

MARINE GUIDANCE NOTE

MGN 410 (M+F) Amendment 3 The merchant shipping and fishing vessels (health and safety at work) (work at height) regulations 2010

Notice to all shipowners, ship operators, charterers, managers and other employers of seafarers and masters, chief engineers, officers, ratings and other workers on merchant ships, fishing vessels, yachts, "Code" vessels and other vessels with paid or self-employed crew on board.

This notice should be read in conjunction with MGN 587 (F) amendment 1 ILO work in fishing convention health and safety responsibilities, MGN 636 (M) amendment 2 merchant shipping and fishing vessels (health and safety at work) regulations 1997, MGN 331 (M+F) amendment 3 provision and use of work equipment regulations 2006, MGN 332 (M+F) amendment 3 lifting operations and lifting equipment regulations and MGN 578 (M) amendment 1 overside working on vessels and replaces MGN 410 (M+F) amendment 2.

Summary

This notice provides guidance on the requirements of the merchant shipping and fishing vessels (health and safety at work) (work at height) regulations 2010 (SI 2010/332) ("the <u>WAH regulations 2010"</u>).

Falls whilst working at height can potentially result in serious or fatal injuries and the Regulations require employers to take account of the risks associated with working at height when carrying out health and safety risk assessments.

The WAH regulations 2010 apply to all UK registered ships, including:

- · fishing vessels
- vachts
- "Code vessels"
- and other small vessels of any type with workers on board.

These provisions apply no matter where the vessels may be, including at sea or on rivers, lakes, canals or other inland waters. Certain provisions also apply to non-United Kingdom ships and fishing vessels which are in United Kingdom waters.

The merchant shipping (maritime labour convention) (health and safety at work) (amendment) regulations 2014 make provision that any duty on an employer in respect of a worker in the <u>WAH regulations</u> is extended to a shipowner in respect of a seafarer. References to "employer" and "worker" in this MGN should therefore be read to include "shipowner" and "seafarer" respectively.

1. Introduction

- 1.1 The merchant shipping and fishing vessels (health and safety at work) (work at height) regulations 2010 (SI 2010/332) (the "WAH Regulations 2010") came into force on 6 April 2010 and form part of the UK's retained legislation and apply to all UK registered ships. The WAH regulations 2010 require workers to be protected from the risks of working at height.
- 1.2 Land-based workers are covered by the work at height regulations 2005 and the work at height (Northern Ireland) regulations 2005 introduced by the Health and Safety Executive (HSE) and the Health and Safety Executive for Northern Ireland (HSE(NI)) respectively.
- 1.3 The <u>WAH regulations 2010</u> build on the requirements of the merchant shipping and fishing vessels (health and safety at work) regulations 1997 (SI 1997/2962) (the "General Duties Regulations"), by requiring that employers ensure that the risk assessment which they are required to carry out under regulation 7 of the general duties regulations includes consideration of any risks to workers that exist, or could arise, as a result of carrying out work at height. Where any risks are identified, the employer must put in place appropriate measures to remove or mitigate the risk thereby protecting the workers.
- 1.4 The provisions of the <u>WAH regulations 2010</u> are applicable to all work carried out "at height" on any vessel where a person could fall a "distance" liable to result in an injury to them. "Distance" in this context does not have a specific definition, as circumstances can vary from job to job.
- 1.5 The current edition of the <u>Code of Safe Working Practices for Merchant Seafarers</u> (Chapter 17 Work at Height) incorporates guidance on undertaking work at height.
- 1.5.1 Chapter 17.3.3 and 17.3.4 provides information and guidance from the HSE and Ladder Association (LA455 issued in 2021). Notably the assessment of the condition of a ladder prior to use and the inspection of ladders and equipment carried out and recorded, on a schedule according to manufacturer's instructions.

