


2025/1034/P & 2025/1090/L 10 CHALCOT CRESCENT - Water Comfort Cooling Specification

Traditional Victorian terraced houses, with solid walls and a high percentage of fenestration are prone to overheating; comfort cooling will provide resident amenity and future-proof the property for future climate change. The property will have secondary glazing retrofitted throughout for thermal and acoustic upgrade. This necessitates some system of mechanical ventilation to habitable rooms, especially bedrooms for protection of occupants.

Internal water-based comfort cooling is the least invasive system available as it is internal to the building envelope and has no impact on neighbours’ amenity.



Ducted Fan Unit- Freematch in R32		
Model		PRK-DI-M095
Code		112001
Cooling	kW	2,6
Heating	kW	2,6
Power Supply	V/Ph/Hz	220~240/50/1
Cooling Power Absorption	W	70
Heating Power Absorption	W	70
Air Flow	m3/h	600
Static Pressure	Pa	25
Sound Pressure	dB (A)	40/39/27/22
Sound Power	dB (A)	52/50/39/34
Refrigerant Pipes Liquid / Gas	inch	1/4" - 3/8"
Dimensions (LxPxH)	mm	700x450x200
Weight	kg	16.5

The specification will be determined by a M & E engineer in due course, but a system such as ‘Parkair Energy Solutions’ PRK DI M095 would be appropriate for the small size of the property.

In the current proposals it is proposed to install 2 units, one at lower ground and one at 2nd floor to serve the bedrooms. Both these areas have had significant 20th century alterations which will be restored as original as part of the proposals. No original fabric will be harmed.

The concealed units are proposed to be housed at high level within built in furniture (bathroom storage unit and wardrobes). The ducting will run to a minimal slot vent, which will be plastered into the wall or ceiling finish.

At lower ground the ducting from the unit to the vent will penetrate a newly infilled opening between the bedrooms (proposed to reinstate the historic separate room plan).

At second floor renewed lath & plasterwork is proposed to repair or replace missing and damaged ceilings. The 100mm diameter ducting from the unit will run up through the loft space and the slot vent will be located in-between existing structure, that is in line with the direction of ceiling joists.

