IN WALL EXTRACT AND SUPPLY FANS

REF	DESCRIPTION	LOCATION	MANUFACTURER	MODEL REF	FLOW RATE L/S	CONTROLL.
EF–01	WALL EXTRACT FAN – 6" WITH KIT – 3 SPEED	GROUND FLOOR LINEN	VENTAXIA	CENT DUO HTP	61	LOCAL
EF–02	WALL EXTRACT FAN – 6" WITH KIT – 3 SPEED	FIRST FLOOR LINEN	VENTAXIA	CENT DUO HTP	61	LOCAL
EF–03	IN–LINE EXTRACTION FAN	PUBLIC WCs	SYSTEMAIR	K150 M SILEO	88	LOCAL TEAMS ROOM
EF–04	IN–LINE EXTRACTION FAN	WASH UP AREA	SYSTEMAIR	K150 M SILEO	110	LOCAL
EF–05	IN–LINE EXTRACTION FAN	BOH KITCHEN AREA	SYSTEMAIR	K250 M SILEO	160	CONTINUOUS
EF–01.01	IN–LINE EXTRACTION FAN – KITCHEN EXTRACTION	EXTERNAL BOH	SYSTEMAIR	MUD/T	1440	MANUAL.
SF–02.01	IN–LINE SUPPLY FAN – RESTAURANT SUPPLY	KITCHEN BOH	SYSTEMAIR	PRIO 400 EC	1220	MANUAL.

HEAT RECOVERY – LOSSNAY MVHR

REF	DESCRIPTION	MANUFACTURER	MODEL REF	100% – m3/h	100% – l/s	Flow Rate Required	Noise dB @3m
HRU–04	LOSSNAY MVHR – TEAMS ROOM	Mitsubishi	LGH–35RVX3–E	350m³/h	98l/s	73l/s	25
	HEAT RECOVER – ALL BED ROOMS	VECTAIRE	PREM–3	TRICKLE (CARD OUT) 6 L/S @ NR20 – BOOST (CARD IN) 16 L/S @ NR30			



ELEVATIONS - NTS

ROOF COWLS SCHEDULE

REF	LOCATION – DESCRIPTION	MANUFACTURER	COLOUR	MODEL REF	SIZE	AIR FLOW (L/S)
RCE01	ROOF HOOD – WC EXHAUST	LINDAB	GLAVANISED STEEL	VH 200	200mm	88.0L/S
RCE02	ROOF HOOD – DISHWASH EXHAUST	LINDAB	GLAVANISED STEEL	VH 125	125mm	18.0L/S
RCE03	ROOF HOOD – TEAMS EXHAUST	LINDAB	GLAVANISED STEEL	VH 160	160mm	50.0L/S
RCS01	ROOF HOOD – TEAMS SUPPLY	LINDAB	GLAVANISED STEEL	VH 160	160mm	50.0L/S
RCE04	ROOF HOOD – RESTAURANT SUPPLY	LINDAB	GLAVANISED STEEL	VH 500	500mm	1200.0L/S

EXTERNAL WEATER LOUVRE SCHEDULE

REF	LOCATION – DESCRIPTION	MANUFACTURER	COLOUR	MODEL REF	SIZE	AIR FLOW (L/S)
EXH01	ALL BEDROOMS – EXHAUST	DOMUS VENTILATION	BLACK	F4904BK	155X155mm	[6 / 16 L/S]
SUP01	ALL BEDROOMS – SUPPLY	DOMUS VENTILATION	BLACK	F4904BK	155X155mm	[6 / 16 L/S]

