



BUILDING SERVICES LIMITED

PROJECT GREAT RUSSEL STREET HOTEL

CLIENT CRITERION CAPITAL 16 Babmaes Street St James London SW1Y 6HD

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No.	Description	Date
R1	FOR COMMENT	20/01/2022
R2	FOR COMMENT	28/01/2022

Criterion Capital

AIR FLOW SCHEMATIC

Project number -

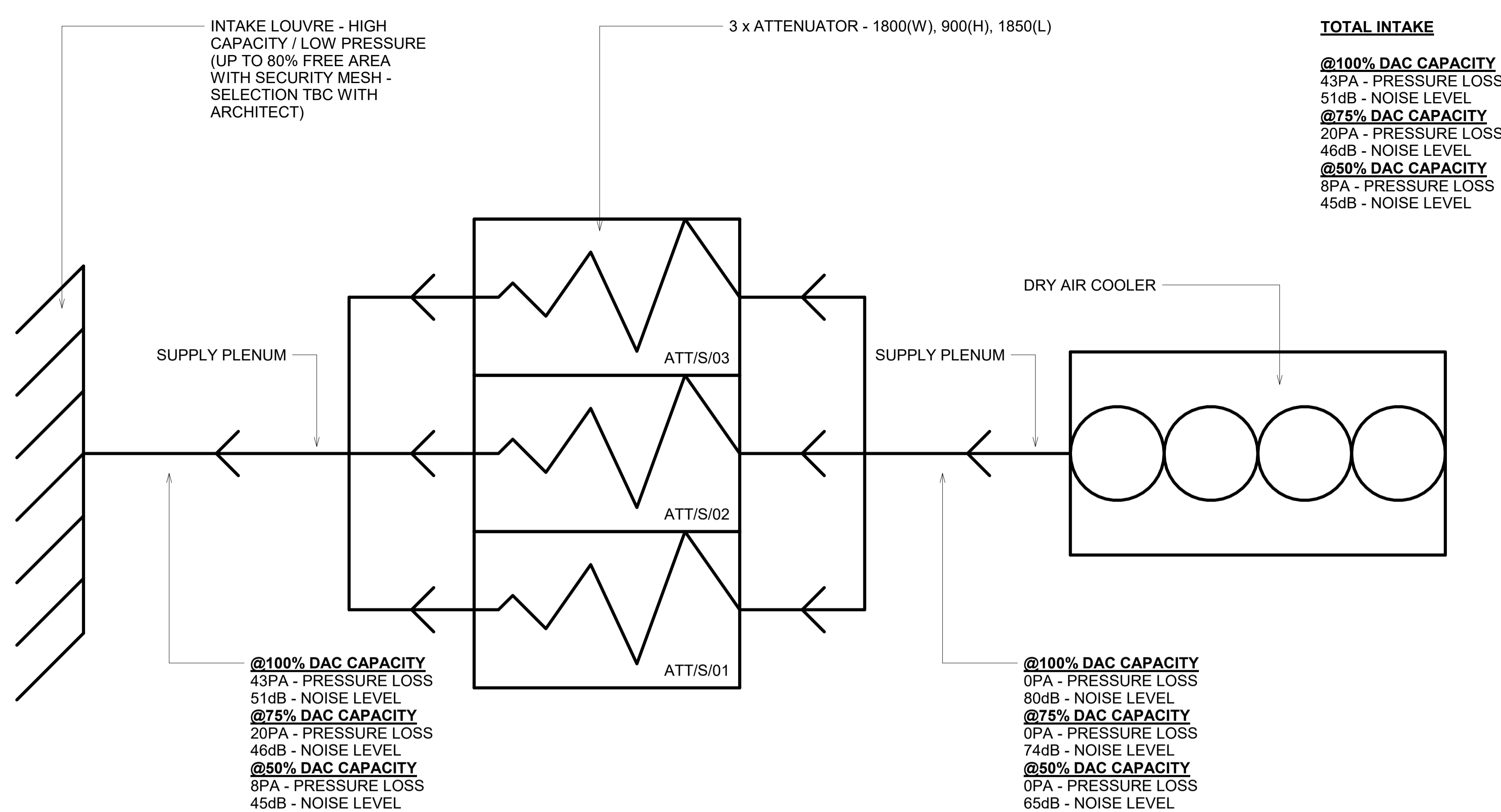
Date 28/01/2022

Drawn by -

Checked by -

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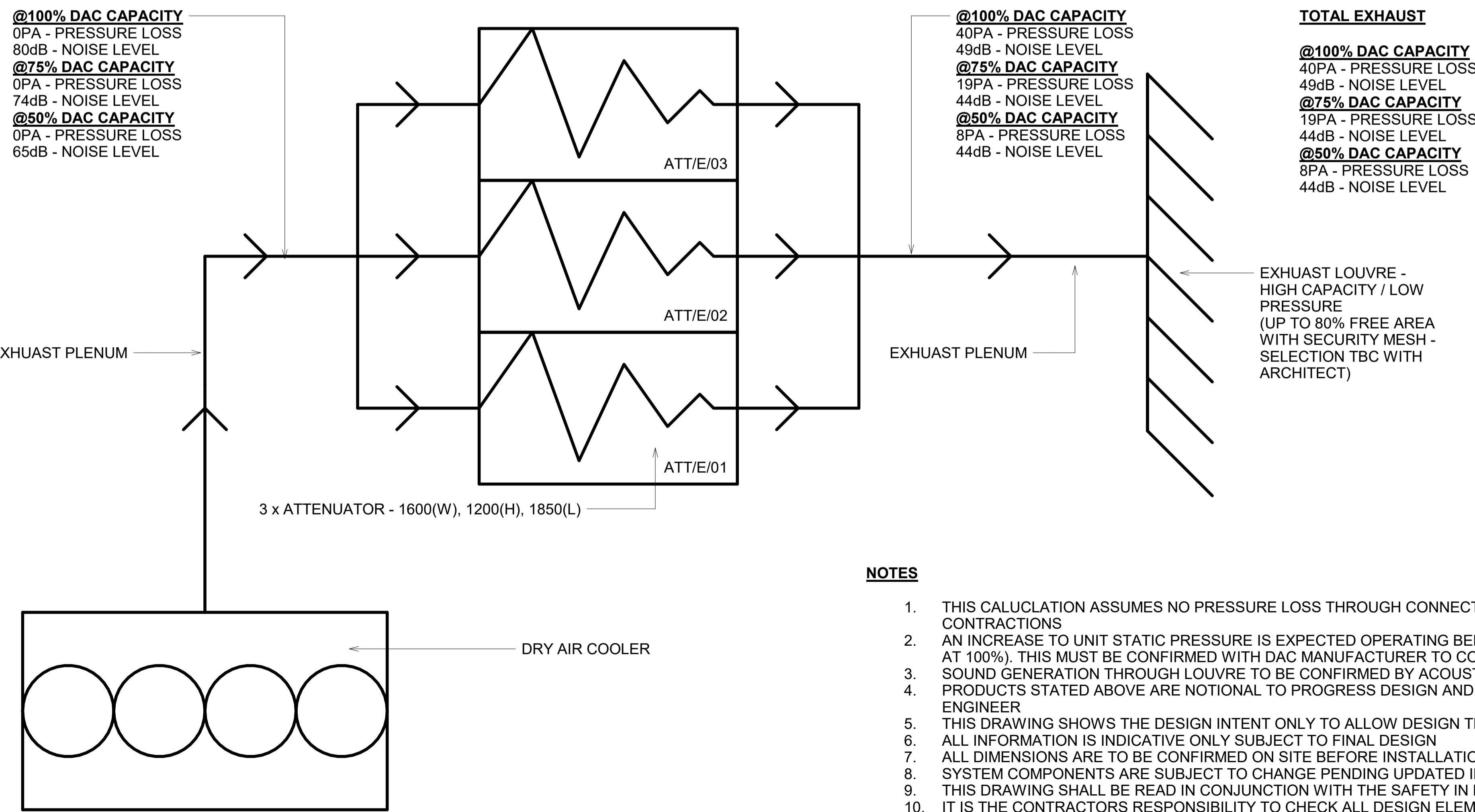
Scale N / A



SUPPLY SECTION - ATTENUATORS @1800 x 900 x 1850mm LENGTH

Capacity	Flow Rate	Flow/ATT	Pressure	Req. Attenuation	Actual Attenuation (Using Power Figures)	Actual Attenuation (Using SPressure Figures)
100%	24725.3	8242	42	31	26	29
99%	24424.3	8141	41.12	30.76	26.08	28.96
98%	24123.3	8041	40.24	30.52	26.16	28.92
97%	23822.3	7941	39.36	30.28	26.24	28.88
