



Australian Government

Department of Education, Employment and Workplace Relations

CPCCSI3004A Apply advanced vinyl applications

Release: 1

CPCCSI3004A Apply advanced vinyl applications

Modification History

Not Applicable

Unit Descriptor

Unit descriptor This unit of competency specifies the outcomes required to produce vinyl signage in advanced forms.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Application of the Unit

Application of the unit This unit of competency supports the achievement of skills and knowledge to apply vinyl sign materials using advanced techniques, and includes working with others and as a member of a team.

Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Prerequisite units

CPCCOHS2001A	Apply OHS requirements, policies and procedures in the construction industry
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Employability Skills Information

Employability skills This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Plan and prepare work.	1.1. Quality assurance requirements of signage operations are recognised and adhered to. 1.2. Safety (OHS) requirements in accordance with application tasks and workplace operations are recognised and adhered to. 1.3. Job requirements are identified from drawings and specifications/instructions and/or client brief. 1.4. Specifications, drawings and instructions are interpreted and job requirements and sequence, determined. 1.5. Layout is set out to scale using setting out techniques applicable to sign design. 1.6. Product range is assessed and selected in accordance with job requirements and relevant Australian standards. 1.7. Tools and equipment and materials are selected to carry out tasks consistent with job requirements. 1.8. Substrates are identified and prepared in accordance with planned material application. 1.9. Colour selection is determined, consistent with job requirements. 1.10. Routine maintenance requirements of equipment are identified and implemented in accordance with workplace and quality assurance procedures. 1.11. Temporary or permanent application of materials is determined from job requirements. 1.12. Potential material shrinkage is determined to ensure quality of completed work.
2. Layout sign.	2.1. Substrate compatibility with vinyl is determined and correct vinyl type identified according to job specifications. 2.2. Surface is appropriately cleaned and any previously applied self-adhesive tape is removed carefully, minimising risk of damage to surface. 2.3. Layout of sign is produced on computer as per job specifications. 2.4. Cut files are prepared and configured correctly to plotter/printer device, outputted and managed.
3. Operate plotter.	3.1. Media is loaded to ensure correct tracking and cutting pressure and speed settings are adjusted to

ELEMENT	PERFORMANCE CRITERIA
	suit media.
	3.2. Cut area dimensions are determined to suit given media.
	3.3. <i>Vinyl layout is cut</i> using appropriate processes, tools and equipment to ensure minimum waste.
4. Operate digital printer.	4.1. Media is loaded to ensure correct tracking, and feed calibration is adjusted to suit given media.
	4.2. Bi-directional calibration is adjusted to suit given media.
	4.3. Print area dimensions are determined to suit given media and digital layout is printed using appropriate processes, tools and equipment to ensure minimum waste.
5. Apply vinyl.	5.1. Lettering or background is weeded out using appropriate tools and minimising risk of damage to vinyl.
	5.2. Transfer or application tape is applied to either lettering or graphics.
	5.3. Laminate is applied to printed vinyl and vinyl <i>applied to surface</i> free of air bubbles and creases and according to layout that conforms to design specifications.
	5.4. Surface of vinyl is finished and trimmed consistent with job requirements.
6. Clean up finished sign.	6.1. Sign and surrounding surface environment/area are cleaned and waste materials removed in accordance with <i>statutory and regulatory authority requirements</i> .
	6.2. Tools and equipment, including personal protective equipment, are cleaned, maintained and stored.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Required skills for this unit are:

REQUIRED SKILLS AND KNOWLEDGE

- ability to apply layout and design concepts and principles
- ability to recognise procedures, respond to change and contribute to workplace responsibilities, such as current work site environmental and sustainability frameworks or management systems
- communication skills to:
 - determine requirements
 - enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand
 - follow instructions
 - read and interpret:
 - charts and hand drawings
 - computer programs
 - design principles
 - job drawings
 - manufacturer specifications and instructions
 - organisational work specifications
 - requirements and instructions issued by authorised organisational or external personnel
 - report faults
 - use and interpret non-verbal communication
 - use language and concepts appropriate to cultural differences
- innovation skills to select appropriate tools and equipment, respond to workplace challenges and put ideas into action
- organisational skills, including the ability to plan and set out work
- problem solving skills to recognise, and take action to rectify, minor faults and problems
- teamwork skills to be able to coordinate with others, action tasks and relate to people from a range of social, cultural, ethnic backgrounds and with varying physical and mental abilities.

Required knowledge

Required knowledge for this unit is:

- job safety analysis (JSA) and safe work method statements
- material safety data sheets (MSDS)
- relevant Australian and New Zealand standards, and:
 - manufacturer specifications
 - other applicable codes or standard operating procedures relevant to the sector
- terminology and definitions used in signage
- theory of cutting vinyl, including:
 - blade offset setting

REQUIRED SKILLS AND KNOWLEDGE

- blade types
- cutting pressure
- cutting speed
- function of plotters
- function of printers
- printer calibration settings
- purpose of test cut
- vinyl tracking
- vinyl types and uses in sign manufacture.

