

SPECIFICATIONS & DRAWINGS

In compiling our quotation, the following specifications and drawings have been used.

Specifications

TACE
Electrical Engineering Systems
Chorlton Street, Manchester
PA1338

Electrical Outline Specification
Revision: CP3 Issue
Date 15th April 2019

Fire Alarm System	- Page 10, section 18
Disabled Refuge Intercom/ Disabled Toilet Alarm System	- Page 11, section 20
Induction loop System	- Page 11, section 21
Access Control System	- Page 11, section 22
Door Monitoring (Intruder) with Panic Alarm System	- Not Indicated

Drawings

<u>Drawing</u>	<u>Revision</u>	<u>Date</u>
E-301	C03	02.09.19
E-302	C03	02.09.19
E-303	C03	02.09.19
E-304	C04	29.10.19
E-305	C04	29.10.19
E-306	C04	29.10.19
E-307	C04	29.10.19
E-308	C04	29.10.19
E-309	C04	29.10.19
E-704	C01	28.08.19

COMPLIANCE STATEMENT

Our quotation is compliant with the drawings and specifications as detailed above. Any deviations are listed below:

FIRE ALARM SYSTEM

1. The panel door will be a plastic construction with a stainless-steel effect finish.
2. All device quantities and locations have been taken from the pre designed drawings with no alterations. If additional equipment is required this will be at cost to the client.
3. All interface quantities and locations will require confirmation by the client and any additional will be at extra cost to the client.

ACCESS CONTROL SYSTEM

1. Primary and secondary containment is to be provided by others
2. The Access Control System Ethernet controllers are IP enabled and requires connecting to an IP Network provided by others. Network to include all copper and Fibre cabling, switches, RJ45 connection units racking, patching and associated equipment
3. Our proposal is based on the locations indicated on the designed drawings provided, we are unable to confirm specific coverage of the areas indicated within the specification as these areas are not indicated on the drawings provided.
4. The intercom system is Digital analogue based. The cost for an IP based system is provided within the Option Price schedule.
5. We have not included for handle sets as instructed. We also have not included for any commissioning of the handle sets, and this is to be either instructed separately or carried out by others. Any costs relating to attendance during the commissioning of handle sets will be charged as extra.

INTRUDER ALARM SYSTEM

1. Primary and secondary containment is to be provided by others
2. We have not included for a Panic Alarm button to the Admin as we are unable to identify this location on the drawings provided.

FIRE ALARM SYSTEM

SYSTEM OVERVIEW

We propose to install an **open protocol** Protec Algo-Tec™ 6500 Interactive Digital Addressable Fire Sensor Control System.

6500 – 6 Panel Network Fire Alarm System

The Fire Alarm Control Panel would include the following features: -

- Open Protocol as Standard
- Separate External charger.
- 100 Secret Until Lit Zone LED Indication
- Full Colour 7" Resistive Touchscreen Display (can be Capacitive upon request)
- Integral printer for the ability to print out all fire and fault activities.
- Secure Network of up to 6 Panels.
- Future Expandable up to 64 Panels.
- Recessed Bezel.
- 4 Loop Up to 200 addresses per loop.
- Key switch to isolate plant interfaces during routine testing (front of main Panel).
- 6 Programmable key switch inputs.
- 3 Programmable Sounder Outputs.
- 3 Programmable Clean Contact Outputs (NO/C/NC)
- Terminal for connection of signal to BT Redcare Monitoring System.
- Cost of Redcare c/w 12 months monitoring has been included within our quotation.
- Stainless steel effect fascia.

Main fire alarm panel will be provided as per the location shown and a repeater panel on the 1st floor as per the fire strategy.

Within the future fitout restaurant, we have allowed for detector coverage above doorways only and we have allowed for MCP's and a tenant's interface for future connection as per drawings.

Interfaces have been included for as per the drawings for access control, smoke vents, lift shutdown, auto doors and plant shutdown.

Sounders and VAD's will be provided on a combined optical heat detector where appropriate otherwise will be wall mounted.

MCP's will be provided with a plastic cover to prevent accidental activation.

All equipment will be provided with a Dymo-tape label to identify its address.

We have left at least 20% spare capacity on the loops for future expansion and if required we can allow for additional loops to be installed in the repeater panel or a loop panel within a riser.

Lift shaft has been covered by air sampling smoke detection at the top as per specification.

Evacuation key switch has been included for on the front of the panel as per request.

Design

The Fire Detection and Alarm System has been designed by others. It should be noted that British Standard BS5839-1:2017, requires that a design certificate is issued by the designer prior to commencement of the installation.

Standby Supplies

In determining the battery stand-by requirements we have based our calculations on the premises being supervised at all times; this requires a 72 hour stand-by in the event of mains failure and half an hour in the alarm condition.

