

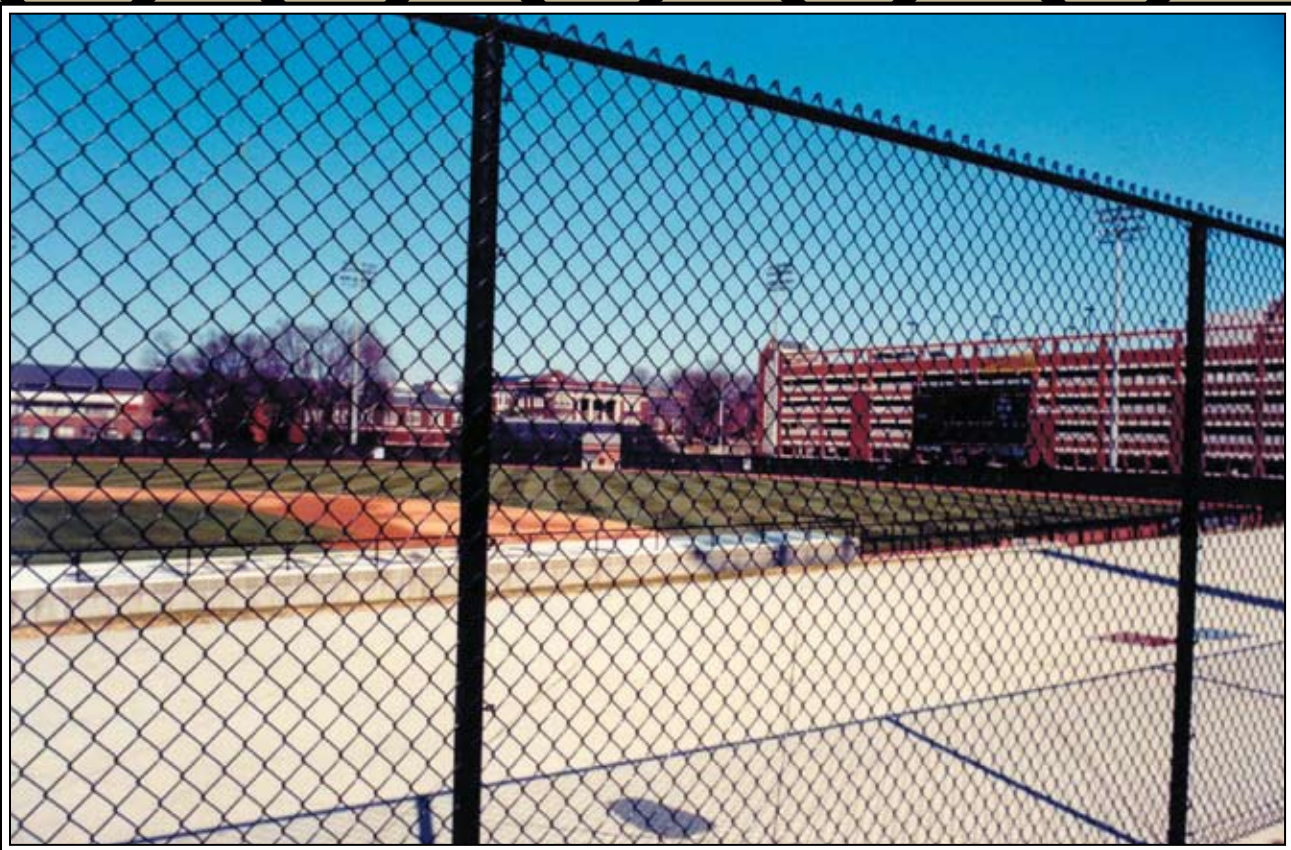


AMERISTAR®

for Architects & Specifiers

32 31 00

PermaCoat® Color Chain Link Fence & TransPort™ Chain Link Gates



University of North Carolina
Greensboro, NC

Maintenance-Free PermaCoat® Finish
Over Galvanized High Strength Steel

www.ameristarfence.com

AMERISTAR®

The Company Behind The Product

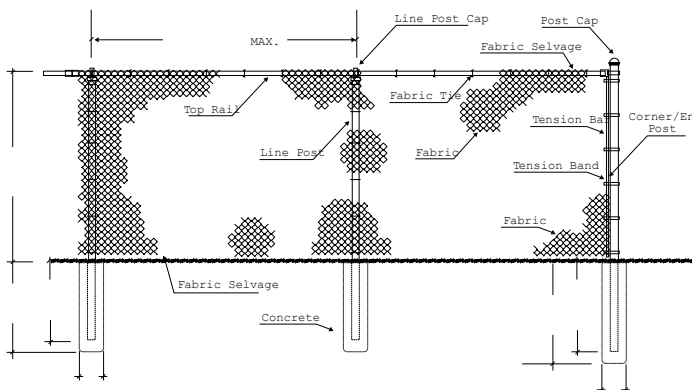


Ameristar Fence Products - Tulsa, OK

Ameristar® was chartered several years ago to provide specialty fence products that were more affordable but did not compromise the quality level demanded by specifiers and consumers. This could be accomplished only by complete reformation of the way fence products were being manufactured. Product design was approached from many new perspectives: maximizing high-volume productivity; increasing strength and durability; promoting ease of installation; ensuring an environmentally friendly workplace; and enhancing aesthetic appearance. A new plant was designed and built to house state-of-the-art roll-forming, metal processing and powder coating equipment. The result (shown in the photo above) has boosted Ameristar to its current position as the manufacturing leader in specialty fence production.

