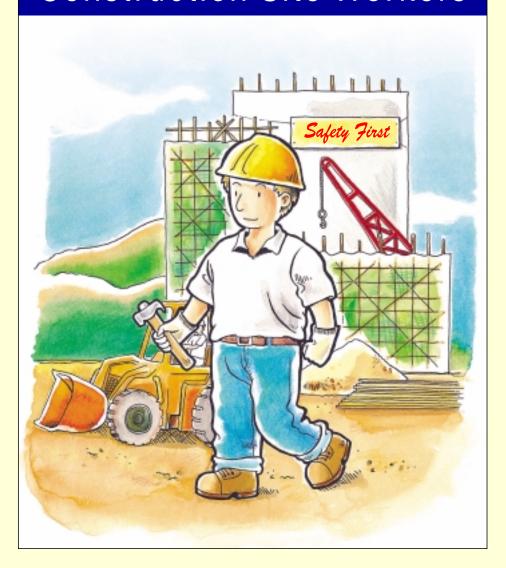
# Safety Handbook for Construction Site Workers







This handbook is issued free of charge and can be obtained from offices of the Occupational Safety and Health Branch, Labour Department. It can also be download from http://www.labour.gov.hk/eng/public/b69.htm. For enquiries about the addresses and telephone numbers of the offices, please call 2559 2297.

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# Safety Handbook for Construction Site Workers



#### Introduction

Most accidents can be prevented by taking simple measures or adopting proper working procedures. This handbook is intended to outline important issues on safety and health that should be paid attention to on construction sites for easy reference by the workers. If we work carefully and take appropriate safety measures, there will definitely be fewer work injury cases, and our sites will become a safe and secure place to work in.

The Occupational Safety and Health Ordinance, which came into operation on 23 May 1997, covers most workplaces in order to protect the safety and health of employees at work. Other legislation applicable to construction sites includes the Factories and Industrial Undertakings Ordinance and its subsidiary legislation, particularly the Construction Sites (Safety) Regulations.

#### Employees' Responsibilities

Employees should cooperate with their employers and other persons in complying with the safety legislation and guidelines, and should not do anything to endanger themselves and other persons.

## Basic Rules for Safety

#### Tidy up construction sites

Keep passages clear all the time.

Sort out materials and pile them up safely. The stacks should not be too high.

Beware of floor openings and ensure that they are fenced or covered.

Remove refuse as soon as possible.

Provide sufficient lighting.

Familiarize with the location and the operation of fire-fighting equipment.

#### Safety measures

Before you operate a machine, ensure that the dangerous part of the machine has been installed with a guard.

Avoid going to any area with insufficient lighting as there may be some dangerous places which have not been provided with fencing.

Keep vigilant all the time and watch out for moving cranes, hooks or other lifting equipment.

Before you use any electrical installation or tool, check the condition of its electric cables.

Avoid dragging electric cables on the ground or allowing the cables to come into contact with water.

Use electrical tools installed with an earth leakage circuit breaker.

Use and handle chemicals with care.

#### **Personal Safety**

Wear protective equipment.

Do not drink or take drugs while working.

Pay attention to personal hygiene.

Do not play in the workplace.

Report to your supervisor immediately if you notice any unsafe condition.

## **Emergency Response to Accidents**

You should have a good understanding of your working environment and the instructions given by your supervisor. When evacuation is required in an emergency, you should keep calm and find out:

What dangerous situation the alarm refers to.

The routes for evacuation.

The safe place that you should go to as designated by the company.

When someone is found seriously injured, you should:

Keep calm.

Seek help immediately.

Accompany the injured person.

Assist in the immediate rescue work as far as possible.

Call the site safety staff.

Do not try to move the injured person unless it is really necessary to do so.

Do not tamper with the accident scene while waiting for the arrival of the investigation team.

When a fire breaks out, you should remember:

Put out the fire with a fire extinguisher if it is a small fire.

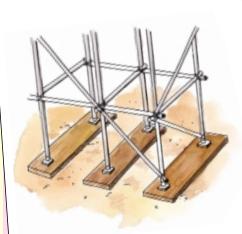
If the blaze is out of control, do not try to extinguish the fire on your own. Call the Fire Services Department right away.

#### Emergency telephone numbers:

Always pay attention to the emergency telephone numbers posted on the notice board in the site office.

## 'Tips 'for Workplace Safety

## Falsework, scaffold and fencing



#### Falsework

If you are engaged in falsework operation, you should:

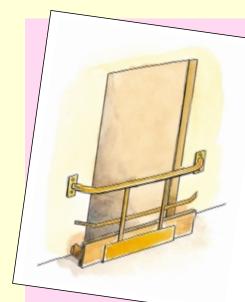
- Check whether the falsework is erected in accordance with the design.
- Make sure that the falsework is securely erected.
- Check whether the struts of the falsework are secure.
- Ensure that the props are erected vertically and arranged at a suitable distance in a row. Report to your supervisor when
- any unsafe situation is found.

