Nu-Heat
Feel the difference

Information sheet

Guidance on plant room layout – space requirements

Creating an effective plant room for heating systems involves careful consideration of space requirements to accommodate key components.

Hot Water Cylinders:

- Adequate space should be allocated for the installation of cylinders, which serve as Domestic Hot Water storage.
- Ensure accessibility for routine inspections and maintenance tasks to maximise system longevity.

Buffer Tanks:

- Buffer tanks, crucial for system efficiency, must be accommodated with attention to dimensions.
- Allow sufficient clearance for easy inspection and maintenance of these vital components.

Ground Source Heat Pump Units:

- Central to the system, ground source heat pump units need space for optimal positioning and service, minimum distance in front of the unit needs to observed for service and maintenance.

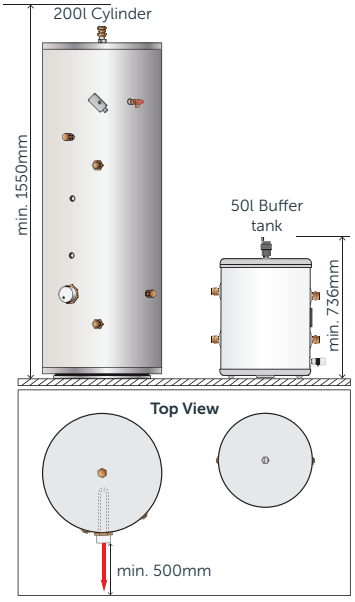
Additional System Items:

- Consider space requirements for filters, allowing for easy access and cleaning during maintenance.
- Allocate room for pumps, ensuring they are positioned for optimal functionality and easy servicing.
- Expansion vessels and other system elements should be placed to allow convenient access for inspections and servicing.

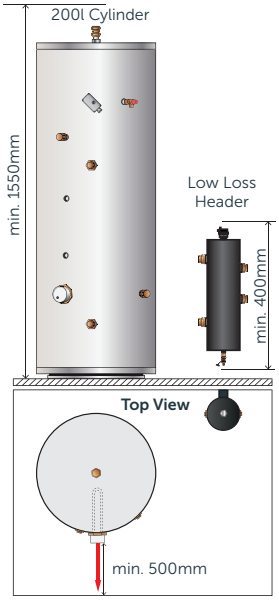
Proper planning and adherence to space requirements are essential for creating an organized and functional plant room. This not only ensures the smooth operation of heating systems but also simplifies routine servicing, contributing to the overall efficiency and longevity of the entire system.

Panasonic Air Source Heat Pump Systems

ASHP systems cylinder/buffer and cylinder/low loss header layout examples



ASHP systems with 50l buffer tank



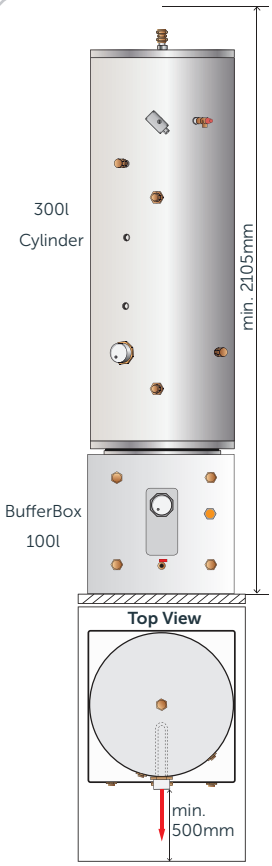
ASHP systems with Low loss header

- **Allow 500mm in front of the cylinder for removal of immersion heaters, may be behind cupboard door**

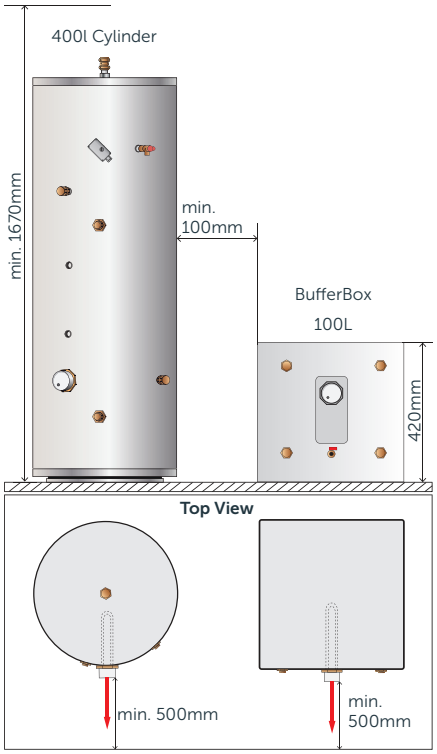
NOTE: These examples only look at space and layout requirements - pipework layouts and access to service items, such as filters and expansion vessels should also be considered.

