



Designation: F3021 – 17

Standard Specification for Universal Design of Fitness Equipment for Inclusive Use by Persons with Functional Limitations and Impairments¹

This standard is issued under the fixed designation F3021; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

INTRODUCTION

The goal of this specification is to promote proper design and manufacturing practices for fitness equipment intended for use by persons with functional limitations and impairments. Through these specifications, this standard aims to assist designers and manufacturers in reducing the possibility of injury when these products are used in accordance with the operational instructions.

The equipment user must recognize, however, that the standard alone will not necessarily prevent injuries. Like other physical activities, exercise involving fitness equipment involves the risk of injury, particularly if the equipment is used improperly or not properly maintained. In addition, users with physical limitations should seek medical advice and instruction from the fitness facility prior to using this equipment. Certain physical conditions or limitations may preclude some persons from using this equipment as intended by the manufacturer, and using this equipment may increase the risk of injury.

1. Scope

1.1 This specification² established additional requirements not set forth in the referenced ASTM standards for the design of commercial fitness equipment to increase access and user independence by people with functional limitations or impairments.

1.2 The intent of this specification is to ensure that the fitness product being designed for inclusive use by individuals with and without functional limitations or impairments remains functional and safe when the equipment is operated according to the manufacturer's operational instructions.

1.3 It is the intent of this specification to specify products for indoor use in a commercial environment by individuals age 13 and above.

1.4 Products designed to meet this specification must not be automatically classified as fit for medical or rehabilitation fitness purposes. Products intended for medical use should comply with any applicable international or national standards.

1.5 Where users are exercising from a wheelchair, it is the intent of this specification to specify products for use by individuals using manual or powered wheelchairs (including scooters) (A1.4.5).

1.6 This standard does not purport to address the needs of every possible user and recognizes that access will not be possible for all individuals or all types of assistive technologies.

1.7 Designers shall use this specification in conjunction with other ASTM fitness equipment standards and its accompanying test method.

1.8 The values stated in SI units are to be regarded as standard. The values given in parentheses are for information only.

1.9 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

NOTE 1—Additional specifications applicable to specific pieces of equipment, such as treadmills, bicycles, ellipticals, and strength equipment are currently under development.

1.10 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

¹ This specification is under the jurisdiction of ASTM Committee F08 on Sports Equipment, Playing Surfaces, and Facilities and is the direct responsibility of Subcommittee F08.30 on Fitness Products.

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