

# The Composite Metal Decking Specialists

## **Health and Safety on site**

A Guide for Deckers, Studwelders and other Contractors



| Watermark Place, London

## Contents

1. An Introduction to Health and Safety on Site
2. Health and Safety Law
3. Accidents at Work
4. SMD Health & Safety Policy
5. Information and training
6. Abrasive Wheels
7. Access and Egress
8. Alcohol / Substance Abuse
9. Cartridge Tools
10. Conduct
11. Other Trades / Visitors / Members of the Public
12. Consultation
13. Decking Procedures
14. Disciplinary Rules
15. Electrical Equipment
16. Environment
17. Eye Protection
18. Falls from Heights
19. Fire Prevention
20. Fire Extinguishers
21. First Aid
22. Hand Injuries - Prevention
23. Hand Tools
24. Health Hazards- Use of Chemicals
25. Housekeeping
26. Ladder Safety
27. Lifting and Carrying
28. Lifting Operations
29. Mobile Elevating Work Platforms
30. Noise
31. Personal Protective Equipment (PPE)
32. Safety Signs
33. Slips, Trips and Falls
34. Safe Systems of Work
35. Skin Care
36. Unsafe Acts and Conditions
37. Vibration
38. Welfare Facilities
39. Personal Details



# Introduction

## 1. An Introduction to Health and Safety on Site

You have a legal duty to work in accordance with your Company's Health and Safety Policy, rules and procedures. You also have a responsibility to report dangerous situations or shortcomings in health and safety arrangements.

This booklet has been written to help you understand the various health and safety rules and procedures which apply to construction sites. Please read it carefully and consult your immediate supervisor if you require further information or advice on any of the matters listed.

The information is supported by a more comprehensive health and safety policy and accompanying policy statement. The latter document details the Company's key health and safety objectives and is detailed in section 4 of this booklet.

## 2. Health & Safety Law

The Health & Safety at Work etc Act 1974 is the principle law for ensuring that appropriate health and safety standards are met. This legal framework is supplemented by more specific requirements relating to construction sites. However, the law places a legal responsibility on you to:

- Take reasonable care of your own health and safety, as well as others who may be affected by what you do and, perhaps more importantly, what you forget to do.
- Avoid misusing anything provided in the interest of health, safety and welfare and to co-operate with your employer in carrying out safety requirements.

Failure to comply with these statutory responsibilities constitutes a criminal offence and may result in action being taken against you by the enforcing authorities. Equally, as your employer, SMD may take appropriate disciplinary action in circumstances where these obligations have not been met.

## 3. Accidents at work

Construction sites can be dangerous places and, therefore, it is extremely important that you work in accordance with the site rules and specific procedures which apply to your job.

The most frequent causes of accidental death and injury within the industry relate to:

- Falls particularly from height
- Falling materials and collapses
- Contact with electrical equipment/ supplies
- Moving objects, including mobile plant and site transport
- Handling loads

There are others, but you should pay particular attention to those parts.

You must report any work related injury or ill health problems to your supervisor and enter details in the Accident Book BI 510, which is available.

It is equally important to co-operate in any subsequent investigation to establish the cause so that appropriate action can be taken to prevent a recurrence.

#### 4. SMD Limited Health, Safety and Welfare Statement

It is the objective of Structural Metal Decks Limited to ensure that it satisfies its duties under the Health and Safety at Work etc. Act, 1974 and other pertinent legislation and achieves the highest possible standards with regard to health, safety and the environment in all of the Company's activities.

As Managing Director, it is my responsibility to ensure that the Company's Policy is implemented and to allocate sufficient resources to provide and maintain safe and healthy working conditions, suitable equipment and systems of work for all employees; and such information, instruction, training and supervision as is needed for this purpose.

The Company will promote and encourage safe working attitudes by active participation from ALL employees, and accepts responsibility for the health and safety of persons other than its own employees who may be affected by its work activities.

The General Statement, Organisation and Arrangements sections of the Health Safety and Welfare Policy define the key areas that help to maintain the Policy.

Employees are reminded of their responsibilities under the Act, which are as follows:

1. To take reasonable care for the health and safety of themselves and to other persons who may be affected by their acts or omissions;
2. To co-operate with The Company in meeting all its statutory requirements;
3. To observe the provisions of the Act wherever applicable to themselves or to matters within their control;

This Policy will be reviewed on an annual basis unless statutory regulations require an immediate amendment.

The Company has an excellent health and safety record and I stress the need for all Directors, Managers and Employees to help to maintain this record by supporting the Health and Safety Policy and by striving to eliminate any foreseeable losses which may result in personal injury or illness, damage to property, fires or security losses.

S B Pratten

Managing Director  
January 2009



## 5. Information and Training

You will receive appropriate training or re-training to ensure that you have the necessary skills to carry out your work safely and without risk to health. All employees will attend regular tool box talks on appropriate subjects and undertake induction training on each site to familiarise you with the rules and procedures that apply and the Method Statement describing your work. Depending on your job, training may include abrasive wheels, cartridge tools, Slinger / Signaller, operating mobile plant etc.

## 6. Abrasive Wheels

Abrasive wheels are the primary means of cutting decking and edge trim. Eye injuries and contact with the machinery are the main dangers, so always wear appropriate eye protection and check that protective screens and guards are in place before using the equipment.

