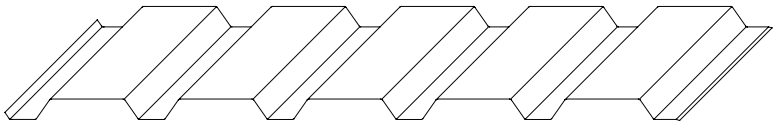
LOAD TABLES
20 ga. STEEL
ASTM A653
SS 50
39 ⅜" COVERAGE

PENUMWALL PANEL

BWS391



F_y=50 KSI		
20 Gauge		
	Top in Compression	Bottom in Compression
Yt=	0.4808 in	0.4808 in
Yb=	0.8073 in	0.8073 in
St=	0.3461 in^3/ft	0.3461 in^3/ft
Sb=	0.1929 in^3/ft	0.1929 in^3/ft
I=	0.1547 in^4/ft	0.1547 in^4/ft
M_a=	249 ft-lb/ft	229 ft-lb/ft
$P_{c,int}$=	1375 lb/ft	1375 lb/ft
$P_{c,end}$=	865 lb/ft	865 lb/ft

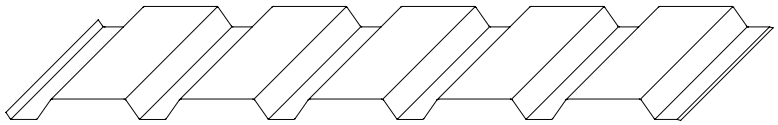
20-Gauge Steel PenumWall/BWS391 Inward (Positive) Pressure									
Load (psf)	Δ ≤ L/240 Deflection Criteria			Δ ≤ L/180 Deflection Criteria			Δ ≤ L/120 Deflection Criteria		
	Span Condition			Span Condition			Span Condition		
	Single	Double	Triple	Single	Double	Triple	Single	Double	Triple
10	*9'-11"	*13'-4"	*12'-4"	*10'-11"	13'-6"	*13'-7"	*12'-7"	13'-6"	15'-1"
15	*8'-8"	11'-0"	*10'-9"	*9'-7"	11'-0"	*11'-10"	*10'-11"	11'-0"	12'-4"
20	*7'-11"	9'-6"	*9'-9"	*8'-8"	9'-6"	10'-8"	9'-11"	9'-6"	10'-8"
25	*7'-4"	8'-6"	*9'-1"	*8'-1"	8'-6"	9'-6"	8'-11"	8'-6"	9'-6"
30	*6'-11"	7'-9"	*8'-6"	*7'-7"	7'-9"	8'-8"	8'-1"	7'-9"	8'-8"
35	*6'-6"	7'-2"	8'-0"	*7'-2"	7'-2"	8'-0"	7'-6"	7'-2"	8'-0"
40	*6'-3"	6'-9"	7'-6"	*6'-11"	6'-9"	7'-6"	7'-0"	6'-9"	7'-6"
45	*6'-0"	6'-4"	7'-1"	6'-7"	6'-4"	7'-1"	6'-7"	6'-4"	7'-1"
50	*5'-10"	6'-0"	6'-9"	6'-3"	6'-0"	6'-9"	6'-3"	6'-0"	6'-9"
55	*5'-7"	5'-9"	6'-5"	6'-0"	5'-9"	6'-5"	6'-0"	5'-9"	6'-5"
60	*5'-5"	5'-6"	6'-2"	5'-9"	5'-6"	5'-2"	5'-9"	5'-6"	5'-2"
65	*5'-4"	5'-3"	5'-11"	5'-6"	5'-3"	5'-11"	5'-6"	5'-3"	5'-11"
70	*5'-2"	5'-1"	5'-8"	5'-3"	5'-1"	5'-8"	5'-3"	5'-1"	5'-8"
75	*5'-1"	4'-11"	5'-6"	5'-1"	4'-11"	5'-6"	5'-1"	4'-11"	5'-6"
80	4'-11"	4'-9"	5'-4"	4'-11"	4'-9"	5'-4"	4'-11"	4'-9"	5'-4"
85	4'-10"	4'-7"	5'-2"	4'-10"	4'-7"	5'-2"	4'-10"	4'-7"	5'-2"
90	4'-8"	4'-6"	5'-0"	4'-8"	4'-6"	5'-0"	4'-8"	4'-6"	5'-0"
95	4'-6"	4'-4"	4'-10"	4'-6"	4'-4"	4'-10"	4'-6"	4'-4"	4'-10"
100	4'-2"	4'-3"	4'-9"	4'-2"	4'-3"	4'-9"	4'-2"	4'-3"	4'-9"

