

LINEAR SUPPLY GRILLE TO SUIT CEILING TILES c/w PLENUM

HVR Ref	Location	Manufacturer	Model	HYBRID VENTILATION UNITS												Heating Coil		Comment
				Flow Rates		SFP		Winter Time Heat Exchanger			Efficiency	FMR Temp	Output	LTHW Flow Rate				
				Daytime	Nighttime	Daytime	Nighttime	Flow Rate	SFP	%								
HVR 1	SEND	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	0.305	42	5040	3.5	0.1	Each unit to be complete with: • External temperature sensor • Recirculation pit sensors • Mixed air supply temp sensor		
HVR 2	SEND	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	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	0.305	42	5040	3.5	0.1			
HVR 4	Dining Room	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	0.305	42	5040	3.5	0.1	Each room to be provided with: • Wall mounted controlled • Room temp sensor • Room CO2 sensor		
HVR 5	Dining Room	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	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	0.305	42	5040	3.5	0.1			
HVR 7	Dining Room	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	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 8	Dining Room	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	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	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	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 11	MLF1	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	0.305	42	5040	3.5	0.1			
HVR 12	MLF1	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	0.305	42	5040	3.5	0.1			
HVR 13	MLF2	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	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 14	MLF2	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	0.305	42	5040	3.5	0.1			
HVR 15	MLF1	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	0.305	42	5040	3.5	0.1			
HVR 16	MLF3	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	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 17	MLF3	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	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	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	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 20	Library	Monodraught	HVR Zero X+	130	250	0.1177	0.23	80	0.305	42	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	0.305	42	5040	3.5	0.1			

SUPPLIER
Manufacture: Monodraught
Contact: Chris Duckworth

2	ATTN 18RU SUPPLY	PL	G	ATSD	600		242	5	13
3	ATTN 18RU INTRM	PL	G	ATSD	1200		487	147	148
4	ATTN 18RU EXTRACT	PL	G	ATSD	600		242	5	13
5	ATTN 18RU EXHUST	PL	G	ATSD	600		244	15	17
6	ATTN 18RU INTRM	PL	G	ATSD	600		242	5	13
7	ATTN 18RU SUPPLY	PL	G	ATSD	600		244	5	6
8	ATTN 18RU INTRM	PL	G	ATSD	600	550	380	15	15
9	ATTN 18RU SUPPLY	PL	GU	ATSD	1200	500	100	156	20
10	ATTN 18RU EXTRACT	PL	GU	ATSD	600	500	100	156	20
11	ATTN 18RU EXHUST	PL	GU	ATSD	600	500	100	156	20
12	ATTN 18RU INTRM	PL	GU	ATSD	600	500	100	156	20
13	ATTN 18RU SUPPLY	PL	GU	ATSD	600	500	100	156	20
14	ATTN 18RU EXTRACT	PL	GU	ATSD	600	500	100	156	20
15	ATTN 18RU EXHUST	PL	GU	ATSD	600	500	100	156	20
16	ATTN 18RU INTRM	PL	GU	ATSD	600	500	100	156	20
17	ATTN 18RU SUPPLY	PL	GU	ATSD	600	500	100	156	20
18	ATTN 18RU EXTRACT	PL	GU	ATSD	600	500	100	156	20
19	ATTN 18RU EXHUST	PL	GU	ATSD	600	500	100	156	20
20	ATTN 18RU INTRM	PL	GU	ATSD	600	500	100	156	20
21	ATTN 18RU SUPPLY	PL	GU	ATSD	600	500	100	156	20
22	ATTN 18RU EXTRACT	PL	GU	ATSD	600	500	100	156	20
23	ATTN 18RU EXHUST	PL	GU	ATSD	600	500	100	156	20
24	ATTN 18RU INTRM	PL	GU	ATSD	600	500	100	156	20
25	ATTN 18RU SUPPLY	PL	GU	ATSD	600	500	100	156	20
26	ATTN 18RU EXTRACT	PL	GU	ATSD	600	500	100	156	20
27	ATTN 18RU EXHUST	PL	GU	ATSD	600	500	100	156	20
28	ATTN 18RU INTRM	PL	GU	ATSD	600	500	100	156	20
29	ATTN 18RU SUPPLY	PL	GU	ATSD	600	500	100	156	20
30	ATTN 18RU EXTRACT	PL	GU	ATSD	600	500	100	156	20
31	ATTN 18RU EXHUST	PL	GU	ATSD	600	500	100	156	20
32	ATTN 18RU INTRM	PL	GU	ATSD	600	500	100	156	20
33	ATTN 18RU SUPPLY	PL	GU	ATSD	600	500	100	156	20
34	ATTN 18RU EXTRACT	PL	GU	ATSD	600	500	100	156	20
35	ATTN 18RU EXHUST	PL	GU	ATSD	600	500	100	156	20
36	ATTN 18RU INTRM	PL	GU	ATSD	600	500	100	156	20
37	ATTN 18RU SUPPLY	PL	GU	ATSD	600	500	100	156	20
38	ATTN 18RU EXTRACT	PL	GU	ATSD	600	500	100	156	20
39	ATTN 18RU EXHUST	PL	GU	ATSD	600	500	100	156	20
40	ATTN 18RU INTRM	PL	GU	ATSD	600	500	100	156	20
41	ATTN 18RU SUPPLY	PL	GU	ATSD	600	500	100	156	20
42	ATTN 18RU EXTRACT	PL	GU	ATSD	600	500	100	156	20
43	ATTN 18RU EXHUST	PL	GU	ATSD	600	500	100	156	20
44	ATTN 18RU INTRM	PL	GU	ATSD	600	500	100	156	20
45	ATTN 18RU SUPPLY	PL	GU	ATSD	600	500	100	156	20
46	ATTN 18RU EXTRACT	PL	GU	ATSD	600	500	100	156	20
47	ATTN 18RU EXHUST	PL	GU	ATSD	600	500	100	156	20
48	ATTN 18RU INTRM	PL	GU	ATSD	600	500	100	156	20
49	ATTN 18RU SUPPLY	PL	GU	ATSD	600	500	100	156	20
50	ATTN 18RU EXTRACT	PL	GU	ATSD	600	500	100	156	20