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1 LOW 2 MEDIUM 3 HIGH

DESIGN RISK ASSESSMENT

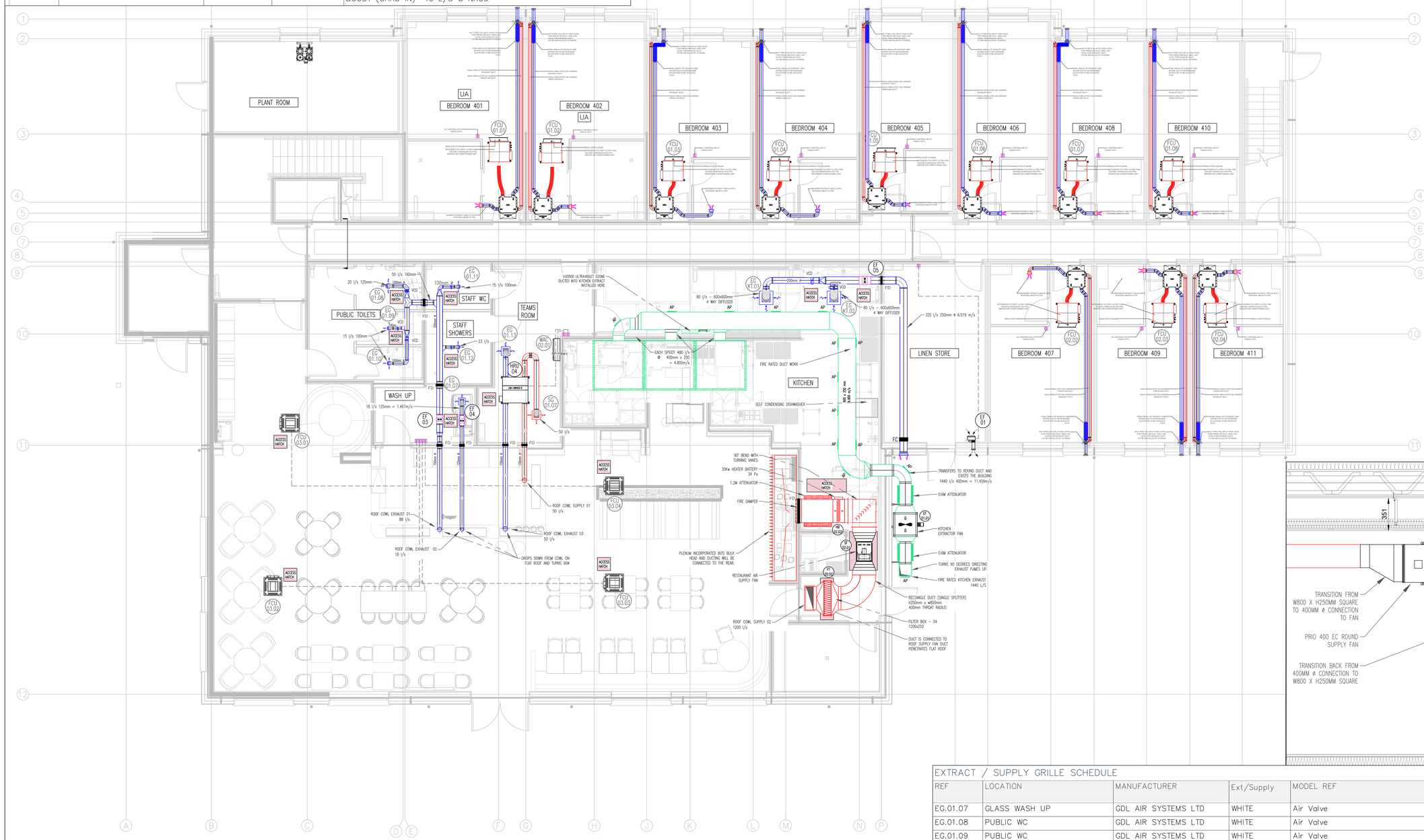
1. NO IDENTIFIED NON-STANDARD RISKS

VENTILATION

- ALL DUCTWORK SHALL BE CLASS LEAKAGE TESTED TO HVCA STANDARDS AND MANUFACTURED TO DW144
- ALL FLEXIBLE DUCTWORK CONNECTIONS TO SUPPLY AND EXTRACT TERMINALS SHOULD HAVE A MAXIMUM LENGTH OF 400mm.
- WHERE REQUIRED ALL DUCTWORK WILL BE SUPPORTED BY ANTI VIBRATION HANGERS.
- ALL DUCTWORK SHALL BE COMMISSIONED IN ACCORDANCE WITH CIBSE COMMISSIONING CODES
- ALL DUCTWORK WILL BE IDENTIFIED IN LINE WITH THE BS REQUIREMENTS
- INSTALLATION TO COMPLY FULLY WITH CURRENT BUILDING REGULATIONS, BRITISH STANDARDS & IET WIRING REGULATIONS
- FIRE DAMPERS SHALL BE PROVIDED AND INSTALLED THROUGH ALL FIRE BARRIER PENETRATIONS INCLUDING FLOOR SLABS TO SUIT FIRE STRATEGY, EXCEPT FIRE RATED KITCHEN EXTRACT DUCTWORK.
- FIRE DAMPERS SHALL BE INDEPENDENTLY SUPPORTED FROM THE DUCTWORK IT IS CONNECTED TO.
- FIRE DAMPERS ARE TO BE FUSIBLE LINK TYPE, AND HAVE THE BLADES INSTALLED OUT OF THE AIR STREAM C/W EXTERNAL VISUAL INDICATION OF DAMPER
- FIRE DAMPERS SHALL BE FITTED WITH AN ADJACENT ACCESS DOOR TO ENABLE RESETS, VISUAL CHECKS AND DROP TESTS TO BE PERFORMED IF REQUIRED.
- ALL SUPPLY, RETURN AND FRESH AIR DUCTWORK TO BE THERMALLY INSULATED. INTERNAL EXHAUST DUCTWORK NEED NOT BE INSULATED IF WITHIN AMBIENT SPACE.
- ALL HEAT RECOVERY UNITS / FANS / AIR HANDLING UNITS TO BE SUPPORTED ON EXTERNAL ANTI VIBRATION MOUNTS WITH ACOUSTIC FLEX DUCT CONNECTIONS.
- ALL KITCHEN EXTRACT DUCTWORK TO BE FIRE RATED USING FIREMAC DUCTWORK WITH BENDS TO BE RADIUS TYPE WITH ROUND THROAT AND NO TURNING VANES.
- ALL KITCHEN EXTRACT DUCTWORK SHALL BE PROVIDED WITH ACCESS DOORS TO COMPLY WITH HVCA TR/19 CLEANLINESS OFF VENTILATION SYSTEMS. KITCHEN EXTRACT ACCESS DOORS SHALL BE A MINIMUM OF 1.5m CENTRES AND 600mm IN LENGTH
- RECTANGULAR DUCTWORK BENDS/OFFSETS TURNING THROUGH 30° AND ABOVE SHALL BE COMPLETE WITH TURNING VANES, AND ALL RECTANGULAR DUCTWORK OFFSET TAPERS WITH ANGLES GREATER THAN 22.5° SHALL BE COMPLETE WITH SPLITTERS.
- ALL SHEET METAL DUCTWORK SERVING COMMERCIAL KITCHEN SHALL BE MANUFACTURED AND INSTALLED TO HVCA SPECIFICATION DW172.
- VOLUME CONTROL DAMPERS WILL BE PROVIDED FOR BALANCING PURPOSES AND SHOULD BE MULTI–BLADED UNLESS STATED OTHERWISE AND BE MANUFACTURED BY ACTIONAR/SHIELD AEROFOIL OR EQUAL (SINGLE BLADE ACCEPTABLE FOR SMALL BRANCH DUCTS).
- ALL VCD HANDLES ARE TO BE POSITIONED TO ALLOW THE BEST POSSIBLE MEANS OF ACCESS FOR THE COMMISSIONING ENGINEER. VCDS SHOULD BE HANDED TO ALLOW MULTIPLE HANDLES TO BE ACCESSED THROUGH THE SAME ACCESS DOOR.

