

Subject: Ventilation Strategy	Project: Downley Drive
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Checked: Daniel Watt	Date & revision: 27/04/2021 (revision C)

Site description:

The Site is bounded by St Vincent Street and the Rochdale Canal to the north, edges of existing dwellings on Woodward Place to the west, Downley Drive to the south and Kingham Drive to the east. The western portion of the Site is currently vacant and secured by fencing, comprising predominantly of overgrown shrubland with a limited amount of hard standing. The eastern portion of the Site is comprised of grassland with a limited number of trees. An unadopted path cuts through the Site from St Vincent Street to the north to Downley Drive to the South.

Simple description of proposals:

The Proposed Development will deliver sixty-eight Affordable Homes, comprising of twenty-three houses and forty-five apartments within a four-storey building, alongside associated landscaping, boundary treatment, car parking, and cycle parking.

Key parameters of the development:

Parameter	Proposed Development
Proposed Site Area	c. 0.69 hectares
Proposed Development	Residential development (Use Class C3)
Proposed Units	68 residential units: 23 houses 45 apartments (22 one bed and 23 two bed)
Proposed Development Height	Houses: 2-3 storeys Apartment: 4 storeys, including ground
Car Parking	44 car parking spaces provided across the development (65% provision): - Houses: 23 spaces, 1 per house (100% provision) - Apartments: 21 spaces (47% provision)
Cycle Spaces	68 cycle parking spaces provided across the development. A timber cycle store will be provided in the rear gardens of all houses. A dedicated cycle storage room will be provided on the ground floor of the apartment block that will provide 100% cycle parking for residents.

Mechanical Ventilation system – apartments and townhouses

The proposed mechanical ventilation system for both apartments and townhouses is **Mechanical ventilation with heat recovery (MVHR)**, or system 4 as defined in Building Regulations Approved Document Part F (ADF) 2013. The system consists of a central, two-speed fan, extracting air from wet rooms, kitchens, and utility cupboards and supplying heat recovered air in bedrooms and living areas. The fan will boost the ventilation rate via occupant control and/or a humidity sensor. Purge ventilation for rapid clearance of odours and for summertime cooling will be achieved through opening windows.

The system will provide background ventilation, meaning trickle vents will not be required in windows.

An example of the MVHR system for the apartments and townhouses can be seen in figures 1 and 2 respectively (below):

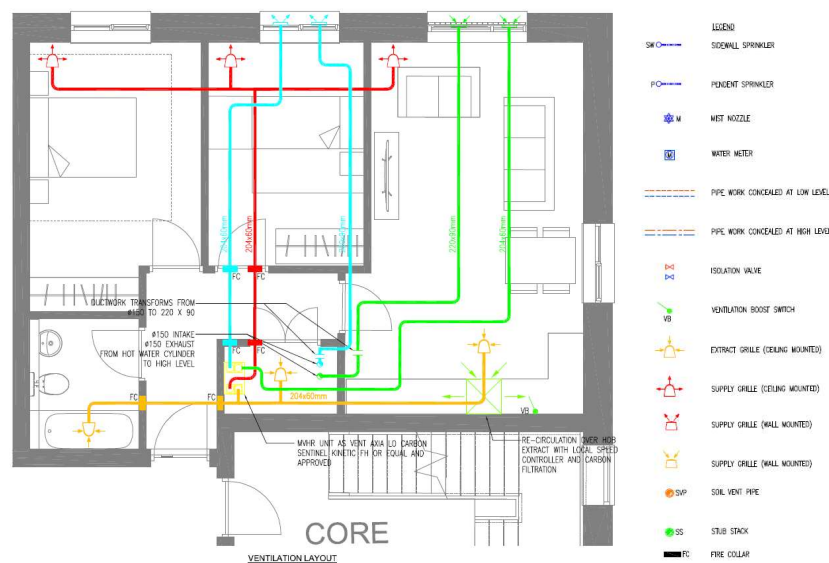


Figure 1 – typical apartment mechanical ventilation system

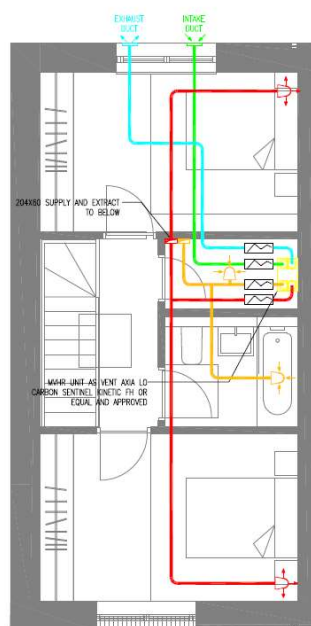


Figure 2 – typical townhouse mechanical ventilation system (first floor)

Ventilation strategy – common areas.

To comply with the fire strategy, both the plant room and refuse store will require ventilation. A mechanical extract system will be provided to the refuse store to extract gases/smoke from the store, as indicated in figure 3 below. The system will consist of a central fan, with ductwork from grilles routed to the façade. The plant room will be naturally ventilated with air bricks in the façade.

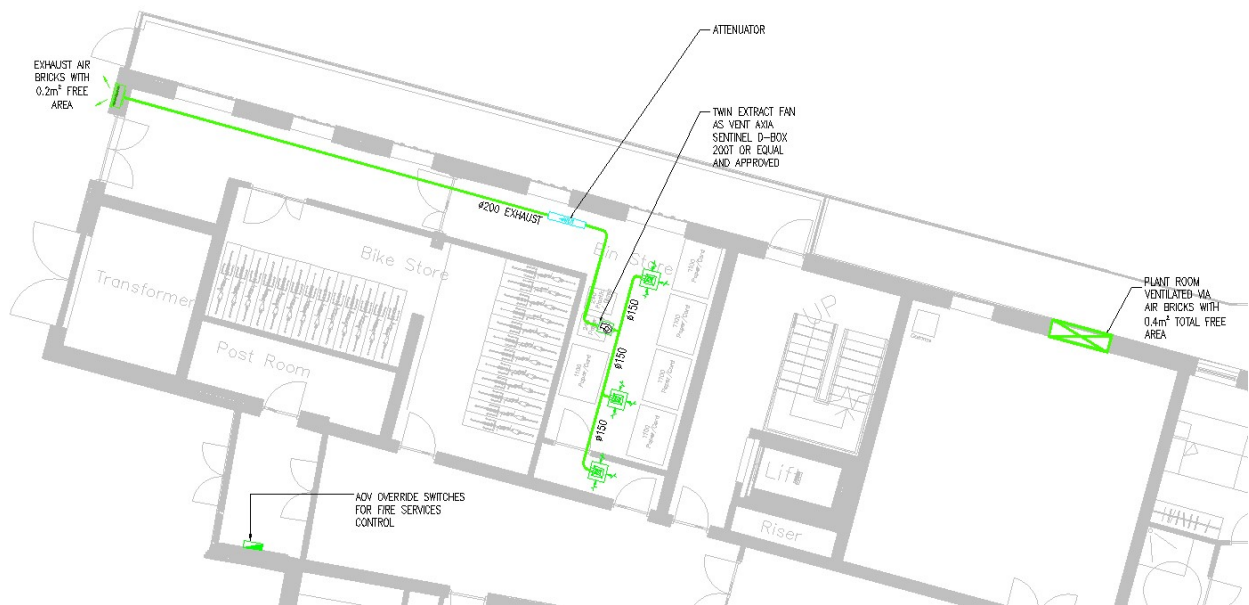


Figure 2 – proposed ventilation system for the plant room and refuse store.