

Overview

This standard is for those who install combined kerb drainage systems that are used within the hard-landscaping industries.

It is suitable for operatives working under limited supervision and focuses on the skills required to both understand the structure and undertake the installation of combined kerb drainage systems while working to specifications.

You will be expected to understand the impact of the installation work on the immediate environment, and the impact of the environment on the structure.

Install combined kerb-drain systems

Performance criteria

You must be able to:

1. assess the risks associated with the site and the proposed work
2. select, prepare and use tools and equipment for the installation of combined kerb-drain systems safely and correctly
3. wear suitable clothing and personal protective equipment (PPE) and respiratory protective equipment (RPE)
4. set out for line and level
5. place and prepare a suitable bed
6. lay units to the correct line and level
7. cut-in units to required specifications
8. maintain correct joint width
9. seal joints to meet specifications
10. connect the kerb-drains to suitable outfalls when installing the system
11. check the completed installation of combined kerb-drain system for compliance and rectify any problems
12. haunch units
13. whilst installing combined kerb-drain systems keep damage, unnecessary waste, unwanted impact on the environment and pollution to a minimum
14. keep the site in a clean and tidy condition whilst completing the installation
15. clean, maintain and store tools and equipment promptly and securely on completion of the installation
16. protect newly installed combined kerb-drain systems correctly against weather and use until they are in a suitable condition
17. leave the site safe, tidy and suitable for intended use
18. maintain good working relations with all those involved in, or affected by, your work
19. maintain communication with colleagues and those involved in, or affected by, your work
20. carry out your work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and organisational policies

Install combined kerb-drain systems

Knowledge and understanding

You need to know and understand:

1. the weather conditions that are appropriate for installation of combined kerb-drain systems
2. how to interpret specifications for installing combined kerb-drain systems
3. how to measure to ensure work is within tolerances
4. how falls, lines and levels are determined and set out
5. how to select the correct tools and equipment for the work including personal protective equipment (PPE) and respiratory protective equipment (RPE)
6. how to use the required tools and equipment safely and correctly
7. how to carry out a risk assessment for the installation and decide on safe working methods
8. the range of combined kerb-drain systems available and their suitable applications
9. the importance of robust edge restraints
10. the importance of using the correct type of bed material
11. how the bed is placed and prepared, and how it is shaped to follow summits, hollows and transitions
12. the pros and cons of using fresh windrow bedding and pre-placed races
13. how to calculate the number of units required
14. how units are delivered to the installation site, stored and positioned for the laying operative
15. how units are manoeuvred into position using mechanical and/or vacuum lifting aids
16. how units are consolidated to the required line and level
17. how units are jointed
18. how combined kerb-drain systems are connected to outfalls
19. how combined kerb-drain systems are checked after installation for accuracy in alignment along both straights and curves
20. how cutting is achieved following the principles of minimum unit size
21. how cutting tools including guillotine, saw and trimming tools are used to install combined kerb-drain systems
22. the importance of dust-suppression and respiratory protective equipment (RPE) when using a cut-off saw
23. the importance of using the correct jointing method and its role in

Install combined kerb-drain systems

- the performance of the completed kerb-drain system
- 24. removal and replacement of defective units
- 25. the importance of maintaining communication with those involved in, or affected by, your work and how this should be done
- 26. the importance of following environmental and ecological best practice to help minimise the impact of your work on the environment
- 27. your responsibilities under relevant health and safety legislation, codes of practice and organisational policies

Install combined kerb-drain systems

Scope/range

A. select and use the following types of tools and equipment when installing combined kerb-drain systems:

1. appropriate mechanical lifting aid
2. cut-off saw
3. maul and/or mallet

B. undertake the following construction tasks:

1. set out for line and level
2. place a suitable kerb race
3. lay units onto a mortar bed on a pre-existing race
4. lay units to a straight line (windrow)
5. lay units to a true arc
6. lay units to a free curve
7. install a dropped crossing
8. lay transitions between kerbs and kerb-drains units
9. lift and repair

C. work with the following types of kerb-drain:

1. single-piece systems
2. multiple-piece systems

Install combined kerb-drain systems

Glossary

Installation tasks:

- set out for line and level
- place a suitable kerb race
- lay units onto a mortar bed on a pre-existing race
- lay units to a straight line (windrow)
- lay units to a true arc
- lay units to a free curve
- install a dropped crossing
- lay transitions between kerbs and kerb-drain units
- lay an edge restraint to a right-angled return using internal/external angle units and quadrants
- lift and repair

Instructions: verbal or written.

Kerb-drain:

- single piece systems
- multiple-piece systems

PPE: Personal Protective Equipment.

RPE: Respiratory Protective Equipment.

Specifications: drawings, schedules, method statements, Standard Operating Procedures (SOPs), manufacturers' guidelines, organisational policies.

Tools and equipment:

- appropriate mechanical lifting aid
- cut-off saw
- maul and/or mallet
- appropriate PPE and RPE

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