GUIDANCE ON THE SELECTION OF APPROPRIATE WORK EQUIPMENT FOR WORK AT HEIGHT ACTIVITIES WITHIN A COLD STORE ENVIRONMENT

This guidance is issued by the BFFF and FSDF after full consultation with HSE. The following is not compulsory and you are free to take other action. Notwithstanding that, the BFFF and FSDF have fully consulted with the HSE in developing this supplementary guidance to PM28, they cannot guarantee that the guidance will ensure compliance with the law. However, on the basis of the equipment readily available, the BFFF and FSDF believe that by following this supplementary guidance cold storage operators are taking adequate steps to ensure that the risks faced are reduced as low as reasonably practicable.

This guidance refers to the selection of appropriate work equipment for work at height activities within a cold store environment only. For the purposes of this guidance a cold store is defined as a warehouse storing goods at temperatures below zero degrees Celsius however, it should be noted that battery performance worsens as temperature falls so it may be practicable to provide better solutions in warmer environments.

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**PART 1**

**INTRODUCTION**

Most cold store and frozen food operators need temporary access to work at height for planned and unplanned tasks. As such, cold store operators are faced with the duty within the Work at Height Regulations 2005 to select the most suitable work equipment for the task to be carried out, regardless of the duration of the task.

This guidance is relevant to both planned, and unplanned activities within a cold store environment and is therefore not restricted to exceptional use. Examples of planned tasks within a cold store include stock taking, planned maintenance tasks such as racking safety checks and lighting checks as well as checks on the integrity of the building insulation whilst an example of an infrequent task is retrieving dislodged pallets.

Initially in 1981, HSE developed guidance note PM28, now in its 3rd edition, ‘Working platforms (non integrated) on forklift trucks’ to assist users and suppliers to meet their legal duties by providing advice on identifying appropriate working platform and forklift truck combinations and for what activity these can be used legally. PM28 includes how they can be used safely together and the necessary design characteristics for working platforms to provide for their safe use. With temperatures often below minus 20ºC, ice formation on floors and fixtures and significant wind chill from evaporators, cold stores are a harsh climatic environment. Due to this environment within a cold store, it is recognized that there is a lack of current state of the art technology in readily available equipment to enable cold store operators to fully and safely adhere to all the guidance laid out within PM28.

The guidance outlined within this document supplements PM28 specifically for operators of **cold stores**. It supports cold store operators in their selection of appropriate work at height equipment by outlining a hierarchy of the alternatives available, prior to companies opting to select a non integrated working platform for planned tasks. However, it must be underlined that when considering this hierarchy firstly the work at height must be eliminated, secondly, PM28 must be considered before taking any action in line with the guidance in this document. This guidance also includes some examples of elements to consider in developing a safe system of work for the operation of lift truck and non-integrated working platform combinations.
DEFINITIONS FOR THE PURPOSES WITHIN THIS GUIDANCE

‘Cold Store’ is a warehouse storing goods at temperatures below zero degrees Celsius.

‘Purpose built access equipment’ means equipment that, by design, is intended to be used by people to allow them to work at height.

‘Non-integrated working platforms’ are attachments for use in conjunction with forklift trucks to elevate people so they can work at height, but they have no controls in the platform that allow a person in the platform to control the lift height of the platform or move the truck; i.e. all truck and working platform movements are controlled by the truck operator.

‘Integrated working platforms’ are attachments with controls that are linked to and isolate the truck controls so that only a person in the platform can control the lift height of the platform and truck movements.

‘Permissioning controlled working platforms’ are non-integrated working platforms with hold-to-run controls that link to and nullify the truck lift/lower and traction controls until the controls in the platform are actuated by a person or persons in the platform; i.e. the height of the platform or truck movement can only occur by the truck operator operating truck controls when the platform controls are held by an operator in the platform.
All companies must adhere to the requirements within the Work At Height Regulations 2005 and, should it be determined that work at height cannot be avoided, assess the risks from working at height. They can utilise this guidance to support their decision on the appropriate equipment for their work at height activities.

Where work at height cannot be avoided, the selection of an appropriate and suitable method of access will depend on the nature of the task to be carried out, the frequency of occurrence, the duration of the work and the availability of equipment. Working at height is a high-risk activity and the planning, selection and use of a safe means of access and working area cannot be stressed too much.

The temperature of the cold store may also be a relevant consideration in the selection of equipment. A particular limitation in using purpose built access equipment such as MEWPS in cold stores is the greatly reduced battery charge working period caused by the very low temperatures. However this limitation may tend to be reduced in higher temperature cold stores.
HIERARCHY FOR SELECTING WORK AT HEIGHT EQUIPMENT
WITHIN A COLD STORE ENVIRONMENT (below 0°C)
PLEASE NOTE THIS HIERARCHY IS FOR OCCASIONAL WORK ONLY

Can work at height be avoided?
→ Yes → Complete work safely from ground level

No

Are you able to use fixed access equipment?
→ Yes

Examples include permanent access steps and tower scaffolds. Their use should be explored particularly when frequent or permanent work at height is required in a particular area.

No

Are you able to use a fully integrated working platform with your existing forklift truck?
→ Yes

Currently none available

Discuss with your forklift truck provider to ascertain if your truck can be provided with a fully integrated working platform that is able to operate within a cold store.

No

Are you able to use purpose built access equipment e.g. Mobile Elevating Work Platforms (MEWPS)?
→ Yes

Examples include man up machines and Mobile Elevating Work Platforms (MEWPS). Equipment must be capable of working within the cold store environment. Manufacturers will recommend the maximum time for use with this environment.

