

Respiratory Protective Equipment Fit Testing

Respiratory Protective Equipment (RPE) Fit Testing is essential for workers required to wear RPE. Fit testing detects for air leaks around the seal between the respirator facepiece and the face of the worker.

Why fit test?

To find out if respirators are actually protecting workers. If there isn't a good face seal, contaminated air will leak into the respirator and the wearer may not get the level of protection that is needed.

How to fit test?

IPM conduct quantitative respirator fit testing using a TSI PortaCount fit testing system. The TSI PortaCount utilises particle counting technology to accurately assess the fit factor of the respirator. It measures the concentration of particles both inside and outside the respirator while the wearer performs a series of exercises or movements.

By comparing the particle concentration inside and outside the respirator, the PortaCount calculates a fit factor, which indicates the effectiveness of the seal and fit of the respirator.



What does fit testing include?

The fit testing process includes evaluating the current respirators' effectiveness, measuring the fit factor, and providing guidance* on proper donning and doffing procedures. In cases where the current respirators are inadequate, recommendations for respirator selection, adjustment, or replacement will be provided based on the fit testing results.

**Information/Guidance provided to workers is limited to the specific respirator that they are wearing for the fit test. It does not include comprehensive training on different types of RPE or filters, the application of RPE in different work environments, an assessment of risk, etc. A separate full day training package can be tailored and delivered to middle management to assist with the implementation of a successful RPE program.*

Length of fit test

On average, each fit test takes approximately 30-40 minutes per person (longer if multiple respirators are tested to achieve the required fit factor), following which a certificate will be issued outlining the testing procedure, type of mask, and fit factor achieved.

Pre-Requisites

- Individuals undergoing RPE fit testing must have a clean-shaven face to ensure a proper fit and an adequate seal. Facial hair can interfere with the seal between the respirator and the face, compromising the effectiveness of the respiratory protection.
- The client is responsible for providing IPM with the type of RPE used on-site, at least two weeks prior to the planned site visit, to ensure IPM can source the correct adaptors.
- Workers are required to bring their RPE to the fit test, and any other mandatory PPE (e.g. hard hat, glasses).
- Workers must not smoke or eat 1-hour prior to the fit test.



When to fit test workers

Australian Standard – AS/NZS 1715:2009 *Selection, Use and Maintenance of Respiratory Protective Equipment* states fit-testing should be conducted for all workers required to wear RPE:

- Initially when the RPE is first issued
- At least annually
- Whenever there is a change in the facial characteristics of the wearer

Cost of training

Price on application - to be provided at time of enquiry, based on number of participants, location, timing, etc.