DETAILED PRODUCT DATA

Ameristar's electronic media enable architects and specifiers to simply download specification information directly into the appropriate section of their CSI-formatted project specifications; they also enable the direct downloading of product drawings onto project blueprints.



- **Architectural Binder**
The adjacent PermaCoat® series drawing is one of several shop drawings contained in Ameristar's Architectural Binder. Available upon request.
- **Internet Website**
The Ameristar® website (<http://www.ameristarfence.com>) enables the user to browse the entire Ameristar® product line. The site is complete with photos, drawings, specifications and installation procedures.

PERMACOAT®

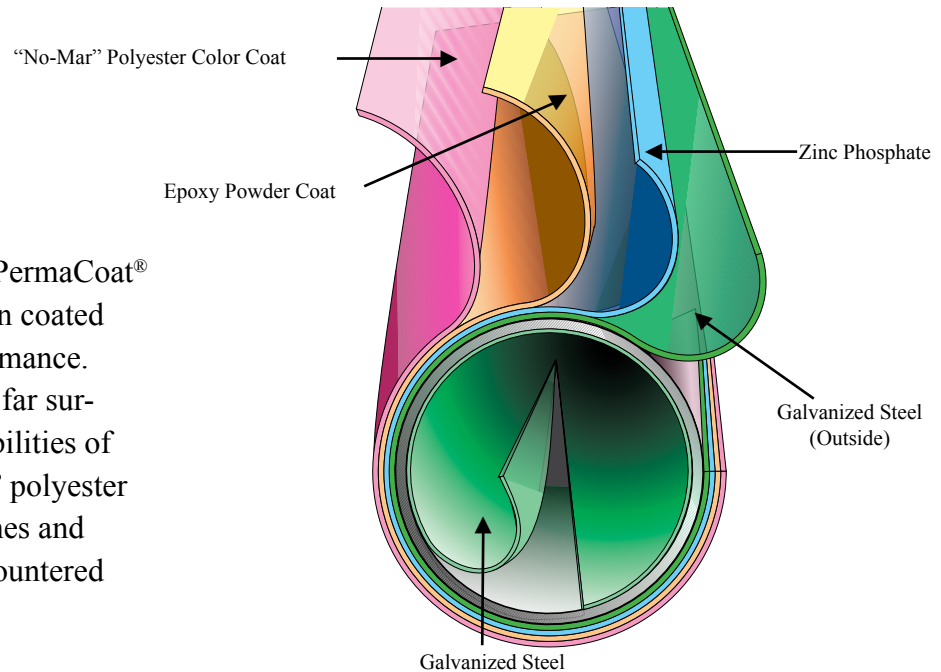
The Product Leader in Color Chain Link Fencing

32 31 00

Any truly great product must have a defining feature that sets it apart from all others; PermaCoat's double coating system, results in a coating durability and life superior to all other coated chain link fence systems.



