Safety in DIY/Builders Suppliers

Builders supplies and DIY shops can be hazardous places. The following details highlight some of the hazards and risks that might exist in your premises. They are by no means exhaustive and will vary depending on your own particular business. As a starting point use the blank sheet provided in this pack and carry out your own simple risk assessment.

Main Types of Hazard	Managing the Risk
Vehicle Movement The movement of goods into, out of and around DIY and builders suppliers involves the use of a wide range of vehicles including forklift trucks, cars, trailers and delivery lorries and accounts for a large proportion of accidents in such premises.	■ Devise a safe system of traffic movement to include methods and procedures for arrival, reception, unloading, loading and movement within the curtilage of the premises. ■ Display clear information/warning signs setting out these procedures. ■ Issue information/instruction cards to visiting drivers and members of the public. ■ Devise one-way traffic systems. ■ Provide sufficient designated parking areas to allow the segregation of private cars from goods traffic ■ Restrict access to dangerous areas such as loading/unloading bays.
Loading/Unloading Accidents can occur if the vision of the driver is obstructed, or the load shifts or falls from the vehicle, or if the vehicle is unsuitable to carry the load.	■ No vehicle should be loaded beyond its rated capacity or beyond the legal limit of gross weight. ■ Always check the floor of the trailer or vehicle to ensure that it is safe to load. ■ Loads should be properly secured or arranged so that they are safe for both transportation and unloading, e.g. so that they do not slide forward in the event of the driver having to brake suddenly.
Manual Handling Lifting and moving heavy, bulky items such as worktops or bags of cement can cause back injuries or muscular strains.	■ Avoid lifting items which are too heavy or bulky - use a trolley or castors where possible. ■ Train staff in proper lifting techniques.
Storage/Racking Incorrectly stacked goods may fall injuring staff below, or overloading shelves/racks may lead to collapse. Persons climbing on racking may fall and injure themselves.	■ Racking should be capable of supporting intended loads and be properly fixed e.g. bolted to the floor. Find out the maximum safe working load of all racking systems and mark it on the racking. Protect the racking from mechanical damage from fork lift trucks etc. ■ Goods should be properly stacked with the heaviest at the bottom if possible. ■ Proper safety ladders should be used and training on their use provided.
Slips, Trips and Falls Uneven slippery or obstructed floor surfaces and trailing cables may lead to accidents and injury.	■ Keep passageways, delivery areas and stairs clear. ■ Clean up spillages immediately and display warning of wet surfaces. ■ Fasten cables securely to the floor or re-route overhead if possible.

Fire Safety

Obstructed exit routes, for example by stock and/or accumulations of packaging can prevent escape and provide fuel for fires.

- Clearly mark escape routes e.g. using painted lines and signs.
- Keep all escape routes and fire exits clear, and make regular checks to ensure that this is the case.
- Clear rubbish regularly.

Hazardous Substances

Some items of stock and chemicals used for cleaning can be harmful. Exposure to them through use or through accidental spillages or leaks can cause respiratory problems, dermatitis or chemical burns.

- Store all hazardous chemicals in their original containers.
- Obtain information on all substances stored and used in the premises from manufacturers hazard data sheets.
- Devise a procedure for handling damaged containers and for cleaning up spillages and leaked substances.
- Provide staff with training, gloves etc. to enable cleaning chemicals to be used safely.

Electricity

Accidents are mainly due to misuse of, or badly maintained equipment and an increased risk of electric shock during cleaning operations.

- All electrical equipment used out of doors should be suitably insulated and should be supplied through a circuit protected by a 30 mA Residual Current Device.
- All electrical switchgear controlling machinery should be clearly labelled and readily accessible at all times.

Noise

Lift trucks, woodworking machinery and conveyor systems may give rise to potentially hazardous levels of noise which can cause incurable hearing damage.

