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Hearing protectors - Guidance on selection of individual fit testing methods

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This standard includes the English version of the European Standard.

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## Hearing protectors - Guidance on selection of individual fit testing methods

Protecteurs individuels contre le bruit -  
Recommandations relatives au choix des méthodes  
individuelles de contrôle de l'ajustement

Gehörschützer - Leitfaden zur Auswahl von  
Prüfverfahren für den individuellen Sitz

This European Standard was approved by CEN on 13 September 2021.

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**EN 17479:2021 (E)**

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## **European foreword**

This document (EN 17479:2021) has been prepared by Technical Committee CEN/TC 159 “Hearing protectors”, the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2022, and conflicting national standards shall be withdrawn at the latest by May 2022.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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## EN 17479:2021 (E)

### Introduction

The need for the use of hearing protectors is obvious nowadays. Appropriate hearing protection is chosen based on different selection criteria such as required sound attenuation, comfort, workplace environment and a possible need for communication, audibility of important sounds etc. Different selection criteria for hearing protector selection are given in EN 458:2016 “Hearing protectors — Recommendations for selection, use, care and maintenance — Guidance document” [4].

As appropriate sound attenuation should be key in this selection process, this should be compared to the user’s need in two steps. Firstly, appropriate hearing protection should be selected based on the attenuation data from the REAT test according to EN ISO 4869-1:2018 [7] and EN ISO 4869-2:2018 [8], as provided by the manufacturer. Secondly, by using individual fit testing methods the effective attenuation can be assessed (e.g. acoustic or pressure sealing, personal attenuation rating, etc.).

In addition, the effective attenuation can be estimated and compared to the required sound attenuation. Whilst fit testing can play a valuable role in the selection and usage, it is no substitute for conformity testing.

Fit testing can also be used to increase the awareness of the user on the importance of a proper fit. It can help the user achieve a fit that maximizes the likelihood of that user receiving the expected level of protection. It could also form part of the training for safety engineers, healthcare specialists and supervisors, to provide a good understanding of the importance of a proper fitting and it can also be a helpful training aid for the user.

This document gives practical guidance for the appropriate selection of fit testing methods, their uses and limitations.

This document does not specify the technical requirements for manufacturing fit testing equipment.

## **1 Scope**

This document gives guidelines for the appropriate selection of fit testing methods and measurement, and provides practical guidelines on fit testing methods, their uses and limitations.

This document does not specify the technical requirements for manufacturing fit testing equipment.

## **2 Normative references**

There are no normative references in this document.

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**