

**AN ROINN TALMHAÍOCHTA, BIA AGUS MARA**  
**DEPARTMENT OF AGRICULTURE, FOOD AND THE MARINE**

**MINIMUM SPECIFICATION FOR CALF REARING EQUIPMENT**

This is a minimum specification. Where the word “SHALL” is used, then that standard (at least) **must** be followed in grant-aided buildings. Where a procedure is “RECOMMENDED”, this is advice only on good practice.

This specification incorporates all the requirements in S.I. No. 311 of 2010, European Communities (Welfare of Farmed Animals) Regulations, 2008. Any building which does not comply with the accommodation, hygiene, and safety clauses of this specification may not be used by law. [Regulations in S.I. No. 311 of 2010 do not apply to holdings with less than 6 calves, or to holdings where calves are kept with their mothers for suckling.]

**1. SAFETY**

**1.1 Responsibility for Safety**

Applicants are reminded that they have a duty under the Safety, Health, and Welfare at Work Act 2005 to provide a safe working environment on the farm, including farm buildings, for all people who may work on that farm. There is a further duty to ensure that any contractor, or person hired to do building work, provides and/or works in a safe environment during construction.

**1.2 Safety during Construction**

**Farmer/Applicant Responsibility:** Please note that neither the Minister nor any official of the Department shall be in any way liable for any damage, loss or injury to persons, animals or property in the event of any occurrence related to the development and the applicant shall fully indemnify the Minister or any official of the Minister in relation to any such damage, loss or injury howsoever occurring during the development works. It is the applicant’s responsibility to provide a construction stage project supervisor.

**2. CALF REARING EQUIPMENT**

**2.1 Milk Feeders**

Milk feeders shall be designed so that calves have to suck milk through a teat from the milk feed container(s). Feeders and teats shall be of proprietary manufacturer (not home-made) and shall be washable and long lasting, with the teats being replaceable.

**2.2 Automatic Calf Feeder**

All Automatic calf feeders shall be computer controlled. The feeder shall be able to automatically mix and dispense milk replacer or dispense whole milk on predetermined

feeding curves for each calf and shall accommodate multiple feeding curves. It shall also monitor the drinking behaviour trends of each calf. The automatic calf feeder shall be comprised of base unit and one or more feed stations. The base unit shall comprise of a single or a dual hopper, mixing bowls and a display screen. The calves drink the milk through a teat placed in one of the feed stations.

Calves shall be monitored by means of an RFID (Radio-frequency identification) Tag/Collar and RFID reader, or by an EID (Electronic Identification) Tag/Collar and EID reader. The feeder shall be easily cleaned and maintained.

### **2.3 Milk Cart with Mixer**

All milk carts/crates shall be of proprietary manufacturer (not homemade) comprising of a stainless steel or plastic container to hold the milk. The milk cart shall comprise of a tank/ container, lid, at least two wheels and a handle to manoeuvre the cart. There shall be a valve/tap to empty the container while in an upright stationary position. The cart shall also incorporate a mixer to mix milk replacer and water. The milk cart shall be designed to be easily cleaned and maintained.

### **2.4 Calf Milk Heater**

Milk heaters shall be electrically powered and of proprietary manufacture. Units shall have an externally adjustable variable thermostat, whereby the unit automatically cuts off after reaching the required temperature. They shall be waterproof rated to IPX7. The milk heater shall be easily cleaned and maintained.

### **2.5 Calf Forage/Hay Rack**

All hay racks shall be of proprietary manufacturer and may be either wall mounted, pen divider mounted, or free standing. Where pen divider mounted and free standing, they can be single or double sided where the double version serves two adjacent pens. The hay rack shall be manufactured from galvanised steel, painted steel or durable plastic.

### **2.6 Calf Meal Trough**

Meal Troughs shall be of proprietary manufacturer and may be ground, wall or pen divider mounted, and shall be manufactured of galvanised steel, painted steel, stainless steel or durable plastic.

### **2.7 Calf Feed Barrier**

Pen fronts shall be movable, afford access to the pen, and provide openings for calves to feed. For single pens and pens for up to 6 calves, the whole front may be hinged as a gate and provided with troughs. The feed barrier shall be of a diagonal or adjustable design.

## 2.8 Calf Pen Dividers

Pen divisions shall be at least 1.2m high, may be fixed or moveable and shall be comprised of tubular steel or steel square sections. Fixed divisions shall be of tubular steel bedded in the floor. Movable divisions of tubular steel may be held on posts set in sockets in the floor and by hook and eye bolts in the walls. Alternatively, removable tubular steel field gates may be used. It is recommended that tubular steel work be galvanised. Pens and equipment with which calves may come into contact shall not cause harm or injury to the animals.

Pen dividers shall have a main frame of Circular Hollow Section (CHS tubular) steel with an outside diameter of 41.28mm and a thickness of 1.5mm. Alternatively Square Hollow Section steel may be used, of at least 38.1mm x 38.1mm x 2.0mm. The infilling shall consist of, at least, C.H.S. 30.0mm O.D. x 1.2mm or S.H.S. 38.1mm x 38.1mm x 2.0mm. Where gates are used, they shall be constructed of galvanised tubular steel properly hinged and bolted.

All steel gates shall be hot dip galvanised in accordance with EN 1461.

Where pen divisions, barriers, etc., are being fixed to already galvanised or painted stanchions, it is recommended that bolts be used rather than welded connections. Alternatively, any welding damage shall be made good as described in the protection of structural steel clause in Specification S101.

### 2.8.1 Individual Pen and Group Penning Space Requirements

Calves may be kept in single pens, in groups, or in a combination of both. Individual pens shall be a minimum of 0.8m wide by 1.25m in length for newly born calves. Calf isolation pens shall be 1.0m width by 1.7m length. Individual pens for calves except those for isolating sick calves shall not have solid walls but shall have perforated walls, which allow the calves to have direct visual and tactile contact.

When group penned, the minimum permissible pen floor space per calf weight and age is as follows:

**Table 1 - Spacing requirements for calves at different stages of production**

<u>Calf Weight</u>	<u>Calf Age(approx)</u>	<u>Space Required</u>
a) <150kg	< 19 weeks	1.5m <sup>2</sup> (1.7m <sup>2</sup> is recommended).
b) 150kg < 220kg	19 to 32 weeks	1.7m <sup>2</sup>
c) > 220kg	> 32 weeks	1.8m <sup>2</sup>

**Note:** Regulations (S.I. 311/2010) state that calves more than 8 weeks old may not be kept in individual pens unless a registered veterinary surgeon certifies that it's health or behaviour requires it to be isolated in order to receive treatment.