## 6219 Entry Level and Level 1 Awards, Certificates and Diplomas in Construction Skills



Candidate task manual – Plastering, Plumbing and Electrical

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Candidate task manual – Plastering, Plumbing and Electrical

Version and date	Change detail	Section
V1.2 October 2014	Knowledge tasks removed to insert in separate 'End of unit knowledge questions' document.	Knowledge tasks
	Removal of erroneous references to permission for candidates to have marking criteria with them during practical tasks.	Practical tasks
V1.3 November 2014	Assignment 130 Task A: Fig 1 amended.	Practical tasks
	Assignments 010; 128; 129; 130; 132: tolerances changed.	Practical tasks
	Task completion record for assignments 101 and 102 added.	Unit assessment overview
V1.4 January 2015	Assignment 127 Task A checklist minor typing error	Practical tasks
V1.5 October 2015	Minor update on guidance for assignment 127	Practical tasks
V1.6 November 2015	Assignment 011 Task B marking criteria included	Practical tasks

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### **Candidate details**



This *Candidate task manual* is a record of your achievement in practical assessments. You must keep it in good condition and it must be stored in a safe place by your Assessor.

Please fill in all of your details before you carry out any assessments.

Candidate Details	
Surname	Forename(s)
City & Guilds enrolment number	
Centre Details	
Name	Centre No
I understand the requirements of the qualification and must be my own.	that all the work towards the assessments
Candidate signature (please print)	
Assessor name (please print)	Signed
	Date

### 1 Unit assessment overview

### 1.1 Task completion record



### To be completed by Assessor:

Assignment 101 Introduction to health and safety in construction

Task		Grade for task
A1	Why health and safety is important	P/X
A2	The role of the Health and Safety Executive	P/X
A3	Health and safety regulations	P/X
A4	Responsibility for health and safety	P/X
A5	Common causes of accidents in the construction industry - hazards	P/X
A6	Common causes of accidents in the construction industry - risks	P/X
A7	Risk assessment	P/X
A8	Health and safety sign categories	P/X
A9	Identify safety signs	P/X
A10	Identify COSSH signs	P/X
A11	Types of personal protective equipment (PPE)	P/X
A12	Purpose of personal protective equipment	P/X

All tasks must be passed for the unit to be achieved. Grading should be taken from the assessor guidance document. The overall grade should be calculated using the Marking Criteria in the Assessor Guide and transferred here.

Assessor signature and date:		
	Overall grade	P/M/D/X

**Assignment 102 Introduction to the construction industry** 

Task		Grade for task
A1	Types of construction	P/X
A2	Sustainable construction	P/X
A3	Identify design features	P/X
A4	Energy saving materials used in the construction industry	P/X
A5	Construction industry activities	P/X
A6	Job opportunities in the construction industry	P/X

All tasks must be passed for the unit to be achieved. Grading should be taken from the assessor guidance document. The overall grade should be calculated using the Marking Criteria in the Assessor Guide and transferred here.

Assessor signature and date:		
	Overall grade	P/M/D/X

### **Assignment 008** Preparing background surfaces and applying render coats

Task	C	Grade for task
Α	Prepare a surface and apply a render coat	P/X
В	Knowledge Task	P/X
All ta	asks must be passed for the unit to be achieved.	

All tasks must be passed for the unit to be achie	veu.
Assessor signature and date:	The overall grade will b

Assessor signature and date:	The overall grade will be pass/fail	
	Overall grade	

**Assignment 125** Preparing background surfaces and applying finishing coats

Task			Grade for task
A Prepare	a background surface and apply finishing co	pats	P/M/D/X
All tasks must be	All tasks must be passed for the unit to be achieved.		
Assessor signatu		grade will be the same as raded task in this unit.	
		Overall grade	

### **Assignment 126** Mixing materials and applying floating coats

Task			Grade for task
Α	Mix materials and apply a floating coat		P/M/D/X
В	Knowledge Task		P/X
All tas	ks must be passed for the unit to be achie	eved.	
Asses	sor signature and date:	The overall grade will be the same as the single graded task in this unit.	
		Overall grade	

### Assignment 127 Producing components from moulds

Assignment 127 Froducing components from modius		
Task		Grade for task
A Produce a cast from a mould		P/M/D/X
All tasks must be passed for the unit to	be achieved.	•
Assessor signature and date:	The overall grade will be the same as the single graded task in this unit.	
	Overall grade	

### Unit 011 Connecting flex to common apparatus

Task	Grade for task
A Practical task	P/X
B Practical task	P/X
C Knowledge task	P/X

### All tasks must be passed for the unit to be achieved.

Assessor signature and date:	The overall grade will be pass/fail.	
	Overall grade	

### Unit 133 Assembling 13amp switched sockets wired in ring final circuit

Task	Grade for task
A Practical task	P/ M / D/ X
B Knowledge task	P/X

### All tasks must be passed for the unit to be achieved.

Assessor signature and date:	The overall grade will be the same as the single graded task in this unit.	
	Overall grade	

### **Unit 134 Constructing PVC Wiring Systems**

Task	Grade for task
A Practical task	P/ M / D/ X
B Knowledge task	P/X

### All tasks must be passed for the unit to be achieved.

Assessor signature and date:	The overall grade will be the same as the single graded task in this unit.	
	Overall grade	

### Unit 135 Cutting bending joining and threading conduit

Task	Grade for task
A Practical task	P/ M / D/ X
B Knowledge task	P/ X

Assessor signature and date:	The overall grade will be the same as the single graded task in this unit.	
	Overall grade	

Unit 136 Installing one way lighting circuit

, .

### Unit 137 Installing two way lighting circuit

Task	Grade for task
A Practical task	P/X
B Knowledge task	P/X

#### All tasks must be passed for the unit to be achieved.

, in case of mass see passes for the arms to see a context on		
Assessor signature and date:	The overall grade will be pass/fail.	
	Overall grade	

### Unit 009 Removing and refitting a water-filled radiators

Task	Grade for task
A Practical task	P/X
B Knowledge task	P/X

#### All tasks must be passed for the unit to be achieved.

Assessor signature and date:	The overall grade will be pass/fail.	
	Overall grade	

### Unit 010 Working with non-manipulative fittings

Task	Grade for task
A Practical task	P/X
B Knowledge task	P/X

, in table 11 de passed for the different construction				
Assessor signature and date:	The overall grade will be pass/fail.			
	Overall grade			

### Unit 128 Bending and Jointing copper pipe

	 	•	• •		
Task					Grade for task
A Practical task					P/M/D/X
B Knowledge task					P/X

### All tasks must be passed for the unit to be achieved.

Assessor signature and date:	The overall grade will be the same as the single graded task in this unit.	
	Overall grade	

