

PERSONAL PROTECTIVE EQUIPMENT:



UNDERSTANDING PPE



Call emergency services: 0800 033 911 in case of any emergencies.
Remain calm but act quickly

This documentation is merely guidelines, suggestions or recommendations and NOT a complete list of loss-control measures; it has been compiled from information obtained via the internet from various fire and safety sites to assist in the basic learning of fire safety. The information is NOT intended to replace manuals or instructions provided by the manufacturer or the advice of a qualified professional, nor is it intended to effect coverage under any policy.



P: Protect your employees

P: Prevent injuries or infections

E: Ensure all rules and regulations are adhered to

Never allow exemptions or excuses

MOST OF THE TIME A TWO SECOND JOB NEVER TAKES "TWO SECONDS". CORRECT?

JUST DO IT.... YOUR EYESIGHT, HEARING OR EVEN USE OF LIMBS IS IMPORTANT TO YOU ...

ESPECIALLY WHEN IT COMES TO YOUR JOB.....

So take an additional two seconds and put ON your PERSONAL PROTECTIVE EQUIPMENT

Which figure would you like to be?



Figure

figure A:

Correct PPE was worn
for that two second job

Figure b:

That two second job could
have been two seconds....
but the healing will take
more than two seconds



Figure B:

PROTECT YOURSELF
PPE ONLY PROTECTS THE PERSON WEARING IT
YOUR SAFETY IS NOTHING TO EXPERIMENT WITH!!!

Inspect it



Wear it

Assist PPE users:
Have SABS approved PPE signs posted where
PPE is required to be worn



What is Personal Protective Equipment (PPE)?

PPE refers to protective equipment such as clothing, helmets, goggles, respirators and boots or any other garments or equipment designed to protect specific parts of the user's body from one or risks causing injury or infection.

Examples of injury or infections: contact with chemical, radiological, physical, electrical, mechanical, or other workplace hazards. Personal protective equipment include items such as gloves, safety glasses and shoes, earplugs or muffs, hard hats, respirators, or coveralls, vests and full body suits.

Who wears Personal Protective Equipment (PPE)?

PPE requirements will differ for each business or site so be aware of these requirements.

PPE is worn by any person working or situated in health or dangerous risk areas, e.g.

Students in an education facility lab require PPE

Employees, employers or sub-contractors require PPE

Visitors require PPE on a construction site

What does PPE do for you?

PPE should be worn to protect the user against health or safety risks, various dangers, obstacles and hazards such as physical, electrical, heat, chemicals, biohazards and airborne particulate matter, obscured sharp objects, loud noises, falling objects, unknown substances, (e.g. powders, fine sugars, gas, dust, hot metal, broken rafters, loud machinery).

Important questions to ask prior to purchasing PPE's

- WHAT: What PPE is relevant to your type of business PRIOR to purchasing, don't end up with something that you cannot utilise (What PPE must I purchase?)
- WHO: Who is exposed and to what? (which employees/employers/visitors require or don't require PPE)
- HOW: How much are they exposed to? (high risk zones: purchase more – safety first.
Is purchasing the cheaper option a wise choice?)
- HOW: How long are they exposed for? (Purchase additional PPE to avoid downtime in times of PPE damage, etc).

Selecting PPE:

- Choose SABS approved products that are the right type and grade of PPE
- Consider the user: find out the correct weight, size and fit that suits the user (must meet the needs of the user)
- Multiple usage of PPE's: don't make it uncomfortable for the user otherwise he/she will end up not using the PPE increasing possible injury or death, i.e. if the user has to use goggles, ear "muffs" and respiratory, make sure PPE fit comfortably, securely and does not interfere with the structure and main purpose of the other PPE (e.g. safety glasses may move or damage the seal of the respirator causing air leaks).
- Does the PPE have adequate control for the risk factor, task in hand or work environment where exposure may occur, or without increasing the overall risk. This must be identified through Risk Assessment?

