Hot Water Storage - updated

Heatpunk helps you specify a hot water storage solution that's compatible with selected heat pump and sized based on property details. Once selected, you can view specs, domestic hot water (DHW) calculations and *Legionella* calculations.

You can fine tune these calculations for the specific requirements of the installation and share these details with customer in the technical report and customer proposal.

Adding hot water storage

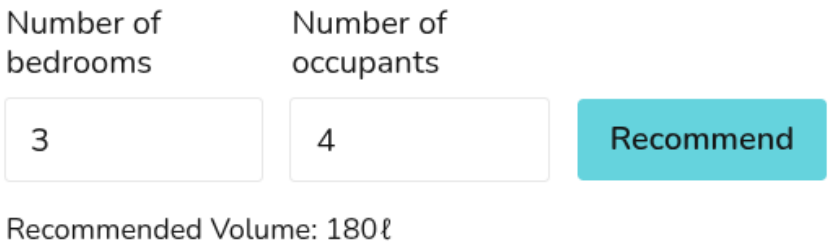


Hot water storage is selected in the ***Plan task***.

While on a design option, drag and drop hot water storage from the left-hand sidebar to place the hot water storage in the plan. After placing it, you can **select a hot water storage** option from the **recommendations** or scroll through the sections on the left sorted by **brand and type** (pre-plumbed, standard, pre-plumbed slimline, slimline and horizontal).

How are the recommended options chosen?

Recommendations are based on compatibility with the heat pump and are sized according to the number of bedrooms and occupants. Adjust the number of bedrooms/occupants and click Recommend to get updated recommendations.



This is calculated using the MCS method for DHW demand:

***Recommended volume* = 45 * N**

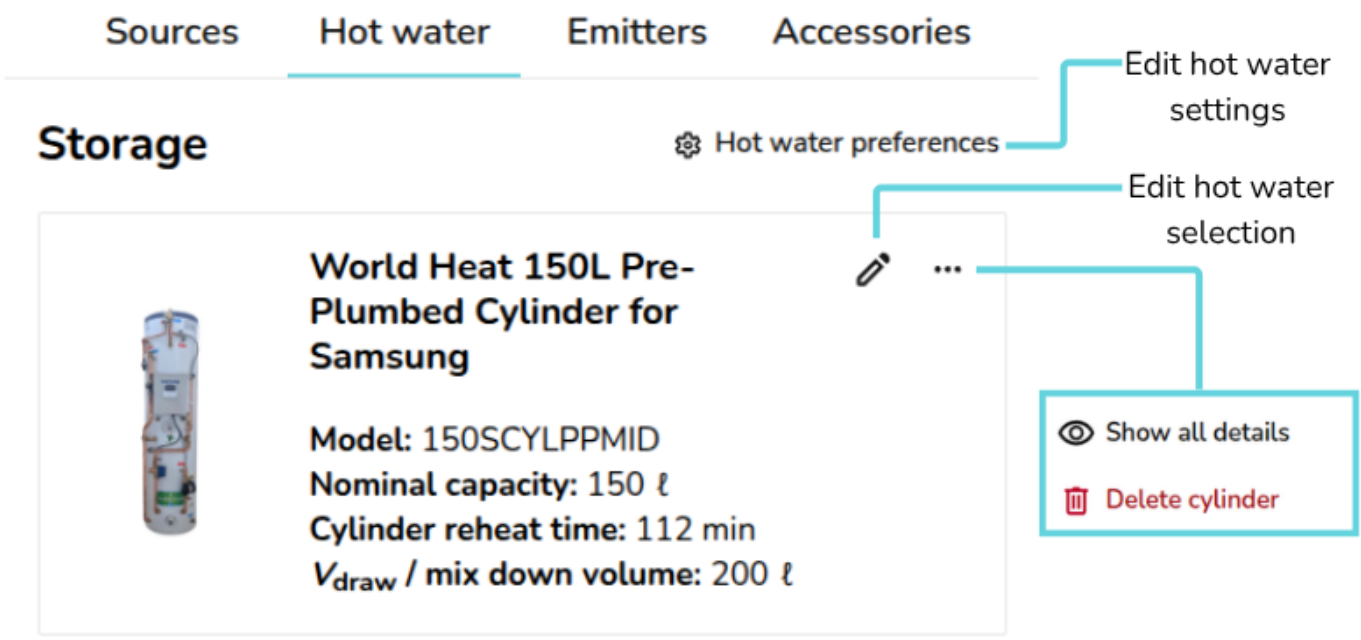
where N is the greater of:

- The number of rooms + 1
- The number of known occupants

When you have an option selected, on the right you will see specs, and Midsummer stock levels and pricing. If your account is connected to Midsummer, you will also see your specific pricing.

Hot water

On the *Hot water* tab on the right-hand sidebar, you will see the following:



Hot water preferences
Edit DHW and *Legionella* calculations. Read more about this below.

Pencil
Edit hot water selection for this design option

Show/hide all details
Show/hide DHW energy and *Legionella* purge demand, weight, standing heat loss, coil size and immersion heater power. Read more about these details below.