### Unit 129 Connecting Pipes and Fittings to Appliances

Task	Grade for task
A Practical task	P/ M / D/ X
B Knowledge task	P/X

### All tasks must be passed for the unit to be achieved.

Assessor signature and date:	The overall grade will be the same as the single graded task in this unit.	
	Overall grade	

### Unit 130 Constructing combined frames

Task	Grade for task
A Practical task	P/ M / D/ X
B Knowledge task	P/X

### All tasks must be passed for the unit to be achieved.

Assessor signature and date:	The overall grade will be the same as the single graded task in this unit.	
	Overall grade	

### Unit 131 Installing rain water goods

Task	Grade for task
A Practical task	P/X
B Knowledge task	P/X

Assessor signature and date:	The overall grade will be pass/fail.		
	Overall grade		

### Unit 132 Working with low carbon steel pipe and fittings

Task	Grade for task
A Practical task	P/M/D/X
B Knowledge task	P/X

Assessor signature and date:	The overall grade will be the same as the single graded task in this unit.	
	Overall grade	

### 2 Practical tasks

## Preparing background surfaces and applying render coats



Task A

Prepare a surface and apply a render coat

To complete this task you must prepare a background surface to receive a render scratch coat and apply the render to the specification in the diagram provided.

You may have a copy of the diagram during the practical assessment. Your assessor will support you with this.

Your assessor will advise how long you have to complete this task.

This task may be achieved at pass only.

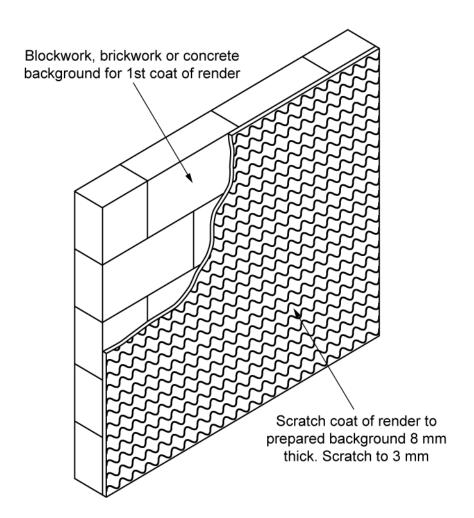
### Assignment 008 Preparing background surfaces and applying render coats



Task A

Prepare a surface and apply a render coat

Fig 1 Specification – Area to be 1m²



## applying

### Assignment 008 Preparing background surfaces and render coats



Task A Marking criteria

Candidate name			<u> </u>
Assessor name			_
Centre name			
To pass the assignment, candidates are required to complete each indicated below.	th task to the r	minimum star	ndard
The candidate has:	Pass	Merit	Distinction
identified and used appropriate Personal Protective Equipment (PPE)			
identified and selected the appropriate materials required			
identified and selected the appropriate tools and equipment required			
set up and maintained a clean and safe working area following health and safety guidelines			
correctly prepared the background surface			
mixed the materials to a workable consistency (including pre- mix)			
applied the render to the correct depth of 8mm +/- 3			
applied the scratch key without penetrating to the background surface to a depth of 3mm			
cleared work area of surplus materials and debris on completion of the job			
Assignment passed? Yes/No			
Assessor signature			
Date			

## Preparing background surfaces and applying finishing coats



Task A

Prepare a background surface and apply finishing coats

To complete this task you must prepare a background surface and apply finishing coats to the specification in the diagram provided.

Your assessor will advise how much time you have to complete this task.

You may have a copy of the diagram during the practical assessment. Your assessor will support you with this.

Your assessor will also ask you **one** oral question which must be answered correctly to pass this Assignment.

This task may be achieved at pass, merit or distinction.

## Assignment 125 applying

Task A

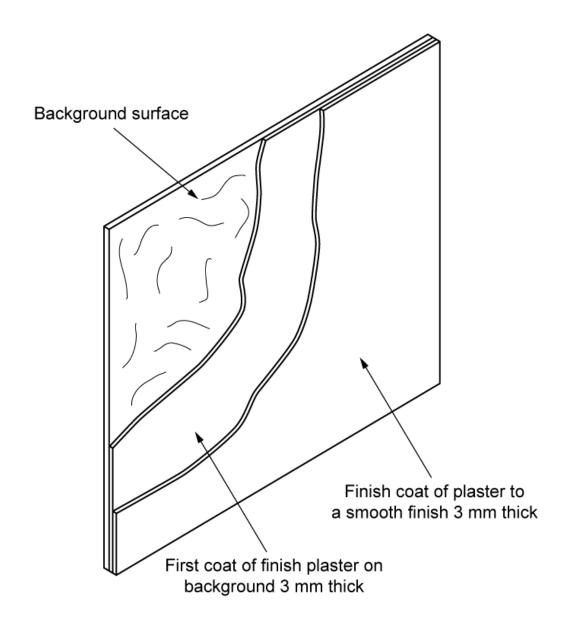
## Preparing background surfaces and finishing coats



Prepare a background surface and apply finishing coats

Fig 1

Specification – Area to be 1m<sup>2</sup>



## Assignment 125 applying

## Preparing background surfaces and finishing coats



Task A Marking criteria

Candidate name			
Assessor name			
Centre name			
To pass the assignment, the candidate is required to compindicated below. All criteria for each grade must be achiev			num standard
The candidate has	Pass	Merit	Distinction
identified and used correct Personal Protective Equipment (PPE) at all times			
identified and selected tools and equipment required			
identified and selected materials required			
set up and maintained a safe working area throughout the task			
prepared the background surface appropriately to receive the finish plaster coats			
mixed the materials to a workable consistancy			
applied the first finishing coat to 3mm even depth			
applied a second finishing coat to 3mm even depth			
completed with a maximum of:	5 defects	3 defects	2 defects
cleared work area of all surplus materials and debris on completion			
cleaned all tools and equipment for re-use			
correctly answered the question			
Assignment passed? Final grade: Pass/Merit/Di	istinction		
Assessor signature  Date			

## Assignment 126 coats

## Mixing materials and applying floating



Task A

Mix materials and apply a floating coat

#### **Candidate Guidance**

To complete this task you must mix materials and apply a floating coat to the specification in the diagram provided.

You may have a copy of the diagram during the practical assessment. Your assessor will support you with this.

Your assessor will advise you how long you have to complete this task.

This task can be achieved at pass, merit or distinction.

