## Maximum Floor Spans - L/360, Nailed Only

### General Notes

1. The tabulated spans may differ slightly from software programs.

2. It is preferable to use a software to reflect true conditions (span(s), loads, floor assembly, etc.). Alternatively, other tables are available on demand.

#### Index

Number	Live load	Dead load	Spans	Deflection limit	Floor system	Shea	0
					·····	Thickness	Туре
	(psf)	(psf)				(in.)	
S1.1	40	15	Simple	L/360	Nailed only	19/32	OSB
S1.2	40	15	Multiple	L/360	Nailed only	19/32	OSB
S2.1	40	15	Simple	L/360	Nailed only	5/8	OSB
S2.2	40	15	Multiple	L/360	Nailed only	5/8	OSB
S3.1	40	15	Simple	L/360	Nailed only	23/32	OSB
S3.2	40	15	Multiple	L/360	Nailed only	23/32	OSB
S4.1	40	15	Simple	L/360	Nailed only	3/4	OSB
S4.2	40	15	Multiple	L/360	Nailed only	3/4	OSB
S5.1	40	15	Simple	L/360	Nailed only	7/8	OSB
S5.2	40	15	Multiple	L/360	Nailed only	7/8	OSB
S6.1	40	15	Simple	L/360	Nailed only	5/8	Plywood
S6.2	40	15	Multiple	L/360	Nailed only	5/8	Plywood
S7.1	40	15	Simple	L/360	Nailed only	3/4	Plywood
S7.2	40	15	Multiple	L/360	Nailed only	3/4	Plywood
M1.1	40	20	Simple	L/360	Nailed only	19/32	OSB
M1.2	40	20	Multiple	L/360	Nailed only	19/32	OSB
M2.1	40	20	Simple	L/360	Nailed only	5/8	OSB
M2.2	40	20	Multiple	L/360	Nailed only	5/8	OSB
M3.1	40	20	Simple	L/360	Nailed only	23/32	OSB
M3.2	40	20	Multiple	L/360	Nailed only	23/32	OSB
M4.1	40	20	Simple	L/360	Nailed only	3/4	OSB
M4.2	40	20	Multiple	L/360	Nailed only	3/4	OSB
M5.1	40	20	Simple	L/360	Nailed only	7/8	OSB
M5.2	40	20	Multiple	L/360	Nailed only	7/8	OSB
M6.1	40	20	Simple	L/360	Nailed only	5/8	Plywood
M6.2	40	20	Multiple	L/360	Nailed only	5/8	Plywood
M7.1	40	20	Simple	L/360	Nailed only	3/4	Plywood
M7.2	40	20	Multiple	L/360	Nailed only	3/4	Plywood
H1.1	40	35	Simple	L/360	Nailed only	19/32	OSB
H1.2	40	35	Multiple	L/360	Nailed only	19/32	OSB
H2.1	40	35	Simple	L/360	Nailed only	5/8	OSB
H2.2	40	35	Multiple	L/360	Nailed only	5/8	OSB
H3.1	40	35	Simple	L/360	Nailed only	23/32	OSB
H3.2	40	35	Multiple	L/360	Nailed only	23/32	OSB
H4.1	40	35	Simple	L/360	Nailed only	3/4	OSB
H4.2	40	35	Multiple	L/360	Nailed only	3/4	OSB
H5.1	40	35	Simple	L/360	Nailed only	7/8	OSB
H5.2	40	35	Multiple	L/360	Nailed only	7/8	OSB
H6.1	40	35	Simple	L/360	Nailed only	5/8	Plywood
H6.2	40	35	Multiple	L/360	Nailed only	5/8	Plywood
H7.1	40	35	Simple	L/360	Nailed only	3/4	Plywood
H7.2	40	35	Multiple	L/360	Nailed only	3/4	Plywood

## Maximum Floor Spans - S1.1, L/360 and Nailed Only

Design Criteria	
Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	19/32 in. oriented strand board (OSB) sheathing, nailed only

#### Maximum Floor Spans

		Bare				1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	13'-8"	12'-9"	12'-3"	-	14'-1"	13'-2"	12'-7"	-	
9-1/2"	NI-40x	14'-11"	13'-11"	13'-4"	-	15'-3"	14'-3"	13'-8"	-	
9-1/2	NI-60	15'-1"	14'-1"	13'-6"	-	15'-5"	14'-5"	13'-10"	-	
	NI-80	16'-2"	15'-1"	14'-5"	-	16'-6"	15'-5"	14'-9"	-	
	NI-20	15'-6"	14'-5"	13'-10"	-	16'-0"	14'-11"	14'-4"	-	
	NI-40x	16'-9"	15'-8"	15'-0"	-	17'-3"	16'-1"	15'-5"	-	
11-7/8"	NI-60	17'-0"	15'-10"	15'-3"	-	17'-5"	16'-3"	15'-7"	-	
	NI-80	18'-3"	16'-11"	16'-3"	-	18'-10"	17'-4"	16'-8"	-	
	NI-90	18'-9"	17'-3"	16'-7"	-	19'-3"	17'-8"	16'-11"	-	
	NI-40x	18'-4"	17'-0"	16'-4"	-	19'-0"	17'-6"	16'-10"	-	
14"	NI-60	18'-9"	17'-4"	16'-7"	-	19'-4"	17'-9"	17'-1"	-	
14	NI-80	20'-5"	18'-7"	17'-9"	-	21'-0"	19'-2"	18'-2"	-	
	NI-90	20'-10"	19'-1"	18'-1"	-	21'-6"	19'-8"	18'-7"	-	
	NI-60	20'-6"	18'-9"	17'-10"	-	21'-2"	19'-5"	18'-5"	-	
16"	NI-80	22'-3"	20'-4"	19'-3"	-	22'-11"	21'-0"	19'-11"	-	
	NI-90	22'-9"	20'-9"	19'-8"	-	23'-5"	21'-5"	20'-4"	-	

		Mi	d-span blocking	g with 1x4 inch s	strap	Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing			On cent	tre spacing		
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	15'-7"	14'-7"	14'-0"	-	16'-0"	15'-0"	14'-4"	-	
9-1/2"	NI-40x	16'-10"	15'-9"	15'-1"	-	17'-2"	16'-1"	15'-5"	-	
9-1/2	NI-60	17'-0"	15'-11"	15'-3"	-	17'-4"	16'-3"	15'-7"	-	
	NI-80	18'-2"	16'-11"	16'-3"	-	18'-7"	17'-3"	16'-7"	-	
	NI-20	17'-10"	16'-8"	16'-0"	-	18'-4"	17'-1"	16'-5"	-	
	NI-40x	19'-6"	17'-11"	17'-2"	-	20'-0"	18'-5"	17'-7"	-	
11-7/8"	NI-60	19'-10"	18'-2"	17'-5"	-	20'-4"	18'-8"	17'-9"	-	
	NI-80	21'-5"	19'-7"	18'-7"	-	21'-11"	20'-1"	19'-1"	-	
	NI-90	21'-11"	20'-1"	19'-0"	-	22'-4"	20'-6"	19'-6"	-	
	NI-40x	22'-0"	20'-2"	19'-1"	-	22'-7"	20'-9"	19'-8"	-	
14"	NI-60	22'-5"	20'-6"	19'-6"	-	23'-0"	21'-1"	20'-0"	-	
14	NI-80	24'-2"	22'-2"	21'-0"	-	24'-9"	22'-8"	21'-6"	-	
	NI-90	24'-8"	22'-8"	21'-5"	-	25'-3"	23'-2"	21'-11"	-	
	NI-60	24'-10"	22'-9"	21'-6"	-	25'-5"	23'-4"	22'-2"	-	
16"	NI-80	26'-8"	24'-6"	23'-2"	-	27'-3"	25'-1"	23'-9"	-	
	NI-90	27'-3"	24'-11"	23'-7"	-	27'-10"	25'-7"	24'-2"	-	

### Notes:

1. The tabulated clear spans are based on CSA O86-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - S1.2, L/360 and Nailed Only

Design Criteria	
Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	19/32 in. oriented strand board (OSB) sheathing, nailed only

#### Maximum Floor Spans

			В	are			1/2 in. gy	psum ceiling		
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	14'-9"	13'-9"	13'-2"	-	15'-2"	14'-2"	13'-7"	-	
9-1/2"	NI-40x	16'-1"	15'-0"	14'-5"	-	16'-6"	15'-5"	14'-9"	-	
9-1/2	NI-60	16'-3"	15'-2"	14'-7"	-	16'-8"	15'-7"	14'-11"	-	
	NI-80	17'-6"	16'-4"	15'-8"	-	17'-11"	16'-8"	16'-0"	-	
	NI-20	16'-8"	15'-7"	15'-0"	-	17'-3"	16'-1"	15'-6"	-	
	NI-40x	18'-2"	16'-11"	16'-3"	-	18'-10"	17'-5"	16'-8"	-	
11-7/8"	NI-60	18'-6"	17'-2"	16'-6"	-	19'-2"	17'-7"	16'-11"	-	
	NI-80	20'-2"	18'-6"	17'-7"	-	20'-10"	19'-1"	18'-1"	-	
	NI-90	20'-9"	18'-11"	18'-0"	-	21'-4"	19'-6"	18'-6"	-	
	NI-40x	20'-3"	18'-7"	17'-8"	-	21'-0"	19'-3"	18'-3"	-	
14"	NI-60	20'-8"	18'-11"	18'-0"	-	21'-5"	19'-8"	18'-8"	-	
14	NI-80	22'-7"	20'-7"	19'-7"	-	23'-3"	21'-3"	20'-2"	-	
	NI-90	23'-1"	21'-1"	20'-0"	-	23'-10"	21'-9"	20'-8"	-	
	NI-60	22'-8"	20'-9"	19'-8"	-	23'-5"	21'-6"	20'-5"	-	
16"	NI-80	24'-8"	22'-6"	21'-5"	-	25'-5"	23'-3"	22'-1"	-	
	NI-90	25'-2"	23'-0"	21'-10"	-	26'-0"	23'-9"	22'-7"	-	

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	16'-8"	15'-7"	15'-0"	-	17'-1"	16'-0"	15'-4"	-	
9-1/2"	NI-40x	18'-0"	16'-10"	16'-2"	-	18'-6"	17'-2"	16'-6"	-	
9-1/2	NI-60	18'-3"	17'-0"	16'-4"	-	18'-9"	17'-5"	16'-8"	-	
	NI-80	19'-10"	18'-3"	17'-5"	-	20'-4"	18'-8"	17'-9"	-	
	NI-20	19'-4"	17'-10"	17'-1"	-	20'-0"	18'-5"	17'-7"	-	
	NI-40x	21'-3"	19'-6"	18'-6"	-	21'-10"	20'-1"	19'-1"	-	
11-7/8"	NI-60	21'-7"	19'-10"	18'-10"	-	22'-2"	20'-5"	19'-5"	-	
	NI-80	23'-5"	21'-6"	20'-4"	-	24'-0"	22'-0"	20'-11"	-	
	NI-90	24'-0"	22'-0"	20'-10"	-	24'-6"	22'-6"	21'-4"	-	
	NI-40x	24'-0"	22'-0"	20'-11"	-	24'-8"	22'-8"	21'-6"	-	
14"	NI-60	24'-5"	22'-5"	21'-3"	-	25'-1"	23'-1"	21'-11"	-	
14	NI-80	26'-5"	24'-3"	23'-0"	-	27'-0"	24'-10"	23'-7"	-	
	NI-90	27'-0"	24'-9"	23'-6"	-	27'-7"	25'-5"	24'-1"	-	
	NI-60	27'-0"	24'-10"	23'-6"	-	27'-9"	25'-7"	24'-3"	-	
16"	NI-80	29'-2"	26'-9"	25'-4"	-	29'-10"	27'-5"	26'-0"	-	
	NI-90	29'-9"	27'-3"	25'-10"	-	30'-5"	28'-0"	26'-6"	-	

### Notes:

1. The tabulated clear spans are based on CSA O86-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - S2.1, L/360 and Nailed Only

Design Criteria	
Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	5/8 in. oriented strand board (OSB) sheathing, nailed only

#### Maximum Floor Spans

		Bare				1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	13'-10"	12'-11"	12'-4"	-	14'-3"	13'-3"	12'-9"	-	
9-1/2"	NI-40x	15'-1"	14'-1"	13'-6"	-	15'-5"	14'-5"	13'-10"	-	
9-1/2	NI-60	15'-3"	14'-3"	13'-8"	-	15'-8"	14'-7"	14'-0"	-	
	NI-80	16'-5"	15'-3"	14'-7"	-	16'-9"	15'-7"	14'-11"	-	
	NI-20	15'-8"	14'-7"	14'-0"	-	16'-2"	15'-1"	14'-5"	-	
	NI-40x	17'-0"	15'-10"	15'-2"	-	17'-5"	16'-3"	15'-7"	-	
11-7/8"	NI-60	17'-3"	16'-1"	15'-5"	-	17'-8"	16'-6"	15'-9"	-	
	NI-80	18'-7"	17'-2"	16'-5"	-	19'-1"	17'-7"	16'-10"	-	
	NI-90	19'-0"	17'-6"	16'-9"	-	19'-7"	17'-10"	17'-1"	-	
	NI-40x	18'-8"	17'-3"	16'-6"	-	19'-3"	17'-8"	17'-0"	-	
14"	NI-60	19'-0"	17'-6"	16'-10"	-	19'-8"	18'-0"	17'-3"	-	
14	NI-80	20'-9"	18'-11"	17'-11"	-	21'-4"	19'-6"	18'-5"	-	
	NI-90	21'-3"	19'-4"	18'-4" - 21'-10" 19'-11" 18'-	18'-10"	-				
	NI-60	20'-10"	19'-0"	18'-0"	-	21'-6"	19'-8"	18'-8"	-	
16"	NI-80	22'-8"	20'-8"	19'-7"	-	23'-3"	21'-3"	20'-2"	-	
	NI-90	23'-2"	21'-1"	20'-0"	-	23'-9"	21'-9"	20'-7"	-	

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	15'-8"	14'-8"	14'-1"	-	16'-1"	15'-1"	14'-5"	-	
9-1/2"	NI-40x	16'-11"	15'-10"	15'-2"	-	17'-3"	16'-2"	15'-6"	-	
9-1/2	NI-60	17'-1"	16'-0"	15'-4"	-	17'-5"	16'-4"	15'-8"	-	
	NI-80	18'-4"	17'-1"	16'-4"	-	18'-9"	17'-4"	16'-8"	-	
	NI-20	17'-11"	16'-9"	16'-1"	-	18'-6"	17'-2"	16'-6"	-	
	NI-40x	19'-8"	18'-0"	17'-3"	-	20'-2"	18'-6"	17'-8"	-	
11-7/8"	NI-60	19'-11"	18'-4"	17'-6"	-	20'-5"	18'-10"	17'-10"	-	
	NI-80	21'-7"	19'-9"	18'-9"	-	22'-1"	20'-3"	19'-2"	-	
	NI-90	22'-1"	20'-3"	19'-2"	-	22'-6"	20'-8"	19'-7"	-	
	NI-40x	22'-2"	20'-4"	19'-3"	-	22'-9"	20'-11"	19'-10"	-	
14"	NI-60	22'-7"	20'-8"	19'-7"	-	23'-2"	21'-3"	20'-2"	-	
14	NI-80	24'-4"	22'-4"	21'-2"	-	24'-11"	22'-10"	21'-8"	-	
	NI-90	24'-11"	22'-10"	21'-7"	-	25'-5"	23'-4"	22'-1"	-	
	NI-60	24'-11"	22'-11"	21'-8"	-	25'-7"	23'-6"	22'-4"	-	
16"	NI-80	26'-11"	24'-8"	23'-4"	-	27'-5"	25'-3"	23'-11"	-	
	NI-90	27'-5"	25'-2"	23'-10"	-	28'-0"	25'-9"	24'-4"	-	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - S2.2, L/360 and Nailed Only

Design Criteria	
Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	5/8 in. oriented strand board (OSB) sheathing, nailed only

#### Maximum Floor Spans

			В	are		1/2 in. gypsum ceiling On centre spacing				
Joist depth	Joist series		On cent	re spacing						
9-1/2" 11-7/8" 14"		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	14'-11"	13'-11"	13'-4"	-	15'-5"	14'-4"	13'-9"	-	
0.1/0"	NI-40x	16'-3"	15'-2"	14'-7"	-	16'-8"	15'-7"	14'-11"	-	
9-1/2	NI-60	16'-6"	15'-4"	14'-9"	-	16'-11"	15'-9"	15'-1"	-	
	NI-80	17'-8"	16'-6"	15'-10"	-	18'-2"	16'-10"	16'-2"	-	
	NI-20	16'-11"	15'-9"	15'-2"	-	17'-5"	16'-3"	15'-8"	-	
	NI-40x	18'-6"	17'-1"	16'-5"	-	19'-1"	17'-7"	16'-10"	-	
11-7/8"	NI-60	18'-10"	17'-4"	16'-8"	-	19'-5"	17'-10"	17'-1"	-	
	NI-80	20'-6"	18'-9"	17'-10"	-	21'-2"	19'-4"	18'-4"	-	
	NI-90	21'-1"	19'-3"	18'-3"	-	21'-8"	19'-10"	18'-9"	-	
	NI-40x	20'-7"	18'-10"	17'-10"	-	21'-4"	19'-6"	18'-6"	-	
4 4 "	NI-60	21'-1"	19'-3"	18'-3"	-	21'-9"	19'-11"	18'-11"	-	
14	NI-80	22'-11"	20'-11"	19'-10"	-	23'-7"	21'-7"	20'-6"	-	
	NI-90	23'-6"	21'-5"	20'-4"	-	24'-2"	22'-1"	20'-11"	-	
	NI-60	23'-0"	21'-1"	20'-0"	-	23'-10"	21'-10"	20'-8"	-	
16"	NI-80	25'-1"	22'-11"	21'-8"	-	25'-9"	23'-7"	22'-4"	-	
	NI-90	25'-7"	23'-5"	22'-2"	-	26'-4"	24'-1"	22'-10"	-	

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	16'-9"	15'-8"	15'-1"	-	17'-2"	16'-1"	15'-6"	-	
9-1/2"	NI-40x	18'-2"	16'-11"	16'-3"	-	18'-8"	17'-4"	16'-8"	-	
9-1/2	NI-60	18'-5"	17'-1"	16'-5"	-	18'-11"	17'-6"	16'-10"	-	
	NI-80	20'-1"	18'-5"	17'-7"	-	20'-6"	18'-10"	17'-10"	-	
	NI-20	19'-6"	17'-11"	17'-2"	-	20'-2"	18'-7"	17'-8"	-	
	NI-40x	21'-5"	19'-8"	18'-8"	-	22'-0"	20'-3"	19'-3"	-	
11-7/8"	NI-60	21'-10"	20'-0"	19'-0"	-	22'-4"	20'-7"	19'-6"	-	
	NI-80	23'-7"	21'-8"	20'-6"	-	24'-2"	22'-2"	21'-1"	-	
	NI-90	24'-2"	22'-2"	21'-0"	-	24'-8"	22'-8"	21'-6"	-	
	NI-40x	24'-2"	22'-2"	21'-0"	-	24'-10"	22'-10"	21'-8"	-	
14"	NI-60	24'-8"	22'-7"	21'-5"	-	25'-3"	23'-3"	22'-1"	-	
14	NI-80	26'-8"	24'-5"	23'-2"	-	27'-3"	25'-1"	23'-9"	-	
	NI-90	27'-3"	25'-0"	23'-8"	-	27'-10"	25'-7"	24'-3"	-	
	NI-60	27'-3"	25'-0"	23'-8"	-	27'-11"	25'-9"	24'-5"	-	
16"	NI-80	29'-5"	27'-0"	25'-6"	-	30'-0"	27'-8"	26'-3"	-	
	NI-90	30'-0"	27'-6"	26'-1"	-	30'-7"	28'-2"	26'-9"	-	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - S3.1, L/360 and Nailed Only

Design Criteria	
Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	23/32 in. oriented strand board (OSB) sheathing, nailed only

#### Maximum Floor Spans

		Bare				1/2 in. gypsum ceiling					
Joist depth	Joist series		On cent	re spacing		On centre spacing					
		12"	16"	19.2"	24"	12"	16"	19.2"	24"		
	NI-20	14'-4"	13'-4"	12'-9"	12'-2"	14'-8"	13'-9"	13'-1"	12'-6"		
9-1/2"	NI-40x	15'-7"	14'-6"	13'-11"	13'-3"	15'-11"	14'-10"	14'-3"	13'-6"		
9-1/2	NI-60	15'-10"	14'-9"	14'-1"	13'-5"	16'-2"	15'-1"	14'-5"	13'-8"		
	NI-80	17'-0"	15'-9"	15'-1"	14'-4"	17'-3"	16'-1"	13'-1" 14'-3" 14'-5" 15'-5" 14'-11" 16'-1" 16'-3" 17'-4" 17'-8" 17'-6" 17'-9"	14'-8"		
	NI-20	16'-3"	15'-1"	14'-6"	13'-9"	16'-8"	15'-7"	14'-11"	14'-2"		
	NI-40x	17'-7"	16'-5"	15'-8"	14'-11"	18'-0"	16'-9"	16'-1"	15'-3"		
11-7/8"	NI-60	17'-10"	16'-7"	15'-11"	15'-1"	18'-4"	17'-0"	16'-3"	15'-6"		
	NI-80	19'-5"	17'-9"	17'-0"	16'-2"	19'-11"	18'-2"	19.2" 13'-1" 14'-3" 14'-5" 15'-5" 14'-11" 16'-1" 16'-3" 17'-4" 17'-8" 17'-6" 17'-9" 19'-2" 19'-7" 19'-5" 20'-11"	16'-6"		
	NI-90	19'-11"	18'-2"	17'-4"	16'-6"	20'-4"	18'-7"		16'-9"		
	NI-40x	19'-6"	17'-10"	17'-1"	16'-3"	20'-1"	18'-4"	17'-6"	16'-8"		
14"	NI-60	19'-11"	18'-2"	17'-4"	16'-6"	20'-6"	18'-9"	17'-9"	16'-11"		
14	NI-80	21'-8"	19'-9"	18'-8"	17'-7"	22'-2"	20'-3"	19'-2"	18'-0"		
	NI-90	22'-2"	20'-3"	19'-1"	17'-11"	22'-8"	20'-9"	19'-7"	18'-5"		
	NI-60	21'-9"	19'-11"	18'-9"	17'-8"	22'-5"	20'-6"	19'-5"	18'-2"		
16"	NI-80	23'-8"	21'-7"	20'-5"	19'-1"	24'-3"	22'-2"	20'-11"	19'-8"		
	NI-90	24'-2"	22'-1"	20'-10"	19'-6"	24'-9"	22'-8"	21'-5"	20'-1"		

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	15'-11"	14'-11"	14'-4"	13'-5"	16'-4"	15'-4"	14'-6"	13'-5"	
9-1/2"	NI-40x	17'-3"	16'-2"	15'-6"	14'-9"	17'-7"	16'-6"	15'-10"	15'-1"	
9-1/2	NI-60	17'-5"	16'-4"	15'-8"	14'-11"	17'-9"	16'-8"	16'-0"	15'-2"	
	NI-80	18'-9"	17'-5"	16'-8"	15'-11"	19'-2"	17'-8"	17'-0"	16'-2"	
	NI-20	18'-3"	17'-1"	16'-4"	15'-7"	18'-10"	17'-6"	16'-9"	16'-0"	
	NI-40x	20'-1"	18'-5"	17'-7"	16'-9"	20'-7"	18'-11"	17'-11"	17'-1"	
11-7/8"	NI-60	20'-5"	18'-9"	17'-9"	16'-11"	20'-11"	19'-3"	18'-3"	17'-4"	
	NI-80	22'-1"	20'-3"	19'-2"	18'-0"	22'-6"	20'-9"	19'-8"	18'-5"	
	NI-90	22'-7"	20'-9"	19'-8"	18'-5"	23'-0"	21'-2"	20'-1"	18'-10"	
	NI-40x	22'-7"	20'-9"	19'-8"	18'-6"	23'-2"	21'-4"	20'-3"	19'-0"	
14"	NI-60	23'-0"	21'-2"	20'-0"	18'-10"	23'-7"	21'-9"	20'-7"	19'-4"	
14	NI-80	24'-11"	22'-11"	21'-8"	20'-4"	25'-5"	23'-5"	22'-2"	20'-9"	
	NI-90	25'-5"	23'-5"	22'-1"	20'-9"	25'-11"	23'-11"	22'-7"	21'-3"	
	NI-60	25'-5"	23'-5"	22'-2"	20'-9"	26'-0"	24'-0"	22'-9"	21'-4"	
16"	NI-80	27'-5"	25'-3"	23'-10"	22'-4"	27'-11"	25'-10"	24'-5"	22'-11"	
	NI-90	28'-0"	25'-9"	24'-4"	22'-10"	28'-6"	26'-4"	24'-11"	23'-4"	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - S3.2, L/360 and Nailed Only

