How to do a User Seal Check

Excerpted information intended for worker populations from NIOSH. The same procedure (with adult assistance) can be used to check seal for children.
(https://www.cdc.gov/niosh/docs/2018-130/pdfs/2018-130.pdf)

What is a User Seal Check?

A user seal check is a procedure conducted by the respirator wearer to determine if the respirator is being properly worn. The user seal check can either be a positive pressure or negative pressure check. During a positive pressure user seal check, the respirator user exhales gently while blocking the paths for air to exit the facepiece. A successful check is when the facepiece is slightly pressurized before increased pressure causes outward leakage. During a negative pressure user seal check, the respirator user inhales sharply while blocking the paths for air to enter the facepiece. A successful check is when the facepiece collapses slightly under the negative pressure that is created with this procedure. A user seal check is sometimes referred to as a fit check. A user seal check should be completed each time the respirator is donned (put on). It is only applicable when a respirator has already been successfully fit tested on the individual.

How do I do a User Seal Check while Wearing a Filtering Facepiece Respirator?

Not every respirator can be checked using both positive and negative pressure. Refer to the manufacturer's instructions for conducting user seal checks on any specific respirator. This information can be found on the box or individual respirator packaging. The following positive and negative user seal check procedures for filtering facepiece respirators are provided as examples of how to perform these procedures.

How to do a positive pressure user seal check

Once the particulate respirator is properly donned,

- place your hands over the facepiece, covering as much surface area as possible.
- Exhale gently into the facepiece.
- The face fit is considered satisfactory if a slight positive pressure is being built up inside the facepiece without any evidence of outward leakage of air at the seal.
- Examples of such evidence would be the feeling of air movement on your face along the seal of the facepiece, fogging of your glasses, or a lack of pressure being built up inside the facepiece.
- If the particulate respirator has an exhalation valve, then performing a positive pressure check may be impossible. In such cases, a negative pressure check should be performed.

How to do a negative pressure user seal check

Negative pressure seal checks are typically conducted on particulate respirators that have exhalation valves. To conduct a negative pressure user seal check,

- cover the filter surface with your hands as much as possible and then inhale.
- The facepiece should collapse on your face and you should not feel air passing between your face and the facepiece.
- In the case of either type of seal check, if air leaks around the nose, use both hands to readjust the nosepiece by placing your fingertips at the top of the metal nose clip.
- Slide your fingertips down both sides of the metal strip to more efficiently mold the nose area to the shape of your nose.
- Readjust the straps along the sides of your head until a proper seal is achieved.
- If you cannot achieve a proper seal due to air leakage, you may need to be fit tested for a different respirator model or size.