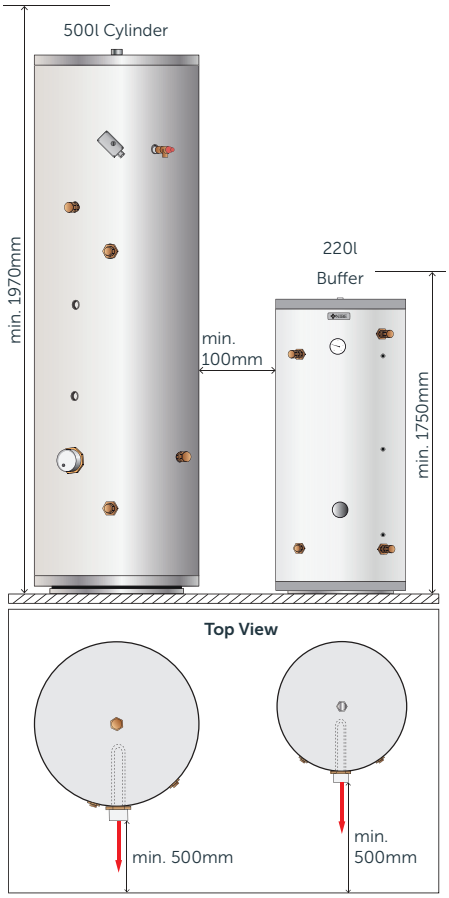
NIBE Air Source Heat Pump Systems

ASHP systems cylinder/buffer layout examples



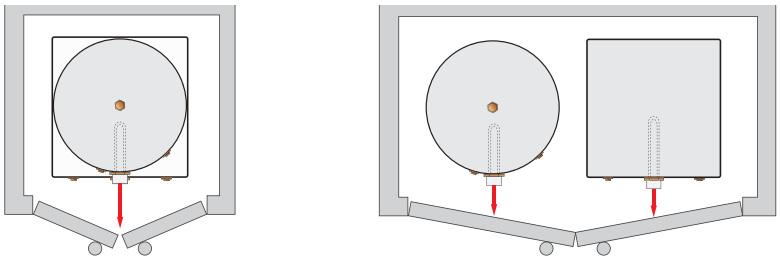
Cylinders up to 300l can be sited on top of the BufferBox100





Cylinders over 300l can be sited alongside the buffer

- **Allow 500mm in front of the cylinder/buffer tank for removal of immersion heaters, may be behind cupboard door**

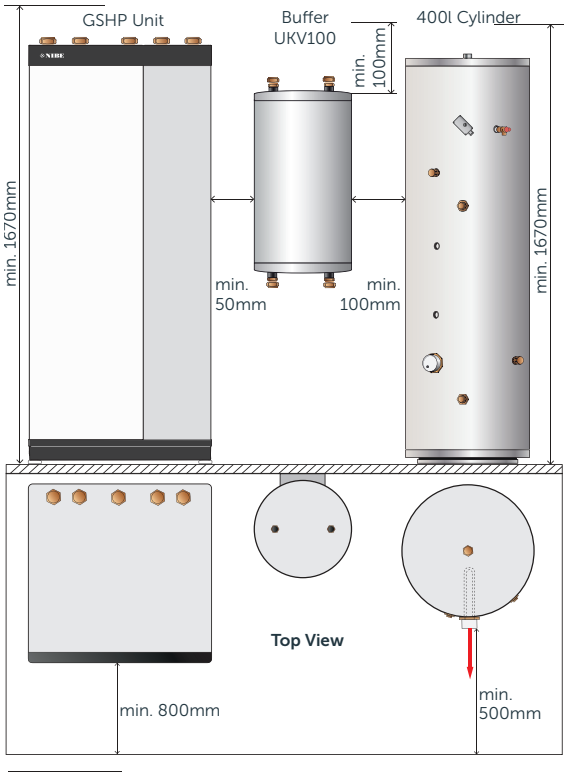


Examples of cylinder and buffer behind a cupboard door, opening doors allows allow access for maintenance and immersion replacement.