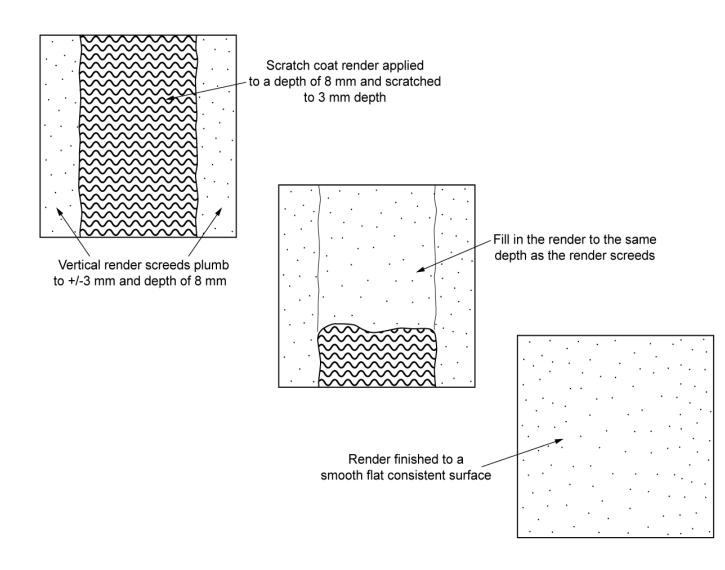
## Assignment 126 Mixing materials and applying floating coats



Task A Mix materials and apply a floating coat

Fig 1

Specification – Area to be 1m²



## Mixing materials and applying floating coats



Task A Marking criteria

Candidate name			
Assessor name			
Centre name			
To pass the assignment, candidates are required to ndicated below. All criteria for each grade must be			
The candidate has:	Pass	Merit	Distinction
identified and used the appropriate Personal Protective Equipment (PPE).			
identified and selected the materials required			
identified and selected the tools and equipment required			
set up and maintained a clean and safe working area following health and safety guidelines			
mixed the materials, either sand and lime (or cement) or pre-mix to a workable consistency			
formed screeds to a minimum of 8mm depth			
plumbed to +/- 3mm			
formed a floating coat ruling off with a feather edge using the screed to form a flat surface			
floated the surface to a smooth finish			
completed with a maximum of	3 defects	2 defects	1 defect
cleared work area of surplus materials and debris on completion of the job			
cleaned all tools and equipment ready for re-use			
Assignment passed? Final grade: Pass/l	Merit/Distinct	ion	
Date			

### **Assignment 127** Producing components from moulds





To complete this task you must mix materials, including reinforcement, where necessary and produce **two** casts from moulds to the specification in the diagram provided.

You should choose the best **one** of these two casts to prepare for assessment.

Your assessor will advise you how long you are allowed to complete this task.

Your assessor will also ask you **one** oral question which must be answered correctly to pass this Assignment.

This task can be achieved at pass, merit or distinction.

## Producing components from moulds



Task A Produce a component from a mould

### Examples of moulds











## **Producing components from moulds**



Task A

Marking criteria

Candidate name			
Assessor name			
Centre name			
To pass the assignment, the candidate is required to coindicated below. All criteria for each grade must be ach			nimum standard
The candidate has:	Pass	Merit	Distinction
identified and used correct Personal Protective Equipment (PPE)			
identified and selected the correct tools and equipment			
identified and selected the correct materials			
set up and maintained a safe working area throughout the task according to health and safety guidelines.			
mixed the materials to a workable consistancy			
added reinforcement materials if necessary			
prepared the mould correctly for casting. i.e. cleaned and supported			
filled the moulds to ensure no air pockets			
produced two casts from moulds to a given specification			
levelled the base			
released the casts			
chosen and tidied one cast to rectify imperfections for marking			
completed with a maximum of	2 defects	1 defect	no defects
cleared work area of all surplus materials and debris on completion of the job.			
cleaned all tools and equipment ready for re-use			
Assignment passed? Final Grade:- Pass/Mer	it/Distinction		
Assessor signature			
Date			

### **Assignment 011 Connecting flex to common apparatus**

Task A Practical task



### Candidate guidance

To complete this task you must connect flex to a ceiling rose and lamp holder with a prescribed distance between the two accessories as shown in the diagram labelled Fig.1 below. You will need to set up your work area, work in a safe manner at all times and should leave your work area and tools clean and tidy. You will also be asked to complete a tools and equipment and a materials checklist. These will be given to you by your assessor to be completed before starting the practical task.

#### You must:

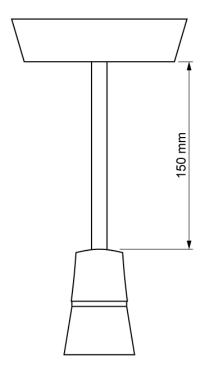
- Identify and wear correct PPE for this task
- Identify and select the tools and equipment for this task
- Identify and select materials to complete the task
- Connect flex to the ceiling rose and lamp holder
- Be able to setup and maintain a clean and safe working environment

Your target time is **1 hour** to complete this task

This task can be achieved at Pass only and the tolerance is +/-10mm

You will also be asked three underpinning knowledge questions. Question one must be answered correctly and you must achieve 4 out of 6 marks from questions two and three to achieve a pass.

Fig 1.



### **Assignment 011 Connecting flex to common apparatus**

Task B Practical task



### Candidate guidance

To complete this task you must connect flex to a plug top as shown in the diagram labelled Fig.2 below. You will need to set up your work area, work in a safe manner at all times and should leave your work area and tools clean and tidy. You will also be asked to complete a tools and equipment and a materials checklist. These will be given to you by your assessor to be completed before starting the practical task.

#### You must:

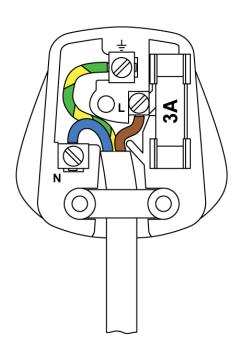
- Identify and wear correct PPE for this task
- Identify and select the tools and equipment for this task
- Identify and select materials to complete the task
- Connect flex to the plug top
- Be able to setup and maintain a clean and safe working environment

Your target time is **1 hour** to complete this task.

This task can be achieved at Pass only.

You will also be asked three underpinning knowledge questions. Question one must be answered correctly and you must achieve 4 out of 6 marks from questions two and three to achieve a pass.

Fig 2.



