Emtec Products Ltd, Unit L Turnpike Way,
High Wycombe, Bucks, HP12 3TF

Telephone: 020 8848 3031 Fax: 020 8573 3605
Web: www.emtecproducts.co.uk Email: sales@emtecproducts.co.uk

RESULTS OF A 24-HOUR NOISE LEVEL SURVEY CARRIED OUT AT THE MELIÁ WHITE HOUSE HOTEL, ALBANY STREET, LONDON NW1 AND A REPORT ON THE NOISE CONTROL MEASURES REQUIRED TO MINIMISE THE NOISE IMPACT OF THE PROPOSED NEW AIR HANDLING PLANT ON THE HOTEL BEDROOMS AND NEAREST NEIGHBOURS

Test Engineer : P G H Roberts

Report Author : M G Roberts

Authorised for
Release by : I J Marchant

Client:	Melia White Hotel/Mike Harvey Associates Ltd
Project:	Meliá White House Hotel, London NW1
Emtec Ref:	QF9616/PF6350/RP1
Issue Date:	26th November 2018

RESULTS OF A 24-HOUR NOISE LEVEL SURVEY CARRIED OUT AT THE MELIÁ WHITE HOUSE HOTEL, ALBANY STREET, LONDON NW1 AND A REPORT ON THE NOISE CONTROL MEASURES REQUIRED TO MINIMISE THE NOISE IMPACT OF THE PROPOSED NEW AIR HANDLING PLANT ON THE HOTEL BEDROOMS AND NEAREST NEIGHBOURS

1.0. INTRODUCTION

This report details the results of a 24-hour noise survey carried out on the plant room roof of the Meliá White House Hotel located off Albany Street, London NW1.

The objectives of this survey were as follows:

- To assess the proposal to install two new Air Handling Units and two Condensers in a ground floor plant-room. This plant will replace existing Air Handling Plant.
- To establish the existing background noise level outside the plantroom and which affects the Hotel bedrooms and the nearest neighbouring noise sensitive properties.
- To recommend noise limits and any necessary measures to ensure that the operation of the new plant does not disturb the occupants of the Hotel and the nearest noise sensitive properties.

This report has been divided into the following sections for ease of analysis:

2.0. SITE DESCRIPTION

The Meliá White House Hotel is a large, 9 storey building located between Albany Street and Osnaburgh Street just north of the Marylebone Road and close to Graet Portland Street Underground Station. The property occupies a plot surrounded by roads on all sides.

On the west side of the building fronting Albany Street there is a single storey plant room with a flat roof. The plant room is enclosed on two sides by the west facing facades of the main Hotel building. These facades have windows from the first floor to the ninth floor which serve the bedrooms of the hotel. These facades can be seen on the attached Photos A, B and E at the back of this report.

Adjacent to the plant room at ground floor level, there is a covered external seating area and terrace which is part of the hotel. This area is shown on the attached Photos A, B and C at the back of this report.

On the opposite side of Albany Street, facing the plant room, are residential properties which can be seen on the Photo D at the back of this report.

3.0. TEST INSTRUMENTATION

All measurement equipment used during the survey complied with the requirements of BS4142:2014 "Method for Rating Industrial Noise Affecting Mixed Residential and Industrial Areas". Details of the equipment are as follows:

Integrating Sound Level Meter:	Rion type NL-52 class 1 Sound Level Meter fitted with a Rion type UC-59 ½ inch condenser microphone. Serial No. 01121378
Statistical Analysis Modules:	Built in module capable of computing the percentile levels L1, L10, L50, L90 and L99 and also the Leq level.
Acoustic Calibrator:	Bruel & Kjaer type 4231 electronic calibrator. Serial No.: 1934160

Calibration was performed before and after the surveys and found to be, in all cases, +/- 0.1 dB from the reference source.

3.1. Existing Noise Climate

Road traffic travelling on Albany Street and on the other surrounding roads could be heard during the manned periods at the start and the end of the survey, so the noise levels measured will include contributions from road vehicles.

Commercial jet aircraft were observed at medium and high altitude during the manned periods at the start and the end of the survey, so it is possible that the noise levels measured could include contributions from medium altitude jet aircraft.

There are no overland railways nearby, so the noise levels measured will not include contributions from rail noise.

4.0. TEST PROCEDURE

The survey was conducted during a continuous 24-hour period from 14:58pm on Monday the 12th of November 2018 to 14:58pm on Tuesday the 13th of November 2018.

Data was continuously acquired throughout the measurement period with the individual averaging time for statistical noise data set to 15 minutes. The following 'A' weighted statistical measurements were recorded concurrently: -

LA_1 - The Sound Pressure Level exceeded for 1% of the measurement period.

LA_{10} - The Sound Pressure Level exceeded for 10% of the measurement period.

LA_{50} - The Sound Pressure Level exceeded for 50% of the measurement period.

LA_{90} - The Sound Pressure Level exceeded for 90% of the measurement period. LA90 is considered to represent the "background noise level" during the measurement period and is used for the assessment of noise to determine the likelihood of complaints (See BS 4142:2014).

LA_{99} - The Sound Pressure Level exceeded for 99% of the measurement period.

LA_{eq} - The continuous steady state Sound Pressure Level that has the same acoustic energy as the real fluctuating level.

4.1. Measurement Positions

Noise levels were measured at a location on the roof of the single storey plant room adjacent to the ground floor open terrace area. The microphone location can be seen on the attached Photos A and B at the rear of this report.

The microphone was mounted on a tripod approximately 1.2m above the roof of the plant room.

The rest of the measurement equipment was located in a weatherproof enclosure with a low impedance cable running from the microphone to the instrumentation.

4.2. Weather Conditions

The weather conditions prevailing during the measurement period were generally in line with those recommended in BS 4142:2014: -

Weather daytime: -	Bright and Clear	Weather night time: -	Clear
Wind daytime: -	Calm	Wind night time: -	Calm

The microphones were protected throughout the tests by acoustically transparent wind balloons.

