RR-F-221/2A September 3, 1976 SUPERSEDING Fed. Spec. RR-F-221/2 August 30, 1973

#### FEDERAL SPECIFICATION

#### FENCING WIRE (WOVEN WIRE AND NETTING. FABRIC) (DETAIL SPECIFICATION)

This specification was approved by the Commissioner, Federal Supply Service, General Services Administration, for the use of all Federal agencies.

- 1. SCOPE AND CLASSIFICATION
- 1.1 Scope. This specification covers specific requirements for fence, woven wire, and netting.
- 1.2 Classification. Fence fabric and netting shall be of the following types and styles, as specified (see 6.1):

Type I - Woven wire.

Style 1 - Farm-field and right-of-way fencing. 3 - Wolf-proof fence.

4 - Poultry and garden fence.

5 - Chick fence.

Type II - Netting, hexagonal.

Style 6 - Light grade, poultry.

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7 - Heavy grade.

Type III - Special.

## 2. APPLICABLE DOCUMENTS

2.1 The following documents, of the issues in effect on date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein.

#### Federal Standards:

RR-F-221/Gen - Fencing, Wire, Fence Posts and Accessories. Fed. Std. No. 123 - Marking for Domestic Shipment (Civil Agencies). Fed. Test Method Std. No. 406 - Plastics, Methods of Testing.

(Activities outside the Federal Government may obtain copies of Federal Specifications, Standards, and Handbooks as outlined under General Information in the Index of Federal Specifications and Standards and at the prices indicated in the Index. The Index, which includes cumulative monthly supplements as issued, is for sale on a subscription basis by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

(Single copies of this specification and other Federal Specifications required by activities outside the Federal Government for bidding purposes are available without charge from Business Service Centers at the General Services Administration Regional Offices in Boston, New York, Washington, DC, Atlanta, Chicago, Kansas City, MO, Fort Worth, Denver, San Francisco, Los Angeles, and Seattle, WA.

(Federal Government activities may obtain copies of Federal Specifications, Standards, and Handbooks and the Index of Federal Specifications and Standards from established distribution points in their agencies.)

FSC 5660

# Military Standards:

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

MIL-STD-129 - Marking for Shipment and Storage.

MIL-STD-163 - Steel Mil Products Preparation for Shipment and Storage.

(Copies of Military Specifications and Standards required by suppliers in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer.)

2.2 Other publications. The following documents form a part of this specification to the extent specified herein. Unless a specific issue is identified, the issue in effect on date of invitation for bids or request for proposal shall apply.

# American Society for Testing and Materials (ASTM) Standards:

- A 90 Methods of Tests for Weight of Coating on Zinc-Coated (Galvanized) Iron or Steel Articles.
- A 428 Methods of Test for Weight of Coating on Aluminum-Coated Iron or Steel Articles.
- D 1535 Method of Specifying Color by the Munsell System.

(Application for copies should be addressed to the American Society for Testing and Materials, 1916 Race St., Philadelphia, PA 19103.)

# National Motor Freight Traffic Association, Inc., Agent:

National Motor Freight Classification.

(Application for copies should be addressed to the American Trucking Associations, Inc., Tariff Order Section, 1616 P Street, N.W., Washington, DC 20036.)

# Uniform Classification Committee, Agent:

Uniform Freight Classification.

(Application for copies should be addressed to the Uniform Classification Committee, Room 1106, 222 South Riverside Plaza, Chicago, IL 60606.)

# 3. REQUIREMENTS

- 3.1 Material. See RR-F-221/GEN.
- 3.2 Type I, styles 1 to 5, design nembers and dimensions.

3.2.1 Style 1, farm-field and right-of-way fencing. Design numbers and dimensions for zinc-coated, and aluminum coated farm-field and right-of-way fencing shall be in accordance with table I and figure 1, as specified (see 6.1).

TABLE I. Style 1, design numbers for zinc-coated, and aluminum coated steel farm-field and right-of-way fencing

					Diameter				
Design numbers	Number of horizontal wires	Height	Spacing of stay wires	lir	mediate ne and v wires	bot	and tom res		
No. 9		Inches	Inches	No.	Inch	No.	Inch		
1155-12-9	11	55	12	9	0.148	9	0.148		
1047-12-9	10	47	12	9	.148	9	.148		
939-12-9	- 9	39	12	9	.148	9	.148		
832-12-9	8	32	12	9	.148	9	.148		
726-12-9	7	26	12	9	.148	9	.148		
949-12-9	ġ	49	12	9	.148	9	.148		
845-12-9	8	45	12	9	.148	9	.148		
635-12-9	6	35	12	9	.148	9	.148		
1047- 6-9	10	47	6	9	.148	9	.148		
726- 6-9	7	26	6	9	.148	9	.148		

TABLE I. Style 1, design numbers for zinc-coated, and aluminum coated steel farm-field and right-of-way fencing (Con.)

