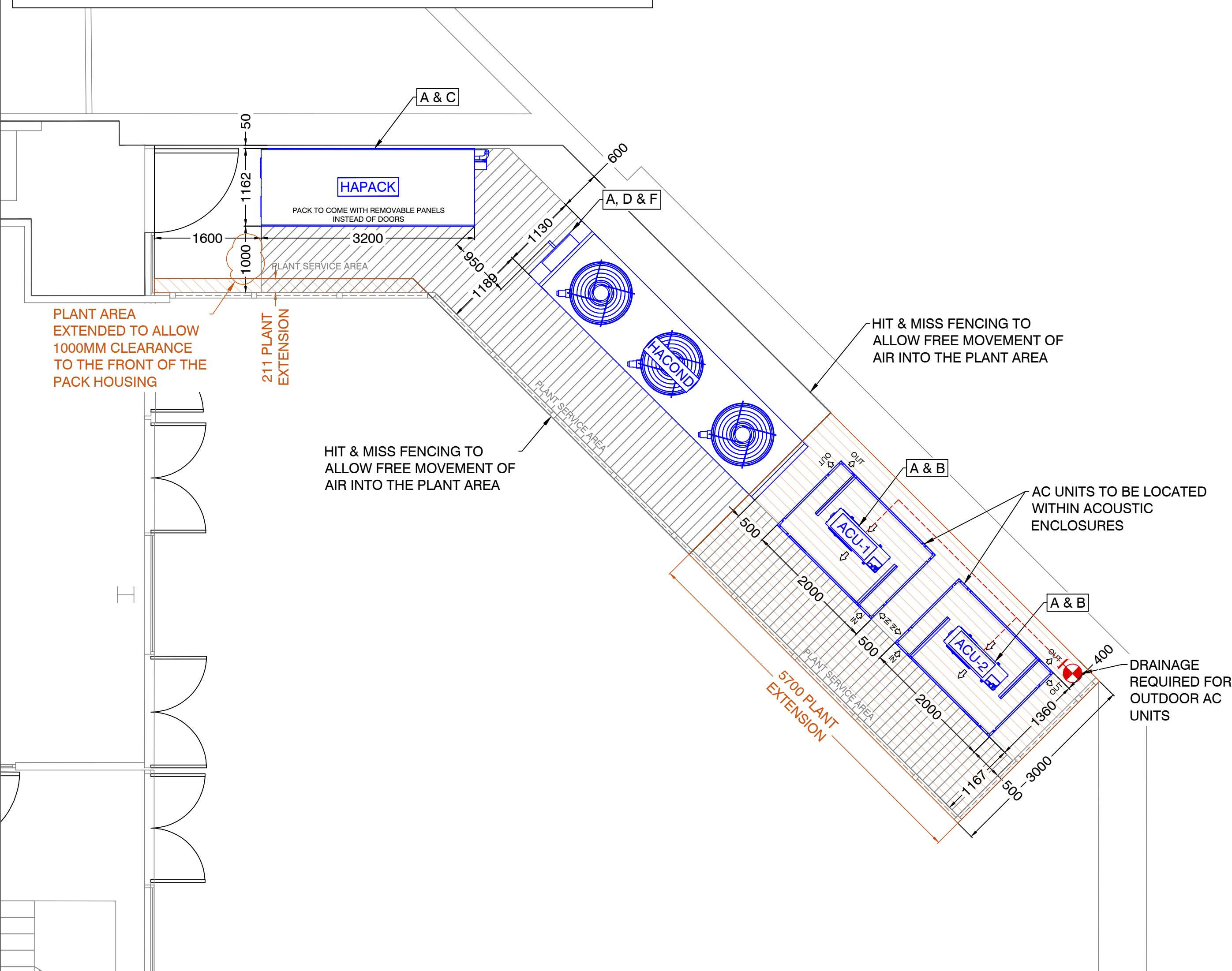


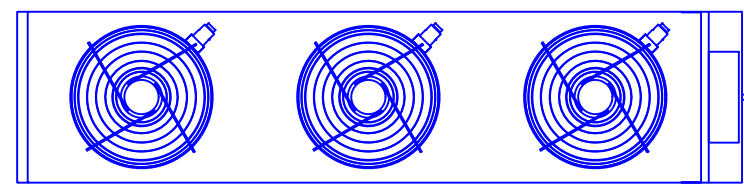
