

Steel Joist Institute – SJI COSP - 2020

TABLE 2.2-3
SLOPED SEAT REQUIREMENTS FOR SLOPES 3/8":12 AND GREATER
LH- AND DLH-SERIES OPEN WEB STEEL JOISTS

LOW END W/OUT TOP CHORD EXTENSIONS	HIGH END W/OUT TOP CHORD EXTENSIONS	SLOPE "X" : 12	MINIMUM HIGH END SEAT DEPTH "d"
		3/8	6
		1/2	6
		1	6 1/2
		1 1/2	6 1/2
		2	7
		2 1/2	7
LOW END W/ TOP CHORD EXTENSIONS	HIGH END W/ TOP CHORD EXTENSIONS	3 1/2	7 1/2
		4	8
		4 1/2	8 1/2
		5	8 1/2
		5 1/2	9
		6	9 1/2
		SEE NOTE (2) FOR SLOPE RATES GREATER THAN 6:12	

Notes:

- (1) Depths shown are the minimum required for manufacturing of sloped seats. Depth may vary depending on actual bearing condition.
- (2) $d = 1/2 + 5 / \cos\theta + 6 \tan\theta$
- (3) Clearance must be checked at outer edge of support. Increase bearing seat depth as required to allow passage of 5" deep extension.
- (4) If extension depth greater than 5" is required, increase bearing depths accordingly.
- (5) Add 2 1/2" to seat depth at 18 thru 25 chord section numbers. Consult with joist manufacturer for information when TCXs are present.
- (6) If slope is 1/4 : 12 or less, sloped seats may not be required.
- (7) Required bearing seat depth shall be determined at END OF SEAT.
- (8) Also refer to SJI Specification 5.4 for special considerations of joist end reaction location.