

Metl-Span Architectural Flat Wall Panels
22 Ga. Exterior / 26 Ga. Interior Facings
Allowable Connection Load^{1,6,7,8} (psf) for Two or More Equal Spans

Panel Type ²	Fastener ^{3,4,5}	Thickness	Support Span								
			4 ft	5 ft	6 ft	7 ft	8 ft	9 ft	10 ft	11 ft	12 ft
CF-36 Architectural Flat	FP1	2"	54.8	42.8	35.0	29.5	25.4	22.4	20.0	18.0	16.4
		2.5"	56.7	44.3	36.2	30.5	26.3	23.1	20.6	18.6	16.9
		3"	58.4	45.7	37.4	31.5	27.1	23.8	21.2	19.1	17.4
		4"	61.5	48.4	39.6	33.4	28.8	25.3	22.5	20.2	18.4
	FP2	2"	66.0	51.5	42.1	35.5	30.6	26.9	24.0	21.7	19.7
		2.5"	71.4	55.8	45.6	38.4	33.1	29.1	25.9	23.4	21.3
		3"	76.6	60.0	49.1	41.3	35.6	31.3	27.8	25.1	22.8
		4"	86.9	68.4	56.0	47.2	40.7	35.7	31.8	28.6	26.0
	FP3	2"	88.3	69.0	56.3	47.0	38.9	32.4	27.2	23.1	19.7
		2.5"	90.0	70.4	57.5	48.4	41.8	36.7	32.7	29.5	26.3
		3"	91.4	71.6	58.5	49.3	42.5	37.3	33.2	29.9	27.2
		4"	93.7	73.7	60.4	50.9	43.9	38.5	34.3	30.8	28.0
CF-30 Architectural Flat	FP1	2"	72.1	56.3	45.9	38.7	33.4	29.4	26.3	23.1	19.7
		2.5"	74.3	58.1	47.4	40.0	34.5	30.3	27.0	24.3	22.2
		3"	76.3	59.8	48.9	41.2	35.5	31.1	27.7	25.0	22.7
		4"	80.0	62.9	51.5	43.5	37.5	32.9	29.2	26.3	23.9
	FP2	2"	90.8	70.9	57.9	47.0	38.9	32.4	27.2	23.1	19.7
		2.5"	95.5	74.7	61.0	51.4	44.3	38.9	34.7	30.5	26.3
		3"	100.0	78.3	64.0	53.9	46.5	40.8	36.3	32.7	29.8
		4"	108.5	85.3	69.9	59.0	50.8	44.6	39.7	35.7	32.4
	FP3	2"	90.8	71.3	57.9	47.0	38.9	32.4	27.2	23.1	19.7
		2.5"	103.5	81.2	66.7	56.5	49.1	41.7	35.5	30.5	26.3
		3"	109.7	86.0	70.2	59.2	51.0	44.8	39.9	35.9	32.4
		4"	112.4	88.4	72.5	61.1	52.7	46.2	41.1	37.0	33.6
CF-24 Architectural Flat	FP1	2"	89.3	69.7	56.9	47.0	38.9	32.4	27.2	23.1	19.7
		2.5"	91.9	71.9	58.7	49.5	42.7	37.5	33.4	30.1	26.3
		3"	94.3	73.9	60.4	50.9	43.8	38.5	34.3	30.9	28.1
		4"	98.5	77.5	63.5	53.5	46.2	40.5	36.0	32.4	29.4
	FP2	2"	90.8	71.3	57.9	47.0	38.9	32.4	27.2	23.1	19.7
		2.5"	103.5	81.2	66.7	56.5	49.1	41.7	35.5	30.5	26.3
		3"	115.2	90.3	74.1	62.7	54.4	48.0	42.9	37.2	32.4
		4"	121.9	95.6	78.4	66.2	57.3	50.5	45.1	40.8	37.2

Notes:

- The Load Span Table above is based on Allowable Stress Design (ASD). For loads calculated based on ASCE 7-10 (LRFD), please refer to section 2.4.1 of ASCE 7-10 for the applicable load combinations using Allowable Stress Design.
- Based on CF-panel with 22 ga. Architecturally Flat exterior and 26 ga. Light Mesa interior face (min $F_y = 33$ ksi).
- Fastener pattern FP1 is based on CF panel clips fastened to min. 14 ga. steel. Fastener options will be (2) ¼"-14 SDS Type 3, (2) ¼"-14 Self-Tapping, (2) ¼"-14 Type 5 SDS, or ¼"-20 Type 5 SDS. Fastener selection will be based on fastener pullout capacity from support steel members.
- For CF-30, FP2 is based on FP1 along with (1) blind rivet at 10" o.c. from female panel sidelap. For CF-24 and CF-36, FP2 is based on FP1 along with (1) blind rivet at 12" o.c. from female panel sidelap.
- For CF-30, FP3 is based on FP1 along with (2) blind rivets at 10" o.c. from female panel sidelap. For CF-36, FP3 is based on FP1 along with (2) blind rivets at 12" o.c. from female panel sidelap.
- Allowable loads based on panel stress, connection strength and deflection design criteria are derived from ASTM E72 and E1592 structural testing.
- The allowable inward or outward loads is the smallest load calculated with a factor of safety of 2.5 for bending stress, 3.0 for shear stresses, 2.0 for connection and deflection limitation of $L/180$.
- The structural capacity of the supports are not considered and must be examined independently.

Metl-Span Architectural Flat Wall Panels⁷

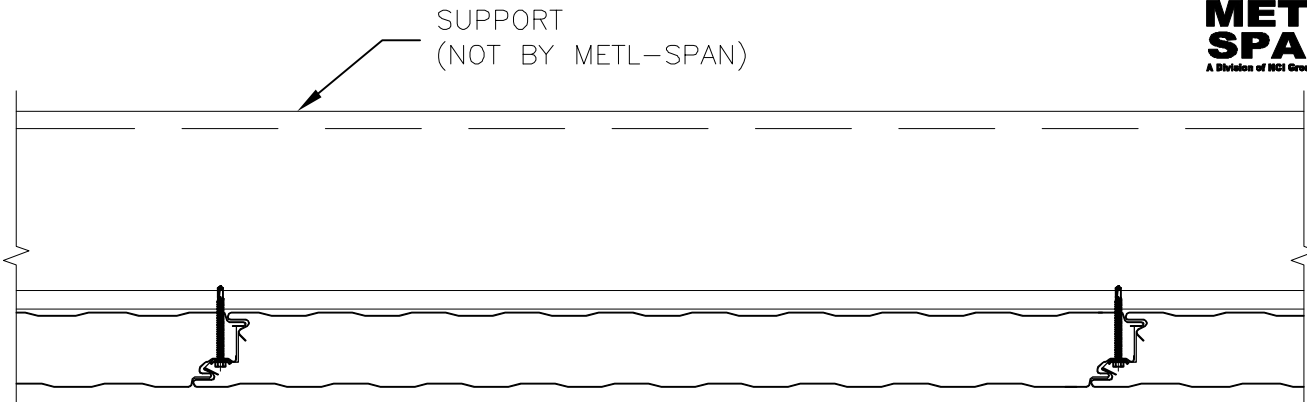
22 Ga. Exterior / 26 Ga. Interior Facings

