

PRELIMINARY

01-GF-ELECTRICAL-BY OTHERS			
SYMBOL	REFERENCE	TYPE	QTY
	AC	AIRCON CONTROLLER	15
	E1	5A HVAC SOFFIT PLUG	10
	E2	16 A SINGLE PHASE WEATHERPROOF LOCKABLE ISOLATOR	29
	E3	60 A 3 PHASE WEATHERPROOF LOCKABLE ISOLATOR	6

01-GF-MECHANICAL OUTDOOR UNITS SCHEDULE					
TAG	TYPE	RUNNING CURRENT	SIZE	QTY	
OU1.0.21	OUTDOOR CONDENSING UNIT	6.60 A	3.6kW	1	
OU1.0.20	OUTDOOR CONDENSING UNIT	6.60 A	3.6kW	1	
OU1.0.19	OUTDOOR CONDENSING UNIT	6.60 A	3.6kW	1	
OU1.0.31	OUTDOOR CONDENSING UNIT	6.60 A	3.6kW	1	
OU1.0.32	OUTDOOR CONDENSING UNIT	6.60 A	3.6kW	1	
OU2.0.22	OUTDOOR CONDENSING UNIT	6.60 A	4.2kW	1	
OU2.0.23	OUTDOOR CONDENSING UNIT	6.60 A	4.2kW	1	
OU3.0.16	OUTDOOR CONDENSING UNIT	6.60 A	7.2kW	1	
OU3.0.17	OUTDOOR CONDENSING UNIT	6.60 A	9kW	1	
OU4.0.18	OUTDOOR CONDENSING UNIT	6.60 A	9kW	1	

01-GF-AIR TERMINALS				
REFERENCE	TYPE	PHYSICAL SIZE	SPIGOT SIZE	QTY
DG01	DOOR GRILLE	200x200	0	21
DG02	DOOR GRILLE	250x250	0	5
DG03	DOOR GRILLE	300x300	0	9
DV01	EXTRACTION DISC VALVE	ø150	100	5
DV02	EXTRACTION DISC VALVE	ø200	150	34
EG01	EXTRACTION EGG CRATE GRILLE WITH OBD DAMPERS	250x250	200	4
EG02	EXTRACTION EGG CRATE GRILLE WITH OBD DAMPERS	1200x600	300	6
FD01	FRESH AIR SUPPLY DISC VALVE	ø150	100	6
FD02	FRESH AIR SUPPLY DISC VALVE	ø200	150	22
FD03	FRESH AIR SUPPLY DISC VALVE	ø250	200	8
FD04	FRESH AIR SUPPLY DISC VALVE	ø300	250	2
RG01	RETURN AIR GRILLE	1200x600	250	5
SD02	MEDIUM CONE VAV DIFFUSER	600x600	250	18
SD03	MEDIUM CONE VAV DIFFUSER	Ø600	200	5
SD05	MEDIUM CONE VAV DIFFUSER	Ø600	300	6
WL01	WEATHER LOUVRE WITH VERMIN SCREEN	150x150	1	
WL02	WEATHER LOUVRE WITH VERMIN SCREEN	250x250	2	
WL03	WEATHER LOUVRE WITH VERMIN SCREEN	350x350	6	