NOTES:

LABEL WITH ITEM NO. & SYSTEM REF.

G - SELF FINISH PRE-GALVANISED STEEL CONSTRUCTION.

J - SPLITTERS ARRANGED HORIZONTALLY.

M - MELINEX ENCAPSULATED INFILL.

E - RECTANGULAR ATTENUATOR SUPPLIED CW CIRCULAR SPIGOT END CONNECTIONS. SPIGOT SIZE IN L2/D COLUMN ABOVE.

9. ALL DUCT FANS SHALL BE INSTALLED WITH AAV MOUNTINGS

EXTRACT GRILLE SCHEDULE							
Reference	Area	Model Ref	Area	Vol	Type	Pressure Drop Pa mm	Neck Connection
E001	WC Store	EA/CR 125 BR	m/s	0.011	Air Valve	<20	125
E002	AWC2	EA/CR 200 BR	0.033	Air Valve	<20	200	
E003	Cleaners Store	EA/CR 125 BR	0.011	Air Valve	<20	125	
E004	Pupils Unisex WC's	EA/CR 125 BR	0.033	Air Valve	<20	200	
E005	Pupils Unisex WC's	EA/CR 125 BR	0.033	Air Valve	<20	200	
E006	Pupils Unisex WC's	EA/CR 125 BR	0.033	Air Valve	<20	200	
E007	Pupils Unisex WC's	EA/CR 125 BR	0.033	Air Valve	<20	200	
E008	Pupils Unisex WC's	EA/CR 125 BR	0.033	Air Valve	<20	200	
E009	AWC1	EA/CR 125 BR	0.033	Air Valve	<20	200	
E010	Unisex WC	EA/CR 125 BR	0.013	Air Valve	<20	125	
E011	Pupils Unisex WC's	EA/CR 125 BR	0.033	Air Valve	<20	200	
E012	Pupils Unisex WC's	EA/CR 125 BR	0.033	Air Valve	<20	200	
E013	Pupils Unisex WC's	EA/CR 125 BR	0.033	Air Valve	<20	200	
E014	Pupils Unisex WC's	EA/CR 125 BR	0.033	Air Valve	<20	200	
E015	Pupils Unisex WC's	EA/CR 125 BR	0.033	Air Valve	<20	200	
E016	Pupils Unisex WC's	EA/CR 125 BR	0.033	Air Valve	<20	200	
E017	Kitchen Sundry	AQN 450x450 ST/CP	0.166	Removable cone egrate grille	<20	315	
E018	Kitchen Sundry	AQN 450x450 ST/CP	0.166	Removable cone egrate grille	<20	315	
E019	Kitchen Sundry	AQN 450x450 ST/CP	0.247	Removable cone egrate grille	<20	315	
E020	SEB	EA/CR 125 BR	0.25	4 way diffuser - RAG	<20	-	
E021	SEND	AQN 450x450 ST/CP	0.25	4 way diffuser - RAG	<20	-	
E022	SEND	AQN 450x450 ST/CP	0.25	4 way diffuser - RAG	<20	-	
E023	SEB	AQN 450x450 ST/CP	0.25	4 way diffuser - RAG	<20	-	
E024	Dining/Social	LAF 10 1400x 125 BR	1.5	Linear Blade diffuser - RAG	<20	-	
E025	SEB	AQN 450x450 ST/CP	0.25	4 way diffuser - RAG	<20	-	
E026	MF1	AQN 450x450 ST/CP	0.25	4 way diffuser - RAG	<20	-	
E027	MF2	AQN 450x450 ST/CP	0.25	4 way diffuser - RAG	<20	-	
E028	MF2	AQN 450x450 ST/CP	0.25	4 way diffuser - RAG	<20	-	
E029	MF3	AQN 450x450 ST/CP	0.25	4 way diffuser - RAG	<20	-	
E030	SEB	AQN 450x450 ST/CP	0.25	4 way diffuser - RAG	<20	-	
E031	AW3	EA/CR 125 BR	0.03	Air Valve	<20	125	
E032	Reading Room	DF 300 x 4 3500 BR	0.14	Steel Slot Diffuser	<20	125	
E033	Reading Room	BQSN R 600-PG21-2+BR	0.14	Swirl	<20	-	
E034	MR1 Office	BQSN R 600-PG21-2+BR	0.165	Swirl	<20	315	
E035	Office (C Person)	BQSN R 600-PG21-2+BR	0.165	Swirl	<20	315	
E036	Library	LAF 10 1400x 125 BR	1.25	Linear Blade diffuser - RAG	<20	-	
E037	SEB	AQN 450x450 ST/CP	0.25	4 way diffuser - RAG	<20	-	
E038	Chapel	AQN 450x450 ST/CP	0.15	4 way diffuser	<20	-	

