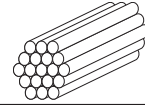


GALVONALL™

CHAIN LINK FRAMEWORK

GALVANIZED ROUNDS (18 GA.)

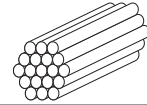


STOCK NO.	DESCRIPTION	WT. PER FOOT	WT. PER EACH	WT. PER BUNDLE	PCS. PER BUNDLE
Rail and Bracing					
GWB300	1-3/8 x 18 GA. GBR x 10'-6" SE	0.64	6.73	612	91
GWB301	1-3/8 x 18 GA. GBR x 21' SE	0.64	13.44	1,223	91
GWB302	1-3/8 x 18 GA. GBR x 24'	0.64	15.36	1,398	91
GWB310	1-5/8 x 18 GA. GBR x 21' SE	0.81	17.01	1,038	91
GWB312	1-5/8 x 18 GA. GBR x 22' SE	0.81	17.82	1,087	61
GWB383	1-5/8 x 18 GA. GBR x 24'	0.81	19.44	1,186	61
GWB314	1-7/8 x 18 GA. GBR x 21'	0.93	19.53	1,191	61
GWB305	1-7/8 x 18 GA. GBR x 24'	0.93	22.32	1,362	61
GWB316	2-3/8 x 18 GA. GBR x 21'	1.17	24.57	909	37
GWB317	2-3/8 x 18 GA. GBR x 24'	1.17	28.08	1,039	37
Cut Post					
GWB322	1-5/8 x 18 GA. GBR x 5'-6"	0.81	4.46	272	61
GWB323	1-5/8 x 18 GA. GBR x 6'	0.81	4.86	296	61
GWB324	1-5/8 x 18 GA. GBR x 6'-6"	0.81	5.27	321	61
GWB326	1-5/8 x 18 GA. GBR x 7'-6"	0.81	6.08	371	61
GWB332	1-7/8 x 18 GA. GBR x 5'-6"	0.93	5.12	312	61
GWB333	1-7/8 x 18 GA. GBR x 6'	0.93	5.58	340	61
GWB335	1-7/8 x 18 GA. GBR x 7'	0.93	6.51	397	61
GWB336	1-7/8 x 18 GA. GBR x 7'-6"	0.93	6.98	425	61
GWB337	1-7/8 x 18 GA. GBR x 8'	0.93	7.44	454	61
GWB342	2-3/8 x 18 GA. GBR x 5'-6"	1.17	6.44	238	37
GWB343	2-3/8 x 18 GA. GBR x 6'	1.17	7.02	260	37
GWB344	2-3/8 x 18 GA. GBR x 6'-6"	1.17	7.61	281	37
GWB345	2-3/8 x 18 GA. GBR x 7'	1.17	8.19	303	37
GWB347	2-3/8 x 18 GA. GBR x 7'-6"	1.17	8.78	325	37
GWB348	2-3/8 x 18 GA. GBR x 8'	1.17	9.36	346	37
GWB349	2-3/8 x 18 GA. GBR x 9'	1.17	10.53	390	37

Run any length
Please call for Mill Run Schedule and Pricing

CHAIN LINK FRAMEWORK

GALVANIZED ROUNDS (17 GA.)

