



Standard Specification for Elliptical Trainers¹

This standard is issued under the fixed designation F2810; 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 elliptical training equipment. 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 a 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 or instruction from the fitness facility, or both, prior to using this equipment. Certain physical conditions or limitations may preclude some persons from using this equipment properly and without increasing the risk of serious injury.

1. Scope

1.1 This specification establishes parameters for the design and manufacture of elliptical training equipment as defined in **3.1** for use in an indoor environment or setting.

1.2 It is the intent of this standard to specify fitness products for use only by an individual age 13 or older.

1.3 This standard is to be used in conjunction with Specification **F2276** and Test Methods **F2811**. All specifications in this standard supersede those of Specification **F2276** where applicable.

1.4 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.

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

1.6 *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 appro-*

priate safety and health practices and determine the applicability of regulatory limitations prior to use.

2. Referenced Documents

2.1 *ASTM Standards:*³

F1749 Specification for Fitness Equipment and Fitness Facility Safety Signage and Labels

F2276 Specification for Fitness Equipment

F2811 Test Methods for Evaluating Design and Performance Characteristics of Elliptical Trainers

F3021 Specification for Universal Design of Fitness Equipment for Inclusive Use by Persons with Functional Limitations and Impairments

3. Terminology

3.1 *Definitions*—The terms listed below are unique to this specification. For terms not defined below, refer to Specifications **F2276** and **F3021**.

3.1.1 *adjustable guide system, n*—components that allow the user to vary the angle or position of a guide surface.

3.1.2 *control panel, n*—equipment/user interface device for controlling the operation of, or displaying information about the operational state of the equipment.

3.1.3 *elliptical trainer, n*—training equipment that can produce a continuous, predominately elliptical motion path. Elliptical training functions as a continuous non-circular closed loop cycle.

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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³ For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.