20-Gauge Steel PenumWall/BWS391 Outward (Negative) Pressure									
Load (psf)	Δ ≤ L/240 Deflection Criteria			Δ ≤ L/180 Deflection Criteria			Δ ≤ L/120 Deflection Criteria		
	Span Condition			Span Condition			Span Condition		
	Single	Double	Triple	Single	Double	Triple	Single	Double	Triple
10	*9'-11"	*13'-4"	*12'-4"	*10'-11"	14'-1"	*13'-7"	*12'-7"	14'-1"	*15'-6"
15	*8'-8"	11'-6"	*10'-9"	*9'-7"	11'-6"	*11'-10"	*10'-11"	11'-6"	12'-10"
20	*7'-11"	9'-11"	*9'-9"	*8'-8"	9'-11"	*10'-9"	9'-6"	9'-11"	11'-1"
25	*7'-4"	8'-11"	*9'-1"	*8'-1"	8'-11"	9'-11"	8'-6"	8'-11"	9'-11"
30	*6'-11"	8'-1"	*8'-6"	*7'-7"	8'-1"	9'-1"	7'-9"	8'-1"	9'-1"
35	*6'-6"	7'-6"	*8'-1"	7'-2"	7'-6"	8'-5"	7'-2"	7'-6"	8'-5"
40	*6'-3"	7'-0"	*7'-9"	6'-9"	7'-0"	7'-10"	6'-9"	7'-0"	7'-10"
45	*6'-0"	6'-7"	7'-5"	6'-4"	6'-7"	7'-5"	6'-4"	6'-7"	7'-5"
50	*5'-10"	6'-3"	7'-0"	6'-0"	6'-3"	7'-0"	6'-0"	6'-3"	7'-0"
55	*5'-7"	6'-0"	6'-8"	5'-9"	6'-0"	6'-8"	5'-9"	6'-0"	6'-8"
60	*5'-5"	5'-9"	6'-5"	5'-6"	5'-9"	6'-5"	5'-6"	5'-9"	6'-5"
65	5'-3"	5'-6"	6'-2"	5'-3"	5'-6"	6'-2"	5'-3"	5'-6"	6'-2"
70	5'-1"	5'-3"	5'-11"	5'-1"	5'-3"	5'-11"	5'-1"	5'-3"	5'-11"
75	4'-11"	5'-1"	5'-8"	4'-11"	5'-1"	5'-8"	4'-11"	5'-1"	5'-8"
80	4'-9"	4'-11"	5'-6"	4'-9"	4'-11"	5'-6"	4'-9"	4'-11"	5'-6"
85	4'-7"	4'-9"	5'-4"	4'-7"	4'-9"	5'-4"	4'-7"	4'-9"	5'-4"
90	4'-6"	4'-8"	5'-2"	4'-6"	4'-8"	5'-2"	4'-6"	4'-8"	5'-2"
95	4'-4"	4'-6"	5'-1"	4'-4"	4'-6"	5'-1"	4'-4"	4'-6"	5'-1"
100	4 '-3"	4'-5"	4'-11"	4'-3"	4'-5"	4'-11"	4 '-3"	4'-5"	4'-11"

Notes:
1. Minimum 1.5" bearing assumed.
2. Connection of panel to supporting structure not investigated.
3. Minimum delivered thickness assumed to be 95% of design thickness.
4. Span lengths indicated by * are controlled by deflection.
5. These Load tables conform to the 2007 edition of the AISI "North American Specification for the Design of Cold-Formed Steel Structural Members."
6. Since allowable loads and spans can be affected by actual conditions of use, information in these tables is intended for use only by those qualified to assess these effects.
7. Load tables are based upon section property analysis. Other factors such as fastener adequacy may apply to allowable span conditions per project.

