



Eco-ficient™ 7.2 Panel
(Allowable Loads in PSF)

Panel Depth	Span Type	Load Type	Span in Feet									
			4'	5'	6'	7'	8'	9'	10'	11'	12'	13'
2.5"	Single Span	Bending & Shear	-	81.50	60.90	47.50	38.00	31.10	25.90	21.90	18.70	16.20
		L/180	-	178.50	117.90	83.00	61.00	46.20	35.90	28.40	22.80	18.60
		Pattern FP1	-	28.70	28.70	24.60	21.50	19.10	17.20	15.70	14.40	13.20
		Pattern FP11	-	81.50	60.90	47.50	38.00	31.10	25.90	21.90	18.70	16.20
	Two Spans	Bending & Shear	97.40	65.40	47.40	36.20	28.60	23.30	19.40	16.40	14.00	12.20
		L/180	407.70	232.60	149.60	104.00	76.30	58.20	45.70	36.60	29.90	24.70
		Pattern FP1	27.20	24.20	22.20	20.70	19.60	18.80	18.10	16.40	14.00	12.20
		Pattern FP11	97.40	65.40	47.40	36.20	28.20	23.30	19.40	16.40	14.00	12.20
	Three or More Spans	Bending & shear	115.40	76.80	55.40	42.20	33.40	27.20	22.60	19.20	16.50	14.40
		L/180	356.40	207.00	134.40	93.80	68.80	52.20	40.80	32.50	26.40	21.70
		Pattern FP1	30.40	27.10	24.80	23.20	22.00	21.00	20.30	19.20	16.50	14.40
		Pattern FP11	115.40	76.80	55.40	42.20	33.40	27.20	22.60	19.20	16.50	14.40
3"	Single Span	Bending & Shear	-	93.40	71.60	56.90	46.40	38.50	32.40	27.60	23.60	19.80
		L/180	-	203.70	138.70	100.40	75.70	58.60	46.40	37.40	30.50	25.20
		Pattern FP1	-	40.70	33.90	29.10	25.50	22.60	20.40	18.50	17.00	15.70
		Pattern FP11	-	93.40	71.60	56.90	46.40	38.50	32.40	27.60	23.60	19.80
	Two Spans	Bending & Shear	101.70	69.30	51.00	39.30	31.50	25.80	21.60	18.40	15.90	13.90
		L/180	431.80	251.80	165.50	117.60	88.00	68.40	54.60	44.50	36.90	31.00
		Pattern FP1	42.70	36.00	31.40	28.20	25.70	23.80	21.60	18.40	15.90	13.90
		Pattern FP11	101.70	69.30	51.00	39.30	31.50	25.80	21.60	18.40	15.90	13.90
	Three or More Spans	Bending & Shear	119.10	80.20	58.50	45.00	36.00	29.60	24.80	21.20	18.40	16.10
		L/180	384.10	228.70	152.20	108.70	81.40	63.10	50.20	40.70	33.60	28.00
		Pattern FP1	47.50	39.90	34.90	31.30	28.60	26.50	24.80	21.20	18.40	16.10
		Pattern FP11	116.20	80.20	58.50	45.00	36.00	29.60	24.80	21.20	18.40	16.10
4"	Single Span	Bending & Shear	-	113.20	90.20	74.00	62.00	52.60	45.10	37.80	31.30	26.40
		L/180	-	241.50	171.20	128.70	100.50	80.50	65.70	54.40	45.60	38.50
		Pattern FP1	-	40.70	33.90	29.10	25.50	22.60	20.40	18.50	17.00	15.70
		Pattern FP11	-	101.70	84.80	72.60	62.00	52.60	45.10	37.80	31.30	26.40
	Two Spans	Bending & Shear	107.70	75.00	56.30	44.20	35.90	29.90	25.30	21.80	19.00	16.70
		L/180	466.50	280.10	189.30	138.10	106.10	84.50	69.10	57.60	48.80	41.80
		Pattern FP1	48.10	40.00	34.40	30.40	27.40	25.00	23.00	21.50	19.00	16.70
		Pattern FP11	105.50	75.00	56.30	44.20	35.90	29.90	25.30	21.80	19.00	16.70
	Three or More Spans	Bending & Shear	124.50	85.30	63.20	49.30	40.00	33.20	28.20	24.30	21.30	18.80
		L/180	423.20	260.10	178.50	131.30	101.30	80.70	65.90	54.80	46.20	39.40
		Pattern FP1	53.20	44.00	37.80	33.40	30.10	27.50	25.40	23.70	21.30	18.80
		Pattern FP11	116.60	85.30	63.20	49.30	40.00	33.20	28.20	24.30	21.30	18.80