Audible Alarms

Whilst determining the quantities and locations of alarm sounders, in the absence of full details relating to the final structure finish materials and predicted acoustic performance of the building, we cannot provide assurance that the audibility levels achieved will meet BS 5839-1:2017 requirements.

Upon completion of the works we shall review the site to determine those situations in which worst case sound levels may be expected, we will check the actual sound levels at these positions to ensure that the appropriate sound levels are being met. Should extra sounders be required, the additional cost will be borne by the client.

Interfacing to Third Party Equipment

Equipment and wiring provided by others and any existing wiring and equipment will be excluded from the certification documents. Therefore, we do not accept any responsibility or liability with regard to the condition and serviceability of same.

We have made no allowance for the interconnection between Protec interface equipment and any third-party equipment such as lifts etc.

Equality Act 2010

As others have carried out the design, we have assumed that the requirements of the Equality Act 2010 and BS 5839-1:2017, detailing the requirement of people with impaired hearing have been considered.

Additional Information

We have allowed a zone plan to be installed adjacent to the fire alarm panel.

No containment has been provided by Protec this will be provide by others at no cost to Protec, we assume that there will be a section for the fire cables to utilise.

We have not included for any containment or wiring from interfaces to plant items, lift controls etc.

We have included for interfaces as follows – mechanical plant, lifts, access, AOV's, etc. all interfaces will need to be confirmed by the client.

We have only allowed sprinkler interfaces on each level for the flow switch.

All cables will be enhanced grade 2 core fire rated cable.

EQUIPMENT SCHEDULE

QTY-	PRODUCT CODE	DESCRIPTION
1	6504E/NET6/P/O	4 Loop Control Panel, Complete with Printer, no Charger
1	6500E/NET6/RP/P/C	6500 Display Complete with Printer and Charger
1	6500/BEZEL	Semi Recessed Mounting Bezel Grey
1	6400/5400/6300/5300 SSKIT	Stainless Steel Recessing Kit Complete with Door, Bezel & Screws
2	SPM0002	Plant Isolate Key Switch Fixed into Panel Inner Plate & Wired to Terminals Labelled "PLANT ISOLATE" for 6500, 6400 & 6300 Panels
1	6000/2IO	2 x Monitored Input & 2 x Clean Contact Output Interface Unit (Din Rail Mounted 3 Way) (Loop Powered)
39	6000/MICCO	Monitored Input Clean Contact Output Interface Unit, Flush 2 Gang Plate
39	MICCO/BOX	Mounting Back Box for MICCO & ZAI
1	62-810-00	Plastic IP56 Enclosure for DIN Rail Mounted Interfaces (1 x 3Way + 1 X 1 Way or 4 x 1 Way)
10	6000P/HT/SVAD	Heat Sensor Complete with Sounder and LED VAD
2	6000PLUS/OP	Optical Smoke Sensor
36	6000PLUS/OPHT	Optical Heat Sensor
66	6000PLUS/OPHT/S	Optical Heat Sensor Complete with Sounder
23	6000P/OPHT/SVAD	Optical Heat Sensor Complete with Sounder and LED VAD
137	6000PLUS/FFBASE	Fast Fix Semi-Recessed Base
15	6000/MCP	Manual Call Point Complete with Isolator
15	MCP/BOX	Standard Red Mounting Box
1	6000/MCP/WP	Weatherproof Manual Call Point
1	6000/SSR/VAD	Combined Sounder & VAD, White LED, Red Body, Loop Powered
4	6000PLUS/SVAD	6000PLUS Discrete Ceiling Sounder VAD (Base Required)
1	9300EN-24AH	Dual Path Battery Charger - 3A Charger, 24 Amp Hour Batteries
1	REDCARE ULTIMATE	Primary Path has a Built in Broadband Hub that Connects to a Private Redcare Broadband Service WLR3 Line, Secondary Path 4G or 2G Mobile Connectivity comes with Dual SIM Cards and 1st Year Monitoring Charges.
2	ZONE CHART 385 X 440	Zone Layout Plan Panel Sized 385mm x 440mm Paper Framed
1	LOG BOOK	Fire Alarm Log Book
15	MCP/PC	Transparent Hinged Cover for MCP Call Point

INSTALLATION

The complete wiring installation will be carried out using suitably approved fire rated cables in compliance with current British Standards. Generally, cables shall have an overall red LSF sheath and will be fixed in a neat and tidy manner and secured with manufacturer's purpose made accessories (including Protec Plug and Play wiring system).

With reference to the 230V primary supplies, we have assumed that suitable circuits in compliance with BS 5839-1:2017, Section 2, Clause 25.2 and current I.E.T. wiring regulations are to be provided at no cost to Protec.

COMMISSIONING AND HANDOVER

The commissioning of the system will be carried out in accordance with BS 5839-1:2017, Section 5, Clause 39.

The purpose of commissioning is to configure and verify that the system operates correctly as per the specification, fire strategy document and any other agreed information.