- Also check the general condition of the cut off saw for damage or defects. Make sure the start/ stop controls work properly before grinding and that lighting is satisfactory.
- Adjust the guard to expose the minimum amount of wheel surface necessary for the operation and avoid grinding with the side of the wheel.
- Don't exert heavy pressure on the wheel and keep fingers clear of the cutting edge.
- Remember, only trained and appointed personnel are permitted to change abrasive wheels and therefore, unless you have been appointed on writing to carry out this task, you must not attempt to replace or change a worn or damaged wheel.
- Check the sparks from the process will not ignite material or injure other personnel in the vicinity.

## 7. Access and Egress

- Keep material and equipment clear of roadways, thoroughfares and walkway, particularly hoses and cables which can cause trips and falls.
- If it is necessary to leave material in access ways for short periods, make sure there is alternative safe access and mark the obstruction to highlight the danger.
- Always keep to the recognised walkway or pedestrian route.
- Never block fire exits - they may be the only way of escape in an emergency.

## 8. Alcohol /Substance Abuse

In a high risk industry such as ours, alcohol and work are not compatible. Alcohol is a depressant drug which alters parts of the brain function including reducing co-ordination. Various prohibited substances also have affects on perception and co-ordination etc. When you are working at heights, operating machinery or moving large objects you require all of your brain functions to minimise the risks of injury.

It is the policy of SMD Limited and a condition of employment on any site that if anyone is suspected of being intoxicated by drink or under the influence of drugs then they will not be permitted to remain on site.

Keep your head clear, leave your drinking sessions to social occasions where you cannot cause injury to yourself or others.

### **Prohibited Substances**

The use, possession, concealment, transportation, promotion or sale of any prohibited substances on SMD Limited premises or sites is **STRICTLY PROHIBITED**.

## **9. Cartridge Tools**

Cartridge tools can be extremely dangerous when they are used incorrectly, the following safe working practices must be adhered to at all times:

- Cartridge tools must only be used by trained and authorised persons.
- Read the maker's instructions carefully before using a cartridge tool.
- Load the tool with the barrel pointing in a safe position - away from you.
- Never walk around with a loaded tool - load at the work-place.
- Check the material that the tool is to be fired into.
- Hold the tool at right angles to the job when firing.
- Wear Grade 1 impact resistant goggles when using cartridge tools.
- Keep the tool regularly serviced, clean and well oiled.
- Do not discard any misfired cartridges, retain them for return to the manufacturer.
- Only low power indirect acting cartridge tools will be permitted on SMD Limited contracts.
- Unless specified otherwise in Method Statements only Hilti DX tools will be permitted on SMD contracts.

**ALWAYS TREAT CARTRIDGE TOOLS WITH RESPECT**

## **10. Conduct**

Irresponsible behaviour can lead to serious accidents.

- Always walk, don't run - running creates unnecessary risks.
- Look where you are going, particularly at blind spots and watch out for moving vehicles and equipment such as cranes, excavators etc. Look both ways when crossing traffic routes, and keep to the proper access way or pavement whenever possible.
- Don't interfere with faulty electrical equipment; arrange for a qualified person to undertake repairs.
- Don't leave material or equipment in access ways - if you do, people may trip over them.

- Never indulge in horseplay or practical jokes.
- When working near moving machinery, secure or remove loose items of clothing which may be caught in the equipment.

## 11. Other Trades/ Visitors/ Members of the Public

- Contractors, visitors & members of the public can be affected by what you do or forget to do.
- When carrying out a job, always check that the risks during such operations as slinging, grinding etc cannot injure others.
- Remember all contractors must conform to the same rules and regulations as you - if you see them act unsafely, report it to your supervisor so that the matter can be addressed.
- Don't enter areas where barriers or warning signs restricting access have been erected unless you are authorised.

## 12. Consultation

When reporting unsafe or unhealthy conditions you must follow the proper procedure - report the matter to your supervisor initially. However, if the matter is not resolved within a reasonable period, discuss the issue with your Manager or a Director.

## 13. Decking Safe Working Procedures

Safe decking is COMMON SENSE. Follow these simple golden rules at all times in order to ensure your safety:

### **Prior to work**

- Safety helmet, hi-vis vest and safety footwear must be worn at all times on site.
- Hearing and eye protection, gloves, work wear and waterproofs should be worn when required by the method statement or because of site conditions.
- Read and understand the job specific method statement before starting work. Attend site induction when required.
- Understand the drawings and specification for the job in hand.
- Always follow site "hot works" procedures and prior to using disc cutters or stud welding. Ensure that the area around and below the work area has been inspected and any flammable or combustible material has been removed or protected.
- Erect bunting and signage to the area below your planned operations.
- Be aware of windy conditions – Your Foreman will decide when work cannot proceed.
- Handrails must be in place prior to the installation of decking or studs. As a guide, if it would be possible for a blind man to walk off the edge of the decked area and not be caught by safety netting, then you should not be working in that area.



- Beware of dropping tools or materials – falling objects can injure and kill people.
- Check all tools, equipment, and PPE for damage before use – report any faults to your Supervisor.
- Only trained and authorised employees are permitted to sling loads and direct crane operations.

