
Supporting Statement

APPENDIX B

Acoustic Isolation and Sound Attenuation



years from the date of this permission.

Reason: In order to comply with the provisions of Section 91 of the Town and Country Planning Act 1990 (as amended).

- 2 All new external work shall be carried out in materials that resemble, as closely as possible, in colour and texture those of the existing building, unless otherwise specified in the approved application.

Reason: To safeguard the appearance of the premises and the character of the immediate area in accordance with the requirements of policies EN1, EN13 and EN31 of the London Borough of Camden Unitary Development Plan 2000 and policies S1/ S2 and B1 and B7 of the London Borough of Camden Replacement Unitary Development Plan 2006.

- 3 Noise levels at a point 1 metre external to sensitive facades shall be at least 5dB(A) less than the existing background measurement (LA90), expressed in dB(A) when all plant/equipment are in operation. Where it is anticipated that any plant/equipment will have a noise that has a distinguishable, discrete continuous note (whine, hiss, screech, hum) and/or if there are distinct impulses (bangs, clicks, clatters, thumps) special attention should be given to reducing the noise levels from that piece of plant/equipment at any sensitive façade to at least 10dB(A) below the LA90, expressed in dB(A).

Reason: To safeguard the amenities of the adjoining premises and the area generally in accordance with the requirements of policies EN1, EN5, and EN7 of the London Borough of Camden Unitary Development Plan 2000 and policies SD6, SD7B, SD8 and Appendix 1, of the London Borough of Camden Replacement Unitary Development Plan 2006.

- 4 Before the use commences, the extract ventilating system and the air-condition plant shall be provided with acoustic isolation and sound attenuation in accordance with the scheme approved by the Council. The acoustic isolation shall thereafter be maintained in effective order to the reasonable satisfaction of the Council.

Reason: To safeguard the amenities of the adjoining premises and the area generally in accordance with the requirements of policies EN1, EN5 and EN7 of the London Borough of Camden Unitary Development Plan 2000 and policies SD6, SD7B, SD8 and Appendix 1 of the London Borough of Camden Replacement Unitary Development Plan 2006.

- 5 Notwithstanding the information submitted for the kitchen extraction ducting hereby approved details of the secondary filtration system incorporating "Halton Vent Master Pollustop Model PS00 shall be submitted to and approved in writing by the local planning authority before the kitchen use is commenced.

Reason: To safeguard the amenities of the adjacent residential premises and the area generally in accordance with the requirements of policies RE2 and EN1 of the London Borough of Camden Unitary Development Plan 2000 and policies S1 and S2 of the Revised Deposit Draft as amended by the Proposed Modifications



BC\P20000562\BC

15 June 2006

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Dear Mr Miller,

ERECTION OF PLANT ENCLOSURE AND HANDRAIL, EXTRACT DUCT AND 8 NO SATELLITE ANTENNAE TO ROOF OF 34-36 JAMESTOWN ROAD, CAMDEN

I refer to our telephone conversation on Friday 9th June regarding the above planning application (ref: 2006/1427/P) and the request for additional information in relation to odour control, noise attenuation and output. The information requested was as follows:

1. Details of a proposed secondary odour control device in order to control potential odour output from the extract duct in relation to the nearby residential area.
2. Details of any proposed isolation mountings to the roof which may attenuate noise from the proposed plant equipment.
3. Details of the potential noise output from the extract duct.

In relation to the first point, all major plant items and main pipe runs in ducts and risers are to be supported to avoid the transmission of noise/vibration and loading to the building structure. All condensers, air handling units and other equipment with moving parts shall be mounted on anti-vibration mountings and/or inertia bases to minimise the transmission of vibration to the structure. Particular attention shall be given to equipment on roof level. Equipment shall be provided for:

- Outdoor condensers in the form of anti-vibration mounts as type RD2 Red to the condenser bases
- Air handling units are to be supported by a steel channel framework on anti-vibration mats.

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Turning to the second point, no secondary odour control in relation to the extract duct is proposed as part of the scheme submitted as part of this planning application. The extract duct has been designed by specialist consultants to provide a solution of a high velocity vertical discharge. This will provide the optimum solution to minimise the potential odour emissions and enable simple and effective maintenance. We would however be happy to incorporate a secondary filtration system into the proposed scheme if this is deemed necessary on consultation with Environmental Health. The unit that would be provided in that event is a Halton Vent Master Pollustop Model PS00 and Appendix C contains details of the exact unit specification. The unit would be located between mezzanine and first floor level behind the proposed screen covering the extract duct, and would therefore not be visible from any external point.

