



# ASTM A589 Type E, Grade B, Type IV / ASTM A53/ASME SA-53 Type E, Grade A Submittal Data Sheet

## Approvals and Specifications

This product meets the following standards:

- Hydrostatically tested
- Non-destructively electric tested
- Flattening tested for NPS 3" and greater
- Made in Canada

## Product Marking

Each length of pipe ½" NPS and larger is continuously stenciled to show:

- The manufacturer name
- "Made in Canada"
- Grade
- Type of pipe
- Size
- Length
- Heat number
- Lot number (if galvanized)
- Date.

## Dimensions and Weights

NPS	Outside Diameter	Thickness	Weight
	in	in	lb/ft
3	3.500	0.125	4.51
3 ½	4.000	0.134	5.53
4	4.500	0.142	6.61
5	5.563	0.188	10.80
6	6.625	0.188*	12.94
6	6.625	0.219	15.00
6	6.625	0.250	17.04



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## Scope

Covers bare, black and hot-dipped galvanized Electric Resistance Welded, Type IV, Pipe. Pipe is intended for mechanical and pressure applications and is acceptable for ordinary uses in Water Well Casing. Produced to latest revisions of ASTM A589/A589M, ASTM A53/A53M, ASME SA53/SA53M and ASME B36.10M.

## Hot-Dipped Galvanized

The average weight of zinc coating determined by the ASTM A90 testing method 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 which causes zinc coating to stretch or compress beyond the limit of elasticity, some flaking of the coating may occur.

## Hydrostatic Testing and Non-destructive Electric Testing

Hydrostatic test pressures for plain-end pipe are indicated below (psi). Test pressures shall be maintained for a minimum of 5 seconds. Non-destructive electric testing of the weld seam is done on each length of ERW pipe NPS 3" and larger.

NPS	OD	Thickness	Test Pressure
	in	in	psi
3	3.500	0.125	1290
3.5	4.000	0.134	1400
4	4.500	0.142	1250
5	5.563	0.188*	1220
6	6.625	0.188*	1020
6	6.625	0.219	1190
6	6.625	0.250	1360

\* in lieu of 0.185"



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## Flattening Test

NPS 3" and greater: As a test for quality of the weld, position of the weld at 90° from the direction of force and flatten until the OD is 2/3 of the original outside diameter. No cracks shall occur along the inside or outside surface of the weld.

## End Finish

Plain end: NPS 3" and larger: ends are beveled top a angle of 30°, + 5° - 0° with a root face of 1/16 ± 1/32  
Couplings: To ASTM Standard A865

## Chemical Requirements

Composition, max % Carbon: 0.25, Manganese: 0.95, Phosphorus: 0.05, Sulfur: 0.045, \*Copper: 0.40, \*Nickel: 0.40 \* Chromium: 0.40, \*Molybdenum: 0.15, \*Vanadium 0.08  
\*The combination of these five elements shall not exceed 1.00%

## Tensile Requirements

Tensile Strength: 60000 Psi (415 Mpa) minimum  
Yield Strength: 35000 Psi (240 Mpa) minimum  
Elongation: Refer to ASTM A53 table X4.1

## Permissible Variations In Wall Thickness, In Outside Diameter, In Weight Per Foot

Minimum wall thickness at any point shall not be more than ±12.5% under nominal wall thickness specified.  
Pipe Diameter NPS 3" and over: ±1%.  
Pipe weight per foot shall not vary more than ±5% from the standard specified.