**Air source heat pumps and hybrid pumps**

**What is it?** Air source heat pumps operate by absorbing heat from outside air to provide heating. Heat pumps are most efficient in buildings that: are well insulated and draught proofed; and have either underfloor or warm air heating as they operate at lower temperatures.

A hybrid heat pump could be an option, where the heat pump and boiler work in tandem. This will work for instances where the heat pump does not generate enough heat (when outdoor temperatures are very low) your boiler will switch on.

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| **Cost** £££ |
| **Improvement** ↗↗↗ |
| **Disruption** !!! |

**Property designations?** Is your home in a Conservation Area? Is it subject to an Article 4 Direction? Is it a Listed Building? These considerations may impact whether development to your property requires planning permission or not. An interactive map showing conservation areas and listed buildings can be [found here](https://ssa.camden.gov.uk/connect/analyst/mobile/#/main?mapcfg=CamdenConservation&lang=en-gb). Details of Article 4 Directions can be [found here](https://www.camden.gov.uk/article-4-directions-heritage-and-conservation). If you are uncertain please contact the planning service planning@camden.gov.uk

Listed Buildings - before embarking on any internal or external works, please discuss the matter with a member of the built heritage Conservation Team (planning@camden.gov.uk) or apply for listed building consent, details [available here](https://www.camden.gov.uk/listed-buildings). Listed building consent is always required for works that have the potential to affect the character or special interest of a listed building.

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| No designation (dwelling-house or block of flats)  | Permitted development (planning permission is not required) if:* The air source heat pump complies with the [MCS Planning Standards or equivalent standards](https://www.planningportal.co.uk/info/200130/common_projects/27/heat_pumps/3);
* There is only one ASHP proposed;
* The volume of the unit must not exceed 0.6 cubic metres;
* Set in 1m from the property boundary;
* Installed on a flat roof and is set in 1m from the external edge of the roof;
* Not on a wall or which fronts a highway
* Not installed on a wall above the level of the ground storey;
* Equipment which is no longer needed for microgeneration shall be removed as soon as reasonably practical;
* Used only for heating purposes;
* Positioned to minimise its impact on the external appearance of the building and amenity of the area;
* Is removed as soon as practicable when no longer needed
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| Conservation Area (with or without Article 4 Direction) | Permitted development - conditions as above, including:* Not installed on a wall or roof which fronts a highway or be nearer to any highway which bounds the curtilage than the part of the building which is nearest to that highway.
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| Listed Buildings | **Planning permission and Listed Building consent required**. Plant has to be close to the building to ensure it would not harm its setting. |
| Building Regulations | Part E (Resistance to sound)Part G (Sanitation, Hot Water Safety and Water Efficiency) – when altering hot water systemPart P (Electrical safety)Permission not required if installed under Competent Person SchemePlanning portal, building regulations information on heat pumps, see [this webpage](https://www.planningportal.co.uk/info/200130/common_projects/27/heat_pumps/4). |

**Other considerations**

* Keeping the unit close to the house keeps efficiency at its maximum to minimise heat loss through pipes.
* The heat pump should not be enclosed, and preferably not screened, if it is screened this should ensure air flow in accordance with the pumps manual.
* Consider reducing noise to neighbours and place the heat pump away from neighbouring buildings as far as practicable.

**Applying for planning permission (if required)**

Where planning permission is required for air source heat pumps the following information will be required alongside a full planning application form. Planning application forms can be filled in [online](https://www.camden.gov.uk/apply-planning-permission) through the planning portal or other digital platforms available.

* [Site location plan](https://www.camden.gov.uk/types-scale-drawings-plans-planning-applications)
* Confirmation of compliance with [MCS Planning Standards or equivalent standards](https://www.planningportal.co.uk/info/200130/common_projects/27/heat_pumps/3), unless [Noise, vibration and ventilation statement provided.](https://www.camden.gov.uk/noise-vibration-ventilation-assessments)
* Existing and proposed plans, sections and elevations of the proposed installation including:
	+ elevations, plans and sections showing any equipment and pipes;
	+ manufacturers manual / specification;
	+ the location of any neighbouring windows should also be displayed on these drawings and be cross referenced in your [noise, vibration and ventilation statement.](https://www.camden.gov.uk/noise-vibration-ventilation-assessments) If required.

**What will be considered?**

* Location, design and appearance

Air source heat pumps located on the front of a property are unlikely to be acceptable as they would detract from the character and appearance of the street-scene. These are best sited at the rear and away from neighbouring properties as far as practicable.

* Noise and vibration
* Efficiency of the unit