

# YOUR BREATHING OUR EXPERTISE

SUNDSTRÖM COMPETENCE CENTRE [srsafety.com](https://srsafety.com)

## PERFECT FIT

# Face Fit Testing when using Respiratory Protective Equipment

To maximise on the correct protection from respiratory equipment, it is crucial to ensure that it fits the user to an optimum level. Air will always take the path of least resistance, so any small gaps between the face and the respirator will result in reduced protection for the wearer. It is crucial to their safety that the user has a suitably sized and positioned respirator, which they know how to correctly fit.

### Why undertake a Face Fit Test (FFT)?

Sundstrom recommends that any half or full-face mask user undergoes a Face Fit Test. Such a test ensures the correct comfort, fit and protection obtained whilst the user is wearing a face mask. One size does not fit all, and the mask must have a suitable and effective fit for you!

Facial hair and jewellery, scars or outstanding facial features can all significantly detract from the performance of a respirator. In order to ensure that there is not leakage between the face and the respirator, leading to potential health issues, the face fit test is used to ensure an adequate seal has been achieved.

Exposure to even low levels of particles, gases and vapours can cause permanent and irreversible damage to the lungs and other vital organs. The importance of correctly protecting against these contaminants over an entire working career has become more apparent. A face fit test ensures that the RPE is both fit for purpose and acceptable to the wearer. In some markets it is a legal requirement, whilst in others it is only a guidance.

Carefully check the regulation that applies to you!



## Fit Test Methods

There are two approved test types which can verify the fit of a face mask.

### Qualitative fit test

As the name suggest this type of Face Fit Test is objective. It involves placing a bag over the head of the wearer whilst wearing the respirator. A substance with a strong smell or taste (normally either Bittrex, giving a bitter taste, Saccharin, giving a sweet taste or banana oil with a strong banana smell) is added into the bag. If the wearer cannot smell or taste any of the additives, they are seen to have an adequate seal. This methodology can be compromised if the wearer has an impaired sense of smell or taste, a cold, or other sensory issue. It is also only suitable for use with half masks!

### Quantitative fit test

This is a much more accurate and sensitive test giving a definitive number of particles inside the mask whilst undertaking several exercises. It also measures the particle count outside the mask and calculates a specified ratio between the two. By comparing both figures you can obtain the measurable level of protection given by the mask. There are a number of ways of performing the quantitative test but all show a more tangible and effective conclusion, offering greater confidence in use.

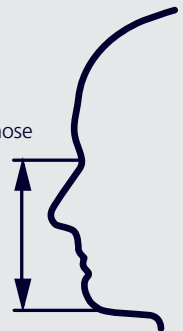
This type of test can be used on both half masks and full-face masks.



## SUNDSTRÖM SIZE GUIDE

Perfect fit means great protection and the chart below will give you a guidance about which size to choose. It is important to have an air tight seal or the respirator will leak.

Take the measurements from the chin to the bridge of the nose



### Half Mask SR 100 (APR)

is made of silicone and available in three sizes, S/M, M/L & L/XL.

**S/M** < 112 mm / 4<sup>13/32</sup>''

**M/L** 112 mm – 125 mm / 4<sup>13/32</sup>'' – 4<sup>59/64</sup>''

**L/XL** > 125 mm / 4<sup>59/64</sup>''

### Half Mask SR 900

made of double molded TPE/PP and comes in three sizes (S/M/L).

**S** < 112 mm / 4<sup>13/32</sup>''

**M** 112 mm – 125 mm / 4<sup>13/32</sup>'' – 4<sup>59/64</sup>''

**L** > 125 mm / 4<sup>59/64</sup>''



S/M

M/L

L/XL



S

M

L