Allowable Positive Load^{1,4,5,6} (psf) for Two or More Equal Spans

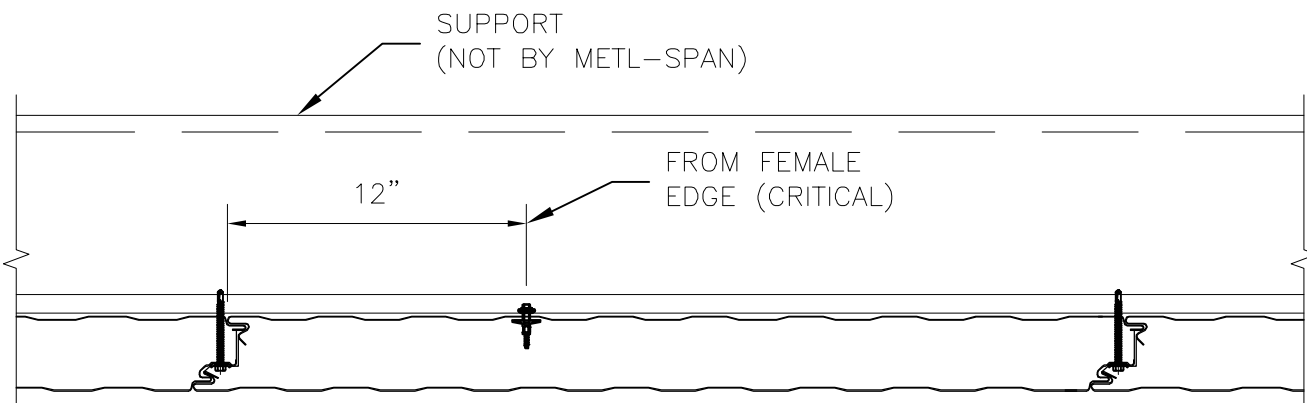
Panel Type ²	Design Criteria ³	Support Span								
		4 ft	5 ft	6 ft	7 ft	8 ft	9 ft	10 ft	11 ft	12 ft
2"	Bending & Shear	90.8	71.3	58.6	49.8	43.2	38.0	33.9	28.5	23.2
	Deflection (L/180)	96.1	73.1	57.9	47.0	38.9	32.4	27.2	23.1	19.7
2.5"	Bending & Shear	106.3	83.1	67.9	57.2	49.3	43.3	38.6	34.8	28.3
	Deflection (L/180)	117.1	89.9	71.7	58.8	49.1	41.7	35.7	30.9	27.0
3"	Bending & Shear	118.2	92.6	75.7	63.8	55.0	48.3	43.0	38.7	33.5
	Deflection (L/180)	135.2	104.4	83.8	69.2	58.2	49.7	42.9	37.4	32.8
4"	Bending & Shear	124.8	98.1	80.4	67.8	58.5	51.3	45.6	41.1	37.3
	Deflection (L/180)	162.2	126.5	102.5	85.3	72.4	62.4	54.4	47.9	42.5

Notes:

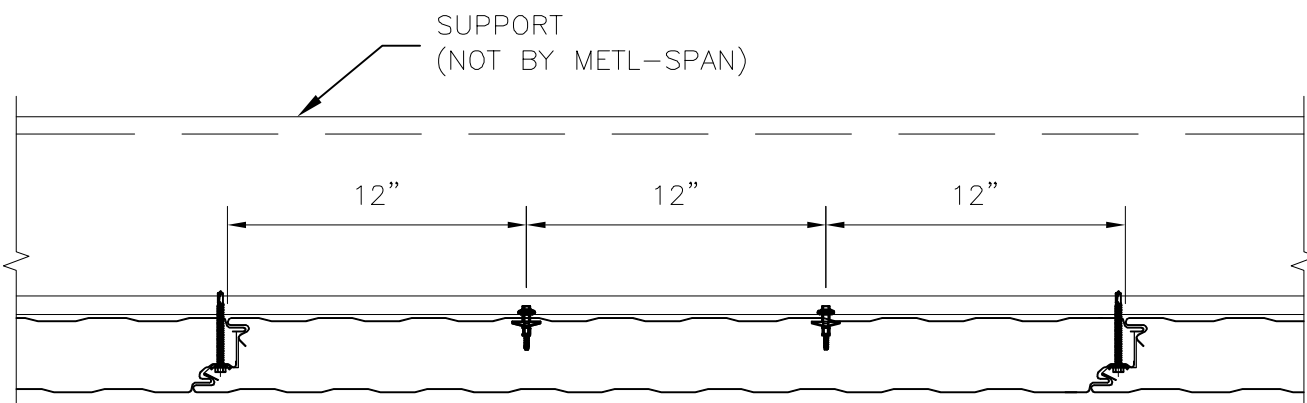
1. The Load Span Table above is based on Allowable Stress Design (ASD). For loads calculated based on ASCE 7-10 (LRFD), please refer to section 2.4.1 of ASCE 7-10 for the applicable load combinations using Allowable Stress Design.
2. Based on CF-panel with 22 ga. Architectural Flat exterior and 26 ga. Light Mesa interior face (min $F_y = 33$ ksi).
3. Refer to the allowable connection load chart, for suction loads.
4. Allowable positive or suction load is the lowest value of panel bending strength, shear strength, deflection limit and connection strength for each fastener pattern.
5. Allowable loads based on panel stress and deflection design criteria are derived from ASTM E72 structural testing and calculated with factor of safety of 2.5 for bending stress, 3.0 for shear stresses and deflection limitation of L/180.
6. The structural capacity of the purlins are not considered and must be examined independently.
7. Consult Metl-Span for recommendations on panel profile and gauge suitable for thermal stresses.



