

























ACR (CP) 005: 2012 [second edition]

Guidance Note for competence and general fitness requirements to

work on roofs

 $\label{lem:covering_loss} \textbf{Covering Inspection, New Build, Maintenance, Repair and Refurbishment Work.}$ 

## **PREFACE**

The Advisory Committee for Roofing was established in the late 90's to improve all safety aspects for those who are required to work on roofs. To achieve this the Committee aim to prepare a number of key documents, with free access to all, that will assist designers, contractors, inspectors and building owners/managers to ensure that the working conditions on all roofs is made as safe as possible for all concerned. However, in focusing on the building and roof conditions, it is easy to overlook the ability of the people that are employed to go on to the roof to carry out inspections or perform work tasks.

This document tries to address the issues and concerns to determine the competency and capability of the people that are required to access a roof. Such people need to be both mentally and physically fit, competent to do the work and be fully aware of all the dangers that exist and the actions necessary to overcome those dangers. In addition, those empowered with the responsibility to send others on to a roof need to be totally satisfied that those that they are instructing are fully fit and competent to carry out the tasks required. I trust that this document will assist in identifying the key issues.

I would like to thank those involved in preparing this valued document from the wealth of their many years of experience working within the roofing industry.

## **Chris Pearce**

Chairman of the ACR

## **CONSTITUTION OF THE SUB GROUP**

This document was originally prepared by a sub group of the Advisory Committee for Roofsafety (ACR) representing the following Associations:

- Health and Safety Executive (HSE)
- National Association of Rooflight manufacturers (NARM)
- · National Federation of Roofing Contractors (NFRC)

by the following people:

Mr. M E Holden (HSE) Sub group Secretary

Mr. C J Pearce (NARM)

Mr. M Long (NFRC)

**Dr. D. Sen**, Senior Medical Inspector (HSE), whose help with this document is acknowledged.

Revision 2 was carried out by:

Mr. C J Pearce (NARM) Mr. M Long (NFRC)

# **CONTENTS**

Foreword	1
Introduction	1
Scope	1
Definitions	1
Interpreting competency	2
Physical fitness for working on roofs	3
Appendix A	4
Revision Information	4

## **FOREWORD**

This Best Practice Guide has been drawn up by the ACR, to assist in making roofwork safer. It draws on the experience of people who have spent many years in the roofing industry and, as such, the advice given in the document is a statement of good practice, which has been achieved. This document concentrates on safe working practices applicable to work on all types of roofs.

It provides a source of essential information, by drawing on existing good practice, which is already being followed by informed clients, and roofing companies. The recommendations in this document are intended to reduce the level of accidents by encouraging clients, employers and roofers to recognise their responsibilities and cooperate, to make working on roofs a less hazardous occupation.

#### INTRODUCTION

Working on a roof can be an extremely hazardous activity. Even a basic inspection requires adequate knowledge and understanding of the hazards and issues involved. This is confirmed by the Health and Safety Executive's accident statistics. These show that many of the accidents happened because the people carrying out the work or the inspection were not trained or competent to do so. Consequently, the work was carried out without the necessary planning or management and, often, without suitable equipment.

Working on or simply inspecting, any roof requires physical exertion, good balance and mobility. This, coupled with working at height, is exacerbated by some clients or employers who may have had no guidance on how to commission safe work on roofs or select appropriate employees.

Using a competent workforce having appropriate levels of fitness is vital in ensuring roofwork safety.

## **SCOPE**

This guide provides advice on what constitutes competency to organise and plan, manage and supervise work on roofs. In addition, it gives very general advice on the legal duties for the commissioners of, and clients for, roofwork.

## **DEFINITIONS**

## 1. Competent person

A person who can demonstrate that they have sufficient professional or technical training, knowledge, actual experience, and authority<sup>1</sup> to enable them to:

- Carry out their assigned duties at the level of responsibility allocated to them;
- Understand any potential hazards related to the work (or equipment) under consideration;
- Detect any technical defects or omissions in that work (or equipment), recognise any implications for health and safety caused by those defects or omissions, and be able to specify a remedial action to mitigate those implications.

**Note 1:** "authority" here means delegated authority to the individual by his employer to carry out a certain function or duty

- 2. Involvement in Roofwork<sup>2</sup> may (generically) comprise one or more of the following activities:
- · Commissioning roofwork

- · The organisation and planning of roofwork
- The management of roofwork
- The supervision of roofwork
- · Working at height
- · Assessing the non fragility of roofs
- The inspection of roofs and roofwork.

**Note 2**: "Roofwork" implies all work where access to the roof is required. Thus, access to the roof to maintain plant and equipment or to remove debris such as branches or leaves must still be considered as roofwork.

