


ODOT TM 158

In-Place Density of Embankment and Base using Deflection Requirements

Deflection Test

Proof Roll



1

ODOT TM 158

Method of Test for

IN-PLACE DENSITY OF EMBANKMENT AND BASE USING DEFLECTION REQUIREMENTS


Scope

This procedure covers the visual determination of density and relative compaction of soil, soil-aggregate mixes and base aggregates.

- Pumping – Vertical displacement of the top surface of the compacted layer, not directly under the vehicles tires.
- Loaded Haul Vehicle – Water truck or Construction material haul unit i.e. belly dump, end dump or similar.
- GVW – Gross Vehicle Weight.

Procedure - General

The compacted layer will be observed for deflection by using a loaded haul vehicle, loaded to the vehicles (GVW). The vehicle will be driven at a speed of 1 – 2 m/s (2 – 4 miles/hour) over the entire compacted layer. There shall be no deflection, reaction, or pumping of the ground surface (as defined above) observed under the moving vehicle's tires. It may be required that testing be performed under the observation of the Engineer.



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ODOT TM 158
Method of Test for
IN-PLACE DENSITY OF EMBANKMENT AND BASE USING DEFLECTION REQUIREMENTS

Scope


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3

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Scope

This procedure covers the visual determination of density and relative compaction of soil, soil-aggregate mixes and base aggregates.

The compacted layer will be observed for deflection by using a loaded haul vehicle, loaded to the vehicles (GVW). The vehicle will be driven at a speed of 1 – 2 m/s (2 – 4 miles/hour) over the entire compacted layer. There shall be no deflection, reaction, or pumping of the ground surface (as defined above) observed under the moving vehicle's tires. It may be required that testing be performed under the observation of the Engineer.

Procedure - General

The compacted layer will be observed for deflection by using a loaded haul vehicle, loaded to the vehicles (GVW). The vehicle will be driven at a speed of 1 – 2 m/s (2 – 4 miles/hour) over the entire compacted layer. There shall be no deflection, reaction, or pumping of the ground surface (as defined above) observed under the moving vehicle's tires. It may be required that testing be performed under the observation of the Engineer.



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