# Assignment 011 Connecting flex to common apparatus Task A Marking criteria City& Guilds



Candidate name			·
Assessor name			
Centre name			
o pass the assignment, candidates are required to condicated below.	omplete each t	ask to the m	inimum standard
The candidate has:	Pass	Merit	Distinction
Used appropriate Personal Protective Equipment (PPE)			
Identified and selected materials required			
Identified and selected tools and equipment required			
Ensured the lamp holder and ceiling rose covers tight			
Ensured there are no unsheathed conductors visible			
Used cord grip correctly and cord is secure			
Ensured no stray conductor strands visible			
Made core insulation to within 2mm of the terminals			
Made terminals tight			
Ensured conductors are secure, doubled and undamaged			
Distance between ceiling rose and lamp holder 150mm	+/- 10mm		
Assignment passed? Yes / No			
Assessor signature			
Date			



## **Assignment 011 Connecting flex to common apparatus**

Task B Marking criteria

Candidate name			
Assessor name			
Centre name			
To pass the assignment, candidates are required to condicated below.	omplete each	n task to the m	inimum standard
The candidate has:	Pass	Merit	Distinction
Used appropriate Personal Protective Equipment (PPE)			
Identified and selected tools and equipment required			
Identified and selected materials required			
Removed the outer layer of cable to expose the required length of wires completed, without damage to the insulation of the three wires			
Removed the insulation to expose the required length of bare wire			
Securely fix the bare wires to the appropriate terminals			
Ensured no bare strands of wire are visible			
Used the cable grip correctly and the cable is secure			
Replaced the plug cover			
Assignment passed? Yes / No Assessor signature			
Date			



## Assignment 133 Assembling 13amp switched sockets wired in ring final circuit

Task A Practical task

#### Candidate guidance

To complete this task you must assemble a surface ring final circuit with 13 amp switched socket outlets on a wooden surface to the specification in the diagram labelled Fig.1 provided. You will need to set up your work area, work in a safe manner at all times and should leave your work area and tools clean and tidy. You will also be asked to complete a tools and equipment and a materials checklist. These will be given to you by your assessor to be completed before starting the practical task.

#### You must:

- Identify and wear correct PPE for this task
- Identify and select the tools and equipment for this task
- Identify and select materials to complete the task
- Assemble 13amp switched sockets wired in ring final circuit
- Inspect completed work
- Use meter to test continuity of circuit
- Be able to setup and maintain a clean and safe working environment

Your target time is **3 hours** to complete this task.

This task can be achieved at Pass, Merit or Distinction.

Pass +/-15mm

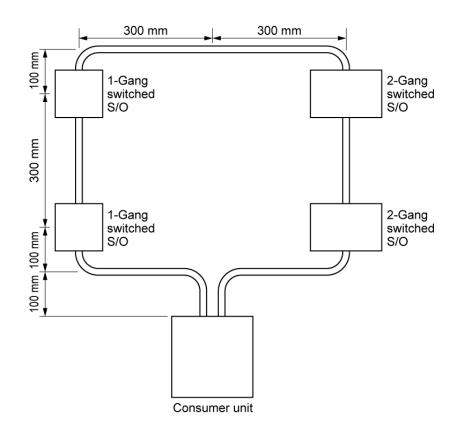
Merit +/-10mm

Distinction +/-5mm

You will also be asked four underpinning knowledge questions. Question one must be answered correctly and you must achieve 6 out of 8 marks from questions two, three and four to achieve a pass.

Task A

Fig 1.



Please note - All terminations should be to industry standard.

# Assembling 13amp switched sockets wired in ring final circuit Guilds

Task A

Candidate name					
Assessor name					
Centre name					
To pass the assignme ndicated below. All c					num standard
The candidate ha	s:		Pass	Merit	Distinction
Used appropriate P	Personal Protectiv	e Equipment (PPE)			
Identified and selec	cted materials req	uired			
Identified and selec	cted tools and equ	ipment required			
Assembled 13amp switched sockets wired in ring final circuit to specification and to tolerances		+/- 15mm	 +/- 10mm	 +/- 5mm	
Used a meter to test continuity of circuits					
Demonstrated safe	setup of the work	< area			
Maintained a clean health and safety g		area following			
Cleared work area completion of the j		ıls and debris on			
Cleaned all tools ar	nd equipment read	dy for re-use			
Assignment passed? Yes / No Final grade Pass/Merit/Distinction					
Assessor signature	e				
Date					

### **Assignment 134** Constructing PVC wiring systems

Task A Practical task

### Candidate guidance

To complete this task you will fabricate and mount PVC trunking and conduit to wood surface as shown in the diagram labelled fig 1 below. You will need to set up your work area, work in a safe manner at all times and should leave your work area and tools clean and tidy. You will also be asked to complete a tools and equipment and a materials checklist. These will be given to you by your assessor to be completed before starting the practical task.

#### You must:

- Identify and wear correct PPE for this task
- Identify and select the tools and equipment for this task
- Identify and select materials to complete the task
- Fabricate and mount PVC trunking and conduit to wood surface
- Be able to setup and maintain a clean and safe working environment

Your target time is **3 hours** to complete this task.

This task can be achieved at Pass, Merit or Distinction.

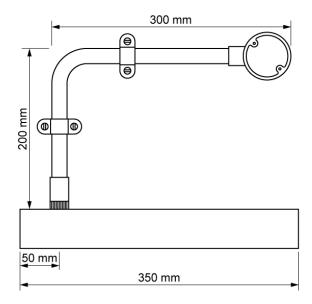
Pass +/-15mm

Merit +/-10mm

Distinction +/-5mm

You will also be asked four underpinning knowledge questions. Question one must be answered correctly and you must achieve 6 out of 8 marks from questions two, three and four to achieve a pass.

Fig 1.



Task A

## **Constructing PVC wiring systems**Marking criteria



Candidate name				
Assessor name				
Centre name				
To pass the assignment, candidates are ndicated below. All criteria for each gra				imum standard
The candidate has:		Pass	Merit	Distinction
Used appropriate Personal Protective (PPE)	Equipment			
Identified and selected materials requi	ired			
Identified and selected tools and equipolatic	oment			
Fabricated PVC trunking correctly				
Assembled and mounted PVC trunking	g correctly			
Fabricated PVC conduit correctly				
Assembled and mounted PVC conduit	correctly			
Constructed PVC wiring system to tole	erances	+/- 15mm	+/- 10mm	+/- 5mm
			<u> </u>	

Assignment passed?	Yes / No	Final grade Pass/Merit/Distinction
Assessor signature		
Date		

## **Cutting bending joining and threading** conduit



Task A Practical task

### Candidate guidance

To complete this task you will fabricate a 90° bend and running coupler and terminate to a pre-fixed stop end box fixed to a wood surface as shown in the diagram labelled fig 1 below. You will need to set up your work area, work in a safe manner at all times and should leave your work area and tools clean and tidy. You will also be asked to complete a tools and equipment and a materials checklist. These will be given to you by your assessor to be completed before starting the practical task.

#### You must:

- Identify and wear correct PPE for this task
- Identify and select the tools and equipment for this task
- Identify and select materials to complete the task
- Fabricate a 90° bend and running coupler, including manufacturing a nipple.
- Terminate to a pre-fixed stop end box fixed to a wood surface
- Be able to setup and maintain a clean and safe working environment

Your target time is **2 hours** to complete this task.

This task can be achieved at Pass, Merit or Distinction.

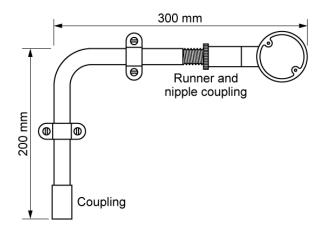
Pass +/-15mm

Merit +/-10mm

Distinction +/-5mm

You will also be asked three underpinning knowledge questions. Question one must be answered correctly and you must achieve 5 out of 7 marks from questions two and three to achieve a pass.

