

FCU INDOOR UNIT SCHEDULE

REFERENCE	LOCATION	DESCRIPTION	MANUFACTURER	MODEL REF	FLOWRATE (L/S)	DUTY (KW)	CONTROL	COMMENTS
FCU 01	4TH FLOOR	FAN COIL UNIT	MTSUSHISH	PSTY-PC2MM-E	200	-	WALL MOUNTED	30Wd UNITS TOTAL @ 2Wd HEATING & 7.7Wd COOLING EACH

VENTILATION HEAT RECOVERY UNIT SCHEDULE

REFERENCE	LOCATION	DESCRIPTION	MANUFACTURER	MODEL REF	FLOWRATE (L/S)	DUTY (KW)	CONTROL	COMMENTS
HRU 01	4TH FLOOR	HEAT RECOVERY UNIT	MTSUSHISH	LQH-100BVT	278	38	CONTINUOUS	9Wd UNITS TOTAL

ALL HEAT RECOVERY UNITS REFERENCED ABOVE ARE AS MANUFACTURED BY MITSUBISHI Tel: 01942 849550 (PACAR)

BRANCH SELECTOR BOX SCHEDULE

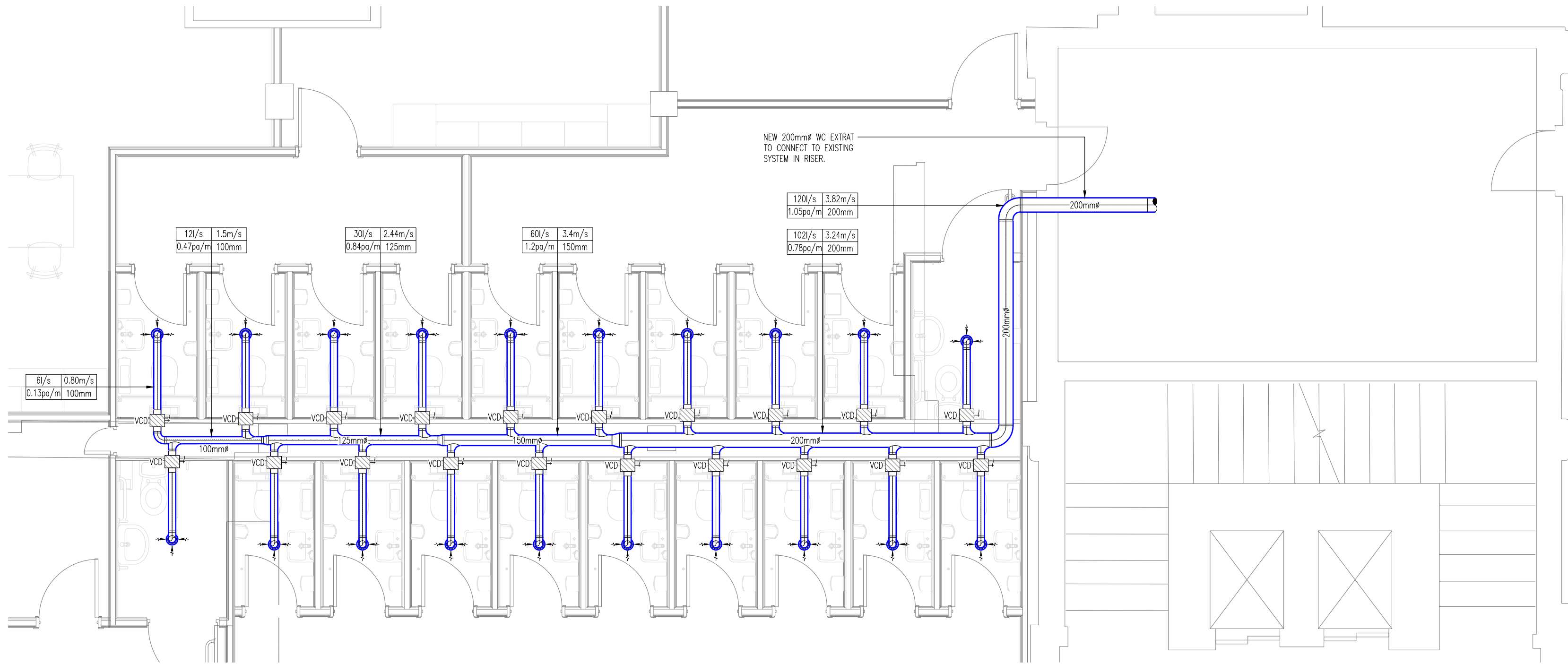
REFERENCE	LOCATION	MANUFACTURER	MODEL REF	DESCRIPTION	SERVED BY	UNITS FEEDING	ELECTRICAL SUPPLY	COMMENTS
CB01 01	4TH FLOOR OPEN AREA	MTSUSHISH	CBM-WT01	BC CONTROLLER	-	10No. FCU 01	24V 50Hz	-
CB02 01	4TH FLOOR OPEN AREA	MTSUSHISH	CBM-WT01	BC CONTROLLER	-	7No. FCU 01	24V 50Hz	-
CB03 01	4TH FLOOR OPEN AREA	MTSUSHISH	CBM-WT01	BC CONTROLLER	-	6No. FCU 01	24V 50Hz	-
CB04 01	4TH FLOOR COMMS ROOM	MTSUSHISH	CBM-WT01	BC CONTROLLER	-	7No. FCU 01	24V 50Hz	-

