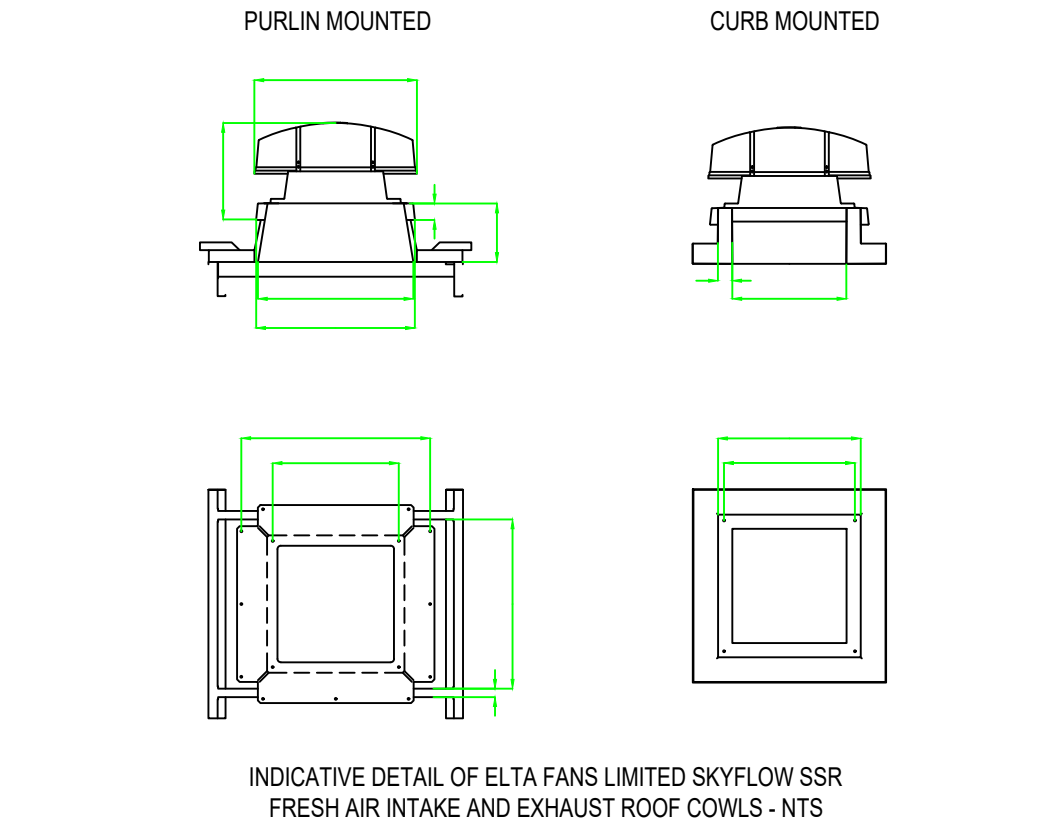
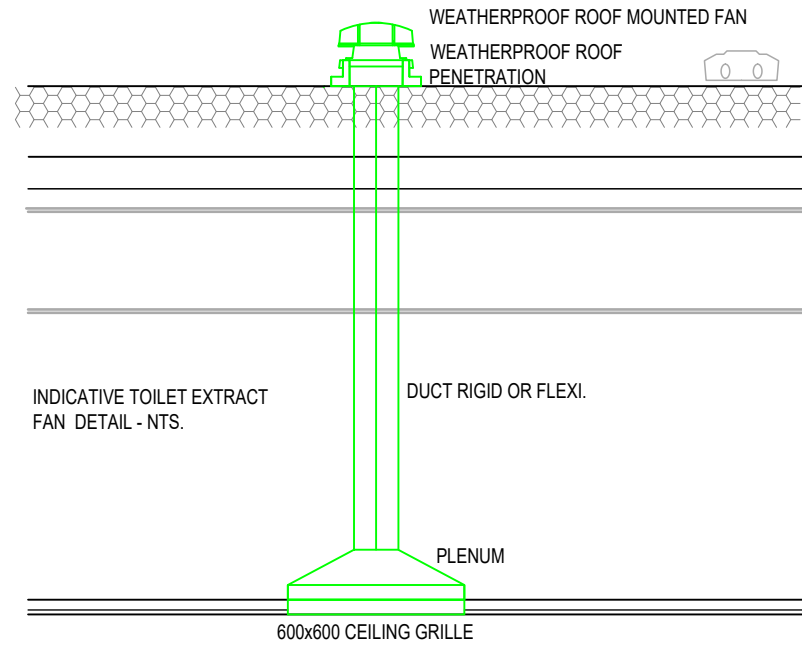


