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

Project No.	QRXG 62615
Drawing Number	3
Project Reference	Haverstock Hill & Prince of Wales Road- Maisonette C
Date	10 June 2016

Ventilation Rates based on size of the Dwelling

Dwelling Area (m^2)	*108*	*32.5 l/s*
Floor Height (m)	*2.40*	
Dwelling Vol (m^3)	*260*	

Ventilation Rates based on Occupancy

No of Bedrooms	*2*	*21 l/s*
Total Occupants	*4*	

Ventilation Rates based on Minimum Extract Rates: *53 l/s*

Ventilation Rate (Minimum - Continuous)	Ventilation Rate (Maximum - Boost)
21 l/s	*53 l/s*

Extract			Supply		
Room Name	Continuous Flow Rate (l/s)	Boost Flow Rate (l/s)	Room Name	Continuous Flow Rate (l/s)	Boost Flow Rate (l/s)
Kitchen	5.2	13.0	Living Room	6.2	15.7
Utility	3.2	8.0	Bedroom 1	7.7	19.4
Toilet	3.2	8.0	Bedroom 2	7.1	18.0
Toilet	3.2	8.0			
Bathroom	3.2	8.0			
Shower Room	3.2	8.0			
Total (l/s)	21.0	53.0	Total (l/s)	21.0	53.0

Extract			Supply		
Room Name	Continuous Flow Rate (m3/hr)	Boost Flow Rate (m3/hr)	Room Name	Continuous Flow Rate (m3/hr)	Boost Flow Rate (m3/hr)
Kitchen	18.5	46.8	Living Room	22.3	56.4
Utility	11.4	28.8	Bedroom 1	27.6	69.8
Toilet	11.4	28.8	Bedroom 2	25.6	64.7
Toilet	11.4	28.8			
Bathroom	11.4	28.8			
Shower Room	11.4	28.8			
Total (m3/hr)	75.6	190.8	Total (m3/hr)	75.6	190.8

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 ≤ $3m^3/(h.m^2)$.