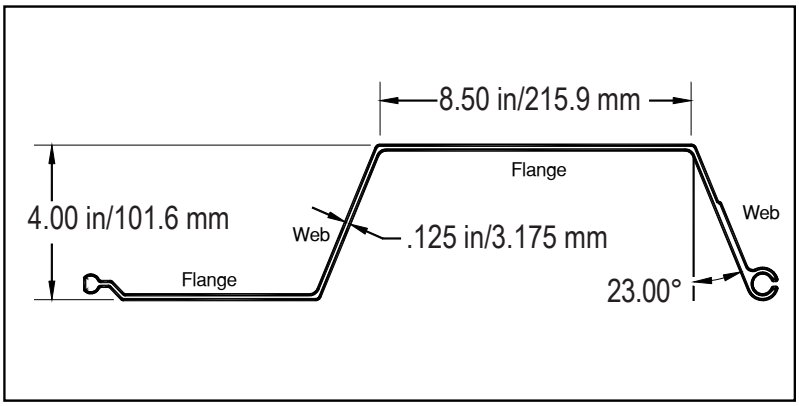
SuperLoc™ 1540 Data Sheet

(Part Number SS803)

Physical Properties

Depth of Sheet	4.00 in. 101.6 mm
Width of Sheet	18.00 in. 457.2 mm
Typical Thickness	0.125 in. 3.175 mm
Weight	1.8 psf 8.79 Kg/m^2
Section Modulus	3 in^3/ft. 1.61E5 mm^3/m
Moment of Inertia	6 in^4/ft. 8.19E6 mm^4/m
Area of the web	0.75 in^2/ft.of wall 1.59E3 mm^2/m
Webs per length of wall	1.50 webs/ft. 4.921 webs/m
Angle of the web	23°
Cross-Sectional Area of the sheet	3.35 in^2 2,161 mm^2

**Wale & Retaining Wall System*
(US Patent #6,893,191 B2/May 17, 2005)



Note: Values are not factored,
an appropriate safety factor must be applied

CW = Crosswise **LW = Lengthwise**

Mechanical Properties	Test Method	Average Values Imperial	Average Values Metric
Full Section Modulus of Elasticity	*** PSU Lab Full Section	3.00E+06 psi	20,684 MPa
Shear Modulus	*** PSU Lab Full Section	425,000 psi	2,930 MPa
Shear Capacity	*** Calculated	3,750 lbs./ft.of wall	5,581 kg/m of wall
Web Buckling Capacity from Wale Force	*** Calculated/Full Section Lab Test	2,466 lbs./ft. of wall[3]	3,670 kg/m of wall[3]
Moment Capacity	*** PSU Lab Full Section	2,800 lbs.ft./ft. of wall	1,270 kg-m/m of wall
Average Stress at Failure	*** PSU Lab Full Section	11,200 psi	77 MPa
Minimum Ultimate Values			
Specific Gravity	**ASTM** D-792	1.7	1.7
IZOD Impact LW	**ASTM** D-256	30 ft.lb./in. notch	1.601 NM/mm notch
IZOD Impact CW	**ASTM** D-256	7 ft.lb./in. notch	.374 NM/mm notch
Tensile Strength Flange LW	**ASTM** D-638	40,000 psi	276 MPa
Tensile Strength Flange CW	**ASTM** D-638	10,000 psi	69 MPa
Tensile Modulus Flange LW	**ASTM** D-638	3.50E+06 psi	24,100 MPa
Tensile Modulus Flange CW	**ASTM** D-638	1.40E+06 psi	9,700 MPa
Compression Modulus Flange LW	**ASTM** D-695	2.60E+06 psi	17,900 MPa
Compression Modulus Flange CW	**ASTM** D-695	1.40E+06 psi	9,700 MPa
Compression Modulus Web CW	**ASTM** D-695	1.40E+06 psi	9,700 MPa
Compression Strength of Flange LW	**ASTM** D-695	35,000 psi	241 MPa
Compression Strength of Flange CW	**ASTM** D-695	20,000 psi	138 MPa
Compression Strength Web CW	**ASTM** D-695	20,000 psi	138 MPa
Bearing Strength LW	**ASTM** D-953	30,000 psi	207 MPa
In-Plane Shear LW	**ASTM** Mod.D2344[1]	5,000 psi	34 MPa
CTE LW	**ASTM** D-696	5.5 (10^{-6} in/in/ºF)	9.9 (10^{-6} mm/mm ºC)
CTE CW	**ASTM** D-696	10.5 (10^{-6} in/in/ºF)	18.9 (10^{-6} mm/mm ºC)

