

# OHSAS 18001 Rev 2 Sept 2011



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## 1 THE DOCUMENTATION SYSTEM

The master copy of the Safety Statement will be maintained at our main offices in Julianstown. Controlled copies of the Safety Statement shall be issued to personnel as specified on the circulation list. Each project site will also have a copy of the Safety Statement on hand along with the specific site safety plan.

All employees will have access to those sections of the manual that are relevant to them. A separate statement covers asbestos removal procedures distributed where applicable.

1.1 Document Approval and Issue

The Directors are responsible for the issue of all new documentation and the retrieval of obsolete documentation. New documents must be issued and approved by the directors prior to general distribution.

## 1.2 Document, Amendment

To ensure that each copy of the Safety Statement contains a record of all changes, the directors will record the change or amendments on the amendment list. The amendment list and any revised or new pages will then be circulated to all on the circulation list above for inclusion.

#### 1.3 Statement of Health & Safety Policy

Hastie Insulation Ltd is in existence for over fifty years and has built a reputation as one of the leaders in quality work in the fields of industrial insulation, asbestos removal, fire stopping and acoustic control of buildings in the private, commercial and hospitality trades.

The company is committed to initiate health and safety policy and to monitor its effectiveness. All employees are legally obliged to co-operate with the company in the implementation of this policy.

It is a policy of our company to provide the necessary measures, controls and equipment to safeguard the health safety and welfare of our entire workforce and to apply with all applicable legal and regulatory requirements.

It is our intention to provide as far as is reasonably practical a safe and healthy environment for our employees, customers and others who may be affected by our operations.

We will endeavour to reduce or eliminate all foreseeable hazards associated with our activities, make all staff within our company aware of the importance of following safety guidelines and procedures through information, training, instruction and supervision. The Safety Statement will be brought to the attention of all our employees and records will be kept of all training activities completed.

All new employees will go through a period of close supervision until such time that the Contracts Manager is satisfied that they are competent to perform their duties in a safe manner.

Safety will be regarded as everyone's responsibility. The Directors are responsible for ensuring the policy document permeates throughout the organisation.

Resources will be made available to ensure this objective is achieved as part of good management practice. Regular safety meetings will be held to aid the consultation process and discuss all safety issues. Employees will be asked to report safety issues to management or supervisors for redress at this meeting.

A responsible person (Safety Officer) shall retain medical records of employees covered under the asbestos removal legislation in the "Occupational Health Register" and the register shall be maintained for at least thirty years after the last entry relating to any specific worker.

It is our intention to review and enhance safety policy in the light of experience, legislative changes and developments within the company

02/09/2011

John Connell, Managing Director Date

# 2 ORGANISATION AND RESPONSIBILITIES.

#### 2.1 Senior Management

The Management has overall responsibility for Safety, Health and Welfare. This includes:

- Taking a direct interest in the Safety Statement and positively supporting any person whose function it is to carry it out.
- Allocating resources within the constraints of the company's budget to implement safety policies within the Safety Statement.
- Periodically reviewing their responsibilities and that of all other persons concerned with implementing policies and procedures outlined in the Safety Statement.
- Ensure that all staff under their control are held accountable for their performance in relation to Occupational Health and Safety.
- Ensuring resources are available to provide training as required, for management, supervisors and employees.
- Managers are responsible for ensuring that staff under their control are made aware of and comply with the Safety Statement at the organisation and arrangements for carrying it out.
- Fulfilling the duties of the Project Supervisors appointed safety co-ordinators where so appointed under the 2006 Construction Regulations.
- Being familiar with the Safety Statement and any subsequent revisions.
- Communicating all relevant information included in the Safety Statement to Project Supervisors where required.
- Ensuring that all Contractors employed by Hastie Insulation are capable and willing to carry out work in a safe manner in accordance with the company Safety Rules.

## 2.2 Site Foreman/Supervisor

Foremen are responsible for the implementation of the Safety Statement in their own areas of responsibility. Specifically they must:

- Ensure that safety standards laid down in the Safety Statement and Site Safety Plan are adhered to and obeyed.
- Be aware of all identified hazards in their area of responsibility and specific measures to reduce the risks associated with these hazards.
- Provide, or ensure, appropriate safety training is given under their supervision.
- Ensure that all staff under their supervision are aware of actions to be taken in case of emergency and properly maintained fire fighting equipment is available.
- Ensure that good housekeeping standards are maintained.

- Ensure that an Accident Report Form is completed thoroughly and promptly for all reported accidents and forwarded to head office on the day in question.
- Participate in safety inspection in their area of responsibility.
- Monitor the activities of visitors and contractors on site and ensure their safety.

## 2.3 Site Safety Person

Maintain the site Safety File to include copies of all equipment certificates, site safety inspections, training records, MSD sheets and other relevant health and safety information.

Obtain and file accident investigation reports in the safety file and, when necessary, ensure accident reports have been filed with the Authority for review when applicable.

#### 2.4 Safety Officer

The designated Safety Officers are responsible for co-ordinating the efforts of management and staff in working towards achieving the company's safety and health objectives by:

- Advising on matters relating to safety, health and welfare.
- Monitoring accidents and incidents and preparing a summary report analysing incident trends.
- Ensuring that, where necessary, following accidents of dangerous occurrence that statutory notification (IR3) are properly completed and submitted to the enforcing Authority.
- Ensuring that the Safety Statement is continually monitored and revised when necessary to comply with all the relevant legislation and best safety practices.
- Liaise with Government and other bodies on matters pertinent to health and safety.
- Consider and, if necessary, act on representation made by the designated Safety Representative on matters pertaining to the safety, health and welfare of persons at work.
- Review and monitor the activities of Contractors and visitors on site in relation to safety.

We will appoint responsible persons to exercise general supervision of safety for projects regarding the day-to-day activities on site.

#### 2.5 Employees

In accordance with the requirements of Section 9 of the Safety, Health and Welfare at Work Act 2005, employees have the responsibilities:

- All employees are required to co-operate fully with all provisions taken by the company for ensuring the safety, health and welfare of other employees, contractors and clients.
- All employees are required immediately to report all incidents and dangerous occurrences.
- All employees are required to adhere to all safe systems of work, wear any personal protective equipment and use any safety equipment provided.
- All employees are required to discharge their work in a safe manner.

## **3 TRAINING**

3.1 Training for Safety.

The company will provide such training as required by the 2005 Act to safeguard the safety, health and welfare of employees. Employees have completed Safe Pass training and will be given training in aspects of Construction site safety as required.

## 3.2 Record of Training.

Training records will be maintained by management and will contain the following information:

Date of Training

Name of organisation and instructors

Name of persons receiving instructions

Nature of instructions

## **4 CONSULTATION**

#### 4.1 The Safety Officer.

The senior management and or safety consultants will be responsible for co-ordinating consultation arrangements with employees and providing appropriate information to their nominated Safety Representative where appointed on matters pertaining to safety, health and welfare.

## 4.2 Safety Representative.

# Company Safety Representative - Frank Egan 087 9751769

A Safety Representative will be selected in accordance with section 23(1) of the Safety, Health and Welfare at Work (Construction) Regulations 2006. The Safety Representative will receive training and assistance in fulfilling his role.

## 4.3 Stress.

Because of occasional work overload, employees should pace themselves to minimise stress. If Stress becomes apparent employees are encouraged to approach Management and a suitable assistance programme will be instigated.

## 4.4 Asthma.

Breathing in irritating substances present in the air causes asthma. When fumes, vapours, dusts or mists are encountered it is essential to notify management, ascertain the source of contaminant and where possible take protective measures such as moving to a safe area. Controls include substitution, segregation and enclosure of the process. PPE should be used as a last resort.

## 4.5 Dermatitis.

This is an irritation of the skin, which becomes red, itchy and blistered. It is the most common work related disease. There are two forms, Irritant (occurs when the substance comes into contact with the skin) and Allergic (when the person becomes sensitised to the smallest amount of the substance). All exposed skin must be protected to ensure the risks are reduced and good hygiene standards adopted.

## 4.6 Drinking, Drugs and Work.

Alcohol consumption and use of Drugs (non-prescribed) is forbidden at any time during working hours. It is also essential that no member of staff arrive to work in an unsuitable condition due to above items. Smoking of illegal substances shall be included in this category.

# A full investigation leading to dismissal will be investigated for any offences.

#### 4.7 Bullying and Violence at work.

The company have prepared an Anti Bullying Policy, which is attached to this document. The management of the company will not tolerate bullying behavior and will take appropriate steps to resolve any existing bullying problems.

## 4.8 Racism

All employees of the company will be treated with the respect and dignity that they deserve and it will be company policy not to discriminate any individual due to colour, race or religion any means. All practical measures up to and including dismissal will be implemented should any employee be found guilty of any breaches of this policy.

4.9 Sexual Harassment.

If there are any alleged incidents of harassment to or from either sex a follow up investigation will be made with individuals impartial to the allegations involved in the review. All practical measures up to and including dismissal will be implemented should any employee be found guilty of any breaches in this policy.

## 5 ACCIDENT INVESTIGATIONS AND REPORTING.

#### 5.1 Introduction.

All accidents and incidents with potential for injury shall be reported to management and, when necessary, action taken to prevent re-occurrence.

#### 5.2 Accident Prevention.

In order to prevent accidents, it is the policy of the company to conduct its activities in accordance with the nine Principles of Prevention set out in the First schedule in the General Application Regulation 2007 which are:

- Avoidance of risks.
- Evaluation of unavoidable risks.
- Combating of risks at source.
- Adaptation of the work to the individual.
- Adaptation of the place of work to technical progress.
- Replacement of dangerous articles by non-dangerous.
- Development of an adequate prevention policy.
- Collective protective measures priority over individual protective measures.
- Appropriate training and instruction to employees.

#### 5.3 The Accident Report Form.

The foreman responsible for the area in which the accident occurred as soon as possible following the incident must complete an Accident Report Form. The Site Foreman should contact the Safety Officer immediately to seek advice in relation to the completion of the Accident Report Form. Such reports are to be sent to our Safety Officer, for comment and will be placed in a designated Accident Report File. Responsibility for ensuring that these reports are made where required rests with the Directors. Records are to be maintained on file for 10 years.

## 6 VISITORS AND CONTRACTORS.

#### 6.1 Visitors

The company will ensure, as far as reasonably possible, the safety of visitors and contractors while on the project sites. To that end the following policies will apply:

- All visitors are to check-in at the reception desk or site office.
- Visitors are to obey the site safety rules and emergency procedures at all times.
- Signage will be erected to make visitors aware of site rules.

#### 6.2 Contractors

Contractors on the company premises or work sites are bound by the following:

- They must complete the pre-qualification health and safety questionnaire prior to allocation of any work.
- They should not work on the premises unless covered by adequate employers and public liability Insurance. Contractor's insurance policies must be submitted for examination prior to work commencing to ensure that they conform to the company requirements.
- They are obliged to observe the Safety Rules and comply with any other instructions given by a representative of the company
- Contractors must not commence with any work on the premises or project site until relevant safety procedures are read, understood and accepted.
- Contractors may be asked to provide their Safety Statement and a Method Statement prior to the commencement of work at the discretion of the safety Officer and executive management. Generally, such Method Statements will be required where works of a Particular Risk are being carried out.

The Safety, Health and Welfare at Work (Construction) Regulations 2006 will be adhered to for all construction work completed on the premises or project sites.

#### 7 FIRST AID

7.1 First Aid Supplies
First Aid boxes are sited at the following locations:
All site offices.
All the company vans/vehicles
Head Office.
Each First Aid box will be stocked in accordance with current guidelines (Guidelines to First Aid in places of Work).
7.2 Nominated First Aiders on Site:
The following person(s) First Aider (Fetec) have received appropriate training and certification:

Training will be carried out by an organisation competent to do so. Refresher training will be provided at intervals no greater than 3 yeEach First Aider will be responsible for the maintenance of first aid supplies, which should be done on a weekly basis or as used. Whenever first aid is given a record of the injury and details of treatment given must be outlined in writing by the First Aider.

1. Michael O'Sullivan	5. Maurice Walsh
2. Stephen Woods	6. Michael Kirby
3. Arthur Mc Cullough	7. Alan Byrnes
4. Turlough Mc Hugh	8. Dermot Keane

## 8 MONITORING AND REVIEW

#### 8.1 Revisions

The Safety Statement will be reviewed on a yearly basis by our Safety Officer and will be changed as names of responsible persons change, as risks change, or as changes in legislation occur.

A copy of revised sections will be circulated to each holder of the Safety Statement by management. Amended sections should be removed and returned to Head Office.

#### 8.2 ANNUAL DIRECTORS REPORT

The Annual Report shall contain a review of the company's Safety Policy for the preceding year which will comply with section 20 of the Safety, Health and Welfare at work Act 2005 and will also include in the report any recommendations for reviewing and upgrading the Safety Statement and Programme with provision in the company's budget for same.

The following was attended to during the year -

Safety toolbox programme.

Target tasks for coming year.

Safety Training; Safe Pass Course.

Purchase of Safety Equipment.

The Company regards the promotion of health and safety measures a mutual objective of Management and Employees alike.

## 9 PROJECT ADMINISTRATION OF HEALTH AND SAFETY POLICY

9.1 Organisation and Responsibilities

9.1.1 Client

The company will normally be acting for the Client. The Client is the person or body who commissions or procures the carrying out of a project.

9.1.2 Project Supervisor – Design Process (PSDP)

The Project Supervisor – Design Stage is appointed by the Client to undertake the role, as per the Construction Regulations 2006. The company will follow the directions of the PSDP.

9.1.3 Project Supervisor – Construction Stage (PSCS)

The Project Supervisor for the Construction Stage is appointed by the Client, to undertake the following duties of the project when appropriate and have the following duties:

- Give written notice to the Health and Safety Authority, as per AF2, prior to the commencement of any work on site.
- Adjust the Safety and Health Plan as required to take into account progress of the work and any changes, which occur.
- Include specific measures for controlling hazards related to work activities listed in the Second Schedule of the Construction Regulations and the Site Safety and Health Plan.
- Co-ordinate implementation of the Safety and Health Plan on site.
- Co-ordinate the implementation of relevant requirements for the Construction Regulations.
- Organise for co-operation between contractors and their activities including provision of information to employees on site.
- Conduct Site Inspections; Ensure any deficiencies are immediately corrected or work stopped until the situation can be made safe.
- Obtain and review Method Statements for any work to be performed, which presents significant risks to employees.
- Co-ordinate measures to protect the public and permit authorised persons only on to the site.
- Maintain records of any notification of an accident, or dangerous occurrence, which occurs on site and ensure proper notification has been made to the Authority where appropriate.

The company will act as PSCS were appointed to do so by PSDP or the Client.

#### 9.2 Site Safety and Health Plan

In accordance with the Safety, Health and Welfare at Work (Construction) Regulations 2006, the company will act upon the Site Specific Safety and Health Plan prior to the commencement of work on a project where we act as Project Supervisor Construction Stage.

The Safety and Health Plan will be developed in two stages, the Preliminary Plan developed at the Design Stage and the Construction Stage Health and Safety Plan.

#### 9.3 Preliminary Plan – Design Stage

The Project Supervisor Design Process, appointed for the Design Stage will prepare the Preliminary Safety and Health Plan, which will be passed on to the PSCS for finalisation.

## 9.4 Construction Stage Health and Safety Plan

The Project Supervisor –Construction Stage will develop and implement the Health and Safety Plan prepared at the design stage to prescribe specific provisions for the management of safety on a project site. The company will appoint a Safety co-ordinator to ensure the safety and health plan is administered where applicable.

The plan will be completed and communicated prior to the commencement of work and updated as required through the life of the project.

#### 9.5 The Safety File

In accordance with the Construction Regulations 2006, the Client will ensure a safety file is prepared containing relevant health and safety information to be taken into account during any subsequent construction following completion of the project.

It is now the responsibility of the Project Supervisor Design Process to prepare a Safety File for the complete structure and give it to the Client.

#### 9.6 Selection of Contractors

Any Contractor wishing to be considered for work on a project will be assessed on their Health and Safety standard.

When being considered for work contractors must submit to the management a copy of the Preliminary Health and Safety Questionnaire.

Only those contractors completing the Questionnaire to the satisfaction of the relevant management will be considered.

#### 9.7 Duties of Contractors

All Contractors including the company when appointed as a contractor will comply with the following duties:

- Co-operate with the Project Supervisor Construction Stage. All contractors must furnish a copy of their Safety Statement and relevant information to the PSCS.
- Promptly provide the PSCS with information required for the Safety File
- · Comply with directions of the Project Supervisors
- Report accidents to the Authority and to the PSCS where an employee can not perform their normal work for more than 3 days.
- Comply with site rules and the safety and health plan and ensure that your employees comply
- Identify hazards, eliminate the hazards or reduce risks during construction
- Facilitate the Site Safety Representative
- Ensure that relevant workers have a FAS Safe Pass card (or similar) and a construction skills card where required.
- Provide workers with site specific induction
- Appoint a safety officer where there are more than 20 on site or 30 employed
- Consult workers and Safety Representatives
- Monitor compliance and take corrective action

#### 9.8 Notification to the Authority

It is the duty of the Project Supervisor Construction Stage to give written notice (AF2 Form) to the Health and Safety Authority. Written notice will be submitted to the HSA when necessary. This notice must also be posted at the Construction Site.

#### 9.9 Equipment Certification and Inspection

The Project Supervisor – Construction Stage/ site management will ensure that any plant and equipment brought onto site carries appropriate certification. Copies of certificates are to be provided to the Project Supervisor – Construction Stage / site management for retention on the site file. Contractors will be expected to carry out equipment inspection as required by law. Documentation of these inspections is to be maintained on site for review by the Project Supervisor Construction Stage / site management.

## 9.10 Project Site Training

The Project Supervisor – Construction Stage is responsible for ensuring that:

All employees on the site have received a brief induction on the following:

- Emergency Procedures.
- Specific hazards to the job.
- Site safety rules and personal protective equipment required.
- First Aid procedures.
- Accident notification procedures.
- Availability of the site Safety and Health Plan.

This is not an exhaustive list.

Documentation will be maintained which contains the date of the training, the instructor, the employees name and signature and the information covered.

## 9.11 Welfare Arrangements

Welfare arrangements will be arranged as per Construction Regulations.

## 9.12 Project Site First Aid

Management will ensure the First Aid requirements of the project have been made.

#### **10 COMPANY OFFICES**

The Company Offices are located at Unit 9, Whitecross Farm, Julianstown, County Meath. All offices and office facilities will be provided and maintained in accordance with the Safety, Health and Welfare at Work Act 2005 and the Safety, Health and Welfare at Work (General Application) Regulations 2007.

Fire precautions shall be provided and maintained in accordance with the requirements of the Fire Services Act 1981.

The Office Manager will ensure that a procedure is drawn up to be followed in the event of fire and that key personnel are given training in the procedures and use of fire fighting equipment. Fire drills will be organised at six monthly intervals, date of drill and comments to be recorded.

All fire extinguishers will be provided in accordance with the latest British Standard and will be serviced and maintained at regular intervals as recommended by the manufacturer.

The Office Manager will ensure that all office machinery is sited and maintained correctly and is serviced in accordance with the manufacturer's recommendations.

All staff required to use office machinery will be given training and instruction in its use.

All accesses, stairways, fire exits, etc. will be kept clear of all materials and well lit.

