Designation: A 975 – 97 (Reapproved 2003)

Standard Specification for Double–Twisted Hexagonal Mesh Gabions and Revet Mattresses (Metallic–Coated Steel Wire or Metallic-Coated Steel Wire With Poly(Vinyl Chloride) (PVC) Coating)[1]

This standard is issued under the fixed designation A 975; 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.

1. Scope

1.1 This specification covers gabions and revet mattresses produced from double-twisted metallic-coated wire mesh, and metallic-coated wire for lacing wire, stiffeners, and fasteners used for manufacturing, assembling, and installation of the product. This specification also covers gabions and revet mattresses in which the wire mesh, lacing wire, and stiffeners are poly(vinyl chloride) (PVC) coated after the metallic coating.

1.2 Double-twisted wire mesh for gabions and revet mattresses is produced in different styles, based on type of coating, as described in Section 4.

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

1.4 This specification references notes and footnotes which provide explanatory material. These notes and footnotes (excluding those in tables and figures) shall not be considered as requirements of this specification.

1.5 The following safety hazards caveat pertains only to the test methods portion, Section 13, of this specification: *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 consult and establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 *ASTM Standards:*

A 90/A 90M Test Method for Weight (Mass) of Coating on Iron and Steel Articles with Zinc or Zinc-Alloy Coating[2]

A 313 Specification for Chromium-Nickel Stainless and Heat-Resisting Steel Spring Wire[3]

A 370 Test Methods and Definitions for Mechanical Testing of Steel Products[3]

A 428 Test Method for Weight of Coating on Aluminum Coated Iron and Steel Articles[2]

A 641 Specification for Zinc Coated (Galvanized) Carbon Steel Wire[2]

A 764 Specification for Steel Wire, Carbon, Drawn Galvanized and Galvanized at Size for Mechanical Springs[3]

A 809 Specification for Aluminum-Coated (Aluminized) Carbon Steel Wire[2]

A 856/A 856M Specification for Zinc-5% Aluminum-Mischmetal Alloy-Coated Carbon Steel Wire[2]

A 902 Terminology Relating to Metallic Coated Steel Products[2]

B 117 Test Method of Salt Spray (Fog) Testing[4]

D 412 Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers-Tension[5]

D 746 Test Method for Brittleness Temperature of Plastics and Elastomers by Impact[6]

D 792 Test Methods for Specific Gravity (Relative density) and Density of Plastics by Displacement[6]

D 1242 Test Methods for Resistance of Plastic Materials to Abrasion[6]

D 1499 Practice for Operating Light-and Water-Exposure Apparatus (Carbon-Arc Type) for Exposure of Plastics[6]

D 2240 Test Method for Rubber Property-Durometer Hardness[5]

G 23 Practice for Operating Light-Exposure Apparatus (Carbon-Arc Type) With and Without Water for Exposure of Nonmetallic Materials[7]

3. Terminology

3.1 *Definitions:*

3.1.1 Refer to Terminology A 902 for general terminology relating to metallic-coated steel products.

3.2 *Definitions of Terms Specific to This Standard:*

3.2.1 *gabion*, *n*—a double-twisted wire mesh container of variable sizes, uniformly partitioned into internal cells, interconnected with other similar units, and filled with stone at the

[1] This specification is under the jurisdiction of ASTM Committee A05 on Metallic Coated Iron and Steel Products and is the direct responsibility of Subcommittee A05.12 on Wire Specifications.

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[2] *Annual Book of ASTM Standards*, Vol 01.06.

[3] *Annual Book of ASTM Standards*, Vol 01.03.

[4] *Annual Book of ASTM Standards*, Vol 03.02.

[5] *Annual Book of ASTM Standards*, Vol 09.01.

[6] *Annual Book of ASTM Standards*, Vol 08.01.

[7] *Annual Book of ASTM Standards*, Vol 14.02.

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