

## Nordic X-Lam Sizing

### L/240, TL DEFLECTION CRITERIA - Panel thickness (in.)

TL (psf)	Simple Span							Multiple Span						
	10 ft	12 ft	14 ft	16 ft	18 ft	20 ft	22 ft	10 ft	12 ft	14 ft	16 ft	18 ft	20 ft	22 ft
40	4 1/8	4 1/8	4 1/8	4 1/8	6 7/8	6 7/8	6 7/8	4 1/8	4 1/8	4 1/8	4 1/8	4 1/8	6 7/8	6 7/8
50				4 1/8							4 1/8	6 7/8		
60			6 7/8	6 7/8						6 7/8				
70											6 7/8	6 7/8		
80			6 7/8	6 7/8						6 7/8				
90		6 7/8			6 7/8	6 7/8								
100			6 7/8	6 7/8			6 7/8							
110		6 7/8			6 7/8	6 7/8								
120			6 7/8	6 7/8			6 7/8							
130		6 7/8			6 7/8	6 7/8								
140	6 7/8		6 7/8	6 7/8										
150		6 7/8			6 7/8	6 7/8								
160	6 7/8		6 7/8	6 7/8										

### L/360, LL DEFLECTION CRITERIA - Panel thickness (in.)

LL (psf)	Simple Span							Multiple Span						
	10 ft	12 ft	14 ft	16 ft	18 ft	20 ft	22 ft	10 ft	12 ft	14 ft	16 ft	18 ft	20 ft	22 ft
40	4 1/8	4 1/8	4 1/8	6 7/8	6 7/8	6 7/8	6 7/8	4 1/8	4 1/8	4 1/8	4 1/8	6 7/8	6 7/8	6 7/8
50											4 1/8			
60			6 7/8							6 7/8	6 7/8			
70														
80			6 7/8							6 7/8	6 7/8			
90		6 7/8		6 7/8	6 7/8									
100			6 7/8			6 7/8	6 7/8							
110		6 7/8		6 7/8	6 7/8									
120			6 7/8			6 7/8	6 7/8							
130		6 7/8		6 7/8	6 7/8									
140	6 7/8		6 7/8			6 7/8								
150		6 7/8		6 7/8	6 7/8									
160	6 7/8		6 7/8			6 7/8								

Notes:

- Sizing (panel thickness shown in inches) based on « Standard » grade layout and according to NDS 2005.  
4 1/8 in. (105 mm) = 3 layers (105-3s), 6 7/8 in. (175 mm) = 5 layers (175-5s), and 9 5/8 in. (245 mm) = 7 layers (245-7s)
- For preliminary design use only. Final design shall include a complete analysis including the verification of the bearing capacity, and a consideration for the effect of vibrations when applicable.
- Tables are based on uniform loads, dry-use conditions and normal duration of load, for bending about the longitudinal axis of the panel. Span is measured center to center of supports.
- The loads indicated above are the uniform total load (TL) or live load (LL). The panels weight is not considered and shall be included in the total load calculation.
- Maximum deflection = L/240 under total load or L/360 under live load. Other deflection limits may apply. A 50% and 25% reduction in shear stiffness has been used when checking the permanent deformation and the elastic deflection, respectively, in order to account for the deformations caused by rolling shear.
- See Nordic technical notes for panel design properties and technical data.