Proper facilities will be provided for office staff required to reach items from high shelving.

Offices will be planned to avoid trailing cables on floors to office equipment.

# 11 RISK ASSESSMENTS, LEGISLATION AND COMPLIANCE

11.1 VISUAL DISPLAY UNITS (VDU'S)

	Visual Discomfort
HAZARDS	Posture
	Radiation
	Stress
RISK ASSESSMENT	Low
CONTROL MEASURES	<ul> <li>The company shall ensure that an appropriate eye and eyesight test shall be provided for all persons obliged to use display screen equipment.</li> <li>The Company shall ensure that work on display screen is interrupted by periodic breaks.</li> <li>The Company shall ensure that VDU screens meet the appropriate criteria for performance, brilliance, character design, freedom for reflective glare etc.</li> <li>Training in the ergonomic aspects of VDU operation is essential. It is important that chairs are correctly selected and used and that their sitting is at an optimum distance from the machine.</li> <li>Lighting, ventilation and temperature must be carefully controlled to provide satisfactory environmental conditions.</li> </ul>
LEGISLATION	The Safety, Health and Welfare at Work (General Application) Regulations 2007; Part 2; Chapter 5

# 11.2 PREGNANT EMPLOYEES

INTRODUCTION	Pregnant- a woman who has given her employer a medical certificate or similar stating she is pregnant. Have recently given birth- during the preceding 14 weeks after giving birth, even if this was a miscarriage or stillbirth.						
	Are breastfeeding- during the 26 weeks immediately after giving birth.						
RISK ASSESSMENT	Low						
CONTROL MEASURES	The Pregnant Employee Regulations must be seen under the ambit of the Safety, Health and Welfare at Work Act 2005 and the Safety, Health and Welfare at Work (General Application) Regulations 2007. The most important elements of the legislation being: <b>1. The identification of Hazards</b> ,						
	An employer must ensure the hazards associated with the work equipment, manual handling of loads, working with Visual Display Units and where necessary, the Chemical Agents, Biological Agents, Carcinogens Regulations and the Lead Regulations are considered.						

	2. Risk Assessments
	This means determining what the pregnant woman is exposed to and how often the exposure occurs and for how long.
	3. The putting in place of adequate safeguards
	Adjust the working conditions and/or hours of work. If this does not eliminate the risk then suitable alternative work must be provided. If this is not viable then the employer should issue the employee with safety and health leave under Section 18 of the Maternity Protection Act 1994.
	4. Consultation with employees.
LEGISLATION	The Safety, Health and Welfare at Work (General Application) Regulations 2007 – Part 6 Sensitive Risk Groups; Chapter 2.

# 11.3 SMOKING

	Emplo	yers	now	have	e a	duty	to	warn	their	em	nployees
INTRODUCTION	about	the	dang	gers	of	smok	ing	and	indee	əd	passive
	smokir	ng (e	xposı	ure to	oth	er pe	ople	e's tob	acco s	smo	oke) and

	to take all such steps as are reasonably practicable to ensure that their employees are not exposed to risks to their health or safety.
RISK ASSESSMENT	Low / Medium
CONTROL MEASURES	Employers at the very least therefore have a duty to take some action against exposing the following categories of employee tobacco fumes:
	Employees with respiratory or heart conditions
	Pregnant women
	Employees with circulation problems
	Employees with serious eye complaints
	Employees working with chemicals.
	Limiting or preventing smoking by an agreed and carefully implemented policy is in everybody's interest and will certainly reduce time lost through sickness, diminish cleaning bills and curtail a known fire risk.
	The management of the company Ltd. states that smoking is only allowed in designated areas only.
LEGISLATION	The Safety, Health and Welfare at Work Act 2005

# 11.4 FIRST AID

	Infection
HAZARDS	Serious loss of blood
	Unconsciousness
	Death
RISK ASSESSMENT	Low
CONTROL MEASURES	<ul> <li>The exact location of the First Aid box must be known to all employees. The company will provide First Aid boxes where applicable.</li> <li>It is the company's policy to appoint First Aiders who have certificates of qualifications in Occupational First Aid.</li> <li>It should be noted that First Aiders are not empowered to dispense analgesics, pills or medications. Supplies of such items will not be in First Aid boxes. Individual employees who believe they might have a need of these items must be responsible for their own supplies.</li> </ul>
	<ul> <li>The following contents are required in a first aid box:</li> <li>Card giving general first aid guidance.</li> <li>Individually wrapped sterile adhesive dressings.</li> <li>Sterile eye pads, with attachment, e.g. Standard</li> </ul>

	<ul> <li>Dressing No. 16 BPC.</li> <li>Triangular bandages (sterile).</li> <li>Safety pins.</li> <li>A selection of unmedicated wound dressings which should include:</li> <li>Medium size sterile unmedicated dressings (approx. 10cm x 8cm, e.g. Standard Dressings Nos. 8 and 13 BPC).</li> <li>Large size sterile unmedicated dressings (approx. 13cm x 9cm, e.g. Standard Dressings Nos. 9 and 14 BPC and the Ambulance Dressing No. 1).</li> <li>Extra large sterile unmedicated dressing (approx. 28cm x 17.5cm, e.g. Ambulance Dressing No. 3).</li> <li>Latex disposable gloves</li> </ul>
	RECORD KEEPING
	In the event of medical requisites being dispensed an entry must be made in the Accident Book. The book should be kept in a suitable place, preferably alongside first aid equipment.
	Safety, Health and Welfare at Work Act 2005.
LEGISLATION	Safety, Health and Welfare at Work (General Application) Regulations 2007

11.5 STRESS		
INTRODUCTION	The Safety, Health and Welfare at Work Act 2005 Section (6)	
	'It shall be the duty of every employer to ensure, so far as is reasonably practicable, the safety, health and welfare at work of all his employees.'	
	This places a general obligation on the employer to ensure that the employee has a reasonable quality of life in the working environment.	
	The Safety, Health and Welfare at Work (General Application) Regulations 2007 state under Regulation 5 (a) that it shall be the duty of every employer to ensure that –	
	'In taking measures necessary for the safety and health protection of employees these measures take account of changing circumstances and the general principles specified in the First Schedule.'	
RISK ASSESSMENT	Low	

CONTROL MEASURES	Section (d) of the First Schedule stated that work should be adapted to the individual with a view to alleviating monotonous work and work at a predetermined work rate and to reducing their effect on health.
	Section (g) makes provision for the development of an adequate prevention policy in relation to safety, health and welfare at work which takes account of technology, organisation of work, working conditions, social factors and the influence of factors related to the working environment.
	The Organisation of Working Time Act 1997 outlines provisions to alleviate long working hours, in terms of compulsory daily and weekly rest breaks, in line with a 48 hour working week, this must also be considered.
	Stress arises when the demands of the job and the working environment, on a person exceeds their capacity to meet them. If stress lasts for a short time then usually it is not a problem, we regain our balance and things return to normal. But if it does go on for sometime, or if it is particularly intense, then it can cause health problems.
	Stress itself is not an illness however, there is evidence that stress can lead to mental health problems such as anxiety, irritability, depression, a tendency to drink and smoke more, difficulty sleeping, poor concentration and an

inability to deal calmly with everyday tasks and situations.
Stress can involve physical health problems such as increased heart rate, increased sweating, headaches, dizziness, blurred vision, aching neck and shoulders, skin rashes and a lowering of resistance to infection
An example of a number of causes contributing to stress
is:
III-defined roles at work
Dull repetitive work
Highly demanding tasks
Poor communication
Poorly organised shift work

# 12 HASTIE INSULATION ASBESTOS SAFETY STATEMENT

## 12.1 General duties of employer

Under the Exposure to Asbestos Regulations 2006, it is the duty of the company -

- to assess the risk to any employee's health or safety resulting from any activity from which an employee is or may be exposed in their place of work to dust arising from either, or both, asbestos and materials containing asbestos, and for that purpose to determine the nature and degree of any employee's exposure to dust arising from asbestos or materials containing asbestos, and to lay down the necessary measures to be taken to ensure the safety and health of employees.
- where an employee's exposure is sporadic and of low intensity, and when it is clear from the results of the risk assessment that the exposure limit value for asbestos in the air of the working area will not be exceeded, Regulations 11, 20 and 21 shall not apply where work involves:
  - short, non-continuous maintenance activities in which only non-friable materials are handled;
  - removal without deterioration of non-degraded materials in which the asbestos fibres are firmly linked in a matrix;
  - encapsulation or sealing of asbestos-containing materials which are in good condition; or
  - Air monitoring and control, and the collection of samples to ascertain whether a specific material contains asbestos.

## 12.2 Exposure limit value

The company shall ensure that no employee is exposed to an airborne concentration of asbestos in excess of 0.1 fibres per cm3 as an eight-hour timeweighted average (TWA).

#### 12.3 Identification of the presence of asbestos

The company shall not undertake any work which would expose or would be liable to expose an employee to dust arising from either or both asbestos or materials containing asbestos at any premises unless he or she has either –

- carried out a risk assessment as to whether asbestos or materials containing asbestos is present or is liable to be present in those premises; or
- if there is doubt as to whether asbestos or materials containing asbestos is present in those premises, we shall assume that asbestos or materials containing asbestos is present, and comply with the provisions of these Regulations as appropriate.

## 12.4 Determination and assessment of risk

The company shall not permit an employee to carry out any activity which would or would be liable to cause such exposure unless he or she has made an assessment of the risk arising from such exposure.

In carrying out risk assessments the company shall-
- identify the type of asbestos or materials containing asbestos;
- identify the condition of the asbestos or materials containing asbestos;
- make a suitable and sufficient assessment of the risk created by that exposure to the health of those employees and of the steps that need to be taken to prevent or minimise the exposure and to comply with the requirements of these Regulations;
- record the significant findings of that risk assessment as soon as is practicable after the risk assessment is made;
- record and retain every risk assessment in a permanent form.

The Risk Assessment shall also:

- determine the nature and degree of exposure which may occur during the course of the work;
- consider the effects of control measures which have been or will be taken to prevent or reduce exposure to asbestos;
- consider the results of monitoring of exposure
- set out the steps to be taken to prevent exposure or reduce it to the lowest level reasonably practicable;
- consider the results of relevant medical surveillance
- include such additional information as the company may need in order to complete the risk assessment in accordance with the Regulations

The risk assessment shall be reviewed regularly and forthwith where -

- there is reason to believe that the assessment is incorrect;
- there is reason to suspect that the existing risk assessment is no longer valid;
- there is a change of a material nature in the activity to which this risk assessment relates, or
- the results of any monitoring carried out in accordance with Regulation 10 show it to be necessary, and where, as a result of the review, changes to the risk assessment are required, those changes shall be made and recorded and any necessary measures implemented.

The company in preparing a risk assessment shall consult with the employees concerned or their representatives, or both, in respect of the risk assessment.

## 12.5 General measures relating to exposure to asbestos

For all activities where there is or is likely to be an exposure of employees at the place of work to dust arising from either or both asbestos or materials containing asbestos, the company shall reduce such exposure to a minimum and in any case below the exposure limit value laid down.

The company shall -

- limit, to the lowest possible number, the number of employees exposed or likely to be exposed to dust arising from either or both asbestos or materials containing asbestos;
- ensure that work processes and systems of work are designed so as not to produce asbestos dust or, if that proves impossible, to avoid the release of asbestos dust into the air;
- ensure that all premises and equipment involved in the treatment of asbestos are capable of being regularly and effectively cleaned and maintained;
- ensure that asbestos or dust-generating asbestos-containing material is stored and transported in suitable sealed packing;
- ensure that waste is collected and removed from the place of work as soon as possible in suitable sealed packing with labels clearly indicating that it contains asbestos.

Where employees are or may be exposed in the course of their work to dust arising from asbestos or materials containing asbestos, the company shall implement the measures to –

- ensure the clear demarcation and indication by adequate warning signs of the areas in which such activities take place;
- ensure that suitable and appropriate protective clothing is worn by employees who are in the area
- ensure that any area is not accessible to employees other than those who, by reason of their work duties, are required to enter such an area;
- ensure that no employee shall smoke in any area;
- ensure that, where exposure cannot reasonably be reduced by other means, employees are provided with appropriate individual respiratory protective equipment and ensure that it is worn by those employees.

#### 12.6 Measurement of asbestos in the air

Where an initial assessment under Regulation 8 determines that the amount of asbestos fibres in the air at a place of work is equal to or greater than the exposure limit value, the measurement of asbestos in the air at the place of work shall be carried out regularly.

For the purposes of measuring asbestos in the air –

- sampling shall be representative of the personal exposure of the employee to dust arising from asbestos or materials containing asbestos;
- sampling shall be carried out by a competent person after the company has consulted with the employees concerned or their representatives, or both, in regard to sampling at the place of work;

- when samples are taken they shall be subsequently analysed by a competent person, in laboratories equipped for fibre counting;
- the duration of sampling shall be such that representative exposure can be established for an eight-hour reference period (one shift) by means of measurements or time-weighted calculations;
- fibre counting shall be carried out wherever possible by PCM (phase contrast microscope) in accordance with the 1997 WHO (World Health Organisation) recommended method or any other method giving equivalent results.

For the purpose of measuring asbestos in the air, only fibres with a length of more than 5 micrometres and a breadth of less than 3 micrometres and a length/breadth ratio greater than 3:1 shall be taken into consideration.

#### 12.7 Notification requirements

The company shall not carry on an activity which would expose or would be liable to expose an employee to dust arising from asbestos or materials containing asbestos unless he or she has prepared a written notification to the Health and Safety Authority so that it is received by the Authority not less than 14 days before commencing the activity, or before such shorter period as the Authority, at its discretion, may agree in writing.

Where the company has notified work as required and there is a material change in the nature of that work which might affect the particulars so notified (including the cessation of the work), the company shall notify the Authority in writing of that change.

The company shall submit a new notification in writing to the Authority taking account of such changes and include the reasons for the new notification.

The company shall keep a copy of every notification submitted to the Authority under the Regulations and of every other document and shall permit, at any reasonable time, access by –

- any employee to any such notification or other document which concerns that employee's place of work and the work activity, and
- any employee's representative to any such notification or other document which concerns any place of work or work activities of employees who are represented by that employee's representative.

### 12.8 Presumed asbestos-containing materials

The company shall take all necessary steps to identify presumed asbestos containing materials at a premises or place of work before commencing demolition, removal or maintenance work at that premises or place of work.

As appropriate the company shall obtain information, relating to the identification of presumed asbestos-containing materials, from the owners of such premises or places of work.

If there is any doubt about the presence of asbestos in a material or construction then the applicable provisions of these Regulations shall be complied with.

12.9 Measures to be taken if the exposure limit value is exceeded (Unforeseeable)

Where employees of the company are exposed in the course of their work to dust arising from asbestos or materials containing asbestos which results in the exposure limit value being exceeded, the company shall identify the reasons for the limit being exceeded and shall implement appropriate measures to remedy the situation as soon as possible.

The company shall ensure that work is not continued in the affected area until adequate measures have been taken for the protection of the employees concerned.

In order to check the effectiveness of the measures taken the company shall have carried out a further determination of the asbestos-in–air concentrations immediately.

Where exposure cannot be reduced by other means and where compliance with the limit value makes necessary the wearing of individual protective breathing equipment, this may not be permanent and shall be kept to the strict minimum necessary for each employee.

During periods of work which require the use of individual respiratory protective equipment to be worn by employees, the company shall make provision for breaks appropriate to the physical and climatic conditions, in consultation with the employees concerned or their representative at the place of work, or both.

12.10 Measures to be taken if the exposure limit value is exceeded (Foreseeable)

Where at any place it is foreseeable that, as a result of certain activities such as demolition, removal, repairing and maintenance, the concentration of asbestos in the air will be in excess of the exposure limit value, despite the use of technical preventive measures for limiting asbestos in air concentrations, the company shall, before the activity is carried out, determine and implement the measures which are necessary to ensure protection of the employees from such asbestos in the air while they are engaged in such activities and, in particular, shall –

- issue those employees with suitable respiratory and other personal protective equipment, which must be worn;
- put up and maintain legible warning signs in and near the relevant areas indicating the areas where it is foreseeable that the exposure limit value will be exceeded;

- ensure that the spread of dust arising from asbestos or materials containing asbestos outside the premises or site of work activity is prevented, and
- inform every employee of his or her obligations under the Regulations

The company shall, before carrying out the activity concerned, consult with the employees concerned or their representative, or both, in respect of the measures to which that paragraph will relate.

### 12.11 Plan of work

Where any demolition or other work involves removing either or both asbestos

and asbestos containing products from any building, other structure, plant, installation or ship, whether or not such removal involves total demolition of the structure, such work shall not commence until a suitable plan of work is drawn up in writing outlining how that work is to be carried out.

The plan of work referred to in shall specify the measures necessary to ensure the safety and health of employees at the place where that work is to be carried out.

The Plan of work shall specify -

- that asbestos or asbestos-containing products, or both, are to be removed so far as is reasonably practicable before demolition techniques are applied or major refurbishment of a premises commences, except where this would cause a greater risk to employees than if the asbestos or asbestos-containing products, or both, had been left in place;
- that personal protective equipment as required shall be provided to the employees concerned;
- information to include:
- the nature and probable duration of the work,
- the location of the place where the work is carried out,
- the methods applied where the work involves the handling of asbestos or of materials containing asbestos, and
- the characteristics of the equipment used for
  - protection and decontamination of the employees carrying out the work, and
  - protection of other persons present on or near the worksite.

The plan of work shall include information on all the necessary preventive measures to be taken to ensure that the demolition of buildings, structures and installations containing asbestos or materials containing asbestos, or both, and the removal there from of asbestos or materials containing asbestos fibres or dust do not cause significant asbestos environmental pollution.

Where a plan of work is required, a copy of the plan shall be provided to the Health and Safety Authority not less than fourteen days before the commencement of the work to which the plan relates and shall be made available, on request, to an inspector or, as the case may be, to an authorised person.

When asbestos removal work has been completed the company shall obtain a written verification regarding the absence of asbestos exposure risks in the place of work otherwise known as "*site clearance for reoccupation*".

The company shall have a competent Independent person assess whether the premises or part of the premises where the work with asbestos has been carried out has been thoroughly cleaned upon completion of that work and is suitable for reoccupation.

The company shall ensure –

- that site clearance includes both visual observance and air monitoring,
- that site clearance is performed by a competent independent analyst,
- receipt of a site clearance certificate in writing before reoccupation or continuation of other works at the site or premises.

A clearance certificate shall be made available, on request, to an inspector.

#### 12.12 Ability to perform asbestos work

A person shall, before carrying out work which includes asbestos demolition or removal, provide evidence of their ability to perform such work to the person for whom the work is being carried out and, on request, to an inspector.

#### 12.13 Training and Information

The company shall provide appropriate training and adequate information for all employees who are, or are likely to be, exposed to asbestos-containing dust.