2. Falls from height and relevance to shipping

- 2.1 Falls from height are a significant cause of death and injury amongst many sectors of industry and even falls from a relatively low level can be serious or even fatal. Falls from height usually occur as a result of poor management of risks rather than because of equipment failure. Common factors include:
 - Failure to recognise a problem.
 - Failure to provide safe systems of work.
 - Failure to ensure that safe systems of work are followed.
 - Inadequate information, instruction, training or supervision provided.
 - Failure to use appropriate safety equipment, including PPE e.g. safety harnesses.
 - Failure to provide safe plant/equipment.
- 2.2 The <u>WAH regulations 2010</u> apply to work on every vessel where it is possible and/or proposed that work, of any kind, will be carried out at height. In this context it should be noted

that "work at height" does not only encompass working from a ladder or on scaffolding but may also include:

- working alongside an open hatch or other opening in a ship's structure;
- working in close proximity to, or supported from, a ship's side;
- working in or entering deep tanks, such as ballast tanks;
- working on or from a permanent stairway, gangway, accommodation ladder or companionway in or on a ship except where the worker is only using that permanent stairway, gangway, accommodation ladder or companionway to obtain access to or egress from any place on a ship; or
- obtaining access to or egress from any place on a ship while at work except where the
 worker is obtaining access to or egress from a ship by use of a permanent stairway,
 gangway, accommodation ladder or companionway for the purpose it was designed
 for;
- where, if the measures required by the <u>WAH regulations 2010</u> are not taken, a person could fall a distance liable to cause personal injury.
- 2.3 In the exceptions described in the final two bullet points above, more specific provisions for safe movement on board ship in MGN 532 amendment 2 and for safe means of access in MGN 533 amendment 2 apply when personnel are moving around the ship or access to or egress from the ship is being obtained. However, in those cases wherever a worker actually undertakes work from such gangways, ladders etc or other means of access, the provisions of the WAH regulations 2010 will apply to that work.

3. Application (Regulations 3 and 4)

- 3.1 The WAH regulations 2010, like the general duties regulations and most other maritime health and safety regulations currently in force, apply to all persons employed or working on board any vessel, including trainees or apprentices, irrespective of whether the vessel goes to sea or only operates on inland waters, but do not apply to trainees on sail training vessels. The rationale for this exemption is that such persons are not, for the purposes of occupational health and safety, "working" and indeed in most instances they will be paying for the instruction received. Notwithstanding this exception, regulation 5(1) of the general duties regulations places a general obligation on employers to ensure the health and safety of all persons on board, so far as is reasonably practicable, irrespective of whether or not they are workers (see MGN 492(M+F)).).
- 3.2 For the rest of this notice, "worker" should be taken to include self-employed seafarers and share fishermen, and duties placed on employers also apply to shipowners and fishing vessel owners As with the general duties regulations and other health and safety regulations, the WAH regulations 2010 apply to all activities of workers on UK registered ships. The WAH regulations 2010 also apply to all types of commercially operated vessels, including yachts, fishing vessels and vessels operating only on inland waters, on which workers are employed. Certain provisions also apply to non-UK ships whilst in UK waters.
- 3.3 Regulation 4(2) provides for a limited derogation from the requirements of the <u>WAH</u> regulations 2010 in respect of vessels undertaking public service or civil protection activities where, because of characteristics peculiar to the activity being undertaken, full compliance with the requirement of the <u>WAH regulations 2010</u> is not possible. This derogation however applies to activities such as search and rescue or law enforcement and only applies in respect of the specific provision of the <u>WAH regulations 2010</u> with which compliance is not possible and for the length of time compliance is not possible.