- If when people speaking normally have difficulty being heard clearly by someone who is about 2m away then you should arrange for a noise assessment to be carried out.
- Reduce noise levels by changing to a quieter process or devise an alternative way of doing a job.
- Limit the time spent by employees in a noisy environment e.g. by providing an accessible quiet area.

Mechanical Handling

The use of equipment such as fork lift trucks and cranes can be particularly hazardous, causing crushing and amputation injuries.

- Adopt safe systems of work e.g. procedures for training employees, for traffic and pedestrian movement, and for control and maintenance of trucks.
- Keys should be kept in a secure place when the equipment is not in use and should only be issued to authorised operators.
- All equipment should be marked with safe working load (SWL) and the SWL should never be exceeded.

Machinery and Equipment

Persons using circular saws, planing machines and band sawing machines can become seriously injured mainly from coming into contact with moving blades e.g. cuts and amputations. Facial and eye injuries can also be caused by stray pieces of wood.

- Provide adequate space around machines, particularly those with exposed blades.
- Site equipment so that the operator cannot be accidentally bumped/distracted.
- Display warning notices alongside machines to remind operators and others of the dangers they pose.
- Ensure dangerous parts of machinery are adequately guarded.
- Provide training in safe systems of work e.g. use of push sticks for cuts less than 300 mm in length or for the last 300 mm of a large cut.
- Ensure that equipment is fitted with an emergency isolation switch.
- Maintain equipment in good condition.

For further information:

Health and Safety in Retail and Wholesale Warehouses
Health and Safety Executive
ISBN 9-780118-857314

Safety Pays £

Safety in Tool and Equipment Hire

There are many hazards in the business of hiring out tools and equipment including the use of dangerous equipment such as chainsaws, grinders, etc. Cleaning and maintenance of equipment also presents certain hazards as does the storage and handling of the equipment. The following details highlight some of the hazards and risks that might exist in your workplace. They are by no means exhaustive and will vary depending on your own particular business. As a starting point use the blank sheet provided in this pack and carry out your own simple risk assessment.

Main Types of Hazards	Managing the Risk
Use of Equipment Tools and equipment available for hire, such as welders, drills, chain saws, sanders etc. can be hazardous if used incorrectly.	■ Ask what the tool or equipment is needed for. ■ Ensure that the safe use of all equipment is demonstrated to the persons hiring the equipment - train staff to enable them to do this. ■ Provide written instructions (including safety information) to be handed out with the equipment. ■ Ensure the appropriate personal protective equipment e.g. goggles, ear defenders, masks, etc. is provided with the equipment. ■ Fit all electrical equipment to be used outdoors with plugs which have 30mA Residual Current Devices (RCD).
Inspection/Maintenance Hire equipment will suffer a considerable amount of wear and tear, e.g. damage to plugs, insulation, guards, blades, etc. which can result in the equipment becoming dangerous to use.	■ All equipment should be inspected for damage prior to hire and on return - written check lists can be used and kept for record purposes. ■ Damaged equipment should be taken out of service immediately. ■ Arrangements should be put in place for the regular maintenance and servicing of equipment. Again accurate records should be kept.
Manual Handling Lifting and moving heavy, bulky items such as pressure washers, kango hammers or generators can cause back injuries or muscular strain.	■ Avoid lifting items which are too heavy or bulky - use a trolley or castors where possible. ■ Train staff in proper lifting techniques.
Storage Racking Incorrectly stacked goods may fall injuring staff below, or overloading shelves/racks may lead to collapse. Persons climbing on racking may fall and injure themselves.	■ Racking should be capable of supporting intended loads and be properly fixed e.g. bolted to the floor. ■ Find out the maximum safe working load of all racking systems and mark it on the racking. Protect the racking from mechanical damage from fork lift trucks etc. ■ Goods should be properly stacked with the heaviest at the bottom if possible. ■ Proper safety ladders should be used and training on their use provided. No one should be permitted to climb on racking.

Slips, trips and falls

Uneven, slippery or obstructed floor surfaces and trailing cables may lead to accidents and injury.

