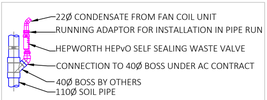
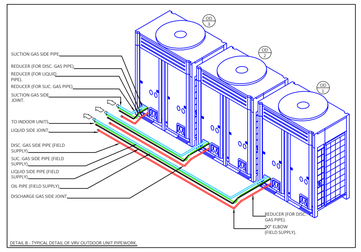
FLOORS	SYSTEM NUMBER
15TH FLOOR	1 & 2
14TH FLOOR	3 & 4
13TH FLOOR	5 & 6
12TH FLOOR	7 & 8
11TH FLOOR	9 & 10
10TH FLOOR	11 & 12
9TH FLOOR	13 & 14
8TH FLOOR	15 & 16
7TH FLOOR	17 & 18
6TH FLOOR	19 & 20
5TH FLOOR	21 & 22
4TH FLOOR	23 & 24
3RD FLOOR	25 & 26
2ND FLOOR	27 & 28
1ST FLOOR	29
GROUND FLOOR	30

SYSTEM FLOOR NUMBER DESCRIPTION
(REFER TO DRAWING 3919/M605)



DETAIL A:
TYPICAL FCU CONDENSATE CONNECTION TO SOIL STACK

OUTDOOR UNIT AIR CONDITIONING SCHEDULE	
REFERENCE	Indoor model
MOU 01	PURY-P700YSNW-A
MOU 02	PURY-P450YSNW-A
MOU 03	PURY-P200YNW-A
MOU 04	PURY-P250YNW-A

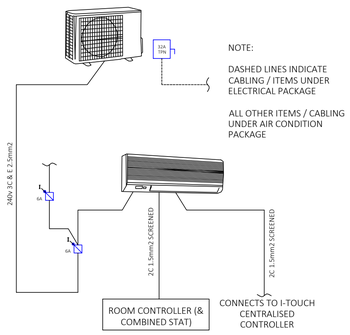


DETAIL B - TYPICAL DETAIL OF VRV OUTDOOR UNIT PIPEWORK.

OUTDOOR UNIT AIR CONDITIONING SCHEDULE		
REFERENCE	Serving	Indoor model
MOU 01	System 30	PURY-P700YSNW-A
MOU 02	System 29	PURY-P450YSNW-A
MOU 03	Systems 28,27,26,25,24,23,22,20,19, 18,17,16,15,14,13,12,11,10, 9,8,7,6,5,4,3,2,1	PURY-P200YNW-A
MOU 04	System 21	PURY-P250YNW-A

IT IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO ENSURE LEAK DETECTION CALCULATIONS ARE COMPLETED AND CHECKED WITH DAIKIN . SHOULD LEAK DETECTION BE REQUIRED THE CONTRACTOR SHALL INCLUDE FOR ALL NECESSARY COSTS INCLUDING ASSOCIATED EQUIPMENT & ELECTRICAL COSTS. ALL SYSTEM LENGTHS & REFRIGERANT CHARGES ARE TO BE CHECKED WITH DAIKIN PRIOR TO ORDER & INSTALLATION.

ALL OUTDOOR CONDENSER UNIT SECTIONS TO BE CHECKED & CONFIRMED BY DAIKIN PRIOR ORDER & INSTALLATION.



SCHEMATIC 1: INDICATIVE DAIKIN COMMS ROOM SPLIT SYSTEM WIRING SCHEMATIC

(FULL SYSTEM SCHEMATIC TO BE DEVELOPED BY SPECIALIST FOR COMMENT BY CONSULTING ENGINEERS)

REFRIGERANT PIPEWORK FROM CONDENSERS OFFSETS TO RISER AND DTB TO SERVE VRV IV BRANCH SELECTOR HEAT RECOVERY FOR SYSTEMS :
- 15th Floor (System 1)
- 15th Floor (System 2)
- 14th Floor (System 3)
- 14th Floor (System 4)
- 13th Floor (System 5)
- 13th Floor (System 6)
- 12th Floor (System 7)
- 12th Floor (System 8)
- 11th Floor (System 9)
- 11th Floor (System 10)
- 10th Floor (System 11)
- 10th Floor (System 12)
- 9th Floor (System 13)
- 9th Floor (System 14)
- 8th Floor (System 15)
- 8th Floor (System 16)
- 7th Floor (System 17)
- 7th Floor (System 18)
- 6th Floor (System 19)
- 6th Floor (System 20)
- 5th Floor (System 21)
- 5th Floor (System 22)
- 4th Floor (System 23)
- 4th Floor (System 24)
- 3rd Floor (System 25)
- 3rd Floor (System 26)
- 2nd Floor (System 27)
- 2nd Floor (System 28)