Design Criteria	
Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	23/32 in. oriented strand board (OSB) sheathing, nailed only

#### Maximum Floor Spans

		Bare				1/2 in. gypsum ceiling					
Joist depth	Joist series		On cent	re spacing			On cent	re spacing			
		12"	16"	19.2"	24"	12"	16"	19.2"	24"		
	NI-20	15'-5"	14'-5"	13'-9"	13'-1"	15'-10"	14'-10"	14'-2"	13'-6"		
0.4/0"	NI-40x	16'-10"	15'-8"	15'-0"	14'-4"	17'-3"	16'-1"	15'-5"	14'-8"		
9-1/2"	NI-60	17'-1"	15'-11"	15'-3"	14'-6"	17'-5"	16'-3"	15'-7"	14'-10"		
	NI-80	18'-5"	17'-1"	16'-4"	15'-7"	18'-11"	17'-5"	16'-8" 16'-1" 17'-4"	15'-10"		
	NI-20	17'-6"	16'-4"	15'-8"	14'-11"	18'-1"	16'-10"	16'-1"	15'-4"		
	NI-40x	19'-4"	17'-8"	16'-11"	16'-2"	19'-11"	18'-3"	17'-4"	16'-6"		
11-7/8"	NI-60	19'-8"	18'-0"	17'-2"	16'-4"	20'-3"	18'-6"	17'-7"	16'-9"		
	NI-80	21'-5"	19'-7"	18'-6"	17'-6"	22'-0"	20'-2"	19'-0"	17'-10"		
	NI-90	22'-0"	20'-1"	19'-0"	17'-10"	22'-6"	20'-7"	17'-7"	18'-4"		
	NI-40x	21'-6"	19'-8"	18'-7"	17'-7"	22'-2"	20'-4"	19'-3"	18'-1"		
14"	NI-60	22'-0"	20'-1"	19'-0"	17'-10"	22'-8"	20'-9"	19'-7"	18'-5"		
14	NI-80	23'-11"	21'-11"	20'-8"	19'-5"	24'-7"	22'-6"	21'-3"	19'-11"		
	NI-90	24'-6"	22'-5"	21'-2"	19'-10"	25'-2"	23'-0"	21'-9"	20'-5"		
	NI-60	24'-1"	22'-0"	20'-9"	19'-6"	24'-9"	22'-8"	21'-6"	20'-2"		
16"	NI-80	26'-2"	23'-11"	22'-7"	21'-2"	26'-10"	24'-7"	23'-3"	21'-10"		
	NI-90	26'-9"	24'-5"	23'-1"	21'-8"	27'-5"	25'-1"	23'-9"	22'-3"		

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	17'-0"	16'-0"	15'-4"	14'-7"	17'-6"	16'-5"	15'-9"	14'-7"	
9-1/2"	NI-40x	18'-7"	17'-3"	16'-7"	15'-5"	19'-1"	17'-8"	16'-11"	15'-5"	
9-1/2	NI-60	18'-11"	17'-6"	16'-9"	16'-0"	19'-4"	17'-10"	17'-1"	16'-4"	
	NI-80	20'-7"	18'-11"	17'-11"	17'-1"	21'-0"	19'-4"	18'-4"	17'-4"	
	NI-20	19'-11"	18'-4"	17'-6"	16'-7"	20'-7"	19'-0"	18'-0"	16'-7"	
	NI-40x	21'-11"	20'-2"	19'-1"	17'-7"	22'-6"	20'-9"	19'-8"	17'-7"	
11-7/8"	NI-60	22'-4"	20'-6"	19'-5"	18'-3"	22'-10"	21'-1"	20'-0"	18'-9"	
	NI-80	24'-2"	22'-3"	21'-1"	19'-9"	24'-8"	22'-9"	21'-7"	20'-3"	
	NI-90	24'-9"	22'-9"	21'-7"	20'-3"	25'-3"	23'-3"	22'-1"	20'-9"	
	NI-40x	24'-8"	22'-9"	21'-6"	19'-4"	25'-4"	23'-5"	21'-8"	19'-4"	
14"	NI-60	25'-2"	23'-2"	21'-11"	20'-7"	25'-9"	23'-10"	22'-7"	21'-3"	
14	NI-80	27'-3"	25'-1"	23'-9"	22'-3"	27'-10"	25'-8"	24'-4"	22'-10"	
	NI-90	27'-10"	25'-7"	24'-3"	22'-9"	28'-5"	26'-2"	24'-10"	23'-4"	
	NI-60	27'-9"	25'-7"	24'-2"	22'-9"	28'-5"	26'-3"	24'-11"	23'-5"	
16"	NI-80	30'-0"	27'-7"	26'-2"	24'-6"	30'-7"	28'-3"	26'-10"	25'-2"	
	NI-90	30'-7"	28'-2"	26'-8"	25'-0"	31'-3"	28'-10"	27'-4"	25'-8"	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - S4.1, L/360 and Nailed Only

Design Criteria	
Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	3/4 in. oriented strand board (OSB) sheathing, nailed only

#### Maximum Floor Spans

		Bare				1/2 in. gypsum ceiling					
Joist depth	Joist series		On cent	re spacing		On centre spacing					
		12"	16"	19.2"	24"	12"	16"	19.2"	24"		
	NI-20	14'-6"	13'-6"	12'-11"	12'-3"	14'-10"	13'-10"	13'-3"	12'-7"		
9-1/2"	NI-40x	15'-9"	14'-8"	14'-1"	13'-4"	16'-1"	15'-0"	14'-4"	13'-8"		
9-1/2	NI-60	16'-0"	14'-10"	14'-3"	13'-6"	16'-4"	15'-2"	14'-6"	13'-10"		
	NI-80	17'-2"	16'-0"	15'-3"	14'-6"	17'-5"	16'-3"	15'-7"	14'-9"		
	NI-20	16'-5"	15'-3"	14'-7"	13'-11"	16'-10"	15'-8"	15'-0"	14'-3"		
	NI-40x	17'-9"	16'-7"	15'-10"	15'-1"	18'-3"	16'-11"	16'-3"	15'-5"		
11-7/8"	NI-60	18'-0"	16'-9"	16'-1"	15'-3"	18'-6"	17'-2"	16'-5"	15'-7"		
	NI-80	19'-8"	17'-11"	17'-2"	16'-4"	20'-2"	18'-5"	17'-6"	16'-7"		
	NI-90	20'-2"	18'-5"	17'-6"	16'-7"	20'-7"	18'-10"	16'-5"	16'-11"		
	NI-40x	19'-9"	18'-0"	17'-3"	16'-5"	20'-4"	18'-7"	17'-8"	16'-9"		
14"	NI-60	20'-2"	18'-5"	17'-6"	16'-8"	20'-9"	19'-0"	17'-11"	17'-1"		
14	NI-80	21'-11"	20'-0"	18'-11"	17'-9"	22'-6"	20'-7"	19'-5"	18'-2"		
	NI-90	22'-6"	20'-6"	19'-4"	18'-1"	23'-0"	21'-0"	19'-10"	18'-7"		
	NI-60	22'-1"	20'-2"	19'-0"	17'-10"	22'-8"	20'-9"	19'-8"	18'-5"		
16"	NI-80	24'-0"	21'-11"	20'-8"	19'-4"	24'-7"	22'-6"	21'-3"	19'-10"		
	NI-90	24'-6"	22'-4"	21'-1"	19'-9"	25'-1"	22'-11"	21'-8"	20'-3"		

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	16'-0"	15'-0"	14'-5"	13'-5"	16'-5"	15'-5"	14'-6"	13'-5"	
9-1/2"	NI-40x	17'-4"	16'-3"	15'-7"	14'-10"	17'-8"	16'-7"	15'-11"	15'-2"	
9-1/2	NI-60	17'-6"	16'-5"	15'-9"	15'-0"	17'-10"	16'-9"	16'-1"	15'-3"	
	NI-80	18'-11"	17'-6"	16'-9"	16'-0"	19'-4"	17'-10"	17'-1"	16'-3"	
	NI-20	18'-5"	17'-2"	16'-5"	15'-8"	18'-11"	17'-7"	16'-10"	16'-1"	
	NI-40x	20'-2"	18'-7"	17'-8"	16'-10"	20'-8"	19'-1"	18'-1"	17'-2"	
11-7/8"	NI-60	20'-6"	18'-11"	17'-11"	17'-0"	21'-0"	19'-5"	18'-4"	17'-5"	
	NI-80	22'-3"	20'-5"	19'-4"	18'-2"	22'-8"	20'-11"	19'-10"	18'-7"	
	NI-90	22'-9"	20'-11"	19'-10"	18'-7"	23'-2"	21'-4"	20'-3"	19'-0"	
	NI-40x	22'-9"	20'-11"	19'-10"	18'-7"	23'-3"	21'-6"	20'-5"	19'-1"	
14"	NI-60	23'-2"	21'-4"	20'-2"	18'-11"	23'-9"	21'-11"	20'-9"	19'-5"	
14	NI-80	25'-1"	23'-1"	21'-10"	20'-5"	25'-6"	23'-7"	22'-4"	20'-11"	
	NI-90	25'-7"	23'-7"	22'-3"	20'-11"	26'-1"	24'-1"	22'-9"	21'-4"	
	NI-60	25'-7"	23'-7"	22'-3"	20'-10"	26'-2"	24'-2"	22'-11"	21'-6"	
16"	NI-80	27'-7"	25'-5"	24'-0"	22'-6"	28'-1"	26'-0"	24'-7"	23'-1"	
	NI-90	28'-2"	25'-11"	24'-6"	22'-11"	28'-8"	26'-6"	25'-1"	23'-6"	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - S4.2, L/360 and Nailed Only

Design Criteria	
Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	3/4 in. oriented strand board (OSB) sheathing, nailed only

#### Maximum Floor Spans

		Bare				1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	15'-7"	14'-7"	13'-11"	13'-3"	16'-0"	15'-0"	14'-4"	13'-7"	
9-1/2"	NI-40x	17'-0"	15'-10"	15'-2"	14'-5"	17'-5"	16'-3"	15'-6"	14'-9"	
9-1/2	NI-60	17'-3"	16'-1"	15'-4"	14'-7"	17'-7"	16'-5"	15'-9"	14'-11"	
	NI-80	18'-8"	17'-3"	16'-6"	15'-8"	19'-2"	17'-7"	16'-10"	16'-0"	
	NI-20	17'-8"	16'-6"	15'-9"	15'-0"	18'-3"	17'-0"	16'-3"	15'-6"	
	NI-40x	19'-7"	17'-11"	17'-1"	16'-3"	20'-2"	18'-5"	17'-7"	16'-8"	
11-7/8"	NI-60	19'-11"	18'-3"	17'-4"	16'-6"	20'-6"	18'-9"	17'-9"	16'-11"	
	NI-80	21'-9"	19'-10"	18'-9"	17'-8"	22'-3"	20'-5"	19'-3"	18'-1"	
	NI-90	22'-4"	20'-4"	19'-3"	18'-0"	22'-10"	20'-11"	17'-9"	18'-6"	
	NI-40x	21'-10"	19'-11"	18'-10"	17'-9"	22'-5"	20'-7"	19'-6"	18'-3"	
14"	NI-60	22'-3"	20'-4"	19'-3"	18'-1"	22'-11"	21'-0"	19'-10"	18'-8"	
14	NI-80	24'-3"	22'-2"	20'-11"	19'-8"	24'-10"	22'-9"	21'-6"	20'-2"	
	NI-90	24'-10"	22'-9"	21'-5"	20'-1"	25'-5"	23'-4"	22'-0"	20'-8"	
	NI-60	24'-4"	22'-3"	21'-1"	19'-9"	25'-1"	23'-0"	21'-9"	20'-5"	
16"	NI-80	26'-6"	24'-3"	22'-11"	21'-5"	27'-2"	24'-11"	23'-7"	22'-1"	
	NI-90	27'-1"	24'-9"	23'-5"	21'-11"	27'-9"	25'-5"	24'-1"	22'-6"	

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing			On cent	re spacing		
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	17'-2"	16'-1"	15'-5"	14'-7"	17'-7"	16'-6"	15'-9"	14'-7"	
9-1/2"	NI-40x	18'-9"	17'-5"	16'-8"	15'-5"	19'-3"	17'-9"	17'-0"	15'-5"	
9-1/2	NI-60	19'-0"	17'-7"	16'-10"	16'-1"	19'-6"	18'-0"	17'-3"	16'-5"	
	NI-80	20'-9"	19'-1"	18'-1"	17'-2"	21'-2"	19'-6"	18'-6"	17'-5"	
	NI-20	20'-1"	18'-6"	17'-7"	16'-7"	20'-9"	19'-2"	18'-2"	16'-7"	
	NI-40x	22'-1"	20'-4"	19'-3"	17'-7"	22'-8"	20'-11"	19'-9"	17'-7"	
11-7/8"	NI-60	22'-5"	20'-8"	19'-7"	18'-5"	23'-0"	21'-3"	20'-2"	18'-11"	
	NI-80	24'-4"	22'-5"	21'-3"	19'-11"	24'-10"	22'-11"	21'-9"	20'-5"	
	NI-90	24'-11"	22'-11"	21'-9"	20'-5"	25'-5"	23'-6"	22'-3"	20'-10"	
	NI-40x	24'-10"	22'-11"	21'-8"	19'-4"	25'-6"	23'-7"	21'-8"	19'-4"	
14"	NI-60	25'-4"	23'-4"	22'-1"	20'-9"	25'-11"	24'-0"	22'-9"	21'-4"	
14	NI-80	27'-5"	25'-3"	23'-11"	22'-5"	28'-0"	25'-10"	24'-6"	23'-0"	
	NI-90	28'-1"	25'-10"	24'-5"	22'-11"	28'-7"	26'-5"	25'-0"	23'-6"	
	NI-60	27'-11"	25'-9"	24'-5"	22'-10"	28'-7"	26'-6"	25'-1"	23'-7"	
16"	NI-80	30'-2"	27'-10"	26'-4"	24'-8"	30'-10"	28'-6"	27'-0"	25'-4"	
	NI-90	30'-10"	28'-5"	26'-11"	25'-2"	31'-5"	29'-0"	27'-6"	25'-10"	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - S5.1, L/360 and Nailed Only

Design Criteria	
Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	7/8 in. oriented strand board (OSB) sheathing, nailed only

#### Maximum Floor Spans

		Bare				1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	15'-0"	14'-0"	13'-5"	12'-9"	15'-5"	14'-4"	13'-9"	13'-0"	
9-1/2"	NI-40x	16'-4"	15'-3"	14'-7"	13'-10"	16'-8"	15'-7"	14'-11"	14'-2"	
9-1/2	NI-60	16'-7"	15'-5"	14'-9"	14'-0"	16'-11"	15'-9"	15'-1"	14'-3"	
	NI-80	17'-10"	16'-7"	15'-10"	15'-0"	18'-1"	16'-10"	16'-2" 15'-7" 16'-10"	15'-3"	
	NI-20	17'-0"	15'-10"	15'-2"	14'-5"	17'-5"	16'-4"	15'-7"	14'-9"	
	NI-40x	18'-7"	17'-2"	16'-5"	15'-7"	19'-1"	17'-7"	16'-10"	15'-11'	
11-7/8"	NI-60	18'-11"	17'-5"	16'-8"	15'-10"	19'-5"	17'-10"	17'-0"	16'-2"	
	NI-80	20'-7"	18'-10"	17'-10"	16'-11"	21'-1"	19'-4"	18'-3"	17'-2"	
	NI-90	21'-2"	19'-4"	18'-3"	17'-2"	21'-7"	19'-9"	15'-7" 16'-10" 17'-0"	17'-6"	
	NI-40x	20'-8"	18'-11"	17'-11"	17'-0"	21'-3"	19'-6"	18'-5"	17'-4"	
14"	NI-60	21'-2"	19'-4"	18'-3"	17'-3"	21'-8"	19'-11"	18'-9"	17'-8"	
14	NI-80	23'-0"	21'-1"	19'-10"	18'-6"	23'-6"	21'-7"	20'-4"	19'-0"	
	NI-90	23'-7"	21'-7"	20'-4"	18'-11"	24'-1"	22'-1"	20'-10"	19'-5"	
	NI-60	23'-1"	21'-2"	20'-0"	18'-8"	23'-8"	21'-9"	20'-7"	19'-3"	
16"	NI-80	25'-2"	23'-0"	21'-8"	20'-3"	25'-8"	23'-7"	22'-3"	20'-9"	
	NI-90	25'-8"	23'-6"	22'-2"	20'-8"	26'-3"	24'-1"	22'-9"	21'-2"	

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing			On cent	re spacing		
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	16'-4"	15'-4"	14'-6"	13'-5"	16'-8"	15'-5"	14'-6"	13'-5"	
9-1/2"	NI-40x	17'-8"	16'-7"	15'-11"	15'-2"	18'-0"	16'-11"	16'-3"	15'-3"	
9-1/2	NI-60	17'-11"	16'-10"	16'-1"	15'-4"	18'-3"	17'-1"	16'-5"	15'-7"	
	NI-80	19'-6"	17'-11"	17'-2"	16'-4"	19'-10"	18'-4"	17'-6"	16'-7"	
	NI-20	18'-10"	17'-6"	16'-10"	16'-0"	19'-4"	17'-11"	17'-3"	16'-2"	
	NI-40x	20'-8"	19'-2"	18'-1"	17'-2"	21'-2"	19'-8"	18'-7"	17'-6"	
11-7/8"	NI-60	21'-1"	19'-5"	18'-5"	17'-5"	21'-6"	19'-11"	18'-11"	17'-9"	
	NI-80	22'-10"	21'-1"	19'-11"	18'-8"	23'-3"	21'-6"	20'-5"	19'-1"	
	NI-90	23'-4"	21'-7"	20'-5"	19'-1"	23'-9"	22'-0"	20'-10"	19'-6"	
	NI-40x	23'-3"	21'-6"	20'-4"	19'-1"	23'-10"	22'-1"	20'-11"	19'-5"	
14"	NI-60	23'-8"	21'-11"	20'-9"	19'-5"	24'-3"	22'-6"	21'-4"	20'-0"	
14	NI-80	25'-8"	23'-9"	22'-5"	21'-0"	26'-2"	24'-3"	23'-0"	21'-6"	
	NI-90	26'-3"	24'-3"	22'-11"	21'-5"	26'-8"	24'-9"	23'-6"	21'-11"	
	NI-60	26'-1"	24'-2"	22'-11"	21'-5"	26'-8"	24'-9"	23'-6"	22'-0"	
16"	NI-80	28'-3"	26'-1"	24'-9"	23'-1"	28'-9"	26'-8"	25'-4"	23'-8"	
	NI-90	28'-10"	26'-8"	25'-3"	23'-7"	29'-4"	27'-2"	25'-10"	24'-2"	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - S5.2, L/360 and Nailed Only

Design Criteria	
Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	7/8 in. oriented strand board (OSB) sheathing, nailed only

#### Maximum Floor Spans

		Bare				1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	16'-2"	15'-1"	14'-5"	13'-8"	16'-7"	15'-6"	14'-10"	14'-1"	
0.4/0"	NI-40x	17'-8"	16'-6"	15'-9"	14'-11"	18'-1"	16'-10"	16'-1"	15'-3"	
9-1/2"	NI-60	17'-11"	16'-8"	15'-11"	15'-2"	18'-4"	17'-1"	16'-4"	15'-5"	
	NI-80	19'-7"	17'-11"	17'-2"	16'-3"	20'-0"	18'-4"	17'-5" 16'-10" 18'-3"	16'-6"	
	NI-20	18'-6"	17'-2"	16'-5"	15'-6"	19'-1"	17'-7"	16'-10"	16'-0"	
	NI-40x	20'-6"	18'-9"	17'-9"	16'-10"	21'-1"	19'-4"	18'-3"	17'-3"	
11-7/8"	NI-60	20'-10"	19'-1"	18'-1"	17'-1"	21'-5"	19'-8"	18'-7"	17'-6"	
	NI-80	22'-9"	20'-10"	19'-8"	18'-5"	23'-3"	21'-4"	20'-2"	18'-10'	
	NI-90	23'-4"	21'-5"	20'-2"	18'-10"	23'-10"	21'-11"	18'-7"	19'-4"	
	NI-40x	22'-10"	20'-11"	19'-9"	18'-6"	23'-6"	21'-7"	20'-5"	19'-1"	
14"	NI-60	23'-4"	21'-4"	20'-2"	18'-10"	23'-11"	22'-0"	20'-10"	19'-5"	
14	NI-80	25'-5"	23'-3"	22'-0"	20'-6"	26'-0"	23'-10"	22'-7"	21'-1"	
	NI-90	26'-1"	23'-10"	22'-6"	21'-0"	26'-7"	24'-5"	23'-1"	21'-7"	
	NI-60	25'-6"	23'-5"	22'-1"	20'-8"	26'-2"	24'-1"	22'-9"	21'-4"	
16"	NI-80	27'-9"	25'-5"	24'-0"	22'-5"	28'-5"	26'-1"	24'-8"	23'-1"	
	NI-90	28'-5"	26'-0"	24'-7"	22'-11"	29'-0"	26'-8"	25'-2"	23'-6"	

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing			On cent	re spacing		
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	17'-6"	16'-5"	15'-9"	14'-7"	17'-11"	16'-10"	15'-9"	14'-7"	
9-1/2"	NI-40x	19'-3"	17'-10"	17'-1"	15'-5"	19'-9"	18'-3"	17'-3"	15'-5"	
9-1/2	NI-60	19'-7"	18'-1"	17'-3"	16'-5"	20'-0"	18'-6"	17'-8"	16'-9"	
	NI-80	21'-4"	19'-8"	18'-8"	17'-7"	21'-9"	20'-1"	19'-1"	17'-10"	
	NI-20	20'-7"	19'-0"	18'-0"	16'-7"	21'-3"	19'-8"	18'-7"	16'-7"	
	NI-40x	22'-8"	20'-11"	19'-9"	17'-7"	23'-3"	21'-6"	19'-9"	17'-7"	
11-7/8"	NI-60	23'-1"	21'-4"	20'-2"	18'-11"	23'-7"	21'-10"	20'-9"	19'-5"	
	NI-80	25'-0"	23'-1"	21'-11"	20'-6"	25'-6"	23'-8"	22'-5"	21'-0"	
	NI-90	25'-8"	23'-8"	22'-5"	21'-0"	26'-1"	24'-2"	20'-9"	21'-5"	
	NI-40x	25'-5"	23'-6"	21'-8"	19'-4"	26'-1"	23'-9"	21'-8"	19'-4"	
14"	NI-60	25'-11"	24'-0"	22'-9"	21'-3"	26'-7"	24'-8"	23'-5"	21'-11"	
14	NI-80	28'-1"	26'-0"	24'-8"	23'-0"	28'-8"	26'-7"	25'-3"	23'-8"	
	NI-90	28'-9"	26'-7"	25'-2"	23'-7"	29'-4"	27'-2"	25'-9"	24'-2"	
	NI-60	28'-7"	26'-5"	25'-1"	23'-6"	29'-3"	27'-2"	25'-10"	23'-11"	
16"	NI-80	30'-11"	28'-7"	27'-1"	25'-4"	31'-6"	29'-3"	27'-9"	26'-0"	
	NI-90	31'-7"	29'-2"	27'-8"	25'-11"	32'-3"	29'-10"	28'-4"	26'-6"	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - S6.1, L/360 and Nailed Only

