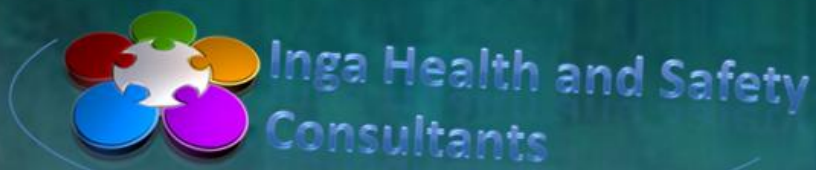




Health & Safety Toolkit





INTRODUCTION

This toolkit provides a ready checklist for health and safety problems often experienced on small construction sites. It will help you to manage or avoid them and to ensure your own health and safety as well as the health and safety of the people who work for you, your clients, and others such as the public. The toolkit also acts as a signpost to more detailed advice.

While substantial improvements have been made in construction health and safety, it is sadly the case that at least one person is killed every week on a construction site and many more are injured or suffer health problems. Twice as many workers are made ill by work than are injured. Each death is one too many and simple measures can prevent them.

Make use of this toolkit. If we all work together, actually participating, then we can make the construction industry a healthier and safer place to work in.

This toolkit does not purport to address all the health and safety aspects and concerns which may arise on construction, but provides a checklist of questions to assist you, the contractor, to manage those risks more common to all construction sites.

For detailed construction implementation packs, for both normal and mining environments you can visit the [online documentation section](#) at Inga Health and Safety.

Detailed ready to use documentation from appointments to safety plans and risk assessments can be found online at www.online documents.

We trust that you will find the information in this eBook useful in your endeavours to make your construction site safer and healthier.

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1 THE 4 KEY CONSTRUCTION HEALTH AND SAFETY CONCEPTS

1.1 MANAGING

When managing your business, do you:

- ✓ Give enough time to planning, organising and controlling your work?
- ✓ Include health and safety in your planning and organizing?
- ✓ Budget for health and safety to ensure the safe execution of your work?
- ✓ Check what actually happens and stop dangerous practices?
- ✓ Have someone to turn to if you need health and safety advice? (Inga is there to help, contact us on 083 6073545 or at info@ingaconsultants.com);
- ✓ Take pride in your standards?
- ✓ Think about health as well as safety risks – it may help you to think of them as ‘slow-acting’ accidents or crocodiles (always there lurking).
- ✓ Set the example for your employees?
- ✓ Compromise on health and safety?
- ✓ Make health and safety part of your business strategy?
- ✓ Include health and safety in all your business meetings?
- ✓ Set goals and objectives?
- ✓ Measure performance and benchmark against best practice?
- ✓ Are senior employee’s allocated responsibility for health and safety and are they held accountable?

For more information, see:

Setting up health and safety on a project at www.setup

20 steps to health and safety maturity at www.safety.maturity

Available auditing and inspection formats at www.formats



1.2 REPORTING AND INVESTIGATING ACCIDENTS

When managing incidents do you:

- ✓ Have the required insurance and is it still in good standing?
- ✓ Have clear definitions and classifications?
- ✓ Notify the Senior Inspector immediately if the accident is fatal or involves a major injury, such as a fracture, amputation or loss of sight.
- ✓ Know who to report reportable incidents to?
- ✓ Do you have an incident reporting and investigation procedure and format?
- ✓ Do you have someone appointed to investigate all incidents?
- ✓ Are employees encouraged to report all incidents?
- ✓ Is management involved in investigations?
- ✓ Are preventative measures identified, implemented and closed out?
- ✓ Are actions audited to ensure they are effective and do not pose a new set of risks?
- ✓ Are corrective actions built into revised work procedures and risk assessments?
- ✓ Try to allocate blame, or try to prevent the incident from happening again?





1.3 EMPLOYING

When you employ or control people doing work for you, do you make sure that:

- ✓ They are trained, competent and fit to do the job safely and without putting their own or others' health and safety at risk?
- ✓ They have received the required health and safety induction training?
- ✓ They have undergone a pre-employment medical?
- ✓ They have been trained in all the relevant risk assessments and safe work procedures?
- ✓ They are properly supervised and given clear instructions?
- ✓ They have access to washing and toilet facilities?
- ✓ They have the right tools, equipment, plant and protective clothing?
- ✓ You talk about health and safety issues with them (or their representatives)?
- ✓ You have made arrangements for employees' health surveillance where required?
- ✓ They understand their role and responsibility with regard to their own safety?

