Guidance For Pricing

Cundall have used their reasonable endeavours to establish the requirements of the Client during the design stages. In this regard, the Contractor should refer to the guidance provided by BSRIA BG 6 - 'A Design Framework for Building Services' (2014 Edition) section 2.11 - Precision In Design.

This states that the design stages represent an iterative process whereby the level of detail and the degree of precision included in the design increases from one stage to the next. Following the guidelines given in Turner and Simister's Handbook of Project Management, which relate specifically to precision of cost estimates, and applying similar guidelines to the accuracy of all design, the following levels of accuracy could reasonably be achieved by the end of the respective design stages:

- **RIBA Stage 2: ± 25%**
- **RIBA Stage 3: ± 15% (± 20% at the completion of RIBA Stage 3a)**
- **RIBA Stage 4: ± 5%**

The Contractor should take into account the level of uncertainty indicated in the guidelines at the designated design stage of the project, and the Contractor should reflect the associated risk and uncertainty in their pricing.

The above precision figures do not include the effects of fundamental variations to the scale or nature of the project, however, they will reasonably be applied to quantities of materials, associated labour costs, service outlets and the final locations for equipment.

FOLLOWING INFORMATION MAY AFFECT THE DESIGN & CONTRACTOR WILL ALLOW FOR IT IN THEIR PRICING

THE FOLLOWING INFORMATION IS PRESENTLY OUTSTANDING AND MAY AFFECT THE INFORMATION SHOWN ON THIS DRAWING.

1. CONTRACTOR IS RESPONSIBLE FOR DESIGN.
2. THE CONTRACTOR SHALL NOTE THAT THEY ARE RESPONSIBLE FOR PURCHASING ALL DEVICES REQUIRED BY THE DESIGN AND AS SUCH LEAD TIME SHOULD BE TAKEN INTO ACCOUNT WITHIN THEIR PROCUREMENT PROCESS.

ROOM LOADING

ROOM NUMBER	ROOM NAME	HEATING LOAD (kW)	SENSIBLE COOLING LOAD (kW)
19	RF TEST	5.0	6.0
23	RF TEST	3.0	3.0
20	RF CHAMBER	6.0	7.0
01	RECEPTION/STAIRS	4.0	5.0
07	KITCHEN	3.0	4.0
09	FLEXIBLE SPACE	3.0	4.0

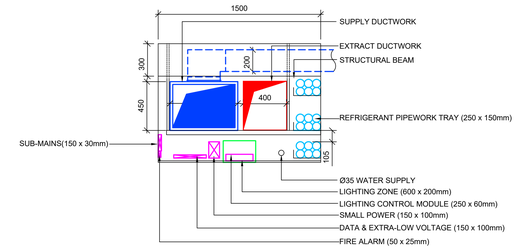
AIR HANDLING UNIT AND TWIN EXTRACT SCHEDULE

REFERENCE	SERVING	FLOW RATE (L/s)	MODEL	MANUFACTURER
AHU 1	OFFICE	2179	BPS THERMAL WHEEL	NUAIRE
EF1	TOILETS/LOCKERS	149	AVT-T INTERNAL DUCT MOUNTED TWIN EXTRACT FAN	NUAIRE

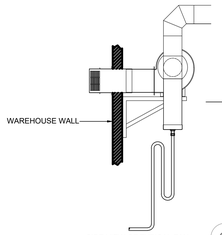
NOTE: THE SELECTION DUTY INCLUDES FOR FUTURE FIRST FLOOR FIT OUT. THE UNIT TO BE FULLY SPEED CONTROLLED TO THE REQUIRED SETPOINT.

