

Full-weight Hot-dipped Galvanized

# ASTM F1083 Schedule 40 Pipe



## Schedule 40 per ASTM F1083

Wheatland F1083 is the original specified fence framework used for commercial, industrial and high-security applications. Wheatland is the leading supplier of ASTM F1083 full-weight Schedule 40 domestic fence framework. Wheatland manufactures all F1083 grades: Regular Grade 30,000 psi, High Strength 50,000 psi and Schedule 80. When the specification requires Schedule 40 pipe, Wheatland's F1083 is the clear choice. Our ISO 9001 certified CW facility produces the finest Schedule 40 products in the world and is supported by over 130 years of experience delivering prompt, knowledgeable and personalized service.

- Meets or exceeds the requirements of ASTM F1083
- Meets or exceeds the requirements of ASTM F1043, Group 1A
- Full-weight Schedule 40 wall thickness
- Pure zinc hot-dip galvanized 1.8 oz./ft<sup>2</sup> outside, and 1.8 oz./ft<sup>2</sup> inside (2.0 oz./ft<sup>2</sup> available)
- Chromate conversion coating inside and outside for additional protection
- The only Schedule 40 pipe coated with virtually lead-free galvanization
- Most extensive size range of any fence framework product, 1 $\frac{3}{8}$ "-8 $\frac{5}{8}$ " OD

## Certification

Wheatland Tube will certify that all Wheatland F1083 fence pipe is manufactured in the USA and is in compliance with applicable local, state and federal specifications. "WHEATLAND USA ASTM F1083" is proudly displayed on each length of F1083 pipe.

## Specifying Agencies

- American Association of State Highway and Transportation Officials (AASHTO) M181—Grade 1
- Federal specifications RR-F-191/2E and RR-F-191/3E
- U.S. Army Corps of Engineers UFGS-32 31 13
- Department of the Navy
- Department of Transportation
- Federal Aviation Administration AC 150/5370-10 Item 162
- U.S. Department of Justice—Federal Bureau of Prisons
- ASTM Specification F1043, Group 1A, Standard Specification for Strength and Protective Coatings
- American Institute of Architects (AIA) MasterSpec®
- ASTM Specification F1083

## ASTM F1083 Regular Grade 30,000 PSI Yield Schedule 40 Pipe – Dimensions and Strength Characteristics

| FENCE INDUSTRY | DECIMAL OD EQUIVALENT |        | PIPE WALL THICKNESS |      | WEIGHT |         | SECTION MODULUS |                  | X | MIN. YIELD STRENGTH |     | = | MAX. BENDING MOMENT | CALCULATED LOAD (LBS.) |         |                    |
|----------------|-----------------------|--------|---------------------|------|--------|---------|-----------------|------------------|---|---------------------|-----|---|---------------------|------------------------|---------|--------------------|
|                | OD                    | in.    | (mm)                | in.  | (mm)   | lb./ft. | (kg/m)          | in. <sup>3</sup> |   | (mm <sup>3</sup> )  | psi |   |                     | (MPa)                  | lb./in. | 10' Free Supported |
|                |                       |        |                     |      |        |         |                 |                  |   |                     |     |   |                     |                        | 4'      | 6'                 |
| 1 3/8"         | 1.315                 | 33.40  | 0.133               | 3.38 | 1.68   | 2.50    | 0.1328          | 3.37             | x | 30000               | 205 | = | 3985                | 133                    | 83      | 55                 |
| 1 1/2"         | 1.660                 | 42.16  | 0.140               | 3.56 | 2.27   | 3.38    | 0.2346          | 5.96             | x | 30000               | 205 | = | 7038                | 235                    | 147     | 98                 |
| 1 7/8"         | 1.900                 | 48.26  | 0.145               | 3.68 | 2.72   | 4.05    | 0.3262          | 8.29             | x | 30000               | 205 | = | 9786                | 326                    | 204     | 136                |
| 2 3/8"         | 2.375                 | 60.33  | 0.154               | 3.91 | 3.65   | 5.43    | 0.5606          | 14.24            | x | 30000               | 205 | = | 16819               | 561                    | 350     | 234                |
| 2 1/2"         | 2.875                 | 73.03  | 0.203               | 5.16 | 5.80   | 8.62    | 1.0640          | 27.03            | x | 30000               | 205 | = | 31921               | 1064                   | 665     | 443                |
| 3 1/2"         | 3.500                 | 88.90  | 0.216               | 5.49 | 7.58   | 11.28   | 1.7241          | 43.79            | x | 30000               | 205 | = | 51723               | 1724                   | 1078    | 718                |
| 4"             | 4.000                 | 101.60 | 0.226               | 5.74 | 9.12   | 13.56   | 2.3939          | 60.80            | x | 30000               | 205 | = | 71816               | 2394                   | 1496    | 997                |
| 4 1/2"         | 4.500                 | 114.30 | 0.237               | 6.02 | 10.80  | 16.07   | 3.2145          | 81.65            | x | 30000               | 205 | = | 96435               | 3214                   | 2009    | 1399               |
| *5 1/16"       | 5.563                 | 141.30 | 0.258               | 6.55 | 14.63  | 21.77   | 5.4511          | 138.46           | x | 35000               | 240 | = | 190789              | 6359                   | 3975    | 2650               |
| *6 5/16"       | 6.625                 | 168.28 | 0.280               | 7.11 | 18.99  | 28.23   | 8.4958          | 215.79           | x | 35000               | 240 | = | 297353              | 9912                   | 6195    | 4130               |
| *8 5/16"       | 8.625                 | 219.08 | 0.322               | 8.18 | 28.58  | 42.49   | 16.8091         | 426.95           | x | 35000               | 240 | = | 588319              | 19610                  | 12257   | 8171               |