MONODRAUGHT HVR ZERO UNIT IN CEILING VOID SUPPLIED WITH DUCT PACK, INCLUDING MONODRAUGHT SWEEP TRANSITION PIECE 250f DUCT AND LOUVRE TRANSITION PIECES TO CONNECT TO LOUVRES IN WINDOW. EACH HVR UNITS TO BE PROVIDED WITH A MONODRAUGHT LOUVRE 300x900 WHICH REQUIRES A 355x955 OPENING.



ELTA FANS LIMITED ROOF COWLS DIMENSIONAL DATA (Dimensions in mm)																WEIGHT (kg) (exc. Purlin Box)
PRODUCT CODE	A	B	C	D	E	F	G	H	J	K	L	M	N			
SSR25	500	475	318	80	428	240	428	175	542	380	340	440	50			4
SSR3135	710	684	378	85	610	240	636	250	750	500	460	610	75			8
SSR4045	800	784	478	90	730	250	756	300	870	600	550	700	75			15
SSR4056	860	834	574	100	860	250	886	350	1000	740	700	850	75			15
SSR8371	1230	1054	660	105	1000	250	1026	435	1140	870	830	980	75			23
SSR830	1400	1174	670	100	1076	270	1076	470	1190	-	950	1100	75			33

550x350 PREP KITCHEN SUPPLY & EXTRACT DUCTS TO RISE TO ABOVE FRESH AIR INTAKE TO TERMINATE VIA MUSHROOM COWL & EXTRACT DUCT TO TERMINATE AT ROOF LEVEL DUCTED AWAY FROM INTAKE TO AVOID RECIRCULATION



EG36 CONTINUOUS LINEAR BLADE DIFFUSER IN CEILING VOID TO ROUTE BENEATH RECIRCULATION GRILLE OF HVR UNITS.

