LANH39

Install hardstanding sub-layers

Overview

This standard is for those who install hardstanding sub-layers that are used within the landscaping industries.

The standard is suitable for operatives working under limited supervision and focuses on the skills required to understand the structure and to undertake the installation of hard surface sub-layers, working to specifications.

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

Performance criteria

You must be able to:

1. assess the risks associated with the site and the proposed work
2. select and wear suitable clothing and personal protective equipment (PPE)
3. select, prepare and use tools and equipment for the installation of hardstanding sub-layers safely and correctly
4. select appropriate materials for the installation of hardstanding sub-layers
5. use correct and safe methods to rectify any problems
6. install hardstanding sub-layers to accurate levels and profiles
7. keep damage, unnecessary waste, unwanted impact on the environment and pollution to a minimum
8. clean tools and equipment and store tools, equipment and materials securely and correctly
9. protect prepared hardstanding sub-layers against weather and use until they are in a suitable condition
10. leave the site safe, tidy and suitable for intended use
11. maintain working relations with those involved in, or affected by, your work
12. maintain communication with those involved in, or affected by, your work
13. carry out your work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and organisational policies

Knowledge and understanding

You need to know and understand:

1. how to identify hazards, assess risks and interpret risk assessments when installing hardstanding sub-layers
2. the importance of hardstanding sub-layers
3. the impact that prevailing weather conditions may have on hardstanding sub-layers
4. how to select, prepare and use the correct tools and equipment for the installation of hardstanding sub-layers, including personal protective equipment (PPE) safely and correctly
5. the various types of compaction equipment that can be used, their efficacy and suitability for various hardstanding sub-layers and materials
6. how to maintain, clean and store the required tools and equipment promptly and securely following installation of hardstanding sub-layers
7. how to measure correctly to ensure work is within tolerances
8. the sequence of layers that may be encountered within a typical installation and the relevance of each to the overall structure
9. the impact of sub-grade conditions on the performance of overlying layers
10. the use of geo-textiles to improve and/or reinforce hardstanding sub-layers
11. the range of primary and secondary aggregates that are used in the installation of hardstanding sub-layers
12. the range of bound and unbound materials used in hardstanding sub-layers
13. the range of conventional and permeable materials used in hardstanding sub-layer installation
14. the concept of optimal moisture content to hardstanding sub-layer compaction
15. the importance of hardstanding sub-layer drainage and how this can best be achieved in a range of circumstances
16. the importance of levelling and grading the aggregate within each hardstanding sub-layer and of working to defined tolerances and profiles, including the checks used to ensure compliance
17. how various types of bound and unbound primary and secondary aggregates compact, to what degree and the importance of installing each hardstanding sub-layer in stages with a specified maximum thickness
18. the importance of maintaining communication with those involved in, or affected by, your work
19. the importance of following relevant environmental and ecological best practice to help minimise the impact of your work on the environment
20. the potential for environmental pollution and how to prevent it

21. the importance of minimising damage and unnecessary waste and how to do so
22. your responsibilities under relevant health and safety legislation, codes of practice and organisational policies

Scope/range

A. install the following hardstanding sub-layers:

1. capping/Improvement Layer
2. sub-base
3. base

B. operate the following types of machinery:

1. vibrating roller
2. vibrating plate compactor
3. rampactor

Glossary

PPE: Personal protective equipment

Machinery:

- vibrating roller
- vibrating plate compactor
- rampactor

Sub-layers:

- capping/improvement layer
- sub-base
- base

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