



Air Source Heat Pumps Outline Introduction

Air source heat pumps (ASHP's) provide an alternative, low cost solution for space heating and hot water, and work in temperatures as low as -20 degrees C.

Unlike ground source heat pumps, ASHP's do not incur ground work costs for the installation and laying of pipe, vastly reducing your initial expenditure.



The systems do have some drawbacks when compared to ground source heat pumps. They are approximately 10% less efficient and require careful consideration when positioning. Where we may have seen a CoP ratio of 4.2 with a ground source heat pump, in the same environment we would see a 3.8 with the air source heat pump.



The unit itself works on pressurising refrigerant to create a heat output. Imagine a refrigerator but working backwards. Air source heat pumps use electrical current to power a compressor that forces gaseous refrigerant through small holes to create heat. This heat is transferred to your heating medium and it's this cycle which makes air source heat pumps so efficient.

We recommend Air Source Heat Pumps as a viable alternative to Ground Source Heat Pumps. Air Source Heat Pumps work with underfloor heating more effectively than radiators because of the lower operating temperatures. They also lend themselves well to refurbishments or situations where ground source heat pump drilling would be disruptive.

More information can be found at www.soloheatinginstallations.co.uk/air_source_heat_pump.htm

Please feel free to keep on file.