5"	Single Span	Bending & Shear	-	136.60	111.60	93.10	77.50	66.40	58.00	47.30	39.30	33.10
		L/180	-	290.00	211.40	162.90	130.00	106.20	88.30	74.30	63.20	54.10
		Pattern FP1	-	40.70	33.90	29.10	25.50	22.60	20.40	18.50	17.00	15.70
		Pattern FP11	-	101.70	84.80	72.60	63.60	56.50	50.90	46.20	39.30	33.10
	Two Spans	Bending & Shear	114.80	81.40	62.00	49.30	40.50	34.00	29.00	25.20	22.10	19.50
		L/180	514.20	317.90	220.50	164.50	128.80	104.30	86.60	73.20	62.80	54.50
		Pattern FP1	48.60	40.40	34.90	30.80	27.70	25.30	23.30	21.70	20.40	18.70
		Pattern FP11	106.60	81.40	62.00	49.30	40.50	34.00	29.00	25.20	22.10	19.50
	Three or More Spans	Bending & Shear	131.00	91.10	68.50	54.10	44.20	37.10	31.70	27.50	24.20	21.50
		L/180	475.00	300.40	211.30	158.90	125.00	101.40	84.10	71.00	60.80	52.50
		Pattern FP1	53.30	44.10	37.90	33.50	30.20	27.60	25.50	23.80	22.40	20.60
		Pattern FP11	117.00	91.10	68.50	54.10	44.20	37.10	31.70	27.50	24.20	21.50
6"	Single Span	Bending & Shear	-	159.40	125.00	100.70	84.30	72.40	63.50	56.60	47.40	40.10
		L/180	-	336.30	250.10	195.90	158.70	131.50	110.60	94.20	81.00	70.20
		Pattern FP1	-	40.70	33.90	29.10	25.50	22.60	20.40	18.50	17.00	15.70
		Pattern FP11	-	101.70	84.80	72.60	63.60	56.50	50.90	46.20	42.40	39.10
	Two Spans	Bending & Shear	121.10	87.10	67.10	53.90	44.60	37.70	32.40	28.20	24.80	22.00
		L/180	559.50	353.90	250.20	189.70	150.60	123.40	103.60	88.40	76.60	67.00
		Pattern FP1	49.00	40.80	35.30	31.20	28.00	25.60	23.60	21.90	20.60	18.90
		Pattern FP11	107.50	86.80	67.10	53.90	44.60	37.70	32.40	28.20	24.80	22.00
	Three or More Spans	Bending & Shear	136.80	96.40	73.10	58.30	48.00	40.50	34.80	30.30	26.80	23.90
		L/180	523.40	338.10	242.10	185.00	147.50	121.20	101.70	86.80	75.00	65.40
		Pattern FP1	53.50	44.30	38.10	33.60	30.30	27.70	25.60	23.80	22.40	20.70
		Pattern FP11	117.40	94.10	73.10	58.30	48.00	40.50	34.80	30.30	26.80	23.90

Notes:

- Based on 7.2 panel with 26 Ga. exterior & 26 Ga. interior face (min Fy = 33 ksi) for loads listed above.
- Allowable positive load is the lowest value of the panel bending and shear strength or deflection limit.
- Allowable suction load is the lowest value of the panel bending and shear strength, deflection limited and connection strength for each fastener pattern.
The numbers have been reduced to reflect the lowest value.
- Loads based on panel stress, deflection and connection design criteria are derived from ASTM E-72 testing.
- Allowable loads are calculated with a factor of safety of 2.5 for bending, 3.0 for shear and 2.0 for connection.
- Pattern FP1 is based on clip with (2) 1/4"-14 Tek III's in minimum 14 gage steel.
- Pattern FP11 is based on five (7.2" on center, low cell of product), 1/4"-14" Tek III's with 5/8" neoprene bonded washer in minimum 14 gage steel.
- The structural capacity of the girts are not considered and must be examined independently.
- This information is subject to change without notice. Please contact MBCI for most current information.