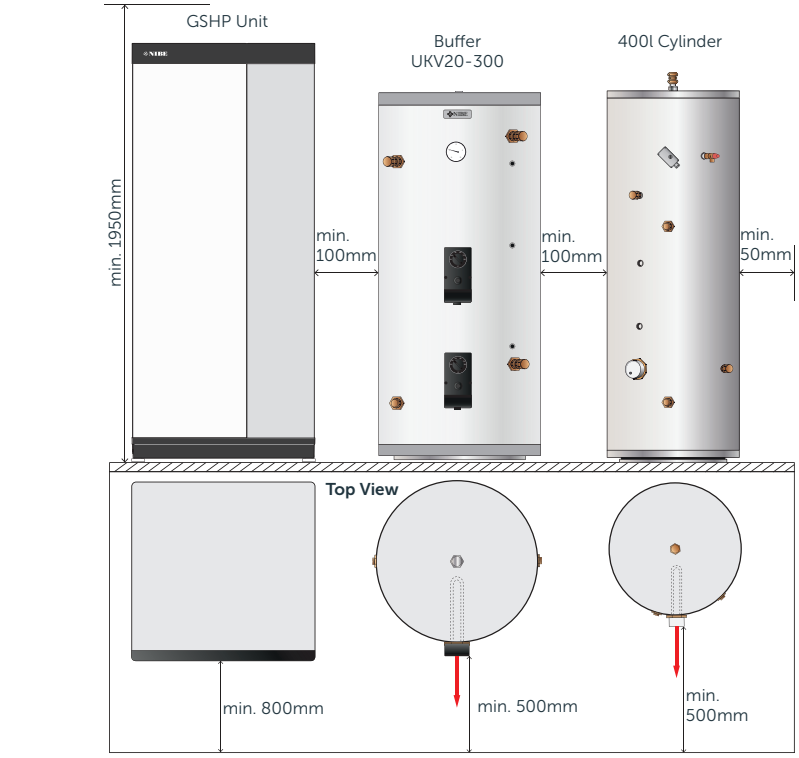
NOTE: These examples only look at space and layout requirements - pipework layouts and access to service items, such as filters and expansion vessels should also be considered.

NIBE Ground Source Heat Pump Systems

GSHP systems cylinder/buffer layout examples



GSHP systems with wall-mounted buffer tank



GSHP systems with floor-standing buffer tank

NOTE: These examples only look at space and layout requirements - pipework layouts and access to service items, such as filters and expansion vessels should also be considered.

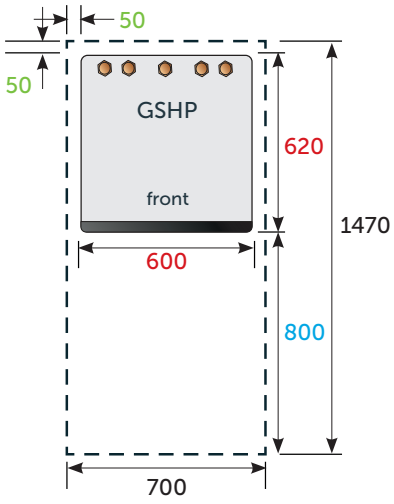
Plant room space requirements

Making sure you have enough space for your heating system components is important. It helps everything run smoothly and makes it easier to do regular check-ups and maintenance. This is key for your system longevity.

Check below for specific space requirements based on the equipment in your system.

Ground source heat pumps

(positioned inside the property)



Key

- Size of heat pump (mm)
- Min. total space needed (mm)
- Min. space needed behind & to the side of heat pump (mm)
- Min. space needed in front of heat pump (mm)

	NIBE S1156	NIBE S1256	NIBE F1345
Height of unit	1500mm	1800mm	1800mm
Height required	1670mm	1950mm	1950mm
Weight	165-184kg	211-217kg*	320-351kg

**Weight without water*

Domestic hot water cylinders

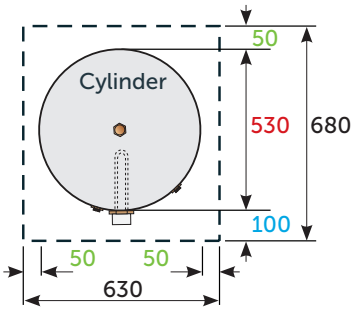
Leave 50mm around the back and sides of the cylinder