01-GF-MECHANICAL FANS SCHEDULE						
REFERENCE	TYPE	SIZE	AIR VOLUME	ELEC-AMPS	ELEC-POWER	PRESSURE
EF1.0.24	AMS HW 350 EXTRACTION WALL FAN	ø350	180 L/s	0.5A	220V / 1P / 50Hz	75.0 Pa
EF1.0.25	AMS HW 350 EXTRACTION WALL FAN	ø350	180 L/s	0.5A	220V / 1P / 50Hz	75.0 Pa
EF2.0.26	AMS FUTURE 300 S EXTRACTION WALL MOUNT FAN	ø300	15 L/s	0.15A	220V / 1P / 50Hz	75.0 Pa
EF2.0.27	AMS FUTURE 300 S EXTRACTION WALL MOUNT FAN	ø300	65 L/s	0.15A	220V / 1P / 50Hz	75.0 Pa
EF2.0.28	AMS FUTURE 300 S EXTRACTION WALL MOUNT FAN	ø300	45 L/s	0.15A	220V / 1P / 50Hz	75.0 Pa
EF2.0.29	AMS FUTURE 300 S EXTRACTION WALL MOUNT FAN	ø300	60 L/s	0.15A	220V / 1P / 50Hz	75.0 Pa
EF2.0.34	AMS FUTURE 300 S EXTRACTION WALL MOUNT FAN	ø300	75 L/s	0.15A	220V / 1P / 50Hz	75.0 Pa
EF3.0.33	HIT 250 B EXTRACTION WALL FAN INCLUDING FIRE DAMPER	ø333	300 L/s	0.65A	220V / 1P / 50Hz	75.0 Pa
EF3.0.65	HIT 250 B VERTICAL MOUNTED EXTRACTION FAN	ø200	150 L/s	0.65A	220V / 1P / 50Hz	150.0 Pa
EF4.0.37	HIT 250 B EXTRACTION FAN	ø333	210 L/s	0.65A	220V / 1P / 50Hz	150.0 Pa
EF4.0.38	HIT 250 B EXTRACTION FAN	ø333	150 L/s	0.65A	220V / 1P / 50Hz	150.0 Pa
EF4.0.39	HIT 250 B EXTRACTION FAN	ø333	150 L/s	0.65A	220V / 1P / 50Hz	150.0 Pa
EF4.0.50	HIT 250 B EXTRACTION FAN	ø333	150 L/s	0.65A	220V / 1P / 50Hz	150.0 Pa
EF5.0.54	AMS HIT 315 B EXTRACTION FAN	ø400	310 L/s	1.1A	220V / 1P / 50Hz	150.0 Pa
EF5.0.55	AMS HIT 315 B EXTRACTION FAN	ø400	360 L/s	1.1A	220V / 1P / 50Hz	150.0 Pa
EF5.0.36	TD 600x400 EXTRACTION FAN	ø400	360 L/s	3.0A	220V / 1P / 50Hz	150.0 Pa
EF5.0.51	TD 600x400 EXTRACTION FAN	ø400	425 L/s	3.0A	220V / 1P / 50Hz	150.0 Pa
EF5.0.52	TD 600x400 EXTRACTION FAN	ø400	250 L/s	3.0A	220V / 1P / 50Hz	150.0 Pa
EF7.0.64	AP 560/250/14 EXTRACTION AIR AXIAL FAN	ø560	2400 L/s	2.7A	400V / 3PH / 50Hz	200.0 Pa
EF8.0.30	AMS FUTURE 300 S EXTRACTION WALL MOUNT FAN	ø300	45 L/s	0.15A	220V / 1P / 50Hz	75.0 Pa
EF8.0.25	AMS FUTURE 300 S EXTRACTION WALL MOUNT FAN	ø300	65 L/s	0.15A	220V / 1P / 50Hz	75.0 Pa
FA1.0.63	AP 560/250/14 FRESH AIR AXIAL FAN	ø560	912 L/s	2.7A	400V / 3PH / 50Hz	300.0 Pa
FA2.0.61	AP 560/250/14 FRESH AIR AXIAL FAN	ø560	1015 L/s	2.7A	400V / 3PH / 50Hz	300.0 Pa
FA3.0.62	AP 560/250/14 FRESH AIR AXIAL FAN	ø560	1605 L/s	1.5A	400V / 3PH / 50Hz	300.0 Pa

01-GF-MECHANICAL INDOOR UNITS SCHEDULE						
TAG	TYPE	SIZE (kW)	ELEC-AMPS	OUTDOOR	COMMENTS	QTY
AH1.0.01	AIR HANDLING UNIT	33.2kW	28.8A	SA: 1336 L/s PA: 285 L/s RA: 891 L/s		1
AH2.0.00	AIR HANDLING UNIT	23.3kW	18.3A	SA: 760 L/s PA: 374 L/s RA: 180 L/s		1
MW1.0.19	MIDWALL UNIT	3.6kW	6.6A	OU1.0.19		1
MW1.0.20	MIDWALL UNIT	3.6kW	6.6A	OU1.0.20		1
MW1.0.21	MIDWALL UNIT	3.6kW	6.6A	OU1.0.21		1
MW1.0.31	MIDWALL UNIT	3.6kW	6.6A	OU1.0.31		1
MW1.0.32	MIDWALL UNIT	3.6kW	6.6A	OU1.0.32		1
MW2.0.22	MIDWALL UNIT	4.2kW	7.2A	OU2.0.22		1
MW2.0.23	MIDWALL UNIT	4.2kW	7.2A	OU2.0.23		1
MW3.0.16	MIDWALL UNIT	7.2kW	11A	OU3.0.16		1
MW4.0.17	MIDWALL UNIT	9kW	9.1A	OU4.0.17		1
MW4.0.18	MIDWALL UNIT	9kW	9.1A	OU4.0.18		1