Training shall be easily understandable to employees and shall enable employees to acquire the necessary knowledge and skills as regards prevention and safety, in particular with regard to –

- the potential risks to health from exposure to dust arising from asbestos or materials containing asbestos;
- the existence and meaning of the established exposure limit value;
- the operations which could result in asbestos exposure;
- the importance of preventive controls to minimise exposure;

- the control limit and the need for atmospheric monitoring;
- the properties of asbestos and its effects on health, including the synergistic effect of smoking;
- the types and products or materials likely to contain asbestos;
- the hygiene requirements necessary, including the need to refrain from smoking, eating or drinking where there is a risk of exposure to asbestos-containing dust;
- safe work practices, control measures and protective equipment;
- the appropriate role, choice, selection, limitations and proper use of respiratory equipment;
- the special precautions to be taken to avoid or minimise risks associated with exposure to asbestos-containing dust, including the need to wear protective clothing and the need to use protective equipment;
- emergency procedures;
- decontamination procedures;
- waste disposal procedures; and
- medical examination requirements.

The training and information shall be -

- given at regular intervals;
- adapted to take account of significant changes in the type of work
- provided in a manner appropriate to the nature and degree of exposure identified by the risk assessment, and so that the employees are aware of and understand -
  - the significant findings of the risk assessment, and
  - the results of any air monitoring carried out with an explanation of the findings.

The company shall ensure that -

- the employees concerned or their representative at the place of work, or both, shall have access to the results of the asbestosin-air measurements, the significance of which shall be explained,
- if the results of the asbestos-in-air measurements show that the exposure limit value is being or has been exceeded at any place of work, the company shall inform the employees concerned or their representatives, or both, of that fact as quickly as possible and the reason for it and those employees or their representatives at the place of work, or both, shall be consulted by the company regarding the measures to be taken to mitigate the situation or, in an emergency situation, shall be informed by the company of the measures which have so been taken.

The company shall keep records of the training given to individual employees. Records of training shall be made available, on request, to an inspector.

The company shall take account of any relevant guidelines published by the European Community when providing training for his or her employees engaged in the removal of asbestos or materials containing asbestos.

12.14 Provision and cleaning of protective clothing

The company shall provide adequate and suitable protective clothing for his or her employees who are exposed or are liable to be exposed to asbestos or materials containing asbestos.

The company shall ensure that protective clothing provided is either disposed of as asbestos waste or adequately cleaned.

The company shall ensure that protective clothing which has been used and is to be removed from the premises (whether for cleaning or disposal) is securely packed, before removal, in a suitable container and adequately labelled as a product containing asbestos whether it is intended for cleaning or for disposal as asbestos waste.

Where, as a result of the failure or improper use of the protective clothing provided asbestos is deposited on the personal clothing of an employee, that personal clothing shall be treated as if it were protective clothing.

12.15 Responsible medical practitioner

A responsible medical practitioner means a registered medical practitioner employed, or otherwise engaged, by the company to be responsible for health surveillance of employees.

"Responsible medical practitioner" means -

- Where a responsible medical practitioner is continuously employed in a whole time or part time capacity by the company (including an employer who is a successor in title to another employer), such responsible medical practitioner for the time being,
- Where a responsible medical practitioner is for the time being employed from time to time by the company for the purposes of these Regulations, and
- in any other case, the last person who was the responsible medical practitioner, in respect of the employees concerned, for so long as he continues to be a responsible medical practitioner.

#### 12.16 Assessment of the health of employees

Where employees are engaged in activities at a place of work where they are or may be exposed in the course of their work to dust arising from asbestos or materials containing asbestos, the company concerned shall ensure that arrangements are made to enable any employee to avail of an assessment of his or her health, as appropriate, and the assessment shall be performed by a responsible medical practitioner.

An assessment of health shall be made -

- prior to the exposure to dust arising from asbestos or materials containing asbestos at the place of work and such assessment shall include a specific examination of the chest;
- where exposure or possible exposure (with or without interruption) of an employee continues over a period of time at the place of work, at least once in every period of 3 years or such shorter period as a responsible medical practitioner may determine.

The company shall –

- ensure that arrangements are made to enable an adequate and suitable health assessment by a responsible medical practitioner of the health of every employee concerned;
- give sufficient notice of those arrangements to the employees concerned
- provide facilities to the responsible medical practitioner so as to enable him or her to become familiar with the exposure conditions for each employee at the relevant place of work.

Every employee at a place of work shall –

- give such information to the responsible medical practitioner concerned about his or her medical history as that doctor may require to enable an assessment to be made
- undergo such tests as the responsible medical practitioner concerned considers necessary to enable an assessment to be made

A health assessment in respect of each employee shall be made by the responsible medical practitioner concerned, after medical interview and medical examination of the employee (which examination may include specific examination of the chest as required by the responsible medical practitioner, in accordance with the principles and practices of occupational medicine), and such tests as he or she may require of that employee, have been carried.

After the making of a health assessment of an employee, the responsible medical practitioner concerned shall -

- where appropriate, advise on or determine any individual protective or preventive measures to be taken, which may include the withdrawal of the employee from all exposure to asbestos
- certify, by causing an entry to be made in the occupational health register, whether the employee is fit, unfit, or fit with certain restrictions for exposure to a concentration of asbestos fibres in the air equal to or in excess of the exposure limit value.

Following a health assessment, the responsible medical practitioner with responsibility for the health surveillance of employees may indicate that health surveillance shall continue after the end of exposure for as long as he or she considers it necessary to safeguard the health of the employee concerned.

### 12.17 Medical records relating to health assessments

Individual medical records in respect of assessments by a responsible medical practitioner of the health of employees shall be maintained by the appropriate responsible medical practitioner and each individual medical record shall include the information as specified in Schedule 5 of the Exposure to Asbestos Regulations 2006.

The medical records of each employee or copies thereof shall be maintained by the appropriate responsible medical practitioner for 40 years after the last assessment recorded in those records for the purposes of these Regulations.

When it is necessary at any time to transfer existing medical records to a person who has become the appropriate responsible medical practitioner, they shall be transferred by the person who had been the last appropriate responsible medical practitioner for those records or, where the circumstances require, by his or her personal representatives.

### 12.18 Review of the determination of the health assessment

Where an employee or his or her employer is aggrieved by a determination made by a responsible medical practitioner concerned under Regulation 20(6) following an assessment, either may apply within 28 days of such determination to the Health and Safety Authority to have the assessment and determination reviewed.

Where the Authority agrees to a review, the assessment and determination shall be reviewed by a person designated by it under section 63 of the Act.

### 12.19 Disclosure of information contained in health assessments

Upon reasonable notice being given by an employee to the responsible medical practitioner concerned, access shall be given to him or her to the information contained in his or her medical record which is maintained for the purpose of these Regulations.

Where an employee's health has, in accordance with these Regulations, been assessed at any time after the end of exposure to asbestos, the responsible medical practitioner concerned shall give information and advice regarding that assessment to him or her.

In this Regulation "employee" includes a former employee of the company concerned.

#### 12.20 Asbestosis and Mesothelioma Register

The Authority shall establish and cause to be maintained a register, to be known as the "Asbestosis and Mesothelioma Register", of diseases which have been reported to the Authority.

Where a registered medical practitioner becomes aware of a case of asbestosis or mesothelioma, he or she shall report that fact to the Authority in writing and it shall be the duty of a person designated by the Authority under section 63 of the Act to accept the report on behalf of the Authority and record an entry in the Register accordingly.

#### 12.21 Occupational Health Register

Where activities are carried out in which employees are or may be exposed in the course of their work to dust arising from asbestos or materials containing asbestos, or a health assessment has been made, it shall be the duty of the company to keep and thereafter to maintain a register to be known as the "occupational health register" which contains, in respect of each employee who is or may be exposed in the course of his or her work to dust arising from asbestos or materials containing asbestos.

The company shall allow the responsible medical practitioner concerned access to the occupational health register at any time.

The company shall allow an inspector or a person designated by the Health and Safety Authority under section 63 of the Act access to the occupational health register at any time.

Upon reasonable notice being given, the company shall allow any employee access to the entries in the occupational health register which relate to him or her. Upon reasonable notice being given, the company shall allow an employee or his or her representative, or both, access to the information in the occupational health register on all employees concerned in such a manner so that the identity of any employee to whom the information relates is not disclosed and, where appropriate, the employer shall also provide such information in a collective form.

The company shall keep and maintain the occupational health register for least 40 years following the end of exposure.

Where the company ceases, or is about to cease, business and has a subsisting occupational health register to which paragraph (6) relates, the appropriate person shall inform the Health and safety Authority of that fact, and deposit the occupational health register with such a person as the Authority directs.

#### 12.22 Prohibitions

Activities which result in exposure of employees to asbestos fibres during the extraction of asbestos or the manufacture and processing of asbestos products containing intentionally added asbestos shall be prohibited, with the exception of the treatment and disposal of products resulting from demolition and asbestos removal.

#### 12.23 Meaning of asbestos

Under the Exposure to Asbestos Regulations 2006, "Asbestos" means the following fibrous silicates:

Asbestos actinolite, CAS No. 77536-66-4\*,

Asbestos gruenerite (amosite), CAS No. 12172-73-5\*,

Asbestos anthophyllite, CAS No. 77536-67-5\*,

Chrysotile, CAS No. 12001-29-5\*,

Crocidolite, CAS No. 12001-28-4\*,

Asbestos tremolite, CAS No. 77536-68-6\*.

\* Number in the register of the Chemical Abstract Service (CAS).

#### 12.24 Measures to be taken to ensure the Safety and Health of Employees

The measures set down in this Schedule are to be taken to ensure the safety and health of employees where employees are involved in activities that can cause, or are likely to cause exposure, during the course of their work, to dust arising from asbestos or materials containing asbestos.

Places in which the above activities take place shall:

- be clearly demarcated and indicated by warning signs;
- not be accessible to employees other than those who by reason of their work or duties are required to enter them;
- constitute areas where there should be no smoking.

Areas shall be set aside where employees can eat and drink without risking contamination by asbestos dust.

With respect to all activities considered under this Schedule The company shall provide appropriate and adequate working or protective clothing and personal protective equipment so that

- such working or protective clothing and personal protective equipment must be kept within the place of work;
- such clothing, where not disposable, may be laundered outside of the place of work, subject to those facilities being equipped for this work and having assessed the risk related to such an action, taking account of the transport and packing of items for laundering in suitable containers which are securely closed and labelled properly;
- separate storage places are provided for working or protective clothing and personal protective equipment and for street clothing;
- employees are provided with appropriate and adequate washing and toilet facilities, including showers;
- a well-defined place is provided for the storage of personal protective equipment;
- personal protective equipment shall be checked and cleaned after each use and before placing in dedicated storage area;
- appropriate measures shall be taken to repair or replace defective equipment before further use.

### 12.25 Particulars to be Notified to the Health and Safety Authority

The particulars which shall be included in a notification to the Health and Safety Authority are -

- Name of notifier.
- Where The company is a body corporate, the address and telephone number of its registered office.
- The name, address and telephone number of the place of work or work site concerned.
- The start date and expected duration of the work activities.
- The number of employees involved.
- The types (e.g. asbestos cement, limpet, thermal insulation, ceiling and floor tiles, asbestos insulation board etc.) and quantities of asbestos likely to be encountered.
- The location(s) at the work site of the materials containing asbestos likely to be encountered.
- A brief description of the activities or processes involved.
- A brief description of the measures to be taken to limit the exposure of employees to asbestos.
- In the case of work involving removal, repair or encapsulation of lagging, insulation or other materials containing asbestos, a brief description of the manner in which that work is to be done.
- Where there is a change of a material nature in the carrying out of the activity to which the notification relates, the company shall inform the Authority of that change in writing and submit a new notification for the purposes of these Regulations advising the Authority in writing of the reasons for this new notification.

• The notification shall be submitted to the Authority so that it is received by the Authority not less than 14 days before commencing the activity to which the notification relates.

12.26 Evidence of Ability to Perform Asbestos Work (Indicative, non-exhaustive list of information to be provided for the purposes of Regulation 16, as appropriate and applicable to the intended work)

- 1. Training Plan and Policy for employees working with materials containing asbestos.
- 2. Individual employee training certificates indicating where, when, duration and type of training received and who provided the training.
- 3. Relevant experience.
- 4. Safety Statement.
- 5. Respiratory Protective Equipment face-fit certificate for individual employees.
- 6. Individual medical certificate for employees.
- 7. Clearance certificate for Decontamination Unit to be used onsite (as appropriate to work).

12.27 Information to be included in Individual Medical Records and Practical Recommendations for the Clinical Assessment of Employees for the purposes of Regulation 20

## Part A - Information

- 1. Name and personal address of the employee concerned.
- 2. Name of employer concerned and the appropriate address or addresses.
- 3. Date of birth of the employee.
- 4. Date of commencement of asbestos exposure (if known).
- 5. Medical history of employee.
- 6. Occupational history of employee.
- 7. The results of asbestos sampling which relates to the employee's exposure.
- 8. The results of clinical examination and the significance of the results.
- 9. Details of any action taken by the responsible medical practitioner concerned following the results of a health assessment.

# Part B – Clinical Assessment

Current knowledge indicates that exposure to free asbestos fibres can give rise to the following diseases:

- asbestosis,

- mesothelioma,
- bronchial carcinoma,
- gastro-intestinal carcinoma.

The responsible medical practitioner concerned for the health surveillance of employees exposed to asbestos shall be familiar with the exposure conditions or circumstances of each employee. Health examination of employees should be carried out in accordance with the principles and practices of occupational medicine. It should include at least the following measures –

- keeping records of an employee's medical and occupational history,
- a personal interview,
- a general clinical examination, with particular reference to the chest,
- lung function tests (respiratory flow volumes and rates).

## 12.28 Occupational Health Register

The information set out in an occupational health register shall include -

- the name and registered business address of the company and the address of the place of asbestos exposure (premises or site location);
- a brief description of the work activity involving asbestos including the nature and duration of activity and the exposure to asbestos;
- the name and address of each person to whom either or both air monitoring and a health assessment relates;
- the dates and times of each assessment of the risk of exposure to asbestos and the name of the person who carried out such assessment;
- details of the nature of each assessment of the risk of exposure to asbestos;
- the dates of and results of examinations and tests on any respiratory protective equipment with sufficient information so as to enable the identification of any particular respiratory protective equipment;
- the dates and results of air monitoring including details of -
  - in the case of personal sampling, the name and job description of the persons being monitored,
  - in the case of static sampling, the location of static samplers,
  - the length of sampling times in each case, and
  - the results and the interpretation of the results of such sampling;

• the name of the responsible medical practitioner making the health assessment, and the name and signature of the person duly making the entry in the register

### 13 GENERAL SAFETY PRECAUTIONS AND CONTROLS(non asbestos)

### Working with Mineral wool fibre, Rockwool and ceramic fibre

Working with mineral wool fibres and dust, without safe systems of work can result in irritation to the eyes, nose, throat and skin. The International Agency for Research on Cancer has classified glass wool (mineral wool) as possibly carcinogenic to humans on the basis of animal experiments and studies of exposed workers.

### There are two common mineral wool products:

- Continuous or woven glass filament used in the reinforcement of mineral wool pools, boats, tanks and other hard synthetic products.
- Glass Wool, such as mats, used for heat and sound insulation in buildings.

### Continuous Glass Filament

Continuous Glass Filament is too thick to be breathed into the lungs. High levels of irritant dust can be generated when mineral wool reinforced plastics are cut, ground or sanded. Extraction ventilation or the wearing of respirators may be necessary.

While dust and fibres from working with continuous glass can cause irritation when they lodge in the skin, eyes, and throat, they are eventually dissolved or expelled by the body and cause no long-term damage.

Styrene vapours from polyester resins used in mineral wool products etc, however, a more serious hazard, and may cause both short-term irritation and long-term affects to the nervous system. Epoxy resins sometimes used in the manufacture of mineral wool products can cause contact dermatitis and burns. Cured resins are practically non-toxic.

### **Glass Wool Insulation**

Glass Wool Insulation consists of fibres blown or spun from molten glass and collected in an entangled mat. Without a safe work procedure, these fibres can also cause short-term irritation to the skin, eyes, and upper repertory tract among workers involved in the manufacture or installation of insulation products. Typically, glass wool insulation fibres are between 5 ant 10 microns in diameter) a micron is one thousandth of a millimetre) however a small proportion of the fibres are fine enough (less than 3 microns in diameter) to be breathed into the lungs.

Binding resins and oils are used during the manufacture of mineral wool insulation to stiffen and bond the fibres together and to prevent them from becoming airborne. These binders can cause irritation.

### Skin Irritation

Mineral wool dust and fibres may cause a stinging, itchy sensation when rubbed on the skin. This can happen to people working with mineral wool insulation, and it occurs particularly in folds of the skin around wrists, collars and waistbands. Perspiration aggravates this condition.

Most people quickly develop tolerance and hence the irritation may be temporary. Showering to remove the fibres will provide relief. Mineral wool insulation installed in buildings does not have adverse health effects on occupants.

Does Mineral wool Cause Cancer?

The International Agency for Research on Cancer (IARC) says:

There is sufficient evidence to show glass wool causes cancer in experimented animals. There in inadequate evidence to show glass wool causes cancer in humans.

As an overall evaluation, glass wool is probably carcinogenic to humans.

While some of the finer glass wool fibres are small enough to be breathed into the lungs, users of mineral wool during the last 30 years have not shown any lung abnormalities that are different from the rest of the population. However workers involved in the manufacture of mineral wool prior to that time, who were exposed to a number of other fibres including asbestos, have shown increased cancers. But because these studies did not find an increased risk of cancer relevant to the length of employment or the amount of fibres inhaled, the evidence is not conclusive.

Mineral wool fibres implanted surgically into the chest cavities of animals have caused cancer. These experiments are of limited relevance because glass fibres do not enter the body in this way. Animals inhaling mineral wool through normal breathing have not developed cancer.

### Safe Working Procedures

Employers must provide safe working procedures to minimise hazards. However, in cramped or enclosed spaces where mineral wool insulation is generally installed, dust may exceed recommended levels and may be difficult to control.

Here a Class P1 AND P2 mask should be worn. Protective overalls should be worn to avoid skin irritation, and these should be washed regularly. Suitable gloves, tucked into overall cuffs, will prevent hand irritation.

Safe working procedures for glass filament are different. Handling continuous mineral wool filament before it is bonded into hardened plastics does not usually generate sufficient dust or airborne fibres to cause even short-term irritation. However once it is in solid form, irritating dust may be generated by cutting, grinding or sanding and ventilation or personal protective equipment may be required.

## MINERAL WOOL HAZARDS

The 2005 Safety Health and Welfare at Work Act states that employers must provide education, training, safe work systems and protection against such hazards. Employees have an equal duty to protect themselves and others from hazards.

# Why is Mineral wool Hazardous?

Mineral wool is formed into a fine filament or fibre where molten glass is forced through small holes. These fibres can cause irritation, but the biggest hazard is from the epoxies or resins used to bind sheets of mineral wool together or to other materials. They can cause irritation in the eyes, nose, throat and skin.

### How fine are the fibres?

Typically they are between 5 and 15 microns (thousandths of millimetres) in diameter. Only fibres less than 3 microns in diameter are small enough to pass into the lungs. Dust and airborne fibres can be released when mineral wool reinforced plastics are cut, ground or sanded.

### What happens if I breathe the dust or fibres?

Most of the fibres will be trapped by the body's nose and throat defence mechanisms but a very small amount of dust may pass into the lungs. Body fluids will dissolve this small amount (unlike asbestos) to remove it.

### What if the fibres break and become smaller?

When mineral wool breaks it does so across the fibre, not along it, forming short thick fibres as opposed to fine ones, as asbestos does. In over 40 years, users of mineral wool have not shown lung abnormalities any different form the rest of the population.

