PORTFOLIO 5 INTRODUCTION TO GAS FITTING

STUDENT SUBMISSION

Student Name: Add your name here Student ID: Add number here

Stream: Add Year and Semester

Submit this document by the due date to Moodle when you have completed it.

Introduction to Gas Fitting

**Introduction**

This course provides foundation knowledge and skills of; Installing flues and ventilation, consumer gas pipework, gas appliances and their applications and adding capabilities in work-readiness.

**Learning Outcomes:**

By the end of this course the student will be able to:

1. Demonstrate knowledge of hazards and precautions for working with gas in plumbing, and gas fitting, including combustion principles
2. Identify and assist with installing appropriate gas pipework and components
3. Identify and assist with installing a flue system.
4. Describe basic gas appliance controls and their operation

**Learning Outcome 1:**

Demonstrate knowledge of hazards and precautions for working with gas in plumbing, and gas fitting, including combustion principles

This outcome is assessed by:

1. List 3 hazards when working with gas
2. Identify and describe 5 precautions that you need to take with gas and why this is the case?
3. What are the basic principles of combustion when working with gas?

**Learning Outcome 4:**

Describe basic gas appliance controls and their operation

This outcome is assessed by:

1. Identify 2 gas appliances that you worked with?
2. What are the basic controls of these appliances and how and what do the controls do? (You can include pictures if you like)

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| --- | --- |
| Outcome 2: Identify and assist with installing appropriate gas pipework and components | |
| Tools Required:   * Add to this list | Fittings and Fixtures Required:   * Add to this list |
| PROCEDURE | |
| Step:   1. What needs to be prepared for this job 2. Add to your procedural list here | |
| LEGISLATION | |
| 1. Reference any legislation that relates to this job or the environment the appliance / fitting is located in. 2. Add to list here 3. Add to list here | |
|  | |
|  | |
|  | |
| CALCULATIONS | |
| Add an image of any calculations you did here or write them in.  This must include gradient / fall calculations. | |
| **List Regulations and standards that relate to this job:**  **1.**  **2.**  **3.** | |

**HEALTH AND SAFETY RISK ASSESSMENT**

Complete the following form for this job as a hard copy and get your Tutor to sign it. Add a quality photo or photocopy of your completed form in the space below.

HEALTH AND SAFETY RISK ASSESSMENT FORM

**ACTIVITY: Roof and Wall pipe penetrations**

|  |  |  |  |
| --- | --- | --- | --- |
| **IDENTIFY RISKS: Highlight / tick those that apply** | | | |
| Tick the potential risks(s) for this activity: | | | |
| * Slips, trips and falls | * Heavy items that could fall | * Sharp objects or tools | * Electrical equipment (incl. power tools) |
| * Gas equipment | * Machinery (moving parts) | * Machinery (sparks) | * Hand tools |
| * Toxic fumes and dust | * Poisonous chemicals | * Flammable substances | * Excessive noise |
| * Ladders (heights) | * Temperature | * Fatigue | * Flames |
| List any other risks:  Add text here | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **RISK CONTROL METHOD:** | | | |
| Write what you will do to eliminate or minimise each risk: | | | |
| **RISK:** | **WHAT MIGHT HAPPEN:** | **HOW YOU WILL ELIMINATE:** | **HOW YOU WILL MINIMISE:** |
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| --- | --- | --- | --- |
| **PERSONAL PROTECTIVE EQUIPMENT (PPE):** | | | |
| Tick the personal protective equipment (PPE) needed to complete this activity: | | | |
| * Footwear | * Overalls | * Safety glasses | * Safety gloves |
| * Welding mask | * Earmuffs / earplugs | * Hard hat | * Hi-vis vest |
| List any other personal protective equipment (PPE) required:  Add text here | | | |

Add text here

Write or draw about what you plan to do to complete this activity.

**PLANNING:**

|  |  |  |  |
| --- | --- | --- | --- |
| **TUTOR SIGNATURE:** |  | **DATE:** |  |

Photographic Evidence appropriate gas pipe ware and components.

|  |  |
| --- | --- |
| Step 1 | Step 2 |
| In a paragraph explain what is happening in this picture. | In a paragraph explain what is happening in this picture. |
| Step 3 | Step 4 |
| In a paragraph explain what is happening in this picture. | In a paragraph explain what is happening in this picture. |
| Step 5 | Step 6 |
| In a paragraph explain what is happening in this picture. | In a paragraph explain what is happening in this picture. |

|  |  |
| --- | --- |
| Outcome 3: Identify and assist with installing a flue system | |
| Tools Required:   * Add to this list | Fittings and Fixtures Required:   * Add to this list * Identify and assist with installing a flue system. |
| PROCEDURE | |
| Step:   1. What needs to be prepared for this job 2. Add to your procedural list here | |
| LEGISLATION | |
| 1. Reference any legislation that relates to this job or the environment the appliance / fitting is located in. 2. Add to list here 3. Add to list here | |
|  | |
|  | |
|  | |
| CALCULATIONS | |
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| * Gas equipment | * Machinery (moving parts) | * Machinery (sparks) | * Hand tools |
| * Toxic fumes and dust | * Poisonous chemicals | * Flammable substances | * Excessive noise |
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| --- | --- | --- | --- |
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Add text here

Write or draw about what you plan to do to complete this activity.

**PLANNING:**

|  |  |  |  |
| --- | --- | --- | --- |
| **TUTOR SIGNATURE:** |  | **DATE:** |  |

Photographic Evidence of installing a flue system

|  |  |
| --- | --- |
| Step 1 | Step 2 |
| In a paragraph explain what is happening in this picture. | In a paragraph explain what is happening in this picture. |
| Step 3 | Step 4 |
| In a paragraph explain what is happening in this picture. | In a paragraph explain what is happening in this picture. |
| Step 5 | Step 6 |
| In a paragraph explain what is happening in this picture. | In a paragraph explain what is happening in this picture. |