CAN

Metl Span CFR-42 Roof System
24 Ga. Exterior / 26 Ga. Interior Facings
Two or More Spans Conditions

CFR Panel Thickness	Design Criteria	LSD (Limit Design State), PSF					
		Panel Span (ft)					
		2.5	3.0	4.0	5.0	6.0	7.0
42" wide	Bending & Shear	172.6	141.5	103.4	81.3	66.9	56.8
2" thick	Deflection (L/180)	160.4	131.1	94.1	71.7	56.5	45.7
2 fasteners/clip	Connection	82.0	74.9	65.6	59.6	48.3	40.0
42" wide	Bending & Shear	198.6	163.0	119.1	93.5	76.8	65.1
2.5" thick	Deflection (L/180)	196.7	161.4	116.8	89.8	71.7	58.6
2 fasteners/clip	Connection	90.9	81.9	70.4	63.1	51.2	42.5
42" wide	Bending & Shear	221.9	182.4	133.4	104.6	85.8	72.7
3" thick	Deflection (L/180)	228.7	188.2	137.1	106.1	85.2	70.2
2 fasteners/clip	Connection	99.9	88.9	75.0	66.6	54.2	45.0
42" wide	Bending & Shear	235.4	194.0	142.3	111.6	91.5	77.4
4" thick	Deflection (L/180)	280.0	231.2	169.7	132.5	107.5	89.5
2 fasteners/clip	Connection	117.7	102.7	83.9	72.5	59.4	50.0
42" wide	Bending & Shear	267.7	221.1	162.7	127.8	104.8	88.6
5" thick	Deflection (L/180)	313.9	259.8	191.8	150.6	123.0	103.1
3 fasteners/clip	Connection	121.0	105.7	86.5	74.8	62.1	53.1
42" wide	Bending & Shear	296.6	245.4	181.2	142.7	117.1	99.0
6" thick	Deflection (L/180)	330.4	273.9	203.0	160.1	131.3	110.6
3 fasteners/clip	Connection	124.3	108.7	89.0	77.0	64.8	56.0

Notes

1. Based on CFR-42 panel with 24 ga. exterior face (min F_y = 50 ksi) and 26 ga. interior face (min F_y = 33 ksi).
2. Fastener pattern FPI: CFR panel clip and (2 or 3 as shown above) ¼"-14 Self-Drilling Tek 3 screws in min. 14 ga. steel or (2) ¼"-14 Self-Drilling Tek 3 screws in min. 12 ga. steel. Two fasteners per clip are required at end supports. In lieu of self-drilling screws, self-tapping screws may be used.
3. Factored resistance inward load is the lower of the panel bending and shear resistance.
4. Factored resistance outward load is the lowest value of panel bending, shear and connection resistances for each fastener pattern.
5. Connection loads may be increased with Fablok. Consult Metl-Span for additional loads.
6. The loads based on panel stress and deflection design criteria are derived from ASTM E-72 structural testing. The factored resistance loads are calculated with resistance factor of 0.5 and 0.4 for bending and shear stresses, respectively.
7. The panel and its connection strength was determined from ASTM E1592 testing and the factored resistance loads are calculated with a resistance factor of 0.7.
8. Specified loads should not exceed the deflection load for L/180 limit.
9. The structural capacity of the purlins are not considered and must be examined independently.
10. Multiple spans are based on 3 or more spans conditions.