Design Criteria	
Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	5/8 in. Canadian softwood plywood, nailed only

#### Maximum Floor Spans

		Bare				1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	13'-9"	12'-10"	12'-4"	-	14'-2"	13'-3"	12'-8"	-	
9-1/2"	NI-40x	15'-0"	14'-0"	13'-5"	-	15'-5"	14'-4"	13'-9"	-	
9-1/2	NI-60	15'-2"	14'-2"	13'-7"	-	15'-7"	14'-6"	13'-11"	-	
	NI-80	16'-4"	15'-2"	14'-7"	-	16'-8"	15'-6"	13'-11" 14'-11" 14'-5" 15'-6" 15'-9"	-	
	NI-20	15'-7"	5'-7" 14'-7" 14'-0" - 16'-1" 15'-0"	14'-5"	-					
	NI-40x	16'-11"	15'-9"	15'-1"	-	17'-4"	16'-2"	15'-6"	-	
11-7/8"	NI-60	17'-2"	16'-0"	15'-4"	-	17'-7"	16'-5"	15'-9"	-	
	NI-80	18'-5"	17'-1"	16'-5"	-	19'-0"	17'-6"	16'-9"	-	
	NI-90	18'-11"	17'-5"	16'-8"	-	19'-5"	17'-10"	17'-1"	-	
	NI-40x	18'-6"	17'-2"	16'-6"	-	19'-2"	17'-7"	16'-11"	-	
14"	NI-60	18'-11"	17'-5"	16'-9"	-	19'-7"	17'-11"	17'-2"	-	
14	NI-80	20'-7"	18'-10"	17'-10"	-	21'-2"	19'-4"	18'-4"	-	
	NI-90	21'-1"	19'-3"	18'-3"	-	21'-8"	19'-10"	18'-9"	-	
	NI-60	20'-8"	18'-11"	17'-11"	-	21'-5"	19'-7"	18'-7"	-	
16"	NI-80	22'-6"	20'-6"	19'-5"	-	23'-2"	21'-2"	20'-1"	-	
	NI-90	23'-0"	21'-0"	19'-11"	-	23'-8"	21'-7"	20'-6"	-	

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing			On cent	re spacing		
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	15'-8"	14'-8"	14'-1"	-	16'-0"	15'-0"	14'-5"	-	
9-1/2"	NI-40x	16'-11"	15'-10"	15'-2"	-	17'-3"	16'-2"	15'-6"	-	
9-1/2	NI-60	17'-1"	16'-0"	15'-4"	-	17'-5"	16'-4"	15'-8"	-	
	NI-80	18'-3"	17'-0"	16'-4"	-	18'-8"	17'-4"	16'-7"	-	
	NI-20	17'-11"	16'-9"	16'-1"	-	18'-5"	17'-2"	16'-6"	-	
	NI-40x	19'-7"	17'-11"	17'-3"	-	20'-1"	18'-6"	17'-7"	-	
11-7/8"	NI-60	19'-11"	18'-3"	17'-5"	-	20'-5"	18'-9"	17'-10"	-	
	NI-80	21'-6"	19'-9"	18'-8"	-	22'-0"	20'-2"	19'-2"	-	
	NI-90	22'-0"	20'-2"	19'-1"	-	22'-6"	20'-8"	19'-7"	-	
	NI-40x	22'-1"	20'-3"	19'-2"	-	22'-8"	20'-10"	19'-9"	-	
14"	NI-60	22'-6"	20'-8"	19'-7"	-	23'-1"	21'-3"	20'-1"	-	
14	NI-80	24'-4"	22'-3"	21'-1"	-	24'-10"	22'-10"	21'-7"	-	
	NI-90	24'-10"	22'-9"	22'-9" 21'-6" - 25'-4" 23'-3" 22'-1	22'-1"	-				
	NI-60	24'-11"	22'-10"	21'-7"	-	25'-6"	23'-6"	22'-3"	-	
16"	NI-80	26'-10"	24'-7"	23'-3"	-	27'-5"	25'-2"	23'-10"	-	
	NI-90	27'-4"	25'-1"	23'-9"	-	27'-11"	25'-8"	24'-4"	-	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - S6.2, L/360 and Nailed Only

Design Criteria	
Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	5/8 in. Canadian softwood plywood, nailed only

#### Maximum Floor Spans

		Bare				1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	14'-10"	13'-10"	13'-4"	-	15'-4"	14'-3"	13'-8"	-	
9-1/2"	NI-40x	16'-2"	15'-1"	14'-6"	-	16'-8"	15'-6"	14'-11"	-	
9-1/2	NI-60	16'-5"	15'-4"	14'-8"	-	16'-10"	15'-8"	15'-1"	-	
	NI-80	17'-7"	16'-5"	15'-9"	-	18'-1"	16'-10"	16'-1" 15'-7" 16'-10"	-	
	NI-20	16'-10"	15'-8"	15'-1"	-	17'-4"	16'-3"	15'-7"	-	
	NI-40x	18'-5"	17'-0"	16'-4"	-	19'-0"	17'-6"	16'-10"	-	
11-7/8"	NI-60	18'-9"	17'-3"	16'-7"	-	19'-4"	17'-9"	17'-0"	-	
	NI-80	20'-5"	18'-8"	17'-9"	-	21'-0"	19'-3"	18'-3"	-	
	NI-90	20'-11"	19'-1"	18'-2"	-	21'-6"	19'-8"	17'-0"	-	
	NI-40x	20'-6"	18'-9"	17'-10"	-	21'-2"	19'-5"	18'-5"	-	
14"	NI-60	20'-11"	19'-2"	18'-2"	-	21'-8"	19'-10"	18'-10"	-	
14	NI-80	22'-9"	20'-10"	19'-9"	-	23'-6"	21'-6"	20'-4"	-	
	NI-90	23'-4"	21'-4"	20'-3"	-	24'-0"	22'-0"	20'-10"	-	
	NI-60	22'-11"	20'-11"	19'-10"	-	23'-8"	21'-8"	20'-7"	-	
16"	NI-80	24'-11"	22'-9"	21'-7"	-	25'-8"	23'-6"	22'-3"	-	
	NI-90	25'-6"	23'-3"	22'-1"	-	26'-2"	24'-0"	22'-9"	-	

		M	d-span blocking	g with 1x4 inch st	trap	Mid-span blocking and 1/2 in. gypsum ceiling On centre spacing				
Joist depth	Joist series		On cent	re spacing						
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	16'-8"	15'-8"	15'-0"	-	17'-2"	16'-1"	15'-5"	-	
9-1/2"	NI-40x	18'-1"	16'-11"	16'-3"	-	18'-7"	17'-3"	16'-7"	-	
9-1/2	NI-60	18'-4"	17'-1"	16'-5"	-	18'-10"	17'-5"	16'-9"	-	
	NI-80	20'-0"	18'-4"	17'-6"	-	20'-5"	18'-9"	17'-10"	-	
	NI-20	19'-6"	17'-10"	17'-2"	-	20'-1"	18'-6"	17'-8"	-	
	NI-40x	21'-5"	19'-7"	18'-7"	-	22'-0"	20'-3"	19'-2"	-	
11-7/8"	NI-60	21'-9"	19'-11"	18'-11"	-	22'-4"	20'-6"	19'-6"	-	
	NI-80	23'-6"	21'-7"	20'-6"	-	24'-1"	22'-2"	21'-0"	-	
	NI-90	24'-1"	22'-1"	20'-11"	-	24'-7"	22'-8"	21'-6"	-	
	NI-40x	24'-1"	22'-1"	21'-0"	-	24'-9"	22'-10"	21'-8"	-	
14"	NI-60	24'-7"	22'-7"	21'-4"	-	25'-3"	23'-3"	22'-0"	-	
14	NI-80	26'-7"	24'-4"	23'-1"	-	27'-2"	25'-0"	23'-8"	-	
	NI-90	27'-2"	24'-11"	23'-7"	-	27'-9"	25'-6"	24'-2"	-	
	NI-60	27'-2"	24'-11"	23'-7"	-	27'-10"	25'-8"	24'-4"	-	
16"	NI-80	29'-4"	26'-11"	25'-6"	-	29'-11"	27'-7"	26'-2"	-	
	NI-90	29'-11"	27'-5"	26'-0"	-	30'-6"	28'-1"	26'-8"	-	

### Notes:

1. The tabulated clear spans are based on CSA O86-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - S7.1, L/360 and Nailed Only

Simple span
Live load = 40 psf and dead load = 15 psf
L/360 under live load and L/240 under total load
3/4 in. Canadian softwood plywood, nailed only

#### Maximum Floor Spans

			В	are		1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing			On cent	re spacing		
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	14'-5"	13'-5"	12'-10"	12'-3"	14'-9"	13'-9"	13'-2"	12'-6"	
0.1/0"	NI-40x	15'-8"	14'-7"	14'-0"	13'-4"	16'-0"	14'-11"	14'-4"	13'-7"	
9-1/2"	NI-60	15'-11"	14'-10"	14'-2"	13'-6"	16'-3"	15'-1"	14'-6"	13'-9"	
	NI-80	17'-1"	15'-11"	15'-2"	14'-5"	17'-4"	16'-2"	15'-6"	14'-8"	
	NI-20	16'-4"	15'-2"	14'-7"	13'-10"	16'-9"	15'-8"	15'-0"	14'-3"	
	NI-40x	17'-8"	16'-6"	15'-9"	15'-0"	18'-1"	16'-10"	16'-2"	15'-4"	
11-7/8"	NI-60	17'-11"	16'-8"	16'-0"	15'-2"	18'-5"	17'-1"	16'-4"	15'-6"	
	NI-80	19'-7"	17'-10"	17'-1"	16'-3"	20'-0"	18'-3"	17'-5"	16'-7"	
	NI-90	20'-0"	18'-3"	17'-5"	16'-7"	20'-6"	18'-9"	17'-9"	16'-10'	
	NI-40x	19'-7"	17'-11"	17'-2"	16'-4"	20'-2"	18'-6"	17'-7"	16'-9"	
14"	NI-60	20'-0"	18'-4"	17'-5"	16'-7"	20'-7"	18'-10"	17'-10"	17'-0"	
14	NI-80	21'-10"	19'-11"	18'-9"	17'-8"	22'-4"	20'-5"	19'-4"	18'-1"	
	NI-90	22'-4"	20'-4"	19'-3"	18'-0"	22'-10"	20'-11"	19'-9"	18'-6"	
	NI-60	21'-11"	20'-0"	18'-11"	17'-9"	22'-6"	20'-8"	19'-6"	18'-4"	
16"	NI-80	23'-10"	21'-9"	20'-6"	19'-3"	24'-5"	22'-4"	21'-1"	19'-9"	
	NI-90	24'-4"	22'-3"	21'-0"	19'-8"	24'-11"	22'-10"	21'-6"	20'-2"	

		Mi	d-span blocking	g with 1x4 inch	strap	Mid-span blocking and 1/2 in. gypsum ceiling On centre spacing				
Joist depth	Joist series		On cent	re spacing						
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	16'-0"	15'-0"	14'-5"	13'-5"	16'-4"	15'-4"	14'-6"	13'-5"	
9-1/2"	NI-40x	17'-3"	16'-2"	15'-6"	14'-10"	17'-7"	16'-6"	15'-10"	15'-1"	
9-1/2	NI-60	17'-6"	16'-5"	15'-8"	14'-11"	17'-9"	16'-8"	16'-0"	15'-3"	
	NI-80	18'-10"	17'-6"	16'-9"	15'-11"	19'-3"	17'-9"	17'-0"	16'-2"	
	NI-20	18'-4"	17'-1"	16'-5"	15'-8"	18'-11"	17'-6"	16'-10"	16'-0"	
	NI-40x	20'-2"	18'-6"	17'-8"	16'-10"	20'-8"	19'-0"	18'-0"	17'-2"	
11-7/8"	NI-60	20'-6"	18'-10"	17'-10"	17'-0"	20'-11"	19'-4"	18'-3"	17'-4"	
	NI-80	22'-2"	20'-4"	19'-3"	18'-1"	22'-7"	20'-10"	19'-9"	18'-6"	
	NI-90	22'-8"	20'-10"	19'-9"	18'-6"	23'-1"	21'-4"	20'-2"	18'-11"	
	NI-40x	22'-8"	20'-10"	19'-9"	18'-6"	23'-3"	21'-5"	20'-4"	19'-1"	
14"	NI-60	23'-1"	21'-3"	20'-1"	18'-10"	23'-8"	21'-10"	20'-8"	19'-5"	
14	NI-80	25'-0"	23'-0"	21'-9"	20'-4"	25'-6"	23'-6"	22'-3"	20'-10"	
	NI-90	25'-6"	23'-6"	22'-2"	20'-10"	26'-0"	24'-0"	22'-8"	21'-3"	
	NI-60	25'-6"	23'-6"	22'-2"	20'-10"	26'-1"	24'-1"	22'-10"	21'-5"	
16"	NI-80	27'-6"	25'-4"	23'-11"	22'-5"	28'-0"	25'-11"	24'-6"	23'-0"	
	NI-90	28'-1"	25'-10"	24'-5"	22'-11"	28'-7"	26'-5"	25'-0"	23'-5"	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - S7.2, L/360 and Nailed Only

Multiple spans
Live load = 40 psf and dead load = 15 psf
L/360 under live load and L/240 under total load
3/4 in. Canadian softwood plywood, nailed only

#### Maximum Floor Spans

			E	Bare		1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing			On cent	re spacing		
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	15'-6"	14'-6"	13'-10"	13'-2"	15'-11"	14'-11"	14'-3"	13'-7"	
9-1/2"	NI-40x	16'-11"	15'-9"	15'-1"	14'-4"	17'-4"	16'-2"	15'-6"	14'-9"	
9-1/2	NI-60	17'-2"	16'-0"	15'-3"	14'-7"	17'-6"	16'-4"	15'-8"	14'-11"	
	NI-80	18'-7"	17'-2"	16'-5"	15'-7"	19'-0"	17'-6"	16'-9"	15'-11"	
	NI-20	17'-7"	16'-5"	15'-8"	14'-11"	18'-2"	16'-11"	16'-2"	15'-5"	
	NI-40x	19'-5"	17'-10"	17'-0"	16'-3"	20'-0"	18'-4"	17'-6"	16'-7"	
11-7/8"	NI-60	19'-10"	18'-1"	17'-3"	16'-5"	20'-4"	18'-8"	17'-8"	16'-10"	
	NI-80	21'-7"	19'-9"	18'-8"	17'-7"	22'-2"	20'-3"	19'-2"	18'-0"	
	NI-90	22'-2"	20'-3"	19'-1"	17'-11"	22'-8"	20'-9"	19'-7"	18'-5"	
	NI-40x	21'-8"	19'-10"	18'-9"	17'-8"	22'-4"	20'-6"	19'-4"	18'-2"	
14"	NI-60	22'-2"	20'-3"	19'-2"	18'-0"	22'-9"	20'-10"	19'-9"	18'-6"	
14	NI-80	24'-1"	22'-0"	20'-10"	19'-6"	24'-9"	22'-8"	21'-5"	20'-1"	
	NI-90	24'-8"	22'-7"	21'-4"	20'-0"	25'-4"	23'-2"	21'-11"	20'-6"	
	NI-60	24'-3"	22'-2"	20'-11"	19'-8"	24'-11"	22'-10"	21'-8"	20'-4"	
16"	NI-80	26'-4"	24'-1"	22'-9"	21'-4"	27'-0"	24'-9"	23'-5"	21'-11"	
	NI-90	26'-11"	24'-7"	23'-3"	21'-10"	27'-7"	25'-3"	23'-11"	22'-5"	

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	17'-1"	16'-0"	15'-4"	14'-7"	17'-6"	16'-5"	15'-9"	14'-7"	
9-1/2"	NI-40x	18'-8"	17'-4"	16'-8"	15'-5"	19'-2"	17'-9"	17'-0"	15'-5"	
9-1/2	NI-60	19'-0"	17'-6"	16'-10"	16'-0"	19'-5"	17'-11"	17'-2"	16'-4"	
	NI-80	20'-8"	19'-0"	18'-0"	17'-1"	21'-1"	19'-5"	18'-5"	17'-5"	
	NI-20	20'-0"	18'-5"	17'-7"	16'-7"	20'-8"	19'-1"	18'-1"	16'-7"	
	NI-40x	22'-0"	20'-3"	19'-2"	17'-7"	22'-7"	20'-10"	19'-9"	17'-7"	
11-7/8"	NI-60	22'-5"	20'-7"	19'-6"	18'-4"	22'-11"	21'-2"	20'-1"	18'-10"	
	NI-80	24'-3"	22'-4"	21'-2"	19'-10"	24'-9"	22'-10"	21'-8"	20'-4"	
	NI-90	24'-10"	22'-10"	21'-8"	20'-4"	25'-4"	23'-4"	22'-2"	20'-9"	
	NI-40x	24'-9"	22'-10"	21'-7"	19'-4"	25'-5"	23'-6"	21'-8"	19'-4"	
14"	NI-60	25'-3"	23'-3"	22'-0"	20'-8"	25'-10"	23'-11"	22'-8"	21'-3"	
14	NI-80	27'-4"	25'-2"	23'-10"	22'-4"	27'-11"	25'-9"	24'-5"	22'-11"	
	NI-90	27'-11"	25'-9"	24'-4"	22'-10"	28'-6"	26'-4"	24'-11"	23'-5"	
	NI-60	27'-10"	25'-8"	24'-3"	22'-9"	28'-6"	26'-5"	25'-0"	23'-6"	
16"	NI-80	30'-1"	27'-9"	26'-3"	24'-7"	30'-8"	28'-5"	26'-11"	25'-3"	
	NI-90	30'-9"	28'-4"	26'-9"	25'-1"	31'-4"	28'-11"	27'-5"	25'-9"	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - M1.1, L/360 and Nailed Only

Design Criteria	
Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	19/32 in. oriented strand board (OSB) sheathing, nailed only

#### Maximum Floor Spans

			В	are		1/2 in. gypsum ceiling					
Joist depth	Joist series		On cent	re spacing		On centre spacing					
		12"	16"	19.2"	24"	12"	16"	19.2"	24"		
	NI-20	13'-8"	12'-9"	12'-3"	-	14'-1"	13'-2"	12'-7"	-		
0.1/0"	NI-40x	14'-11"	13'-11"	13'-4"	-	15'-3"	14'-3"	13'-8"	-		
9-1/2"	NI-60	15'-1"	14'-1"	13'-6"	-	15'-5"	14'-5"	13'-10"	-		
	NI-80	16'-2"	15'-1"	14'-5"	-	16'-6"	15'-5"	14'-9"	-		
	NI-20	15'-6"	14'-5"	13'-10"	-	16'-0"	14'-11"	14'-4"	-		
	NI-40x	16'-9"	15'-8"	15'-0"	-	17'-3"	16'-1"	15'-5"	-		
11-7/8"	NI-60	17'-0"	15'-10"	15'-3"	-	17'-5"	16'-3"	15'-7"	-		
	NI-80	18'-3"	16'-11"	16'-3"	-	18'-10"	17'-4"	16'-8"	-		
	NI-90	18'-9"	17'-3"	16'-7"	-	19'-3"	17'-8"	16'-11"	-		
	NI-40x	18'-4"	17'-0"	16'-4"	-	19'-0"	17'-6"	16'-10"	-		
14"	NI-60	18'-9"	17'-4"	16'-7"	-	19'-4"	17'-9"	17'-1"	-		
14	NI-80	20'-5"	18'-7"	17'-9"	-	21'-0"	19'-2"	18'-2"	-		
	NI-90	20'-10"	19'-1"	18'-1"	-	21'-6"	19'-8"	18'-7"	-		
	NI-60	20'-6"	18'-9"	17'-10"	-	21'-2"	19'-5"	18'-5"	-		
16"	NI-80	22'-3"	20'-4"	19'-3"	-	22'-11"	21'-0"	19'-11"	-		
	NI-90	22'-9"	20'-9"	19'-8"	-	23'-5"	21'-5"	20'-4"	-		

		Mi	d-span blocking	g with 1x4 inch s	strap	Mid-span blocking and 1/2 in. gypsum ceiling On centre spacing				
Joist depth	Joist series		On cent	re spacing						
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	15'-7"	14'-7"	14'-0"	-	16'-0"	15'-0"	14'-4"	-	
9-1/2"	NI-40x	16'-10"	15'-9"	15'-1"	-	17'-2"	16'-1"	15'-5"	-	
9-1/2	NI-60	17'-0"	15'-11"	15'-3"	-	17'-4"	16'-3"	15'-7"	-	
	NI-80	18'-2"	16'-11"	16'-3"	-	18'-7"	17'-3"	16'-7"	-	
	NI-20	17'-10"	16'-8"	16'-0"	-	18'-4"	17'-1"	16'-5"	-	
	NI-40x	19'-6"	17'-11"	17'-2"	-	20'-0"	18'-5"	17'-7"	-	
11-7/8"	NI-60	19'-10"	18'-2"	17'-5"	-	20'-4"	18'-8"	17'-9"	-	
	NI-80	21'-5"	19'-7"	18'-7"	-	21'-11"	20'-1"	19'-1"	-	
	NI-90	21'-11"	20'-1"	19'-0"	-	22'-4"	20'-6"	19'-6"	-	
	NI-40x	22'-0"	20'-2"	19'-1"	-	22'-7"	20'-9"	19'-8"	-	
14"	NI-60	22'-5"	20'-6"	19'-6"	-	23'-0"	21'-1"	20'-0"	-	
14	NI-80	24'-2"	22'-2"	21'-0"	-	24'-9"	22'-8"	21'-6"	-	
	NI-90	24'-8"	22'-8"	21'-5"	-	25'-3"	23'-2"	21'-11"	-	
	NI-60	24'-10"	22'-9"	21'-6"	-	25'-5"	23'-4"	22'-2"	-	
16"	NI-80	26'-8"	24'-6"	23'-2"	-	27'-3"	25'-1"	23'-9"	-	
	NI-90	27'-3"	24'-11"	23'-7"	-	27'-10"	25'-7"	24'-2"	-	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - M1.2, L/360 and Nailed Only

Design Criteria	
Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	19/32 in. oriented strand board (OSB) sheathing, nailed only

#### Maximum Floor Spans

			В	are		1/2 in. gypsum ceiling					
Joist depth	Joist series		On cent	re spacing		On centre spacing					
		12"	16"	19.2"	24"	12"	16"	19.2"	24"		
	NI-20	14'-9"	13'-9"	13'-2"	-	15'-2"	14'-2"	13'-7"	-		
9-1/2"	NI-40x	16'-1"	15'-0"	14'-5"	-	16'-6"	15'-5"	14'-9"	-		
9-1/2	NI-60	16'-3"	15'-2"	14'-7"	-	16'-8"	15'-7"	14'-11"	-		
	NI-80	17'-6"	16'-4"	15'-8"	-	17'-11"	16'-8"	16'-0"	-		
	NI-20	16'-8"	15'-7"	15'-0"	-	17'-3"	16'-1"	15'-6"	-		
	NI-40x	18'-2"	16'-11"	16'-3"	-	18'-10"	17'-5"	16'-8"	-		
11-7/8"	NI-60	18'-6"	17'-2"	16'-6"	-	19'-2"	17'-7"	16'-11"	-		
	NI-80	20'-2"	18'-6"	17'-7"	-	20'-10"	19'-1"	18'-1"	-		
	NI-90	20'-9"	18'-11"	18'-0"	-	21'-4"	19'-6"	18'-6"	-		
	NI-40x	20'-3"	18'-7"	17'-8"	-	21'-0"	19'-3"	18'-3"	-		
14"	NI-60	20'-8"	18'-11"	18'-0"	-	21'-5"	19'-8"	18'-8"	-		
14	NI-80	22'-7"	20'-7"	19'-7"	-	23'-3"	21'-3"	20'-2"	-		
	NI-90	23'-1"	21'-1"	20'-0"	-	23'-10"	21'-9"	20'-8"	-		
	NI-60	22'-8"	20'-9"	19'-8"	-	23'-5"	21'-6"	20'-5"	-		
16"	NI-80	24'-8"	22'-6"	21'-5"	-	25'-5"	23'-3"	22'-1"	-		
	NI-90	25'-2"	23'-0"	21'-10"	-	26'-0"	23'-9"	22'-7"	-		