## What happens if I get it on my skin?

Mineral wool dust will cause irritation when rubbed on the skin of most people, particularly in the folds of the skin around the wrists, collars and waistbands. Perspiration aggravates the situation. Most people quickly become desensitised hence the irritation is usually temporary. Showering to remove the fibres will provide relief. Mineral wool insulation in a building will cause no discomfort to occupants once installed.

Solvents such as Acetone or Ethyl Acetate, are often used to clean resin from equipment. They should not be used to clean resin form the skin because they can cause drying of the skin or dermatitis. They can also be absorbed through the skin and cause adverse long-term effects on the body

## How should I handle mineral wool insulation?

Employers should provide safe work systems to minimise hazards. However, because of the sometimes-cramped locations during installation of mineral wool matting, dust levels may sometimes be higher. Here it is recommended a class L or M mask must be worn, the disposable type is ideal. Cotton overalls should be worn to avoid skin irritation, and these should be washed regularly. Suitable gloves with overall cuffs worn over them will prevent hand irritation.

## What about mineral wool reinforced products?

Safe work systems for handling woven mineral wool used in mineral wool-reinforced plastics are the same as for insulation. However, the plastic resin used in the process requires further precautions. The resin called either epoxy or polyester is very chemically active.

Epoxy resins are caustic and can cause burns and dermatitis. Contact with the eyes will cause severe damage. Vapours may cause irritation to the eyes, nose and throat. Cured resins are practically non-toxic.

# **Styrene Hazards**

Styrene monomer is a chief constituent in polyester resins. It is an irritant to the eyes, nose, throat and skin, and it is central nervous system depressant. It has a low odour threshold, i.e. it can be smelled at very low concentrations.

Inhalation of vapours can cause headache, nausea, loss of co-ordination and drowsiness. Repeated or prolonged skin contact may lead to dermatitis through defatting of the skin. Styrene should be absorbed through skin, and is also thought to affect the liver.

# Hardeners

The catalyst or hardener is a chemical called methyl ethyl ketone peroxide (MEKP). It is extremely hazardous, being flammable, potentially explosive and very damaging to eyes and skin.

Catalyst in the eyes should be washed out within seconds with copious amounts of water to avoid blindness. Medical treatment should then be urgently obtained. Wherever MEKP Catalyst is used safety goggles must be worn, since there is no antidote for it. Heat is generated during mixing and curing and flammable vapours are given off. There must be no sources of ignition present during mixing and care is needed to dispose of unused mixed resin to avoid a fire. Designated bins partly filled with water are ideal for this.

# Precautions when handling mineral wool and resins

- Avoid skin contact at all times by using overalls and gloves.

- A respirator with organic vapour cartridges should be worn if vapour builds up is likely. An air supply respirator will be necessary if fibre glassing is in a confined area.
- Solvents used in fibre glassed reinforced plastics are all flammable appropriate precautions should be taken in use and storage.

# **REMEMBER:**

If you are unsure about the safety of the products you use or the way in which you use them consult your Health and Safety Representative or talk to your employer.

# 14 GENERAL RISK ASSESSMENTS

#### 14.1 EXSPOSURE TO ASBESTOS

HAZARDS	Exposure to, or inhalation of, asbestos fibres
RISK ASSESSMENT	High

CONTROL MEASURES	<ul> <li>Carry out a Risk Assessment to identify any areas of asbestos, the type and the risk of exposure</li> <li>Provide all employees with training/information about the dangers of asbestos and the use of PPE</li> <li>Notify H.S.A. 14 days in advance of any work involving exposure to asbestos</li> <li>Maintain an Occupational Health Register of all workers exposed to asbestos (Employers Duty) Keep record for 40 years after the last entry relating to each employee (Asbestos Regulations Fifth Schedule)</li> <li>Never strip out asbestos insulation yourself, The law only allows trained and authorised personnel from specialist contractors to remove asbestos from a building</li> <li>If asbestos is in good condition, leave it where it is – it is only a hazard when damaged or during attempts at removal</li> <li>Keep asbestos material (including wastes) damp while working on them</li> <li>Do not use power tools on asbestos materials, as they create dust, use hand tools instead</li> <li>Put asbestos waste in a suitable sealed container, such as a heavy duty polythene bag, then put that bag in a second bag and label it to show it contains asbestos</li> <li>Ensure that disposal is carried out as per the Regulations</li> </ul>
RISK RATING WITH CONTROLS	LOW
	Safety, Health and Welfare at Work Act 2005.

LEGISLATION	SHWW (Construction) Regulations 2006 SHWW (Exposure to Asbestos) Regulations 2006 SHWW (Exposure to Asbestos)(Amendment Regulations 2010 SHWW (Chemical Agents) Regulations 2006 Safety, Health and Welfare at Work (General Application) Regulations 2007
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# 14.2 MINERAL WOOL/STONE WOOL/ROCKWOOL

HAZARDS	Skin Irritation Eye irritation
	Respiratory irritation
RISK ASSESSMENT	Medium
CONTROL MEASURES	<ul> <li>Details of hazards associated with chemical products and their safe usage are given on Material Safety Data Sheets or come with the product. The supplier or manufacturer is obliged by law to give this information. A Material Safety Data Sheet must be readily available on site for all hazardous substances brought onto site.</li> <li>All personnel must be made aware of the relevant material safety data sheet and control measures in connection with all hazardous substances in use on site.</li> <li>Use suitable PPE ie.</li> <li>Cotton overalls for work with new product.</li> <li>Tyvek or similar disposable overalls for work with old or damaged product</li> <li>Tight fit gloves</li> <li>Type P2 disposable dust masks or better for work with old or damaged product</li> <li>Standard safety glasses with new product</li> <li>In some cases safety goggles when working with</li> </ul>

RISK RATING WITH CONTROLS	<ul> <li>badly degraded product</li> <li>Keep area clean</li> <li>Dampen with water when removing old/damaged product</li> <li>Dispose of cut offs in refuses sacks</li> <li>For fine cleaning use industrial type vacuum.</li> <li>Washing facilities will be available to all personnel.</li> </ul>
LEGISLATION	The Safety, Health and Welfare at Work Regulations 2006 EU Directive 67/548/EC

# 14.3 VITREOUS FIBER PRODUCT – SUPERMAG/SUPERWOOL

HAZARDS	Skin Irritation Eye irritation Respiratory irritation
RISK ASSESSMENT	Low
CONTROL MEASURES	<ul> <li>Details of hazards associated with chemical products and their safe usage are given on Material Safety Data Sheets or come with the product. The supplier or manufacturer is obliged by law to give this information. A</li> </ul>

RISK RATING WITH CONTROLS	<ul> <li>Material Safety Data Sheet must be readily available on site for all hazardous substances brought onto site.</li> <li>All personnel must be made aware of the relevant material safety data sheet and control measures in connection with all hazardous substances in use on site.</li> <li>Use suitable PPE ie. <ul> <li>Cotton overalls for work with new product.</li> <li>Tyvek or similar disposable overalls for work with old or damaged product</li> <li>Tight fit gloves</li> <li>Type P2 disposable dust masks or better for work with old or damaged product</li> <li>Standard safety glasses with new product.</li> <li>In some cases safety goggles when working with badly degraded product</li> </ul> </li> <li>Keep area clean</li> <li>Dampen with water when removing old/damaged product</li> <li>Dispose of cut offs/old product in refuses sacks</li> <li>For fine cleaning use industrial type vacuum.</li> <li>Washing facilities will be available to all personnel.</li> </ul>
LEGISLATION	The Safety, Health and Welfare at Work Regulations 2006
	EU DIRECTIVE 67/69/EC

## 14.4 NOISE

HAZARDS	Inability to hear other sounds, instructions and warnings
	Affects concentration
	Fatigue
RISK ASSESSMENT	High

CONTROL MEASURES	<ul> <li>Three control measures are:</li> <li>Access – noise survey</li> <li>Eliminate – remove noise sources from the site</li> <li>Control – measures to prevent / reduce exposure</li> </ul>
	General Control Measures:
	<ul> <li>Use of physical noise barriers, where possible (fitting of silencers etc.)</li> </ul>
	<ul> <li>Ensure that a noise survey is carried out by a competent person, and that a Risk Assessment is prepared</li> </ul>
	<ul> <li>Put in place a control programme and create ear protection zones</li> </ul>
	<ul> <li>Isolate Plant &amp; Machinery that emit high levels of noise, where applicable</li> </ul>
	<ul> <li>Make sure all forms of ear protection are available to workers</li> </ul>
	<ul> <li>Provide training and information to workers on the dangers of noise and the use, care and maintenance of PPE</li> </ul>
	<ul> <li>Wear hearing protection at all times when using or working in the vicinity of operating rock- breakers/scabblers/kango hammers/angle-grinders or any other work equipment emitting high noise levels</li> <li>Identify the vehicles/machines/work situations with</li> </ul>
	the highest level of vibration and arrange a rota for operators/drivers to reduce the time spent on them.
RISK RATING WITH CONTROLS	LOW

	Safety, Health and Welfare at Work Act 2005.
	SHWW (Construction) Regulations 2006
LEGISLATION	Hearing Injury Act,1998
	SHWW (Control of Noise at Work) Regulations 2006
	SHWW (Control of Vibration at Work) Regulations 2006
	Safety, Health and Welfare at Work (General Application) Regulations 2007

# 14.5 VIBRATION

HAZARDS	Chainsaws Jack-Hammers/rock-breakers/concrete-breakers/road-drills Hammer Drills Hand-held grinders and sanders Power hammers and chisels Riveting hammers and bolsters
RISK ASSESSMENT	High

CONTROL MEASURES	<ul> <li>Allow only authorised/competent persons to operate plant/machinery</li> <li>Instruct all workers in the potential sources and effects of vibration</li> <li>Wear appropriate hearing/eye/hand protection</li> <li>Provide training in the correct use and care of PPE</li> <li>Maintain all machinery as per manufacturers instructions</li> <li>Identify the vehicles/machines/work situations with the highest level of vibration and arrange a rota for operators/drivers to reduce the time spent on them.</li> <li>Where possible, construct jogs to hold materials or tools</li> <li>For pneumatic machinery, wear protective gloves to help prevent vibration white finger.</li> </ul>
RISK RATING	<ul> <li>Selecting low-vibration tools</li> <li>Tools with CE mark are declare by the manufacturer to be safe when used as instructed</li> <li>Manufacturers identify vibration levels in m/s2</li> <li>Vibration data is given in technical sales literature and the instructions book, if the vibration level exceeds 2.5m/s2 during the standard tests</li> <li>Supplementary information on measure necessary to control risks from exposure to tool vibration should appear in the instruction book.</li> <li>Low vibration tool accessories should be selected.</li> </ul>
WITH CONTROLS	

	Safety, Health and Welfare at Work Act 2005.
	SHWW (Construction) Regulations 2006
	SHWW (Control of Vibration at Work) Regulations 2006
LEGISLATION	Safety, Health and Welfare at Work (General Application) Regulations 2007

# 14.6 PERSONAL PROTECTIVE EQUIPMENT

HAZARDS	Physical Exposures
	Chemical and Environmental Exposures.
RISK ASSESSMENT	High

CONTROL MEASURES	<ul> <li>The company shall ensure that all employees use personal protective equipment where required.</li> <li>All safety equipment purchased by the company will be to approved standards.</li> <li>Gloves, overalls, shoes, face masks, caps/hats, safety helmets and harnesses will be available where appropriate.</li> <li>If cleaners are employed in noisy environments then hearing defenders will be supplied.</li> <li>It is essential that all protective measures are correctly selected, and users are instructed in their correct use. In this respect, training will be provided to all employees.</li> <li>Whenever appropriate manufacturer's guidance will be heeded. In cases where this is inadequate, additional information will be provided by the company.</li> <li>The company will ensure that adequate supplies of all the necessary protective clothing and equipment are available for issue as required and that when issued to employees a signature is obtained for the equipment.</li> <li>The Supervisor will inform any person in the workplace observed carrying out any procedures which require the use of protective clothing or equipment of both statutory and company policy requirements and such persons will be instructed not to continue working until protective clothing or equipment is obtained and used. This applies not only to employees but also to subcontractors.</li> </ul>
RISK RATING WITH CONTROLS	Low
	Safety, Health and Welfare at Work Act 2005.

LEGISLATION	Safety,	Health	and	Welfare	at	Work	(General	Application)
	Regulat	ions 200	)7					

# 14.7 LASER EQUIPMENT

HAZARDS	Direct Eye Contact with laser - can lead to eye-injury/blindness, burns or electric shock
RISK ASSESSMENT	High
CONTROL MEASURES	<ul> <li>Operate and maintain all laser equipment as per the manufacturers instructions</li> <li>Ensure that no worker looks at the laser beams or directs the beams towards other workers</li> <li>Ensure that all laser equipment is serviced/repaired only by the manufacturer</li> <li>Do not use wet batteries/chargers</li> <li>Do not cover the battery charger while charging</li> <li>Do not use laser equipment in explosive/damp atmospheres, unless rated suitable/safe by the manufacturer</li> </ul>
RISK RATING WITH CONTROLS	Low
LEGISLATION	Safety, Health and Welfare at Work Act 2005. SHWW (Construction) Regulations 2006 Safety, Health and Welfare at Work (General Application)

Regulations 2007

# 14.8 DEMOLITION

	Falls of persons/ falls of materials.			
HAZARDS	Materials / sections falling			
	Collapse of the structure/ overturning plant			
	Contact with plant			
	Hot work/fire & explosion			
	Dust, fibres and fumes/Psittacosis/Weil's Disease/Noise			
	Buried services			
RISK ASSESSMENT	High			
CONTROL MEASURES	<ul> <li>The demolition sub-contractor will submit a detailed Method Statement to the company in advance of any demolition.</li> <li>The Method Statement will set out the sequence of demolition clearly. It will also identify the duties of key persons, the details of access, edge protection and fall arrest systems, the means of pre-weakening and any temporary supports needed. It should identify the load- bearing capacity of floors or other features used to support rubble or plant. Emergency procedures are also required.</li> <li>The Site Agent (or a nominated Depute-e.g. foreman)</li> </ul>			

<ul> <li>and the Demolition Foreman will ensure that the work is carried out in accordance with the Method Statement at all times. Any significant changes to it must be agreed with the Managing Director before being actioned. The Site Agent and Foreman may only agree minor changes on site. All changes or additions are to be confirmed in written form and kept on site.</li> <li>Written confirmation is required that all services across the site are disconnected. This includes buried services and any within buildings.</li> <li>All non-essential persons will be excluded from the vicinity. Effective cordons and signs will be maintained by the demolition contractor at all times. This is especially important in areas where members of the public may approach. Machine demolition may be allowed where there is an exclusion zone that is at least 6m wide or a distance equivalent to 1.5 x the height of the building (whichever is the greater figure). Otherwise hand demolition and debris protection measures are required.</li> <li>Buildings will be checked thoroughly before demolition to ensure that no vagrants or other trespassers remain there.</li> <li>The Site Agent will ensure that all other site operatives are instructed to stay clear of the demolition zone, unless given express permission by him.</li> <li>Edge protection will be provided and maintained where practicable during all significant work at height. Guardrails/toe-boards, MEWPs or tower scaffolds are preferred over fall arrest systems. Where the use of harnesses is</li> </ul>
over fall arrest systems. Where the use of harnesses is agreed in the Method Statement suitable anchorages should also be identified.
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RISK RATING WITH CONTROLS
LEGISLATION

#### 14.9 MOVEMENT OF VEHICLES

HAZARDS	Collisions with persons Collisions with other vehicles or structures (e.g. scaffolds) Overturning Speeding Reversing unsupervised Overloading or insecure loads Debris falling on the public highway
RISK ASSESSMENT	Medium
CONTROL MEASURES	<ul> <li>Only authorised, competent persons (over 18) should operate vehicles on site. If the vehicle is to be operated on the public road, the driver must have a current driver's licence.</li> <li>Only vehicles necessary for the project are permitted within the site area.</li> <li>Vehicles must not obstruct the main entrance or other key access routes or fire hydrants.</li> <li>Passengers are not to be carried on any vehicle unless it is designed for this.</li> <li>Traffic routes should be planned and controlled. A banksman / flagman will be used during vehicle manoeuvring operations onto and off adjacent roads.</li> <li>Reversing of large plant (e.g. telescopic handlers) should be avoided where possible. Persons on foot should be excluded from areas of risk.</li> </ul>

<ul> <li>Plant. Alternative means of access must be provided - along with signs/tape/barriers as appropriate.</li> <li>A site speed limit of 10 mph is in operation on this project. Obviously, crawl speed is required in restricted spots (or where the load carried or the location demands it). All reversing must be at low speed.</li> <li>Before routine unladen travel is undertaken by jibbed vehicles, the jib/forks/bucket must be lowered to the travel position. The body of every dump truck/tipper truck must also be lowered before travelling.</li> <li>All Drivers should leave the vehicle during loading (unless suitable falling object protection is fitted e.g. reinforced cab roof).</li> <li>Drivers must not consume alcohol or drugs that may impair their judgement prior to or during work. These</li> </ul>
<ul> <li>All vehicles should be kept in a good state of repair according to the manufacturer's recommendations. An inspection should be made of each machine prior to first use on site and at regular intervals after. Drivers are expected to maintain mirrors, lights, indicators, etc in a good, clean condition and to report any problems to Management at the earliest opportunity. Falling object protection / roll over protection will be maintained in vehicles operating in areas where these respective hazards exist.</li> <li>All debris/muck will be removed from the roadway in order to avoid causing a hazard to road users.</li> <li>Vehicles should not operate out-with the hours of davlight unless Site Management has specifically</li> </ul>

	<ul> <li>approved the operation and the standard of lighting provided.</li> <li>Drivers are expected to remove keys from vehicles every time they leave the cab. This is to prevent unauthorised use (including by members of the public) and also to avoid accidental movement (e.g. dumpers engaging gear). All work on or near the public road should be strictly controlled. Signs/ cones will be maintained in accordance with D. O. E. guidance.</li> <li>Split-braking mode will only be used (on tractors or excavators) where it is absolutely necessary. That is, in very heavy ground or during crawl speed around a tight space. Combined-braking must be used during all other travel.</li> </ul>
	Plant used for lifting (e.g. telescopic handlers, some excavators, mobile cranes) should only be operated within the limits of the machine – especially if "free on wheels" used c.f. "blocked" duties. For example, ensure suitable ground conditions or use outriggers, etc. Never ignore or over-ride safety devices.
RISK RATING WITH CONTROLS	Low
LEGISLATION	The Safety, Health and Welfare at Work (Construction) Regulations 2006
	The Safety, Health and Welfare at Work Act 2005
	DOE Chapter 8 Signing, Lighting and Guarding

### 14.10 DERMATITIS

HAZARDS	Working with Irritants/allergens may lead to inflammation, which may lead to dermatitis
RISK ASSESSMENT	High