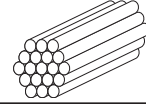


STOCK NO.	DESCRIPTION	WT. PER FOOT	WT. PER EACH	WT. PER BUNDLE	PCS. PER BUNDLE
Rail and Bracing					
GWB400	1-3/8 x 17 GA. GBR x 10'-6" SE	0.74	7.77	707	91
GWB401	1-3/8 x 17 GA. GBR x 21' SE	0.74	15.54	1,414	91
GWB402	1-3/8 x 17 GA. GBR x 21'	0.74	15.54	1,414	91
GWB410	1-5/8 x 17 GA. GBR x 21' SE	0.94	19.74	1,204	61
GWB412	1-5/8 x 17 GA. GBR x 22' SE	0.94	20.68	1,261	61
GWB411	1-5/8 x 17 GA. GBR x 21'	0.94	19.74	1,204	61
GWB414	1-7/8 x 17 GA. GBR x 21'	1.08	22.68	1,383	61
GWB415	1-7/8 x 17 GA. GBR x 24'	1.08	25.92	1,581	61
GWB417	2-3/8 x 17 GA. GBR x 24'	1.36	32.64	1,208	37
Cut Post					
GWB422	1-5/8 x 17 GA. GBR x 5'-6"	0.94	5.17	315	61
GWB423	1-5/8 x 17 GA. GBR x 6'	0.94	5.64	344	61
GWB424	1-5/8 x 17 GA. GBR x 6'-6"	0.94	6.11	373	61
GWB425	1-5/8 x 17 GA. GBR x 7'	0.94	6.58	401	61
GWB426	1-5/8 x 17 GA. GBR x 7'-6"	0.94	7.05	430	61
GWB427	1-5/8 x 17 GA. GBR x 8'	0.94	7.52	459	61
GWB432	1-7/8 x 17 GA. GBR x 5'-6"	1.08	5.94	362	61
GWB433	1-7/8 x 17 GA. GBR x 6'	1.08	6.48	395	61
GWB435	1-7/8 x 17 GA. GBR x 7'	1.08	7.56	461	61
GWB436	1-7/8 x 17 GA. GBR x 7'-6"	1.08	8.10	494	61
GWB437	1-7/8 x 17 GA. GBR x 8'	1.08	8.64	527	61
GWB442	2-3/8 x 17 GA. GBR x 5'-6"	1.36	7.48	227	37
GWB443	2-3/8 x 17 GA. GBR x 6'	1.36	8.16	302	37
GWB444	2-3/8 x 17 GA. GBR x 6'-6"	1.36	8.84	327	37
GWB447	2-3/8 x 17 GA. GBR x 8'	1.36	10.88	403	37
GWB449	2-3/8 x 17 GA. GBR x 9'	1.36	12.24	453	37

Run any length
Please call for Mill Run Schedule and Pricing

CHAIN LINK FRAMEWORK

GALVANIZED ROUNDS (16 GA.)

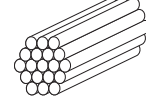


STOCK NO.	DESCRIPTION	WT. PER FOOT	WT. PER EACH	WT. PER BUNDLE	PCS. PER BUNDLE
Rail and Bracing					
GWB500	1-3/8 x 16 GA. GBR x 10'-6" SE	0.87	9.14	831	91
GWB501	1-3/8 x 16 GA. GBR x 21' SE	0.87	18.27	1,663	91
GWB507	1-3/8 x 16 GA. GBR x 21'	0.87	18.27	1,663	91
GWB505	1-3/8 x 16 GA. GBR x 24'	0.87	20.88	1,900	91
GWB530	1-5/8 x 16 GA. GBR x 10'-6" SE	1.11	11.66	711	61
GWB510	1-5/8 x 16 GA. GBR x 21' SE	1.11	23.31	1,422	61
GWB512	1-5/8 x 16 GA. GBR x 22' SE	1.11	24.42	1,490	61
GWB511	1-5/8 x 16 GA. GBR x 21'	1.11	23.31	1,422	61
GWB513	1-5/8 x 16 GA. GBR x 24'	1.11	26.64	1,625	61
GWB514	1-7/8 x 16 GA. GBR x 21'	1.27	26.67	1,627	61
GWB515	1-7/8 x 16 GA. GBR x 24'	1.27	30.48	1,859	61
GWB516	2-3/8 x 16 GA. GBR x 21'	1.60	33.60	1,243	37
GWB517	2-3/8 x 16 GA. GBR x 24'	1.60	38.40	1,421	37
Cut Post					
GWB523	1-5/8 x 16 GA. GBR x 6'	1.11	6.66	406	61
GWB524	1-5/8 x 16 GA. GBR x 6'-6"	1.11	7.22	440	61
GWB525	1-5/8 x 16 GA. GBR x 7'	1.11	7.77	474	61
GWB526	1-5/8 x 16 GA. GBR x 7'-6"	1.11	8.33	508	61
GWB527	1-5/8 x 16 GA. GBR x 8'	1.11	8.88	542	61
GWB533	1-7/8 x 16 GA. GBR x 6'	1.27	7.62	465	61
GWB534	1-7/8 x 16 GA. GBR x 6'-6"	1.27	8.26	504	61
GWB535	1-7/8 x 16 GA. GBR x 7'	1.27	8.89	542	61
GWB536	1-7/8 x 16 GA. GBR x 7'-6"	1.27	9.53	581	61
GWB537	1-7/8 x 16 GA. GBR x 8'	1.27	10.16	620	61
GWB543	2-3/8 x 16 GA. GBR x 6'	1.60	9.60	355	37
GWB544	2-3/8 x 16 GA. GBR x 6'-6"	1.60	10.40	385	37
GWB545	2-3/8 x 16 GA. GBR x 7'	1.60	11.20	414	37
GWB546	2-3/8 x 16 GA. GBR x 7'-6"	1.60	12.00	444	37
GWB547	2-3/8 x 16 GA. GBR x 8'	1.60	12.80	474	37

