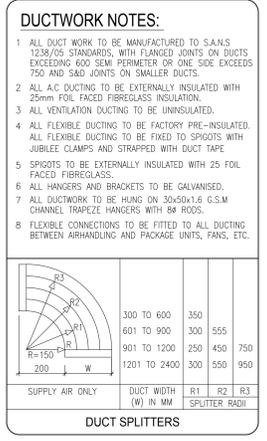


- NOTES**
- 1: GENERAL NOTES:**
- 1.1 THIS DRAWING FORMS PART OF THE SPECIFICATION AND MUST BE READ THEREWITH AND IN CONJUNCTION WITH THE DRAWINGS AS LISTED THEREIN.
  - 1.2 REFER TO THE SPECIFICATION FOR ALL EQUIPMENT DETAILS.
  - 1.3 ALL DIMENSIONS TO BE CHECKED ON SITE PRIOR TO MANUFACTURE.
- 2: CHILLED WATER PIPING NOTES:**
- 2.1 ALL CHILLED WATER PIPE WORK AND FITTINGS SHALL BE INSTALLED AS PER THE SPECIFICATION.
  - 2.2 ALL CHILLED WATER PIPING SHALL BE S.A.B.S 62 & 719 MEDIUM BLACK PIPING 2.21 PIPE SIZES #10 TO #50 - S.A.B.S 62 W.D. BLACK SCREWED ENDS TO BS-97 (BSPT) THREAD.
  - 2.2.2 SIZE #65 TO #150 - S.A.B.S 62 W.D. BLACK BUTT WELDED.
  - 2.2.3 SIZE #160 UPWARDS - S.A.B.S 719 W.D. BLACK BUTT WELDED.
  - 2.3 ALL CHILLED WATER FITTINGS SHALL CONFORM WITH THE FOLLOWING:
    - 2.3.1 #65 TO #150 - SCREWED MALLEABLE CAST IRON.
    - 2.3.2 #160 UPWARDS - BUTT WELD TO ANSI B16.9
  - 2.4 ALL CHILLED WATER PIPE FLANGES SHALL BE TABLE D S/LIP ON 2.5 CHILLED WATER PIPE GASKETS
  - 2.5.1 FOR SCREWED PIPING USE 'THREAD SEAL' (PTFE)
  - 2.5.2 FOR FLANGES USE RUBBER INSERTION.
- 3: CHILLED WATER VALVES:**
- 3.1 ALL CHILLED WATER ISOLATING VALVES TO BE AS FOLLOWS:
    - 3.1.1 #15 TO #50 - BALL VALVE, SCREWED BSP ENDS
    - 3.1.2 #65 TO #150 - SHORT STEM BUTTERFLY VALVES
- 4: CHILLED WATER PIPE INSULATION:**
- 4.1 ALL CHILLED WATER PIPING TO BE INSULATED AND CLAD AS PER THE ENGINEER'S SPECIFICATION.
  - 4.2 INSULATION THICKNESSES:
    - 150mm - 50mm - 25mm TRUCK
    - 65mm - 150mm - 40mm TRUCK
    - 100mm - 300mm - 50mm TRUCK
- 5: CONDENSER WATER PIPING NOTES:**
- 5.1 ALL CONDENSER WATER PIPE WORK AND FITTINGS SHALL BE INSTALLED AS PER THE SPECIFICATION.
  - 5.2 ALL CONDENSER WATER PIPING SHALL BE S.A.B.S 62 & 719 MEDIUM BLACK PIPING.
  - 5.3 PIPE SIZES #15 TO #50 - S.A.B.S 62 W.D. BLACK GALVANIZED TO S.A.B.S SCREWED ENDS BS-97 (BSPT) THREAD.
  - 5.4 SIZE #65 TO #150 - S.A.B.S 62 W.D. BLACK BUTT WELDED, HOT DIP GALVANIZED TO S.A.B.S 763 AFTER FABRICATION.
  - 5.5 SIZE #160 UPWARDS - S.A.B.S 719 W.D. BLACK BUTT WELDED, HOT DIP GALVANIZED TO S.A.B.S 763 AFTER FABRICATION.
  - 5.6 ALL CONDENSER WATER FITTINGS SHALL CONFORM WITH THE FOLLOWING:
    - 5.6.1 #15 TO #50 - SCREWED MALLEABLE CAST IRON GALVANIZED TO S.A.B.S 763
    - 5.6.2 #65 UPWARDS - BUTT WELD TO ANSI B16.9
  - 5.7 ALL CONDENSER WATER PIPE FLANGES SHALL BE TABLE D S/LIP ON.
  - 5.8 CONDENSER WATER PIPE GASKETS:
    - 5.8.1 FOR SCREWED PIPING USE 'THREAD SEAL' (PTFE)
    - 5.8.2 FOR FLANGES USE RUBBER INSERTION.
- 6: CONDENSER WATER ISOLATING VALVES:**
- 6.1 ALL CHILLED WATER ISOLATING VALVES TO BE AS FOLLOWS:
    - 6.1.1 #15 TO #50 - BALL VALVE, SCREWED BSP ENDS
    - 6.1.2 #65 TO #150 - SHORT STEM BUTTERFLY VALVES