Note: If a person working under your control and direction is treated as self-employed for whatever purpose, they may nevertheless be your employee for health and safety purposes. Whether they are employed or self-employed, you need to take action to protect people under your control.

For more information, see:

Health and safety training at www.safety training





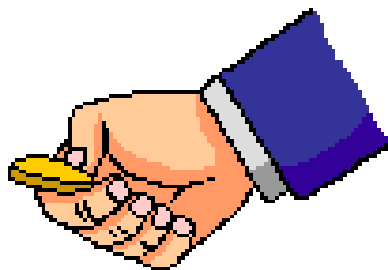
1.4 SUBCONTRACTING

When you subcontract work to others, do you:

- ✓ Ensure they have the skills and resources to complete the scope of work?
- ✓ Check the health and safety performance of the people you plan to use?
- ✓ Give them the health and safety information they need for the work? ([Specifications/safety plans](#))
- ✓ Enter into an agreement with regard to health and safety?
- ✓ Talk about the work with them before they start?
- ✓ Make sure that you have provided everything you agreed (e.g. safe scaffolds, the right plant, access to welfare, etc)?
- ✓ Check their performance and remedy shortcomings?
- ✓ Treat them as partners and provide guidance?

For more information and assistance, see:

Sub contractor packs to assist you with implementing your program at www.subby.pack



“Or is your contracting philosophy a gamble”



2 A BASIC SITE HEALTH AND SAFETY CHECKLIST

2.1 ACCESS ON SITE

- ✓ Can everyone get to their place of work safely – and work there safely?
- ✓ Are access routes in good condition and clearly signposted?
- ✓ Are edges which people could fall from provided with double guard rails or other suitable edge protection?
- ✓ Are holes protected with clearly marked and fixed covers to prevent falls?
- ✓ Are all excavations protected?
- ✓ Is the site tidy, and are materials stored safely?
- ✓ Is lighting good enough where work is required after dark?
- ✓ Do people have to walk through construction areas to get to their lay down area?
- ✓ Do you have a standard identifying the use of vehicles on site?

2.2 WELFARE

- ✓ Are toilets readily available and are they kept clean and properly lit?
- ✓ Are there washbasins, hot and cold (or warm) running water, soap and towels?
- ✓ Are the washbasins large enough to wash up to the elbow and are they kept clean?
- ✓ Is there somewhere to change, dry and store clothing?
- ✓ Are cups and drinking water provided?
- ✓ Is there a place where workers can sit, make hot drinks and prepare or have food?
- ✓ Can everyone who needs to use them get to the welfare facilities easily and safely?
- ✓ Are welfare facilities kept warm and well ventilated?





2.3 WORKING AT HEIGHT

- ✓ Have you planned the work properly and identified suitable precautions to make sure work can be carried out safely?
- ✓ Have you thought about whether you can avoid working at height by using different equipment or a different work method?
- ✓ Can you use equipment that will prevent a fall from happening, such as scaffolding or a mobile elevating work platform?
- ✓ Can you put in place measures to reduce the distance and consequences of a fall should one happen, such as nets, soft landing systems or safety decks?
- ✓ Will the weather conditions threaten the health and safety of those carrying out the work?
- ✓ Have you thought about all the options and are you certain that you are gaining access to height using the safest means possible?

2.4 SCAFFOLDS

- ✓ Are scaffolds erected, altered and dismantled by competent people?
- ✓ Are all uprights provided with base plates (and, where necessary, timber sole plates)?
- ✓ Are all uprights, ledgers, braces and struts in position?
- ✓ Is the scaffold secured to the building or structure in enough places to prevent collapse?
- ✓ Are there double guard rails and toe boards, or other suitable protection, at every edge to prevent falling?
- ✓ Are additional guards provided to prevent materials falling from scaffolds?
- ✓ Are the working platforms fully boarded, and are the boards arranged to avoid tipping or tripping?
- ✓ Are there effective barriers or warning notices in place to stop people using an incomplete scaffold, eg where working platforms are not fully boarded? (green and red tag system?)
- ✓ Is the scaffold strong enough to carry the weight of materials stored on it and are these evenly distributed?
- ✓ Are scaffolds being properly maintained?
- ✓ Does a competent person inspect the scaffold or proprietary tower scaffold regularly, eg at least once a week; and always after it has been altered, damaged and following bad weather?





