



# LEIA Safety Information Sheet

## Risk Assessment

Prepared by the LEIA Safety and Environment Committee

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## SAFETY INFORMATION SHEET

### RISK ASSESSMENT

#### PREAMBLE

This Information Sheet is one of a series produced by the LEIA Safety and Environment Committee on topics relevant to the Lift and Escalator Industry. Whilst every effort has been taken in the production of these sheets, it must be acknowledged that they should be read in conjunction with the relevant legislation, codes of practice etc. They should not be taken as an authoritative interpretation of the law but guidance to it.

#### INTRODUCTION

The Management of Health and Safety at Work Regulations 1999 require every employer to make a suitable and sufficient assessment of the health and safety risks whilst at work. There is no Approved Code of Practice for this legislation as it was withdrawn in 2013. However HSE have produced additional guidance to assist employers in complying with the requirements.

#### RISK ASSESSMENT

A Risk Assessment is simply a careful examination of what, in your workplace, could cause harm to people. This enables you to decide whether you have taken enough precautions or should do more to prevent harm.

An assessment should be carried out by a competent person. Competence being defined as a combination of training, knowledge, experience, and other qualities, including the ability to make sound judgements.

A simple Risk Assessment is essentially divided into five stages: -

1. Identify the hazards.
2. Decide who may be harmed and how.
3. Evaluate the risks and decide on precautions.
4. Record your findings and implement them.
5. Review your assessment and update if necessary

Therefore, when carrying out a Risk Assessment consideration must be given to the following: -

- What can go wrong
- How likely is it that something will go wrong?
- If it goes wrong, how serious is the consequence?
- How frequently does the risk arise?
- Who and how many would be affected?
- What does the law require?

## DEFINITIONS

**Hazard:** Means anything that can cause harm i.e. electricity, machines, working from ladders.

**Generic or Model Risk Assessment:** These are assessments produced only once for a type of workplace or work activity e.g. if a company has employees working at a number of sites, a generic risk assessment can be used for the hazardous work rather than attempting to produce an assessment for every workplace and activity. Although each assessment should be tailored to the individual site as working environments may differ.

**Risk:** Is the chance, high or low, that somebody will be harmed by the hazard together with an indication of how serious the harm could be.

**Risk Assessment:** Is a qualitative or quantitative evaluation of the chance that a hazard will cause harm.

## IDENTIFY THE HAZARDS

In order to achieve a suitable and sufficient Risk Assessment, it is essential to identify the hazards associated with an activity. A useful method of doing this can involve discussion with supervisors, managers, safety representatives, employees, etc as well as an inspection and observation of the area. Another source that may help to identify the less obvious hazard is to look at accident, ill health records and near hit reports.

An assessment can then be undertaken to cover the areas of activity by using a generic based assessment, such as Maintenance, Servicing, or Installation. However, each site should then be inspected for hazards not included in the generic assessment. As a guide the following list gives examples of hazards that should be considered when carrying out an assessment. The list is an indicator and should not be treated as comprehensive or in any order of priority.

- Access/Egress
- Lighting
- Confined Spaces
- Hot Work
- Adverse Weather
- Radiation
- Electrical (live working, high voltage)
- Control of Machinery
- Tools
- Manual Handling
- Slipping, Tripping or Falling
- Working at Height
- Children/Young Persons at Work
- New and Expectant Mothers

## DECIDE WHO MAY BE HARMED AND HOW

For each hazard it will need to be decided “who might be harmed”, this could be the lift engineer, a member of the public or other persons who may be involved in the work on or near the hazard. By identifying those who may be harmed it should help to identify the best way of managing the risk.

For each person that has been identified as “might be harmed” it then needs to be established “how they might be harmed” i.e. what type of injury or ill health might occur. As an example, the lift engineer may suffer a back injury from manual handling heavy loads.

## EVALUATE THE RISKS AND DECIDE ON PRECAUTIONS

### Simple Risk Rating Method:

A simple Risk Assessment evaluates the risks (low/medium/high) to which the individual might be exposed.

This can be a subjective judgement but can be used to give an indication of the priority with which the risk needs to be addressed.

Where the risk is judged to be medium or high, action needs to be taken to remove/reduce the risk.

	Severity		
	Minor	Significant	Major/Fatal
Probability	Probable	Medium	High
	Reasonably Probable	Low	Medium
	Remote	Low	Low

Simple Risk Rating Evaluation can be evaluated as: -

Low	Go ahead with the task
Medium	Seek advice from specialist or consult further documentation
High	Do not allow work to proceed and speak to your Manager

### Numeric Risk Rating Method:

Some companies use different methods using numbers which are multiplied to provide a numeric Risk Rating.