- Keep passageways, delivery areas and stairs clear.
- Clean up spillages immediately and display warning of wet surfaces.
- Fasten cables securely to the floor or re-route overhead if possible.

Fire Risks

Obstructed exit routes, for example by stock and or accumulations of packaging can prevent escape and provide fuel for fires.

- Clearly mark escape routes e.g. using painted lines and signs.
- Keep all escape routes and fire exits clear, and make regular checks to ensure that this is the case
- Clear rubbish regularly.

Hazardous Substances

Fuel and some chemicals used for cleaning and maintaining hire equipment can be harmful. Exposure to them through use or through accidental spillages or leaks can cause respiratory problems, dermatitis or chemical burns.

- Store all hazardous chemicals in their original containers.
- Obtain information on all substances stored and used in the premises from manufacturer's hazard data sheets.
- Devise a procedure for handling damaged containers and for cleaning up spillages and leaked substances.
- Provide staff with training, gloves etc. to enable cleaning chemicals to be used safely.

Mechanical Handling

The use of equipment such as fork lift trucks and cranes can be particularly hazardous causing crushing and amputation injuries.

- Adopt safe systems of work e.g. procedures for training employees for traffic and pedestrian movement and for controlling the maintenance of trucks, cranes etc.
- Keys should be kept in a secure place when the equipment is not in use and should only be issued to authorised operators.
- All equipment should be marked with the safe working load (SWL) and the SWL should never be exceeded.

Vehicle Movement

The collection and return of equipment can involve the use of a wide range of vehicles including cars, trailers, delivery lorries and fork lift trucks and can account for a large proportion of accidents in such premises.

- Devise a safe system of traffic movement to include methods and procedures for arrival, reception, unloading, loading and movement within the premises.
- Display clear information/warning signs setting out these procedures.
- Issue information/instruction cards to visiting drivers and members of the public.
- Devise one way traffic systems.
- Provide sufficient designated parking areas to allow the segregration of private cars from goods traffic.
- Restrict access to dangerous areas such as loading/unloading bays.

Loading/Unloading

Accidents can occur if the vision of the driver is obstructed, or the equipment shifts or falls from the vehicle, or if the vehicle is unsuitable to carry the equipment.

- No vehicle should be loaded beyond its rated capacity or beyond the legal limit of gross weight.
- If a trailer is being used, always check the floor to ensure that it is safe to load.
- Equipment should be properly secured or arranged so that it is safe for both transportation and unloading.

For Further Information:

Health & Safety in Retail and Wholesale Warehouses
Health & Safety Executive
ISBN 9-780118-857314

Safety Pays £

Manual Handling

In the UK, 54 million working days are lost each year because of pain, strain and injuries to the back. Nearly all jobs involve some form of manual handling which includes lifting, pulling, pushing and carrying a range of objects. Use of poor techniques to move materials is the most common cause of injury at work.

Injuries to the back, shoulders, neck, hands, arms and feet mostly result from moving heavy or awkward loads, restricted space, carrying loads up and down stairs and awkward movements such as reaching, stooping and twisting.

The simple steps below will help you to prevent injuries caused by manual handling, you may wish to use them as a safety checklist.

STEP 1 Think about all the activities in your workplace which involve staff moving materials and assess whether such manual handling is really necessary, for example could you use lifting aids such as trolleys, lift trucks, hoists, chutes or roll cages?

STEP 2 If you can't avoid manual handling, then you need to assess the risks associated with each task involving movement of materials, considering steps 3 - 7 below.

STEP 3 **Think about the load**

- if it is heavy, - consider breaking it up or ordering smaller packages?
- if it is difficult to grasp or could shift during carrying - consider placing the load in a container for carrying or binding it together before moving
- if it is awkward - consider using another person to assist, or the use of a trolley

STEP 4 **Think about the task**

- if it involves twisting, stooping or reaching - consider rearranging the storage facilities by providing more space or shelving or reorganising shelves so that the heaviest items are kept at a height between mid thigh and mid-chest. Consider also the use of stepladders or platforms for access to higher shelves.
- if it involves long distance carrying - consider rearranging the layout of the workplace to minimise travel by arranging delivery and storage to be as near as possible to the point of use or consider using a trolley or powered truck.
- if it involves repetitive movements - consider varying the work to ensure that one set of muscles can rest while an other works.

