



1 02_SECOND FLOOR
1 : 100

Legend

- Externally insulated supply ducting
- Externally insulated return ducting
- Uninsulated return ducting
- Uninsulated supply ducting
- Double exhaust ducting
- 600x600 Constant Volume Supply Air Diffuser with flow rate
- 425 galvanized condensate/trash plying
- Refrigerant piping
- Duct stop end
- Single phase isolator by electrical
- Three phase isolator by electrical
- 4 Way Blow Ceiling Cassette with Cooling Capacity
- Fire Damper with Locking Bolt
- Under Door Seal (25mm)
- Door Gaps with size and flow rate
- Door Gaps with size and flow rate
- 425 galvanized condensate/trash plying
- Return Air Grille (600x600) with flow rate
- Variable Refrigerant Flow Condensers
- Mid Wall Unit
- Mid Area (Ceiling) Unit
- Add Fan
- Sound Attenuator (1.80)
- 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 these.
- To prepare his construction/installation drawing, the subcontractor must obtain the construction programme and must liaise with the architect's drawings, including structural and other drawings, to ensure that the work is coordinated with the general arrangement of all other services and future building work. The work is not to obstruct the fixing of any services.
- The subcontractor is responsible for correct field dimensions, clearance and heights, quantities, fabrication processes and materials, a correct installation, operation of the work and the satisfactory 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 units to be fitted with metal grid platform on floors with access doors.
 - 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 fixed on top and installed hard-up to the underside of the slab soffit.
 - 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.
 - Thermostat positions are provisional. Final positions shall be determined on site in consultation with Client/Engineer, where full height partitioning is 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 units must pass in 'trunking' or cable trays with cover plates securely fixed against wall.
 - Condenser must be mounted on galvanneal cantilever frame.
 - All supply air ducting must be externally insulated.
 - All BMS wiring must be installed in PVC conduit by BMS contractor.

- DIVISION OF WORK**
- Work by Main Contractor**
- Opening in slabs for ducting and/or fans.
 - Opening in concrete slabs with similar frames (on non-fire rated) for ducting and/or installation of HVAC equipment.
 - Supply and mounting of fan sets, etc.
 - Condensate around HVAC equipment.
 - Metal grid platform in AC shafts.
 - Building in and sealing of fire stoppers.
- Work by Electrical Subcontractor**
- Power supply terminating in Distribution boards.
 - Master interlocking appliances with the air pressure switch.
 - Stop/start interlocking of indoor exhaust fans.
 - Fire interlocking signal to each AHU.
- Work by Plumbing Subcontractor**
- Fullsize outlets on roof.
 - Water outlet points for Cooler Units.

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

COPYRIGHT OF THIS DESIGN AND DRAWINGS IS RESERVED. SCALED DIMENSIONS ARE INVALID. ALL DIMENSIONS AND LEVELS TO BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF WORK. DISCREPANCIES TO BE REPORTED IMMEDIATELY. ALL BUILDING WORK TO BE IN COMPLIANCE WITH NATIONAL BUILDING REGULATIONS, SOUTH AFRICAN NATIONAL STANDARDS AND LOCAL AUTHORITY BY-LAWS.

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

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PROJECT
JOHANNESBURG CENTRAL LIBRARY

DRAWING
SECOND FLOOR LEVEL HVAC LAYOUT

DATE	SCALE
02/06/2022	N.T.S.

DESIGNED BY: J. MAPHELA CHECKED BY: T. MATHONI

PROJ - JCL/DW 016-MA-104 01

ISSUED FOR INFORMATION