

PROJECTX N° 015

“INSTALLATION OF WIRING SYSTEMS AND ENCLOSURES”

PRESENTATION



Promoting school:

South & City College Birmingham
Birmingham. United Kingdom



A. GENERAL DESCRIPTION

Title of the ProjectX

**ELECTRICAL INSTALLATION 2365 L2 (UNIT 204)
INSTALLATION OF WIRING SYSTEMS AND ENCLOSURES**

Core area

GENERAL / KNOWLEDGE	ELECTRICITY
PARTICULAR / ACTIVITY:	INSTALLATION, TESTING AND COMMISSIONING OF ELECTRICAL SYSTEM

Promoting school

SCCB

Schools participants in the revision of the ProjectX

LYCEE ISAAC NEWTON
SCCB
XABEC

Reference to ECVET Credit System and EQF / NQF

ECVET	EQF	REFERENCE TO NATIONAL QUALIFICATIONS (NQF)						
		Spain	Finland	Romania	Portugal	UK	Turkey	France
2	3	4	4	3	4	3	4	4

Learning Outcomes achieved (to be developed in the future related with ECVET credit system)

1. Install wiring system based on wiring diagram and layout drawing
2. Visually inspect and assess against IET BS7671 and Electricity at Work Regulations 1989
3. Complete Electrical Installation Certificate

Time that is necessary to do the ProjectX (in hours)

Theory:	16 hours
Practice:	24 hours

Link to real companies in your region (it is just informative)

- | | |
|---------------------------------------|-----------------------|
| 1. NAME:CAPRICORN ELECTRICAL | WORKPLACE: TECHNICIAN |
| 2. NAME:HARPER ELECTRICAL CONTRACTORS | WORKPLACE: TECHNICIAN |



B. THEORY

Objectives of the theoretical Knowledge

1. To produce a wiring diagram to represent the proposed installation
2. Confirm current carrying capacity of cables and selection of appropriate wiring system
3. Complete electrical installation activity
4. To visually inspect the circuit, noting any deviations from BS 7671
5. Test and commission circuit in accordance with BS7671 and EAWR 1989

List of activities

1. To understand and be able to produce a wiring diagram, select most appropriate wiring systems, cable and protective devices
2. Learners will be given standard diagrams made available by the awarding body to make selection relevant to this unit

C. PRACTICE

Brief description of the Practice

Circuit diagrams will be available for the learners and they will be required to translate these into an actual working wiring diagram with suitable selection of equipment. Learners will be assessed on the appropriate selection of equipment to produce the best working plan for the unit criteria. Using the tools and equipment the learners will set the equipment up to visually inspect, test and install the system. As part of the qualification the learners will have to complete the course documentation relevant to Complete relevant to BS7671 standards

Steps or activities to be performed by the student

- | | |
|---------|---|
| First: | Produce wiring diagram and materials list |
| Second: | Selection of appropriate tools |
| Third: | Complete electrical installation |
| Fourth: | Test and commission installation |



D. DETAILED DESCRIPTION OF LEARNING OUTCOMES.

Learning Outcome:	Technical Drawing and specifications understanding
Knowledge	
- To be able to produce wiring diagram / materials list based on specification	
Skills	
- Maths, English, drawing, interpretation of technical drawing and specification	
Competences	
- Practical ability to draw technical drawings and interpret specifications	

Learning Outcome:	Selections of tools and safety implications
Knowledge	
- To be able to select appropriate tools and equipment for carrying out electrical installation	
Skills	
- English, writing, interpretation of technical information, identification of tools and equipment	
Competences	
- Practical ability to draw technical drawings and interpret specifications and to select appropriate tools, identifying safety implications	

Learning Outcome:	Installation of wiring systems to specifications
Knowledge	
- To be able to carry out electrical installation to supplied technical information and specifications	
Skills	
- Practical and theoretical electrical installation	
Competences	
- Practical ability to install a range of wiring systems, accessories and enclosures to specifications and BS7671	

Learning Outcome:	Test of electrical circuits
Knowledge	
- To be able to undertake basic electrical inspection and testing and record results appropriately on documentation	
Skills	
- Theoretical and practical Knowledge of inspection and testing requirements (dead tests only) to BS7671	
Competences	
- Ability to test electrical circuits and installations and record results, all under supervision	