		<u> </u>	n-lield and lig		Diam		
	Number of				ediate	Тор	
Daniem	horizontal		Spacing of	line	and	boti	
Design	wires	Height	stay wires		wires	Wil	Inch
numbers No. 1		Inches	Inches	No.	Inch	No.	THE
10. 1.						•	0.148
1047-12-11	10	47	12	11	0.120	9 9	.148
939-12-11	9	39	12	11	.120	-	.148
	8	32	12	11	.120	9	
832-12-11	7	26	12	11	.120	9	.148
726-12-11	8	45	12	11	.120	9	.148
845-12-11		35	12	11	.120	9	.148
635-12-11	6	47	6	11	.120	9	.148
1047- 6-11	10	39	6	11	.120	9	.148
939- 6-11	9	32	6	11	.120	9	.148
832- 6-11	8	26	ě	11	.120	9	.148
726- 6-11	7	20	J				
		Inches	Inches	No.	Inch	No.	Inch
No. 12-1	./2	Inches					
		47	12	12-1/2	0.099	10	0.139
1047-12-12 1/		39	12	12-1/2	.099	10	.135
939-12-12 1/	<b>'</b> 2 9	32	12	12-1/2	.099	10	.13
832-12-12 1/	<b>'</b> 2 8	26	12	12-1/2	.099	10	. 13
726-12-12 1/	/2 7	45	12	12-1/2	.099	10	.13
845-12-12 1/			12	12-1/2	.099	10	.13
635-12-12 1/		35	6	12-1/2	.099	10	. 13
1047- 6-12 1/		47	6	12-1/2	. 099	10	.13
939- 6-12 1/		39	6	12-1/2	.099	10	.13
832- 6-12 1/	/2 8	32	6	12-1/2	.099	10	.13
726- 6-12 1/	/2 7	26	O	12 1/-			
			Inches	No.	Inch	No.	Inc
No. 14-	1/2	Inches	Inches				
		20	6	14-1/2	0.076	11	0.12
939- 6-14 1,	/2 9	39	6	14-1/2	.076	11	.12
832- 6-14 1,	/2 8	32	6	14-1/2	.076	11	.12
726- 6-12 1		26	O	14 1/2			

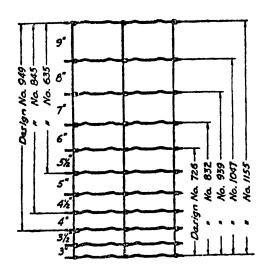


FIGURE 1. Style 1, dimensions and design numbers for farm-field and right-of-way fencing in table I.

3.2.2 Style 3, wolf-proof fencing. Design numbers and dimensions for zinc-coated wolf-proof fencing shall be in accordance with table II and figure 2, as specified (see 6.1).

TABLE I	I. Style 3,	design numbe	rs for zinc-c	oated wolf	-proof fen Diame	cing ter	
Design	Number of horizontal		Spacing of stay wires	Intermoline stay	ediate and		
numbers	wires	Height Inches	Inches	No.	Inch	No.	Inch
No. 14-1/  1035-12-14 1/2 825-12-14 1/2 1443- 6-14 1/2 1035- 6-14 1/2 930- 6-14 1/2 825- 6-14 1/2	10 8 14 10	35 25 43 35 30 25	12 12 6 6 6	14-1/2 14-1/2 14-1/2 14-1/2 14-1/2 14-1/2	0.076 .076 .076 .076 .076	11 11 11 11 11	0.120 .120 .120 .120 .120

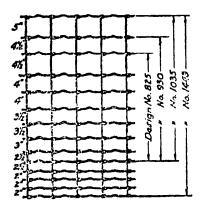


FIGURE 2. Style 3, dimensions and design numbers for wolf-proof fencing in table III.

3.2.3 Style 4, poultry and garden fence. Design numbers and dimensions for zinc-coated rectangular mesh poultry and garden fencing shall be in accordance with table III and figure 3, as specified (see 6.1).

