

TECHNICAL SPECIFICATION

This section of the specification includes the supply, installation, testing, commissioning and handing over of Fire man telephone system which is required to form a complete, operative, coordinated system for theSite Address Details.....It shall include, but not be limited to, Telephone Jack, Hand set and wiring as specified herein.

FIRE MAN TELEPHONE SYSTEM (FTS):

The fireman telephone system (FTS) shall be suitable for Class-B wiring. It shall have provision to accept the range of 230V \pm 10% single phase, 50 Hz Leaner power supply. The FTS shall have maximum capacity of 8zones.

Firemen Telephone System provides a reliable user friendly Fireman's Emergency Communication. It consists of master Control panel with 8 zone location alarm indications, Phone jack and Handset. The Phone jack senses the insertion of the Fireman's handset into jack and Immediately signals the status to the Control panel. The Control Panel in turn will indicate the Location of the call and provide an audio visual indication to alert the operator's attention. Group or all call can also be selected. Once connected a clear full duplex audio Conversation can take place. The call is ended by, replacing the master handset. The Phone jack senses the insertion of the Fireman's handset into jack and Immediately signals the status to the Control panel. The Control Panel in turn will indicate the location of the call and provide an audio visual indication to alert the operator's attention. Group or all call can also be selected. Once connected a clear full duplex audio conversation can take place. The call is ended by, replacing the master handset.

Where required by code, and where shown on the plans, provide an Integral Fire Fighters" Telephone subsystem in each building, to include:

- 1) A dedicated LED which indicates, the Call-In Status of remote telephones.
- 2) Selection of any remote telephone for two-way communications shall be accomplished with the pressing of a single switch.
- 3) Systems not provide a dedicated LCD shall provide individual selection Switches, call-in and trouble indicators for each telephone circuit.
- 4) Telephone Hand Sets: High-impact plastic handset, heavy-duty coil cord, and hook switch; connected to the FACP by means of dedicated, supervised communication lines. Handsets have a Dynamic receiver and a carbon transmitter, operating 24VDC.
- 5) A Red master telephone handset with a push to talk button and a Flexible-coiled self-winding five (5) foot cord shall be provided and Recessed within a protective unit-mounted enclosure at the command Centre.

6) Cabinet: Flush-or surface-mounted as indicated, 18-gage, minimum, Painted steel with a latched hinged door with trim labeled "Fire Fighters" Phone." Size to accommodate handset and cord.

CONSTRUCTION DETAILS:

The Fire man telephone system shall be of CRCA MS cabinet. It shall be capable of being wall Mounted or flush mounted. The cabinet and front shall be corrosion protected, given a rust-resistant, and manufacturer's standard finish. It shall be of Red color finish as per requirement. The FTS shall be provided with earthing terminals with cable entry from the top. The panel shall be completely factory wired, absolutely ready-in all respects for installation at site. The internal wiring of the panel shall be carried out with 650V grade, stranded copper wires of size rated for the current in the corresponding circuit. The minimum size of the wire shall be not less than 0.8 sq.mm for electronic-circuits and 1.5sq.mm for electrical circuits & 14AWG for grounding.

POWER SUPPLY:

The System shall operate in the range of 220VAC, 50Hz main supply (Leaner Power supply). The power supply shall have Glass fuse/auto resettable fuses. The panel shall have protection against transient and surges. The Power Supply shall be provided with an earth detect circuit, capable of detecting earth faults. The power supply shall have Battery charging facility with thermal fuses to avoid reverse polarity damages.

Telephone Jack:

Telephone Jack is used to communicate with the central Fire Fighter Telephone console by using the portable handsets. RE-751J Telephone Jack back box with monitor module facilitates third party devices to interface with ravel make addressable panel. It is an input interface device to connect the switches like security contacts, waterflow switches, pull stations etc., and this input is supervised for the loop open and short conditions. The address for these devices are given by 8 way DIP switch.

Telephone Hand set:

Fire Fighters Telephone handset is constructed with MS Box. It comes with coiled cord with RJ 11. Single handset is housed in a single cabinet Phone jack and Handset.

A. Batteries:

- (i) Battery shall have sufficient capacity to power the fire alarm system for not less half an hour in alarm condition and at least 24 hours in normal condition.
- (ii) The batteries are to be completely maintenance free.
- (iii) The batteries shall be of Lead acid type.

B. Cables/conduits:

All cables/conduits to be laid on wall, ceiling and on the hangers wherever necessary and as directed by the authority with required hardware. The cables shall be armored PVC twisted 1.5 sq mm multi strand insulated, copper conductor, conforming to IS: 1554 and shall be of specified make. The cables shall be properly terminated and labeled.