5.0. RESULTS AND EVALUATION OF NOISE CRITERIA

The raw test data, gathered during the noise survey, is given in Appendix 'A 'of this report.

The 'A' Weighted Leq levels measured over each 15 minute interval throughout the 24-hour period (denoted by LA_{eq}, (15 mins)) are displayed as a bar graph on the attached Sketch No QF/9616/T1 at the back of this report.

The 'A' Weighted percentile levels measured over each 15 minute interval denoted by LA_{10} (15 mins), LA_{50} (15 mins) and LA_{90} (15 mins) are displayed as line graphs on the attached Sketch No QF/9616/T2 at the back of this report.

5.1. Summary of Results

The table QF/9616/D1 below summarises the noise levels taken over the 24-hour period in terms of the maximum and minimum Sound Pressure Levels recorded.

Table QF/9616/D1 – Summary of Maximum and Minimum Noise Levels

	LA_{eq}	**LA_1**	**LA_{10}**	**LA_{50}**	**LA_{90}**	**LA_{99}**
Minimum	57.1dBA	66.6dBA	61.5dBA	48.4dBA	45.1dBA	44.1dBA
Maximum	69.1dBA	82.1dBA	68.9dBA	64.9dBA	61.3dBA	58.0dBA

The following table QF/9616/D2 states the minimum LA_{90} noise levels recorded in the two positions in the time periods of 7.00am to 23.00pm (Daytime) and between 23.00pm and 7.00am (Night time)

Table QF/9616/D2 – Minimum LA_{90} Noise Levels – Daytime and Night time

Time of Day	**LA_{90}**
Minimum Daytime (7am to 11pm)	52.4dBA
Minimum Night Time (11pm to 7am)	45.1dBA

5.2. Summary of the Local Authority's planning requirements regarding noise for noise sensitive properties

The local planning authority is the London Borough of Camden.

The Camden Local Plan sets out the Council's planning policies and replaces the Core Strategy and Development Policy planning documents (adopted in 2010). It ensures that Camden continues to have robust, effective and up-to-date planning policies that respond to changing circumstances and the borough's unique characteristics and contribute to delivering the Camden Plan and other local priorities.

The Local Plan will cover the period from 2016-2031. Policy A4 of The Local Plan is entitled Noise and Vibration and states:

The Council will seek to ensure that noise and vibration is controlled and managed. Development should have regard to Camden's Noise and Vibration thresholds (Appendix 3). We will not grant planning permission for a) a development likely to generate unacceptable noise and vibration impacts or b) a development sensitive to noise in locations which experience high levels of noise, unless appropriate attenuation measures can be provided and will not harm the continued operation of existing uses. We will only grant permission for noise generating development, including any plant and machinery, if it can be operated without causing harm to amenity. We will also seek to minimise the impact on local amenity from deliveries and from the demolition and construction phases of development.

The parts of Appendix 3 that we have identified as relevant to this application are as follows:

Appendix 3: Noise thresholds

The significance of noise impact varies dependent on the different noise sources, receptors and times of operation presented for consideration within a planning application. Therefore, Camden's thresholds for noise and vibration evaluate noise impact in terms of various 'effect levels' described in the National Planning Policy Framework and Planning Practice Guidance:

- *NOEL – No Observed Effect Level*
- *LOAEL – Lowest Observed Adverse Effect Level*
- *SOAEL – Significant Observed Adverse Effect Level*

Three basic design criteria have been set for proposed developments, these being aimed at guiding applicants as to the degree of detailed consideration needed to be given to noise in any planning application. The design criteria outlined below are defined in the corresponding noise tables. The values will vary depending on the context, type of noise and sensitivity of the receptor:

- *Green – where noise is considered to be at an acceptable level.*
- *Amber – where noise is observed to have an adverse effect level, but which may be considered acceptable when assessed in the context of other merits of the development.*
- *Red – where noise is observed to have a significant adverse effect.*

Table C: Noise levels applicable to proposed industrial and commercial developments (including plant and machinery)

Existing Noise sensitive receptor	*Assessment Location*	*Design Period*	*LOAEL (Green)*	*LOAEL to SOAEL (Amber)*	*SOAL (Red)*
*Dwellings***	*Garden used for main amenity (free field) and Outside living or dining or bedroom window (façade)*	*Day*	*'Rating level' 10dB* below background*	*'Rating level' between 9dB below and 5dB above background*	*'Rating level' greater than 5dB above background*
*Dwellings***	*Outside bedroom window (façade)*	*Night*	*'Rating level' 10dB* below background and no events exceeding 57dBL_{Amax}*	*'Rating level' between 9dB below and 5dB above background or noise events between 57dB and 88dB L_{Amax}*	*'Rating level' greater than 5dB above background and/or events exceeding 88dBL_{Amax}*

**10dB should be increased to 15dB if the noise contains audible tonal elements (day and night). However, if it can be demonstrated that there is no significant difference in the character of the residual background noise and the specific noise from the proposed development then this reduction may not be required. In addition, a frequency analysis (to include, the use of Noise Rating (NR) curves or other criteria curves) for the assessment of tonal or low frequency noise may be required.*

***levels given are for dwellings, however, levels are use specific and different levels will apply dependent on the use of the premises.*

The periods in Table C correspond to 0700 hours to 2300 hours for the day and 2300 hours to 0700 hours for the night. The Council will take into account the likely times of occupation for types of development and will be amended according to the times of operation of the establishment under consideration.

There are certain smaller pieces of equipment on commercial premises, such as extract ventilation, air conditioning units and condensers, where achievement of the rating levels (ordinarily determined by a BS:4142 assessment) may not afford the necessary protection. In these cases, the Council will generally also require an NR curve specification of NR35 or below, dependant on the room (based upon measured or predicted Leq (5mins) noise levels in octave bands, 1 metre from the façade of affected premises, where the noise sensitive premise is located in a quiet background area.

