

Bearing Plates for Nordic Lam

The table below indicates the steel thickness required for bearing plates in order to increase the compressive resistance perpendicular to grain (bearing) for 24F-1.9E Nordic Lam beams from 1,088 psi (7.5 MPa) to an equivalent value of 1,603 psi (11.0 MPa).

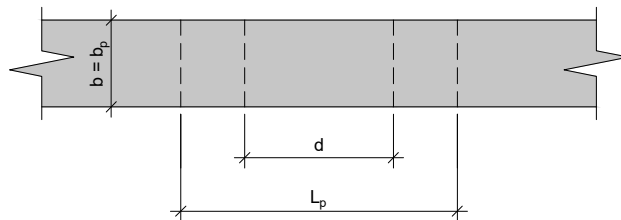
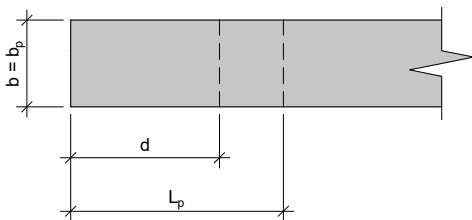
Cantilevered Bearing Plates

Column		End or intermediate bearing plate		
Width ^(a)	Depth	Width	Length	Thickness
b	d	b _p	L _p	t _p
(in.)	(in.)	(in.)	(in.)	(in.)
3-1/2	3-1/2	3-1/2	5-1/4	3/8
5-1/2	3-1/2	5-1/2	5-1/4	3/8
5-1/2	5-1/2	5-1/2	8-1/4	5/8
5-1/2	7	5-1/2	10-1/2	3/4
7	3-1/2	7	5-1/4	3/8
7	5-1/2	7	8-1/4	5/8
7	7	7	10-1/2	3/4

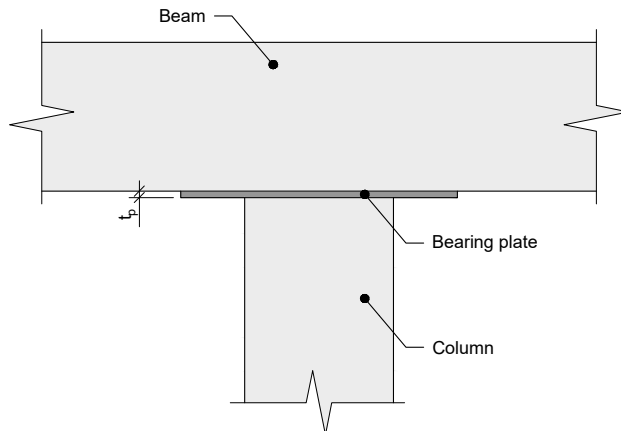
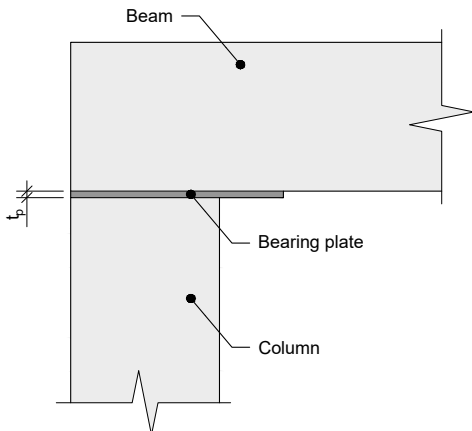
a) The width of the beam should match the width of the column.

Notes:

1. The use of a bearing plate results in an increase in the compressive resistance perpendicular to grain (bearing), F_{cp} , of 24F-1.9E Nordic Lam beams from 1,088 psi (7.5 MPa) to an equivalent value of 1,603 psi (11.0 MPa).
2. The bearing plates are not designed to provide lateral resistance or resist uplift.
3. Steel plates shall conform to CSA G40.21, grade 300W ($F_y = 300$ MPa).
4. The plates should be nailed to the column and beam with 2-1/2-inch nails (0.131 in. x 2-1/2 in.).
5. The calculations are based on the Wood Design Manual 2020 and CSA O86:19.



Plan View



Elevation View