

Dear Liven,

Thank you for your inquiry and the opportunity to clarify the cooling requirements for the proposed development.

To ensure clarity of terminology and comprehension, it's essential to note that a condenser is a fundamental component within an Air Source Heat Pump (ASHP) system. An air source heat pump constitutes a comprehensive HVAC system that operates via a refrigeration cycle, inclusive of a condenser, to provide both heating and cooling for indoor spaces. The condenser plays a pivotal role within the ASHP system.

We would like to emphasize that the cooling requirements remain consistent with those outlined in the original planning application that was approved.

The design incorporates an Air Source Heat Pump (ASHP) system with dual functions, encompassing both cooling and supplementary heating for the house. The ASHP's outdoor unit, often referred to as a condenser (specifically the Mitsubishi PURY- P550YNW model), is proposed to be located behind the garage, complete with appropriate acoustic enclosures to minimize noise impact on neighbouring properties.

Furthermore, our design accounts for the inclusion of AV equipment within the store room, necessitating an active cooling system. This requirement led to the development of a separate ASHP system, exclusively dedicated to meeting the cooling needs of the AV room, thereby ensuring optimal operational conditions.

Additionally, the house ASHP system, does not extend its reach to the pool orangery room. To address this, a third ASHP system has been designed solely to providing cooling for the pool area via an AHU.

Both ASHPs outdoor units or condensers, namely the Mitsubishi PUZ- ZM71VHA for AV and Toshiba RAV-GM280 for the Pool, are planned for installation on the flat roof towards the rear of the main house, also equipped with appropriate acoustic enclosures to mitigate noise impact.

Notably, bespoke acoustic enclosures around the ASHP were meticulously designed to align with the noise levels stipulated in the noise survey.

We trust that this clarification addresses your concerns and reaffirms our commitment to adhering to the cooling requirements initially outlined in the approved planning application.

Should you require any further information or have additional inquiries, please do not hesitate to reach out to us.

Thank you  
Best regards