ANALOGUE COLOUR VIDEO INTERCOM SYSTEM

The contractor shall Supply, Install, Test and Commission a modern Video Entry Phone System to facilitate Audio-Visual Communication between the different apartments and the building Main Entrance.

The system shall operate when an apartment is called from the main entrance and shall be received on the unit in the apartment. The system shall block out calls to other apartments while a call is in progress.

The system shall be supplied and installed by a specialist contractor, who shall be the main agent of the equipment supplied. Items of equipment from various manufactures, mixed to form a system shall not be accepted.

The contractor shall submit a complete proposal with schematic drawings, list of materials and original detailed catalogues of the equipment for consultant/client approval before starting the work.

1. GENERAL:

1.1 The Video Entry Phone System shall be suitable for visual monitoring of the main entrance lobby / door and a 2 way voice communication between the different apartments and the main entrance panel.

Unlocking of building entrance door shall be possible by pressing the monitor's door-opener button.

1.2 Submittals

The contractor shall submit to the Consultant 4 Copies of Descriptive Literature, Technical Data, Catalogues, Installation Instructions and Maintenance recommendation of all the Products used.

The Contractor shall provide detailed Shop Drawings for the review/approval by the Consultant which include the Schematic Diagram of the VI Distribution Network indicating all the System components including Splitters, Power Supplies, Cables etc.

1.3 Codes & Standards

All the equipment and components shall be in accordance with CE Standards and they shall bear the EU Directives (89/336/EEC) label on them.
2. **SYSTEM'S EQUIPMENT:**

The system shall consist of, but not necessarily be limited to the following:

2.1. Video Intercom Entrance Panel with Colour Camera, Speech Unit and Push Buttons.

2.2. Monitor Unit with phone handset in each apartment.

2.3. Sufficient power supply units, Video Signal Distributors, Video Cables and all necessary accessories.

3. **Equipment's specifications:**

3.1. **Entrance panel:**

3.1.1 Entrance Panel shall be wall-mounted in extruded aluminium with a special paint finish, chosen for its resistance to atmospheric agents and copolymers with optimal technical properties in extruded aluminium with a special paint finish, chosen for its resistance to atmospheric agents and copolymers with optimal technical properties.

3.1.2 The panel extension modules shall be paint-finished aluminium and copolymer.

3.1.3 Each panel modules shall have illuminated key-buttons with name tags for calling each apartments.

3.1.4 Panel shall have beep sound to confirm call.

3.2. **Video Camera:**

Built-in 1/4" Colour CCD (Charge Coupled Device) Camera with the following characteristics:

- Standard CCIR 625 lines, 50 half field/sec, 1 Vpp on 75 Ohm coaxial cable
- 3mm Lens
- With infrared LED at maximum distance of 50 cm
- Supply : 12V DC
- The lens shall be adjusted vertically, manually
- Horizontal Frequency: 15625 Hz
- Vertical Frequency: 50Hz
- Definition of image center: 330 horizontal lines, 400 vertical lines.
- Automatic Linear brightness control.
- Operating Temperature -10°C to +50°C.

3.3 **Monitors:**

3.3.1 Wall-mounted type in white colour ABS plastic.

3.3.2 Monitor shall have 4” LCD Colour complete with phone-type handset.

3.3.3 Monitors shall be equipped with the following:

- Phone-handset with Flex cord with two RJ connectors.
- Internal electronic chime with adjustable intensity (call signal volume control) for calls from entrance panel
- PAL
- Brightness, contrast, call volume
- Red LED for call exclusion and green LED for door/gate open.
- Door Lock / release control push buttons.
- Self protected against short circuit and overload through PTC.
- Equipped with 8 terminal with drawable connector for faster and easier connections.
- Terminal numeration matching in all the equipment in a system
- to avoid connection errors.
- Supply 15 – 20V DC
- Brightness & Contrast controls.
- Wiring: 6 common wires, 1 call wire and 1 coaxial cable, 1 for door lock release, 1 for self-start and 1 for auxiliary services

3.4 **Power supply units:**

3.4.1 Basic power supply units 60VA, 15W, shall be in ABS case.

3.4.2 Power supply units shall operate on 240 V, 50Hz with low-voltage output for feeding the monitors along with the camera and video-signal Distributors.

3.4.3 All outputs shall be stabilized and protected against short-circuits with PTC against short circuits and temperature variations
3.4.4 Call inhibiting circuit when system is in use.

3.4.5 Timed lock-release control, and automatic disconnection device of monitor previously activated.

3.5 **Cables:**

Multi-conductor video cable shall be used for wiring the system. The cable shall consist of the following on the minimum:

- 75 Ohm shielded coaxial cable of 3 mm diameter
- 3 coloured conductors of 1mm² cross section area
- 7 coloured conductors of 0.5mm² cross section area
- PVC protection gray jacket.
**Bill of materials:**

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<tr>
<th>No.</th>
<th>Description</th>
<th>Unit</th>
<th>Qty</th>
<th>Rate</th>
<th>Total</th>
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<td>Supply, installation &amp; commissioning of video Open Voice intercom system for the buildings as per the enclosed specification</td>
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<td>Power supply units as required for the system.</td>
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<td>4.</td>
<td>Video signal splitters with suitable number of connections in floor electrical rooms</td>
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<td>6.</td>
<td>Supply, installation and commissioning of the above system as specified with all necessary accessories.</td>
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