

# **EUSMUNC13 (SQA Unit Code - FA8X 04)**

## **Install engineering products or assets for Utility Network Construction**



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### **Overview**

This national occupational standard defines the competence required to interpret technical specifications and install new engineering products or assets

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### Performance criteria

*You must be able to:*

#### **Interpret technical information for installing components of the system**

- P1 use drawings, records, work documents, manuals, and technical specifications to provide work details for component installation
- P2 take off dimensions, lengths, widths, and quantities from the technical information
- P3 take off the positions of utilities plant, services, buildings, kerbs and boundaries from the technical information
- P4 make corrections through drawings, records and work documents

*You must be able to:*

#### **Select components and resources for installation of the system**

- P5 select the type of the components in compliance with the work and quality specifications
- P6 follow procedures to replace defective components, non-match components, and sub-standard components
- P7 ensure sufficient labour, plant, equipment, materials and consumables are available for the job in hand
- P8 deal promptly and effectively with actual and predicted changes to the planned use of the resource
- P9 check components and installation equipment for operability and ensure free from damage

*You must be able to:*

#### **Install components of the system**

- P10 determine method of installation to be used (e.g. mains bursting, dead insertion, live insertion, soil displacement, directional drilling, open cut)
- P11 carry out a site-specific risk assessment and review in accordance with company policy
- P12 select and wear the designated PPE
- P13 check and confirm the condition of the excavation conforms with instructions and specifications
- P14 select, prepare and operate installation equipment in accordance with the specification and manufacturer's instructions
- P15 position components in accordance with the specification
- P16 assemble components to industry standards using mechanical and/or fusion welding techniques
- P17 take adequate precautions to prevent damage to components, tools and equipment during installation
- P18 protect installed assets with fine fill in accordance with specification and codes of practice
- P19 maintain proximity distances from other utilities apparatus in accordance with approved codes of practice

## EUSMUNC13 (SQA Unit Code - FA8X 04)

### Install engineering products or assets for Utility Network Construction

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- P20 ensure installed assets are supported and anchored in accordance with codes of practice
- P21 connect to existing system using in-line squeeze off, side entry or top entry tee, in accordance with codes of practice.
- P22 check quality of installation and confirm compliance with specified standard.
- P23 maintain the security and safety of the system and third parties where work is not complete or not to schedule
- P24 ensure work practices conform to safe working procedures throughout the work activity
- P25 follow all procedures where lone working is required

*You must be able to:*

#### **Use and communicate data and information**

- P26 provide oral information to the people who will require technical information in a way that ensures they have understood it
- P27 provide written instructions to the people who will be using technical information in a way that suits the type of information and how it will be used
- P28 confirm the recipients of technical information have understood it
- P29 report, to a designated person, any inaccuracies in the technical information sources used
- P30 complete work documentation accurately and record it in the specified place or pass to a designated person
- P31 follow correct procedures if working on a 'permit to work' designated activity

*You must be able to:*

#### **Resolve problems that arise from technical information and installation work**

- P32 report - to the designated person - damage or defects to tools, equipment or materials
- P33 report work which is incomplete and not to schedule to the designated person
- P34 refer problems and conditions outside the responsibility of the job role to a designated person using approved procedures

# EUSMUNC13 (SQA Unit Code - FA8X 04)

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### Knowledge and understanding

*You need to know and understand:*

#### **General**

- K1 the main responsibilities of the employer and employee under the Health and Safety at Work Act
- K2 the health and safety guidance governing work in excavations
- K3 the safe procedures for handling hazardous materials
- K4 organisational accident recording and reporting procedures
- K5 the range and use of personal protective equipment for the work

*You need to know and understand:*

#### **Installing engineering products or assets**

- K6 the importance of carrying out on-site risk assessments and the need for constant review
- K7 the importance of understanding and implementing a safe system of work (SSOW) document when working in excavations
- K8 organisations policy and procedures for meeting relevant statutory requirements, regulations, codes of practice
- K9 the implications for not obtaining the correct authorisation
- K10 the factors affecting, and means of confirming, the suitability of excavations
- K11 potential dangers in trenches and holes
- K12 the main responsibilities of employers and employees under the current working at height regulations
- K13 the dangers of taking actions that can create confined spaces risks in excavations
- K14 the implications of using incorrect plant, tools, materials and system components
- K15 actions to be taken where plant, tools, materials and system components fail to meet required specification
- K16 faults associated with use of inappropriate installation methods and tools
- K17 range of isolation methods available and rationale for selection
- K18 the procedure for obtaining authorisation to proceed with connections
- K19 the importance of obtaining necessary permissions for isolation of any part of utilities network
- K20 range of actions to be taken if work cannot proceed to schedule
- K21 means of determining appropriate safe remedial action if work cannot proceed
- K22 methods of accessing information obtainable from reference documents, Regulations, Codes of Practice
- K23 the organisation's policy and procedures for meeting relevant statutory requirements, Regulations, Codes of Practice
- K24 types and causes of disruption likely and avoidance measures
- K25 dangers of inadequate handling and lifting procedure

## **EUSMUNC13 (SQA Unit Code - FA8X 04)**

### **Install engineering products or assets for Utility Network Construction**

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- K26 types and signs of defect likely to be present on sub-system and means of determining the correct, and safe, action
- K27 the importance of compliance with current industry standards

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### Additional Information

#### Behaviours

**Behaviour which underpins effective performance**

**You work in a manner in which you:**

1. are vigilant to possible risks and hazards
2. treat people with civility

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**Developed by** Energy and Utility Skills

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**Originating organisation** Energy and Utility Skills

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**Original URN** MUNC13

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**Relevant occupations** Construction, planning and the built environment

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**Suite** Multi-Utility Network Construction

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