

Continuous Mechanical Extraction with Heat Recovery (MVHR)
 Document F1 (October 2010)
 Calculations for Flats & Houses

Project No. QRXG 62615
 Drawing Number 1
 Project Reference Haverstock Hill & Prince of Wales Road- Maisonette A
 Date 17 June 2016

Ventilation Rates based on size of the Dwelling

Dwelling Area (m²) 120
 Floor Height (m) 2.40
 Dwelling Vol (m³) 288

36 l/s

Ventilation Rates based on Occupancy

No of Bedrooms 2
 Total Occupants 4

21 l/s

Ventilation Rates based on Minimum Extract Rates **37 l/s**

Ventilation Rate (Minimum - Continuous)	
21 l/s	

Ventilation Rate (Maximum - Boost)	
37 l/s	

Extract		
Room Name	Continuous Flow Rate (l/s)	Boost Flow Rate (l/s)

Kitchen	7.4	13.0
Toilet	4.5	8.0
Bathroom	4.5	8.0
Bathroom	4.5	8.0

Total (l/s)	21.0	37.0
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Supply		
Room Name	Continuous Flow Rate (l/s)	Boost Flow Rate (l/s)

Living Room	9.8	17.3
Bedroom 1	5.9	10.3
Bedroom 2	5.3	9.4

Total (l/s)	21.0	37.0
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Extract		
Room Name	Continuous Flow Rate (m3/hr)	Boost Flow Rate (m3/hr)

Kitchen	26.6	46.8
Toilet	16.3	28.8
Bathroom	16.3	28.8
Bathroom	16.3	28.8

Total (m3/hr)	75.6	133.2
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Supply		
Room Name	Continuous Flow Rate (m3/hr)	Boost Flow Rate (m3/hr)

Living Room	35.4	62.4
Bedroom 1	21.1	37.1
Bedroom 2	19.1	33.7

Total (m3/hr)	75.6	133.2
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Notes:

1. It has been assumed that provision has been made for Purge Ventilation via openable windows and doors.
2. It has been assumed that Air Permiability is $\leq 3\text{m}^3/(\text{h}\cdot\text{m}^2)$.