



HSE Pack

GUIDANCE ON RESPIRATORY PROTECTIVE EQUIPMENT (RPE) FIT TESTING

The Regulations

The Health and Safety at Work etc Act 1974 and COSHH Regulations 2002



Respiratory Protective Equipment (RPE) legislation requires employers to prevent or adequately control worker exposure to hazardous airborne substances. Under the Health and Safety at Work at Work etc Act 1974 and the COSHH Regulations 2002, RPE is considered a last line of defence when exposure cannot be prevented by other reasonably practicable means.

Before using RPE, exposure should be controlled by other measures (such as local exhaust ventilation), which are reasonably practicable. In other words, RPE should only be used as a last choice of protection when working with hazardous substances such as gases, solvents, powered chemicals, mists and sprays or entering a confined space

Ensure the RPE is adequate and suitable to ensure the wearer is protected. This means:

Adequate – It is right for the hazard and reduces exposure to the level required to protect the wearer's health.

Suitable – It is right for the wearer, task and environment, such that the wearer can work freely and without additional risks due to the RPE.

Types of RPE

The two main types of RPE are respirators and breathing apparatus.

Respirators (filtering devices)	Breathing Apparatus (BA)
Removes contaminants from the surrounding air using filters	Supplies clean breathing air from an independent source, such as an air cylinder or compressor.
Can be: • Non-powered (wearer breathes through the filter) • Powered (fan-assisted airflow through the filter)	

Facepiece styles (available for certain respirators and BA):

- **Tight-fitting (often referred to as masks):** Relies on negative pressure making a good seal with the wearer's face - **requires a face fit test.**
- **Loose-fitting** – uses positive pressure and does not rely on a facial seal. Examples include; hoods, helmets, visors, blouses and suits.



Selection of RPE – What should I choose?



When selecting RPE, consider:

- COSHH assessment recommendations.
- The hazardous substance and level of exposure.
- Whether the contaminant is a gas, vapour, mist, fume or dust.
- The task being carried out and how exposure may occur.
- Compatibility with other PPE.
- The correct filter type and protection level.



Using RPE Effectively

How do I make sure it works?

Ensure:

- The chosen RPE fits, is suitable for the task and the wearer.
- It has the correct filtration properties for the task
- You conduct face fit tests for each wearer, for each piece of tight-fitting RPE they use.
- The RPE works with other protective equipment the user wears.
- The wearers are trained on how to maintain and use of it.
- You maintain each device as per the manufacturers' instructions, with the correct materials provided.
- The RPE is stored properly.

RPE used must be "**CE**" marked to confirm that they have been designed and tested to meet at least the minimum requirements laid out in law.

CE marking on RPE **does not make it automatically suitable for a task.**



Face Fit Testing

A face fit test confirms that a **tight-fitting RPE facepiece forms an effective seal against the wearer's face**. As people have different face shapes and sizes, one type or size of RPE will not suit everyone.

- Face fit testing must be carried out by a competent person with the appropriate knowledge, instruction and training.
- The tester should explain the purpose of the test, the process being followed and the results.
- Before a qualitative fit test, wearers should not eat, drink (except still water), smoke or chew gum for at least 30 minutes before testing.
- Before an ambient particle counting test, wearers should not smoke (including e-cigarettes) for at least 60 minutes before testing.



Re-testing requirements

A repeat face fit test may be required if:

- A different make, model or size of RPE is issued.
- Significant facial changes occur.
- Significant weight loss or gain affects facial shape and the seal of the mask.



Factors Affecting Face Seal (The Wearer)



Facial Hair

Many tight-fitting masks rely on a good seal against the face. Any gap between the mask and skin can allow contaminated air to bypass the filter and enter the breathing zone.

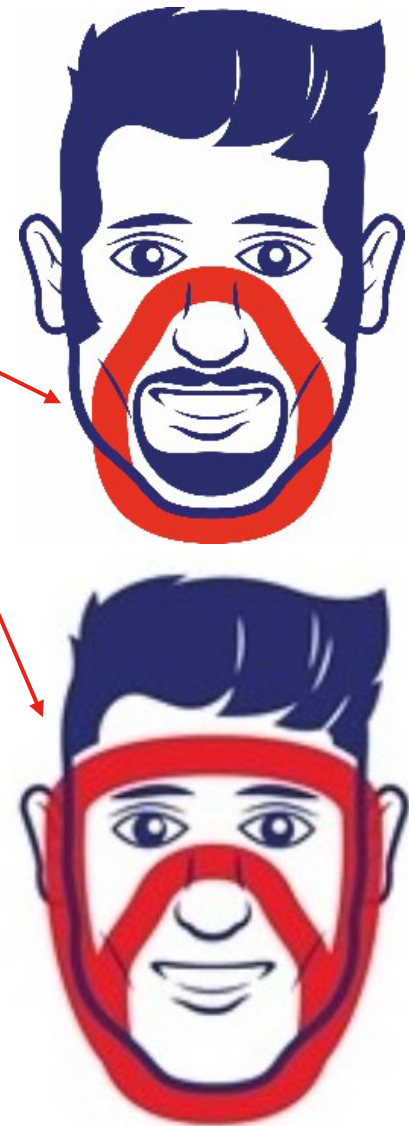
- Stubble and beards prevent an effective seal.
- Wearers of tight-fitting RPE must be **clean shaven where the facepiece seals against the skin.**
- A poor face seal can increase exposure to hazardous substances and occupational illnesses.

PBS and client requirements state that personnel required to wear tight-fitting RPE must be clean shaven during face fit testing and whenever the RPE is worn.

Other Personal Factors

- Significant weight loss or gain.
- Facial surgery or injury.
- Changes to facial structure.

These factors may affect the fit of RPE and require re-testing.



Factors Affecting Face Seal (The Equipment) **PBS**

PPE Compatibility

Safety helmets, eye protection, prescription glasses and hearing protection can interfere with the fit of a mask and break the seal.



Incorrect Donning

Straps must be positioned and adjusted correctly. Poorly fitted straps can affect the seal and level of protection.



Physical Damage

Damage to the face seal, filter material or mask body can allow unfiltered air to enter the breathing zone.

Worn or Perished Straps

Frayed, stretched or damaged straps may not hold the mask firmly against the face.

Contamination

Always ensure the face seal and internal surfaces of the RPE are clean before use.



Maintaining RPE



RPE must be maintained, examined and tested by trained personnel.

Routine-use RPE: test at least monthly

**Occasional-use RPE: test before use -
never exceed 3 months**



Follow Instructions Always follow manufacturer's guidance.



Competent Person Maintenance must be carried out by trained personnel.



Keep Records Inspection and maintenance records must be maintained.



Schedule Checks Conduct examinations at the required intervals.



Dispose Correctly Single-use RPE must be disposed of responsibly.

Maintaining RPE



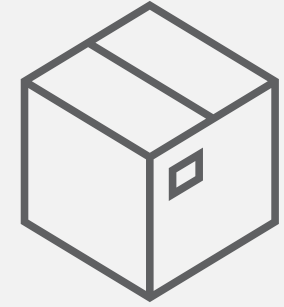
DISPOSAL



Dispose Correctly

- Contaminated RPE may be hazardous waste.
- Used filters should be treated as hazardous waste.
- Follow site procedures when changing and disposing of filters.

STORAGE



Store Correctly

- Follow manufacturer's storage instructions.
- Clean RPE before storage.
- Store in a clean, accessible location.
- Protect from contamination and damage.