POLYVINYL CHLORIDE (PVC) COATED STEEL CHAIN LINK FENCE FABRIC

ASTM F668-EXTRUDED CLASS 1
FEDERAL SPECIFICATION RR-F-191/1E TYPE IV
AASHTO M-181 TYPE IV CLASS A



FENCE SPEC DATA SHEET

PRODUCT NAME

Extruded Polyvinyl Chloride PVC Coated Steel Chain Link Fence Fabric.

BASIC USE

Extruded PVC coated fabric is a PVC-coated, high strength galvanized steel chain link fence fabric for industrial, commercial and institutional applications. Extruded Fabric is contained in local, state and federal government specifications for use in prison, road, dock, airport, housing, forestry, and military use.

COMPOSITION AND MATERIAL

The galvanized steel core wire for producing extruded PVC-coated steel chain link fence fabric is produced by cold-drawing good commercial grade steel rod into a wire of the appropriate diameter. The steel rod from which the wire is drawn is produced by the open hearth, 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 extruded PVC coating is produced by extruding PVC at a coating thickness of 0.015 in. (0.38 mm) - 0.025 in. (0.64 mm) over a galvanized core wire.

STANDARDS

ASTM B6 - Slab Zinc

ASTM F567 - Installation of Chain Link Fence

ASTM F668 – Polyvinyl Chloride (PVC) and Other Organic Polymer-Coated Steel Chain Link Fence Fabric. Class 1

Federal Specification RR-F-191K/1E – Fencing, Wire, and Post Metal (Chain Link Fence Fabric), Type IV

AASHTO M-181 - Chain Link Fence, Type IV, Class A

TECHNICAL DATA

GENERAL

The manufacturer, if requested, will supply samples and certification that all materials furnished 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 continuously applied over the galvanized wire by the extrusion process. The extrusion process ensures a dense and impervious coating free of voids, as well as a smooth and lustrous surface appearance. Vinyl coating thickness, galvanized coating weight, and wire tensile strength conform to ASTM F668. Class 1. Federal Specification RR-F-191/1E 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. (50 mm) mesh, under 72 in. (1,830 mm) in height, is knuckled at both selvages; fabric 72 in. (1,830 mm) high and over is knuckled at one end and twisted at the other. All fabrics woven into meshes under 2 in. (50 mm) have both selvages knuckled. See Table 2.

WIRE COATING

Only plasticized polyvinyl chloride (PVC) with a low temperature (-20°C; -4°C) plasticizer and no extenders or extraneous matter other than the necessary stabilizers and pigments, is used. The PVC coatings resist attacks from prolonged exposure to dilute solutions most common mineral acids, seawater, and dilute solutions of most salts and alkali. See Table 2.

INSTALLATION

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

MAINTENANCE

Periodic inspection is recommended but no routine maintenance is required.

TECHNICAL SERVICES



Jamieson Fence Supply
Technical Sales Department
Phone: 800-527-6464
Fax: 214-337-2061

www.jamiesonfence.com

POLYVINYL CHLORIDE (PVC) COATED STEEL CHAIN LINK FENCE FABRIC



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, Min. | | TENSILE Strength, Min. | | |
|----------------------------|-------|-------------------------------------|--|--------|---|--------------------|--------------------------|-----------------|----------------------------|-------|---------------------------|-----|-----|
| GAGE | INCH | MM | GAGE | INCH | MM | OZ/FT ² | G/M ² | INCH | MM | LBF | NEWTONS | KSI | MPA |
| 9 | 0.148 | 3.76 | 6 | ±0.005 | ±0.13 | 0.30 | 92 | 0.015 | | 1,290 | 5,740 | 75 | 515 |
| 11 | 0.120 | 3.05 | 8 | ±0.005 | ±0.13 | 0.30 | 92 | to 0.38 to 0.64 | 850 | 3,780 | 75 | 515 | |
| 14 | 0.080 | 2.03 | 11 | ±0.005 | ±0.13 | 0.25 | 76 | | 380 | 1,690 | 75 | 515 | |

TABLE 2 — PVC COATED CHAIN LINK FABRIC SIZES

| MESH SIZE | CINICHED WIDE CACE | FABRIC WIRE HEIGHT INCH | SELVAGE: K- KNUCKLED, | ROLL SIZE | |
|-----------|--------------------|-------------------------|-----------------------|-----------|--|
| INCH | FINISHED WIRE GAGE | FADRIC WIRE REIONT INCH | T-TWISTED/BARBED | FT | |
| 2" | 6, 8 | 18" – 240" | KK, KT, TT | 25′, 50′ | |
| 1 3/4" | 6, 8 | 18" – 240" | KK only | 25′, 50′ | |
| 1" | 8 | 18" – 144" | KK only | 25' | |

Maximum Security Mesh

| 5/8" | 11 | 18" - 72" | KK only | 25' |
|------|----|-----------|---------|-----|
| 1/2" | 11 | 18" – 72" | KK only | 25' |
| 3/8" | 11 | 18" – 72" | KK only | 25' |

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 D 668 | -20° F (-29° C) | | |
| Dielectric Strength, volt/mil | ASTM D 149 | 750 | | |
| Compression cut-through, lb. | BELL LABS | 1,500 | | |
| Accelerated Aging Test | ASTM D 1499 | 1,500 hrs @ 145° F | | |