		Severity				
		Trivial	Minor	Moderate	Major	Death
Probability	Likely / Frequent	5	10	15	20	25
	Probable	4	8	12	16	20
	Possible	3	6	9	12	15
	Remote	2	4	6	8	10
	Improbable	1	2	3	4	5

Hazards associated with an activity are identified and the risk rating calculated. The rating is worked out by appointing a number on a scale of 1-5 for the “Probable Frequency” of an accident and multiplying this by the number appointed for “Severity of harm” again on a scale of 1-5. Using this method allows actions required to reduce risks to be prioritised.

Having calculated the risk rating, further judgement is required to examine each hazard for: -

Factors that increase the risk rating for all or some groups (for example, where employees working in a lift shaft during installation can be at greater risk due to noise, manual handling etc. than those working in a lift shaft during maintenance).

Factors which decrease the risk rating (due to control measures already in place).

Once these factors have been identified and, if necessary, the risk rating reassessed, review again the initial assessment, this time taking into account the factors described above.

The calculation of individual rating uses the judgement and foresight of the competent person with the relevant knowledge and experience.

Probable Frequency of an accident occurring on a score of 1-5 (see below)

1 = Improbable:	very unlikely, close to zero
2 = Remote:	unlikely, though conceivable
3 = Possible:	could occur sometime
4 = Probable:	likely to occur a number of times
5 = Likely/Frequent:	occurs repeatedly, event expected

Severity of Harm to Person(s) or Property on a score of 1-5 (see below)

1 = Trivial Injury/injuries	hazard will not result in serious injury
2 = Minor Injury/injuries	can cause injury or damage to equipment
3 = Moderate	injury, damage to equipment and property
4 = Major	severe injury, damage to equipment and property
5 = Death	Loss of life

Risk Rating equals Probable Frequency multiplied by Severity of Harm

The risk rating for each hazard is calculated by simple multiplication. A hazard whose probable frequency rating is 5 and severity rating is 3 has a risk rating of 15: this hazard, before other factors are considered would be rated as having a higher priority than another hazard with a risk rating of 12. Whatever system is adopted by individual companies', operatives need to know when assessing risks themselves what actions are required when a risk is identified as Low, Medium, or High.

Having identified the hazards it then has to be decided what to do about them. In deciding on what measure to take, the following principles should be applied: -

- Elimination – for example designing out a hazard at source. Eliminating it completely. e.g. eliminating sharp edges on manufactured items
- Substitution – using an alternative less risky method, a less dangerous tool or a less hazardous substance.
- Engineering controls – guarding over a piece of moving machinery
- Signage and warnings – warning notices and signs
- Personal protective equipment (PPE) – eye protection, hard hats, gloves

## RECORD YOUR FINDINGS AND IMPLEMENT THEM

If you have fewer than five employees there is no legal requirement to record your risk assessment, though it is useful to do so as it is proof that the assessment has been carried out should you be required to provide evidence of a risk assessment at a later date. It can also be used when reviewing procedures at a later date to identify if anything has changed.

When writing the results of a risk assessment keep the wording simple. The HSE do not expect the risk assessment to be perfect but it must be suitable and sufficient.

The risk assessment process therefore requires the completion of a risk assessment proforma that should include the following fields that require completion.

Activity/Hazard:	Brief details of the work activity (sequential) or details of the identified foreseeable hazards.
Risk:	Brief details of the actual significant risks associated with the activity or hazard.
Probability:	Evaluate the frequency that the employee will be exposed to the risk associated with the activity/hazard
Severity:	Identify the potential severity should the employee be exposed to the risks associated with the activity/hazard
Risk Value:	The Risk Value should be evaluated based on the proposed control measures being implemented or operational
Person affected:	Provide details of all persons who could be affected by the activity/hazard
Control Measures	Provide details of how the risks associated with the activity/hazard will be controlled.

## REVIEW YOUR ASSESSMENT AND UPDATE IF NECESSARY

The workplace is a constantly changing environment, sooner or later new equipment, substances and procedures will be introduced which could create new hazards. Risk assessments should be reviewed on an on-going basis. Every year or so the risk assessment should be formally reviewed to make sure there is continual improvement.

## FURTHER INFORMATION

Management of Health & Safety at Work Regulations 1999

INDG163(rev4), revised 08/2014 – Risk Assessment: A brief guide to controlling risks in the workplace.