

Overview

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

This standard is one 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 to both understand the structure and to 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 rigid 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 rigid 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 rigid 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 to required standard at edges and around obstructions such as access covers
8. compact setts/cobbles
9. check completed surface for compliance and rectify any problems
10. fill joints and finish, ensuring a clean surface
11. keep the site in a clean and tidy condition
12. clean, maintain and store tools and equipment following the installation of rigid sett/cobble surfaces, promptly and securely
13. protect working areas 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 rigid 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

Install rigid sett/cobble surfaces

Knowledge and understanding

You need to know and understand:

1. the weather conditions that are appropriate for installation of rigid sett/cobble surfaces
2. how to carry out a risk assessment for installation of rigid sett/cobble surfaces and decide on safe working methods
3. how to interpret rigid 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, prepare and use the correct tools and equipment for the task, including personal protective equipment (PPE) and respiratory protective equipment (RPE) safely and correctly
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 paving materials should be stored on site, how they are delivered to the laying face and how they are positioned for the laying operative
12. the range of setts, cubes and cobbles available and their suitable applications
13. the importance of movement joints
14. the importance of intermediate restraints
15. the range of suitable laying-course materials
16. how to determine the most suitable type of laying-course preparation (screeded, individual bed, or a combination of both) for any given sett-laying project
17. how a rigid laying course is prepared, the working life of the bed material and the importance of not preparing too large an area in advance of the laying face
18. the range of laying patterns commonly used and how they are established
19. how laying patterns affect overall strength and performance
20. the importance of mixing and randomising units from three or more packs prior to laying
21. how surfaces are continuously checked for compliance to line,

Install rigid sett/cobble surfaces

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

Install rigid sett/cobble surfaces

Scope/range

A select and use of the following types of tools and equipment when installing rigid 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 construction tasks:

1. laying in courses
2. laying in chevrons
3. laying in bogens/segmental arches
4. laying in fans
5. cutting-in
6. slurry 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

Install rigid sett/cobble surfaces

Glossary

Instructions: verbal or written.

Materials:

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

PPE: Personal Protective Equipment.

RPE: Respiratory Protective Equipment.

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

Tasks:

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

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
- maul and/or mallet
- appropriate PPE and RPE

Install rigid sett/cobble surfaces

Developed by	Lantra
Version Number	2
Date Approved	January 2019
Indicative Review Date	January 2024
Validity	Current
Status	Original
Originating Organisation	Lantra
Original URN	LANL30
Relevant Occupations	Landscaper
Suite	Horticulture
Keywords	block; landscape