On completion of the commissioning, Protec will issue a Commissioning Certificate in accordance with BS 5839-1:2017, Clause 39.

Where Protec have carried out the installation, we will produce all 'as fitted' documentation and issue a formal Acceptance Certificate to the Client for signature as per BS 5839-1:2017 Clause 42.2c.

DISABLED REFUGE / DISABLED TOILET ALARM SYSTEM

SYSTEM OVERVIEW

The system proposed is a Disabled Refuge Intercom / Disabled toilet alarm system within Chorlton Street Hotel, Manchester.

An EVC master control panel will be located in the Ground Floor Main Entrance and comprise of a surface, wall mounted unit c/w handset telephone, full system monitoring, LCD Display, termination chamber and battery back-up. A self-indicating LED / button for each remote unit will be provided on the console. Requires 230V supply by others. This unit must be installed in a quiet area so that communication with the outstations can be clearly heard, as required by BS5839-9:2011.

4No loop powered green hands-free type Disabled Refuge Intercom Type B Outstations will be provided as detailed in the drawings and specification below. These units must be installed in a quiet area so that communication with the master panel can be clearly heard, as required by BS5839-9:2011.

5No Disabled Toilets will have the following:

- Ceiling Pull Cord c/w Reassurance Light;
- Over-Door Indicator/Buzzer; (Requires 230V supply, by others).
- Reset Unit;
- Remote Relay to provide Indication on the Master Control Panel.

Design

The Disabled Refuge Intercom / Disabled Toilet Alarm System has been designed by others and our quotation is based on the specification and drawings supplied, as outlined within this proposal.

It is essential that consultation and agreement with all relevant interested parties has taken place to provide the client with a system which is fit for purpose.

Please see qualification section for recommendations / deviations.

Standby Supplies

In determining the battery stand-by capacity we have based our calculations on the requirements of British Standard BS5839-9:2011. Section 13.2 e) 4 which states;

"The capacity of the batteries should be sufficient to maintain the system in a quiescent state of operation for at least 24 hours after which sufficient capacity should remain to allow the system to be used for voice communication in an emergency situation for at least 3 hours".

We have provided battery backup for 72hours in a quiescent state with 180 minutes active use.

Qualifications

- It is imperative that the Main Control Panel and all outstations are installed in areas that do not exceed ambient noise levels of 40dB as required by BS5839-9:2011. This allows clear channels of communication to be established, particularly in an emergency situation.
- EVC systems should not be installed in close proximity to AM modulated radio transmitters.
- The proposed quantities and locations of outstations are as detailed in the specification and drawings above or as our assumptions and are therefore subject to the actual Refuge Areas being confirmed by the client or his representative.
- All primary and secondary containment by others at no cost to Protec Fire Detection Plc.

EQUIPMENT SCHEDULE

QTY.	PRODUCT CODE	PRODUCT / DESCRIPTION
1	SPXXX1	16 WAY DISABLED REFUGE PANEL (BVOC16M)
1	SPXXX2	FLUSH MOUNT BEZEL FOR MASTER PANEL (BVCRFB2)
4	SPXXX3	GREEN DISABLED REFUGE OUTSTATION (BVOCECPG)
4	SPXXX4	FLUSH MOUNT BEZEL FOR REFUGE OUTSTATION (BVCRMGRN)
5	SPXXX5	DISABLED TOILET ALARM KIT (DTAKIT)
5	SPXXX6	REPEATER UNIT FOR DISABLED TOILET ALARM KITS (BVOCRIF)
1	SPXXX7	ENCLOSURE FOR 72 HOUR STANDBY BATTERIES (BVOBATT2)
1	SPXXX8	BATTERIES FOR 72 HOUR STANDBY (BY90)

INSTALLATION

The complete wiring installation will be carried out using suitably approved fire rated cables in compliance with current British Standard BS5839-9: 2011. Generally, cables shall have an overall red LSF sheath and will be fixed in a neat and tidy manner and secured with manufacturer's purpose made accessories.

With reference to the 230V primary supplies detailed in equipment schedule above, we have assumed that suitable circuits in compliance with BS 5839-9:2011, Section 2, Clause 13.1 and current I.E.T. regulations are to be provided at no cost to Protec.

On completion Protec will issue an Installation Certificate, detailing the category of system, areas covered, and any variations from the original design certificate and specification.

COMMISSIONING AND HANDOVER

The commissioning of the system will be carried out in accordance with BS 5839-9:2011, Section 4.

The purpose of commissioning is to configure and verify that the system operates correctly as detailed in the specification and any other agreed information.

On completion of the commissioning, Protec will issue a Commissioning Certificate.

Where Protec have carried out the installation will produce all 'as fitted' documentation and issue a formal Acceptance Certificate to the Client for signature.

INDUCTION LOOP SYSTEM

SYSTEM OVERVIEW

The systems proposed are Induction Loop Hearing Enhancement Systems for the Hard of Hearing.