- 3.4 All remaining provisions of the <u>WAH regulations 2010</u> continue to apply in full and as soon as the activity concerned is no longer being undertaken full compliance with all the requirements of the <u>WAH regulations 2010</u> will be required. In this context "activity" is considered to refer to specific occasions on which an activity is undertaken and not to an ongoing period during which such activities might periodically occur. Notwithstanding the derogation, the health and safety of any person on board who is affected as a result of the application of the derogation must be safeguarded as far as is reasonably practicable.
- 3.5 The provisions of the work at height regulations 2010 do not apply to land-based workers (including contractors, stevedores and other port workers) to whom the HSE's work at height regulations 2005 or the HSE(NI) work at height (Northern Ireland) regulations 2005 apply. Please note that the HSE/HSE(NI) regulations only apply within UK waters or to UK offshore installations. Where a land-based worker is on a vessel that goes outside of UK waters, the HSE regulations will cease to apply, and the maritime work at height regulations 2010 will apply to that worker as appropriate.
- 3.6 It should also be noted that so far as ships, fishing vessels and other marine craft are concerned, the HSE work at height regulations 2005 and the HSE (NI) work at height (Northern Ireland) regulations 2003 are only disapplied to the master or crew of a ship other vessel or to the employer of such persons in respect of the normal shipboard activities of a ship's crew which: -
- (a) are carried out solely under the direction of the master; and
- (b) are not liable to expose persons other than the master and crew to a risk to their health and safety.

In the light of this there is potential for ships and their crews to fall under the HSE or HSE(NI) Regulations in certain circumstances when in UK ports.

4. Application of related legislation (regulation 5)

- 4.1 The provisions of the maritime general duties regulations, the merchant shipping and fishing vessels (provision and use of work equipment) regulations 2006 (PUWER) and merchant shipping and fishing vessels (lifting operations and lifting equipment) regulations 2006 (LOLER) remain fully in force and are applicable to all work to be carried out at height, and to equipment used for carrying out such work. However, where the WAH regulations 2010 have introduced more stringent requirements, those more stringent requirements will apply. Guidance on the requirements of the general duties regulations, PUWER 2006 and LOLER 2006 can be found in MGN 587 (F) amendment 1, MGN 636 (M) amendment 2, MGN 331 (M+F) amendment 3 and MGN 332 (M+F) amendment 3 respectively.
- 4.2 In addition, the following regulations continue to apply in the circumstances referred to: -
- (a) The merchant shipping (safety of navigation) regulations 2020 (as amended), in so far as they give effect to the provisions of SOLAS Chapter V covering pilot transfer arrangements and equipment such as pilot ladders/hoists, accommodation ladders etc when used for embarking/disembarking pilots;
- (b) The merchant shipping (life saving appliances for passenger ships of classes III To VI(A)) regulations 1999 (as amended) and the merchant shipping (life-saving appliances and arrangements) regulations 2020 (as amended) in so far as they apply to such appliances when used for the purpose of saving life; and

However, where any equipment covered by the regulations referred to in (a) to (d) is actually used for the purpose of carrying out of work at height and a more stringent or specific provision is contained in the WAH regulations 2010, that more stringent or specific provision will apply.

5. Competence (Regulation 6)

5.1 Employers are required to ensure that only workers who are competent to do so undertake any activity involving the carrying out of work at height or use work equipment for carrying out such work. Where a worker is being trained to undertake such work, employers must ensure that the worker is supervised by another worker who is competent to undertake that activity themselves as well as being competent to supervise others undergoing training to undertake that activity. An "activity" involving the carrying out of work at height includes the organisation, planning and supervision of any such activity.