- ✓ Are the results of inspections recorded?
- ✓ Have the wheels of tower scaffolds been locked when in use and are the platforms empty when they are moved?
- ✓ Has everyone been trained in the safe use of scaffolding?

2.5 LADDERS

- ✓ Ladders and stepladders are the last resort. Can you buy or hire some alternative equipment that would provide a safer means of access?
- ✓ Is the work of short duration and low risk?
- ✓ Are they in good condition?
- ✓ Do ladders rest against a solid surface and not on fragile or insecure materials?
- ✓ Are ladders secured at the top and bottom to prevent them slipping sideways and outwards?
- ✓ Do ladders rise at least a metre above their landing place?
- ✓ If not, are there other handholds available?
- ✓ Are the ladders positioned so that users don't have to overstretch?
- ✓ Do you have to use the top three rungs of a stepladder? If so your stepladder is too short.
- ✓ Is the user competent? Those using ladders should be trained to use the equipment safely.
- ✓ Are all ladders properly inspected and on a register?



2.6 ROOF WORK

- ✓ Is there edge protection to stop people or materials falling?
- ✓ During industrial roofing, have nets been provided to stop people falling from the leading edge of the roof and from partially fixed sheets?
- ✓ Where nets are used, have they been hung safely?
- ✓ Have you identified fragile material which could result in the risk of someone falling through a roof?
- ✓ Have you taken precautions to stop people falling through fragile materials when working on the roof, eg by providing barriers, covers or working platforms?
- ✓ Are people kept away from the area below the roof work?



- ✓ Are roof workers trained and experienced to recognise the risks and are they competent to do the work?
- ✓ Have the necessary fall protection devices been issued to roof workers and are they trained in the use of the equipment?

2.7 EXCAVATIONS

- ✓ Is there enough support for the excavation, or has it been sloped or battered back to a safe angle?
- ✓ Is a safe method used for putting in the support, without people working in an unsupported trench?
- ✓ Is there safe access into the excavation, e.g. a sufficiently long, secured ladder?
- ✓ Are there barriers or other protection to stop people and vehicles falling in?
- ✓ Are properly secured stop blocks provided to prevent tipping vehicles falling in?
- ✓ Could the excavation affect the stability of neighbouring structures or services?
- ✓ Are materials, spoil and plant stored away from the edge of the excavation to reduce the chance of a collapse?
- ✓ Is the excavation regularly inspected by a competent person?

2.8 MANUAL HANDLING

- ✓ Are there heavy materials such as roof trusses, concrete lintels, steel pipes and material, kerbstones or bagged products which could cause problems if they have to be moved by hand?
- ✓ If so, can you:
 - ✓ Choose lighter materials?
 - ✓ Use trolleys, hoists, telehandlers and other plant or equipment so that manual lifting of heavy objects is kept to a minimum?
 - ✓ Order materials such as cement and aggregates in 25 kg bags?
 - ✓ Avoid the repetitive laying of heavy building blocks or other masonry units weighing more than 20 kg?
- ✓ Have people been instructed and trained how to use lifting aids and other handling equipment safely?



- ✓ Have people been trained how to lift safely?
- ✓ Are all mechanical handling methods exhausted before you resort to continuous manual handling?



2.9 LOADING AND UNLOADING

- ✓ Have you checked that the load has not moved or destabilised during the journey to site?
- ✓ Is there an exclusion zone around the loading/unloading area to keep people who are not involved away from the work?
- ✓ Have you planned your method of unloading?
- ✓ Does your lifting equipment have a current thorough examination certificate?
- ✓ Do you have to access the back of the lorry at all, or can the preparation work be done from ground level? If not: do you have a safe way of getting up and down from the back of the vehicle?
- ✓ What do you have in place to prevent workers from falling off the back of the vehicle?
- ✓ Are your employees provided with sensible safety footwear with a good grip?
- ✓ Are suppliers informed that unsafe loads will be returned?
- ✓ Do you provide suitable, safe access to the back of trucks?
- ✓ Is this task supervised by a competent person?
- ✓ Do you have people to guide loads in and out?