01-GF-DUCT ACCESSORIES SCHEDULE			
REFERENCE	TYPE	SIZE	QTY
BD01	BALANCING DAMPER	ø100	6
BD02	BALANCING DAMPER	ø150	22
BD03	BALANCING DAMPER	ø200	13
BD04	BALANCING DAMPER	ø250	26
BD05	BALANCING DAMPER	ø300	6
FD01	ROUND FIRE DAMPER	ø150	1
FD02	ROUND FIRE DAMPER	ø250	1
FD03	ROUND FIRE DAMPER	ø300	1
FD04	ROUND FIRE DAMPER	ø400	2
FD05	ROUND FIRE DAMPER	ø450	2
FP01	FILTER PANEL	TO SUIT	3
NR01	NON-RETURN DAMPER	ø150	1
SA01	SOUND ATTENUATOR	ø150	2
SA02	SOUND ATTENUATOR	ø200	6
SA03	SOUND ATTENUATOR	ø250	13
SA04	SOUND ATTENUATOR	ø450	1
SA05	SOUND ATTENUATOR	ø550	1
SA06	SOUND ATTENUATOR	ø630	6

APPROVED

NAME \_\_\_\_\_ SIGNATURE \_\_\_\_\_

PR. NO. \_\_\_\_\_ DATE \_\_\_\_\_

NOTES

INSTALLATION NOTE

- ALL HIDDEN DUCTWORK SPLIT UNITS TO HAVE 25mm ISOLATION AROUND SUPPLY DUCTWORK.
- ALL EXPOSED DUCTWORK SHOULD BE PAINTED TO ARCHITECTS FINISH DETAIL.
- ALL EXPOSED DUCTWORK SHOULD BE SPIRAL DUCTING AND INTERNALLY INSULATED.
- CEILING LAAYOUT TO BE CONFIRM AND COORDINATED BETWEEN SERVICE. NO SILICONE OR SILICONE CONTAINING PRODUCTS TO BE USED ON SITE.
- ALL PRODUCTS INCLUDING GASKETS, WIRING AND SEALANT TO BE TESTED AT LABORATORIES FOR CONFORMANCE.
- P1 = CONDENSATE TO CONNECT TO NEAREST DRAIN POINT WITH P-TAP
- M = MASTER
- S = SLAVE

LEGEND

FLOOR NUMBER  
MECHANICAL EQUIPMENT TYPE NUMBER  
UNIQUE MECHANICAL EQUIPMENT IDENTIFICATION NUMBER

DUCTWORK NOTES:

- ALL DUCT WORK TO BE MANUFACTURED TO THE LATEST S.M.A.C.N.A STANDARDS WITH FLANGED JOINTS ON DUCTS EXCEEDING 600 SEMI PERIMETER OR ONE SIDE EXCEEDS 750 AND S&D JOINTS ON SMALLER DUCTS.
- ALL A.C. DUCTING TO BE INTERNALLY INSULATED WITH 25mm SONIC INSULATION UNLESS OTHERWISE SHOWN.
- ALL VENTILATION DUCTING TO BE UNINSULATED.
- ALL FLEXIBLE DUCTING TO BE FACTORY PRE-INSULATED. ALL FLEXIBLE DUCTING TO BE FIXED TO SPIGOTS WITH JUBILEE CLAMPS AND STRAPPED WITH DUCT TAPE.
- SPIGOTS TO BE EXTERNALLY INSULATED WITH 25 FOIL FACED FIBREGLOSS.
- ALL HANGERS AND BRACKETS TO BE GALVANISED.
- ALL DUCTWORK TO BE HUNG ON 30x50x1.6 G.S.M. CHANNEL TRAPEZE HANGERS WITH Ø8 RODS.
- FLEXIBLE CONNECTIONS TO BE FITTED TO ALL DUCTING BETWEEN AIRHANDLING AND PACKAGE UNITS, FANS, ETC.
- ALL GRILLE BRANCHES TO HAVE STRAIGHTENING VANES AS DETAILED.