5.3. Determination of noise sensitive property design criteria

We believe that the new plant, which will consist of two new Air Handling Units and a number of condensing units will not emit noise that will have a distinguishable discrete continuous note, or emit noise that has distinct impulses. The fans within the Air Handl;ing Units and the condensers will be inverter controlled and will slowly ramp up to their operating condition. To comply with a green rating from the table above the new units should have a combined Sound Pressure Level 10dB below the lowest LA_{90} background noise level at 1 metre from the nearest noise sensitive window.

The lowest background noise level measured during the survey was 45.1dBA and this reading occurred during the time period starting at 03.43am. The daytime minimum LA_{90} noise level was 52.4dBA. The proposed plant will run during the daytime and the night time periods and applying a rating level that is 10dB below the lowest daytime and night time LA_{90} noise levels would give the limiting rating LAeq levels as listed in table QF/9616/D3 below:

Table QF/9616/D3 – Proposed Design Rating Levels

Existing Noise sensitive receptor	*Design Period*	*Lowest measured background level*	***Proposed rating level***	*Proposed Local Authority criteria*
Dwellings	*Day*	*52.4dBA*	***42.4dBA***	*Green*
Dwellings	*Night*	*45.1dBA*	***35.1dBA***	*Green*

5.4. Summary of external noise criteria

Based upon the results of the survey and the above design criteria we summarise the actual design rating levels to be adopted for this project in table QF/9616/D4: -

Table QF/9616/D4 – recommended design rating levels $L_{Ar,T}$

Type of premises	**$L_{Ar,T}$ (7am – 11pm)**	**$L_{Ar,T}$ (11pm – 7am)**
Noise sensitive	42.4dBA	35.1dBA

6.0. DISCUSSION OF RESULTS

It is proposed to replace the existing Air Handling Plant by two new Air Handling Units which will be located within the existing ground floor plantroom adjacent to the ground floor open terrace area which looks onto Albany Road and is covered by the large umbrella structures shown in the attached Photos A, B, C and E.

The two Air Handling Units will be as manufactured by Air Handlers (Northern) Ltd and will have the Sound Power Levels for the fresh air and exhaust as listed in table QF/9616/D5.

The condensers will be two number Mitsubishi PURY-P500YLM-A1 units which will be contained within the small plant area adjacent to the plant room.

The following table QF/9616/D5 shows the noise level that can be expected, during the daytime, when the condensing units are operating on full volume, at the nearest hotel window. The table QF/9616/D6 shows the noise level that can be expected during the night time period with the condensers operating on their low noise setting.

Table QF/9616/D5 – Daytime Operation of Condensers (7am to 11pm)

Unit/Attenuation	Sound Pressure Level (dB ref 2 x 10^{-5} N/m^2) 63	125	250	500	1k	2k	4k	8k	dBA
Mitsubishi PURY-P500YLM-A1 Condenser (1m free field)	72.5	69.5	66	62	56	51.5	46.5	39.5	63.5
2 off units	+3	+3	+3	+3	+3	+3	+3	+3	
Reverberation of Plantroom (with Emtec WCAC 30 Acoustic Wall Lining)	+5	+3	+1	0	0	0	0	0	
Distance correction to 3 metres (10 log A_2/A_1)	-4	-4	-4	-4	-4	-4	-4	-4	
Emtec RAAC/25/1200LF silencer on outlet/ LAAC30/2105 on inlet	-10	-17	-29	-40	-49	-47	-45	-36	
Resultant Unattenuated SPL at 1 metre from residential window	66.5	54.5	37	21	6	3.5	0.5	2.5	42.7

The above table shows that for daytime operation of the condensers at their maximum duty the noise level created at 1 metre from the nearest Hotel bedroom window will exceed the limiting LAeq noise level of 42.4dBA by 0.3dB.

This will give a noise level in this location which is 0.1dB above the lowest LA90 background noise level recorded between 7am and 11pm. Whilst this is an SOAEL level it is considered to be such a small excess over the LOAEL level as to be insignificant.

Table QF/9616/D6 – Night Time Operation of Condensers (11pm to 7am)

Unit/Attenuation	Sound Pressure Level (dB ref 2 x 10^{-5} N/m^2) 63	125	250	500	1k	2k	4k	8k	dBA
Mitsubishi PURY-P500YLM-A1 Condenser (1m free field) on low noise operation	64.5	61	52.5	50	46.5	43.5	39	37.5	53
2 off units	+3	+3	+3	+3	+3	+3	+3	+3	
Reverberation of Plantroom (with Emtec WCAC30 Acoustic Wall Lining)	+5	+3	+1	0	0	0	0	0	
Distance correction to 3 metres (10 log A_2/A_1)	-4	-4	-4	-4	-4	-4	-4	-4	
Emtec RAAC/25/1200LF silencer on outlet/ LAAC30/2105 on inlet	-10	-17	-29	-40	-49	-47	-45	-36	
Resultant Unattenuated SPL at 1 metre from residential window	58.5	46	23.5	9	-	-	-	0.5	34.4

Based upon the above calculations the five condenser units can operate during the night time period (11pm to 7am) and will not exceed the established limiting LAeq noise level of 35.1dBA at 1 metre from the Hotel windows.

In order to reduce the noise level of the condensers to below the night time limiting LAeq noise limit it will be necessary to install the acoustic treatment outlined on the attached sketch No QF/9616/GA1 and operate the two condensers during the night on their low noise mode.

The condensers should be isolated from the structure of the building by placing them onto six off Emtec/VMC type RD2 Black anti-vibration mountings having a minimum static deflection of 6mm.

With regard to the attenuation of the two Air Handling Units that are to be installed within the existing plantroom it will be necessary to fit silencers onto the fresh air and exhaust duct connections as listed in table QF/9616/D7.