Fig 1.



## Cutting bending joining and threading conduit

Guilds

Task A

Marking criteria

Candidate name				
Assessor name				
Centre name				
	andidates are required to con ia for each grade must be ach			
The candidate has:		Pass	Merit	Distinction
Used appropriate Personal Protective Equipment (PPE)				
identified and selected materials required				
Identified and selected to	ools and equipment required			
Fabricated steel conduit	correctly			
Assembled and mounted	steel conduit correctly			
Fabricated a 90° bend an manufacture nipple and t end box fixed on a wood	terminate to a pre fixed stop	+/- 15mm	+/- 10mm	+/- 5mm
Assignment passed?	Yes / No	Final grade	Pass/Merit/l	Distinction
Assessor signature				
Date				

Task A

## Installing one way lighting circuit



## Practical task

### Candidate guidance

To complete this task you must install a one-way lighting circuit using twin and CPC, PVC insulated cable, clipped direct, controlling one light as shown in the diagram labelled fig.1. All accessories should be surface mounted. The light will be a pendant type.

The dimensions will be set by your examiner and will be explained to you before starting the assessment.

You will need to set up your work area, work in a safe manner at all times and should leave your work area and tools clean and tidy. You will also be asked to complete a tools and equipment and a materials checklist. These will be given to you by your assessor to be completed before starting the practical task.

#### You must:

- Identify and wear correct PPE for this task
- Identify and select the tools and equipment for this task
- Identify and select materials to complete the task
- install a one-way lighting circuit using twin and CPC, PVC insulated cable, clipped direct, controlling one light as shown on the diagram labelled Fig.1 provided
- Be able to setup and maintain a clean and safe working environment
- Safely inspect and test the completed circuit for continuity and insulation resistance using the form provided.

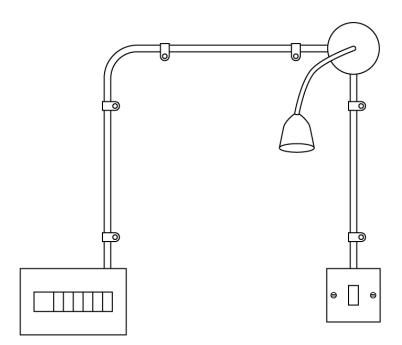
Your target time is **4 hours** to complete this task.

This task can be achieved at Pass only.

You will also be asked four underpinning knowledge questions. Question one must be answered correctly and you must achieve 8 out of 10 marks from questions two, three and four to achieve a pass.



Fig 1.



### **Electrical installation Test Sheet for Task A**

Test one.  Continuity of protective co	onductor	Ohms
Test two		
Insulation resistance	L-N	MOhms
	L-E	MOhms
	N-E	MOhms
Test three		
Polarity		Tick
Details of ohm meter/insu	ulation resistance te	ester
Make and model:		
Serial Number:		
Candidate Signature:		
Date:		

# Installing one way lighting circuit



Task A Marking criteria

Candidate name			
Assessor name			
Centre name			
To pass the assignment, candidates are required to coindicated below.	omplete ead	ch task to the n	ninimum standard
The candidate has:	Pass	Merit	Distinction
Used appropriate Personal Protective Equipment (PPE)			
identified and selected materials required			
Identified and selected tools and equipment required			
Fitted accessories and cables correctly			
Connected accessories correctly			
Satisfactorily completed testing			
On completion left the work area in a safe and clean condition			
Satisfactorily completed the exercise to industry standard			
Assignment passed? Yes / No Assessor signature			
Date			

### Task A

# Installing two way lighting circuit



Install a two way lighting circuit

To complete this task you must install a two-way lighting circuit using twin and CPC, PVC insulated cable, three core and CPC, PVC insulated cable, clipped direct, controlling one light as shown in the diagram labelled fig.1. All accessories should be surface mounted. The light will be a pendant type.

The dimensions will be set by your examiner and will be explained to you before starting the assessment.

You will need to set up your work area, work in a safe manner at all times and should leave your work area and tools clean and tidy. You will also be asked to complete a tools and equipment and a materials checklist. These will be given to you by your assessor to be completed before starting the practical task.

#### You must:

- Identify and wear correct PPE for this task
- Identify and select the tools and equipment for this task
- Identify and select materials to complete the task
- Install a two-way lighting circuit using twin and CPC, PVC insulated cable, three core and CPC, PVC insulated cable, clipped direct, controlling one light as shown on the diagram labelled Fig.1 provided
- Be able to setup and maintain a clean and safe working environment
- Safely inspect and test the completed circuit for continuity and insulation resistance using the form provided.

Your target time is **4 hours** to complete this task.

This task can be achieved at Pass only.

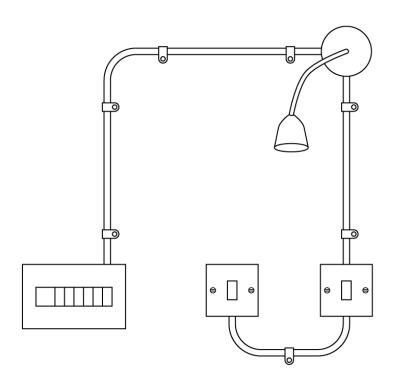
You will also be asked four underpinning knowledge questions. Question one must be answered correctly and you must achieve 8 out of 10 marks from questions two, three and four to achieve a pass.

Task A

# **Installing two way lighting circuit** Install a two way lighting circuit



Figure 1



### **Electrical installation Test Sheet for Task A**

Test one.		
Continuity of protective co	nductor	Ohms
<u>Test two</u>		
Insulation resistance	L-N	MOhms
	L-E	MOhms
	N-E	MOhms
<u>Test three</u>		
Polarity		Tick
Details of ohm meter/insu	ılation resistance t	ester
Make and model:		
Serial Number:		
Candidate Signature:		
Date:		

# Installing two way lighting circuit

Task A

Marking criteria

City&
Guilds

Candidate name			
Assessor name			
Centre name			
To pass the assignment, candidates are required to con indicated below.	nplete eac	h task to the r	ninimum standard
The candidate has:	Pass	Merit	Distinction
Used appropriate Personal Protective Equipment (PPE)			
Identified and selected materials required			
Identified and selected tools and equipment required			
Fitted accessories and cables correctly			
Connected accessories correctly			
Satisfactorily completed testing			
On completion left the work area in a safe and clean condition			
Satisfactorily completed the exercise to industry standard			
Assignment passed? Yes / No			
Assessor signature			
Date			

# Removing and refitting water-filled radiators

Task A

Practical task



### Candidate guidance

To complete this task you must successfully decommission a radiator by isolating it, draining it down and then removing it.

