

SPECIFICATIONS

THIS SHEET IS DESIGNED TO HELP YOU SPECIFY A VINYL COATED FENCE SYSTEM.

For other products or special applications contact Richard's Technical Support at 1-800-624-5520.

1. This is an "edit and delete" master specification with flexibility to tailor it to a particular project.
2. Optional words, phrases or dimensions are included in square brackets([]). Where only one phrase appears in brackets, it is either deleted or retained. Sometimes entire paragraphs are deleted (such as those subsequent paragraphs for continuity).
3. After all editing is completed, delete all square brackets([]) and the explanatory notes at the end of the text. The finished system specification is ready for inclusion in the project specifications.

PART 1 - GENERAL

1.01 Section Includes:

PermaBond, PermaGuard, and ColorLink vinyl coated fence systems.

1.02 References:

Federal Specifications:

RR-F- 191

ASTM Specifications:

F-668, F-626, F-669, F-934,

F-1083, and F-1234.

PART 2 - PRODUCTS

2.01 Manufacturer:

Vinyl clad chain link fabric, framework, fittings and accessories shall be manufactured by Richard's Fence Company, Inc in the U.S.A.

2.02 Vinyl Clad Fence Fabric

1. General:

A. PermaBond Fence Systems shall be supplied with a thermally fused and bonded vinyl clad coating over a galvanized or aluminized steel core wire manufactured in accordance with ASTM F-668 class 2b.

B. PermaGuard Fence Systems shall be supplied with a extruded and adhered vinyl clad coating over a galvanized or aluminized steel core wire in accordance with ASTM F-668 class 2a.

C. ColorLink Fence Systems are used for residential applications. ColorLink fence fabric shall be supplied with and extruded vinyl clad coating over a galvanized core wire. ColorLink fence fabric is not presently a part of the ASTM specifications.

2. Vinyl Clad Coating:

The chain link fence fabric shall have and [extruded], [extruded and adhered], [fused and bonded] vinyl clad coating. (See Table 1)

3. Wire Size:

Steel core wire sized is _____ gauge and the coated wire sized is _____ gauge. (See Table 1)

4. Height and Mesh Size:

Fabric height is _____ feet high with a mesh size of _____ inches.

(See Table 1)

5. Selvage:

Top edge [knuckled] [barbed], and bottom edge [knuckled] [barbed].

6. Color:

Color of vinyl coating shall be _____ per ASTM F-934.

Special colors are available for an extra charge.

2.03 Steel Framework

1. General:

PermaBond and PermaGuard fence systems shall have fence posts and rails vinyl coated and manufactured in accordance with Federal Specification RR-F-191/3D, Class 1, Grade A or B.

ColorLink fence systems are supplied with vinyl coated fence posts and rails with strength requirements per ASTM F-761. The framework for all three fence systems shall have a 10 to 15 mil coating per ASTM F-1043.

2. Line Posts:

Steel pipe shall be _____ inches O.D. weighing _____ lbs. per lineal ft. (See Table 2)

3. End Posts and Corner Posts:

Steel pipe shall be _____ inches O.D. weighing _____ lbs. per lineal ft. (See Table 2)

4. Pull Posts:

Stretches of fence more than 500 feet in length shall have one intermediate pull post with braces in both directions. Size and weight of pull

posts shall be the same as specified for end and corner posts.

5. Gate Posts:

Furnish posts to support single gate leaf, or one leaf of a double gate, for the following gate widths:

Leaf Width	Gate Post	Weight/foot
up to 6'	3" OD	4.64 lbs.
6' to 13'	4" OD	6.56 lbs.
13' to 18'	6-5/8" OD	18.97 lbs.
18' to 32'	8-5/8" OD	28.55 lbs.

6. Top Rail: (Optional)

The top rail shall be supplied in 21' lengths joined by 6" long sleeves and run continuously along the top of the fence through openings provided in the line post tops. The fence fabric shall be fastened to the top rail at intervals of 24" O.C. with fabric ties. Provide means for attaching top rail securely to each gate, corner, end and pull post. Steel pipe shall be _____ inches O.D. weighing _____ lbs. per lineal ft. (See Table 2)

7. Bottom Rail: (Optional)

The bottom rail shall be joined at line posts with boulevard clamps. Provide means of attaching rail securely to each gate, corner, end and pull post. Size and weight of rail shall be the same as specified for top rail.