NOTE: ALL EQUIPMENT SELECTED AND SPECIFIED BY PACAR. CONTACT: 01942 254001 or SALES@PACAR.CO.UK

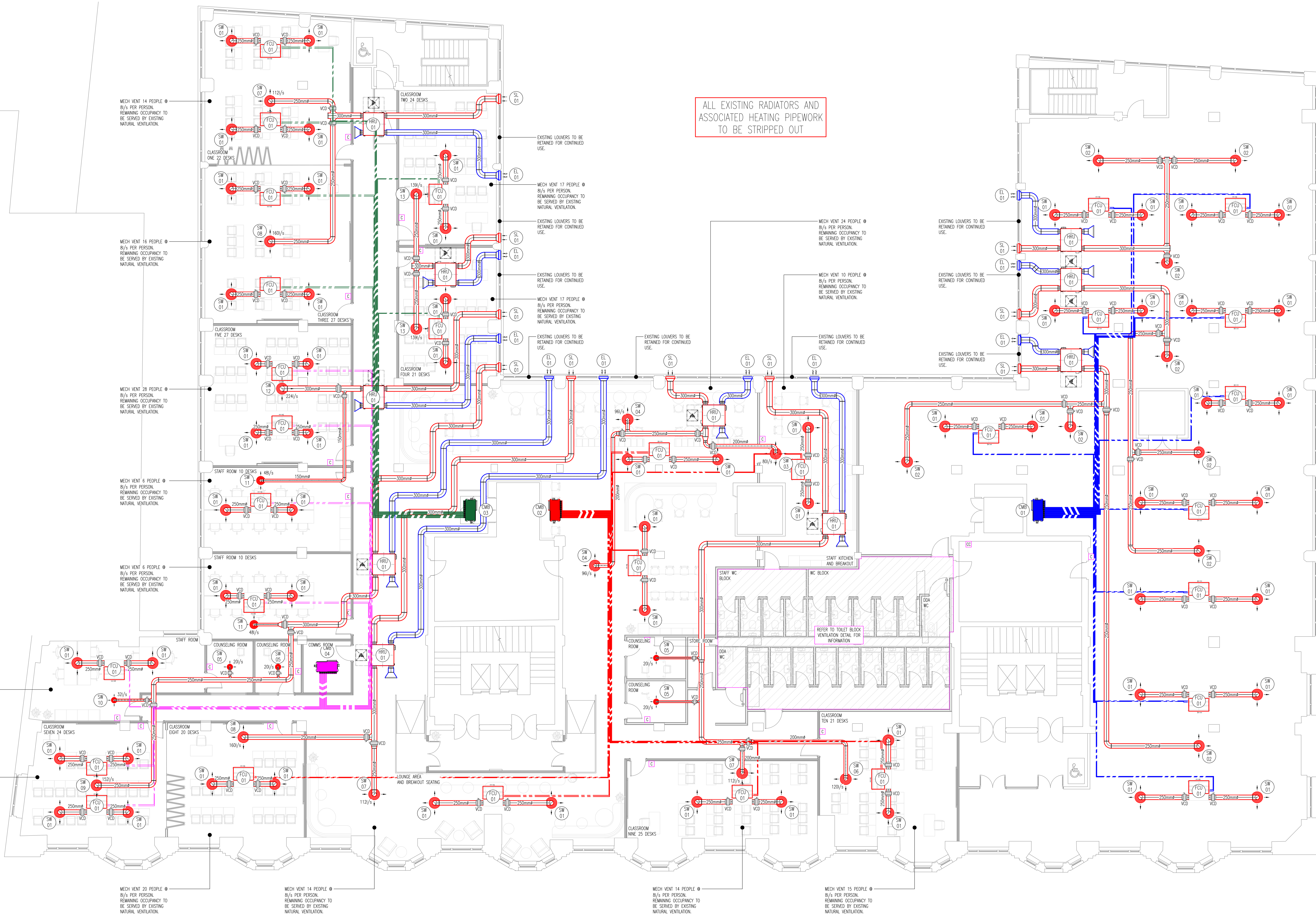
SCHEDULE OF SUPPLY SWIRL DIFFUSER

REFERENCE	LOCATION	TYPE	GRILLE SIZE	CONN. SIZE	COLOR	BAR FLOW RATE (L/S)	THROW (m)	PRESSURE DROP (Pa)	MANUFACTURER	GRILLE REF
SW 01	4TH FLOOR	SWIRLS	400	250	PAL 9010	134 L/S	<5.6	<20	WATERLOO	SDFC-400
SW 02	4TH FLOOR	SWIRLS	400	250	PAL 9010	82 L/S	<5.6	<20	WATERLOO	SDFC-400
SW 03	4TH FLOOR	SWIRLS	400	200	PAL 9010	80 L/S	<5.6	<20	WATERLOO	SDFC-400
SW 04	4TH FLOOR	SWIRLS	400	200	PAL 9010	86 L/S	<5.6	<20	WATERLOO	SDFC-400