Notes

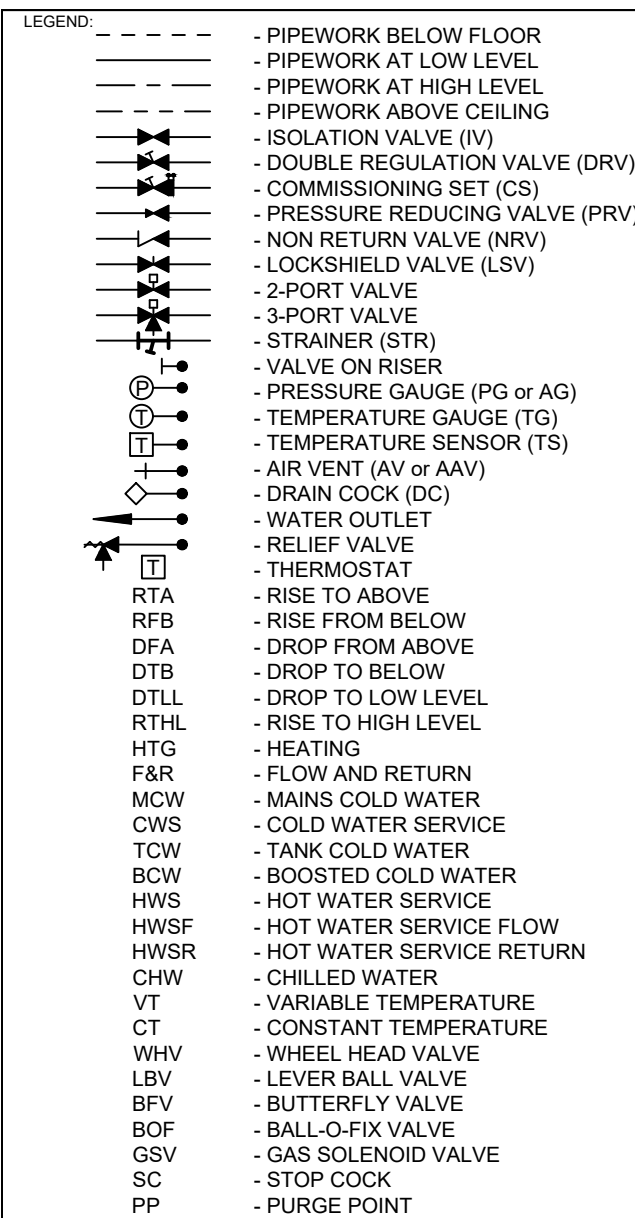
1. Grilles to be provided in a standard RAL colour, colour to be advised by architect
2. All grilles are to be provided with plenum boxes which are to be barofoam lined
3. Return air grilles shall be non vision type with a matt black painted back plate
4. All grilles are to be provided with opposed blade dampers
5. Contractor shall confirm the ceiling grid/lange fixing type with the architect before ordering
6. Grilles to be independently supported unless agree with architect and structural engineer that the ceiling can support the grille weight
7. Grille selections to take account of WIE Acoustic Report Requirements for each room

