

On Reactors Limited Agade Hadod Swarsen

Health & Safety Handbook for Employees

### **INTRODUCTION**

This booklet has been produced to assist the employees of John Weaver (Contractors) Ltd. (the Company) in undertaking their duties and responsibilities and those of the Company. Please read it carefully and ask your supervisor if you require clarification on any of its contents.

We place great emphasis on ensuring the health & safety of our employees and those other persons who may be affected by our operations. To this end, we have prepared a comprehensive Company Safety Manual, copies of which are held at head office and in the site offices at our major contracts. This document is available for you to see during normal working hours and we encourage you to refer to the Manual if you are unsure about any aspect of your work.

In order to assist us in implementing our Safety Policy, South Wales Safety **Consultancy Limited** are available to advise us on all aspects of health & safety. If necessary, they may be contacted at their offices on (029) 2062 8763 or by email: handbook@swsconsultancy.com.

Finally, a reminder. Working in an unsafe manner exposes both yourself and others to unacceptable risks. The Company will take such failures very seriously and will take whatever actions necessary to rectify the matters. This may include disciplinary measures against the offender which could result in suspension or dismissal.

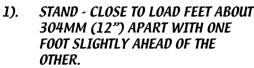


## Safe Lifting Practice



### DO NOT RISK INIURY BY ATTEMPTING TO LIFT HEAVY LOADS AND ALWAYS SEEK ASSISTANCE

THE FOLLOWING PRECAUTIONS MUST BE TAKEN WHEN LIFTING: -





**Avoid Twisting** the Back

- WITH THE BACK STRAIGHT BEND 2). THE KNEES. KEEP CHIN TUCKED IN.
- *3*). OBTAIN A FIRM DIAGONAL GRIP. KEEP LOAD CLOSE TO BODY.
- LIFT UP BY STRAIGHTENING LEGS AND MOVE OFF.
- WHEN LOWERING LOAD. KEEP THE BACK STRAIGHT, BEND LEGS.
- AVOID TRAPPING FINGERS BY PLACING THE LOAD ASKEW ON SUITABLE PACKING



**Avoid Sideways** Bending of the Back



Too High

Avoid **Bent Back** 



Kinetic Lifting - The Correct Position.

Head Erect, Back Straight, Elbows in, Knees Bent, Feet Slightly Apart and One Foot Ahead of the Other to Maintain Balance

# PLEASE READ THIS HANDBOOK CAREFULLY. IF THERE ARE ANY PARTS WHICH YOU DON'T UNDERSTAND OR ABOUT WHICH YOU WOULD LIKE FURTHER INFORMATION, PLEASE CONTACT YOUR SITE MANAGER

OR HEAD OFFICE.

I have read & understood the contents of this handbook. I will endeavour to work without endangering the health & safety of myself, my colleagues or others.

### John Weaver (Contractors) Ltd.

### **Health and Safety at Work**

### **Safety Policy Statement**

### 1. Introduction

- 1.1 This Statement sets out the policy of John Weaver (Contractors) Ltd. in respect of any employee, self-employed person and contractor under our control whose health and safety may be affected by our workactivities. Its intention is to assist in protecting all our personnel whilst at work and to assist the Company in fulfilling its legal and moral obligations.
- 1.2 In addition to the groups of persons mentioned above, this Policy is also intended to assist in ensuring that all Clients and other persons who may come into contact with this Company or its premises or its activities (whether or not work-related) are not adversely affected with regard to their health and safety.
- 1.3 Provided that persons referred to in 1.1 above adhere to the provisions and precautions contained within this policy, they will normally be able to work safely and without undue risk to their health. They will also be considered to have demonstrated compliance with their conditions of employment or contract insofar as they refer to health and safety at work.
- 1.4 All persons referred to in 1.1 above are to be made aware of the contents of this Policy and become familiar with the conditions and precautions laid down. A copy of the Policy will be available at each place of work. Personal copies of the Policy may be obtained on request from Head Office.

