

# QualificationAssessment titleCity & Guilds Level 3 Diploma in Engineering<br/>Construction (2660)Fabricating and installing a pipework assemblyUnits<br/>311 Interpret and mark out pipework<br/>312 Fabrication and joining of pipework<br/>materialsVersion A

Deadline date	Start date
You must hand the completed assessment in by the above date.	

### **Assessment conditions**

Location: Workshop or outside work facility

Security of work: Individual times and candidate numbers to be allocated

**Supervision:** You will be supervised at all times by your assessor.

# **Assessment Composition**

Task	Evidence	Unit coverage (LO & AC references)	Grading ref
1a	Method Statement	311 L.O 1.1,1.4,1.5,1.8,1.9,1.10,2.1-2.4,3.1,3.4,3.5, 3.15, 4.1, 5.1 312 L.O 1.1-1.4,2.1-2.3,3.3-3.5,5.1-5.6,5.9,5.10,6.1-6.3, 7.1,7.8, 8.2,8.4,9.1	N/A
1b	Development of pipework set out	311 LO 2.5,3.3-3.5,3.9,4.1-4.3 312 L.O.1.1,6.1,6.2	N/A
1c	List of Personal Protective Equipment (PPE)	311 L.O 2.4 312 L.O 4.1,4.2,8.8	N/A
1d	Cutting list	311L.O1.3-1.6,1.9,1.10,2.1,2.2,3.15,3.16,4.1,5.1,5.4, 6.1, 6.2, 312 L.O.2.3, 3.7,9.1	N/A
1d	Material list	311 L.O1.3 -1.5,1.9,1.10,2.2,3.15,3.16,4.1,5.1,5.4,6.1, 6.2, 312 L.O 6.6, 6.8	N/A
2a	Fabrication of pipe spool	311 L.O2.4,2.5,3.1-3.6,3.8,3.13,4.1-4.5 312 L.O 2.4, 2.5, 3.1, 3.5, 3.6, 3.8,4.2,4.4,4.5-4.7,5.6, 5.9, 5.10, 6.4, 6.5, 6.6,7.8,8.2,8.4,8.10,8.11,9.2	N/A
2b	Risk assessment	311 L.O 1.8, 2.1, 2.4 312 L.O 1.1, 2.4, 4.1-4.4, 7.8, 7.9, 8.2, 8.8	N/A
2c	Drawing	312 L.O 2.3	N/A
2d	Dimension check sheet	311 L.O 2.6, 3.5,4.3,5.1 312 L.O 5.10,9.1- 9.3	N/A
2e	Assessment evidence recording form	311 L.O 1.2,1.7,3.6,3.7,3.14, 5.5,6.3,7.1-7.6,7.8-7.11 312 L.O 1.7, 1.8, 3.2, 5.7,5.8,6.7,6.13,7.2,7.5,7.6,8.1, 8.3, 8.5-8.7, 8.9, 9.4	N/A
3a	Underpinning Knowledge	311 L.O 1.1,1.4 -1.6,1.9,1.10,2.1,2.2,3.10,3.11,3.12,	N/A

# **Assessment tasks**



Questions	5.1-5.4, 6.1, 7.7	
	312 L.O 1.1, 1.2, 1.3, 1.6, 2.1, 2.2, 3.4, 3.6, 3.8, 4.3,	
	4.4, 5.1-5.4, 5.6, 5.10, 6.1, 6.2, 6.6, 6.8,6.9-6.12, 7.1,	
	7.3, 7.4, 7.7, 7.8, 9.5	

#### **Health and Safety**

You must always work safely, in particular while you are carrying out practical tasks.

You must always follow any Health and Safety regulations and codes of practice relevant to your work.

If your assessor observes you working in a way that is unsafe for yourself or others, they will ask you to stop immediately, and tell you why.

Your assessor will not be able to reassess you until they are sure you are ready for assessment and can work safely.

## **Plagiarism**

It is your qualification, so it must be your own work.

Your assessor must be able to identify which work you have done yourself, and what you have found from other sources, it is therefore important to make sure you acknowledge all of your sources.

You assessor can show you how to do this for the assessment you are doing.

#### Notes to candidates:

- This assessment has been written to make sure you have the opportunity to show that you have met the learning outcomes of the unit.
- You will be marked against the assessment criteria of the unit and the grading criteria for the qualification. You should read these carefully before you start so you know what you need to do.
- You should make sure that you do your best in the assessment so that the evidence you hand in shows your best performance for this unit.
- You may ask your assessor for help in understanding the tasks, but all of the work you hand in must be your own work.
- If you have a good reason for needing more time, you will need to explain the reasons to your assessor and agree a new deadline date. Changes to dates will be at the discretion of the assessor, and the centre may not mark work that is handed in after the agreed deadlines.

#### Scenario/context

You have been asked to produce a Pipework Assembly. This assignment has been designed for you to demonstrate the knowledge, understanding and skills required to carry out a basic sequence of operations using a range of hand tools and machines which simulates a pipework fabrication environment.

Variations from this brief will need to be discussed and approved by your tutor before you commence work, in writing and supported by detailed amended drawings.

#### Task 1:

- 1. Read the drawings you have been provided with (see example).
- 2. Produce a method statement (this will help you achieve the target time).
- 3. Produce a set out development
- 4. Produce a list of the Personal Protective Equipment (PPE)
- 5. Produce a cutting list including the types of materials you will be using.

#### Evidence to be handed in:

- Method Statement 1a
- Development 1b
- List of Personal Protective Equipment (PPE)1c



Cutting/material list 1d

Your assessor will mark and give you feedback on task 1 before you proceed to task 2

#### Task 2:

Produce the Pipework Assembly following the given drawing to match your method statement and cutting list prepared in task 1.

You must ensure that you maintain your work area throughout the tasks.

You will need to:

- 1. Prepare a risk assessment
- 2. Mark out as per your method statement.
- 3. Cut and prep joints required using the tools supplied and methods stated.
- 4. Carry out assembly of the spool using selected tools and tacking methods.
- 5. Carry out checking of the assembly.

## Evidence to be handed in:

- Pipe Spool 2a
- Risk assessment 2b
- Drawing 2c
- Dimension check sheet 2d
- Assessment evidence recording form 2e

## **Task 3: Underpinning Knowledge Assessment**

You will need to:

1. Complete a written underpinning knowledge question sheet

Question 1 - 7 in Section 1 relate to Unit 311

Questions 8 – 16 in Section 2 relate to Unit 312

# Evidence to be handed in:

Knowledge Answer Paper 3a

#### Now make sure you have:

- filled in the front sheet correctly for all of your written work including the declaration of authenticity
- labelled any loose sheets or products carefully with your name and the qualification and assessment titles, and date.