96%	23521.3	7840	38.48	30.04	26.32	28.84
95%	23220.3	7740	37.6	29.8	26.4	28.8
94%	22919.3	7640	36.72	29.56	26.48	28.76
93%	22618.3	7539	35.84	29.32	26.56	28.72
92%	22317.3	7439	34.96	29.08	26.64	28.68
91%	22016.3	7339	34.08	28.84	26.72	28.64
90%	21715.3	7238	33.2	28.6	26.8	28.6
89%	21414.3	7138	32.32	28.36	26.88	28.56
88%	21113.3	7038	31.44	28.12	26.96	28.52
87%	20812.3	6937	30.56	27.88	27.04	28.48
86%	20511.3	6837	29.68	27.64	27.12	28.44
85%	20210.3	6737	28.8	27.4	27.2	28.4
84%	19909.3	6636	27.92	27.16	27.28	28.36
83%	19608.3	6536	27.04	26.92	27.36	28.32
82%	19307.3	6436	26.16	26.68	27.44	28.28
81%	19006.3	6335	25.28	26.44	27.52	28.24
80%	18705.3	6235	24.4	26.2	27.6	28.2
79%	18404.3	6135	23.52	25.96	27.68	28.16
78%	18103.3	6034	22.64	25.72	27.76	28.12
77%	17802.3	5934	21.76	25.48	27.84	28.08
76%	17501.3	5834	20.88	25.24	27.92	28.04
75%	17200.3	5733	20	25	28	28

