



D O M E S T I C A L L Y M A N U F A C T U R E D

SS 20®

High Strength Fence Framework

F O R C O M M E R C I A L A N D I N D U S T R I A L A P P L I C A T I O N S

Allied's **SS 20®** was specifically designed and engineered for use in the industrial fence market. As the leading supplier of framework to the fence industry, Allied manufactures **SS 20** with high yield strength steel, and with our unique in-line continuous, FLO-COAT® process. **SS 20** out-performs mill structural pipe both in strength and corrosion resistance.

"Made in USA" is proudly displayed on every length of **SS 20**.

Superior Corrosion Resistance

Flo-Coat, a uniform application of zinc, conversion coating and a clear organic top coat gives **SS 20** a superior exterior finish. This carefully monitored triple coating results in a smooth, lustrous and durable surface that provides lasting corrosion resistance in all climates.

Laboratory tests conducted per ASTM test methods show that **SS 20**'s zinc-rich interior coating provides superior corrosion protection.

Flo-Coat® Process



Exceptional Strength

SS 20 is fabricated from steel conforming to ASTM A 1011 and is cold-formed to a minimum of 50,000 psi yield strength. The yield strength compared to hot-dipped galvanized structural pipe is up to 65% stronger, yet as much as 20% lighter. ***This dispels the old philosophy that greater weight means greater strength.***

Fabrication

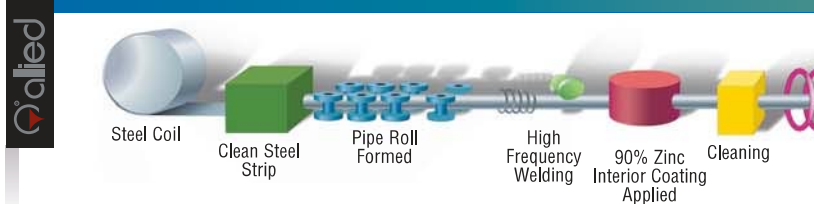
SS 20 is the obvious choice for industrial and commercial gate framework as well as a variety of specialty applications. Welding can be done without protective coatings crazing or flaking and there is less burnback at the weldments. Also, **SS 20**'s light weight and superior strength aid in reducing stress on gate accessories (hinges, slide gate rollers, automatic operators, etc.) **SS 20**'s strength and coatings exceed the provisions of ASTM F 1043. ***Group IV Standard Specifications for Strength and Protective Coatings on Steel Industrial Chain Link Fence Framework.***

Applications

With a proven performance record, **SS 20** continues to be the pipe of choice which includes the following applications:

- | | |
|-----------------------|---------------------|
| ■ Perimeter Security | ■ Sports Facilities |
| ■ Parks / Playgrounds | ■ Partitions |
| ■ Parking Lots | ■ Tool Cribs |
| ■ Industrial Gates | ■ Athletic Fields |

FLO-COAT® Process



Commercial and Industrial Applications for CHAIN-LINK FENCES AND GATES

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Fence framework, fabric and accessories.
- B. Gates and related hardware.
- C. Installation

1.02 SCOPE OF WORK

- A. Summary: This section covers the work necessary to complete the chain link fence and gate installation.
- B. General: Like items of materials provided hereafter shall be the end-products of one manufacturer in order to achieve standardization for appearance, maintenance, and replacement.
- C. Delivery, Storage, and Handling: Deliver material to the site in an undamaged condition. Carefully store material off the ground to provide proper protection against oxidation caused by ground moisture.

1.03 SUBMITTALS AND CERTIFICATION

- A. Shop Drawings: Include complete details of fence and gate construction, fence height, post spacing, dimensions, and unit weights of framework and concrete footing details.
- B. Product Data: Provide manufacturer's catalog cuts with printed specifications. Manufacturer shall provide certification of compliance with material specifications. Actual samples of the material maybe requested.

PART 2 - PRODUCTS

2.01 MATERIAL

- A. Framework: SS 20® Fence Framework manufactured by Allied Tube & Conduit Corporation using steel sheet conforming to Standard Specification ASTM A1011 with a 50,000 PSI yield strength. Coatings are applied by the Flo-Coat® process consisting of high-grade zinc, conversion coating, and a clear organic topcoat.
- B. Fabric Options: Fabric to be 9-gauge wire, woven in a 2" diamond mesh. Top selvage to be twisted and barbed, bottom selvage to be knuckled unless otherwise specified.
 - 1. Aluminized fabric shall be manufactured in accordance with ASTM A 491 and coated before weaving with a minimum .40 ounces of aluminum per square foot of surface area. The steel wire and coating shall conform to ASTM A 817.
 - 2. Zinc-coated fabric shall be galvanized before or after weaving in accordance with ASTM A 392, Class 1 or Class 2.

2.02 CONCRETE MIX

- A. Concrete: Conforming to ASTM C 94, having a minimum compressive strength of 3,000 PSI at 28 days.

2.03 COMPONENTS

- A. Rails and Braces: 1-5/8" O.D.
- B. Gates: Per ASTM F 900
- C. Fittings, Tie Wires, and Hog Rings: Per ASTM F 626
- D. Tension Wire: Per ASTM A 824. (If required)
- E. Barbed Wire: If required, commercial quality steel, 12-1/2 gauge, two strand twisted line wire with 4 point barbs at 5"

spacing. Coating shall consist of a minimum of 0.80 ounces of zinc per square foot of wire surface conforming to ASTM A 121 or a minimum of 0.30 ounces of aluminum per square foot of wire surface conforming to ASTM A 585.

- F. Barbed Tape: If required, options are available in ASTM F 1910 Table 1 and 2.