Electrostatic application in the PermaCoat® powder coating system results in coated surfaces with unmatched performance. The base coat of epoxy powder far surpasses the corrosion resisting abilities of painted surfaces. The “no-mar” polyester powder top coat reduces scratches and burnishing marks normally encountered during shipping.



FRAMEWORK

The fence framework was designed and developed to answer the need for a more durable, attractive and affordable framing product. It is produced from high yield strength galvanized steel, using state-of-the-art mill forming and in-line welding techniques. It is coated with the PermaCoat® powder coating system, with its double layer of protection (actually powder coated twice). The base coat is a epoxy moisture barrier that is thermally fused to the galvanized substrate and is known for its outstanding corrosion resistance. The finish coat is a thermo-setting TGIC “no-mar” polyester with enhanced UV resistance to maintain a beautiful color finish for a lifetime of maintenance-free enjoyment.

COLORS



Black



Green



Brown

SUPERIOR FINISH

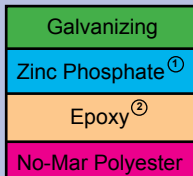
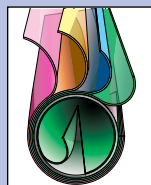
AMERISTAR® PERMACOAT® (DOUBLE COATED)

CONVENTIONAL POLYESTER (ONE COAT)

CONVENTIONAL POLY-VINYL CHLORIDE (ONE COAT)

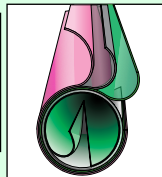
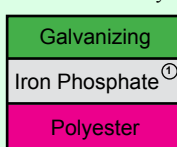
PROTECTIVE APPLICATIONS

PermaCoat® Fence System

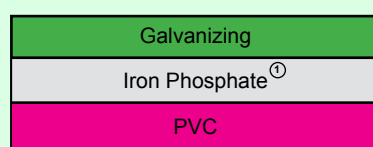


Double
Coating
(5 to 6 Mils.)

Conventional Polyester Fence Systems



Conventional PVC Fence Systems

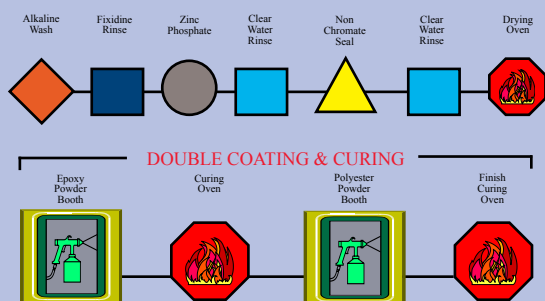


SALT SPRAY RESISTANCE (ASTM B117)
3,500 Hrs. 1,200 Hrs. 500 Hrs.

- ① Zinc compounds are used in the phosphatizing process because they add a significant amount of sacrificial cathodic protection. The zinc is much more active than steel; therefore, the zinc must oxidize before the steel is free to corrode. Iron phosphate, by contrast, provides no sacrificial cathodic advantage when applied to steel.
- ② The epoxy in the first of Ameristar's two coating applications provides an effective barrier to moisture and humidity; acting as a primer (3 mils thick) between the galvanized substrate and the polyester finish coat.

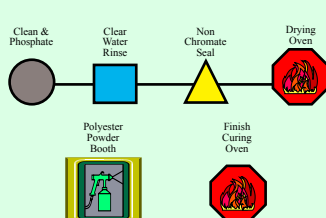
PRE-TREATMENT/COATING PROCESS

11 Stage PermaCoat® Double-Coating Process 7 STAGE PRE-TREATMENT



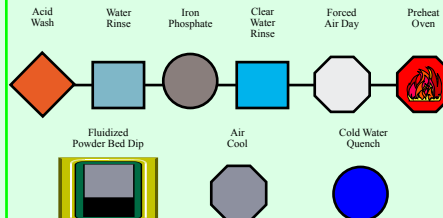
All fence parts, gates and accessories are given complete double PermaCoat® application.

