



Behaviour of toecaps (thermal and chemical)

Objective

This test verifies impact resistance after conditioning in temperatures and chemical.

Principle

For Class I and II non-metallic tips, an impact test is carried out after various temperature conditions and contact with chemical.

When non-metallic toecaps are subject to each single one of the treatments according to ISO 20344:2021 , 5.6.2, the clearance under the toecap, at the moment of impact, shall not be less than the appropriate value . In addition, the non-metallic toecap shall not develop delamination or sharp edges or any cracks passing through the material (i.e. through which light can be seen). During the assessment of the non-metallic toecap designed with perforations the criteria whether light can be seen shall not be applied to the perforation.

Type: [Physical and mechanical test](#)

Standards: [EN ISO 20344 §5.6.2](#) / [EN ISO 20345 §5.3.2.5](#)

Product: [Footwear](#)

Criteria: [Mechanical risk](#) / [PEE](#)

Component: [Whole shoe](#)

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