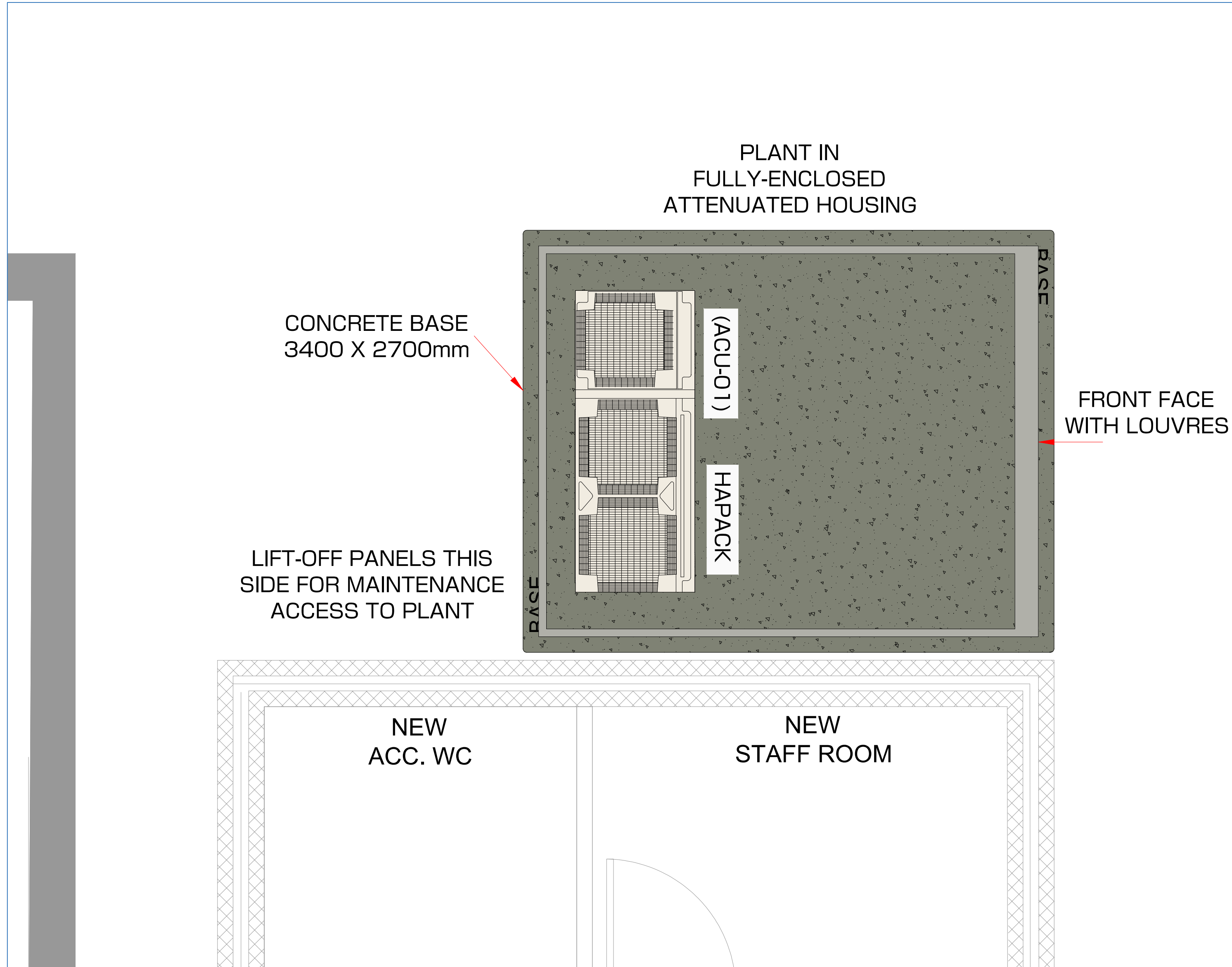
