

LOAD TABLES

ALUMINUM
ASTM B209
3003-H16

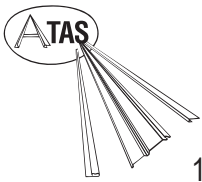
L/120 MAXIMUM
DEFLECTION CRITERIA

MULTI-PURPOSE PANEL MPN120 & MPN160

MPN120 12" COVERAGE GAUGE .032							MPN160 16" COVERAGE GAUGE .032						
AREA: 0.43425 in ² /ft.			Sb: 0.32277 in ³ /ft.				AREA: 0.41719 in ² /ft.			Sb: 0.32447 in ³ /ft.			
Yb: 0.15658 in.			St: 0.04755 in ³ /ft.				Yb: 0.12223 in.			St: 0.03615 in ³ /ft.			
Yt: 1.06292 in.			l: 0.05054 in ⁴ /ft.				Yt: 1.09727 in.			l: 0.03966 in ⁴ /ft.			
LOAD (PSF)	DOWNWARD LOAD			UPWARD LOAD			LOAD (PSF)	DOWNWARD LOAD			UPWARD LOAD		
	SINGLE SPAN	DOUBLE SPAN	THREE SPAN	SINGLE SPAN	DOUBLE SPAN	THREE SPAN		SINGLE SPAN	DOUBLE SPAN	THREE SPAN	SINGLE SPAN	DOUBLE SPAN	THREE SPAN
10	* 5'-10"	* 4'-9"	* 5'-4"	* 4'-9"	* 5'-10"	* 6'-0"	10	* 5'-1"	* 4'-1"	* 4'-7"	* 4'-1"	* 5'-1"	* 5'-1"
15	* 4'-9"	* 3'-11"	* 4'-4"	* 3'-11"	* 4'-9"	* 4'-10"	15	* 4'-2"	* 3'-4"	* 3'-9"	* 3'-4"	* 4'-2"	* 4'-2"
20	* 4'-2"	* 3'-4"	* 3'-9"	* 3'-4"	* 4'-2"	* 4'-2"	20	* 3'-7"	* 2'-10"	* 3'-3"	* 2'-10"	* 3'-7"	* 3'-7"
25	* 3'-8"	* 3'-0"	* 3'-4"	* 3'-0"	* 3'-8"	* 3'-9"	25	* 3'-3"	* 2'-7"	* 2'-10"	* 2'-7"	* 3'-3"	* 3'-3"
30	* 3'-4"	* 2'-9"	* 3'-1"	* 2'-9"	* 3'-4"	* 3'-5"	30	* 2'-11"	* 2'-4"	* 2'-7"	* 2'-4"	* 2'-11"	* 2'-11"
35	* 3'-1"	* 2'-6"	* 2'-10"	* 2'-6"	* 3'-1"	* 3'-2"	35	* 2'-9"	* 2'-2"	* 2'-5"	* 2'-2"	* 2'-9"	* 2'-8"
40	* 2'-11"	* 2'-4"	* 2'-8"	* 2'-4"	* 2'-11"	* 3'-0"	40	* 2'-6"	* 2'-0"	* 2'-3"	* 2'-0"	* 2'-6"	* 2'-6"
45	* 2'-9"	* 2'-3"	* 2'-6"	* 2'-3"	* 2'-9"	* 2'-9"	45	* 2'-5"	* 1'-11"	* 2'-2"	* 1'-11"	* 2'-5"	* 2'-5"
50	* 2'-7"	* 2'-1"	* 2'-4"	* 2'-1"	* 2'-7"	* 2'-8"	50	* 2'-3"	* 1'-10"	* 2'-0"	* 1'-10"	* 2'-3"	* 2'-3"
55	* 2'-6"	* 2'-0"	* 2'-3"	* 2'-0"	* 2'-6"	* 2'-6"	55	* 2'-2"	* 1'-9"	* 1'-11"	* 1'-9"	* 2'-2"	* 2'-2"
60	* 2'-4"	* 1'-11"	* 2'-2"	* 1'-11"	* 2'-4"	* 2'-5"	60	* 2'-1"	* 1'-8"	* 1'-10"	* 1'-8"	* 2'-1"	* 2'-1"
65	* 2'-3"	* 1'-10"	* 2'-1"	* 1'-10"	* 2'-3"	* 2'-4"	65	* 2'-0"	* 1'-7"	* 1'-9"	* 1'-7"	* 2'-0"	* 2'-0"