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	16'-8"	15'-7"	15'-0"	-	17'-1"	16'-0"	15'-4"	-	
9-1/2"	NI-40x	18'-0"	16'-10"	16'-2"	-	18'-6"	17'-2"	16'-6"	-	
9-1/2	NI-60	18'-3"	17'-0"	16'-4"	-	18'-9"	17'-5"	16'-8"	-	
	NI-80	19'-10"	18'-3"	17'-5"	-	20'-4"	18'-8"	17'-9"	-	
	NI-20	19'-4"	17'-10"	17'-1"	-	20'-0"	18'-5"	17'-7"	-	
	NI-40x	21'-3"	19'-6"	18'-6"	-	21'-10"	20'-1"	19'-0"	-	
11-7/8"	NI-60	21'-7"	19'-10"	18'-10"	-	22'-2"	20'-5"	19'-5"	-	
	NI-80	23'-5"	21'-6"	20'-4"	-	24'-0"	22'-0"	20'-11"	-	
	NI-90	24'-0"	22'-0"	20'-10"	-	24'-6"	22'-6"	21'-4"	-	
	NI-40x	24'-0"	22'-0"	20'-10"	-	24'-8"	22'-8"	20'-10"	-	
14"	NI-60	24'-5"	22'-5"	21'-3"	-	25'-1"	23'-1"	21'-11"	-	
14	NI-80	26'-5"	24'-3"	23'-0"	-	27'-0"	24'-10"	23'-7"	-	
	NI-90	27'-0"	24'-9"	23'-6"	-	27'-7"	25'-5"	24'-1"	-	
	NI-60	27'-0"	24'-10"	23'-6"	-	27'-9"	25'-7"	24'-3"	-	
16"	NI-80	29'-2"	26'-9"	25'-4"	-	29'-10"	27'-5"	26'-0"	-	
	NI-90	29'-9"	27'-3"	25'-10"	-	30'-5"	28'-0"	26'-6"	-	

### Notes:

1. The tabulated clear spans are based on CSA O86-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans – M2.1, L/360 and Nailed Only

Design Criteria	
Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	5/8 in. oriented strand board (OSB) sheathing, nailed only

#### Maximum Floor Spans

		Bare				1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	13'-10"	12'-11"	12'-4"	-	14'-3"	13'-3"	12'-9"	-	
9-1/2"	NI-40x	15'-1"	14'-1"	13'-6"	-	15'-5"	14'-5"	13'-10"	-	
9-1/2	NI-60	15'-3"	14'-3"	13'-8"	-	15'-8"	14'-7"	14'-0"	-	
	NI-80	16'-5"	15'-3"	14'-7"	-	16'-9"	15'-7"	14'-11"	-	
	NI-20	15'-8"	14'-7"	14'-0"	-	16'-2"	15'-1"	14'-5"	-	
	NI-40x	17'-0"	15'-10"	15'-2"	-	17'-5"	16'-3"	15'-7"	-	
11-7/8"	NI-60	17'-3"	16'-1"	15'-5"	-	17'-8"	16'-6"	15'-9"	-	
	NI-80	18'-7"	17'-2"	16'-5"	-	19'-1"	17'-7"	19.2" 12'-9" 13'-10" 14'-0" 14'-11" 14'-5" 15'-7"	-	
	NI-90	19'-0"	17'-6"	16'-9"	-	19'-7"	17'-10"		-	
	NI-40x	18'-8"	17'-3"	16'-6"	-	19'-3"	17'-8"	17'-0"	-	
14"	NI-60	19'-0"	17'-6"	16'-10"	-	19'-8"	18'-0"	17'-3"	-	
14	NI-80	20'-9"	18'-11"	17'-11"	-	21'-4"	19'-6"	18'-5"	-	
	NI-90	21'-3"	19'-4"	18'-4"	-	21'-10"	19'-11"	18'-10"	-	
	NI-60	20'-10"	19'-0"	18'-0"	-	21'-6"	19'-8"	18'-8"	-	
16"	NI-80	22'-8"	20'-8"	19'-7"	-	23'-3"	21'-3"	20'-2"	-	
	NI-90	23'-2"	21'-1"	20'-0"	-	23'-9"	21'-9"	20'-7"	-	

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	15'-8"	14'-8"	14'-1"	-	16'-1"	15'-1"	14'-5"	-	
9-1/2"	NI-40x	16'-11"	15'-10"	15'-2"	-	17'-3"	16'-2"	15'-6"	-	
9-1/2	NI-60	17'-1"	16'-0"	15'-4"	-	17'-5"	16'-4"	15'-8"	-	
	NI-80	18'-4"	17'-1"	16'-4"	-	18'-9"	17'-4"	16'-8"	-	
	NI-20	17'-11"	16'-9"	16'-1"	-	18'-6"	17'-2"	16'-6"	-	
	NI-40x	19'-8"	18'-0"	17'-3"	-	20'-2"	18'-6"	17'-8"	-	
11-7/8"	NI-60	19'-11"	18'-4"	17'-6"	-	20'-5"	18'-10"	17'-10"	-	
	NI-80	21'-7"	19'-9"	18'-9"	-	22'-1"	20'-3"	19'-2"	-	
	NI-90	22'-1"	20'-3"	19'-2"	-	22'-6"	20'-8"	19'-7"	-	
	NI-40x	22'-2"	20'-4"	19'-3"	-	22'-9"	20'-11"	19'-10"	-	
14"	NI-60	22'-7"	20'-8"	19'-7"	-	23'-2"	21'-3"	20'-2"	-	
14	NI-80	24'-4"	22'-4"	21'-2"	-	24'-11"	22'-10"	21'-8"	-	
	NI-90	24'-11"	22'-10"	21'-7"	-	25'-5"	23'-4"	22'-1"	-	
	NI-60	24'-11"	22'-11"	21'-8"	-	25'-7"	23'-6"	22'-4"	-	
16"	NI-80	26'-11"	24'-8"	23'-4"	-	27'-5"	25'-3"	23'-11"	-	
	NI-90	27'-5"	25'-2"	23'-10"	-	28'-0"	25'-9"	24'-4"	-	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans – M2.2, L/360 and Nailed Only

Design Criteria	
Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	5/8 in. oriented strand board (OSB) sheathing, nailed only

#### Maximum Floor Spans

		Bare					1/2 in. gyp	osum ceiling		
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	14'-11"	13'-11"	13'-4"	-	15'-5"	14'-4"	13'-9"	-	
9-1/2"	NI-40x	16'-3"	15'-2"	14'-7"	-	16'-8"	15'-7"	14'-11"	-	
9-1/2	NI-60	16'-6"	15'-4"	14'-9"	-	16'-11"	15'-9"	15'-1"	-	
	NI-80	17'-8"	16'-6"	15'-10"	-	18'-2"	16'-10"	16'-2"	-	
	NI-20	16'-11"	15'-9"	15'-2"	-	17'-5"	16'-3"	15'-8"	-	
	NI-40x	18'-6"	17'-1"	16'-5"	-	19'-1"	17'-7"	16'-10"	-	
11-7/8"	NI-60	18'-10"	17'-4"	16'-8"	-	19'-5"	17'-10"	17'-1"	-	
	NI-80	20'-6"	18'-9"	17'-10"	-	21'-2"	19'-4"	19.2"   13'-9"   14'-11"   15'-1"   16'-2"   15'-8"   16'-10"   17'-1"   18'-4"   18'-9"   18'-6"   18'-11"   20'-6"   20'-11"   20'-8"   22'-4"	-	
	NI-90	21'-1"	19'-3"	18'-3"	-	21'-8"	19'-10"		-	
	NI-40x	20'-7"	18'-10"	17'-10"	-	21'-4"	19'-6"	18'-6"	-	
14"	NI-60	21'-1"	19'-3"	18'-3"	-	21'-9"	19'-11"	18'-11"	-	
14	NI-80	22'-11"	20'-11"	19'-10"	-	23'-7"	21'-7"	20'-6"	-	
	NI-90	23'-6"	21'-5"	20'-4"	-	24'-2"	22'-1"	20'-11"	-	
	NI-60	23'-0"	21'-1"	20'-0"	-	23'-10"	21'-10"	20'-8"	-	
16"	NI-80	25'-1"	22'-11"	21'-8"	-	25'-9"	23'-7"	22'-4"	-	
	NI-90	25'-7"	23'-5"	22'-2"	-	26'-4"	24'-1"	22'-10"	-	

		Mi	Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing					
		12"	16"	19.2"	24"	12"	16"	19.2"	24"		
	NI-20	16'-9"	15'-8"	15'-1"	-	17'-2"	16'-1"	15'-6"	-		
9-1/2"	NI-40x	18'-2"	16'-11"	16'-3"	-	18'-8"	17'-4"	16'-8"	-		
9-1/2	NI-60	18'-5"	17'-1"	16'-5"	-	18'-11"	17'-6"	16'-10"	-		
	NI-80	20'-1"	18'-5"	17'-7"	-	20'-6"	18'-10"	17'-10"	-		
	NI-20	19'-6"	17'-11"	17'-2"	-	20'-2"	18'-7"	17'-8"	-		
	NI-40x	21'-5"	19'-8"	18'-8"	-	22'-0"	20'-3"	19'-0"	-		
11-7/8"	NI-60	21'-10"	20'-0"	19'-0"	-	22'-4"	20'-7"	19'-6"	-		
	NI-80	23'-7"	21'-8"	20'-6"	-	24'-2"	22'-2"	21'-1"	-		
	NI-90	24'-2"	22'-2"	21'-0"	-	24'-8"	22'-8"	21'-6"	-		
	NI-40x	24'-2"	22'-2"	20'-10"	-	24'-10"	22'-10"	20'-10"	-		
14"	NI-60	24'-8"	22'-7"	21'-5"	-	25'-3"	23'-3"	22'-1"	-		
14	NI-80	26'-8"	24'-5"	23'-2"	-	27'-3"	25'-1"	23'-9"	-		
	NI-90	27'-3"	25'-0"	23'-8"	-	27'-10"	25'-7"	24'-3"	-		
	NI-60	27'-3"	25'-0"	23'-8"	-	27'-11"	25'-9"	24'-5"	-		
16"	NI-80	29'-5"	27'-0"	25'-6"	-	30'-0"	27'-8"	26'-3"	-		
	NI-90	30'-0"	27'-6"	26'-1"	-	30'-7"	28'-2"	26'-9"	-		

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - M3.1, L/360 and Nailed Only

Design Criteria	
Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	23/32 in. oriented strand board (OSB) sheathing, nailed only

#### Maximum Floor Spans

		Bare				1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	14'-4"	13'-4"	12'-9"	12'-2"	14'-8"	13'-9"	13'-1"	12'-6"	
9-1/2"	NI-40x	15'-7"	14'-6"	13'-11"	13'-3"	15'-11"	14'-10"	14'-3"	13'-6"	
9-1/2	NI-60	15'-10"	14'-9"	14'-1"	13'-5"	16'-2"	15'-1"	14'-5"	13'-8"	
	NI-80	17'-0"	15'-9"	15'-1"	14'-4"	17'-3"	16'-1"	15'-5"	14'-8"	
	NI-20	16'-3"	15'-1"	14'-6"	13'-9"	16'-8"	15'-7"	14'-11"	14'-2"	
	NI-40x	17'-7"	16'-5"	15'-8"	14'-11"	18'-0"	16'-9"	16'-1"	15'-3"	
11-7/8"	NI-60	17'-10"	16'-7"	15'-11"	15'-1"	18'-4"	17'-0"	16'-3"	15'-6"	
	NI-80	19'-5"	17'-9"	17'-0"	16'-2"	19'-11"	18'-2"	17'-4"	16'-6"	
	NI-90	19'-11"	18'-2"	17'-4"	16'-6"	20'-4"	18'-7"	19.2"   13'-1"   14'-3"   14'-5"   15'-5"   14'-11"   16'-1"   16'-3"	16'-9"	
	NI-40x	19'-6"	17'-10"	17'-1"	16'-3"	20'-1"	18'-4"	17'-6"	16'-8"	
14"	NI-60	19'-11"	18'-2"	17'-4"	16'-6"	20'-6"	18'-9"	17'-9"	16'-11"	
14	NI-80	21'-8"	19'-9"	18'-8"	17'-7"	22'-2"	20'-3"	19'-2"	18'-0"	
	NI-90	22'-2"	20'-3"	19'-1"	17'-11"	22'-8"	20'-9"	19'-7"	18'-5"	
	NI-60	21'-9"	19'-11"	18'-9"	17'-8"	22'-5"	20'-6"	19'-5"	18'-2"	
16"	NI-80	23'-8"	21'-7"	20'-5"	19'-1"	24'-3"	22'-2"	20'-11"	19'-8"	
	NI-90	24'-2"	22'-1"	20'-10"	19'-6"	24'-9"	22'-8"	21'-5"	20'-1"	

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing			On cent	re spacing		
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	15'-11"	14'-11"	14'-4"	13'-5"	16'-4"	15'-4"	14'-6"	13'-5"	
9-1/2"	NI-40x	17'-3"	16'-2"	15'-6"	14'-9"	17'-7"	16'-6"	15'-10"	14'-11"	
9-1/2	NI-60	17'-5"	16'-4"	15'-8"	14'-11"	17'-9"	16'-8"	16'-0"	15'-2"	
	NI-80	18'-9"	17'-5"	16'-8"	15'-11"	19'-2"	17'-8"	17'-0"	16'-2"	
	NI-20	18'-3"	17'-1"	16'-4"	15'-7"	18'-10"	17'-6"	16'-9"	16'-0"	
	NI-40x	20'-1"	18'-5"	17'-7"	16'-9"	20'-7"	18'-11"	17'-11"	17'-0"	
11-7/8"	NI-60	20'-5"	18'-9"	17'-9"	16'-11"	20'-11"	19'-3"	18'-3"	17'-4"	
	NI-80	22'-1"	20'-3"	19'-2"	18'-0"	22'-6"	20'-9"	19'-8"	18'-5"	
	NI-90	22'-7"	20'-9"	19'-8"	18'-5"	23'-0"	21'-2"	20'-1"	18'-10"	
	NI-40x	22'-7"	20'-9"	19'-8"	18'-6"	23'-2"	21'-4"	20'-3"	18'-8"	
14"	NI-60	23'-0"	21'-2"	20'-0"	18'-10"	23'-7"	21'-9"	20'-7"	19'-4"	
14	NI-80	24'-11"	22'-11"	21'-8"	20'-4"	25'-5"	23'-5"	22'-2"	20'-9"	
	NI-90	25'-5"	23'-5"	22'-1"	20'-9"	25'-11"	23'-11"	22'-7"	21'-3"	
	NI-60	25'-5"	23'-5"	22'-2"	20'-9"	26'-0"	24'-0"	22'-9"	21'-4"	
16"	NI-80	27'-5"	25'-3"	23'-10"	22'-4"	27'-11"	25'-10"	24'-5"	22'-11"	
	NI-90	28'-0"	25'-9"	24'-4"	22'-10"	28'-6"	26'-4"	24'-11"	23'-4"	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans – M3.2, L/360 and Nailed Only

Design Criteria	
Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	23/32 in. oriented strand board (OSB) sheathing, nailed only

#### Maximum Floor Spans

			B	are		1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing			On cent	re spacing		
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	15'-5"	14'-5"	13'-9"	13'-1"	15'-10"	14'-10"	14'-2"	13'-6"	
9-1/2"	NI-40x	16'-10"	15'-8"	15'-0"	14'-4"	17'-3"	16'-1"	15'-5"	14'-8"	
9-1/2	NI-60	17'-1"	15'-11"	15'-3"	14'-6"	17'-5"	16'-3"	15'-7"	14'-10"	
	NI-80	18'-5"	17'-1"	16'-4"	15'-7"	18'-11"	17'-5"	16'-8"	15'-10"	
	NI-20	17'-6"	16'-4"	15'-8"	14'-11"	18'-1"	16'-10"	16'-1"	15'-4"	
	NI-40x	19'-4"	17'-8"	16'-11"	16'-2"	19'-11"	18'-3"	17'-4"	16'-6"	
11-7/8"	NI-60	19'-8"	18'-0"	17'-2"	16'-4"	20'-3"	18'-6"	17'-7"	16'-9"	
	NI-80	21'-5"	19'-7"	18'-6"	17'-6"	22'-0"	20'-2"	19.2"   14'-2"   15'-5"   15'-7"   16'-8"   16'1"   17'-7"   19'0"   19'-6"   19'-7"   21'-3"   21'-6"   23'-3"	17'-10"	
	NI-90	22'-0"	20'-1"	19'-0"	17'-10"	22'-6"	20'-7"		18'-4"	
	NI-40x	21'-6"	19'-8"	18'-7"	17'-7"	22'-2"	20'-4"	19'-3"	18'-1"	
14"	NI-60	22'-0"	20'-1"	19'-0"	17'-10"	22'-8"	20'-9"	19'-7"	18'-5"	
14	NI-80	23'-11"	21'-11"	20'-8"	19'-5"	24'-7"	22'-6"	21'-3"	19'-11"	
	NI-90	24'-6"	22'-5"	21'-2"	19'-10"	25'-2"	23'-0"	21'-9"	20'-5"	
	NI-60	24'-1"	22'-0"	20'-9"	19'-6"	24'-9"	22'-8"	21'-6"	20'-2"	
16"	NI-80	26'-2"	23'-11"	22'-7"	21'-2"	26'-10"	24'-7"	23'-3"	21'-10"	
	NI-90	26'-9"	24'-5"	23'-1"	21'-8"	27'-5"	25'-1"	23'-9"	22'-3"	

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	17'-0"	16'-0"	15'-4"	14'-0"	17'-6"	16'-5"	15'-8"	14'-0"	
9-1/2"	NI-40x	18'-7"	17'-3"	16'-7"	14'-10"	19'-1"	17'-8"	16'-8"	14'-10"	
9-1/2	NI-60	18'-11"	17'-6"	16'-9"	16'-0"	19'-4"	17'-10"	17'-1"	16'-4"	
	NI-80	20'-7"	18'-11"	17'-11"	17'-1"	21'-0"	19'-4"	18'-4"	17'-4"	
	NI-20	19'-11"	18'-4"	17'-6"	16'-0"	20'-7"	19'-0"	17'-11"	16'-0"	
	NI-40x	21'-11"	20'-2"	19'-0"	16'-11"	22'-6"	20'-9"	19'-0"	16'-11"	
11-7/8"	NI-60	22'-4"	20'-6"	19'-5"	18'-3"	22'-10"	21'-1"	20'-0"	18'-9"	
	NI-80	24'-2"	22'-3"	21'-1"	19'-9"	24'-8"	22'-9"	21'-7"	20'-3"	
	NI-90	24'-9"	22'-9"	21'-7"	20'-3"	25'-3"	23'-3"	22'-1"	20'-9"	
	NI-40x	24'-8"	22'-9"	20'-10"	18'-7"	25'-4"	22'-10"	20'-10"	18'-7"	
14"	NI-60	25'-2"	23'-2"	21'-11"	20'-7"	25'-9"	23'-10"	22'-7"	21'-3"	
14	NI-80	27'-3"	25'-1"	23'-9"	22'-3"	27'-10"	25'-8"	24'-4"	22'-10"	
	NI-90	27'-10"	25'-7"	24'-3"	22'-9"	28'-5"	26'-2"	24'-10"	23'-4"	
	NI-60	27'-9"	25'-7"	24'-2"	22'-9"	28'-5"	26'-3"	24'-11"	23'-0"	
16"	NI-80	30'-0"	27'-7"	26'-2"	24'-6"	30'-7"	28'-3"	26'-10"	25'-2"	
	NI-90	30'-7"	28'-2"	26'-8"	25'-0"	31'-3"	28'-10"	27'-4"	25'-8"	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - M4.1, L/360 and Nailed Only

Design Criteria	
Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	3/4 in. oriented strand board (OSB) sheathing, nailed only

#### Maximum Floor Spans

		Bare				1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	14'-6"	13'-6"	12'-11"	12'-3"	14'-10"	13'-10"	13'-3"	12'-7"	
9-1/2"	NI-40x	15'-9"	14'-8"	14'-1"	13'-4"	16'-1"	15'-0"	14'-4"	13'-8"	
9-1/2	NI-60	16'-0"	14'-10"	14'-3"	13'-6"	16'-4"	15'-2"	14'-6"	13'-10"	
	NI-80	17'-2"	16'-0"	15'-3"	14'-6"	17'-5"	16'-3"	15'-7" 15'-0" 16'-3" 16'-5"	14'-9"	
	NI-20	16'-5"	15'-3"	14'-7"	13'-11"	16'-10"	15'-8"	15'-0"	14'-3"	
	NI-40x	17'-9"	16'-7"	15'-10"	15'-1"	18'-3"	16'-11"	16'-3"	15'-5"	
11-7/8"	NI-60	18'-0"	16'-9"	16'-1"	15'-3"	18'-6"	17'-2"	16'-5"	15'-7"	
	NI-80	19'-8"	17'-11"	17'-2"	16'-4"		17'-6"	16'-7"		
	NI-90	20'-2"	18'-5"	17'-6"	16'-7"	20'-7"	18'-10"	14'-4" 14'-6" 15'-7" 15'-0" 16'-3" 16'-5" 17'-6" 17'-10" 17'-8" 17'-11" 19'-5" 19'-10"	16'-11"	
	NI-40x	19'-9"	18'-0"	17'-3"	16'-5"	20'-4"	18'-7"	17'-8"	16'-9"	
14"	NI-60	20'-2"	18'-5"	17'-6"	16'-8"	20'-9"	19'-0"	17'-11"	17'-1"	
14	NI-80	21'-11"	20'-0"	18'-11"	17'-9"	22'-6"	20'-7"	19'-5"	18'-2"	
	NI-90	22'-6"	20'-6"	19'-4"	18'-1"	23'-0"	21'-0"	19'-10"	18'-7"	
	NI-60	22'-1"	20'-2"	19'-0"	17'-10"	22'-8"	20'-9"	19'-8"	18'-5"	
16"	NI-80	24'-0"	21'-11"	20'-8"	19'-4"	24'-7"	22'-6"	21'-3"	19'-10"	
	NI-90	24'-6"	22'-4"	21'-1"	19'-9"	25'-1"	22'-11"	21'-8"	20'-3"	