8. Middle Rail: (Optional)

The middle rail shall be joined at line posts with boulevard clamps. Provide means of attaching rail securely to each gate, corner, end and pull post. Size and weight of rail shall be the same as specified for top rail.

9. Brace Rail: (Optional)

Brace rail shall be the same size and weight rail as specified for the top rail. Provide means of attaching brace rail securely to each gate, corner, end and pull post. Also use the same attaching method on adjacent line post.

10. [Top Tension Wire] and/or [Bottom Tension Wire] (Optional - in place of top/bottom rail)

Galvanized steel core wire size shall be [7 gauge core/6 gauge O.D.] [6 gauge core/5 gauge O.D.]. The fence fabric shall be fastened to the tension wire at intervals of 24" O.C. with aluminum 9 gauge hog rings. Provide means of attaching tension wire securely to all terminal posts. Color to match fabric and manufacturing coating process.

2.04 Fittings and Accessories:

1. General:

All fittings and accessories shall be vinyl coated and manufactured in accordance with Federal Specification RR-F-191/4D and ASTM F-626. Color to match fence fabric.

2. Terminal Post Caps:

[Pressed Steel] [Aluminum]

3. Line Post Caps:

[Pressed Steel] [Aluminum]

4. Tension Bars:

For 2" and 1-3/4" mesh, use 3/16" x 3/4" steel, and for 1" mesh use 3/16" x 1/2" steel. Bars shall be one-piece lengths up to 12', less 1". Provide one tension bar for each gate and end post, and two for each corner and pull post.

5. Tension Bands:

Fabricated from 12 gauge pressed steel. Spaced not over 14" O.C. to secure tension bars to terminal posts. Bands shall have beveled edges.

6. Brace Bands:

Fabricated from 12 gauge pressed steel. Bands are to secure rail ends and truss rods to terminal posts. Bands shall have beveled edges.

7. Truss Rods:

Truss rods shall be 3/8" minimum diameter steel with adjustable take-ups.

8. Fabric Ties:

PVC coated 9 gauge O.D. [steel] [aluminum] core wire.

9. Barbed Wire Supporting Arm - 3- Strand: (Optional)

Press steel lines and press steel or malleable terminal post 45 degree arm for 3 strands of barbwire.

10. Barbed Wire "V" Supporting Arm: (Optional)

Press Steel "V" arm for 6 strands of barbed wire, with provision for anchorage to posts and integral with weather tight caps.

11. Barbed Wire: (Optional)

[3] [6] strands each composed of 2 each 12-1/2 gauge twisted galvanized steel core wires with 14 gauge 4-point aluminum barbs spaced not more than 5" O.C. Color to match fabric and manufacturing coating process.

12. Rail Ends:

PVC coated [Press steel] [Aluminum].

13. Sleeves:

PVC coated steel.

14. Boulevard Clamps: (Optional)

PVC coated steel with galvanized carriage bolts.

15. Bolts and Nuts:

ASTM A-307, Grade A galvanized. Bolts and nuts shall be field coated with touch-up spray after installation to match the color of the fence.

2.05 Gates

1. General:

PermaBond and PermaGuard fence systems shall have gate frames vinyl coated and manufactured in accordance with Federal Specification RR-F-191/2D and ASTM F-900. Size and weight of pipe used for gate frame shall meet the requirements of the above specifications. ColorLink fence systems are supplied with vinyl coated gate frames not presently included in Federal Specifications.

2. Assembly:

Gate frames shall be assembled using specially designed corner fittings or welded to form a rigid panel. If welded, all welded surfaces shall be coated with a special PVC paint to match the PVC coating on the pipe. Frames shall be fitted with the same gauge fabric as the fence. The vertical sides shall be attached by use of tension bands and bars. The horizontal

sides shall be attached by use of 9 gauge O.D. tie wires spaced 12" O.C.

2. Hinges:

[PermaBond and PermaGuard systems shall be supplied with either a 90 degree industrial hinge or a 180 degree offset hinge. Provide 1 pair of hinges for each leaf and 1-1/2 pair for each leaf and truss rod support for extra large gates. Supply pressed steel industrial 90 degree box hinges for 8-5/8" O.D. gate posts.]

