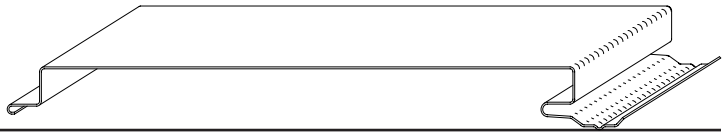
LOAD TABLES

ALUMINUM
ASTM B209
3105-H14

12” COVERAGE

DESIGN WALL
DWF120



L/180 DEFLECTION CRITERIA .032 FTY=18KSI

POSITIVE BENDING
Yt= 0.1785 in.
St= 0.2563 cubic in/ft. (bend.)
Sb= 0.0786 cubic in/ft. (bend.)
I= 0.0397 in.^4/ft. (defl.)

NEGATIVE BENDING
Yt= 0.1785 in.
St= 0.2563 cubic in/ft. (bend.)
Sb= 0.0786 cubic in/ft. (bend.)
I= 0.0499 in.^4/ft. (defl.)

LOAD (PSF)	DOWNWARD LOAD			UPWARD LOAD		
	SINGLE SPAN	DOUBLE SPAN	THREE SPAN	SINGLE SPAN	DOUBLE SPAN	THREE SPAN
10	4'- 6”	4'- 1”	4'- 7”	4'- 1”	4'- 6”	5'- 1”
15	3'- 8”	3'- 4”	3'- 9”	3'- 4”	3'- 8”	4'- 1”
20	3'- 2”	2'- 10”	3'- 2”	2'- 10”	3'- 2”	3'- 7”
25	2'- 10”	2'- 7”	2'- 10”	2'- 7”	2'- 10”	3'- 2”
30	2'- 7”	2'- 4”	2'- 7”	2'- 4”	2'- 7”	2'- 11”
35	2'- 5”	2'- 2”	2'- 5”	2'- 2”	2'- 5”	2'- 8”
40	2'- 3”	2'- 0”	2'- 3”	2'- 0”	2'- 3”	2'- 6”
45	2'- 1”	1'- 11”	2'- 1”	1'- 11”	2'- 1”	2'- 4”
50	2'- 0”	1'- 10”	2'- 0”	1'- 10”	2'- 0”	2'- 3”
55	1'- 11”	1'- 9”	1'- 11”	1'- 9”	1'- 11”	2'- 2”
60	1'- 10”	1'- 8”	1'- 10”	1'- 8”	1'- 10”	2'- 0”
65	1'- 9”	1'- 7”	1'- 9”	1'- 7”	1'- 9”	1'- 11”
70	1'- 8”	1'- 6”	1'- 8”	1'- 6”	1'- 8”	1'- 11”

L/240 DEFLECTION CRITERIA .032 FTY=18KSI

POSITIVE BENDING
Yt= 0.1785 in.
St= 0.2563 cubic in/ft. (bend.)
Sb= 0.0786 cubic in/ft. (bend.)
I= 0.0397 in.^4/ft. (defl.)

NEGATIVE BENDING
Yt= 0.1785 in.
St= 0.2563 cubic in/ft. (bend.)
Sb= 0.0786 cubic in/ft. (bend.)
I= 0.0499 in.^4/ft. (defl.)

LOAD (PSF)	DOWNWARD LOAD			UPWARD LOAD		
	SINGLE SPAN	DOUBLE SPAN	THREE SPAN	SINGLE SPAN	DOUBLE SPAN	THREE SPAN
10	* 4'- 5”	4'- 1”	4'- 7”	4'- 1”	4'- 6”	5'- 1”
15	3'- 8”	3'- 4”	3'- 9”	3'- 4”	3'- 8”	4'- 1”
20	3'- 2”	2'- 10”	3'- 2”	2'- 10”	3'- 2”	3'- 7”
25	2'- 10”	2'- 7”	2'- 10”	2'- 7”	2'- 10”	3'- 2”
30	2'- 7”	2'- 4”	2'- 7”	2'- 4”	2'- 7”	2'- 11”
35	2'- 5”	2'- 2”	2'- 5”	2'- 2”	2'- 5”	2'- 8”
40	2'- 3”	2'- 0”	2'- 3”	2'- 0”	2'- 3”	2'- 6”
45	2'- 1”	1'- 11”	2'- 1”	1'- 11”	2'- 1”	2'- 4”
50	2'- 0”	1'- 10”	2'- 0”	1'- 10”	2'- 0”	2'- 3”
55	1'- 11”	1'- 9”	1'- 11”	1'- 9”	1'- 11”	2'- 2”
60	1'- 10”	1'- 8”	1'- 10”	1'- 8”	1'- 10”	2'- 0”
65	1'- 9”	1'- 7”	1'- 9”	1'- 7”	1'- 9”	1'- 11”
70	1'- 8”	1'- 6”	1'- 8”	1'- 6”	1'- 8”	1'- 11”

L/180 DEFLECTION CRITERIA .040 FTY=18KSI

POSITIVE BENDING
Yt= 0.1785 in.
St= 0.3140 cubic in/ft. (bend.)
Sb= 0.0983 cubic in/ft. (bend.)
I= 0.0521 in.^4/ft. (defl.)