METL SPAN® CANADA

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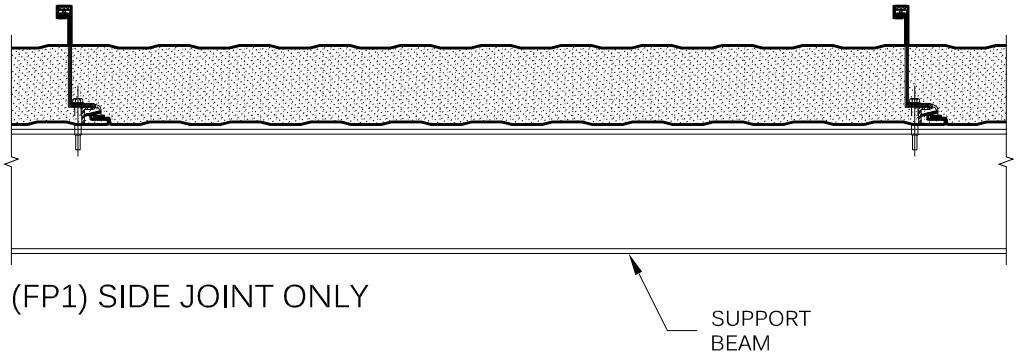
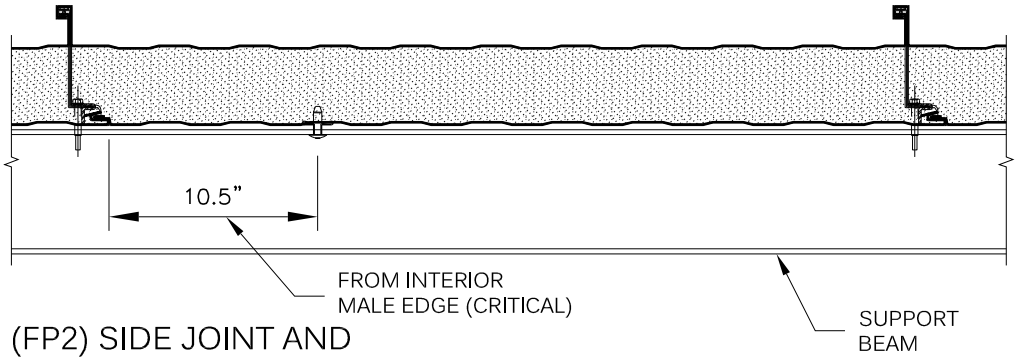


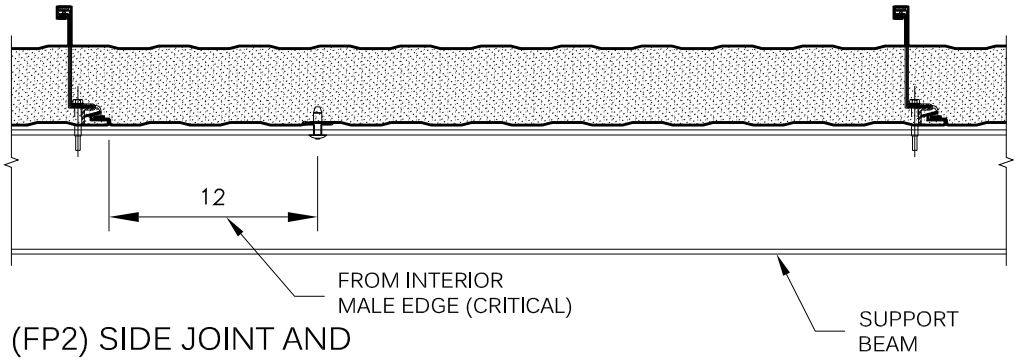
(FP1) SIDE JOINT ONLY

FP1 SAME CLIP AND FASTENER FOR CFR42, CFR36, CFR30



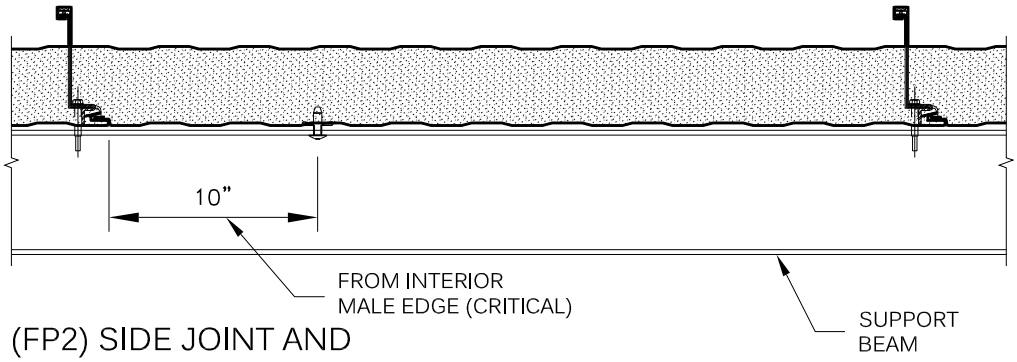
(FP2) SIDE JOINT AND
(1) BULB-TITE

FP2 FOR CFR42



(FP2) SIDE JOINT AND
(1) BULB-TITE

FP2 FOR CFR36



(FP2) SIDE JOINT AND
(1) BULB-TITE

FP2 FOR CFR30

METL SPAN® CANADA