Table QF/9616/D7 – 24 hour Operation of The two Air Handling Unit

Unit/Attenuation	Sound Pressure Level (dB ref 2 x 10^{-5} N/m^2) 63	125	250	500	1k	2k	4k	8k	dBA
Fresh Air Sound Power Level	72	70	80	78	75	76	74	73	
SWL to SPL at inlet	-8	-8	-8	-8	-8	-8	-8	-8	
Ducting Attenuation (3m)	-2	-2	-1	-1	-1	-1	-1	-1	
End Reflection of inlet	-6	-2	0	0	0	0	0	0	
Distance correction to Hotel windows at 3 m and 6m (15 log 2)	-5/ -12	-5/ -12	-5/ -12	-5/ -12	-5/ -12	-5 -12	-5/ -12	-5 -12	
Emtec RAAC/20/900LFP silencer	-11	-19	-27	-38	-48	-50	-50	-38	
Resultant SPL at 1 metre from Hotel window (a)	41	35	40	27	14	13	11	22	32.5
Exhaust Air Sound Power Level	75	75	85	88	89	84	82	81	
SWL to SPL at outlet	-8	-8	-8	-8	-8	-8	-8	-8	
Ducting Attenuation (3m)	-2	-2	-1	-1	-1	-1	-1	-1	
End Reflection of outlet	-6	-2	0	0	0	0	0	0	
Distance correction to Hotel windows at 10 metres (15 log 9)	-14	-14	-14	-14	-14	-14	-14	-14	
Barrier Effect of Plantroom	-4	-6	-7	-8	-9	-10	-12	-12	
Emtec RAAC/25/900 Silencer	-7	-11	-18	-32	-40	-40	-36	-33	
Resultant SPL at 1 metre from residential window (b)	34	32	37	25	17	11	11	13	30
Combined SPL at 1 metre from residential window (a + b)	42	37	42	29	19	15	14	23	34.5

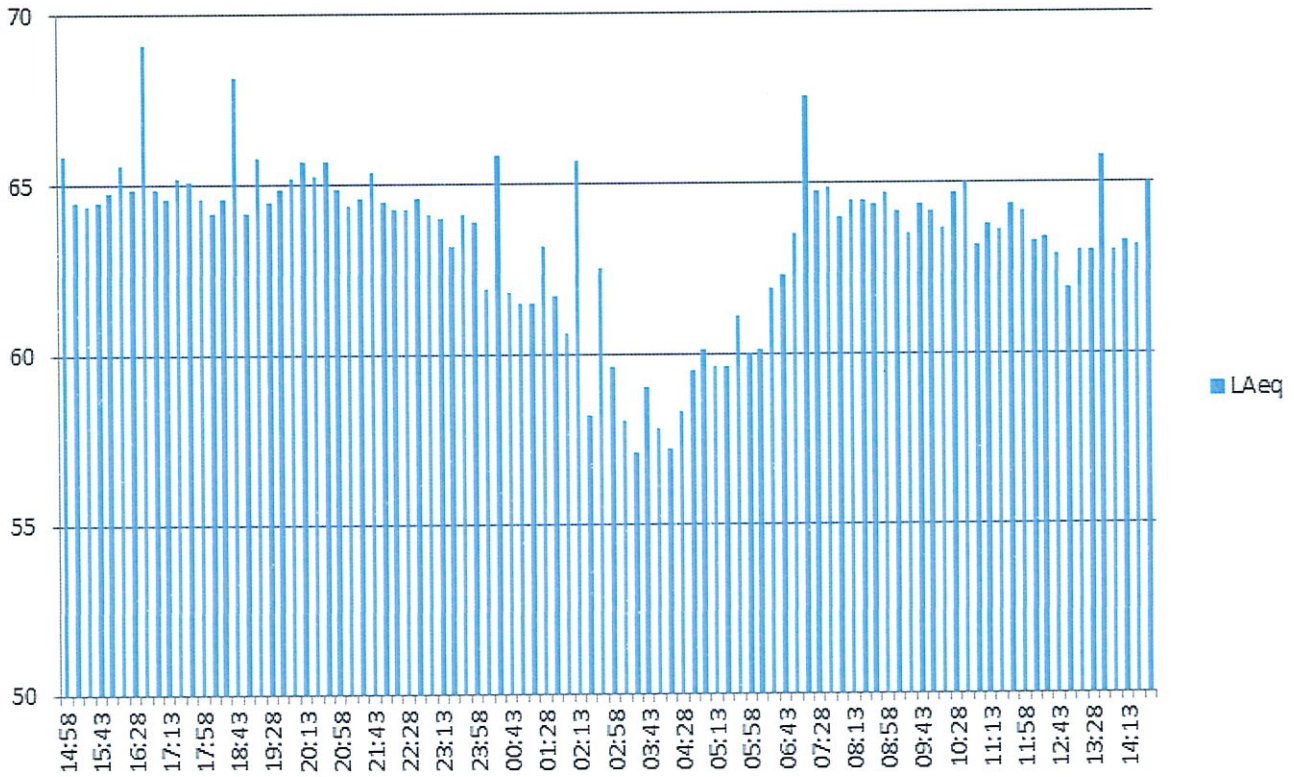
The Emtec silencers outlined in the table above should be fitted onto the fresh air and exhaust ductwork so as to reduce the noise level, at 1 metre from the nearest Hotel bedroom window, to below the limiting LAeq noise level of 35.1dBA and thereby allow 24 hour operation of the plant.

The new double leaf external door set into the ground floor plantroom should be an Emtec DAC40 acoustic door having a minimum noise reduction capability of Rw:40dB in order to reduce plantroom noise breakout.

If the above acoustic door is fitted into the plantroom structure, the above silencers are installed onto the Air Handling Unit and the recommendations outlined above are followed with regard to the condensers then the new plant should meet the planning requirements of the local authority and should not evoke any justifiable complaints, from users of the first floor hotel bedrooms or from the nearest residential neighbours on the other side of Albany Street, under the guidelines of BS4142:2014.

