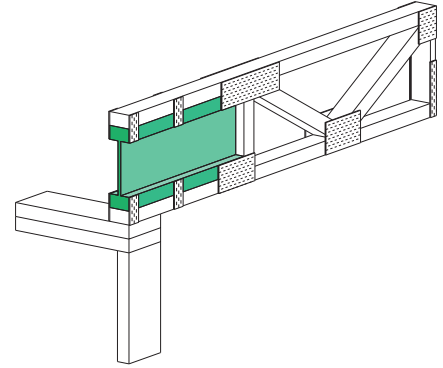


Nordic Joist Inserts

This technical note provides the design properties for I-joist inserts for use in floor or roof trusses.

This technical note is based on the following assumptions:

1. Inserts used on exterior bearings.
2. Inserts with a maximum length of 16 inches.
3. Connection detail with common nails or truss plates by others.



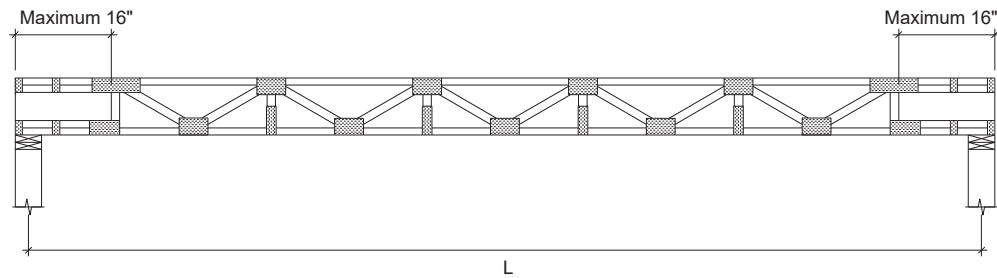
Design Properties for Nordic Joist Inserts

Joist depth	Joist series	V ^(a) (lbf)	1-3/4" Bearing		Weight (plf)
			ER ^(b) (lbf)	ER ^(b) w/ BS (lbf)	
8-7/8"	NI-40x	1,090	1,065	1,065	2.54
	NI-80	1,090	1,090	1,090	3.12
11"	NI-40x	1,380	1,240	1,380	2.79
	NI-80	1,380	1,310	1,380	3.37
13"	NI-40x	1,625	1,300	1,590	2.93
	NI-80	1,720	1,405	1,680	3.61

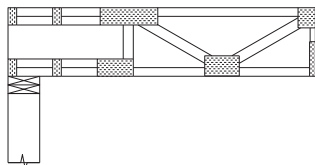
- a) Shear capacity, V, of the I-joist.
 b) End reaction capacity, ER, of the I-joist with and without bearing stiffeners (BS).

Notes:

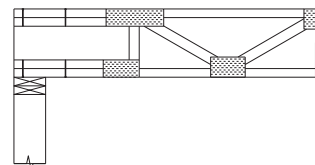
1. The tabulated design values are for normal duration of loading ($C_D = 1.0$).
2. The vertical (bearing) linear load capacity is 2,000 lbf/ft without bearing stiffeners.



Elevation view of a simple span joist with inserts



Connection with truss plates (by others)



Connection with common nails (by others)