VENTILATION LEGEND

4–WAY LOUVRE SUPPLY GRILLE; 4–WAY LOUVRE EXTRACT GRILLE; AIR VALVE SUPPLY GRILLE; AIR VALVE EXTRACT GRILLE; ROWE LOUVRE; EXHAUST LOUVRE; CIRCULAR DUCTWORK; RECTANGULAR DUCTWORK; VOLUME CONTROL DAMPER (VCD); FIRE DAMPER (FD); CONTROLLER; RCD XX l/s REQUIRED COMMISSIONING FIGURE



EXTRACT / SUPPLY GRILLE SCHEDULE

REF	LOCATION	MANUFACTURER	Ext/Supply	MODEL REF	SIZE	AIR FLOW (L/S)
EG.01.07	GLASS WASH UP	GDL AIR SYSTEMS LTD	WHITE	Air Valve	150 Ø	19.0L/S
EG.01.08	PUBLIC WC	GDL AIR SYSTEMS LTD	WHITE	Air Valve	150 Ø	20.0L/S
EG.01.09	PUBLIC WC	GDL AIR SYSTEMS LTD	WHITE	Air Valve	150 Ø	14.0L/S
EG.01.10	PUBLIC WC	GDL AIR SYSTEMS LTD	WHITE	Air Valve	150 Ø	14.0L/S
EG.01.11	STAFF WC	GDL AIR SYSTEMS LTD	WHITE	Air Valve	150 Ø	15.0L/S
EG.01.12	STAFF CHANGE	GDL AIR SYSTEMS LTD	WHITE	Air Valve	150 Ø	23.0L/S
EG.01.13	TEAMS ROOM	GDL AIR SYSTEMS LTD	WHITE	Air Valve	150 Ø	47.0L/S
SG.01.07	TEAMS ROOM	GDL AIR SYSTEMS LTD	WHITE	Air Valve	150 Ø	50.0L/S
EG.KT.01	BOH KITCHEN	GDL AIR SYSTEMS LTD	WHITE	4 Way Diffuser	400x400	80.0L/S
EG.KT.01	BOH KITCHEN	GDL AIR SYSTEMS LTD	WHITE	4 Way Diffuser	400x400	80.0L/S

REV	DESCRIPTION / REVISION NOTES	BY	DATED
C02	UVO500 ADDED/CANOPY MOVED	WB	12.05.26
C01	FIRST CONSTRUCTION ISSUE	WB	05.05.26

CONSTRUCTION

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Client: WHITBREAD

Project: PREMIER INN SERVICES
WEST DIDSBURY

Title: MECHANICAL SERVICES
GROUND FLOOR
VENTILATION LAYOUT

Drawn	Date	Scale	Xref
WB	05.05.26	1:50@AO	

Approved	Date	Project No
SH	05.05.26	RC3748/001

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