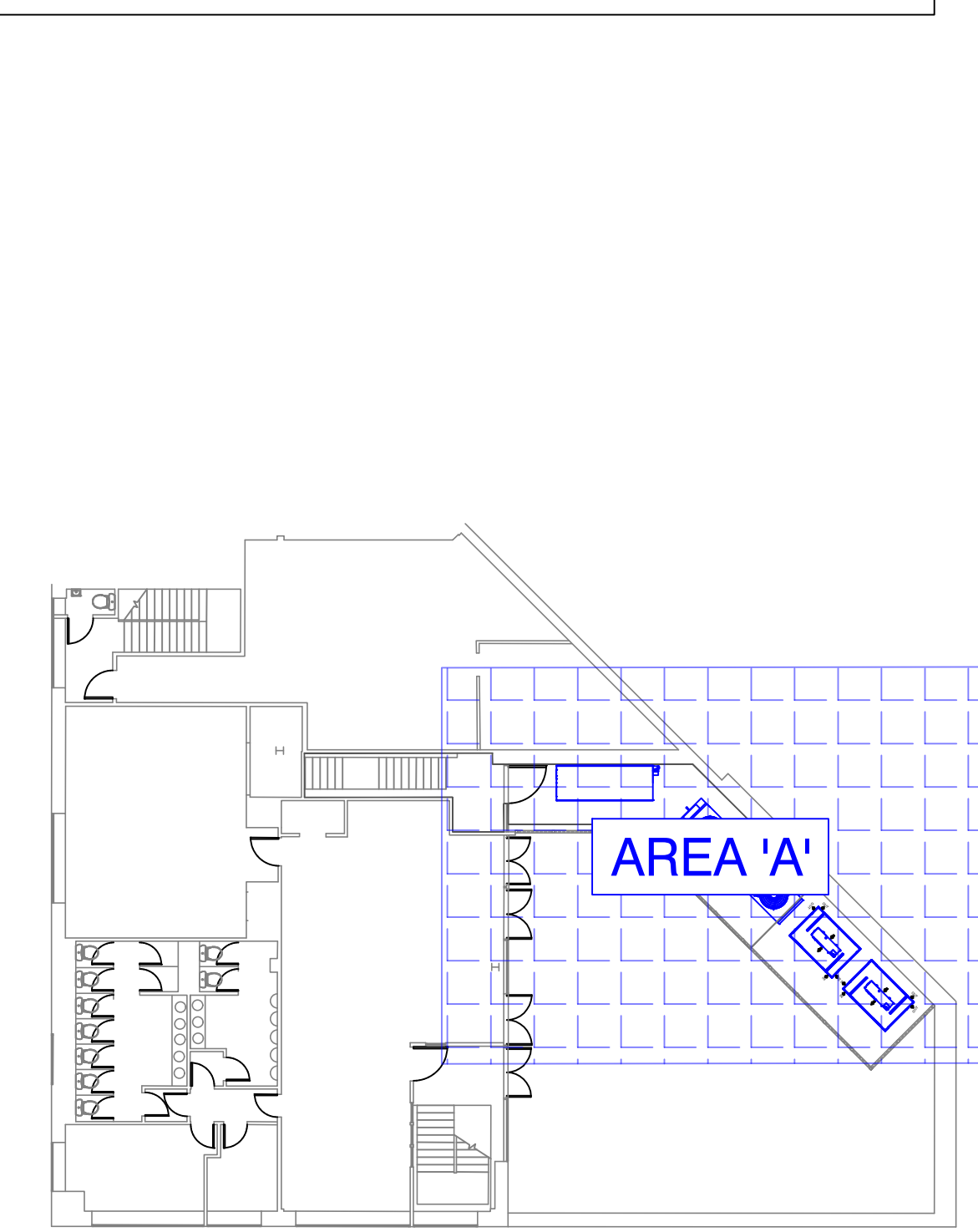
FIRST FLOOR TERRACE PLANT AREA (AREA "A")