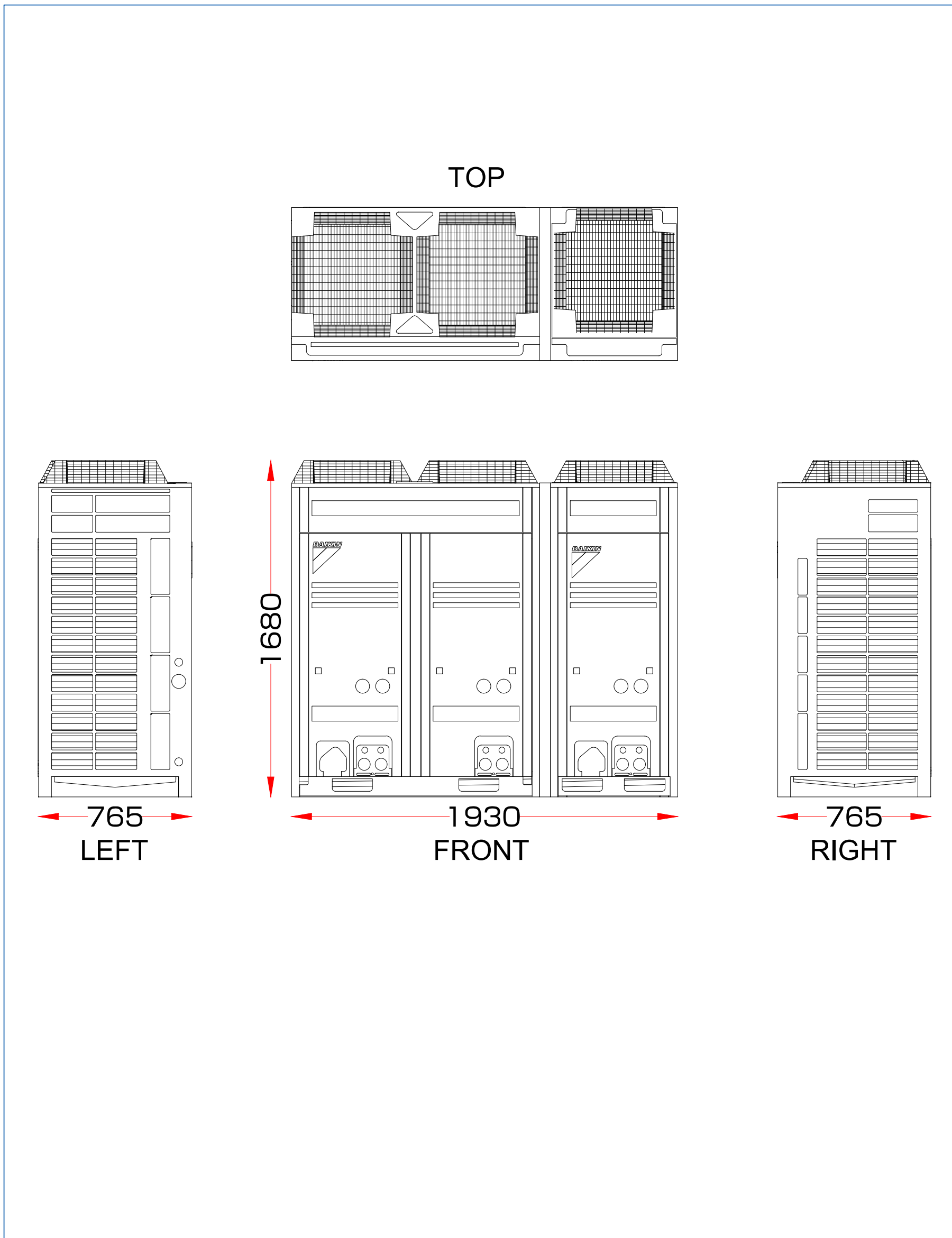


