

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

This guidance is issued jointly by the BFFF and the FSDF and is supplementary guidance to HSE Guidance Note PM28 (4th Edition) *Working platforms (non – integrated) on fork lift trucks*. On the basis of the equipment readily available, the BFFF and the FSDF believe that by following PM28 and this supplementary guidance, cold storage operators are taking adequate steps to ensure that the risks associated with work at height are reduced to a level which is 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**. It is recognised that it stands outside HSE's normal policy line, however the use of non- integrated working platforms in cold stores is recognised within HSE guidance L117 paragraph 153.

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 environments that aren't quite so cold (but still below zero degrees Celsius). This guidance outlines how fork lift trucks may be used in certain circumstances, but they are not specifically designed for lifting people. Where reasonably practicable you should obtain and use purpose built equipment for lifting people.



British Frozen Food Federation
www.bfff.co.uk



Food Storage & Distribution Federation
www.fsdf.org.uk

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Technical solutions suitable for cold store will continue to be reviewed at least annually. The full guidance to be reviewed no later than November 2018

INTRODUCTION

Most cold store and frozen food operators need temporary access to work at height for planned and occasional tasks. As such, cold store operators are faced with the duty under the Work at Height Regulations 2005 (WAHR) to select the most suitable work equipment for the task to be carried out, regardless of the duration of the task. All work at height must be properly planned, organised and the risks managed.

This guidance is relevant to both planned and occasional activities within a cold store environment and includes the use of non-integrated working platforms on fork lift trucks, where the duration of the activity means that the battery life of alternative equipment, e.g. MEWPS would be insufficient. PM28 makes it clear that routine or planned tasks; particularly those associated with production or pre-planned activities such as periodic maintenance or stocktaking, are not exceptional circumstances, and are therefore not examples of occasional use (see PM28 paragraph 14). An example of an infrequent task is retrieving dislodged pallets. PM28 (see paragraphs 4 & 13) gives other examples of occasional use of non- integrated working platforms .

HSE guidance L117, 'Rider-operated lift trucks, Operator training and safe use' recognises the restrictions caused by the cold store environment. Paragraph 153 states 'Lift trucks fitted with non-integrated working platforms are not suitable for stock checking, order picking, routine maintenance or the transfer of goods or people from one level to another. However, stocktaking within cold stores is currently permitted using non-integrated work platforms, due to the lack of an effective alternative.'

Following PM28 will help users and suppliers meet their legal duties by providing advice on identifying appropriate working platform and fork lift truck combinations and how these can be used safely. PM28 includes the necessary design characteristics for working platforms to provide for their safe use. With temperatures often below minus 20°C, ice formation on floors and fixtures and significant wind chill from evaporators, cold stores are a harsh climatic environment. It is recognised that due to the environment equipment ordinarily used for work at height is unsuitable. Operators should seek advice from equipment suppliers when selecting equipment suitable for use in a cold store environment.

The guidance outlined within this document supplements PM28 and is 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 avoided if possible, 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 fork 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.

'Competent person' is someone who has sufficient training and experience or knowledge, and the ability to apply them to perform a task safely.

'LOLER' refers to the **Lifting Operations and Lifting Equipment Regulations 1998**.

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

'MEWP' is a **mobile elevating work platform**.

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

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

'Permissioning controlled working platforms' are non-integrated working platforms with controls that are linked to those in the fork lift truck in such a way that the lift/lower and traction functions cannot take place until both sets of controls (those on the working platform and those in the fork lift truck) are being operated.

'Permit to work' means a formal written safe system of work to control potentially hazardous activities.

'PPE' means Personal Protective Equipment.