Finally, we refer to the potential acoustic output of the proposed extract duct. Below is a table that details the sound power levels of the Kitchen Extract Fan.

| Equipment | Manufacturer/ Model | Sound Power Level (db ref 10 -12 watts) | | | | | | | |
|--|------------------------|---|-----|-----|-----|----|----|----|----|
| | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
| Kitchen Extract Fan (1.25m ³ /sec@350pa) | BIFCN040K2- A10/19 | 82 | 82 | 92 | 91 | 89 | 85 | 80 | 75 |

Acoustic equipment will be provided to attenuate noise from the extract duct in order to ensure that the noise output is below 33 dBA at 1 metre from the adjacent building penthouse and 37dBA at 1 metre from the residential properties within the development. Attached at Appendix A is a schedule of proposed silencers to be installed in order to control the noise transmission. An Emtec PAC 30 acoustic enclosure is also proposed which will contain and allow access to the duct and silencers. Appendix B contains a sketch to demonstrate where and how the equipment will be installed. In selecting the necessary silencers the Sound Power level data listed on the schedules has been used to calculate the total noise output. The installation of the proposed equipment is sufficient to ensure that the noise output is below 33 dBA.

I trust that this information now enables the Council to determine this planning application within the target period. If however you require any further assistance with this matter, please do not hesitate to contact me.

Yours sincerely,

Becky Cocker
Town Planner for BDP

APPENDIX A – Schedule of Proposed Silencers

SILENCER SCHEDULE

Client: Peter Dear & Associates

Project: The Iceworks, Jamestown Road

| Ref. | Location | Type | Dimensions (mm) | | | Vol (m ³ /s) | P.D (Pa) | Dynamic Insertion Loss (dB) | | | | | | | | No. Off | Price Each (£) | Total (£) |
|--|--|---------------------------------|-----------------|-----|------|----------------------------|-------------|-----------------------------|-----|-----|-----|----|----|----|----|---------|-------------------|--------------|
| | | | W | H | L | | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | | | |
| A) CAM UNIT ACOUSTIC PLINTHS AND SILENCERS | | | | | | | | | | | | | | | | | | |
| SC1 | Cam 15 Acoustic plinth (Zone 16) | PAC30 | 1000 | 745 | 500 | 1.11 | Neg | 18 | 20 | 28 | 32 | 40 | 41 | 44 | 38 | 1 | | £488.00 |
| SC1A | Supply air silencers from plinth (Zone 16) | RAAC/43/900 | 450 | 250 | 900 | 0.55 | 30 | 3 | 6 | 13 | 22 | 27 | 26 | 20 | 10 | 2 | £92.00 | £184.00 |
| SC1B | Return air silencers to plinth (Zone 16) | RAAC/43/900 | 450 | 250 | 900 | 0.55 | 30 | 3 | 6 | 13 | 22 | 27 | 26 | 20 | 10 | 2 | £92.00 | £184.00 |
| SC2 | Cam 35 acoustic plinths (Zone 14) | PAC30 | 2000 | 745 | 500 | 2.64 | Neg | 18 | 20 | 28 | 32 | 40 | 41 | 44 | 38 | 1 | | £784.00 |
| SC3 | Cam 25 Units (Zones 9 & 10) | Fit supplier's standard plinths | | | | | | | | | | | | | | | | |
| SC4 | Cam 25 Units (Zones 5 & gym) | Fit supplier's standard plinths | | | | | | | | | | | | | | | | |
| SC5 | Cam 35 acoustic plinth (Zones 6 and 15) | PAC30 | 2000 | 745 | 700 | 2.64 | Neg | 18 | 20 | 28 | 32 | 40 | 41 | 44 | 38 | 2 | £926.00 | £1,852.00 |
| SC6 | Cam25 unit to lounge (Zone 3) | PAC30 | 1440 | 745 | 500 | 1.94 | Neg | 18 | 20 | 28 | 32 | 40 | 41 | 44 | 38 | 1 | | £642.00 |
| SC6A | Supply air silencers from plinth (Zone 3) | RAAC/53/1500 | 500 | 250 | 1500 | 0.77 | 25 | 3 | 8 | 14 | 26 | 30 | 35 | 23 | 11 | 2 | £128.00 | £256.00 |
| SC6B | Supply air silencer from plinth (Zone 3) | RAAC/53/1500 | 260 | 250 | 1500 | 0.40 | 25 | 3 | 8 | 14 | 26 | 30 | 35 | 23 | 11 | 1 | | £99.00 |
| SC6C | Return air silencer to plinth (Zone 3) | RAAC/48/1200 | 665 | 250 | 1200 | 1.00 | 35 | 3 | 6 | 14 | 24 | 30 | 31 | 22 | 11 | 1 | | £138.00 |
| SC6D | Return air silencer to plinth from Mezz level | RAAC/53/1500 | 665 | 250 | 1500 | 0.94 | 25 | 3 | 8 | 14 | 26 | 30 | 35 | 23 | 11 | 1 | | £142.00 |
| Total price for CAM unit acoustic plinths and silencers (supply only, ex works) | | | | | | | | | | | | | | | | ... | £4,769.00 | |

