

TrueCore CFR-42 Roof System – PUR
24 Ga. Exterior / 26 Ga. Interior Facings
Two or More Spans Conditions

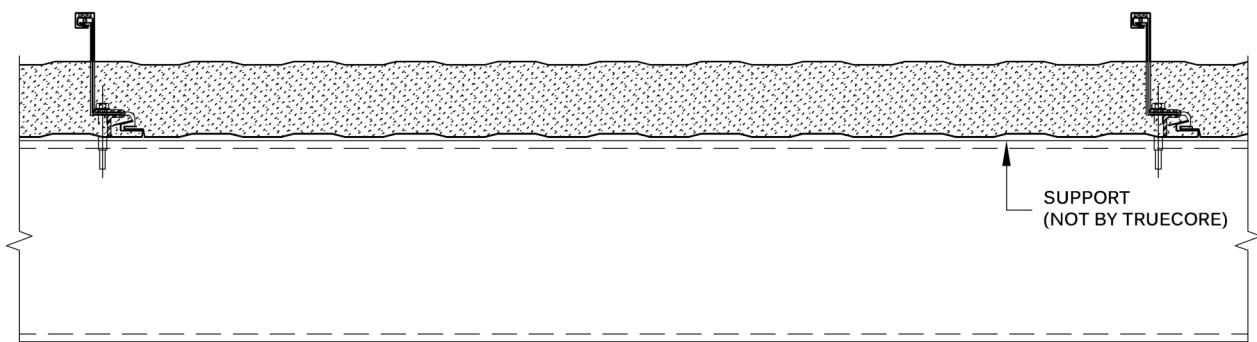
CFR Panel Thickness	Design Criteria	LSD (Limit Design State), PSF					
		Panel Span (ft)					
		2.5	3.0	4.0	5.0	6.0	7.0
42" wide 2" thick 2 fasteners/clip	Bending & Shear	172.6	141.5	103.4	81.3	66.9	56.8
	Deflection (L/180)	160.4	131.1	94.1	71.7	56.5	45.7
	Connection	82.0	74.9	65.6	59.6	48.3	40.0
42" wide 2.5" thick 2 fasteners/clip	Bending & Shear	198.6	163.0	119.1	93.5	76.8	65.1
	Deflection (L/180)	196.7	161.4	116.8	89.8	71.7	58.6
	Connection	90.9	81.9	70.4	63.1	51.2	42.5
42" wide 3" thick 2 fasteners/clip	Bending & Shear	221.9	182.4	133.4	104.6	85.8	72.7
	Deflection (L/180)	228.7	188.2	137.1	106.1	85.2	70.2
	Connection	99.9	88.9	75.0	66.6	54.2	45.0
42" wide 4" thick 2 fasteners/clip	Bending & Shear	235.4	194.0	142.3	111.6	91.5	77.4
	Deflection (L/180)	280.0	231.2	169.7	132.5	107.5	89.5
	Connection	117.7	102.7	83.9	72.5	59.4	50.0
42" wide 5" thick 3 fasteners/clip	Bending & Shear	267.7	221.1	162.7	127.8	104.8	88.6
	Deflection (L/180)	313.9	259.8	191.8	150.6	123.0	103.1
	Connection	121.0	105.7	86.5	74.8	62.1	53.1
42" wide 6" thick 3 fasteners/clip	Bending & Shear	296.6	245.4	181.2	142.7	117.1	99.0
	Deflection (L/180)	330.4	273.9	203.0	160.1	131.3	110.6
	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) $\frac{1}{4}$ "-14 Self-Drilling Tek 3 screws in min. 14 ga. steel or (2) $\frac{1}{4}$ "-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 TrueCore 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.
- 10.10. Multiple spans are based on 3 or more spans conditions