CONTROL MEASURES	<ul> <li>Engineering control methods include:</li> <li>Enclosure of processes to separate workers from the harmful substances they work with</li> <li>Use of local exhaust systems where toxic substances may escape into the workroom,</li> <li>Substitution of non-hazardous for hazardous substances</li> </ul>
	<ul> <li>Other control methods include:</li> <li>Make an assessment of the risks</li> <li>Put in place a system of health surveillance to recognise early symptoms</li> <li>Ensure the manufacturers MSDS's are available</li> <li>Ensure all necessary PPE is selected by a competent person and is provided to all employees</li> <li>Adhere to manufacturer's specifications for all PPE</li> <li>User barrier creams as substitutes for protective clothing, especially when gloves or sleeves cannot be used safely</li> <li>Provide advice on personal hygiene, including hand washing</li> <li>Avoid handling any chemicals, if cuts or scrapes are present on hands or forearms</li> <li>Ensure good housekeeping at all times, including <ul> <li>Proper storage of materials</li> <li>Frequent disposal of waste</li> <li>Prompt removal of spills</li> <li>Maintenance of equipment to keep it free if dust, dirt and drippings.</li> </ul> </li> </ul>
RISK RATING WITH	Low

CONTROLS	
	Safety, Health and Welfare at Work Act 2005.
	SHWW (Construction) Regulations 2006
LEGISLATION	SHWW (Chemical Agents) 2001
	Safety, Health and Welfare at Work (General Application) Regulations 2007

### 14.11 TEMPORARY SERVICES

HAZARDS	Poor welfare facilities and hence health hazards.
RISK ASSESSMENT	Low

CONTROL MEASURES	<ul> <li>The site will be provided with temporary electricity, water supplies, and sewage facilities.</li> <li>All temporary services shall be maintained for the duration of the project.</li> <li>The canteen area will be cleaned after every break and all tables will be covered with a washable cover.</li> <li>Drying rooms will be provided.</li> <li>Washing facilities will be provided close to the canteen (-including hot water).</li> <li>Adequate toilet facilities will be provided and maintained. Flush toilets will be provided at the earliest opportunity. A cleaning rota will be established.</li> </ul>
RISK RATING WITH CONTROLS	Low
LEGISLATION	The Safety, Health and Welfare at Work (General Application) Regulations 2007 The Safety, Health and Welfare at Work Act 2005

#### 14.12 PREVENTION OF HEAD INJURIES

HAZARDS	<ul> <li>Falling materials striking individuals working on site.</li> <li>Striking head off fixed object.</li> <li>Third party (member of the public) being hit by falling object</li> </ul>
RISK ASSESSMENT	Medium
	<ul> <li>All areas (and activities) forming part of this contract are designated as hard hat areas unless specifically identified by the Senior Site Management as no risk.</li> <li>No person may work on site without a hard hat. Anyone found without one may be dismissed from site.*</li> <li>When programming work, due consideration will be given to ensuring that hazardous operations are not carried out above others. Close-boarding or sheeting of scaffold lifts will be used when it is unavoidable.</li> <li>All scaffolding on the perimeter of the project will be fitted with netting to prevent loose material falling onto the public.</li> <li>All walkways will be kept clear of hazards at head height. Where this is not possible the obstructions should be clearly marked (e.g. yellow &amp; black striped tape) or padded.</li> <li>Toe boards and guard-rails will be fitted to all 2m high edges. Brick guards will be used where it is possible for materials to fall. Loose materials, such as lagging or cladding, will be stacked in a manner that minimises the risk of falling.</li> </ul>

	<ul> <li>Note the hard hat rule is only ever relaxed for internal finishing operations and asbestos removal.</li> <li>Drivers of cranes, telescopic handlers, etc and Banksmen will ensure that loads are not lifted over persons where possible. All operatives must respect orders from Drivers or Banksmen if directed to keep out of lifting zones. Loads to be tied securly.</li> <li>Operatives removing bands from palletised material (e.g. lagging) at loading bays or other edges will first ensure the area below is free of persons. At ground level pallets will be lowered to single height before the bands are removed.</li> </ul>
RISK RATING WITH CONTROLS	Low
LEGISLATION	The Safety, Health and Welfare at Work (General Application) Regulations 2007 The Safety, Health and Welfare at Work (Construction) Regulations 2006 The Safety, Health and Welfare at Work Act 2005

# 14.13 SECURITY

HAZARDS RISK ASSESSMENT	Unauthorised persons on site, placing themselves and others at risk. Potential violence to security staff Medium
CONTROL MEASURES	<ul> <li>The following security measures apply on the company projects to exclude unauthorised persons from the site, including members of the public and especially children:-</li> <li>On particular high risk sites a security guard will be present. He will be stationed near the main entrance to the site. No persons will be allowed access until cleared by security. All visitors to site will sign in and sign out.</li> <li>All drivers working near the site entrance or on the street will be expected to remain in their vehicles. When this is not possible, drivers must remove the keys (even during the shortest periods out of the cab). Awkward manoeuvres (such as reversing telescopic handlers/tipper trucks) will only be allowed under the strict control of a Banksman. Cranes, vehicles and other accessible equipment will be disabled during nonworking hours.</li> <li>In addition, the following measures are required to protect security staff:-</li> <li>Every security guard will be provided with a hard hat, safety boots and a high-visibility vest. Torches will be available for night-shifts.</li> </ul>

RISK RATING WITH CONTROLS	<ul> <li>facilities. There will also be some means of heating their workstations. Security staff will be informed of the basic hazards to avoid on site during an induction talk. In addition, they will be given a reminder of the dangers of fire/explosion and carbon monoxide poisoning from LPG burners.</li> <li>Security guards are also required to have the Safe Pass Card</li> <li>Low</li> </ul>
LEGISLATION	The Safety, Health and Welfare at Work (Construction) Regulations 2006
	The Safety, Health and Welfare at Work Act 2005

## 14.14 PORTABLE ELECTRICAL EQUIPMENT

HAZARDS	<ul> <li>Electric Shock</li> <li>Burns</li> <li>Tripping and Falling over Cables</li> </ul>	
RISK ASSESSMENT	Low –when 110V is being used	
CONTROL MEASURES	<ul> <li>All portable tools on site (under 2kW) will be 110V or less.</li> <li>All cable connections should be properly made. Under</li> </ul>	

	<ul> <li>no circumstances is insulation tape to be used for repairs or joining electrical cables. Only industrial grade electrical equipment and connections will be used on site.</li> <li>Only competent electricians will attempt to repair or alter any electrical equipment.</li> <li>Flammable material will be kept a safe distance from electrical equipment.</li> <li>All portable tools will be maintained in good condition with the casings intact.</li> <li>Any defects in tools will be reported to the relevant Foreman who will ensure that the appropriate remedial action is taken.</li> <li>Cables will be positioned where they don't cause trip hazards.</li> <li>It is acknowledged that a few specialist tools are less than 2kW but are not manufactured in 110V. In those exceptional cases where an essential tool is available in 220V only it <i>may</i> be allowed (once the permission of Senior Management is granted) <i>provided</i> it is r.c.d. protected, in excellent condition, kept well away from potential water ingress and a sign warning of 220V is fitted.</li> </ul>
RISK RATING WITH CONTROLS	Low

LEGISLATION The Safety, Health and Welfare at Work (General Application Regulations 2007	
	The Safety, Health and Welfare at Work (Construction) Regulations 2006
	The Safety, Health and Welfare at Work Act 2005

## 14.15 HOT WORK

HAZARDS	<ul> <li>Fire</li> <li>Explosion</li> <li>Exposure to fumes</li> <li>Burns</li> <li>Eye injury</li> </ul>
RISK ASSESSMENT	Medium
CONTROL MEASURES	<ul> <li>The company may require a Permit for all internal hot work depending on an assessment establishing the degree of risk.</li> <li>The purpose of a Hot Work Permit is to ensure that adequate fire precautions have been taken prior to work commencing, e.g. fire extinguishers and fire blanket present, and all combustibles removed.</li> <li>Flashback arrestors will be fitted to all oxygen and fuel gas lines. All hoses and gauges will be removed from site at the end of each working day.</li> <li>Gloves, safety boots, overalls, safety helmets and eye protection will be worn at all times during welding operations.</li> <li>Gas cylinders will be on trolleys or otherwise secured in</li> </ul>

	an upright position during use and securely stored away (outdoors) after use. During use and storage they will be kept more than 3m away from combustible/ flammable material.
	<ul> <li>The operator will ensure that there is adequate ventilation during standard operations. Detailed risk assessments/method statements will be required to determine the necessary precautions during non-routine work e.g. in confined areas or any work on stainless or galvanised material. Forced ventilation or local exhaust ventilation will be provided where required.</li> </ul>
RISK RATING WITH CONTROLS	Low
LEGISLATION	The Safety, Health and Welfare at Work (General Application) Regulations 2007
	The Safety, Health and Welfare at Work (Construction) Regulations 2006
	The Safety, Health and Welfare at Work Act 2005

# 14.16 ABRASIVE WHEELS

HAZARDS	<ul> <li>Bursting of the wheel or disc</li> <li>Injuries from flying particles</li> <li>Cuts</li> <li>Dust</li> <li>Entanglement</li> <li>Naise</li> </ul>

	<ul><li>Electric shock</li><li>Fire and explosion</li></ul>
RISK	
ASSESSMENT	Medium
CONTROL MEASURES	<ul> <li>Only experienced/trained persons will operate abrasive wheels.</li> <li>Where there is a risk of sparks igniting material or smouldering occurring, the use of abrasive wheels will be under a Hot Work Permit.</li> <li>Eye protection must be worn by operatives using abrasive wheels.</li> <li>A visual check will be carried out on the machine before putting it into use. Check for loose plug connections or damage to the cable sheath on electrical machines.</li> <li>When using abrasive wheels, the operator will ensure that the area around is clear and that all personnel are in safe positions.</li> <li>Operators must not wear loose clothing.</li> <li>Operatives must ask management for a demonstration on how to use the con saw if they have not operated it before.</li> </ul>
RISK RATING WITH CONTROLS	Low

LEGISLATION	Safety in Industry (Abrasive Wheel) Regulations 1982
	SHWW (General Applications) Regulations 2007
	SHWW (Construction) Regulations 2006
	SHWW Act 2005.

### 14.17 COMPRESSED AIR EQUIPMENT

HAZARDS	<ul> <li>Dust/ grit injuries to eyes</li> <li>Compressed air entering the body via orifices or through the skin.</li> <li>Noise</li> <li>Injuries to feet</li> <li>Manual Handling</li> </ul>
RISK ASSESSMENT	Medium
CONTROL MEASURES	<ul> <li>All compressed air equipment on site must have a current test certificate (every 26 months).</li> <li>Equipment should be checked daily before being put into use. In particular, all guards and safety devices must be in good condition and operating correctly.</li> <li>All persons operating compressed air equipment must wear eye, ear and foot protection.</li> <li>Hoses, connectors and valves must be in good condition and correctly fitted.</li> <li>Compressed air will not be used for blowing down clothing etc. as it can enter the bloodstream via the skin.</li> <li>When removing or changing compressed air tools, the air will be closed off at the valve prior to removal.</li> <li>No horseplay will be tolerated.</li> </ul>

RISK RATING WITH CONTROLS	Low
LEGISLATION	Safety in Industry Act, 1980, s. 33
	SHWW (General Application) Regulations 2007
	The Safety, Health and Welfare at Work (Construction) Regulations 2006; Part 7 (31-34); Sixth Schedule
	SHWW Act 2005

## 14.18 SUBSTANCES HAZARDOUS TO HEALTH

HAZARDS	External Contact – corrosive action, skin absorption, dermatitis, e.g. cement, acids, epoxy resins etc. Inhalation - gases, fumes, dusts, vapours Ingestion – swallowing	
RISK ASSESSMENT	Low	
CONTROL MEASURES	<ul> <li>All contractors must inform the company's Site Management of any hazardous substances that are brought onto the site.</li> <li>Details of hazards associated with chemical products and their safe usage are given on Material Safety Data</li> </ul>	

RISK RATING	<ul> <li>Sheets or come with the product. The supplier or manufacturer is obliged by law to give this information. A Material Safety Data Sheet must be readily available on site for all hazardous substances brought onto site.</li> <li>In the case where dust/fumes may be evolved during any process or activity a risk assessment must be completed and the control measures identified.</li> <li>A method statement may be required for the use of, or the exposure to, hazardous substances on site.</li> <li>All hazardous substances should be used according to the agreed control measures.</li> <li>All personnel must be made aware of the relevant material safety data sheet and control measures in connection with all hazardous substances in use on site.</li> <li>Chemical products must never be allowed to come into eye contact, and generally contact with the skin should be kept to a minimum. Operatives working near wet cement will be informed of the contents. Ensure that all spillages are cleared up immediately and that waste and used containers are disposed of properly.</li> <li>Washing facilities will be available to all personnel.</li> </ul>
WITH CONTROLS	LOW
LEGISLATION	The Safety, Health and Welfare at Work (Chemical Agents) Regulations 2006

#### 14.19 LIFTING OPERATIONS

HAZARDS	Overloading due to failure to correctly estimate loads or due to incorrect use of crane.
HALANDO	Inadequate maintenance of equipment or use of defective equipment.
	Unsafe methods of erection, alteration or dismantling of crane.
	Insecure loads/lifting over persons.
	Handling of loads in high winds.
	Incorrect signals.
	Use of uncertified lifting appliance/gear
RISK ASSESSMENT	Medium
CONTROL MEASURES	<ul> <li>The company's Site Management will ensure that the cranes provided for use have current test certificates (CR3) and have been thoroughly examined within the preceding 14 months (CR4A). The Site Agent will check these certs before any crane is set to work on his site.</li> <li>The Site Agent will also ensure that the weekly inspections of the crane are recorded in Construction Form CR 4B. These inspections will be carried out by the Crane Driver.</li> <li>Safe Working Loads will be clearly marked on all lifting gear and on the jib of the tower crane at different operating radii (unless this information is provided on screen in the newer cabs).</li> <li>All lifts must be well within the operating limits of the</li> </ul>

lifting appliance used. With mobile cranes and
telescopic handlers the Driver must ensure that any "free
on wheels" operations are safe otherwise "blocked
duties" /outriggers must be used. Drivers must be
provide & maintain adequate grillages where required
and avoid any outriggers resting on soft ground or near
underground voids or near edges of excavations, etc.
Outriggers to be fully extended as per manufacturer's
instructions.
<ul> <li>No safety devices to be ignored or over-ridden.</li> </ul>
• The weight of individual loads should be known before
the lift, as far as practicable. For example, with steel
erection the largest beams/trusses should have their
weight clearly marked on them (or on readily available
drawings).
• All metal skips used will have a current (6-month)
inspection certificate. They will not be overfilled. A sheet
or net will be fitted prior to any lift. Nets will also be
securely fastened around loads of blocks, bricks, tiles,
etc.
The Site Agent will ensure that all necessary certificates
and reports are kept readily available in the site office.
<ul> <li>Only authorised, and suitably certified, persons will be</li> </ul>
permitted to operate lifting appliances or to give signals
and sling loads, in accordance with the Construction
Skills Certification Scheme.
• If a <b>defect</b> is found in any crane or item of lifting gear, it
must be taken out of use until the defect is rectified.
The operating instructions for each crane will be
available in the cab. All Crane Drivers will be in radio
communication with personnel on the ground
<ul> <li>Where weather conditions may affect the safety of</li> </ul>
- Where Weather benations may areat the safety of

	<ul> <li>lifting operations the Site Agent (or Foreman or the Crane Driver) may stop operations until conditions improve. In addition ensure that a wind speed indicator is available on site, and the manufacturer's max. wind speed for safe working is available in each cab. Otherwise 35 m.p.h. is the wind speed at which all operations will cease for tower cranes, 30 m.p.h. for mobile cranes, and 24m.p.h. for mobile elevating working platforms. Obviously, these figures should be further reduced where the load presents additional problems e.g. large, light panels.</li> <li>Safety Harnesses <u>must be</u> used by persons carrying out inspections, installations, or maintenance of cranes where a fall of 2m or more is possible.</li> <li>All cranes must be secured and left in a safe condition at the end of each working day. Loads must not be left suspended when the crane is unattended.</li> <li>Drivers of cranes, telescopic handlers, etc and Banksmen will ensure that loads are not lifted over persons where possible. All operatives must respect orders from Drivers or Banksmen if directed to keep out of lifting zones. Tag-lines should be considered for any load which is liable to swing in a hazardous manner.</li> </ul>
RISK RATING WITH CONTROLS	Low
LEGISLATION	The Safety, Health and Welfare at Work (Construction) Regulation 2001

#### 14.20 HOUSEKEEPING

	Slips, trips and falls.
HAZARDS	Unsafe access and egress
	Fire
	Collapse of stored material.
	Falling materials
RISK ASSESSMENT	High
CONTROL MEASURES	<ul> <li>All sub-contractors will be informed by Site Management that they will be required to clean up their rubbish as they go.</li> <li>Facilities will be available, such as skips, debris chutes etc., to ensure that rubbish can be removed safely. Material will not be thrown from height. Skips should be sheeted to reduce dust/fallout.</li> <li>All main access routes, such as all stairwells, will be kept clear and adequately lit.</li> <li>Sufficient labour will be available for clearing up operations, cleaning of welfare facilities etc.</li> <li>Sharp items (like protruding cladding/metal) will be cut or</li> </ul>

	<ul> <li>capped where practicable.</li> <li>Care should be taken to reduce trailing/hanging leads or hoses especially near stairwells.</li> <li>Palletised material (e.g. Rockwool, foamglass, cladding, etc) will not be stored 2-high unless the bands or equivalent packing remain intact. Bands will be disposed of immediately rather than becoming potential trip hazards.</li> <li>Combustible waste should not accumulate. Fire escape routes must be kept clear at all times.</li> <li>Food litter is an invitation to vermin and will not be tolerated. Waste bins are provided and the canteen and office areas are swept clean at regular intervals.</li> </ul>
RISK RATING WITH CONTROLS	Low
LEGISLATION	The Safety, Health and Welfare at Work (General Application) Regulations 2007

14.21 CARTRIDGE TOOLS

HAZARDS	Flying particles i.e. pieces of metal or concrete
RISK ASSESSMENT	Medium

CONTROL MEASURES	<ul> <li>Users of Cartridge operated tools must be over the age of 18.</li> <li>Only cartridge tools of the low velocity and indirect type will be used on this site.</li> <li>All operatives required to use cartridge tools should receive instruction from the manufacturer's representative on their proper use.</li> <li>Suitable, locked storage facilities will be provided for the tool and the cartridges.</li> <li>All operatives using such equipment will wear eye protection.</li> <li>Operatives should treat cartridges as explosive and NOT leave spare or spent rounds lying around the site.</li> <li>Users of cartridge tools must receive training from the supplier.</li> </ul>
RISK RATING WITH CONTROLS	Low
LEGISLATION	The Safety, Health and Welfare at Work (General Application) Regulations 2007 Construction Regulations 2006

# 14.22 WEIL'S DISEASE

HAZARDS	Exposure may be fatal if adequate precautions are not adhered
	to.