STEP 5 **Think about the working environment**

- remove any obstructions in the areas where people need to carry materials and ensure that there are no tripping hazards.
- ensure that lighting levels are adequate.
- if there are steps or ramps - consider use of more than one person or the use of chutes, hoists, or conveyors.

STEP 6 **Think about the physical capability of your staff**

- ensure the staff you are asking to handle materials are capable of doing so - consider those who are pregnant, or who have a physical weakness.
- train all staff in the safe lifting technique and in the safe procedures you have identified for moving materials.
- instruct staff on the correct clothing and footwear to use.
- provide protective shoes, hats and gloves where necessary.

STEP 7 Remember to assess any new manual handling tasks.

please turn over

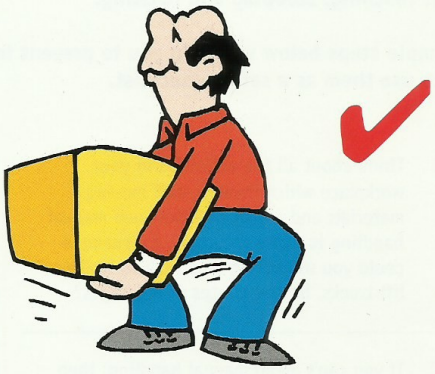
The Safe Lifting Technique

1. Stop and Think

Do I need help?

Where is the load going?

Are there any aids to help me?



2. The Lift

Feet apart

Leading leg forward

Bend the knees

Lift in stages

Keep back straight

Keep load close to body

Lean forward a little for good grip

Keep shoulders level

Get a firm grip

Put down first, then adjust

3. Don't

- Jerk
- Overstretch
- Twist
- Lift loads which are too heavy

For Further Information:

Manual Handling - Solutions You Can Handle

Health & Safety Executive ISBN 0-7 176-0693-7

Safety Pays £

The Control of Hazardous Substances

Hazardous substances are not only used or produced in factories, they can be found in offices, shops, hotels, etc. They may be used directly in the workplace like paints and cleaning agents e.g. bleach, or they may arise from the work process itself in the form of fumes and waste products. Contact with, or exposure to, hazardous substances at work can result in discomfort, pain, time off work and even death, e.g. skin irritation, dermatitis or skin cancer from frequent contact with oils, and injuries to hands and eyes from contact with corrosive liquids. The following checklist will help you to understand the steps that you must take to control the risks from any hazardous substances present in your workplace.

STEP 1 Identify and list all the substances brought into your workplace, used or stored there, that may be hazardous. Normally they will be labelled Toxic, Harmful, Irritant, or Corrosive, (e.g. detergents, cleaning products, paints, toners etc.). Also identify all work activities likely to produce or generate hazardous substances.

STEP 2 Obtain information on all the hazardous substances from hazard data sheets (available from the manufacturer or supplier). Think how the information is relevant to the way the substances are used in your workplace, i.e. where and how they are used, handled, generated, released etc. (identify places, e.g. storage areas, painting booths). Find out if substances have occupational exposure limits (OELs) (HSE Guidance booklet EH 40 gives the official list of OELs and is revised annually).

STEP 3 Identify who might be affected (e.g. employees, contractors, public) and to what extent they are likely to be exposed to a hazardous substance and how, (e.g. from breathing the substance in, swallowing it or through contact with the skin).

