

PERSONAL PROTECTIVE EQUIPMENT GUIDANCE



Legislation requires a workplace to identify and assess significant hazards (via a risk assessment) associated with workplace activities. The purpose of the assessment is to enable a valid decision about the measures necessary to prevent or adequately control the exposure of employees to activities hazardous to health arising from the work. Personal Protective Equipment (PPE) will be provided where hazards cannot be totally removed and a risk to health remains. Where the need for Personal Protective Equipment has been identified through risk assessment, by law the University have to supply employees with relevant pieces of PPE for use at work and at no charge.

Personal Protective Equipment can be defined as:

“All equipment designed to be worn or held by a person at work specifically to protect them against one or more defined significant hazards, and any addition or accessory designed to meet this objective.”

Whatever PPE is chosen and used it must be remembered that none will provide 100% protection. PPE only protects the individual wearer to the hazard so others in the vicinity can still be exposed (i.e. noise or dust)

REMEMBER PPE SHOULD BE THE LAST CONTROL MEASURE YOU CONSIDER

PERSONAL PROTECTIVE EQUIPMENT GUIDANCE

1. USING PPE

It is the employees responsibility to ensure they use all PPE as per the manufacturer's instructions, managers/supervisors must also ensure their employees are using the PPE correctly.

2. MAINTENANCE AND STORAGE

All PPE should be examined and checked to ensure it is in good working order before use. If it is found to be defective or requires cleaning remove from service. Defective PPE should be replaced as required. Such examinations should be carried out to the manufacturer's instructions.

Most PPE will be issued on a personal basis, where this is not the case a programme of cleaning and disinfecting must be established.

PPE should be provided with suitable accommodation for storage. This could be a simple case/bag for protective eye wear or lockers/boxes for a full face respirator or protective work wear. PPE should be stored to ensure that it is kept free from contamination i.e. harmful substances, damp or sunlight. If the PPE is used for hazardous materials, it may need special storage arrangements.

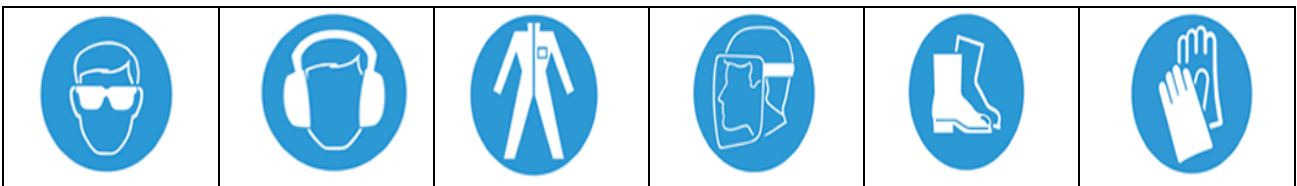
3. EDUCATION AND TRAINING

All users of PPE should receive information, instruction and training on;

- a) when to use (including signage) and the limitations of PPE,
- b) how to correctly wear,
- c) how to keep clean and maintain in good condition.

Blue and white signs indicates that the PPE is **mandatory** and it must be worn!

Examples of PPE Mandatory signs



4. SPECIALIST PPE

Some high risk activities will require specialist PPE i.e. laser eye protection, chainsaw trousers or air-fed or filtered masks. A risk assessment of these high risk activities will be required to aid in the selection of suitable PPE for the task.

PERSONAL PROTECTIVE EQUIPMENT GUIDANCE

5. TYPES AND STANDARDS OF PPE

The PPE used within the University **MUST** as a minimum meet the standards below:

a. Head protection

Safety helmets conforming to BS EN 397 should be used whenever there is a risk of objects/materials striking the head. Safety helmets deteriorate with age, therefore they must be replaced after three years or if they have been subjected to an impact or other damage. Safety helmets should be stored away from direct sunlight, chemicals and extreme temperatures, and should not be modified in any way.

b. Safety footwear

Steel or composite toecaps shoes or boots, protect toes against high impact injuries such as heavy materials/objects dropped from height or equipment dropped on toes. Footwear may be selected with steel mid sole plate to protect from penetrating injuries such as nails/screws/hot metal if there is a potential for injury during work activities. The EN ISO 20345:2011 standard sets out minimum requirements that safety footwear must be successfully tested against. The standard specifies all safety footwear must have toe protection against a 200 Joule impact **Classification S or SB**.

