Standard Steel Pipe

ASTM A53 TYPE E GRADE A Submittal Data Sheet



EXTRA STRONG (SCH. 80)

BLACK PLAIN END

Scope

Covers black and hot-dip galvanized electric resistance weld Grade A pipe. Pipe is intended for mechanical and pressure applications and is acceptable for ordinary uses in steam, water, gas and air lines. Pipe is suitable for welding and threading. It is produced to the latest revision of ASTM A53/A53M, Federal Specification WW-P404 and ASME B36.10M.

Hot-dip Galvanized

The average weight of zinc coating shall be not less than 1.8 oz. per sq. ft. of surface (inside and outside). When galvanized pipe is bent or otherwise fabricated to a degree that causes zinc coating to stretch or compress beyond the limit of elasticity, some flaking of the coating may occur.

Hydrostatic and Non-destructive Electric Testing

Hydrostatic inspection test pressures for plain-end pipe are listed in Table X 2.2 of the A53/A53M specification. Test pressures shall be maintained for a minimum of five seconds. Non-destructive electric testing of the weld seam is not a requirement on lengths of ERW pipe NPS $1\frac{1}{2}$ and smaller.

Chemical Requirements

Composition, max. %

| <u>Carbon</u> .25 | Manganese .95 | Phosphorus .05 | <u>Sulfur</u> .045 | |
|----------------------|------------------|-------------------|-----------------------|-----------|
| Copper* | Nickel* | Chromium* | Molybdenum* | Vanadium* |
| .50 | .40 | .40 | .15 | .08 |

^{*}The combination of these five elements shall not exceed 1.00%.

Tensile Requirements

| TENSILE STRENGTH, MIN. | YIELD STRENGTH, MIN. | ELONGATION IN 2" |
|------------------------|----------------------|--------------------------|
| 48,000 psi | 30,000 psi | Refer to A53 table X 4.1 |

Bending Test (Cold)

| NPS | DEGREE OF BEND | DIAMETER OF MANDREL |
|-------------|----------------|---------------------|
| 2 and under | 90° | 12x pipe OD |

Frequency of Tests

Tensile tests are required on one length of pipe from each lot of 500 lengths or fraction thereof for each size.

End Finish

Plain End: End finish shall be at the option of the manufacturer.

Threaded: to ANSI® Standard B 1.20.1 Couplings: to ASTM Standard A 865

Weights and Dimensions

STANDARD (SCH. 40) BLACK PLAIN END

| NPS | OD | NOMINAL WALL | WEIGHT | NPS | OD | NOMINAL WALL | WEIGHT |
|-----|-------|-----------------|----------|-----|-------|-----------------|----------|
| | in. | in. | lbs./ft. | | in. | in. | lbs./ft. |
| 1/4 | 0.540 | 0.088 | 0.43 | 1/4 | 0.540 | 0.119 | 0.54 |
| 3/8 | 0.675 | 0.091 | 0.57 | 3/8 | 0.675 | 0.126 | 0.74 |

All information contained herein is accurate as known at the time of publication.
Wheatland Tube reserves the right to change product specifications without notice and
without incurring obligations.

Permissible Variations in Wall Thickness

Minimum wall thickness at any point shall not be more than 12.5% under nominal wall thickness specified.

Permissible Variations in Outside Diameter

Pipe shall not vary more than +/- 0.016" from the standard specified.

Permissible Variations in Weight per Foot.

Pipe shall not vary more than +/- 10% from the standard specified.

Product Marking

Each bundle tag securely attached to the bundle shall show the manufacturer, the grade of pipe (ASTM A53), the kind of pipe (E for electric resistance weld, A for Grade A), the size (XS for extra strong), and the length. Bar coding is acceptable as a supplementary identification method.

| PROJECT: | CONTRACTOR: | DATE: |
|------------|--------------------------|--------------|
| ENGINEER: | SPECIFICATION REFERENCE: | SYSTEM TYPE: |
| LOCATIONS: | COMMENTS: | |





SUBMITTAL INFORMATION