Run any length
 Please call for Mill Run Schedule and Pricing

CHAIN LINK FRAMEWORK

GALVANIZED ROUNDS (GBR-20)

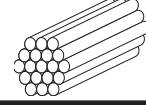


STOCK NO.	DESCRIPTION	WT. PER FOOT	WT. PER EACH	WT. PER BUNDLE	PCS. PER BUNDLE
<u>Rail and Bracing</u>					
GWB611	1-5/8 x GBR-20 x 21' SE	1.43	30.04	1,832	61
GWB609	1-5/8 x GBR-20 x 24' SE	1.43	30.04	1,832	61
GWB612	1-5/8 x GBR-20 x 21'	1.43	30.04	1,832	61
GWB610	1-5/8 x GBR-20 x 24'	1.43	30.04	1,832	61
GWB613	1-7/8 x GBR-20 x 21'	1.74	36.54	2,229	61
GWB614	1-7/8 x GBR-20 x 24'	1.74	41.76	2,547	61
GWB615	2-3/8 x GBR-20 x 21'	2.32	48.73	1,803	37
GWB616	2-3/8 x GBR-20 x 24'	2.32	55.68	2,060	37
GWB617	2-7/8 x GBR-20 x 21'	3.25	68.27	1,297	19
GWB618	2-7/8 x GBR-20 x 24'	3.25	78.00	1,482	19
<u>Cut Post</u>					
GWB631	1-7/8 x GBR-20 x 6'	1.74	10.44	637	61
GWB632	1-7/8 x GBR-20 x 7'	1.74	12.18	743	61
GWB633	1-7/8 x GBR-20 x 8'	1.74	13.92	849	61
GWB642	2-3/8 x GBR-20 x 7'	2.32	16.24	601	37
GWB643	2-3/8 x GBR-20 x 8'	2.32	18.56	687	37
GWB644	2-3/8 x GBR-20 x 9'	2.32	20.88	773	37
GWB653	2-7/8 x GBR-20 x 8'	3.25	26.00	494	19
GWB654	2-7/8 x GBR-20 x 9'	3.25	29.25	556	19
GWB655	2-7/8 x GBR-20 x 10'	3.25	32.50	618	19

Run any length
Please call for Mill Run Schedule and Pricing

CHAIN LINK FRAMEWORK

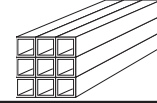
GALVANIZED ROUNDS (GBR-40)