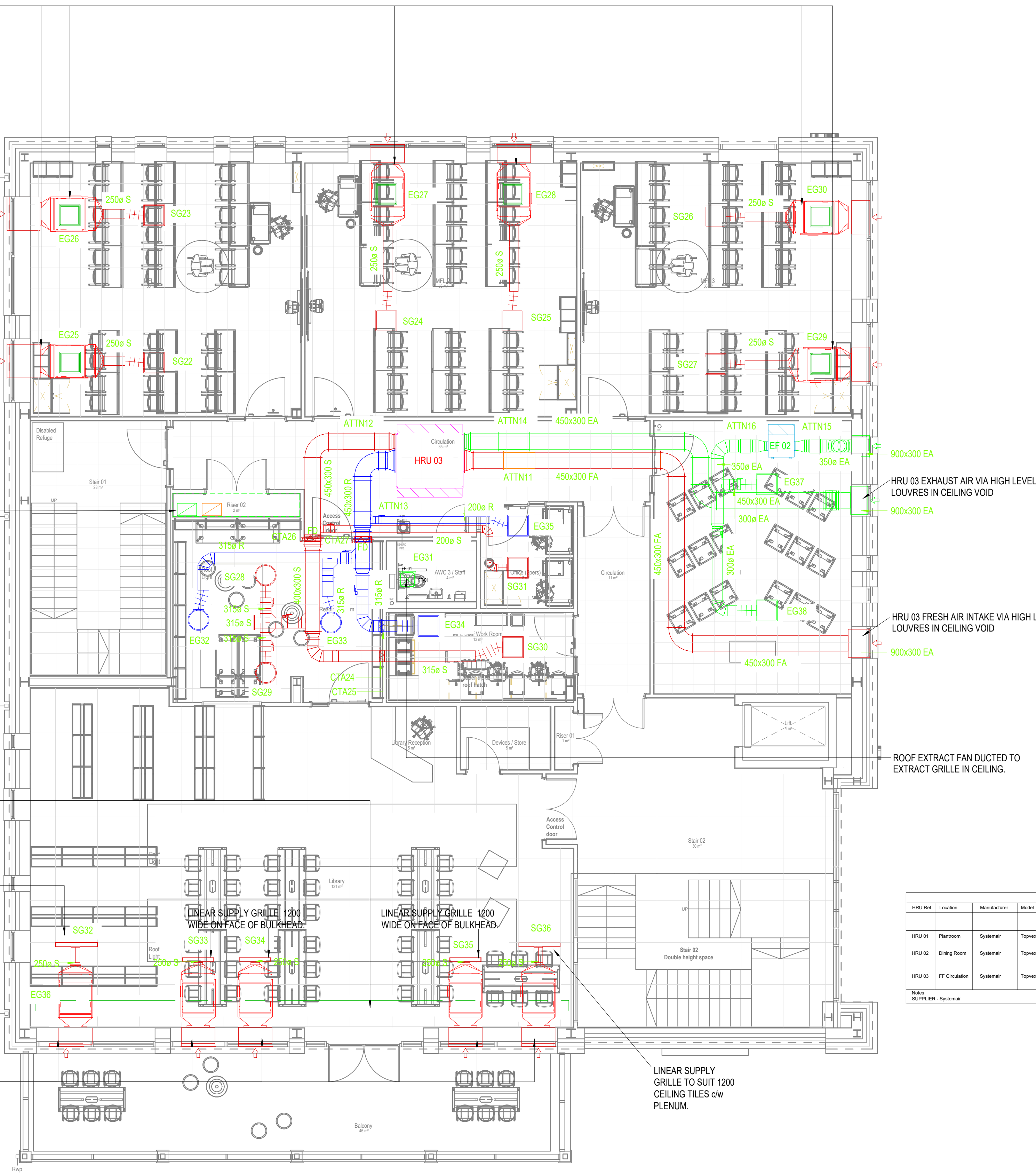
LINEAR SUPPLY GRILLE TO SUIT 1200 CEILING TILES c/w PLENUM.

MONODRAUGHT HVR ZERO UNIT IN CEILING VOID SUPPLIED WITH DUCT PACK, INCLUDING MONODRAUGHT SWEEP TRANSITION PIECE 250f DUCT AND LOUVRE TRANSITION PIECES TO CONNECT TO LOUVRES IN WINDOW. EACH HVR UNITS TO BE PROVIDED WITH A MONODRAUGHT LOUVRE 300x900 WHICH REQUIRES A 355x955 OPENING.

HYBRID VENTILATION UNITS														
HVR Ref	Location	Manufacturer	Model	Flow Rates		SFP		Winter Time Heat Exchanger		Efficiency	Heating Coil		LTHW Flow Rate	Comment
				Daytime	Nighttime	Daytime	Nighttime	Flow Rate	SFP		F&R Temps	Output		
				l/s	l/s	Wt/s	Wt/s	l/s	Wt/s	%	°C	kW	l/s	
HVR 1	SEND	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	5040	3.5	0.1	Each unit to be complete with: • External temperature sensor • Recirculation pet sensors • Mixed air supply temp sensor
HVR 2	SEND	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	5040	3.5	0.1	
HVR 3	SEND	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	5040	3.5	0.1	
HVR 4	SEND	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	5040	3.5	0.1	
HVR 5	Dining Room	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	5040	3.5	0.1	
HVR 6	Dining Room	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	5040	3.5	0.1	Each room to be provided with: • Wall mounted controlled • Room temp sensor • Room CO2 sensor
HVR 7	Dining Room	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	5040	3.5	0.1	
HVR 8	Dining Room	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	5040	3.5	0.1	
HVR 9	Dining Room	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	5040	3.5	0.1	
HVR 10	Dining Room	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	5040	3.5	0.1	
HVR 11	MFL1	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	5040	3.5	0.1	NOTE:- dining area and Library to be provided with additional temp and CO2 sensors to ensure space conditions are accurately measured and controlled to.
HVR 12	MFL1	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	5040	3.5	0.1	
HVR 13	MFL2	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	5040	3.5	0.1	
HVR 14	MFL2	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	5040	3.5	0.1	
HVR 15	MFL3	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	5040	3.5	0.1	
HVR 16	MFL3	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	5040	3.5	0.1	
HVR 17	Library	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	5040	3.5	0.1	
HVR 18	Library	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	5040	3.5	0.1	
HVR 19	Library	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	5040	3.5	0.1	
HVR 20	Library	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	5040	3.5	0.1	
HVR 21	Library	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	5040	3.5	0.1	

