



SECURITY CONTRACTOR SERVICES

*Large Enough To Serve
Small Enough To Care*

**Poly(Vinyl Chloride) (PVC)- Coated Steel Chain Link Fence Fabric
Class 2b - Fused and Adhered
ASTM F668, Federal specification RR-191 Type IV, AASHTO M-181
Type IV**

1. PRODUCT NAME

Fused and Adhered Poly(Vinyl Chloride)-PVC Coated Steel Chain Link Fence Fabric

2. DISTRIBUTOR

Corporate Headquarters: **5339 Jackson St, North Highlands, CA 95660**

Phone:(916)338- 4800

SCS centers are located throughout the West Coast of the United States

3. PRODUCT DESCRIPTION

Basic Use: Fused and adhered fabric is a bonded vinyl, high strength galvanized steel chain link fence fabric for industrial, commercial, and institutional applications. Extruded and adhered fabric is contained in local, state and federal government specifications for use in prison, road, dock, airport, housing, forestry, and military use.

Composition and Materials: The galvanized steel core wire for producing extruded and adhered PVC coated steel chain link fence fabric is produced by cold-drawing good commercial grade steel rod into wire of the appropriate diameter. The steel rod from which the wire is drawn is produced by the open heart, electric furnace or basic oxygen process. The galvanized coating is produced by passing the cleaned wire through a bath of molten zinc which conforms to ASTM B6. The fused and adhered PVC coating is produced by first applying a molecular bonding agent to the galvanized core wire to eliminate slippage of the PVC. A coating of PVC up to 0.010 in. (0.25 mm) is then fusion/ bonded to the wire.

Standards:

- ASTM B 6 Slab Zinc
- ASTM F567 Installation of Chain Link Fence
- ASTM F668 Poly (Vinyl Chloride) (PVC) and Other Organic Polymer-Coated Steel Chain Link Fence Fabric, Class 2b
- Federal specification RR-F-191K/1D Fencing, Wire and Post Metal (Chain-Link Fence Fabric), Type IV
- American Association of State Highway Transportation Officials (AASHTO) M-181 Chain Link Fence, Type IV, Class A

4. TECHNICAL DATA

General: The manufacturer, if requested, will supply samples and certification that all materials furnished fully comply with the appropriate specifications.

Chain Link Fence Fabric: The base metal of the chain link fence fabric is composed of commercial quality, medium-carbon galvanized (zinc coated) steel wire. The vinyl coating is thermally bonded to a thermoset bonding layer over a galvanized steel wire. This process ensures a tightly adherent and impervious coating free of voids, as well as a smooth lustrous surface appearance. Vinyl coating thickness, galvanized coating weight, and wire tensile strength conform to ASTM F668, Class 2a, Federal specification RR-F-191 Type IV, and AASHTO M-181 Type IV, Class A, as shown in Table 1. The wire is PVC coated before weaving and is free and flexible at all joints. Unless otherwise specified, fabric woven in 2 in (50mm) mesh, under 72" (1,830 mm) in height, is knuckled at both selvages: fabric 72" (1,830 mm) high and over is knuckled at one selvage and twisted at the other. All fabrics woven into meshes under 2 in (50) have both selvages knuckle. See Table 2.

Wire Coating: Only plasticized poly (vinyl chloride) (PVC) with low temperature (-20 C; -4 F) plasticizer and no extenders or extraneous matter other than the necessary stabilizers and pigments, is used. The PVC coating resists attack from prolonged exposure to dilute solutions of most common mineral acids, seawater, and dilute solutions of most salts and alkali. See Table 3.

ASTM Color System: Standard colors conform to ASTM F934 and include:

	Dark Green	Brown	Black
L	28.61	27.76	22.30
A	-12.59	3.37	-0.09
B	1.95	4.28	-0.85

Coating Adhesion: The PVC coated wire shall pass the test for adhesion contained in ASTM F668 for Class 2b chain link fabric.