\*Manufactured to ASTM A53 specifications; exceeds F1083 requirements.

## ASTM F1083 High Strength Grade 50,000 PSI Yield Schedule 40 Pipe – Dimensions and Strength Characteristics

| FENCE INDUSTRY | DECIMAL OD EQUIVALENT |        | PIPE WALL THICKNESS |      | WEIGHT |         | SECTION MODULUS |                  | X | MIN. YIELD STRENGTH |     | = | MAX. BENDING MOMENT | CALCULATED LOAD (LBS.) |         |                    |
|----------------|-----------------------|--------|---------------------|------|--------|---------|-----------------|------------------|---|---------------------|-----|---|---------------------|------------------------|---------|--------------------|
|                | OD                    | in.    | (mm)                | in.  | (mm)   | lb./ft. | (kg/m)          | in. <sup>3</sup> |   | (mm <sup>3</sup> )  | psi |   |                     | (MPa)                  | lb./in. | 10' Free Supported |
|                |                       |        |                     |      |        |         |                 |                  |   |                     |     |   |                     |                        | 6'      | 15'                |
| 1 1/2"         | 1.660                 | 42.16  | 0.140               | 3.56 | 2.27   | 3.38    | 0.2346          | 5.96             | x | 50000               | 345 | = | 11730               | 392                    | 163     | 65                 |
| 1 7/8"         | 1.900                 | 48.26  | 0.145               | 3.68 | 2.72   | 4.05    | 0.3262          | 8.29             | x | 50000               | 345 | = | 16310               | 543                    | 227     | 91                 |
| 2 3/8"         | 2.375                 | 60.33  | 0.154               | 3.91 | 3.65   | 5.43    | 0.5606          | 14.24            | x | 50000               | 345 | = | 28030               | 935                    | 389     | 156                |
| 2 1/2"         | 2.875                 | 73.03  | 0.203               | 5.16 | 5.80   | 8.62    | 1.0640          | 27.03            | x | 50000               | 345 | = | 53200               | 1773                   | 739     | 296                |
| 3 1/2"         | 3.500                 | 88.90  | 0.216               | 5.49 | 7.58   | 11.28   | 1.7241          | 43.79            | x | 50000               | 345 | = | 86205               | 2873                   | 1197    | 479                |
| 4 1/2"         | 4.500                 | 114.30 | 0.237               | 6.02 | 10.80  | 16.07   | 3.2145          | 81.65            | x | 50000               | 345 | = | 160725              | 5357                   | 2232    | 893                |
| 5 1/16"        | 5.563                 | 141.30 | 0.258               | 6.55 | 14.63  | 21.77   | 5.4511          | 138.46           | x | 50000               | 345 | = | 272555              | 9085                   | 3785    | 1514               |
| 6 5/16"        | 6.625                 | 168.28 | 0.280               | 7.11 | 18.99  | 28.23   | 8.4958          | 215.79           | x | 50000               | 345 | = | 424790              | 14160                  | 5900    | 2360               |
| 8 5/16"        | 8.625                 | 219.08 | 0.322               | 8.18 | 28.58  | 42.49   | 16.8091         | 426.95           | x | 50000               | 345 | = | 840455              | 28015                  | 11673   | 4669               |

Please contact Fence Sales for mill run schedule. Minimum order quantities may be required. Specifications, illustrated material and descriptions are accurate as known at time of publication and are subject to change without notice.