## Decking

- Never climb steelwork. Use ladders or access stairs or appropriate access equipment.
- Never walk top flanges even when nets are erected. Maintain three points of contact by beam straddling.
- Safety netting will be erected prior to installation of decking. Where netting is incomplete contact your Supervisor. Do not remove or tamper with netting. Work should cease 2m back from the edge of the nets where no handrail is in place.
- When inertia reel systems are used the attachment of the inertia reel must be directly to your safety harness. A lanyard must not be used. The positioning of Spanset safety straps must always be carefully considered. Inertia reel straps must only be used at right angles to the Spanset so that if you fall there is no swing effect which could cause you to strike steelwork or the floor below.
- Only trained and authorised employees are permitted to operate cut off saws and cartridge tools.
- When accessing bundles to remove straps beware of trap ends.
- Work as a team and do not attempt to lift sheets that are too heavy to lift on your own.
- Be aware of the requirements of stud-welders – cut out ribs and watch out for painted top flanges.
- Never cut double span sheets to a single span without checking with your superior.
- Be aware of the risk of sparks from cutting hitting other site operatives and flammable materials.
- Sheets should be fixed progressively and fully pined prior to breaks or shift end.
- At the end of each shift scrap should be secured or removed to the skip. Unfixed sheets should be secured with a strap.
- When using filler foam always be aware of the COSHH Assessment, always wear appropriate gloves and do not allow foam to contact bare skin.

## Stud Welding

- Safety netting will be removed prior to stud installation. Where netting is not removed contact your Supervisor. Welding over nets is a fire hazard and risks damage to the nets which may go undetected.
- Particular attention is required to the erection of bunting and signage below stud welding works. Be aware that sparks may pass down voids or core to the floors below.
- Consider spark control at perimeters. Use fire blankets where required. Be aware that sparks can be blown in windy conditions.

- Stud barrels must only be lifted in appropriate tested stillages or barrel lifts. Chains must not be wrapped around barrels.
- Only trained and authorised employees are permitted to use stud welding plant.
- Only trained and authorised employees are permitted to undertake electrical repairs.
- Understand and consider stud spacing, edge distances etc.
- At the end of a shift spent studs and empty barrels should be secured or removed to the skip.
- Ensure a testing regime appropriate to the weather conditions is maintained.
- Ferrules must be broken away to allow inspection of the weld. Where required, ensure ferrules are collected and placed in skips.

## 14. Disciplinary Rules

Disciplinary rules aim to encourage all employees to improve their conduct where it is falling short of the required standard. They are not primarily for the purpose of punishment.

The following rules and procedures are intended to ensure that:

1. All employees are fully aware of the standards of performance, action and behaviour required of them;
2. Disciplinary action, where necessary, is taken in a fair, uniform and consistent manner.

It is not possible to specify all the offences that may result in disciplinary action as circumstances may vary depending on the nature of the work.

### Rules covering unsatisfactory conduct and misconduct:

#### 1. Health and Safety

- All employees must make themselves familiar with the Company's Health and Safety Policy and their own health and safety duties.
- Employees must, at all times, abide by the Company Health and Safety Rules and procedures.
- No action must be taken by an employee which could threaten the health and safety of themselves, other employees or any other persons. You are responsible in law for your acts or omissions.

#### 2. Behaviour at Work

- All employees should behave with civility towards fellow employees and no rudeness will be permitted towards members of the public. Objectionable or insulting behaviour or bad language will render an employee liable to disciplinary action.
- All employees shall use their best endeavours to promote the interests of the Company and shall, during their normal working hours, devote the whole of their time, attention and abilities to its business and affairs.

- Any involvement in activities which could be construed as being in competition with the Company is forbidden.
- An employee shall not, during or after termination of his/her employment, disclose to any person whomsoever any confidential information, including financial, regarding the Company, its business or trade secrets.
- All reasonable instructions from an employee's superior are to be obeyed.
- Alcohol must not be consumed during the working day, nor may it be brought to your place of work.
- Incapacity at work or poor performance due to the taking of intoxicants or drugs will be treated as a serious breach of the rules.

### 3. Working Standards

- Unsatisfactory standards of work will be investigated and employees concerned will be subject to disciplinary action if poor job performance is proved to have been caused by their carelessness or neglect of duty.
- Unsatisfactory output of work will be viewed similarly to (1) above, and may result in action being taken to remedy the employee's deficiencies, or to enforce the disciplinary procedures if improved output is not maintained.

#### Rules covering gross misconduct:

An employee will be liable to summary dismissal if he/she is found to have acted in any of the following ways:-

1. A serious or wilful breach of the above rules on Unsatisfactory Conduct and Misconduct.
2. Gross indecent or immoral behaviour.
3. Dangerous behaviour, fighting or physical assault.
4. Deliberate falsification of any Company records, including timesheets, absence records, expenses claims, and so on in respect of employment.
5. The consumption of alcoholic beverages or being under the influence of drugs in such a manner as to impair an employee's ability to carry out his/her duties safely and effectively.
6. The use, possession, concealment, transportation, promotion or sale of any prohibited substances.
7. Undertaking private work on the premises and/or in working hours without the express permission of a Company Director.
8. Misappropriation or unauthorised possession of money or property whether belonging to SMD Limited,, another employee, or any other person or company.
9. Serious health and safety breaches which endanger the lives of employees or any other person.
10. Destruction/sabotage of SMD property or any other property at the workplace.
11. Gross insubordination and/or refusal to obey legitimate instructions given by a Manager

or Supervisor of SMD Limited.