ELECTRIC RADIATOR SCHEDULE

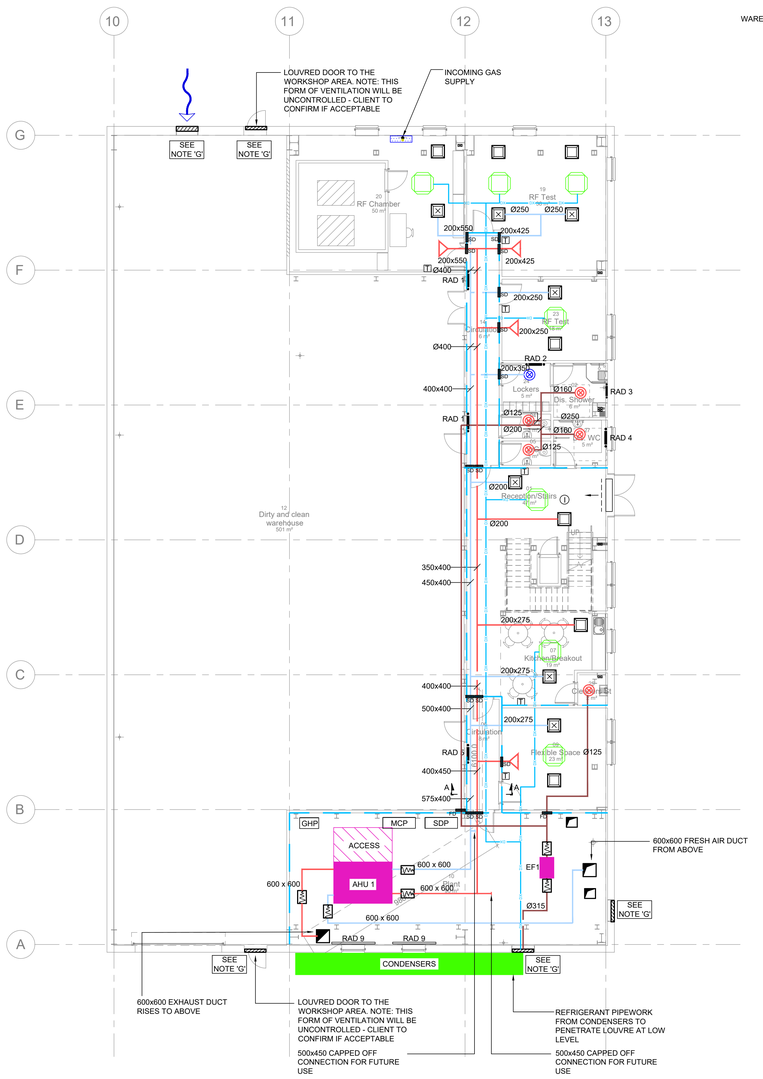
REFERENCE	HEAT OUTPUT REQUIRED (kW)	MODEL	MANUFACTURER
RAD 1	0.6	PANEL HEATER	DIMPLEX
RAD 2	0.4	PANEL HEATER	DIMPLEX
RAD 3	0.5	LOW SURFACE TEMPERATURE PANEL HEATER	DIMPLEX
RAD 4	0.5	LOW SURFACE TEMPERATURE PANEL HEATER	DIMPLEX
RAD 5	0.6	PANEL HEATER	DIMPLEX
RAD 6	0.7	PANEL HEATER	DIMPLEX
RAD 7	0.8	PANEL HEATER	DIMPLEX
RAD 8	2.0	PANEL HEATER	DIMPLEX
RAD 9	1.0	TUBULAR C/W STAT	DIMPLEX