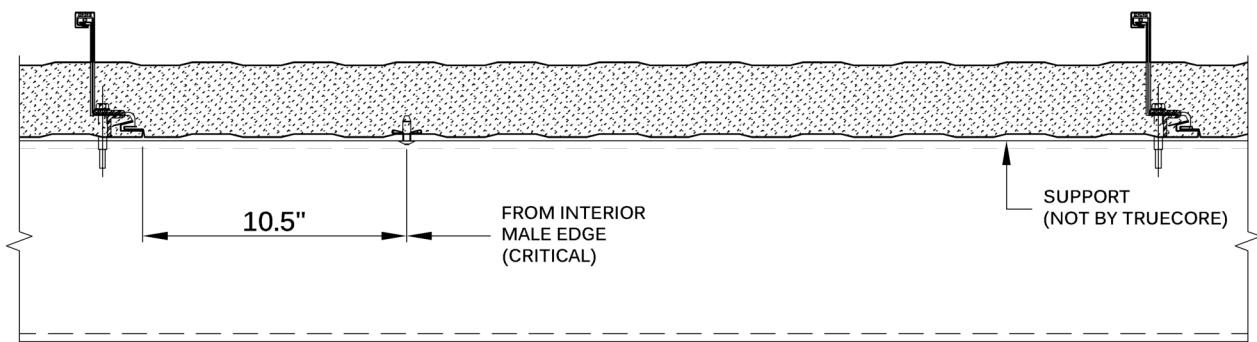


TrueCore



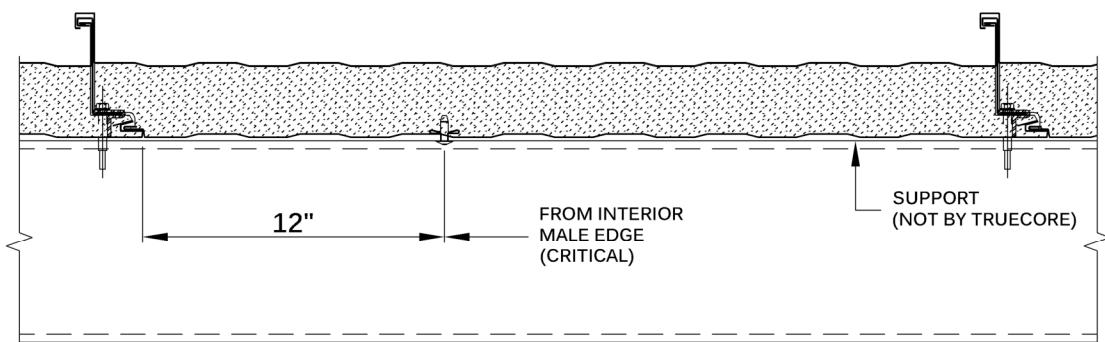
(FP1) SIDE JOINT ONLY

CFR42



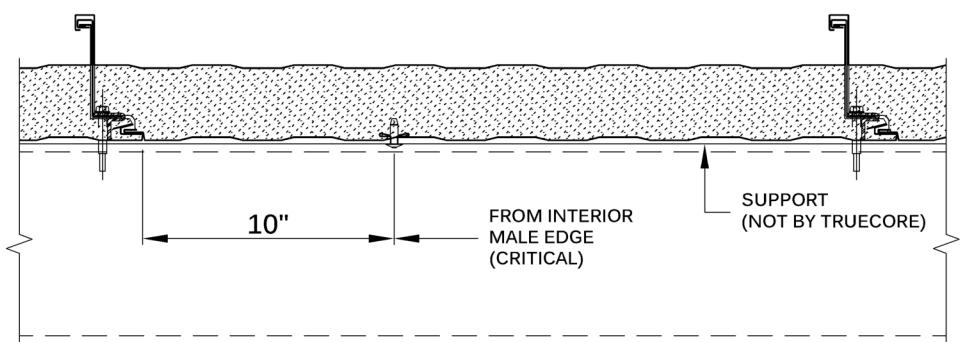
(FP2) SIDE JOINT AND (1) BULB-TITE® RIVET

CFR42



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

CFR36



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

CFR30

CFR42, CFR36 AND CFR30 FASTENING PATTERNS

Canada Version - PUR

APPLICATION: COLD STORAGE	CFR42, CFR36 AND CFR30 FASTENING PATTERNS	DRAWING NO: TC-CS-CFR-FP-01
		DATE: MAR '22

REV:
01