RISK ASSESSMENT	Low
CONTROL MEASURES	<ul> <li>Weil's Disease is caused by contact with rats' urine, or water contaminated by rats. The infection may enter the body via damaged skin or by accidental ingestion through the nose or mouth. The disease may be fatal although the early symptoms are similar to influenza.</li> <li>Areas which may pose a risk are any puddles or other water, drains, within the derelict buildings or other places where rats may be found</li> <li>Personnel working in likely contaminated areas should ensure that any cuts or scratches are carefully cleaned and covered.</li> <li>After contact with raw water, the hands and forearms should be thoroughly washed especially before eating, drinking or smoking and persons should avoid rubbing their nose, eyes or mouth during work.</li> <li>Wherever possible, protective clothing such as gloves should be worn to avoid contact with infected areas. Persons should avoid touching (live or dead) rats.</li> <li>All personnel will receive instruction / information in the form of a toolbox talk on this subject. Operatives are reminded to inform their G.P. of any influenza-like symptoms and the nature of their job.</li> </ul>

	<ul> <li>Adequate washing facilities will be provided on site.</li> </ul>
RISK RATING WITH CONTROLS	Low
LEGISLATION	The Safety, Health and Welfare at Work (General Application) Regulations 2007

# 14.23 PSITTACOSIS - PIGEON INFESTATION

HAZARDS	Exposure may be fatal if adequate precautions are not adhered to.
RISK ASSESSMENT	Medium
CONTROL MEASURES	<ul> <li>All Personnel involved in clearing out / demolition works shall wear gloves, overalls, and dust masks.</li> <li>Personnel working in likely contaminated areas should ensure that any cuts or scratches are carefully cleaned and covered.</li> <li>After contact with the contaminated areas the hands and</li> </ul>

	<ul> <li>forearms should be thoroughly washed especially before eating, drinking or smoking and persons should avoid rubbing their nose, eyes or mouth during work.</li> <li>All personnel will receive instruction / information in the form of a toolbox talk on this subject.</li> </ul>
RISK RATING WITH CONTROLS	Low
LEGISLATION	The Safety, Health and Welfare at Work Act 2005 The Safety, Health and Welfare at Work (General Application) Regulations 2007

## 14.24 MANUAL HANDLING

	Spinal Injuries
HAZARDS	Cuts crushing of hands or fingers
	Injuries to toes and feet
	Various sprains, strains etc.
RISK ASSESSMENT	Medium
CONTROL	<ul> <li>Wherever practicable the company will provide, and use, mechanical handling devices for the handling of</li> </ul>

MEASURES	<ul> <li>materials. Such devices will include material handlers, cranes and hoists.</li> <li>All personnel involved in manual handling will wear safety shoes, and gloves as appropriate.</li> <li>Walkways and access points will be kept clear and lighting will be adequate.</li> <li>Sharp edges will be protected.</li> <li>If possible, break the load down into smaller items and provide proper handles, handholds or use carrying devices, to avoid the possibility of trapped fingers etc.</li> <li>Secure items that are loose to prevent the load shifting when being carried.</li> <li>Avoid carrying awkward items up and down steps.</li> <li>Specialist Sub-contractors, such as scaffolders and steel erectors, are expected to detail their manual handling proposals in their Method Statement or Risk Assessment.</li> <li>Where mechanical devices cannot be used an operatives have to move heavy loads they must receive adequate manual handling training.</li> <li>All operatives to be trained in manual handling.</li> </ul>
RISK RATING WITH CONTROLS	Low
LEGISLATION	SHWW (Construction) Regulations 2006 The Safety, Health and Welfare at Work (General Application) Regulations 2007 SHWW Act, 2005

# 14.25 EXCAVATIONS

HAZARDS	<ul> <li>Collapse of the sides.</li> <li>Persons falling into excavations.</li> <li>Striking underground services</li> <li>Persons being struck by falling materials.</li> <li>Buildings or structures collapsing due to excavations.</li> <li>Flooding.</li> <li>Dangerous gases or hazardous dusts within excavations</li> <li>Plant running into excavations / other contact with plant.</li> </ul>
RISK ASSESSMENT	High
CONTROL MEASURES	<ul> <li>No person is permitted to enter any unsupported excavation more than 1.25 metres deep unless the sides are properly supported or battered back to a safe angle for the ground conditions that apply. Shallower trenches may also require support in very poor conditions.</li> <li>Every person required to enter an excavation must wear a hard hat. All are reminded to keep as far as practicable away from plant (e.g. the buckets of excavators).</li> <li>Should any excavation be required in a public area the safety of the public, particularly children and blind or disabled persons, must be considered when excavations are left open outside working hours.</li> <li>Where possible, the excavation support should be installed from ground level. Otherwise precautions must be provided for the safety of operatives installing support.</li> <li>The company Site Agent will ensure that all excavations</li> </ul>

<ul> <li>are inspected daily at the commencement of each shift and are fenced and supported as required. The Site Agent will also ensure that a thorough examination is made of any excavation open for 7 days and is recorded on Form CR9.</li> <li>Access and plant must be routed away from the edges of excavations. Fences or stop- blocks will be fitted if</li> </ul>
<ul> <li>Materials must not be stacked or placed near the edges of excavations</li> </ul>
<ul> <li>Fall protection measures (e.g. guard-rails or "Easy-fencing") must be provided around any excavation more than 2 metres deep or around excavations of any depth in public areas</li> <li>Also, secure barriers will be erected at the back of the perimeter sheet piles or retaining walls if access is possible.</li> </ul>
<ul> <li>Securely fixed ladders must be provided for access into excavations and to provide a means of egress in the event of flooding.</li> </ul>
<ul> <li>Adequate pumps will be available to pump out the excavation where required.</li> </ul>
<ul> <li>Care will be taken to ensure that the stability of adjacent buildings, fences and poles is not compromised by any work activity in the vicinity.</li> </ul>
<ul> <li>The risk of gases entering excavations will be assessed. Particular attention will be paid to eliminating exhaust fumes from petrol/diesel plant and placing LPG cylinders well away from excavations.</li> </ul>
<ul> <li>Suitable precautions will be taken to address the dangers from potential exposure contaminated soils, or Methane, Hydrogen Sulphide and Oxygen depletion during work on or adjacent to live sewers. These will include a Permit to Work system, the</li> </ul>

	provision and use of gas monitors, the presence of a watchman at all times and detailed rescue procedures. A detailed Method Statement will also be prepared for any high risk stages.
RISK RATING WITH CONTROLS	Low
LEGISLATION	The Safety, Health and Welfare at Work (Construction) Regulation 2006

### 14.26 WORK AT HEIGHT

HAZARDS	Falls of persons Falls of materials or articles Falls through openings in slabs or roofs Falling from any height can result in either Serious Injury or Death
RISK ASSESSMENT	High
CONTROL MEASURES	<ul> <li>Before SHWW (Work at Height) Regulations 2006, a Risk Assessment must be carried out.</li> <li>Ensure that there is a safe method of access and egress</li> <li>Only persons who have received the site induction will be allowed to work on site.</li> <li>Sufficient materials and labour will be available on site to protect edges and openings.</li> <li>All edges, from which it is possible to fall, will be protected by guard-rails and toeboards as far as possible. Middle rails will also be fitted where practicable.</li> <li>All guard-rails (and their uprights) will be of adequate strength.</li> <li>The persons fitting the protection will use harnesses attached to secure anchor points at all times. It shall be prohibited to work within two metres of the edge without being clipped to an adequate anchor point.</li> <li>All work will be supervised by Site Management.</li> <li>Persons required to wear/use harnesses will receive instruction on their proper use and maintenance.</li> <li>Site Management will ensure that work is planned so safe access/egress and working places are provided for operatives to work at height.</li> </ul>
RISK RATING WITH CONTROLS	<ul> <li>Work on roofs and other exposed areas will not be permitted when high winds or gusting is experienced. Roof surfaces and access routes must be checked at the commencement of work after heavy rain, frost or snow.</li> <li>Where edge protection is not available safety harnesses <u>must</u> be used and a Method Statement prepared.</li> <li>Materials must not be dropped or thrown down from a height other than by means of a chute or other suitable safe methods.</li> <li>Portable access equipment, such as trestles, stepladders and tower scaffolds, will not be positioned near stairwells or floor/roof edges if this places operatives at risk of falls.</li> </ul>
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LEGISLATION	The Safety, Health and Welfare at Work (Construction) Regulation 2006, Part 13; SHWW (Work at Height) Regulations 2006 SHWW Act 2005 SHWW (General Applications) Regulations 2007

#### 14.27 SCAFFOLDING

HAZARDS	<ul> <li>Collapse of scaffold</li> <li>Persons falling from heights</li> <li>Falls of materials</li> <li>Unauthorised alteration of scaffolding</li> <li>Unauthorised access to scaffolding</li> <li>Untrained erectors</li> </ul>
RISK ASSESSMENT	High
CONTROL MEASURES	<ul> <li>Scaffolding will only be erected by competent and authorised persons. On completion, the Scaffolding Foreman will ensure that a signed "hand over certificate" is given to the Site Agent. "Scaffold incomplete" or "scaffolding in progress" signs must be fitted until the Site Agent accepts this hand over.</li> <li>Scaffolders who erect below 7m metres must have a Basic ticket. Those who are more experienced and erect above 7m must have an Advanced Construction Skills Certification Scheme (CSCS) ticket.</li> <li>Uprights, ledgers, braces, ties, etc must not be removed from the scaffold by anyone other than an authorised Scaffolder. Temporary removal of a single guard-rail or other item to allow essential work (e.g. loading) may be permitted occasionally but in every case it will only be undertaken by authorised, experienced persons with Site Management approval. Such items will be replaced</li> </ul>

	immediately.
•	All platforms and gangways where a person may fall 2
	metres or more must have hand/guard-rails and toe-
	boards provided. Guard-rails must be erected to a height
	of between 950mm - 1150mm. Toe board height should
	not be less than 150mm.
•	All scaffolding will be tied /braced to the building in
	accordance with the current K-stage manual. The
	preferred tie system is a combination of 2 or 3 ring bolts
	drilled into suitable concrete (rated at 12kN minimum
	each) and connected together by a horizontal tube. Pull
	tests conducted on numerous ring bolts have
	consistently confirmed this rating – results are available
	from Head Office.
•	A single short tube through a ring bolt should generally
	be avoided. Where this is not practicable there must be a
	check coupler fitted before the end of the short tube and
	a maximum horizontal distance from corner to ring bolt of
	150mm.
•	Where concrete is not available the Scaffolding Foreman
	may use box or lip ties around steel columns or similar
	structural features. The Scaffold Contractor must confirm
	that any deviation from this (e.g. clamps attached to
	steelwork) provides a minimum strength of 6.3kN.
•	All ties must be attached to the scaffold within 300mm of
	the node point (i.e. the point where uprights and ledgers
	meet). If this is not possible then the Scaffolding
	Contractor will provide alternative measures, such as
	attaching the connecting tube to front as well as rear
	uprights or adding extra ties.
•	Surplus ties are to be provided initially in any area where
	individual ties may need to be removed briefly at key

<ul> <li>stages. Removal and replacement of such ties will only be undertaken by the Scaffolding Foreman.</li> <li>Proper ladder access must be provided to the scaffold platforms. Access must never be by climbing the standards, ledgers or braces. Ladders should be erected inside the scaffolding, with the size of the ladder-way opening reduced to a reasonable minimum.</li> <li>Any scaffold being erected, altered or dismantled and which is not suitable for use must have a warning notice displayed.</li> <li>The Scaffolding Contractor will provide all the items.</li> </ul>
<ul> <li>The Scanduling Contractor will provide all the items listed in their detailed contract (e.g. including brick-guards, internal corner fillers, etc). Loading capacity and use are to be specified in the hand over certificates. In almost every case there will be 1 x general purpose (2kN/m<sup>2</sup>) working lift only per elevation. Loading towers are to be erected to specified designs. The standard design in common use at present is 5kN/m<sup>2</sup>.</li> <li>Site specific designs must be approved before any non-standard items are constructed (e.g. bridging by unit/ladder beams or cantilevered/trussed out sections).</li> <li>Scaffolds must be inspected once a week, after elevations.</li> </ul>
alterations, and after extreme weather. Records of these inspections must be made on construction form WH 1, by the Site Agent.
<ul> <li>During erection / alterations all Scaffolders will vet the quality of materials used, paying particular attention to sensitive items such as "V locating lugs", wedges and tie bars. This is in addition to the off-site quality assurance regime operated by the Scaffolding Contractor.</li> <li>Also any other operative finding damaged or</li> </ul>
substandard items later will be expected to report it

immediately to site management (as per instructions in the tool box talk on the subject).
<ul> <li>Erection /Alterations:</li> <li>Erection and dismantling procedures will be in accordance with the K-stage manual and the National Association of Scaffolding and Access Contractors' rules. For example, above 2m operatives will stand on a minimum of 3 boards and will erect the external guardrail at the earliest opportunity (and dismantle it at the latest).</li> <li>In exceptional locations where the "3 board rule" is not possible (e.g. slung scaffolds) harnesses or man-riding cradles must be used.</li> </ul>
<ul> <li>Dismantling:</li> <li>Before starting the dismantling procedure the scaffold should be checked to see if any modifications have occurred during its use that will affect the overall stability as ties are removed. Gangways must be cleared of all loose materials.</li> <li>A temporary working platform must be positioned below the level to be dismantled and be at least 3 boards wide.</li> <li>The scaffold must be dismantled in layers. Ensure that it remains adequately braced and tied throughout and do not overload with stillages of materials. Avoid leaving tubular materials where they can roll or fall (e.g. do not stack unsecured long tubes end-on and with short sections like butting tubes make sure they are prevented from falling off platforms).</li> </ul>

	<ul> <li>Materials must never be dropped, thrown or tipped from a height. Instead they will be brought down in a controlled fashion i.e. hand-balling or by crane or telescopic handler.</li> </ul>
	<ul> <li>Dismantling Procedure Summary:</li> <li>Do not remove all ties.</li> <li>Do not remove all braces.</li> <li>Dismantle in layers.</li> <li>Dismantling must be planned and supervised by a competent trained person.</li> </ul>
RISK RATING WITH CONTROLS	Low
	Scaffolding Code of Practice
LEGISLATION	<b>K-Stage Manual or equivalent</b> SHWW (Work at Height) Regulations 2006 The Safety, Health and Welfare at Work (Construction) Regulations 2006

### 14.28 MOBILE TOWER SCAFFOLDING

HAZARDS	<ul> <li>Collapse of scaffold</li> <li>Persons falling from heights</li> <li>Falls of materials</li> <li>Untrained erectors</li> </ul>
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RISK ASSESSMENT	High
CONTROL MEASURES	<ul> <li>Scaffolding will only be erected by trained (CSCS card holders), competent and authorised persons.</li> <li>Heights must be relative to the effective base (3.5 to 1 or to manufactures instructions).</li> <li>Assembled in accordance with manufactures instructions.</li> <li>Outriggers or stabilisers must be used where possible.</li> <li>Towers must not be used on slopping, uneven or obstructed surfaces.</li> <li>Towers should be tied to stable structures where possible.</li> <li>Towers to be moved from ground level. No person to remain on tower whilst moving.</li> <li>Tools and materials to be removed before moving tower.</li> <li>Overhead obstructions to be noted and risk assessed.</li> <li>Wheels must be locked when in used.</li> <li>Do not use during adverse weather conditions.</li> <li>Never overload with operatives or materials.</li> <li>Tower to be dismantled after ever shift on insecure sites.</li> <li>Signs to warn of risk to be erected.</li> <li>Area around tower to be cordoned of with barrier tape where possible.</li> </ul>
<b>RISK RATING</b>	Low

WITH CONTROLS	
LEGISLATION	SHWW (Work at Height) Regulations 2006 The Safety, Health and Welfare at Work (Construction) (Amendment)Regulations 2006 SI 130 2008
	The Safety, Health and Welfare at Work Act 2005
	SHWW (General Applications) Regulations 2007

#### 14.29 ROOF WORK

HAZARDS	<ul> <li>Falls of persons (- edges, openings, fragile materials)</li> <li>Falls of tools</li> <li>Falls of materials</li> </ul>
RISK ASSESSMENT	High
CONTROL MEASURES	<ul> <li>Only competent operatives and/or contractors will be considered to carry out work on the roof.</li> <li>Safe access will be provided to the roof by Site Management.</li> <li>Any roof openings will be protected by a fixed cover or by a solid handrail system. Covers will be robust enough to support persons and resist the impact of a fall. They should be clearly marked "Danger – Opening" or similar.</li> <li>Roof edge protection will be maintained whenever</li> </ul>

	<ul> <li>required. Toe-boards and guard-rails of suitable height will be fitted. If mid-rails or top-rails are needed they will be provided.</li> <li>Work on roofs will not be permitted when high winds or gusting is experienced. Roof surfaces and access routes must be checked at the commencement of work after heavy rain, frost or snow.</li> <li>In exceptional (short duration) cases some roof work may involve dependence on harnesses.</li> <li>Fragile surfaces (e.g. roof-lights, asbestos cement sheeting) are to be avoided where possible in the design of this project. Where this is not practicable all materials suspected of being fragile will be treated as fragile until proved otherwise. That is, fall protection measures and warning signs to be maintained at all times.</li> </ul>
RISK RATING WITH CONTROLS	Low
	SHWW (General Applications) Regulations 2007
LEGISLATION	SHWW (Construction) Regulations 2006, Part 13: SHWW (Work at Height) Regulations 2006, regs. 76 & 77
	SHWW Act 2005
	SHWW (Work at Height) Regulations 2006 Regulations 2006
	Code of Practice for Safety in Roof work 2005
	The Safety, Health and Welfare at Work Act 2005

#### 14.30 FIRE

HAZARDS	<ul> <li>Common fire hazards include improperly stored combustible or flammable materials, faulty electrical equipment and smoking in undesignated areas.</li> <li>Uncontrolled welding or burning.</li> </ul>
RISK ASSESSMENT	Low at the onset of the construction stage but increases near completion
CONTROL MEASURES	<ul> <li>Fire extinguishers will be placed at strategic locations.</li> <li>Fire blankets to be supplied when welding/cutting</li> <li>All stairwells and access routes shall be kept clear of waste and materials for the duration of the project so as to reduce the potential risk of fire occurring and to aid evacuation in the event of fire.</li> <li>Fire drills will be carried out on site at reasonable intervals</li> <li>The quantity of flammable solvents and L.P.G. cylinders will be reduced to the minimum practicable. All will be stored safely, more than 3m from combustibles – i.e. solvents in steel drum or container and L.P.G. externally.</li> <li>As the fire load increases, a Permit to Work System will be imposed by the Site Management for any hot work.</li> </ul>
<b>RISK RATING</b>	Low

WITH CONTROLS	
LEGISLATION	The Fire Precautions Act 1981

#### 14.31 FALL ARREST-SAFETY HARNESSES

HAZARDS	<ul> <li>Falls of more than 2m</li> <li>Damaged or sub-standard equipment</li> <li>Inadequate anchorages</li> <li>Failure to wear harness or attach lanyard when required</li> <li>Insufficient clearance</li> <li>Slips and trips</li> <li>Snagging lanyard – poor housekeeping</li> </ul>
RISK ASSESSMENT	High
CONTROL MEASURES	<ul> <li>A harness is a form of Personal Protective Equipment (PPE) and should only be used in exceptional cases when it is reasonably practicable (e.g. on the grounds of short duration).</li> <li>Like all PPE it is dependent on the discipline of the user and the level of supervision provided. Only operatives trained in the correct use of fall arrest equipment will be permitted to use harnesses. Site management will monitor conditions closely.</li> <li>All fall arrest equipment should be individually inspected before use. Operatives and supervisors will monitor colleagues on an ongoing basis.</li> <li>Every operative is to receive site-specific induction and regular refresher sessions.</li> <li>Full body harnesses should be adjusted to suit the user as per the supplier's demonstration. Lanyards and shock absorbers (capable of reducing the deceleration forces to less than 6g) will also be issued.</li> <li>Storage of fall arrest equipment should be in a clean dry</li> </ul>