Notes: - All CAM units not fitted with an acoustic plinth should be fitted with the manufacturer's standard plinth.
 - Details of acoustic plinths are given on our attached sketches No. QF/2973A/P2(A) and -P3.

SILENCER SCHEDULE

Client: Peter Deer & Associates

Project: The Iceworks, Jamestown Road

| Ref. | Location | Type | Dimensions (mm) | | | Vol (m ³ /s) | P.D (Pa) | Dynamic Insertion Loss (dB) | | | | | | | | No.Off | Price Each (£) | Total (£) |
|----------------------------|---|----------------------|-----------------|------|------|----------------------------|-------------|-----------------------------|-----|-----|-----|----|----|----|----|--------|--------------------|--------------|
| | | | W | H | L | | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | | | |
| B) SYSTEM SILENCERS | | | | | | | | | | | | | | | | | | |
| S1 | Chairmans Flat-Zone 17 supply air to living room | RAAC/48/2100 | 600 | 100 | 2100 | 0.396 | 45 | 5 | 15 | 24 | 38 | 44 | 46 | 35 | 18 | 1 | £176.00 | |
| S1A | Chairmans Flat-Zone 17 supply air to living room | RAAC/43/1800 | 600* | 100 | 1800 | 0.396 | 35 | 5 | 13 | 23 | 39 | 46 | 41 | 32 | 17 | 1 | £273.00 | |
| S1B | Acoustic plinth to AHU (Zone 17) | PAC 30 | 1850 | 1800 | 400 | 1.900 | 50 | 18 | 20 | 28 | 32 | 40 | 41 | 44 | 38 | 1 | £1,128.00 | |
| S2 | Chairmans Flat-Zone 17 Supply air to living room | RAAC/48/1800 | 600 | 100 | 1800 | 0.396 | 45 | 4 | 12 | 20 | 33 | 39 | 40 | 32 | 15 | 2 | £155.00 £310.00 | |
| S3 | Chairmans Flat-Zone 17 Supply to bedroom | RAAC/53/2400 | 300* | 100 | 2400 | 0.198 | 15 | 6 | 18 | 21 | 36 | 41 | 46 | 38 | 18 | 1 | £238.00 | |
| S4 | Zone 17-Lobby Supply | RAAC/38/1500cc | 325 | 150 | 1600 | 0.117 | 12 | 5 | 13 | 24 | 34 | 43 | 42 | 35 | 22 | 1 | £186.00 | |
| S5 | Return air to Zone 17 AHU | RAAC/53/2400 | 800 | 300 | 2400 | 1.90 | 50 | 6 | 18 | 21 | 36 | 41 | 46 | 38 | 18 | 1 | £214.00 | |
| S6 | Crosstalk silencers to overnight bedrooms (supply) | RAAC/43/2100 | 350 | 150 | 2100 | 0.04 | Neg | 6 | 16 | 29 | 44 | 50 | 48 | 36 | 21 | 3 | £126.00 £378.00 | |
| S7 | Crosstalk silencers to overnight bedrooms (return) | RAAC/20/900 | 500 | 150 | 900 | 0.04 | 5 | 8 | 16 | 24 | 37 | 48 | 50 | 50 | 38 | 3 | £94.00 £282.00 | |
| S8 | Fresh air to Zone 16 | RAAC/20/1500 | 450 | 200 | 1500 | 0.15 | 50 | 14 | 25 | 39 | 50 | 50 | 50 | 50 | 49 | 1 | £138.00 | |
| S9 | Fresh air to Zone 17 | RAAC/38/2100 | 325 | 200 | 2100 | 0.25 | 35 | 7 | 19 | 33 | 47 | 50 | 49 | 41 | 28 | 1 | £141.00 | |
| S10 | Fresh air to all other areas | RAAC/38/1800 | 700 | 800 | 1800 | 2.80 | 50 | 6 | 16 | 28 | 44 | 47 | 44 | 38 | 24 | 1 | £290.00 | |
| S11 | Fresh air intake to AHU | RAAC/25/450C | 2000 | 700 | 550 | 3.00 | 35 | 4 | 8 | 15 | 23 | 33 | 34 | 33 | 22 | 1 | £476.00 | |
| S12 | Exhaust air from AHU | No silencer required | | | | | | | | | | | | | | | | |
| S13 | Extract air from building | RAAC/43/2100 | 500 | 350 | 2100 | 1.00 | 45 | 6 | 16 | 29 | 44 | 50 | 48 | 36 | 21 | 1 | £192.00 | |
| S14 | Toilet extract (EF1) | RAAC/43/900 | 250 | 200 | 900 | 0.20 | 20 | 3 | 6 | 13 | 22 | 27 | 26 | 20 | 10 | 1 | £73.00 | |
| S15 | Toilet exhaust to atmosphere | No silencer required | | | | | | | | | | | | | | | | |
| S16 | 4th Floor prep kitchen extract | RAAC/38/900cc | 250 | 250 | 1000 | 0.15 | 10 | 4 | 7 | 15 | 24 | 32 | 33 | 29 | 18 | 1 | £148.00 | |
| S17 | 4th Floor prep kitchen exhaust to atmosphere | No silencer required | | | | | | | | | | | | | | | | |
| S18 | Acoustic plinth to AHU (Zone 13) | PAC 30 | 1350/ 1585 | 610 | 700 | 0.90 | Neg | 18 | 20 | 28 | 32 | 40 | 41 | 44 | 38 | 1 | £986.00 | |
| S19 | Supply air to Chairmans Office | RAAC/38/1800 | 500 | 250 | 1800 | 0.45 | 25 | 6 | 16 | 28 | 44 | 47 | 44 | 38 | 24 | 2 | £155.00 £310.00 | |

