

## Maximum Floor Spans

### 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 (psf)	Dead load (psf)	Spans	Deflection limit	Floor system	Sheathing	
						Thickness (in.)	Type
S1.1	40	15	Simple	L/480	Nailed-glued	19/32	OSB
S1.2	40	15	Multiple	L/480	Nailed-glued	19/32	OSB
S2.1	40	15	Simple	L/480	Nailed-glued	5/8	OSB
S2.2	40	15	Multiple	L/480	Nailed-glued	5/8	OSB
S3.1	40	15	Simple	L/480	Nailed-glued	23/32	OSB
S3.2	40	15	Multiple	L/480	Nailed-glued	23/32	OSB
S4.1	40	15	Simple	L/480	Nailed-glued	3/4	OSB
S4.2	40	15	Multiple	L/480	Nailed-glued	3/4	OSB
S5.1	40	15	Simple	L/480	Nailed-glued	7/8	OSB
S5.2	40	15	Multiple	L/480	Nailed-glued	7/8	OSB
S6.1	40	15	Simple	L/480	Nailed-glued	5/8	Plywood
S6.2	40	15	Multiple	L/480	Nailed-glued	5/8	Plywood
S7.1	40	15	Simple	L/480	Nailed-glued	3/4	Plywood
S7.2	40	15	Multiple	L/480	Nailed-glued	3/4	Plywood
M1.1	40	20	Simple	L/480	Nailed-glued	19/32	OSB
M1.2	40	20	Multiple	L/480	Nailed-glued	19/32	OSB
M2.1	40	20	Simple	L/480	Nailed-glued	5/8	OSB
M2.2	40	20	Multiple	L/480	Nailed-glued	5/8	OSB
M3.1	40	20	Simple	L/480	Nailed-glued	23/32	OSB
M3.2	40	20	Multiple	L/480	Nailed-glued	23/32	OSB
M4.1	40	20	Simple	L/480	Nailed-glued	3/4	OSB
M4.2	40	20	Multiple	L/480	Nailed-glued	3/4	OSB
M5.1	40	20	Simple	L/480	Nailed-glued	7/8	OSB
M5.2	40	20	Multiple	L/480	Nailed-glued	7/8	OSB
M6.1	40	20	Simple	L/480	Nailed-glued	5/8	Plywood
M6.2	40	20	Multiple	L/480	Nailed-glued	5/8	Plywood
M7.1	40	20	Simple	L/480	Nailed-glued	3/4	Plywood
M7.2	40	20	Multiple	L/480	Nailed-glued	3/4	Plywood
H1.1	40	35	Simple	L/480	Nailed-glued	19/32	OSB
H1.2	40	35	Multiple	L/480	Nailed-glued	19/32	OSB
H2.1	40	35	Simple	L/480	Nailed-glued	5/8	OSB
H2.2	40	35	Multiple	L/480	Nailed-glued	5/8	OSB
H3.1	40	35	Simple	L/480	Nailed-glued	23/32	OSB
H3.2	40	35	Multiple	L/480	Nailed-glued	23/32	OSB
H4.1	40	35	Simple	L/480	Nailed-glued	3/4	OSB
H4.2	40	35	Multiple	L/480	Nailed-glued	3/4	OSB
H5.1	40	35	Simple	L/480	Nailed-glued	7/8	OSB
H5.2	40	35	Multiple	L/480	Nailed-glued	7/8	OSB
H6.1	40	35	Simple	L/480	Nailed-glued	5/8	Plywood
H6.2	40	35	Multiple	L/480	Nailed-glued	5/8	Plywood
H7.1	40	35	Simple	L/480	Nailed-glued	3/4	Plywood
H7.2	40	35	Multiple	L/480	Nailed-glued	3/4	Plywood

## Maximum Floor Spans – S1.1

### Design Criteria

Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	19/32 in. nailed-glued oriented strand board (OSB) sheathing

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	19/32 in. nailed-glued oriented strand board (OSB) sheathing

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	5/8 in. nailed-glued oriented strand board (OSB) sheathing

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	5/8 in. nailed-glued oriented strand board (OSB) sheathing