STOCK NO.	DESCRIPTION	WT. PER FOOT	WT. PER EACH	WT. PER BUNDLE	PCS. PER BUNDLE
Rail and Bracing					
GWB711	1-5/8 x GBR-40 x 21'	1.84	38.64	2,357	61
GWB712	1-5/8 x GBR-40 x 24'	1.84	44.16	2,694	61
GWB713	1-7/8 x GBR-40 x 21'	2.28	47.88	2,921	61
GWB714	1-7/8 x GBR-40 x 24'	2.28	54.72	3,338	61
GWB715	2-3/8 x GBR-40 x 21'	3.12	65.52	2,424	37
GWB716	2-3/8 x GBR-40 x 24'	3.12	74.88	2,771	37
GWB717	2-7/8 x GBR-40 x 21'	4.64	97.44	1,851	19
GWB718	2-7/8 x GBR-40 x 24'	4.64	111.36	2,116	19
Cut Post					
GWB730	1-7/8 x GBR-40 x 7'	2.28	15.96	974	61
GWB731	1-7/8 x GBR-40 x 8'	2.28	18.24	1,113	61
GWB733	1-7/8 x GBR-40 x 9'	2.28	20.52	1,252	61
GWB741	2-3/8 x GBR-40 x 7'	3.12	21.84	808	37
GWB742	2-3/8 x GBR-40 x 8'	3.12	24.96	924	37
GWB744	2-3/8 x GBR-40 x 9'	3.12	28.08	1,039	37
GWB745	2-3/8 x GBR-40 x 10'	3.12	31.20	1,154	37
GWB781	2-3/8 x GBR-40 x 11'	3.12	34.32	1,270	37
GWB747	2-3/8 x GBR-40 x 12'	3.12	37.44	1,385	37
GWB749	2-3/8 x GBR-40 x 13'	3.12	40.56	1,501	37
GWB740	2-3/8 x GBR-40 x 14'	3.12	43.68	1,616	37
GWB750	2-3/8 x GBR-40 x 15'	3.12	46.80	1,732	37
GWB751	2-7/8 x GBR-40 x 8'	4.64	37.12	705	19
GWB752	2-7/8 x GBR-40 x 9'	4.64	41.76	793	19
GWB753	2-7/8 x GBR-40 x 10'	4.64	46.40	882	19
GWB755	2-7/8 x GBR-40 x 11'	4.64	51.04	970	19
GWB756	2-7/8 x GBR-40 x 12'	4.64	55.68	1,058	19
GWB757	2-7/8 x GBR-40 x 13'	4.64	60.32	1,146	19
GWB760	2-7/8 x GBR-40 x 14'	4.64	64.96	1,234	19
GWB758	2-7/8 x GBR-40 x 15'	4.64	69.60	1,322	19

Run any length
Please call for Mill Run Schedule and Pricing

GALVANIZED SQUARES



SIZE	GAUGE	PIECES PER BUNDLE
5/8" Square	18	260
3/4" Square	18	160
3/4" Square	16	160
1" Square	16	96
1" Square	14	96
1-1/4" Square	16	100
1-1/4" Square	14	100
1-1/2" Square	16	64
1-1/2" Square	14	64
2" Square	16	64
2" Square	14	64
2-1/2" Square	14	36
2-1/2" Square	12	36
3" Square	12	25
4" Square	11	16

- All tubing galvanized to ASTM Standards
- Produced in mill lengths of 20' and 24'
- Cut lengths available in Bundle quantity, upon request
- Optional spear pointing available for 5/8", 3/4" and 1" on request
- Minimum Order = 1/2 Truckload
- Minimum quantity of one item = Bundle

AVAILABILITY SUBJECT TO MILL SCHEDULE
REFER TO SALES POLICY FOR PURCHASING GUIDELINES

Run any length
 Please call for Mill Run Schedule and Pricing

CONSTRUCTION SPECIFICATION FOR GALVANIZED CHAIN LINK FENCE SYSTEMS UTILIZING AMERISTAR® GalvOnAll™ GBR-20™ FENCEPIPE (COMMERCIAL WEIGHT)

PART 2 - MATERIALS

2.01 MANUFACTURER

Framework for galvanized chain link fence systems shall conform to Ameristar® GalvOnAll™ GBR-20™ FencePipe (commercial weight), as manufactured by Ameristar® Fence Products in Tulsa, Oklahoma.

2.02 MATERIAL – STEEL FRAMEWORK

A. The steel material used to manufacture Ameristar® GalvOnAll™ GBR-20™ FencePipe shall be zinc-coated steel strip, galvanized by the hot-dip process conforming to the criteria of ASTM A653/A653M and the general requirements of ASTM A924/A924M.

