RESPIRATORY **PROTECTION** GUIDE

PROTECTION LEVEL ○ APPROPRIATE ✓ RECOMMENDED
CONTAMINANT □ DUST/MIST/FUMES ▭ GASES/VAPOURS

Disposable respirators are a good first line of defence for limited time periods in low/ moderate risk situations.

Use **reusable respirators** for higher protection in prolonged exposure environments.


Breathe Easy **DRND**


Breathe Easy **DRP2**


Breathe Easy **DRP2V**


Breathe Easy **DRP2F**


Breathe Easy **DRP2VF**


Breathe Easy **DRP2VC**


Stealth **EHMSRP2+ESF-P3**


Stealth **EHMSRP2+ESF-P3NO**


AIR8 Kit **A8WRKCB**


AIR8 Kit **A8GRKCB**


AIR8 Kit **A8PRKCB**


AIR8 Kit **A8ADRKCB**


AIR8 Kit **A8WRKFCB**


AIR8 Kit **A8GRKFCB**


AIR8 Kit **A8PRKFCB**


AIR8 Kit **A8ADRKFCB**

		DISPOSABLE RESPIRATORY PROTECTION (FOR SINGLE USE)						REUSABLE RESPIRATORY PROTECTION									
LOW / MODERATE RISK	**SOIL** (Including compost)	○	○	✓	✓	✓											
	HOUSEHOLD DUST	○	○	✓	✓	✓											
	WORK SITE DUST		○	✓	✓	✓		✓		✓			✓				
	DRYWALL PLASTER DUST					✓		✓		✓			✓				
	NUISANCE ODOURS						○		✓	✓		✓	✓				
	TIMBER DUST (Including MDF and chipboard dust)			○	○	✓		✓		✓			✓				
	PAINT DUST				○	✓		✓		✓			✓	✓			✓
HIGH RISK	**METAL DUSTS**					○		○		✓			✓	✓			✓
	MOULD SPORES			○	○	✓		✓		✓			✓	✓			✓
	BACTERIA & VIRUSES			○	○	✓		✓		✓			✓	✓			✓
	FIBREGLASS, ROCK WOOL			○	○	✓		✓		✓			✓	✓			✓
	PETROL, DEGREASER VAPOURS								○			✓				✓	
	PAINT, ADHESIVE VAPOUR								○			✓				✓	
	WELDING FUMES						○		○	✓			✓	○			○
	PESTICIDES, HERBICIDES						○		✓			✓				✓	
VERY HIGH RISK	**ASBESTOS DUST/FIBRES** (Non-notifiable work only)			○		○		✓		✓			✓	✓			✓
	SILICA DUST (Stone, engineered stone, tiles, brick, mortar, cement, levelling compound, concrete, fibre cement)			○	○	✓		✓		✓			✓	✓			✓
	LEAD PAINT DUST					○		✓		✓			✓	✓			✓
	AMMONIA										✓				✓		
	ACETONE, THINNERS								○			✓				✓	
	ENGINEERED STONE ((Agglomerated benchtop))					○		○		✓			✓	✓			✓

NOTE: If unsure, consult an expert for advice on the appropriate respiratory protection for your task.

RESPIRATORY **PROTECTION** FACTS

Do I need respiratory protection?

Firstly, there are legal obligations to ensure a worker's health is not at risk in a workplace. WorkSafe NZ has a lot of good information available, check their website. Secondly, aside from any legal obligations, remember a typical adult takes around 20,000 breaths each day. This means about 11 cubic metres of air pass through your lungs. When dirty air is breathed in, pollutants (dust, soot, smoke, toxins) are drawn deep into the lungs. If the pollutant is a dust or mist the particle can lodge in the lungs, in some cases permanently (asbestos and silica especially). If the pollutant is a gas or vapour it can be transferred through the lung and into the bloodstream, where it can damage the brain or internal organs. So, respiratory protection is truly inexpensive insurance.

What's the hazard?

Before choosing any sort of protection it's vital to identify the hazard. There are several types of respiratory hazard:

- **Dust:** Small airborne particles, typically from sanding, grinding or brushing. Airborne fibres are also treated as dust. Use a particulate filter.
- **Fume:** Evaporation of solid material under high heat to produce a suspension of particles in air, such as produced by fires or welding. Use a particulate filter.
- **Mist:** Liquid atomised to produce tiny droplets, also called an aerosol. Use a particulate/cartridge filter combination.
- **Vapour:** A gaseous state formed by evaporation of substances that are normally solid or liquid at room temperature. Use a gas/vapour cartridge.
- **Gas:** Chemical matter in a state that is air-like at room temperature. Use a gas/vapour cartridge.
- **Oxygen deficient:** Where an atmosphere contains less than 18% oxygen (normal air is 21% oxygen). A supplied-air breathing system is required.

Also identify the toxicity of the hazard and the degree of exposure (the concentration of the pollutant and the length of time you might be exposed). This may require specialist advice. WorkSafe NZ has helpful resources regarding workplace exposure standards (WES). In particular situations you may need to use an industry consultant.

What are disposable masks suitable for?

Disposable masks provide convenient, comfortable protection against general dust hazards but are not intended to be used in hazardous environments. Regardless of the grade (P1, P2 etc) they will never seal to the face quite as well as a reusable mask and (except for activated carbon impregnated masks) they will not absorb gases or vapours. And even activated carbon disposable masks should only be used for low level organic vapours and nuisance odours.

When should I change a disposable mask?

In their designed usage disposable masks can be expected to last for a maximum of an eight-hour shift. However, in hot, dusty, humid conditions, or where the wearer is removing or adjusting the mask frequently, the effective life of the mask will be reduced.

Does the gear need maintenance?

Disposable masks are intended to be thrown away after use—so no maintenance with these. Reusable respiratory gear needs some minimal maintenance:

- Clean after use. Use only respirator cleaning wipes, or water and mild cleaning products. Rinse and dry before storage.
- Inspect regularly for signs of damage, especially the straps and valves. Replace parts if needed.
- Replace filters and cartridges as needed.
- Keep away from dust, oil and sunlight.
- Store in an airtight container or Ziploc bag.

How often should I change a reusable respirator's gas/vapour cartridge?

There is no hard and fast rule, but as a guide, cartridges should be replaced:

- In accordance with the company's change schedule,
- Or, at the cartridge's expiration date,
- Or, at least after six months service, according to the AS/NZS recommendation
- Or, at any time if contaminant can be smelled or tasted inside the mask

What is a seal check?

A seal check ensures the respirator is properly fitted. The user should test under both positive and negative pressure conditions. For a positive pressure check, breathe out gently while blocking the exit valve of the facepiece. The facepiece should feel slightly pressurised before any leakage develops around the edges of the mask. For a negative pressure check, inhale sharply while blocking off the filter entries. The facepiece should collapse slightly under the negative pressure. A quick seal check is recommended each time you put on your mask.

Be aware that beards and stubble make it very hard to get a proper seal.

In workplace situations where records need to be maintained we recommend engaging a professional provider. They will have specialised equipment for seal testing.

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