#### Scaffold

Do not use scaffolds unless they have been erected by trained workmen and under the supervision of a competent person. Do not use a scaffold unless it has been inspected and certified safe by a competent person before use. Strictly follow the instructions of a competent person. Do not alter the scaffold unless authorized to do so. Do not work on an unfinished scaffold. When it is necessary to work on a mobile scaffold, lock the wheels of the scaffold before you start working.

Do not work on a scaffold unless it has been provided with a suitable working platform.





#### Fencing

Do not work in a dangerous place unless its floor edges and openings have been installed with secure fencing.

If you notice any dangerous places that have not been installed with fencing or the fencing has been damaged, reinstall or repair the fencing. If this is beyond your capability, inform your supervisor at once.

#### Ladder

Use a ladder which is of good construction, sound material and adequate strength.

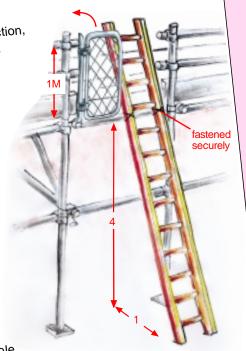
Examine the ladder before using it and inspect it at regular intervals. Place the ladder on a level and firm footing.

Place the ladder at an appropriate angle.

Ensure that the ladder has a sufficient length. The upper end of the ladder should be at least 1 metre above the landing against which the ladder leans.

Do not use a ladder unless its upper or lower end has been securely fixed or secured by another worker.

If there are electrical installations nearby, do not use metal ladders. If work is carried out 2 metres or more above the floor, use a suitable working platform.



## **Equipment and Electricity**

#### Lifting Appliance and Gear

Do not operate a lifting appliance unless trained. In the case of a crane,

Before using lifting gear such as hook, shackle or chain sling,

check whether there is any wear and tear.

Check the weight of the load to be lifted.

Do not exceed the safe working load of

a lifting appliance or lifting gear.

Adopt the correct lifting method.

Do not use a lifting appliance or lifting gear unless it has been examined and certified safe by a competent examiner.

Do not use a lifting appliance unless it has been regularly repaired and maintained by a competent person.

No unauthorized repair is allowed.

Follow the safe working instructions of the manufacturer of a lifting appliance.

Do not work beneath any suspended load.





#### Material Hoist

Do not ride on a material hoist.

Do not operate a material hoist without prior proper training.

Do not exceed the safe working load of a material hoist. Do not use a material hoist unless it has been examined and certified safe by a competent examiner.

Do not use a material hoist unless its gates have been installed with an effective interlocking safety system.

The hoist is only operable after all the gates have been closed.

Do not use a material hoist unless it has been repaired and maintained by a competent person. No unauthorized repair is allowed.

Do not put loose materials into receptacles unless properly secured.

Ensure good communication with the operator of a material hoist. All signals should be understood and followed.

## Loadshifting Machinery

Unless you are a worker concerned, do not work in an area where a loader, an excavator, etc. is in operation.

Do not operate any loadshifting machinery without training and approval.

Operators of forklift trucks, bulldozers, loaders, excavators, trucks or lorries should possess appropriate certificates.





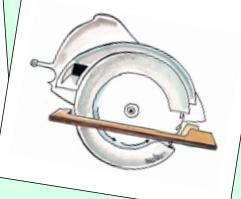
## Cartridge-operated Fixing Tool

Do not operate a cartridgeoperated fixing tool unless you have possessed a valid certificate. Wear suitable eye and ear protectors while operating a cartridge-operated fixing tool. Use a cartridge-operated fixing tool with great care.

## Portable Power Tool

Do not use a portable power tool (such as saw, grinder and drill) unless its dangerous parts have been effectively guarded.

Place the electric cable and hose of a tool at an appropriate position to avoid tripping





## Compressed Air

Use compressed air only for specified purposes.

Do not use any compressed air equipment, pipes and relevant devices unless they are of good construction and have been examined and certified safe by a competent examiner before use.

Fix the connectors properly.

Do not twist the pipes.

Do not abuse the use of compressed air for cleaning purpose. Use a brush or a vacuum cleaner to remove dust from clothing and skin.

#### Electric Tool

Before using an electric tool, check the tool and its plug and connecting cable.

Do not use a damaged tool.

Do not use an electric tool unless its connecting cable is well protected.

Do not use an electric tool unless its metal casing is earthed and its power supply is provided with an earth leakage circuit breaker. Do not repair or alter any electrical installation unless competent to do so. If you meet any fault or problem, report it to your supervisor immediately.



