Respirator Seal Check Guide

Persons using tight-fitting respirators must perform a user seal check to ensure an adequate seal is achieved each time the respirator is put on. A positive and negative pressure check; or as recommended by the respirator manufacturer’s must be followed in performing seal check. User seal checks are not substitutes for qualitative or quantitative fit tests.

1. **Positive and/or Negative Pressure Checks**

   A. Positive pressure check

   Close off the exhalation valve and exhale gently into the mask. The face fit is considered satisfactory if a slight positive pressure can be built up inside the mask without any evidence of outward leakage of air at the seal. For most respirators this method of leak testing requires the wearer to first remove the exhalation valve cover before closing off the exhalation valve and then carefully replacing it after the test.

   B. Negative pressure check

   Close off the inlet opening of the canister or cartridge(s) by covering with the palm of the hand(s) or by replacing the filter seal(s), inhale gently so that the mask collapses slightly, and hold the breath for ten seconds. The design of the inlet opening of some cartridges cannot be effectively covered with the palm of the hand. The test can be performed by covering the inlet opening of the cartridge with a thin latex or nitrile glove. If the mask remains in its slightly collapsed condition and no inward leakage of air is detected, the tightness of the respirator is considered satisfactory.

2. **Manufacturer’s Recommended User Seal Check Procedures**

   The respirator manufacturer’s recommended procedures for performing a user seal check may be used instead of the positive and/or negative pressure check procedures provided that the employer demonstrates that the manufacturer’s procedures are equally effective.

For more information, see the EH&S Respiratory Protection Program. If you have questions please contact EH&S office at (252) 328-6166.