Induction Loop Hearing Enhancement Systems proposed for this project are as follows:

- 1) Ground Floor Reception Desk – Cross-Counter 1:1 Induction Loop System,

Cross-Counter Induction Loop Systems - Comprise of: 1No Induction Loop Amplifier, mounted under the desk on the staff side, 1No Microphone Unit, mounted so as to pick up the speech of staff and enough cable to form a loop on the underside of the desk. This system requires a 230V AC supply (By others).

System operation is as follows: A hearing aid wearer wishing to utilise the system must firstly switch their ear piece to the 'T' position, secondly, they must make sure they are within a one metre radius to where the system is installed. Once both these criteria have been met the hearing aid wearer will be able to clearly hear the speech of staff at the counter, broadcast via the suitably positioned microphone unit.

DESIGN

The Induction-Loop Hearing Enhancement Systems have been designed by others and our quotation is based on the specification and drawings supplied, as outlined within this proposal.

For Cross Counter systems if the construction of the desk does not permit installation of the same then we reserve the right to offer a portable desk top type system in its place.

It is essential that consultation and agreement with all relevant interested parties has taken place to provide the client with a system which is fit for purpose.

EQUIPMENT SCHEDULE

QTY.	PRODUCE CODE	PRODUCT / DESCRIPTION
1	SP2960	CLD1-CD Cross-Counter Induction Loop Kit

INSTALLATION

The induction loop wiring will be carried out using suitably approved cables and will be fixed in a neat and tidy manner and secured with manufacturer's purpose made accessories.

All line level input cabling will be carried out using a screened multi-core cable.

All microphone cabling will be carried out using a screened multi-core cable.

Microphone cables must be separated from any other cables by a minimum of 300mm in accordance with BS 6259.

With reference to the 230V primary supplies, we have assumed that suitable circuits in compliance with current I.E.E. regulations are to be provided at no cost to Protec.

On completion Protec will issue an Installation Certificate, detailing the category of system, areas covered, and any variations from the original design certificate and specification.

COMMISSIONING AND HANDOVER

The commissioning of the system will be carried out in accordance with BS EN 60118-4.

The purpose of commissioning is to configure and verify that the system operates correctly as detailed in the specification and any other agreed information.

On completion of the commissioning, Protec will issue a Commissioning Certificate.

Where Protec have carried out the Installation, we will produce all 'as fitted' documentation and issue a formal Acceptance Certificate to the Client for signature.

ACCESS CONTROL SYSTEM

SYSTEM OVERVIEW

Read in only access readers have been provided for the areas indicated on the drawings. The system offered incorporates magnetic locking devices and monitoring contacts for the online doors for door forced alarm and egress button/emergency break glass units for exit rights. Readers will be enabled for using mobile devices. All fitting of locking devices is to be undertaken by third parties and is excluded from this quotation.

It should be noted that no allowance has been made within this quotation for the supply of fire alarm interface units. These devices would be configured so as to render the doors open/unlocked in the event of a fire alarm. This cost is included in the Fire Alarm Section of this Protec quotation

In the absence of specific door details, the maglocks provided include 'Z & L' Brackets. Additional costs may occur for alternative door arrangements/locking devices.

System control and programming is undertaken via a PC provided at the reception together with Standard level software.

Intercom/Video Entry

A two to one single button video entrance intercom is provided to allow communication from the main entrance and side entrance to the reception. The panel has DDA facilities such as yellow Halo buttons

BASIS OF OUR QUOTATION

Protec Fire Detection plc is a National Security Inspectorate (NSI) 'Gold' quality assured accredited company for the provision of Intruder, CCTV and Access Control Systems.

APPROVAL STANDARDS

The System offered will be provided in line with the following industry standard specifically NSI NCP 109 (Issue 1) – Code of Practice for the Design, Installation & Maintenance of Access Control Systems and Company Procedures for Security Systems.

Our quotation has been based on the following provided information:

DESIGN RESPONSIBILITY

The level of Access Control coverage offered within this quotation has been determined by others and our quote is based upon supplied drawings and site dimensions appertaining to this enquiry. The areas, which are equipped with access control facilities, are highlighted within the system design specification section for your reference.

Please Note: A full site Risk Assessment Report cannot be undertaken, if the works are estimated from a written layout enquiry only.

