

VARIABLE REFRIGERANT VOLUME - INDOOR UNIT SCHEDULE (DAIKIN)																								
TAG	ROOM	"BASIS OF DESIGN (DAIKIN)"	"NOMINAL CAPACITY "	TYPE	CONNECTED TO:		SUPPLY FAN	COOLING CAPACITY				HEATING CAPACITY			ELECTRICAL			DIMENSIONS		WEIGHT	Options and Accessories			
					CONDENSING UNIT	"ZONE CHANGEOVER DEVICE"	"AIR FLOW RATE l/s"	REQUIRED		AVAILABLE		ENTERING AIR		"REQUIRED kW"	"AVAILABLE kW"	"ENTERING AIR "C DB"	POWER SUPPLY	Min Circuit Amps	"Max Overcurrent Protection"	WxHxD		kg		
								TOTAL kW	SENSIBLE kW	TOTAL kW	SENSIBLE kW	°C DB	°C WB											
AC 3	Cardio Space	FXFA100A	10	Round Flow Round flow cassette	OU-01 Cardio Space (DX Heat Pump)	No	480.00	n/a	n/a	7.6	6.0	22.0	15.4	n/a	11.5	22.0	220V 1ph	0.8	6.0	840 x 246 x 840	24.0	BRC1H52W7 (1), BYCQ140E (1)		
AC 2	Cardio Space	FXFA100A	10	Round Flow Round flow cassette	OU-01 Cardio Space (DX Heat Pump)	No	480.00	n/a	n/a	7.6	6.0	22.0	15.4	n/a	11.5	22.0	220V 1ph	0.8	6.0	840 x 246 x 840	24.0	BRC1H52W7 (1), BYCQ140E (1)		
AC 1	Cardio Space	FXFA100A	10	Round Flow Round flow cassette	OU-01 Cardio Space (DX Heat Pump)	No	480.00	n/a	n/a	7.6	6.0	22.0	15.4	n/a	11.5	22.0	220V 1ph	0.8	6.0	840 x 246 x 840	24.0	BRC1H52W7 (1), BYCQ140E (1)		
AC 6	High Performance Gym	FXMA250A	25	Concealed ceiling unit with high ESP	OU-02 High Performance Gym (DX Heat Pump)	No	1,233.33	n/a	n/a	19.3	15.8	22.0	15.4	n/a	29.1	22.0	220V 1ph	5.2	6.0	1,490 x 470 x 1,100	115.0	BRC1H52W7 (1)		
AC 4	High Performance Gym	FXMA250A	25	Concealed ceiling unit with high ESP	OU-02 High Performance Gym (DX Heat Pump)	No	1,233.33	n/a	n/a	19.3	15.8	22.0	15.4	n/a	29.1	22.0	220V 1ph	5.2	6.0	1,490 x 470 x 1,100	115.0	BRC1H52W7 (1)		
AC 7	High Performance Gym	FXMA250A	25	Concealed ceiling unit with high ESP	OU-03 High Performance Gym (DX Heat Pump)	No	1,233.33	n/a	n/a	19.3	15.8	22.0	15.4	n/a	29.1	22.0	220V 1ph	5.2	6.0	1,490 x 470 x 1,100	115.0	BRC1H52W7 (1)		
AC 5	High Performance Gym	FXMA250A	25	Concealed ceiling unit with high ESP	OU-03 High Performance Gym (DX Heat Pump)	No	1,233.33	n/a	n/a	19.3	15.8	22.0	15.4	n/a	29.1	22.0	220V 1ph	5.2	6.0	1,490 x 470 x 1,100	115.0	BRC1H52W7 (1)		