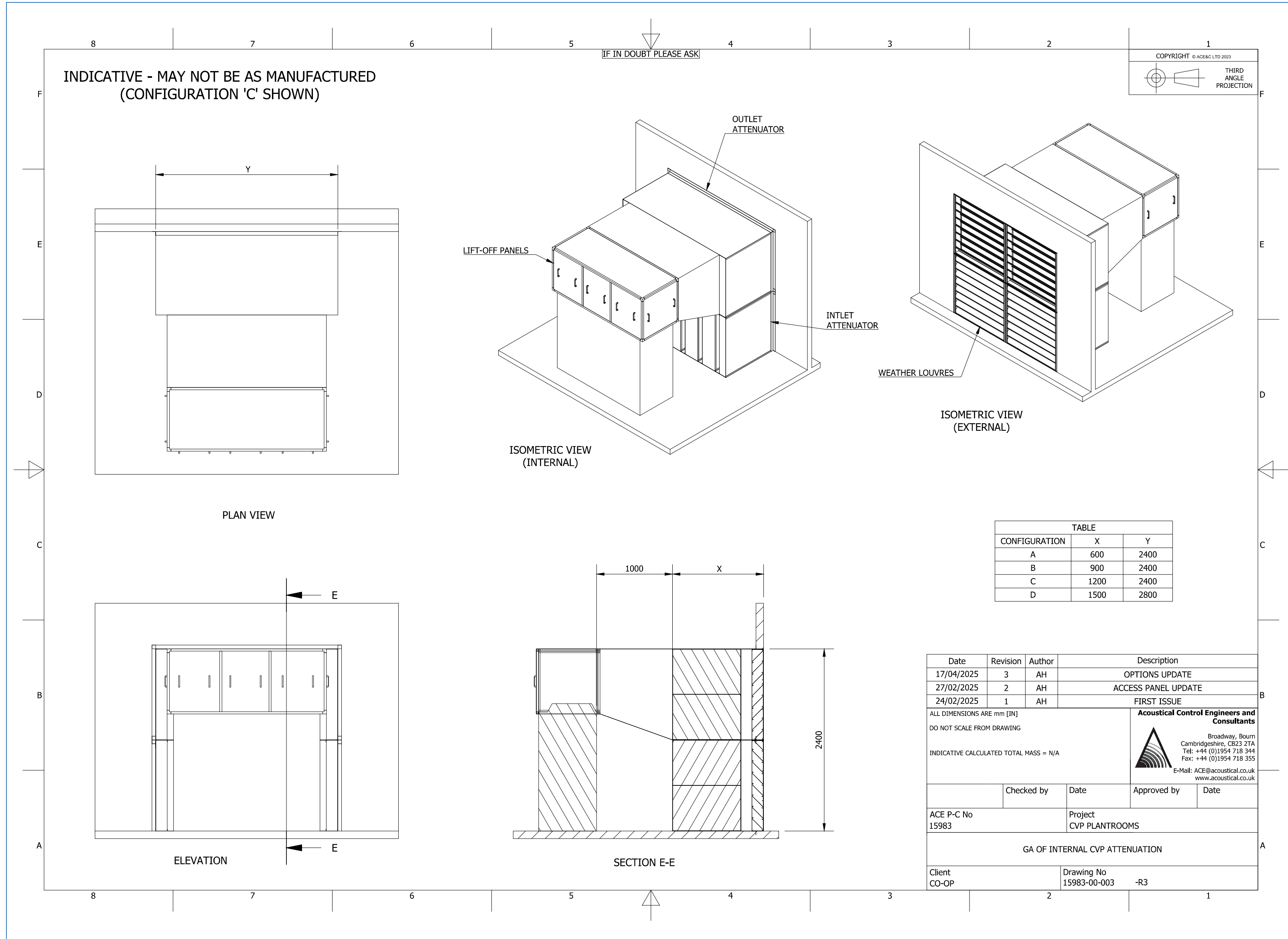
PLANT AREA (1:20)



