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**NATIONAL STANDARD OF THE  
PEOPLE'S REPUBLIC OF CHINA**

**GB/T 47259-2026**

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**Noise transmission loss test method for aircraft fuselage  
structures**

航空器机身结构隔声试验方法

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## Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1. Structure and Drafting Rules of Standardization Documents". Drafting. Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed and is under the jurisdiction of the National Aircraft Standardization Technical Committee (SAC/TC435). This document was drafted by: China Aeronautical Integrated Technology Research Institute, China Aircraft Strength Research Institute, and Commercial Aircraft Corporation of China, Ltd. Naval Aircraft Design and Research Institute, Aero Engine Corporation of China (AECC) Commercial Aircraft Engine Co., Ltd., China Helicopter Design and Research Institute, Aviation Industry Corporation of China (AVIC) The group includes Xi'an Aircraft Design Institute and AVIC Xi'an Aircraft Industry Co., Ltd. The main drafters of this document are. Yan Hao, Lü Baoliang, Yan Qun, Sun Yifeng, Xu Kangle, Song Xiao, Gao Fei, Wang Fengjiao, Liu Xiaochuan, Gao Liwen, and Dong Ningjuan. Gu Jintao, Ren Haitao, Hou Feng, Xu Honggang, Li Qian, Lu Yujie. Test methods for sound insulation of aircraft fuselage structure

## 1 Scope

GB/T 47259-2026 is the Chinese national standard covering how much noise a fuselage panel keeps out - measured between reverberant and anechoic chambers, which is what determines the cabin noise a passenger experiences and how much insulation weight the aircraft has to carry to achieve it. First edition, in force since 1 October 2026. It was issued on 31 March 2026 and takes effect on 1 October 2026, as a first edition. The document is under the responsibility of the Standardization Administration of China. This page is published from the official record of the 2026 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

This document specifies the general requirements for sound insulation testing of aircraft fuselage structures, including the purpose, categories, items, and environment. It also

describes the... Test methods for sound insulation of fuselage wall panel structure and test methods for sound insulation of fuselage compartment structure. This document applies to sound insulation testing of aircraft fuselage structures in a laboratory environment. It aims to obtain the sound attenuation of aircraft sections or the entire aircraft. At that time, measurements were taken in accordance with the test method for sound insulation of fuselage section structure.

## 2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 3785.1 Electroacoustic sound level meters - Part

## 3 Terms and Definitions

The terms and definitions defined in GB/T 3947-1996 and GB/T 41886-2022, as well as the following terms and definitions, apply to this document.

3.1 In a given noise environment, the ratio of transmitted sound intensity to incident sound intensity through the wall panel.

3.2 sound insulation In a sound transmission system, it represents the decrease in sound pressure level from one point to another. [Source: GB/T 41886-2022, 3.1.9, with modifications]

3.3 diffuse sound field A sound field with uniform energy density and random distribution in all directions of propagation. [Source: GB/T 3947-1996, 4.63]

3.4 reverberation time A physical quantity that describes how quickly indoor sound decays.