6. Organisation of work at height (Regulation 7)

- 6.1 Work should only be carried out at height if there is no reasonably practicable alternative to doing so. Where a reasonably practicable alternative does exist, it should be adopted. Where work can only be carried out at height, the employer must ensure that such work is properly planned, appropriately supervised and carried out in as safe a manner as is reasonably practicable. In this context, planning should include the carrying out of a risk assessment in accordance with regulation 7 of the general duties regulations. This might include giving consideration to potential risks from falling objects or of falling from or through fragile surfaces. In addition, work equipment must be selected and used in accordance with the provisions of the PUWER 2006 and LOLER 2006 and the related marine guidance notes referred to in section 4.
- 6.2 Planning should also take into account the possibility of emergencies occurring which result in workers requiring rescue from where they are working at height. Available guidance is listed at annex A note in particular the Work at Height Association guidance as regards rescue. In conjunction with the risk assessment, consideration should be given to circumstances which might possibly occur when work is undertaken at height and how rescue could be achieved, including the following questions: -
- (a) what type of emergency could occur requiring the rescue of a worker e.g., is it likely to be a fall from height to the deck or into an open hold or a fall which leaves a worker suspended from a safety harness or from the equipment on which they were working, or might it even involve a full or partial collapse of that equipment?
- (b) is access likely to be readily available to the worker or workers concerned should a rescue situation occur?
- (c) how difficult will it be to recover a fallen or suspended worker from a hold to deck level or to lower a fallen or suspended worker to deck level?
- (d) what level of competence will be required of those involved in the rescue?
- (e) will any specialist equipment be required?
- (f) are there any hazards that could potentially be encountered during the rescue e.g., is the worker requiring rescue in an area where oxygen deficiency or other hazardous atmosphere could be a problem for rescuers?

- (g) is appropriate protective equipment readily available to rescuers in situations referred to in (f) above?
- (h) are rescuers, or others on board, appropriately trained in the provision of appropriate medical care to a worker who has fallen or become suspended whilst working at height?

Note -this list is only illustrative and should not be considered to be definitive.

- 6.3 When a ship is in port, there may be a tendency to await the arrival of the local emergency services. However, there is always the risk that emergency service response is not as rapid as expected. It is therefore essential that appropriate procedures and measures are in place on board to deal with any emergencies and rescues that could potentially arise, whether at sea or in port. The aim in any situation requiring the rescue of a person suspended whilst working at height should be to rescue the suspended person, whether injured or uninjured, as safely and expeditiously as possible, having regard to all the circumstances including the health and safety of the rescuers.
- 6.4 During and after rescue, standard first aid guidance should be followed. Syncope is the sudden transient loss of consciousness and postural tone, followed by spontaneous recovery. Suspension syncope is the term used for symptoms of pre-syncope (loss of consciousness), semi-consciousness or unconsciousness caused by prolonged vertical suspension. If the rescuer is unable to immediately release a conscious casualty from a suspended position, elevation of the legs by the casualty or the rescuer where safely possible may help prolong tolerance of suspension. Guidance on the treatment of suspension syncope/intolerance is given in <a href="https://doi.org/10.1001/journal.org/10.1

7. Assessment and selection of work equipment for work at height (Regulation 8)

- 7.1 Where, following a risk assessment, an employer identifies a potential risk arising from working at height, the employer must take appropriate measures to remove or, where that is not possible, reduce that risk as far as is reasonably practicable. In addition, any work equipment to be used for carrying out work at height and which is provided for use by workers on a ship must be the most suitable for that purpose to ensure and maintain safe working conditions. In this context, work equipment must be selected which: -
- takes account of the provisions of more general health and safety regulations including the general duties, PUWER 2006 and LOLER 2006 regulations;
- gives collective protection measures priority over personal protection measures:
- is appropriate to the nature of the work to be performed and to foreseeable loads and stresses placed on the equipment being used.
- 7.2 Where any work equipment is to be used as a means of access to perform work at height, it must—
- be the most suitable equipment taking into account the nature, frequency and duration of the work, as well as the height to be negotiated in the event of imminent danger; and
- not give rise to any additional risk of falling arising from passage in either direction between the work equipment selected and a working platform.
- be chosen taking in to consideration the working conditions (e.g. weather)
- 7.3 The use of work equipment to undertake any work over the side of yachts or other vessels will fall within the definition of "Work at Height". In this context, MCA has produced guidance

on the use of systems for undertaking "overside" work and this is contained in MGN 578 (M) amendment 1 Use of overside working on commercial yachts, small commercial vessels and loadline vessels

