**IS 17275 (Part 2) : 2024**

***भारतीय मानक***

***Indian Standard***

**ISO 22568- 4 : 2021**

**Doc: CHD 19 (25588) F**

**October 2024**

**पैरों की सुरक्षा के लिए बींध प्रतिरोधी**

**तले — विशिष्टि**

भाग 2 अधात्वीय बिंध पतिरोधी तले

(***पहला पुनरीक्षण***)

**Perforation Resistant Inserts for Protection of Feet — Specification**

Part 2 Non-Metallic Perforation Resistant Inserts

(*First Revision*)

ICS 13.34.50

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भारतीय मानक ब्यूरो

BUREAU OF INDIAN STANDARDS

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October 2024 Price Group X

Footwear Sectional Committee, CHD 19

NATIONAL FOREWORD

This Indian Standard (First Revision) (Part 2) which is identical with ISO 22568-4 : 2021 ‘Foot and leg protectors — Requirements and test methods for footwear components Part 4: Non-metallic perforation resistant inserts’ issued by the International Organization for Standardization (ISO) was adopted by the Bureau of Indian Standards on the recommendation of the Sectional Committee and approval of the Footwear Chemical Division Council.

Perforation resistant inserts are necessary components of safety and protective footwear and they provide protection to the wearer against sharp objects lying on the ground.

Under the general tittle ‘Perforation Resistant Inserts for Protection of Feet — Specification’ this standard has been published in two parts. This Part 2 deals with nonmetallic perforation resistant inserts while, Part 1 deals with metallic perforation resistant inserts.

This standard was originally published in 2019 as an identical adoption of ISO 22568-4: 2019 under dual numbering. This first revision of the standard has been undertaken in order to adopt the latest version of ISO 22568-4: 2021. This standard specifies requirements and test methods for the non-metallic inserts with resistance against mechanical perforation, intended to function as components of PPE footwear.

In this revision following modifications have been done:

1. **Table 2**, changes in the type names from X and Y to PL and PS, new requirements (“tent effect” and minimum value of 950 N);
2. New nail, *see* Figure **B.1** (conical shape instead of pyramidal);
3. New definition in [**3.2**;](https://www.iso.org/obp/ui/en/#iso%3Astd%3Aiso%3A22568%3A-4%3Aed-2%3Av1%3Aen%3Asec%3A3.2)
4. Figure **B.3** new dimension of the nail;
5. Annex **C** and the reference material have been deleted.

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:

1. Wherever the words ‘International Standard’ appear referring to this standard, they should be read as ‘Indian Standard’.
2. 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 this adopted standard, reference appears to certain International Standards for which Indian Standards also exist. The corresponding Indian Standards, which are to be substituted in their places, are listed below along with their degree of equivalence for the editions indicated:

|  |  |  |
| --- | --- | --- |
| *International Standard* | *Corresponding Indian Standard* | *Degree of Equivalence* |
| ISO 105-E04 : 2013 — Textiles — Tests for colour fastness — Part E04: Colour fastness to perspiration | IS 105-E04 : 2013 — Textiles — Tests for colour fastness Part E04 — Colour fastness to perspiration *(first revision)* | Identical with  ISO 105-E04 : 2013 |
| ISO 20344 — Personal protective equipment — Safety footwear | IS 15298 (Part 1) : 2015 — Personal protective equipment Part 1 — Test methods for footwear (*second revision* ) | Identical with  ISO 20344 : 2011 |
| ISO 20345 — Personal protective equipment — Safety footwear | IS 15298 (Part 2) : 2016 —  Personal protective equipment: Part 2 — Safety footwear (*second revision*) | Identical with  ISO 20345 : 2011 |
| ISO 20346 — Personal protective equipment — Protective footwear | IS 15298 (Part 3) : 2019 — Personal protective equipment: Part 3 — protective footwear (*second revision*) | Identical with  ISO 20346 : 2014 |
| ISO 20347 — Personal protective equipment — Occupational footwear | IS 15298 (Part 4) : 2017 —  Personal protective equipment: Part 4 — occupational footwear *(second revision)* | Identical with  ISO 20347 : 2012 |

The standard also makes a reference to the BIS Certification Marking of the product, details of which are given in National Annex A.

In this adopted standard, reference appears to certain International Standards where the standard atmospheric conditions to be observed are stipulated which are not applicable to tropical/subtropical countries. The applicable standard atmospheric conditions for Indian conditions are 27 °C ± 2 °C and (65 ± 5) percent, relative humidity and shall be observed while using this standard.

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*)’.

**National Annex A**

# (National Foreword)

**A-1 BIS CERTIFICATION MARKING**

The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provision of the *Bureau of Indian Standards Act*, 2016 and the rules and regulations framed there under, and the products may be marked with the standard mark.