SILENCER SCHEDULE

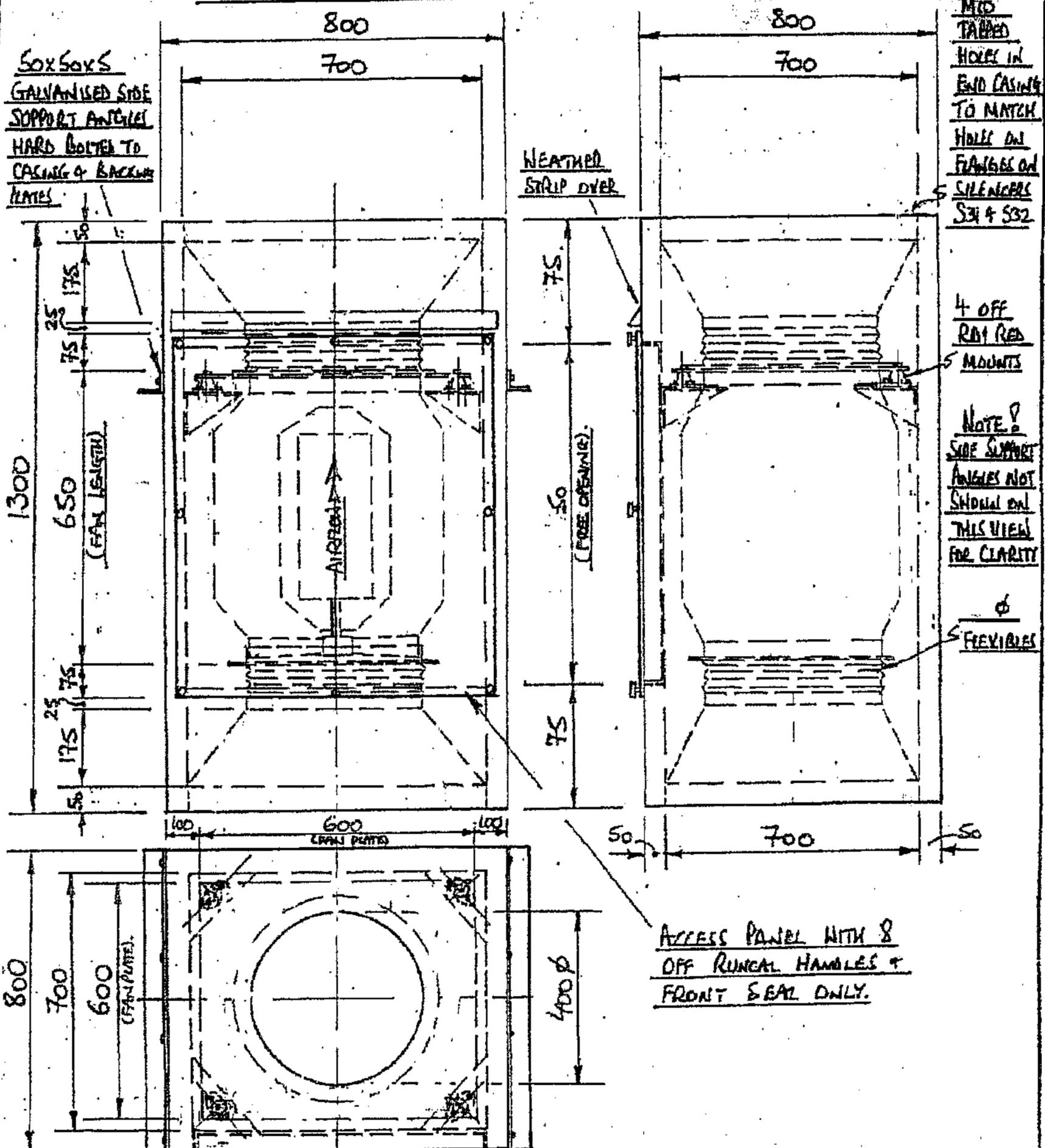
| Ref. | Location | Type | Dimensions (mm) | | | Vol (m ³ /s) | P.D (Pa) | Dynamic Insertion Loss (dB) | | | | | | | | No. Off Price Each (£) | Total (£) | |
|---|--|---------------|-----------------|-----|------|----------------------------|-------------|-----------------------------|-----|-----|-----|----|----|----|-----|---------------------------|--------------|---------|
| | | | W | H | L | | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | | | |
| S20 | Return air from Chalmers Office | RAAC/43/1800 | 600 | 300 | 1800 | 0.90 | 35 | 5 | 13 | 23 | 39 | 45 | 41 | 32 | 17 | 1 | £155.00 | |
| S20A | Acoustic plinth to AHU (Zone 8) | PAC 30 | 1350/ 1585 | 610 | 700 | 0.90 | Neg | 18 | 20 | 28 | 32 | 40 | 41 | 44 | 38 | 1 | £988.00 | |
| S21 | Boardroom Supply air (Zone 8) | RAAC/38/1500 | 500 | 250 | 1500 | 0.60 | 45 | 5 | 13 | 24 | 34 | 43 | 42 | 35 | 22 | 1 | £136.00 | |
| S22 | Boardroom Supply air (Zone 8) | RAAC/38/1500 | 500 | 250 | 1500 | 0.40 | 20 | 5 | 13 | 24 | 34 | 43 | 42 | 35 | 22 | 1 | £136.00 | |
| S23 | Boardroom Return air (Zone 8) | RAAC/43/1800 | 600 | 300 | 1800 | 1.00 | 40 | 5 | 13 | 23 | 39 | 45 | 41 | 32 | 17 | 1 | £155.00 | |
