

[INCH-POUND]
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April 19, 1990
SUPERCEDING
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COMMERCIAL ITEM DESCRIPTION

WIRE FABRIC (Industrial)

The General Services Administration has authorized the use of this commercial item description in lieu of Federal Specification RR-W-360.

1. SCOPE AND CLASSIFICATION

1.1 Scope. This commercial item description covers woven, square mesh wire fabric suitable for general purpose applications. Requirements for insect, hardware or Fourdrinier wire fabric are not included.

1.2 Classification. The wire fabric shall be of the following types, classes, and grades.

Type I - Square mesh.

Class 1 - Plain weave.
Class 2 - Twilled weave.

Grade A - Medium heavy.
Grade B - Medium.
Grade C - Medium light.
Grade D - Light.

Type II - Space cloth.

Class 1 - Plain weave.
Class 2 - Twilled weave.

Grade A - Heavy.
Grade B - Medium heavy.
Grade C - Medium.
Grade D - Medium light.

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any data which may improve this document should be sent to: General Services Administration, Industrial Engineering Group (7FXE1), 819 Taylor St., Fort Worth, TX 76102

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

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2. APPLICABLE DOCUMENTS

2.1 The documents referenced in this commercial item description shall be the issues in effect on the date of the invitation for bids or request for proposal unless otherwise specified. These documents form a part of this commercial item description to the extent specified. In the event that there is a conflict between this commercial item description and a document referenced herein, this commercial item description shall take precedence.

Federal Specifications:

- QQ-P-35 - Passivation Treatments For Corrosion-Resistant Steel.
- QQ-P-416 - Plating, Cadmium (ELECTRODEPOSITED).

Federal Standard:

- FED-STD-376 - Preferred Metric Units For General Use By The Federal Government.

Copies of Federal specifications and standards are available from the General Services Administration Business Service Centers in Boston, MA; New York, NY; Philadelphia, PA; Washington, DC; Atlanta, GA; Chicago, IL; Kansas City, MO; Fort Worth, TX; Denver, CO; San Francisco, CA; Los Angeles, CA; and Seattle, WA.

Military Standard:

- MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes.

Copies of military specifications and standards may be obtained from Military Specifications and Standards, Bldg. 4D, 700 Robbins Avenue, Philadelphia, PA 19111-50943.

ASTM standards:

- A 153 - Standard Specification For Zinc Coating (Hot-Dip) On Iron and Steel Hardware.
- B 633 - Standard Specification For Electrodeposited Coatings Of Zinc On Iron Or Steel.
- E 29 - Standard Practice For Using Digits In Test Data To Determine Conformance With Specifications.
- E 437 - Standard Specification For Industrial Wire Cloth And Screens.

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Application for copies of ASTM standards should be addressed to ASTM, 1916 Race Street, Philadelphia, PA 19103.

3. SALIENT CHARACTERISTICS

3.1 Design. The wire fabric design, materials, mesh size, filament sizes and tolerances shall be in accordance with ASTM E437 'Standard Specification for Industrial Wire Cloth And Screens'. Type I fabric dimensions shall conform with ASTM E437, Table 2 and Type II fabric dimensions shall conform with ASTM E437, Table 1.

3.2 Crimp type. The wire fabric shall be lock crimped at points of intersection (except mesh sizes too fine to effectively lock crimp are exempt from this requirement).

3.3 Edges. When fabric being offered is prone to edge ravelling (due to mesh size or other characteristics), the fabric edges shall be selvaged or otherwise treated to prevent ravelling.

3.4 Roll dimensions.

3.4.1 Length. The wire fabric shall be furnished in a roll with a minimum length of 100 feet.

3.4.2 Width. The roll shall be furnished in the following widths as specified: 16, 24, 30, 36, 40, or 48 inches.

3.5 Roll dimension tolerances.

3.5.1 Roll length. The stated length is minimum (minus 0, plus unlimited).

3.5.2 Roll width. Tolerances of the width of the wire fabric (measured outside to outside) shall be as shown below:

<u>Mesh sizes or equivalent opening</u>	<u>Tolerance in width (inches)</u>
5 mesh and coarser	+ 1/4
6 to 50 mesh	+ 1/8
Finer than 50 mesh	+ 1/16

3.6 Continuity. The roll shall contain not more than three pieces, none of which shall be less than 10 feet in length.

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3.7 Metal alloys. Metal alloys shall be those specified in APPENDIX X2 of ASTM E437, as specified.

3.8 Finish.

3.8.1 Zinc coating. When galvanized-after-weaving wire fabric is specified, carbon steel shall be hot-dipped with zinc in accordance with ASTM A153 or electroplated with zinc in accordance with ASTM B633. When galvanized-before-weaving wire fabric is specified, it shall be made of wire which has been commercially coated with zinc. The coating shall be not less than 5 percent of the bare steel weight.

3.8.2 Passivation. Corrosion resistant steel wire (except stainless steel) fabric shall be passivated in accordance with QQ-P-35B after fabrication.

3.8.3 Cadmium plating. When specified, carbon steel wire fabric shall be cadmium plated in accordance with QQ-P-416 after fabrication.