NEGATIVE BENDING
Yt= 0.1785 in.
St= 0.3140 cubic in/ft. (bend.)
Sb= 0.0983 cubic in/ft. (bend.)
I= 0.0623 in.^4/ft. (defl.)

LOAD (PSF)	DOWNWARD LOAD			UPWARD LOAD		
	SINGLE SPAN	DOUBLE SPAN	THREE SPAN	SINGLE SPAN	DOUBLE SPAN	THREE SPAN
10	* 5'- 4”	4'- 11”	5'- 6”	4'- 11”	5'- 6”	6'- 1”
15	4'- 5”	4'- 0”	4'- 6”	4'- 0”	4'- 5”	5'- 0”
20	3'- 10”	3'- 6”	3'- 11”	3'- 6”	3'- 10”	4'- 4”
25	3'- 5”	3'- 1”	3'- 6”	3'- 1”	3'- 5”	3'- 10”
30	3'- 2”	2'- 10”	3'- 2”	2'- 10”	3'- 2”	3'- 6”
35	2'- 11”	2'- 7”	2'- 11”	2'- 7”	2'- 11”	3'- 3”
40	2'- 9”	2'- 5”	2'- 9”	2'- 5”	2'- 9”	3'- 0”
45	2'- 7”	2'- 4”	2'- 7”	2'- 4”	2'- 7”	2'- 10”
50	2'- 5”	2'- 2”	2'- 5”	2'- 2”	2'- 5”	2'- 9”
55	2'- 4”	2'- 1”	2'- 4”	2'- 1”	2'- 4”	2'- 7”
60	2'- 2”	2'- 0”	2'- 3”	2'- 0”	2'- 2”	2'- 6”
65	2'- 1”	1'- 11”	2'- 2”	1'- 11”	2'- 1”	2'- 4”
70	2'- 0”	1'- 10”	2'- 1”	1'- 10”	2'- 0”	2'- 3”

L/240 DEFLECTION CRITERIA .040 FTY=18KSI

POSITIVE BENDING
Yt= 0.1785 in.
St= 0.3140 cubic in/ft. (bend.)
Sb= 0.0983 cubic in/ft. (bend.)
I= 0.0521 in.^4/ft. (defl.)

NEGATIVE BENDING
Yt= 0.1785 in.
St= 0.3140 cubic in/ft. (bend.)
Sb= 0.0983 cubic in/ft. (bend.)
I= 0.0623 in.^4/ft. (defl.)

LOAD (PSF)	DOWNWARD LOAD			UPWARD LOAD		
	SINGLE SPAN	DOUBLE SPAN	THREE SPAN	SINGLE SPAN	DOUBLE SPAN	THREE SPAN
10	* 4'- 10”	4'- 11”	5'- 6”	4'- 11”	5'- 6”	6'- 1”
15	* 4'- 3”	4'- 0”	4'- 6”	4'- 0”	4'- 5”	5'- 0”
20	* 3'- 10”	3'- 6”	3'- 11”	3'- 6”	3'- 10”	4'- 4”
25	3'- 5”	3'- 1”	3'- 6”	3'- 1”	3'- 5”	3'- 10”
30	3'- 2”	2'- 10”	3'- 2”	2'- 10”	3'- 2”	3'- 6”
35	2'- 11”	2'- 7”	2'- 11”	2'- 7”	2'- 11”	3'- 3”
40	2'- 9”	2'- 5”	2'- 9”	2'- 5”	2'- 9”	3'- 0”
45	2'- 7”	2'- 4”	2'- 7”	2'- 4”	2'- 7”	2'- 10”
50	2'- 5”	2'- 2”	2'- 5”	2'- 2”	2'- 5”	2'- 9”
55	2'- 4”	2'- 1”	2'- 4”	2'- 1”	2'- 4”	2'- 7”
60	2'- 2”	2'- 0”	2'- 3”	2'- 0”	2'- 2”	2'- 6”
65	2'- 1”	1'- 11”	2'- 2”	1'- 11”	2'- 1”	2'- 4”
70	2'- 0”	1'- 10”	2'- 1”	1'- 10”	2'- 0”	2'- 3”

L/180 DEFLECTION CRITERIA .050 FTY=18KSI

POSITIVE BENDING
Yt= 0.1785 in.
St= 0.3828 cubic in/ft. (bend.)
Sb= 0.1229 cubic in/ft. (bend.)
I= 0.0681 in.^4/ft. (defl.)

NEGATIVE BENDING
Yt= 0.1785 in.
St= 0.3828 cubic in/ft. (bend.)
Sb= 0.1229 cubic in/ft. (bend.)
I= 0.0779 in.^4/ft. (defl.)

