



Standard Specification for Competition Wrestling Mats¹

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1. Scope

1.1 This specification covers competition wrestling mats used at the high school and college levels. All mat constructions are included, except felt-core mats enclosed in sewn covers. The intended use of this standard is for the qualification of construction designs.

NOTE 1—The known constructions, as of the issuance of this specification are: (1) closed-cell foam cores with polyvinyl chloride (PVC) or PVC copolymer coatings, or both, which are integral parts of the mat; (2) closed-cell foam cores with attached fabric cover; (3) foam cores, either open- or closed-cell enclosed in sewn, loose covers, and (4) molded open-cell PVC foam with a dense skin on one surface which is an integral part of the mat.

NOTE 2—There is no equivalent ISO standard.

1.2 This specification covers mats used in the two major styles of wrestling: U.S. collegiate or high school, and international free style.

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

1.4 *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. See Note 5 and Note 8 for specific hazards statements.*

2. Referenced Documents

2.1 ASTM Standards:

- D 412 Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers—Tension²
- D 1056 Specification for Flexible Cellular Materials—Sponge or Expanded Rubber³
- D 1682 Methods of Test for Breaking Load and Elongation of Textile Fabrics⁴
- F 355 Test Method for Shock Absorbing Properties of

Playing Surface Systems and Materials⁵

2.2 *National Collegiate Athletic Association Document:*⁶
NCAA Official Wrestling Rules

2.3 *U.S. Wrestling Federation Document:*⁷

International Wrestling Rules, Freestyle, and Greco-Roman

2.4 *National Federation of State High School Associations Document:*⁸

Official High School Wrestling Rules

3. Terminology

3.1 Definitions of Terms Specific to This Standard:

3.1.1 *coating*—Polyvinyl chloride (PVC) or PVC copolymer, or both, or other suitable polymeric materials.

3.1.2 *cure*—Evaporation of solvents from coating and coated foam mats only.

4. Classification

4.1 Classify mats in accordance with the style of wrestling being performed.

4.2 The classifications are:

4.2.1 *Type I*—U.S. collegiate or high school style wrestling.

4.2.2 *Type II*—International free style wrestling.

5. Significance and Use

5.1 The mats shall be constructed to yield the values listed in Table 1 throughout the mat area under the conditions of the manufacturer's warranty.

5.2 Special requirements for the mats shall be subject to purchase agreements. Special requirements shall never reduce any of the basic requirements listed in this standard.

5.3 Good manufacturing practices shall be used in the construction and inspection of the mats.

6. Physical Properties

6.1 *Tensile Strength*—The minimum tensile strength of the cover and foam system shall be 8.8 N/mm (50 lbf/in.).

7. Performance Requirements

7.1 The requirements listed in this section and in Table 1 are minimal for new and reconditioned mats.

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² *Annual Book of ASTM Standards*, Vol 09.01.

³ *Annual Book of ASTM Standards*, Vol 08.01.

⁴ *Annual Book of ASTM Standards*, Vol 07.01.

⁵ *Annual Book of ASTM Standards*, Vol 15.07.

⁶ NCAA, Shawnee Mission, KN 66222.

⁷ US Wrestling Federation, 405 West Hall of Fame Ave., Stillwater, OK 74074.

⁸ National Federation of State High School Associations, P.O. Box 20626, Kansas City, MO 64195.