SCALE: 1:50 @A1

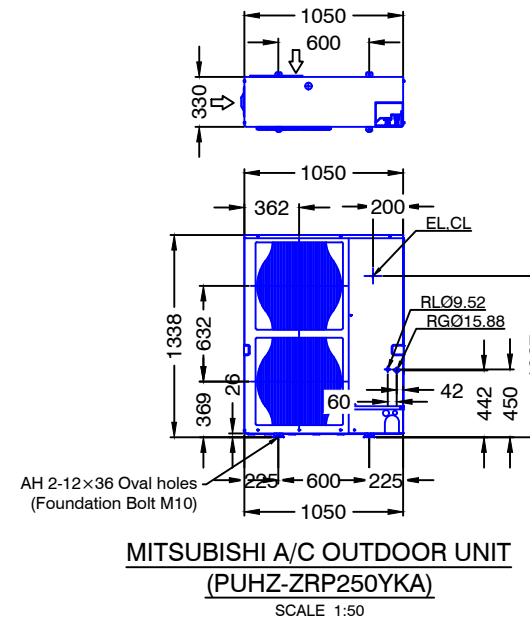
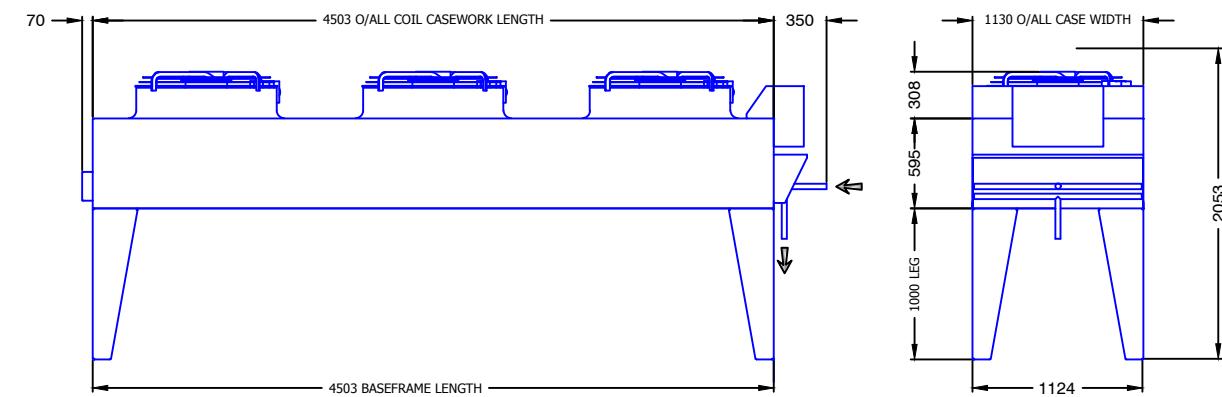


FIRST FLOOR / TERRACE OVERVIEW

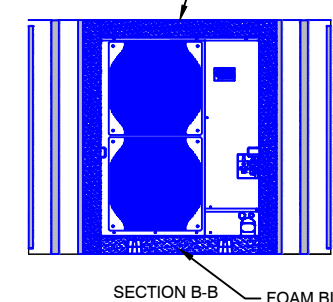
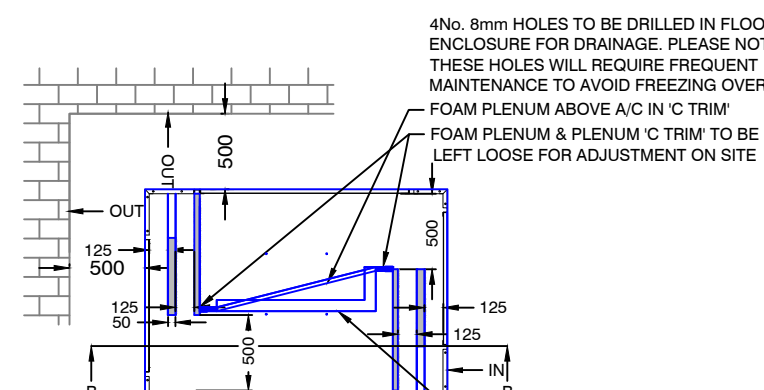
SCALE: NTS @A1