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	16'-0"	15'-0"	14'-5"	13'-5"	16'-5"	15'-5"	14'-6"	13'-5"	
9-1/2"	NI-40x	17'-4"	16'-3"	15'-7"	14'-10"	17'-8"	16'-7"	15'-11"	14'-11"	
9-1/2	NI-60	17'-6"	16'-5"	15'-9"	15'-0"	17'-10"	16'-9"	16'-1"	15'-3"	
	NI-80	18'-11"	17'-6"	16'-9"	16'-0"	19'-4"	17'-10"	17'-1"	16'-3"	
	NI-20	18'-5"	17'-2"	16'-5"	15'-8"	18'-11"	17'-7"	16'-10"	16'-1"	
	NI-40x	20'-2"	18'-7"	17'-8"	16'-10"	20'-8"	19'-1"	18'-1"	17'-0"	
11-7/8"	NI-60	20'-6"	18'-11"	17'-11"	17'-0"	21'-0"	19'-5"	18'-4"	17'-5"	
	NI-80	22'-3"	20'-5"	19'-4"	18'-2"	22'-8"	20'-11"	19'-10"	18'-7"	
	NI-90	22'-9"	20'-11"	19'-10"	18'-7"	23'-2"	21'-4"	20'-3"	19'-0"	
	NI-40x	22'-9"	20'-11"	19'-10"	18'-7"	23'-3"	21'-6"	20'-5"	18'-8"	
14"	NI-60	23'-2"	21'-4"	20'-2"	18'-11"	23'-9"	21'-11"	20'-9"	19'-5"	
14	NI-80	25'-1"	23'-1"	21'-10"	20'-5"	25'-6"	23'-7"	22'-4"	20'-11"	
	NI-90	25'-7"	23'-7"	22'-3"	20'-11"	26'-1"	24'-1"	22'-9"	21'-4"	
	NI-60	25'-7"	23'-7"	22'-3"	20'-10"	26'-2"	24'-2"	22'-11"	21'-6"	
16"	NI-80	27'-7"	25'-5"	24'-0"	22'-6"	28'-1"	26'-0"	24'-7"	23'-1"	
	NI-90	28'-2"	25'-11"	24'-6"	22'-11"	28'-8"	26'-6"	25'-1"	23'-6"	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - M4.2, L/360 and Nailed Only

Design Criteria	
Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	3/4 in. oriented strand board (OSB) sheathing, nailed only

#### Maximum Floor Spans

		Bare				1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	15'-7"	14'-7"	13'-11"	13'-3"	16'-0"	15'-0"	14'-4"	13'-7"	
9-1/2"	NI-40x	17'-0"	15'-10"	15'-2"	14'-5"	17'-5"	16'-3"	15'-6"	14'-9"	
9-1/2	NI-60	17'-3"	16'-1"	15'-4"	14'-7"	17'-7"	16'-5"	15'-9"	14'-11"	
	NI-80	18'-8"	17'-3"	16'-6"	15'-8"	19'-2"	17'-7"	14'-4" 15'-6" 15'-9" 16'-10" 16'-3" 17'-7" 17'-9" 19'-3" 19'-9" 19'-6"	16'-0"	
	NI-20	17'-8"	16'-6"	15'-9"	15'-0"	18'-3"	17'-0"	16'-3"	15'-6"	
	NI-40x	19'-7"	17'-11"	17'-1"	16'-3"	20'-2"	18'-5"	17'-7"	16'-8"	
11-7/8"	NI-60	19'-11"	18'-3"	17'-4"	16'-6"	20'-6"	18'-9"	17'-9"	16'-11"	
	NI-80	21'-9"	19'-10"	18'-9"	17'-8"	22'-3"	20'-5"	15'-6" 15'-9" 16'-10" 16'-3" 17'-7" 17'-9" 19'-3" 19'-9" 19'-6" 19'-10" 21'-6" 22'-0"	18'-1"	
	NI-90	22'-4"	20'-4"	19'-3"	18'-0"	22'-10"	20'-11"		18'-6"	
	NI-40x	21'-10"	19'-11"	18'-10"	17'-9"	22'-5"	20'-7"	19'-6"	18'-3"	
14"	NI-60	22'-3"	20'-4"	19'-3"	18'-1"	22'-11"	21'-0"	19'-10"	18'-8"	
14	NI-80	24'-3"	22'-2"	20'-11"	19'-8"	24'-10"	22'-9"	21'-6"	20'-2"	
	NI-90	24'-10"	22'-9"	21'-5"	20'-1"	25'-5"	23'-4"	22'-0"	20'-8"	
	NI-60	24'-4"	22'-3"	21'-1"	19'-9"	25'-1"	23'-0"	21'-9"	20'-5"	
16"	NI-80	26'-6"	24'-3"	22'-11"	21'-5"	27'-2"	24'-11"	23'-7"	22'-1"	
	NI-90	27'-1"	24'-9"	23'-5"	21'-11"	27'-9"	25'-5"	24'-1"	22'-6"	

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	17'-2"	16'-1"	15'-5"	14'-0"	17'-7"	16'-6"	15'-8"	14'-0"	
9-1/2"	NI-40x	18'-9"	17'-5"	16'-8"	14'-10"	19'-3"	17'-9"	16'-8"	14'-10"	
9-1/2	NI-60	19'-0"	17'-7"	16'-10"	16'-1"	19'-6"	18'-0"	17'-3"	16'-5"	
	NI-80	20'-9"	19'-1"	18'-1"	17'-2"	21'-2"	19'-6"	18'-6"	17'-5"	
	NI-20	20'-1"	18'-6"	17'-7"	16'-0"	20'-9"	19'-2"	17'-11"	16'-0"	
	NI-40x	22'-1"	20'-4"	19'-0"	16'-11"	22'-8"	20'-10"	19'-0"	16'-11"	
11-7/8"	NI-60	22'-5"	20'-8"	19'-7"	18'-5"	23'-0"	21'-3"	20'-2"	18'-11"	
	NI-80	24'-4"	22'-5"	21'-3"	19'-11"	24'-10"	22'-11"	21'-9"	20'-5"	
	NI-90	24'-11"	22'-11"	21'-9"	20'-5"	25'-5"	23'-6"	22'-3"	20'-10"	
	NI-40x	24'-10"	22'-10"	20'-10"	18'-7"	25'-6"	22'-10"	20'-10"	18'-7"	
14"	NI-60	25'-4"	23'-4"	22'-1"	20'-9"	25'-11"	24'-0"	22'-9"	21'-4"	
14	NI-80	27'-5"	25'-3"	23'-11"	22'-5"	28'-0"	25'-10"	24'-6"	23'-0"	
	NI-90	28'-1"	25'-10"	24'-5"	22'-11"	28'-7"	26'-5"	25'-0"	23'-6"	
	NI-60	27'-11"	25'-9"	24'-5"	22'-10"	28'-7"	26'-6"	25'-1"	23'-0"	
16"	NI-80	30'-2"	27'-10"	26'-4"	24'-8"	30'-10"	28'-6"	27'-0"	25'-4"	
	NI-90	30'-10"	28'-5"	26'-11"	25'-2"	31'-5"	29'-0"	27'-6"	25'-10"	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans – M5.1, L/360 and Nailed Only

Design Criteria	
Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	7/8 in. oriented strand board (OSB) sheathing, nailed only

#### Maximum Floor Spans

		Bare				1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	15'-0"	14'-0"	13'-5"	12'-9"	15'-5"	14'-4"	13'-9"	13'-0"	
9-1/2"	NI-40x	16'-4"	15'-3"	14'-7"	13'-10"	16'-8"	15'-7"	14'-11"	14'-2"	
9-1/2	NI-60	16'-7"	15'-5"	14'-9"	14'-0"	16'-11"	15'-9"	15'-1"	14'-3"	
	NI-80	17'-10"	16'-7"	15'-10"	15'-0"	18'-1"	16'-10"	13'-9" 14'-11" 15'-1" 16'-2" 15'-7" 16'-10" 17'-0" 18'-3" 18'-8" 18'-5" 18'-9"	15'-3"	
	NI-20	17'-0"	15'-10"	15'-2"	14'-5"	17'-5"	16'-4"	15'-7"	14'-9"	
	NI-40x	18'-7"	17'-2"	16'-5"	15'-7"	19'-1"	17'-7"	16'-10"	15'-11'	
11-7/8"	NI-60	18'-11"	17'-5"	16'-8"	15'-10"	19'-5"	17'-10"	17'-0"	16'-2"	
	NI-80	20'-7"	18'-10"	17'-10"	16'-11"	21'-1"	19'-4"	15'-1" 16'-2" 15'-7" 16'-10" '17'-0" 18'-3" 18'-8" 18'-5"	17'-2"	
	NI-90	21'-2"	19'-4"	18'-3"	17'-2"	21'-7"	19'-9"		17'-6"	
	NI-40x	20'-8"	18'-11"	17'-11"	17'-0"	21'-3"	19'-6"	18'-5"	17'-4"	
14"	NI-60	21'-2"	19'-4"	18'-3"	17'-3"	21'-8"	19'-11"	18'-9"	17'-8"	
14	NI-80	23'-0"	21'-1"	19'-10"	18'-6"	23'-6"	21'-7"	20'-4"	19'-0"	
	NI-90	23'-7"	21'-7"	20'-4"	18'-11"	24'-1"	22'-1"	20'-10"	19'-5"	
	NI-60	23'-1"	21'-2"	20'-0"	18'-8"	23'-8"	21'-9"	20'-7"	19'-3"	
16"	NI-80	25'-2"	23'-0"	21'-8"	20'-3"	25'-8"	23'-7"	22'-3"	20'-9"	
	NI-90	25'-8"	23'-6"	22'-2"	20'-8"	26'-3"	24'-1"	22'-9"	21'-2"	

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing			On cent	re spacing		
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	16'-4"	15'-4"	14'-6"	13'-5"	16'-8"	15'-5"	14'-6"	13'-5"	
9-1/2"	NI-40x	17'-8"	16'-7"	15'-11"	14'-11"	18'-0"	16'-11"	16'-3"	14'-11"	
9-1/2	NI-60	17'-11"	16'-10"	16'-1"	15'-4"	18'-3"	17'-1"	16'-5"	15'-7"	
	NI-80	19'-6"	17'-11"	17'-2"	16'-4"	19'-10"	18'-4"	17'-6"	16'-7"	
	NI-20	18'-10"	17'-6"	16'-10"	16'-0"	19'-4"	17'-11"	17'-3"	16'-1"	
	NI-40x	20'-8"	19'-2"	18'-1"	17'-0"	21'-2"	19'-8"	18'-7"	17'-0"	
11-7/8"	NI-60	21'-1"	19'-5"	18'-5"	17'-5"	21'-6"	19'-11"	18'-11"	17'-9"	
	NI-80	22'-10"	21'-1"	19'-11"	18'-8"	23'-3"	21'-6"	20'-5"	19'-1"	
	NI-90	23'-4"	21'-7"	20'-5"	19'-1"	23'-9"	22'-0"	20'-10"	19'-6"	
	NI-40x	23'-3"	21'-6"	20'-4"	18'-8"	23'-10"	22'-1"	20'-11"	18'-8"	
14"	NI-60	23'-8"	21'-11"	20'-9"	19'-5"	24'-3"	22'-6"	21'-4"	20'-0"	
14	NI-80	25'-8"	23'-9"	22'-5"	21'-0"	26'-2"	24'-3"	23'-0"	21'-6"	
	NI-90	26'-3"	24'-3"	22'-11"	21'-5"	26'-8"	24'-9"	23'-6"	21'-11"	
	NI-60	26'-1"	24'-2"	22'-11"	21'-5"	26'-8"	24'-9"	23'-6"	22'-0"	
16"	NI-80	28'-3"	26'-1"	24'-9"	23'-1"	28'-9"	26'-8"	25'-4"	23'-8"	
	NI-90	28'-10"	26'-8"	25'-3"	23'-7"	29'-4"	27'-2"	25'-10"	24'-2"	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans – M5.2, L/360 and Nailed Only

Design Criteria	
Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	7/8 in. oriented strand board (OSB) sheathing, nailed only

#### Maximum Floor Spans

		Bare				1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	16'-2"	15'-1"	14'-5"	13'-8"	16'-7"	15'-6"	14'-10"	14'-0"	
9-1/2"	NI-40x	17'-8"	16'-6"	15'-9"	14'-10"	18'-1"	16'-10"	16'-1"	14'-10"	
9-1/2	NI-60	17'-11"	16'-8"	15'-11"	15'-2"	18'-4"	17'-1"	16'-4"	15'-5"	
	NI-80	19'-7"	17'-11"	17'-2"	16'-3"	20'-0"	18'-4"	16'-4" 17'-5" 16'-10" 18'-3" 18'-7" 20'-2"	16'-6"	
	NI-20	18'-6"	17'-2"	16'-5"	15'-6"	19'-1"	17'-7"	16'-10"	16'-0"	
	NI-40x	20'-6"	18'-9"	17'-9"	16'-10"	21'-1"	19'-4"	18'-3"	16'-11"	
11-7/8"	NI-60	20'-10"	19'-1"	18'-1"	17'-1"	21'-5"	19'-8"	18'-7"	17'-6"	
	NI-80	22'-9"	20'-10"	19'-8"	18'-5"	23'-3"	21'-4"	19.2" 14'-10" 16'-1" 16'-4" 17'-5" 16'-10" 18'-3" 18'-7" 20'-2" 20'-8" 20'-5" 20'-6" 20'-5" 20'-10" 22'-7" 23'-1" 22'-9" 24'-8"	18'-10"	
	NI-90	23'-4"	21'-5"	20'-2"	18'-10"	23'-10"	21'-11"		19'-4"	
	NI-40x	22'-10"	20'-11"	19'-9"	18'-6"	23'-6"	21'-7"	20'-5"	18'-7"	
14"	NI-60	23'-4"	21'-4"	20'-2"	18'-10"	23'-11"	22'-0"	20'-10"	19'-5"	
14	NI-80	25'-5"	23'-3"	22'-0"	20'-6"	26'-0"	23'-10"	22'-7"	21'-1"	
	NI-90	26'-1"	23'-10"	22'-6"	21'-0"	26'-7"	24'-5"	23'-1"	21'-7"	
	NI-60	25'-6"	23'-5"	22'-1"	20'-8"	26'-2"	24'-1"	22'-9"	21'-4"	
16"	NI-80	27'-9"	25'-5"	24'-0"	22'-5"	28'-5"	26'-1"	24'-8"	23'-1"	
	NI-90	28'-5"	26'-0"	24'-7"	22'-11"	29'-0"	26'-8"	25'-2"	23'-6"	

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	17'-6"	16'-5"	15'-8"	14'-0"	17'-11"	16'-10"	15'-8"	14'-0"	
9-1/2"	NI-40x	19'-3"	17'-10"	16'-8"	14'-10"	19'-9"	18'-3"	16'-8"	14'-10"	
9-1/2	NI-60	19'-7"	18'-1"	17'-3"	16'-5"	20'-0"	18'-6"	17'-8"	16'-9"	
	NI-80	21'-4"	19'-8"	18'-8"	17'-7"	21'-9"	20'-1"	19'-1"	17'-7"	
	NI-20	20'-7"	19'-0"	17'-11"	16'-0"	21'-3"	19'-8"	17'-11"	16'-0"	
	NI-40x	22'-8"	20'-10"	19'-0"	16'-11"	23'-3"	20'-10"	19'-0"	16'-11"	
11-7/8"	NI-60	23'-1"	21'-4"	20'-2"	18'-11"	23'-7"	21'-10"	20'-9"	19'-5"	
	NI-80	25'-0"	23'-1"	21'-11"	20'-6"	25'-6"	23'-8"	19'-0" 20'-9" 22'-5" 22'-11"	21'-0"	
	NI-90	25'-8"	23'-8"	22'-5"	21'-0"	26'-1"	24'-2"		21'-5"	
	NI-40x	25'-5"	22'-10"	20'-10"	18'-7"	26'-1"	22'-10"	20'-10"	18'-7"	
14"	NI-60	25'-11"	24'-0"	22'-9"	21'-3"	26'-7"	24'-8"	23'-5"	21'-4"	
14	NI-80	28'-1"	26'-0"	24'-8"	23'-0"	28'-8"	26'-7"	25'-3"	23'-8"	
	NI-90	28'-9"	26'-7"	25'-2"	23'-7"	29'-4"	27'-2"	25'-9"	24'-2"	
	NI-60	28'-7"	26'-5"	25'-1"	23'-0"	29'-3"	27'-2"	25'-9"	23'-0"	
16"	NI-80	30'-11"	28'-7"	27'-1"	25'-4"	31'-6"	29'-3"	27'-9"	26'-0"	
	NI-90	31'-7"	29'-2"	27'-8"	25'-11"	32'-3"	29'-10"	28'-4"	26'-6"	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - M6.1, L/360 and Nailed Only

Design Criteria	
Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	5/8 in. Canadian softwood plywood, nailed only

#### Maximum Floor Spans

		Bare				1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	re spacing 19.2" 12'-8" 13'-9" 13'-11" 14'-11" 14'-5" 15'-6" 15'-9" 16'-9" 16'-9" 16'-11" 16'-11" 17'-2" 18'-4" 18'-9" 18'-7"	24"	
	NI-20	13'-9"	12'-10"	12'-4"	-	14'-2"	13'-3"	12'-8"	-	
9-1/2"	NI-40x	15'-0"	14'-0"	13'-5"	-	15'-5"	14'-4"	13'-9"	-	
9-1/2	NI-60	15'-2"	14'-2"	13'-7"	-	15'-7"	14'-6"	13'-11"	-	
	NI-80	16'-4"	15'-2"	14'-7"	-	16'-8"	15'-6"	14'-11"	-	
	NI-20	15'-7"	14'-7"	14'-0"	-	16'-1"	15'-0"	14'-5"	-	
	NI-40x	16'-11"	15'-9"	15'-1"	-	17'-4"	16'-2"	15'-6"	-	
11-7/8"	NI-60	17'-2"	16'-0"	15'-4"	-	17'-7"	16'-5"	15'-9"	-	
	NI-80	18'-5"	17'-1"	16'-5"	-	19'-0"	17'-6"	16'-9"	-	
	NI-90	18'-11"	17'-5"	16'-8"	-	19'-5"	17'-10"	17'-1"	-	
	NI-40x	18'-6"	17'-2"	16'-6"	-	19'-2"	17'-7"	16'-11"	-	
14"	NI-60	18'-11"	17'-5"	16'-9"	-	19'-7"	17'-11"	17'-2"	-	
14	NI-80	20'-7"	18'-10"	17'-10"	-	21'-2"	19'-4"	18'-4"	-	
	NI-90	21'-1"	19'-3"	18'-3"	-	21'-8"	19'-10"	18'-9"	-	
	NI-60	20'-8"	18'-11"	17'-11"	-	21'-5"	19'-7"	18'-7"	-	
16"	NI-80	22'-6"	20'-6"	19'-5"	-	23'-2"	21'-2"	20'-1"	-	
	NI-90	23'-0"	21'-0"	19'-11"	-	23'-8"	21'-7"	20'-6"	-	

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	15'-8"	14'-8"	14'-1"	-	16'-0"	15'-0"	14'-5"	-	
9-1/2"	NI-40x	16'-11"	15'-10"	15'-2"	-	17'-3"	16'-2"	15'-6"	-	
9-1/2	NI-60	17'-1"	16'-0"	15'-4"	-	17'-5"	16'-4"	15'-8"	-	
	NI-80	18'-3"	17'-0"	16'-4"	-	18'-8"	17'-4"	16'-7"	-	
	NI-20	17'-11"	16'-9"	16'-1"	-	18'-5"	17'-2"	16'-6"	-	
	NI-40x	19'-7"	17'-11"	17'-3"	-	20'-1"	18'-6"	17'-7"	-	
11-7/8"	NI-60	19'-11"	18'-3"	17'-5"	-	20'-5"	18'-9"	17'-10"	-	
	NI-80	21'-6"	19'-9"	18'-8"	-	22'-0"	20'-2"	19'-2"	-	
	NI-90	22'-0"	20'-2"	19'-1"	-	22'-6"	20'-8"	19'-7"	-	
	NI-40x	22'-1"	20'-3"	19'-2"	-	22'-8"	20'-10"	19'-9"	-	
14"	NI-60	22'-6"	20'-8"	19'-7"	-	23'-1"	21'-3"	20'-1"	-	
14	NI-80	24'-4"	22'-3"	21'-1"	-	24'-10"	22'-10"	21'-7"	-	
	NI-90	24'-10"	22'-9"	21'-6"	-	25'-4"	23'-3"	22'-1"	-	
	NI-60	24'-11"	22'-10"	21'-7"	-	25'-6"	23'-6"	22'-3"	-	
16"	NI-80	26'-10"	24'-7"	23'-3"	-	27'-5"	25'-2"	23'-10"	-	
	NI-90	27'-4"	25'-1"	23'-9"	-	27'-11"	25'-8"	24'-4"	-	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - M6.2, L/360 and Nailed Only

Design Criteria	
Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	5/8 in. Canadian softwood plywood, nailed only

#### Maximum Floor Spans

		Bare On centre spacing				1/2 in. gypsum ceiling On centre spacing				
oist depth 9-1/2" 11-7/8"	Joist series									
		12"	16"	19.2"	24"	12"	16"	•	24"	
	NI-20	14'-10"	13'-10"	13'-4"	-	15'-4"	14'-3"	13'-8"	-	
0.1/0"	NI-40x	16'-2"	15'-1"	14'-6"	-	16'-8"	15'-6"	14'-11"	-	
9-1/2	NI-60	16'-5"	15'-4"	14'-8"	-	16'-10"	15'-8"	15'-1"	-	
	NI-80	17'-7"	16'-5"	15'-9"	-	18'-1"	16'-10"	16'-1"	-	
	NI-20	16'-10"	15'-8"	15'-1"	-	17'-4"	16'-3"	15'-7"	-	
	NI-40x	18'-5"	17'-0"	16'-4"	-	19'-0"	17'-6"	16'-10"	-	
11-7/8"	NI-60	18'-9"	17'-3"	16'-7"	-	19'-4"	17'-9"	17'-0"	-	
	NI-80	20'-5"	18'-8"	17'-9"	-	21'-0"	19'-3"	18'-3"	-	
	NI-90	20'-11"	19'-1"	18'-2"	-	21'-6"	19'-8"	16'-10" 17'-0" 18'-3" 18'-8"	-	
	NI-40x	20'-6"	18'-9"	17'-10"	-	21'-2"	19'-5"	18'-5"	-	
14"	NI-60	20'-11"	19'-2"	18'-2"	-	21'-8"	19'-10"	18'-10"	-	
14	NI-80	22'-9"	20'-10"	19'-9"	-	23'-6"	21'-6"	20'-4"	-	
	NI-90	23'-4"	21'-4"	20'-3"	-	24'-0"	22'-0"	20'-10"	-	
	NI-60	22'-11"	20'-11"	19'-10"	-	23'-8"	21'-8"	20'-7"	-	
16"	NI-80	24'-11"	22'-9"	21'-7"	-	25'-8"	23'-6"	22'-3"	-	
	NI-90	25'-6"	23'-3"	22'-1"	-	26'-2"	24'-0"	22'-9"	-	

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	16'-8"	15'-8"	15'-0"	-	17'-2"	16'-1"	15'-5"	-	
9-1/2"	NI-40x	18'-1"	16'-11"	16'-3"	-	18'-7"	17'-3"	16'-7"	-	
9-1/2	NI-60	18'-4"	17'-1"	16'-5"	-	18'-10"	17'-5"	16'-9"	-	
	NI-80	20'-0"	18'-4"	17'-6"	-	20'-5"	18'-9"	17'-10"	-	
	NI-20	19'-6"	17'-10"	17'-2"	-	20'-1"	18'-6"	17'-8"	-	
	NI-40x	21'-5"	19'-7"	18'-7"	-	22'-0"	20'-3"	19'-0"	-	
11-7/8"	NI-60	21'-9"	19'-11"	18'-11"	-	22'-4"	20'-6"	19'-6"	-	
	NI-80	23'-6"	21'-7"	20'-6"	-	24'-1"	22'-2"	21'-0"	-	
	NI-90	24'-1"	22'-1"	20'-11"	-	24'-7"	22'-8"	21'-6"	-	
	NI-40x	24'-1"	22'-1"	20'-10"	-	24'-9"	22'-10"	20'-10"	-	
14"	NI-60	24'-7"	22'-7"	21'-4"	-	25'-3"	23'-3"	22'-0"	-	
14	NI-80	26'-7"	24'-4"	23'-1"	-	27'-2"	25'-0"	23'-8"	-	
	NI-90	27'-2"	24'-11"	23'-7"	-	27'-9"	25'-6"	24'-2"	-	
	NI-60	27'-2"	24'-11"	23'-7"	-	27'-10"	25'-8"	24'-4"	-	
16"	NI-80	29'-4"	26'-11"	25'-6"	-	29'-11"	27'-7"	26'-2"	-	
	NI-90	29'-11"	27'-5"	26'-0"	-	30'-6"	28'-1"	26'-8"	-	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans – M7.1, L/360 and Nailed Only