12. Abandoning your job without notification or sleeping on duty.
13. Sexual or racial discrimination.
14. Loss of vehicle driving licence through criminal conviction.

*(The list is not exhaustive)*

**Dismissal for Gross Misconduct offences will render the employee liable to termination without notice.**

### **Disciplinary Appeals Procedure:**

The disciplinary rules and procedures which form part of your Contract of Employment incorporate your right to lodge an appeal in respect of any disciplinary action taken against you.

If you wish to exercise this right, you should apply to the Managing Director in writing within 5 working days of being informed of the decision you are appealing against, stating why you feel that the penalty imposed is too severe and/or that you are innocent of the stated offence.

When a disciplinary Appeal investigation is heard, you will retain your right to be accompanied by a fellow employee and you will be given full opportunity to state your case.

The result of the appeal will be made known to you in writing within 5 working days after the hearing.

**THE DECISION OF THE MANAGING DIRECTOR IS FINAL**

## 15. Electrical Equipment

- Never tamper with electrical equipment or attempt to make repairs. Remember - even low voltage equipment can be dangerous.
- Report electrical faults to your Supervisor or Manager so that repairs can be carried out by a competent person.
- Always make sure covers and doors protecting electrical apparatus remain securely in place.
- Keep trailing electrical cables to a minimum to minimise tripping hazards. If cables have to cross passageways or traffic routes, cover them with a cable ramp to avoid tripping passers-by or damage to the cables.
- Don't overload circuits - check that the supply can safely deliver the electrical load required.
- Watch out for overhead cables and lines especially when carrying or moving metal objects - remember electricity can arc.
- Always check equipment and cables for any exposed wiring. loose connections, etc before use and report any damage.

## Portable Electric Tools

Portable tools can inflict serious injury if used improperly.

- Always check the supply and tool are both 110V, with the appropriate plug and socket. Only 110v tools are permitted on site
- Check the casing and supply cable, plugs or connectors to make sure they are in good condition before use. If any equipment is damaged do not use it but report the damage to your supervisor.
- Make sure the supply cable is long enough to avoid straining. If necessary, use a suitable extension.
- Only use portable tools for their intended purpose and avoid using worn, blunt or damaged bits, drills or other accessories.
- Never connect a portable electric tool to a lighting socket.
- Always wear eye protection when using tools to carry out work which may eject particles.
- Always disconnect power tools when not in use.
- Try to avoid standing on damp or wet surfaces when using electrical equipment, and keep equipment dry at all times.
- Electric power tools must be regularly inspected and maintained by a competent electrician.



## 16. Environment

Accidental spills and discharges can have an adverse impact on the environment.

- Make sure chemicals and other harmful substances are not stored next to drains, rivers, canals etc.
- Always place chemicals and other harmful substances in their appropriate storage areas.
- Don't discharge chemicals or other harmful substances down drains, sinks, toilets etc. - always follow the correct disposal procedure.
- Do not tamper with or open discharge valves on tanks or vessels containing harmful substances unless you are authorised to undertake this work.
- Report any leaks from plant or equipment so that it can be repaired.
- Always re-fuel equipment in designated areas in order to minimise the risks from fire.



## 17. Eye Protection

Impact resistant goggles and welding goggles are provided to all employees as appropriate. All employees have a legal obligation to wear eye protection when necessary and even if you are not carrying out work which is generating a risk you may be affected by other site activities.

Adherence to the following guidance will help to protect your eyes:

- Take care of any protective equipment issued to you.
- Make sure that the eye protection provided are suitable for you and the work being undertaken.
- Make sure that any protective goggles/visors issued to you are comfortable to wear and keep them clean.
- Have any damaged, lost or unserviceable protective equipment replaced immediately.
- Do not enter any areas where eye protection is required unless you are wearing the correct protective equipment.
- Do not watch welding processes unless your eyes are properly protected.
- A tiny fragment in your eye can cause damage, if you get material in your eye seek trained first-aid help, not a dirty handkerchief!
- The place for eye protection is over your eyes, not over your helmet or round your neck.
- Remember – eye protection is replaceable – your eyes are not.



## A SENSIBLE WORKER VALUES AND PROTECTS HIS SIGHT

### 18. Falls from Height

Climbing onto trailers or steelwork may be quicker, but if you fall the consequences could be serious. Always select the right access equipment - remember the scope of ladders and step ladders is limited and, depending on the work, you may have to consider using a mobile scaffold or properly erected working platform.

#### Scaffolds

Properly erected scaffolds provide a safe means of access and place of work when carrying out jobs at a height - make sure you eliminate falls by following these simple rules:

- Do not erect or alter scaffolds unless you have been properly trained and authorised to do so.
- Do not remove or interfere with ties, guardrails bracing, boards and ladders.
- Always use the ladder or access provided.

- Do not erect any makeshift platforms.
- Never exceed the load bearing capability of the scaffold - if in doubt check with your supervisor.
- Never leave loose items in the scaffold. If you stack materials on a scaffold, always leave a two-board wide (minimum) passageway.
- Always stack materials safely to prevent them falling - use guards or netting if necessary.
- Always report defects to your supervisor.