REFRIGERANT PIPEWORK IN RISER TO RISE TO H/L OFFSETTING IN PLANTROOM & DROPPING TO L/L EXTERNALLY TO SERVE CONDENSERS.

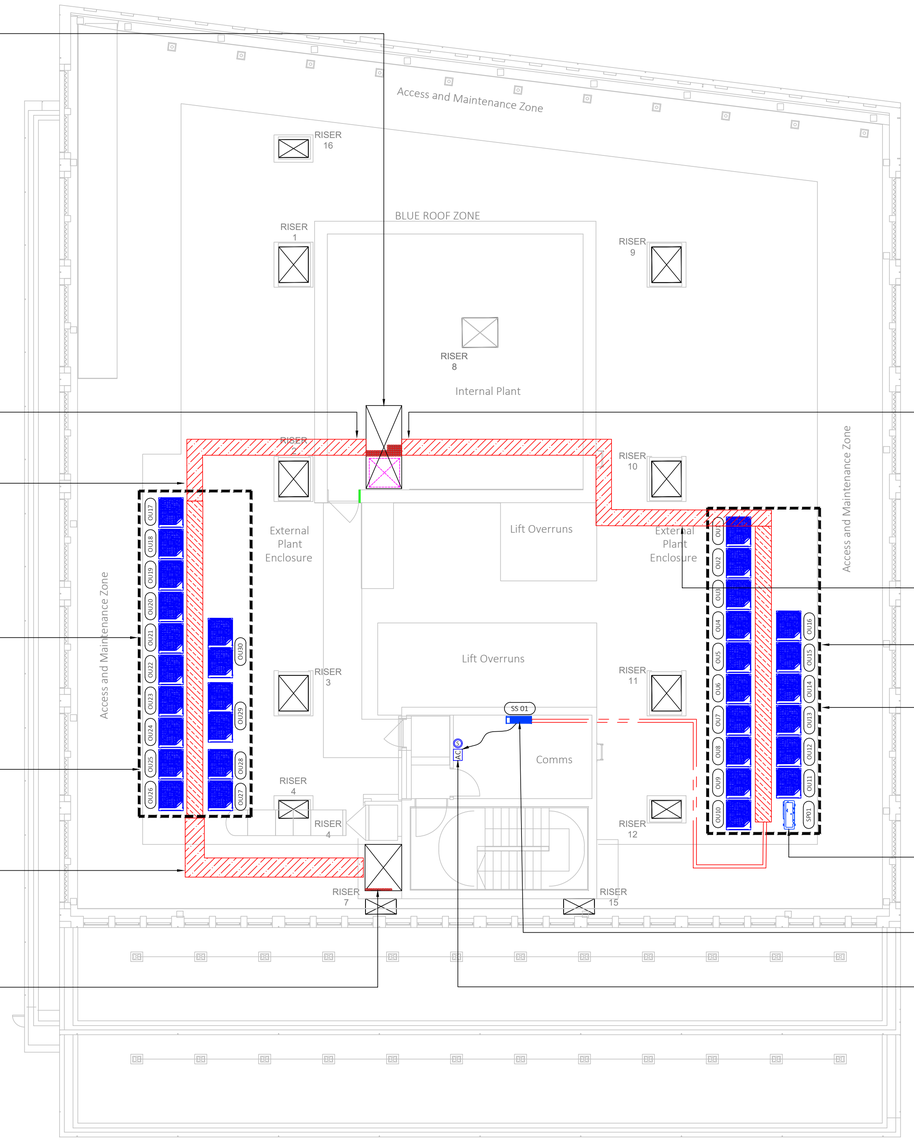
MAIN CONTRACTOR TO PROVIDE STEP OVER ACCESS SYSTEM TO PROTECT AC PIPEWORK WHERE REQUIRED.