- Notes
- Hybrid Ventilation System to be controlled with Monodraught iNvent Acuity Control System
 - Hybrid Ventilation controls system shall be capable of interfacing with the central BMS system and alert any faults to the central BMS

SUPPLIER
Manufacture Monodraught
Contact: Chris Duxworth



ATTENUATOR SCHEDULE									
ITEM	SYSTEM REF DESCRIPTION	MODEL	SUFFIX	DATA SHEET (11 mm x 220 mm)	W max (mm)	VOL max	PD Pa (Wt kg)		
1	ATTN12 HVR1 INTAKE	PL	G	A130	600	600	5.47	15	34
2	ATTN13 HVR1 EXTRACT	PLP	G	A130	1200	600	5.47	15	34
3	ATTN14 HVR1 EXTRACT	PLP	G	A130	1200	600	5.47	15	34
4	ATTN15 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
5	ATTN16 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
6	ATTN17 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
7	ATTN18 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
8	ATTN19 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
9	ATTN20 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
10	ATTN21 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
11	ATTN22 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
12	ATTN23 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
13	ATTN24 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
14	ATTN25 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
15	ATTN26 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
16	ATTN27 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
17	ATTN28 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
18	ATTN29 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
19	ATTN30 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
20	ATTN31 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
21	ATTN32 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
22	ATTN33 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
23	ATTN34 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
24	ATTN35 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
25	ATTN36 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
26	ATTN37 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
27	ATTN38 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
28	ATTN39 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
29	ATTN40 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
30	ATTN41 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
31	ATTN42 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
32	ATTN43 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
33	ATTN44 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
34	ATTN45 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
35	ATTN46 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
36	ATTN47 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
37	ATTN48 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
38	ATTN49 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
39	ATTN50 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
40	ATTN51 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34
41	ATTN52 HVR1 EXTRACT	PLP	G	A130	600	600	5.47	15	34

