



Australian Government

Department of Education, Employment and Workplace Relations

FPICOT3204B Prepare and interpret sketches and drawings

Release: 1

FPICOT3204B Prepare and interpret sketches and drawings

Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit specifies the outcomes required to identify, select and interpret a sketch or drawing. The unit includes interpreting a range of sketch and drawing details, and preparing sketches and drawings using dimensions, tolerances and notes following industry and site conventions

This unit replaces FPICOT3204A Prepare and interpret sketches and drawings

Application of the Unit

Application of the unit

This unit involves preparing and interpreting sketches and drawings in an office environment setting

The skills and knowledge required for competent workplace performance are to be used within the scope of the person's job and authority

Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Not Applicable

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. Identify and select correct sketch or drawing	1.1. Applicable occupational health and safety (OHS), environmental, legislative and organisational requirements relevant to preparing and interpreting sketches and drawings are identified and followed 1.2. Sketches or drawings are obtained and confirmed in line with job requirements and site procedures 1.3. Notes and sketches or drawings are interpreted, checked and validated for correct application and omissions are determined in line with site procedures 1.4. Communication with others is established and maintained in line with OHS requirements
2. Interpret sketch or drawing detail	2.1. Sketches or drawing features are accurately identified and interpreted to provide a three-dimensional picture of components, assemblies or structures 2.2. Sketches or drawings are used to orientate and fit components or assemblies as required 2.3. Dimensions and tolerances are interpreted to correctly measure, select, mark or set up items or equipment 2.4. Areas of insufficient detail are identified and reported in line with site procedures
3. Prepare sketch or drawing	3.1. Items to be drawn are identified to ensure clear communication of requirements in line with site procedures 3.2. Drawing views are selected to present required information with minimal drawing complexity in line with site standards 3.3. Sketches or drawings are correctly and clearly drawn in line with customer expectations, site and industry conventions and standards 3.4. Sketch and drawing preparation and interpretation activities are recorded and reported to the appropriate personnel

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level required for this unit.

Required skills

- Technical skills sufficient to use and maintain relevant tools and equipment; interpret the detail and features of sketches or drawings; use sketches and drawings to measure, select, mark or set up production requirements
- Communication skills sufficient to interpret and convey information in written, sketch or verbal form; use appropriate communication and interpersonal techniques and methods with colleagues and others
- Literacy skills sufficient to record and report workplace information; maintain documentation
- Numeracy skills sufficient to measure, estimate and calculate time required to complete a task
- Problem solving skills sufficient to identify problems and equipment faults; identify omissions and areas of insufficient detail; demonstrate appropriate response procedures

Required knowledge

- Applicable commonwealth, state or territory legislation, regulations, standards, codes of practice and established safe practices relevant to the full range of processes for preparing and interpreting sketches and drawings
- Environmental protection requirements, including the safe disposal of waste material
- Organisational and site standards, requirements, policies and procedures for preparing and interpreting sketches and drawings
- Environmental risks and hazards
- Problem identification and resolution strategies, including methods for identifying omissions or areas of insufficient detail in sketches and drawings
- Types of tools and equipment, and procedures for their safe use and maintenance
- Drawing systems and conventions, including computerised design where appropriate
- Standard industry and site conventions for views, notes, dimensions and tolerances
- Types of drawings and sketches and dimensioning systems
- Procedures for recording, reporting and maintaining workplace records and information
- Established communication channels and protocols

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

A person who demonstrates competency in this unit must be able to provide evidence that they can safely and efficiently identify, select and interpret sketches and drawings following industry and site conventions

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

The evidence required to demonstrate competency in this unit must be relevant to, and satisfy, all of the requirements of the elements of this unit and include demonstration of:

- following applicable commonwealth, state or territory legislative and regulatory requirements and codes of practice relevant to preparing and interpreting sketches and drawings
- following organisational policies and procedures relevant to preparing and interpreting sketches and drawings
- communicating with others in the work area to convey information relating to sketching and drawing detail and items to be drawn
- interpreting sketch and drawing details to determine material requirements and providing a three-dimensional picture of components, assemblies or structures
- determining areas of insufficient detail or omissions from sketch and drawing detail
- preparing a sketch or drawing that correctly represents intended items and follows industry and site conventions

Context of and specific resources for assessment

- Competency is to be assessed in the workplace or realistically simulated workplace
- Assessment is to occur under standard and authorised work practices, safety requirements and environmental constraints
- Assessment of required knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to follow relevant regulatory or Australian Standards requirements

EVIDENCE GUIDE

Method of assessment

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials and equipment relevant to undertaking work applicable to this unit
 - specifications and work instructions
- Assessment must satisfy the endorsed Assessment Guidelines of the FPI11 Training Package
- Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with application of required knowledge
- Assessment must be by direct observation of tasks, with questioning on required knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the required knowledge
- Assessment may be applied under project-related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency
- The assessment environment should not disadvantage the candidate
- Assessment practices should take into account any relevant language or cultural issues related to Aboriginality, gender or language backgrounds other than English
- Where the participant has a disability, reasonable adjustment may be applied during assessment
- Language and literacy demands of the assessment task should not be higher than those of the work role

Range Statement

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.

OHS requirements: are to be in line with applicable commonwealth, state or territory legislation and regulations, and organisational safety policies and procedures, and may include:

- personal protective equipment and clothing
- safety equipment
- first aid equipment
- fire fighting equipment
- hazard and risk control
- fatigue management
- elimination of hazardous materials and substances
- safe forest practices, including required actions relating to forest fire
- manual handling including shifting, lifting and carrying
- legislation
- organisational policies and procedures
- workplace practices

Environmental requirements may include:

Legislative requirements: are to be in line with applicable commonwealth, state or territory legislation, regulations, certification requirements and codes of practice and may include:

- award and enterprise agreements
- industrial relations
- Australian Standards
- confidentiality and privacy
- OHS
- the environment
- equal opportunity
- anti-discrimination
- relevant industry codes of practice
- duty of care

Organisational requirements

- legal

RANGE STATEMENT

may include:

- organisational and site guidelines
- policies and procedures relating to own role and responsibility
- quality assurance
- procedural manuals
- quality and continuous improvement processes and standards
- OHS, emergency and evacuation procedures
- ethical standards
- recording and reporting requirements
- equipment use, maintenance and storage requirements
- environmental management requirements (waste minimisation and disposal, recycling and re-use guidelines)

Sketches and drawings may:

- be computer-assisted, freehand or completed with simple drawing instruments
- present one, two or three projections
- involve timber, assemblies, structures and hardware items within the individual's field of work and with which the individual is familiar
- be used as a basis for selecting, preparing or assembling components or products

Obtained may be from:

- order documentation
- file systems
- local sources

Checked may include:

- pictorially checking to present all necessary items

Communication may relate to:

- drawing version
- dates
- application of the drawing or sketch
- omissions
- areas of insufficient information

Features may include:

- individual components or items
- base lines
- datum points
- views and projections
- dimensions and tolerances
- instructions and notes
- elementary drawing
- product and production symbols

RANGE STATEMENT

Interpreted

may be for the purposes of determining:

- material requirements
- areas of insufficient detail or omissions
- item, component, assembly and structure

Drawn may include:

- views, placement and projection, correct representation of items
- use of clear lines, dimensions, and tolerances
- notes to fully define requirements

Records and reports may include:

- sketches and drawings
- tally sheets
- quality sheets and forms
- production sheets and downtime sheets

and relate to:

- production details
- computer problems
- interruptions to production

and may be:

- manual
- a computer-based system
- other appropriate organisational communication system

Unit Sector(s)

Not Applicable

Competency field

Competency field

Common Technical