2.10 TRAFFIC, VEHICLES AND PLANT

- ✓ Are vehicles and pedestrians kept apart?
- ✓ If not, do you:
 - ✓ Provide barriers to separate them as much as you can?
 - ✓ Tell people (e.g. your workers and anyone who lives or works in the property where you are working) about the problem, and what they need to do about it?
 - ✓ Display warning signs?
- ✓ Are people kept away from slewing vehicles or, if not, can you use a zero tail-swing machine?
- ✓ Can reversing be avoided, e.g. by using a one-way system or a turning area? If not, are properly trained banks men used?
- ✓ Do you restrict the number of vehicles on site?
- ✓ Are all vehicles roadworthy and do they have daily checklists?
- ✓ Are vehicles and plant properly maintained, e.g. do the steering, brakes, hydraulics, mirrors and any other vision aid work properly? Are tyres in good condition and at the correct pressure?
- ✓ Have drivers received proper training and are they competent and fit to use the vehicles or plant they are operating?
- ✓ Are loads properly secured?
- ✓ Have you made sure that passengers are only carried on vehicles designed to carry them?
- ✓ Have you made sure that plant and vehicles are not used on dangerous slopes?
- ✓ If you need to work on or drive across sloping ground, have you checked that the plant and vehicles are safe to use?
- ✓ Do your construction vehicles have backup hooters?

2.11 TOOLS AND MACHINERY

- ✓ Are the right tools or machinery being used for the job?
- ✓ Are all dangerous parts guarded, e.g. gears, chain drives, projecting engine shafts?
- ✓ Are guards secured and in good repair?
- ✓ Are tools and machinery maintained in good repair and are all safety devices operating correctly?
- ✓ Are all operators trained and competent?



2.12 HOISTS/MAN CAGES/LIFTS

- ✓ Has the equipment been installed by a competent person?
- ✓ Are the operators trained and competent?
- ✓ Is the rated capacity clearly marked?
- ✓ Does the hoist have a current report of thorough examination and a record of inspection?
- ✓ Is there a suitable base enclosure to prevent people from being struck by any moving part of the hoist?
- ✓ Are the landing gates kept shut except when the platform is at the landing?
- ✓ Have all fail safes been installed and inspected?
- ✓ Are daily pre-use inspections done?
- ✓ Have the legal inspections been done?
- ✓ Are they on a maintenance plan?

2.13 EMERGENCIES

- ✓ Are there emergency procedures, e.g. for evacuating the site in case of fire?
- ✓ Do people on site know what the procedures are?
- ✓ Is there a means of raising the alarm, and does it work?
- ✓ Is there a way to contact the emergency services from site?
- ✓ Are there enough suitable escape routes and are these kept clear?
- ✓ Is the first-aid provision good enough?
- ✓ Are emergency drills held and recorded?
- ✓ Are there sufficient first aiders and fire fighters?





2.14 FIRE

- ✓ Is the quantity of flammable materials, liquids and gases kept to a minimum?
- ✓ Are they properly stored?
- ✓ Are flammable gas cylinders returned to a ventilated store at the end of the shift?
- ✓ Are smoking and other ignition sources banned in areas where gases or flammable liquids are stored or used?
- ✓ Are gas cylinders, associated hoses and equipment properly maintained and in good condition?
- ✓ When gas cylinders are not in use, are the valves fully closed?
- ✓ Is flammable and combustible waste removed regularly and stored in suitable bins or skips?
- ✓ Are suitable fire extinguishers provided?
- ✓ Has a survey been done to identify exposures and fire prevention needs?

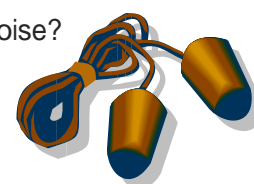
2.15 HAZARDOUS SUBSTANCES

- ✓ Have you identified all harmful substances and materials, such as asbestos, lead, solvents, paints, cement and silica dust (e.g. from kerb or paving cutting)?
- ✓ Have you checked whether a licensed contractor is needed to deal with asbestos on site? (Most work with asbestos requires a licence, although you can do some very limited work with materials that contain asbestos without one.)
- ✓ Do you have a suitable storage area, according to regulations?
- ✓ Are all chemical containers suitably labelled and are MSDS's available?
- ✓ Have you identified and put into place precautions to prevent or control exposure to hazardous substances, by:
 - ✓ Doing the work in a different way, to remove the risk entirely?
 - ✓ Using a less hazardous material?
 - ✓ Using tools fitted with dust extraction?
 - ✓ Using tools fitted with water suppression?
- ✓ Have workers had information and training so they know what the risks are from the hazardous substances used and produced on site, and what they need to do to avoid those risks?
- ✓ Have you got procedures to prevent contact with wet cement (as this can cause dermatitis and cement burns)?
- ✓ Have you arranged health surveillance for people using certain hazardous substances (e.g. lead, silica, and cement, sensitizers such as two-pack adhesives or coatings)?