(FP1) SIDE JOINT CLIP ONLY

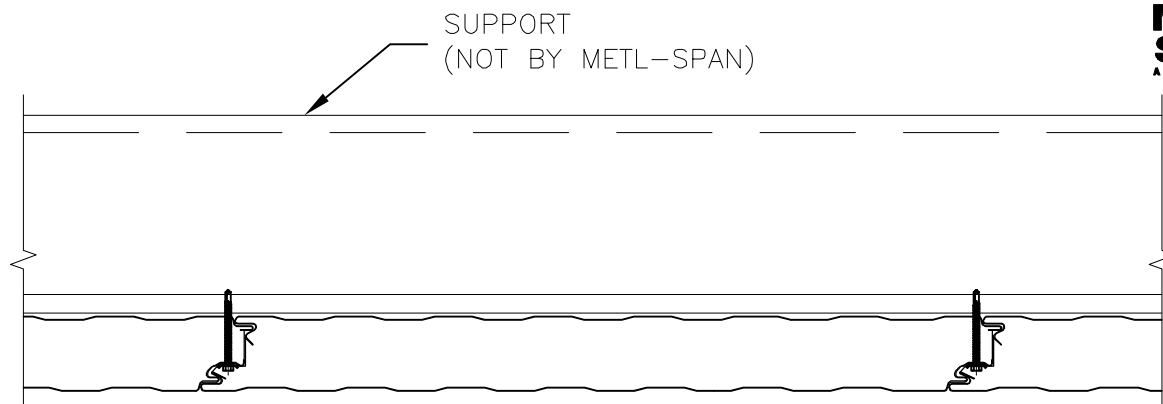


(FP2) SIDE JOINT AND (1) BLIND RIVET

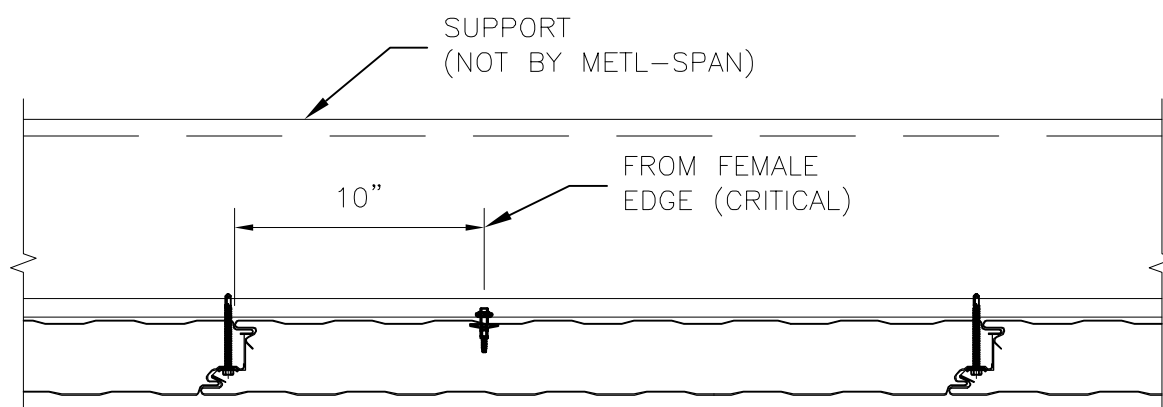


(FP3) SIDE JOINT AND (2) BLIND RIVETS

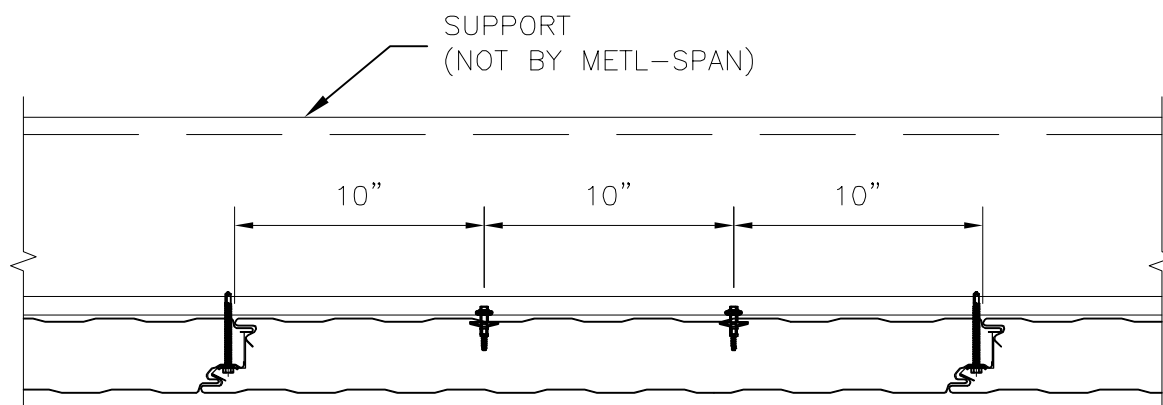
CF36 FASTENING PATTERNS



(FP1) SIDE JOINT CLIP ONLY

