

## **FACE FIT TESTING: Selecting close fitting RPE**

There are many RPE makes and types and choosing an appropriate type can be challenging. If you have not done this before then please contact [face\\_fit@admin.cam.ac.uk](mailto:face_fit@admin.cam.ac.uk) for advice.

### **Key considerations**

- It is good to select RPE with adjustable straps and a variety of sizes.
- It is important to select the correct RPE for the hazard to which the wearer is exposed.
- Wearers are fitted to a specific type of RPE. The department must have a consistent reliable supply of selected RPE (filters and disposable) to ensure users can always be protected.
- Close fitting RPE should only be selected if the wearer is free of facial hair and agrees to be clean shaven for all future work that will involve RPE use.
- Fit testing will need to be repeated every 2 years or sooner if a users face shape changes e.g. loses or gains weight, has a facial injury.

### **Disposable respirators - FFP (facepieces)**

- Disposable means that the respirator can only be used for one set use. This depends on the task and could be one session, one day or one week. This will depend on the hazard, as it is not possible to clean this RPE easily between uses and there is a risk of the inside of the RPE becoming contaminated between uses if poorly stored. The risk assessment will determine how often you have to change your disposable respirator.
- They are designed to stop aerosols e.g. dusts, fibres, mists and fumes (aerosols)
- They will **not stop** gases and vapours
- There are three ratings for FFP disposable respirators - **FFP1** stop 80%, **FFP2** stop 94% and **FFP3** stop 99% of aerosols.
- Disposable respirators are only effective when there is a good seal between the edges of the respirator and the wearer's face. If the seal is poor, protection will be compromised as contaminated air can leak in through any gaps
- A successful Face Fit test is required before using a disposable respirator to ensure a good fit

### **Reusable respirators**

- Reusable respirators can be used multiple times so long as they are cleaned and stored well between uses making them a good option for frequent tasks.
- They are adaptable as a variety of filters can be fitted to them to protect the wearer from different hazards. These can be used on combination e.g. particulate and gases.
- P3 filters used on a half mask protect the wearer from 99.5% of particulates – dusts, fibres mists and fumes. **R** indicates a filter is reusable.
- Gas vapour filters will stop various (but not all) gases and vapours as indicated on the filter and manufacturers data sheets.
- Reusable respirators are only effective when there is a good seal between the edges of the respirator and the wearer's face. If the seal is poor, protection will be compromised as contaminated air can leak in through any gaps
- A successful Face Fit test is required before using a reusable respirator to ensure a good fit

The Safety Office have been selecting and recommending RPE for a number of years and have some preferred suppliers and RPE types these are listed below. Where possible we would recommend that you select one of the recommended options:-

**Half Masks – Reusable**



**3M – 6300**



**3M 7502**



**3M 4251A1P2**



**Sundstrom SR100**

**Full face mask – reusable (to be selected if eye and face protection is also needed)**



**3M 6000 Full-Face Respirator Mask**

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**3M Half mask filters**



**3M 2135 (P3 filters)**

**3M 6035 (reusable P3 filters)**



**3M 5935 P3 R Particulate Filters**

(to be used in combination with gas filters)



**3M 501 Filter Retainers (to be used in combination with gas filters)**

**Sundstrom**



**Sundstrom P3 filter SRS10 P3R**

## Gas/vapour filters-

Selection of a gas filter needs to ensure it offers the correct protection for the hazard. For detailed information on selection of filter consult HSE guidance document INDG479 (page 45) [Respiratory protective equipment at work: A practical guide HSG53 \(hse.gov.uk\)](https://www.hse.gov.uk/indg479/)

Filter types				
Colour code	Type	For use against	Class	Other information
White	P	Particles	1 2 3	European standard EN 143
Brown	A	Organic gases and vapours, boiling point above 65 °C	1 2 3	European standard EN 14387
Grey	B	Inorganic gases and vapours	1 2 3	European standard EN 14387 Do not use against natural monoamides
Yellow	E	SO <sub>2</sub> and other acid gases	1 2 3	European standard EN 14387
Green	K	Ammonia and its organic derivatives	1 2 3	European standard EN 14387
Red & white	Hg P3	Mercury	–	European standard EN 14387 Includes P3 particle filter Maximum use time 30 hours No class number
Blue & white	NO P3	Oxides of nitrogen	–	European standard EN 14387 Includes P3 particle filter Single use only No class number
Brown	AK	Organic gases and vapours, boiling point at or below 65 °C	–	European standard EN 14387 Single use only No class number
Purple	SK	Substance as specified by the manufacturer	–	European standard EN 14387

Here are some examples of gas filters used at the University:-

### 3M gas/vapour filters



3M 6051 A1 Organic Vapour Gas Filters

Figure 1



3M 6054 K1 Ammonia Gas Filters

Figure 2



3M 6057 ABE1 Combination Gas Filters

Figure 3



3M 6099 ABEK2P3 R Combination Gas

Figure 4

### Sundstrom gas/vapour filters

A variety of filters can be used alone or in combination here are two examples-



Gas filter SR 297

Gas Filter A2 SR 218

**Filtering Face Pieces (FFP)**



**Alpha Solway S-3V (FFP3)**



**3M 8835+ (FFP3)**



**3M AURA (unvalved FFP3)**

**Suppliers**

ARCO are an approved University supplier and sell all the recommended RPE

[Face Masks & Respirators](#) | [Personal Protective Equipment](#) | [Web Taxonomy](#) | [Arco](#)

3M

[3M Respiratory Protection](#) | [3M UK](#)

Sundstrom

[HALF-/FULL FACE MASK - Products - Sundström Safety \(srsafety.com\)](#)

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