Leave 100mm for the immersion cap

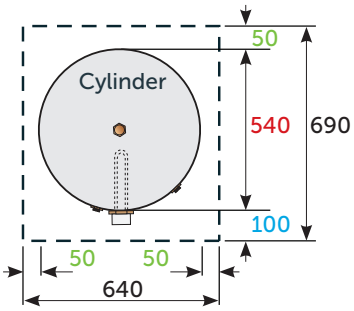
Allow 500mm maintenance access for removal of immersion heaters , cylinders and buffer may be behind cupboard door to minimise plant room space

Additional space for expansion vessel is required

Pipework layout should also be taken into account



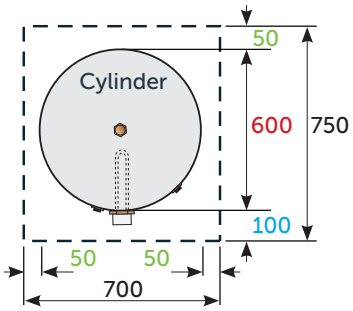
EnergyPro™ ENHP200	
Height of unit	1450mm
Height required	1550mm
Weight	268kg



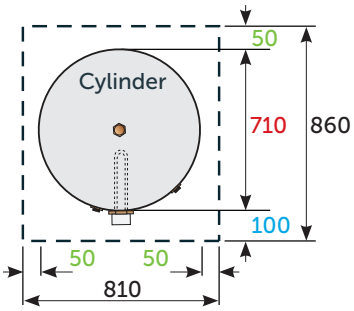
EnergyPro™ ENHP250S - Solar	
Height of unit	1815mm
Height required	1915mm
Weight	344kg

Key

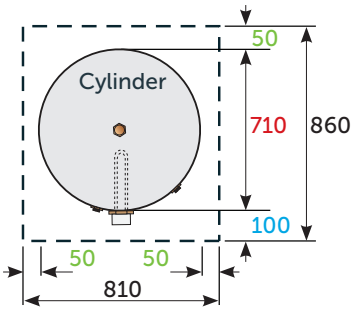
- Size of cylinder (mm)
- Min. total space needed (mm)
- Min. space needed behind to the side of cylinder (mm)
- Min. space needed in front of cylinder (mm)



EnergyPro™ ENHP300 & EnergyPro™ ENHP300S - Solar	
Height of unit	1585mm
Height required	1685mm
Weight	391kg
Weight - Solar	402kg



EnergyPro™ ENHP400 & EnergyPro™ ENHP400S - Solar	
Height of unit	1570mm
Height required	1670mm
Weight	500kg
Weight	510kg



EnergyPro™ ENHP500 & EnergyPro™ ENHP500S - Solar	
Height of unit	1870mm
Height required	1970mm
Weight	636kg
Weight	647kg

Expansion vessels

Wall Mounted		
Volume	19L	24L
Vessel Diameter	270mm	300mm
Vessel Height	349mm	392mm

Floor Mounted		
Volume	35L	50L
Vessel Diameter	380mm	380mm
Vessel Height	360mm	505mm

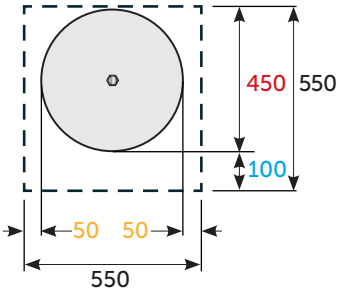
Buffer tanks

Allow minimum 500mm for removal of immersion heater(s) if fitted, may be behind cupboard door

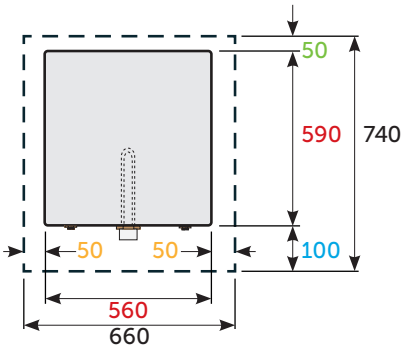
Pipework layout should also be taken into account

Key

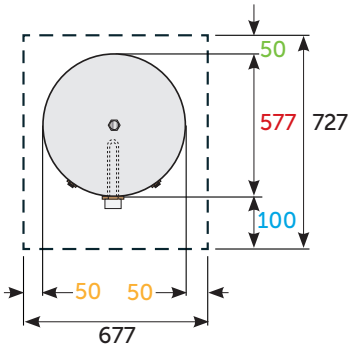
- Size of buffer tank (mm)
- Min. total space needed (mm)
- Min. space needed behind buffer tank (mm)
- Min. space needed in front of buffer tank (mm)
- Min. space needed either side of buffer tank (mm)