OUTDOOR AC CONDENSERS TO SERVE HOTEL

OUTDOOR UNITS TO BE MOUNTED IN EXTERNAL PLANT AREA FULLY LABELLED WITH RELATION & WITH REQUIRED MANUFACTURERS CLEARANCES. OUT DOOR CONDENSERS TO BE MOUNTED ON ACOUSTIC PADS.

MAIN CONTRACTOR TO PROVIDE STEP OVER ACCESS SYSTEM TO PROTECT AC PIPEWORK WHERE REQUIRED.

REFRIGERANT PIPEWORK FROM CONDENSERS OFFSETS AT LOW LEVEL TO RISER AND DTB TO SERVE VRV IV BRANCH SELECTOR HEAT RECOVERY FOR SYSTEMS :
- 1st Floor (System 29)
- Ground Floor (System 30)



REFRIGERANT PIPEWORK IN RISER TO RISE TO H/L OFFSETTING IN PLANTROOM & DROPPING TO L/L EXTERNALLY TO SERVE CONDENSERS.

MAIN CONTRACTOR TO PROVIDE STEP OVER ACCESS SYSTEM TO PROTECT AC PIPEWORK WHERE REQUIRED.

OUTDOOR AC CONDENSERS TO SERVE HOTEL,

OUTDOOR UNITS TO BE MOUNTED IN EXTERNAL PLANT AREA FULLY LABELLED WITH RELATION & WITH REQUIRED MANUFACTURERS CLEARANCES. OUT DOOR CONDENSERS TO BE MOUNTED ON ACOUSTIC PADS.

COMMS ROOM SPLIT SYSTEM 1NO. DAIKIN RZQSG100L9V1 TO SERVE COMMS ROOM ON THIS LEVEL. OUTDOOR UNIT TO BE CONFIRMED BY COMMS ROOM SPECIALISTS. REFRIGERANT PIPEWORK OFFSETS AS INDICATED TO SERVE COMMS ROOM. EXACT LOCATION TO BE FULLY COORDINATED ONSITE BY MECHANICAL CONTRACTOR.

WALL MOUNTED COMMs ROOM SPLIT SYSTEM UNIT. REF: FAQ100C9. REFER TO TYPICAL SCHEMATIC 2.

INDIVIDUAL WALL MOUNTED CONTROLLER FOR COMMS ROOM SPLIT SYSTEM UNIT.

INCLUDE ALL NECESSARY OFFSETS OF SERVICES IN CEILING VOIDS, SERVICE DUCTS AND ALL OTHER AREAS TO ACHIEVE CROSSOVERS AND CO-ORDINATION OF MECHANICAL AND ELECTRICAL SERVICES.

GENERAL NOTES (AIR CONDITIONING):

THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL AND INTERIOR DESIGN DRAWINGS.

THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL RELEVANT MEP SCHEMATICS AND SPECIFICATIONS.

DO NOT SCALE. VERIFY ALL DIMENSIONS BY SITE MEASUREMENT.

REFER TO SCHEDULE OF AC UNITS AND CIRCUIT BREAKDOWN ON AC SCHEDULES.

THE CONTRACTOR WILL ALLOW FOR THE INSTALLATION OF A GRAVITY CONDENSATE DRAIN BETWEEN THE FAN COIL INDOOR UNIT AND THE CLOSEST SOIL STACK (IF A GRAVITY FED CONDENSATE DRAIN IS NOT ACHIEVABLE, AC UNITS SHALL HAVE A PUMPED CONDENSATE DRAIN PROVIDING PRIOR AGREEMENT IS CONFIRMED WITH THE CONSULTING ENGINEERS). THE CONTRACTOR SHALL INCLUDE FOR PIPEWORK, HEPvO INLINE DRY TRAP (INCLUDING ADAPTORS AND ANCILLARIES) AND FINAL CONNECTION TO A 40mm BOSS IN THE SOIL STACK.

FAN COIL, WALL MOUNTED TEMPERATURE SENSOR & GRILLES POSITIONS ARE INDICATIVE. EXACT POSITION TO BE COORDINATED WITH INTERIOR DESIGN PACKAGE.