In addition, if the job is at a high risk of penetrating injuries to the foot then **Classification SB P** must be selected.

In some circumstances footwear with slip resistant soles or waterproofing may be needed.

c. Eye and face protection

Visors, face shields, safety glasses or goggles are mainly worn to protect against flying material causing injury, however, they may also be selected to protect against chemicals and or other substances. Advice of what eye protection is required for specialist eye protection e.g. when using lasers, can be sought from the University Safety team.

Eye protection must be selected to meet the British Standard e.g.

- BS EN 166: 2001 – Personal Eye Protection - Optical class 1, 2 or 3
- S - Increased robustness (oculars only)
- F - High speed particles, low energy impact (any type)
- B - High speed particles, medium energy impact (goggles and face shields only)
- A - High speed particles, high energy impact (face shields only)
- BS EN 207:1998 - Filters and eye protection against laser radiation
- BS EN 1731:2006 - Mesh type eye and face protectors

PERSONAL PROTECTIVE EQUIPMENT GUIDANCE

d. Hand protection

Gloves of different types can be used to protect against a range of hazards such as infection risks, sharp or abrasive materials and solvents. Dexterity, grip, fit and comfort are important, as well as thinking whether the use of gloves adds any other risk factor, for example, a heavy glove may impede accuracy of selecting control buttons on a machine. An adequate supply of different sizes of gloves must be available. Most gloves reduce the risk of injury and reduce the damage if injury does occur, but they cannot be relied upon totally so users need to understand their limitations and the need to check reusable gloves for damage before use. Gloves must conform to BS EN 388 and meet the correct requirements for abrasion, blade cut, tear and puncture resistance for the work activity.

e. Respiratory protective equipment (RPE)

Following a risk assessment that deems it is necessary to use RPE for an activity face fit testing will be required.

All RPE needs thorough instruction, training and supervision of the employees using it, and records need to be kept of its issue, inspection, cleaning, repair and maintenance, as well as a record of training.

There are two commonly used types of RPE:

- Disposable filter masks
- Filter respirators relying on the user inhaling air through an appropriate replaceable filter; these may be full face or half face.

f. Hearing protection

Noise can damage the structure of the inner ear leading to deafness. Although there are other factors which influence the onset of deafness, including genetics and ageing, when noise levels are greater than 85dB(A) there is a significant risk of noise induced hearing loss over a period of time. Noise induced hearing loss is irreversible but is preventable with the correct control measures in place. Where hearing protectors are needed they must be selected according to the level of protection they offer. Over protection (i.e. reducing noise levels too much) may cause difficulty in communication and hearing warning signals.

PERSONAL PROTECTIVE EQUIPMENT GUIDANCE

A noise assessment may be required to determine what type of hearing protection is required for a specific task.

As a minimum hearing protection must comply with:

BS EN 352-1 for ear muffs-headbands
 BS EN 352-2 for ear plugs
 BS EN 353-3 for helmet-mounted ear muffs.

g. Protection from the elements

Suitable protective equipment should be issued to protect workers from weather e.g. waterproof coats and trousers, hats, jumpers, waterproof boots and gloves.

h. Hi-visibility (HV) clothing

To be effective, HV clothing should be of a colour that will allow the wearer to stand out against the ambient background found in the working environment. In practice the best colours for this purpose are likely to be day-glo, or fluorescent yellow. Where necessary the clothing should also incorporate reflective material to make the wearer visible when seen in headlights in poor lighting conditions or during darkness. This may require reflective strips at or below waist level on waistcoats or jackets, or strips on trousers.

- HV clothing must be in a clean state and in good working order.
- HV clothing should be comfortable and fit the wearer properly. It should cause the minimum of restriction in the wearer's movement.
- HV coats may be too warm in summer months, in which case, waistcoats or overalls with the appropriate HV qualities could be supplied. **Remember:** PPE must always be suitable for the work; if the way of working changes - check that the PPE is still suitable.
- Supervise employees to ensure that they wear the clothing correctly and whenever it is needed.

Specifications:

Hi-Vis Coat

BS EN 471 Specification for high-visibility warning clothing – Class 2

Hi-Vis Jacket

BS EN 471 Specification for high-visibility warning clothing – Class 2

Hi-Vis Waistcoat

BS EN 471 Specification for high-visibility warning clothing – Class 2