When issuing PPE

- When issuing PPE to user (initial issue), discuss the following:
 - Have the user try on PPE and confirm correct fit, if PPE does not fit, it could be deemed ineffective
 - Make sure all PPE has been issued so avoid "running around" at a later stage
 - Where to obtain replacement PPE

➤ **TRAINING:** educate the user :

- Teach / train the user on the correct way BEFORE issue: e.g. how to put it on, use and remove PPE,
 - On how to use the PPE for effective and smooth performance
 - The risks / hazards present and why the PPE is needed
 - Put PPE on, adjust, use and remove once finished job
 - The operation (including demonstration), performance and limitations of the equipment
 - Any testing requirements before use
 - What to do with the PPE after use and storage
 - Any maintenance or repairs that the user needs to carry out (e.g. hygiene/cleaning procedures)
 - Factors that can affect the performance of the equipment (e.g. working conditions, personal factors, defects and damage)
 - How to recognise defects in PPE, and arrangements for reporting them
 - Pros and cons of using PPE's
 - Maintenance and care of the PPE
 - Regular training and/or refresher training should take place
- Have procedures in place on "how, when, where, who, why" and post in them required areas to remind the user on usage.

What can be done to ensure proper use of PPE once issued to user?

- Prior to receiving and signing for PPE, try it/them on, make sure item/s fit PROPERLY
- Although great care has been taken in the design and manufacture of PPE, the user should always carry out regular checks on the PPE to confirm no maintenance or repairs are required and PPE is clean and in good working condition.

Suitability of PPE

- PPE must meet the needs of the individual user
- Can the PPE be adjusted to fit the wearer correctly?
- What are the needs on the job and demands it places on the wearer?
- If two or more PPE are required, are they compatible?
- Has the state of health of those using the PPE been taken into account?

Duties of employees regarding PPE

- Always wear PPE when required
- Take responsibility to ensure PPE remain in good working condition EXAMINE BEFORE AND AFTER USE
- Keep PPE in a safe place when not in use
- Report any faults to supervisor
- Can the PPE be adjusted to fit the wearer correctly?
- What are the needs on the job and demands it places on the wearer?
- If two or more PPE are required, are they compatible?
- Does the PPE have adequate control for the risk factor, task or work environment where exposure may occur, or without increasing the overall risk?
- Has the state of health of those using the PPE been taken into account?

Responsibilities for the PPE

- Management and supervisors are normally in charge of PPE, unless otherwise stated, responsible and competent person must:
 - Assess the task and confirm correct PPE is being used
 - Assess the needs of the PPE and judge whether other methods of risk control can offer better protection of safety and health than the provision of PPE
 - Assess the user to confirm if they are competent or "qualified" to use PPE (enough training, etc)
 - Provide training or refresher training, if required
 - Confirm tasks are being carried out as per procedures, rules and regulations
 - Regularly evaluate the effectiveness of the PPE
 - Confirm user is not misusing or damaging PPE
 - Provide PPE for visitors

Maintenance:

Maintaining your PPE in good working condition will allow continued protection to which is designed.

- On issuing the PPE, discuss maintenance and care of the PPE, advise user as to who is in charge of the PPE should something go wrong with it and confirm that any faults or loss MUST be reported immediately,
- Carry out daily, weekly or monthly inspections on PPE's (dependent on usage), not good having PPE's if they are damaged and not doing what they meant to do. Faulty, damaged or missing PPE's delay the user and the compromise the lead time and possibly the quality of the product,
- If PPE's can be repaired, or if spares (e.g. filters) are required use the correct parts, or alternatively, to avoid injuries discard of faulty PPE,
- Do maintenance when required (e.g. replace filters when due) to prevent any unnecessary damage,
- If the PPE is reusable, it must be cleaned and kept in good condition for next use
- Always have replacement PPE available.
- Some repairs or replacements require qualified technicians, DO NOT attempt repairs or replacements if you are not qualified to carry them out

Extra PPE:

- It is equally important to have spare or additional PPE for staff users as well as visitors, contractors, etc.
- Make sure that you inform your supervisor before replacement is required (e.g. when you have two disposable dust masks out of a box of 10)
- Remind your supervisor to order more PPE (if required) this benefits the user as well as the supervisor as no PPE will result in downtime

Storing PPE:

- Adequate and safe storage must be available, unless employees remove of site (footwear, clothing)
 - Storage facilities can be simple, however, must be appropriate for the PPE
 - When transporting PPE must also have appropriate storage (goggles in case, ear plugs in container)
 - PPE that could be contaminated during use should be separately stored so as to not contaminate other PPE
- Leaving PPE lying around could become contaminated

BEING SELF-EMPLOYED DOES NOT MAKE YOU EXEMPT FROM WEARING PPE

Types of PPE:

