

11 GIBBONS ST, REDFERN

MECHANICAL SERVICES

LEGEND:

	HIDDEN DUCTWORK
	NEW UNINSULATED DUCTWORK
	NEW CIRCULAR RIGID DUCT
	50mm THICK EXTERNALLY INSULATED DUCT, OR EQUIVALENT TO ACHIEVE R2.0.
	50mm THICK INTERNALLY INSULATED DUCT, OR EQUIVALENT TO ACHIEVE R2.0.
	FLEXIBLE DUCT
	75mm DIAMETER SUPPLY AIR TUBES
	FLEXIBLE DUCT WITH RIGID DUCT LENGTH
	SHOE TAKEOFF
	DOOR UNDERCUT
	ACCESS PANEL IN CEILING BY OTHERS
	FIRE DAMPER AND ACCESS PANEL
	SUPPLY HEADER MANIFOLD TO EACH 1 BEDROOM APARTMENT.
	SUPPLY HEADER BOX TO EACH ROOM.
	SUPPLY HEADER MANIFOLD TO EACH 2 AND 3 BEDROOM APARTMENT.
	GRILLE TYPE
	AIR QUANTITY (L/s)
	LINEAR BAR GRILLE
	WALL GRILLE
	SUPPLY DUCT RISING OR DROPPING
	RETURN DUCT RISING OR DROPPING
	SUPPLY DUCT RISING OR DROPPING WITH TURNING VANES
	TURNING VANES IN DUCT
	AIR FLOW DIRECTION
	RETURN AIR

NOTES:

- THE MECHANICAL SERVICES DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE ARCHITECTURAL, STRUCTURAL, AND OTHER SERVICES DRAWINGS AND WITH OTHER SUCH WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF TENDER AND CONSTRUCTION.
- THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE MECHANICAL SERVICES SPECIFICATION. NOTE THAT THE SPECIFICATION IS NOT A GENERIC DOCUMENT AND CONTAINS INSTRUCTIONS CRITICAL TO THE COMPLIANT INSTALLATION OF THESE WORKS.
- REFER TO THE DELIVERABLES WITHIN THE ASSOCIATED SPECIFICATION. PROVIDE A SCHEDULE OF DELIVERABLES TO THE CONSULTING ENGINEER. THIS IS TO INCLUDE DATES FOR WORKSHOP DRAWINGS, COMMISSIONING FIGURES, MANUALS AND AS INSTALLED DRAWINGS. REFER TO THE MECHANICAL SERVICES SPECIFICATION FOR FURTHER DETAILS ON THESE ITEMS.
- IF ANY DISCREPANCY OCCURS BETWEEN THE DRAWINGS AND THE SPECIFICATION, THE CONTRACTOR IS TO ASSUME THE LARGER/GREATER FOR THE PURPOSES OF TENDER, AND SEEK CLARIFICATION. ANY DISCREPANCY SHALL BE REFERRED TO THE ENGINEER BEFORE UNDERTAKING THE WORK.
- SUBSTITUTIONS MUST BE APPROVED BY THE ENGINEER, AND BE INCLUDED IN THE TENDER RETURN DOCUMENTATION.
- UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE IN MILLIMETERS AND DUCTWORK SIZES INDICATED ARE AIR-WAY SIZE.
- AIR QUANTITIES ARE GIVEN IN LITERS PER SECOND.
- ALL MATERIALS AND WORKMANSHIP MUST CONFIRM TO THE RELEVANT AUSTRALIAN STANDARDS, CODES AND THE CONTRACT SPECIFICATION.
- DUCTWORK IS TO CONFORM TO THE LATEST ITERATION OF AS4252, AS1668.1, BCA SECTION J, AND SMACNA CODES.
- ALL ROUTES, INCLUDING PIPEWORK ARE SHOWN INDICATIVE AND ARE FOR PRICING PURPOSES ONLY. FINAL ROUTES ARE TO BE CONFIRMED ON SITE AND COORDINATED FULLY WITH THE OTHER TRADES.
- DRAWINGS MUST NOT BE SCALED. ALL DIMENSIONS SHALL BE FROM THE ARCHITECTS DRAWINGS, AND VERIFIED BY ACTUAL SITE MEASUREMENT PRIOR TO MANUFACTURE AND INSTALLATION OF MECHANICAL SERVICES.
- THE ACOUSTIC ENGINEER MUST VERIFY ALL FINAL EQUIPMENT SELECTIONS.
- ALL WALL AND ROOF PENETRATIONS AND UPSTANDS/UNDERFLASHING ARE BY THE BUILDER. MECHANICAL CONTRACTOR TO PROVIDE OVERFLASHING.
- DOOR GRILLES SHALL BE SUPPLIED BY THE MECHANICAL CONTRACTOR AND FITTED BY THE BUILDER.
- ALL FIRE DAMPERS ARE TO BE PROVIDED WITH DUCT ACCESS PANELS AND ASSOCIATED CEILING ACCESS PANELS WHERE REQUIRED.
- PVC CONDENSATE DRAIN SHALL BE RUN FROM EACH A/C UNIT TO A TUNDISH OR FLOOR WASTE. THE TUNDISH OR FLOOR WASTE SHALL BE PROVIDED BY THE HYDRAULICS TRADE. SOFT POLY PIPE CONDENSATE PIPE SHALL NOT BE USED.
- ALL PIPEWORK PENETRATIONS THROUGH FIRE/SMOKE RATED WALLS/SLABS SHALL BE PROTECTED BY FIRE RATED MASTIC.
- FINAL CEILING ACCESS PANEL LOCATIONS AND SIZES SHALL BE ADVISED BY THE MECHANICAL CONTRACTOR, COORDINATED WITH THE ARCHITECT AND INSTALLED BY BUILDER.
- TEMPERATURE SENSORS SHALL TYPICALLY BE INSTALLED 1500 AFFL.
- TEMPERATURE SENSOR, CONTROL PANELS, THERMOSTAT LOCATIONS SHALL BE COORDINATED AND CONFIRMED WITH THE ARCHITECT PRIOR TO INSTALLATION. RELOCATIONS THROUGH NOT GAINING APPROVAL SHALL BE AT CONTRACTORS COST.
- ALL TAKEOFFS SHALL BE PROVIDED WITH OPPOSED BLADE BALANCING DAMPERS.
- THE MECHANICAL CONTRACTOR SHALL ALLOW FOR ALL DUCT BENDS, OFFSETS AND TRANSITIONS TO CLEAR BEAMS, TRUSSES, DUCTWORK AND OTHER SERVICES AND OBSTACLES.
- THE CONTRACTOR SHALL ENGAGE THE SERVICES OF AN EXTERNAL PASSIVE PROTECTION SPECIALIST COMPANY QUALIFIED TO PROVIDE A REVIEW OF THE PROPOSED "PASSIVE FIRE PROTECTION" WORKS PRE-CONSTRUCTION, AND UNDERTAKE AN AUDIT AND CERTIFICATION ON ALL MEASURES INSTALLED, INCLUDING, BUT NOT LIMITED TO FIRE/SMOKE DAMPERS, PIPE PENETRATIONS, SEALANT ETC.

