



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

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**Ergonomics of the thermal environment - Vocabulary and
symbols**

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

The translation method used in this standard is equivalent to ISO 13731.2001 Ergonomic Terms and Symbols for Thermal Environments.

This standard has made the following editorial changes.

---Update the international standards that have been partially replaced in the references.

This standard was proposed and managed by the National Ergonomics Standardization Technical Committee (SAC/TC7).

Drafting organizations of this standard. Guangdong Midea Refrigeration Equipment Co., Ltd., China National Institute of Standardization, Beijing University of Aeronautics and Astronautics, Energy Efficiency Division

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1 Scope

This standard gives definitions for the relevant physical quantities in the field of ergonomics of the thermal environment, and lists the corresponding symbols and units.

The main purpose of this standard is.

--- Give definitions and symbols of physical quantities in ergonomics of thermal environment;

---Provide terminology and symbol references for the preparation of standards or other publications related to the ergonomics of the thermal environment.

Note. This standard allows the correct addition of terms and symbols in the revision of new

standards or current standards.

2 Terms and definitions

2.1

Absolute radiant heat flow

The total emission rate of energy per unit area in a certain direction of an object.

2.2

Air temperature

The dry bulb temperature of the air surrounding the human body.

2.3

Air velocity

Mean air velocity

The average flow velocity of air, that is, the size of the air velocity vector at the measured position in unit time.

2.4

Instantaneous air velocity air velocity at the time

At time t , measure the magnitude of the air velocity vector at the point.

2.5

Allowable exposure time

Duration limited exposure

Recommended maximum exposure time.

2.6

Atmospheric pressure

Outdoor atmospheric pressure, the value is shown on the barometer.

2.7

Auditory canal temperature

The temperature measured by a sensor located on the inner wall of the ear canal near the eardrum.

2.8

Basal metabolic rate basal metabolic rate

In the heat-neutral state, the human body is awake, fasting and resting energy metabolism rate.

2.9

Body heat gain or loss

The increase or decrease of body heat caused by the imbalance of heat production and heat dissipation of the human body is usually expressed by the increase or decrease of heat per unit body surface area.