TABLE III.	Number of horizontal		for zinc-coate Spacing of stay wires	Interm line stay	ediate and	Top bott win	and com res
numbers No. 13	wires	Height Inches	Inches	No.	Inch	No.	Inch
2158-6-13 1948-6-13	21 19	58 48	6	13 13	0.092 .092	11 11	0.120 .120
No. 14-1	/2	Inches	Inches	No.	Inch	No.	Inch
2158-6-14 1/2 1948-6-14 1/2	21	58 48	6	14-1/2 14-1/2	0.076	11 11	0.120

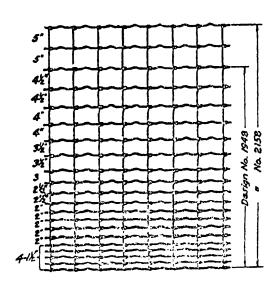


FIGURE 3. Style 4, dimensions and design numbers for poultry and garden fencing in table III.

3.2.4 Style 5, chick fence. Design numbers and dimensions for zinc-coated chick fence shall be in accordance with table IV and figure 4, as specified (see 6.1).

TA	BLE IV. Style	5, design	numbers for zi	The Courter	Diam	eter	
Design	Number of horizontal	Height	Spacing of stay wires	line	ediate and wires	Top bott wir	om es
numbers No. 14-1	wires	Inches	Inches	No.	Inch	No.	Inch
2672-6-14 1/2 2360-6-14 1/2 2048-6-14 1/2	2 26 2 23	72 60 48	6 6 6	14-1/2 14-1/2 14-1/2	0.076 .076 .076	11 11 11	0.120 .120 .120
No. 15-	1/2	Inches	Inches	No.	Inch	No.	Inch
2360-6-15 1/2 2048-6-15 1/2	2 23	60 <b>4</b> 8	6 6	15-1/2 15-1/2	0.067	12-1/2	0.099

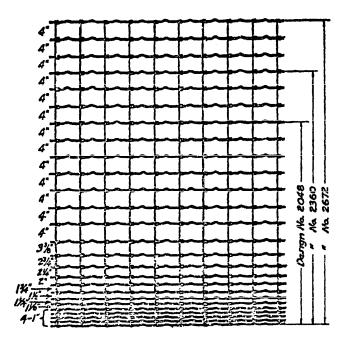


FIGURE 4. Style 5, dimensions and design numbers for chick fence in table IV.

- 3.3 Type II, styles 6 and 7, dimensions.
- 3.3.1 Size of mesh.
- 3.3.1.1 Style 6, light grade, poultry. Size of mesh shall be 1 or 2 inches measured across flats, as specified (see 6.1).
- 3.3.1.2 Style 7, heavy grade. Size of mesh shall be 1, 1-1/2 or 2 inches as specified (see 6.1).
- 3.3.2 Height of netting. Height of netting for styles 6 and 7 shall be the following, as specified (see 6.1).

Inches	Inches
18	48
24	50
36	72

3.3.3 Size of netting wire. Size of netting wire shall be as follows and as specified (see 6.1):

TABLE V.	Netting wire, size
Steel wire gage	Zinc-coated wire diameter
16	0.062
17	.054
18	.048
20	.035

# 3.4 Types I and II, metal coating on wire.

3.4.1 Style 1, farm-field and right-of-way fencing. Farm-field and right-of-way fencing shall be zinc-coated or aluminum-coated, as specified (see 6.1). Minimum weight of aluminum on style 1 fencing shall be in accordance with table VI, as specified (see 4.3.2.2 and 6.1).

TABLE VI. Style 1, weight of aluminum on aluminum-coated wire Minimum weight of coating, of uncoated wire surface Nominal diameter of Class 2 Size, coated Class 1 aluminum-coated wire oz/ft2 wire gage oz/ft2 Inch No. 0.30 0.23 0.177 7 .30 .23 .148 .30 9 .19 .135 10 .30 .19 .120 11 .30 .19 .106 12 .30 .19 .099 12-1/2 .30 .19 .092 13 .23 .15 .076 14-1/2 .15 .11 .067 15-1/2

3.4.2 Styles 1 to 5, weight of zinc coating. Minimum weight of zinc coating on woven wire fencing shall be in accordance with table VII, as specified (4.3.2.1 and 6.1).

