

LAND OFF BOTLEY ROAD, PHASE II, WEST END
FOREMAN HOMES BUILD SPECIFICATION FOR NOISE MITIGATION

The facades shown in **BLUE** below will be fitted with standard glazing 4SC-16-8 and acoustic trickle vents. MEVDC will also be installed in wet rooms.

2.5m high close board fencing (with a minimum surface density of 5kg/m²) will be installed along the boundaries in **RED**

GROUND FLOOR.....



FIRST FLOOR.....



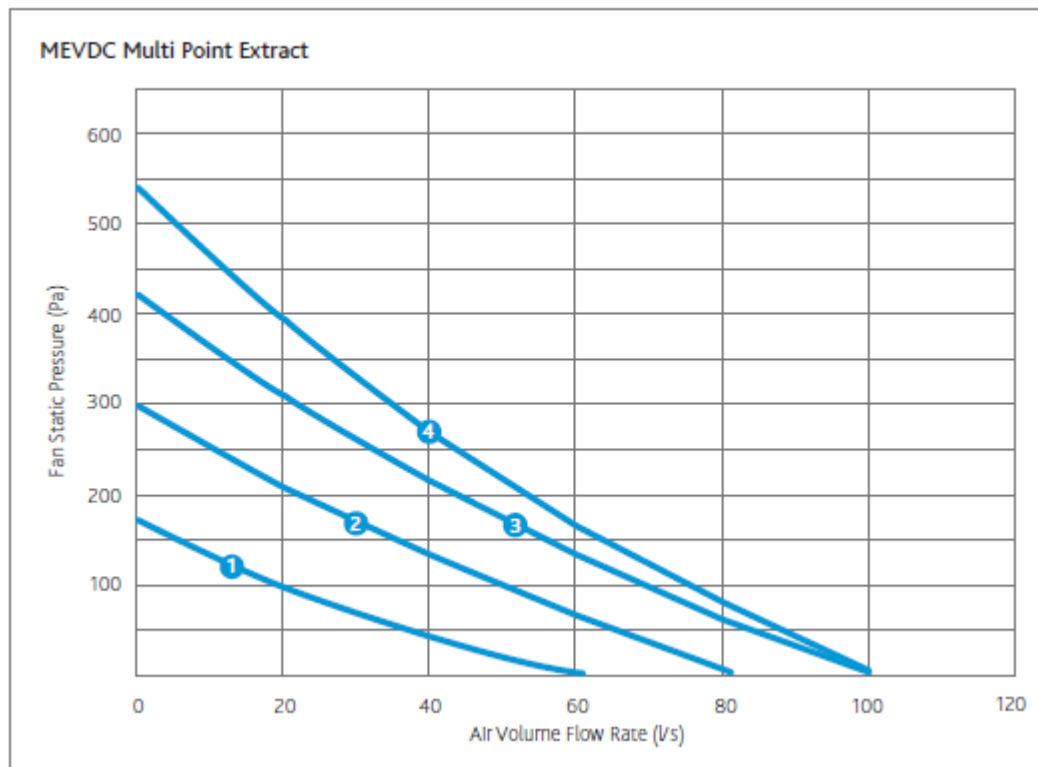
MECHANICAL VENTILATION

MEVDC

A quiet, energy-efficient, low depth central extract system, which has been independently tested by the Building Research Establishment (BRE) for inclusion within the Product Characteristics Database (previously SAP Appendix Q).