Design Criteria	
Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	3/4 in. Canadian softwood plywood, nailed only

#### Maximum Floor Spans

		Bare On centre spacing				1/2 in. gypsum ceiling On centre spacing				
Joist depth	Joist series									
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	14'-5"	13'-5"	12'-10"	12'-3"	14'-9"	13'-9"	13'-2"	12'-6"	
9-1/2"	NI-40x	15'-8"	14'-7"	14'-0"	13'-4"	16'-0"	14'-11"	14'-4"	13'-7"	
9-1/2	NI-60	15'-11"	14'-10"	14'-2"	13'-6"	16'-3"	15'-1"	14'-6"	13'-9"	
	NI-80	17'-1"	15'-11"	15'-2"	14'-5"	17'-4"	16'-2"	15'-6"	14'-8"	
	NI-20	16'-4"	15'-2"	14'-7"	13'-10"	16'-9"	15'-8"	15'-0"	14'-3"	
	NI-40x	17'-8"	16'-6"	15'-9"	15'-0"	18'-1"	16'-10"	16'-2"	15'-4"	
11-7/8"	NI-60	17'-11"	16'-8"	16'-0"	15'-2"	18'-5"	17'-1"	16'-4"	15'-6"	
	NI-80	19'-7"	17'-10"	17'-1"	16'-3"	20'-0"	18'-3"	19.2"   13'-2"   14'-4"   14'-6"   15'-6"   15'-0"   16'-2"   16'-4"   17'-7"   17'-10"   19-4"   19'-9"   19'-6"   21'-1"	16'-7"	
	NI-90	20'-0"	18'-3"	17'-5"	16'-7"	20'-6"	18'-9"		16'-10'	
	NI-40x	19'-7"	17'-11"	17'-2"	16'-4"	20'-2"	18'-6"	17'-7"	16'-9"	
14"	NI-60	20'-0"	18'-4"	17'-5"	16'-7"	20'-7"	18'-10"	17'-10"	17'-0"	
14	NI-80	21'-10"	19'-11"	18'-9"	17'-8"	22'-4"	20'-5"	19'-4"	18'-1"	
	NI-90	22'-4"	20'-4"	19'-3"	18'-0"	22'-10"	20'-11"	19'-9"	18'-6"	
	NI-60	21'-11"	20'-0"	18'-11"	17'-9"	22'-6"	20'-8"	19'-6"	18'-4"	
16"	NI-80	23'-10"	21'-9"	20'-6"	19'-3"	24'-5"	22'-4"	21'-1"	19'-9"	
	NI-90	24'-4"	22'-3"	21'-0"	19'-8"	24'-11"	22'-10"	21'-6"	20'-2"	

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	16'-0"	15'-0"	14'-5"	13'-5"	16'-4"	15'-4"	14'-6"	13'-5"	
9-1/2"	NI-40x	17'-3"	16'-2"	15'-6"	14'-10"	17'-7"	16'-6"	15'-10"	14'-11"	
9-1/2	NI-60	17'-6"	16'-5"	15'-8"	14'-11"	17'-9"	16'-8"	16'-0"	15'-3"	
	NI-80	18'-10"	17'-6"	16'-9"	15'-11"	19'-3"	17'-9"	17'-0"	16'-2"	
	NI-20	18'-4"	17'-1"	16'-5"	15'-8"	18'-11"	17'-6"	16'-10"	16'-0"	
	NI-40x	20'-2"	18'-6"	17'-8"	16'-10"	20'-8"	19'-0"	18'-0"	17'-0"	
11-7/8"	NI-60	20'-6"	18'-10"	17'-10"	17'-0"	20'-11"	19'-4"	18'-3"	17'-4"	
	NI-80	22'-2"	20'-4"	19'-3"	18'-1"	22'-7"	20'-10"	19'-9"	18'-6"	
	NI-90	22'-8"	20'-10"	19'-9"	18'-6"	23'-1"	21'-4"	20'-2"	18'-11"	
	NI-40x	22'-8"	20'-10"	19'-9"	18'-6"	23'-3"	21'-5"	20'-4"	18'-8"	
14"	NI-60	23'-1"	21'-3"	20'-1"	18'-10"	23'-8"	21'-10"	20'-8"	19'-5"	
14	NI-80	25'-0"	23'-0"	21'-9"	20'-4"	25'-6"	23'-6"	22'-3"	20'-10"	
	NI-90	25'-6"	23'-6"	22'-2"	20'-10"	26'-0"	24'-0"	22'-8"	21'-3"	
	NI-60	25'-6"	23'-6"	22'-2"	20'-10"	26'-1"	24'-1"	22'-10"	21'-5"	
16"	NI-80	27'-6"	25'-4"	23'-11"	22'-5"	28'-0"	25'-11"	24'-6"	23'-0"	
	NI-90	28'-1"	25'-10"	24'-5"	22'-11"	28'-7"	26'-5"	25'-0"	23'-5"	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - M7.2, L/360 and Nailed Only

Design Criteria	
Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	3/4 in. Canadian softwood plywood, nailed only

#### Maximum Floor Spans

		Bare				1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	15'-6"	14'-6"	13'-10"	13'-2"	15'-11"	14'-11"	14'-3"	13'-7"	
9-1/2"	NI-40x	16'-11"	15'-9"	15'-1"	14'-4"	17'-4"	16'-2"	15'-6"	14'-9"	
9-1/2	NI-60	17'-2"	16'-0"	15'-3"	14'-7"	17'-6"	16'-4"	15'-8"	14'-11"	
	NI-80	18'-7"	17'-2"	16'-5"	15'-7"	19'-0"	17'-6"	16'-9"	15'-11"	
	NI-20	17'-7"	16'-5"	15'-8"	14'-11"	18'-2"	16'-11"	1" 16'-2"	15'-5"	
	NI-40x	19'-5"	17'-10"	17'-0"	16'-3"	20'-0"	18'-4"	17'-6"	16'-7"	
11-7/8"	NI-60	19'-10"	18'-1"	17'-3"	16'-5"	20'-4"	18'-8"	17'-8"	16'-10"	
	NI-80	21'-7"	19'-9"	18'-8"	17'-7"	22'-2"	20'-3"	17'-6" 17'-8" 19'-2" 19'-7"	18'-0"	
	NI-90	22'-2"	20'-3"	19'-1"	17'-11"	22'-8"	20'-9"		18'-5"	
	NI-40x	21'-8"	19'-10"	18'-9"	17'-8"	22'-4"	20'-6"	19'-4"	18'-2"	
14"	NI-60	22'-2"	20'-3"	19'-2"	18'-0"	22'-9"	20'-10"	19'-9"	18'-6"	
14	NI-80	24'-1"	22'-0"	20'-10"	19'-6"	24'-9"	22'-8"	21'-5"	20'-1"	
	NI-90	24'-8"	22'-7"	21'-4"	20'-0"	25'-4"	23'-2"	21'-11"	20'-6"	
	NI-60	24'-3"	22'-2"	20'-11"	19'-8"	24'-11"	22'-10"	21'-8"	20'-4"	
16"	NI-80	26'-4"	24'-1"	22'-9"	21'-4"	27'-0"	24'-9"	23'-5"	21'-11"	
	NI-90	26'-11"	24'-7"	23'-3"	21'-10"	27'-7"	25'-3"	23'-11"	22'-5"	

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	17'-1"	16'-0"	15'-4"	14'-0"	17'-6"	16'-5"	15'-8"	14'-0"	
9-1/2"	NI-40x	18'-8"	17'-4"	16'-8"	14'-10"	19'-2"	17'-9"	16'-8"	14'-10"	
9-1/2	NI-60	19'-0"	17'-6"	16'-10"	16'-0"	19'-5"	17'-11"	17'-2"	16'-4"	
	NI-80	20'-8"	19'-0"	18'-0"	17'-1"	21'-1"	19'-5"	18'-5"	17'-5"	
	NI-20	20'-0"	18'-5"	17'-7"	16'-0"	20'-8"	19'-1"	17'-11"	16'-0"	
	NI-40x	22'-0"	20'-3"	19'-0"	16'-11"	22'-7"	20'-10"	19'-0"	16'-11"	
11-7/8"	NI-60	22'-5"	20'-7"	19'-6"	18'-4"	22'-11"	21'-2"	20'-1"	18'-10"	
	NI-80	24'-3"	22'-4"	21'-2"	19'-10"	24'-9"	22'-10"	21'-8"	20'-4"	
	NI-90	24'-10"	22'-10"	21'-8"	20'-4"	25'-4"	23'-4"	22'-2"	20'-9"	
	NI-40x	24'-9"	22'-10"	20'-10"	18'-7"	25'-5"	22'-10"	20'-10"	18'-7"	
14"	NI-60	25'-3"	23'-3"	22'-0"	20'-8"	25'-10"	23'-11"	22'-8"	21'-3"	
14	NI-80	27'-4"	25'-2"	23'-10"	22'-4"	27'-11"	25'-9"	24'-5"	22'-11"	
	NI-90	27'-11"	25'-9"	24'-4"	22'-10"	28'-6"	26'-4"	24'-11"	23'-5"	
	NI-60	27'-10"	25'-8"	24'-3"	22'-9"	28'-6"	26'-5"	25'-0"	23'-0"	
16"	NI-80	30'-1"	27'-9"	26'-3"	24'-7"	30'-8"	28'-5"	26'-11"	25'-3"	
	NI-90	30'-9"	28'-4"	26'-9"	25'-1"	31'-4"	28'-11"	27'-5"	25'-9"	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - H1.1, L/360 and Nailed Only

Design Criteria	
Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 35 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	19/32 in. oriented strand board (OSB) sheathing, nailed only

#### Maximum Floor Spans

		Bare				1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	13'-8"	12'-9"	12'-3"	-	14'-1"	13'-2"	12'-7"	-	
9-1/2"	NI-40x	14'-11"	13'-11"	13'-4"	-	15'-3"	14'-3"	13'-8"	-	
9-1/2	NI-60	15'-1"	14'-1"	13'-6"	-	15'-5"	14'-5"	13'-10"	-	
	NI-80	16'-2"	15'-1"	14'-5"	-	16'-6"	15'-5"	14'-9"	-	
	NI-20	15'-6"	14'-5"	13'-10"	-	16'-0"	14'-11"	14'-4"	-	
	NI-40x	16'-9"	15'-8"	15'-0"	-	17'-3"	16'-1"	15'-5"	-	
11-7/8"	NI-60	17'-0"	15'-10"	15'-3"	-	17'-5"	16'-3"	15'-7"	-	
	NI-80	18'-3"	16'-11"	16'-3"	-	18'-10"	17'-4"	16'-8"	-	
	NI-90	18'-9"	17'-3"	16'-7"	-	19'-3"	17'-8"	16'-11"	-	
	NI-40x	18'-4"	17'-0"	16'-4"	-	19'-0"	17'-6"	16'-10"	-	
14"	NI-60	18'-9"	17'-4"	16'-7"	-	19'-4"	17'-9"	17'-1"	-	
14	NI-80	20'-5"	18'-7"	17'-9"	-	21'-0"	19'-2"	18'-2"	-	
	NI-90	20'-10"	19'-1"	18'-1"	-	21'-6"	19'-8"	18'-7"	-	
	NI-60	20'-6"	18'-9"	17'-10"	-	21'-2"	19'-5"	18'-5"	-	
16"	NI-80	22'-3"	20'-4"	19'-3"	-	22'-11"	21'-0"	19'-11"	-	
	NI-90	22'-9"	20'-9"	19'-8"	-	23'-5"	21'-5"	20'-4"	-	

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	15'-7"	14'-3"	13'-5"	-	15'-9"	14'-3"	13'-5"	-	
9-1/2"	NI-40x	16'-10"	15'-9"	15'-1"	-	17'-2"	16'-1"	15'-1"	-	
9-1/2	NI-60	17'-0"	15'-11"	15'-3"	-	17'-4"	16'-3"	15'-7"	-	
	NI-80	18'-2"	16'-11"	16'-3"	-	18'-7"	17'-3"	16'-7"	-	
	NI-20	17'-10"	16'-8"	16'-0"	-	18'-4"	17'-1"	16'-2"	-	
	NI-40x	19'-6"	17'-11"	17'-2"	-	20'-0"	18'-5"	17'-3"	-	
11-7/8"	NI-60	19'-10"	18'-2"	17'-5"	-	20'-4"	18'-8"	17'-9"	-	
	NI-80	21'-5"	19'-7"	18'-7"	-	21'-11"	20'-1"	19'-1"	-	
	NI-90	21'-11"	20'-1"	19'-0"	-	22'-4"	20'-6"	19'-6"	-	
	NI-40x	22'-0"	20'-2"	18'-11"	-	22'-7"	20'-9"	18'-11"	-	
14"	NI-60	22'-5"	20'-6"	19'-6"	-	23'-0"	21'-1"	20'-0"	-	
14	NI-80	24'-2"	22'-2"	21'-0"	-	24'-9"	22'-8"	21'-6"	-	
	NI-90	24'-8"	22'-8"	21'-5"	-	25'-3"	23'-2"	21'-11"	-	
	NI-60	24'-10"	22'-9"	21'-6"	-	25'-5"	23'-4"	22'-2"	-	
16"	NI-80	26'-8"	24'-6"	23'-2"	-	27'-3"	25'-1"	23'-9"	-	
	NI-90	27'-3"	24'-11"	23'-7"	-	27'-10"	25'-7"	24'-2"	-	

### Notes:

1. The tabulated clear spans are based on CSA O86-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - H1.2, L/360 and Nailed Only

Design Criteria	
Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 35 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	19/32 in. oriented strand board (OSB) sheathing, nailed only

#### Maximum Floor Spans

		Bare					1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing					
		12"	16"	19.2"	24"	12"	16"	19.2"	24"		
	NI-20	14'-9"	13'-9"	13'-2"	-	15'-2"	14'-2"	13'-7"	-		
9-1/2"	NI-40x	16'-1"	15'-0"	14'-5"	-	16'-6"	15'-5"	14'-9"	-		
9-1/2	NI-60	16'-3"	15'-2"	14'-7"	-	16'-8"	15'-7"	14'-11"	-		
	NI-80	17'-6"	16'-4"	15'-8"	-	17'-11"	16'-8"	16'-0"	-		
	NI-20	16'-8"	15'-7"	15'-0"	-	17'-3"	16'-1"	15'-6"	-		
	NI-40x	18'-2"	16'-11"	16'-3"	-	18'-10"	17'-5"	16'-8"	-		
11-7/8"	NI-60	18'-6"	17'-2"	16'-6"	-	19'-2"	17'-7"	16'-11"	-		
	NI-80	20'-2"	18'-6"	17'-7"	-	20'-10"	19'-1"	18'-1"	-		
	NI-90	20'-9"	18'-11"	18'-0"	-	21'-4"	19'-6"	18'-6"	-		
	NI-40x	20'-3"	18'-7"	17'-8"	-	21'-0"	19'-3"	18'-3"	-		
14"	NI-60	20'-8"	18'-11"	18'-0"	-	21'-5"	19'-8"	18'-8"	-		
14	NI-80	22'-7"	20'-7"	19'-7"	-	23'-3"	21'-3"	20'-2"	-		
	NI-90	23'-1"	21'-1"	20'-0"	-	23'-10"	21'-9"	20'-8"	-		
	NI-60	22'-8"	20'-9"	19'-8"	-	23'-5"	21'-6"	20'-5"	-		
16"	NI-80	24'-8"	22'-6"	21'-5"	-	25'-5"	23'-3"	22'-1"	-		
	NI-90	25'-2"	23'-0"	21'-10"	-	26'-0"	23'-9"	22'-7"	-		

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	16'-8"	15'-7"	14'-2"	-	17'-1"	15'-7"	14'-2"	-	
9-1/2"	NI-40x	18'-0"	16'-6"	15'-0"	-	18'-6"	16'-6"	15'-0"	-	
9-1/2	NI-60	18'-3"	17'-0"	16'-4"	-	18'-9"	17'-5"	16'-8"	-	
	NI-80	19'-10"	18'-3"	17'-5"	-	20'-4"	18'-8"	17'-9"	-	
	NI-20	19'-4"	17'-9"	16'-2"	-	20'-0"	17'-9"	16'-2"	-	
	NI-40x	21'-3"	18'-10"	17'-2"	-	21'-9"	18'-10"	17'-2"	-	
11-7/8"	NI-60	21'-7"	19'-10"	18'-10"	-	22'-2"	20'-5"	19'-5"	-	
	NI-80	23'-5"	21'-6"	20'-4"	-	24'-0"	22'-0"	20'-11"	-	
	NI-90	24'-0"	22'-0"	20'-10"	-	24'-6"	22'-6"	21'-4"	-	
	NI-40x	23'-11"	20'-8"	18'-10"	-	23'-11"	20'-8"	18'-10"	-	
14"	NI-60	24'-5"	22'-5"	21'-3"	-	25'-1"	23'-1"	21'-7"	-	
14	NI-80	26'-5"	24'-3"	23'-0"	-	27'-0"	24'-10"	23'-7"	-	
	NI-90	27'-0"	24'-9"	23'-6"	-	27'-7"	25'-5"	24'-1"	-	
	NI-60	27'-0"	24'-10"	23'-4"	-	27'-9"	25'-6"	23'-4"	-	
16"	NI-80	29'-2"	26'-9"	25'-4"	-	29'-10"	27'-5"	26'-0"	-	
	NI-90	29'-9"	27'-3"	25'-10"	-	30'-5"	28'-0"	26'-6"	-	

### Notes:

1. The tabulated clear spans are based on CSA O86-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - H2.1, L/360 and Nailed Only

Design Criteria	
Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 35 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	5/8 in. oriented strand board (OSB) sheathing, nailed only

#### Maximum Floor Spans

		Bare				1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	13'-10"	12'-11"	12'-4"	-	14'-3"	13'-3"	12'-9"	-	
9-1/2"	NI-40x	15'-1"	14'-1"	13'-6"	-	15'-5"	14'-5"	13'-10"	-	
9-1/2	NI-60	15'-3"	14'-3"	13'-8"	-	15'-8"	14'-7"	14'-0"	-	
	NI-80	16'-5"	15'-3"	14'-7"	-	16'-9"	15'-7"	13'-10"	-	
	NI-20	15'-8"	14'-7"	14'-0"	-	16'-2"	15'-1"	14'-5"	-	
	NI-40x	17'-0"	15'-10"	15'-2"	-	17'-5"	16'-3"	15'-7"	-	
11-7/8"	NI-60	17'-3"	16'-1"	15'-5"	-	17'-8"	16'-6"	15'-9"	-	
	NI-80	18'-7"	17'-2"	16'-5"	-	19'-1"	17'-7"	16'-10"	-	
	NI-90	19'-0"	17'-6"	16'-9"	-	19'-7"	17'-10"	15'-9" 16'-10"	-	
	NI-40x	18'-8"	17'-3"	16'-6"	-	19'-3"	17'-8"	17'-0"	-	
4.4"	NI-60	19'-0"	17'-6"	16'-10"	-	19'-8"	18'-0"	17'-3"	-	
14"	NI-80	20'-9"	18'-11"	17'-11"	-	21'-4"	19'-6"	18'-5"	-	
	NI-90	21'-3"	19'-4"	18'-4"	-	21'-10"	19'-11"	18'-10"	-	
	NI-60	20'-10"	19'-0"	18'-0"	-	21'-6"	19'-8"	18'-8"	-	
16"	NI-80	22'-8"	20'-8"	19'-7"	-	23'-3"	21'-3"	20'-2"	-	
	NI-90	23'-2"	21'-1"	20'-0"	-	23'-9"	21'-9"	20'-7"	-	

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	15'-8"	14'-3"	13'-5"	-	15'-9"	14'-3"	13'-5"	-	
9-1/2"	NI-40x	16'-11"	15'-10"	15'-1"	-	17'-3"	16'-2"	15'-1"	-	
9-1/2	NI-60	17'-1"	16'-0"	15'-4"	-	17'-5"	16'-4"	15'-7"	-	
	NI-80	18'-4"	17'-1"	16'-4"	-	18'-9"	17'-4"	16'-8"	-	
	NI-20	17'-11"	16'-9"	16'-1"	-	18'-6"	17'-2"	16'-2"	-	
	NI-40x	19'-8"	18'-0"	17'-3"	-	20'-2"	18'-6"	17'-3"	-	
11-7/8"	NI-60	19'-11"	18'-4"	17'-6"	-	20'-5"	18'-10"	17'-10"	-	
	NI-80	21'-7"	19'-9"	18'-9"	-	22'-1"	20'-3"	19'-2"	-	
	NI-90	22'-1"	20'-3"	19'-2"	-	22'-6"	20'-8"	19'-7"	-	
	NI-40x	22'-2"	20'-4"	18'-11"	-	22'-9"	20'-9"	18'-11"	-	
14"	NI-60	22'-7"	20'-8"	19'-7"	-	23'-2"	21'-3"	20'-2"	-	
14	NI-80	24'-4"	22'-4"	21'-2"	-	24'-11"	22'-10"	21'-8"	-	
	NI-90	24'-11"	22'-10"	21'-7"	-	25'-5"	23'-4"	22'-1"	-	
	NI-60	24'-11"	22'-11"	21'-8"	-	25'-7"	23'-6"	22'-4"	-	
16"	NI-80	26'-11"	24'-8"	23'-4"	-	27'-5"	25'-3"	23'-11"	-	
	NI-90	27'-5"	25'-2"	23'-10"	-	28'-0"	25'-9"	24'-4"	-	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - H2.2, L/360 and Nailed Only

Design Criteria	
Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 35 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	5/8 in. oriented strand board (OSB) sheathing, nailed only

#### Maximum Floor Spans

		Bare				1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	14'-11"	13'-11"	13'-4"	-	15'-5"	14'-4"	13'-9"	-	
9-1/2"	NI-40x	16'-3"	15'-2"	14'-7"	-	16'-8"	15'-7"	14'-11"	-	
9-1/2	NI-60	16'-6"	15'-4"	14'-9"	-	16'-11"	15'-9"	15'-1"	-	
	NI-80	17'-8"	16'-6"	15'-10"	-	18'-2"	16'-10"	16'-2"	-	
	NI-20	16'-11"	15'-9"	15'-2"	-	17'-5"	16'-3"	15'-8"	-	
	NI-40x	18'-6"	17'-1"	16'-5"	-	19'-1"	17'-7"	16'-10"	-	
11-7/8"	NI-60	18'-10"	17'-4"	16'-8"	-	19'-5"	17'-10"	17'-1"	-	
	NI-80	20'-6"	18'-9"	17'-10"	-	21'-2"	19'-4"	18'-4"	-	
	NI-90	21'-1"	19'-3"	18'-3"	-	21'-8"	19'-10"	18'-9"	-	
	NI-40x	20'-7"	18'-10"	17'-10"	-	21'-4"	19'-6"	18'-6"	-	
14"	NI-60	21'-1"	19'-3"	18'-3"	-	21'-9"	19'-11"	18'-11"	-	
14	NI-80	22'-11"	20'-11"	19'-10"	-	23'-7"	21'-7"	20'-6"	-	
	NI-90	23'-6"	21'-5"	20'-4"	-	24'-2"	22'-1"	20'-11"	-	
	NI-60	23'-0"	21'-1"	20'-0"	-	23'-10"	21'-10"	20'-8"	-	
16"	NI-80	25'-1"	22'-11"	21'-8"	-	25'-9"	23'-7"	22'-4"	-	
	NI-90	25'-7"	23'-5"	22'-2"	-	26'-4"	24'-1"	22'-10"	-	

