

FUNCTIONAL FIT TEST -- POSITIVE PRESSURE TEST

Purpose:

The positive pressure test checks the presence and function of the respirator inhalation valves as well as potential leakage due to improper cartridge or respirator face seals. It is performed to help the wearer assess respirator function and to detect gross leaks between the face and face piece. OSHA standards [29 CFR 1910.134 (E) (5) (I)] require this positive pressure test or a negative pressure test prior to use of any respirator in a contaminated or potentially contaminated atmosphere.

Procedure:

1. Block off the exhalation valve cover opening(s).
Exhale gently, creating a slight positive pressure within the face piece.
2. Maintain positive pressure for at least 5 seconds.
 - a. If no outward leakage is detected, the test has been passed.
 - b. If leakage is detected (usually felt as a cool sensation against the skin or as a loss of pressure hold), either the respirator is malfunctioning or a gross leak exists between the face and face piece.
3. If a failure occurs:
 - a. Redon or readjust the respirator.
 - b. If the face piece continues to lose pressure – even if previous positive or negative pressure tests performed with that respirator were passed -- it is probably malfunctioning. Consult the supervisor. It is also possible for new scars, wrinkles, beard growth, missing teeth or dentures, significant weight gain or loss, etc. to cause gross leakage into the face piece. When such a new condition exists, re-evaluate the respirator fit through exposure to a test atmosphere.
 - c. If the person is selecting a respirator before it has been qualitatively fit tested and if the positive or negative pressure test is a failure, a gross leak is probably present between the face and the face piece. Another respirator brand or size should be chosen.