

What is respirator fit testing?

Respirator fit testing is performed to check that a tight fitting face piece (full-face mask, half-face mask, or disposable mask) matches the wearer's facial features and seals adequately to the wearer's face so that it reduces exposure to hazard as low as is reasonably practicable and to an acceptable level (below any applicable Occupational Exposure Limits or Control Limits)



Why is respirator fit testing necessary?

Respirator fit testing is mandatory under current legislation. It is vital that selected respiratory protective equipment (RPE) is adequate and suitable for the purpose. The performance of tight fitting face pieces relies heavily on the quality of fit to the wearer's face - on achieving a good contract between the wearer's skin and the face seal of the face piece. An inadequate fit will significantly reduce the protection provided to the wearer. Any reduction in protection can endanger the wearer's life or lead to immediate or long-term ill health. Whilst fit testing has a key role to play, it must not be forgotten that this is only one small part of a respiratory protection programme. For adequate respiratory protection to be achieved in the workplace, a comprehensive and effective respiratory protection programme must be in place.

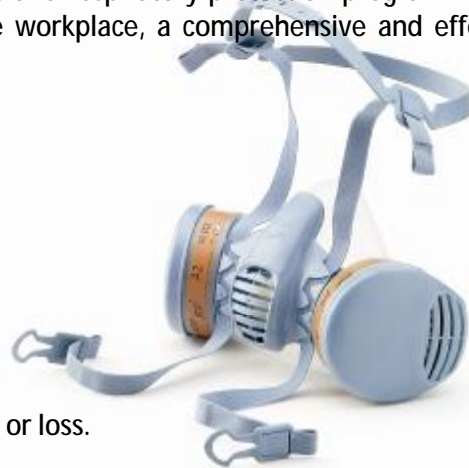
When should a fit test be carried out?

A fit test should be carried out:

- As part of the initial selection of RPE.
- Where an untested face piece is in place.
- In the course of respirator fit training.

A repeat fit test should be conducted:

- As required (at least annually).
- If the wearer experiences significant weight gain or loss.
- If the wearer undergoes substantial dental work.
- If the wearer develops any facial changes (scars, moles etc.) around the face seal area.



Fit test records should be stored and available for inspection for at least five years by the employer

How is fit testing carried out?

Fit testing can be administered using qualitative or quantitative fit test protocols and employees must be tested with the same make, model, style and size of respirator that will be used on-site.

Qualitative fit testing

Qualitative fit testing is a simple pass/fail test based on the wearer's subjective assessment of the leakage, via the face seal region, of a test agent, usually a sprayed solution of a sweet or bitter tasting substance. These tests are relatively simple to perform and are suitable for half masks and filtering face pieces. They are not suitable for full face masks.

Quantitative fit testing

These tests give an objective measure of face fit. They require specialised equipment and are more complicated to carry out than qualitative methods. Quantitative fit testing provides a numerical measure of the fit that is called a fit factor (FF). The fit factor is a measure of how well a particular face piece seals against the wearer's face. A higher fit factor means the face piece achieved good contact between the face seal and the face during the test. The recommended minimum fit factor that should be achieved to pass a fit test will depend on the type of face piece being tested.

Who should carry out respirator fit testing?

RPE fit testing should be conducted by a competent person. To be deemed competent, the person should have adequate knowledge and have received adequate instruction and training in the following areas:

- Selection of adequate and suitable RPE.
- Examination of RPE and the ability to identify poorly maintained face pieces.
- Ability to correctly fit a face piece and perform pre-use fit checks.
- Ability to recognise a poor fitting face piece.
- The purpose and applicability of fit testing, the differences between, and the appropriate use of quantitative and qualitative fit testing methods.
- The purpose of fit test exercises.
- Preparation of face pieces for fit testing.
- How to carry out diagnostic checks on the face piece and the fit test equipment.
- Capabilities and limitations of the fit test equipment.
- How to perform a correct fit test with the chosen method.
- How to prevent and correct problems during fit testing.
- Interpretation of fit test results.
- An understanding of the differences between fit factor, workplace protection factor, assigned protection factor and nominal protection factors.
- An understanding of regulations and approved codes of practice relating to fit testing.

How can Anderco help?

Anderco can provide your company with an economical and convenient onsite respirator fit testing service designed to cause minimal disruption to operational needs. Our trained fit test consultants can provide a full fit testing service at your facility at a time that is convenient to you:

- **Qualitative and quantitative fit testing** – with the technical knowledge and equipment available to provide an on-site fit testing service nationwide.
- **Experienced fit test professionals** - trained and experienced fit test professionals to conduct fit testing at your facility in full accordance with the manufacturers documented instructions and Approved Codes of Practice (AcoPs) supporting the Control of Substances Hazardous to Health Regulations 2002 (COSHH) HSE UK operational circular OC 282/88.
- **Certification** – upon completion, Anderco issues a fit test report for each test conducted.
- **Training** – to reinforce your respiratory policy and ensure your employees are properly protected, Anderco can provide training on the correct fitting and care of respirators in use on site.

CONTACT US

For full details on the fit testing service available from Anderco, contact your Anderco representative on 1850 303304 or email training@anderco.eu.



Your specialists in safety services, products, training and workwear

www.anderco.eu