Unit 113: Plumbing, heating and ventilation

# Worksheet 8: Hot water part 2 (tutor)

Complete the tasks in this worksheet as directed by your tutor:

1. Label the connections on the cylinder:

|  |  |
| --- | --- |
| **Label** | **Connection** |
| A | Hot water draw off |
| B | Immersion heater connection |
| C | Primary flow |
| D | Primary return |
| E | Cold feed connection |

Type of cylinder: Double feed indirect hot water cylinder



1. Complete the table indicating True or False to the statements relating to open vented indirect hot water systems:

|  |  |
| --- | --- |
| **Statement** | **True or False?** |
| Open vented double feed hot water systems are fed straight from the cold water main | False |
| The correct storage temperature for hot water is between 45–55⁰C | False |
| The water contained within the cylinder that feeds outlets is called secondary water | True |
| The water contained within the coil within the cylinder is called primary water | True |
| Heat is mostly transferred by radiation within an indirect hot water cylinder | False |

1. Use the space below to list advantages of the indirect system over the direct system of hot water:

Can be used with fully pumped heating systems and condensing boilers

ADVANTAGES

DISADVANTAGES

Expensive to install

Wide range of capacities available

Will require a second cistern and associated pipework or expansion vessel and

filling loop

Fully compliant with Document L of the Building Regulations

1. Identify the components shown below and describe their function within a hot water system:

**A**: **B**:

A picture containing camera

Description automatically generated

A close up of a sign

Description automatically generated

OPEN

**A:** Cylinder thermostat – controls the temperature of the stored hot water by activating or de-activating the heat source.

**B:** Two port motorised valve – Used to stop the flow of water by automatically opening and closing. The head is fitted with a motor which drives the valve open. Typically used within heating circuits and primary hot water circuits.