We are therefore of the opinion that the local authority should not refuse planning permission for the proposed plant, under its current planning guidelines, on the grounds of noise.

EMTEC PRODUCTS LTD
26th November 2018



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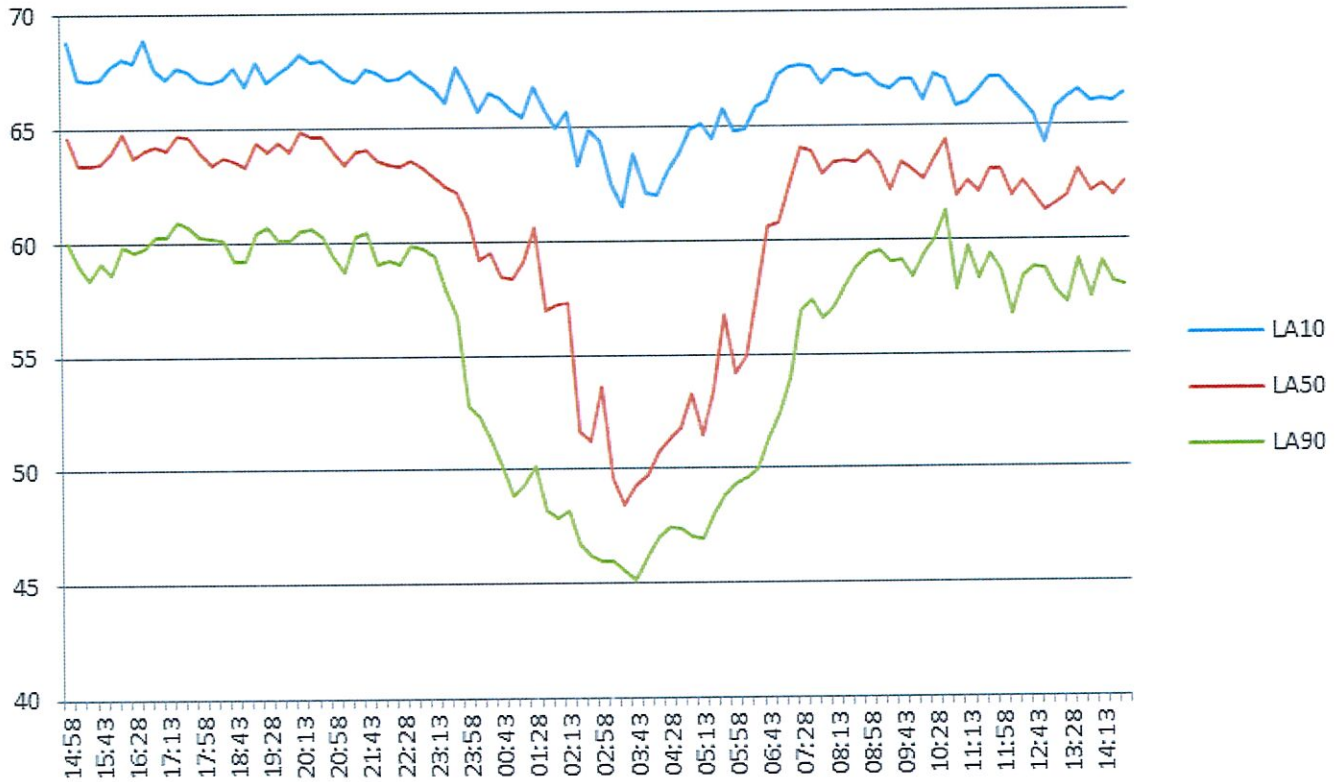
CLIENT: Meliá White House/ Mike Harvey Associates	*PF No: 6350*				*APPROVED BY:* *MGR*	*REVISION*							
PROJECT: Meliá White House, London NW1	*Q*	*A*	*M*	*I*	*DESIGN AUTH:* *MGR*	*SKETCH No. QF/9616/T1*							

EMTEC
Unit L, Turnpike Way, High Wycombe
Bucks HP12 3TF
Tel: 020 8848 3031 Fax: 020 8573 3605



TITLE: *LA10; LA50 & LA90 Levels*	*ISSUE DATE:* 15/11/2018				*DRAWN BY:* *MGR*	*A*	*B*	*C*	*D*	*E*	*F*	*G*	*H*
CLIENT: Meliá White House/ Mike Harvey Associates	*PF No: 6350*				*APPROVED BY:* *MGR*	*REVISION*							
PROJECT: Meliá White House, London NW1	*Q*	*A*	*M*	*I*	*DESIGN AUTH:* *MGR*	*SKETCH No. QF/9616/T2*							

EMTEC
Unit L, Turnpike Way, High Wycombe
Bucks HP12 3TF
Tel: 020 8848 3031 Fax: 020 8573 3605

APPENDIX 'A'

Raw Data – Noise Survey

12th to 13th November 2018

RAW NOISE DATA - Meliá White House, London NW1

Ref: QF9616/PF6350/RP1
Client: Meliá White House/ Mike Harvey Associates
Date: 12th to 13th November 2018