Delete cylinder
Remove hot water storage from this design option

Hot water storage details and DHW calculations

You can view details for the chosen hot water storage in the *Hot water* tab:

- Model
- Nominal capacity (ℓ)
- Cylinder re-heat time (min)
- Vdraw/Mix down volume (ℓ)

On the cylinder, click **··· three dots** > **Show all details** to view the following additional details:

- DHW energy demand (kWh/year)
- *Legionella* Purge Demand (kWh/year)

- Weight (empty | full) (kg)
- Standing heat loss (kWh / Hrs)
- Coil size (m^2)
- Immersion heater power (kW)

This information is then given in the *Hot Water Calculations* page of the **Technical report** and **Customer proposal** for you to share with the customer.

How is DHW energy demand calculated?

DHW energy demand is calculated using the storage temperature, supply temperature, number of occupants and the water needed per person.

First the volume of water needed per year is calculated with the following calculation:

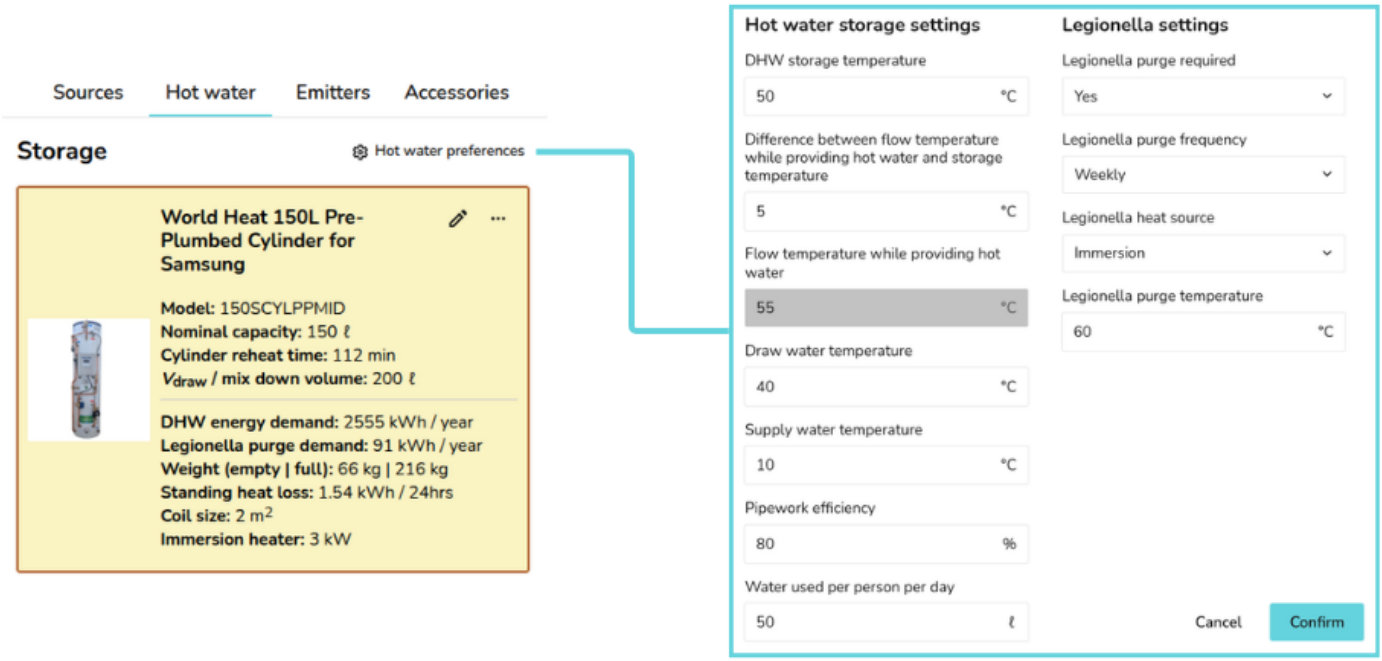
> ***Volume per year = number of occupants * the water needed per person* * 365**

Noting that for water, *volume* (L) = *mass* (kg). Then using the specific heat capacity of water (kJ/kg°C), this is converted to kWh/year:

> ***DHW energy demand* = 4.2 * (1/3600) * *mass per year* * (*storage temperature* - *supply temperature*)**

Adjusting DHW and *Legionella* calculations

These calculations can be fine tuned by editing the *Hot water preferences* on the *Hot water* tab:



This will give you the following options to edit under *Hot water storage settings*:

- DHW Storage Temperature (°C)
- Difference between flow temperature while providing hot water and storage temperature (°C)
- Flow Temperature while providing hot water (°C) *(This is calculated based on the two previous inputs)*
- Draw Water Temperature (°C)
- Supply Water Temperature (°C)
- Pipework Efficiency (%)
- Water used per person per day (ℓ)

Under *Legionella settings*, you then have these options:

- *Legionella* purge required (Yes/No)
- *Legionella* purge frequency (Weekly/Daily)
- *Legionella* heat source (Immersion/Heat pump)
- *Legionella* purge temperature (°C)

> Changes to these settings will only affect the selected design option.

Take a look at our Plan task guides for more info. If you have further questions, please get in touch on help@heatpunk.co.uk or help@heatpunk.ie.

Revision #34
Created 9 April 2026 16:00:33
Updated 2 November 2026 13:07:36