1. Follow ASTM D2344, but rotate the coupon 90 degrees (cut section of coupon length faces up)
2. Values are published as ultimate. Appropriate Safety Factors must be applied.
3. Based on 6"-8" (152.4mm - 203.2mm) wide wale sections

Refer to the SuperLoc™ Design/Installation Manual for Comprehensive Information

See Back For Detailed Drawing & Recommended Safety Factors

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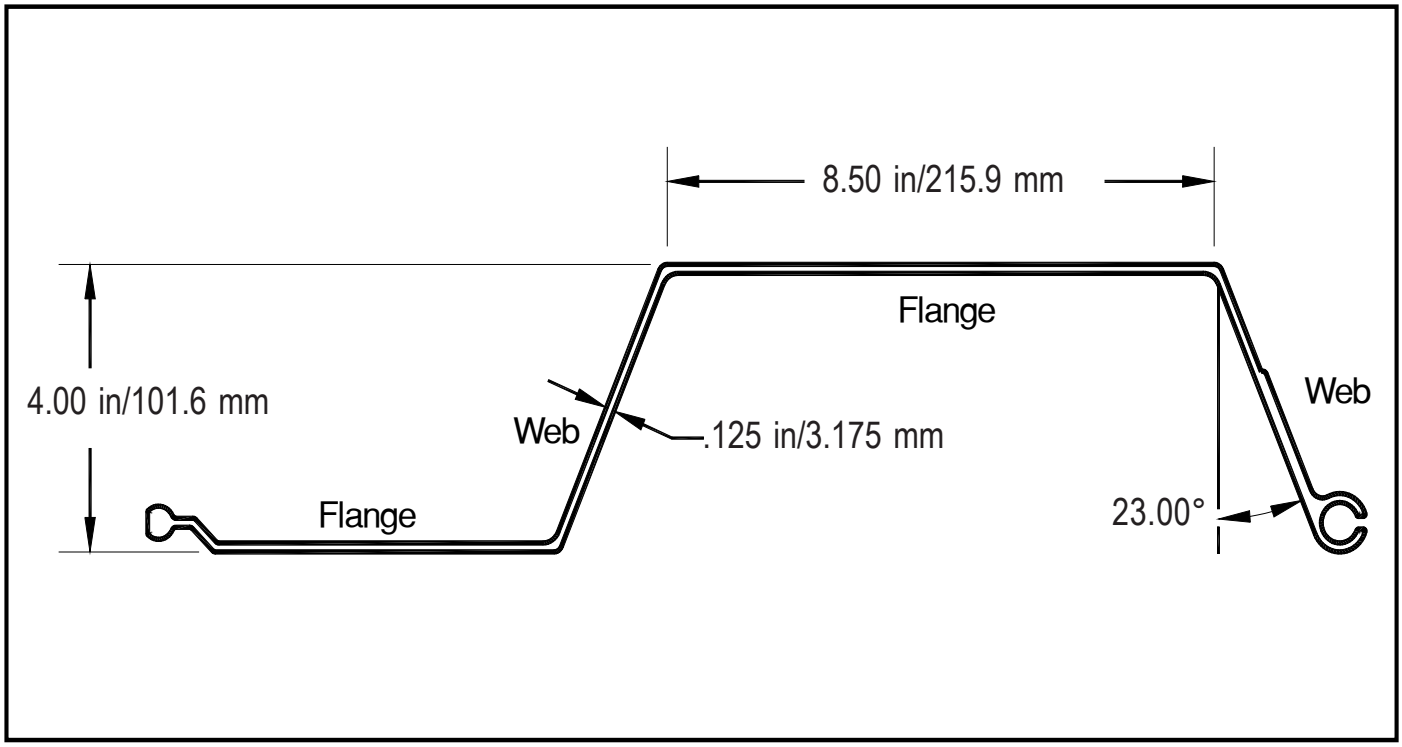

	Load Type	Factor
Suggested Safety Factor	Moment	2.5
Suggested Safety Factor	Shear	3.0
Suggested Safety Factor	Web Buckling from Wale Force	2.5
Suggested Safety Factor	Bearing	2.5

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