SW 05	4TH FLOOR	SWIRLS	125	100	PAL 9010	20 L/S	-	-	WATERLOO	SDFC-125
SW 06	4TH FLOOR	SWIRLS	400	200	PAL 9010	120 L/S	<5.6	<20	WATERLOO	SDFC-400
SW 07	4TH FLOOR	SWIRLS	400	250	PAL 9010	112 L/S	<5.6	<20	WATERLOO	SDFC-400
SW 08	4TH FLOOR	SWIRLS	400	250	PAL 9010	160 L/S	<5.6	<20	WATERLOO	SDFC-400
SW 09	4TH FLOOR	SWIRLS	400	250	PAL 9010	152 L/S	<5.6	<20	WATERLOO	SDFC-400
SW 10	4TH FLOOR	SWIRLS	160	125	PAL 9010	32 L/S	-	-	WATERLOO	SDFC-160
SW 11	4TH FLOOR	SWIRLS	200	150	PAL 9010	48 L/S	-	-	WATERLOO	SDFC-200
SW 12	4TH FLOOR	SWIRLS	400	300	PAL 9010	224 L/S	<5.6	<20	WATERLOO	SDFC-400
SW 13	4TH FLOOR	SWIRLS	400	280	PAL 9010	139 L/S	<5.6	<20	WATERLOO	SDFC-400