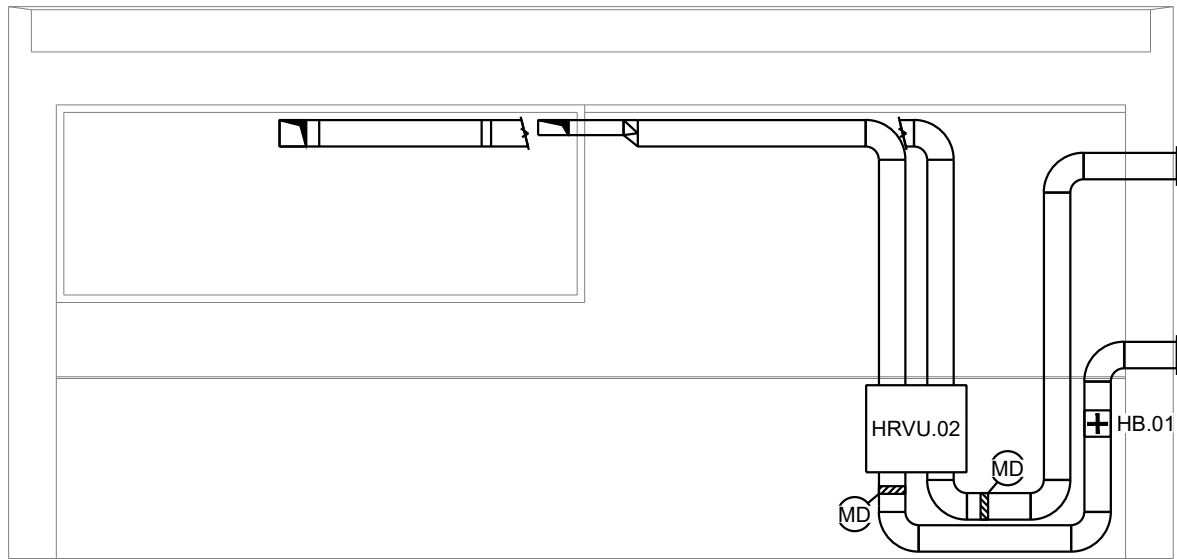
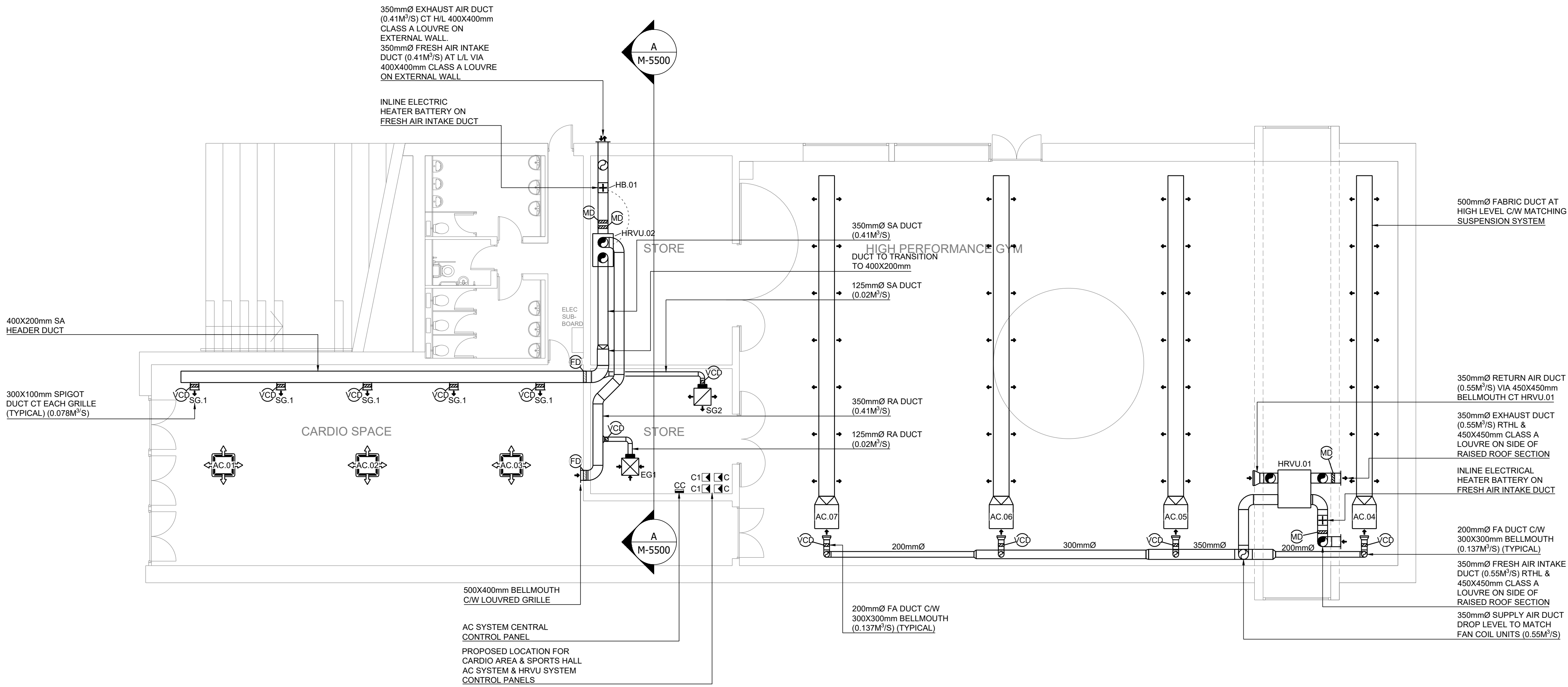
SCHEDULE OF HEAT RECOVERY UNITS (DAIKIN)									
REF	MODEL	WXHXD (MM)	WEIGHT (KG)	MAX RH (S)	MIN TA ("C)	MAX TA ("C)	MIN AFL (L/S)	MAX AFL (L/S)	HEATER BATTERY
HRVU.01	VAM2000J	1327x720x1152	160	80	-15.0	50.0	416	555	VH5B 2.5KW
HRVU.02	VAM1500J	1327x720x1152	160	80	-15.0	50.0	341	416	VH5B 2.5KW

