

## Overview

This standard covers the skills and knowledge required to be able to identify and match quality, properties and characteristics of wood or wood-based materials. This involves identifying the wood that has been used and sourcing the same species or one with similar characteristics, structure and properties. To do this, you will need to understand how the structure and properties of wood affect the surface texture, grain characteristics, density, presence of extractives and overall look and also how it reacts to treatments and finishes.

This standard is suitable for anyone needing to match wood including those working in restoration or heritage.

Match existing wood properties, characteristics and manufacture when renewing or renovating wood or wood-based materials

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## Performance criteria

*You must be able to:*

1. comply with health and safety requirements and procedures at all times
2. identify species of wood or wood-based materials used in structures or products
3. analyse quality, properties and characteristics of wood or wood-based materials used in structures or products
4. review availability of wood with identical or similar composition to originals
5. work with others to identify available woods that will best match priorities where it is not possible for an exact match

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## Knowledge and understanding

*You need to know and understand:*

1. legal duties for health and safety in the workplace and legislation covering your job role
2. species of timber in commercial use, their appearance, individual characteristics, properties and typical end uses
3. differences between softwood and hardwood and the impact this has on the wood products used
4. how structure and properties of wood affect the surface texture, grain characteristics, density, presence of extractives and overall look
5. what is meant by durability, differing levels of durability, how they are categorised and the woods listed within each category
6. ways to improve woods ability to resist weathering, decay or infestation and mechanical durability or performance, types of preservative treatments available, level of protection they provide and how they are applied
7. effects of wood treatments and exterior coatings on wood structures, properties, durability and appearance
8. effect moisture content has and reasons for drying wood
9. recommended moisture content for wood for its intended use
10. sources and suppliers of wood or wood-based materials
11. current price structure for the wood or wood-based materials used
12. how quality of wood affects the quality of end products
13. schemes related to environmental issues, sustainability and quality and how to work within them
14. differences between wood quality schemes, grading rules and standards
15. how quality range differs between hardwoods and softwoods and appearance and strength grades
16. ways to maximise efficient use of timber
17. effect of wood properties and characteristics on tools and machinery
18. basic rules of storage, handling and protection for wood or wood-based materials and the damage or deterioration that will occur if they are not followed
19. regulations and codes of practice that you need to comply with when working with wood
20. appropriate equipment used to examine wood
21. how wood changes with time and how this affects the matching of wood of different ages
22. effect of different approaches on historical accuracy, traditional techniques, dimensions used and accepted practice

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