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

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**Non-destructive testing - Acoustic emission testing -
Measurement method for acoustic emission signals in concrete**

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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.

This document is equivalent to ISO 16836.2019 "Test method for non-destructive testing of acoustic emission signals in concrete".

Please note that some content in this document may be subject to patents. The publisher of this document assumes no responsibility for identifying patents.

1 Scope

This document specifies the test methods for acoustic emission signals from concrete.

2 Normative reference documents

The contents of the following documents constitute essential provisions of this document through normative references in the text. Among them, the dated quotations

For undated referenced documents, only the version corresponding to that date applies to this document; for undated referenced documents, the latest version (including all amendments) applies to

this document.

ISO 12713 Primary calibration of acoustic emission detection transducers for non-destructive testing (Non-destructive testing-Acoustic

Note. GB/T 19800-2005 First-level calibration of acoustic emission detection transducers for non-destructive testing (ISO 12713.1998, IDT)

ISO 12714 Secondary calibration of acoustic emission sensors for non-destructive testing (Non-destructive testing-

Note. GB/T 19801-2005 Secondary calibration of acoustic emission sensors for non-destructive testing of acoustic emissions (ISO 12714.1999, IDT)

tion-Vocabulary)

Note. GB/T 12604.4-2005 Non-destructive testing terminology acoustic emission testing (ISO 12716.2001, IDT)

ISO /T R13115 Absolute calibration method for acoustic emission sensors based on reciprocity technology for non-destructive testing (Non-destructivetes-

3 Terms and definitions

The terms and definitions defined in ISO 12716 and below apply to this document.

The URLs for the terminology databases used in standardization work maintained by ISO and IEC are as follows.

3.1

Acoustic emission acousticemission

AE

The energy of the local energy source in the material is rapidly released to generate transient elastic waves.

3.2

Acoustic emission signalAEmignal

An electrical signal generated by the conversion of AE waves (3.3) (elastic waves) detected by the sensor.

3.3

AEwaveAEwave

A wave that can be detected as an impact (3.5) on one or more channels (3.4).