SURVIVAL PRIORITY SCHEDULE									
Reference	Area	Model Ref	Supply Vol	Unit	Type	Plenum box	Throw	Pressure drop	Neck connection
			m ³ /h				m	Pa	mm
SG01	Pupils Unisex WC's	BQSN-R 000-PHQ2+2BR	0.11	Swirl	Yes	Yes	1	<15	224
SG02	Pupils Unisex WC's	BQSN-R 000-PHQ2+2BR	0.11	Swirl	Yes	Yes	1	<15	224
SG03	Pupils Unisex WC's	BQSN-R 000-PHQ2+2BR	0.11	Swirl	Yes	Yes	1	<15	224
SG04	Endorsed Health/Club	BQSN-R 000-PHQ2+2BR	0.03	Swirl	Yes	Yes	1	<15	200
SG05	Meeting/Meeting Room	BQSN-R 000-PHQ2+2BR	0.03	Swirl	Yes	Yes	1	<15	200
SG06	Endorsed Health/Club	BQSN-R 000-PHQ2+2BR	0.03	Swirl	Yes	Yes	1	<15	200
SG07	SEMH	BQSN-R 000-PHQ2+2BR	0.03	Swirl	Yes	Yes	1	<15	200
SG08	Dry Store	BQSN-R 000-PHQ2+2BR	0.03	Swirl	Yes	Yes	1	<15	200
SG09a	Store	SSA 25225S+2 STAP	0.04	2 way diffuser	Yes	Yes	1.8	<15	150
SG09b	Kitchen Server	SSA 40545S+2 STAP	0.21	2 way diffuser	Yes	Yes	1.3	<15	315
SG10	Kitchen Server	SSA 40545S+2 STAP	0.21	2 way diffuser	Yes	Yes	1.3	<15	315
SG11	Kitchen Server	SSA 40545S+2 STAP	0.21	2 way diffuser	Yes	Yes	1.3	<15	315
SG12	SEIND	SSA 40545S+2 STBP	0.25	4 way diffuser	Monodirectional sweep plenum	Yes	<20	<250	
SG13	Kitchen Server	SSA 40545S+2 STBP	0.25	4 way diffuser	Monodirectional sweep plenum	Yes	<20	<250	
SG14	SEIND	SSA 40545S+2 STBP	0.25	4 way diffuser	Monodirectional sweep plenum	Yes	<20	<250	
SG15	Kitchen Server	SSA 40545S+2 STBP	0.25	4 way diffuser	Monodirectional sweep plenum	Yes	<20	<250	
SG16	Dining/Social	LAF 10800X20 BR	0.25	Linear Blade diffuser	Yes	Yes	<20	<250	
SG17	LAF Longitudinal	LAF 10800X20 BR	0.25	Linear Blade diffuser	Yes	Yes	<20	<250	
SG18	Dining/Social	LAF 10800X20 BR	0.25	Linear Blade diffuser	Yes	Yes	<20	<250	
SG19	LAF Longitudinal	LAF 10800X20 BR	0.25	Linear Blade diffuser	Yes	Yes	<20	<250	
SG20	Dining/Social	LAF 10800X20 BR	0.25	Linear Blade diffuser	Yes	Yes	<20	<250	
SG21	Dining/Social	LAF 10800X20 BR	0.25	Linear Blade diffuser	Yes	Yes	<20	<250	
SG22	MF1	SSA 40545S+2 STBP	0.25	4 way diffuser	Monodirectional sweep plenum	Yes	<20	<250	
SG23	MF1	SSA 40545S+2 STBP	0.25	4 way diffuser	Monodirectional sweep plenum	Yes	<20	<250	
SG24	MF2	SSA 40545S+2 STBP	0.25	4 way diffuser	Monodirectional sweep plenum	Yes	<20	<250	
SG25	MF2	SSA 40545S+2 STBP	0.25	4 way diffuser	Monodirectional sweep plenum	Yes	<20	<250	
SG26	MF3	SSA 40545S+2 STBP	0.25	4 way diffuser	Monodirectional sweep plenum	Yes	<20	<250	
SG27	MF3	SSA 40545S+2 STBP	0.25	4 way diffuser	Monodirectional sweep plenum	Yes	<20	<250	
SG28	MF3	SSA 40545S+2 STBP	0.25	4 way diffuser	Monodirectional sweep plenum	Yes	<20	<250	
SG29	Reading Room	DLF-40 x 3500 BR	0.14	Linear Slot	Yes	Yes	2.3	<25	315
SG30	Reading Room	DLF-40 x 3500 BR	0.14	Linear Slot	Yes	Yes	1.2	<15	315
SG31	MPIL Office	BQSN-R 000-PHQ2+2BR	0.185	Swirl	Yes	Yes	1.4	<15	315
SG32	Office (2 Person)	BQSN-R 000-PHQ2+2BR	0.185	Swirl	Yes	Yes	1.4	<15	315
SG33	Library	LAF 10800X20 BR	0.25	Linear Blade diffuser	Yes	Yes	<20	<250	
SG34	Library	LAF 10800X20 BR	0.25	Linear Blade diffuser	Yes	Yes	<20	<250	
SG35	Library	LAF 10800X20 BR	0.25	Linear Blade diffuser	Yes	Yes	<20	<250	
SG36	Library	LAF 10800X20 BR	0.25	Linear Blade diffuser	Yes	Yes	<20	<250	
SG37	Library	LAF 10800X20 BR	0.25	Linear Blade diffuser	Yes	Yes	<20	<250	
SG38	Library	LAF 10800X20 BR	0.25	Linear Blade diffuser	Yes	Yes	<20	<250	
SG39	Library	LAF 10800X20 BR	0.25	Linear Blade diffuser	Yes	Yes	<20	<250	
SG40	Library	LAF 10800X20 BR	0.25	Linear Blade diffuser	Yes	Yes	<20	<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 are to be barfoam lined
3. All grilles are to be provided with opposed blade dampers
4. Contractor shall confirm the ceiling grid/fixing type with the architect before ordering
5. Grilles to be independently supported unless agree with architect and structural engineer that the ceiling can support the grille weight