Performance



Electrical & Sound

Curve	Maximum power consumption (Watts)	FLC Amps	Sound Power Levels dB re 1pW								dB(A) @3m
			63	125	250	500	1K	2K	4K	8K	
1	11	0.14	39	39	44	36	31	22	21	18	19
2	21	0.19	40	42	46	41	37	28	24	18	27
3	35	0.25	43	43	50	46	41	31	28	27	31
4	52	0.37	45	44	54	52	44	35	31	27	34

SAP Test Results

Application	MEVDC	
	Specific Fan Power (W/l/s)	Energy Saving Trust Best Practice Compliant
Kitchen + 1 Wet Room	0.35	Yes
Kitchen + 2 Wet Room	0.30	Yes
Kitchen + 3 Wet Room	0.31	Yes
Kitchen + 4 Wet Room	0.33	Yes
Kitchen + 5 Wet Room	0.38	Yes

ACOUSTIC TRICKLE VENT – OPEN

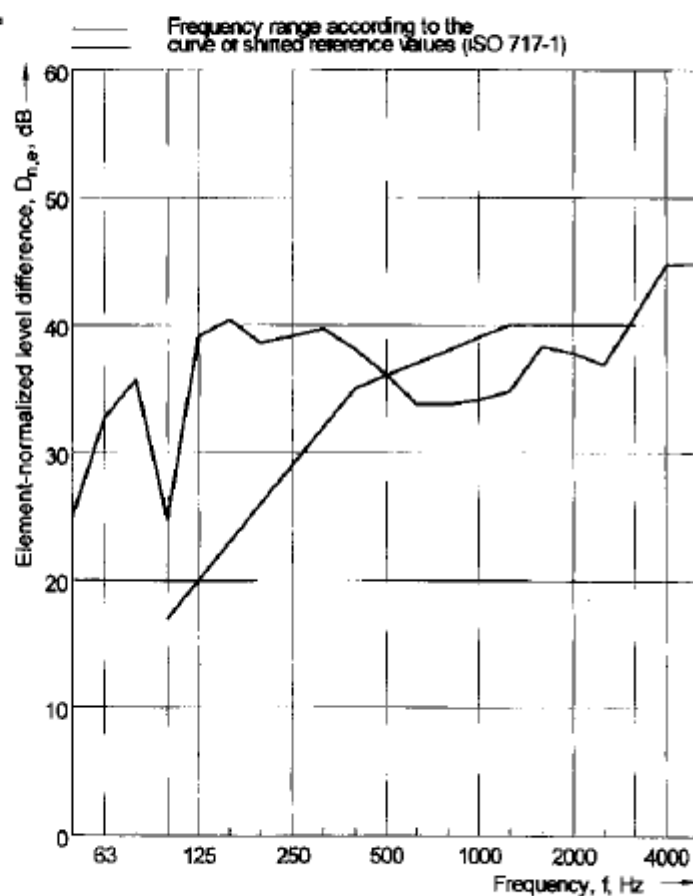
Element-normalized level difference according to ISO 10140-2

Laboratory measurements of airborne sound insulation of building elements

Client: Munster Joinery Date of test: 4th September 2017
 Manufacturer: Munster Joinery
 Test room identification:
 Test specimen mounted by: Technology Centre
 Product identification: Acoustic vents
 Description of the specimen: M335 A/17, open
 Sample No. A6694-7
 WP_20170604_15_29_31_Pro

Barometric pressure: 99.9 kPa
 Size of test opening: 0.04 m²
 Mass per unit area: kg/m²
 Temperature: 20.0 °C
 Air humidity: 74 %
 Source room volume: 85 m³
 Receiving room volume: 57.0 m³

Frequency f [Hz]	D _{ne} 1/3 octave [dB]
50	25.0
63	32.7
80	35.7
100	24.8
125	39.1
160	40.4
200	38.6
250	39.1
315	39.7
400	38.1
500	38.1
630	33.8
800	33.8
1,000	34.1
1,250	34.8
1,600	38.3
2,000	37.8
2,500	38.9
3,150	40.7
4,000	44.7
5,000	44.8



Rating according to ISO 717-1

$D_{n,e,w}(C, C_f) = 36 (0, -1) \text{ dB}$

Evaluation based on laboratory measurement results obtained in one-third-octave bands by an engineering method.