5. INSTALLATION

Install fence in accordance with ASTM Practice 567. Handle all PVC coated material with care. If PVC coating is damaged during installation, the contractor must replace or repair the material at own expense.

6. AVAILABILITY AND COST

Availability: PVC-coated steel chain link fence fabric is available for shipment throughout the United States and worldwide.

Cost: Material cost may vary depending on specific requirements. Costs may be obtained through all SCS Service Centers.

7. WARRANTY

Fused and adhered PVC coated steel chain link fence fabric is warranted for 20 years against failure due to rust or corrosion.

8. MAINTENANCE

Periodic inspection is recommended but no routine maintenance is required.

9. TECHNICAL SERVICES

Technical services are available through the SCS Corporate Office:

Phone: (916)338-4200

Fax: (916)338- 1140

Quote: (800)843-7893

Poly(Vinyl Chloride) (PVC)- Coated Steel Chain Link Fence Fabric Fused and Adhered ASTM F668 Class 2b, Federal specification RR-191 Type IV, AASHTO M-181 Type IV, Class B

Table 1 - PVC - Coated Steel Wire Characteristics

Zinc Coated Core Wire Size			PVC Coated Finished Wire Size	PVC Coated Wire Allowable Variance			Core Wire Zinc Coating Weight, min.		PVC Coating Thickness		Breaking Strength, minimum		Tensile Strength, min	
ga	inch	mm	ga	inch	mm	oz/ft	g/m	inch	mm	lbf	N	ksi	MPs	
6	0.192	4.88	5	0.005	0.13	0.4	122	0.006 to 0.010	0.15 to 0.25	2,170	9,650	75	515	
9	0.148	3.76	8	0.005	0.13	0.3	92			1,290	5,740	75	515	
10	0.135	3.43	9	0.005	0.13	0.3	92			1,290	5,740	90	620	
11	0.12	3.05	10	0.005	0.13	0.3	92			850	3,780	75	515	
12	0.105	2.67	11	0.005	0.13	0.3	76			650	2,890	75	515	
14	0.08	2.03	13	0.005	0.13	0.25	76			380	1,690	75	515	

Table 2 - PVC Coated Chain Link Fabric Sizes

Mesh Size		Finished Wire Gage	Fabric Wire Height inch (mm)	Selvage K-Knuckled, T-Twisted/Barbed	Roll Size	
inch	mm				ft	M
2"	50	5	36-240 (910-6,100)	KK Only	50	15.24
2"	50	8, 9, 10	36-240 (910-6,100)	KK, KT, TT	50	15.24
1-3/4"	44	8, 9, 11	36-240 (910-6,100)	KK Only	25	7.62
1"	25	8, 9, 12	36-144 (910-3,660)	KK Only	25	7.62

Maximum Security Mesh

5/8"	16	8, 9, 10	36-120 (910-3,050)	KK Only	25	7.62
5/8"	16	11, 13	36-72 (910-1,830)	KK Only	25	7.62
1/2"	13	9,10	36-96 (910-2,440)	KK Only	25	7.62
1/2"	13	11, 13	36-96 (910-2,440)	KK Only	25	7.62
3/8"	10	10	36-96 (910-2,440)	KK Only	25	7.62
3/8"	10	13	36-72 (910-1,830)	KK Only	25	7.62

Table 3: Typical Vinyl Properties

Test	Test Method	Value
Specific Gravity	ASTM D 792	1.30 +/- 0.03
Hardness, Durometer	ASTM D 2240	A90 +/- 5
Tensile Strength	ASTM D 412	2,600 +/- 5%
Ultimate Elongation	ASTM D 412	275 +/- 5%
Mandrel Bend Test, 10X mandrel	ASTM F 668	-20 degrees f
Dielectric Strength, volt/mil	ASTM D 149	750
Compression cut through, lbs	Bell Labs	1,500
Accelerated Aging Test	ASTM D 1499	1500 hrs. @145 degrees f