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	16'-9"	15'-7"	14'-2"	-	17'-2"	15'-7"	14'-2"	-	
9-1/2"	NI-40x	18'-2"	16'-6"	15'-0"	-	18'-8"	16'-6"	15'-0"	-	
9-1/2	NI-60	18'-5"	17'-1"	16'-5"	-	18'-11"	17'-6"	16'-10"	-	
	NI-80	20'-1"	18'-5"	17'-7"	-	20'-6"	18'-10"	17'-10"	-	
	NI-20	19'-6"	17'-9"	16'-2"	-	20'-2"	17'-9"	16'-2"	-	
	NI-40x	21'-5"	18'-10"	17'-2"	-	21'-9"	18'-10"	17'-2"	-	
11-7/8"	NI-60	21'-10"	20'-0"	19'-0"	-	22'-4"	20'-7"	19'-6"	-	
	NI-80	23'-7"	21'-8"	20'-6"	-	24'-2"	22'-2"	21'-1"	-	
	NI-90	24'-2"	22'-2"	21'-0"	-	24'-8"	22'-8"	21'-6"	-	
	NI-40x	23'-11"	20'-8"	18'-10"	-	23'-11"	20'-8"	18'-10"	-	
14"	NI-60	24'-8"	22'-7"	21'-5"	-	25'-3"	23'-3"	21'-7"	-	
14	NI-80	26'-8"	24'-5"	23'-2"	-	27'-3"	25'-1"	23'-9"	-	
	NI-90	27'-3"	25'-0"	23'-8"	-	27'-10"	25'-7"	24'-3"	-	
	NI-60	27'-3"	25'-0"	23'-4"	-	27'-11"	25'-6"	23'-4"	-	
16"	NI-80	29'-5"	27'-0"	25'-6"	-	30'-0"	27'-8"	26'-3"	-	
	NI-90	30'-0"	27'-6"	26'-1"	-	30'-7"	28'-2"	26'-9"	-	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - H3.1, L/360 and Nailed Only

Design Criteria	
Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 35 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	23/32 in. oriented strand board (OSB) sheathing, nailed only

#### Maximum Floor Spans

		Bare				1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	14'-4"	13'-4"	12'-9"	12'-2"	14'-8"	13'-9"	13'-1"	12'-4"	
9-1/2"	NI-40x	15'-7"	14'-6"	13'-11"	13'-3"	15'-11"	14'-10"	14'-3"	13'-6"	
9-1/2	NI-60	15'-10"	14'-9"	14'-1"	13'-5"	16'-2"	15'-1"	14'-5"	13'-8"	
	NI-80	17'-0"	15'-9"	15'-1"	14'-4"	17'-3"	16'-1"	19.2" 13'-1" 14'-3" 14'-5" 15'-5" 14'-11" 16'-1" 16'-3" 17'-4" 17'-8" 17'-6" 17'-9" 19'-2"	14'-8"	
	NI-20	16'-3"	15'-1"	14'-6"	13'-9"	16'-8"	15'-7"	14'-11"	14'-2"	
	NI-40x	17'-7"	16'-5"	15'-8"	14'-11"	18'-0"	16'-9"	16'-1"	15'-3"	
11-7/8"	NI-60	17'-10"	16'-7"	15'-11"	15'-1"	18'-4"	17'-0"	16'-3"	15'-6"	
	NI-80	19'-5"	17'-9"	17'-0"	16'-2"	19'-11"	18'-2"	19.2" 13'-1" 14'-3" 14'-5" 15'-5" 14'-11" 16'-1" 16'-3" 17'-4" 17'-8" 17'-6" 17'-9"	16'-6"	
	NI-90	19'-11"	18'-2"	17'-4"	16'-6"	20'-4"	18'-7"		16'-9"	
	NI-40x	19'-6"	17'-10"	17'-1"	16'-3"	20'-1"	18'-4"	17'-6"	16'-8"	
14"	NI-60	19'-11"	18'-2"	17'-4"	16'-6"	20'-6"	18'-9"	17'-9"	16'-11"	
14	NI-80	21'-8"	19'-9"	18'-8"	17'-7"	22'-2"	20'-3"	19'-2"	18'-0"	
	NI-90	22'-2"	20'-3"	19'-1"	17'-11"	22'-8"	20'-9"	19'-7"	18'-5"	
	NI-60	21'-9"	19'-11"	18'-9"	17'-8"	22'-5"	20'-6"	19'-5"	18'-2"	
16"	NI-80	23'-8"	21'-7"	20'-5"	19'-1"	24'-3"	22'-2"	20'-11"	19'-8"	
	NI-90	24'-2"	22'-1"	20'-10"	19'-6"	24'-9"	22'-8"	21'-5"	20'-1"	

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	15'-9"	14'-3"	13'-5"	12'-4"	15'-9"	14'-3"	13'-5"	12'-4"	
9-1/2"	NI-40x	17'-3"	16'-2"	15'-1"	13'-6"	17'-7"	16'-4"	15'-1"	13'-6"	
9-1/2	NI-60	17'-5"	16'-4"	15'-7"	14'-4"	17'-9"	16'-7"	15'-7"	14'-4"	
	NI-80	18'-9"	17'-5"	16'-8"	15'-11"	19'-2"	17'-8"	17'-0"	16'-0"	
	NI-20	18'-3"	17'-1"	16'-2"	14'-6"	18'-10"	17'-3"	16'-2"	14'-6"	
	NI-40x	20'-1"	18'-5"	17'-3"	15'-5"	20'-7"	18'-10"	17'-3"	15'-5"	
11-7/8"	NI-60	20'-5"	18'-9"	17'-9"	16'-11"	20'-11"	19'-3"	18'-3"	17'-3"	
	NI-80	22'-1"	20'-3"	19'-2"	18'-0"	22'-6"	20'-9"	19'-8"	18'-5"	
	NI-90	22'-7"	20'-9"	19'-8"	18'-5"	23'-0"	21'-2"	20'-1"	18'-10"	
	NI-40x	22'-7"	20'-9"	18'-11"	16'-11"	23'-2"	20'-9"	18'-11"	16'-11"	
14"	NI-60	23'-0"	21'-2"	20'-0"	18'-10"	23'-7"	21'-9"	20'-7"	19'-4"	
14	NI-80	24'-11"	22'-11"	21'-8"	20'-4"	25'-5"	23'-5"	22'-2"	20'-9"	
	NI-90	25'-5"	23'-5"	22'-1"	20'-9"	25'-11"	23'-11"	22'-7"	21'-3"	
	NI-60	25'-5"	23'-5"	22'-2"	20'-9"	26'-0"	24'-0"	22'-9"	20'-11"	
16"	NI-80	27'-5"	25'-3"	23'-10"	22'-4"	27'-11"	25'-10"	24'-5"	22'-11"	
	NI-90	28'-0"	25'-9"	24'-4"	22'-10"	28'-6"	26'-4"	24'-11"	23'-4"	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - H3.2, L/360 and Nailed Only

Design Criteria	
Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 35 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	23/32 in. oriented strand board (OSB) sheathing, nailed only

#### Maximum Floor Spans

		Bare				1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	15'-5"	14'-5"	13'-9"	12'-8"	15'-10"	14'-10"	14'-2"	12'-8"	
9-1/2"	NI-40x	16'-10"	15'-8"	15'-0"	13'-5"	17'-3"	16'-1"	15'-0"	13'-5"	
9-1/2	NI-60	17'-1"	15'-11"	15'-3"	14'-4"	17'-5"	16'-3"	15'-7"	14'-4"	
	NI-80	18'-5"	17'-1"	16'-4"	14'-4"	18'-11"	17'-5"	16'-8"	14'-4"	
	NI-20	17'-6"	16'-4"	15'-8"	14'-5"	18'-1"	16'-10"	16'-1"	14'-5"	
	NI-40x	19'-4"	17'-8"	16'-11"	15'-4"	19'-11"	18'-3"	17'-2"	15'-4"	
11-7/8"	NI-60	19'-8"	18'-0"	17'-2"	16'-4"	20'-3"	18'-6"	17'-7"	16'-9"	
	NI-80	21'-5"	19'-7"	18'-6"	17'-6"	22'-0"	20'-2"	19'-0"	17'-10"	
	NI-90	22'-0"	20'-1"	19'-0"	17'-10"	22'-6"	20'-7"	16'-1" 17'-2" 17'-7"	18'-4"	
	NI-40x	21'-6"	19'-8"	18'-7"	16'-10"	22'-2"	20'-4"	18'-10"	16'-10"	
14"	NI-60	22'-0"	20'-1"	19'-0"	17'-10"	22'-8"	20'-9"	19'-7"	18'-5"	
14	NI-80	23'-11"	21'-11"	20'-8"	19'-5"	24'-7"	22'-6"	21'-3"	19'-11"	
	NI-90	24'-6"	22'-5"	21'-2"	19'-10"	25'-2"	23'-0"	21'-9"	20'-3"	
	NI-60	24'-1"	22'-0"	20'-9"	19'-6"	24'-9"	22'-8"	21'-6"	19'-8"	
16"	NI-80	26'-2"	23'-11"	22'-7"	21'-2"	26'-10"	24'-7"	23'-3"	21'-10"	
	NI-90	26'-9"	24'-5"	23'-1"	21'-8"	27'-5"	25'-1"	23'-9"	21'-11'	

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	17'-0"	15'-7"	14'-2"	12'-8"	17'-6"	15'-7"	14'-2"	12'-8"	
9-1/2"	NI-40x	18'-7"	16'-6"	15'-0"	13'-5"	19'-1"	16'-6"	15'-0"	13'-5"	
9-1/2	NI-60	18'-11"	17'-6"	16'-9"	14'-4"	19'-4"	17'-10"	17'-1"	14'-4"	
	NI-80	20'-7"	18'-11"	17'-11"	14'-4"	21'-0"	19'-4"	18'-0"	14'-4"	
	NI-20	19'-11"	17'-9"	16'-2"	14'-5"	20'-6"	17'-9"	16'-2"	14'-5"	
	NI-40x	21'-9"	18'-10"	17'-2"	15'-4"	21'-9"	18'-10"	17'-2"	15'-4"	
11-7/8"	NI-60	22'-4"	20'-6"	19'-5"	17'-7"	22'-10"	21'-1"	19'-8"	17'-7"	
	NI-80	24'-2"	22'-3"	21'-1"	17'-10"	24'-8"	22'-9"	21'-7"	17'-10"	
	NI-90	24'-9"	22'-9"	21'-7"	20'-3"	25'-3"	23'-3"	22'-1"	20'-3"	
	NI-40x	23'-11"	20'-8"	18'-10"	16'-10"	23'-11"	20'-8"	18'-10"	16'-10"	
14"	NI-60	25'-2"	23'-2"	21'-7"	18'-11"	25'-9"	23'-8"	21'-7"	18'-11"	
14	NI-80	27'-3"	25'-1"	23'-9"	20'-1"	27'-10"	25'-8"	24'-4"	20'-1"	
	NI-90	27'-10"	25'-7"	24'-3"	20'-3"	28'-5"	26'-2"	24'-10"	20'-3"	
	NI-60	27'-9"	25'-6"	23'-4"	19'-8"	28'-5"	25'-6"	23'-4"	19'-8"	
16"	NI-80	30'-0"	27'-7"	26'-2"	21'-11"	30'-7"	28'-3"	26'-10"	21'-11"	
	NI-90	30'-7"	28'-2"	26'-8"	21'-11"	31'-3"	28'-10"	27'-4"	21'-11"	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - H4.1, L/360 and Nailed Only

Design Criteria	
Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 35 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	3/4 in. oriented strand board (OSB) sheathing, nailed only

#### Maximum Floor Spans

		Bare				1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	14'-6"	13'-6"	12'-11"	12'-3"	14'-10"	13'-10"	13'-3"	12'-4"	
9-1/2"	NI-40x	15'-9"	14'-8"	14'-1"	13'-4"	16'-1"	15'-0"	14'-4"	13'-6"	
9-1/2	NI-60	16'-0"	14'-10"	14'-3"	13'-6"	16'-4"	15'-2"	14'-6"	13'-10"	
	NI-80	17'-2"	16'-0"	15'-3"	14'-6"	17'-5"	16'-3"	15'-7"	14'-9"	
	NI-20	16'-5"	15'-3"	14'-7"	13'-11"	16'-10"	15'-8"	15'-0"	14'-3"	
	NI-40x	17'-9"	16'-7"	15'-10"	15'-1"	18'-3"	16'-11"	16'-3"	15'-5"	
11-7/8"	NI-60	18'-0"	16'-9"	16'-1"	15'-3"	18'-6"	17'-2"	16'-5"	15'-7"	
	NI-80	19'-8"	17'-11"	17'-2"	16'-4"	20'-2"	18'-5"	17'-6"	16'-7"	
	NI-90	20'-2"	18'-5"	17'-6"	16'-7"	20'-7"	18'-10"	15'-7" 15'-0" 16'-3" 16'-5"	16'-11"	
	NI-40x	19'-9"	18'-0"	17'-3"	16'-5"	20'-4"	18'-7"	17'-8"	16'-9"	
14"	NI-60	20'-2"	18'-5"	17'-6"	16'-8"	20'-9"	19'-0"	17'-11"	17'-1"	
14	NI-80	21'-11"	20'-0"	18'-11"	17'-9"	22'-6"	20'-7"	19'-5"	18'-2"	
	NI-90	22'-6"	20'-6"	19'-4"	18'-1"	23'-0"	21'-0"	19'-10"	18'-7"	
	NI-60	22'-1"	20'-2"	19'-0"	17'-10"	22'-8"	20'-9"	19'-8"	18'-5"	
16"	NI-80	24'-0"	21'-11"	20'-8"	19'-4"	24'-7"	22'-6"	21'-3"	19'-10"	
	NI-90	24'-6"	22'-4"	21'-1"	19'-9"	25'-1"	22'-11"	21'-8"	20'-3"	

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing			On cent	re spacing		
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	15'-9"	14'-3"	13'-5"	12'-4"	15'-9"	14'-3"	13'-5"	12'-4"	
9-1/2"	NI-40x	17'-4"	16'-3"	15'-1"	13'-6"	17'-8"	16'-4"	15'-1"	13'-6"	
9-1/2	NI-60	17'-6"	16'-5"	15'-7"	14'-4"	17'-10"	16'-7"	15'-7"	14'-4"	
	NI-80	18'-11"	17'-6"	16'-9"	16'-0"	19'-4"	17'-10"	17'-1"	16'-0"	
	NI-20	18'-5"	17'-2"	16'-2"	14'-6"	18'-11"	17'-3"	16'-2"	14'-6"	
	NI-40x	20'-2"	18'-7"	17'-3"	15'-5"	20'-8"	18'-10"	17'-3"	15'-5"	
11-7/8"	NI-60	20'-6"	18'-11"	17'-11"	17'-0"	21'-0"	19'-5"	18'-4"	17'-3"	
	NI-80	22'-3"	20'-5"	19'-4"	18'-2"	22'-8"	20'-11"	19'-10"	18'-7"	
	NI-90	22'-9"	20'-11"	19'-10"	18'-7"	23'-2"	21'-4"	20'-3"	19'-0"	
	NI-40x	22'-9"	20'-9"	18'-11"	16'-11"	23'-3"	20'-9"	18'-11"	16'-11"	
14"	NI-60	23'-2"	21'-4"	20'-2"	18'-11"	23'-9"	21'-11"	20'-9"	19'-5"	
14	NI-80	25'-1"	23'-1"	21'-10"	20'-5"	25'-6"	23'-7"	22'-4"	20'-11"	
	NI-90	25'-7"	23'-7"	22'-3"	20'-11"	26'-1"	24'-1"	22'-9"	21'-4"	
	NI-60	25'-7"	23'-7"	22'-3"	20'-10"	26'-2"	24'-2"	22'-11"	20'-11"	
16"	NI-80	27'-7"	25'-5"	24'-0"	22'-6"	28'-1"	26'-0"	24'-7"	23'-1"	
	NI-90	28'-2"	25'-11"	24'-6"	22'-11"	28'-8"	26'-6"	25'-1"	23'-6"	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - H4.2, L/360 and Nailed Only

Design Criteria	
Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 35 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	3/4 in. oriented strand board (OSB) sheathing, nailed only

#### Maximum Floor Spans

		Bare				1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	15'-7"	14'-7"	13'-11"	12'-8"	16'-0"	15'-0"	14'-2"	12'-8"	
9-1/2"	NI-40x	17'-0"	15'-10"	15'-0"	13'-5"	17'-5"	16'-3"	15'-0"	13'-5"	
9-1/2	NI-60	17'-3"	16'-1"	15'-4"	14'-4"	17'-7"	16'-5"	15'-9"	14'-4"	
	NI-80	18'-8"	17'-3"	16'-6"	14'-4"	19'-2"	17'-7"	16'-10"	14'-4"	
	NI-20	17'-8"	16'-6"	15'-9"	14'-5"	18'-3"	17'-0"	16'-2"	14'-5"	
	NI-40x	19'-7"	17'-11"	17'-1"	15'-4"	20'-2"	18'-5"	17'-2"	15'-4"	
11-7/8"	NI-60	19'-11"	18'-3"	17'-4"	16'-6"	20'-6"	18'-9"	17'-9"	16'-11"	
	NI-80	21'-9"	19'-10"	18'-9"	17'-8"	22'-3"	20'-5"	19'-3"	17'-10"	
	NI-90	22'-4"	20'-4"	19'-3"	18'-0"	22'-10"	20'-11"	17'-2" 17'-9" 19'-3" 19'-9"	18'-6"	
	NI-40x	21'-10"	19'-11"	18'-10"	16'-10"	22'-5"	20'-7"	18'-10"	16'-10"	
14"	NI-60	22'-3"	20'-4"	19'-3"	18'-1"	22'-11"	21'-0"	19'-10"	18'-8"	
14	NI-80	24'-3"	22'-2"	20'-11"	19'-8"	24'-10"	22'-9"	21'-6"	20'-1"	
	NI-90	24'-10"	22'-9"	21'-5"	20'-1"	25'-5"	23'-4"	22'-0"	20'-3"	
	NI-60	24'-4"	22'-3"	21'-1"	19'-8"	25'-1"	23'-0"	21'-9"	19'-8"	
16"	NI-80	26'-6"	24'-3"	22'-11"	21'-5"	27'-2"	24'-11"	23'-7"	21'-11"	
	NI-90	27'-1"	24'-9"	23'-5"	21'-11"	27'-9"	25'-5"	24'-1"	21'-11"	

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing			On cent	re spacing		
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	17'-2"	15'-7"	14'-2"	12'-8"	17'-7"	15'-7"	14'-2"	12'-8"	
9-1/2"	NI-40x	18'-9"	16'-6"	15'-0"	13'-5"	19'-1"	16'-6"	15'-0"	13'-5"	
9-1/2	NI-60	19'-0"	17'-7"	16'-10"	14'-4"	19'-6"	18'-0"	17'-3"	14'-4"	
	NI-80	20'-9"	19'-1"	18'-0"	14'-4"	21'-2"	19'-6"	18'-0"	14'-4"	
	NI-20	20'-1"	17'-9"	16'-2"	14'-5"	20'-6"	17'-9"	16'-2"	14'-5"	
	NI-40x	21'-9"	18'-10"	17'-2"	15'-4"	21'-9"	18'-10"	17'-2"	15'-4"	
11-7/8"	NI-60	22'-5"	20'-8"	19'-7"	17'-7"	23'-0"	21'-3"	19'-8"	17'-7"	
	NI-80	24'-4"	22'-5"	21'-3"	17'-10"	24'-10"	22'-11"	21'-9"	17'-10"	
	NI-90	24'-11"	22'-11"	21'-9"	20'-3"	25'-5"	23'-6"	22'-3"	20'-3"	
	NI-40x	23'-11"	20'-8"	18'-10"	16'-10"	23'-11"	20'-8"	18'-10"	16'-10"	
14"	NI-60	25'-4"	23'-4"	21'-7"	18'-11"	25'-11"	23'-8"	21'-7"	18'-11"	
14	NI-80	27'-5"	25'-3"	23'-11"	20'-1"	28'-0"	25'-10"	24'-6"	20'-1"	
	NI-90	90 28'-1" 25'-10" 24'-5" 20'-3" 28'-7" 26'-5	26'-5"	25'-0"	20'-3"					
	NI-60	27'-11"	25'-6"	23'-4"	19'-8"	28'-7"	25'-6"	23'-4"	19'-8"	
16"	NI-80	30'-2"	27'-10"	26'-4"	21'-11"	30'-10"	28'-6"	27'-0"	21'-11"	
	NI-90	30'-10"	28'-5"	26'-11"	21'-11"	31'-5"	29'-0"	27'-6"	21'-11"	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - H5.1, L/360 and Nailed Only

Design Criteria	
Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 35 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	7/8 in. oriented strand board (OSB) sheathing, nailed only

#### Maximum Floor Spans

		Bare				1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	15'-0"	14'-0"	13'-5"	12'-4"	15'-5"	14'-3"	13'-5"	12'-4"	
9-1/2"	NI-40x	16'-4"	15'-3"	14'-7"	13'-6"	16'-8"	15'-7"	14'-11"	13'-6"	
9-1/2	NI-60	16'-7"	15'-5"	14'-9"	14'-0"	16'-11"	15'-9"	15'-1"	14'-3"	
	NI-80	17'-10"	16'-7"	15'-10"	15'-0"	18'-1"	16'-10"	16'-2" 15'-7" 16'-10"	15'-3"	
	NI-20	17'-0"	15'-10"	15'-2"	14'-5"	17'-5"	16'-4"	15'-7"	14'-6"	
	NI-40x	18'-7"	17'-2"	16'-5"	15'-5"	19'-1"	17'-7"	16'-10"	15'-5"	
11-7/8"	NI-60	18'-11"	17'-5"	16'-8"	15'-10"	19'-5"	17'-10"	17'-0"	16'-2"	
	NI-80	20'-7"	18'-10"	17'-10"	16'-11"	21'-1"	19'-4"	18'-3"	17'-2"	
	NI-90	21'-2"	19'-4"	18'-3"	17'-2"	21'-7"	19'-9"	15'-1" 16'-2" 15'-7" 16'-10" 17'-0" 18'-3" 18'-8" 18'-5" 18'-9" 20'-4"	17'-6"	
	NI-40x	20'-8"	18'-11"	17'-11"	16'-11"	21'-3"	19'-6"	18'-5"	16'-11"	
14"	NI-60	21'-2"	19'-4"	18'-3"	17'-3"	21'-8"	19'-11"	18'-9"	17'-8"	
14	NI-80	23'-0"	21'-1"	19'-10"	18'-6"	23'-6"	21'-7"	20'-4"	19'-0"	
	NI-90	23'-7"	21'-7"	20'-4"	18'-11"	24'-1"	22'-1"	20'-10"	19'-5"	
	NI-60	23'-1"	21'-2"	20'-0"	18'-8"	23'-8"	21'-9"	20'-7"	19'-3"	
16"	NI-80	25'-2"	23'-0"	21'-8"	20'-3"	25'-8"	23'-7"	22'-3"	20'-9"	
	NI-90	25'-8"	23'-6"	22'-2"	20'-8"	26'-3"	24'-1"	22'-9"	21'-2"	

