



# armadillo safety solutions

HEALTH & SAFETY HANDBOOK

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## Introduction

The purpose of this safety handbook is to assist you in maintaining safe working practices whilst at work and will act as a reminder of the essential safety precautions which are necessary.

Each section details the actions necessary to ensure safety whilst working in particular situations. It is not a finite list and, in specific instances, additional safety checklists may be issued to meet particular working practices.

Remember to think about safety before accidents happen. Work safely and, if you do not understand instructions given, ask your supervisor.

You must be aware that over 200 people a year lose their lives at work in Britain. In addition, around 150,000 non-fatal injuries are reported each year, and an estimated 2 million suffer from ill health caused or made worse by work.

## Your Responsibilities

As an employee you have legal duties to:

- take reasonable care for your own health and safety and that of others who may be affected by what you do or do not do
- co-operate with your employer on health and safety
- correctly use work items provided by your employer, including personal protective equipment, in accordance with your training and instructions
- not interfere with or misuse anything provided for your health, safety or welfare

You can be prosecuted for working in a manner that could cause an accident.

Protect others when you leave the site by:

- securing all machines and equipment
- locking away small tools and equipment
- removing ladders or placing boards over them
- installing suitable barriers and warning signage

## Safe Practices and Site Tidiness

Be sure you are in good physical condition before you commence work

Do not take risks and short cuts as this causes accidents

Do not work whilst under the influence of drugs or alcohol

Stack and secure all materials safely in authorised areas, never near doorways or on fire escapes routes. Do not stack too high. Take additional care with bricks, blocks, palletised materials, timber, pre-fabricated panels, pipes and tubes

When leaving a site, or roof, tie down or secure tools and materials

Remove waste through chutes and into skips where appropriate

If you see any damaged equipment, do not use it, but report it immediately to your supervisor

Respect the welfare facilities provided - and leave them tidy

Use drying rooms for clothes only

## First Aid and Accident Reporting

It is your responsibility to know who are the first aiders and the location of the first aid kit(s) on site

Report all accidents and dangerous occurrences, however small, immediately to your supervisor

If you witness a serious accident, get help

Whilst waiting for the medical services to arrive:

- make the person warm and comfortable
- do not move them, unless in a dangerous place

## Safe Manual Handling

Always lift materials carefully, bend your legs not your back

For awkward or heavy loads - get help – observe the following issues:

- know your capability
- do you need help?
- plan/walk the route
- is there good lighting?
- wear protective gloves and safety shoes
- stand close to load
- place feet hips width apart
- place one foot slightly forward in direction of travel
- bend knees and straighten back when raising/lowering
- secure grip
- do not twist your spine

Use lifting equipment, avoid manual handling where possible

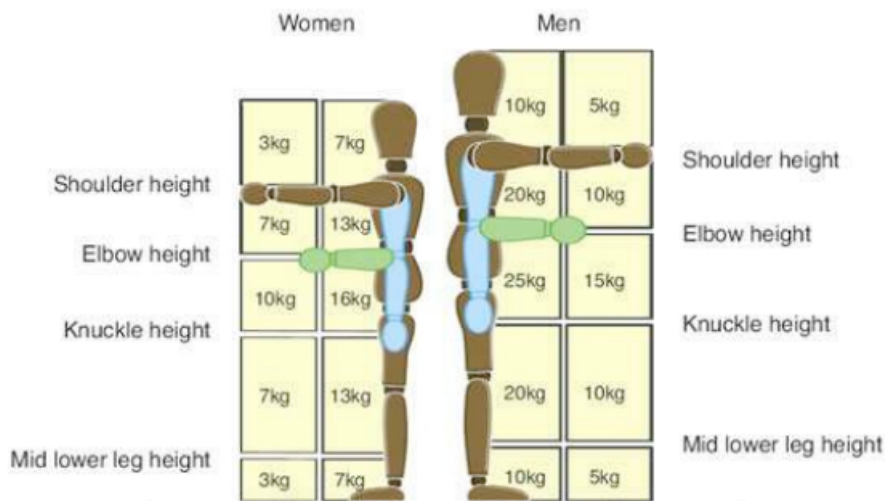
When using fork lift trucks make sure they are:

- suitable for terrain
- not overloaded
- driven by a competent and qualified driver

When handling materials make sure:

- there are no obstructions in your path
- you keep away from roof edges

30% of all accidents are caused by incorrectly handling loads!