B. The zinc used in the galvanizing process shall conform to ASTM B6. Weight of zinc shall be determined using the test method described in ASTM A90 and shall conform to the weight range allowance for ASTM A653, Designation G-90.

C. The framework shall be manufactured in accordance with commercial standards to meet the strength requirements (45,000 psi minimum yield strength) of ASTM F1043, Group IC, Electrical Resistance Welded Round Steel Pipe, light industrial (commercial) weight.

D. The exterior surface of the electrical resistance weld shall be recoated with the same type of material and thickness as the basic zinc coating.

E. A chromate conversion coating shall be applied to the external surface. The chromate shall be 30-micrograms/in² ± 15 micrograms/in² and shall be verified by a strip and weigh method utilizing an atomic absorption spectrophotometer or x-ray fluorescence spectrograph.

F. A clear coat shall be applied over the chromate conversion coating. Clear polymeric coatings shall be a clear film applied in the manner assuring good adhesion. The existence of a clear film coating shall be verified by a 15-second contact with a copper sulfate solution (specific gravity 1.186) at three separate locations on a specimen. Copper sulfate will react with zinc to form a black deposit of copper anywhere the zinc is not protected by the clear polymeric coating. The exterior clear-coated surface must demonstrate the ability to withstand exposure of 500 hours without failure at a black panel temperature of 145° F when tested in accordance with ASTM D1499. The clear coat shall also withstand 500 hours of exposure to 100% relative humidity per ASTM D2247 without blistering or peeling and 950 hours of exposure to salt spray per ASTM B117 with a maximum of 5% red rust.

G. The strength of Ameristar® GalvOnAll™ GBR-20™ FencePipe shall conform to the requirements of ASTM F1043. The strength of line, end, corner and pull posts shall be determined by the use of 4' or 6' cantilevered beam test. The top rail shall be determined by a 10' free-supported beam test (see Table 1). An alternative method of determining pipe strength is by the calculation of bending moment (see Table 1). Conformance with this specification can be demonstrated by measuring the yield/tensile strength of a randomly selected piece of pipe from each lot and calculating the section modulus. The yield/tensile strength shall be determined according to the methods described in ASTM E8. For materials under this specification, the 0.2 offset method shall be used in determining yield strength. Terminal posts, line posts and top/bottom rails shall be precut to specified lengths.

TABLE 1

Fence	Decimal O.D.		Pipe Wall		Weight		Section		Min. Yield		Max Bending	Calculated Load (lbs.)		
Industry	Equivalent		Thickness		Weight		Modulus	x	Strength	=	Moment	10' Free	Cantilever	
O.D.	Inches	(mm)	Inches	(mm)	Lb./ft.	(kg/m)	Inches		psi		lb. in.	Supported	4'	6'
1-3/8"	1.315	33.40	.080	2.03	1.06	1.57	.0900	x	50,000	=	4,500	150	N/A	N/A
1-5/8"	1.660	42.16	.085	2.16	1.43	2.13	.1574	x	50,000	=	7,870	262	164	109
2"	1.900	48.26	.090	2.29	1.74	2.59	.2208	x	50,000	=	11,040	N/A	230	154
2-1/2"	2.375	60.33	.095	2.41	2.32	3.45	.3734	x	50,000	=	18,670	N/A	389	259
3"	2.875	73.03	.111	2.82	3.26	4.85	.6365	x	50,000	=	31,825	N/A	663	442

**CONSTRUCTION SPECIFICATION FOR GALVANIZED CHAIN LINK FENCE SYSTEMS
UTILIZING AMERISTAR® GalvOnAll™ GBR-30™ FENCEPIPE (INDUSTRIAL WEIGHT)**

PART 2 - MATERIALS

2.01 MANUFACTURER

Framework for galvanized chain link fence systems shall conform to Ameristar® GalvOnAll™ GBR-30™ FencePipe (industrial weight), as manufactured by Ameristar® Fence Products in Tulsa, Oklahoma.

2.02 MATERIAL – STEEL FRAMEWORK

A. The steel material used to manufacture Ameristar® GalvOnAll™ GBR-30™ FencePipe shall be zinc-coated steel strip, galvanized by the hot-dip process conforming to the criteria of ASTM A653/A653M and the general requirements of ASTM A924/A924M.

