

**TECHNICAL SPECIFICATIONS
FOR
ADDRESSABLE FIRE ALARM INSTALLATION**

**IN THE WAREHOUSES
FOR**

**ZAMMSA
HEAD OFFICE
MUKWA ROAD, LUSAKA**

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LUSAKA**

TECHNICAL SPECIFICATIONS

FIRE ALARM SYSTEM

4.1 SCOPE

The works involves supply, installation and setting to work of an analogue addressable fire alarm system as follows:

The system will generally be designed and installed in accordance with BS 5839-1, BS 5445 and SABS 0139-1981.

The layout of the system shall be as shown on the drawings.

The system shall provide full battery back-up for a period of at least 24 hours in case of power failure.

All fire equipment including fire panels, smoke detectors, heat detectors, sirens, manual call points etc shall be as EATON (COOPER FIRE SAFETY) or equal approved.

No locally assembled equivalents will be accepted.

Where a specific manufacture and type is specified, this shall be provided as indicated, unless substitution is approved by the Engineer in writing.

Prior to any materials being ordered and prior to any works commencing, full working drawings of the works must be submitted to the Engineer for approval.

A period of at least two weeks should be allowed for this process.

4.2 BASIC OPERATION

A detected fire alarm condition will initiate the following:

- The common alarm LED on the main fire alarm panel shall illuminate.
- All sirens will sound.
- The back lit LED display will indicate all information associated with the fire alarm condition including the addresses of the device which has activated and its location in the protected premises.
- The information will be logged along with similar previous alarm conditions together with date and time of occurrence.

4.3 SUBMITTALS

All reference to manufacturers model no. specs etc shall be submitted to the engineer on award of tender to establish that minimum standards of performance, function and utility have been met.

This shall include any substitute equipment proposed as equal to the equipment specified herein shall meet or exceed the standards specified.

4.4 GUARANTEE

All work performed and all material and equipment supplied and installed shall be guaranteed for a period of 12 months from date of handover. The 12-month guarantee would be in accordance with CI standard DLP provisions. The service contract would be a deliverable under the construction contract

It will be necessary for the Contractor to enter into a Service and Maintenance contract with the client. The Contractor's charges thereof shall be indicated in the bills attached.

The guarantee of the works would be conditional on the contractor and client entering into such a contract within one month of handing over of the system satisfactorily and to the approval of the engineer.

Further to the above the full cost of any replacement of parts, labour etc will be provided free of charge during this initial one-year period.

4.5 AS FITTED DRAWINGS

The contractor shall supply one hard copy and one soft copy of the operation manuals and the as fitted drawings.

In addition, a framed block diagram will be provided indicating the position of each device and mounted in a robust frame and located on the wall of the room where the fire control panel is located.

SPRINKLER ALARM

Facility in the fire alarm panel shall be provided to allow for the connection by the Fire alarm contractor to two flow switches via addressable interface units. One flow switch is mounted on the incoming sprinkler mains and the other in the new fire pump house. The flow switches are provided with normally open and normally closed contacts in order to facilitate connection.

4.6 POST CONTRACT EXPANSION

Capacity on the equipment supplied is to be provided in order to facilitate the expansion of the proposed system to cover all other Warehouse Compound and Offices areas not included under this contract.

4.7 MAIN FIRE ALARM CONTROL PANEL

The main control panel shall be as EATON C0P1200NC or equal approved

4.8 DEVICES

Optical smoke detectors shall be as EATON COPP 420 or equal approved.

Sounders shall be as EATON-COPWS / COPWS-WP weatherproof Hoorn sounders or equal approved.

Manual call points shall be as EATON COPBGUS or equal approved complete with surface mounted base coloured red. The supply of 5 spare glasses shall form part of this contract.

I/O units shall be as EATON or equal approved.

4.9 CABLING

Cabling shall be in PH120 fire resistant cable (120min fire resistant) with 2.5 mm sq. dia. and shall be run in PVC conduit throughout neatly following building contours. Where verticals runs are required conduit should be bracketed neatly to wall surfaces using proprietary bracketry.