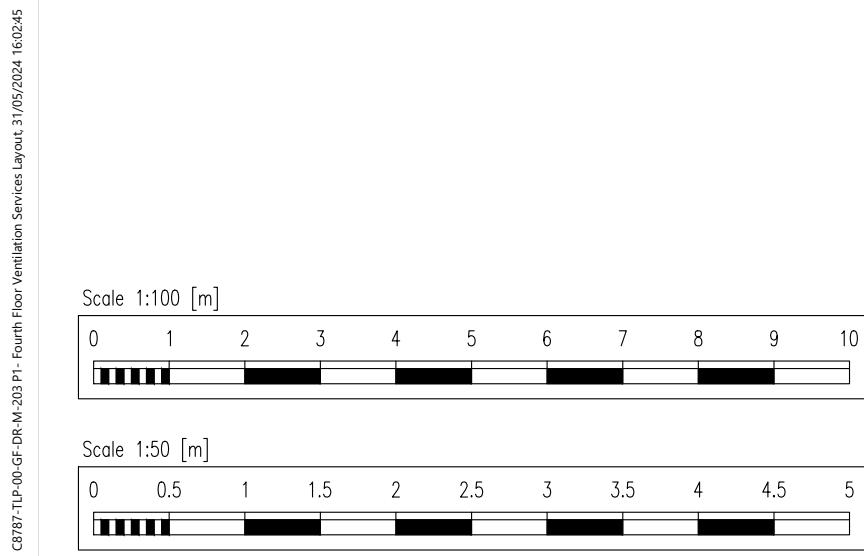
NOTE: ALL SUPPLY GRILLES MANUFACTURED BY WATERLOO Tel: 01622 711550



4th FLOOR TOILET BLOCK Scale 1:50
VENTILATION SERVICES LAYOUT



FOURTH FLOOR Scale 1:100
VENTILATION SERVICES LAYOUT



THIS DRAWING IS PROTECTED UNDER COPYRIGHT AND AT NO TIME MUST ANY PORTION OF THIS DRAWING BE REPRODUCED OR COPIED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF THORNTLEY & LUMB PARTNERSHIP LIMITED.

ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE AND MUST BE CHECKED ON SITE AND NOT ASSUMED FROM THIS DRAWING. THE DRAWING IS TO BE READ IN ACCORDANCE WITH ALL RELEVANT SPECIFICATIONS AND ROOM DATA DOCUMENTS.

