



1 03_THIRD FLOOR
1 : 100

Legend

- - Externally Insulated Supply Ducting
- - Externally Insulated Return Ducting
- - Uninsulated Extract Ducting
- - Ducted Extract Ducting
- - R20000 Constant Volume Supply Air Diffuser with Flow Rate
- - R22 galvanized condensate/return piping
- - Rainwater Piping
- - Duct Stop end
- - Single phase motor by electricity
- - Three phase motor by electricity
- - 4 Way Flow Ceiling Cassette with Cooling Capacity
- - Fire Damper with Flexible Inlet
- - Under Coat door (20mm)
- - Door Grille with size and flow rate
- - 20mm valve with flow rate
- - Return Air Grille (R20000) with flow rate
- - Variable Refrigerant Flow Condensate
- - Wet Wall unit
- - Air Fan (Connected) Unit
- - Add Fan
- - Sound Attenuator (1.00)
- - Weather Louvre with size and flow rate
- - Condenser

CONSTRUCTION NOTES

- Notes:**
- This drawing is not to be used as a construction/installation drawing. Risers and zones have been allocated to this service, location dimensions are indicative of these.
- To prepare the construction/installation drawing, the subcontractor shall agree with the construction services contractor and project services' design drawings pertaining to the works shall coordinate thereof with the general arrangements of all other services and ensure that the general arrangements of all other services do not obstruct the future maintenance of other services.
- The subcontractor is responsible for correct field dimensions, clearances and heights, quantities, positioning processes and of all other trades providing all devices necessary for safe and satisfactory operation. Detailed drawings, typical sections, typical weight including all typical details as well as the legend can be read off drawing number MA-100.
1. All installation should be carried out as per Part IV of the tender specification.
 2. Dust sizes shown are sheet metal sizes.
 3. All ducting to be manufactured & installed in accordance with the SANS standards.
 4. All A/C shaft to be fitted with metal grid platform on floors with access door.
 5. All exposed ducting to be painted to an approved colour.
 6. All take-offs from supply & exhaust air ducting to be 45° bends.
 7. All equipment to be fitted with anti-vibration mountings as per specification.
 8. HVAC contractor to ensure that all condensate drains are trapped and slope adequately. All drains to be tested for leaks on completion.
 9. All ducting to be fit on top and installed hard-up to the underside of the slab above.
 10. HVAC Contractor is responsible for connecting the condensate drains to the drain stack or the nearest drain. The connection must be a solid connection to prevent leakage.
 11. Thermostat positions are provisional. Final positions shall be determined in close consultation with Client/Engineer. Where full height partitioning is not possible for mounting the thermostat, it must be mounted on the brick wall.
 12. All refrigerant piping, electrical and control wiring between indoor and outdoor units shall be in a separate cable tray with cover plate securely fitted against wall.
 13. Condenser must be mounted on galvanized customer frame.
 14. All supply air ducting must be externally insulated.
 15. All BMS wiring must be installed in PVC conduit by BMS contractor.
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- DIVISION OF WORK**
- Work by Main Contractor**
- Openings in doors for door grilles.
 - Openings in ceiling for air conditioning units and/or fans.
 - Concrete enclosures for fan units.
 - Enclosures around HVAC openings.
 - Metal grid platforms on air shafts.
 - Building in and sealing of fire dampers.
- Work by Electrical Subcontractor**
- Power supply terminating in distribution boards.
 - Heater interfacing facilities with the air pressure switch.
 - Stop/Start interfacing of robot exhaust fans.
 - Fire shut-off signal to each RAG.
- Work by Plumbing Subcontractor**
- Furbore outlets on roof.
 - Water outlet points for Chiller units.

REV	DATE	REVISION DETAILS
00	07.06.2022	PRELIMINARY DESIGN
01	14.10.2022	ARCHITECTS PLAN UPDATED

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THE MASTER IS HELD AT ELTEK ENGINEERING SERVICES AND BEARS THE ORIGINAL SIGNATURE OF APPROVAL.

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THIRD FLOOR LEVEL HVAC LAYOUT

DATE	02/09/2022	SCALE	N.T.S.
DESIGNED	J. MAPHILA	DRAWN	T. MATHONI
PROJECT	PROJ - JCLDW 016-MA-101		

ISSUED FOR INFORMATION