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	23/32 in. nailed-glued oriented strand board (OSB) sheathing

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	23/32 in. nailed-glued oriented strand board (OSB) sheathing

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	3/4 in. nailed-glued oriented strand board (OSB) sheathing

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	3/4 in. nailed-glued oriented strand board (OSB) sheathing

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	7/8 in. nailed-glued oriented strand board (OSB) sheathing

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	7/8 in. nailed-glued oriented strand board (OSB) sheathing

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	5/8 in. nailed-glued Canadian softwood plywood

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	5/8 in. nailed-glued Canadian softwood plywood

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	3/4 in. nailed-glued Canadian softwood plywood

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 15 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	3/4 in. nailed-glued Canadian softwood plywood

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	19/32 in. nailed-glued oriented strand board (OSB) sheathing

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	19/32 in. nailed-glued oriented strand board (OSB) sheathing

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	5/8 in. nailed-glued oriented strand board (OSB) sheathing

### Maximum Floor Spans

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

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

### Notes:

- The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
- The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
- For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
- Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
- 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

### Design Criteria

Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	5/8 in. nailed-glued oriented strand board (OSB) sheathing

### Maximum Floor Spans

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

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

### Notes:

- The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
- The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
- For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
- Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
- 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

### Design Criteria

Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	23/32 in. nailed-glued oriented strand board (OSB) sheathing

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	23/32 in. nailed-glued oriented strand board (OSB) sheathing

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	3/4 in. nailed-glued oriented strand board (OSB) sheathing

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	3/4 in. nailed-glued oriented strand board (OSB) sheathing

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	7/8 in. nailed-glued oriented strand board (OSB) sheathing

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	7/8 in. nailed-glued oriented strand board (OSB) sheathing

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	5/8 in. nailed-glued Canadian softwood plywood

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	5/8 in. nailed-glued Canadian softwood plywood

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	3/4 in. nailed-glued Canadian softwood plywood

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 20 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	3/4 in. nailed-glued Canadian softwood plywood

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 35 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	19/32 in. nailed-glued oriented strand board (OSB) sheathing

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 35 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	19/32 in. nailed-glued oriented strand board (OSB) sheathing

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 35 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	5/8 in. nailed-glued oriented strand board (OSB) sheathing

### Maximum Floor Spans

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

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

### Notes:

- The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
- The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
- For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
- Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
- 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

### Design Criteria

Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 35 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	5/8 in. nailed-glued oriented strand board (OSB) sheathing

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 35 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	23/32 in. nailed-glued oriented strand board (OSB) sheathing

### Maximum Floor Spans

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

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

### Notes:

- The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
- The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
- For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
- Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
- 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

### Design Criteria

Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 35 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	23/32 in. nailed-glued oriented strand board (OSB) sheathing

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 35 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	3/4 in. nailed-glued oriented strand board (OSB) sheathing

### Maximum Floor Spans

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

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

### Notes:

- The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
- The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
- For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
- Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
- 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

### Design Criteria

Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 35 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	3/4 in. nailed-glued oriented strand board (OSB) sheathing

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 35 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	7/8 in. nailed-glued oriented strand board (OSB) sheathing

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 35 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	7/8 in. nailed-glued oriented strand board (OSB) sheathing

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 35 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	5/8 in. nailed-glued Canadian softwood plywood

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 35 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	5/8 in. nailed-glued Canadian softwood plywood

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Simple span
Loads:	Live load = 40 psf and dead load = 35 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	3/4 in. nailed-glued Canadian softwood plywood

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. 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

### Design Criteria

Spans:	Multiple spans
Loads:	Live load = 40 psf and dead load = 35 psf
Deflection limits:	L/480 under live load and L/240 under total load
Sheathing:	3/4 in. nailed-glued Canadian softwood plywood

### Maximum Floor Spans

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

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

### Notes:

1. The tabulated clear spans are based on CSA O86:19 and NBC 2020, and are applicable to residential floor construction meeting the above design criteria.
2. The vibration-controlled span is determined using Clause A.5.4.5.2 b) of CSA O86:19.
3. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
4. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
5. Bearing stiffeners are not required when I-joists are used in accordance with this table, except as required for hangers.