NOTES

LABEL WITH TENDS & SYSTEM REF

1. SELF TIGHTENING PLATE WITH STEEL CONSTRUCTION

2. SPLITTERS ARRANGED HORIZONTALLY

3. MESHED COMPARTMENTED WELL

4. RECTANGULAR ATTENUATOR SUPPLIED WITH CIRCULAR SPOOT END CONNECTIONS. SPOOT SIZE IN L&L COLUMN ABOVE

SUPPLY GRILLE SCHEDULE									
Reference	Area	Model Ref	Flow Rate	Type	Plenum Box	Throw	Pressure Drop	Neck Connection	
			m/s			m	Pa	mm	
SG01	Pupils Unisex WC's	BQSN-R 600+PQ21-2+BR	0.11	Swirl	Yes	1	<15	224	
SG02	Pupils Unisex WC's	BQSN-R 600+PQ21-2+BR	0.11	Swirl	Yes	1	<15	224	
SG03	Pupils Unisex WC's	BQSN-R 600+PQ21-2+BR	0.11	Swirl	Yes	1	<15	224	
SG04	Emotional Health/School	BQSN-R 600+PQ21-2+BR	0.04	Swirl	Yes	1	<15	200	
SG05	Therapy/Meeting Room	BQSN-R 600+PQ21-2+BR	0.03	Swirl	Yes	1	<15	200	
SG06	Subsiding Team	BQSN-R 600+PQ21-2+BR	0.04	Swirl	Yes	1	<15	200	
SG07	SEMR	BQSN-R 600+PQ21-2+BR	0.03	Swirl	Yes	1	<15	200	
SG08	Dry Store	AKN 220x250-D STAP	0.25	2 way diffuser	Yes	1.8	<15	315	
SG09	Kitchen Servary	AKN 450x450-D STAP	0.14	3 way diffuser	Yes	1.4	<15	315	
SG10	Kitchen Servary	AKN 450x450-D STAP	0.21	3 way diffuser	Yes	1.3	<15	315	
SG11	Kitchen Servary	AKN 450x450-D STAP	0.21	3 way diffuser	Yes	1.3	<15	315	
SG12	SEND	AKN 450x450-D STBP	0.25	4 way diffuser	Monodraught swept plenum	<10	<10	250	
SG13	SEND	AKN 450x450-D STBP	0.25	4 way diffuser	Monodraught swept plenum	<10	<10	250	
SG14	SEND	AKN 450x450-D STBP	0.25	4 way diffuser	Monodraught swept plenum	<10	<10	250	
SG15	SEND	AKN 450x450-D STBP	0.25	4 way diffuser	Monodraught swept plenum	<10	<10	250	
SG16	Dining/Social	LAF 10 800x300 BR	0.25	Linear Blade diffuser	Yes	<10	<10	250	
SG17	Dining/Social	LAF 10 800x300 BR	0.25	Linear Blade diffuser	Yes	<10	<10	250	
SG18	Dining/Social	LAF 10 800x300 BR	0.25	Linear Blade diffuser	Yes	<10	<10	250	
SG19	Dining/Social	LAF 10 800x300 BR	0.25	Linear Blade diffuser	Yes	<10	<10	250	
SG20	Dining/Social	LAF 10 800x300 BR	0.25	Linear Blade diffuser	Yes	<10	<10	250	
SG21	Dining/Social	LAF 10 800x300 BR	0.25	Linear Blade diffuser	Yes	<10	<10	250	
SG22	MF1	AKN 450x450-D STBP	0.25	4 way diffuser	Monodraught swept plenum	<10	<10	250	
SG23	MF1	AKN 450x450-D STBP	0.25	4 way diffuser	Monodraught swept plenum	<10	<10	250	
SG24	MF2	AKN 450x450-D STBP	0.25	4 way diffuser	Monodraught swept plenum	<10	<10	250	
SG25	MF2	AKN 450x450-D STBP	0.25	4 way diffuser	Monodraught swept plenum	<10	<10	250	
SG26	MF3	AKN 450x450-D STBP	0.25	4 way diffuser	Monodraught swept plenum	<10	<10	250	
SG27	MF3	AKN 450x450-D STBP	0.25	4 way diffuser	Monodraught swept plenum	<10	<10	250	
SG28	Reading Room	DLF-40 4 3500 BR	0.14	Linear Slot	Yes	2.3	<25	315	
SG29	Reading Room	DLF-40 4 3500 BR	0.14	Linear Slot	Yes	2.3	<25	315	
SG30	NFL Office	BQSN-R 600+PQ21-2+BR	0.055	Swirl	Yes	1.4	<15	200	
SG31	Office (2 Person)	BQSN-R 600+PQ21-2+BR	0.055	Swirl	Yes	1.4	<15	200	
SG32	Library	LAF 10 800x300 BR	0.25	Linear Blade diffuser	Yes	<10	<10	250	
SG33	Library	LAF 10 800x300 BR	0.25	Linear Blade diffuser	Yes	<10	<10	250	
SG34	Library	LAF 10 800x300 BR	0.25	Linear Blade diffuser	Yes	<10	<10	250	
SG35	Library	LAF 10 800x300 BR	0.25	Linear Blade diffuser	Yes	<10	<10	250	
SG36	Library	LAF 10 800x300 BR	0.25	Linear Blade diffuser	Yes	<10	<10	250	
Notes									
1. Grilles to be provided in a standard RAL colour, colour to be advised by architect									
2. All grilles are to be provided with plenum boxes which type to be barntamin lead									
3. All grilles are to be provided with opposed blade dampers									
4. Contractor shall confirm the ceiling grid/frame fixing type with the architect before ordering									
5. Grilles to be independently supported unless agreed with architect and structural engineer that the ceiling can support the grille weight too									