### 2. Definitions

- 2.1 In this Policy, the expression 'at work' means whenever and wherever work takes place and may include travel for work (for instance travel between premises, sites, to and from meetings etc.).
- 2.2 The term 'legal obligations' refers to the statutory duties laid down principally in The Health & Safety at Work etc. Act 1974, but also in supporting legislation brought under the Act from time to time.

### 3. Policy

- 3.1 The Company will take all reasonable measures to ensure that those persons referred to in 1.1 above are made aware of the contents of this Policy, the possible effects upon their personal health & safety and the possible consequences in the event of any breach of this Policy.
- 3.2 The Company recognises itis obligations under Section 2(1) of The Health and Safety at Work etc. Act 1974 and the various duties and obligations under The Management of Health and Safety at Work Regulations 1999 and associated legislation and will take all reasonable measures to prevent, so far as is reasonably practicable, any breach of duty placed upon the Company by legislation and/or this Policy.

- 3.3 All employees of the Company will at all times exercise diligence in ensuring that this policy is adhered to. Responsibilities of individuals are determined by their grade of employment as detailed elsewhere in this Policy.
- 3.4 The Company will undertake, so far as is reasonably practicable, the following:-
- a). The provision and maintenance of plant and systems of work that are safe and without risks to health.
- b). Arrangements for ensuring safety and absence of risks to health in connection with the supply, use, handling, storage and transporting of articles and substances.
- c). The maintenance of premises and places of work which are safe and without risks to health, and safe access to and egress from such places.
- d). The provision and maintenance of a working environment for employees without risks to health and adequate as regards facilities and arrangements for their welfare at work.
- e). The provision of such information, instruction, training and supervision as is necessary to ensure the health and safety at work of employees.
- f). Adequate arrangements to ensure that employees or their representatives are given every facility for consulting with management in promoting and developing measures to ensure the health and safety at work of all employees.
- g). Systems and procedures which will ensure that all operations and activities are executed at all times in such a manner that persons not in our employment who may be affected by such operations are not exposed to risks to their health and safety.

### 4. Supporting Documentation

- 4.1 Additional information has been prepared in order to assist in adhering to this Policy. Reference should therefore be made to the following groups of documents:
  - a). Documents Directly Associated With This Policy

    These comprise the allocation of health and safety responsibilities within the Company and the general arrangements for implementing the policy.
  - Safe Systems of Work
     These comprise the rules and conditions for carrying out specified activities.
  - c). <u>Health and Safety Information</u>
    Information about matters such as noise at work, manual handling techniques, risk assessment, first aid procedures etc.
  - d). Other Policies
    In addition to this general policy on health and safety, the Company has prepared the following policies relating to specific health and safety related topics:-

Notes

- Can all the plant, substances and goods involved in the work be safely handled by one person?
- Does the work involve lifting objects too large or heavy for one person?
- Is more than one person required to operate essential equipment?
- Is there a risk of violence against the lone worker?
- Are women especially at risk?
- Are young persons especially at risk?
- Is the individual medically fit and suitable to work alone?
- What training is required for the lone worker?
- How will the lone worker be monitored and supervised?
- What arrangements will be necessary should the lone person become ill, have an accident or if there is another type of emergency?

### **Control Measures**

In addition to the control measures which would be required whether or not lone working was involved, the following procedures should be considered and implemented as necessary:

- Supervisors periodically visiting and observing lone workers
- Regular contact between the lone worker and their supervisor, using telephones or radios
- Use of automatic warning devices which operate if specific signals are not received from the lone worker (e.g. systems for security staff)
- Alarms which are activated automatically by the absence of activity
- Permits to Work
- Access to fire fighting and first aid equipment

- i). Violence at Work
- ii). Equal Opportunities
- iii). Alcohol & Drugs
- iv). Lone Working
- v). Accident and Incident Reporting, Recording and Investigation
- vi). Control of Substances Hazardous to Health
- vii). Environmental Management
- e) Forms and Miscellaneous Items.
  Standard forms are used for various aspects of health and safety
  management. These include such items as risk assessments (both generic and
  specific), display screen equipment checklists, safety audit checklists, employee
  handbooks etc.