| S24 | Mezzanine level fan coil inlet (Zones 4 and 18) | RAAC/25/400 | 1330 | 285 | 400 | 0.253 | 5 | 3 | 6 | 13 | 21 | 28 | 29 | 25 | 15 | 2 | £216.00 | £432.00 |
| S25 | Mezzanine level fan coil outlet (Zones 4 and 18) | RAAC/25/400 | 1330 | 285 | 400 | 0.253 | 5 | 3 | 6 | 13 | 21 | 28 | 29 | 25 | 15 | 2 | £213.00 | £426.00 |
| S26 | Dining room supply air (Zone 1) | RAAC/53/2100 | 800 | 150 | 1800 | 0.90 | 35 | 5 | 15 | 19 | 33 | 38 | 44 | 34 | 15 | 1 | £198.00 | |
| S27 | Dining room supply air (Zone 1) | RAAC/53/2100 | 600 | 150 | 2100 | 0.60 | 30 | 5 | 15 | 19 | 33 | 38 | 44 | 34 | 15 | 2 | £176.00 | £352.00 |
| S27A | Acoustic Plinth to AHU (Zone 1) | PAC 30 | 2000 | 900 | 400 | 2.10 | Neg | 18 | 20 | 28 | 32 | 40 | 41 | 44 | 38 | 1 | £872.00 | |
| S28 | Return air to dining room AHU (Zone 1) | RAAC/25/1200 | 4300 | 300 | 1200 | 2.50 | 35 | 8 | 14 | 26 | 39 | 49 | 47 | 45 | 36 | 1 | £808.00 | |
| S29 | Kitchen supply (Zone 2) | RAAC/43/1800 | 700 | 150 | 1800 | 0.60 | 35 | 5 | 13 | 23 | 39 | 45 | 41 | 32 | 17 | 2 | £176.00 | £352.00 |
| S30 | Supply to lobby area (Zone 2) | RAAC/43/1200 | 400 | 150 | 1200 | 0.30 | 35 | 4 | 8 | 17 | 27 | 33 | 33 | 24 | 13 | 1 | £98.00 | |
| S30A | Supply to corridor (Zone 2) | RAAC/38/900 | 300 | 150 | 900 | 0.15 | 25 | 4 | 7 | 15 | 24 | 32 | 33 | 29 | 18 | 1 | £73.00 | |
