

SAFETY IN STEEL ERECTION AND ROOF CLADDING: GUIDANCE ON THE PREVENTION OF FALLS

Introduction

Work at heights is the main risk of fatality when erecting steelwork or undertaking commercial roof or wall cladding. Indeed, falls are the largest cause of accidental death in the construction industry and can occur during steel erection, from the outside or leading edge of the roof during roof work. Most falls can be prevented if the risks have been identified and addressed at the design stage and if the right method of work has been devised and applied in the construction phase. It is not acceptable for contractors to work without adequate protection against falls. The development of new technologies and safer ways of working means that employers should now review their approach to this type of work. This document gives guidance as to the standards expected on the Isle of Man for controlling the risks associated with this steel erection and cladding activities.

What are the legal requirements on the Isle of Man?

The Isle of Man's Construction (Health and Safety) Regulations 1985 contain a large number of detailed requirements for construction activities. Detailed guidance on these regulations is available from the Health and Safety at Work Inspectorate and this document does not attempt to restate those rules for steel erection and cladding work. Rather, it is intended to help clients, designers and contractors achieve good standards of health and safety by highlighting the main concerns and suggesting good practice solutions that may help save lives.

Clients and designers

When clients and designers are specifying this type of project, consideration should be given to reducing the risk of accidents from working at heights. Tender specifications should include reference to the relevant valid standards for this type of work (see below) and to the need for these to be adopted on site. Designers should consider how the work is to be undertaken and how they can design the project to assist contractors and minimise risks in the construction phase.

In particular, they should:

- Ensure that the contract specification allows sufficient resources to reduce the risks of falls.
- Check that those tendering have the necessary competencies and have allowed sufficient resources to undertake the project safely.
- Check that contractors and sub-contractors comply with the standards and for this type of work

Contractors

Main contractors and specialist sub-contractors should work together to minimise the risks to those working at height and to others who could be put at work by such work. This process should be begun as early as possible so that the construction programme is designed in such a way that risks reduced to the lowest practicable level.

HEALTH AND SAFETY AT WORK INSPECTORATE INFORMATION DOCUMENT: STEEL ERECTION AND ROOF CLADDING

In particular, they should

- Develop contract documentation that ensures sufficient resources are allowed by all contractors to reduce the risks of falls.
- Plan site operations so that the order of work is safe for steel erectors and roof cladding operations.
- Verify that the competency of sub-contractors and the training requirements have been complied with
- Ensure that preference is given to use of mobile elevated work platforms rather than only relying on harness for steel erectors and be able to justify any decision to rely on harnesses alone.
- Ensure adequate scaffolding for access and edge outside edge protection.
- Ensure adequate measures to prevent leading edge falls during roof cladding operations. The use of netting or the reduction of maximum potential fall heights to less than 2 metres by the provision of decking are the preferred options.
- Be aware that local companies can supply mobile elevated work platforms and safety netting for hire on contracts.
- Be aware that the use of harnesses should be regarded as a last resort– on most occasions this is not a practical solution to preventing falls.
- Be aware that the use of Youngmans boards pushed over the roof trusses alone does not give adequate protection.

High Risk Activities

The following activities are seen as posing the highest risks of injury and are likely to be in breach of the Construction (Health and Safety) Regulations 1985 or the Health and Safety at Work etc Act 1974 as applied, against which standards are assessed and enforced:

- Inadequate safe access to the roof area
- Inadequate protection from falls on or through existing fragile roof materials
- Roof cladding being undertaken without adequate protection against leading edge falls
- Steelwork being erected without the protection of mobile elevated work platforms or by employees with harness that are not worn when they are on the steel work
- Clients, planning supervisors, project managers, designers or contractors who have not made adequate allowance for this type of work to be completed safely

Further Guidance

There is a large range of guidance available on construction safety. The publications of the Construction Industry Training Board and Health and Safety Executive in the UK are recommended. Of particular relevance are:

HS(G)33: Safety in Roofwork
HS(G) 150: Health and Safety in Construction

Further guidance on Isle of Man health and safety legislation and advice on good site practice is available from the Health and Safety at Work Inspectorate, 23 Athol Street, Douglas, tel: 685952 and e-mail WorkSafe@dlge.gov.im.

The information in this document is current as at July 2002 and has been prepared by the Health and Safety at Work Inspectorate. This document does not replace any other Health and Safety at Work Inspectorate guidance or affect any existing enforcement procedures: it contains advice for best practice and does not necessarily reflect minimum legislative requirements. Copies of this document are available in electronic format from the Inspectorate.