

ASSESSMENT GUIDELINES

Unit 22202

Select, calculate and prepare timber quantity
for landscape features

Level 3, Credit 5, Version 1

Select, calculate and prepare timber quantity for landscape features.

Unit standard 22202

Level 3, Credit 5, Version 1

Level of performance required for this unit standard

This is a level 3 unit standard. At this level trainees are expected to demonstrate the following abilities when completing assessment tasks:

- To work under general supervision, with some independence; with significant responsibility for the standard of the outcome achieved.
- To apply technical skills and knowledge to complete the task to the specified standard, in a familiar context.
- To interpret available information, and use discretion and judgment.

Workplace assessment:

For guidelines on Workplace Assessment, please refer to the NZHITO Workplace Assessors Manual, and for further information, please contact: NZHITO, P O Box 8638, Christchurch. Ph 03 9644 735, fax 03 9644 737, website www.hortito.org.nz

Special notes:

1. The New Zealand Standards applicable to this unit standard are: NZS 3631:1988 *New Zealand timber grading rules*, NZS 3640:2003 *Chemical preservation of round and sawn timber*, available from <http://www.standards.co.nz>.
2. Legislation relevant to this unit standard includes but is not limited to the Native Plants Protection Act 1934.

Unit 22202: Select, calculate and prepare timber quantity for landscape features. (Apprentice copy)

ELEMENT	Competent	Range of evidence an assessor should consider
Element 1 Explain the application of timber grading in landscape work.	Yes/No	<ul style="list-style-type: none"> ▪ Define the grades of indigenous and exotic timber in accordance with NZS 3631:1988 and described them in terms of the permitted characteristics of each grade. ▪ Define each grade of timber in landscape work in terms of its use and limitations.
Element 2 Explain the application of timber preservation in landscape work.	Yes/No	<ul style="list-style-type: none"> ▪ Describe methods of timber preservation in terms of the characteristics of the materials used. Range: methods – pressure, brush, spray. ▪ Described the effectiveness of timber treatment in terms of the influences of timber size and species. ▪ Identify three native and three exotic timbers which may be used in landscape work without preservation treatment, define their use limitations, and list reasons for their durability. ▪ Describe preservation classifications defined in NZS 3640:2003A1 in terms of the landscaping uses of timber treated to the requirements of each classification. ▪ Describe the retention of specified durability of treated timber in terms of requirements in use. Range: requirements for – cutting, covering, appropriate use.
Element 3 Identify insect and fungal attack in timber.	Yes/No	<ul style="list-style-type: none"> ▪ Identify the types of insect attack in samples of timber, giving an explanation of an eradication method for each type. Range: two of the following insects – common house borer, two-toothed longhorn borer, pin-hole borer, termites. ▪ Identify the types of fungal attack in samples of timber giving an explanation of an eradication method for each type. Range: two of the following fungi – dry rot, wet rot, sap stain, moulds.
Element 4 Select timber for landscape work.	Yes/No	<ul style="list-style-type: none"> ▪ Identify the end use of the timber to determine grade, durability or preservation, and moisture content which are required for timber selected. Range: end uses – in-ground, in water, exposed to the weather, covered, construction, finishing. ▪ Select timber meeting the defined requirements for length, to minimise waste, and freedom from insect or fungal infestation detrimental to the work. ▪ Explain the choice of timber species in terms of environmental issues and the selection available in New Zealand. Range: protection of native bush, sources of imported timbers, selection of alternatives. ▪ Ensure that recycled timber selected for landscape work meets workplace procedures required for its designated use. Range: local authority requirements, strength, durability, appearance.
Element 5 Calculate quantities and prepare an order of materials for a timber feature.	Yes/No	<ul style="list-style-type: none"> ▪ Calculate the quantities of timber materials in order to meet the requirements of drawings and specifications. ▪ Price the cost of the selected timber from two merchants including delivery. ▪ Prepare documentation for quantities of materials to meet specifications and delivery requirements.

(Name of Apprentice)

is **Competent / Not yet competent** in Unit Standard 22202, version 1

Signed (Assessor): _____

WPA Registration Number: _____ Date: _____

Unit 22202: Select, calculate and prepare timber quantity for landscape features. (Assessor copy)

ELEMENT	Competent	Range of evidence an assessor should consider
Element 1 Explain the application of timber grading in landscape work.	Yes/No	<ul style="list-style-type: none"> ▪ Define the grades of indigenous and exotic timber in accordance with NZS 3631:1988 and described them in terms of the permitted characteristics of each grade. ▪ Define each grade of timber in landscape work in terms of its use and limitations.
Element 2 Explain the application of timber preservation in landscape work.	Yes/No	<ul style="list-style-type: none"> ▪ Describe methods of timber preservation in terms of the characteristics of the materials used. Range: methods – pressure, brush, spray. ▪ Described the effectiveness of timber treatment in terms of the influences of timber size and species. ▪ Identify three native and three exotic timbers which may be used in landscape work without preservation treatment, define their use limitations, and list reasons for their durability. ▪ Describe preservation classifications defined in NZS 3640:2003A1 in terms of the landscaping uses of timber treated to the requirements of each classification. ▪ Describe the retention of specified durability of treated timber in terms of requirements in use. Range: requirements for – cutting, covering, appropriate use.
Element 3 Identify insect and fungal attack in timber.	Yes/No	<ul style="list-style-type: none"> ▪ Identify the types of insect attack in samples of timber, giving an explanation of an eradication method for each type. Range: two of the following insects – common house borer, two-toothed longhorn borer, pin-hole borer, termites. ▪ Identify the types of fungal attack in samples of timber giving an explanation of an eradication method for each type. Range: two of the following fungi – dry rot, wet rot, sap stain, moulds.
Element 4 Select timber for landscape work.	Yes/No	<ul style="list-style-type: none"> ▪ Identify the end use of the timber to determine grade, durability or preservation, and moisture content which are required for timber selected. Range: end uses – in-ground, in water, exposed to the weather, covered, construction, finishing. ▪ Select timber meeting the defined requirements for length, to minimise waste, and freedom from insect or fungal infestation detrimental to the work. ▪ Explain the choice of timber species in terms of environmental issues and the selection available in New Zealand. Range: protection of native bush, sources of imported timbers, selection of alternatives. ▪ Ensure that recycled timber selected for landscape work meets workplace procedures required for its designated use. Range: local authority requirements, strength, durability, appearance.
Element 5 Calculate quantities and prepare an order of materials for a timber feature.	Yes/No	<ul style="list-style-type: none"> ▪ Calculate the quantities of timber materials in order to meet the requirements of drawings and specifications. ▪ Price the cost of the selected timber from two merchants including delivery. ▪ Prepare documentation for quantities of materials to meet specifications and delivery requirements.

(Name of Apprentice)

is **Competent / Not yet competent** in Unit Standard 22202, version 1

Signed (Assessor): _____

WPA Registration Number: _____ Date: _____

Please send this page to your NZHITO Regional Manager, who will forward it to National Office to register the credits on your NZQA Record of Learning.

Unit 22202: Select, calculate and prepare timber quantity for landscape features.

(Name of Apprentice)

is Competent in Unit Standard 22202. (version 1)

Signed (Assessor):

WPA Registration Number: _____

Date: _____