70	* 2'-2"	* 1'-9"	* 2'-0"	* 1'-9"	* 2'-2"	* 2'-3"	70	* 1'-11"	* 1'-6"	* 1'-8"	* 1'-6"	* 1'-11"	* 1'-11"
MPN120 12" COVERAGE GAUGE .040							MPN160 16" COVERAGE GAUGE .040						
AREA: 0.54763 in ² /ft.			Sb: 0.40572 in ³ /ft.				AREA: 0.52622 in ² /ft.			Sb: 0.40795 in ³ /ft.			
Yb: 0.15562 in.			St: 0.05980 in ³ /ft.				Yb: 0.12147 in.			St: 0.04546 in ³ /ft.			
Yt: 1.05588 in.			l: 0.06314 in ⁴ /ft.				Yt: 1.09003 in.			l: 0.04955 in ⁴ /ft.			
LOAD (PSF)	DOWNWARD LOAD			UPWARD LOAD			LOAD (PSF)	DOWNWARD LOAD			UPWARD LOAD		
	SINGLE SPAN	DOUBLE SPAN	THREE SPAN	SINGLE SPAN	DOUBLE SPAN	THREE SPAN		SINGLE SPAN	DOUBLE SPAN	THREE SPAN	SINGLE SPAN	DOUBLE SPAN	THREE SPAN
10	6'-6"	* 6'-0"	* 6'-9"	* 6'-0"	* 6'-7"	* 7'-4"	10	* 5'-9"	* 5'-2"	* 5'-9"	* 5'-2"	* 5'-9"	* 6'-5"
15	* 5'-4"	* 4'-11"	* 5'-6"	* 4'-11"	* 5'-4"	* 6'-0"	15	* 4'-8"	* 4'-2"	* 4'-8"	* 4'-2"	* 4'-8"	* 5'-3"
20	* 4'-8"	* 4'-3"	* 4'-9"	* 4'-3"	* 4'-8"	* 5'-2"	20	* 4'-0"	* 3'-7"	* 4'-1"	* 3'-7"	* 4'-0"	* 4'-6"
25	* 4'-2"	* 3'-9"	* 4'-3"	* 3'-9"	* 4'-2"	* 4'-8"	25	* 3'-7"	* 3'-3"	* 3'-7"	* 3'-3"	* 3'-7"	* 4'-0"
30	* 3'-9"	* 3'-5"	* 3'-10"	* 3'-5"	* 3'-9"	* 4'-3"	30	* 3'-4"	* 2'-11"	* 3'-4"	* 2'-11"	* 3'-4"	* 3'-8"
35	* 3'-6"	* 3'-2"	* 3'-7"	* 3'-2"	* 3'-6"	* 3'-11"	35	* 3'-1"	* 2'-9"	* 3'-1"	* 2'-9"	* 3'-1"	* 3'-5"
40	* 3'-3"	* 3'-0"	* 3'-4"	* 3'-0"	* 3'-3"	* 3'-8"	40	* 2'-10"	* 2'-7"	* 2'-10"	* 2'-7"	* 2'-10"	* 3'-2"
45	* 3'-1"	* 2'-10"	* 3'-2"	* 2'-10"	* 3'-1"	* 3'-5"	45	* 2'-8"	* 2'-5"	* 2'-8"	* 2'-5"	* 2'-8"	* 3'-0"
50	* 2'-11"	* 2'-8"	* 3'-0"	* 2'-8"	* 2'-11"	* 3'-3"	50	* 2'-6"	* 2'-3"	* 2'-7"	* 2'-3"	* 2'-6"	* 2'-10"
55	* 2'-9"	* 2'-6"	* 2'-10"	* 2'-6"	* 2'-9"	* 3'-1"	55	* 2'-5"	* 2'-2"	* 2'-5"	* 2'-2"	* 2'-5"	* 2'-9"
60	* 2'-8"	* 2'-5"	* 2'-9"	* 2'-5"	* 2'-8"	* 3'-0"	60	* 2'-4"	* 2'-1"	* 2'-4"	* 2'-1"	* 2'-4"	* 2'-7"
65	* 2'-7"	* 2'-4"	* 2'-7"	* 2'-4"	* 2'-7"	* 2'-10"	65	* 2'-3"	* 2'-0"	* 2'-3"	* 2'-0"	* 2'-3"	* 2'-6"
70	* 2'-6"	* 2'-3"	* 2'-6"	* 2'-3"	* 2'-6"	* 2'-9"	70	* 2'-2"	* 1'-11"	* 2'-2"	* 1'-11"	* 2'-2"	* 2'-5"