Therefore, for the purposes of this guide, the following definitions apply:

## a) Commission [roofwork]

Initiate and pay for [roofwork]

## b) Organise and plan [work on roofs]

Price for, make appointments for and set out arrangements including: method\_statements, provisions for safety and programme for [work on roofs]

# c) Manage [work on roofs]

Procure, be in overall control of (including ultimate control of who may access the roof) and implement the plan for [work on roofs] on site

## d) Supervise [work on roofs]

Work on, be in charge of and exercise the necessary authority over workers on roofs and carry out day-to-day management of [work on roofs]

**Note:** It is not necessary for each role defined above to be carried out by different individuals or companies

# INTERPRETING COMPETENCY FOR THE VARIOUS ROLES IN WORK ON ROOFS

- **3.** To **commission roofwork** there is no requirement in law to be competent. But, under the Construction (Design and Management) Regulations 2007 clients for, and commissioners of, roofwork have a number of duties, including:
- · The duty to make competent appointments;
- Consequently, the information in this guide should help them to discharge this duty;
- Supplying information about the premises/site a roof worker/contractor will need to know to enable the work to be undertaken safely.
- **4.** In addition, the ACR recommends that commissioners of work on roofs should have the ability to establish and operate permit to work systems.
- **5.** To **organise and plan roofwork** the definition in Paragraph **1** implies:
- A knowledge of which health and safety legislation is applicable to roofwork and how it should be applied to the task in hand;
- An understanding of the hazards associated with the type of roof or system;
- The ability to carry out and implement comprehensive risk assessments, to deal with associated hazards;

- The ability and authority to select the most appropriate working equipment for the task, regardless of financial constraints;
- An understanding of method statements and what needs to be included within them:
- An understanding of available techniques (including rescue) which can be employed to safely access and carry out work on a roof;
- Delegated authority to grant permission to access the roof.
- **6.** To **manage roofwork** the definition in Paragraph **1** implies:
- A knowledge of the specific health and safety legislation needed to be applied to project being undertaken;
- The ability to prepare, compile, interpret and implement method statements and rescue plans;
- An understanding of the importance of following method statements;
- A knowledge of the correct hierarchy of fall protection implicit within the regulations covering work at height;
- Ultimate control of access to the roof and the authority to grant access to it (for the duration of the work);
- Having the necessary competence to work at height on a roof [see 8 and 9 below].
- **7.** To **supervise roofwork** [on any roof] the definition in Paragraph **1** implies:
- A knowledge and understanding of the legislation affecting the work;

**Note**: Typically in the UK this will be Health and Safety at Work etc Act, the Management Regulations, the Work at Height Regulations, Construction (Design and Management) Regulations and the Control of Asbestos at Work Regulations.

- Competence to work at height on a roof [see 12 and 9 below];
- The ability to identify and pre-empt a dangerous situation developing and how to intervene and stop the situation developing;
- The ability to recognise dangerous working practises and workers;
- The authority to stop own and others work until a safe environment has been created;
- An understanding that method statements must be followed;
- The ability to understand and implement the requirements of risk assessments, method statements and rescue plans;
- The authority and ability to instruct and monitor others in the correct methods and procedures for carrying the work out in a safe and satisfactory manner;
- The authority and ability to obtain permission for, and provide management of, access to the roof;
- A knowledge of the effects that weather and environmental factors have for safe working on roofs.
- **8.** Going onto or carrying out actual work on any roof will involve **working at height**. The Advisory Committee for Work at Height Training (ACWAHT) indicate that, for anyone who works at height, the definition in Paragraph 1 implies:

- To know and understand the specific legal duties under the Work at Height Regulations which apply to them as an individual;
- To understand who controls their activity and the lines of communication to use:
- To understand the principles of fall protection that the Work at Height Regulations requires to be used;
- To be able to recognise safe and unsafe situations/activities;
- To understand how to deal with the hazards associated with the task allocated to them;
- To have adequate training in the correct use and limitations of any work equipment allocated to them for the task;
- To understand the need for and the ability to check the adequacy of the safety equipment allocated to them;
- If that equipment has been issued to them on a personal basis an understanding of the correct procedure for storage and maintenance and inspection;
- To understand safe procedures of work and be able to state the correct procedure for the task, the emergency (including rescue) procedures in place for the work and their role in it;
- To know the procedure for reporting any defects, hazards or unsafe procedures they detect.
- **9.** Additionally, the ACR consider that when **working on a roof**, being able to "recognise safe and unsafe situations" specifically implies:
- Having knowledge of the effects that weather and environmental factors have for safe working on roofs.

# **10.** To **assess the non fragility of a roof** the definition in Paragraph **1** above implies:

- Sufficient knowledge of the mechanical and physical properties of the materials and assemblies involved;
- Practical experience of correct installation of the product, usage, behaviour and failure in service;
- If it involves going onto a roof, to be competent to work at height on a roof [see 8 and 9 above];
- If it involves going on a roof, authority to access the roof;
- If it involves going on a roof, an understanding of the available techniques<sup>3</sup> which can be used.