8. Duty to minimise risks (Regulation 9)

- 8.1 Employers are required to take appropriate measures to minimise any risk, resulting from the use of the work equipment selected by them to carry out work at height in accordance with the requirements set out in paragraphs 8.1 and 8.2 that have been identified by the risk assessment.
- 8.2 Such measures should include the installation of safeguards of a suitable configuration and strength to prevent, or where that is not possible arrest, falls from a height and as far as possible prevent injury to workers. The form such safeguards should take is primarily for the employer to decide and may vary depending on the equipment being used. However, safeguards could include safety harnesses for workers, guards to prevent falls from scaffolding or towers, or fall arrest equipment. The primary aim of such safeguards should be to prevent falls occurring thus precluding injury to workers and accordingly fall arrest equipment should only be seen as a precautionary measure in case of failure of the primary measures. Further guidance on lifting equipment and operations can be found in Chapter 19 of COSWP, on the use of guardrails in chapter 11.5 and other safeguarding equipment in chapter 17.
- 8.3 Employers must also have regard to the provisions of the PUWER 2006 regulations relating to the protection of workers against specific hazards. In the case of work at height this might include protecting workers against injury resulting from being hit by tools or other items dropped by persons working at height. The measures to be taken to prevent such injuries are primarily for the employer to decide but might include excluding workers from any area where there was a risk of being hit by falling objects.

9. Weather conditions (regulation 10)

9.1 Employers are required to ensure that work is only carried out at height when weather conditions do not jeopardise the health and safety of workers. The weather may not only affect workers working at height on an open deck but may also adversely affect workers working at height inside a vessel where it is moving as a result of wind or wave action. Except for cases of emergency, work at height should only be undertaken when weather conditions are such that the health and safety of workers is not put at risk.

10. Collective safeguards (regulation 12)

10.1 Where safeguards, such as guardrails or netting, have been put in place in accordance with the <u>WAH regulations 2010</u>, such safeguards may only be interrupted at points of ladder, companionway or stairway access. Should it prove necessary to remove any such safeguard, work in the vicinity must not be allowed to commence or continue until such time as effective compensatory safety measures have been put in place. The original safeguard must then be reinstalled as soon as possible once the task has been completed either on a temporary or permanent basis.

11. Ladders (regulation 13)

11.1 Work can only be carried out at height from ladders if the employer's risk assessment shows that the use of safer work equipment is not justified either because of the low risk and the short duration of the work to be undertaken, or because there are existing features of the

ship that the employer cannot alter, which preclude the use of other equipment. In circumstances where a ladder is to be used, the employer must ensure that the provisions of Schedule 1 to the <u>WAH regulations 2010</u> are fully complied with. See COSWP Chapter 17.3 and annex 17.2 for guidance on ladders.

12. Scaffolding (regulation 14)

12.1 Employers must ensure that scaffolding is not used for work to be carried out at height unless the provisions of schedule 2 to the <u>WAH regulations 2010</u> have been complied with. In addition, it should be noted that regulation 8 of the PUWER 2006 regulations requires any equipment, where the safety of that equipment is dependent upon its correct installation, to be inspected by a competent person after installation, or after assembly in a new location, before it is put into use. This will apply to scaffolding. See COSWP Chapter 17.7 and annex 17.4 for guidance on scaffolding.

13. Rope access and positioning techniques (regulation 15)

13.1 Rope access and positioning techniques must not be used for the carrying out of work at height unless the employer's risk assessment has demonstrated that the work can be performed safely, the use of safer work equipment is not justified, and the provisions of Schedule 3 to the <u>WAH Regulations 2010</u> () have been complied with. In addition, the employer must provide the worker with a seat with appropriate accessories if it is appropriate to do so, taking into account the risk assessment and, in particular, the duration of the task and the ergonomic constraints under which the worker will be working. See COSWP Annex 17.3 for guidance on rope access and positioning techniques.