NOTE: BOTH UNITS TO BE COMPLETE WITH INTEGRAL CO2 SENSORS TO CONTROL VENTILATION RATES.

SCHEDULE OF SUPPLY AIR GRILLES (GILBERTS)				
REF	LOCATION	AIR VOLUME M³/S	SIZE (MM)	TYPE
SG1	CARDIO ROOM	0.078	300X100	SERIES G ADJUSTABLE DOUBLE DEFLECTION GRILLE GHV-DO (GRILL TO BE C/W INTEGRAL DAMPER)
SG2	OFFICE	0.02	600X600	FIXED SWIRL DIFFUSER GSF8160 C/W PLENUM BOX WITH SIDE ENTRY C/W PERFORATED PLATE

SCHEDULE OF EXTRACT AIR GRILLES (GILBERTS)				
REF	LOCATION	AIR VOLUME M³/S	SIZE (MM)	TYPE
EG1	OFFICE	0.02	600X600	GILBERT PERFORATED FACE PLATE PGR C/W PLENUM BOX & OBD. C/W WHITE POWDER PAINT FINISH

VARIABLE REFRIGERANT VOLUME - AIR-COOLED CONDENSING UNIT SCHEDULE (DAIKIN)																				
TAG: ROOM	"BASIS OF DESIGN (DAIKIN)"	"NOMINAL CAPACITY "	DESCRIPTION	COOLING CAPACITY		HEATING CAPACITY		REFRIGERANT CHARGE		"CONNECTION RATIO (%)"	ELECTRICAL						DIMENSIONS			
				kW	AMBIENT DESIGN ("C DB)	kW	"AMBIENT DESIGN ("C DB / WB)"	Factory Charge (kg)	Add'l Refrigerant (kg)		"VOLTAGE- PHASE"		"MIN CIRCUIT AMPS (MCA)"		"MAX OVERCURRENT PROTECTION (MOP)"		"RUNNING CURRENT(RLA)"		"WxHxD (mm)"	"WEIGHT (kg)"
											mod #1	total	mod #1	total	mod #1	total	mod #1	total		
OU-01 Cardio Space (DX Heat Pump)	RXYA12A	12	Air cooled heat pump (1)	23.4	28.0	23.5	-3.0 / -3.0	9.0	3.6	100.0	400V 3Nph	24	24	32	32	15.60	15.60	930 x 1,685 x 765	214.0	
OU-02 High Performance Gym (DX Heat Pump)	RXYA20A	20	Air cooled heat pump (1)	39.1	28.0	40.2	-3.0 / -3.0	10.6	6.7	100.0	400V 3Nph	42	42	50	50	32.80	32.80	1,240 x 1,685 x 765	320.0	
OU-03 High Performance Gym (DX Heat Pump)	RXYA20A	20	Air cooled heat pump (1)	39.1	28.0	40.2	-3.0 / -3.0	10.6	6.7	100.0	400V 3Nph	42	42	50	50	32.80	32.80	1,240 x 1,685 x 765	320.0	



