



Australian Government

Department of Education, Employment and Workplace Relations

RTF3020A Install and maintain interior plant displays

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This competency standard covers the process of the installation and maintenance work associated with interior plant displays in buildings and offices.

The installation and maintenance of interior plant displays is likely to be under limited supervision from others, with checking only related to overall progress. Some discretion and judgement in assessing locations, selecting equipment and materials, organisation of work, services, actions, and the achievement of outcomes within time and budgetary constraints will be required. Installation and maintenance requires the application of extensive horticultural knowledge and a broad range of horticultural skills.

Application of the Unit

Not applicable.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Not applicable.

Elements and Performance Criteria Pre-Content

Not applicable.

Elements and Performance Criteria

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Element	Performance Criteria
1 Assess requirements for plantscaping	1.1 Access factors are assessed and recorded prior to installation. 1.2 Internal environmental parameters are assessed and recorded prior to installation. 1.3 Light sources in regard to both plant growth and client requirements are noted, and light meter readings taken and recorded to match plants to the lighting available. 1.4 Growing conditions and constraints are analysed and recorded.
2 Install containerised and direct planted specimens	2.1 Materials, equipment and machinery required for the job are identified and scheduled according to a given plan or specifications. 2.2 Personnel required for the job are identified and scheduled. 2.3 OHS hazards are identified, risks assessed and controls implemented and reported to the supervisor. 2.4 Suitable safety equipment and personal protective equipment (PPE) are selected, used and maintained. 2.5 Plants are installed securely so that they are well presented, accessible for routine maintenance and conform to the plan or specifications. 2.6 Damaged or unnecessary material is pruned to enhance the presentation. 2.7 Plants are watered and fertilised as required according to enterprise policy. 2.8 The site is left in a clean and tidy state following installation of plants.

- 3 Maintain indoor plants
 - 3.1 The **symptoms of under and over-watering** in indoor plants are detected and actioned according to the maintenance agreement.
 - 3.2 The **symptoms of low and high light intensity** are detected and rectified.
 - 3.3 The **symptoms of low and high fertiliser concentration** are detected and the pH of the growing medium is measured and altered as required.
 - 3.4 **Insects, pests and diseases associated with indoor plants** are detected and controlled as required.
 - 3.5 Appearance of indoor plants is **enhanced** according to the maintenance agreement.
 - 3.6 The cost benefit of reviving plants is determined in line with site requirements.

Required Skills and Knowledge

Not applicable.

Evidence Guide

What evidence is required to demonstrate competence for this standard as a whole?

Competence in installing and maintaining interior plant displays requires evidence that the area to be plantscaped can be assessed for plants and clients needs, and that appropriate plants can be selected, installed, maintained and revived as necessary.

The skills and knowledge required to install and maintain interior plant displays must be **transferable** to a different work environment. For example, this could include different plant species, display types and locations.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts, and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

characteristics and attributes of a range of plants used for interior plantscaping

indoor plant growth requirements

light and moisture tolerance/intolerance for common indoor plant species

photosynthesis, respiration, nutrient uptake and growth rate for indoor plants

acclimatisation techniques for indoor plants

commonly occurring problems with indoor plantscaping

remedial action options.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- identify a range of plants used for interior displays
- communicate with work team members, supervisors, suppliers and clients
- interpret plans and specifications, and product labels
- calculate numbers of plants and materials
- calculate rates of chemicals
- determine spatial measurements of plantscape
- interpret test results as required
- co-ordinate work group, materials, equipment and own activities to sequentially and effectively complete plantscaping in a timely manner.

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the **key competencies**, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

1. How can **communication of ideas and information** (2) be applied?

Written, oral and telecommunication of ideas and information relating to installation and maintenance of plantscapes, and other problems encountered will be required with the supervisor, work group, suppliers or clients.

2. How can **information be collected, analysed and organised** (2)?

Enterprise work procedures, plantscape plan or specifications and test results should be consulted, interpreted and applied to co-ordinate installation and maintenance activities, with further clarification sought from the supervisor where necessary.

3. How are **activities planned and organised** (2)?

Installation and maintenance of the plantscape will require planning for site assessment, selection of equipment and materials, and placing of plants and accessories. These actions may have to be co-ordinated and organised around others movements and work activities.

4. How can **team work** (2) be applied?

Installation and ongoing maintenance of the plantscape may involve facilitating and leading members of a team to complete activities to plan and on time. Discussion of plantscape requirements and plant suitability may need to be carried out with supervisors or others in the workplace.