Address	Start Time	LAeq	LE	Lmax	Lmin	LA1	LA10	LA50	LA90	LA99
1	14:58	65.9	95.5	78.9	55.7	72.7	68.8	64.6	60	57
2	15:13	64.5	94.1	82.6	54.8	71.1	67.2	63.4	59	56
3	15:28	64.4	94	76.7	53.1	70.8	67.1	63.4	58.4	55.1
4	15:43	64.5	94.1	76	52.3	70.7	67.2	63.5	59.1	53.6
5	15:58	64.8	94.4	73.6	54.3	70.4	67.8	64	58.6	56
6	16:13	65.6	95.2	79.2	51.4	71.4	68.1	64.8	59.9	52.7
7	16:28	64.9	94.5	78.3	54.7	71.1	67.9	63.7	59.6	56.8
8	16:43	69.1	98.7	91.2	55.2	82.1	68.9	64.1	59.8	56.6
9	16:58	64.9	94.5	76.6	53.7	70.2	67.6	64.2	60.3	56.8
10	17:13	64.6	94.2	71.4	54	69.4	67.2	64.1	60.3	56.5
11	17:28	65.2	94.8	74.1	55.3	70	67.7	64.7	60.9	57
12	17:43	65.1	94.7	76.4	55	70.3	67.5	64.6	60.7	57.1
13	17:58	64.6	94.2	75.7	55.4	69.5	67.1	64	60.3	57.2
14	18:13	64.2	93.8	73.3	54	69.8	67	63.4	60.2	57.1
15	18:28	64.6	94.2	78.3	55.3	70.3	67.2	63.7	60.1	57.1
16	18:43	68.2	97.8	88.8	54.4	80.7	67.7	63.6	59.2	56.8
17	18:58	64.2	93.8	76.1	55.2	70.4	66.9	63.3	59.2	56.8
18	19:13	65.8	95.4	83.5	54.7	71.2	67.9	64.4	60.4	57.6
19	19:28	64.5	94.1	72.4	55.5	69.3	67	64	60.7	57.9
20	19:43	64.9	94.5	76.8	53.8	70.2	67.4	64.4	60.1	56.3
21	19:58	65.2	94.8	79.1	53.7	71.9	67.8	64	60.1	57.7
22	20:13	65.7	95.3	77.2	55.2	72.6	68.3	64.9	60.5	58
23	20:28	65.3	94.9	75.9	55.8	70.7	67.9	64.6	60.6	57.9
24	20:43	65.7	95.3	83.7	55.9	71.8	68	64.6	60.3	57.8
25	20:58	64.9	94.5	75.1	54.6	70.7	67.6	64	59.4	56.5
26	21:13	64.4	94	75.9	52.3	71.1	67.2	63.4	58.7	54.5
27	21:28	64.6	94.2	77.5	53.9	69.9	67	64	60.3	58
28	21:43	65.4	95	88.8	55.3	71.1	67.6	64.1	60.4	57.6
29	21:58	64.5	94.1	76.1	52.7	69.6	67.4	63.6	59	55.6
30	22:13	64.3	93.9	74.2	53.8	70	67.1	63.4	59.2	56.1
31	22:28	64.3	93.9	75.7	53.7	70.3	67.2	63.3	59	56.2
32	22:43	64.6	94.2	75.7	55	70.3	67.5	63.6	59.9	57.8
33	22:58	64.1	93.7	74.9	53.2	69.5	67	63.2	59.7	56.9
34	23:13	64	93.6	80.5	53.8	69.5	66.7	62.8	59.4	56.8
35	23:28	63.2	92.8	72.1	52.4	68.5	66.1	62.4	57.9	55.3
36	23:43	64.1	93.7	74.6	49.9	71.4	67.7	62.2	56.7	52.5
37	23:58	63.9	93.5	83.6	48.6	71.9	66.8	61.1	52.8	49.9
38	00:13	61.9	91.5	74.3	47.5	69.5	65.7	59.2	52.3	49
39	00:28	65.9	95.5	91.6	47.2	74.5	66.5	59.5	51.3	48
40	00:43	61.8	91.4	73.1	46.9	69.5	66.3	58.5	50.1	47.9
41	00:58	61.5	91.1	70.4	46	68.8	65.8	58.4	48.8	46.7
42	01:13	61.5	91.1	72.6	45.7	69.8	65.5	59.1	49.3	46.5
43	01:28	63.2	92.8	82.2	46.8	70.6	66.8	60.6	50.1	47.7
44	01:43	61.7	91.3	79	44.8	70.5	65.8	57	48.2	45.7
45	01:58	60.6	90.2	70	45.1	68	65	57.2	47.8	46
46	02:13	65.7	95.3	89.5	45.6	73.9	65.7	57.3	48.2	46.2
47	02:28	58.2	87.8	71.1	44.4	67.7	63.3	51.6	46.7	45.1
48	02:43	62.5	92.1	84.2	44.1	73.9	64.9	51.2	46.2	44.9
49	02:58	59.6	89.2	71.9	44.2	68.6	64.4	53.6	45.9	44.8
50	03:13	58	87.6	73.1	43.5	68.8	62.5	49.6	45.9	44.8