## Working Platforms

Working platforms that have been incorrectly erected or maintained can be liable to sudden collapse. Before using a platform, check that:

- The platform is fully boarded to eliminate gaps and that boards are not damaged or split. It is wide enough to accommodate materials safely, if necessary, and will still allow the free movement of personnel - 600mm e.g. 4 boards wide.
- All boards are adequately supported to prevent sagging, and that they overlap the support by at least 50mm, but no more than 4 times the board thickness.
- If personnel can fall more than 2m, check that guardrails and toe boards have been fitted. Toe boards should be at least 150mm high and guardrails at least 910mm above the platform with an intermediate rail to ensure there is no unprotected gap more than 470mm in height.

## Tower Scaffolds

- Check the scaffold is on firm level ground
- Make sure wheels are locked before use.
- Don't climb the scaffold frame - use the ladder or stair provided.
- Don't attempt to move mobile scaffolds with people on them.
- Check working platforms are fully boarded.
- Check platforms have suitable guardrails and toe boards around all four sides. (See working platforms).
- If using outriggers make sure they are fully extended and properly support the tower at all four corners.
- Check that the "free standing" mobile towers do not exceed the height to smallest base dimension of 3.5:1 for inside work or 3:1 for outside work.

## Fall Arrest Equipment

In situations where it is not practical to provide access equipment or working platforms to prevent personnel falling, fall arrest equipment must be worn and used. When in such situations you should:

- Be issued with the correct fall arrest equipment.
- Ensure that you know how to wear and adjust it properly.

- Always check for wear or damage before use.
- Make sure you put it on before commencing work.
- Always attach the lanyard to a suitable anchor point - if you are not sure, check with your supervisor.
- Always store the equipment correctly after use.



## 19. Fire Prevention

Fire can cause serious injury and extensive property damage:

- Read the fire instructions displayed on site and follow the correct procedure in the event of a fire.
- Get to know the location and types of extinguishers available on site.
- Make sure that you have fire extinguishers located close to where you are working for both decking and studwelding operations.
- Always ensure that the fire fighting equipment is kept clear of material and other obstructions. Don't tamper with fire equipment - leave it in its designated locations unless you need it to extinguish a fire.
- Inspect areas around and beneath the decking before commencing studwelding. Ensure that flammable or combustible material is moved or covered prior to carrying out any hot work (e.g. sparks from grinding, burning etc.) and follow any permit condition which may apply.
- Shut off engines of petrol driven tools and other equipment before adding fuel.
- Keep sparks, flames and excessive heat away from solvents and other combustible materials.
- Make sure you are familiar with the escape routes so that you know which route to follow in an emergency.
- Always ensure that you have a clear escape route when tackling fires to avoid being trapped.
- Keep combustible materials, particularly clothing, well away from heaters.
- Regularly remove all scraps and debris, particularly combustible and flammable material, from your work area to minimise potential fire risks.
- Report all fire hazards to your superior immediately.
- Only smoke in authorised places and make sure you extinguish matches, cigarettes etc. in the receptacles provided. Obey the "No Smoking" and "No open flames" signs



## 20. Fire Extinguishers

All new portable fire extinguishers are painted red. With one exception, they may have a separately coloured panel that indicates the extinguisher medium and hence the type of fire they are capable of extinguishing. The one exception is the "all red" extinguisher, which uses water as its extinguishing medium.

Extinguishing Medium	Description	Use on
<b>WATER</b>	<b>Red</b> May have red coloured panel with white boarder	Combustible Materials:- Wood, Paper, Cardboard, Fabric, Textiles....
<b>POWDER</b>	<b>Blue</b> May be red with blue coloured panel	Flammable liquids and gases / Electrical equipment
Carbon Dioxide <b>CO<sup>2</sup></b>	<b>Black</b> May be red with black coloured panel	Electrical and Flammable Liquid fires
<b>FOAM</b>	<b>Cream</b> May be red with cream coloured panel	Flammable liquids, oils, fats and spirits

For fires including electrical equipment - isolate the electrical supply before attempting to fight the fire.

Some older extinguishers are completely painted in the above single colours, but they will be withdrawn eventually , and will be replaced by extinguishers with the new colour coded panel.



## 21. First Aid

First aid equipment is provided for treating various types of injuries. Consult the noticeboard about first aid arrangements on site.

- Get to know where the first aid equipment is kept and who to contact in an emergency.
- Do not interfere with or misuse first aid equipment.
- Report all injuries, even minor ones, so that proper treatment can be given.



## 22. Hand Injuries - Prevention

Many hand injuries occur on construction sites due to contact with sharp or jagged objects, splinters, and the use of defective hand tools. Common causes of hand injury to metal deckers are cuts sustained while laying decks and particularly from the cut ends of sheets.

- You can avoid or minimise hand injuries by taking sensible precautions including wearing appropriate gloves when:
  1. Handling objects with sharp or rough edges e.g. decking sheets,
  2. Unpacking banded loads e.g. decking bundles etc. where the bands can be very sharp and under tension,
  3. Work in dirty or contaminated areas,
  4. Using chemicals and other hazardous substances.
- Suitable gloves must also be worn when carrying out the following activities:
  1. Welding or cutting etc.
  2. Grinding or disc cutting etc.
- Care must be exercised at all times to prevent hands being trapped e.g. under sheets or against steelwork.