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

This unit of competency could be assessed in the workplace or a close simulation of the workplace environment, provided that simulated or project-based assessment techniques fully replicate construction workplace conditions, materials, activities, responsibilities and procedures.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

A person who demonstrates competency in this unit must be able to provide evidence of:

- understanding and applying:
 - principles of vinyl cutting
 - vinyl theory
 - attributes of vinyl
- applying appropriate software to produce vinyl signage
- correct and effective protocols for using computers and software
- applying vinyl to vehicle panels, free of air bubbles.

Context of and specific resources for assessment

This competency is to be assessed using standard and authorised work practices, safety requirements and environmental constraints.

Assessment of essential underpinning knowledge will usually be conducted in an off-site context.

Assessment is to comply with relevant regulatory or Australian standards' requirements.

Resource implications for assessment include:

- an induction procedure and requirement
- realistic tasks or simulated tasks covering the mandatory task requirements
- relevant specifications and work instructions
- tools and equipment appropriate to producing vinyl signage
- support materials appropriate to activity
- workplace instructions relating to producing vinyl signage

EVIDENCE GUIDE

- material safety data sheets
- research resources, including industry-related systems information
- range of digital printers
- relevant software.

Reasonable adjustments for people with disabilities must be made to assessment processes where required. This could include access to modified equipment and other physical resources, and the provision of appropriate assessment support.

Method of assessment

Assessment methods must:

- satisfy the endorsed Assessment Guidelines of the Construction, Plumbing and Services Training Package
- include direct observation of tasks in real or simulated work conditions, with questioning to confirm the ability to consistently identify and correctly interpret the essential underpinning knowledge required for practical application
- reinforce the integration of employability skills with workplace tasks and job roles
- confirm that competency is verified and able to be transferred to other circumstances and environments.

Validity and sufficiency of evidence requires that:

- competency will need to be demonstrated over a period of time reflecting the scope of the role and the practical requirements of the workplace
- where the assessment is part of a structured learning experience the evidence collected must relate to a number of performances assessed at different points in time and separated by further learning and practice, with a decision on competency only taken at the point when the assessor has complete confidence in the person's demonstrated ability and applied knowledge
- all assessment that is part of a structured learning experience must include a combination of direct, indirect and

EVIDENCE GUIDE

supplementary evidence.

Assessment processes and techniques should as far as is practical take into account the language, literacy and numeracy capacity of the candidate in relation to the competency being assessed.

Supplementary evidence of competency may be obtained from relevant authenticated documentation from third parties, such as existing supervisors, team leaders or specialist training staff.

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Quality assurance requirements include:

- attention to work specifications
- Australian and international standards relevant to the sign industry
- control of handling procedures
- internal company quality assurance policy and risk management strategies
- procedures for installing and finishing
- quality of materials
- use and maintenance of equipment
- workplace operations and procedures.

Safety (OHS) is to be in accordance with state and territory legislation and regulations and project safety plan and may include:

- emergency procedures, including extinguishing fires, organisational first aid requirements and evacuation
- hazard control
- hazardous materials and substances
- organisational first aid
- PPE prescribed under legislation, regulations and workplace policies and practices
- safe operating procedures, including the

RANGE STATEMENT

conduct of operational risk assessment and treatments associated with:

- concealed services (water, power and gas)
- lighting
- restricted access barriers
- traffic control
- work site visitors and the public
- working at heights
- working in confined spaces
- working in proximity to others
- use of firefighting equipment
- use of machines
- use of tools and equipment
- workplace environmental requirements and safety.

Job requirements include:

- assessment of conditions and hazards
- determination of work requirements
- equipment defect identification
- safety plans and policies
- work site inspection.

Clients include:

- business owners
- printers
- property owners
- sign manufacturers
- statutory bodies.

Relevant Australian standards include:

- regulatory requirements
- standard drawings and details
- urban design manuals.

Tools and equipment include:

- application fluid
- application tape
- applicators
- coloured marking pencils
- metal rules
- weeding tools.

Substrates types include:

- corflute
- glass surfaces
- illuminated surfaces
- metals
- plastics

RANGE STATEMENT

<i>Vinyl</i> includes:	• vehicle panels. • calendared (polymeric/monomeric) • cast • easy apply (vehicle wrap) • translucent.
<i>Layout of sign</i> includes:	• function of printers • printer calibration settings • test print • vinyl tracking.
<i>Vinyl layout cut</i> includes:	• blade types • cutting pressure • cutting speed • function of plotters • test cut • vinyl tracking.
<i>Applied to surface</i> includes:	• curved (irregular) • flat • illuminated.
<i>Statutory and regulatory authority requirements</i> include:	• federal, state and local authorities administering applicable Acts, regulations and codes of practice and also can pertain to: • removal of waste products • storage of chemicals.

Unit Sector(s)

Unit sector	Construction
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Co-requisite units

Co-requisite units	Nil
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Functional area

Functional area