B. The zinc used in the galvanizing process shall conform to ASTM B6. Weight of zinc shall be determined using the test method described in ASTM A90 and shall conform to the weight range allowance for ASTM A653, Designation G-185.

C. The framework shall be manufactured in accordance with commercial standards to meet the strength (50,000 psi minimum yield strength) and coating requirements of the following standards:

- 1) ASTM F1043, Group IC, Electrical Resistance Welded Round Steel Pipe, heavy industrial weight.
- 2) M181, Type I, Grade 2, Electrical Resistance Welded Steel Pipe
- 3) RR-F-191/3, Class 1, Grade B, Electrical Resistance Welded Steel Pipe

D. The exterior surface of the electrical resistance weld shall be recoated with the same type of material and thickness as the basic zinc coating.

E. A chromate conversion coating shall be applied to the external surface. The chromate shall be 30-micrograms/in² ± 15 micrograms/in² and shall be verified by a strip and weigh method utilizing an atomic absorption spectrophotometer or x-ray fluorescence spectrograph.

F. A clear coat shall be applied over the chromate conversion coating. Clear polymeric coatings shall be a clear film applied in a manner assuring good adhesion. The existence of a clear film coating shall be verified by a 15-second contact with a copper sulfate solution (specific gravity 1.186) at three separate locations on a specimen. Copper sulfate will react with zinc to form a black deposit of copper anywhere the zinc is not protect by the clear polymeric coating. The exterior clear-coated surface must demonstrate the ability to withstand exposure of 500 hours without failure at a black panel temperature of 145° F when tested in accordance with ASTM D1499. The clear coat shall also withstand 500 hours of exposure to 100% relative humidity per ASTM D2247 without blistering or peeling and 950 hours of exposure to salt spray per ASTM B117 with a maximum of 5% red rust.

G. The strength of Ameristar® GalvOnAll™ GBR-30™ FencePipe shall conform to the requirements of ASTM F1043; the minimum weight shall not be less than 90% of the nominal weight (see Table 1). The strength of line, end, corner and pull posts shall be determined by the use of 4' or 6' cantilevered beam test. The top rail shall be determined by a 10' free-supported beam test (see Table 1). An alternative method of determining pipe strength is by the calculation of bending moment (see Table 1). Conformance with this specification can be demonstrated by measuring the yield strength of a randomly selected piece of pipe from each lot and calculating the section modulus. The yield strength shall be determined according to the methods described in ASTM E8. For materials under this specification, the 0.2 offset method shall be used in determining yield strength. Terminal posts, line posts and top/bottom rails shall be precut to specified lengths.

TABLE 1

Fence Industry	Decimal O.D.		Pipe Wall Thickness		Weight		Section Modulus	x	Min. Yield Strength	=	Max Bending Moment	Calculated Load (lbs.)					
	Equivalent		Inches	(mm)	Lb./ft.	(kg/m)						Inches	psi	lb. in.	10' Free Cantilever		
	Inches	(mm)													Supported	4'	6'
1-5/8"	1.660	42.16	.095	2.41	1.59	2.36	.1730	x	50,000	=	8,650	288	180	120			
2"	1.900	48.26	.105	2.66	2.01	2.99	.2519	x	50,000	=	12,595	420	262	175			
2-1/2"	2.375	60.33	.115	2.92	2.78	4.13	.4402	x	50,000	=	22,006	734	458	306			
3"	2.875	73.03	.125	3.18	3.66	5.44	.7116	x	50,000	=	35,580	1186	741	494			
4"	4.000	101.60	.145	3.68	5.98	8.90	1.6338	x	50,000	=	81,690	2723	1701	1134			

**CONSTRUCTION SPECIFICATION FOR GALVANIZED CHAIN LINK FENCE SYSTEMS
UTILIZING AMERISTAR® GalvOnAll™ GBR-40™ FENCEPIPE (INDUSTRIAL WEIGHT)**

PART 2 - MATERIALS

2.01 MANUFACTURER

Framework for galvanized chain link fence systems shall conform to Ameristar® GalvOnAll™ GBR-40™ FencePipe (industrial weight), as manufactured by Ameristar® Fence Products in Tulsa, Oklahoma.

