
PRACTICAL ELECTRICAL WIRING STANDARDS - IEE BS7671:2008 EDITION



WHAT YOU WILL LEARN:

- The essentials of the BS7671 standard
- How to find your way around BS7671
- Harmonisation issues with European standards
- Principles and practice of shock protection
- Calculation of circuit impedances
- Discrimination between devices
- Cable sizing
- Earthing and bonding
- Inspection and testing requirements
- Certification requirements

WHO SHOULD ATTEND:

- Electrical Engineers
- Electrical Trades Persons
- Electrical Apprentices
- Engineering Managers
- Maintenance Managers
- Private Electrical Contractors
- Building Services Engineers
- Graduate Electrical Engineer Trainees
- Electrical Design Staff
- Maintenance and Shutdown Planning Staff



Technology Training that Works

The Workshop

Internationally there is a steady progress towards the harmonisation of the electrical wiring standards. This is reflected in the IEC standard 60364, the European Harmonisation Document HD384 and the UK IEE Wiring Regulations 17th Edition, now also known as British Standard BS7671:2008, all of which share a common format.

Pre-requisites

You will need a fundamental understanding of electrical systems. We will provide this material to you if you feel you would like some further pre-course reading.

Please bring a calculator (or computer) and pen along to the course to assist with the calculations.

Objectives

- Up to date information and training on the current edition of BS7671:2008, Requirements for Electrical Installations.
- In depth teaching on all aspects of the regulations and their application with many practical examples and sample design calculations.
- References to safety, maintenance, inspection and testing.
- The course also provides a summary of some of the basic principles necessary for a good understanding of electrical installation technology.

Practical Sessions

There will be at least eleven exercises (with many sample calculations and designs to be undertaken) to reinforce the knowledge gained including an in-depth study on the second day.

All delegates are asked to bring a calculator to the workshop with them.

To gain full value from this workshop, please bring your laptop/notebook computer.

On-Site Training

- ✓ **SAVE** over 50% by having an IDC workshop presented at your premises.
- ✓ Customise the training to **YOUR** workplace.
- ✓ Have the training delivered when and where you need it.

Contact us for a **FREE** proposal.

The Program

DAY ONE

INTRODUCTION TO REGULATIONS

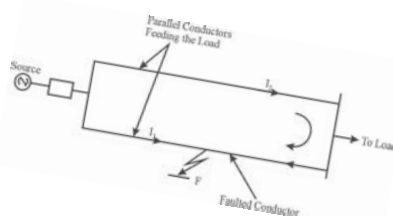
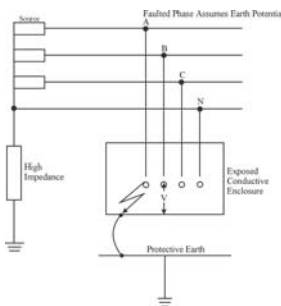
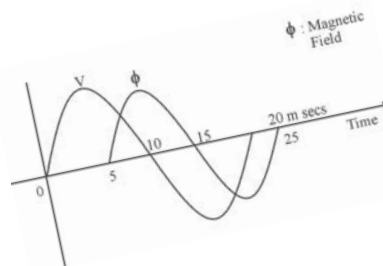
- Structure of International and UK Wiring Regulations
- Foundation Electrical Principles and Terminology
- Scope of Regulations
- Requirements for Safety

PROTECTION FOR SAFETY

- Shock
- Basic and Fault Protection
- Effects of Shock on the Human Body
- Electrical Hazards
- Calculation of Disconnection Times
- Voltage Disturbances

CABLE PROTECTION

- Over-current -cable sizing, neutral conductors
- Selecting Protective Devices
- Calculation of Adiabatic Heating Effect
- Effect of Harmonic Currents - Thermal Effects
- Parallel Cables



DAY TWO

SELECTION AND ERECTION OF EQUIPMENT

- Wiring Systems
- Switchgear
- Characteristics and Limitations of Fuses and Circuit Breakers
- Breaking Capacity
- Coordination and Discrimination Between Devices
- Calculation of Fault Levels

EARTHING ARRANGEMENTS

- Calculation of Protective Conductor Sizes
- Bonding Requirements
- Supplies for Safety Services

SPECIAL INSTALLATIONS OR LOCATIONS

- Locations of Increased Shock Risk

INSPECTION AND TESTING

- Test Instruments
- o Certification

MAINTENANCE CONSIDERATIONS

SAMPLE DESIGN CALCULATIONS

SUMMARY, OPEN FORUM AND CLOSING