You then will be asked by your assessor to refit the radiator and refill it, all this work should be done as if you are working in somebody's home. You will need to set up your work area, work in a safe manner at all times and should leave your work area and tools clean and tidy. You will also be asked to complete a tools and equipment and a materials checklist. These will be given to you by your assessor to be completed before starting the practical task.

#### You must;

- Identify and wear the correct PPE for this task
- Identify and select the tools and equipment for the task
- Identify and select all the materials to complete the task
- Isolate the radiator, drain it down and then remove it
- Re-fit the radiator and refill.
- Be able to setup and maintain a clean and safe working environment

The installation should be water tight and all air removed from the radiator

Your target time is **3 hours** to complete this task,

This task can only achieve a Pass

You will also be asked three underpinning knowledge questions. Question one must be answered correctly and you must achieve 3 out of 4 marks from questions two and three to achieve a pass.

# Removing and refitting water-filled radiators

Task A

Marking criteria



Candidate name			
Assessor name			
Centre name			
To pass the assignment, candidates are required to coindicated below.	omplete ead	ch task to the n	ninimum standard
The candidate has:	Pass	Merit	Distinction
Used appropriate personal protective equipment (PPE)			
Identified and selected tools /equipment required			
Identified materials needed to correctly do the task			
Successfully isolated and drained down the radiator			
Successfully re-fitted and refilled the radiator ensuring it is free from air			
Demonstrated safe setup of the work area			
Maintained` a clean and safe working area and has followed health and safety guidelines			
Cleared work area of surplus materials			
Returned all tools and equipment			
Assignment passed? Yes / No			
Assessor signature			
Date			

## Assignment 010 Working with non-manipulative fittings

Task A Practical task



#### **Candidate guidance**

To complete this task you must construct a copper framework using non-manipulative fittings to the specification in the diagrams provided in Fig.1 You will need to set up your work area, work in a safe manner at all times and should leave your work area and tools clean and tidy. You will also be asked to complete a tools and equipment and a materials checklist. These will be given to you by your assessor to be completed before starting the practical task.

#### You must:

- Identify and wear the correct PPE for this task
- Identify and select the tools and equipment for the task
- Identify and select all fittings and materials to complete the task
- Prepare and Join copper pipe using the correct methods
- Be able to setup and maintain a clean and safe working environment

The framework should be water tight and pressure tested to 3 Bar and within the given tolerances

Your target time is **2 hours** to complete this task.

This task can only achieve at Pass and the tolerance is +/-8mm

You will also be asked three underpinning knowledge questions. Question one must be answered correctly and you must achieve 5 out of 7 marks from questions two and three to achieve a pass.

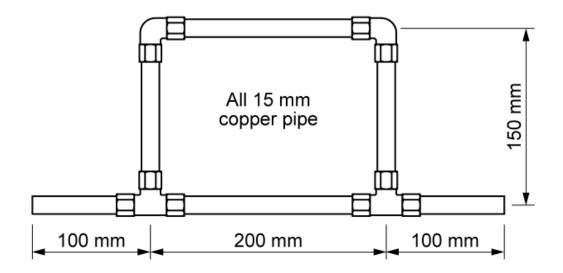
# Assignment 010 Working with non-manipulative fittings

Task A

Construct a copper framwork using non-manipulative fittings



Fig1



# Assignment 010 Working with non-manipulative fittings Task A Marking criteria City& Guilds



Candidate name			
Assessor name			
Centre name			
To pass the assignment, candidates are required to c indicated below.	omplete each	n task to the r	ninimum standard
The candidate has:	Pass	Merit	Distinction
Used appropriate personal protective equipment (PPE)			
Identified and selected tools /equipment required			
Identified and selected fittings/materials correctly			
Built Framework to tolerances	+/-8mm		
Pressure tested framework to 3 bar without it leaking			
Demonstrated safe setup of the work area			
Maintained` a clean and safe working area and has followed health and safety guidelines			
Cleared work area of surplus materials			
Assignment passed? Yes / No			
Assessor signature  Date			

## Bending and jointing copper pipe

Task A

Practical task



### Candidate guidance

To complete this task you must construct a copper framework to the specification in the diagrams provided in Fig.1 You will need to set up your work area, work in a safe manner at all times and should leave your work area and tools clean and tidy. You will also be asked to complete a tools and equipment and a materials checklist. These will be given to you by your assessor to be completed before starting the practical task.

#### You must:

- Identify and wear the correct PPE for this task
- Identify and select the tools and equipment for the task
- Identify and select all fittings and materials to complete the task
- Bend copper pipe to the given angle
- Join copper pipe using the correct methods
- Be able to setup and maintain a clean and safe working environment

The framework should be water tight and pressure tested to 3 Bar and within the given tolerances

Your target time is **3 hours** to complete this task.

This task can be achieved at Pass, Merit or Distinction to tolerances Pass +/-8mm

Merit +/-6mm

Distinction +/-3mm

You will also be asked four underpinning knowledge questions. Question one must be answered correctly and you must achieve 5 out of 7 marks from questions two, three and four to achieve a pass.

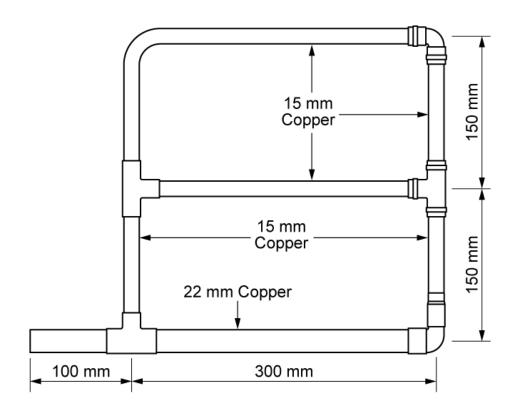
Task A

# Bending and jointing copper pipe

Construct a copper framework



Fig1.



# Bending and jointing copper pipe



Task A

Marking criteria

Candidate name			
Assessor name			
Centre name			
To pass the assignment, candidates are required to a indicated below. All criteria for each grade must be	complete eac achieved to c	h task to the n laim that grad	ninimum standard e.
The candidate has:	Pass	Merit	Distinction
Identified and Used appropriate personal protective equipment (PPE)			
Identified and selected tools /equipment required			
Identified and selected fittings/materials correctly			
Produced the bend to correct angle without visible defects			
Cut and joined pipework without defects			
Built Framework to tolerances	+/-8mm	-/-6mm	+/-3mm
Pressure tested framework to 3 bar without it leaking			
Demonstrated safe setup of the work area			
Maintained` a clean and safe working area and has followed health and safety guidelines			
Cleared work area of surplus materials			
Returned all tools and equipment			
Assignment passed? Yes / No Final	Grade Passi	/Merit/Distinct	ion
Assessor signature			
Date			

# Connecting pipes and fittings to appliances



Task A Practical task

### Candidate guidance

To complete this task you must install and connect the hot and cold water pipework and the waste system to either a kitchen sink or a basin to the specification in the diagrams provided in Fig.1. The hot and cold pipework installation must be completed in copper pipe. You will need to set up your work area, work in a safe manner at all times and should leave your work area and tools clean and tidy. You will also be asked to complete a tools and equipment and a materials checklist. These will be given to you by your assessor to be completed before starting the practical task.

