# Knowledge Assessment

**Event: 1 of 2**

## Criteria

### Unit code, name and release number

MEM09002B - Interpret technical drawing (1)

### Qualification/Course code, name and release number

MEM30205 - Certificate III in Engineering - Mechanical Trade (3)

## Student details

### Student number

### Student name

## Assessment Declaration

* This assessment is my original work and no part of it has been copied from any other source except where due acknowledgement is made.
* No part of this assessment has been written for me by any other person except where such collaboration has been authorised by the assessor concerned.
* I understand that plagiarism is the presentation of the work, idea or creation of another person as though it is your own. Plagiarism occurs when the origin of the material used is not appropriately cited. No part of this assessment is plagiarised.

### Student signature and Date

Version: 1.0

Date created: 06/06/2019

Date modified: 16/10/2019

For queries, please contact:

*IMRS SkillsPoint*

*Block B Level 1*

*Hamilton Campus Newcastle*

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RTO Provider Number 90003 | CRICOS Provider Code: 00591E

This assessment can be found in the: [Learning Bank](https://share.tafensw.edu.au/share/access/searching.do?doc=%3Cxml%2F%3E&in=P7ac4831b-430a-4b8d-8b56-f7b32ed5b9cf&q=&type=standard&sort=rank&dr=AFTER)

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## Assessment instructions

Table 1 Assessment instructions

| Assessment details | Instructions |
| --- | --- |
| **Assessment overview** | The objective of this assessment is to assess your knowledge as required to interpret technical drawings |
| **Assessment Event number** | 1 of 2 |
| **Instructions for this assessment** | This is a written assessment and it will be assessing you on your knowledge of the unit.  This assessment is in 5 parts:   1. Multiple choice questions 2. True or False questions 3. Short answer questions 4. Assessment feedback 5. Appendix containing reference drawings (**Remove appendix if required**) |
| **Submission instructions** | On completion of this assessment, you are required to hand it to your assessor for marking.  Ensure you have written your name at the bottom of each page of this assessment. |
| **What do I need to do to achieve a satisfactory result?** | To achieve a satisfactory result for this assessment all questions must be answered correctly. |
| **What do I need to provide?** | Calculator, pens, pencils, eraser |
| **Due date/time allowed** | TBC/ One hour |
| **Assessment feedback, review or appeals** | Appeals are addressed in accordance with [Assessment Guidelines for TAFE NSW](https://staff.tafensw.edu.au/documents/2017/11/assessment-guidelines-v02.pdf/). |

## Part 1: Multiple choice

Read the question and answer each question carefully. Put an X in the table next to your chosen answer.

1. The General Notes shown below indicate typical specifications. What unit of measurement is used for ‘All machine sizes’?

Table 2 multiple choice

|  |  |  |
| --- | --- | --- |
| General Notes | Answer choices | Put X next to your answer |
|  | 1. Micrometres |  |
| 1. Millimetres |  |
| 1. Metres |  |
| 1. Centimetres |  |

1. What does the abbreviation U.N.O mean in the GENERAL NOTES above?

Table 3 multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. Unless Known Otherwise |  |
| 1. Unit Number Otherwise |  |
| 1. Unless Not Otherwise |  |
| 1. Unless Noted Otherwise |  |

***Refer to ‘Drawing 09204-T5-1’ (Appendix 1) and answer the following questions***

1. How many **items** make up the stair assembly?

Table 4 multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. 1 item |  |
| 1. 2 items |  |
| 1. 7 items |  |
| 1. 4 items |  |

1. How many parts (QTY) in total are required for a complete stair assembly?

Table 5 multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. 1 part |  |
| 1. 2 parts |  |
| 1. 16 parts |  |
| 1. 23 parts |  |

1. The total mass of the Hand railing is:

Table 6 multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. 224.465 kg |  |
| 1. 49.758 kg |  |
| 1. 47.958 kg |  |
| 1. 45. 958 kg |  |