PRELIMINARY REVISIONS			
REV	DATE	DESCRIPTION	BY
0A	2021-10-10	PRELIMINARY DESIGN	RN
0B	2022-04-04	UPDATED FOLLOWING COMMENTS	RN
0C	2022-04-11	UPDATED ARCH MODEL	RN
0D	2022-05-03	CO-ORDINATED LAOUT	RN
0E	2022-05-24	UPDATED LAYOUTS TO COMMENTS	RN

CLIENT

ARCHITECT

CONSULTANT

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PROJECT DESCRIPTION

NGWELEZANA HOSPITAL: NEW ORTHOTICS AND PROSTHETICS CENTRE

DRAWING TITLE

GROUND FLOOR HVAC LAYOUT

DATE

2022-05-24

DRAWN BY

R NIEMANN

CHECKED BY

J. HILL / D.DE WIT

DESIGNED BY

J. HILL / D.DE WIT

DRAWING SIZE

A1

SCALE

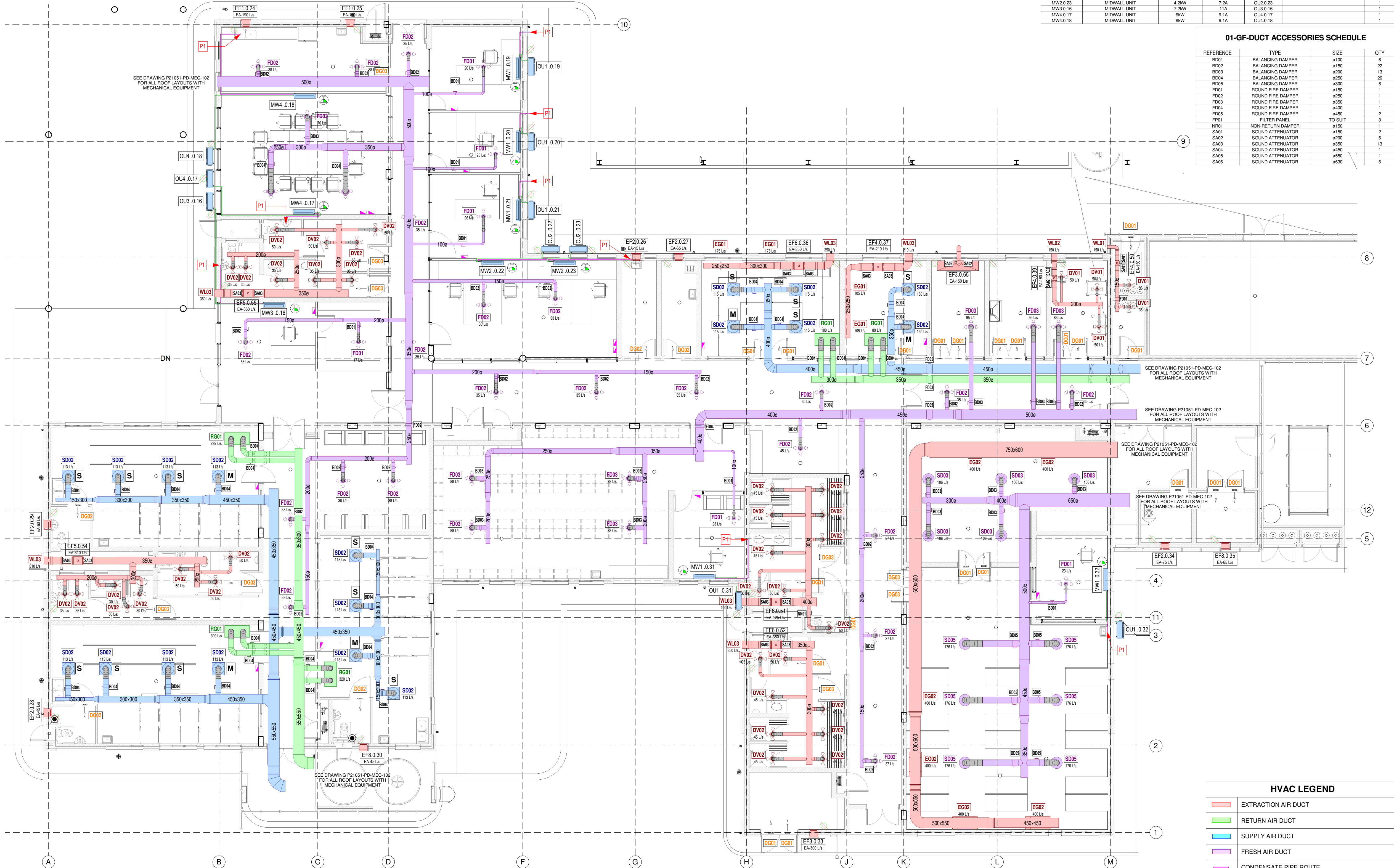
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DRAWING NUMBER

P21051-PD-MEC-101

REV

0E



HVAC GROUND FLOOR  
1 : 100