


LOAD TABLES  
**STEEL**  
**ASTM A653**  
**SS 40**  
**0.021" GAUGE**

# MULTI-PURPOSE PANEL

## MPV127 & MPV167

L/180 DEFLECTION CRITERIA MPV127  
 12" COVERAGE FY=40KSI 

L/240 DEFLECTION CRITERIA MPV127  
 12" COVERAGE FY=40KSI 

POSITIVE BENDING Yt= 0.827 in.  
 S= 0.047 cubic in/ft. (bend.)  
 I= 0.043 in.^4/ft. (defl.)


NEGATIVE BENDING Yt= 0.379 in.  
 S= 0.021 cubic in/ft. (bend.)  
 I= 0.020 in.^4/ft. (defl.)


POSITIVE BENDING Yt= 0.827 in.  
 S= 0.047 cubic in/ft. (bend.)  
 I= 0.043 in.^4/ft. (defl.)

NEGATIVE BENDING Yt= 0.379 in.  
 S= 0.021 cubic in/ft. (bend.)  
 I= 0.020 in.^4/ft. (defl.)

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

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

L/180 DEFLECTION CRITERIA MPV167  
 16" COVERAGE FY=40KSI 

L/240 DEFLECTION CRITERIA MPV167  
 16" COVERAGE FY=40KSI 

POSITIVE BENDING Yt= 0.961 in.  
 S= 0.038 cubic in/ft. (bend.)  
 I= 0.042 in.^4/ft. (defl.)

NEGATIVE BENDING Yt= 0.379 in.  
 S= 0.037 cubic in/ft. (bend.)  
 I= 0.014 in.^4/ft. (defl.)

POSITIVE BENDING Yt= 0.961 in.  
 S= 0.038 cubic in/ft. (bend.)  
 I= 0.042 in.^4/ft. (defl.)

NEGATIVE BENDING Yt= 0.379 in.  
 S= 0.037 cubic in/ft. (bend.)  
 I= 0.014 in.^4/ft. (defl.)

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

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

Notes:

- \* Indicates 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.
- Load tables are based upon section property analysis. Other factors such as fastener adequacy may apply to allowable span conditions per project.