3.8.4 Clear lacquer or varnish. Commercial bronze fabric shall be coated with clear lacquer or varnish.

3.9 Workmanship. The wire fabric shall be free from imperfections which may impair serviceability or affect its appearance. The cloth shall have smooth edges, and be free of tearing, projecting ends and rust pits.

3.10 Regulatory requirements. In accordance with section 23.403 of the Federal Acquisition Regulations, the Government's policy is to acquire items composed of the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition without adversely affecting performance requirements or exposing suppliers' employees to undue hazards from the recovered materials. The term "recovered materials" means materials which have been collected or recovered from solid waste and reprocessed to become a source of raw materials as opposed to virgin raw materials. None of the above shall be interpreted to mean that the use of used or rebuilt products are allowed under this commercial item description unless otherwise specified.

3.10.1 Finish processes. Caution should be taken during any plating, cleaning, descaling, passivation, and similar processes. The contractor shall be responsible for the safe reutilization and disposal of all materials generated by these processes in accordance with ASTM A380, sections 8.2, and 8.7.

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3.11 Metric products. Products manufactured to metric dimensions will be considered on an equal basis with those manufactured using inch/pound units, provided they fall within the tolerances specified using conversion tables contained in the latest revision of Federal Standard No. 376, and all other requirements of this commercial item description are met.

If a product is manufactured to metric dimensions and those dimensions exceed the tolerances specified in the inch/pound units, a request should be made to the contracting officer to determine if the product is acceptable.

The contracting officer has the option of accepting or rejecting the product.

3.12 Commercial item. The use of the term "commercial item description" in this document does not imply that any item or items offered are not required to conform with all requirements specified herein.

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified in the contract or order, the contractor may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure that supplies and services conform to prescribed requirements.

4.2 Sampling. The sample size levels of inspection shall be in accordance with MIL-STD-105.

4.3 Lot formation. All wire fabric of the same type, class, and grade offered for delivery at one time shall be considered a lot for purposes of inspection.

4.4 Sampling for visual and dimensional examination. A random sample of wire fabric rolls shall be selected from each lot in accordance with general inspection level I, AQL 2.5 expressed in terms of percent defective (PD). The sample unit shall be one wire fabric roll.

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4.5 Visual and dimensional examination. The sample rolls shall be visually and dimensionally examined to verify compliance with this description. Tolerance limits specified are absolute limits as defined in ASTM E 29. The wire fabric shall be examined for the following defects.

1. Type, class and grade not as specified
2. Dimensions not as specified
3. Continuity not as specified
4. Selvage not as specified
5. Mesh size not as specified
6. Finish not as specified
7. Alloy not as specified
8. Workmanship not as specified

4.6 Examination for preparation for delivery. A random sample of unit, intermediate and shipping containers (as applicable) shall be selected from each lot and examined for conformance with the preservation, packaging, packing, labeling and marking required in the contract or order. Samples shall be selected in accordance with MIL-STD-105, Inspection level S-2, AQL 6.5 expressed in terms of defects per hundred unit.

5. PREPARATION FOR DELIVERY

5.1 Preservation, packaging, packing, labeling, and marking. The preservation, packaging, packing, labeling, and marking shall be as specified in the contract or order.

6. NOTES

6.1 Ordering data. Purchasers should select the preferred options permitted herein and include the following information in procurement documents (if applicable).

- a. Title, number and date of this commercial item description.
- b. The type, class, grade, weave, crimp style (if other than lock crimp), metal or alloy, mesh or opening size, length (if other than 100 feet), width, edge type, finish and quantity of rolls.
- c. The preservation, packaging, packing, labeling, and marking desired.

When industrial wire cloth is needed which is woven of metals or alloys other than those listed or having wire sizes and openings or meshes other than those listed, it is recommended that this CID be used in the procurement document and exceptions to the CID be defined as needed. Purchasers should consult vendors as to available alternative products.

6.2 Part Numbering. Wire fabric rolls conforming with this commercial item description shall be identified by a part number configuration consisting of identification of a portion of the specification number, type, class, grade, metal alloy, finish and size. An example of the part number configuration is shown below. This part numbering system is intended for identification and cross-indexing of the item within the Federal cataloging system. Part numbers are not required to be placed on the product or container.

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Roll width 16, 24, 30, 36, etc.

Finish (A=Galvanized after weaving,
B=Galvanized before weaving,
C=Cadmium, D=Other).

Alloy (1=Carbon steel, 2=Stainless steel, 3=Nickel-Chromium, 4=Copper alloy, 5=Nickel alloy, 6=Aluminum alloy.

Grade A, B, C or D.

Class 1 or 2.

Type (1=I, 2=II).

General specification number.

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MILITARY INTERESTS:

Military Coordinating Activity:

Army - ME

Custodians:

Army - ME

Navy - YD

Air Force - 99

Review Activities:

Army - EA

DLA - IS

User Activity:

Navy - MC

PREPARING ACTIVITY:

GSA - FSS

Review Activity

VA - OSS