EQUIPMENT SCHEDULE

- 1 PC AND MONITOR FOR PROGRAMMING AND OPERATION OF SYSTEM
- 5 STANDARD MAGLOCK 12/24V UNMONITORED
- 3 STANDARD DOUBLE MAGLOCK 12/24V UNMONITORED
- 11 ZL BRACKET SET FOR STANDARD MAGLOCK
- 8 FLUSH S/STEEL DOMED 'PRESS TO EXIT' EGRESS RELEASE
- 8 RESETTABLE DOUBLE POLE GREEN BREAK GLASS SURFACE
- 11 DOOR CONTACT
- 11 6 WAY JUNCTION BOX
- 5 12VDC 2 AMP POWER SUPPLY (BOXED)
- 5 12 VOLT 7 AMP HOUR BATTERY
- 8 WALL READER
- 3 ETHERNET CONTROLLER
- 1 USB CARD ENCODER
- 1 BASIC SOFTWARE MODULE
- 1 MIFARE CARDS - PACK 50
- 10 CONSTRUCTION CARD
- 2 AUXILIARY CONTROLLER
- 1 HOTEL MODULE
- 1 ANNUAL LICENCE
- 2 1 WAY DDA SURFACE STAINLESS STEEL VIDEO DOOR STATION
- 1 7 INCH COLOUR VIDEO MASTER STATION HANDS FREE
- 1 DESK STAND
- 1 BUS CONTROL UNIT
- 1 VIDEO CONTROL UNIT
- 1 POWER SUPPLY, 24V, 2A

ACCESS CONTROL SPECIFICATION

The areas covered with Access Control have been detailed upon the drawings returned with our system quotation

ACCESS CONTROL SYSTEM CLASSIFICATION

Class 2B

Our proposed system complies with NSI Codes of Practice namely NCP 109, the System will be classed as Class 2 System deemed low to medium risk with Option B. Class 2B definition: At an Access Control Point to Class 2B, access will only be granted following the presentation of a valid unique token to a reader.

INSTALLATION TECHNIQUES

The complete installation of the aforementioned Access Control System will be carried out by Protec dedicated electrical engineers in liaison with a nominated representative of the Client.

The Access Control System Ethernet controllers are IP enabled and requires connecting to an IP Network provided by others. Network to include all copper and Fibre cabling, switches, RJ45 connection units racking, patching and associated equipment

Online doors will be cabled in multi-core signalling type cables, clipped to trays/enclosed in designated trunking (provided by others) and routed in natural voids or roof spaces where available. Specialist access equipment to any high level works, if required, should be made available for Protec use.

COMMISSIONING AND SYSTEM DOCUMENTATION

The Access Control System offered will be commissioned and tested in line with current company and NSI requirements prior to full system handover. All 240 VAC supplies and telephone/IT lines for remote operation of equipment (if applicable) are to be permanently energised/operational prior to the commencement of system commissioning. Delays as a result of this requirement may lead to additional costs being incurred.

A fully comprehensive Customer Manual will be issued upon job completion, which provides data for the Access Control System, detailing:

- System Specification
- Handover Checklist
- Circuit Test Readings
- NSI Certificate
- Operating and Maintenance Instructions
- Schedule of Equipment
- Log Record
- 'As Fitted' Layout Drawings

In addition to our Main Exclusions detailed within the General Section of this quotation, the following specific items relating to the Access Control System have been excluded from our offer:

- 240 Volt AC supply to ALL Controllers, PSU's and Locking equipment.
- Fitting of locking devices for Handle sets and on line Entrances.
- Provision of ducting to remote buildings (if applicable).
- All telecommunication lines and IT Networks for remote signalling and remote diagnostic purposes.

DOOR MONITORING WITH PANIC ALARM SYSTEM

SYSTEM OVERVIEW

We have outlined below our quotation for an Intruder Alarm System at Chorlton Street.

A Texecom Intruder Alarm Panel will be provided to control the system along with keypad/fob setting and unsetting facilities for the Ground Floor and 1st Floor Areas.

Detection is provided via door contacts sited as indicated on the drawings provided. Audible warning devices will be provided and the system will be connected to a Remote Central Station.

APPROVAL STANDARDS

Protec Fire Detection plc is a National Security Inspectorate (NSI) 'Gold' Quality Assured Accredited Company for the provision of Intruder, CCTV and Access Control Systems.

The System offered will be provided in line with the following industry standards specifically PD6662:2010, which is the UK equivalent of EN-50131 to Grade 3 requirements, Environmental Class 2 for Internal Products and Class 4 for External Products, together with Type EP Signalling for Panic Alarm events

NSI	-	Codes of Practice for Intruder Alarm Systems.
NPCC	-	National Police Chiefs Council.
EN-50131	-	European Intruder Alarm Code of Practices.
PD6662-2010	-	Code of Practice for Intruder and Hold-up Alarms.
BS8243:2010	-	Standard for confirmation of Intruder and Hold-up Alarms.

Our quotation has been based on the following provided information:

DESIGN RESPONSIBILITY

The level of Intruder coverage offered within this quotation has been determined by others and our quote is based upon supplied drawings and specifications appertaining to this enquiry. The areas, which are equipped with sequential confirmation, are shown within our Detection Circuit Specification Section.