***Refer to ‘Drawing 09204-T5-2’ (Appendix 2) and answer the following questions***

1. All structural welds full penetration bevel or butt welds conform to what Australian Standard

Table 7 multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. AS 1657 |  |
| 1. AS 1554-1-SP |  |
| 1. AS 1554-1-GP |  |
| 1. AS 1250 – 8.8/TS |  |

1. What size masonry anchors bolt the stairwell to the concrete wall?

Table 8 multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. M16 |  |
| 1. M18 |  |
| 1. M6 |  |
| 1. M12 |  |

1. How many masonry anchors bolt the stairwell to the concrete wall?

Table 9 multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. 6 |  |
| 1. 16 |  |
| 1. 18 |  |
| 1. 12 |  |

***Refer to ‘Drawing 09204-T5-3’ (Appendix 3) and answer the following questions***

1. What type of material are the stair treads made from?

Table 10 multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. Diamond plate 6 long |  |
| 1. 200 PFC |  |
| 1. 300 PFC |  |
| 1. Diamond plate 6 thick |  |

1. What is the height of the Stair Assembly from ground level to the top platform?

Table 11 multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. 2316 |  |
| 1. 1105 |  |
| 1. 3630.5 |  |
| 1. 2492 |  |

1. What is the Rise of each stair tread?

Table 12 multiple choice

| Answer choices | Put X next to your answer |
| --- | --- |
| 1. 264 |  |
| 1. 178 |  |
| 1. 187 |  |
| 1. 246 |  |

1. From the pictorial drawing shown below left select the correct view names:

Table 13 multiple choice

|  |  |  |
| --- | --- | --- |
| Pictorial (Below) and Multiple Views in Third Angle Projection. | Answer Choices | Put X next to your answer |
|  |  |  |
|  | a) Front View |  |
| b) Top View |  |
| c) Left Side View |  |
| d) Right Side View |  |
|  | a) Front View |  |
| b) Top View |  |
| c) Left Side View |  |
| d) Right Side View |  |
|  | a) Front View |  |
| b) Top View |  |
| c) Left Side View |  |
| d) Right Side View |  |

1. Which document is the reference for Australian drawing standards in engineering?

Table 14 multiple choice

|  |  |
| --- | --- |
| **Answer choices** | **Put X next to your answer** |
| 1. AS1100 |  |
| 1. AS1554 GP |  |
| 1. AS1554 SP |  |
| 1. Engineering Australia Code of Practice (C.O.P) |  |

## Part 2: True or false

Read the question and then write **True** or **False** in the space provided.

Table 1 true or false

| Question | Symbol | Write *True* or *False* |
| --- | --- | --- |
| 1. The symbol shown right represents diameter |  |  |
| 2. The symbol shown right represents 1st Angle Projection |  |  |
| 3. The symbol shown right is a Datum Identification |  |  |
| 4. The symbol shown right indicates a taper |  |  |
| 1. The symbol shown right indicates a Centreline |  |  |
| 1. The symbol shown right indicates a machined surface |  |  |
| 1. The line shown right is a dimension line |  |  |
| 1. The symbol shown right indicates a weld |  |  |

## Part 3: Short answer

Read the question carefully. Your answer should be no longer than 5 (five) words.

***Refer to the ‘Bracket Detail Drawing’ (Appendix 4) and answer the following questions***

1. What are the overall dimensions of the object?
2. Total Length =
3. Total Height =
4. Total Width =
5. How many holes are shown on the drawing?

