

Australian Standard™

Methods of testing soils for engineering purposes

Method 5.8.9: Soil compaction and density tests—Nuclear surface moisture-density gauges—Water content of a standard moisture block using comparison against primary blocks

1 SCOPE This Standard sets out the method for the determination of the assigned water content, by comparison against a set of primary moisture blocks of a standard moisture block, to be used for the calibration of the moisture mode of nuclear surface moisture-density gauges in accordance with AS 1289.5.8.4. The block shall consist of an array of alternate vertical aluminium or magnesium and polyethylene plates. The assignment of water content is made using comparison against a set of primary moisture blocks. Guidance on the number of blocks required for a set of standard moisture blocks is given in AS 1289.5.8.4.

A separate assigned water content for a particular standard moisture block is required for each make of gauge and, in some cases, for different models of the same make. The determination of the assigned water content for a particular standard moisture block shall be completed within one year of commencement, and the value of the assigned water content for a particular gauge make, and model if necessary, cannot be calculated until all of the predicted water content values have been obtained.

For any gauge, the determination of a predicted water content value for a standard moisture block is usually made during the calibration, but not as part of the calibration, of the gauge.

2 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS

- 1289 Methods of testing soils for engineering purposes
- 1289.5.8.4 Method 5.8.4: Soil compaction and density tests—Nuclear surface moisture-density gauges—Calibration using standard blocks
- 1289.5.8.7 Method 5.8.7: Soil compaction and density tests—Nuclear surface moisture-density gauges—Water content of a standard moisture block using hydrogen content of components
- 1289.5.8.8 Method 5.8.8: Soil compaction and density tests—Nuclear surface moisture-density gauges—Water content of a standard moisture block using proportion of water