

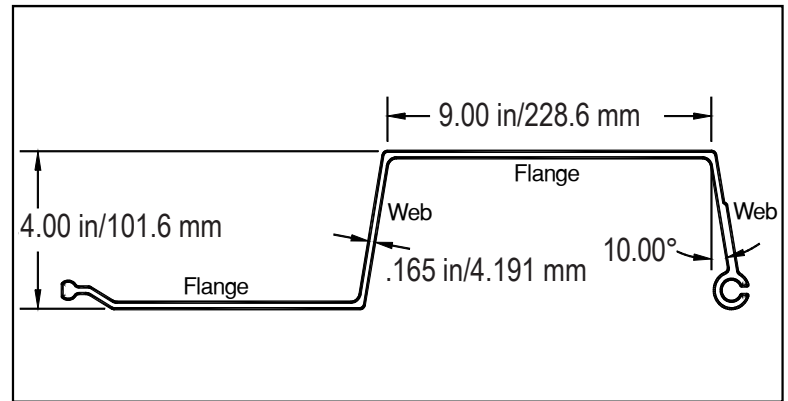
# SuperLoc™ 1550 Data Sheet

(Part Number SS808)

## Physical Properties

Depth of Sheet	4.00 in. 101.6 mm
Width of Sheet	18.00 in. 457.2 mm
Typical Thickness	0.165 in. 4.191 mm
Weight	2.45 psf 11.96 Kg/m <sup>2</sup>
Section Modulus	4.08 in <sup>3</sup> /ft. 2.19E5 mm <sup>3</sup> /m
Moment of Inertia	8.42 in <sup>4</sup> /ft. 1.15E7 mm <sup>4</sup> /m
Area of the web	1.00 in <sup>2</sup> /ft. of wall 2.12E3 mm <sup>2</sup> /m
Webs per length of wall	1.50 webs/ft. 4.921 webs/m
Angle of the web	10°
Cross-Sectional Area of the sheet	4.60 in <sup>2</sup> 2,968 mm <sup>2</sup>

\*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	5,100 lbs./ft. of wall	7,590 kg/m of wall
Web Buckling Capacity from Wale Force	*** Calculated/Full Section Lab Test	5,152 lbs./ft. of wall <sup>3</sup>	7,667 kg/m of wall <sup>3</sup>
Moment Capacity	*** PSU Lab Full Section	3,760 lbs.ft./ft. of wall	1,706 kg-m/m of wall
Average Stress at Failure	*** PSU Lab Full Section	11,059 psi	76 MPa
<b>Minimum Ultimate Values</b>			
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	35,000 psi	241 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	2.70E+06 psi	18,600 MPa
Compression Modulus Flange CW	ASTM D-695	1.50E+06 psi	10,300 MPa
Compression Modulus Web CW	ASTM D-695	1.40E+06 psi	9,700 MPa
Compression Strength of Flange LW	ASTM D-695	30,000 psi	207 MPa
Compression Strength of Flange CW	ASTM D-695	19,000 psi	131 MPa
Compression Strength Web CW	ASTM D-695	19,000 psi	131 MPa
Bearing Strength LW	ASTM D-953	30,000 psi	207 MPa
In-Plane Shear LW	ASTM Mod.D2344 <sup>1</sup>	5,000 psi	34 MPa
CTE LW	ASTM D-696	5.5 (10 <sup>-6</sup> in/in/°F)	9.9 (10 <sup>-6</sup> mm/mm °C)
CTE CW	ASTM D-696	10.5 (10 <sup>-6</sup> in/in/°F)	18.9 (10 <sup>-6</sup> mm/mm °C)

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

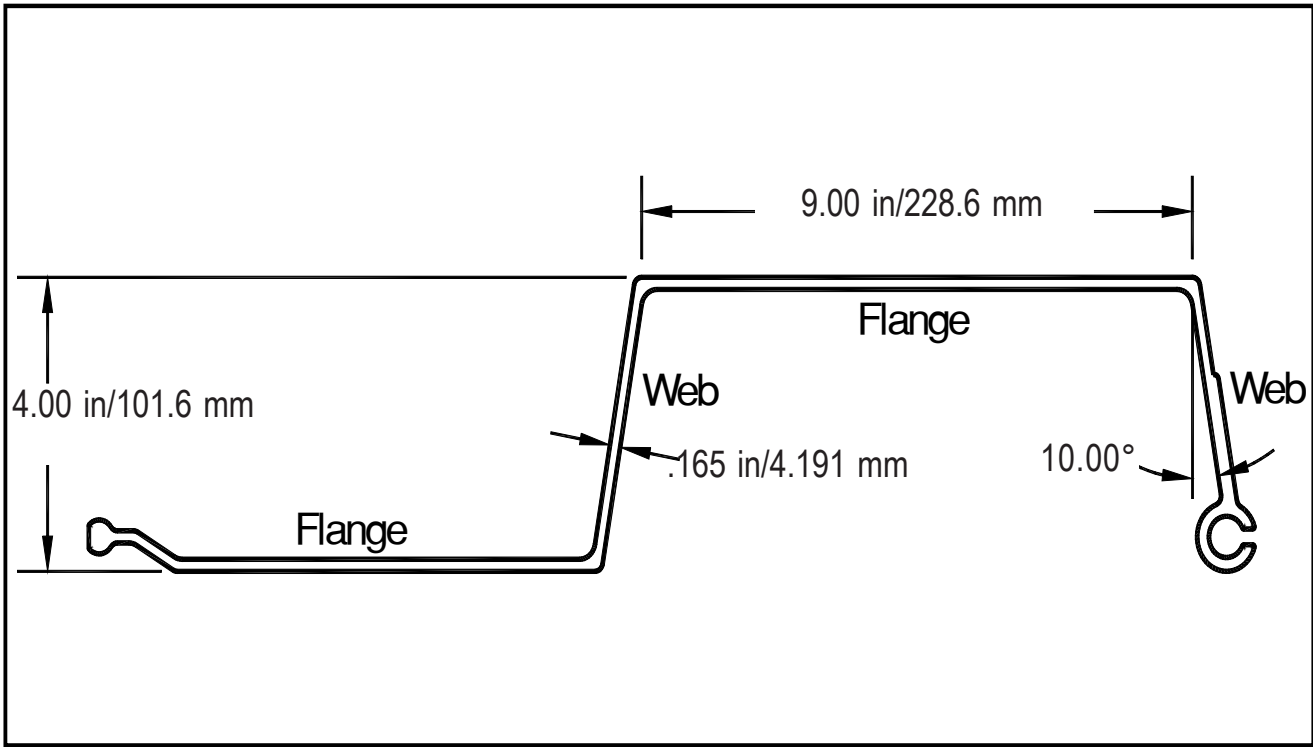
**See Back For Detailed Drawing  
& Recommended Safety Factors**



CREATIVE PULTRUSIONS, INC.

214 Industrial Lane ■ Alum Bank, PA 15521  
Toll-Free: 888-CPI-PULL (274-7855) ■ 814-839-4186 ■ Fax: 814-839-4276  
Web site: <http://www.creativepultrusions.com> ■ E-mail: [crpul@pultrude.com](mailto:crpul@pultrude.com)

CPMI03-0406.5C  
April 2006



	Load Type	Factor
<b>Suggested Safety Factor</b>	Moment	2.5
<b>Suggested Safety Factor</b>	Shear	3.0
<b>Suggested Safety Factor</b>	Web Buckling	
	from Wale Force	2.5
<b>Suggested Safety Factor</b>	Bearing	2.5

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