LOAD TABLES
22 ga. STEEL
ASTM A653
SS 50
39 ⅜" COVERAGE

PENUMWALL PANEL
BWS391



F_y=50 KSI		
22 Gauge		
	Top in Compression	Bottom in Compression
Yt=	0.4765 in	0.4765 in
Yb=	0.8031 in	0.8031 in
St=	0.2696 in^3/ft	0.2696 in^3/ft
Sb=	0.1500 in^3/ft	0.1500 in^3/ft
I=	0.1205 in^4/ft	0.1205 in^4/ft
M_a=	162 ft-lb/ft	155 ft-lb/ft
$P_{c,int}$=	863 lb/ft	863 lb/ft
$P_{c,end}$=	547 lb/ft	547 lb/ft

22-Gauge Steel PenumWall/BWS391 Inward (Positive) Pressure

Load (psf)	Δ ≤ L/240 Deflection Criteria			Δ ≤ L/180 Deflection Criteria			Δ ≤ L/120 Deflection Criteria		
	Span Condition			Span Condition			Span Condition		
	Single	Double	Triple	Single	Double	Triple	Single	Double	Triple
10	*9'-2"	11'-1"	12'-5"	*10'-1"	11'-1"	12'-5"	11'-4"	11'-1"	12'-5"
15	*8'-0"	9'-1"	10'-1"	*8'-10"	9'-1"	10'-1"	9'-3"	9'-1"	10'-1"
20	*7'-3"	7'-10"	8'-9"	8'-0"	7'-10"	8'-9"	8'-0"	7'-10"	8'-9"
25	*6'-9"	7'-0"	7'-10"	7'-2"	7'-0"	7'-10"	7'-2"	7'-0"	7'-10"
30	*6'-4"	6'-5"	7'-2"	6'-6"	6'-5"	7'-2"	6'-6"	6'-5"	7'-2"
35	6'-0"	5'-11"	6'-7"	6'-0"	5'-11"	6'-7"	6'-0"	5'-11"	6'-7"
40	5'-8"	5'-6"	6'-2"	5'-8"	5'-6"	6'-2"	5'-8"	5'-6"	6'-2"
45	5'-4"	5'-2"	5'-10"	5'-4"	5'-2"	5'-10"	5'-4"	5'-2"	5'-10"
50	5'-1"	4'-11"	5'-6"	5'-1"	4'-11"	5'-6"	5'-1"	4'-11"	5'-6"
55	4'-10"	4'-8"	5'-3"	4'-10"	4'-8"	5'-3"	4'-10"	4'-8"	5'-3"
60	4'-7"	4'-6"	5'-0"	4'-7"	4'-6"	5'-0"	4'-7"	4'-6"	5'-0"
65	4'-5"	4'-4"	4'-10"	4'-5"	4'-4"	4'-10"	4'-5"	4'-4"	4'-10"
70	4'-3"	4'-2"	4'-8"	4'-3"	4'-2"	4'-8"	4'-3"	4'-2"	4'-8"
75	4'-1"	4'-0"	4'-6"	4'-1"	4'-0"	4'-6"	4'-1"	4'-0"	4'-6"
80	4'-0"	3'-11"	4'-4"	4'-0"	3'-11"	4'-4"	4'-0"	3'-11"	4'-4"
85	3'-10"	3'-9"	4'-3"	3'-10"	3'-9"	4'-3"	3'-10"	3'-9"	4'-3"
90	3'-9"	3'-8"	4'-1"	3'-9"	3'-8"	4'-1"	3'-9"	3'-8"	4'-1"
95	3'-8"	3'-7"	4'-0"	3'-8"	3'-7"	4'-0"	3'-8"	3'-7"	4'-0"
100	3'-7"	3'-6"	3'-11"	3'-7"	3'-6"	3'-11"	3'-7"	3'-6"	3'-11"

