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भारतीय मानक ब्यूरो
BUREAU OF INDIAN STANDRADS

Draft For Comments Only

भारतीय मानक मसौदा

भूकृत्रिम – संपीड़न व्यवहार का निर्धारण — भाग 2 : अल्पकालिक संपीड़न व्यवहार का निर्धारण

Draft Indian Standard

GEOSYNTHETICS — DETERMINATION OF COMPRESSION BEHAVIOUR — PART 2: DETERMINATION OF SHORT-TERM COMPRESSION BEHAVIOUR

ICS : 59.080.70

Geosynthetics Sectional Committee, TXD 30	Last date for receipt of comments is **23 September 2025**

NATIONAL FOREWORD

(*Formal clauses will be added later*)

This Indian Standard intended to be adopted is identical with ISO 25619-2 : 2015 'Geosynthetics — Determination of compression behaviour — Part 2 : Determination of short-term compression behaviour' issued by the International Organization for Standardization (ISO).

The conditioning temperature of (20 ± 2)°C as specified in International Standard is not suitable for tropical countries like India where the atmospheric temperature is normally much higher than 20 °C. It is almost impossible to maintain this temperature specially during summer when the atmospheric temperature rises even up to 50°C. In view of the above, IS 6359 : 2023 'Method for conditioning of textiles (first revision)' which specifies a temperature of (27 ± 2) °C for conditioning of the test specimens for the tropical countries like India shall be referred.

The text of ISO Standard has been approved as suitable for publication as an Indian Standard without deviations. Certain conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

a) Wherever the words 'International Standard' appear referring to this standard, they should be read as 'Indian Standard'.
b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In the standard intended to be adopted, reference appears to certain International Standards for which Indian Standards also exist. The corresponding Indian Standards which are to be substituted in their respective places are listed below along with their degree of equivalence for the editions indicated:

International Standard	*Corresponding Indian Standard*	*Degree of Equivalence*
ISO 10318-1 Geosynthetics — Part 1: Terms and definitions	IS 13321 (Part 1):2022 Geosynthetics - (Part 1) : Terms and definitions (*first revision*)	Identical
ISO 7500-1 Metallic materials — Calibration and verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Calibration and verification of the force-measuring system	IS 1828 (Part 1) : 2022 Metallic materials — Calibration and verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Calibration and verification of the force-measuring system (*fifth revision*)	Identical

The technical committee has reviewed the provisions of the following International Standard referred in this standard intended to be adopted and has decided that these are acceptable for use in conjunction with this standard:

International Standard	*Title*
ISO 554	Standard atmospheres for conditioning and/or testing — Specifications

In reporting the result of a test or analysis made in accordance with this standard, if the final value, observed or calculated, is to be rounded off, it shall be done in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*)'.

EXTRACT OF ISO 25619-2 : 2015 GEOSYNTHETICS — DETERMINATION OF COMPRESSION BEHAVIOUR — PART 2: DETERMINATION OF SHORT-TERM COMPRESSION BEHAVIOUR

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on

that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 221 *Geosynthetics*.

This second edition cancels and replaces the first edition (ISO 25619-2:2008), which has been technically revised.

ISO 25619 consists of the following parts, under the general title *Geosynthetics — Determination of compression behaviour*:

- *Part 1: Compressive creep properties*
- *Part 2: Determination of short-term compression behaviour*

1 Scope

This part of ISO 25619 specifies an index test method for determining the short-term compressive behaviour of geosynthetics. It can be used to determine the deformation behaviour under short-term compressive stress, e.g. after exposure to stress, liquids, or light.

This part of ISO 25619 can be used for quality control purposes. It is not intended to be used for design purposes.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

- ISO 554, *Standard atmospheres for conditioning and/or testing — Specifications*
- ISO 7500-1, *Metallic materials — Verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Verification and calibration of the force-measuring system*
- ISO 10318-1, *Geosynthetics — Part 1: Terms and definitions*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 10318 and the following apply.

3.1

initial thickness

***d*i**

thickness measured in the direction of loading at a stress of 5 kPa

3.2

compressive strain

ε_{mr}

ratio of the decrease in thickness of the test specimen to its *initial thickness*, d_i (3.1) at failure/rupture, and expressed as a percentage

3.3

short-term compressive strength

σ_{mr}

ratio of the maximum compressive force, F_{mr}, reached when the pressure at collapse is less than 1 MPa, to the initial cross-sectional area of the test specimen

Note 1 to entry: See Figure 2.

FORMAT FOR SENDING COMMENTS ON BIS DOCUMENTS

(Please use A4 size sheet of paper only and type within fields indicated. Comments on each clause/sub clause/table/fig etc. be started on a fresh box. Information in column 3 should include reasons for the comments and suggestions for modified working of the clauses when the existing text is found not acceptable. Adherence to this format facilitates Secretariat's work)

Please e-mail your comments to txd@bis.gov.in

NAME OF THE COMMENTATOR/ORGANIZATION:

DOCUMENT NO: TXD 30 (28449) WC

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Item, Clause Sub-Clause No. Commented upon (Use Separate Box afresh)	**Comments**	**Specific Proposal (Draft clause to be add/amended)**	**Remarks**	**Technical References and justification on which (2), (3), (4) are based**
(1)	**(2)**	**(3)**	**(4)**	**(5)**