SYSTEM USE/TESTING

Details of the set positions of the controls for range and pulse count (if used) and confirmation of any zone blanking of the lenses for all movement detectors will be recorded in the System Record at the time of commissioning of the system, and subsequently at the time of a Service Visit, if any changes are made.

The customer should note that alterations to the physical structure, building services, furniture or any stock piling at the protected location may adversely affect the area of coverage provided, and in that event the customer should liaise with the company about a re-evaluation of the security protection provided.

It is stressed that customers should CHECK the coverage afforded by all movement detectors by means of REGULAR "WALK TESTING" CHECKS between the Service Visits undertaken by the Maintenance Company.

METHOD OF SETTING

Setting of the system is a 2-stage process as per BS8243:2010 Sub Clause 6.3: the system is set using a fob at the keypad followed by the opening and closing of the Final Exit Door.

METHOD OF UNSETTING

The unsetting process as per BS8243:2010 Sub Clause 6.4.5 is started when the Final Exit Door is opened which starts the Entry Sounder and then by presenting a fob to the Intruder Keypad the system is disarmed.

Note: Please be aware that if one detector is activated off the entry route then on completion of the entry time a confirmed alarm will be generated.

ANTI MASK DETECTION

All movement detection in this quotation conforms to PD6662:2010. If a detector is covered a masked alert is generated on the Intruder Alarm Control Panel to notify the client to investigate further the cause. All alerts have to be accepted by the user to allow the system to then be set.

ENVIRONMENTAL CONSIDERATIONS

To comply with current Noise Pollution Law and PD6662:2010, all external, audible warning devices will be programmed to switch off after 15 minutes of activation (unless otherwise stated). Within 48 hours of the system coming into operation you must inform your local Police Force and Environmental Health Authority. All Internal Security Products offered within this quotation conform to current Environmental Recognised Classifications. The Internal Products such as Intruder Panels, keypads and detectors conform to Class 2 and external sounders/strobe units, roller shutter contacts conform to Class 4. All un-used packaging and waste materials are processed in line with our Company's Environmental Policy, copies of which are available upon request.

REMOTE SIGNALLING

Where the System is connected to a Central Station, we would draw your attention to the fact that if they receive excessive False Alarm Calls (3 per 12-month period for Intruder or 2 for Personal Attack), the Police will withdraw their attendance response from your System. Information on how to avoid unwanted calls will be provided in our Operating & Maintenance System Manual. Our False Alarm Management Department will also contact you (during normal Office Hours) following an Alarm Activation to determine cause and advise corrective action if required. Please have the correct Circuit details and Alarm Location available.

EQUIPMENT SCHEDULE

1	12 VOLT 17 AMP HOUR BATTERY
17	ELMDENE SURFACE CONTACT
10	6 WAY JUNCTION BOX
1	SOUNDER
2	DOUBLE PUSH PANIC BUTTON PLASTIC
1	1 AMP BOXED INTELLIGENT PSU
1	12 VOLT 7AMP HOUR BATTERY
1	REDCARE ULTIMATE INC. MONITORING
1	TRIGGER LEAD FROM PANEL TO COMMUNICATOR
1	24 ZONE PREMIER ELITE CONTROL PANEL C/W METAL END STATION
1	PREMIER PROXIMITY ARMING/DISARMING TAG (PACK OF 5)
1	PREMIER 8XP 8 ZONE SYSTEM EXPANDER C/W 8 AVAILABLE ZONES,
1	GRADE 3 EXTERNAL SOUNDER
1	IP BOARD

INTRODUCTION

The Texecom 24 Intruder Alarm Control System has been designed to suit medium to large commercial applications. It can be expanded up to 24 individual detection/monitoring zones. The system is capable of “up” and “down” line loading allowing remote programming and interrogation via the telephone line and a PC connection.

Complex site requirements such as multi-ward setting can be achieved as the system is capable of being broken down into 2 separately controlled groups so that the premises or parts of the premises can be controlled independently.

The Texecom Control Panel is a true multi-tasking system, which allows multiple users operating the system simultaneously.

The panel has the capability to comply with the requirements of PD6662:2010 Grade 3 standard.

CONTROL PANEL

The Control Panel is the central processing unit for the system, it has a power supply and connections for a standby battery and has the following features:

- 8 onboard zones
- 9 onboard outputs
- 2.5 Amp Integrated PSU

REMOTE KEYPADS

Up to 4 Remote Keypads can be connected when directly wired to the network.

The Premier Elite Keypad has a 32-character LCD display, and incorporates two DP or EOL zones and one output, for a local speaker. The keypad has an integrated proximity tag reader, which allows the system to be set and unset by use of a proximity tag.

EXPANSION DEVICE

The following devices have been utilised for expanding the system:

8 Zone Expanders

The Premier Elite 8XP provides zone and output expansion for the Texecom System:

- 8 fully programmable Zones
- 8 programmable outputs
- 1auxiliary input
- Speaker driver output with programmable volume control
- Tamper protection

CONTROL EQUIPMENT SPECIFICATION

Control Panel: Texecom Premier Elite 24 sited in the1st Floor Riser.