## Workplace Safety and Fire Prevention

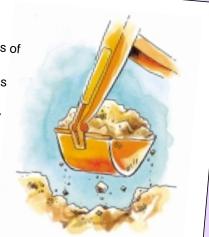
#### Excavations

Keep the fence on all sides of an excavation intact.

Use safe access for ingress and egress.

Do not pile soil or any other materials at the edge of an excavation.

Make sure that a trench is securely shored before working in it.



## Gas Welding and Flame Cutting

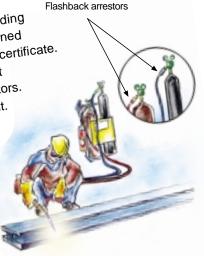
Do not use the equipment for gas welding or flame cutting unless you have attained the age of 18 years and hold a valid certificate.

Do not use any gas cylinder unless it has been fitted with flashback arrestors. Wear personal protective equipment.

Keep the workplace clean.

Place fire extinguishers within reach.

Keep gas cylinders in an upright position and secure it properly to avoid overturning. If gas leakage is detected, report it to your supervisor immediately.





#### Fire Risk

There is always a fire risk. However, the chances of fire can be reduced, and you will know what to do when a fire breaks out if you:

Always keep the workplace clean and tidy.

Handle machinery and tools that may generate sparks or heat carefully.

Do not smoke or use naked flames in any area where flammable and explosive substances are stored.

Know where fire extinguishers are located and how they are used. Know the place of assembly for fire evacuation.

#### Public Safety

Pay attention to public safety. Members of the public are often unaware of or do not understand the work carried out on construction sites and the risks involved.

Take great care to prevent the fall of materials from height. Do not stack materials on floor edges or on scaffolds.





## Waste Disposal

Dispose all wastes, and unwanted materials must be disposed of at a designated place. Notify your supervisor of the requirement for the separate disposal of chemical or inflammable wastes. Do not leave planks with nails on passageways.

## Safety Supervisors

Their responsibility is to assist others to work smoothly and safely.

They have received specific safety training and are important members of the construction team.

They have legal responsibility or liability for the overall safety of the construction site. You should get to know your safety supervisor.



## Personal Safety and Hygiene

#### Eye Protection

A wise worker will certainly take good care of his eyesight. A small fragment may cause serious consequences if it enters one's eyes.

When there is a risk of eye injury, such as in concrete breaking or using abrasive wheels, you should wear suitable eye protectors.

Take proper care of the eye protectors provided to you. Replace damaged or defective eye protectors immediately.

Ensure that eye protectors are comfortable to wear, and keep clean. do not put it on your head Use eye protectors for eye protection or hang it on your neck.

Bear in mind that eye protectors are replaceable, but not your eyes.





#### Noise

Wear ear protectors in areas with high noise levels.

Properly wear ear protectors according to the manufacturer's instructions.

Do not reuse disposable ear plugs.

Clean ear protectors regularly.

## Personal Protective Equipment

For your own safety and interest, use the personal protective equipment provided by your employer.

Wear gloves when handling or contacting chemicals.

Remember to wear a mask when working in a dusty environment.

Wear eye and ear protectors whenever necessary.

Wear a safety harness and secure it to a safe anchorage point when working at height. A bamboo scaffold is not a safe anchorage point, so do not fasten the safety harness to it.

Wear safety shoes to prevent foot injury. Consult your supervisor if in doubt.





#### Safety Helmet

Wear a safety helmet on a construction site.

Keep the harness of the helmet clean and make sure that it fits well.

Do not drill any holes on the helmet or use it for pounding.

#### First Aid

If you sustain an injury or feel not well while at work, even if it is minor, go to the first aid room right away for medical treatment and notify your supervisor.

Put the case on record.



#### Manual Handling Operations

Avoid manual handling operations as far as possible to minimize the risk of injury. Estimate the weight of the load. Lift an object with a correct posture. Wear suitable protective equipment. Put on gloves as far as possible to protect your hands from any cut, scratch or puncture, and wear safety boots or shoes to prevent injury to toes by heavy falling objects. Seek assistance from someone





in lifting a load if necessary.

## Alcohol and Drugs

Do not drink alcohol, or take drugs, while at work.
If you need to take drugs due to illness, report it to your supervisor.

## Personal Hygiene

Keep yourself clean.
Wash hands before meals
and after using the toilet.
Dress tidily and in protective
clothing.



#### Occupational Safety and Health Enquiry Service

**2559 2297** : 2559 2297

( auto-recording after office hours )

**-----** : 2915 1410

🛂 : enquiry@labour.gov.hk

: http://www.labour.gov.hk

Information on the services offered by the Occupational Safety and Health Council can be obtained through hotline 2739 9000.