



# Commissioning Standard Terms

## **1.0 Inspection and testing of wiring (BS5839-1:2002) Section 38**

*Note these tests should be carried out PRIOR to commissioning, with equipment disconnected.*

- 1.1 All wiring must be installed and secured to BS7671.
- 1.2 ECA recommended Cable Separation for Electromagnetic Compatibility in Buildings, must be followed.
- 1.3 With reference to BS5839-1:2002 section 38.2 (a) - All installed cables with a voltage rating suitable for mains use should be subject to insulation testing at 500V d.c. Prior to this test, cables should be disconnected from all equipment that could be damaged by the test.
- 1.4 With reference to BS5839-1:2002 section 38.2 (b) - Insulation resistance, measured in test 38.2 (a), between conductors, between each conductor and earth, and between conductor and any screen should be at least 2M ohms.
- 1.5 With reference to BS5839-1:2002 section 38.2 (c) - Earth continually and for mains supply circuits, earth fault loop impedance should be tested to ensure compliance with BS7671.
- 1.6 The resistance of any addressable; analogue; digital loop must not exceed 16 ohms per conductor.
- 1.7 Earth continually must be maintained throughout all cabling.
- 1.8 All termination boxes to be securely fixed and earth bonded.
- 1.9 All conductors must be identified, Tails should be sufficient length to connect with the equipment.
- 1.10 Any cabling errors must be located and rectified by the electrical installer.

## **2.0 Connection of field equipment**

- 2.1 All field equipment must be connected as per the provided wiring connection diagrams.
- 2.2 Install all field devices i.e MCP's, Detectors, interfaces, sounders etc.
- 2.3 Addressable or Analogue addressable loop devices, must have their 'addresses' set.
- 2.4 Digital addressable systems (6000 range) the 'Barcode' label from each loop device must be removed and entered into the 'Loop Commissioning' book against the address number. This completed book must be available at the beginning of the commission.

## **3.0 Connection of control panels**

- 3.1 ALL control equipment must be secured correctly.
- 3.2 Field wiring must be terminated into the control panel/PSU/interface units, however no cables must be connected.
- 3.3 Power MUST NOT be switched on until the commission engineer is in attendance.

## **4.0 Documentation**

- 4.1 Protec are unable to commission to BS:5839 if ALL the information in sections 8.0 & 9.0 of this Request Form are not provided.
- 4.2 All tests results from 1.0 of our terms should be available for our commission engineer.
- 4.3 Cause and effects specification should be available in writing to our commission engineer. Failure to provide any system specification will result in the system being pre-programmed. ie: Any device activates all outputs. If verbal instructions are given, any return visit to change the program will be chargeable at our current rates.
- 4.4 Device location text must be completed and issued prior to commissioning. If text is provided once the commissioning has commenced, the text will be inspected by random tests.

## **5.0 General**

- 5.1 The commissioning application form must be completed before an engineer will attend site.
- 5.2 Suitable scaffolding and plant must be supplied to meet the requirements of the Health and Safety at work Act.
- 5.3 The installation electrician shall be present for the duration of the commissioning, along with wiring drawings.
- 5.4 An appointed representative will be present to witness tests and provide the certificate of installation and commissioning so that our engineer can sign. If this certificate is not available, then we will provide Protec product commissioning certificate.
- 5.5 A commissioning can not take place if an account is overdue.
- 5.6 Payment for commissioning will be nett, payable within 28 days.
- 5.7 Commissioning of systems will normally be charged at engineers current rate plus all expenses unless a figure is previously quoted. If quoted, insert figure on application form. When a quotation is given it is subject to all terms and conditions adhered to, and the information given on this form being accurate. If this is not complied with then at our sole discretion, we reserve the right to charge on a time and expenses basis. Normally we will allow a total allowance of 30 minutes waiting time on site for breach of terms to be rectified before implementing the above.
- 5.8 Any time attending a site induction will be additional to the number of days required to commission the system as stated in section 7.0.

## **6.0 Product commissioning standards**

- 6.1 The equipment will be commissioned to BS5839-1:2002 section 5 part 39.2 excluding clause 9 and 27.
- 6.2 If additional sections of the BS5839-1:2002 are required, this work will be chargeable at our current rates.
- 6.3 Our commissioning does not include certifying or providing a 'Verification certificate'.

## **7.0 Performance Monitoring**

- 7.1 In section 11.0 of our "Commissioning Certificate" a 'soak test' will be recommended as per BS:5839. A return visit to inspect the system after this period is additional and an additional order will be required.