ANGLES BEAMS CHANNELS

(Mill Finish and Galvanized)

Alaska Steel stocks a wide range of sizes of angles, beams and channels which meet the requirements of ASTM A36. These structurals are available in either 20, 40, 50, or 60 foot lengths. We also carry structurals that meet ASTM A-572 grade 50 and beams to ASTM A-992.

ASTM A36 STRUCTURAL SHAPES

CHEMICAL ANALYSIS

C	Mn*	P	S	Cu
.26 max	—	.040 max.	.050 max	.20 min % when copper steel is specified

*manganese content of .85–1.35% and silicon content of .15–.40% is required for shapes over 426 lb/ft.

TENSILE REQUIREMENTS[A]

Plates, Shapes[B], and Bars:	
Tensile strength, ksi	58–80
Yield point, min, ksi	36[C]
Plates and Bars[E]:	
Elongation in 8 in. min, %	20
Elongation in 2 in. min, %	23
Shapes:	
Elongation in 8 in. min, %	20
Elongation in 2 in. min, %	21[B]

[A]For plates wider than 24 in, the test specimen is taken in the transverse direction.

[B]For wide flange shapes over 426 lb/ft tensile strength minimum of 58 ksi only and elongation in 2 in. of 19% minimum applies.

[C]Yield point 32 ksi for plates over 8 in. in thickness.

[D]Elongation not required to be determined for floor plate.

[E]For plates wider than 24 in. the elongation requirement is reduced two percentage points.

Shapes less than 1 in. in cross section and bars, other than flats, less than 1/2 in. in thickness or diameter need not be subjected to tension tests by the manufacturer.