KELVION GAS COOLER - GF-MB103F4H-091
SCALE: 1:50



MITSUBISHI A/C OUTDOOR UNIT (PUHZ-ZRP250YKA)
SCALE: 1:50



NSL ACOUSTIC JAGUAR ENCLOSURE
SCALE: 1:50

REFRIGERATION PACK SELECTION															
HAPACK	Pack Refrigerant: R744		Manufacturer: Space Engineering		Integrated Receiver Size: 60.00L				Pack Details						
Compressor Reference	Compressor Model	Compressor Manufacturer	New/Exist	SST (°C)	Evap Capacity (kW)	THR (kW)	Design current (A/ph)	Full load Current (A/ph)	Electrical Connection	Length (mm)	Width (mm)	Height (mm)	Weight (kg)	Max dBA Rating @10m	
HA1	4MTL-07X [INV]	Copeland	New	-7	12.20	19.30	14.22	17.50	415v/3ph/50hz	3200	1130	1877	1750 (Dry Weight)	23 / 23	
HA2	4MTL-07X	Copeland	New	-7	12.10	19.00	12.48	17.50							
HA3	4MTL-07X	Copeland	New	-7	12.10	19.00	12.48	17.50							
HA4	4MTL-07X	Copeland	New	-7	12.10	19.00	12.48	17.50							
HT COMPRESSOR TOTALS					48.50	76.30	51.66	70.00							
PACK TOTALS					48.50	81.40	63.50	84.00	Pressure Relief Valves (High):		120.00 bar		Pressure Relief Valves (Low):		60.00 bar

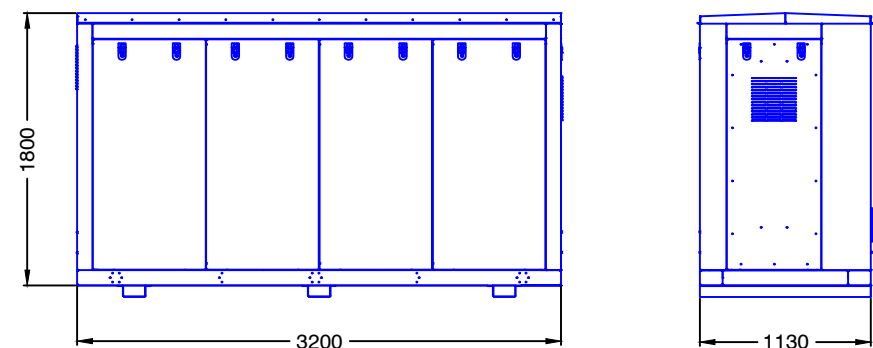
GAS COOLER SELECTION																	
Reference	Model	Manufacturer	New / Existing	Refrigerant	Gas Outlet / Ambient Temperature (°C)	TD (K)	THR (kW)	Current @ Design (per fan) (A)	Full Load Current (per fan) (A)	Supply Voltage & Phase	Run speed signal voltage (0-10v) (Day / Night)	RDM Setback Setting (Day / night)	Pipe / Fin Material	Pipe Sizes (In / Out)	Weight (kg)	Dimensions (LxWxH) (mm)	dB(A) @ 10m Day / Night
HACOND	GF-MB103F4H-091	Kelvion	New	R744	37 / 35	2	81.40	0.4	0.3	400V/3Ph/50Hz	2.2 / 2.2	78 / 78	Cu / AlMg	1-1/8" & 1-1/8"	700	4914 x 1130 x 1833	19 / 19