5. How can the use of **mathematical ideas and techniques** (2) be applied?

Mathematical concepts may be used to calculate spatial requirements, test results and cost benefits.

6. How can **problem-solving skills** (2) be applied?

Variation of the internal environmental, client intervention, pest or disease infestation, watering and nutritional difficulties and timeline failures may require problem-solving techniques.

7. How can the **use of technology (2)** be applied?

Technological understanding may be required to access and apply plans and specifications, use and/or calibrate testing equipment, communicate and keep records.

Are there other competency standards that could be assessed with this one?

This competency standard **could** be assessed on its own or in combination with other competencies relevant to the job function.

There is essential information about **assessing this competency standard for consistent performance and where and how it may be assessed**, in the Assessment Guidelines for this Training Package. All users of these competency standards must have **access** to the **Assessment Guidelines**. Further advice may also be sought from the relevant **sector booklet**.

Range Statement

Range of Variables

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment requirements may depend on the work situations available

What does the term **plantscaping** refer to in terms of this standard?

The term plantscaping refers to interior landscaping, and includes the design and installation of containerised and in-ground plants to enhance the interior landscape of businesses, offices, hotels, hospitals, schools, houses, shopping malls and other public buildings. In addition, plantscapes may be used to create privacy screens, direct traffic, create a relaxing atmosphere, highlight a special occasion, and improve air quality of the internal landscape.

What **access factors** need to be considered when assessing interior spaces?

Access factors include time constraints, parking restrictions, stairs and level changes, watering facilities, room surface finishes, work areas, lift size, equipment needed, loading bay (walls, floor, furnishings), spatial volume and room use.

What **environmental parameters** may need to be assessed?

Room temperature range, cooling, heating, air circulation and ventilation, humidity, drainage and traffic patterns.

What type of light sources may be used in the interior plantscape?	Light sources may include natural, incandescent, fluorescent and metal halide lights.
What growing conditions and constraints may need to be analysed?	Growing conditions and constraints may include possible plant pests and diseases; growing media and water conditions; available light, spatial volume and room use.
What is the difference between containerised and direct planted specimens ?	Containerised specimens may be portable or fixed pots/decorative containers, and may include live plants (which may be subirrigated), preserved plants and replica plants, whereas direct planted specimens include in-ground specimens and may include irrigated projects.
What materials, equipment and machinery might be required to install plantscapes?	Materials, equipment and machinery may include growing media, fertilisers, fungicides, insecticides, climate controlled trucks, cranes, pulley systems, trolleys, sack trucks, shovels, trowels, secateurs, hand tools, cleaning equipment, sprayers, water spray containers, plant supports, ties, pots, decorative containers, accessories and rubbish bins.
What OHS hazards may be associated with the installation of plantscapes?	Hazards may include disturbance or interruption of services, chemicals, manual handling, moving machinery and machinery parts, uneven surfaces and personnel.
What safety equipment may be required?	Safety equipment may include signage and barriers.
What PPE may be required to install plantscapes?	PPE may include boots, overalls, gloves, goggles, respirator or face mask, and hard hat.
What methods may be employed to water interior plantscapes?	Watering methods may include surface irrigation, sub surface irrigation, hand-watering and spraying.
What symptoms may indicate that plants are suffering from under and over-watering ?	Symptoms of over-watering may include die back on leaf tips, rotting corms, dropping leaves, water logged growing media, or excess overflow in trays. Symptoms of under-watering may include general dehydration, curling leaves, leaf loss or dry

growing media.

What symptoms may indicate that plants are suffering from the effects of **low and high light intensity**?

Symptoms of low light intensity may include yellowing of leaves, drawn growth, elongated, more prone to pests and diseases. Symptoms of high light intensity may include yellowing or burning of leaves, plant stress or dehydration.

What symptoms may indicate that the plants are suffering from **low and high fertiliser concentration**?

Symptoms may include yellow lower leaves; discoloured, stunted, mottled or yellow new leaves, wilting, leaf drop, or failure to flower.

What common **insects, pests and diseases associated with indoor plants** may need to be detected and controlled?

Common insects, pests and diseases associated with indoor plants may include beetles, mites, borers, thrips, weevils, mealy bug, scale, powdery mildew, root rot and crown rot.

How might the appearance of interior plants be **enhanced**?

Enhancement of interior plants may include, pruning, trimming, brading, cleaning, waxing, training, cleaning and polishing accessories.

For more information on contexts, environment and variables for training and assessment, refer to the Sector Booklet.

Unit Sector(s)

Not applicable.