**Note 3**: Advice on access techniques can be found in the ACR publication ACR(CP)002, Guidance Note for Safe Working on Fragile Roofs

# **11.** To **carry out an inspection** the definition in Paragraph 10 above implies:

- Competence to work on at height on a roof [see 8 and 9 above];
- · An understanding of the available techniques<sup>4</sup> that can be used.

**Note 4**: Further information can be found in ACR(CP)002, Guidance Note for Safe Working on Fragile Roofs

- An understanding of fragility and what it implies for working procedures;
- · Having the authority to access the roof;
- Knowledge (including their limitations) of appropriate methods of preventing falls from roof edges;
- A knowledge of the effects that weather and environmental factors have for safe working on roofs.

## PHYSICAL FITNESS FOR WORKING ON ROOFS

- 12. Fitness to work (and medicals to confirm such) is currently a requirement for many industry sectors. It is particularly important in high hazard/high risk work. Most roof work is high hazard/high risk work. However, many workers (and trainees) will be self-employed. Therefore, costs of formal medicals, etc need to be considered.
- **13.** Both training and operational work on roofs can be hazardous, strenuous work, often involving:
- work at considerable heights for long periods of time;
- work outdoors usually in hot, cold, wet and especially high winds;
- · repetitive materials handling;
- reaching, stretching, and maintaining balance in awkward postures whilst carrying loads on varying roof terrains.
- **14.** Fitness to work (and train) is important and needs to be considered by the employers and training organisation, particularly if the trainee is self employed. There is no difference in the fitness requirements (and evidence of such) in training, as compared to operational work. For both activities there should, therefore, be evidence provided to show that the individual does not suffer from<sup>5</sup>:
- any neurological condition likely to cause seizures, weakness of limbs, loss of balance including vertigo (dizziness from being at height);
- any heart or lung condition likely to be aggravated by strenuous work:
- any disability/impairment of limb function;
- any other disease, disability, medication, alcohol, drugs or affects of toxic substances (lead etc) likely to impair mental or physical activity especially at a height;
- Temporary ailments such as influenza or other conditions that may affect judgment;
- · Uncorrected sight problems;
- A physique that would be unsuitable for the work environment.

**Note 5**: Attention is drawn to the Disability Discrimination Act 1995

- 15. Employers should establish fitness for work.
- **16.** However, such information should be sought prior to training and/or work with the individual giving signed consent for his/her GP<sup>6,7</sup> to be contacted for confirmation. This could be done by the use of a standard letter in which there is a brief description of the hazards and risks of training or work and the question, "Is your patient fit to do this?"

Note 6: There will probably be a charge for this.

Note 7: If a person who has had a recent medical for another industry, e.g. offshore or HGV work, someone (a 'competent' medical person) will need to ensure that the fitness to work considerations in that medical satisfy the fitness to work needs of roofwork.

**17.** It is recommended that Company Rules should be developed to cover any situations where such procedures cannot be applied for any reason (e.g. temporary or emergency situations).

# The Self Employed

**18.** Even if the operative is self employed the employer<sup>8</sup> still has a duty under HSWA to consider whether they are fit

to work on roofs as he need to do for his own employees (see 23 and 26 below).

**Note 8:** Employers of subcontractors or the self-employed should consider including a health clause in any service agreement or contract

19. Employers should consider whether those employed for tasks associated with roofwork are fit for work. It is good practice for all operating and maintenance personnel to be screened for fitness before employment and at five yearly intervals in middle age; also after sickness or an accident, where it appears likely that this may have affected fitness, in order to assess the possible effect of the illness or injury and its treatment on the individual's current and future performance.

Note 9: Advice on suitable screening can be obtained from the nearest office of the HSE's Employment Medical Advisory Service

**20.** Each person's fitness for operating or maintenance should always be judged individually. Some disabled workers have developed skills that compensate for their disability. Competence in an emergency should always be considered.

## **APPENDIX A**

# Points to be considered concerning the normal level of fitness required for work on roofs

#### General

**21.** Roof workers should have full movement of the trunk, neck and limbs and normal agility. However, an experienced worker who loses a limb may successfully be re-employed after retraining. A stable disposition is required, but a history of previous mental illness should not necessarily preclude selection.

# Vision

**22.** Safety on roofs depends upon good judgement of space and distance. This generally requires the effective use of both eyes. Although some persons with monocular vision can undertake roofwork satisfactorily, normal distance vision should not be less than  $6/12^{10}$  with both eyes, and if corrected by glasses these should always be worn while operating.