KEYPAD LOCATIONS:

Keypad 1: located Main Entrance

Detection Circuit Specification

The level of detection coverage offered is detailed upon the drawings returned with our system quotation.

Panic Alarm Buttons

The 'multiple action/push' panic alarm buttons will be installed in the following locations: -

- a) Reception (2No)

Will comply with BS8243:2010 and will be sequentially confirmed.

AUDIBLE WARNING

1 No external warning device with a self -contained electronic sounder and flashing light fixed to the building fabric sited Front Elevation

The external self-contained sounder has an independent re-chargeable battery power supply which will operate when there is interference with the normal connections between this unit and the control panel.

Internal warning devices, which mimic the Intruder alarm tones, will be sited in the following locations: -

1. Entrance Lobby 1st Floor

REMOTE SIGNALLING

A standalone Redcare GSM Transmitter will be installed to transmit Intruder Alarm, Personal Attack, fault, mains fail, confirmed and open/close signals to an approved central station with Police response and actioned as agreed with the customer. This also includes the 1st years monitoring, and the arrangement of the Police Unique reference number. It is a requirement of the Police ACPO policy for the client to issue our company with a completed 'Appendix F' form and the remittance of £52.18 for each element (Intruder and/or personal attack) that you require police response for, should this facility be required.

Your attention is also drawn to fact that the Police will only attend site upon receipt of a Confirmed Signal i.e. 1st Activation the Central Station will contact the Keyholder only and only inform the Police if a secondary device is triggered. Your attention is also drawn to the fact that confirmation technology is isolated upon opening of the final exit door/circuit during the entry timer.

The areas which have 'sequential confirmation' fitted are detailed within the aforementioned detection specification, if additional detection devices are deemed necessary upon occupation we would be pleased to advise and quote these works at a later date – if required.

INSTALLATION TECHNIQUES

The complete installation of the aforementioned Intruder Alarm System will be carried out by Protec employed electrical engineers in liaison with a nominated representative of the Client.

The Security System will be wired in multi-core signalling cables, routed in natural voids or roof spaces, where available.

COMMISSIONING AND SYSTEM DOCUMENTATION

The Intruder Alarm system offered will be commissioned and tested in line with current company and NSI requirements prior to full system handover. We will require the full access to the empty building for our commissioning process to ensure the correct system setting/un-setting processes are tested. Also, all 240 VAC supplies and telephone lines for remote signalling equipment (if applicable) are to be permanently energised/operational prior to the commencement of system commissioning. Delays as a result of this requirement may lead to additional costs being incurred. Copies of all electrical supply test readings undertaken by the electrical contractor are required to be issued to our nominated Project Engineer to include within our test data records.

A fully comprehensive customer manual will be issued upon system completion, which provides data for the Intruder Alarm system, detailing: -

- System Specification
- Hand Over Checklist
- Circuit Test Readings
- NSI Certificate
- Operating Instructions
- Schedule of Equipment
- False Alarm Prevention
- Log record
- 'As-fitted' Layout Drawings'

In addition to our main exclusions detailed within the General section of this quotation, the following specific items relating to the Intruder Alarm system have been excluded from our offer:

- 240 Volt AC supply to the control panel and remote PSU equipment
- Provision of ducting to remote buildings (if applicable).
- All telecommunication lines for remote signalling and remote diagnostic equipment.
- LAN and connection points to control panel Ethernet modules.

Maintenance:

To comply with N.S.I./ACPO Requirements, a maintenance contract must be taken out if the System is connected to a Remote Central Station with Police Response.

It is vitally important that the system(s) that we have supplied are maintained to ensure that they continue to operate as provided at handover, even though you have a 12 months defect warranty.

The benefits would include:

- 24hrs per day 365 days a year support
- 4 Hour response on all urgent fault calls
- Police Response (Intruder Systems Only with active Police URN in place)
- Remote diagnostics (office hours)
- Personalised activation and keyholder reports/updates
- Latest software upgrades
- Possible reduced Insurance premiums
- Peace of mind that your system is working as effectively as it was installed.

Protec provide maintenance inspections and emergency service visits which conform to BS EN ISO 9001:2008 and NSI Gold. It is also an ACPO Police requirement that in order for the Central Station to pass alarm calls to the relevant Police Authority a valid maintenance contract is in place.

Our management team and our service technicians are conscientious professionals with a wealth of industry experience and training.

All our technicians' vehicles are equipped with satellite navigation and vehicle fleet monitoring, which improves our levels of field service efficiency, as an NSI NACOSS company, we are inspected at our premises and our customers are also inspected. This is an audit check that technicians carry out preventative maintenance inspections in compliance with the relevant requirements of standards applicable to the systems installed.