	<ul> <li>area free of any corrosive chemicals.</li> <li>Each item will have an identifiable mark and be subjected to regular inspection as per the supplier's instructions.</li> <li>Due regard will be paid to the setting up operation – particularly ensuring that there is no approach within 2m of an unprotected edge before fall arrest is attached. Lanyards will remain connected until safe egress is reached.</li> <li>Lines will not run over any sharp objects or edges. A high standard of housekeeping must be maintained in the area.</li> <li>Anchorages are to be clearly identified. They should be chest height or above with the amount of slack in the line reduced to the minimum that is reaceable.</li> </ul>
	Rescue procedures should be detailed during the site- specific induction and refresher sessions
RISK RATING WITH CONTROLS	Low/medium
LEGISLATION	SHWW (General Applications) Regulations 2007 The Safety, Health and Welfare at Work (Construction) Regulations 2006 SHWW Act 2005 SHWW (Work at Height) Regulations 2006

#### 14.32 ELECTRICITY OVER 220V

<ul> <li>Electrocution</li> <li>Fire/Explosion</li> <li>Entrapment (-i.e. failure to isolate plant)</li> <li>Damage to property</li> </ul>
High
Planning
<ul> <li>Power requirements for a project will be calculated by a competent person.</li> <li>Prior to starting any works on site the Site Agent shall ensure that all electrical cables have been physically located</li> <li>Wiring installations on site shall be checked by a competent, qualified electrician.</li> <li>Only competent electricians are permitted to undertake work on any electrical equipment on site.</li> <li>Any person carrying out work on electrical equipment must first isolate it - normally by removing the main fuse or locking off the isolator.</li> <li>Whenever possible, site electrical supplies will be protected by residual current or other such protection devices.</li> <li>Cables will be routed in a way that protects them from damage. Where there is a possibility of damage from vehicles etc. they will be clearly marked by ESB warning tape, or yellow paint or fenced off as required.</li> </ul>
<ul> <li>The temporary electrical supply will be installed and</li> </ul>

	tested as planned.
v	<ul> <li>Vork in Existing Buildings</li> <li>Before work starts the Site Agent shall survey the existing buildings to ensure that all circuits which are live, or may become live, are protected from damage.</li> <li>Where possible redundant cables should be removed as soon as possible in the project to reduce the risk of confusion and danger.</li> </ul>
L V s P lii liu e	<b>ive working is a danger to be avoided if at all possible.</b> Where live working is required a detailed Method Statement hall be required to include:-the precautions to be taken and the Personal Protective Equipment needed, actions required to mit unauthorised access to the area, the required space/ ghting/ access to ensure safe working, and details of the back p personnel who will implement emergency procedures in the vent of an accident.
v	<ul> <li>Vork Adjacent to Overhead Electricity Lines</li> <li>Before commencing work in the vicinity of the small section of overhead cables, Site Management should consult with the ESB regarding the protection that must be provided on site. The emphasis should be on deenergising the line at the earliest opportunity.</li> <li>The protection provided shall be in accordance with HSE Guidance Note GS6 "Avoidance of Danger form Overhead Electric Power Lines" and the ESB leaflet derived from it.</li> </ul>

	<ul> <li>Fit and maintain ground level barriers and high level bunting along the entire length of the overhead power lines.</li> <li>All verticals to bunting poles to be made of timbers or other non conducting material. They must be robust enough to provide stability in all weather.</li> <li>All vehicle drivers will be instructed on the safe practices. Particular emphasis will be placed on avoiding travel with raised booms etc. ESB notices will be placed on the windscreen of vehicles (-these are freely available from local ESB offices).</li> <li>Site Management will supervise the erection of overhead warning barriers and then inspect all bunting on a daily basis. After periods of severe weather or suspected vandalism, all overhead line protection will be inspected by Site Management.</li> <li>All relevant operatives will be informed of the dangers of overhead power lines as part of site induction and the ongoing training programme.</li> <li>Signs stating "Danger Overhead Power Lines" or similar will be prominently displayed.</li> </ul>
RISK RATING WITH CONTROLS	Low

LEGISLATION	The Safety, Health and Welfare at Work (General Application) Regulations 2007
	Construction Regulations 2006
	SHWW Act 2005
	ECTI Guidelines
	ESB Guidelines

#### 14.33 NEEDLESTICK INJURIES

HAZARDS	<ul> <li>Puncture wounds</li> <li>Hepatitis</li> <li>Tetanus</li> <li>H.I.V.</li> </ul>
RISK ASSESSMENT	Low
CONTROL MEASURES	If required a dedicated sharps bin will be brought to site for the disposal of any needles found. If needles are encountered the following procedures will be initiated:-

	<ul> <li>The person discovering the needles should not attempt to move them without first putting on rubber gloves</li> <li>The sharps bin should be brought to the location of the needles and not the reverse.</li> <li>Needles should be handled with care (while wearing the gloves) and dropped in the sharps bin.</li> <li>The bin will then be returned to its secure location.</li> <li>It will be returned to the specialist waste disposal contractor when full or no longer required.</li> </ul> Note-if anyone is accidentally stuck by a needle he should report immediately to Site Management who will advise that he attends a hospital or Doctor's surgery.
RISK RATING WITH CONTROLS	Low
LEGISLATION	The Safety, Health and Welfare at Work (General Application) Regulations 2007

## 14.34 COMPANY VEHICLES

HAZARDS	Driving remains one of the most dangerous activities we undertake and as it can take up a large proportion of working
	nours, particularly for company representatives and to a lesser
	extent auministrative, managenal and technical stan, it

	deserves special treatment.
RISK ASSESSMENT	Medium
CONTROL MEASURES	<ul> <li>All persons who drive on the public road are subject to the provisions of the Road Traffic Act 1961. They must at all time drive in a manner that is safe both to themselves and other road users and at all times observe the basic 'rules of the road'. We expect all operators of company vehicles not alone to fulfil their obligations under the 1961 Act but coupled with the Safety, Health and Welfare at Work Act 2005 to observe the following guidelines:</li> <li>Wear safety belts at all times.</li> <li>Do not drink alcohol or take medication which could affect driving or operating ability.</li> <li>Check lights, tyres, oil, water, windscreen wipers and washer reservoir etc. at regular intervals.</li> <li>Ensure your vehicle is serviced in accordance with the manufactures requirements.</li> <li>Report all accidents or damage, however minor. to the</li> </ul>
	<ul> <li>Ensure any traffic violations you are involved in which result in yourself being prosecuted are reported to the company secretary.</li> </ul>

	<ul> <li>Ensure before reversing that there are no obstructions or people behind the vehicle.</li> <li>Make regular inspections of your vehicle for obvious defects and ensure any defects noticed are rectified without delay.</li> <li>Do not carry unauthorised passengers or unauthorised loads.</li> <li>Do not use company vehicles for unauthorised purposes.</li> <li>You must not drive or operate any company vehicle for which you do not hold the appropriate driving license or permit.</li> </ul>
	Low/medium
CONTROLS	
LEGISLATION	The Safety, Health and Welfare at Work Act 2005 The Road Traffic Act 1961 - 2003

### 14.35 MOBILE PHONES

HAZARDS	<ul><li>Loss of concentration</li><li>Distractions</li></ul>
RISK ASSESSMENT	Low

CONTROL MEASURES	<ul> <li>Do not use mobile phones when:</li> <li>operating plant/machinery</li> <li>When a vehicle/machine is in motion</li> <li>In area where a machine is refuelling</li> <li>The preferred method of using a mobile phone on site is by hands free headset – especially for lifting operations</li> <li>When making or receiving calls park the car at the side of the road in a safe manner and then make the call or speak to the caller. Outward calls should never be made while driving, as the driver has to take his/her eye of the road to dial the number.</li> <li>Keep mobile calls short if possible take a number and ring back from a landline. During an unavoidably long call, switch the phone from ear to ear.</li> <li>A car kit or ear piece should be supplied and used if a mobile phone is issued by the company and is likely to be used while travelling on business.</li> </ul>
	It is an offence to drive while using a mobile phone. However a person may be charged without due care and attention, dangerous driving or some similar offence.
RISK RATING WITH CONTROLS	Low
LEGISLATION	SHWW General Application Regulations Act 2007
	Road Traffic (Construction, Equipment & Use of Vehicles) (Amendment) (No.2) Regulations 2002
	The Safety, Health and Welfare at Work Act 2005

## 14.36 LONE WORKING

INTRODUCTION	There is no general prohibition on a person working alone, but there are specific instances where legislation requires more than one person to be involved in the operations, in which case the work will be planned for the relevant number of persons. In certain circumstances lone working is not permissible and the worker will be physically supervised e.g. young persons operating prescribed dangerous machinery, persons
	Devising safe work arrangements for solitary workers should be no different from organising the safety of other employees. Hazards need to be identified and risks assessed. Solitary workers should not be exposed to significantly more risks than employees who work together.
HAZARDS	Likely hazards might include:- Fire, equipment failure, illness, accidents, is there any special risk?, safe access / exit for one person?, manual handling of access equipment e.g. ladders and trestles, handling of plant, substances and goods i.e. weight considerations, medical condition of employee, lack of suitable training. This list is by no means exhaustive but gives a guide to what type of hazard to consider.

RISK ASSESSMENT	Medium
CONTROL MEASURES	<ul> <li>When working alone you have a duty to take reasonable care of yourself. Make sure that your supervisor is aware that you will be working alone, and knows what you will be doing. The supervisor should be informed when you will be starting and when you have finished. Before working alone you must consider: <ul> <li>Make sure that the job you have been asked to do can be done safely by one person.</li> <li>Make sure that there is a safe access and exit in case of an emergency.</li> <li>Ensure that someone can be alerted should you require assistance.</li> <li>If you think that there are medical reasons why you should not work alone, then tell your supervisor. Do not risk you own safety because of a medical condition</li> </ul> </li> </ul>
RISK RATING WITH CONTROLS	Low
LEGISLATION	SHWW General Application Regulations Act 2007 The Organisation of Working Time Act 1997

# 14.37 ACETYLENE (WELDING GAS)

HAZARDS	Acetylene is a high pressure gas that:
	<ul> <li>Can cause rapid suffocation</li> </ul>
	May form explosive mixtures in air

	Is colourless
	<ul> <li>Has a low odour, and thus poor warning properties at low concentrations (it gives off a garlic like smell)</li> </ul>
RISK ASSESSMENT	High
CONTROL MEASURES	<ul> <li>Adhere strictly to the suppliers safety guidelines</li> <li>Make available the MSDS to users of acetylene</li> <li>Allow only experiences and properly trained and instructed persons to handle acetylene and to take part in welding activities</li> <li>Never attempt to transfer acetylene from one cylinder to another</li> <li>Always use flashback arrestors with acetylene to prevent flames travelling back into the cylinder</li> <li>Always use acetylene in the upright position, if a cylinder has been transports horizontally, leave it upright for 12 hours before use</li> <li>Always protect the cylinder from physical damage by securing in an upright position – Do not drag, roll or drop.</li> <li>Avoid inhalation of gas – wear suitable PPE at all times</li> <li>Never use acetylene in temperatures exceeding 50 degrees centigrade</li> <li>Always use an adjustable strap-wrench to remove over tight or rusted caps</li> <li>Before connecting the cylinder, ensure that back-feed from the system into the container is prevented</li> <li>Never insert a wrench / screwdriver / pry-bar etc. into valve cap openings</li> </ul>

<ul> <li>No smoking while handling acetylene or cylinders</li> <li>Keep cylinders away from combustible materials Ensure adequate ventilation, especially in confined areas</li> <li>Return all empty / unused cylinders to the supplier</li> </ul>
<ul> <li>When handling cylinders:</li> <li>Wear appropriate PPE. Do not wear loose clothing when handling cylinders</li> <li>Ensure that vertical cylinders are secured or under direct control of a worker</li> <li>Never turn your back on a free standing cylinder</li> <li>Avoid uneven, sloping, slippery or vibrating surfaces when standing or churning cylinders</li> <li>Ensure that all cylinders in pallets are stable before releasing straps or chain</li> <li>Lift cylinders using suitable hoists with certified slings and hooks</li> <li>Exercise caution when manual handling cylinders. NOTE: acetylene cylinders are heavier than other cylinders because they are packed with a porous material and acetone</li> <li>Do not attempt to catch a falling cylinder – get out of the way!</li> </ul>
<ul> <li>Training/Certification</li> <li>BOC Gas Safety Awareness Workshops, training includes:</li> <li>Relevant Legislation</li> <li>Gas Properties and Hazards</li> <li>Safe use, handling, storage and transportation</li> </ul>

	Best Practise
RISK RATING WITH CONTROLS	Low
LEGISLATION	Safety, Health and Welfare at Work Act 2005. SHWW (Construction) Regulations 2006 SHWW (Chemical Agents) 2001
	Safety, Health and Welfare at Work (General Application) Regulations 2007

# 14.38 AUGERS/DRILLS

HAZARDS	Digging holes, resulting in fractures of pipes or cables, or flying objects –which may result in: • Explosion • Electrocution • Injury
RISK ASSESSMENT	High
CONTROL MEASURES	<ul> <li>Allow only competent persons to operate augers/drills</li> <li>Before opening augers/drills, read understand and follow the manufacturers operating manual and safety decals on the equipment</li> <li>Ensure the auger / drill point and cutting edges are in good working order and the equipment is in good</li> </ul>

	<ul> <li>working order also.</li> <li>Position oneself not to be hit by the handle, if the auger/drill stops abruptly</li> <li>Operate the auger/drill at low speeds</li> <li>Shut off the drive and stop the power sources if the auger/drill jams</li> <li>Watch out for loose shirts/coats and bootlaces that may get caught</li> <li>Turn off the power before cleaning</li> <li>Ensure that no one is in contact with, or near, the auger/drill before operating</li> <li>Ensure that all machine guards/shields are in place before digging.</li> </ul>
RISK RATING WITH CONTROLS	Low
LEGISLATION	Safety, Health and Welfare at Work Act 2005.
	SHWW (Construction) Regulations 2006
	Safety, Health and Welfare at Work (General Application) Regulations 2007

# 14.39 BATTERIES

HAZARDS	Fire/Explosion – resulting in Burns
	Toxic Fumes – resulting in unconsciousness/death

	In addition, the charging of batteries gives off flammable hydrogen gas. If this is allowed to collect and a source of ignition is present, it will cause an explosion, leading to acid burns.
RISK ASSESSMENT	High
CONTROL MEASURES	<ul> <li>Adhere strictly to manufacturers instructions for charging batteries</li> <li>Ensure that any recharging takes place in a well ventilated area, with suitable fire extinguishers available</li> <li>Switch off the battery charger before connecting / disconnecting clips</li> <li>Ensure that charging leads are firmly in place and clamped, before switching on the charger</li> <li>Adjust vent plugs before connecting / disconnect it last using insulated tools.</li> <li>Wear suitable PPE (goggles/gloves/overalls)</li> <li>Do not wear metallic items on hands/wrists neck</li> <li>Do not rest tools or metallic objects on top of the battery</li> <li>Restrict access to the battery charging areas</li> <li>No smoking or naked lights in the charging area.</li> </ul>
RISK RATING WITH CONTROLS	Low

LEGISLATION	Safety, Health and Welfare at Work Act 2005; Part III: Use of work equipment
	SHWW (Construction) Regulations 2006
	Safety, Health and Welfare at Work (General Application) Regulations 2007

## 14.40 DIESEL FUMES

HAZARDS	Inhalation of fumes – Irritation to upper respiratory system – coughing, chestiness, breathlessness and Cancer						
	Contact with hot diesel fuel may result in Burns						
	Contact with cold diesel fuel may result in Dermatitis.						
RISK ASSESSMENT	High						
CONTROL MEASURES	<ul> <li>Install workplace air extractor fans and tail-pipe exhaust extraction systems and filters, as appropriate</li> <li>Use catalytic converters</li> </ul>						
	<ul> <li>General</li> <li>Always turn off engines when not required</li> <li>Keep all doors open, when practicable</li> <li>Use job rotation to minimise exposure</li> <li>Wear suitable PPE at all times and provide workers with training in its correct use and maintenance</li> <li>No smoking or eating in areas where diesel fumes are likely to occur</li> <li>Avoid skin contact with cold or hot diesel fuel or oil</li> </ul>						

	<ul> <li>Provide all workers with information on the risks of exposure to diesel fumes</li> <li>Report all faults /defects in any controls measures to site management immediately.</li> </ul>				
RISK RATING WITH CONTROLS	Low				
LEGISLATION	Safety, Health and Welfare at Work Act 2005; Part III: Use of work equipment				
	SHWW (Chemical Agents) Regulations 2006				
	SHWW (Construction) Regulations 2006				
	Safety, Health and Welfare at Work (General Application) Regulations 2007				
	SHWW Act, 2005				

## 14.41 GENERATORS

HAZARDS	<ul> <li>Toxic Fumes from engines operating/running in enclosed areas may result in:</li> <li>Nausea</li> <li>Asphyxia</li> <li>Unconsciousness</li> <li>Death</li> </ul>
RISK	High

ASSESSMENT	
CONTROL MEASURES	<ul> <li>Adhere strictly to manufacturers instruction</li> <li>Allow only competent / qualified staff to supervise operations</li> <li>Store diesel properly</li> <li>Do not operate generators indoors, where possible</li> <li>Where combustion engines must operate indoors or in confined spaces, such as workshops/deep excavations etc, put in place adequate suitable exhaust systems to ventilate the workshop/excavations so as not to endanger workers</li> <li>So not over load generators</li> <li>Ensure that generators are selected for use by a competent person</li> <li>Limit access to generators to competent persons only</li> </ul>
RISK RATING WITH CONTROLS	Low
	Safety, Health and Welfare at Work Act 2005;
	SHWW (Construction) Regulations 2006
LEGISLATION	Safety, Health and Welfare at Work (General Application) Regulations 2007
	SHWW Act, 2005

#### 14.42 LADDERS

HAZARDS	<ul> <li>Falls – which may result in:</li> <li>Accident/injuries</li> <li>Back Injury</li> <li>Paralysis</li> <li>Unconsciousness</li> <li>Death</li> </ul>
RISK ASSESSMENT	High
CONTROL MEASURES	<ul> <li>Before use, unsure that the ladder is not damaged and is suitable for the task, is secure and cannot slip</li> <li>Do not use make shift, painted or home made ladders</li> <li>Always ensure that the ladder is angled to minimise the risk of slipping</li> <li>Set ladders on a firms, level base – do not use make shift props</li> <li>Do not stand on the top three rungs of ladders</li> <li>So not secure ladder by its rungs – place the lashing around the stiles, or use ladder ties/clips</li> <li>So not place ladders against fragile surfaces or fittings, use bracing boards on openings</li> <li>Do not over-reach when on ladders, or carry heavy loads up/down ladders</li> <li>Climb/descend the ladder facing the ladders and using both hands foe security</li> <li>Report ladders showing signs of defects to Site Manager/Safety Officer and remove them from the site</li> <li>Do not drop or throw a ladder</li> <li>Take care that ladders do not come in contact with power cables</li> </ul>