A Section A

Scale: 1:100

SPECIFICATION FOR FIBERTEC AIR DISTRUBTION TEXTILE DUCTS			
MANUFACTURER	KE FIBERTEC		
DUCT SHAPE	CIRCULAR		
DIAMETERS	500MM AS INDICATED ON DRWGS		
LENGTHS	AS PER DRAWING		
DUCT TYPE	KE DIRECT SYSTEM NOZZFLOW 18MM NOZZLES - NOZZLE LOCATIONS TO BE FINALISED BEFORE MANUFACTURE		
MATERIAL	GREENWEAVE		
MATERIAL PROPERTIES	FIRE RETARDANT - DIN 4102 B1		
	HEAT RESISTANCE (CONTINUOUS)	OC	140
	HEAT RESISTANCE (SOFTENING)	OC	235
SUSPENSION TYPE	SHRINKAGE % AT 40 DEG C - MAX 0.5%		
	KE MOUNTING SAFETRACK STANDARD		
	STANDARD RAL COLOURS AVAILABLE	WHITE (9003)	BLUE (5005) ORANGE (1003)
SUPPLIER	DARK GREY (7005)		
	BLACK (9005) RED (3027)		
	LIGHT GREY (7044)		
CONTACT	GREEN (6016) TAN (1017)		
	SUPPLIER KE FIBRETECH LTD		
CONTACT	JAMES BOWLES / PH: 0044 02382 511052 / E: JAMES@KE-FIBERTEC.CO.UK		

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- General notes:
- This drawing to be read in conjunction with all relevant architectural drawings and specifications.
- This drawing to be read in conjunction with all relevant structural drawings and specifications.
- This drawing to be read in conjunction with all relevant mechanical and electrical drawings and specifications.
- All dimensions in millimeters, do not scale from this drawing, only use figured dimensions only.
- Contractor must verify all dimensions on site prior to installation of services and production of working drawings.
- Notes:
- The entire ductwork installation shall be supplied & installed in full compliance with DW144 and CIBSE standard guidelines & recommendations
 - All supply, extract, return grilles to be complete with volume control damper / opposed blade damper to allow the system to be balanced correctly
 - All supply, extract, return grilles to be complete 250mm high grille box minimum
 - All ductwork bends weather curved or mitres to be complete with internal turning vanes
 - All supply and return air ductwork to be fully insulated as per technical specification. All insulation to be properly secured into position.
 - All ductwork systems to be clearly labelled in accordance with DW144 and CIBSE standard guidelines and recommendations
 - All external louvre's to be class "A" and c/w internal insect mesh & powder coated coloured paint finish, colour to be finalized with project architect
 - All transfer grilles grilles in internal doors to be complete with strips double sided obstructed view type c/w RAL colour powder paint finish, colour to be finalized with project architect

- Legend:
- VOLUME CONTROL DAMPER
 - MOTORISED DAMPER
 - FIRE DAMPER
 - TEMPERATURE SENSOR
 - CONTROLLER PANEL
 - SUPPLY GRILLE
 - EXTRACT GRILLE

P01	For Information	dd/mm/2025
Rev	Description	Date
MOLONEYFOX CONSULTING ENGINEERS 48 O'Connell Street, Limerick, T. 061527881 E: info@MFCConsulting.ie www.MoloneyFoxConsulting.ie		
Client:	Mary Immaculate College	
Architect:	Quinn Architects	
Project:	High Performance Gym T2 Tailteann Building, MIC	
Drawing:	Mechanical Installation Ventilation & Air Conditioning Services	
MFC Project Reference 26.3138		Scale 1:100 A1
Drawn GJA	Checked TK	Approved JM
Drawing Reference:		Status: Rev:
26.3138-MFC-XX-00-DR-M-5500 (S2) (P01)		