

Personal Protective Equipment (PPE)

Video Session Presenter Pack



General Introduction

Fatalities and major injuries in construction have continued to drop in number over the past five years, however there were still 49 fatal injuries to construction workers in the year 2011/2012; the equivalent of one per week.

Contractor Members of CONSTRUCT participate in a yearly review and comparison of accident and incidents rates, including comparison against HSE published figures. The details are broken down in to type of accident; age and gender of injured persons; type of injuries; occupations and what body parts were injured. This collation of information further facilitates the opportunity to consider trends or factors affecting the industry. The open sharing of information allows for companies to share experiences and learn from others.

CONSTRUCT as an organisation sets out to support our members and the wider construction industry in the Management of Health and Safety on sites and provide materials to assist in the communicating the messages of safe working and safe behaviour.

This video and support materials is one of a series of six sessions that have been created with financial funding provided by CITB. The remit was to create a suite of videos specific to the Reinforced Concrete Formwork Industry, helping organisations to provide specific messages to their workforce on the risks associated with their role and continue the downward trend in accident rates. CONSTRUCT has worked with Exemphas, our delivery partner, on all materials produced and the CONSTRUCT members have assisted by reviewing and evaluating the contents of each session.

About CONSTRUCT

CONSTRUCT is the trade association for those working in the Concrete Structures industry. The Concrete Structures industry is worth more than £1billion per annum, with the projects our members deliver accounting for as much as 93% of that total spend.

As a members' organisation, CONSTRUCT represents all the voices in our specialist sector, with a membership made up of specialist concrete frame contractors as well as their clients, suppliers, consultants and other industry bodies.

CONSTRUCT exists for the benefit of its members, positioned to directly and specifically improve the concrete frames and structures industry, to constantly evaluate and respond to industry needs, and to influence developments with speed and economy.

We are driven by four priorities, each led by a Champion within the organisation:

- Improving safety and efficiency.
- Co-ordinating views and acting in members' interests.
- Promoting innovation in the use of concrete.
- Identifying and addressing best practice and build ability.

Our Health and Safety Charter on improving safety and efficiency includes the specific aims and objectives of:

- Eliminating accidents and injuries on construction sites.
- Advance high professional standards and excellence in the construction of In Situ RC Frames and other structures.
- Raise the profile of safety and health in the construction industry.

More information on CONSTRUCT, publications and good practice guidance and accident statistics are available at www.construct.org.uk

Session Aims and Objectives

Session Introduction

In recent years there has been increased recognition that addressing worker behaviours can positively influence the safety culture in a workplace. The move away from a 'parent/child' or 'policing' attitude towards that of mentoring has been proven to improve buy in to safety.

This ethos is applied to the "What's your Motivation" references on the handouts and within this session presenter pack. Rather than simply being about complying with the law or Company procedures, it is about the impact a lapse of attention or attitude would have on an individual's life. Throughout this session the aim is to provoke genuine thought about the daily grind and the reasons why safety needs to be at the top of everyone's agenda.

Personal choice of actions and changes to behaviour towards safer working methods has been proven to create a construction industry where the workforce is motivated to work in a safe way and reduce accidents as a result.

Aims and Objectives

The aim of this Personal Protective Equipment (PPE) session is to gain an understanding of both the basic PPE requirements on site as well as those specific to work in the RC concrete structures industry. Please read the following aims and objectives of this session to your audience before starting the video session.

By the end of the session the attendees will have covered the PPE considerations relating to:

- Eyes
- Hearing
- Feet
- Head
- Hands
- Body
- Respiratory Protection.

For each of the videos, supporting handouts have been produced which provide a brief reminder of the key points covered. Ensure these are given to each delegate after the video has been shown.



Advice on Conducting the Session

This session is not intended to replace formal training; instead it should be used along with other titles in the series and support formal training by acting as a reminder of the practices that will help prevent a serious injury on-site.

Although detailed specialist knowledge is not required to facilitate the delivery of these videos, experience of the activities is preferable together with an adequate appreciation of safety matters. The following list provides some tips to help delegates get the most from the session.