UNIT EXPECTED TO OPERATE BETWEEN 90% - 100%. MAXIMUM CAPACITY AVAILABLE TO BE CONFIRMED POST INSTALLATION



EXHAUST SECTION - ATTENUATORS @1600 x 1200 x 1850mm LENGTH

Capacity	Flow Rate	Flow/ATT	Pressure	Req. Attenuation	Actual Attenuation (Using Power Figures)	Actual Attenuation (Using SPressure Figures)
100%	24725.3	8242	40	31	31	31
99%	24424.3	8141	39.16	30.76	31.2	30.96
98%	24123.3	8041	38.32	30.52	31.4	30.92
97%	23822.3	7941	37.48	30.28	31.6	30.88
96%	23521.3	7840	36.64	30.04	31.8	30.84
95%	23220.3	7740	35.8	29.8	32	30.8
94%	22919.3	7640	34.96	29.56	32.2	30.76
93%	22618.3	7539	34.12	29.32	32.4	30.72
92%	22317.3	7439	33.28	29.08	32.6	30.68
91%	22016.3	7339	32.44	28.84	32.8	30.64
90%	21715.3	7238	31.6	28.6	33	30.6
89%	21414.3	7138	30.76	28.36	33.2	30.56
88%	21113.3	7038	29.92	28.12	33.4	30.52
87%	20812.3	6937	29.08	27.88	33.6	30.48
86%	20511.3	6837	28.24	27.64	33.8	30.44
85%	20210.3	6737	27.4	27.4	34	30.4
84%	19909.3	6636	26.56	27.16	34.2	30.36
83%	19608.3	6536	25.72	26.92	34.4	30.32
82%	19307.3	6436	24.88	26.68	34.6	30.28
81%	19006.3	6335	24.04	26.44	34.8	30.24
80%	18705.3	6235	23.2	26.2	35	30.2
79%	18404.3	6135	22.36	25.96	35.2	30.16
78%	18103.3	6034	21.52	25.72	35.4	30.12
77%	17802.3	5934	20.68	25.48	35.6	30.08
76%	17501.3	5834	19.84	25.24	35.8	30.04
75%	17200.3	5733	19	25	36	30

UNIT EXPECTED TO OPERATE BETWEEN 90% - 100%. MAXIMUM CAPACITY AVAILABLE TO BE CONFIRMED POST INSTALLATION

NOTES

- THIS CALCULATION ASSUMES NO PRESSURE LOSS THROUGH CONNECTING PLENUM SECTIONS AS WELL DUCT CONNECTIONS / EXPANSIONS / CONTRACTIONS
- AN INCREASE TO UNIT STATIC PRESSURE IS EXPECTED OPERATING BELOW 100% CAPACITY (DAC SPECIFICATION ONLY STATES AVAILABLE PRESSURE AT 100%). THIS MUST BE CONFIRMED WITH DAC MANUFACTURER TO CONFIRM NOTE 1
- SOUND GENERATION THROUGH LOUVRE TO BE CONFIRMED BY ACOUSTIC ENGINEER
- PRODUCTS STATED ABOVE ARE NOTIONAL TO PROGRESS DESIGN AND NOT TO BE PROCURED WITHOUT CONFIRMATION FROM BSL AND ACOUSTIC ENGINEER
- THIS DRAWING SHOWS THE DESIGN INTENT ONLY TO ALLOW DESIGN TEAM'S COORDINATION, COSTING AND COMMENT
- ALL INFORMATION IS INDICATIVE ONLY SUBJECT TO FINAL DESIGN
- ALL DIMENSIONS ARE TO BE CONFIRMED ON SITE BEFORE INSTALLATION
- SYSTEM COMPONENTS ARE SUBJECT TO CHANGE PENDING UPDATED INFORMATION
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE SAFETY IN DESIGN HAZARDOUS REGISTER AND OTHER PROJECT H&S DOCUMENTATION
- IT IS THE CONTRACTORS RESPONSIBILITY TO CHECK ALL DESIGN ELEMENTS HIGHLIGHTED IN THIS DRAWING FOR SAFETY AND CORRECT FUNCTION