## Personal Protective Equipment (PPE)

Obey all safety signs indicating you are entering a 'hard hat' area

Wear your safety helmet as instructed and report any defects

Safety footwear should be ankle length with non-slip rubber soles

Wear suitable PPE for your work e.g. respirators, safety harnesses, ear defenders, safety goggles, protective gloves and other clothing as appropriate for:

- adverse weather conditions
- exposure to hazardous substances (including dust and fumes)
- exposure to lead
- use of cutting machinery
- use of heavy materials/equipment which might harm feet and/or toes
- use of hand or powered work equipment

Look after personal protective equipment and keep it in good condition

When working in dirty areas:

- apply barrier cream to skin
- remove material residues from your hair and skin as soon as possible

Observe the arrangements for cleaning, maintenance and storage of PPE on site

Common PPE Safety Signage:



Eye protection must be worn



Safety helmet must be worn



Ear protection must be worn



Safety boots must be worn



Safety gloves must be worn



Safety overalls must be worn

## Hazardous Substances

Ensure you are trained to handle a hazardous substance before using it

Take the necessary precautions with hazardous substances as described on the material safety data sheets (MSDS) supplied

Wear appropriate PPE (e.g. face mask, respirator, rubber gloves, coveralls etc)

Observe hazard symbols on packaging:



Xn – Harmful / Xi – Irritant



T – Toxic



O – Oxidising



F - Highly Flammable



E – Explosive



N – Dangerous to the Environment



C – Corrosive

## Asbestos

Do not expose yourself to any type of asbestos

Asbestos can be found:

- in insulation or coating material
- in insulating board
- in cement or cladding

Only trained and authorised personnel are to survey or remove asbestos

Check the asbestos survey/register prior to commencement of work

## Ladders and Stepladders

Do not climb on make-shift arrangements - get a ladder or stepladder

Make sure that the access equipment is fit for purpose. If not don't use it!

Before-use check:

- there are no broken rungs or splits, etc
- the foot of the ladder is on a firm level surface
- the ladder is secure at the top and/or bottom
- the top of the ladder is resting against a solid surface
- it extends at least 5 rungs above the top platform
- it rests at a sensible angle, about one unit out to four units up
- there are no cables or lines which can catch when moving ladders

When carrying tools on a ladder:

- use a shoulder bag or holster attached to a belt
- hold and face the ladder and maintain a firm grip
- use a small lifting appliance, hoist or rope to move larger equipment to where it is required

Over-reaching and over-balancing on ladders and stepladders will cause accidents

Ladders are for short duration works only (15-30 minutes)

Use Class 1 ladders only

Do not carry more than 10kg up a ladder

Avoid smooth/wet floors

Retain three points of contact on the ladder/stepladder at all times

When working ensure you have two feet on one rung

Do not work from a stepladder positioned side-on

Do not place a ladder on a back slope of 6 degrees or greater or a side slope of 16 degrees or greater and ensure the rungs are levelled.





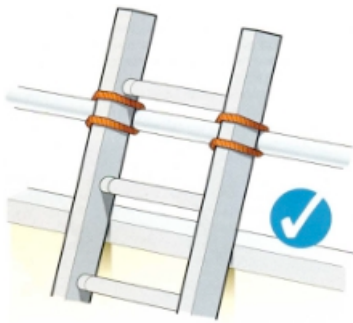
Correct 1 in 4 Angle



Incorrect - Overreaching



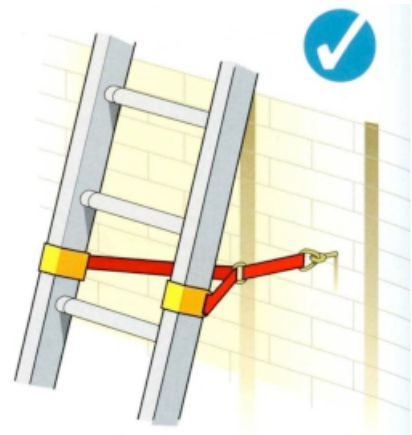
Correct Position



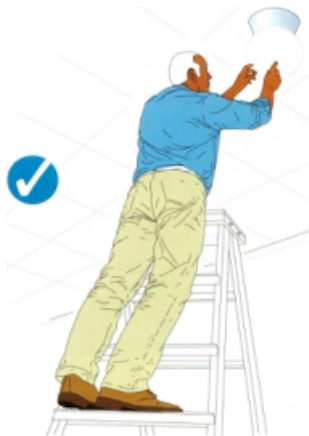
Tying at Top



Tying at Middle



Tying at Base



Correct - Three Clear Steps



Correct - Two Clear Rungs

## Buried Services (Gas, Water Mains, Sewers, Electricity)

Do not start digging before you have been instructed by your supervisor

Check before digging where, if any, the underground services are located using gas company plans and cable locators

Do not use power tools within 0.5m of the indicated line of a cable, where practicable, and never over the line of a cable

Assume all cables to be live

Dig carefully using spades or shovels rather than forks or picks

Do not work bare-chested. Normal work clothing will provide some protection from flash burns