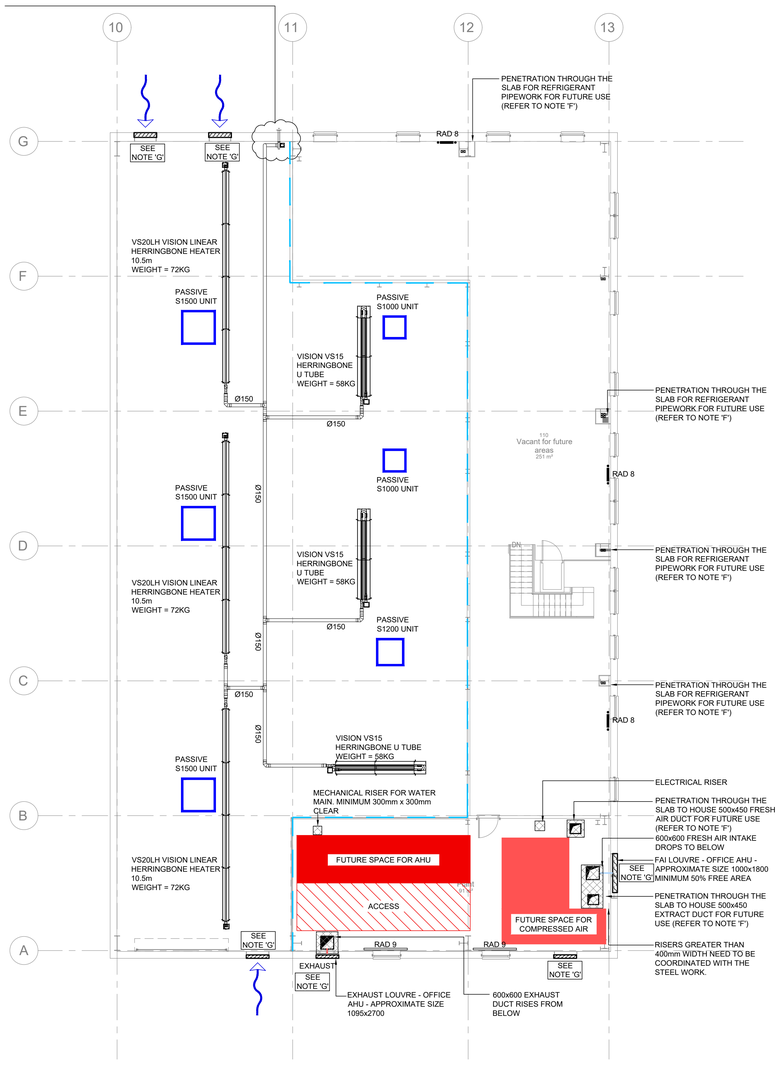
CORRIDOR SECTION SHOWING M&E SERVICES
SECTION A-A



SIDE VIEW OF TYPICAL FAN, CONDENSATE AND DISCHARGE



LEVEL 00



LEVEL 01 (MEZZANINE)

CDM RISK

WORKING ON THE FIRST FLOOR: MAINTENANCE WORK TO BE LIMITED TO DAYLIGHT HOURS. ALL CONTRACTORS TO PROVIDE RITELITE K9 30 PORTABLE WORK LIGHT.

1016090 A0

Based on.
Architects Drg No. 7604-FDG-ZZ-XX-DR-A-11101-P08
Structural Drg No.
Survey Drg No.
Other Drg No.
Other Drg No.

Notes

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL AND ENGINEERING SERVICES DRAWINGS, SPECIFICATIONS, SCHEDULES AND PROJECT SPECIFIC DOCUMENTS.
2. ALL PLANT AND EQUIPMENT IS TO BE INSTALLED TO MANUFACTURER'S RECOMMENDATIONS, ALLOWING FULL ACCESS FOR COMMISSIONING, MAINTENANCE AND REMOVAL/REPLACEMENT.
3. ALL DIMENSIONS IN mm UNLESS OTHERWISE STATED.
4. DO NOT SCALE FROM THIS DRAWING.

