

Overview

This standard is for those who install flexible sett/cobble surfaces.

This standard is one of a series of six aimed at those who install the various forms of hardstanding surfaces that are used within the landscaping industries.

This standard is targeted at operatives working under limited supervision and focuses on the skills required both to understand the structure and undertake the installation of hard surfaces while working to specifications.

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

Install flexible sett/cobble surfaces

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 flexible sett/cobble surfaces including personal protective equipment (PPE) and respiratory protective equipment (RPE) safely and correctly
3. keep damage, unnecessary waste, unwanted impact on the environment and pollution to a minimum whilst installing flexible sett/cobble surfaces
4. set out for line and level
5. lay setts, cubes and/or cobbles to a suitable pattern
6. check laid sett/cobble surfaces for alignment
7. cut-in setts/cobbles to required standard at edges and around obstructions such as access covers
8. compact setts/cobbles
9. check completed installation of flexible sett/cobble surfaces for compliance and rectify any problems
10. fill joints and recompact
11. keep the site in a clean and tidy condition whilst installing flexible sett/cobble surfaces
12. clean, maintain and store tools and equipment following the installation of flexible sett/cobble surfaces, promptly and securely
13. protect flexible sett/cobble surfaces correctly against weather and use until they are in a suitable condition
14. leave the site safe, tidy and suitable for intended use
15. maintain working relations with all those involved in, or affected by, the installation of flexible block surfaces
16. maintain communication with all those involved in, or affected by, your work
17. carry out your work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and organisational policies

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Knowledge and understanding

You need to know and understand:

1. the weather conditions that are appropriate for installation of flexible sett/cobble surfaces
2. how to carry out a risk assessment for installation of flexible sett/cobble surfaces and decide on safe working conditions
3. how to interpret flexible sett/cobble surface installation specifications
4. how to measure to ensure work is within tolerances
5. how falls, lines and levels are determined and set out
6. how to select and prepare the correct tools and equipment for the task, including personal protective equipment (PPE) and respiratory protective equipment (RPE)
7. how to use, maintain, clean and store the required tools and equipment, including splitters, saws and trimming tools, safely and correctly
8. the importance of dust-suppression and respiratory protective equipment (RPE) when using a cut-off saw
9. the importance of edge restraints
10. how to calculate the quantity of paving materials required
11. how flexible sett/cobble surfaces are delivered to the site, stored and how they are positioned for the laying operative
12. the range of setts, cubes and cobbles available and their suitable applications
13. the range of suitable laying-course materials
14. how to determine the most suitable type of laying-course preparation (screeded, individual bed, or a combination of both) for any given sett/cobble laying project
15. the range of laying patterns commonly used and how they are established
16. how laying patterns affect overall surface strength and performance
17. the importance of mixing and randomising setts and cobbles from three or more packs prior to laying
18. how surfaces are continuously checked for compliance to line, level, joint width and sett/cobble competence during the laying process
19. how cutting-in is achieved following the principles of minimum sett/cobble size and inboard cutting techniques

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20. the use of concrete fillets around pavement obstructions such as access covers
21. the importance of using the correct jointing material and its role in the performance of the completed surface
22. techniques used for dry and wet grouting
23. techniques used for polymeric jointing
24. the size, mass and type of compaction equipment suitable for the type of surface being laid
25. how compaction equipment is used, and the use of any required attachments
26. removal and replacement of defective sets and cobbles
27. how surfaces are continuously checked for compliance to line, level, joint width and material competence during the laying process
28. the importance of final compliance checks
29. the importance of maintaining communication with those involved in, or affected by, your work and how this should be done
30. the importance of following relevant environmental and ecological best practice to help minimise the impact of your work on the environment
31. your responsibilities under relevant health and safety legislation, codes of practice and organisational policies

Install flexible sett/cobble surfaces

Scope/range

A. select and use the following types of tools and equipment when installing flexible sett/cobble surfaces:

1. hand tools
2. vibrating plate compactors
3. guillotine splitters
4. cut-off saws
5. maul and/or mallet

B. undertake the following tasks when installing flexible sett/cobble surfaces:

1. laying in courses
2. laying in chevrons
3. laying in bogens/segmental arches
4. laying in fans
5. cutting-in
6. loose material jointing
7. polymeric jointing
8. compaction
9. lift and repair

C. use the following types of material:

1. sawn cubes
2. cropped cubes
3. sawn setts
4. cropped/textured setts
5. cobbles

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Glossary

Installation tasks:

- laying in courses
- laying in chevrons
- laying in bogens/segmental arches
- laying in fans
- cutting-in
- loose material jointing
- polymeric jointing
- compaction
- lift and repair

Instructions: verbal or written.

Materials:

- sawn cubes
- cropped cubes
- sawn setts
- cropped/textured setts
- cobbles

PPE: Personal protective equipment.

RPE: Respiratory protective equipment.

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

Tools and equipment:

- hand tools including floats and trowels, brick/scutch hammers, paving hammer/ maul/mallet, alignment bar, string lines, line pins, cold chisels, punches, bolsters and pitching chisels
- vibrating plate compactors
- guillotine splitters
- cut-off saws

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- appropriate PPE and RPE

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Developed by	Lantra
Version Number	2
Date Approved	January 2019
Indicative Review Date	January 2024
Validity	Current
Status	Original
Originating Organisation	Lantra
Original URN	LANL32
Relevant Occupations	Landscaper
Suite	Horticulture
Keywords	paving; sett; cobble
