



R A L P H T. K I N G & A S S O C I A T E S

[REDACTED]

Edward Calver  
Hoban Design  
43 Church Road,  
Wimbledon,  
London SW19 5DQ

11<sup>th</sup> January 2023

Dear Edward,

**Re: 1 Froggnal Gardens, Hampstead, London NW3 6UY**

Following your recent request with regards to information related to the proposed condenser installation, our response is as detailed below.

The application relates to the replacement of an external condenser that is in theory life expired, in poor condition, operating on old technology and requires replacement.

Modest active cooling is required within the property as it is an existing property undergoing cosmetic refurbishment works with the façade retained intact and with the internal primary layout unaffected. Unlike a New Build we are therefore unable to take full advantage of the various insulation and thermal enhancement techniques that would otherwise be available to the Team.

The replacement condenser is an air source heat pump that operates with the latest controls technology that improves the overall operational efficiency of the equipment. To assist in this objective, the internal room side units which connect to the external condenser are also being replaced and the control system upgraded to maximise the efficiency of operation of the installation when in use.

With regard to the replacement condenser plant both the Coefficient of Performance [COP] and the Energy Efficiency Ratio [EER] remain similar to the existing unit, however the Seasonal Coefficient of Performance [SCOP] is substantially increased from 4.98 to 13.53 and representing a 271% uplift in efficiency. In addition, the Seasonal Energy Efficiency Ratio [SEER] is improved by 7.1%. [Source Mitsubishi Technical Dept] based on the relevant Part L Regulations.

This overall efficiency improvement is related to the seasonal use of the plant and with far more sophisticated controls configuration in this instance.

I hope that the above is of assistance.

Yours sincerely

[REDACTED]

HAYDN L JONES, B.Tech(Hons.), M.Sc., C.Eng  
Director

**Ralph T. King & Associates**



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