14. Duties of other persons (regulation 16)

14.1 The <u>WAH regulations 2010</u> make provision to extend any duty placed on an employer to any other person who has control of the matter to which the provision in question relates in any circumstances where the employer concerned does not have responsibility for the operation of the vessel. This is in line with other health and safety regulations and recognises the situation on many ships where more than one employer can be responsible for the workers on board. Whilst every employer is responsible for their own workers, an overall duty in respect of all workers on board, irrespective of who employs them, will be placed on the person(s) (usually the "company" in ISM terms) responsible for the actual operation of the vessel.

14.2 In addition to the duty referred to in paragraph 15.1, the <u>WAH regulations 2010</u> require all workers to make full and proper use of all work equipment provided for their use when working at height, and to comply with any relevant instruction or training with which they have been provided.

15. Prohibition on charging of workers (Regulation 25)

15.1 When complying with any requirement of the <u>WAH regulations</u>, an employer may not charge any worker for any costs incurred as a result of that compliance.

16. Other sources of information

16.1 Further sources of information on working at height are listed in annex A to this MGN.

More information

Seafarer Safety and Health Branch Maritime and Coastguard Agency Bay 2/17 Spring Place 105 Commercial Road Southampton SO15 1EG

Telephone: +44 (0)203 81 72250

Email: seafarersafety@mcga.gov.uk

Website: www.gov.uk/mca

General enquiries: infoline@mcga.gov.uk

Please note that all addresses and telephone numbers are correct at time of publishing.

Annex A

Other sources of information **MCA Marine notices**

MGN 636 (M) amendment 2 merchant shipping and fishing vessels (health and safety at work) regulations 1997

MGN 578 (M) amendment 1 overside working on vessels

MGN 533 amendment 2 Means of access

MGN 532 amendment 2 Safe movement on board ship

<u>Code of Safe Working Practices for Merchant Seafarers</u> A "read only" copy of the Code can be found on www.gov.uk

(copies of this document are required to be carried on board all UK registered merchant ships but not fishing vessels)

Digital and paper copies can be purchased from:

https://www.tsoshop.co.uk/ Tel: +44 (0) 333 202 5070

E-mail: customer.services@tso.co.uk

Web: www.tso.co.uk

Heath and Safety Executive Publications (HSE)

The HSE have produced guidance on their related work at height regulations, which may be of assistance to employers of seafarers on ships. They have also produced a research report (<u>HSE RR708</u>) -"Evidence-based review of the current guidance on first aid measures for suspension trauma"., which can be downloaded or alternatively can be obtained from:

HSE Customer Services PO Box 29 Norwich NR3 1GN

Tel: +44 (0)333 202 5070

HSE Books website: for HSE priced and free publications and leaflets

<u>The Ladder Association (LA455):</u> a copy can be downloaded from the Ladder Association website

Work at Height Safety Association Publications (WAHSA)

The WAHSA has produced the following Technical Guidance Notes (TGNs) which, whilst relating primarily to work at height on land, do contain some information that may also be assistance to employers in relation to work at height in the maritime environment:-

Copies of these technical guidance notes can be downloaded from the WAHSA website.

TGN01 -guidance on the selection, use, maintenance and inspection of retractable type fall arresters

TGN02 -guidance on the use of single and twin energy absorbing lanyards

TGN03 -guidance on inspecting eyebolts used for personal fall protection

TGN04 – guidance on the selection, use, maintenance and inspection of anchor devices

TGN05 – guidance on the selection, use, maintenance and inspection connectors

TGN06 – guidance on the use and inspection of mobile man anchors to BS EN 795 class E

TGN07 -guidance on the suitability of abseil rails. Design, selection, use, maintenance and Inspection

TGN08 -Guidance on connector safety