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

GB/T 45122-2024

**Guidelines for age-friendly accessible design of consumer
products**

消费品适老无障碍设计指南

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part

1. Structure and drafting rules for standardization documents" Drafting. Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents. This document is proposed and coordinated by the National Technical Committee on Ergonomics Standardization (SAC/TC7). This document was drafted by: China National Institute of Standardization, Hefei Midea Washing Machine Co., Ltd., Guangdong Midea HVAC Equipment Co., Ltd., Beijing Jiaotong University, Xiamen Tengshengxing Electronic Technology Co., Ltd., Qingdao Haigao Design and Manufacturing Co., Ltd., Automation Research Institute of Chinese Academy of Sciences Institute, China Architecture Design & Research Group Co., Ltd., Chongqing University, Zhongbiao Energy Efficiency Technology (Beijing) Co., Ltd., Arrow Home Furnishing Group Co., Ltd., Qingdao Hisense Hitachi Air Conditioning System Co., Ltd., Guangdong Midea Refrigeration Equipment Co., Ltd., Hisense Visual Technology Co., Ltd., Xiaomi Smart Energy Appliances (Wuhan) Co., Ltd., Hisense Air Conditioning Co., Ltd., Bear Electric Appliance Co., Ltd., Nantong University Affiliated Hospital, Hisense Refrigerator Co., Ltd. Company, Guangdong Zhige Air Conditioning Co., Ltd., and Opp Home Furnishing Co., Ltd. The main drafters of this document are: Zhang Xin, Luo Ling, Li Yicheng, Ran Linghua, Zhang Yiwen, Hu Huimin, Fang Weining, Wang Rui, Wang Danli, Wang Yu, Zhou Jia, Ge Meng, Jiang Nan, Zhong Yixiong, Zhang Wenqiang, Xie Yuerong, Chen Jian, Shang Tingting, Wang Yedong, Zhang Jufa, Shan Lianyu, Bie Qingfeng, Yin Xunlan, Gu Zhifeng, Zhang Xiangping, Hu Gen, Zhang Xinyu, Li Hongwei, Tian Hao, Ding Yao, Wang Yiran, Ren Zhaoting, Zheng Chunyuan, Li Xia, Zheng Chongkai, Chen Jijun, Chen Shouhai, Liu Wei, Li Jiaming, Huang Jiale, and Lin Kai. Guidelines for Elderly-Friendly Design of Consumer Products

1 Scope

GB/T 45122-2024 gives the guidelines for designing consumer products that older people can actually use. The failures are ordinary and well known: a control marked in grey on grey, a beep at four kilohertz, a lid needing a grip strength that halves after seventy, a menu that assumes the user will remember where they were. The standard turns those into design input. It sets the objectives and strategies of age-friendly accessible design, then the user characteristics that matter - visual, auditory, tactile, olfactory and cognitive characteristics,

human body morphology and biomechanical characteristics - and derives from them the design guidance on information presentation, on the operating interface and controls, on the physical form and handling of the product, on safety, and on the instructions and packaging. It takes effect on 1 July 2025.

This document provides the characteristics of elderly users and design points that need to be considered in the barrier-free design of consumer products for the elderly, based on the law of aging decline. Provide technical guidance for designs that meet the special needs of the elderly user group. This document is applicable to the design of consumer products whose target users include but are not limited to the elderly, and is used as a reference for the design of products for the elderly.

Note. Elderly products refer to products that are targeted only at the elderly.

2 Normative references

This document has no normative references.

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Age-friendly The attributes that adapt to the physiological and psychological characteristics of the elderly and meet their needs for safe, healthy, efficient and comfortable use.

3.2 accessible design Focus on user differences, with the goal of maximizing the number of potential users who can easily use the system in different contexts. design. Note

1.This objective can be achieved by.

a) Design the system so that most users can use it easily without any modification;

b) Make the system suitable for different users (provide a user interface with wide applicability);

c) have standardized interfaces that are compatible with assistive products and assistive technologies. Note

2.Terms such as barrier-free design, universal design, and inclusive design have basically the same meaning and are often used interchangeably. [Source: ISO /IEC Guide 71.2014, 2.19]

3.3 usability Based on effectiveness, efficiency and satisfaction, a system, product or service can be used to achieve specific goals in a specific usage scenario. The extent of use by a particular user. Note 1 to entry. "Specific" users, goals, and usage scenarios refer specifically to the specific combination of users, goals, and usage scenarios for which

usability is considered. Note 2 to entry. The term "usability" is also used as a modifier for design knowledge, capabilities, activities, and design attributes related to usability, such as usability expertise, usability Practitioners, usability engineering, usability methods, usability evaluation, and usability heuristics. [Source: GB/T 18978.11-2023, 3.1.1]

3.4 User Individuals that interact with the system. [Source: GB/T 18978.11-2023, 3.1.7, modified]

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