$C_{50-3150} = 0 \text{ dB}$

$C_{+50-3150} = -1 \text{ dB}$

$C_{50-5000} = 1 \text{ dB}$

$C_{+50-5000} = -1 \text{ dB}$

$C_{100-5000} = 1 \text{ dB}$

$C_{+100-5000} = -1 \text{ dB}$

ACOUSTIC TRICKLE VENT – CLOSED

Element-normalized level difference according to ISO 10140-2

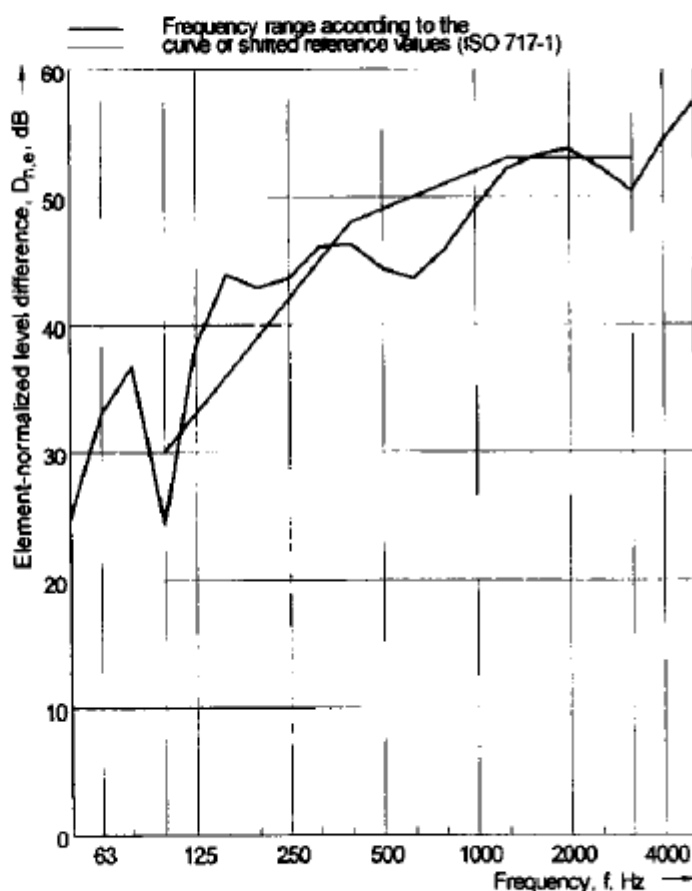
Laboratory measurements of airborne sound insulation of building elements

Client: Munster Joinery
 Manufacturer: Munster Joinery
 Test room identification:
 Test specimen mounted by: Technology Centre
 Product identification: Acoustic vents
 Description of the specimen: M335 AV17, closed
 Sample No. A6594-6

Date of test: 4th September 2017

Barometric pressure: 99.9 kPa
 Size of test opening: 0.04 m²
 Mass per unit area: kg/m²
 Temperature: 20.0 °C
 Air humidity: 74 %
 Source room volume: 65 m³
 Receiving room volume: 57.0 m³

Frequency f [Hz]	$D_{n,e}$ 1/3 octave [dB]
50	24.9
63	33.0
80	36.7
100	24.4
125	38.3
160	43.9
200	42.9
250	43.6
315	46.1
400	46.3
500	44.4
630	43.8
800	45.9
1,000	49.2
1,250	52.2
1,600	53.3
2,000	53.6
2,500	52.3
3,150	50.5
4,000	54.4
5,000	57.4



Rating according to ISO 717-1

$D_{n,e,w}(C;C_T) = 49 (-2; -7)$ dB

Evaluation based on laboratory measurement results obtained in one-third octave bands by an engineering method.

$C_{50-3150} = -2$ dB

$C_{T,50-3150} = -7$ dB

$C_{50-5000} = -1$ dB

$C_{T,50-5000} = -8$ dB

$C_{100-5000} = -1$ dB

$C_{T,100-5000} = -7$ dB