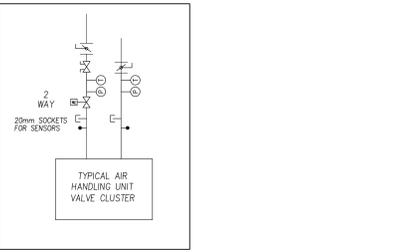
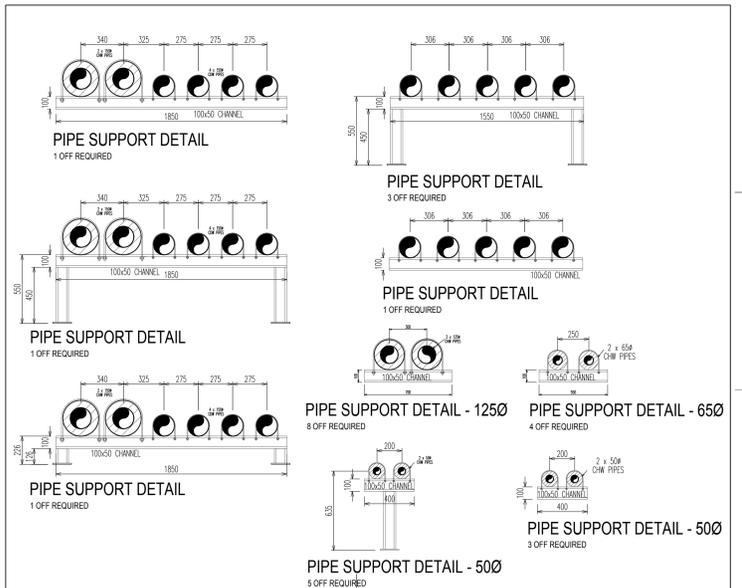
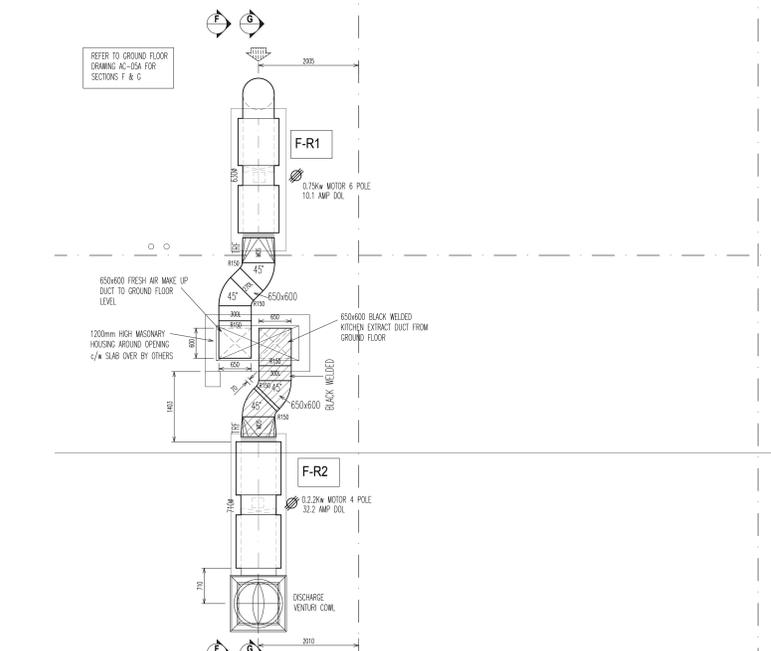
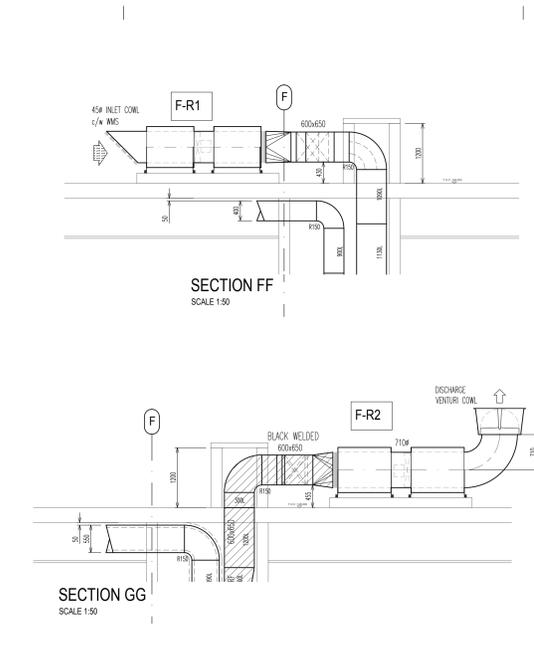
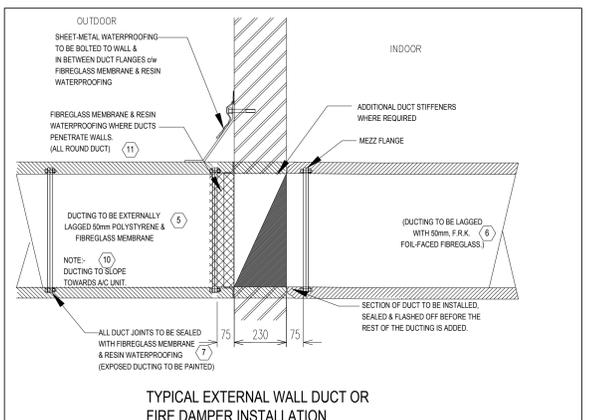