LOAD (PSF)	DOWNWARD LOAD			UPWARD LOAD		
	SINGLE SPAN	DOUBLE SPAN	THREE SPAN	SINGLE SPAN	DOUBLE SPAN	THREE SPAN
10	* 5'- 10”	6'- 0”	6'- 9”	6'- 0”	6'- 7”	7'- 5”
15	* 5'- 1”	4'- 11”	5'- 6”	4'- 11”	5'- 5”	6'- 0”
20	* 4'- 7”	4'- 3”	4'- 9”	4'- 3”	4'- 8”	5'- 3”
25	4'- 2”	3'- 9”	4'- 3”	3'- 9”	4'- 2”	4'- 8”
30	3'- 10”	3'- 5”	3'- 10”	3'- 5”	3'- 10”	4'- 3”
35	3'- 6”	3'- 2”	3'- 7”	3'- 2”	3'- 6”	3'- 11”
40	3'- 3”	3'- 0”	3'- 4”	3'- 0”	3'- 3”	3'- 8”
45	3'- 1”	2'- 10”	3'- 2”	2'- 10”	3'- 1”	3'- 6”
50	2'- 11”	2'- 8”	3'- 0”	2'- 8”	2'- 11”	3'- 3”
55	2'- 10”	2'- 7”	2'- 10”	2'- 7”	2'- 10”	3'- 2”
60	2'- 8”	2'- 5”	2'- 9”	2'- 5”	2'- 8”	3'- 0”
65	2'- 7”	2'- 4”	2'- 7”	2'- 4”	2'- 7”	2'- 11”
70	2'- 6”	2'- 3”	2'- 6”	2'- 3”	2'- 6”	2'- 9”

L/240 DEFLECTION CRITERIA .050 FTY=18KSI

POSITIVE BENDING
Yt= 0.1785 in.
St= 0.3828 cubic in/ft. (bend.)
Sb= 0.1229 cubic in/ft. (bend.)
I= 0.0681 in.^4/ft. (defl.)

NEGATIVE BENDING
Yt= 0.1785 in.
St= 0.3828 cubic in/ft. (bend.)
Sb= 0.1229 cubic in/ft. (bend.)
I= 0.0779 in.^4/ft. (defl.)

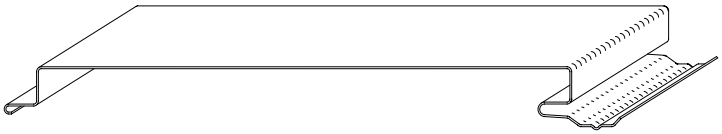
LOAD (PSF)	DOWNWARD LOAD			UPWARD LOAD		
	SINGLE SPAN	DOUBLE SPAN	THREE SPAN	SINGLE SPAN	DOUBLE SPAN	THREE SPAN
10	* 5'- 3”	6'- 0”	* 6'- 7”	* 5'- 6”	6'- 7”	* 6'- 10”
15	* 4'- 7”	4'- 11”	5'- 6”	* 4'- 10”	5'- 5”	* 6'- 0”
20	* 4'- 2”	4'- 3”	4'- 9”	4'- 3”	4'- 8”	5'- 3”
25	* 3'- 11”	3'- 9”	4'- 3”	3'- 9”	4'- 2”	4'- 8”
30	* 3'- 8”	3'- 5”	3'- 10”	3'- 5”	3'- 10”	4'- 3”
35	* 3'- 6”	3'- 2”	3'- 7”	3'- 2”	3'- 6”	3'- 11”
40	3'- 3”	3'- 0”	3'- 4”	3'- 0”	3'- 3”	3'- 8”
45	3'- 1”	2'- 10”	3'- 2”	2'- 10”	3'- 1”	3'- 6”
50	2'- 11”	2'- 8”	3'- 0”	2'- 8”	2'- 11”	3'- 3”
55	2'- 10”	2'- 7”	2'- 10”	2'- 7”	2'- 10”	3'- 2”
60	2'- 8”	2'- 5”	2'- 9”	2'- 5”	2'- 8”	3'- 0”
65	2'- 7”	2'- 4”	2'- 7”	2'- 4”	2'- 7”	2'- 11”
70	2'- 6”	2'- 3”	2'- 6”	2'- 3”	2'- 6”	2'- 9”

Notes:

1. *Indicates maximum span controlled by deflection.
2. All loads are applied perpendicular to surface of panel.
3. No increase for wind loading has been assumed.
4. Shaded area denotes loads at which deflection of the panel in the transverse direction due to static gravity load may cause permanent deformations.
5. 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.

LOAD TABLES
STEEL
ASTM A653
SS 50
12″ COVERAGE

DESIGN WALL
DWF120



Fy=50 KSI		
	22 Gauge	
	Top in Compression	Bottom in Compression
Yt=	0.1893 in	0.1893 in
Yb=	0.8398 in	0.8398 in
St=	0.2457 in^3/ft	0.2457 in^3/ft
Sb=	0.0554 in^3/ft	0.0554 in^3/ft
I=	0.0465 in^4/ft	0.0465 in^4/ft
M_a=	44 ft-lb/ft	93 ft-lb/ft
$P_{c,int}$=	2589 lb/ft	2589 lb/ft
$P_{c,end}$=	1995 lb/ft	1995 lb/ft

22-Gauge Steel Design System/DWF120 Inward (Positive) Pressure

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

22- Gauge Steel Design System/DWF120 Outward (Negative) Pressure

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

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 with * 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 intende 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.