Total number of holes =

1. What are the diameters of the largest and smallest holes shown?
2. Largest hole diameter =
3. Smallest hole diameter =
4. What are the sloping lines called in SECTION AA?
5. What is the distance from the left hand edge of the bracket to the centreline of the first hole?
6. **Select word or phrases** from the following group and insert them in the correct place on table 1.0 below:

Radius, Not to scale, Inside Diameter, Across Flats, Diameter, Right Hand, Centre Line, Counterbore, Minimum, Left Hand, Drawing, International Standards Organisation, Maximum, Diameter

Table 1.0 short answer

|  |  |
| --- | --- |
| **Abbreviation** | **Meaning** |
| A/F |  |
| CL |  |
| DIA |  |
| DWG |  |
| I.D. |  |
| ISO |  |
| LH |  |
| MAX |  |
| MIN |  |
| N.T.S |  |
| φ |  |
| R |  |
| RH |  |
| CB |  |

## Part 4: Assessment Feedback

### Assessment outcome

Satisfactory

Unsatisfactory

### Assessor Feedback

Was the assessment event successfully completed?

If no, was the resubmission/re-assessment successfully completed?

Was reasonable adjustment in place for this assessment event?

Comments:

### Assessor name, signature and date:

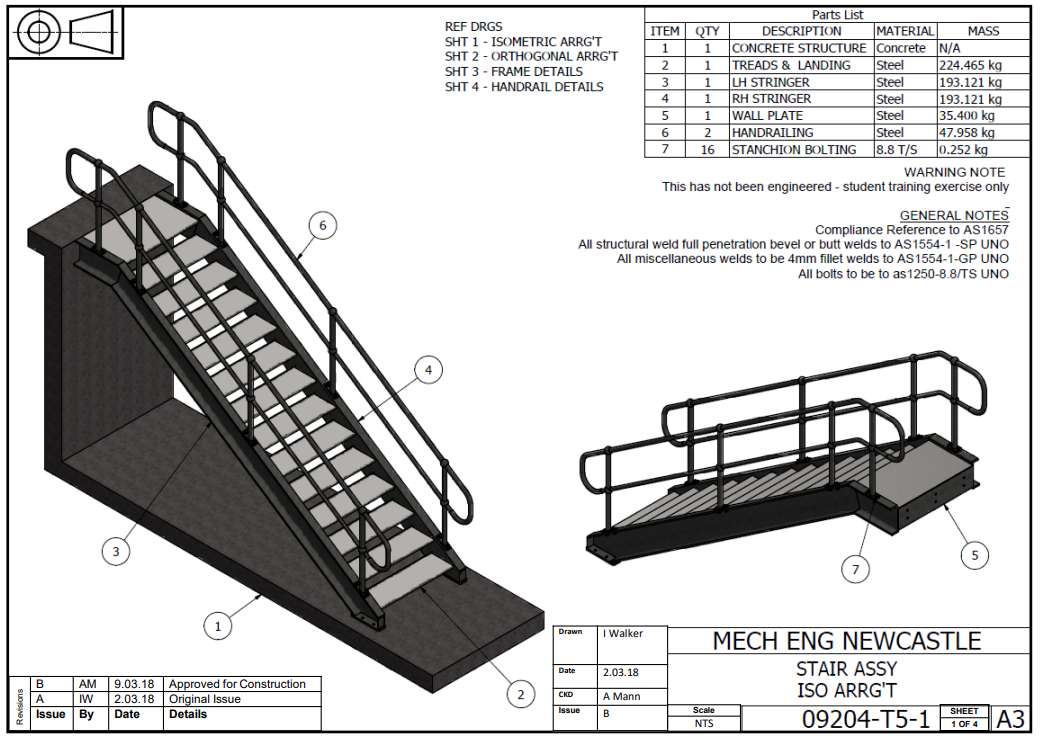
### Student acknowledgement of assessment outcome

Would you like to make any comments about this assessment?

