

Compaction Control

Civil Engineering

Getting fill to the density assumed.

Proctor in the laboratory, then verification on site.

1

Run the Proctor test

Compact at several water contents to find the peak dry density.

2

Read the optimum

Maximum dry density, and the water content that produced it.

3

Set the specification

A percentage of that maximum, plus an allowed water content band.

4

Place in thin layers

Layer depth matched to the roller, not to the contractor's convenience.

5

Test in the field

Sand replacement, nuclear gauge or core, at an agreed frequency.

6

Rework what fails

Under-compacted fill is scarified and recompactd, never left in place.

Educational reference. Compaction specifications are project-specific, set by the designer and the governing standard.