



Standard Specification for Industrial Woven Wire Cloth¹

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INTRODUCTION

Industrial wire cloth can be produced in many thousands of combinations of size and shape of opening, wire diameter, type of weave, and metal. This specification covers woven wire cloth for industrial use, including the separation of particles. Its purpose is to introduce standard terms and definitions, to note the normal range of specifications woven, and to establish tolerances and requirements. This specification excludes sieve cloth from its scope, since this is covered under Specification [E11](#). If a user has a specific application for industrial wire cloth that is not within the scope of this specification, it is recommended that the wire cloth supplier be consulted.

1. Scope

1.1 This specification covers industrial woven wire fabric, referred to as wire cloth, for general use including the separation of particles. Wire cloth can be made of any primary metal or metal alloy wire that is suitable for weaving. This specification does not apply to the following special types of wire cloth: filter cloth or dutch weave (see [Appendix X1](#)), fourdrinier and cylinder cloth, galvanized hardware cloth, insect wire screening, spiral weave wire cloth, testing sieve cloth, or welded wire cloth.

1.2 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.3 *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.*

2. Referenced Documents

2.1 ASTM Standards:²

[A510](#) Specification for General Requirements for Wire Rods and Coarse Round Wire, Carbon Steel

[A555/A555M](#) Specification for General Requirements for Stainless Steel Wire and Wire Rods

[E11](#) Specification for Woven Wire Test Sieve Cloth and Test Sieves

[E1638](#) Terminology Relating to Sieves, Sieving Methods, and Screening Media

[E2814](#) Guide for Industrial Woven Wire Filter Cloth

3. Terminology

3.1 *Definitions*—For definitions of related terms, refer to Terminology [E1638](#).

3.2 Definitions of Terms Specific to This Standard:

3.2.1 *aperture, n*—the opening in a screening or sieving medium.

3.2.2 *aperture size, n*—the dimension defining an opening in a screening or sieving medium (see also *width opening*).

3.2.3 *bolting cloth, n*—wire cloth meeting a group of specifications that are typical for higher sifting capacities and which can speed the bolting action of vibratory screening machines, manufactured based on using a limited number of wire diameters for a large group of mesh designations.

3.2.3.1 *Discussion*—“Bolting Grade” designations are often misused; and should not be specified without a wire diameter, as the designations have become non-standard.

3.2.4 *firmness, n*—a subjective term referring to the planar rigidity of wire cloth (as a roll good, not mounted in a frame).

3.2.4.1 *Discussion*—Firmness is established by the tensile strength of the material, the relationship of the mesh to wire diameters, the type of weave, and amount of crimp in the wires. The absence of firmness in wire cloth is termed *sleaziness*.

3.2.5 *market grade wire cloth, n*—wire cloth meeting a group of specifications that are typical for use in the general

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² 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.