2.16 NOISE

- ✓ Have you identified and assessed workers' exposure to noise?
- ✓ Have workers had information and training so they know what the risks are from noise on site, and what they need to do to avoid those risks?
- ✓ Can the noise be reduced by using different working methods or selecting quieter plant, e.g. by fitting breakers and other plant or machinery with silencers?
- ✓ Are people not involved in the work kept away from the source of the noise?
- ✓ Is suitable hearing protection provided and worn in noisy areas?
- ✓ Have hearing protection zones been marked?
- ✓ Have you arranged health surveillance for people exposed to high levels of noise?



2.17 HAND-ARM VIBRATION

- ✓ Has exposure to HAV been avoided or reduced as much as possible by selecting suitable work methods and plant?
 - ✓ Have you chosen the lowest vibration tool that is suitable and can do the job efficiently?
 - ✓ Have you limited the time that each worker uses high- vibration tools such as concrete breakers, angle grinders or hammer drills as far as possible?
- ✓ Have workers had information and training so they know what the risks are from hand-arm vibration (HAV) on site, and what they need to do to avoid those risks?
- ✓ Have vibrating tools been properly maintained including keeping bits and drills sharp?
- ✓ Have you arranged health surveillance for people exposed to high levels of hand-arm vibration, especially when exposed for long periods?





2.18 ELECTRICITY AND OTHER SERVICES

- ✓ Have all necessary services been provided on site before work begins and have you also identified existing services present on site (eg electric cables or gas mains) and taken effective steps, if necessary, to prevent danger from them?
- ✓ Are you using low voltage for tools and equipment, e.g. battery-operated tools or low-voltage systems?
- ✓ Are cables and leads protected from damage?
- ✓ Are all connections to the system properly made and are suitable plugs used?
- ✓ Are tools and equipment checked by users, visually examined on site and regularly inspected and tested by a competent person?
- ✓ Have hidden electricity cables and other services been located (e.g. with a locator and plans) and marked, and have you taken precautions for safe working?
- ✓ Where there are overhead lines, has the electricity supply been turned off, or have other precautions been taken, such as providing 'goal posts' or taped markers?
- ✓ Have COC's been provided for all temporary installations?



2.19 PROTECTING THE PUBLIC

- ✓ Is the work fenced off from the public?
- ✓ Are road works barriered off and lit?
- ✓ Are the public protected from falling material?
- ✓ When work has stopped for the day:
 - ✓ Are all boundaries protected?
 - ✓ Are all ladders removed or their rungs boarded so that they cannot be used?
 - ✓ Are excavations and openings securely covered or fenced off?
 - ✓ Is all plant immobilised to prevent unauthorised use?
 - ✓ Are bricks and materials safely stacked?
 - ✓ Are flammable or dangerous substances locked away in secure storage places?
- ✓ Have you taken the time to let the public know what you are busy with?
- ✓ Do you have sufficient signage?



3 CONCLUSION

We have put this eBook together in a format that will assist small to medium enterprises, who do not have the experience or knowledge base that some of the bigger organizations have. The information provided will assist construction managers and supervisors to comply with their legal and moral obligations on construction, which can be defined as follows:

1. **Identify** hazards and exposures.
2. **Assess** the extent of these exposures to own and other persons.
3. Identify and **implement control** measures to address these risks.
4. **Communicate** the exposures and control measures to personnel.

3.1 USEFUL LINKS

The following useful links have been added to assist contractors to gain access to information critical to the successful implementation of health and safety:

Legal compliance: www.acts.co.za

Benchmark standards: <http://www.worksafebc.com>

Consulting and online support: www.ingaconsultants.com

3.2 ACKNOWLEDGEMENTS

We would like to acknowledge HSE for some source information included in this document.