### You must;

- Identify and wear the correct PPE for this task
- Identify and select the tools and equipment for the task
- Identify and select all fittings and materials to complete the task
- Install hot and cold water pipework to an existing appliance
- Install the waste trap and waste pipework
- Be able to setup and maintain a clean and safe working environment

The installation should be water tight and within the given tolerances

Your target time is 6 hours to complete this task

This task can be achieved at Pass, Merit or Distinction.

Pass +/-8mm

Merit +/-6mm

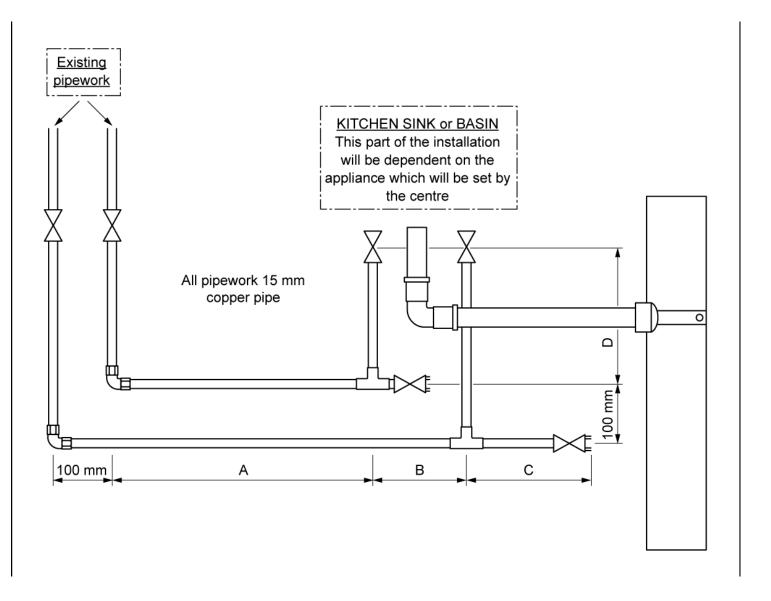
Distinction +/-3mm

You will also be asked four underpinning knowledge questions. Question one must be answered correctly and you must achieve 4 out of 6 marks from questions two, three and four to achieve a pass.

# Assignment 129 Connecting pipes and fittings to appliances

Task A Installation of pipework to an appliance and associated fittings

Fig1



# Connecting pipes and fittings to appliances

Task A

Marking criteria



Candidate name			
Assessor name			
Centre name			
To pass the assignment, candidates are required to cindicated below. All criteria for each grade must be			nimum standard
The candidate has:	Pass	Merit	Distinction
Used appropriate personal protective equipment (PPE)			
Identified and selected tools /equipment required			
Identified and selected fittings/materials correctly			
Installed all pipework to industry standard and within tolerances	-/-8mm	+/-6mm	+/-3mm
Ensured pipework is watertight			
Demonstrated safe setup of the work area			
Maintained` a clean and safe working area and has followed health and safety guidelines			
Cleared work area of surplus materials			
Returned all tools and equipment			
Assignment passed? Yes / No Final Assessor signature	<b>Grade</b> Pass/l	Merit/Distinction	ו
Date			

## **Constructing combined frames**

Task A

Practical task



#### Candidate guidance

To complete this task you must construct a combined framework to the specification in the diagrams provided in Fig.1 You will need to set up your work area, work in a safe manner at all times and should leave your work area and tools clean and tidy. You will also be asked to complete a tools and equipment and a materials checklist. These will be given to you by your assessor to be completed before starting the practical task.

#### You must;

- Identify and wear the correct PPE for this task
- Identify and select the tools and equipment for the task
- Identify and select all fittings and materials to complete the task
- Bend pipe to the given angle
- Join pipe using the correct methods
- Be able to setup and maintain a clean and safe working environment

The framework should be water tight and pressure tested to 3 Bar and within the given tolerances

Your target time is **8 hours** to complete this task.

This task can be achieved at Pass, Merit or Distinction.

Pass +/-8mm

Merit +/-6mm

Distinction +/-3mm

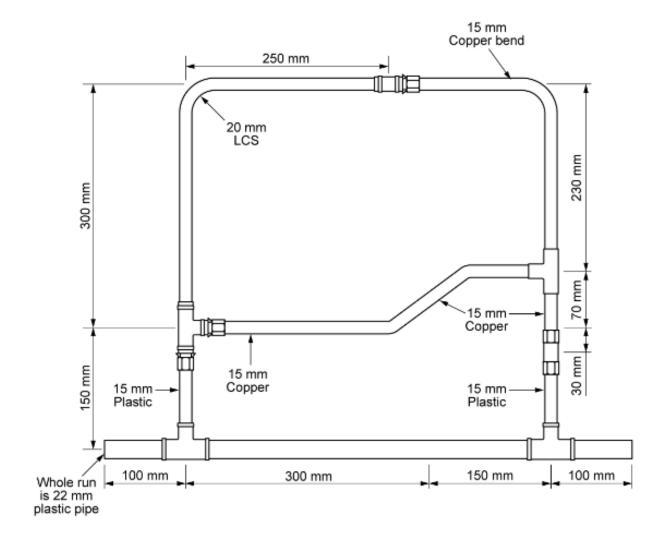
You will also be asked three underpinning knowledge questions. Question one must be answered correctly and you must achieve 3 out of 4 marks from questions two and three to achieve a pass.

Task A

# **Constructing combined frames**Construct a combined framwork



Fig1.



Task A

# **Constructing combined frames**



Marking criteria

Candidate name			
Assessor name			
Centre name			
To pass the assignment, candidates are required to c indicated below. All criteria for each grade must be a			
The candidate has:	Pass	Merit	Distinction
Used appropriate personal protective equipment (PPE)			
Identified and selected tools /equipment required			
Identified and selected fittings/materials correctly			
Built Framework to tolerances	+/-8mm	+/-6mm	+/-3mm
Pressure tested framework to 3 bar without it leaking			
Demonstrated safe setup of the work area			
Maintained` a clean and safe working area and has followed health and safety guidelines			
Cleared work area of surplus materials			
Returned all tools and equipment			
Assignment passed? Yes / No Final Assessor signature		Merit/Distinctic	on
Date			

## Assignment 131 Installing rain water goods

Task A

Practical task



#### Candidate guidance

To complete this task you must install a rain water guttering system to the specification in the diagrams provided in Fig.1 You will need to set up your work area, work in a safe manner at all times and should leave your work area and tools clean and tidy. You will also be asked to complete a tools and equipment and a materials checklist. These will be given to you by your assessor to be completed before starting the practical task.

