



Face Masks

Builders face risk of long term health problems due to dust inhalation during works connected with bricks, tiles, ceramics, stoneworks, marl, gravel etc. Inhaling silica can lead to silicosis, which is a serious and irreversible lung disease that causes permanent disablement and early death, and it is made worse by smoking.

In addition to silica inhalation, numerous construction work activities may result in harmful substances contaminating the air in the form of dust, mist, vapour, gas or fume. For example, when:

- cutting a material such as stone or wood;
- using a product containing volatile solvents;
- handling a dusty powder;
- welding stainless steel.

Exposure to dust is covered by the Control of Substances Hazardous to Health Regulations 2002 (COSHH) but in addition each product has to comply with particular standard like EN149 for

disposable masks, EN140 for reusable half masks etc. Moreover, The Health and Safety at Work etc Act 19745 and the Management of Health and Safety at Work Regulations 19996 require employer to provide and maintain a safe working environment.

Respiratory protective equipment (RPE) filter the air to remove harmful substances and breathing apparatus provides clean air for workers.

JSP® Force 8 is the UK's leading respiratory dust protection solution with integral face-fit checking. JSP® Force 8 half mask is fitted with PressToCheck P3 Filters which enables workers to ensure they are protected against fine construction dust including silica. It is the winner of the 2014 BSIF Product Innovation of the Year Award.

- Durable
- Greater efficiency
- Better protection in wet environments
- Hardwearing
- Resistant to clogging
- Improved hygiene








JSP® Force 8 is the innovative mask which filters are more than 99.95% effective. With Press to Check filters user can instantly check if he has the correct seal before entering the dust zone. Manufactured in three sizes this modern masks can be perfectly fitted and adjusted during the

day. The design enables excellent visibility, allowing the filters to be worn effectively behind all types of faceshield and welding visor. Filters are reusable and cost-effective. This ensures the optimal protection at a lower cost than disposable dust mask.

JSP® Force 8 mask is made with a durable thermoplastic rubber offering a superior fit to most face shapes. The mask accepts the full range of low profile Force8 filters giving the Force8 the flexibility to be used for many applications, providing filtering protection against particulates, many gases and vapours.

Disposable masks should be disposed after one shift. Reusable masks must be cleaned and stored properly. Special attention should be paid to the valves and filters. Always check filters expire date and follow manufacturer's manual for equipment cleaning and usage. When selecting the mask always check the filter type. Particle filters do not trap gases or vapours, or give any protection against oxygen-deficient atmospheres. While gas/vapour filters do not protect against particles, or give any protection against oxygen-deficient atmospheres. You can also buy a combine filter on the market. For more information visit www.jsp.co.uk

(Source: JSP, HSE)

Adequacy/suitability	Respirators						
RPE type							
	Disposable half mask – particle filter*	Reusable half mask – particle filter	Reusable half mask – gas/vapour filter	Full face mask – particle filter	Full face mask – gas/vapour filter	Powered mask	Powered hoods/helmets
Effective for particles	✓	✓	✗	✓	✗	✓**	✓**
Effective for gas/vapour	✗	✗	✓	✗	✓	✓**	✓**
Continuous wear time	Less than 1 hr	Less than 1 hr	Less than 1 hr	Less than 1 hr	Less than 1 hr	More than 1 hr	More than 1 hr
APF4 types	✓	✓	✗	✓	✗	✗	✗
APF10 types	✓	✓	✓	✓	✗	✓	✓
APF20 types	✓	✓	✗	✗	✓	✓	✓
APF40 types	✗	✗	✗	✓	✗	✓	✓
APF200 types	✗	✗	✗	✗	✗	✗	✗
APF2000 types	✗	✗	✗	✗	✗	✗	✗
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* Sometimes referred to as a filtering facepiece or orinasal respirator.

** Only protects against particle or gas/vapour when the appropriate filter is fitted.

Table Source : HSE HSG53 (Fourth edition, published 2013).



ASSIGNED PROTECTION FACTORS

To determine the required APF it is simply a matter of dividing the measured level of concentration by the Workplace Exposure Limit (WEL) that the local legislation allows. This calculation will give a required protection factor, selection is then just to ensure that the APF for the RPE selected is above the requirement. If when selecting RPE there are any questions, then a quick call to JSP's Technical Helpline on +44(0)1993 826051 will help you solve any queries.

Whether or not a mask / filter / respirator is adequate can be determined by using the following calculation to find the Required Protection Factor (RPF):

RPF = Measured level of contamination ÷ Exposure limit for contaminate

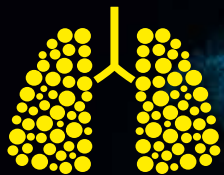
For example: $RPF = 250\text{mg/m}^3 \div 50\text{mg/m}^3$ Therefore: $RPF = 5$ Therefore a respiratory device with an APF of 10 would be required.

*Assigned Protection Factor (APF)	Powered filtering: helmets and hoods EN12941	Half or quarter mask plus filter EN140	Filtering half mask EN149
APF 4	-	P1	FFP1 
APF 10	TH1 All face-pieces 	P2, Gas**, Gas** + P3 	FFP2 
APF 20	TH2 All face-pieces 	P3 	FFP3 

* UK Assigned Protection Factor ** Gas capacity can be 1 or 2

DON'T BITE THE DUST

- Around **13,000 deaths** every year from occupational lung disease and cancer.
- Construction dust can cause **irreparable damage** to lungs and airways.
- Over **500 deaths** every year from exposure to **silica dust**.
- Around **4,000 deaths** every year from **COPD** due to past workplace exposures.



**DON'T BITE
THE DUST.**



**WEAR A
MASK!**