**Balancing Damper Schedule**

Ref	Make	Model	Duct Size	Length	No Off	Notes
DA1	European	Balancing Damper	300x450	180mm	1	
DA2	European	Balancing Damper	500x600	180mm	1	
DA3	European	Balancing Damper	500x500	180mm	1	

**Fire Damper Schedule**

Ref	Make	Model	Duct Size	Length	No Off	Notes
FD-1	European	Comb Damper	500x350	500mm	1	Fusible Link
FD-2	European	Comb Damper	500x350	500mm	1	Fusible Link



**AIR HANDLING UNIT SCHEDULE**

REFERENCE	MAKE	MODEL	TYPE	LEVEL SERVED	CAPACITY	SUPPLY AIR	RETURN AIR	OUTSIDE AIR	Ent DB / WB	Leav DB / WB	CHW Flow	CHW P/ipe	POWER SUPPLY	MASS	NO-OFF
UG-2	Trox	TC-H4-L-3.5	CHV Air Handling Unit	Ground Floor	50.7Kw	2997 l/s	1420 l/s	1259 l/s	26.6°C DB / 21.3°C WB	11.3°C DB / 10.6°C WB	2.2 l/s	Ø50	400V	-	1
UG-3a	Trox	TC-H4-L-4	CHV Air Handling Unit	Ground Floor	50.7Kw	2997 l/s	1995 l/s	639 l/s	24.5°C DB / 17.0°C WB	11.3°C DB / 10.6°C WB	2.2 l/s	Ø50	400V	-	1
UG-3b	Trox	TC-H4-L-4	CHV Air Handling Unit	Ground Floor	50.7Kw	2997 l/s	1995 l/s	639 l/s	24.5°C DB / 17.0°C WB	11.3°C DB / 10.6°C WB	2.2 l/s	Ø50	400V	-	1
UG-4	Trox	TC-H4-L-6	CHV Air Handling Unit	Ground Floor	85 Kw	4220 l/s	2781 l/s	2425 l/s	23.8°C DB / 17.2°C WB	11.3°C DB / 10.7°C WB	3.7 l/s	Ø50	400V	-	1
UF-2	Trox	TC-H4-L-3.5	CHV Air Handling Unit	First Floor	106.6 Kw	4713 l/s	3286 l/s	1427 l/s	24.8°C DB / 17.4°C WB	11.3°C DB / 10.7°C WB	4.4 l/s	Ø65	400V	-	1
UF-3	Trox	TC-H4-L-3.5	CHV Air Handling Unit	First Floor	106 Kw	5133 l/s	3678 l/s	1455 l/s	24.0°C DB / 17.2°C WB	11.3°C DB / 10.7°C WB	4.6 l/s	Ø65	400V	-	1

**Heat Recovery Unit Schedule**

REFERENCE	MAKE	MODEL	TYPE	Serving	CAPACITY	Fresh Air	Extract Air	POWER SUPPLY	MASS	NO-OFF
HRU-2	Apache	HRFS150	Heat Recovery Unit	UG-3A&B & UF-2 & 3	100 Kw	4107 l/s	1647 l/s	5.5 kVA	-	1
HRU-3	Apache	HRFS170	Heat Recovery Unit	UG-4	122 Kw	3728 l/s	1728 l/s	5.5 kVA	-	1
HRU-4	Apache	HRFS100	Heat Recovery Unit	UG-2	58 Kw	2101 l/s	2401 l/s	5.5 kVA	-	1

**Cooling Tower Schedule**

REFERENCE	MAKE	MODEL	TYPE	Water Supply	Ent Temp	Leaving Temp	POWER SUPPLY	MASS	NO-OFF
CT-1	KT	KT 2150	Cooling Tower	25.2 l/s	35°	29.5°	400V	-	1
CT-2									

**Fan Schedule**

REFERENCE	MAKE	MODEL	TYPE	Air Flow	Motor Kw	Speed	POWER SUPPLY	Pressure	NO-OFF
F-R1	Domini	M4kw-2-400-200-B	Axial Flow Fan	2800 l/s	0.79kw	1460 RPM	400V	138 Total	1
F-R2	Domini	M4kw-2-720-30-0-B	Axial Flow Fan	2800 l/s	2.2kw	1440 RPM	400V	306 Total	1