Preparing for the session:

- Ideally use the session to improve or relate to something which has recently happened on your site.
- Look for ways to encourage your audience to talk about experiences they have had with incidents relating to the session topic.
- Familiarise yourself with this document and the lesson plan.
- Watch the video beforehand to ensure you know the content and when interactive sections are scheduled.
- Know what sections you are required to present and where you need to lead group discussions
- Choose the right place to conduct the session. Avoid locations where distractions are likely and make sure you can be heard in all parts of the room.
- Try to make the training area as comfortable as possible and ensure adequate seating is available.
- Think about the right time to do the session. First thing in the morning, when there is time, and people are more likely to devote attention, is generally a good choice. End of the day talks tend to fail to hold the attention of the operatives eager to get home!
- It is recommended that class sizes do not exceed 15 to help promote as much interaction as possible.
- Check you have the materials and equipment necessary to deliver the session:
 - DVD or Internet Link and the access to the website e.g Vimeo or YouTube.
 - TV with DVD player or computer / laptop with web access.
 - Projector / screen.
 - Speakers.
 - Training or tool box talk attendance register (company specific).
 - Course specific handouts.

Advice on Conducting the Session

Conducting the session:

- Set aside enough time (30-40 minutes) to allow the session to be delivered without feeling rushed.
- Ensure the appropriate attendance register is completed by all delegates.
- Portray a positive image.
- Encourage as much interaction and participation as possible where this is indicated in the video.
- Speak clearly and loudly enough to get the message across.
- Where possible, use your own experiences to start the group discussions as delegates may feel uneasy about speaking up in front of their peers. It is your responsibility to make them feel comfortable about doing so.
- If not a lot of conversation is being generated, start people on their way by asking the question in a different way (which is why it is important to know the content of the video up front) or giving them the first answer.
- Allow enough time for questions. These sessions provide an excellent opportunity for discussions around safety and how it specifically applies on-site.
- Look for opportunities to discuss why people might work in an unsafe manner and what could motivate them to change their behaviour.

Have details of your own company procedures relevant to the session subject as this will assist you in making the session and learning more site or company specific for your attendees.

After the session:

- Give each delegate their handouts to take away with them, providing a brief reminder of the key points to remember from the video.
- Check the training attendance register has been completed by delegates. Retain and submit to the relevant person in your company.
- Take away any questions you are unsure of and report back once you have consulted a professional.
- Ask for any feedback on the session – you can send this to CONSTRUCT if relevant.

Video Overview

Personal Protective Equipment (PPE) includes all clothing and equipment used to protect the worker against the risk to health or safety including extreme temperatures, wet and adverse weather conditions. This video outlines both the basic PPE typically used on all construction sites as well as exploring PPE specific to working with concrete and on concrete structures. It covers the types of protective equipment that could be used to protect:

- Eyes
- Hearing
- Feet
- Head
- Hands
- Body
- Respiratory Protection

The video considers the compatibility between PPE used and the importance of wearing it correctly, in order for the user to gain maximum protection levels.

The video has pause points where the audience and presenter will need to undertake group discussions on issues covered; after each pause point the video should be resumed at the point it was paused. The following sections of this guide identify what these discussion areas are and what information you will need to know about your own company before presenting the session.

The video covers the use and fitting of harnesses, protective overalls and RPE, however there are no formal group discussion questions included in the film for these sections. You may wish to consider adding your own relevant questions on these subjects if they directly relate to the work being undertaken on site.

Key Points of Interaction in Session

At specific points within the video you will be instructed to pause the film and discuss, as a group, answers to the posed questions. Please be prepared to lead the discussions and encourage the answers to come from your attending audience rather than just read the answers out yourself. Below are the questions relevant to this session along with appropriate suggested answers and additional support information which you should feedback along with the answers given by those attending the session.



Question 1 - How would you fit and wear goggles correctly?