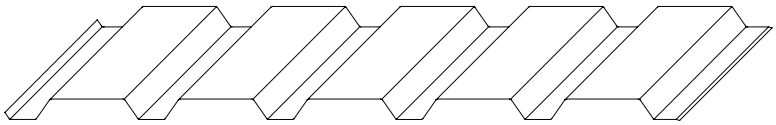
22-Gauge Steel PenumWall/BWS391 Outward (Negative) Pressure

Load (psf)	Δ ≤ L/240 Deflection Criteria			Δ ≤ L/180 Deflection Criteria			Δ ≤ L/120 Deflection Criteria		
	Span Condition			Span Condition			Span Condition		
	Single	Double	Triple	Single	Double	Triple	Single	Double	Triple
10	*9'-2"	11'-4"	*11'-4"	*10'-1"	11'-4"	*12'-6"	11'-1"	11'-4"	12'-7"
15	*8'-0"	9'-3"	*9'-11"	*8'-10"	9'-3"	10'-4	9'-1"	9'-3"	10'-4"
20	*7'-3"	8'-0"	8'-11"	7'-10"	8'-0"	8'-11"	7'-10"	8'-0"	8'-11"
25	*6'-9"	7'-2"	8'-0"	7'-0"	7'-2"	8'-0"	7'-0"	7'-2"	8'-0"
30	*6'-4"	6'-6"	7'-4"	6'-5"	6'-6"	7'-4"	6'-5"	6'-6"	7'-4"
35	5'-11"	6'-0"	6'-9"	5'-11"	6'-0"	6'-9"	5'-11"	6'-0"	6'-9"
40	5'-6"	5'-8"	6'-4"	5'-6"	5'-8"	6'-4"	5'-6"	5'-8"	6'-4"
45	5'-2"	5'-4"	5'-11"	5'-2"	5'-4"	5'-11"	5'-2"	5'-4"	5'-11"
50	4'-11"	5'-0"	5'-8"	4'-11"	5'-0"	5'-8"	4'-11"	5'-0"	5'-8"
55	4'-8"	4'-10"	5'-5"	4'-8"	4'-10"	5'-5"	4'-8"	4'-10"	5'-5"
60	4'-6"	4'-7"	5'-2"	4'-6"	4'-7"	5'-2"	4'-6"	4'-7"	5'-2"
65	4'-4"	4'-5"	4'-11"	4'-4"	4'-5"	4'-11"	4'-4"	4'-5"	4'-11"
70	4'-2"	4'-3"	4'-9"	4'-2"	4'-3"	4'-9"	4'-2"	4'-3"	4'-9"
75	4'-0"	4'-1"	4'-7"	4'-0"	4'-1"	4'-7"	4'-0"	4'-1"	4'-7"
80	3'-11"	4'-0"	4'-5"	3'-11"	4'-0"	4'-5"	3'-11"	4'-0"	4'-5"
85	3'-9"	3'-10"	4'-4"	3'-9"	3'-10"	4'-4"	3'-9"	3'-10"	4'-4"
90	3'-8"	3'-9"	4'-2"	3'-8"	3'-9"	4'-2"	3'-8"	3'-9"	4'-2"
95	3'-7"	3'-8"	4'-1"	3'-7"	3'-8"	4'-1"	3'-7"	3'-8"	4'-1"
100	3'-6"	3'-7"	4'-0"	3'-6"	3'-7"	4'-0"	3'-6"	3'-7"	4'-0"

Notes:
1. Minimum 1.5" bearing assumed.
2. Connection of panel to supporting structure not investigated.
3. Minimum delivered thickness assumed to be 95% of design thickness.
4. Span lengths indicated by * are controlled by deflection.
5. These Load tables conform to the 2007 edition of the AISI "North American Specification for the Design of Cold-Formed Steel Structural Members."
6. Since allowable loads and spans can be affected by actual conditions of use, information in these tables is intended for use only by those qualified to assess these effects.
7. Load tables are based upon section property analysis. Other factors such as fastener adequacy may apply to allowable span conditions per project.