2.02 MATERIAL – STEEL FRAMEWORK

A. The steel material used to manufacture Ameristar® GalvOnAll™ GBR-40™ FencePipe shall be zinc-coated steel strip, galvanized by the hot-dip process conforming to the criteria of ASTM A653/A653M and the general requirements of ASTM A924/A924M.

B. The zinc used in the galvanizing process shall conform to ASTM B6. Weight of zinc shall be determined using the test method described in ASTM A90 and shall conform to the weight range allowance for ASTM A653, Designation G-185.

C. The framework shall be manufactured in accordance with commercial standards to meet the strength (50,000 psi minimum yield strength) and coating requirements of the following standards:

- 1) ASTM F1043, Group IC, Electrical Resistance Welded Round Steel Pipe, heavy industrial weight.
- 2) M181, Type I, Grade 2, Electrical Resistance Welded Steel Pipe
- 3) RR-F-191/3, Class 1, Grade B, Electrical Resistance Welded Steel Pipe

D. The exterior surface of the electrical resistance weld shall be recoated with the same type of material and thickness as the basic zinc coating.

E. A chromate conversion coating shall be applied to the external surface. The chromate shall be 30-micrograms/in² ± 15 micrograms/in² and shall be verified by a strip and weigh method utilizing an atomic absorption spectrophotometer or x-ray fluorescence spectrograph.

F. A clear coat shall be applied over the chromate conversion coating. Clear polymeric coatings shall be a clear film applied in a manner assuring good adhesion. The existence of a clear film coating shall be verified by a 15-second contact with a copper sulfate solution (specific gravity 1.186) at three separate locations on a specimen. Copper sulfate will react with zinc to form a black deposit of copper anywhere the zinc is not protect by the clear polymeric coating. The exterior clear-coated surface must demonstrate the ability to withstand exposure of 500 hours without failure at a black panel temperature of 145° F when tested in accordance with ASTM D1499. The clear coat shall also withstand 500 hours of exposure to 100% relative humidity per ASTM D2247 without blistering or peeling and 950 hours of exposure to salt spray per ASTM B117 with a maximum of 5% red rust.

G. The strength of Ameristar® GalvOnAll™ GBR-40™ Fence Pipe shall conform to the requirements of ASTM F1043; the minimum weight shall not be less than 90% of the nominal weight (see Table 1). The strength of line, end, corner and pull posts shall be determined by the use of 4' or 6' cantilevered beam test. The top rail shall be determined by a 10' free-supported beam test (see Table 1). An alternative method of determining pipe strength is by the calculation of bending moment (see Table 1). Conformance with this specification can be demonstrated by measuring the yield strength of a randomly selected piece of pipe from each lot and calculating the section modulus. The yield strength shall be determined according to the methods described in ASTM E8. For materials under this specification, the 0.2 offset method shall be used in determining yield strength. Terminal posts, line posts and top/bottom rails shall be precut to specified lengths.

TABLE 1

Fence Industry	Decimal O.D.		Pipe Wall Thickness		Weight		Section Modulus	x	Min. Yield Strength	=	Max Bending Moment	Calculated Load (lbs.)		
	O.D.	Inches	Inches	(mm)	Lb./ft.	(kg/m)						Inches	psi	lb. In.
1-5/8"	1.660	42.16	.111	2.82	1.84	2.74	.1961	x	50,000	=	9,805	327	204	136
2"	1.900	48.26	.120	3.05	2.28	3.39	.2810	x	50,000	=	14,050	468	293	195
2-1/2"	2.375	60.33	.130	3.30	3.12	4.64	.4881	x	50,000	=	24,405	814	508	339
3"	2.875	73.03	.160	4.06	4.64	6.90	.8778	x	50,000	=	43,890	1,463	914	610
4"	4.000	101.60	.160	4.06	6.56	9.76	1.7819	x	50,000	=	89,095	2,970	1,856	1,237