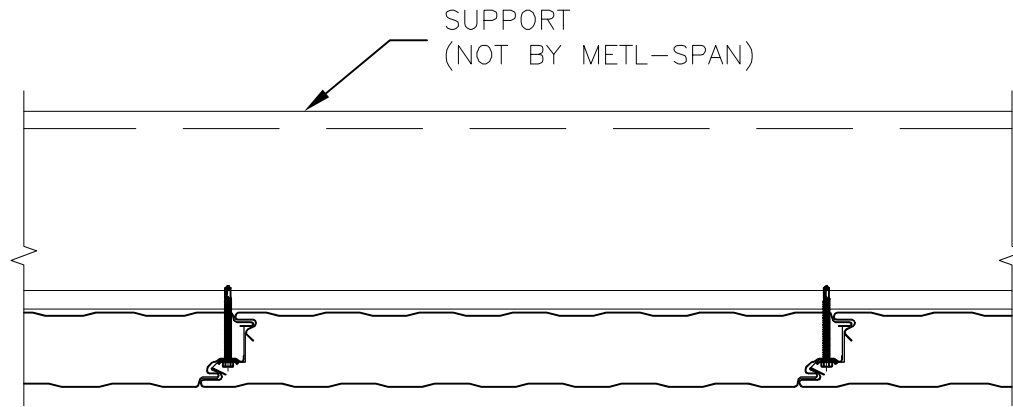


(FP2) SIDE JOINT AND (1) BLIND RIVET

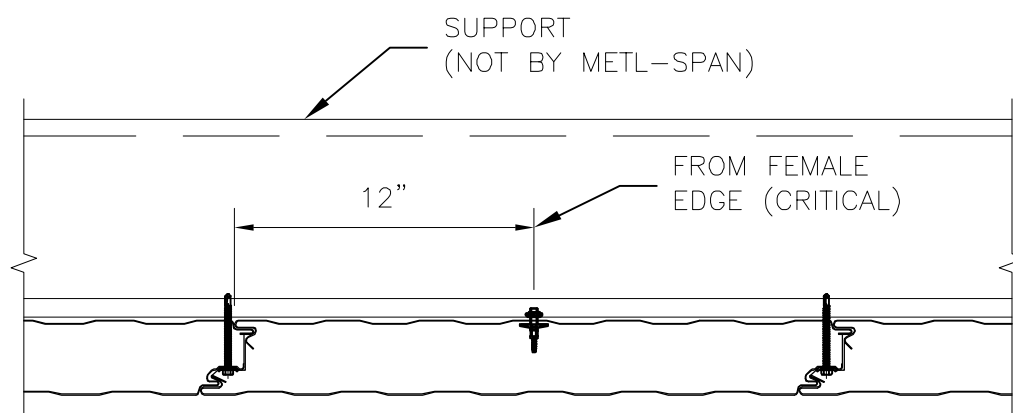


(FP3) SIDE JOINT AND (2) BLIND RIVETS

CF30 FASTENING PATTERNS



(FP1) SIDE JOINT CLIP ONLY



(FP2) SIDE JOINT AND (1) BLIND RIVET

CF24 FASTENING PATTERNS