### 5. Policy Review

5.1 This Policy and its associated documentation will be reviewed after changes in legislation, changes in the structure of the Company, in the light of additional knowledge or information becoming available, and in any event annually.

### 6. Responsibility for Policy Implementation

- 6.1 The overall responsibility for the implementation of this policy is vested in the Board of Directors of John Weaver (Contractors) Ltd.. They will be assisted as necessary by South Wales Safety Consultancy Limited, who will provide support and advice on strategy and day to day health and safety related matters.
- 6.2 Responsibilities for different management grades and individuals are detailed in accompanying documentation.

The original of this policy has been signed & dated and may be inspected at Head Office.

### **Responsibilities of Individuals**

All grades of employees have an overall responsibility, defined in Section 7 of The Health and Safety at Work etc. Act 1974, to ensure that they take reasonable care of their own health and safety whilst at work and also that they do not adversely affect others by anything they do (or fail to do) whilst at work.

Section 8 of the same Act places a duty on all employees not to interfere with or misuse anything that is provided for reasons of health and safety.

All individuals are required to co-operate with the Company and his or her fellow employees on all matters relating to health and safety at work.

All persons are required to report to their manager, supervisor or the Health and Safety Adviser any condition which is or may be detrimental to the health and safety of any person. This may include the physical condition of premises or equipment, a dangerous or unsafe work practice or the regard paid to health and safety matters by others.

No person may undertake any form of work for which they have not been specifically trained and/or authorised. The decision regarding the competence of any person with regard to health and safety matters will be taken by the appropriate Manager, after discussion where necessary with the Director(s) and/or the Health and Safety Adviser.

### LONE WORKING

### **Definition**

Lone workers are defined as those who work by themselves and without close or direct supervision. They are found in a wide range of situations, such as:-

People in fixed establishments where:

- only one person works on the premises (e.g. small workshops, petrol stations or shops)
- Homeworkers
- people work separately from others in places such as factories, warehouses, leisure centres etc.
- people work outside normal hours, such as cleaners, security personnel, maintenance staff etc.

Mobile workers working away from their fixed base:

- on construction, plant installation, lift repairs, vehicle recovery etc.
- agricultural and forestry workers
- service workers, such as rent collectors, postal staff, drivers, estate agents, sales representatives etc.

### Risk Assessment

All lone working operations must be assessed and appropriate control measures introduced. The assessment must cover all eventualities and it is often useful to talk to lone workers, who will usually be able to provide valuable information about their work.

Control measures will include instruction, training, supervision, protective equipment and communication procedures. All control measures must be checked for their effectiveness and to ensure that they are being properly implemented. The amount of monitoring required will usually depend on the level of risk being encountered by the lone worker.

In certain instances, the assessment will establish that it is not possible for the work to be done safely by a lone worker. Clear and effective arrangements must then be made for providing help or back-up.

Lone workers should not be more at risk than other employees. This may require extra control measures. Precautions should take account of normal work and foreseeable emergencies, such as fire, equipment failure, illness and accidents. When planning work activities which may involve lone working, the following questions may be considered:-

- Can the risks of the job be adequately controlled by one person?
- Does the workplace present a special risk to lone workers?
- Is there safe access and egress?
- If access equipment is needed (e.g. ladders or trestles), can it be safely handled and used by one person?

### **WORKING IN THE SUN**

The hazards caused by working in the sun are the Ultraviolet - UV - rays in strong sunlight.

The dangers :-

Short term - sun exposure to pale skin can cause burns leading to blistering.

Long term - increased risk of developing skin cancer in later life. Too much sun will also prematurely age skin making it leathery, mottled and wrinkled.

Fair or freckle skinned persons must take extreme care when in the sun as they are more likely to burn.

Obtain and apply a known sun protection lotion and apply it to exposed areas. If possible, in strong sunlight, wear a hat to deflect the rays.

# KEEP YOUR TOP ON!

### **USE OF COMPANY & PERSONAL VEHICLES**

Any person who wishes to drive a vehicle owned or hired to the Company must be in possession of a current, valid UK driver's licence.