### REMEMBER

- Always wear appropriate gloves when carrying out work where there is a risk of hand injury.
- Take care whilst handling decking. Ensure that there are no trapping hazards in the immediate vicinity of the area where the decking or studwelding is being carried out.
- Make sure that any hand-tools that you might use are in good repair. Report any defective or damaged hand tools.

## 23. Hand Tools

- Always use the correct hand tool for the job and inspect it before use. Don't use hammers with loose heads, chisels with mushroom heads, worn spanners and screwdrivers. Protect sharp edged tools when not in use.
- Always use suitable knives for cutting and keep your hands behind the cutting edge, wherever possible. Avoid cutting towards the body and wear cut resistant gloves or gauntlets if necessary.
- Do not use screwdrivers whilst holding work in your hand. It is much safer to put the work piece down just in case the screwdriver slips.
- Make sure files are fitted with the correct size of handle.
- Keep tools in boxes or racks when not in use and scrap tools which are worn or damaged beyond repair.

## 24. Health Hazards

The Control of Substances Hazardous to Health (COSHH) Regulations are intended to protect workers from the effects, whether immediate or delayed, of exposure to hazardous substance.



There may be such substances on site which could be harmful to health if used improperly, such as solvents, epoxy based products, cement etc.

Always follow the safe working procedure listed below:

- Always read and follow the instructions on the container, hazard data sheet and assessment form for the substance you are using.
- If you are required to wear protective equipment, make sure you put it on before handling the container.
- Never sniff a container to find out what is inside.
- Ensure there is adequate ventilation or wear suitable respiratory protection when using a substance that gives off a harmful vapour/ dust.
- Never put harmful substances in unmarked containers in case they are mistaken for something else.
- Never mix substances together that react with one another.

- Make sure lids, caps or bungs are replaced as soon as possible, and place the container in its correct storage area.
- Do not eat, drink or smoke when using harmful substances and always wash your hands and face at the end of the work to avoid contamination.
- In the case of spills, follow the emergency procedure detailed in the data/ assessment sheet.
- Never discharge harmful substances down drains, sinks etc.

## 25. Housekeeping

- Keep your work area tidy by removing unwanted waste regularly.
- Always stack material safely in the storage area provided.
- Coil up hoses and cables when not in use.
- Clean up spills to prevent slips.
- Store tools safely when not in use.
- Never overload storage racks - always check the safe working load of the rack to ensure the item is within this load.
- Keep gangway, passageways, fire exits and access to fire fighting equipment clear at all times.

## 26. Lifting and Carrying

Bad lifting techniques can lead to serious back strain and other injuries. If you have to lift or carry something, follow these simple rules:

- Use mechanised systems, whenever possible, to reduce the need for manual handling.
- Where possible gloves should be worn to protect against cuts, scratches or puncture wounds, be careful not to crush your fingers when lowering loads.
- Always wear safety boots or shoes on site to protect toes from falling loads.
- Make sure there are no obstructions or tripping hazards on your planned travel route.
- Plan the lift, think about where and how you'll put the load down.
- Evaluate the load and, if necessary, make a trial lift of a few inches.
- If necessary ask for assistance to make the task easier.
- When lifting to a height from the floor, do it in stages.
- If the load is within your capability - keep your feet slightly apart with one foot front of the other and with your back straight, bend your knees, get a firm grip, hold the item close to your body and use your legs to straighten up.
- Try to avoid twisting, turning or stretching whilst holding material. If you need to change direction, turn your whole body.
- Do not carry loads which obscure your vision, make sure you can see where you are going.

## 27. Lifting Operations

All operatives undertaking slinger/signaller duties must be trained and authorised.

- Various items are provided for lifting purposes e.g. wire rope slings, chains, shackles, eye bolts etc.
- All lifting gear must be marked with its Safe Working Load. Establish the SWL and make sure that lifting gear is in good condition before use.
- Remember the SWL may vary depending on the configuration of the sling during use. There should be a table available showing the Safe Working Load (SWL) for various lifting configurations.
- Never exceed the SWL of either the lifting equipment or lifting appliance - if you are not sure, check with your supervisor. Always inspect items of lifting equipment before use, especially soft slings such as nylon to ensure they are in good condition and fitted with appropriate protection, such as sleeves etc. and wire ropes to ensure that they are not kinked, frayed, or have projecting needles.
- Never use improvised slings or a single leg of a multiple leg sling.
- Never tie knots in chain to shorten them - use shortening clutches or get shorter slings.
- Make sure that the right pin is used in all shackles and that the pin is properly screwed home before lifting.
- All hooks must be approved "C" type or fitted with an effective safety catch to prevent displacement of the lifting gear.
- Ensure that appropriate signage is displayed and warning barriers erected to keep all persons not involved in the lifting operations away from the immediate vicinity, particularly children and the general public.
- Always see that the crane hook is centrally placed over the load to prevent swinging when the load is being raised.
- Take your hands away from chains and ropes before the crane takes the load and stand clear.
- Ensure that the load is fitted off the ground and see that it is free and correctly slung before hoisting.
- Never crawl or stand under suspended loads and warn others to keep clear of moving loads.
- When lowering, provided suitable bearers beneath the load, where appropriate, to avoid crushing the lifting gear and to facilitate its removal.
- Once the load has been lowered - check it is secure and stable before releasing the lifting equipment.
- Never leave slings hanging from crane hooks since they may catch on obstructions whilst the crane is travelling.
- When signalling, stand where you can see the load clearly and where the operator can see you. Whenever possible face the operator.
- Always wear a safety helmet, high visibility vest or coat and safety boots.