LOAD TABLES
24 ga. STEEL
ASTM A653
SS 50
39 ⅜" COVERAGE

PENUMWALL PANEL
BWS391



F_y=50 KSI		
24 Gauge		
	Top in Compression	Bottom in Compression
Yt=	0.4734 in	0.4734 in
Yb=	0.7999 in	0.7999 in
St=	0.2107 in^3/ft	0.2107 in^3/ft
Sb=	0.1186 in^3/ft	0.1186 in^3/ft
I=	0.0949 in^4/ft	0.0949 in^4/ft
M_a=	107 ft-lb/ft	102 ft-lb/ft
$P_{c,int}$=	555 lb/ft	555 lb/ft
$P_{c,end}$=	353 lb/ft	353 lb/ft

24-Gauge Steel PenumWall/BWS391 Inward (Positive) Pressure

Load (psf)	Δ ≤ L/240 Deflection Criteria			Δ ≤ L/180 Deflection Criteria			Δ ≤ L/120 Deflection Criteria		
	Span Condition			Span Condition			Span Condition		
	Single	Double	Triple	Single	Double	Triple	Single	Double	Triple
10	*8'-5"	9'-0"	10'-1"	9'-2"	9'-0"	10'-1"	9'-2"	9'-0"	10'-1"
15	*7'-4"	7'-3"	8'-2"	7'-6"	7'-3"	8'-2"	7'-6"	7'-3"	8'-2"
20	6'-6"	6'-4"	7'-1"	6'-6"	6'-4"	7'-1"	6'-6"	6'-4"	7'-1"
25	5'-10"	5'-8"	6'-4"	5'-10"	5'-8"	6'-4"	5'-10"	5'-8"	6'-4"
30	5'-4"	5'-2"	5'-9"	5'-4"	5'-2"	5'-9"	5'-4"	5'-2"	5'-9"
35	4'-11"	4'-9"	5'-4"	4'-11"	4'-9"	5'-4"	4'-11"	4'-9"	5'-4"
40	4'-7"	4'-6"	5'-0"	4'-7"	4'-6"	5'-0"	4'-7"	4'-6"	5'-0"
45	4'-4"	4'-3"	4'-9"	4'-4"	4'-3"	4'-9"	4'-4"	4'-3"	4'-9"
50	4'-1"	4'-0"	4'-6"	4'-1"	4'-0"	4'-6"	4'-1"	4'-0"	4'-6"
55	3'-11"	3'-10"	4'-3"	3'-11"	3'-10"	4'-3"	3'-11"	3'-10"	4'-3"
60	3'-9"	3'-8"	4'-1"	3'-9"	3'-8"	4'-1"	3'-9"	3'-8"	4'-1"
65	3'-7"	3'-6"	3'-11"	3'-7"	3'-6"	3'-11"	3'-7"	3'-6"	3'-11"
70	3'-5"	3'-4"	3'-9"	3'-5"	3'-4"	3'-9"	3'-5"	3'-4"	3'-9"
75	3'-4"	3'-3"	3'-8"	3'-4"	3'-3"	3'-8"	3'-4"	3'-3"	3'-8"
80	3'-3"	3'-2"	3'-6"	3'-3"	3'-2"	3'-6"	3'-3"	3'-2"	3'-6"
85	3'-2"	3'-1"	3'-5"	3'-2"	3'-1"	3'-5"	3'-2"	3'-1"	3'-5"
90	3'-0"	3'-0"	3'-4"	3'-0"	3'-0"	3'-4"	3'-0"	3'-0"	3'-4"
95	3'-0"	2'-11"	3'-3"	3'-0"	2'-11"	3'-3"	3'-0"	2'-11"	3'-3"
100	2'-11"	2'-10"	3'-2"	2'-11"	2'-10"	3'-2"	2'-11"	2'-10"	3'-2"

