

DUCTWORK NOTES:

- 1 ALL DUCT WORK TO BE MANUFACTURED TO S.A.N.S 1238/05 STANDARDS, WITH FLANGED JOINTS ON DUCTS EXCEEDING 600 SEMI PERIMETER OR ONE SIDE EXCEEDS 750 AND S&B JOINTS ON SMALLER DUCTS.
- 2 ALL A.C DUCTING TO BE EXTERNALLY INSULATED WITH 25mm FOIL FACED FIBREGLASS INSULATION.
- 3 ALL VENTILATION DUCTING TO BE UNINSULATED.
- 4 EXTRACT & SUPPLY DUCTING FROM ENERGY WHEEL IS INSULATED.
- 5 ALL FLEXIBLE DUCTING TO BE FACTORY PRE-INSULATED. ALL FLEXIBLE DUCTING TO BE FIXED TO SPROGITS WITH JUBILEE CLAMPS AND STRAPPED WITH DUCT TAPE.
- 6 ALL HANGERS AND BRACKETS TO BE GALVANISED.
- 7 ALL SPROGITS TO BE EXTERNALLY INSULATED WITH 25 FOIL FACED FIBREGLASS.
- 8 ALL DUCTWORK TO BE HUNG ON 30x50x1.6 G.S.M CHANNEL TRAPEZE HANGERS WITH #8 RODS.
- 9 FLEXIBLE CONNECTIONS TO BE FITTED TO ALL DUCTING BETWEEN AIRHANDLING AND PACKAGE UNITS, FANS, ETC.

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|-----------------|--------------|----------------------|-----------------|
| | 300 to 600 | 350 | 555 |
| | 601 to 900 | 300 | 555 |
| | 901 to 1200 | 250 | 450 |
| | 1201 to 2400 | 300 | 550 |
| SUPPLY AIR ONLY | | DUCT WIDTH (W) IN MM | SPLITTER RADIUS |

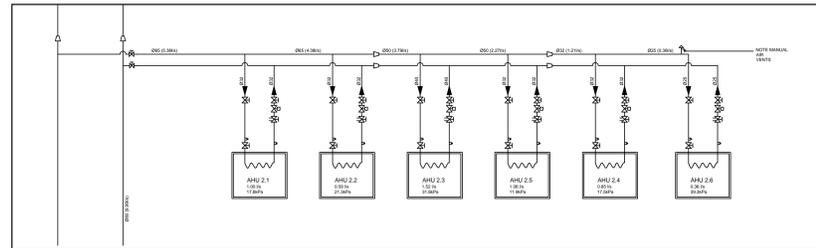
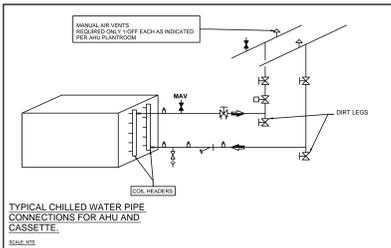
DUCT SPLITTERS

CHILLED WATER PIPING NOTES:

- 1 ALL PIPE WORK AND FITTINGS SHALL BE INSTALLED AS PER THE SPECIFICATION.
 - 2 ALL PIPING SHALL BE S.A.B.S 62 & 719 MEDIUM BLACK.
 - 3 PIPE SIZES #15 TO #65 - S.A.B.S 62 MED BLACK SCREWED ENDS TO ISO-R7 (BS21) THREAD.
 - 4 SIZE #80 TO #150 - S.A.B.S 62 MED BLACK BUTT WELDED.
 - 5 SIZE #200 UPWARD - S.A.B.S 719 MED BLACK BUTT WELDED.
 - 6 ALL CHILLED WATER FITTINGS.
 - 6.1 #15 TO #65 - SCREWED MALLEABLE CAST IRON.
 - 6.2 #80 UPWARDS : BUTT WELD TO ANSI B16.9.
 - 7 ALL PIPE FLANGES UP TO 150# TO BE TABLE -D.
 - 8 CHILLED WATER PIPE GASKETS.
 - 8.1 FOR SCREWED PIPING USE THREAD SEAL (PTFE).
 - 8.2 FOR FLANGES USE RUBBER INSERTION.
 - 9 ALL FLANGE NUTS & BOLTS TO BE TO ASTM A193.
- VALVES:**
- 1 ALL ISOLATING VALVES TO BE AS FOLLOWS:
 - 2 #15 TO #65 : BALL VALVE, SCREWED BSP ENDS.
 - 3 #80 TO #150 : LONG STEM BUTTERFLY VALVES.
- PIPE INSULATION:**
- 1 ALL CHILLED WATER PIPING TO BE INSULATED AS PER THE SPECIFICATION.

LEGEND

- FIRE SIGNAL TO PANEL IN PLANTROOMS BY OTHERS
- 240V POWER 5 AMP SUPPLY AND ISOLATOR IN CEILING VOID FOR AC UNIT BY ARVENT
- 400V POWER SUPPLY & ISOLATOR TO PANEL BY OTHERS - TO UNIT BY ARVENT
- 500mm ROUND WALL BOX POSITIONED NEXT TO LIGHT SWITCH BY ARVENT. 20W CONDUIT TO BE CHASED IN WALL TO ABOVE CEILING BY ARVENT
- MIDWALL UNIT REMOTE
- TRAPPED DRAIN POINT IN CEILING VOID WITHIN 0.5m FROM UNIT
- DOOR GRILLE, SUPPLIED BY TEKWIN AIR AND FITTED BY OTHERS
- DOOR TO BE UNDERCUT BY 25mm BY OTHERS
- UNIT AVERAGING SENSOR - BY ARVENT



| Damper Schedule | | | | | |
|-----------------|------|-------|------------------|---------|-----|
| Reference | Make | Model | Description | Size | Qty |
| DA-P5 | AAP | ECD | Balancing Damper | 300x300 | 1 |
| DA-P6 | AAP | ECD | Balancing Damper | 250x250 | 1 |
| DA-P7 | AAP | ECD | Balancing Damper | 400x350 | 1 |
| DA-P8 | AAP | ECD | Balancing Damper | 300x300 | 1 |
| DA-P9 | AAP | ECD | Balancing Damper | 300x250 | 1 |
| DA-P10 | AAP | ECD | Balancing Damper | 200x200 | 1 |

| Unit Schedule | | | | | | | | |
|---------------|----------|-------|----------|---------------------------------|------------|----------|----------|---|
| Reference | Make | Model | Type | Power | Air Volume | Capacity | Qty | |
| AHU 2.1 | FUJIAIRE | SA | FMA 0414 | Chilled Water Air Handling Unit | 3 Phase | 2014 l/s | 29.32 Kw | 1 |
| AHU 2.2 | FUJIAIRE | SA | FMA 0507 | Chilled Water Air Handling Unit | 3 Phase | 1175 l/s | 19.21 Kw | 1 |
| AHU 2.3 | FUJIAIRE | SA | FMA 0612 | Chilled Water Air Handling Unit | 3 Phase | 2892 l/s | 46.32 Kw | 1 |
| AHU 2.4 | FUJIAIRE | SA | FMA 0510 | Chilled Water Air Handling Unit | 3 Phase | 1793 l/s | 28.82 Kw | 1 |
| AHU 2.5 | FUJIAIRE | SA | FMA 0510 | Chilled Water Air Handling Unit | 3 Phase | 1945 l/s | 31.15 Kw | 1 |
| AHU 2.6 | FUJIAIRE | SA | FMA 0405 | Chilled Water Air Handling Unit | 3 Phase | 611 l/s | 10.13 Kw | 1 |