

## GD 13 NON-FRAGILITY OF ROOFS: A CHECKLIST

### INTRODUCTION

As in all building work, good safety standards are essential to prevent accidents. In accordance with the Health and Safety at Work Act and the Construction (Design and Management) or CDM Regulations, buildings must be designed with safety in mind, not only for the construction period itself but also throughout the normal life of the building. This will include considering the safety of people involved in maintenance, installation of PVs, forming of penetrations, inspections, repair and even demolition. For example, it might mean as part of the design process providing permanent access to the roof via a fixed ladder and hatch, or walkways and parapets.

Work on a roof during the construction and installation phase and the subsequent operational phase must be undertaken with extreme caution by experienced and competent people. The work must be meticulously planned and specific risk assessment and method statement must be in place to manage all potential risks. Contractors and those planning to work on the roof must plan and document a safe system of work before starting construction, installation, inspections or maintenance.

MCRMA works closely with the Advisory Committee for Roofsafety (ACR) to ensure that all those involved in roof work construction have access to the most up to date advice on safe working practices and also the legal requirements. Modern metal-based industrial and commercial roofing systems incorporating rooflights and components which have been tested and assessed for non-fragility and installed in accordance with manufacturer's installation instructions can provide a sound platform for work. However, the use of safety netting, edge protection and safety line systems with attached safety harnesses should always form part of the safe system of work.

In addition to guidance provided by MCRMA members, it is incumbent on all those who need to work at heights to accept a degree of responsibility for their own safety. The contracting company, individual workers and the building owner or occupier all have a part to play to ensure that the work is conducted in a safe manner. The following checklist must be considered before accessing any roof.

## CHECKLIST

- The roof should be declared **FRAGILE** unless there is documentation to confirm its current non-fragility.
- Could the building's external or internal environment have an adverse influence on the durability of the materials, systems or assemblies used in the construction?
- Before accessing the roof, the condition of the roof should be assessed from the inside of the building for the following:
  - Are any of the fasteners missing or not attached to the purlins? If yes, the roof is **FRAGILE**.
  - Count the number of fasteners per sheet or the panel width per bearing end. If there are less than 3 - the roof is **FRAGILE**.
  - If corrosion is visible on the liner or inside face of the panel – the roof is **FRAGILE**.
  - If the joints in the liner or sandwich panels are not in close contact with the purlins – the roof is **FRAGILE**.
- If roof access is unavoidable where possible always use a fall restraint and/or fall arrest system. If no safety line system is available or the safety line system has not got a current test certificate do not access the roof.
- Before connecting to the fall restraint and/or fall arrest system check that it has been tested and certified within the last 12 months.
- Check that the fall restraint and/or fall arrest system posts are not corroded: if there are signs of corrosion do **NOT** use and do **NOT** access the roof.
- Before accessing any roof ensure that a specific assessment and method statement has been prepared and issued.
- If in any doubt do **NOT** access the roof until further checks can be made by a competent person.

**Note:** It would be prudent that prior to any work being carried out on any roof that the questions raised in Annex C of the ACR publication *Recommended Practice for Work on Profiled Sheeted Roofs* ACR [CP] 001:2007 Rev 3 (Orange Book) are fully understood and answered to demonstrate that all due regard to safety has been considered.

## NOTE

To ensure safety during roof work requires the commitment of ALL those involved in the procurement process and consideration needs to be given to the following:

- Operatives must be trained for working at height and they must be supervised;
- The planning of, and safe systems of work for work at height;
- The selection and use of work equipment for work at height;
- The management and supervision of work at height;
- Clients must check the competence of workers performing work at height; and
- The role designers can play in limiting hazards.

## MCRMA SAFETY LINES GROUP

MCRMA member companies can advise on the suitability and performance of materials, systems and assemblies which may be used within a tested and rated non-fragile roof assembly.

In addition, the MCRMA Safety Lines Group has been formed to address industry concerns that the specific requirements for safe work at height; that is, access, inspection and maintenance, is still not fully understood in certain sectors of the market place.

The members of the Safety Lines Group take an active role in the Advisory Committee for Roofsafety (ACR) and support the aim to make working on roofs safer through involvement on the ACR committee and endorsement of the recommendations contained within the Magenta Book.

Members of the Safety Lines Group have more than 35 years of experience in fall protection and provide a wide range of safety solutions. Information about the Safety Lines Group and its members can be found at <http://www.mcrma.co.uk/safety-lines.htm>

## USEFUL PUBLICATIONS

*Fall protection anchorage standards, EN 795 2012 & CE marking.* MCRMA guidance document GD 09, November 2013

*Test for Non-Fragility of Profiled Sheeted and Large Element Roofing Assemblies* ACR [M] 001:2011 (Red Book)

*Recommended Practice for Work on Profiled Sheeted Roofs* ACR [CP] 001:2007 Rev 3 (Orange Book)

*Rooflighting Best Practice Quickguide 01: Non-fragility: key points from the Red Book*  
National Association of Rooflight Manufacturers (NARM)

Available from the Health & Safety Executive web site:

Construction Safety Topic: Assessing all work at height

Construction Safety Topic: Roofwork

Free leaflet: Fragile roofs – safe working practices

Free leaflet: Roofwork – what you need to know as a busy builder

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