

## Maximum Trimmer Joist Spans

### Design Criteria

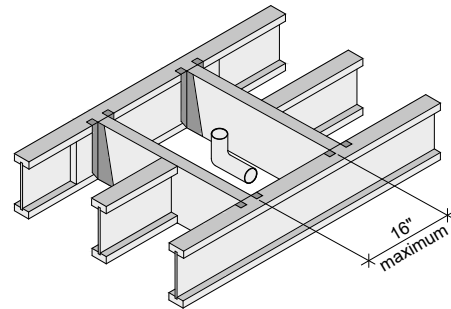
Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	See note 2.

### Maximum Trimmer Joist Spans

Joist depth	Joist series	Simple or multiple span(s)			
		On centre spacing			
		12"	16"	19.2"	24"
9-1/2"	NI-20	13'-5"	12'-3"	11'-7"	9'-9"
	NI-40x	15'-1"	13'-5"	12'-3"	10'-5"
	NI-60	15'-4"	13'-11"	13'-1"	10'-5"
	NI-80	16'-10"	15'-3"	13'-1"	10'-5"
11-7/8"	NI-20	16'-1"	14'-5"	13'-2"	11'-9"
	NI-40x	17'-8"	15'-3"	13'-11"	12'-4"
	NI-60	18'-3"	16'-8"	15'-6"	12'-4"
	NI-80	20'-1"	18'-3"	16'-3"	13'-0"
	NI-90	20'-8"	18'-8"	17'-1"	13'-7"
14"	NI-40x	19'-5"	16'-10"	15'-4"	12'-10"
	NI-60	20'-10"	18'-11"	16'-5"	13'-0"
	NI-80	22'-10"	20'-8"	17'-10"	14'-2"
	NI-90	23'-5"	21'-3"	17'-10"	14'-2"
16"	NI-60	23'-1"	20'-9"	17'-3"	13'-9"
	NI-80	25'-4"	22'-11"	19'-0"	15'-1"
	NI-90	25'-11"	22'-11"	19'-0"	15'-1"

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to trimmer joists supporting a single joist and meeting the above design criteria, without considering floor vibrations nor the differential deflection.
2. Spans are based on a composite floor with nailed-glued oriented strand board (OSB) sheathing with a minimum thickness of 5/8 inch for a joist spacing of 19.2 inches or less, or 3/4 inch for a joist spacing of 24 inches.
3. Minimum bearing length shall be 1-3/4 inch for end bearings and 3-1/2 inches for intermediate bearings.
4. Bearing stiffeners are not required when I-joists are used in accordance with this table, except as required for hangers.
5. If the spacing varies on either side of the trimmer joist, select the larger spacing.
6. The original span of the header-off I-joist shall be within the maximum trimmer span.
7. For installation details, see document NS-DC3, details 7c-1 and 7c-2.



## Design Criteria

Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	See note 2.

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Joist depth	Joist series	Simple or multiple span(s)			
		On centre spacing			
		12"	16"	19.2"	24"
9-1/2"	NI-20	14'-8"	12'-8"	11'-7"	9'-9"
	NI-40x	15'-6"	13'-5"	12'-3"	10'-5"
	NI-60	17'-0"	15'-5"	13'-1"	10'-5"
	NI-80	18'-9"	15'-9"	13'-1"	10'-5"
11-7/8"	NI-20	16'-8"	14'-5"	13'-2"	11'-9"
	NI-40x	17'-8"	15'-3"	13'-11"	12'-4"
	NI-60	20'-3"	17'-6"	15'-6"	12'-4"
	NI-80	22'-4"	19'-7"	16'-3"	13'-0"
	NI-90	22'-11"	20'-7"	17'-1"	13'-7"
14"	NI-40x	19'-5"	16'-10"	15'-4"	12'-10"
	NI-60	22'-3"	19'-3"	16'-5"	13'-0"
	NI-80	25'-4"	21'-6"	17'-10"	14'-2"
	NI-90	26'-0"	21'-6"	17'-10"	14'-2"
16"	NI-60	24'-0"	20'-9"	17'-3"	13'-9"
	NI-80	28'-1"	22'-11"	19'-0"	15'-1"
	NI-90	28'-9"	22'-11"	19'-0"	15'-1"

### Notes:

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- Spans are based on a composite floor with nailed-glued oriented strand board (OSB) sheathing with a minimum thickness of 5/8 inch for a joist spacing of 19.2 inches or less, or 3/4 inch for a joist spacing of 24 inches.
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- If the spacing varies on either side of the trimmer joist, select the larger spacing.
- The original span of the header-off I-joist shall be within the maximum trimmer span.
- For installation details, see document NS-DC3, details 7c-1 and 7c-2.