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	15'-9"	14'-3"	13'-5"	12'-4"	15'-9"	14'-3"	13'-5"	12'-4"	
9-1/2"	NI-40x	17'-8"	16'-4"	15'-1"	13'-6"	18'-0"	16'-4"	15'-1"	13'-6"	
9-1/2	NI-60	17'-11"	16'-7"	15'-7"	14'-4"	18'-3"	16'-7"	15'-7"	14'-4"	
	NI-80	19'-6"	17'-11"	17'-2"	16'-0"	19'-10"	18'-4"	17'-5"	16'-0"	
	NI-20	18'-10"	17'-3"	16'-2"	14'-6"	19'-1"	17'-3"	16'-2"	14'-6"	
	NI-40x	20'-8"	18'-10"	17'-3"	15'-5"	21'-2"	18'-10"	17'-3"	15'-5"	
11-7/8"	NI-60	21'-1"	19'-5"	18'-5"	17'-3"	21'-6"	19'-11"	18'-8"	17'-3"	
	NI-80	22'-10"	21'-1"	19'-11"	18'-8"	23'-3"	21'-6"	20'-5"	19'-1"	
	NI-90	23'-4"	21'-7"	20'-5"	19'-1"	23'-9"	22'-0"	20'-10"	19'-6"	
	NI-40x	23'-3"	20'-9"	18'-11"	16'-11"	23'-10"	20'-9"	18'-11"	16'-11"	
14"	NI-60	23'-8"	21'-11"	20'-9"	19'-5"	24'-3"	22'-6"	21'-4"	19'-5"	
14	NI-80	25'-8"	23'-9"	22'-5"	21'-0"	26'-2"	24'-3"	23'-0"	21'-6"	
	NI-90	26'-3"	24'-3"	22'-11"	21'-5"	26'-8"	24'-9"	23'-6"	21'-11"	
	NI-60	26'-1"	24'-2"	22'-11"	20'-11"	26'-8"	24'-9"	23'-4"	20'-11"	
16"	NI-80	28'-3"	26'-1"	24'-9"	23'-1"	28'-9"	26'-8"	25'-4"	23'-6"	
	NI-90	28'-10"	26'-8"	25'-3"	23'-6"	29'-4"	27'-2"	25'-10"	23'-6"	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - H5.2, L/360 and Nailed Only

Design Criteria	
Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 35 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	7/8 in. oriented strand board (OSB) sheathing, nailed only

#### Maximum Floor Spans

		Bare				1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	16'-2"	15'-1"	14'-2"	12'-8"	16'-7"	15'-6"	14'-2"	12'-8"	
9-1/2"	NI-40x	17'-8"	16'-6"	15'-0"	13'-5"	18'-1"	16'-6"	15'-0"	13'-5"	
9-1/2	NI-60	17'-11"	16'-8"	15'-11"	14'-4"	18'-4"	17'-1"	16'-4"	14'-4"	
	NI-80	19'-7"	17'-11"	17'-2"	14'-4"	20'-0"	18'-4"	17'-5"	14'-4"	
	NI-20	18'-6"	17'-2"	16'-2"	14'-5"	19'-1"	17'-7"	16'-2"	14'-5"	
	NI-40x	20'-6"	18'-9"	17'-2"	15'-4"	21'-1"	18'-10"	17'-2"	15'-4"	
11-7/8"	NI-60	20'-10"	19'-1"	18'-1"	17'-1"	21'-5"	19'-8"	18'-7"	17'-6"	
	NI-80	22'-9"	20'-10"	19'-8"	17'-10"	23'-3"	21'-4"	20'-2"	17'-10"	
	NI-90	23'-4"	21'-5"	20'-2"	18'-10"	23'-10"	21'-11"	20'-8"	19'-4"	
	NI-40x	22'-10"	20'-8"	18'-10"	16'-10"	23'-6"	20'-8"	18'-10"	16'-10"	
14"	NI-60	23'-4"	21'-4"	20'-2"	18'-10"	23'-11"	22'-0"	20'-10"	18'-11"	
14	NI-80	25'-5"	23'-3"	22'-0"	20'-1"	26'-0"	23'-10"	22'-7"	20'-1"	
	NI-90	26'-1"	23'-10"	22'-6"	20'-3"	26'-7"	24'-5"	23'-1"	20'-3"	
	NI-60	25'-6"	23'-5"	22'-1"	19'-8"	26'-2"	24'-1"	22'-9"	19'-8"	
16"	NI-80	27'-9"	25'-5"	24'-0"	21'-11"	28'-5"	26'-1"	24'-8"	21'-11'	
	NI-90	28'-5"	26'-0"	24'-7"	21'-11"	29'-0"	26'-8"	25'-2"	21'-11"	

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	17'-6"	15'-7"	14'-2"	12'-8"	17'-11"	15'-7"	14'-2"	12'-8"	
9-1/2"	NI-40x	19'-1"	16'-6"	15'-0"	13'-5"	19'-1"	16'-6"	15'-0"	13'-5"	
9-1/2	NI-60	19'-7"	18'-1"	17'-3"	14'-4"	20'-0"	18'-6"	17'-3"	14'-4"	
	NI-80	21'-4"	19'-8"	18'-0"	14'-4"	21'-9"	20'-1"	18'-0"	14'-4"	
	NI-20	20'-6"	17'-9"	16'-2"	14'-5"	20'-6"	17'-9"	16'-2"	14'-5"	
	NI-40x	21'-9"	18'-10"	17'-2"	15'-4"	21'-9"	18'-10"	17'-2"	15'-4"	
11-7/8"	NI-60	23'-1"	21'-4"	19'-8"	17'-7"	23'-7"	21'-7"	19'-8"	17'-7"	
	NI-80	25'-0"	23'-1"	21'-11"	17'-10"	25'-6"	23'-8"	22'-4"	17'-10"	
	NI-90	25'-8"	23'-8"	22'-5"	20'-3"	26'-1"	24'-2"	22'-11"	20'-3"	
	NI-40x	23'-11"	20'-8"	18'-10"	16'-10"	23'-11"	20'-8"	18'-10"	16'-10"	
14"	NI-60	25'-11"	23'-8"	21'-7"	18'-11"	26'-7"	23'-8"	21'-7"	18'-11"	
14	NI-80	28'-1"	26'-0"	24'-8"	20'-1"	28'-8"	26'-7"	25'-2"	20'-1"	
	NI-90	28'-9"	26'-7"	25'-2"	20'-3"	29'-4"	27'-2"	25'-4"	20'-3"	
	NI-60	28'-7"	25'-6"	23'-4"	19'-8"	29'-3"	25'-6"	23'-4"	19'-8"	
16"	NI-80	30'-11"	28'-7"	27'-1"	21'-11"	31'-6"	29'-3"	27'-6"	21'-11"	
	NI-90	31'-7"	29'-2"	27'-6"	21'-11"	32'-3"	29'-10"	27'-6"	21'-11"	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - H6.1, L/360 and Nailed Only

Design Criteria	
Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 35 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	5/8 in. Canadian softwood plywood, nailed only

#### Maximum Floor Spans

		Bare				1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	13'-9"	12'-10"	12'-4"	-	14'-2"	13'-3"	12'-8"	-	
9-1/2"	NI-40x	15'-0"	14'-0"	13'-5"	-	15'-5"	14'-4"	13'-9"	-	
9-1/2	NI-60	15'-2"	14'-2"	13'-7"	-	15'-7"	14'-6"	13'-11"	-	
	NI-80	16'-4"	15'-2"	14'-7"	-	16'-8"	15'-6"	14'-11" 14'-5" 15'-6"	-	
	NI-20	15'-7"	14'-7"	14'-0"	-	16'-1"	15'-0"	14'-5"	-	
	NI-40x	16'-11"	15'-9"	15'-1"	-	17'-4"	16'-2"	15'-6"	-	
11-7/8"	NI-60	17'-2"	16'-0"	15'-4"	-	17'-7"	16'-5"	15'-9"	-	
	NI-80	18'-5"	17'-1"	16'-5"	-	19'-0"	17'-6"	16'-9"	-	
	NI-90	18'-11"	17'-5"	16'-8"	-	19'-5"	17'-10"	17'-1"	-	
	NI-40x	18'-6"	17'-2"	16'-6"	-	19'-2"	17'-7"	16'-11"	-	
14"	NI-60	18'-11"	17'-5"	16'-9"	-	19'-7"	17'-11"	17'-2"	-	
14	NI-80	20'-7"	18'-10"	17'-10"	-	21'-2"	19'-4"	18'-4"	-	
	NI-90	21'-1"	19'-3"	18'-3"	-	21'-8"	19'-10"	18'-9"	-	
	NI-60	20'-8"	18'-11"	17'-11"	-	21'-5"	19'-7"	18'-7"	-	
16"	NI-80	22'-6"	20'-6"	19'-5"	-	23'-2"	21'-2"	20'-1"	-	
	NI-90	23'-0"	21'-0"	19'-11"	-	23'-8"	21'-7"	20'-6"	-	

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	15'-8"	14'-3"	13'-5"	-	15'-9"	14'-3"	13'-5"	-	
9-1/2"	NI-40x	16'-11"	15'-10"	15'-1"	-	17'-3"	16'-2"	15'-1"	-	
9-1/2	NI-60	17'-1"	16'-0"	15'-4"	-	17'-5"	16'-4"	15'-7"	-	
	NI-80	18'-3"	17'-0"	16'-4"	-	18'-8"	17'-4"	16'-7"	-	
	NI-20	17'-11"	16'-9"	16'-1"	-	18'-5"	17'-2"	16'-2"	-	
	NI-40x	19'-7"	17'-11"	17'-3"	-	20'-1"	18'-6"	17'-3"	-	
11-7/8"	NI-60	19'-11"	18'-3"	17'-5"	-	20'-5"	18'-9"	17'-10"	-	
	NI-80	21'-6"	19'-9"	18'-8"	-	22'-0"	20'-2"	19'-2"	-	
	NI-90	22'-0"	20'-2"	19'-1"	-	22'-6"	20'-8"	19'-7"	-	
	NI-40x	22'-1"	20'-3"	18'-11"	-	22'-8"	20'-9"	18'-11"	-	
14"	NI-60	22'-6"	20'-8"	19'-7"	-	23'-1"	21'-3"	20'-1"	-	
14	NI-80	24'-4"	22'-3"	21'-1"	-	24'-10"	22'-10"	21'-7"	-	
	NI-90	24'-10" 22'-9" 21'-6" - 25'-4" 23'-3"	22'-1"	-						
	NI-60	24'-11"	22'-10"	21'-7"	-	25'-6"	23'-6"	22'-3"	-	
16"	NI-80	26'-10"	24'-7"	23'-3"	-	27'-5"	25'-2"	23'-10"	-	
	NI-90	27'-4"	25'-1"	23'-9"	-	27'-11"	25'-8"	24'-4"	-	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - H6.2, L/360 and Nailed Only

Design Criteria	
Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 35 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	5/8 in. Canadian softwood plywood, nailed only

#### Maximum Floor Spans

		Bare				1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	14'-10"	13'-10"	13'-4"	-	15'-4"	14'-3"	13'-8"	-	
9-1/2"	NI-40x	16'-2"	15'-1"	14'-6"	-	16'-8"	15'-6"	14'-11"	-	
9-1/2	NI-60	16'-5"	15'-4"	14'-8"	-	16'-10"	15'-8"	15'-1"	-	
	NI-80	17'-7"	16'-5"	15'-9"	-	18'-1"	16'-10"	13'-8" 14'-11" 15'-1" 16'-1" 15'-7" 16'-10" 17'-0" 18'-3" 18'-8" 18'-5"	-	
	NI-20	16'-10"	15'-8"	15'-1"	-	17'-4"	16'-3"	15'-7"	-	
	NI-40x	18'-5"	17'-0"	16'-4"	-	19'-0"	17'-6"	16'-10"	-	
11-7/8"	NI-60	18'-9"	17'-3"	16'-7"	-	19'-4"	17'-9"	17'-0"	-	
	NI-80	20'-5"	18'-8"	17'-9"	-	21'-0"	19'-3"	18'-3"	-	
	NI-90	20'-11"	19'-1"	18'-2"	-	21'-6"	19'-8"	15'-7" 16'-10" 17'-0" 18'-3" <u>18'-8"</u> 18'-5"	-	
	NI-40x	20'-6"	18'-9"	17'-10"	-	21'-2"	19'-5"	18'-5"	-	
14"	NI-60	20'-11"	19'-2"	18'-2"	-	21'-8"	19'-10"	18'-10"	-	
14	NI-80	22'-9"	20'-10"	19'-9"	-	23'-6"	21'-6"	20'-4"	-	
	NI-90	23'-4"	21'-4"	20'-3"	-	24'-0"	22'-0"	20'-10"	-	
	NI-60	22'-11"	20'-11"	19'-10"	-	23'-8"	21'-8"	20'-7"	-	
16"	NI-80	24'-11"	22'-9"	21'-7"	-	25'-8"	23'-6"	22'-3"	-	
	NI-90	25'-6"	23'-3"	22'-1"	-	26'-2"	24'-0"	22'-9"	-	

		Mid-span blocking with 1x4 inch strap On centre spacing				Mid-span blocking and 1/2 in. gypsum ceiling On centre spacing				
Joist depth	Joist series									
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	16'-8"	15'-7"	14'-2"	-	17'-2"	15'-7"	14'-2"	-	
9-1/2"	NI-40x	18'-1"	16'-6"	15'-0"	-	18'-7"	16'-6"	15'-0"	-	
9-1/2	NI-60	18'-4"	17'-1"	16'-5"	-	18'-10"	17'-5"	16'-9"	-	
	NI-80	20'-0"	18'-4"	17'-6"	-	20'-5"	18'-9"	17'-10"	-	
	NI-20	19'-6"	17'-9"	16'-2"	-	20'-1"	17'-9"	16'-2"	-	
	NI-40x	21'-5"	18'-10"	17'-2"	-	21'-9"	18'-10"	17'-2"	-	
11-7/8"	NI-60	21'-9"	19'-11"	18'-11"	-	22'-4"	20'-6"	19'-6"	-	
	NI-80	23'-6"	21'-7"	20'-6"	-	24'-1"	22'-2"	21'-0"	-	
	NI-90	24'-1"	22'-1"	20'-11"	-	24'-7"	22'-8"	21'-6"	-	
	NI-40x	23'-11"	20'-8"	18'-10"	-	23'-11"	20'-8"	18'-10"	-	
14"	NI-60	24'-7"	22'-7"	21'-4"	-	25'-3"	23'-3"	21'-7"	-	
14	NI-80	26'-7"	24'-4"	23'-1"	-	27'-2"	25'-0"	23'-8"	-	
	NI-90	27'-2"	24'-11"	23'-7"	-	27'-9"	25'-6"	24'-2"	-	
16"	NI-60	27'-2"	24'-11"	23'-4"	-	27'-10"	25'-6"	23'-4"	-	
	NI-80	29'-4"	26'-11"	25'-6"	-	29'-11"	27'-7"	26'-2"	-	
	NI-90	29'-11"	27'-5"	26'-0"	-	30'-6"	28'-1"	26'-8"	-	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - H7.1, L/360 and Nailed Only

Design Criteria	
Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 35 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	3/4 in. Canadian softwood plywood, nailed only

#### Maximum Floor Spans

		Bare On centre spacing				1/2 in. gypsum ceiling On centre spacing				
Joist depth	Joist series									
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	14'-5"	13'-5"	12'-10"	12'-3"	14'-9"	13'-9"	13'-2"	12'-4"	
9-1/2"	NI-40x	15'-8"	14'-7"	14'-0"	13'-4"	16'-0"	14'-11"	14'-4"	13'-6"	
9-1/2	NI-60	15'-11"	14'-10"	14'-2"	13'-6"	16'-3"	15'-1"	14'-6"	13'-9"	
	NI-80	17'-1"	15'-11"	15'-2"	14'-5"	17'-4"	16'-2"	15'-6"	14'-8"	
	NI-20	16'-4"	15'-2"	14'-7"	13'-10"	16'-9"	15'-8"	15'-0"	14'-3"	
	NI-40x	17'-8"	16'-6"	15'-9"	15'-0"	18'-1"	16'-10"	16'-2"	15'-4"	
11-7/8"	NI-60	17'-11"	16'-8"	16'-0"	15'-2"	18'-5"	17'-1"	16'-4"	15'-6"	
	NI-80	19'-7"	17'-10"	17'-1"	16'-3"	20'-0"	18'-3"	17'-5"	16'-7"	
	NI-90	20'-0"	18'-3"	17'-5"	16'-7"	20'-6"	18'-9"	17'-9"	16'-10"	
	NI-40x	19'-7"	17'-11"	17'-2"	16'-4"	20'-2"	18'-6"	17'-7"	16'-9"	
14"	NI-60	20'-0"	18'-4"	17'-5"	16'-7"	20'-7"	18'-10"	17'-10"	17'-0"	
14	NI-80	21'-10"	19'-11"	18'-9"	17'-8"	22'-4"	20'-5"	19'-4"	18'-1"	
	NI-90	22'-4"	20'-4"	19'-3"	18'-0"	22'-10"	20'-11"	19'-9"	18'-6"	
16"	NI-60	21'-11"	20'-0"	18'-11"	17'-9"	22'-6"	20'-8"	19'-6"	18'-4"	
	NI-80	23'-10"	21'-9"	20'-6"	19'-3"	24'-5"	22'-4"	21'-1"	19'-9"	
	NI-90	24'-4"	22'-3"	21'-0"	19'-8"	24'-11"	22'-10"	21'-6"	20'-2"	

		Mid-span blocking with 1x4 inch strap On centre spacing				Mid-span blocking and 1/2 in. gypsum ceiling On centre spacing				
Joist depth	Joist series									
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	15'-9"	14'-3"	13'-5"	12'-4"	15'-9"	14'-3"	13'-5"	12'-4"	
9-1/2"	NI-40x	17'-3"	16'-2"	15'-1"	13'-6"	17'-7"	16'-4"	15'-1"	13'-6"	
9-1/2	NI-60	17'-6"	16'-5"	15'-7"	14'-4"	17'-9"	16'-7"	15'-7"	14'-4"	
	NI-80	18'-10"	17'-6"	16'-9"	15'-11"	19'-3"	17'-9"	17'-0"	16'-0"	
	NI-20	18'-4"	17'-1"	16'-2"	14'-6"	18'-11"	17'-3"	16'-2"	14'-6"	
	NI-40x	20'-2"	18'-6"	17'-3"	15'-5"	20'-8"	18'-10"	17'-3"	15'-5"	
11-7/8"	NI-60	20'-6"	18'-10"	17'-10"	17'-0"	20'-11"	19'-4"	18'-3"	17'-3"	
	NI-80	22'-2"	20'-4"	19'-3"	18'-1"	22'-7"	20'-10"	19'-9"	18'-6"	
	NI-90	22'-8"	20'-10"	19'-9"	18'-6"	23'-1"	21'-4"	20'-2"	18'-11"	
	NI-40x	22'-8"	20'-9"	18'-11"	16'-11"	23'-3"	20'-9"	18'-11"	16'-11"	
14"	NI-60	23'-1"	21'-3"	20'-1"	18'-10"	23'-8"	21'-10"	20'-8"	19'-5"	
14	NI-80	25'-0"	23'-0"	21'-9"	20'-4"	25'-6"	23'-6"	22'-3"	20'-10"	
	NI-90	25'-6"	23'-6"	22'-2"	20'-10"	26'-0"	24'-0"	22'-8"	21'-3"	
16"	NI-60	25'-6"	23'-6"	22'-2"	20'-10"	26'-1"	24'-1"	22'-10"	20'-11"	
	NI-80	27'-6"	25'-4"	23'-11"	22'-5"	28'-0"	25'-11"	24'-6"	23'-0"	
	NI-90	28'-1"	25'-10"	24'-5"	22'-11"	28'-7"	26'-5"	25'-0"	23'-5"	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.

## Maximum Floor Spans - H7.2, L/360 and Nailed Only

Design Criteria	
Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 35 psf
Deflection limits:	L/360 under live load and L/240 under total load
Sheathing:	3/4 in. Canadian softwood plywood, nailed only

#### Maximum Floor Spans

		Bare On centre spacing				1/2 in. gypsum ceiling On centre spacing				
Joist depth	Joist series									
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	15'-6"	14'-6"	13'-10"	12'-8"	15'-11"	14'-11"	14'-2"	12'-8"	
9-1/2"	NI-40x	16'-11"	15'-9"	15'-0"	13'-5"	17'-4"	16'-2"	15'-0"	13'-5"	
9-1/2	NI-60	17'-2"	16'-0"	15'-3"	14'-4"	17'-6"	16'-4"	15'-8"	14'-4"	
	NI-80	18'-7"	17'-2"	16'-5"	14'-4"	19'-0"	17'-6"	16'-9"	14'-4"	
	NI-20	17'-7"	16'-5"	15'-8"	14'-5"	18'-2"	16'-11"	16'-2"	14'-5"	
	NI-40x	19'-5"	17'-10"	17'-0"	15'-4"	20'-0"	18'-4"	17'-2"	15'-4"	
11-7/8"	NI-60	19'-10"	18'-1"	17'-3"	16'-5"	20'-4"	18'-8"	17'-8"	16'-10"	
	NI-80	21'-7"	19'-9"	18'-8"	17'-7"	22'-2"	20'-3"	19'-2"	17'-10"	
	NI-90	22'-2"	20'-3"	19'-1"	17'-11"	22'-8"	20'-9"	19'-7"	18'-5"	
	NI-40x	21'-8"	19'-10"	18'-9"	16'-10"	22'-4"	20'-6"	18'-10"	16'-10"	
14"	NI-60	22'-2"	20'-3"	19'-2"	18'-0"	22'-9"	20'-10"	19'-9"	18'-6"	
14	NI-80	24'-1"	22'-0"	20'-10"	19'-6"	24'-9"	22'-8"	21'-5"	20'-1"	
	NI-90	24'-8"	22'-7"	21'-4"	20'-0"	25'-4"	23'-2"	21'-11"	20'-3"	
16"	NI-60	24'-3"	22'-2"	20'-11"	19'-8"	24'-11"	22'-10"	21'-8"	19'-8"	
	NI-80	26'-4"	24'-1"	22'-9"	21'-4"	27'-0"	24'-9"	23'-5"	21'-11"	
	NI-90	26'-11"	24'-7"	23'-3"	21'-10"	27'-7"	25'-3"	23'-11"	21'-11"	

		Mid-span blocking with 1x4 inch strap				Mid-span blocking and 1/2 in. gypsum ceiling				
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	17'-1"	15'-7"	14'-2"	12'-8"	17'-6"	15'-7"	14'-2"	12'-8"	
9-1/2"	NI-40x	18'-8"	16'-6"	15'-0"	13'-5"	19'-1"	16'-6"	15'-0"	13'-5"	
9-1/2	NI-60	19'-0"	17'-6"	16'-10"	14'-4"	19'-5"	17'-11"	17'-2"	14'-4"	
	NI-80	20'-8"	19'-0"	18'-0"	14'-4"	21'-1"	19'-5"	18'-0"	14'-4"	
	NI-20	20'-0"	17'-9"	16'-2"	14'-5"	20'-6"	17'-9"	16'-2"	14'-5"	
	NI-40x	21'-9"	18'-10"	17'-2"	15'-4"	21'-9"	18'-10"	17'-2"	15'-4"	
11-7/8"	NI-60	22'-5"	20'-7"	19'-6"	17'-7"	22'-11"	21'-2"	19'-8"	17'-7"	
	NI-80	24'-3"	22'-4"	21'-2"	17'-10"	24'-9"	22'-10"	21'-8"	17'-10"	
	NI-90	24'-10"	22'-10"	21'-8"	20'-3"	25'-4"	23'-4"	22'-2"	20'-3"	
	NI-40x	23'-11"	20'-8"	18'-10"	16'-10"	23'-11"	20'-8"	18'-10"	16'-10"	
14"	NI-60	25'-3"	23'-3"	21'-7"	18'-11"	25'-10"	23'-8"	21'-7"	18'-11"	
14	NI-80	27'-4"	25'-2"	23'-10"	20'-1"	27'-11"	25'-9"	24'-5"	20'-1"	
	NI-90	27'-11"	25'-9"	24'-4"	20'-3"	28'-6"	26'-4"	24'-11"	20'-3"	
16"	NI-60	27'-10"	25'-6"	23'-4"	19'-8"	28'-6"	25'-6"	23'-4"	19'-8"	
	NI-80	30'-1"	27'-9"	26'-3"	21'-11"	30'-8"	28'-5"	26'-11"	21'-11"	
	NI-90	30'-9"	28'-4"	26'-9"	21'-11"	31'-4"	28'-11"	27'-5"	21'-11"	

### Notes:

1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.

2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.

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.