



1 00.0_GROUND FLOOR
1 : 100

Legend

- Externally heated supply ducting
- Externally heated return ducting
- Unheated extract ducting
- Constant Volume Supply Air Diffuser with flow rate
- 432 galvanized condensate/return piping
- Refrigerant piping
- Duct stop end
- Single phase section by elevation
- Three phase section by elevation
- 4 Way Blue Ceiling Cassette with Cooling Capacity
- Fire Damper with handle box
- Under Cut door (20mm)
- Door Gable with size and flow rate
- Door Gable with size and flow rate
- Return Air Grille (R004/R00) with flow rate
- Variable Refrigerant Flow Condensate
- Mini Wall Unit
- Hide Away (Concealed) 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. Routes and zones have been allocated to this service, location dimensions are indicative of measured dimensions.
To prepare his construction/installation drawing, the subcontractor must adhere to this co-ordination process and must impact all the disciplines drawings, including structural, architectural and mechanical with the general arrangement of all other services and ensure that the work is not obstructed during the fitting of future maintenance of other services.
The subcontractor is responsible for correct field dimensions, clearances and heights, quantities, fabrication processes and terminology of construction, coordination of the work with that of all other disciplines, including structural, architectural, mechanical and infrastructure operation. Detailed drawings, typical sections, typical weights including all typical details as well as the legend can be read off drawing number MA-100.

- All installation should be carried out as per Part IV of the tender specification.
- Duct sizes shown are sheet metal sizes.
- All ducting to be manufactured & installed in accordance with the SANS standards.
- All A/C shaft to be fitted with metal grid platform on floors with access door.
- All exposed ducting to be painted to an approved colour.
- All take-offs from supply & exhaust air ducting to be 45° bends.
- AC equipment to be fitted with anti-vibration mountings as per specification.
- HVAC contractor to ensure that all condensate drains are trapped and slope adequately. All drains to be tested for leaks and operation.
- All ducting to be fit on top and installed hard-up to the underside of the BSB above.
- HVAC Contractor is responsible for connecting the condensate drains to the drain block of the nearest shaft. The connection must be a solid connection to prevent leakage.
- Thermostat positions are provisional. Final positions shall be determined on site in consultation with Client/Engineer. Where full height partitions are not suitable for mounting the thermostat, it must be mounted on the brick wall.
- All refrigerant piping, electrical and control wiring between indoor and outdoor must run in bundling on cable trays with cover plate securely fixed against wall.
- Condenser must be mounted on galvanneal condenser frame.
- All supply air ducting must be externally insulated.
- All RWS wiring must be installed in PVC conduit by RWS contractor.

DIVISION OF WORK
Work by Main Contractor

- Openings in doors for door grilles.
- Openings in ceiling for air services and/or fans.
- Supply air ducting on ceiling with Spider frames (in non-fire walls) and making good after installation of HVAC equipment.
- Concrete bases for fan sets, etc.
- Enclosures around HVAC equipment.
- Makeup grid platform in AC shafts.
- Building in and sealing of the dampers.

Work by Electrical Subcontractor

- Power supply terminating in Distribution boards.
- Weather interlocking safeties with the air pressure switch.
- Stop/Start interlocking of inlet exhaust fans.
- Fire interlocking signal to each A/C.

Work by Plumbing Subcontractor

- Full bore 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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GROUND FLOOR LEVEL HVAC LAYOUT

DATE	ISSUED	SCALE	N.T.S.
02/09/2022			
DESIGNED BY	J. MAPHILA	DRAWN BY	T. MATHONI
PROJECT	PROJ - JCL/DW 016		01

ISSUED FOR INFORMATION