Drivers must check that valid insurance has been arranged.

Drivers must check over their vehicles before each use, except in the case of regular drivers, in which case normal inspection and maintenance procedures will apply.

Defects must be reported to the manager responsible for the vehicle in order that remedial works can be arranged.

Wherever possible, park vehicles on firm, level ground and always apply the handbrake.

Never open doors or alight from a moving vehicle.

If reversing a vehicle with restricted vision or manoeuvring in a confined space, seek assistance so that the operation is carried out safely.

Do not leave a vehicle unattended unless the engine has been turned off and the vehicle has been locked.

Never smoke or use a mobile phone during refuelling.

Never attempt to drive a vehicle you feel would be outside your capabilities.

Line managers must be informed of any change in circumstances of any vehicle driver. This could include physical problems or matters which may result in insurance cover being withheld or subjected to excess.

It is not permissible to use a hand held mobile phone or microphone whilst driving and safer to find somewhere to park before using even hands free equipment.

If carrying a mobile phone whilst driving, the following procedures should be followed:-

- i). Switch off the phone
- or
  ii). Let your message service answer
- or
- iii). Ask a colleague to answer
- iv). Use call divert
- or v). Park (safely) and answer
- or vi). Ignore the call

Switch off mobile phones in petrol station forecourts.

All company vehicles must be equipped with a first aid kit. Any person using any of the contents of a first aid kit must report to their appropriate manager so that replacement first aid materials can be provided.

Remember to report all accidents and record the circumstances in the first aid book.

### **WORK AT HEIGHT**

The Work at Height Regulations 2005 came into force on 6th April 2005. They replace all earlier regulations regarding work at height, including the sections relating to work at height contained within the Workplace (Health, Safety and Welfare) Regulations 1992 and the Construction (Health, Safety and Welfare) Regulations 1996.

Work at height is defined as being any place where a person could be injured as a result of falling from it - even if it is at, or below, ground level.

### Employer's Duties

This company accepts its responsibilities as a duty holder, i.e. as an employer and when in control of work undertaken by others. Our responsibilities are;

- To properly plan and organise all work at height (including contingencies for emergency situations);
- To ensure that work at height takes account of weather conditions that may endanger health and safety;
- To ensure that those involved in planning and carrying out work at height are trained and competent;
- To ensure the place where work at height is to be carried out, is safe (including access to the workplace and egress from it);
- To ensure that work equipment used for work at height is appropriately inspected;
- To ensure risks from falls through fragile surfaces are properly controlled;
- To ensure risks from falling objects are properly controlled.

Work at height must be risk-assessed in all cases, in accordance with the requirements of the Management of Health and Safety at Work Regulations.

### Hierarchy of Controls

The following hierarchy of measures must be adopted for all work at height:-

- The need for work at height must be minimised so far as is reasonably practicable.
   Work should not be undertaken at height if it can be carried out safely by other
   methods.
- Appropriate work equipment or other measures must be used to prevent falls where working at height cannot be avoided. (e.g. guard rails and toe boards)
- 3. Where the risk of a fall cannot be eliminated, work equipment or other measures must be used to minimise the distance and consequences of a fall. (e.g. safety nets or soft landing systems)

### Selection of protective equipment

Collective protection measures must be given priority over personal protection measures when selecting equipment for work at height. For example, the installation of guardrails would protect all persons working at height, whereas a safety harness would only protect the individual wearing it (and its effectiveness would rely on the user clipping on correctly).

THE TASKS

THE LOADS

holding loads away from the trunk?

bulky/unwieldy?

heavy?

twisting? stooping?

difficult to grasp?

large vertical movements?

intrinsically harmful (sharp /

hot)?

strenuous pushing or pulling?

long distances?

unpredictable movement of loads?

repetitive handling?

insufficient rest or recovery?

a work rate imposed by an activity?