HATCHED AREA SHOWN INDICATES PROVISIONAL ZONE FOR REFRIGERANT & WATER PIPEWORK TO RUN. AC CONTRACTOR TO CO-ORDINATE AC PIPEWORK WITH ALL OTHER SERVICES PRIOR TO INSTALLATION. (EACH PIPE NOT SHOWN FOR CLARITY OF DRAWING.)

DESIGN BASED ON DAIKIN VRF SYSTEM.

THIS DRAWING SHALL BE READ IN CONJUNCTION WITH OUTDOOR AND INDOOR UNIT SCHEDULES PROVIDED IN SPECIFICATION SCHEDULES.

THIS DRAWING SHALL BE READ IN CONJUNCTION WITH AC TERMINAL SCHEDULE (AC GRILLE SCHEDULE) PROVIDED IN SPECIFICATION SCHEDULES.

MOULDED FLEXIBLE DUCTWORK CONNECTIONS SHALL ONLY BE PERMITTED AT THE INLETS TO EACH GRILLE PLENUM BOX AS APPLICABLE TO SUIT THE SYSTEMS INSTALLATION. MAXIMUM LENGTH 300mm. CONNECTIONS TO SPIGOTS SHALL BE MADE BY MEANS OF WORM DRIVE CLIP ARRANGEMENT.

ALL INDOOR & OUTDOOR UNITS LINKED TOGETHER VIA BACKNET PROTOCOL SYSTEM. SYSTEM COMPLETE WITH INDIVIDUAL WALL MOUNTED CONTROLLERS AND CENTRALISED CONTROL SYSTEM & INTERLINK TO BMS.

LEGEND (AIR CONDITIONING):

- LINEAR SLOT DIFFUSER.
- VG?? — 4 WAY BLOW DIFFUSER.
- RECESSED FAN COIL UNIT COMPLETE WITH PLENUM BOX. DUCTWORK FROM EACH FAN COIL UNIT TO SUPPLY GRILLE / DIFFUSER. 600 X 600 RETURN AIR GRILLE TO BE PROVIDED FOR EACH RECESSED FAN COIL.
- DENOTES BS CONTROLLER.
- AC — DENOTES WALL MOUNTED AC CONTROLLER . EXACT POSITION TO BE CONFIRMED.
- DENOTES WALL MOUNTED TEMPERATURE SENSOR BY AIR CONDITIONING CONTRACTOR. 1 NUMBER WALL MOUNTED SENSOR PER INDOOR UNIT. POSITIONS NOTED ON DRAWING ARE INDICATIVE AND TO BE DETERMINED ON SITE.
- DENOTES DUCTWORK VOLUME CONTROL DAMPER.
- 4-WAY BLOW CEILING CASSETTE INDOOR UNIT
- 600 X 600 FCU RETURN AIR GRILLE/ACCESS HATCH.
- AC G? — AC TERMINAL REFERENCE, REFER TO AC TERMINAL ON THIS DRAWING FOR FURTHER DETAILS.
- FC ?? — FAN COIL UNIT REFERENCE. REFER TO FCU SCHEDULE ON THIS DRAWING FOR FURTHER DETAILS.
- OU ?? — OUTDOOR UNIT REFERENCE. REFER TO UNIT SCHEDULE ON THIS DRAWING FOR FURTHER DETAILS.
- 600x600 FIRE RATED ACCESS HATCH
- AH — STANDARD 600x600 ACCESS HATCH

REV	DATE	DESCRIPTION	DR	CK
C1	12/08/20	UPDATED TO REFLECT DESIGN CHANGE FROM DAIKIN TO MITSUBISHI - ISSUE FOR REVIEW TO TC	DML	GK

Caldwell

ARCHITECT
SIMPSON HAUGH

JOB
CHARLES STREET
MANCHESTER

DRAWING
MECHANICAL SERVICES INSTALLATION

AIR CONDITIONING INSTALLATION

LEVEL 16

DRAWING No./REVISION
3919/M405

SCALE/PRINTED AT	DATE	DRAWN	CHECKED
1:100@A1	JAN'20	DML	GJK

UNIT 6 FORESTGROVE BUSINESS PARK, NEWTOWNBREDA, BELFAST, BT8 6AW
TEL: 028 9069 9720 FAX: 028 9064 1625 EMAIL: admin@caldwellconsulting.net