AIR CONDITIONING - SELECTION DETAILS																		
Item (Sys-FCU)	Model	Make	New/Existing	Type	Refrigerant	Position	Duty - Cooling (kW)	Duty - Heating (kW)	MCB Rating	Running Current (Max Current)	Electrical Connections	Refrigerant weight (kg)	Tail Sizes (S&L)	Airflow Rate	Weight (kgs)	Dimensions (L x W x H)	Noise dBA @ 1m	Attenuated Noise dBA @ 1m
ACU-1	PUHZ-ZRP250YKA3	Mitsubishi	New	Outdoor Unit	R410a	Plant	-	-	32	13.27	380-415v/3Ph/50hz	7.7	-	-	135	1050 x 330 x 1338	62	42
ACU-2	PUHZ-ZRP250YKA3	Mitsubishi	New	Outdoor Unit	R410a	Plant	-	-	32	13.27	380-415v/3Ph/50hz	7.7	-	-	135	1050 x 330 x 1338	62	42

NO NOISE SURVEY AVAILABLE AT TIME OF DESIGN



SPACE ENGINEERING - ST-4A PACK
SCALE: 1:50



AB Group - Reigate Office
Bank Chambers, 2 Church Street,
Reigate, Surrey, RH2 0AN.

AB Group - Manchester Office
Kenworthy Building, 83 Bridge Street
Manchester, M3 2RF.

AB Group - Ipswich Office
Bristol Court, Betts Ave, Martlesham,
Ipswich, IP5 3RY

Tel: 0333 9000 180
Web: abgroup.com

SCALE 1:50
DO NOT SCALE

- LEGEND
- HA01-1 FIXTURE NUMBER
 - MINIMUM SERVICE AREA REQUIRED
 - KEYCLAMP
 - HIT & MISS FENCING

PLEASE NOTE THAT ALL CDM DESIGN / WORKS BY MAIN CONTRACTOR

- GENERAL NOTES
- DESIGN IS BASED UPON REMOTE HT DISPLAY CASES & COLD ROOMS AND INTEGRAL FROZEN FOOD DISPLAY CASES & FREEZER COLD ROOM.
- GAS COOLER TO BE SUPPLIED WITH MINIMUM 750MM LEGS.
- TERRACE STRUCTURE TO BE CONFIRMED BY OTHERS IF IT IS SUITABLE FOR THE WEIGHT OF THE PLANT EQUIPMENT.
- OUTDOOR AC UNITS TO BE INSTALLED WITHIN ACOUSTIC ENCLOSURES - TBC ONCE NOISE REPORT AVAILABLE. NO NOISE SURVEY AT TIME OF DESIGN.

- REFERENCE NOTES
- A SMOOTH AND LEVEL BASE / PLINTH REQUIRED FOR REFRIGERATION PLANT AND AC OUTDOOR UNITS - TO BE PROVIDED BY THE BUILDER.
 - B AC UNIT - REQUIRED TO BE MOUNTED ON SUITABLE ANTI-VIBRATION PAD.
 - C COMPRESSOR PACK - TO BE MOUNTED ON SUITABLE ANTI-VIBRATION MOUNT.
 - D GAS COOLER - TO BE MOUNTED ON SUITABLE ANTI-VIBRATION PAD.
 - E MINIMUM PLANT AREA FENCE TO BE 2.4M HIGH.
 - F GAS COOLERS ARE SUPPLIED WITH ISOLATOR & CONTROL PANEL ON THE PIPE END, UNLESS OTHERWISE STATED.

FEASIBILITY

Site Address: Co-op - Lord Street Wrexham LL11 1LG			
Drawing Title: REFRIGERATION PLANT LAYOUT			
Consultant:			
Design Engineer: Bradley S Davis			
Date: 20.03.20		Drawn By: JRG	
Checked By: JG		Drawing No: CR3	
Revision: 02		Scale: 1:50@A1	
Contract No: QR C4243		Derived File: WACBLD802	
Revision	Details	Drawn	Date
02	Acoustic Enclosures relocated and plant footprint updated.	JG	22.04.20
01	Plant relocated to the first floor terrace.	JG	16.04.20
00	Preliminary Issue.	JRG	20.03.20