

ANSI-S3.19

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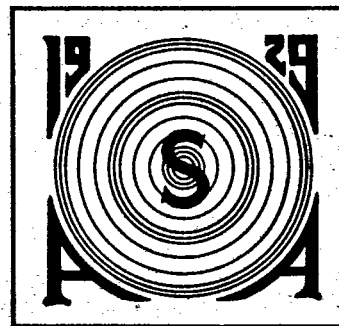
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ANSI S3.19-1974 (R 1979)
(ASA 1-1975)

American National Standard

**METHOD FOR THE MEASUREMENT
OF REAL-EAR PROTECTION
OF HEARING PROTECTORS
AND PHYSICAL ATTENUATION
OF EAR MUFFS**



**Standards Secretariat
Acoustical Society of America
335 East 45th Street
New York, New York 10017**

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ASA STD 1-1975

ACOUSTICAL SOCIETY OF AMERICA STANDARD
Method for the Measurement of Real-Ear Protection of
Hearing Protectors and Physical Attenuation of Earmuffs

Standards Secretariat
Acoustical Society of America
335 East 45th Street
New York, New York 10017

Published by the American Institute of Physics for the Acoustical Society of America

AMERICAN NATIONAL STANDARDS ON ACOUSTICS

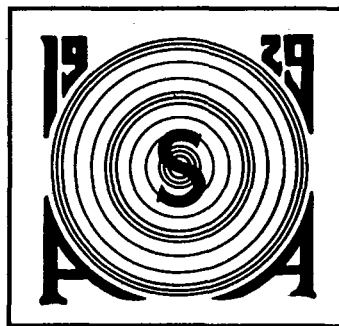
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These standards are developed as a public service to provide standards useful to the public, industry, and consumers, and to Federal, State, and local governments.

This standard was approved by the American National Standards Institute as ANSI S3.19-1974 on 14 August 1974 and reaffirmed by ANSI in 1979.

An American National Standard implies a consensus of those substantially concerned with its scope and provisions. An American National Standard is intended as guide to aid the manufacturer, the consumer, and the general public. The existence of an American National Standard does not in any respect preclude anyone, whether he has approved the standard or not, from manufacturing, marketing, purchasing, or using products, processes, or procedures not conforming to the standard. American National Standards are subject to periodic review and users are cautioned to obtain the latest editions.

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FOREWORD

(This Foreword is not a part of Acoustical Society of America Standard Method for the Measurement of Real-Ear Protection of Hearing Protectors and Physical Attenuation of Earmuffs, ASA STD 1-1975.)

This standard specifies the definitions, requirements, and procedures for the measurement of acoustical performance of personal hearing protection devices. It is a revision of American National Standard for the Measurement of the Real-Ear Attenuation of Ear Protectors at Thresholds, Z24.22-1957. The principal changes are the inclusion of a method for the measurement of physical attenuation of earmuff devices and the substitution of narrow bands of noise instead of discrete tones as the test stimuli. The physical measurement method is intended for production test and engineering design; it is not suitable for earplug testing. This standard is not appropriate to the evaluation of hearing-protective devices designed to operate exclusively against impulsive noise.

Performance requirements for personal hearing-protective devices and requirements for their selection, use, care, and maintenance will be specified separately in a future American National Standard.*

American National Standards Committee on Bioacoustics S3, under whose jurisdiction this standard was developed, has the following scope:

Standards, specifications, and methods of measurement and testing in the fields of psychological and physiological acoustics, including aspects of general acoustics, noise, shock, and vibration, which pertain to biological safety, tolerance, and comfort.

Suggestions for improvement of this standard will be welcome. They should be sent to the Standards Secretariat, Acoustical Society of America, 335 East 45th Street, New York, New York 10017.

Robert W. Benson, *Chairman*

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*A standard on Occupational and Educational Personal Hearing-Protective Devices is under development by American National Standards Committee Z137.