| S30B | Acoustic plinth to AHU (Zone 2) | PAC 30 | 2000 | 900 | 400 | 1.85 | Neg | 18 | 20 | 28 | 32 | 40 | 41 | 44 | 38 | 1 | £872.00 | |
| S31 | Kitchen Extract (Roomside) | RAAC/33/2400M | 700 | 700 | 2400 | 1.25 | 35 | 14 | 27 | 21 | 23 | 31 | 33 | 34 | 23 | 1 | £448.00 | |
| S32 | Kitchen Exhaust (Atmospheric) | RAAC/33/2400M | 700 | 700 | 2400 | 1.25 | 35 | 14 | 27 | 21 | 23 | 31 | 33 | 34 | 23 | 1 | £448.00 | |
| S33 | Kitchen Extract Fan Acoustic Enclosure | PAC30 HD | 800 | 800 | 1300 | - | - | 18 | 20 | 28 | 32 | 40 | 41 | 44 | 38 | 1 | £1,238.00 | |
| Total price for system silencers (Supply only, ex works) | | | | | | | | | | | | | | | ... | £14,122.00 | | |

APPENDIX B – Sketch of Acoustic Fan Box

All dimensions in mm unless stated

ITEM: S33 - KITCHEN EXTRACT FAN ACOUSTIC BOX - PAC 3011D - 1 OFF.

(NOTE: BOX TO BE WEATHERPROOF)



| | | | |
|---|-------------------------|--|--|
| TITLE: <u>ACOUSTIC FAN BOX - S</u> | | DOCUMENT No. <u>QF/2973A/E1</u> | |
| CLIENT: <u>PETER DEER & ASSOCIATES.</u> | | REVISION | |
| PROJECT: <u>34-36, JAMESTOWN ROAD.</u> | | STATUS | |
| ISSUE DATE: <u>8/5/2006</u> | PF No. | APPROVED BY: <u>[Signature]</u> | |
| DRAWN BY: <u>MGR</u> | DESIGN AUTH: <u>MGR</u> |  Emrec Products Ltd. Enterprise House, Birch Road, Hayes, Middx, U.K. UB8 3JZ. Tel: 0181-875 3033 Fax: 0181-875 3575 | |