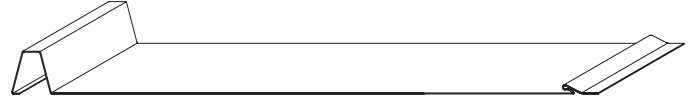
- Notes:
- *Indicates that maximum span length is controlled by stress.
 - All loads are applied perpendicular to surface of panel.
 - All computations have been made in accordance with the Aluminum Association's Specifications for Aluminum Structures.

- 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
ALUMINUM
ASTM B209
3003-H16
16" COVERAGE

MULTI-PURPOSE PANEL MPN160



L/180 DEFLECTION CRITERIA .032							L/240 DEFLECTION CRITERIA .032						
POSITIVE BENDING				NEGATIVE BENDING			POSITIVE BENDING				NEGATIVE BENDING		
Yt= 1.09727 in.				Yt= 1.09727 in.			Yt= 1.09003 in.				Yt= 1.09003 in.		
St= 0.03615 cubic in/ft. (bend.)				St= 0.03615 cubic in/ft. (bend.)			St= 0.04546 cubic in/ft. (bend.)				St= 0.04546 cubic in/ft. (bend.)		
Sb= 0.32447 cubic in/ft. (bend.)				Sb= 0.32447			Sb= 0.40795 cubic in/ft. (bend.)				Sb= 0.40795 cubic in/ft. (bend.)		
I= 0.03966 in. ⁴ /ft. (defl.)				I= 0.03966 in. ⁴ /ft. (defl.)			I= 0.04955 in. ⁴ /ft. (defl.)				I= 0.04955 in. ⁴ /ft. (defl.)		
LOAD (PSF)	DOWNWARD LOAD			UPWARD LOAD			LOAD (PSF)	DOWNWARD LOAD			UPWARD LOAD		
	SINGLE SPAN	DOUBLE SPAN	THREE SPAN	SINGLE SPAN	DOUBLE SPAN	THREE SPAN		SINGLE SPAN	DOUBLE SPAN	THREE SPAN	SINGLE SPAN	DOUBLE SPAN	THREE SPAN
10	* 5'- 1"	4'- 1"	4'- 7"	* 4'- 1"	* 5'- 1"	* 5'- 1"	10	* 5'- 9"	5'- 2"	5'- 9"	* 5'- 2"	* 5'- 9"	* 6'- 5"
15	* 4'- 2"	3'- 4"	3'- 8"	* 3'- 4"	* 4'- 2"	* 4'- 2"	15	* 4'- 8"	4'- 2"	4'- 8"	* 4'- 2"	* 4'- 8"	* 5'- 3"
20	3'- 7"	2'- 10"	3'- 3"	* 2'- 10"	3'- 7"	* 3'- 7"	20	* 4'- 0"	3'- 7"	4'- 1"	* 3'- 7"	* 4'- 0"	* 4'- 6"
25	3'- 3"	2'- 7"	2'- 10"	2'- 7"	3'- 3"	3'- 3"	25	* 3'- 7"	3'- 3"	3'- 7"	* 3'- 3"	* 3'- 7"	* 4'- 0"
30	2'- 11"	2'- 4"	2'- 7"	2'- 4"	2'- 11"	2'- 11"	30	3'- 4"	2'- 11"	3'- 4"	* 2'- 11"	* 3'- 4"	* 3'- 8"
35	2'- 9"	2'- 2"	2'- 5"	2'- 2"	2'- 9"	2'- 8"	35	3'- 1"	2'- 9"	3'- 1"	* 2'- 9"	3'- 1"	* 3'- 5"
40	2'- 6"	2'- 0"	2'- 3"	2'- 0"	2'- 6"	2'- 6"	40	2'- 10"	2'- 7"	2'- 10"	2'- 7"	2'- 10"	3'- 2"
45	2'- 5"	1'- 11"	2'- 2"	1'- 11"	2'- 5"	2'- 5"	45	2'- 8"	2'- 5"	2'- 8"	2'- 5"	2'- 8"	3'- 0"
50	2'- 3"	1'- 10"	2'- 0"	1'- 10"	2'- 4"	2'- 3"	50	2'- 6"	2'- 3"	2'- 7"	2'- 3"	2'- 6"	2'- 10"
55	2'- 2"	1'- 9"	1'- 11"	1'- 9"	2'- 3"	2'- 2"	55	2'- 5"	2'- 2"	2'- 5"	2'- 2"	2'- 5"	2'- 9"
60	2'- 1"	1'- 8"	1'- 10"	1'- 8"	2'- 2"	2'- 1"	60	2'- 4"	2'- 1"	2'- 4"	2'- 1"	2'- 4"	2'- 7"
65	2'- 0"	1'- 7"	1'- 9"	1'- 7"	2'- 1"	2'- 0"	65	2'- 3"	2'- 0"	2'- 3"	2'- 0"	2'- 3"	2'- 6"
70	1'- 11"	1'- 6"	1'- 8"	1'- 6"	2'- 0"	1'- 11"	70	2'- 2"	1'- 11"	2'- 2"	1'- 11"	2'- 2"	2'- 5"

Notes:

- * Indicated maximum span controlled by deflection.
- All loads are applied perpendicular to surface of panel.
- No increase for wind loading has been assumed.
- 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.