HAPACK (1:20) (NEW)



HAPACK (ACU-01) ATTENUATED HOUSING (1:40)



NOTE: CONFIGURATION "C" SPECIFIED. FULL HOUSING NOT SHOWN FOR CLARITY.

REFRIGERATION ENGINEERING SCHEDULE - PLANT

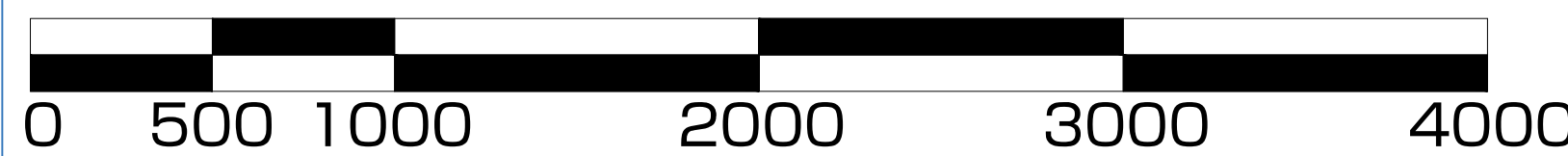
HAPACK (ACU-01) Details													
Casing	Colour	LRYEN10A7Y1				Total Load		9.676kW					
Dimensions	Unit	Height	mm	1680		Total Load, 5% safety		10.160kW					
		Width	mm	1930		Evaporator Capacity		15.660kW					
		Depth	mm	765									
Weight	Unit		kg	563									
Fan	Type	Propeller fan											
	Quantity	3											
	Air flow rate	Cooling	Nom.	m³ /min	300								
Fan motor	Output	W				750							
Heat exchanger	Type	Cross fin coil											
Refrigerant	Type 2	R-744											
	GWP	1.0											
	Charge		kg	6.30									
Standard Accessories	Installation manual	1											
	General safety precautions	1											
	Operation manual	1											
	Copper packing for stop valve (15 pcs)	1											
	Copper packing for service port (15 pcs)	1											
	Declaration of conformity	1											
Power supply	Phase	3N											
	Frequency		Hz	50									
	Voltage		V	380-415									
Notes													
Heat Pump Details For Zone: Sales Area													
Outdoor Unit Models													
AC I.D.	New / Existing	Model	Manufacturer	Number of Connected Indoor Units	Refrigerant	System Type	Furthest Pipe Length (m)	Maximum Pipe Length (m)	Refrigerant Charge (Standard) (kg)	Refrigerant Charge (Additional) (kg)	Nominal Heating Power Input (kW)	Nominal Cooling Power Input (kW)	
ACU-01	New	CVP (LRYEN10A7Y1)	Daikin	2	R744	Conveni-Pack	36	-	5.300	29.400	4.000	3.500	
	Totals	1							5.300	29.400	4.000	3.500	
Indoor Unit Models													
AC I.D.	New / Existing	Model	Connected Outdoor Unit I.D.	Emitter Type	Nominal Heating Capacity (kW)	Nominal Cooling Capacity (kW)	Actual Heat Capacity @ Design WBT (kW)	Actual Cool Capacity @ Design DBT (kW)	Zone Heating Load Inc. Safety (kW)	Zone Cooling Load Inc. Safety (kW)	Utilisation at Design Conditions Heating	Utilisation at Design Conditions Cooling	
AC1-01	New	FXFN112A2	ACU-01	Ceiling Cassette	11.000	5.500	10.765	7.570					
AC1-02	New	FXFN112A2	ACU-01	Ceiling Cassette	11.000	5.500	10.765	7.570					
	Totals	2			22.000	11.000	21.530	15.140	16.717	3.246	77.64%	21.44%	
Plant Details (Outdoor Units)													
ACU-01													
Weight (kg)	Width (mm)	Depth (mm)	Height (mm)	Sound dB(A) @ 1m H.	Sound dB(A) @ 1m C.	Sound Power dB(A)	Starting Current (A)	Run Current Heat (A)	Run Current Cool (A)	Full Load Current (A)	Fuse Rating (A)	Power Supply	
563	1930	765	1680	64*	64*	75*	-	25.700	25.700	45.000	60	400v 3P & N	