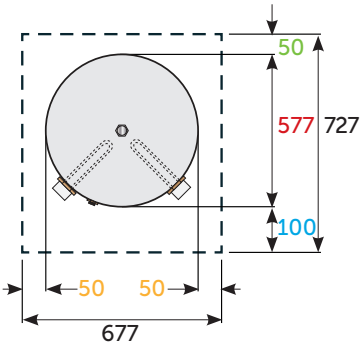
NIBE UKV40 (wall-mounted)	
Height of unit	495mm
Height required	695mm
Weight	55kg



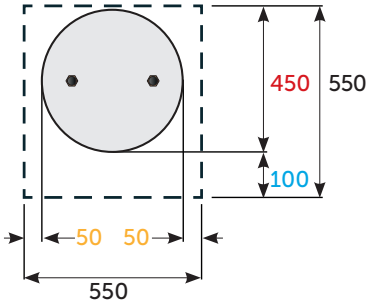
Nu-Heat BufferBox100	
Height of unit	420mm
Height required	420mm
Weight	140kg



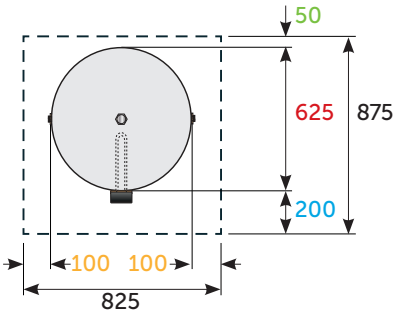
Nu-Heat 150 litre buffer tank	
Height of unit	1080mm
Height required	1180mm
Weight	185kg



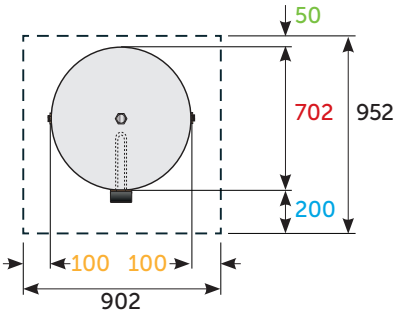
Nu-Heat 215 litre buffer tank	
Height of unit	1485mm
Height required	1585mm
Weight	255kg



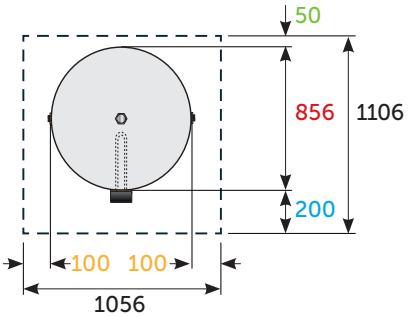
NIBE UKV100 (wall-mounted)	
Height of unit	1012mm
Height required	1212mm
Weight	130kg



NIBE UKV20-220	
Height of unit	1650mm
Height required	1750mm
Weight	280kg

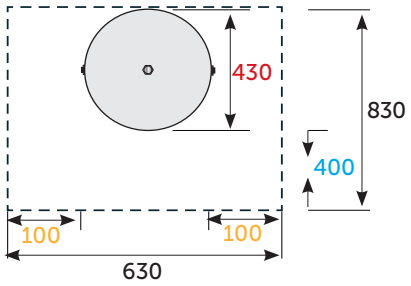


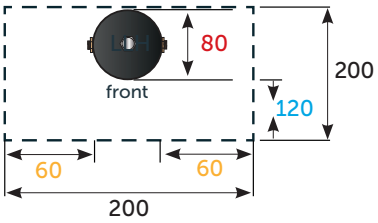
NIBE UKV20-300	
Height of unit	1634mm
Height required	1734mm
Weight	380kg



NIBE UKV20-500	
Height of unit	1834mm
Height required	1934mm
Weight	607kg

Panasonic systems





Key

- Size of buffer tank (mm)
- Min. total area needed (mm)
- Min. space needed behind buffer tank (mm)
- Min. space needed in front of buffer tank (mm)
- Min. space needed either side of buffer tank (mm)

Panasonic 50l buffer tank (Wall/Floor mounted)	
Height of unit	636mm
Height required	736mm
Weight	67kg

Low Loss Header	
Height of unit	320mm
Height required	400mm
Weight	3kg