Answers –

- **Fitted securely** – Discuss the correct methodology; place the lenses of the goggles over the eyes and adjust them slightly so they seal tight to the face. Generally, the goggles will cover the eyes above your eyebrows, over the bridge of the nose and down to the cheekbones.
- **No gaps between the face and goggles** - This is achieved by placing the elastic strap around the top of the head and pulling it so that the goggles fit tightly but not so tight that they feel uncomfortable or painful. Finally, gently push the goggles against the face to create a tight seal.
- **No visible damage** – Typical damage to safety goggles include a cracked lens, scuffing of the lens due to poor storage between use and frayed or broken elastic straps. Scratches on safety glasses can reduce their effectiveness and cause eye problems. Prevention is better than cure so avoid carelessly handling them. Don't carelessly leave them around, on the floor or even in the glove compartment of your vehicle. Store them with protection and in a dry place.
- **Clean** - Safety glasses need periodic maintenance. Daily inspection of safety glasses is required to make sure that they are not dirty, dusty or broken. Unclean or scratched eye wear can lead to eye strain and headaches. There may be safety glasses cleaning stations available within the workplace that contain a spray bottle of cleaning solution and a lens cleaning tissue dispenser. Many lens cleaning solutions offer anti-static and anti-fog properties as well. They may also be cleaned with a non-abrasive soap and water using a soft, dry cloth. Even a clean cotton T-shirt will do. When cleaning safety glasses, only apply enough pressure to remove dirt, dust, or residue. Pressing too hard may cause scratches or cracks in the lenses.

Key Points of Interaction in Session



Question 2 - How could hearing protection interfere with other PPE?

Answers –

- **Your hard hat might not fit** – the combination of ear defenders with a hard hat can mean there is insufficient space for both. This means either the hard hat or the ear defenders are not properly worn.
- **Could cause a gap between face and goggles** – If worn with goggles, space becomes an issue and it may result in the goggles becoming ‘buckled’, causing a gap. This decreases the functionality of the goggles to protect the users eyes. It may be possible to change goggles for safety glasses, if the risk assessment finds this to be a suitable alternative.
- **Consider alternatives** – In most cases, the wearer can simply switch to using earplugs to avoid conflicts with other PPE. They offer a good level of protection if worn properly and are compatible with virtually all other PPE. Users should follow the manufacturer’s instructions for fitting, which can be found on the packaging and are advised not to keep reusing the same pair. Personal hygiene is important when inserting ear plugs as dirty hands could introduce bacterial infections into the ears. The other option is to wear a hat mounted ear defender which allows users to easily rotate the defenders back when not in use. Whichever type is used they must be kept clean and worn correctly - which includes being fully over the ears.

Others problems which you could consider discussing:

- Ironically, one of the problems associated with wearing hearing protection is a reduced ability to communicate with work colleagues. There needs to be a balance between protecting a workers hearing and the ability to communicate, which needs to be assessed by the employer in the form of a risk assessment. Suitable and sufficient alternative methods of communicating must be identified.
- Some people find wearing different types of hearing protection uncomfortable so this also needs to be considered during the risk assessment process.



Question 3 - What types of injury does safety footwear prevent?

Answers –

- Broken toe
- Injury to foot
- Twisted ankle
- Cuts or puncture wounds from falling objects – and other objects or protrusions around the site
- Contact with chemicals such as concrete during pours.

Key Points of Interaction in Session



Question 4 - What are the common problems associated with the wearing of high visibility clothing?

Answers –

- **Wearing the jacket/vest incorrectly** – or even not at all. It is not acceptable to remove it, even if it is wet or the weather is hot. It is also not permitted to have it tied around your waist or tucked in the back of trousers.
- **Jacket/vest faded or dirty** – It is important that high visibility clothing is clean and in good condition. Replace any clothing that is worn out or no longer suitable for use.
- **Incorrect items are worn and are not visible** – Generally, Class 2 hi-visibility garments can be worn on most sites except when working on a road where the speed limit is over 50mph where a Class 3 garment must be worn (with long sleeves). **It is advisable here to confirm the type of high visibility clothing required on the site.** It is also worth noting that supervisors or people with specific responsibilities may wear different coloured high visibility clothing so they can be easily identified.



Question 5 - What are the key considerations when selecting the right gloves to wear?