STEP 4 If it is reasonably practicable you should prevent exposure by:

- Changing the process or activity so that the hazardous substance is not required or generated, or
- Replacing it with a safer alternative, or
- Using it in a safer form, e.g. pellets instead of powder

Case Study

An employee was permanently scarred when a cleaning product containing hydrofluoric acid spilled onto his foot as he was pouring the cleaner from a 25 litre container into a small spray which was used to clean alloy wheels. At the time of the incident he was wearing trainers. He washed his foot and returned to work. He had to attend hospital that evening with a badly burned and blistered foot. Hydrofluoric acid attacks the calcium in the skin, bone and soft tissue.

Hazard Warning Symbols

Very Toxic | Toxic | Harmful | Corrosive | Irritant

STEP 5 If prevention is not practicable you must adequately control exposure by a combination of the following:

- total enclosure of the process
- partial enclosure and extraction equipment
- general ventilation
- using systems of work and handling procedures which minimise the chances of spills, leaks, and other escapes of hazardous substances
- The use of personal protective equipment (PPE) such as goggles, gloves and masks (this should never be the first or only form of control)

STEP 6 Ensure that control measures remain effective by introducing a regular inspection, testing and maintenance system for plant and equipment (including any PPE).

STEP 7 Determine if you need to monitor employee exposure and provide health and or medical surveillance.

STEP 8 Train and inform your workforce about the risks they may face and the precautions to be taken.

STEP 9 Record your assessment, including the control measures introduced (unless the range of products and substances which might cause harm is very limited).

For Further Information:

Control of Substances Hazardous to Health Regulations (NI) 2000

General COSHH - *Approved Code of Practice*
Health and Safety Executive
ISNB 0-7176-1670-3

Safety Pays £

Portable Ladders/Stepladders

It is likely that this week someone in Britain will die from an accident with a ladder, and more than a hundred people will be injured. Falling off ladders is a common cause of accidents, and therefore employers should take particular care to ensure they are properly constructed and used. Employees should be trained, instructed and given comprehensive information about the safe use of ladders and the associated risks and control measures.

Work which requires the use of ladders should be included in the risk assessment for the workplace.

The simple but essential safety steps given below will help you to control the risks when using ladders and stepladders, and you may find them useful as a safety checklist.

STEP 1 Is a ladder or a stepladder the best equipment for the work to be done? For example, it might be better to use a mobile tower or scaffolding. Or if access to high shelving is required 'Airport Steps' which are moveable but which can be fixed and fitted with a handrail and top landing platform may be more appropriate.

STEP 2 Is the ladder/stepladder strong enough? There are now 2 classes of ladder / stepladder, rated according to their safe working loads. Ladders marked with BS EN131 are given a maximum static **vertical** load rating. Ladders marked with BS2037 are given a **duty rating** which is calculated at a pitch of 75° to vertical.

Class 1 (Industrial) Maximum static **vertical** load 175Kg (27.5 stone) **Duty rating 130kg**

Class 3 (Domestic) Maximum static **vertical** load 125Kg (19.5 stone) **Duty rating 95kg**

A previous Class 2 (Light Trade) is no longer used as classification, it's maximum static **vertical** load is 150Kg (23.5 stone). **Duty rating 110kg.**

STEP 3 Is the ladder long enough?
Allow one metre of ladder length above the highest rung you use. Never stand on the top three rungs. Make sure extension ladders over 18 rungs have an overlap of at least three rungs. Shorter ladders up to 18 rungs need a minimum overlap of two rungs.

The height at which a ladder may be unsuitable for use depends on the space available, the nature of the work, the physical effort required to erect the ladder and the availability of a means to secure the ladder. 10 metres is the maximum length of ladder which one person can normally handle.

STEP 4 Is the ladder/stepladder safe enough? Inspect it regularly.

Ladder Safety Checklist

General sound condition (clean and dry, free from wet paint, oil, mud etc.)	☐
No Cracks	☐
No rungs missing or loose	☐
No stiles damaged or bent	☐
No warping or splitting (wood)	☐
No corrosion (metal)	☐
No sharp edges or dents (metal)	☐
No rungs bent (metal)	☐
Are the caps/rubber fittings on the feet in place and in good condition	☐
Is there any damage to the rungs/steps or to the top platform (stepladder)	☐

Note: Never paint ladders or stepladders as this could hide dangerous defects. A wooden ladder can be protected with clear varnish or transparent rot-proofer.

