



A-709

Overview

A 709-50 has good strength to weight ratios and is conducive to bridge and support applications. The enhanced strength allows for thinner sections and yield the same support over heavier uses of mild steel.

Tensile Requirements

*Elements represented in percentage
Where “-” appears in this table, there is no requirement.

Grade	Plate Thickness, in. [mm]	Yield Point or Yield Strength,Â Bksi [MPa]	Tensile Strength, ksi [MPa]	Min. Elongation, %
				Plates and BarsC,E
				8 in. or 200 mm
36 [250]	to 4 [100], incl	36 [250] min	58-80 [400-550]	20
		36 [250] min	58 [400] min	—
50 [345]	to 4 [100], incl	50 [345] min	65 [450] min	18
50S [345S]	G	50-65 [345-450]H,I	65 [450]Hmin	—
50W [345W] and HPS 50W [HPS 345W]	to 4[100], incl	50 [345] min	70 [485]	18
HPS 70W [HPS 485 W]	to 4[100], incl	70 [485] minB	85-110 [585-760]	—
HPS 100W [HPS 690 W]	to 2½[65], incl	100 [690] minB	110-130 [760-895]	—
	over 2½ to 4 [65 to 100], inclM	90 [620] minB	100-130 [690-895]	—