'WAHR' refers to **The Work at Height Regulations 2005**

PART 2

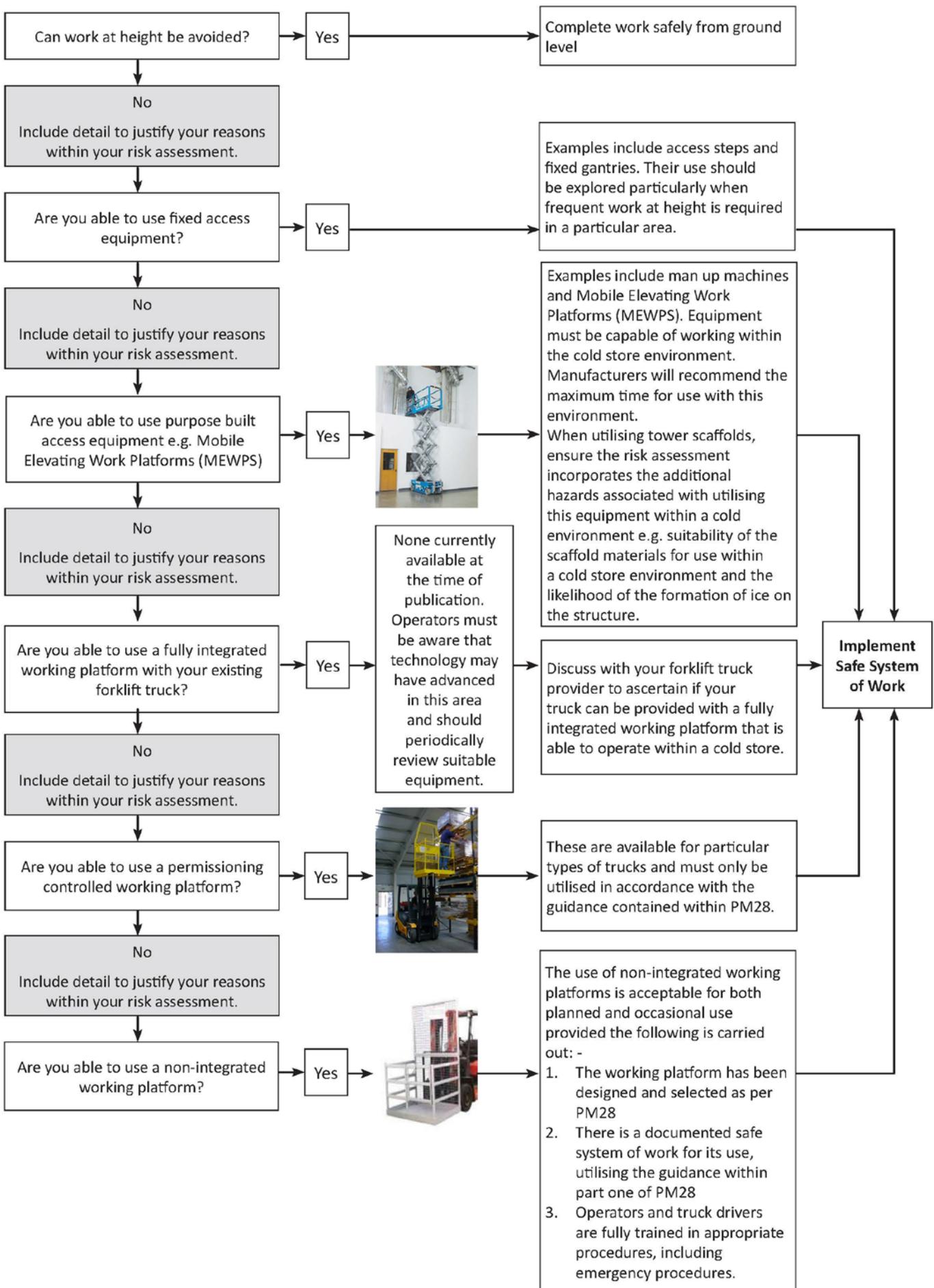
HIERARCHY FOR SELECTING WORK AT HEIGHT EQUIPMENT WITHIN A COLD STORE ENVIRONMENT

All companies must adhere to the requirements under the WAHR. Should it be determined that work at height cannot be avoided; companies must assess the risks associated with working at height and introduce suitable control measures to reduce the risk to the lowest level reasonably practicable. 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 the task occurring, the duration of the work and the availability of equipment. Working at height is a high-risk activity and it is essential that a competent person is directly involved in determining a safe means of access, a suitable working platform and personal protective equipment.

The temperature of the cold store may also be a relevant consideration in the selection of equipment and it is important the equipment is suitable for cold store use. 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 and for short duration tasks a MEWP may be utilised.

HIERARCHY FOR SELECTING WORK AT HEIGHT EQUIPMENT WITHIN A COLD STORE ENVIRONMENT (below 0°C)



PART 3

AREAS FOR CONSIDERATION WITHIN A SAFE SYSTEM OF WORK FOR USING 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 the comprehensive guidance within Part 1 of PM28 <http://www.hse.gov.uk/workplacetransport/pm28.pdf>.

Examples of areas for consideration within a safe system of work 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 will vary and each company needs to consider the hazards and controls involved for their particular set of circumstances.

Working platform

- Work at height operations using a non-integrated working platform must only be undertaken by trained and authorised personnel. This includes specific training for both the person/ people within the working platform and also the operator of the fork lift truck. They must be given full instructions on safe systems of working with working platforms and the necessary element of pair working including what to do in the event of an emergency and the dangers associated with leaning out of the working platform (PM28, paragraph 34).
- It is advisable not to lean out of the platform when it is raised and, so far as is reasonably practicable, the platform should be positioned to prevent the need for people to lean out when carrying out their work. If people have to lean out of the platform to carry out work at height then they should wear harness and lanyards that are linked to the platform's harness anchorage points to prevent them from overbalancing and falling over the rails. (PM28, paragraph 31)
- The working platform should be a proprietary item, designed and constructed in accordance with the guidance within Part 1 of PM28.
- The working platform must be compatible with the fork lift truck on which it is used. Before any combination is used **for the first time** the working platform and fork lift truck manufacturer/supplier must be consulted. (PM28, paragraphs 16 and 17)
- A sign should be attached to the working platform identifying the specific fork lift trucks on which it can be used before the platform is used. Take account of any attachments on the fork lift truck when identifying the trucks with which the working platform may be used. Working platforms should not be used on fork lift trucks that are not identified on the sign (PM 28, paragraphs 21 and 64)
- The fork lift truck and working platform combination must remain stable under all circumstances in which it is intended to be used. Also the working platform, plus personnel and equipment must not exceed 50% of the rated capacity of the fork lift truck. It is important to ensure the weight of the people (or person) as well as the tools and materials are also taken into account. (PM28, paragraphs 17, 18, 19, 38, 53 and 54)
- 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, paragraph 23).