PART 3 - EXECUTION

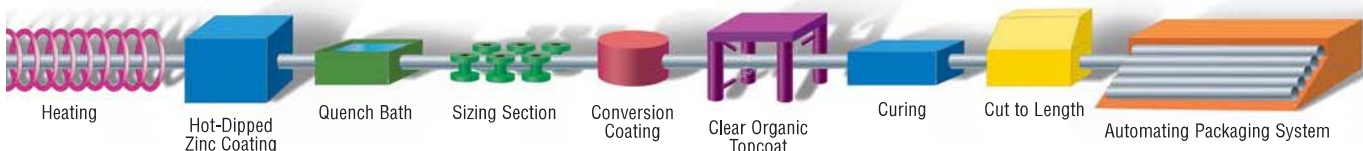
3.01 INSTALLATION

- A. General: Installation to conform to ASTM F 567.
- B. Height: Provide height as indicated on contract drawings.
- C. Post Spacing: Space line posts at intervals not exceeding ten feet.
- D. Post Setting: Set terminal, gate and line posts plumb in concrete footings. Top of footing to be 2" above grade and sloped to direct water away from posts.
- E. Bracing: Brace Gate and terminal posts back to adjacent line posts with horizontal brace rails and diagonal truss rods.
- F. Top Rail: Install through line loop caps connecting sections with sleeves to form a continuous rail between terminal posts.
- G. Bottom / Middle Rail: Install between posts with line rail clamps or rail ends and bands.
- H. Fabric: Pull fabric taut with bottom selvage 2" above grade. Fasten to terminal posts with tension bars threaded through mesh and secured with tension bands at maximum 15" intervals. Tie to line posts and top rails with tie wires spaced at maximum 12" on posts and 24" on rails. Attach to bottom/top tension wire with hog rings at maximum 24" intervals.
- I. Barbed Wire: Anchor to terminal extension arms, pull taut, and firmly install in slots of line post extension arms.
- J. Gates: Install gates plumb, level and secure for full opening without interference. Anchor center stops and keepers in concrete.
- K. Fasteners: Install nuts for fittings, bands, and hardware bolts on inside of fence.
- L. Barbed Tape: Install in accordance with ASTM F 1911. Consult with manufacturer for unique applications, and keepers in concrete.

3.02 COMPLETION

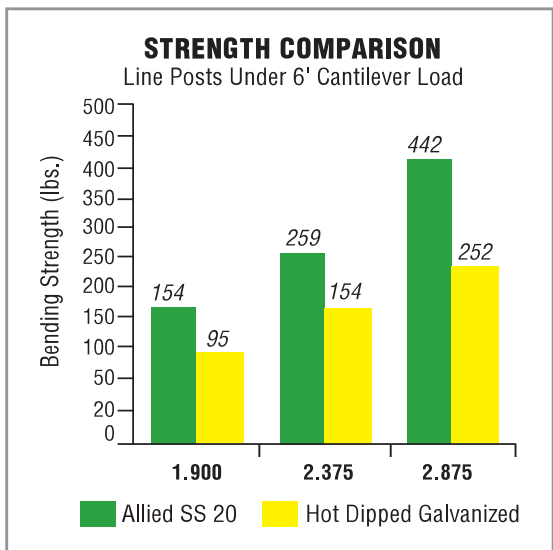
- A. The area of installation shall be left free of debris caused by the installation of the fence.

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SS 20® vs. Hot Dipped Galvanized Comparison Chart

Posts		Outside Dimensions (in.)	Pipe Wall Thickness (in.)	Weight (lbs./ft)	Section Modulus (inches ³)	Yield Strength (psi)	Bending Moment (lbs. in.)	6' Cantilever
1-7/8" O.D.	SS 20	1.900	.090	1.74	0.2212	50,000	11,060	154
1-7/8" O.D.	HDG	1.900	.116	2.21	0.2735	25,000	6,835	95
2-3/8" O.D.	SS 20	2.375	.095	2.32	0.3731	50,000	18,655	259
2-3/8" O.D.	HDG	2.375	.116	2.80	0.4434	25,000	11,085	154
2-7/8" O.D.	SS 20	2.875	.110	3.25	0.6364	50,000	31,820	442
2-7/8" O.D.	HDG	2.875	.128	3.76	0.7264	25,000	18,160	252
Top Rail								10' Supported
1-5/8" O.D.	SS 20	1.660	.085	1.43	0.1576	50,000	7,880	263
1-5/8" O.D.	HDG	1.660	.116	1.91	0.2032	25,000	5,079	169



Performance SS 20®

Strength	65% Stronger
Durability (Corrosion Resistance)	Superior Coatings
Appearance	Smooth, bright finish
Weight Savings	20% lighter
Weldability	Less Burnback
Ease of Fabrication	Coatings will not flake or craze
Value	The obvious choice

Bundle Counts for SS 20®

Shape	O.D.	Bundle Qty.
Round	1.315	91
Round	1.660	61
Round	1.900	61
Round	2.375	37
Round	2.875	30
Round	3.500	19
Round	4.000	19
Round	4.500	19

SS 20® is available with POLYKOTE color finish: Allied Tube's patented Flo-Coat® process with polyester coating conforms to ASTM F 1043 the recommended standards of Section 8, Additional Coatings Requirements. Contact your distributor for details.

SS 20® is available in long and extra long lengths and in cut posts.

Manufacturing Locations:

Harvey, IL / Pine Bluff, AR / Philadelphia, PA / Phoenix, AZ

For information on Razor Ribbon® brand barbed tape products, please visit www.razorribbon.com

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TUBE & CONDUIT



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