Conventional Polyester Process



Simultaneous cleaning and phosphatizing significantly decreases the effectiveness of both treatments.

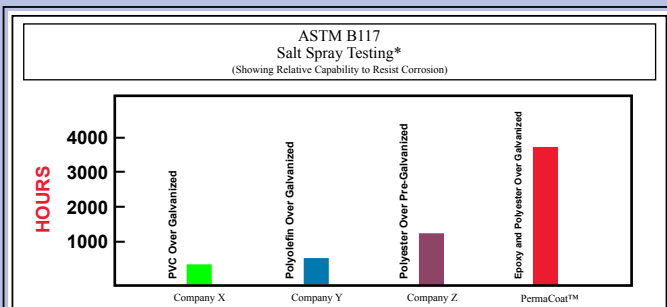
Conventional PVC Process



Curing is by a melt and quench process wherein the PVC material solidifies against the base metal surface. Adhesion is suspect and can vary greatly with small ambient changes.

CORROSION RESISTANCE

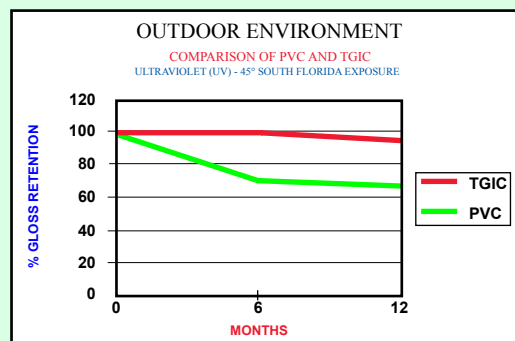
PermaCoat® significantly exceeds PVC and one coat polyester finishes in its ability to resist corrosion. ASTM B117 test results below show the dramatic difference.



* Testing to ASTM B-117 with scribe to ASTM D1654 - Failure mode of 1/8-inch undercut or medium #8 blisters.

UV RESISTANCE

PermaCoat® is far superior to PVC in resistance to the harmful effects of UV radiation, as shown below using South Florida exposure tests.



Ameristar® is America's premier manufacturer of color chain link fence materials. Applying the most extensive surface protection ever used on chain link fencing is one of the reasons our company has reached that achievement.