GENERAL

Installation

Our quotation for the installation is based upon the following requirements unless stated otherwise in our quotation:

We will utilise all available and suitable ceiling voids, ducts, cable trays and trunkings. Should the specification identify requirements for containment/supports such as cable trays, trunking, primary and secondary containment, channels, drop rods and the like, these will be provided free of charge by the Client, for our wiring cables and equipment.

Where we utilise the client's containment systems for our cables it is the installer's responsibility to ensure the containment and fixings are installed to meet the requirements of regulation 521.11.201 of the current IET wiring regulations.

PVC mini-trunking may be used to encase cables where appropriate at Protec's discretion.

Secondary Containment

Unless stated within the 'Option Cost' pricing schedule, Secondary Containment has not been included, we would be pleased to offer a cost. In order to accurately assess the requirements, please issue a set of your primary containment drawings to Protec.

All cable terminations will be carried out in accordance with manufacturers' recommendations.

With reference to the 230V primary supplies, we have assumed that suitable circuits in compliance with the current I.E.T. wiring regulations are to be provided at no cost to Protec.

This quotation excludes the following:

- All builders' works, except for the drilling of holes up to 35mm.
- All chasing out, fire stopping, making good and re-decoration of walls.
- It is not our policy to undertake non licensed, notifiable non licensed or licensed works on asbestos containing materials. If asbestos is identified prior to or during our installation works it will be the clients' responsibility to make the area safe for the installation works to proceed. Additional costs may be incurred for installation works carried out adjacent to areas containing asbestos.
- The disposal of any redundant hazardous equipment. Special arrangement will need to be taken by the Client.
- The removal and replacement of fixtures and fittings, including furniture, carpets and client stock. Where we have included for the removal of existing redundant equipment, existing cabling will be removed from visible open areas only.
- Electrical power and lighting.
- Site welfare, storage and administration facilities.

The customer is responsible for ensuring that the quantities, types of devices, colour etc. are correct and for giving Protec any necessary information including all relevant up to date drawings and specifications etc. within sufficient time to enable Protec to perform the works required.

Delivery of custom-made items will be up to 6 to 8 weeks from receipt of your written order being acknowledged by ourselves. The delivery date is dependent upon design approval, stock availability and the programmed work at the time the order is acknowledged.

Our quotation is based upon the works being carried out during normal working hours and on a continual basis (Monday to Friday – 8.00am to 5.00pm)

We have assumed that the site does not have an M&E Major Projects Agreement.

Please note that we cannot guarantee the battery prices and other bought in products within this quotation due to the uncertainty within the world wide battery market at present.

The prices are nett and are exclusive of VAT. This quotation remains valid for a period of 30 days or until the Company announces or applies any price changes, whichever, may be the sooner, or unless you have been advised in writing of any other arrangements.

Please note this quotation has been provided in accordance with Protec Terms and Conditions of sale and supply available at www.protec.co.uk.

Please note our quotations do not include main contractor discount.

Design

Should we state in our quotation that we are design responsible in line with the appropriate standards for that system, we will require full consultation with all relevant interested parties such as the user or purchaser, building control, local fire officers, mechanical and electrical consultants and fire engineering consultants. We assume we have already received full information of any reports, drawings, fire risk assessment etc., previously prepared by these parties and that all information is listed in our quotation. We reserve the right to adjust our costs should we later be advised of information not previously listed by us that will affect our system design.

REDCARE ULTIMATE

Please be aware should we have offered Dual Communication REDCARE ULTIMATE within our quotation, it is offered prior to a signal strength test being undertaken. The purpose of the test is to ensure the location and final site location of the transmitter is conducive to full and correct signaling operation. If suitable signal strength is not available, we reserve the right to provide an alternative signaling format, where available. All associated telephone line installation costs and rental charges are excluded from our quotation.

Should any supply and commission options in the aforementioned quotation be ordered then the following conditions will also apply to those disciplines.

The number of days estimated above for Commissioning is based on the following:

- I} The installation and wiring for the System/Equipment is complete and fault free.
- II} Any installed System Sounders provide acceptable audibility throughout the areas covered by the System.
- III} Continuous working for the above number of days.
- IV} All work to be carried out during normal working hours.
- V} Our costs does not include for our Engineers to attend any Site Induction/Training Courses.

Conditions differing from I} to V} above could result in additional costs being incurred.

Please note that to have the System Commissioned by Protec Engineers provides an on site Equipment Guarantee for 12 months, from the date of Commissioning.

No as fitted drawings, manuals or zone plans will be supplied for supply and commission only options.

The System Equipment and quantities detailed in this quotation are provided in good faith. Please refer to your Tender Documents for corroboration.

Carriage and packing will be included in the price of Goods on Orders of value in excess of **£400.00**. This value will be subject to Annual Review by the Supplier. The Client shall be liable to pay the Suppliers' charges for transport, packaging and Insurance in all other cases.