PARTICULAR NOTES:

A. ALL DUCTWORK BRANCHES ARE TO BE COMPLETE WITH VCDs.
B. 110 FLEXIBLE SPACE DX SYSTEM IS TO CONSIST OF INDEPENDENT SPLITS FOR FUTURE FLEXIBILITY.
C. FIRE/SMOKE DAMPER REQUIREMENTS ARE SUBJECT TO THE FINAL BUILDING FIRE STRATEGY.
D. CROSS-TALK ATTENUATORS TO BE PROVIDED WHERE REQUIRED TO MEET NOISE CRITERIA.
E. CONTRACTOR TO ALLOW FOR SMOKE/FIRE DAMPERS WITHIN FLOORS.
F. RISER FOR FUTURE USE TO BE SEALED WITH APPROPRIATE FIRE BARRIER
G. REFER TO DRAWING BSXX(50)4001 FOR LOUVRE DETAILS.

LEGEND:

- DX SPLIT SYSTEM CEILING MOUNTED 4-WAY CASSETTE AS MANUFACTURED BY LG
- WALL MOUNTED ELECTRIC HEATER AS MANUFACTURED BY DIMPLEX
- ROOF MOUNTED PENTHOUSE LOUVRE. ALL INSULATED BLADE, AIR TIGHT SHUT OFF DAMPERS WITH MOTORISED ACTUATORS. WAREHOUSE AREA TO BE PROVIDED WITH CO_2 SENSORS. THE DAMPERS TO MODULATE DEPENDING ON C02 LEVEL. AS MANUFACTURED BY BREATHING BUILDING
- LOUVRE
- GAS FIRED RADIANT HEATING AS MANUFACTURED BY NORTEK
- INCOMING WATER AND GAS SUPPLY LOCATIONS
- INTERNAL 2kW WALL MOUNTED COOLING UNIT AS MANUFACTURED BY LG (N+1 WITH AUTO CHANGE OVER)
- 6kW EXTERNAL DOOR CURTAIN (CONTRACTOR TO VERIFY SIZE). AS MANUFACTURED BY BIDDLE
- SUPPLY SWIRL DIFFUSER (DQJA SR VM SAK Li Z AS MANUFACTURED BY SCHAKO)
- RETURN AIR GRILLE (DQJA SR VM SAK AS MANUFACTURED BY SCHAKO)
- EXTRACT BELL MOUTH, C/W VCD
- EXTRACT VALVE (SVA150 AS MANUFACTURED BY SCHAKO)
- GENERAL SUPPLY
- GENERAL EXTRACT
- TOILET EXTRACT
- SMOKE DAMPERS
- FIRE DAMPERS
- REFRIGERANT CONTAINMENT ROUTE
- T — WALL MOUNTED TEMPERATURE CONTROLLER
- VM — ATTENUATOR
- SDP — SMOKE DAMPER PANEL
- MCP — MECHANICAL CONTROL PANEL
- GHP — NORTEL GAS HEATER CONTROL PANEL
- ASSUMED FIRE LINE
- SUPPLY GRILLE (SVA200 AS MANUFACTURED BY SCHAKO)

Issue	Date	Description	By	Chkd	Verfd
P5	27/09/18	STAGE 3 - TENDER ADDENDUM	RP	BS	PDW
P4	15/08/18	STAGE 3 - TENDER ISSUE	FRM	BS	MW
P3	03/08/18	STAGE 3 - TENDER ISSUE	RP	BS	YK
P2	26/07/18	STAGE 3 - WORK IN PROGRESS	RP	YK	PDW
P1	24/07/18	STAGE 3 - WORK IN PROGRESS	RP	YK	PDW

Project
SATELLITE APPLICATION DISC II

Client
SATELLITE APPLICATION CATAPULT

Architect
FAIRHURSTS DESIGN GROUP

Title
PROPOSED MECHANICAL LAYOUT

Drawing No.	Drawing Status
BSXX(50)1001	D2 - ISSUED FOR TENDER
Job No. 1016090	Scale 1:100

CUNDALL
4th Floor, Cathedral Court
15 Colmore Row
Birmingham, B3 2BH
Tel: +44 (0)121 262 2720

Website: www.cundall.com

True scale at 1:1