51	03:28	57.1	86.7	74	43.8	68.3	61.5	48.4	45.5	44.6
52	03:43	59	88.6	75.2	43.4	69.8	63.8	49.2	45.1	44.1
53	03:58	57.8	87.4	74.9	43.9	67.9	62.1	49.7	46.2	45.2
54	04:13	57.2	86.8	68.1	45	66.6	62	50.7	47	45.9
55	04:28	58.3	87.9	71.7	45.7	67.4	63.1	51.3	47.4	46.5
56	04:43	59.5	89.1	76.3	45.2	69.5	63.8	51.8	47.3	46.1
57	04:58	60.1	89.7	74.5	45.3	69.3	64.9	53.3	47	46
58	05:13	59.6	89.2	72.1	45.2	69	65.1	51.5	46.9	45.8
59	05:28	59.6	89.2	72.2	46.2	68.9	64.5	53.4	48	46.9
60	05:43	61.1	90.7	71.6	46.6	69.6	65.8	56.7	48.8	47.5
61	05:58	60	89.6	71.5	47.3	68.9	64.8	54.2	49.3	48.1
62	06:13	60.1	89.7	71.4	47.4	68.3	64.9	54.9	49.6	48.2
63	06:28	61.9	91.5	80.2	47.5	70.7	65.9	57.7	50	48.5
64	06:43	62.3	91.9	70.9	48.6	69.2	66.1	60.6	51.3	49.7
65	06:58	63.5	93.1	77.1	48.6	71.1	67.3	60.8	52.4	49.5
66	07:13	67.6	97.2	90.3	50.6	75.7	67.6	62.4	53.9	51.6
67	07:28	64.8	94.4	76.1	51.6	71	67.7	64.1	56.9	52.7
68	07:43	64.9	94.5	78.6	52.7	71.1	67.6	63.9	57.4	54.3
69	07:58	64	93.6	74.5	52.3	71.3	66.9	62.9	56.6	53.6
70	08:13	64.5	94.1	73.6	53.2	71	67.4	63.4	57.1	54
71	08:28	64.5	94.1	78.1	53.2	70.9	67.4	63.5	58	54.3
72	08:43	64.4	94	76.1	54.3	70.8	67.2	63.4	58.8	55.8
73	08:58	64.7	94.3	74.9	52.7	70.9	67.3	63.9	59.4	53.6
74	09:13	64.2	93.8	74	54.6	70.7	66.8	63.3	59.5	55.7
75	09:28	63.5	93.1	77.1	54.9	69.1	66.6	62.2	59	57.1
76	09:43	64.4	94	75.5	52.2	71.2	67	63.4	59.1	54.5
77	09:58	64.2	93.8	78.4	52.9	70.7	67	63.1	58.4	54.6
78	10:13	63.7	93.3	77.9	54.2	69.4	66.1	62.7	59.4	56.3
79	10:28	64.7	94.3	77.2	54	71.7	67.3	63.6	60	55.3
80	10:43	65	94.6	80.3	55.9	70.2	67	64.4	61.3	57.3
81	10:58	63.2	92.8	81.1	53.8	70	65.9	61.9	57.8	55.1
82	11:13	63.8	93.4	80.3	56.1	70.8	66	62.6	59.7	57.4
83	11:28	63.6	93.2	77.2	54.3	70.2	66.5	62.1	58.3	55.9
84	11:43	64.4	94	75.9	56.5	71.9	67.1	63.1	59.4	57.6
85	11:58	64.2	93.8	75.7	52.8	71.1	67.1	63.1	58.6	54.6
86	12:13	63.3	92.9	76.7	52.3	69.7	66.5	61.9	56.7	53.7
87	12:28	63.4	93	75.6	51.8	70	66	62.6	58.4	54.6
88	12:43	62.9	92.5	72	54.4	68.7	65.5	61.9	58.8	55.8
89	12:58	61.9	91.5	71.9	55.9	67	64.2	61.3	58.7	57.3
90	13:13	63	92.6	77.6	53.1	69.9	65.8	61.6	57.7	54.4
91	13:28	63	92.6	73.6	53.8	69.4	66.2	61.9	57.2	54.9
92	13:43	65.8	95.4	85.2	54.1	76.9	66.5	63.1	59.1	56.3
93	13:58	63	92.6	73.1	53	69.2	66	62.1	57.5	54.4
94	14:13	63.3	92.9	71.3	53.3	69.1	66.1	62.4	59	55.8
95	14:28	63.2	92.8	77.2	51.8	69.3	66	61.9	58.1	53.2
96	14:43	65	94.6	82.4	54.2	74	66.4	62.5	58	55.8

APPENDIX 'B'

Photos and Sketch

Photo A – Ground floor plantroom with umbrella roofs of open terrace area and adjacent hotel bedroom windows

Microphone

Hotel bedroom windows

(1st to 9th floor)

