

1 | Requirements for housing

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Requirements

Housing systems must provide:

- A comfortable, well drained lying area
- Shelter from adverse weather
- Space to allow the animal to move, lie down and rise freely without undue risk of injury
- Access to adequate food and water to maintain health and vigour.

For a housing system to be successful, it must provide for the spatial and behavioural needs of the cow. To achieve this, it is important to understand how an animal behaves when performing routine activities such as drinking, feeding, lying, rising and walking.

The design of the system and the level of management applied can affect the health and welfare of the cows, this can have an influence on ailments such as lameness and mastitis.

1.1 Management systems

Historically, the vast majority of dairy cows were kept out at grass from early spring to late autumn, then housed for the remainder of the year. Traditionally, cows grazing pasture year round would have been defined as extensive, whereas cows housed for a large part of, if not all of, the year would be categorised as intensive. Dairy cows may also be managed on intensive grazing systems.

A number of different management systems have evolved in Great Britain (GB), each with their own advocates. These can be categorised into:

Year-round housing (or continuous housing) – describes a system of management for dairy cows where the cows are housed indoors throughout the year although heifer replacements are likely to be grazed at least during their first year. Cows may have access to an outside

loafing area. In 2010, FAWC concluded that “a cow housed all year round with no access to grazing can have a satisfactory standard of welfare”.

Seasonal housing – this is the more traditional (and still the most common) system where cows are housed during the autumn and winter (usually when ground conditions dictate), cows then graze from spring until autumn. Where grazed grass cannot meet the nutrient needs of the cows, the herd, or herd groups, will be buffer fed.

Zero-grazing – zero-grazing describes a system of pasture management. This system is most likely to be used when grass fields are difficult to access, making it more difficult for the cows to go out to graze. Instead, fresh grass is cut and fed indoors.

Grass-based system – grazing predominantly from early February to late November. Cows will either be housed for the remainder of the year or if soil type and/or farm layout allow, they may be overwintered on crops such as fodder beet.

A 2009 report on dairy cow health and welfare by the European Food Safety Authority (EFSA) stated that: “It should not be assumed that providing cows with access to pasture will automatically improve their welfare or that a high level of animal welfare cannot be achieved in zero-grazing systems.”

Woodchip pads – Woodchip pads have been used as a generic term to describe both unlined, woodchip corrals and sealed/lined overwintering pads (OWPs), known also as “stand-off” pads. Woodchip pads have gained popularity over the last ten years across Scotland, England and Wales, having been already well established in New Zealand and Ireland. In those countries, woodchip pads are considered to offer an economic means of wintering animals, reducing or avoiding the need for conventional housing.

The use of woodchip also avoids the high cost and sometimes low availability of straw for bedding. The management of the pad with regard to accumulation of slurry solids and drainage flow is of key importance to the efficient performance of the pad and the comfort and hygiene of the stock.

Many of the management systems are not used as stand-alone systems but are often mixed. There are certain areas of GB where the relatively mild climate has led to the emergence of management systems defined above which extend the grazing season and maximise the use of grazed grass. The majority of these systems will still provide covered accommodation for a part of the winter. While there are some dairy farm systems in GB where no accommodation is provided, these are likely to remain the minority.

The Defra climate change study suggested that rainfall in the UK may increase by 10% by 2050 which would require some changes to management currently undertaken.

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Irrespective of the management system selected, to maximise performance of the herd, the accommodation must fully provide the cow's needs.

Apart from the immediate requirement that any investment in new facilities or improvement of existing facilities must be financially justified, it is critical that the system fully complies with the relevant animal welfare legislation and requirements of the Red Tractor Farm Assurance Dairy Scheme (Red Tractor Scheme).