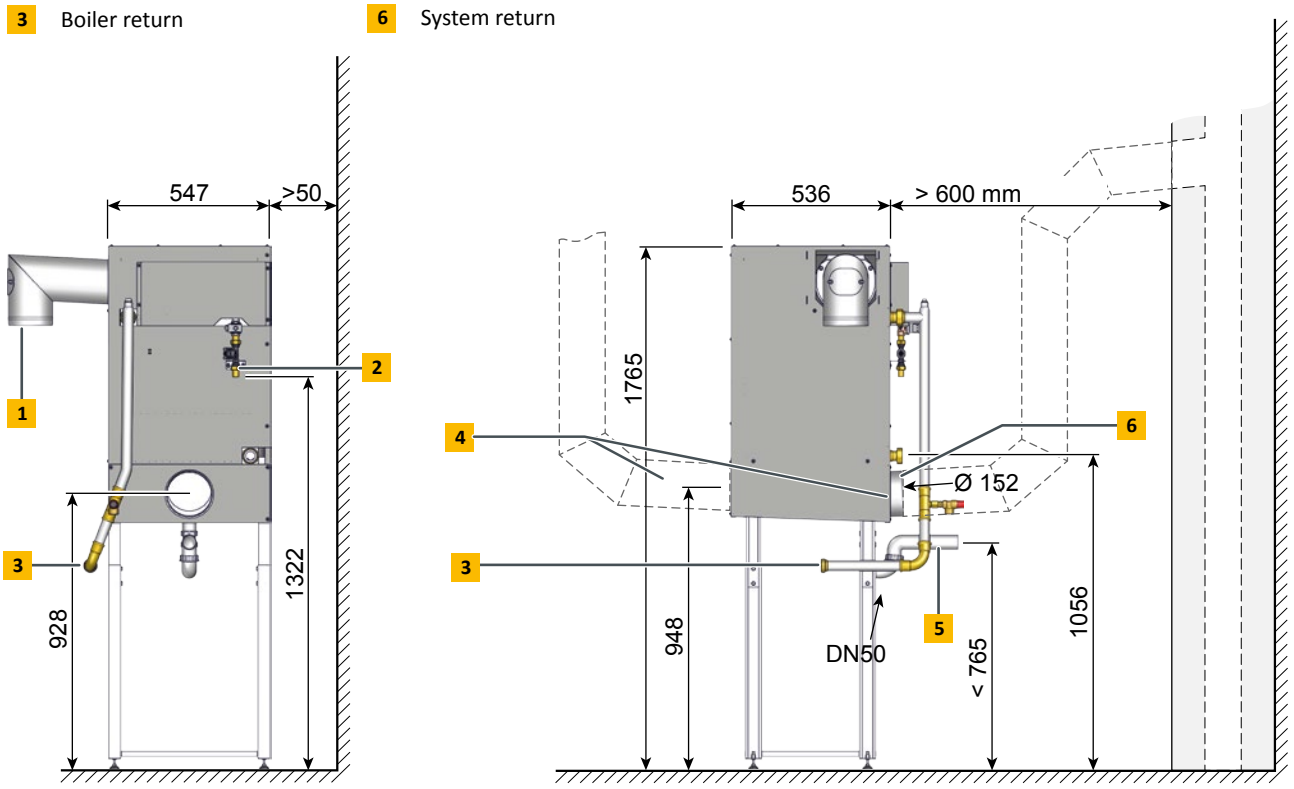
*The distance to the wall (> 50 mm) is only required for installation. The boiler together with the condensing heat exchanger can be pushed to the wall after installation.





ETA condensing heat exchanger for ETA PC 60 to 105

1 Boiler flue gas
2 Domestic water connection
3 Boiler return
4 Possible flue gas connection (Sleeve 150 mm)
5 Drain connection DN 50
6 System return



*The distance to the wall (> 50 mm) is only required for installation. The boiler together with the condensing heat exchanger can be pushed to the wall after installation.

ETA Pelletboiler

ETA PU PelletsUnit	7 - 15 kW
ETA PC PelletsCompact	20 - 105 kW
ETA *e*PE-K Pelletskessel	100 - 240 kW

ETA condensing heat technology

ETA *e*PE BW pellet boiler	22 kW
ETA BW condensing heat exchanger PU	7 - 15 kW
ETA BW condensing heat exchanger PC	20 - 105 kW

ETA SH log wood boiler and TWIN pellet boiler

ETA SH log wood boiler	20 - 60 kW
ETA SH-P log wood boiler	20 - 60 kW
with ETA TWIN pellet boiler	20 - 50 kW

ETA wood chip boiler

ETA *e*HACK wood chip boiler	20 - 240 kW
ETA HACK VR wood chip boiler	250 - 500 kW

ETA buffer storage tank

ETA buffer	500 l
ETA buffer storage tank SP	600 - 5.000 l
ETA buffer storage tank SPS	600 - 5.000 l

ETA hydraulic modules

- ETA fresh water module
- ETA stratified charging module
- ETA system seperation module
- ETA mixing circuit module
- ETA heat transfer module and station

Your heating specialist will be happy to advise you:

...mein Heizsystem

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Prospekt Brennwertwärmetauscher EN, 2021-03