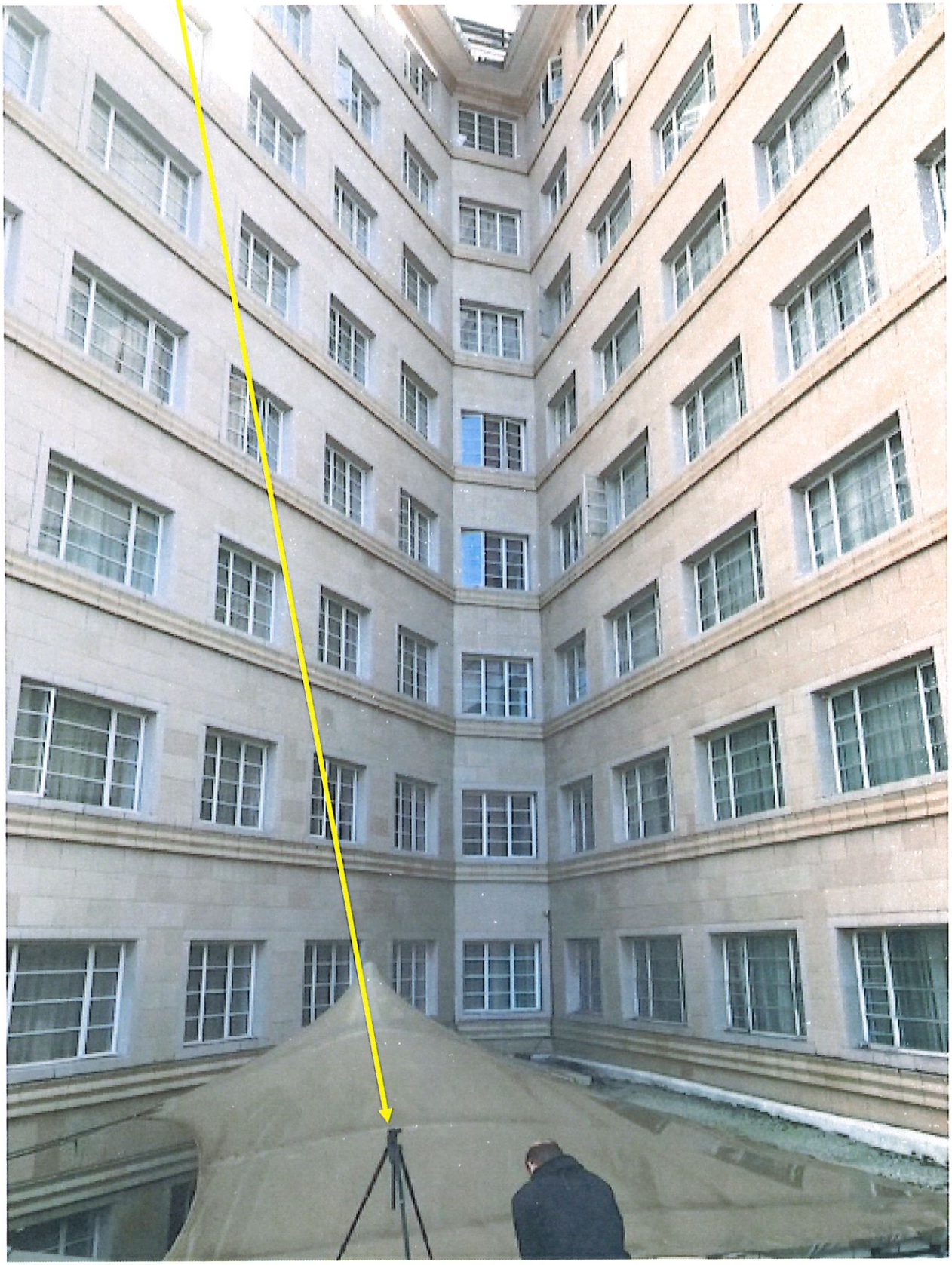


Photo B – View of hotel facades which surround and face the plant room roof

Nearest residential neighbours

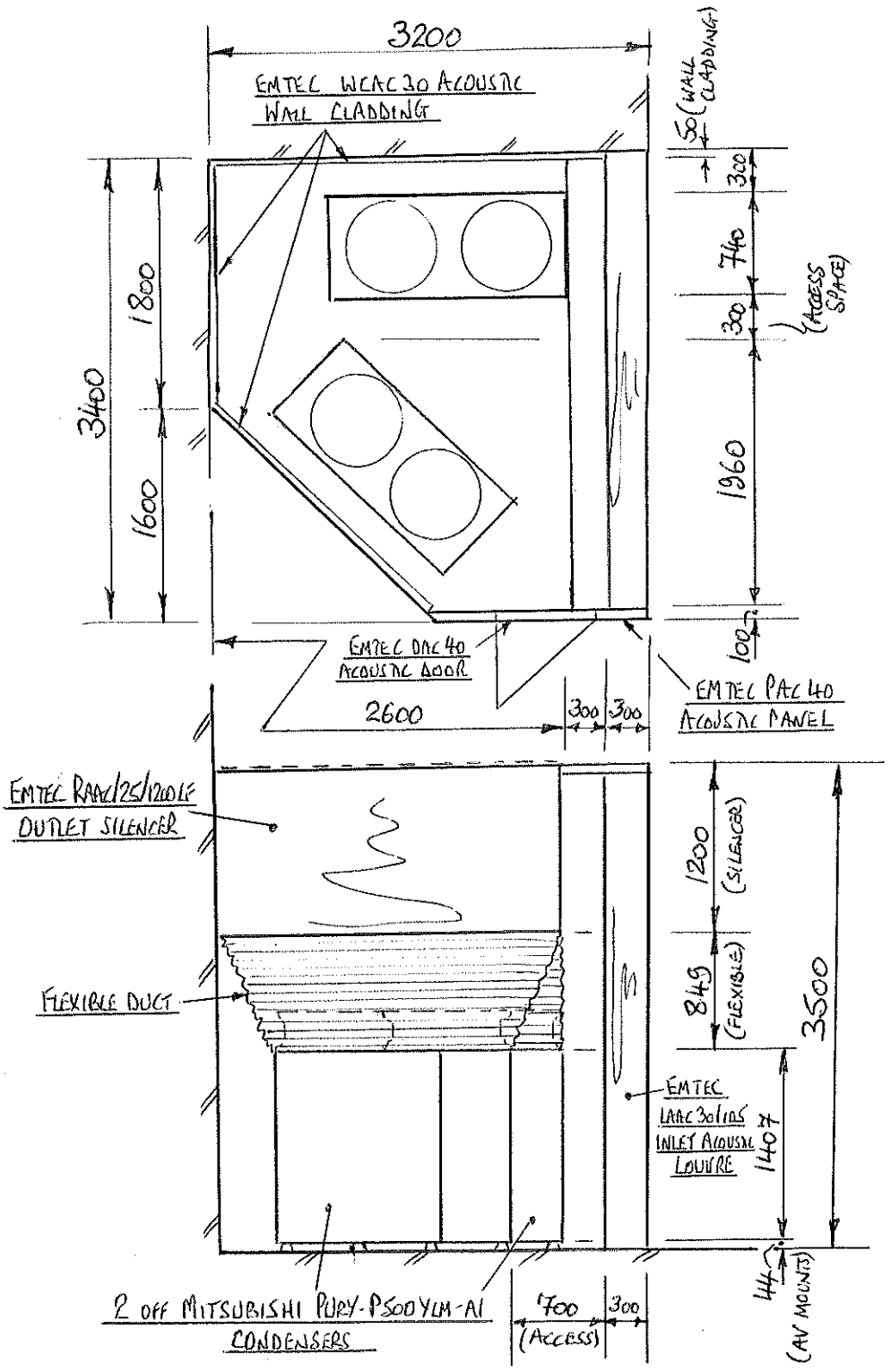
Covered seating/terrace area

Photo C – View across Albany Street overlooking the part covered seating/terrace area adjacent to the plant room

Photo D – View of Residential Properties on Albany Street facing towards the plant room/ hotel

Photo E – Façade of hotel building looking towards Albany Street with terrace umbrellas in the foreground

All dimensions in mm unless stated



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