

## FORMAT FOR SYNOPSIS OF INDIAN STANDARDS

Number and Title of the Indian Standard: IS 17420:2020 Geosynthetics — Index Test Procedure for the Evaluation of Mechanical Damage Under Repeated Loading — Damage Caused by Granular Material(Laboratory Test Method) [DOC. TXD 30 (15143)]

## Scope:

This document describes an index test procedure for simulating mechanical damage to geosynthetics, caused by granular material, under repeated loading. The damage is assessed visually and by the loss of tensile strength.

Other reference tests can be used to assess the damage caused by this test. The test method described is an index test procedure, using a standard granular material, and is not intended to be used for the derivation of a reduction factor for geosynthetic reinforcement.

- a) Salient features of content: A geosynthetic specimen is placed between two layers of a standard granular material and subjected to a period of dynamic loading. The geosynthetic specimen is then removed from the test apparatus, examined for any visual damage and subjected to a mechanical test, to measure the change in mechanical properties. The result is expressed as the change (in percent) of the reference property. The visual damage is also reported.
- b) Types/Grades/classes, if any covered in the standard:NA