NOTES

- ALL DUCTWORK SHALL BE CLASS 1/2M2, TESTED TO 100Pa STANDARDS AND MANUFACTURED TO BS44.
- RECTANGULAR DUCTWORK BEING OFFSETS, TURNING BRANCHES AND ADJUNCTS SHALL BE COMPLETE WITH TURNING UNITS, AND ALL RECTANGULAR DUCTWORK OFFSETS WITH ANGLES GREATER THAN 22.5° SHALL BE COMPLETE WITH SPURTERS.
- FLANGE DUCTWORK ON SUPPLY & RETURN SYSTEMS SHALL BE MANUFACTURED BY CLT TYPE TESTER AND TECHNIQUE 400 OR EQUIVALENT.
- FLANGE DUCTWORK ON EXHAUST ONLY SYSTEMS SHALL BE MANUFACTURED BY CLT TYPE TESTER 400 OR EQUIVALENT.
- ALL EXHAUST DUCTWORK CONNECTIONS TO SUPPLY AND EXTRACT TERMINALS SHOULD HAVE A MINIMUM LENGTH OF 400mm.
- ALL SUPPLY VENTILATION AND EXHAUST AIR DUCTWORK TO BE THERMALLY INSULATED. INTERNAL EXHAUST DUCTWORK NEED NOT BE INSULATED IF WITHIN AMBIENT SPACE.
- ALL DUCTWORK WILL BE IDENTIFIED IN LINE WITH THE BS REQUIREMENTS.
- WHERE REQUIRED ALL DUCTWORK WILL BE SUPPORTED BY AIR WARRIORS.
- ALL MECH RECOVERY UNITS / FANS / AIR HANDLING UNITS TO BE SUPPORTED ON EXTERNAL VENTILATION MOUNTS WITH ACUSTIC FLEX DUCT CONNECTIONS.
- ALL SHEET METAL DUCTWORK SERVING COMMERCIAL KITCHENS SHALL BE MANUFACTURED AND INSTALLED TO MEET SPECIFICATION D1712.
- FIRE DAMPERS SHALL BE PROVIDED AND INSTALLED THROUGH ALL FIRE BARRIER PENETRATIONS INCLUDING FLOOR SLABS TO SATISFY THE STRIKES, EXCEPT FIRE RATED KITCHEN EXTRACT DUCTWORK.
- FIRE DAMPERS SHALL BE NECESSARILY SUPPORTED FROM THE DUCTWORK IF IT IS CONNECTED TO.
- FIRE DAMPERS ARE TO BE FUSIBLE LINK TYPE AND HAVE THE BLADES INSTALLED OUT OF THE AIR STREAM & AN EXTERNAL VISUAL INDICATOR OF DAMPER.
- FIRE DAMPERS SHALL BE FITTED WITH AN ADJUNCT ACCESS DOOR TO ENABLE REGULAR VISUAL CHECKS AND DROP TESTS TO BE PERFORMED IF REQUIRED.
- ROOFING CONTROL DAMPERS WILL BE PROVIDED FOR SHEDDING PURPOSES AND SHOULD BE MULTI-BEADED UNLESS STATED OTHERWISE AND BE MANUFACTURED BY AUTOMATICALLY OPERATED OR EQUAL QUALITY SLAB ACCEPTABLE FOR SMALL BRANCH DUCTS.
- ALL VED UNITS ARE TO BE PROVIDED TO ALLOW THE BEST POSSIBLE MEANS OF ACCESS FOR THE COMMISSIONING ENGINEER ACCESS SHOULD BE PROVIDED TO ALLOW MAINTENANCE UNITS TO BE ACCESS THROUGH THE SAME ACCESS DOOR.
- ALL KITCHEN EXTRACT DUCTWORK TO BE FIRE RATED USING FIRE-RATED DUCTWORK WITH BENDS TO BE RIGIDLY TIGHT WITH NO JOINTS AND NO TURNING UNITS.
- ALL KITCHEN EXTRACT DUCTWORK SHALL BE PROVIDED WITH ACCESS DOORS TO COMPLY WITH HSE H1017 GUIDANCE ON VENTILATION SYSTEMS. KITCHEN EXTRACT ACCESS DOORS SHALL BE A MINIMUM OF 1.5m CENTRES AND 600mm IN LENGTH.
- ALL DUCTWORK SHALL BE COMMISSIONED IN ACCORDANCE WITH CORE COMMISSIONING CODES.
- REGULATION TO COMPLY FULLY WITH CURRENT BUILDING REGULATIONS, BREXIT STANDARDS & BT MTR REGULATIONS.

2.

THIS DRAWING IS PROVIDED IN ACCORDANCE WITH ARCHITECTS/MAIN CONTRACTORS DRAWING REFERENCE
23-186 AXI 104 Proposed Fourth Floor Plan

P1 PLANNING ISSUE A LS 21.05.24
REV DESCRIPTION DWG CHK DATE

PLANNING

Client
Cattella
Birger Jarisgatan 6

Architect
Axi Studio
Calico, 4th floor
53-55 Mosley St.
Manchester
M23HQ

Thornley & Lumb
Building Services Consultancy Engineers
Head Office:
Cotton House, 287 Carter Heights Lane
Burslem, West Yorkshire, M8 5JG
Telephone: +44(0)1274 244 774
Fax: +44(0)1274 244 774
2nd Floor, 216 Tower Bridge Road
London, SE1 2UP
Telephone: +44(0)20 7320 9335
www.thornleyandlumb.co.uk info@thornleyandlumb.co.uk

Project Number
C8787
Project Name
Bridgewater House
Bridgewater

Drawing Title
Fourth Floor
Ventilation Services Layout

Engineer
SF
Checked by
LS
Drawn By
JL

Date
14.05.24
Scale
1:100
Size
A0

Drawing Number
C8787 - TLP - 00 - GF - DR - M - 203 P1