No

Are you able to use a permissioning controlled working platform?
→ Yes

These are available for particular types of trucks and must only be utilised in accordance with the guidance contained within PM28.

The use of non-integrated working platforms is acceptable for both planned and unplanned use provided the following is carried out:
1. The working platform has been designed and selected as per PM28
2. There is a documented safe system of work for its use, utilising the guidance within part one of PM28
3. Operators and truck drivers are fully trained in appropriate procedures, including emergency procedures.

No

Use a non-integrated working platform

Implement Safe System of Work
→ Complete work
PART 3

AREAS FOR CONSIDERATION WITHIN A SAFE SYSTEM OF WORK FOR A NON-INTEGRATED WORKING PLATFORM

A company’s safe system of work for the use of a non integrated working platform should be developed from the company’s risk assessment of their particular work at height requirements and using the detailed and comprehensive guidance within part one of PM28. Examples of areas for consideration and precautions to be taken may include the following:

Important - The areas for consideration below are only examples of the elements to be considered within a safe system of work for a non integrated working platform. The requirements of individual companies for working at height requirements will vary and each company needs to think through the hazards and controls required in it’s own particular circumstances and based on it’s own risk assessment. Companies should refer to the detailed and comprehensive guidance within part one of PM28 for further elements to be considered.


Working platform

- Work at height operations using a non-integrated working platform must only be undertaken by trained and authorised personnel both within the working platform and operating the lift truck. (PM28, Page 11 Point 82 f, Page 12 Point 85)

- The working platform should be a proprietary item, designed and constructed in accordance with the guidance within PM28. (PM28, Page 11 Points 82 a, b, d)

- The working platform must be compatible with the lift truck on which it is used. Before any combination is used for the first time the working platform and truck manufacturer/supplier must be consulted. (PM28, Page 11 Points 82 and 83)

- The lift truck and working platform combination must remain stable under all circumstances in which it is intended to be used and the working platform must not exceed the maximum permissible weight. It is important to ensure the weight of tools and materials are also taken into account. (PM28, Page 11 Point 84)
PM28 states that the tilting mechanism, side shift, chassis or mast levelling, reach (reach trucks) and variable geometry attachments shall not be capable of movement whilst the working platform is elevated (PM28 Page 5 Point 23), and every effort must be made to provide fork lift trucks which have measures that prevent these functions.

The platform must be securely attached to the truck in accordance with the manufacturer's instructions. (PM28, Page 12 Point 87 LOLER regulations)

Pre user checks must be carried out by an authorised person to ensure the platform is properly located and secured to the truck each time it is used. A positive locking device behind the heels of the fork arms must be included on the platform to retain it to the truck when in use. Any defects or damage to the working platform or associated control systems must be reported and rectified before further use. (PM28, Page 12 Point 86 LOLER regulations)

The lift truck fork pockets must fully enclose the fork arm along the full length of the platform and be fully enclosed along their underside. (PM28, Page 7 Point 45)

Staff on the platform must not be able to reach hazardous moving parts or controls on the truck. The platform must provide adequate protection to prevent the risk from trapping and or crushing by the mechanism of the lift truck. (PM28, Page 7 Point 42 and Page 12 Point 87 a)

A visual inspection of the gate-locking device must be undertaken to confirm that it conforms to the manufacturer's recommendations.

The lifting equipment (which includes the working platform) must be inspected every 6 months in accordance with Regulation 9 of the Lifting Operations and Lifting Equipment Regulations 1998. This includes any equipment that you have on hire.

Staff must wear a work restraint safety harness when operating in the platform. Safety harness anchorages must be included on the working platform. They must be marked as work restraint anchorages so as to deter the use of fall arrest equipment that is not appropriate for this use. (PM28, Page 5 Point 31)
**Lift Truck Operator**

- The lift truck operator MUST remain at the controls of the lift truck while the platform is in an elevated position and at any other time the platform is occupied.  (PM28, Page 5 Point 24)

- The lift truck operator MUST NOT operate the tilting mechanism, side shift, chassis or mast levelling and reach (reach trucks) and variable geometry attachments whilst the platform is in an elevated position.

- The lift truck must not be moved while the working platform is elevated, HOWEVER, small and controlled positional adjustments are acceptable under the instruction of the person in the platform if they are necessary to allow the task to be carried out safely.  (PM28, Page 5 Point 26)

- The parking brake of the lift truck must be applied whenever the working platform is elevated and, where applicable, the transmission placed in neutral before elevating the platform.  (PM28, Page 5 Point 26)

- On no occasion must more than the permitted number of staff be carried in the working platform.

**Communication**

- A clear communication system must be in place between the truck operator and the persons in the platform, especially when raising and lowering.  Hand held communication devices or a system of signals should be used where communication is difficult.  INSTRUCTIONS FOR MOVING THE PLATFORM MUST ONLY BE GIVEN BY THE PERSON IN THE PLATFORM. If there are two people working within the platform, instructions to the lift truck operator must only be given by a single nominated person.  (PM28, Page 5 Points 28 and 30)

- When using hand signals an agreed system should be used and full training given in its proper use.  (PM28, Page 5 Point 29)

**Segregation of work area**

The working area below the work at height must be isolated and cleared of any other work activity.  Staff and other MHE must be prevented from approaching the working at height activity.  This may be achieved by the use of warning cones, lights, barriers or signs as appropriate.  Where necessary, other adjacent operations or activities may have to be stopped. Additionally, the work area must be inspected to ensure that there are no overhead hazards.  (PM28, Page 6 Point 35)