- The working platform must be positively locked on to the fork lift truck with which it is used in accordance with the manufacturer's instructions. (PM28, paragraphs 18, 19, 43, 44, 45, 46 and 48, and in accordance with the Lifting Operations and Lifting Equipment Regulations 1998 [LOLER]).
- Pre user checks must be carried out by an authorised person to ensure the working platform is properly located and secured to the fork lift truck each time it is used. A positive locking device behind the heels of the fork arms must be included on the working platform to retain it to the fork lift 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, paragraphs 22, 44 and 86 and in accordance with the LOLER regulations)
- The fork pockets must fully enclose the fork arm along the full length of the working platform and be fully enclosed along their underside. (PM28, paragraph 45)
- Personnel on the working platform must not be able to reach hazardous moving parts or controls on the fork lift truck. The working platform must provide adequate protection to prevent the risk from trapping and or crushing by the mechanism of the fork lift truck. (PM28, paragraphs 42 and 87)
- PM28 states that any gate provided should open inwards, upwards or sideways and return automatically to the closed position. A visual inspection of the gate-locking device must be undertaken prior to use to confirm that it conforms to the manufacturer's recommendations. (PM28, paragraph 59)
- The lifting equipment (which includes the working platform) must be inspected every six months in accordance with Regulation 9 of LOLER. This includes any equipment that is on hire. The inspection must be a thorough examination by a competent person as required under the Regulations.
- Personnel must have and wear a safety harness with a fixed length lanyard (i.e. work restraint) and other appropriate PPE when operating the working platform. Personnel must be trained in the use of a harness. **Safety harness anchorages must be included on the working platform and personnel must be trained in the use of the PPE.** Work restraint anchorages must be clearly marked to deter their use for fall arrest equipment as this is not appropriate. (PM28, paragraphs 31 and 52)

Fork Lift Truck Operator

- It is recommended that a permit to work should be issued each time tasks involving the use of non-integrated working platforms are about to be undertaken. The permit should detail the work to be done, the operating procedures to be followed and the safety precautions to be taken. When the work is completed permits should be checked and signed off by a competent person who is not involved in undertaking the work. If the duration of the work exceeds one continuous working period (day or shift) a new permit should be issued before the start of each new working period.
- The fork lift truck operator must remain seated at the controls of the fork lift truck while the working platform is in an elevated position and at any other time the working platform is occupied. (PM28, paragraph 24)
- The fork 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 working platform is in an elevated position (PM28, paragraph 23).
- The fork 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 working platform if they are necessary to allow the task to be carried out safely. (PM28, paragraph 26)

- The parking brake of the fork lift truck must be applied whenever the working platform is elevated and, where applicable, the transmission placed in neutral before elevating the working platform. (PM28, paragraph 26)
- On no occasion should **the number of persons permitted to use the working platform be exceeded.**

Communication

- A clear communication system must be in place between the fork lift truck operator and the persons in the working 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 working platform must only be given by the person in the working platform. If there are two people working within the working platform, instructions to the fork lift truck operator must only be given by a single nominated person other than in emergency situations. (PM28, paragraphs 28 and 30)
- When using hand signals an agreed system should be used and full training given in its proper use. A written procedure of appropriate hand signals to use must be in place to avoid confusion (PM28, paragraph 29)

Segregation of work area

The working area below the work at height must be segregated from any other work activity. Personnel, vehicles and other equipment 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, paragraphs 33 and 35)

PART 4

DOCUMENTATION AND RECORDS

If a non-integrated work platform is to be used the following documentation should be in place prior to any use:

- Risk assessments for the following:
 - (i) the decision to use a non-integrated work platform; and
 - (ii) the particular task
- Training and assessment records for both the fork lift truck operator and people using the work platform in combination. They must be given full instructions on safe systems of working with working platforms and the necessary element of pair working.

It is recommended that periodic refresher training should take place. There is no specific time period after which you need to provide refresher training or formal assessment. However, you may decide that automatic refresher training or a retest after a set period (for example 3-5 years) is the best way to make sure employees remain competent. Where you adopt this approach, you will still need to monitor performance, in case operators need extra training before the set period ends.

- Procedures relevant to the safe system of work.

These should include describing the system of work to be followed; the permit to work procedures; precautions to be in place e.g. how others not involved are to be excluded from the working area; and the emergency arrangements e.g. in the event of a breakdown whilst the platform is at height. Also the level of supervision and monitoring to be provided.

- A list of the trucks that the work platform(s) are authorised to be used with.