MECHANICAL SERVICES DRAWING LIST

NS18138-M01	LEGEND AND NOTES
NS18138-M02	GROUND FLOOR AIR CONDITIONING AND VENTILATION LAYOUT
NS18138-M03	LEVELS 1-2 AIR CONDITIONING AND VENTILATION LAYOUT
NS18138-M04	LEVEL 3 AIR CONDITIONING AND VENTILATION LAYOUT
NS18138-M05	LEVELS 4-17 AIR CONDITIONING AND VENTILATION LAYOUT
NS18138-M06	ROOF AIR CONDITIONING AND VENTILATION LAYOUT
NS18138-M07	APARTMENT LAYOUT DETAIL SHEET 1
NS18138-M08	APARTMENT LAYOUT DETAIL SHEET 2
NS18138-M09	APARTMENT LAYOUT DETAIL SHEET 3
NS18138-M10	TYPICAL DETAILS

PLANT AND EQUIPMENT DESIGNATIONS:

AC	- DX SPLIT OR PACKAGED UNIT
AF	- FILTERS (PANEL, DEEP VEE OR BAG)
AT	- ATTENUATOR (SILENCER)
CU	- CONDENSING UNIT
EF	- EXHAUST FAN
MD	- MOTORISED DAMPER
MSSB	- MECHANICAL SERVICES SWITCHBOARD
OAF	- OUTSIDE AIR FAN
SF	- SUPPLY FAN
SPF	- STAIR PRESSURISATION FAN
TEF	- TOILET EXHAUST FAN

FLEXIBLE DUCT SCHEDULE

AIR QTY (L/s)	DUCT SIZE (mm)*
0-50	#150
51-100	#200
101-150	#250
151-250	#300
251-300	#350
301-500	#400

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TITLE
MECHANICAL SERVICES
LEGEND AND NOTES

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E.O.	S.C.	S.C.	M01
JOB No.		SCALE	REV
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