24-Gauge Steel PenumWall/BWS391 Outward (Negative) Pressure

Load (psf)	Δ ≤ L/240 Deflection Criteria			Δ ≤ L/180 Deflection Criteria			Δ ≤ L/120 Deflection Criteria		
	Span Condition			Span Condition			Span Condition		
	Single	Double	Triple	Single	Double	Triple	Single	Double	Triple
10	*8'-5"	9'-2"	10'-4"	8'-6"	9'-2"	10'-4"	8'-6"	9'-2"	10'-4"
15	7'-4"	7'-6"	8'-5"	7'-4"	7'-6"	8'-5"	7'-4"	7'-6"	8'-5"
20	6'-4"	6'-6"	7'-3"	6'-4"	6'-6"	7'-3"	6'-4"	6'-6"	7'-3"
25	5'-8"	5'-10"	6'-6"	5'-8"	5'-10"	6'-6"	5'-8"	5'-10"	6'-6"
30	5'-2"	5'-4"	5'-11"	5'-2"	5'-4"	5'-11"	5'-2"	5'-4"	5'-11"
35	4'-9"	4'-11"	5'-6"	4'-9"	4'-11"	5'-6"	4'-9"	4'-11"	5'-6"
40	4'-6"	4'-7"	5'-1"	4'-6"	4'-7"	5'-1"	4'-6"	4'-7"	5'-1"
45	4'-3"	4'-4"	4'-10"	4'-3"	4'-4"	4'-10"	4'-3"	4'-4"	4'-10"
50	4'-0"	4'-1"	4'-7"	4'-0"	4'-1"	4'-7"	4'-0"	4'-1"	4'-7"
55	3'-10"	3'-11"	4'-4"	3'-10"	3'-11"	4'-4"	3'-10"	3'-11"	4'-4"
60	3'-8"	3'-9"	4'-2"	3'-8"	3'-9"	4'-2"	3'-8"	3'-9"	4'-2"
65	3'-6"	3'-7"	4'-0"	3'-6"	3'-7"	4'-0"	3'-6"	3'-7"	4'-0"
70	3'-4"	3'-5"	3'-10"	3'-4"	3'-5"	3'-10"	3'-4"	3'-5"	3'-10"
75	3'-3"	3'-4"	3'-9"	3'-3"	3'-4"	3'-9"	3'-3"	3'-4"	3'-9"
80	3'-2"	3'-3"	3'-7"	3'-2"	3'-3"	3'-7"	3'-2"	3'-3"	3'-7"
85	3'-1"	3'-1"	3'-6"	3'-1"	3'-1"	3'-6"	3'-1"	3'-1"	3'-6"
90	3'-0"	3'-0"	3'-5"	3'-0"	3'-0"	3'-5"	3'-0"	3'-0"	3'-5"
95	2'-11"	2'-11"	3'-4"	2'-11"	2'-11"	3'-4"	2'-11"	2'-11"	3'-4"
100	2'-10"	2'-10"	3'-3"	2'-10"	2'-10"	3'-3"	2'-10"	2'-10"	3'-3"

Notes:
1. Minimum 1.5" bearing assumed.
2. Connection of panel to supporting structure not investigated.
3. Minimum delivered thickness assumed to be 95% of design thickness.
4. Span lengths indicated by * are controlled by deflection.
5. These Load tables conform to the 2007 edition of the AISI "North American Specification for the Design of Cold-Formed Steel Structural Members."
6. Since allowable loads and spans can be affected by actual conditions of use, information in these tables is intended for use only by those qualified to assess these effects.
7. Load tables are based upon section property analysis. Other factors such as fastener adequacy may apply to allowable span conditions per project.