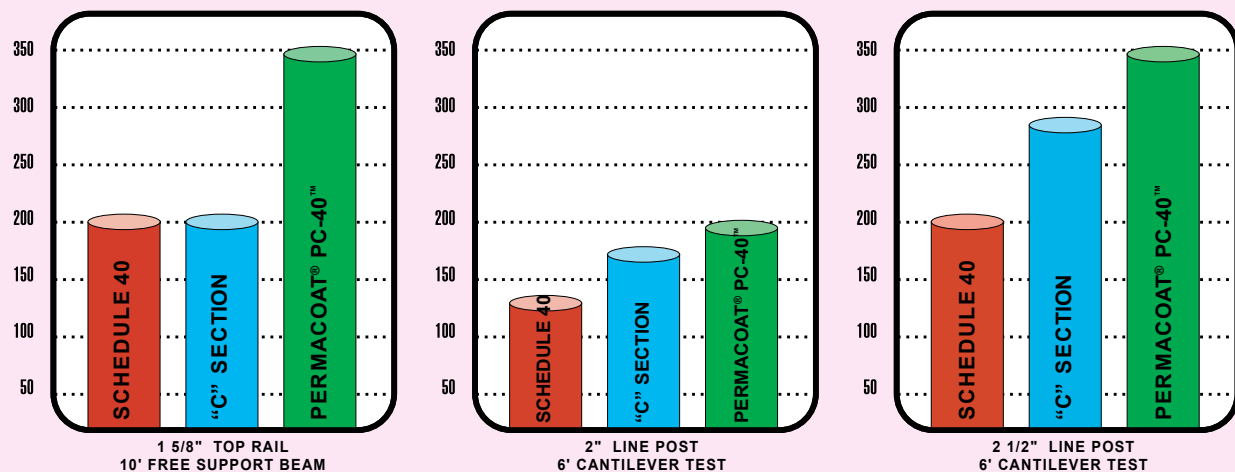
SUPERIOR STRENGTH

PERMACOAT® PC-40™ INDUSTRIAL STRENGTH PIPE PHYSICAL DIMENSIONS & STRENGTH CHARACTERISTICS

FENCE INDUSTRY O.D.	NOMINAL PIPE SIZE I.D.	ACTUAL O.D. (IN.)	WALL THICKNESS (IN.)	WT./FT. (POUNDS)	MIN. YIELD STRENGTH	X	(I) SECTION MODULUS	=	MAX. BENDING MOMENT LBS./IN.	10' FREE SUPPORTED LBS.	CALCULATED LOAD (LBS.)	
											CANTILEVER	
											4'	6'
1-5/8"	1-1/4"	1.660	.111	1.84	50,000	x	.1961	=	9,805	327	204	135
2"	1-1/2"	1.900	.120	2.28	50,000	x	.2810	=	14,050	468	293	195
2-1/2"	2"	2.375	.130	3.12	50,000	x	.4881	=	24,405	814	508	330
3"	2-1/2"	2.875	.160	4.64	50,000	x	.8778	=	43,890	1,463	914	610
4"	3-1/2"	4.000	.160	6.56	50,000	x	1.7819	=	89,095	2,969	1,856	1,237

(1) Nominal O.D. and minimum wall thickness

PERMACOAT® PC-40™ VS. SCHEDULE 40 & "C" SECTION BENDING STRENGTH COMPARISON



PERMACOAT® PC-20™ COMMERCIAL STRENGTH PIPE PHYSICAL DIMENSIONS & STRENGTH CHARACTERISTICS

FENCE INDUSTRY O.D.	NOMINAL PIPE SIZE I.D.	ACTUAL O.D. (IN.)	WALL THICKNESS (IN.)	WT./FT. (POUNDS)	MIN. YIELD STRENGTH	X	(I) SECTION MODULUS	=	MAX. BENDING MOMENT LBS./IN.	10' FREE SUPPORTED LBS.	CALCULATED LOAD (LBS.)	
											CANTILEVER	
											4'	6'
1-5/8"	1-1/4"	1.660	.085	1.43	50,000	x	.158	=	7,880	262	164	109
2"	1-1/2"	1.900	.090	1.74	50,000	x	.221	=	11,060	-	230	154
2-1/2"	2"	2.375	.095	2.31	50,000	x	.373	=	18,650	-	389	259
3"	2-1/2"	2.875	.110	3.25	50,000	x	.636	=	31,810	-	664	442

(1) Nominal O.D. and minimum wall thickness

Ameristar® is America's premier manufacturer of color chain link fence materials. Making the strongest fence pipe in its state-of-the-art roll-forming mill is one of the reasons for Ameristar's prominence.

