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

Project No.	QRXG 62615
Drawing Number	2
Project Reference	Haverstock Hill & Prince of Wales Road- Maisonette B
Date	17 June 2016

Ventilation Rates based on size of the Dwelling

Dwelling Area (m^2)	*94*	*28.3 l/s*
Floor Height (m)	*2.40*	
Dwelling Vol (m^3)	*226*	

Ventilation Rates based on Occupancy

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

Ventilation Rates based on Minimum Extract Rates: *29 l/s*

Ventilation Rate (Minimum - Continuous)	Ventilation Rate (Maximum - Boost)
21 l/s	*29 l/s*

Extract

Room Name	Continuous Flow Rate (l/s)	Boost Flow Rate (l/s)
Kitchen	9.4	13.0
Shower Rom	5.8	8.0
Shower Rom	5.8	8.0
Total (l/s)	21.0	29.0

Supply

Room Name	Continuous Flow Rate (l/s)	Boost Flow Rate (l/s)
Living Room	12.1	16.7
Bedroom	8.9	12.3
Total (l/s)	21.0	29.0

Extract

Room Name	Continuous Flow Rate (m3/hr)	Boost Flow Rate (m3/hr)
Kitchen	33.9	46.8
Shower Rom	20.9	28.8
Shower Rom	20.9	28.8
Total (m3/hr)	75.6	104.4

Supply

Room Name	Continuous Flow Rate (m3/hr)	Boost Flow Rate (m3/hr)
Living Room	43.5	60.1
Bedroom	32.1	44.3
Total (m3/hr)	75.6	104.4

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 ≤ $3m^3/(h.m^2)$.