- Make your signals clear and distinctly and always use the approved code signals.
- When the crane is operating do not leave the area unless you have been relieved by a trained deputy.
- When the crane is travelling, ensure that you signal to the operator to warn him of obstructions on the route or awkward corners.
- Riding on loads is strictly prohibited.
- Never allow lifting gear to be used for any other purpose, e.g. towing.
- Take good care of all lifting equipment and return equipment to its proper storage area off the ground when not in use.



## 28. Mobile Elevating Work Platforms

Only trained and authorised personnel are permitted to use MEWPs

Prior to use of the equipment you must ensure that:

1. A site-specific survey and risk assessment has been completed.
2. All necessary safety equipment (harnesses etc.) is available and used.
3. The operating area is adequately signed, and fenced to prevent access from pedestrians and other site vehicles and plant.

Mobile elevating work platforms must not be used:

- as jacks, props, ties or supports
- primarily for the transfer of goods or materials
- as a crane or lifting appliance.

## 29. Noise

Excessive noise can affect your hearing and over a period of time will result in noise-induced deafness. The use of a petrol cut-off saw, grinding, shot firing and working near stud-welding generators are extremely noisy operations. If you work in areas where you have to shout to be heard then you require to use hearing protection.

- Look out for noise warning and hearing protection signs. Wear suitable hearing protection before entering these areas or using a noisy plant and equipment.
- Do not use cotton wool for hearing protection, it is not effective.
- When using ear plugs make sure that they are a good fit and are properly inserted in each ear.
- Regularly clean re-usable ear plugs to the manufacturers instructions.
- Do not re-use disposable ear plugs.
- Make sure your hands are clean before handling ear plugs.

- Ear muffs must be a good fit to the head all around the seal.
- Ensure that ear muffs are worn the correct way round.
- Make sure that the muff seals are undamaged.
- Do not alter the pressure of ear muffs by bending the head band.
- Never use damaged or dirty hearing protection.
- Take care of your hearing protection and replace it when necessary.
- Unless necessary, do not remove acoustic covers or panels from noisy equipment, such as compressors, and always replace these covers or panels as soon as possible.
- To minimise the risk, always switch off noisy machines when not in use.



### 30. Personal Protective Equipment (PPE)

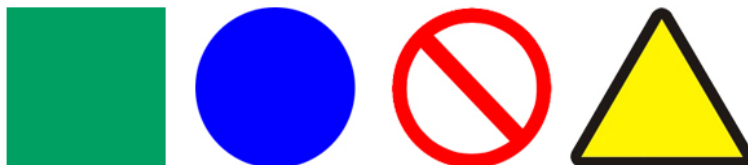
It is not possible or practicable to eliminate all risks and therefore you may need to wear PPE to avoid injury or ill health. PPE is normally provided to enable you to work safely, therefore, you must wear the protection provided. The type of PPE will largely depend on the risks involved as shown in the following examples.

Part of Body	Protection which may be required
Head	Safety Helmets
Face	Visors, face shields etc
Eyes	Goggles, spectacles, visors etc
Hearing	Ear defenders, ear plugs etc
Respiratory	Disposable/ cartridge respirators, breathing apparatus etc.
Hands	Gloves (canvas, neoprene, PVC etc.)
Legs	Trousers, leggings, spats etc.
Feet	Protective footwear
Whole Body	Foul weather gear, high visibility vests and coats, aprons etc

- Make sure you know what to wear before commencing work - if in doubt, check with your supervisor.
- Look out for PPE signs in the area or labels on containers, drums, etc. which tell you what to wear.
- Check if there are published data sheets which stipulate what protective equipment should be worn.
- Always wear the PPE required for the job
- Report defects to your supervisor.

## 31. Safety Signs

Signs may be displayed around the site to help you understand the action which needs to be taken in particular situations. These signs now conform to standard colours, shapes and symbols as shown below:



Green means safe condition

Blue means mandatory

Red means stop/ prohibition.

Yellow means caution.

Look out for these signs and follow the instructions.

Remember:

Red means stop/ prohibition. Remember red means danger

Blue means mandatory. Remember blue is something you must do.

Yellow warns of a hazard.

## 32. Slips, Trips and Falls

Slips, trips and falls result in a high number of accidents each year, and falling from a height is the single largest cause of site fatalities. A great deal can be done to prevent slips, trips and falls, but this requires your commitment and action to reduce the risks.

- Pay attention to where you are going - many accidents are caused by people not looking out for obstructions.
- Walk - don't run. Running only increases the risks.
- Clear up as you go - do not leave things lying around for others to slip, trip or fall over.
- Put waste in the skips and bins provided.
- Report poor site conditions such as holes, oil or excess water, so that action can be taken to rectify the problem.
- Wear suitable footwear and try to avoid contamination from oil, mud, water etc. which may cause you to slip.
- Always use the correct access equipment for work at heights.





### 33. Safe Systems of Work including Permits

Some jobs and activities are inherently dangerous which means that certain risks remain. To avoid injury or ill health, these risks need to be properly controlled by adopting a safe way to do the work.