Keep records of all inspections of ladders and stepladders.

STEP 5

Putting up Ladders

Place the base of the ladder/stepladder on a firm, level, dry, stable surface. If you are using an extension ladder, always extend it before climbing it. Rest the ladder against a solid surface, never against guttering or narrow or plastic features. When positioning the ladder make sure that the base cannot slip outwards. Leaning ladders are designed so that their safest angle of use is when every 1 measure out from the wall is matched by 4 measures up the wall, look for marks on the stiles of new ladders which show the safest angle of leaning.
Remember the rule **'One out for Four Up'.**

Putting up Step-ladders

- Make sure the stepladder is locked into its correct position. Follow the manufacturers instructions.
- Rest it on a firm, level base, use a large flat board on soft ground.
- Position the stepladder front-on to the work.

STEP 6 Securing the Ladder

- Secure the bottom and top of the ladder by tying it (from the stiles, not the rungs) with rope or straps to a stable, fixed object.
- Tie the base of the ladder to stakes in the ground or use fixed blocks or sandbags or specially designed stabilisers to help prevent the ladder slipping.
- If it is not possible to secure the ladder, get another person to 'foot it' by standing with one foot on the bottom rung and holding a stile in each hand.

STEP 7 Storage of Ladders/Stepladders

Store in a covered ventilated area, protected from the weather and from dampness and heat. Store horizontally hanging from a stile, or rest the stiles on the floor. Never hang ladders or stepladders vertically. Store wooden ladders off the ground.

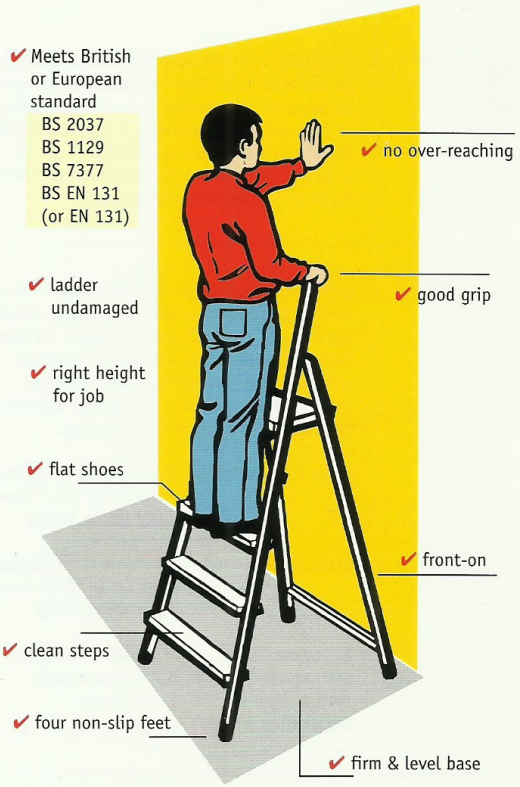
STEP 8 Training

Train all your staff how to use ladders and stepladders safely, and how to spot defects.

NEVER

- over reach
- stand on the top handrail of a stepladder
- allow more than one person on a ladder or stepladder
- work sideways
- stand with 1 foot on the ladder and the other on another surface
- carry heavy items or long lengths of material up a ladder
- position a ladder in front of an openable door
- use a ladder in strong winds or near power lines
- use metal ladders or timber ladders with metal parts where any electrical hazard exists
- use a ladder the wrong way round
- stand the foot of the ladder on a kerb or on the highway
- support scaffold boards on the rungs of a ladder.

✔ The right way



case study

An employee sustained a broken leg when the stepladder he was using broke into 2 parts causing him to fall. The stepladder was a domestic rating and was being used on a very regular basis in a commercial environment.