Size coated	TABLE VII. Styles 1 to 5, weight  Nominal diameter of zinc-coated	coat	ing, of uncoa	ted
wire,	wire	Class l	Class 2	Class 3
gage No.	Inch	oz/ft <sup>2</sup>	oz/ft <sup>2</sup>	oz/ft <sup>2</sup>
7 9 10 11 12 12-1/2 13 14-1/2 15-1/2	0.177 .148 .135 .120 .106 .099 .092 .076	0.40 .40 .30 .30 .30 .30 .20	0.60 .60 .50 .50 .50 .50 .50	0.80 .80 .80 .80 .80 .70 .60

3.4.3 Styles 6 and 7, weight of zinc coating. Minimum weight of zinc coat on netting for wire sizes in 3.3.3 shall be in accordance with table VIII (see 4.3.2.1).

TABLE VIII. Styles 6 and 7, weight of zinc on zinc-coated wire Minimum weight of coating ounces per square foot of uncoated wire surfaces Class 3 Class 2 Class 1 Steel wire gage .40 .30 .10 20 Style 6 .30 .40 .15 16, 17, and 18 Style 7

Style 6 netting shall be galvanized before weaving and style 7 shall be galvanized after weaving unless otherwise specified.

### 3.5 Types I and II, tolerances.

3.5.1 <u>Wire diameter</u>. Tolerance on diameter of zinc-coated and aluminum-coated wire shall be as follows:

Wire	Tolerance
gage	plus or minus
No.	Inch
7 to 12	0.005
12-1/2 to 15-1/2	.004
16 to 20	.003

- 3.5.2 Netting mesh. Tolerance on the netting mesh shall be plus or minus 1/8 inch.
- 3.5.3 Stay wire. The average stay wire tolerance over a length of fabric, including ten stay wires, shall be within plus or minus 1/4 inch of the required spacing. No individual stay spacing shall differ from that required by more than 1/2 inch.
- 3.5.4 <u>Height</u>. The height of woven wire fence and wire netting shall be plus or minus 1 inch. The height of woven wire fence is based on the sum of the line wire spacing shown in the figures and not the height as designated in the tables.
- 3.5.5 Length. The length of woven wire fence and netting rolls shall be minus nothing, plus 3 percent.
- 3.6 Styles 1 to 5 joints. Splicing of individual line wires by means of a wrap joint or an electric butt weld is permissible. The maximum number of line wire splices or joints shall not exceed one-half of the number of line wires in any 20-rod (330 foot) roll, or multiple rolls of fencing.
- 3.7 Type III, special. This type fencing fabric is defined as any type which does not fall within the other type classifications of this specification, but the materials, workmanship, and quality shall meet the applicable provisions of this specification.
  - 3.8 Types I, II and III.
- 3.8.1 Styles 1 to 7. When specified (see 6.1), fencing shall be plastic coated. Plastic used in coating woven wire and netting shall be melt mixed (see 4.3.3.1).
- 3.8.1.1 Specific gravity. Specific gravity of the plastic shall be 1.4 or greater (see 4.3.3.2).
- 3.8.1.2 Color. Color of plastic shall be medium green, light green or any other color, as specified (see 6.1). Value, hue and chroma for the green colors shall be in accordance with table IX. Unless otherwise specified (see 6.1), the value, or value, hue and chroma of other colors shall be at the manufacturer's option (see 4.3.3.3).

	TABLE IX.	Color of plastic on plastic-coated fencing  Medium green log 4/10	Light green 3G, log 6.8/10
Hue		7.5G to 2.5BG	2G to 4G
Value		3.5 to 4.5	6.3 to 7.3
Chroma		6	8

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# 3.9 Types I and II, roll size.

#### 3.9.1 Type I, woven wire.

- 3.9.1.1 Style 1, farm-field and right-of-way fencing. Woven farm-field and right-of-way fencing shall be furnished to 10, 20, 40 rod (165, 330, 660 foot) size or any other size, as specified (see 6.1).
- 3.9.1.2 Style 3, wolf-proof fencing. Wolf-proof fencing shall be furnished in 10, 20 rod (165, 330 foot) size or any other size, as specified (see 6.1).
- 3.9.1.3 Styles 4 and 5, poultry and garden, and chick fencing. Woven poultry and garden, and chick fencing shall be furnished in 10-rod (165 foot) rolls, or any other size, as specified (see 6.1).
- 3.9.2 Type II, netting. Unless otherwise specified (see 6.1), hexagonal netting shall be furnished in 150 foot rolls.
- 3.9.3 Type III, special. Special fencing shall be furnished in roll sizes, as specified (see 6.1).
- 3.10 Workmanship. Zinc-coated fabric wire shall be free of bruised or scaled coating, blisters and uncoated areas. Aluminum-coated fabric wire shall be free of flaking and shall completely cover the wire, except wire ends. Plastic coated fence wire shall have a smooth coating and shall completely cover the wire, except wire ends. Joints in wire shall be made in a workmanlike manner. All stay wires in woven fencing shall be properly spaced and substantially perpendicular to the line wires.
  - 4. QUALITY ASSURANCE PROVISIONS. See GEN part of this specification.
  - 4.1 Sampling.
- 4.1.1 Lot. Unless otherwise specified (see 6.1), a lot shall consist of all rolls of each type and style of fabric offered for delivery at the same time.
- 4.1.2 Visual and dimensional examination, end item. Sampling for these characteristics shall be in accordance with level S-2 in MIL-STD-105.
  - 4.1.3 Sampling for tests. Select one roll in each 50-rolls or fraction thereof.