**Note 10:** An ability to read a car number plate at 23 m (75 ft) for figures 90 mm high or at 20.5 m (67 ft) for figures 80 mm high is equivalent to a visual acuity of between 6/9 and 6/12.

**23.** Correct colour vision should also be taken into consideration in relation to operation of equipment that has colour-coded controls such as found in some MEWPs or electrical equipment. Some companies use colour coding for lifting equipment or lifting tackle.

#### Hearing

**24.** The ability to hear instructions and warning signals with each ear is important.

## **Epilepsy**

- **25.** This should not debar if the individual is eligible for an ordinary driving licence (i.e. has had no waking seizures for three years) but any recurrence of seizures must always be reassessed medically.
- **26.** It is recommended that any person (including the self employed) having a physical or mental problem should be the subject of a separate individual risk assessment.

## **Revision Information**

Revision 2		
Paragraph No(page)	Changes made	
Constituents of sub group (1)	Details of Revision group members	
Contents	Revision information added	
Paragraph 1(1)	Minor Typographical amendments	
Paragraph 2 (2)	Minor Typographical amendments	
Paragraph 3 (2)	CDM Regulation reference updated	
Paragraph 7 (2)	Regulation information updated. Authority applicability clarified.	
Note 3 & Note 4 (3)	ACR publication reference updated	
Paragraph 22 (4)	Typographical error corrected	
Paragraph 23 (4)	Use of colour coding added	
Disclaimer (4)	Moved to rear page	
Rear page	Trade Association contact information updated	

This document can be downloaded free of charge from the ACR website at <a href="http://www.roofworkadvice.info">http://www.roofworkadvice.info</a>
Where the up to date list of members can also be found

#### **British Constructional Steel Association [BCSA]**

4 Whitehall Court Westminster London SW1A 2ES

Tel: 020 7839 8566 www.steelconstruction.org Contact: Mr P Walker

#### **British Safety Industry Federation, Height Safety Group**

93 Bowen Court St. Asaph Business Park St. Asaph Clwyd LL17 OJE Tel: 01745 5856000

www.bsif.co.uk Contact: Mr G Hook

## Concrete Tile Manufacturers Association [CTMA]

60 Charles Street Leicester Leicestershire Tel: 0116 253 6161 www.britishprecast.org Contact: Mr C Nessfield

## **Engineered Panels in Construction [EPIC]**

29 High Street Ewell Surrey KT17 1SB Tel: 020 8786 3619 www.epic.uk.com

Contact: Mr P Trew

# Fall Arrest Safety Equipment Training [FASET]

PO Box 138 Whitchurch Shropshire SY13 9AD Tel: 01948 780652

e-mail: tony.seddon@faset.org.uk

Contact: Mr A Seddon

## Fibre Cement Manufacturers' Association [FCMA]

5a The Maltings Stowupland Road Stowmarket Suffolk IP14 5AG Tel: 01449 676053

e-mail: <u>fcma@ghyllhouse.co.uk</u> Contact: Mr A M Hutchinson

## Metal Cladding & Roofing Manufacturers Association [MCRMA]

MCMRA Ltd 106, Ruskin Avenue Rogerstone South Wales NP10 8BD Tel: 01633 891584

Email: mcrma@compuserve.com

Contact: Mr C Jones

## National Association of Rooflight Manufacturers [NARM]

43 Clare Croft
Middleton
Milton Keynes
MK10 9HD
Tel: 01908 692325
e-mail: admin@narm.org.uk
Contact: Lorraine Cookham

#### National Federation of Roofing Contractors Ltd [NFRC]

Roofing House 31Worship St London EC2A 2DY Tel: 020 7638 7663 e-mail: info@nfrc.co.uk Contact: The Technical Officer

## Rural Industrial Design and Building Association [RIDBA]

5a The Maltings Stowupland Road Stowmarket Suffolk IP14 5AG Tel: 01449 676049

e-mail: secretary@ridba.org.uk Contact: Mr A M Hutchinson

#### Work at Height Safety Association [WAHSA]

3 Sherwood Road Aston Fields Industrial Estate Bromsgrove Worcestershire B60 3DU Tel: 01527 577665 www.wahsa.org.uk Contact: Mr M Griffiths

#### DISCLAIMER

NOTE Although care has been taken to ensure, to the best of our knowledge, that all data and information contained herein are accurate to the extent that they relate to either matters of fact or accepted practice or matters of opinion at the time of publication, the ACR, the authors and the reviewers assume no responsibility for any errors in or misrepresentations of such data and/or information or any loss or damage arising from or related to their use

The Advisory Committee for Roofsafety (ACR) is a body dedicated to making working on roofs safer. Its membership is made up of nominees from the major roof working Federations and Associations and the Health and Safety Executive, who provide the experience of many years of involvement in working on roofs in the advice given in their documents.