[ColorLink fence systems shall be supplied with pressed steel 90 degree post and gate frame hinges.]

3. Latch:

Fork latch for single swing gates and plunger-bar type or industrial latch for double swing gates, both to permit operation from either side of gate, with padlock eye as integral part of latch.

4. Double Gate Drop Rod Latch:

To be provided for double swing gates.

5. Keeper:

Provide keeper for double swing gates, in order to automatically engage gate leaf and hold it in open position until manually released.

PART 3 - EXECUTION

3.01 Installation:

1. Install fence in accordance with ASTM Practice F567.

2. Handle all vinyl coated material with care. If vinyl finish is damaged during installation, contractor shall repair or replace material at their own expense.

TABLE 1: VINYL COATED CHAIN LINK FABRIC

Fence System Name	Fabric Coating Type	Steel Core Wire Gauge	Vinyl Coated Wire Gauge	Steel Core Wire Size/Toler.	Min. Vinyl wall Thickness	Min. Break Strength	Zinc Oz/Sq. Ft.	Alum Oz/Sq. Ft.
PermaBond	Fused/Bonded	6	5	.192"+/-.005	.007"	2,170#	0.40	.40
PermaGuard	Extruded/Adhered	9	6	.148"+/-.005	.015"	1,290#	0.30	.40
PermaBond	Fused/Bonded	9	8	.148"+/-.005	.007"	1,290#	0.30	.40
PermaBond	Fused/Bonded	10	9	.135"+/-.005	.007"	1200#	0.30	0.35
PermaGuard	Extruded/Adhered	11	8	.120"+/-.005	.021"	850#	0.30	0.35
PermaBond	Fused/Bonded	11	10	.120"+/-.005	.007"	850#	0.30	0.35
PermaGuard	Extruded/Adhered	12	11	.105"+/-.005	.022"	660#	0.30	N/A
ColorLink	Extruded	12.5	9	.097"+/-.005	.022"	500#	Non Spec	N/A

All Fabric has a Minimum Tensile Strength of 75,000 PSI.
Fabric Available in Mesh Sizes of 1", 1-1/4", 1-1/2", 1-3/4", 2", 2-1/4".

Fabric Available in Heights From 2' to 20'.

Call 1-800-624-5520 for Any Questions on Height, Mesh, and Selvage Availabilities.

TABLE 2: VINYL COATED FRAMEWORK

Product Use	Size	O.D.	Min. Wall Thickness	Length	Weight Per Linear Ft.	Vinyl Thickness
TOP, MIDDLE, BOTTOM RAIL/GATES	1-3/8"	1.315"	0.055"	21'	0.770	10-15 MILS
TOP, MIDDLE, BOTTOM RAIL, GATES, LINE POSTS	1-5/8"	1.660"	0.065"	21'/24'	1.170	10-15 MILS
	1-5/8"	1.660"	0.085"	21'/24'	1.431	10-15 MILS
	1-5/8"	1.660"	0.111"	21'/24'	1.840	10-15 MILS
GATES, LINE POST AND TERMINAL POSTS	2"	1.900"	0.065"	21'/24'	1.350	10-15 MILS
	2"	1.900"	0.090"	18'/21'/24'	1.741	10-15 MILS
	2"	1.900"	0.120"	18'/21'/24'	2.280	10-15 MILS
LINE POST AND TERMINAL POSTS	2-1/2"	2.375"	0.065"	21'/24'	1.700	10-15 MILS
	2-1/2"	2.375"	0.095"	18'/21'/24'	2.315	10-15 MILS
	2-1/2"	2.375"	0.130"	18'/21'/24'	3.120	10-15 MILS
TERMINAL POSTS	3"	2.875"	0.110"	18'/21'/24'	3.251	10-15 MILS
	3"	2.875"	0.160"	18'/21'/24'	4.640	10-15 MILS
	4"	4.000"	0.226	21'/24'	9.100	10-15 MILS
	6-5/8"	6.625"	0.286"	21'/24'	18.970	10-15 MILS
	8-5/8"	8.625"	0.322"	21'/24'	28.550	10-15 MILS

Custom Heights and Cut Lengths are Available
Roll Formed "C" Post/ "H" Sections/ Schedule 40 Pipe Available