# 4.2 Examination.

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4.2.1 End item. Fencing fabric selected in accordance with 4.1.2 shall be examined for defects listed in table X. The Acceptable Quality Levels (AQL's) in accordance with MIL-STD-105, shall be 2.5 percent defective for major defects and 6.5 percent defective for total defects.

TABLE X. Classification of defects, end item		
Defects	Major	Minor
Type and style not as specified.	x	
Design number not as specified.	x	
Weight of coating for zinc or aluminum not as specified.	X	
Color of plastic for plastic-coated wire not as specified.	x	
Size of mesh and height of fabric not within tolerance.	x	
Mesh poorly formed or uneven.	Х	
Stay wire spacing not within tolerance.	X	
Abundant deposit of zinc coating at joints in netting which		
has been galvanized after weaving.		Х
Damage or defects affecting function or serviceability.	Х	
Damage or defects not affecting function or serviceability.		Х

- 4.2.2 Diameter of wire. Measure diameter of coated wire by the mean of two dimensions at right angles to each other. Use a suitable micrometer (see 3.5.1 and tables I to VI).
- 4.2.3 <u>Inspection of preparation for delivery requirements</u>. An inspection shall be made to determine that the packing and marking comply with the requirements of section 5 of this specification.
  - 4.3 Test methods.
  - 4.3.1 Test specimens.
- 4.3.1.1 Type I, styles 1 through 5, woven wire. Cut a length of fabric from the end of the roll including 3 stay wires. Cut specimens of line wire between these 3 vertical stay wires. Cut stay wire specimens from 2 or 3 of the vertical stay wires. Exclude wire knots, wraps and welded sections. Use 3 specimens from each group for tests.
- 4.3.1.2 Type II, styles 6 and 7, netting. Use a 1 square foot section selected at any point in the width of the netting and from the end of the roll, but not including the selvage.
  - 4.3.2 Coating weights.
- 4.3.2.1 Weight of zinc coating. Test for weight of zinc coating by the stripping test in accordance with ASTM A 90 (see 3.4.2, 3.4.3, tables VII and VIII).
- 4.3.2.2 Weight of aluminum coating. Test for weight of aluminum coating in accordance with ASTM A 428 (see 3.4.1 and table VI).
- 4.3.2.3 Weight of zinc, and aluminum coatings. As an alternate by agreement between the purchaser and producer, quality control tests for weight of zinc coating, and for weight of aluminum coating made on the wire prior to fabrication may be substituted for tests in 4.3.2.1 and 4.3.2.2 on specimens from the finished netting and fencing (see 6.1).
  - 4.3.3 Plastic-coated fabric.
- 4.3.3.1 Plastic material. Examine a convenient size specimen mounted in a binocular microscope at 100 to 150 X, and using reflected light. Presence of resin or other discrete particles shall be cause for rejection (see 3.8.1).
- 4.3.3.2 Specific gravity. Determine specific gravity in accordance with method 5011 in Fed. Test Method Std. No. 406 (see 3.8.1.1).
- 4.3.3.3 Color of plastic. Test for hue, value and chroma using ASTM D 1535 for guidance (see 3.8.1.2).
  - 5. PREPARATION FOR DELIVERY
  - 5.1 Preservation. Preservation shall be level A or C, as specified (see 6.1).
- 5.1.1 Level A. Woven wire and netting shall be preserved in accordance with the level A requirements in MIL-STD-163.
- 5.1.2 Level C. Woven wire and netting shall be preserved to afford adequare protection against deterioration and damage during shipment from the supplier to the initial destination. The supplier may use his standard practice when it meets these requirements.
  - 5.2 Packing. Packing shall be level A, B or C, as specified (see 6.1).
- 5.2.1 Level A. Woven wire and netting shall be packed in accordance with the level A requirement in MIL-STD-163.

