

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

**MINIMUM SPECIFICATION FOR PRECISION GRASS MEASURING
EQUIPMENT**

The receiving of this specification does not imply approval of a grant application. However, if written approval is issued, then this specification becomes part of the contract between the applicant and the Department of Agriculture Food and the Marine.

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.

Note that all references to other Department Specifications are to the current edition of that specification [available on the Department of Agriculture, Food and the Marine website (www.agriculture.gov.ie) under Building Specifications]. Similarly, references to Standards are to the current edition of the Irish, British or European Standard, as appropriate.

This specification covers the minimum requirements for precision grass measurement devices.

Components of precision grass measurement

The grass measurement system shall comprise three main components:

- 1) System hardware comprising the physical measurement device including an electronic sensing and communications unit,
- 2) A plate/pole with its associated handles and adjustments.
- 3) An App, on a smart device, to record the grass measurements.

Operation of precision grass measurement

The equipment shall operate on either of the following systems:

- 1) On the rising plate principle whereby a plate of known area and weight is placed on the grass being measured where it exerts a pressure on the grass and a compressed sward height is produced and accurately measured with the ground surface as a reference point, or
- 2) On the principle whereby the overall height of the grass is accurately measured with the ground surface as a reference point.

Measurements are repeated many times within a paddock and used as the basis of calculation of the available dry matter in kg per hectare. These measurements are constantly transmitted, via Bluetooth, to a smart device which is running an App compatible with the grass measuring equipment.

The precision grass measuring equipment is only eligible provided the applicant has a smart device, which is capable of running the required compatible App and communicating with the grass measuring equipment while the smart device is being carried in a pocket or under other cover (The actual smart device is not eligible for grant aid).

The equipment shall be capable of being comfortably operated by a variety persons ranging in stature.

The system shall conform to the ISO 9001 standard for mobile communications.



Figure 1: Example of a rising plate meter

Terms Used in this Specification

App – A computer application running on a smart device used in conjunction with the hardware.

Smart Devices – phones and tablets capable of running 'Apps'.