Mark all known pipes/cables following standard colour coding:

- Water - Blue
- Gas - Yellow
- Electricity - Black or Red

If you break or damage a cable or pipeline inform your supervisor immediately

If you damage a gas pipe, keep everyone away and warn occupants of any building serviced by the cable or pipeline

Do not smoke on site

Follow gas company plans when backfilling

## Excavations

Trenches deeper than 1.2m must be supported

Fixed barriers or guard rails must be erected to prevent people falling into the excavations

Do not place materials close to the edge of excavations

Vehicles approaching the edge of excavations should use stop-blocks

Use secured ladders to climb in and out of the trenches

Use the proper access to cross a trench or gap

A cubic metre of earth can weigh over 1.5 tonnes. The only body able to support that is a dead one!

## Confined Spaces

Be careful on entering confined spaces, check for the following:

- an inadequate source of ventilation
- deficiencies in oxygen
- presence of methane

Before working in a confined space be sure you are trained in rescue procedures and in the use of emergency breathing apparatus

Avoid the use of hazardous substances and ensure good ventilation

Do not enter without an attendant. If you see someone in trouble do not enter yourself - summon assistance

## Fire Extinguishers

It is your responsibility to know the location and type of extinguishers on site

When extinguishing a fire, always aim the extinguisher at the base of the flames

Remove the heat source to prevent re-ignition

There are four common types of fire extinguisher:

- Water (H<sub>2</sub>O) – Red Label  
For freely burning materials such as paper, wood and textiles  
NOT to be used on electrical fires
- Carbon Dioxide (CO<sub>2</sub>) – Black Label  
For flammable liquids such as petrol and oil  
Safe to use on electrical fires
- Foam (AFFF) – Cream Label  
For freely burning materials and flammable liquids  
NOT to be used on electrical fires
- Dry Powder – Blue Label  
For freely burning materials, flammable liquids and gaseous fires  
Safe to use on electrical fires

Special extinguishers will be required for use with metal fires and cooking oils

Whilst every effort should be made to control an outbreak of fire, your first responsibility should always be to raise the alarm - only then should an attempt be made to tackle the fire, and only if it does not put you at risk

Fire Triangle:



## Noise

If shouting is necessary to be heard, the noise level is dangerously high and you must wear ear defenders (above 85db)

Keep compressor covers closed

Ensure breaker mufflers are securely fitted

See machinery panels do not rattle

Do not keep machinery running unnecessarily

Obey noise hazard signage

## Vibration

Take care when working with powered hand-held tools, equipment or processes that can damage the hands and arms of users causing 'hand-arm vibration syndrome'

Rotate jobs that expose users to vibration hazards to limit exposure

Ensure your hands are kept warm and dry

Wear suitable protective clothing (e.g. gloves)

Report any tingling or numbness in the hands to your supervisor immediately

## Vehicles and Plant

Only trained personnel and persons over 18 years of age are authorized to drive or operate any company vehicle, or item of plant

Take extra care when towing:

- stopping distances are much greater
- loads must be evenly distributed and secured

Do not reverse vehicles without an observer to watch the blind spots and warn others

Be aware of vehicles and plant crossing the site, especially when doing the same

Driver's responsibilities:

- vehicles must be fit to be on the road
- any defaults should be reported immediately
- operators and passengers must wear seat belts
- familiarize yourself with site layout and in particular underground and overhead services and obstructions

## Electrical Tools and Equipment

Do not operate equipment if:

- you have not been trained or shown how to use it
- the guards are not in place

Only fully trained persons should:

- carry out electrical installations or repairs
- fit abrasive cutting discs

Inspect equipment regularly for damage or deterioration

Disconnect the power supply of a machine or tool when cleaning, adjusting or repairing

Check:

- the voltage of equipment is 110v
- sockets, plugs and casing are undamaged
- the equipment is correctly wired
- that automatic cut-out switches have not been interfered with

Do not use pieces of wood and match-sticks to secure cable ends into sockets

## Pressurised Gases

When using a cylinder, secure it at your place of work

When transporting cylinders:

- keep them in an upright position
- do not drop them or roll them on their side along the ground
- do not lift cylinders with chain slings

Check the hose and pressure regulator prior to and after using a cylinder

Turn off the gas supply at the cylinder as well as at appliances

Use soapy water to check if a cylinder is leaking

If a leak cannot be stopped, remove it to a safe place in the open air and ensure the supplier is informed immediately

When not in use, all cylinders should be kept in a secure ventilated store

Do not use oxygen deliberately to try to clear other fumes from the air, one spark could set clothing alight

When using compressed gases eye protection and protective clothing should be worn to protect you from burns

## Compressed Air

When using compressed air jets:

- wear goggles
- aim away from yourself and others

Keep safety in mind for yourself and your workmates