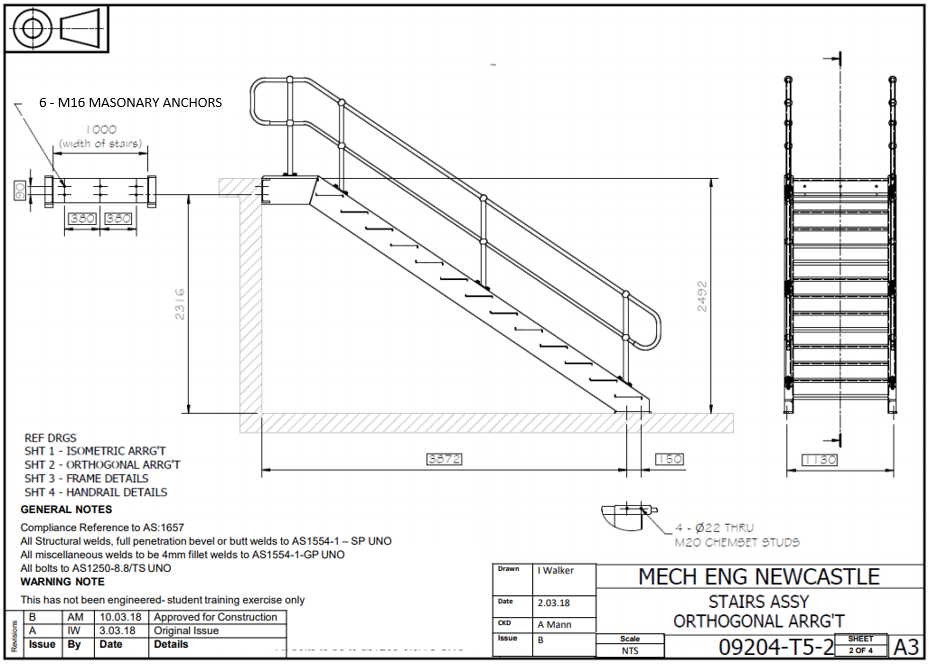
### Student name, signature and date

***NOTE: Make sure you have written your name at the bottom of each page of your submission before attaching the cover sheet and submitting to your assessor for marking.***

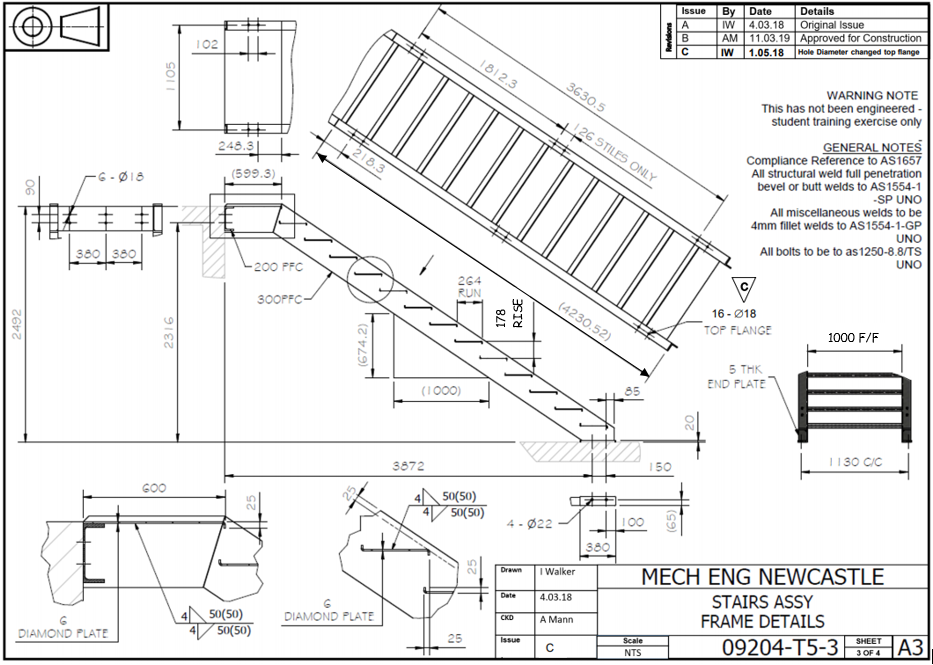
**APPENDIX 1**



**APPENDIX 2**



**APPENDIX 3**



**APPENDIX 4**