PROJECT DETAILS & DESIGN CONDITIONS

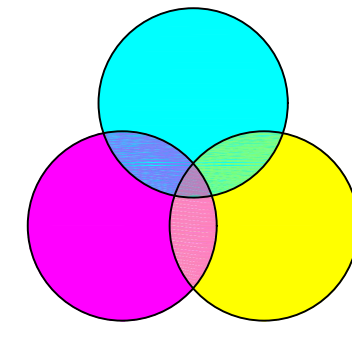
Project Details		
Store Name:	Cuckfield	
Store Code:	4177	
Project Name:	2026 Food Refit	
Address:	Whitemans Green Cuckfield West Sussex RH17 5BY	
Client:	Co-op	
Project Reference Number:	2663	
Client Drawing Number:	P2-F7-M0	
Engineer:	Gary Bell-Bond	
Date:	18/06/2026	
Engineering Revision:	-	
Refrigeration Design Conditions		
System Name:	HA System	
Refrigerant	R744	
System Configuration	DX TO F9-BP	
	HT	Units
Maximum Allowable Pressure	60	bar(g)
Evaporating Temperature	-3	° C
Suction Penalty	1	K
Saturated Suction Temperature	-4	° C
Evaporator Superheat	4	K
Suction Line Superheat	8	K
Additional Superheat	0	K
Total Superheat at Compressor Inlet	12	K
Suction Gas Return Temperature	8	° C
	High Side	
Maximum Allowable Pressure	120	bar(g)
Supercritical Operation		
Maximum Ambient Temperature	35	° C
Gas Cooler TD	3	K
Gas Cooler Outlet Temperature	38	° C
Return Line HX Cooling	0	K
Cooled Gas Temperature	38	° C
Discharge Design Pressure f(GCOT) Profile	Daikin	90 bar(a)
Subcritical Operation		
Maximum Ambient Temperature	20.0	° C
Condenser TD	8.0	K
Maximum Condensing Temperature (GC/Condenser Selection)	28.0	° C
Minimum Condensing Temperature (Compressor Envelope)	13.0	° C
Winter Ambient	-3.0	° C
	Intermediate Side	
Maximum Allowable Pressure	60	bar(g)
Intermediate Operating Pressure	38	bar(a)
Equivalent Vessel Temperature	3.3	° C
Liquid HX Subcooling	0	K
Liquid Temperature	3.3	° C
Maximum Liquid Temp (Pipework Design)	5	° C
Maximum Liquid Temp (Pipework Design)	-2	° C
Notes: The refrigeration plant consists of a HT-Only Daikin CVP (R744). Limited design information of proprietary plant. The LT cases and back-up freezer shall be integral. Sales area heating is via the CVP with 120 bar cassettes.		

DWG Units: mm

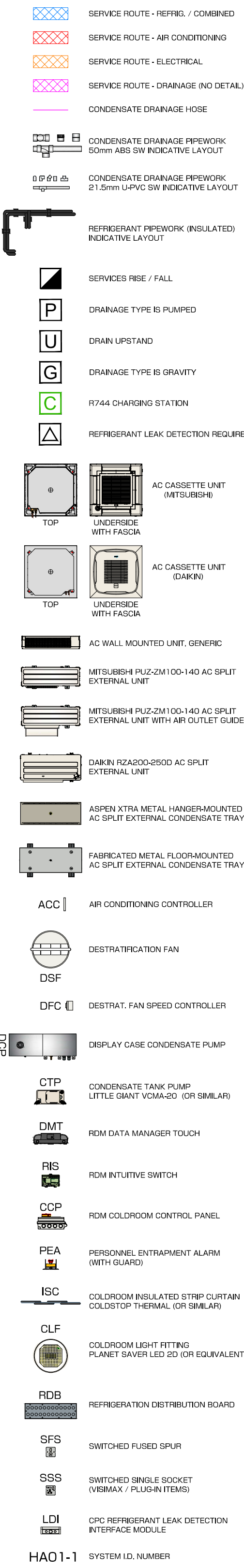
SCALE BAR 1:20



TO MAINTAIN STANDARDS AND THE REQUIRED LEVEL OF SAFETY, THERE MUST BE NO DEVIATIONS FROM THE DESIGN DRAWINGS. ANY CHANGES MUST BE CLEARED WITH A SENIOR MANAGER AT HEALYS. DO NOT INSTALL ANYTHING DIFFERENTLY WITHOUT PRIOR PERMISSION.



LEGEND (NTS)



HA01-1 SYSTEM ID NUMBER

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