- 5.2.2 Level B. Woven wire and netting rolls shall be securely tied, unprotected.
- 5.2.3 Level C. Woven wire and netting shall be packed in a manner that will assure carrier acceptance and safe arrival at destination in compliance with the Uniform Freight Classification rules and the National Motor Freight Classification.
- 5.3 Marking. Marking shall be in accordance with 5.3.1 or 5.3.2, as specified (see 6.1).
- 5.3.1 Civil agencies. In addition to any special marking required by the contract or order, interior packages and shipping containers shall be marked in accordance with Fed. Std. No. 123.
- 5.3.2 Military agencies. In addition to any special markings required by the contract or order, all interior packages and shipping containers shall be marked in accordance with MIL-STD-129.
  - 6. NOTES
- 6.1 Ordering data. Purchasers should select the preferred options permitted herein, and include the following information in procurement documents:
  - (a) Title, number, and date of this specification.

(b) Type and style (see 1.2).

- (c) Size of lot, if different from 4.1.
  (d) Level of preservation and packing required (see 5.1 and 5.2).
- (e) Marking for shipment (see 5.3).

Type I, woven wire, design numbers and dimensions (see 6.5).

- (a) Style 1 (see 3.2.1, table I and figure 1).
- (b) Style 3 (see 3.2.2, table II and figure 2).
  (c) Style 4 (see 3.2.3, table III and figure 3).
  (d) Style 5 (see 3.2.4, table IV and figure 4).
- Type II, netting.
  - (a) Size of mesh (see 3.3.1.1 and 3.3.1.2).
  - (b) Height of netting (see 3.3.2).
  - (c) Size of netting wire (see 3.3.3 and table V).
- Type I and II.
  - (a) Style 1, zinc or aluminum coating, and when required aluminum coating weight (see 3.4.1, 4.3.2.3 and table VI).
  - (b) Styles 1 to 5, zinc coating weight (see 3.4.2 and table VII).
- Types I, II and III.
  - (a) Plastic coat, when required (see 3.8.1).
  - (b) Color of plastic coat (see 3.8.1.2).(c) Roll size (see 3.9.1.1 to 3.9.3).
- 6.2 Zinc-coated fabric. The surface of zinc coatings, particularly those produced by hot-dip galvanizing, are not always smooth and devoid of irregularities. Such irregularities ordinarily do not warrent rejection of zinc coated fabric. Thickness of the zinc coat can be determined, using 1 ounce of zinc per square foot equivalent to a coating thickness of 1.7 mils (0.0017 inch).
- 6.3 Aluminum-coated fabric. Discoloration of the wire and rust formations on the cut ends are inherent characteristics of this material and do not warrent rejection of aluminum coated fabric. Thickness of the aluminum coat can be determined, using l ounce of aluminum per square foot of surface equivalent to a coating thickness of 4.35 mils (0.00435 inch).
- 6.4 Plastic-coated fabric. Rust formations on the cut ends are inherent characteristics of this material and do not warrant rejection of plastic-coated fabric.
- 6.5 Design numbers. According to regular trade practice, each design of fencing is expressed by a group of 3 numbers separated by a hyphen (-).

- 6.5.1 First number. The first number of the group contains either 3 or 4 digits. In a number containing 4 digits, the first two represent the number of horizontal wires, and the second two the total height in inches. Where 3 digits are used the first one represents the number of horizontal wires and the remaining two, the height in inches.
- 6.5.2 Second number. The second number of the group indicates the spacing of the stay wires (vertical wires) in inches.
- 6.5.3 Third number. The third number of the group indicates the gage of the intermediate line (horizontal) wires and of the stay wires. It doesn't apply to the top and bottom horizontal wires, the gage for which is shown separately in the tables.
- 6.5.4 Tables and figures. Tables and figures are intended to show the characteristics of each type of fence and each design number. In the figures, the design number is indicated by only the first number of the group of three, since the remaining two would necessarily vary with the stay-wire spacing and the gage of the wire.

MILITARY INTERESTS:

Preparing activity:

GSA-FSS

Custodians:

Navy - YD Air Force - 84 Civil Agency Coordinating Activities:

COMMERCE - NBS HEW - FEC INTERIOR - BPA USDA - AFS

#### User interest:

Navy - MC, CG Army - ME, CE

Military Coordinating Activity:

Navy - YD

Orders for this publication are to be placed with General Services Administration, acting as an agent for the Superintendent of Documents. See section 2 of this specification to obtain extra copies and other documents referenced herein. Price 35 cents each.