- Respiratory protection - E.G. disposable, cartridge, airline, half or full face, BA's
- Eye protection - E.G. spectacles/goggles, shields, visors
- Hearing protection - E.G. ear muffs and plugs
- Hand protection - E.G. gloves and barrier creams
- Foot protection - E.G. shoes/boots
- Head protection - E.G. helmets, caps, hoods, hats
- Working from heights - E.G. harness and fall arrest devices
- Skin protection - E.G. hats, sunburn cream, long sleeved clothes
- Torso/Full body - lead aprons for x-ray protection, fire retardant suits, leather jackets, trousers, sleeve protectors. Thermal/cold suits
- "Disposables" - E.G. clothing for working with chemicals, radiation hazards, painting,

USE CORRECT PPE FOR THE TASK AT HAND

Some PPE's

- HEAD
- NECK



- Hard hats
- Hair nets
- Neck "covers"



Protects the user from:

Falling objects; chemical drips or splashes; climate or temperature; sharp, protruding/stationary objects; flying/swinging objects; head contact with electrical hazards

Hair nets: Hair "accidents", hair falling into food, hair getting caught/entangled in machinery

neck protection, e.g. scarves for use during welding

Replace head protection if it is damaged, inspect for dents, cracks (any damage)

- EYES
- FACE
- NECK



- Goggles
- Face shields/visors



Protects the user from:

Eyes from any foreign objects: shards, dust, chemical/metal splashes, gas, radiation, etc

Make sure the eye protection chosen has the right combination of impact/dust/splash/molten metal eye protection for the task and fits the user properly

- EARS



- Ear plugs
- Ear muffs



Protects the user from:

High sound levels (explosions, gas, machinery) etc

Re-usable: clean and inspect before and after every use

Disposable: Discard after each use

- NOSE/
- MOUTH/
- LUNGS/
- THROAT/
- BREATHING



- Respiratory (e.g. dust masks)
- Breathing apparatus
- Disposable dust masks
- Filter airline dust masks



Protects the user from:

Lack of oxygen (deficient atmospheres, inhaling toxic fumes/chemicals/powders/smoke/gases/vapours, etc

Re-usable: clean and inspect before and after every use

Disposable: discard after every use

➤ HANDS



- **Gloves:**
There are a variety of gloves, dependant on usage:



Protects the user from:

Cutting and handling glass, hot metals, welding, fires (stoves), concrete work, temperature extremes, sharp objects (cuts, punctures, abrasions), hard impact, chemicals, electric shocks, radiation, vibration, biological agents, prolonged immersion in water

Cautions:

Confirm gloves fit perfectly

Using gloves when carrying out some tasks (e.g. operating some machinery) does compromise your safety (grip, getting caught in machinery, etc)

Prolonged use of gloves can result in sweaty, hot skin causing skin problems. Using separate cotton inner gloves can help prevent this.

➤ FEET



- Safety boots
- Safety gum boots



Protects the user from:

Heavy equipment/loads, falling objects, wet/hot/cold conditions, electrostatic build up, slipping, cuts, punctures, metal and chemical splashes, tyres, construction/demolition, etc

➤ TORSO/ABDOMEN



- Aprons



Protects the user from:

Protects abdomen, skin and clothes from accidental stains, chemical or metal splashes, shards, welding
Re-usable or disposable suits available

- Vests



Visibility from afar

- FIRE RETARDANT JACKETS
- FIRE RETARDANT TROUSERS



Protects the user from:

Accidental stains, chemical or metal splashes, radiation, shards, welding, burns, extreme temperatures

➡ BODY	    
➡ FULL BODY Re-usable or disposable suits available	       
Protects the user from: Protects body, skin and clothes from accidental stains, chemical or metal splashes, radiation, shards, welding, , extreme temperatures, contaminated/hazardous materials, impact, penetration, spray from pressure leaks or spray guns	
➡ HARNESSES	 
Protects the user from: Fall protection	
➡ BUOYANCE	  
➡ Life jackets ➡ Life buoys	 
Protects the user from: Drowning	
➡ Immersion suit	
Protects the user from: Drowning, hypothermia	

This is the Required P.P.E. for this site!



NO EXCUSES

- Safety helmet:**
Hard hat
- Eye protection:**
Safety goggles
- Hand protection:**
Safety gloves
- Body protection:**
Reflective clothing
- Foot protection:**
Safety boots