Answers –

- **What job are you doing?** For example, what materials are being handled? Do they need to be of a non-slip material or be resilient to a particular liquid you may come into contact with. Dexterity is also important. If you are required to undertake precise activities, the gloves will need to be of a thinner material than if you are carrying bricks for example.
- **What hazards are you exposed to?** Cement / concrete is an obvious hazard when working on site but there may be other chemicals to consider. It is important to choose a glove that is resilient to these. Other hazards include mechanical, heat and electricity. Consideration also needs to be made to how the hazards are going to impact on the hand, so the nature of the contact is important (total immersion, splashes, constant contact etc), the duration of the contact, the area requiring protection (hand only, forearm, arm), whether the material being handled is abrasive (in which case a stronger fabric will be necessary).
- **Do they fit?** If gloves are too big, they will create folds, impairing the ability to carry out the task in hand and becoming uncomfortable. Conversely, if the glove is too small, they could restrict blood flow and make hands feel tired. Sizing charts (available from the manufacturer) might be an option to help workers determine the correct size for them. Employers might also suggest that workers take 'glove breaks' if gloves are worn for long periods of time. This helps to prevent hands getting hot and sweaty.
- **Suitable for the working environment?** Particular considerations here are whether the worker is expected to work in wet conditions or where there are temperature extremes. Getting the balance right between the nature of the work being undertaken and the environment being worked in needs to be determined by risk assessment.
- **Glove contamination** also needs to be considered if gloves are taken off and reused. Employees must keep up good personal hand hygiene and storage of gloves in order to not contaminate the inside of the gloves.

Key Points of Interaction in Session



Question 6 - Identify and discuss the mandatory PPE requirements on your site and other hazards which require PPE to be worn.

During this discussion –

- Take the time to work through the specific activities carried out on your site (e.g. drilling into concrete, concrete pouring) and what the specific PPE requirements are. Remember these can be determined by risk assessment as well as being defined by the Client.
- It is worth reiterating here that it is the responsibility of the worker to wear any PPE mandated by the employer, look after it, consider personal hygiene when putting on PPE, store it correctly, keep it clean and report it if it should get damaged in any way. It should also not be tampered with or altered in anyway, even if it is uncomfortable. These issues should be discussed with the Employer. The consequences of doing so could be severe and irreversible.
- An Employer should maintain a PPE Register as proof that the correct PPE has been issued to an individual. Confirm the specific arrangements for this during these discussions.



Question 7 - Does all your PPE fit correctly? Is it in good working order? Is it compatible with each other?

Answers – These are rhetorical questions, designed to bring the video to a close with a ‘pause for thought’ asking workers to think about their own PPE and whether it is right for the job they doing, questioning whether it is being worn correctly, it is in good working order and if it is compatible with any other PPE they are required to wear.

You might also wish to use these questions to lead an employee consultation on the PPE you provide, which could help you establish any issues that are contributing to why employees are not wearing the PPE you supply.

Information the Presenter Needs to Know About Their Own Company

In preparation to fully answer question 6, which requires discussion about the mandatory PPE requirements on the site being worked on, you need to be fully aware of:

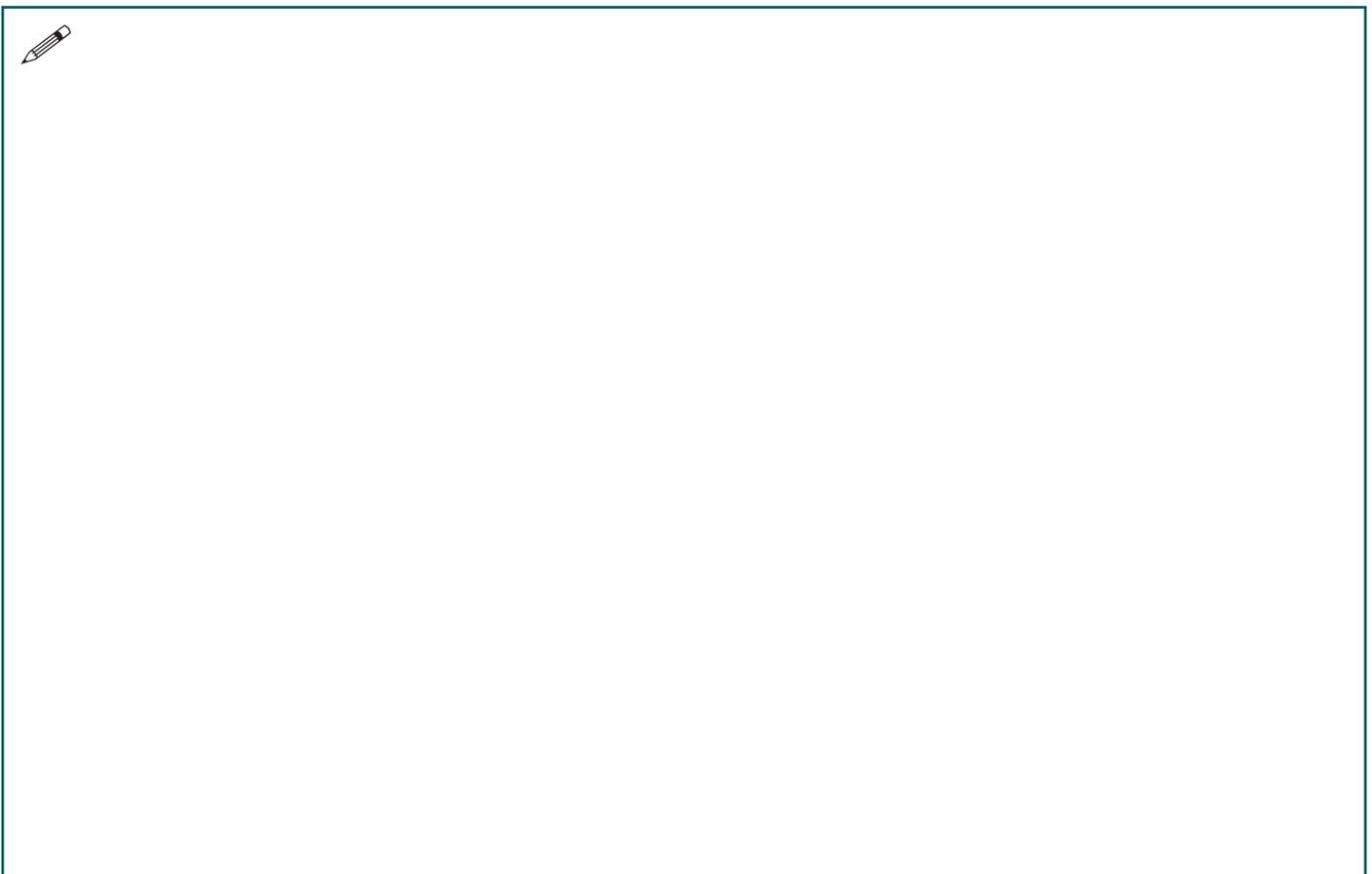
- Mandatory COMPANY wide PPE requirements (including the type of PPE register used)
- ACTIVITY specific PPE
- CLIENT defined PPE (such as a mandatory gloves policy when working for a certain client or on a specific site).

If you have different high visibility clothing in use for different job roles, eg supervisor, banksman etc, or if your hard hat colours represent different experience levels or job roles, please ensure you introduce this in to the session to remind those attending.

Any PPE issue policy for your company or PPE register procedure should be known and included.

Details of whether goggles or safety glasses are required for specific tasks and what hearing protection is available and where from.

Use the space below for your own notes, reference to further support materials or additional information you wish to include in your session.



Sources of Further Information

All HSE Guidance and ACOPs listed below is subject to revision - please check the HSE Website for the latest versions.

- Personal Protective Equipment at Work Regulations 2002
- Construction (Head Protection) Regulations 1989 [note: these are due to be revoked]
- Control of Noise at Work Regulations 2005
- Work at Height Regulations 2005
- COSHH Regulations 2002
- Electricity at Work Regulations
- Confined Space Regulations 1997
- Dangerous Substances and Explosive Atmospheres Regulations 2002
- HSG53 – Respiratory Protective Equipment at Work – A Practical Guide
- L25 – Personal protective equipment at work – guidance on regulations
- INDG174- Personal protective equipment (PPE) at work - A brief guide
- CIS36 – Construction Dust (revision 2)
- CIS54 – Dust control on cut-off saws used for stone or concrete cutting.
- INDG362 - Noise at work: A brief guide to controlling the risks
- INDG163 – Five steps to Risk Assessment.

The HSE website pages also provide further information, frequently asked questions and resources on the subjects covered in this session. www.hse.gov.uk



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Part-funded by



“This project has been delivered with support from the CITB Growth Fund, which aims to ensure that the construction industry has the right people, with the right skills, in the right place, at the right time and is equipped to meet the future skills demands of the industry.”