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# *Elliptical Tube for Bridge Rail*

## **Electric Resistance Welded Pipe**

Rev. 0-2005

The purpose of this specification is to provide a standard for electric resistance welded steel pipe suitable for use in structural bridge rail applications.

Bridge rail is produced continuously off the pipe mill in an elliptical shape in accordance with the chemical, mechanical, and testing requirements of **API 5L Grade X52 PSL 1 Type E**, as herein modified or subject to agreement between the purchaser and the manufacturer.

Acceptable modifications:

The inside flash for elliptical pipe used in a splice sleeve application shall not be removed.

Eddy current testing of the weld line, calibrated to 1/8th inch drilled hole is acceptable.

Flattening of the elliptical shape (sample shall be cut from the leading and trailing end of each coil) with the weld line located between the 10 o'clock and 2 o'clock position is acceptable. Flattening shall be done to 1/3 rd of the original outside diameter without the weld opening.

Hydrostatic testing is not required for the elliptical pipe.

Pipe ends shall be square cut and may not be burr free.

### *Specification: API 5L Grade X52 PSL1 Type E*

<i>NPS (inches)</i>	<i>OUTSIDE DIAMETER OF ROUND (inches)</i>	<i>ELLIPTICAL DIMENSIONS<sup>(1)</sup> (inches)</i>	<i>WALL THICKNESS (inches)</i>	<i>WEIGHT (lb/ft)</i>	<i>NUMBER LENGTHS PER BUNDLE</i>	<i>LENGTH<sup>(4)</sup> (ft)</i>
6	6	4-1/4 x 7-3/8 <sup>(2)</sup>	.219	13.54	15	21 - 40
6	6-5/8	4-7/8 x 8 <sup>(3)</sup>	.188	12.94	15	21 - 50

**Notes:** (1) Refer to attached drawing for elliptical tube dimensions and tolerance; (2) Splice sleeve;  
 (3) Rail member; (4) Other lengths are available upon request.

### **Chemical Requirements**

<i>Composition, max %</i>				
<b>C</b>	<b>Mn</b>	<b>P</b>	<b>S</b>	<b>Cb</b>
.26	1.40	.030	.030	.008 min.

### **Tensile Requirements**

<b>Yield strength, min (psi)</b>	52,000
<b>Tensile strength, min (psi)</b>	66,000