



ClarkWestern Building Systems
 CW Tech Support: (888) 437-3244
 clarkwestern.com

2007 North American Specification ASD
 DATE: 11/15/2017
 Bldg A Stud Wall 12" O.C.

SECTION DESIGNATION: 600S250-68 [50] Single

Section Dimensions:

Web Height =	6.000 in
Top Flange =	2.500 in
Bottom Flange =	2.500 in
Stiffening Lip =	0.625 in
Inside Corner Radius =	0.1070 in
Punchout Width =	1.500 in
Punchout Length =	4.000 in
Design Thickness =	0.0713 in



Steel Properties:

Fy =	50.000 ksi
Fu =	65.000 ksi
Fya =	50.000 ksi

Gross Properties

A(gross)	Weight	A(net)	Sxx	Ixx	Rx	Iyy	Ry
(in ²)	(lb/ft)	(in ²)	(in ³)	(in ⁴)	(in)	(in ⁴)	(in)
0.8356	2.8435	0.7287	1.5757	4.7270	2.3784	0.6883	0.9076

Effective Properties

Ixx(defl)	Sxx	Ma-xx	Ma-x(dist)	Vag	Vanet	Syy	Ma-y
(in ⁴)	(in ³)	(Ft-Lb)	(Ft-Lb)	(lb)	(lb)	(in ³)	(Ft-Lb)
4.7270	1.3858	3457.6	3255.8	5350	2879	0.3512	876.2

K-phi for Distortional Buckling = 0.00 lb*in/in

Torsional Properties

Jx1000	Cw	Xo	m	Ro	Beta
(in ⁴)	(in ⁶)	(in)	(in)	(in)	
1.4160	5.1455	-1.842	1.119	3.142	0.656

Warping Torsional Properties

a	Sxx(lip)	Wn(1)	Wn(2)	Wn(3)	Wn(4)	Wn(5)	Wn(6)
(in ³)	(in ³)	(in ²)	(in ²)	(in ²)	(in ²)	(in ²)	(in ²)
97.4	1.7282	5.9724	3.8814	-3.3181	3.3181	-3.8814	-5.9724

Web Crippling - Allowable Loads, Pa (lb)

End Bearing Length = 1.00 (in)
 Interior Bearing Length = 3.50 (in)

Cond. 1 (E1F)
914

Cond. 2 (I1F)
2596

Cond. 3 (E2F)
816

Cond. 4 (I2F)
2881

Punchout Reduction Factor Cond. 1, Rc(E1F) = 0.924 + 0.083x/h <= 1.0

Punchout Reduction Factor Cond. 2, Rc(I1F) = 0.888 + 0.053x/h <= 1.0