It is also important to consider the working environment, individual capability and other factors. For example, are there:-

constraints on posture?

poor floors/ground

conditions?

variations in levels?

hot/cold/humid conditions?

strong air movements?

poor visibility conditions?

unusual capability requirements?

any health conditions to be considered?

When carrying out any manual handling activity, no person must risk injury through attempting to lift heavy loads. Always seek assistance.

The following precautions should be taken when lifting:-

- Stand firmly, close to load, feet about 304mm (12") apart, one foot slightly ahead of the other.
- With back straight, bend the knees. Keep chin tucked in.
- Obtain a firm, diagonal grip. Keep load close to body.
- Lift up by straightening legs and move off.
- When lowering load, keep the back straight, bend legs.
- Avoid trapping fingers by placing the load askew on suitable packing.

### MANUAL HANDLING OPERATIONS

The Manual Handling Operations Regulations 1992 require that every employer shall, so far as is reasonably practicable, avoid the need for employees to undertake any manual handling operations which involve a risk of their being injured. Only if this cannot be achieved may manual handling be considered, subject to a suitable and sufficient assessment being carried out.

Where there is a foreseeable risk of any injury to employees from carrying out manual handling activities, the responsible manager/supervisor must carry out an assessment of any risk on the form provided in the 'Forms' section of this manual. Employees involved in the manual handling operation must be informed of the risk and of the control measures required to be taken by them.

Except under special circumstances, no manual handling assessment will generally be required for loads of 25kg (56lbs) or under for men and 17.5kg (38lbs) for women.

For work activities with variable weights, such as the unloading of vehicles, employees may be trained to assess the manual handling risks involved and the control measures to be adopted.

When carrying out any manual handling, consider whether any special PPE may be required (e.g. gloves, aprons, safety shoes etc.) and whether any mechanical devices can be utilised (e.g. trolleys, hoists, lifting tongs, vacuum handles etc.)

The following list of weights gives the suggested action required to enable manual handling operations to be carried out safely.

N.B. Mechanical handling must be considered BEFORE carrying out any manual handling operation.

LOAD		ACTION
<20kg	(44lbs)	Repetitive lifting - usually within the capability of persons with no known medical conditions
20 - 25kg	(56lbs)	Occasional lifting - usually within the capability of persons with no known medical condition.
25 - 35kg	(56-75lbs)	Specific training required to be able to overcome lifting problems.
35-50kg	(75-112lbs)	Within the capability of 2 well trained persons in an ideal environment.
>50kg	(112lbs)	Mechanical handling required.

When carrying out manual handling assessments, the criteria shown below must be considered:-

### WORK AT HEIGHT (cont)

### **Inspections**

Inspections required by these Regulations vary according to the work equipment being used and the type of work being undertaken. More details are contained in the relevant pages this manual and in the schedules appended to the Regulations. The requirements for inspections are in addition to those that may be required by the Provision and Use of Work Equipment Regulations (PUWER) and the Lifting Operations and Lifting Equipment Regulations (LOLER).

'Inspections' are defined as 'such visual or more rigorous inspection by a competent persons as is appropriate for safety purposes...(including) any testing appropriate for those purposes'.

Each individual place of work at height must be checked on every occasion before the place is used. This will include its access, surface, guardrails, etc.

The following items must be inspected after assembly or installation and as often as is necessary to ensure safety, in particular to make sure that any deterioration can be detected and remedied in good time;

- Guardrails
- Toe-boards
- Barriers
- Working platforms
- Ladders
- Safety netting
- Etc.

The top guardrail or other similar means of protection must be at least 950mm above the edge from which persons could fall, although a height of 1000mm is recommended.

### **Employees Duties**

All employees are required to report to their employer any activity or defect relating to work at height which is likely to cause danger. Employees are also required to use any work equipment or safety device provided for work at height in accordance with training and instruction they have received. These are in addition to the general duties placed on employees by other legislation, including the Health and Safety at Work etc. Act 1974

### HAND/ARM VIBRATION

### What is "hand arm vibration"?

Hand Arm Vibration Syndrome, also known as "vibration white finger", is a condition that affects people who regularly use high vibration equipment such as power tools.