HEAT RECOVERY UNIT SCHEDULE																	
HPU Ref	Location	Manufacturer	Model	Supply		Extract		Heating Coil		Electrical Requirements				FCLC	SFP	Comments	
				Flow Rate	Est. Resistance	Flow Rate	Est. Resistance	Type	kW	V	Hz	V	W				W
				l/s	Pa	l/s	Pa										
HPU 01	Plantroom	Systemair	Tapvep FRIGEL-R-CAV	0.47	200	0.46	200	Electric	9	230	1	50	10,100	46	19	ECosmart approved (with TREND) HPU to run on time clock control	
HPU 02	Dining Room	Systemair	Tapvep FRIGEL-R-CAV	0.56	200	0.66	200	Electric	9	230	1	50	10,540	47	19	ECosmart approved (with TREND) HPU to run on time clock control	
HPU 03	FF Cytification	Systemair	Tapvep FRIGEL-R-CAV	0.5	200	0.5	200	Electric	9	230	1	50	10,100	46	19	ECosmart approved (with TREND) HPU to run on time clock control	
Notes SUPPLIER: Systemair																	



NOTES:

VENTILATION LEGEND

FA	FRESH AIR
EA	EXHAUST AIR
S	SUPPLY AIR
RE	RETURN AIR / EXTRACT
TE	TOILET EXTRACT
AHU	AIR HANDLING UNIT
ADO	AUTOMATIC OPENING VENT
ATTN	ATTENUATOR
CFAT	CIRCULAR FAN ATTENUATOR
FCU	FAN COIL UNIT
FD	FIRE DAMPER
VCD	VOLUME CONTROL DAMPER
DFA	DROP FROM ABOVE
DTB	DROP TO BELOW
RTA	RISE TO ABOVE
FB	FROM BELOW
LL	LOW LEVEL
HL	HIGH LEVEL

C2	SG08a ADDED, GRILLE LOCATIONS UPDATED, BUILDING LAYOUT UPDATED	27.06.22	PG
REV	DESCRIPTION	DATE	NAME

STATUS

CONTRACT

CLIENT:

ROSSLEE CONSTRUCTION

PROJECT:

OUR LADY'S RC HIGH SCHOOL
MANCHESTER

MECHANICAL SERVICES
VENTILATION LAYOUT
GROUND FLOOR



CPL Heating and Plumbing Ltd
Unit C1, Anchorage Business Park, Chain Caul Way
Ashton on Ribble, Preston, PR2 2YL

T: 01772 723723
mail@cplbuildingservices.co.uk
www.cplbuildingservices.co.uk

SCALE: 1:75@A1	DATE: JUN 22	DRAWN: PG	CHECKED: GF
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DRAWING NO:	REV:
12500 M E7000	C2