SUPERIOR SYSTEM

APPLICATION		INDUSTRIAL <u>ASTM F668/F1043 & ASTM F1712</u> Sports Complexes • Recreational Facilities • Industrial Plant Facilities Government Facilities • Department of Transportation • Prisons	COMMERCIAL <u>ASTM F668/F1043 & F934</u> Nurseries • Mini-Storages • Golf Courses • Apartments • Office Complexes • Swimming Pools	TENNIS COURT <u>ASTM F969</u>
PERMACOAT® FRAMEWORK 15 Year Warranty Heights from 3' to 20' Black, Green or Brown PermaCoat® Epoxy & Polyester Powder Coating No-Mar Finish Type B Tubular Steel Framework With Supplemental Color Coating As Per ASTM F1043	PRODUCT	PERMACOAT® PC-40 FENCE PIPE	PERMACOAT® PC-20 FENCE PIPE	PERMACOAT® FENCE PIPE
	Terminal Posts up to 6'	2.375" O.D. x .130" Wall 3.12 lb./ft.	2.375" O.D. x .095" Wall 2.31 lb./ft.	N/A
	Terminal Posts over 6'	2.875" O.D. x .160" Wall 4.64 lb./ft.	2.875" O.D. x .110" Wall 3.25 lb./ft.	2.875" O.D. x .160" Wall 4.64 lb./ft.
	Terminal Posts over 10'	4" O.D. x .160" Wall 6.56 lb./ft.	N/A	2.875" O.D. x .160" Wall 4.64 lb./ft.
	Line Posts up to 6'	1.900" O.D. x .120" Wall 2.28 lb./ft.	1.900" O.D. x .090" Wall 1.74 lb./ft.	N/A
	Line Posts over 6'	2.375" O.D. x .130" Wall 3.12 lb./ft.	2.375" O.D. x .095" Wall 2.31 lb./ft.	2.375" O.D. x .130" Wall 3.12 lb./ft.
	Line Posts over 10'	2.875" O.D. x .160" Wall 4.64 lb./ft.	N/A	2.875" O.D. x .160" Wall 4.64 lb./ft.
	Rails & Bracing	1.660" O.D. x .111" Wall 1.84 lb./ft.	1.660" O.D. x .090" Wall 1.43 lb./ft.	1.660" O.D. x .090" Wall 1.43 lb./ft.

With the strength and surface protection manufactured into PermaCoat® chain link fence components, it is clear why Ameristar® is the premier source for all color chain link fence applications.

THE CHAIN LINK REVOLUTION

Color is now being demanded in ever increasing proportions over galvanized chain link fencing. Facility owners and managers wishing to retain the well known endurance of chain link systems while providing a perimeter that blends attractively with its surroundings are finding color systems to be the answer. Ameristar's PermaCoat® supplies the best answer for several reasons.

- ① **HIGHER QUALITY** – PermaCoat® is the only framework product with the double protection of epoxy (to resist corrosion) and TGIC polyester (to resist UV radiation). Ameristar's state-of-the-art factory houses the complete process from start to finish, employing rigid quality inspections as part of every operation.

HIGH SPEED TUBE MILL	MULTI-PASS ROLL FORM	METAL PROCESSING & GATE MFG.	PERMACOAT® ELECTROSTATIC POWDER COATING	FINISHED GOODS, PACKAGING & MARKING	READILY AVAILABLE INVENTORY	LOGISTICAL ROUTING, LOADING, & SHIPPING
-------------------------	-------------------------	---------------------------------------	--	--	-----------------------------------	--

- ② **ENVIRONMENTALLY FRIENDLY PRODUCTION** – The modern high-speed tube mill and the extensive pre-treating and coating line were designed to ensure an environmentally friendly workplace and product.
- ③ **LOWER COSTS** – Ameristar's direct manufacturing throughput system ensures a competitive initial cost but a significantly lower long term cost enabled by superior strength and higher quality coating. Maintenance or replacement costs of other systems raises their long term costs far beyond the PermaCoat® color system.
- ④ **SUPERIOR VALUE ALTERNATIVE** – PermaCoat® makes the increasingly popular color chain link fencing a preferred alternative, costing only a fraction more than galvanized chain link systems, while retaining the strength and endurance of the fence that was king over the past century.

PRODUCT PRESENTATION

PermaCoat® - The revolutionary leader in color chain link fence framework, form a fence system that is easily installed, giving an attractive, continuously smooth look to any line of fence.

INDUSTRIAL PC-40™ COLOR CHAIN LINK FENCE



Ameristar's PermaCoat® PC-40™ industrial color chain link not only control access, as one would expect from an industrial fence; they also enhance the beauty of the facilities and properties they surround.

The use of stainless steel fasteners with the PermaCoated framework, makes the PermaCoat® PC-40™ Industrial Fence the most attractive and durable industrial chain link fence available.