



**ENGINEERING TECHNICAL BULLETIN**

**BAC-12**

**PRODUCT:**

IWP Series – Insulated Metal Panels  
 Profiles: CleanLine, Impression, Infinity, MesaLine, MesaLine HSE, ShadowLine, Stucco, VeeLine, WaveLine  
 Width: 42-inch or narrower  
 Thickness: 2.5, 3, 4, 5 and 6-inch  
 Gauge: 26-gauge or heavier (facer and liner)  
 Finish: embossed or smooth

**ALLOWABLE UNIFORM LOADS (PSF):**

Panel Thickness (in)	Span Type	Load Type	Span (ft)												
			5	6	7	8	9	10	11	12	13	14	15	16	
2.5	Simple	Positive	77.03	59.83	47.47	38.25	31.21	25.72	21.40	17.94					
		Negative FP-D	56.08	47.33	40.26	34.75	30.08	26.15	22.80	19.90					
	Two	Positive	80.04	63.79	52.21	43.57	36.89	31.59	27.29	23.53					
		Negative FP-D	57.62	47.44	40.39	34.98	30.95	27.78	25.23	23.14					
	Three	Positive	80.91	64.54	52.74	43.85	36.91	31.38	26.90	23.07					
		Negative FP-D	58.66	49.65	42.61	37.39	33.36	29.78	26.20	23.05					
3	Simple	Positive	98.32	77.03	61.65	50.12	41.24	34.27	28.71	24.18					
		Negative FP-D	56.10	47.62	40.89	35.42	30.90	27.08	23.83	21.02					
	Two	Positive	95.27	77.83	65.58	55.86	47.51	40.87	35.14	29.83					
		Negative FP-D	57.37	48.10	41.26	36.20	32.33	29.23	26.64	24.52					
	Three	Positive	98.00	81.01	67.41	56.36	47.73	40.83	34.82	29.39					
		Negative FP-D	58.45	49.92	43.27	38.33	34.46	30.88	27.28	24.26					
4	Simple	Positive	131.20	105.09	85.51	70.68	59.12	49.92	42.48	36.06	30.73	26.49	23.08	20.28	
		Negative FP-D	56.15	48.20	41.89	36.77	32.52	28.95	25.89	23.26	20.96	18.94	17.14	15.54	
	Two	Positive	122.66	100.37	84.60	72.94	64.00	56.43	49.41	43.58	37.51	32.62	28.64	25.34	
		Negative FP-D	56.86	48.76	42.26	37.42	33.71	30.78	28.77	26.47	24.22	22.03	20.05	18.27	
	Three	Positive	125.06	103.32	87.96	76.55	65.72	56.85	49.57	43.42	37.17	32.18	28.12	24.79	
		Negative FP-D	58.03	50.18	43.92	39.26	35.68	32.83	29.45	26.68	24.39	22.26	20.34	18.60	
5	Simple	Positive	154.36	128.63	107.54	89.91	76.08	64.98	55.92	48.43	42.17	36.90	32.44	28.62	
		Negative FP-D	56.15	48.39	42.24	37.24	33.10	29.61	26.63	24.06	21.82	19.85	18.10	16.54	
	Two	Positive	146.07	119.74	101.03	87.13	76.44	68.00	61.19	55.46	49.53	44.48	40.12	36.18	
		Negative FP-D	56.53	49.10	42.71	37.94	34.25	31.33	29.32	27.02	25.05	22.95	21.05	19.33	
	Three	Positive	148.09	122.35	104.12	90.56	80.12	71.75	63.05	55.78	49.62	44.35	39.80	35.70	
		Negative FP-D	57.68	50.21	44.04	39.45	35.92	33.10	30.07	27.41	25.05	23.03	21.20	19.54	
6	Simple	Positive	173.20	144.33	123.71	107.43	91.68	78.98	68.56	59.89	52.59	46.39	41.09	36.54	
		Negative FP-D	56.15	48.59	42.59	37.71	33.68	30.28	27.38	24.87	22.68	20.76	19.05	17.53	
	Two	Positive	165.40	135.82	114.74	99.02	86.89	77.29	69.53	63.13	57.79	53.26	48.70	44.30	
		Negative FP-D	56.20	49.44	43.16	38.45	34.79	31.88	29.53	27.57	25.71	23.79	22.04	20.39	
	Three	Positive	167.06	138.05	117.46	102.14	90.32	80.94	73.32	67.01	60.01	53.96	48.71	44.13	
		Negative FP-D	57.32	50.23	44.16	39.64	36.15	33.37	30.68	28.14	25.88	23.86	22.06	20.48	

**NOTES:**

1. Allowable loads were derived from test conducted in accordance with ASTM E1592 and ASTM E72.
2. All loads reflect Fastener Pattern D (FP-D) – BAC-12 clip with (3) 5/16 - 12 self-drilling fasteners.
3. The above loads reflect attachment to 12-ga. steel supports. Attachment to other substrates must be designed separately.
4. Allowable loads assume a minimum bearing surface of 2.0".
5. Allowable loads are for uniform span lengths.
6. The BAC-12 is a 12-inch long clip and must have 6-inch space from center of support to end of panel.
7. Allowable loads reflect a deflection limit of L/180.
8. The panel self-weight was not added or subtracted from the allowable loads.
9. Above load table does not consider thermal effects.