### You must:

- Identify and wear the correct PPE for this task
- Identify and select the tools and equipment for the task
- Identify and select all fittings and materials to complete the task
- Install guttering to correct gradient
- Join and install rain water guttering using the correct methods
- Be able to setup and maintain a clean and safe working environment

The installation should be water tight and a performance test should be completed to ensure that it works correctly

Your target time is **3 hours** to complete this task,

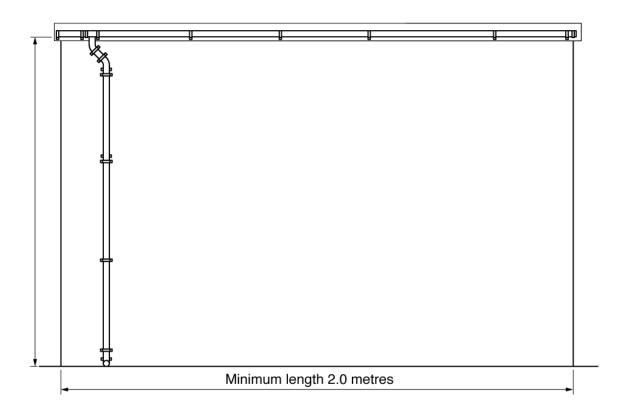
This task can be achieved at Pass only to tolerances +/-10mm

You will also be asked three underpinning knowledge questions. Question one must be answered correctly and you must achieve 2 out of 3 marks from questions two and three to achieve a pass.

Task A

# **Installing rain water goods**Install rain water guttering system





# Assignment 131 Installing rain water goods

Task A Marking criteria



Candidate name			
Assessor name			
Centre name			
To pass the assignment, the candidate is required to cindicated below.	omplete each	task to the m	ninimum standard
The candidate has:	Pass	Merit	Distinction
Used appropriate personal protective equipment (PPE)			
Identified and selected tools /equipment required			
Identified and selected fittings/materials correctly			
Installed the guttering to correct length	+/-10mm		
Completed a performance test on the guttering			
Demonstrated safe setup of the work area			
Maintained` a clean and safe working area and has followed health and safety guidelines			
Cleared work area of surplus materials			
Returned all tools and equipment			
Assignment passed? Yes / No Assessor signature			
Date			

# Assignment 132 Working with low carbon steel pipe and fittings



Task A Practical task

### Candidate guidance

To complete this task you must construct a low carbon steel pipe framework to the specification in the diagram provided in Fig.1 You will need to set up your work area, work in a safe manner at all times and should leave your work area and tools clean and tidy. You will also be asked to complete a tools and equipment and a materials checklist. These will be given to you by your assessor to be completed before starting the practical task.

#### You must;

- Identify and wear the correct PPE for this task
- Identify and select the tools and equipment for the task
- Identify and select all fittings and materials to complete the task
- Join, cut and thread pipe using the correct methods
- Be able to setup and maintain a clean and safe working environment

The framework should be water tight and pressure tested to 3 Bar and within the given tolerances

Your target time is 6 hours to complete this task,

This task can be achieved at Pass, Merit or Distinction.

Pass +/-8mm

Merit +/-6mm

Distinction +/-3mm

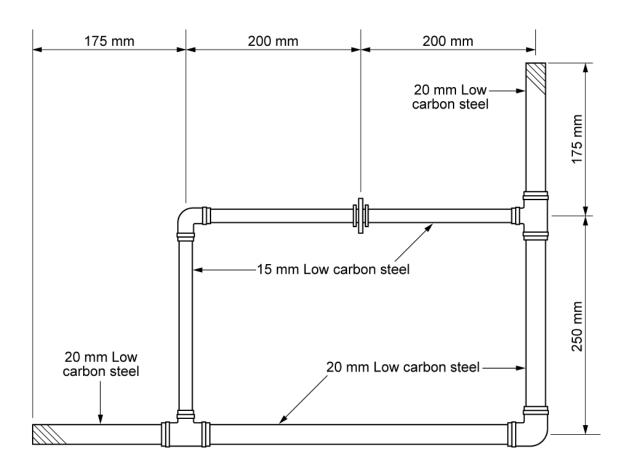
You will also be asked three underpinning knowledge questions. Question one must be answered correctly and you must achieve 4 out of 6 marks from questions two, three and four to achieve a pass.

# Working with low carbon steel pipe and fittings fittings



Task A

Construct a low carbon steel pipe framework



# Assignment 132 Working with low carbon steel pipe and fittings

k	City&
	Guilds

Task A Marking criteria

Candidate name			
Assessor name			
Centre name			
To pass the assignment, candidates are required to coindicated below. All criteria for each grade must be a			nimum standard
The candidate has:	Pass	Merit	Distinction
Used appropriate personal protective equipment (PPE)			
Identified and selected tools /equipment required			
Identified and selected fittings/materials correctly			
Built Framework to tolerances	+/-8mm	+/-6mm	+/-3mm
Pressure tested framework to 3 bar without it leaking			
Demonstrated safe setup of the work area			
Maintained` a clean and safe working area and has followed health and safety guidelines			
Cleared work area of surplus materials			
Returned all tools and equipment			
Assignment passed? Yes / No Final (		erit/Distinctior	1
Date			

## Unit feedback and forward planning form



Feedback and action planning form

Unit and task number			
Candidate name			
Task reference	Unit feedback		
Task reference	Action plan	Target date	Achievement date

## **Useful contacts**

UK candidates General qualification information	T: +44 (0)844 543 0033 E: candidatesupport@cityandguilds.com
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	E: intcg@cityandguilds.com
Centres	T: +44 (0)844 543 0000
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Certificates, Invoices, Missing or late exam materials, Nominal roll reports, Results	E: centresupport@cityandguilds.com
Single subject qualifications	T: +44 (0)844 543 0000
Exam entries, Results, Certification, Missing or	F: +44 (0)20 7294 2413
late exam materials, Incorrect exam papers,	F: +44 (0)20 7294 2404 (BB forms)
Forms request (BB, results entry), Exam date and time change	E: singlesubjects@cityandguilds.com
International awards	T: +44 (0)844 543 0000
Results, Entries, Enrolments, Invoices, Missing or late exam materials, Nominal roll reports	F: +44 (0)20 7294 2413
	E: intops@cityandguilds.com
Walled Garden	T: +44 (0)844 543 0000
Re-issue of password or username, Technical	F: +44 (0)20 7294 2413
problems, Entries, Results, e-assessment, Navigation, User/menu option, Problems	E: walledgarden@cityandguilds.com
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