Such examples are called safe systems of work ; method statements are an example.

- Get to know what safe systems exist e.g. isolation procedures, erecting steel, dismantling etc. - if you are not sure, check with your supervisor.
- Read through the procedure and make sure you understand it - if you don't, ask for help.
- Always follow the procedure - don't take short cuts or make it up as you go along.
- If the procedure seems out of date or mentions things which no longer exist, bring the matter to the attention of your supervisor.

If you ignore written safe systems it can lead to serious injury and may well result in disciplinary action or criminal prosecution - so remember to follow the correct procedure at all times.

### 34. Skin Care

Occupational contact dermatitis is a skin condition which is caused by contact with substances used at work. It can look like some common rashes not connected with work. Some people are much more likely to catch it than others but it is not catching.

Signs can be redness, itching, scaling and blistering. If it gets worse the skin can crack and bleed and the dermatitis can spread all over the body.

It most commonly affects the hands, forearms and legs but you can also get it on your face, neck or chest, particularly following contact with dust, mist or fumes.

Some common causes are:

Brick,	Stone,	Plaster,	Dust
Cement,	Petrol,	Diesel,	Studwelding Fumes
Oil	Solvents	Detergents,	Expanding Foam.

Some substances take weeks, months or even years to cause dermatitis. This is because the skin becomes allergic to them. This type of dermatitis may also cause swelling of the eyes and lips.

Occupational contact dermatitis is the most common occupational health problem and the Employment Medical Advisory Service, in conjunction with the Health and Safety Executive has issued information about skin care. If you work with substances that can cause

dermatitis:

- Avoid skin contact with the substance
- Wear protective clothing, such as gloves
- Keep your skin clean and use an after wash cream
- Keep your workplace clean
- Get first aid treatment for all cuts and grazes and keep them covered
- Don't use abrasives or solvents to clean your skin
- Don't let filler foam contact your skin
- Avoid work with irritant or allergic substances if you suffer from eczema or allergic rashes.
- Keep an eye on your skin

NB If you notice a rash tell your doctor AT ONCE.

Untreated dermatitis becomes serious.

### 35. Unsafe Acts and Conditions

Keep the site safe.

- Don't take short cuts or act unsafely.
- If you see others at risk bring it to their attention.
- If you see unsafe conditions:
  - Eliminate them without putting yourself at risk.
  - If this is not possible, warn others about the hazard and report the matter to your supervisor immediately.

### 36. Vibration

Repeated exposure to vibration which reaches your hands when you are working with hand-held power tools like cutting off machines and cartridge tools can cause Hand Arm Vibration Syndrome.

The symptoms of HAVS in the hands can include:

- Pins and needles,
- Loss of sense of touch,
- Severe pain and numbness,
- Loss of grip strength,
- Painful wrists (carpal tunnel syndrome)

These symptoms could limit the work that you can do, for example you may not be able to continue to use the vibrating equipment (which would make the symptoms worse), work in cold or wet conditions (which could trigger painful attacks), or do work requiring handling of

small things like screws or nails. They may also affect your family or leisure activities like fishing, golf, washing the car, gardening or even fastening buttons or sorting out coins.

What can I do to reduce the risk?

- Tell your Supervisor about any tools or jobs which produce high levels of vibration,
- Co-operate with any new ways of working introduced to reduce the risk,
- Keep warm at work, especially your hands. Wear warm gloves and extra clothing if you work in the cold,
- Don't smoke, or at least cut down just before and while you are at work,
- Exercise your hands and fingers to improve blood flow,
- Use the correct tool for the job. Making do with the wrong tool can mean more vibration, that you have to grip the tool harder or that you have to use it for longer,
- Do not use any more force than is necessary when using tools,
- Try to avoid long periods of using equipment without a break - short bursts are better,
- Keep tools in good working order - badly maintained or unrepaired equipment may produce more vibration
- Don't ignore symptoms. It is important to do something about them before they become a problem. Tell your supervisor, see your doctor or an occupational nurse. If they give any advice take it and go for routine medical check-ups if provided.

You must co-operate with the procedures in place to minimise the risks, e.g.

- Taking breaks from working with vibrating tools,
- Using the suitable clothing and gloves provided.
- Making sure that new and replacement tools are low vibration where possible,
- When appropriate using the special reduced vibration gloves provided'
- Completing records of usage of specific tools to aid assessment of the risks.

### 37. Welfare Facilities

You are legally entitled to suitable and sufficient welfare facilities such as changing rooms, washing facilities, toilets etc. However, you have a responsibility to look after these facilities.

- Always use the facilities provided for eating, washing, changing etc.
- Try to keep these areas clean and tidy. Simple things like wiping surfaces, handing up clothes, rinsing basins, flushing toilets properly - go some way to maintaining welfare standards.
- Report any damaged or broken equipment to your supervisor so that it can be repaired.
- Always wash your hands before eating and drinking and after you have been to the toilet.

### 38. Personal Details

**Structural Metal Decks Limited**  
**Health and Safety on Site**  
**A Guide for Deckers, Studwelders and other Contractors**

This Guide is supplied by Structural Metal Decks Limited

To: \_\_\_\_\_

Name: \_\_\_\_\_

Signature of Recipient: \_\_\_\_\_

Date: \_\_\_\_\_

Note: After completion photocopy this page and send to Head Office for individual record file.



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