Vibration from the equipment can damage to blood vessels in the fingers, reducing the supply of blood. It can also damage nerves leading to a loss of feeling in the fingers and hands - especially when they become cold. Muscles and bones may also be affected.

Sufferers find it hard to move their fingers and lose their ability to grip things properly. Work with hand-held tools can become difficult and picking up small items - such as nails - can be almost impossible. The condition can become very painful.

### What leads to hand arm vibration?

Vibration is transmitted straight into your hands through the handles of tools such as:

- mechanical breakers
- angle grinders/disc cutters
- · hammer drills
- · Whacker plate

### **Symptoms**

At first, hand-arm vibration syndrome can cause a tingling sensation, or "pins and needles" in the fingers, maybe with some numbness. This will usually happen at the end of a day working with vibrating equipment.

As the condition gets worse, symptoms may be triggered by cold weather, even without using vibrating equipment. The fingers will become white and numb, initially just the tips, but the area can get larger if you continue to work with high-vibration equipment.

As blood circulation returns, the fingers may get a red flush and become painful. In worse cases, pain, stiffness and difficulty in handling small items can last for up to an hour, and be triggered by any exposure to mild cold.

### A NEW SOLUTION

The Construction Confederation and Hire Association Europe, in partnership with the HSE have developed a simple 'traffic light' indicator system of colour coding to show the vibration risks associated with the use of power tools.

The system features a red/amber/green colour-coding scheme that will allow better tool selection at a glance, without recourse in many cases to complex vibration data.

Using the new package the following stickers will be displayed on vibrating hand tools for your guidance.

### **High Vibration Risk Equipment (RED)**

The red range covers anything over 10 m/s2 and specific assessment will be required

High vibration risk equipment could cause vibration injury even when used for a short time each day this could vary from as short a period as a few minutes, to a few hours. You will need adequate precautions or control if you use this equipment regularly. Find out how long you can use the tool safely.

### Medium Vibration Risk Equipment (AMBER)

The amber range has been set at 5 to 10 m/s2 allowing for two hours maximum daily use without further assessment as required under legislation.

Some of the products at the lower end of the amber vibration range may be used for longer periods but this must be justified by a **risk assessment** based on the actual vibration levels the tool will produce under normal working conditions. Consult your supervisor if you are not sure how to do this risk assessment. Find out how long you can use the tool safely.

High vibration risk or medium vibration risk equipment should not be used throughout the day. If you need to use the equipment for long periods each day, ask the hire company if they can provide a vibration-reduced version of the tool. This could increase the amount of time that you could use the tool without risk of injury. Alternatively, they may suggest a different tool or different method of doing the job, which could also be more efficient.

### **Low Vibration Risk Equipment**

The green range has been set at 0 to 2.5 m/s2 encompassing all tools up to the absolute limit of 2.8 m/s2 for an exposure of up to 8 hours.

Low vibration risk equipment can usually be used regularly throughout an eight-hour working day with low likelihood of vibration injury.

### HIGH VIBRATION EQUIPMENT

### SCHEDULE OF LIKELY EXPOSURE

Equipment	Likely AVL (Good Tools) (Poor Tools)		Max Daily Usage (Good Tools) (Poor Tools)	
Stone Working Hammer	11	25	31m	6m
Scaling Hammer	22	22	8m	8m
Hammer Drill	5	20	3 h	10m
Riveting Hammer or Dolly	2	10	16h	37m
Impact Wrench	1	8		1 h
Chain Saw	3	26	7 h	5m
Pedestal Grinder	4	40	4h	2m
Hand Held Portable Grinder	2	12	16h	26m
Strimmer	4	15	4h	16m
Impact Screwdriver	4	4	4 h	4 h
Jig Saw	4	4	4h	4 h
Concrete Vibrothickener	3	5	7 h	3 h
Hand Held Sander	4	7	4h	75m
Disc Cutter	3	5	7 h	3 h
Metal Saw	5	5	3 h	3 h
Circular Saw	2	2	16h	16h
Metal Drill	3	3	7 h	7 h