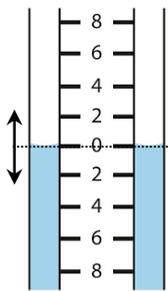


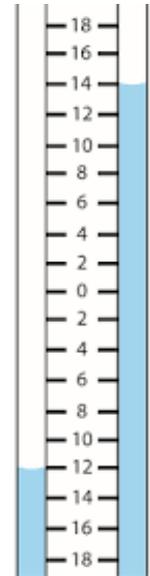
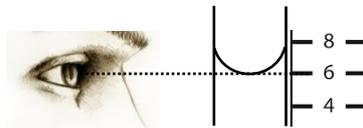
PREPARATION FOR PRACTICAL ASSESSMENT

Using a manometer (standard u-gauge)



Make sure the gauge is half-filled with water so that the zero on the movable scale can be moved above and below the water level (with the gauge open to air on both sides). Always zero the gauge before use.

Hold the gauge upright with the water level at eye level, reading from the bottom of the meniscus (water curve):



Always read both sides of the gauge. If the two readings are not equal, adjust the scale up or down, or average the two readings. In the diagram on the right, the u-gauge reads $(12 + 14) \div 2 = 13$ mbar. Try to achieve an accuracy of 0.25 mbar when reading a u-gauge.

Pressure test points

Before opening any pressure test point, ensure the gas is isolated at an upstream valve.

After closing any pressure test point, test it at operating pressure with leak detection fluid (LDF) or a gas detector. Remember that to test burner pressure test points the burner has to be running. Be careful not to leave LDF inside any test point.

Visual inspections

When inspecting a meter installation, pipework installation, appliance, or flue, ensure the inspection is **thorough**. Look **behind** and **around** the object in question. Imagine you are inspecting a **real** installation. Use your hands to feel around places inaccessible to visual inspection. Note down **all** the faults you find.

For **pipework inspections** check all pipework up to appliance connections for:

- Open ended pipes or valves
- Unsuitable materials (e.g. lead pipe downstream of meter)
- Pipes or fittings not designed for gas (e.g. water isolation valves)

- Proximity to electrical equipment
- Damage or corrosion (e.g. flux corrosion, condensate corrosion, etc.)
- Incorrect supports or clips
- Main earth bonding
- Correct sleeving and sealing through walls
- Accessibility of compression fittings
- Incorrect corrosion protection (e.g. unprotected pipe in a chimney or buried)
- Incorrect cooker hose type or connection method

For **flue inspections** inspect the **entire length** of the flue including the **connection** to the appliance and the terminal. For flue pipe systems look around the complete circumference of the flue. Wear safety goggles when checking chimneys internally. Check or identify:

- Integrity breaches, cracking, damage or corrosion
- Proximity to combustible materials
- Flue route (e.g. bend angles and positions)
- Suitability of the terminal / chimney pot
- Terminal / chimney pot position
- (Chimneys) catchment space is free of debris and is of the correct volume
- (Chimneys) dampers or blockage

For **appliance inspections** check or identify:

- Signs of spillage of products of combustion (sooting)
- Signs of “distress” including heat damage or corrosion
- Condition of any case seals
- Stability
- Level
- Cleanliness of all burners
- Ignition
- Flame picture (all burners where possible)
- Stiff or loose gas taps
- Correct operation of safety controls
- Provision of combustion air or cooling air:
 - Measure the free area of any air vents
 - Identify incorrect vents, e.g. closable vents, fly-screens etc.
- Clearances from surfaces/combustibles