	<ul> <li>Do not use aluminium ladders near overhead cables</li> <li>Spread open stepladders securely. Never use a folding stepladder in an unfolded position</li> <li>Remember that ladders are for access only and are never to be used as a working platform</li> <li>As a general rule, ensure that you always have three points of contact with a ladder, two feet and one hand</li> <li>As a general rule, incline a ladder art an angle of 1:4</li> <li>Where the ladder is over 33 metres high, secure it at the top. Ensure that the ladder extends a minimum height (about 1 m) above any landing area, unless a suitable scaffold handholds is freely available</li> <li>Ensure that all ladders to scaffolding are installed by a competent person or scaffolding company and that they are not tampered with by other workers</li> </ul>
RISK RATING WITH CONTROLS	Low
LEGISLATION	Safety, Health and Welfare at Work Act 2005; SHWW (Construction) Regulations 2006: Working at Heights Regs Safety, Health and Welfare at Work (General Application) Regs 2007 SHWW Act, 2005

### 14.43 LIGHTING

HAZARDS	<ul> <li>Inadequate lighting and Faulty earthing may lead to:</li> <li>Eye sight damage</li> <li>Slips, trips and falls</li> <li>Lacerations / abrasion</li> <li>Sprains / strains</li> </ul>
	Sprains / strains

	Electrocution.
RISK ASSESSMENT	High
CONTROL MEASURES	<ul> <li>Provide suitable / safe lighting</li> <li>Provide safe access lighting, sufficient to carry out all operations (main contractors responsibility)</li> <li>Provide task lighting, if required by the worker (subcontractors responsibility)</li> <li>Ensure that lighting is in place on all access routes for vehicles and pedestrians</li> <li>Ensure that lighting is sufficient, especially where lifting operations are in progress</li> <li>Ensure all areas with openings are adequately lighted and that warning signs are in place</li> <li>Fit emergency lighting where special risks arise if the artificial light were to fail</li> <li>Ensure that all lighting installed is checked regularly by a competent person</li> <li>Ensure that all faulty lighting is marked and removed offsite until repaired by a competent person</li> </ul>
RISK RATING WITH CONTROLS	Low
	Safety, Health and Welfare at Work Act 2005; Part III: Use of work equipment
LEGISLATION	SHWW (Construction) Regulations 2006

Safety, Regulat	Health ions 200	and )7	Welfare	at	Work	(General	Application)

# 14.44 MOBILE ELEVATED WORK PLATFORMS (MEWPs)

... better known as "Cherry Pickers" and "Scissors Lifts"

HAZARDS	Working at Heights – overhead power lines / falls / overturning / collision / unauthorised use							
	Collapse / over-turning							
	Faulty outriggers							
	Unstable Ground conditions							
	All of the above can lead to:							
	Persons falling							
	Equipment / materials falling							
	<ul> <li>Injury – trapped against a fixed structure</li> </ul>							
	<ul> <li>Flectrocution</li> </ul>							
RISK	High							
ASSESSMENT								
	Allow only authorised, trained, competent persons (over							
	<ul><li><b>ROL</b> 18) to operate MEWPs</li><li>Maintain all MEWPs as per manufacturers instructions</li></ul>							
CONTROL								
• Ensure all maintenance is carried out by a co								
	person							
	• Ensure all MEWPs have daily safety checks and a							

•	weekly inspection Ensure the MEWP is suitable for the task (ground conditions, working height, the tasks, range/sensitivity of movement, anticipated load, etc.) Do not operate MEWPs on unstable ground or soft
•	ground conditions Use mechanical stabilisers, where necessary. Ensure that stabilisers are extended before the platform is raised Check work area for localised features – for example, manholes, service ducts, potholes, etc. (Note: A hole of as little as 75mm deep can cause an MEWP to over turn) Use temporary covers, strong enough to withstand
•	applied pressure to cover localised features Do not operate MEWPs near overhead power lines Ensure that a safe system is in place to prevent people from being struck by the platform or the platform coming into contact with obstructions that may cause it to tip. Do not allow operators to climb out of, or over reach, while working in the platform
•	Before use, ensure the safety rail is secured Ensure that the doors on the basket are securely locked, before raising Check that all the emergency stop devices are in good working order
•	Ensure that all operators wear suitable fall protection PPE, anchored within the platform, while working in an elevated platform Ensure that all fall protection/work restraint systems for use on a MEWP are selected by a competent person. (A work restraint system for use on a MEWP should
	use on a MEWP are selected by a competent person. (A work restraint system for use on a MEWP should normally be a combination of a full body harness (BS /
	<ul> <li>EN 361) and a lanyard (BS/EN 354) – not normally shock absorbing).</li> <li>Ensure that all workers keep both their feet on the platform at all times</li> <li>So not move the machine within the platform in a raised position, unless designed to do so.</li> <li>Beware of obstacles protruding from roofs or sides</li> <li>Keep the platform tidy and free of materials. Clear the basket completely at the end of work</li> <li>Do not use a MEWP as a crane</li> <li>Secure MEWPs when left unattended, to prevent unauthorised use, especially at the end of the working day.</li> </ul>
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RISK RATING WITH CONTROLS	Low
	Safety, Health and Welfare at Work Act 2005;
LEGISLATION	SHWW (Construction) Regulations 2006
	Safety, Health and Welfare at Work (General Application) Regulations 2007
	BS / EN 361 – full body harness
	BS / EN 354 – Lanyard

#### 14.45 SAWS

HAZARDS       Incorrect adjustment of guards and inexperienced operators may result in:         Laceration / amputation.       Laceration / amputation.         RISK ASSESSMENT       High         CONTROL MEASURES       • Allow only trained / competent workers to use saws unsupervised         MEASURES       • Adhere to manufacturers instruction at all times         • Ensure that machine guards are in position and maintained correctly       • Maintain blades at the minimum height and in first class condition         • Always keep hands clear of the blade and never closer than 500mm       • Wear appropriate PPE         Before starting to cut with powered hand saws:       • Wear safety glassed or a face shield         • Make sure guards, if present, are installed and are working properly       • Position the saw beside the material before cutting, and avoid entering the cut with a moving blade.		
Laceration / amputation.         RISK ASSESSMENT       High         CONTROL MEASURES       • Allow only trained / competent workers to use saws unsupervised         • Adhere to manufacturers instruction at all times         • Ensure that machine guards are in position and maintained correctly         • Maintain blades at the minimum height and in first class condition         • Always keep hands clear of the blade and never closer than 500mm         • Wear appropriate PPE         Before starting to cut with powered hand saws:         • Wear safety glassed or a face shield         • Make sure guards, if present, are installed and are working properly         • Position the saw beside the material before cutting, and avoid entering the cut with a moving blade.	HAZARDS	Incorrect adjustment of guards and inexperienced operators may result in:
RISK ASSESSMENT       High         CONTROL MEASURES <ul> <li>Allow only trained / competent workers to use saws unsupervised</li> <li>Adhere to manufacturers instruction at all times</li> <li>Ensure that machine guards are in position and maintained correctly</li> <li>Maintain blades at the minimum height and in first class condition</li> <li>Always keep hands clear of the blade and never closer than 500mm</li> <li>Wear appropriate PPE</li> </ul> Before starting to cut with powered hand saws:           • Wear safety glassed or a face shield           • Make sure guards, if present, are installed and are working properly           • Position the saw beside the material before cutting, and avoid entering the cut with a moving blade.           Working Safely with powered hand-saw           Working Safely with powered hand-saw           Working Safely with powered hand-saw		Laceration / amputation.
<ul> <li>Allow only trained / competent workers to use saws unsupervised</li> <li>Adhere to manufacturers instruction at all times</li> <li>Ensure that machine guards are in position and maintained correctly</li> <li>Maintain blades at the minimum height and in first class condition</li> <li>Always keep hands clear of the blade and never closer than 500mm</li> <li>Wear appropriate PPE</li> <li>Before starting to cut with powered hand saws:         <ul> <li>Wear safety glassed or a face shield</li> <li>Make sure guards, if present, are installed and are working properly</li> <li>Position the saw beside the material before cutting, and avoid entering the cut with a moving blade.</li> </ul> </li> <li>Working Safely with powered hand-saw</li> </ul>	RISK ASSESSMENT	High
Working Safely with powered hand-saw	CONTROL MEASURES	<ul> <li>Allow only trained / competent workers to use saws unsupervised</li> <li>Adhere to manufacturers instruction at all times</li> <li>Ensure that machine guards are in position and maintained correctly</li> <li>Maintain blades at the minimum height and in first class condition</li> <li>Always keep hands clear of the blade and never closer than 500mm</li> <li>Wear appropriate PPE</li> </ul> Before starting to cut with powered hand saws: <ul> <li>Wear safety glassed or a face shield</li> <li>Make sure guards, if present, are installed and are working properly</li> <li>Position the saw beside the material before cutting, and avoid entering the cut with a moving blade.</li> </ul>
		Working Safely with powered hand-saw

<ul> <li>Disconnect the power supply before changing or adjusting blades</li> <li>Keep all cords clear of cutting area</li> <li>Remember that sabre-saws cut on the up-stroke</li> <li>Secure and support stock as close as possible to the cutting line to avoid vibration</li> <li>Keep the base or shoe of the saw in firm contact with the stock being cut</li> <li>Select the correct blade for the material being cut and allow it to cut steadily. Do not force it. Clean and sharp blades operate best</li> <li>Do not start cutting until the saw reaches its full power</li> <li>Do not force a saw along or around a curve. Allow machines to turn with ease.</li> <li>Do not insert a blade into, or withdraw a blade from, a cut/lead hole while the blade is moving</li> <li>Do not put down a saw until the motor has stopped</li> <li>Do not reach under or around the stock being cut</li> <li>Maintain control of the saw always. Avoid cutting above shoulder height</li> </ul>
<ul> <li>Starting an external cut</li> <li>Place the front of the shoe on the stock</li> <li>Make sure that the blade is not in contact with the material or the saw will stall when the motor starts</li> <li>Hold the saw firmly down against the material and switch the saw on</li> <li>Feed the blade slowly into the stock, maintaining an even forward pressure</li> </ul>

	<ul> <li>Starting an inside cut:</li> <li>Drill a lead hole slightly larger than the saw blade. With the saw switched on, insert eh blade in the hole, until the shoe rests firmly on the stock</li> <li>Do not let the blade touch the stock until the saw has been switched on.</li> </ul>
RISK RATING WITH CONTROLS	Low
LEGISLATION	Safety, Health and Welfare at Work Act 2005; Part III: Use of work equipment SHWW (Construction) Regulations 2006 Safety, Health and Welfare at Work (General Application)
	Regulations 2007

## 14.46 YOUNG WORKERS / APPRENTICES

HAZARDS	Untrained workers
	Inexperienced Workers
	Incompetent Workers
	Unsupervised workers
	May lead to:

	<ul><li>Injuries</li><li>Serious Injuries</li><li>Death</li></ul>
RISK ASSESSMENT	High
CONTROL MEASURES	<ul> <li>Do not employ persons under 16 on a construction site</li> <li>Ensure all new staff are in possession of a current Safe Pass card</li> <li>Ensure all new / young employees undergo Induction training before working on site. This induction training should include the contents / implication of the Safety Statement/ fire safety / general safety / the wearing of PPE / care and maintenance of PPE . Keep records of all such training</li> <li>Do not allow risk – taking, horseplay and "hazing" of young workers on site</li> <li>Ensure that II young/inexperienced workers are under the direct supervision of a competent person for the duration of their training. Only allow them to work unsupervised when the site management is satisfied that the person is competent.</li> </ul>
RISK RATING WITH CONTROLS	Low

	Safety, Health and Welfare at Work Act 2005; Part III: Use of work
	equipment
LEGISLATION	Protection of Young Persons (Employment) Act 1996
	SHWW (Children and Young Persons) Act 1997
	SHWW (Chemical Agents) Regulations 2006
	SHWW (Construction) Regulations 2006
	Safety, Health and Welfare at Work (General Application) Regulations 2007
	SHWW Act, 2005

# 14.47 CONFINED SPACES, SEWERS, MANHOLES

HAZARDS	Confined spaces (e.g.) manholes, pump chambers, sewer pipes, boilers, could contain dangerous atmospheres. Workers should be advised of the most common dangers, their causes and the appropriate remedial measures.
RISK ASSESSMENT	High
CONTROL MEASURES	<ul> <li>Concentrations of dangerous gases can exist in confined and unventilated spaces and needs to be determined by monitoring prior to work commencing.</li> <li>Those entering need Confined Space Training to the ACOP &amp; regulations.</li> <li>Oxygen deficiency in sewers can arise by ingress of methane thus creating a risk of asphyxiation. Recognise the danger signs – eye irritation and feeling of illness.</li> <li>Always bring assistant when working in confined spaces. Assistant must remain outside constantly observing the worker inside.</li> <li>Ensure safe means of access/egress to confined spaces.</li> </ul>

	<ul> <li>Wear P.P.E. and protective clothing to include: Hardhat, P.V.C. suit, gloves, safety boots or waders and safety harness attached to a lifeline where there may be a danger of being swept away or falling.</li> <li>Be aware of the danger of contacting Weils disease through open cuts becoming infected (transmitted by contact with rats urine)</li> <li>Report causes of flesh cuts and scratches (e.g. rough ladder rungs, step irons etc.)</li> <li>Protect hands using gloves before working in confined spaces.</li> <li>Enforce a sign in – sign out system with designated controller.</li> </ul>
RISK RATING WITH CONTROLS	Low
	Safety, Health and Welfare at Work Act 2005.
LEGISLATION	SHWW (Construction) Regulations 2006
	SHWW (Exposure to Asbestos) Regulations 2006
	SHWW (Chemical Agents) Regulations 2006
	Safety, Health and Welfare at Work (General Application) Regulations 2007

## 14.48 STANLEY KNIVES

HAZARDS	Use of blade when cutting / Incorrect use and inexperienced operators may result in:
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	Laceration / amputation.
RISK ASSESSMENT	High
CONTROL MEASURES	<ul> <li>Allow only competent workers to use blade knifes unsupervised</li> <li>Adhere to manufacturers instruction at all times</li> <li>Ensure that blade guard is in position and maintained correctly</li> <li>Maintain blades</li> <li>Always keep hands clear of the blade</li> <li>Wear appropriate PPE, being suitable hand protection which will prevent cuts/injuries to the hand – such as Kevlar or light chainmail type gloves – should be cut level 3 gloves</li> <li>Carry out Toolbox Talks as required.</li> <li>When using blade</li> </ul>
	<ul> <li>Maintain control of the blade always. Avoid cutting above shoulder height</li> <li>Operatives must cut away from the body, always wearing gloves when cutting</li> </ul>
RISK RATING WITH CONTROLS	Low

LEGISLATION	Safety, Health and Welfare at Work Act 2005; Part III: Use of work equipment
	SHWW (Construction) Regulations 2006
	Safety, Health and Welfare at Work (General Application) Regulations 2007

## 14.49 MANBASKETS FOR CRANES

HAZARDS	<ul> <li>Falls of persons</li> <li>Falls of materials or articles</li> <li>Falls through openings in basket</li> <li>Falling from any height can result in either Serious Injury or Death</li> </ul>
RISK ASSESSMENT	High
CONTROL MEASURES	<ul> <li>Before SHWW (Work at Height) Regulations 2006, a Risk Assessment must be carried out.</li> <li>Ensure that there is a safe method of access and egress</li> <li>The manbasket will be protected by guard-rails and toeboards with strong metal mesh in between. Hand rails will also be fitted where practical.</li> <li>The persons in the basket will use harnesses attached to secure anchor points at all times</li> <li>All work will be supervised by Site Management/Appointed Person in charge.</li> <li>Persons required to wear/use harnesses will receive</li> </ul>

	<ul> <li>instruction on their proper use and maintenance.</li> <li>Site Management will ensure that work is planned so safe access/egress and working places are provided for operatives to work at height.</li> <li>Weather conditions to be accessed prior to work starting.</li> <li>No manbasket work to be carried out during high winds.</li> <li>Where edge protection is not available safety harnesses must be used and a Method Statement prepared.</li> <li>Materials must not be dropped or thrown down from a height.</li> <li>Small materials/elements will be bagged or placed in a suitable container.</li> <li>Lagging to be secured and bagged.</li> <li>Cladding to be removed/applied carefully one sheet at a time.</li> <li>Nothing is to be left unsecured as wind may increase at any time.</li> <li>Chin straps to be used with hard hats.</li> </ul>	
RISK RATING WITH CONTROLS	Low	
LEGISLATION	The Safety, Health and Welfare at Work (Construction) Regulation 2006, Part 13;	
	SHWW (Work at Height) Regulations 2006	
	SHWW Act 2005	
	SHWW (General Applications) Regulations 2007	

#### 14.50 WORKING ON LIVE PLANT/ MACHINERY

HAZARDS	<ul> <li>Electricity</li> <li>Fire/Explosion</li> <li>Entrapment (-i.e. failure to isolate plant)</li> <li>Burns</li> <li>Eye Injuries</li> <li>Noise</li> </ul>
RISK ASSESSMENT	High
CONTROL MEASURES	<ul> <li>Client/main contractor to point out dangerous plant/machinery in work area and outline specific rule regarding same.</li> <li>Prior to starting any works on site the Site Supervisor shall ensure that all electrical cables have been physically located.</li> <li>Treat all services found as live. DO NOT assume that any cables/switchgear found are dead.</li> <li>Any wires etc that will become exposed as job progresses will be carefully avoided and treated as live</li> <li>Do not remove any guarding on motors etc</li> <li>Do not stand on any pipework etc during the strip out</li> <li>Beware of the danger of some corrosion in parts where work is being done</li> <li>Scaffold will be erected for access – Hasties to confirm that scaffolding is certified &amp; is adequate for their requirements (ie mods, etc).</li> <li>Harness tied off will be worn anywhere a fall can happen unless fall prevention is in place</li> <li>The company may require a Permit for all hot work from client, depending on an assessment establishing the</li> </ul>

	dogroo of risk			
	<ul> <li>Gloves and eye protection to be worn</li> </ul>			
	Wear hearing protection at all times when using or			
	working in the vicinity of operating plant or any other			
	work equipment emitting high noise levels			
	<ul> <li>Keep materials/tools away from hot surfaces and/or moving parts.</li> </ul>			
	<ul> <li>Keep work area tidy at all times &amp; avoid cluttering up</li> </ul>			
	work space and on the scaffold platform			
	Demove all wests at and of each shift			
	Remove all waste at end of each shift			
RISK RATING	low			
WITH				
CONTROLS				
	The Safety, Health and Welfare at Work (General Application) Regulations			
	2007			
LEGISLATION	Construction Regulations 2006			
	SHWW Act 2005			
	Safety in Industry Act 1980			
	ECTL Cuidelines			
	ESB Guidelines			

#### **15 EMPLOYEE DECLARATION**

### Safety Statement Declaration

I hereby declare that the above statement has been explained to me. I fully understand my duties under this document, which will be used as a means of promoting a safe attitude during all work processes within the company.

I will endeavour to follow all rules and guidelines in this statement and any additional information relating to safe practices, which may be introduced in line with progress and developments within the company. I understand that if unsure of any issue I will contact management immediately for guidance.

	Employee / Contractor	Print Name.
Signed		
Signed _		
Signed _		
Signed		

Signed		
Signed		
Signed	Employee / Contractor	Print Name.
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