

# DECK DESIGN

Apply online! Visit [edmonton.ca/deckpermit](http://edmonton.ca/deckpermit) for a complete list of application rules and requirements. Refer to the [Deck Design Guide](#) for definitions, technical details, and more information. For decks with a roof or walls, see [Home Additions](#).

Project Address:

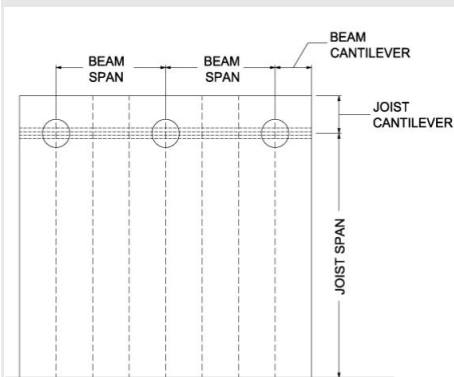
## SECTION 1: DIMENSIONS (METRES/FEET)

**Deck Height** greatest vertical distance between deck surface and finished ground level:

**Deck Width** measured parallel to house OR if a freestanding deck, the dimension at a right angle to joists:

**Deck Length** at a right angle to/projecting from house OR if a freestanding deck, the dimension in direction of joists:

## SECTION 2: JOISTS (SPAN: LENGTH FROM ONE CENTRE-OF-SUPPORT TO ANOTHER CANTILEVER: JOIST OVERHANG FROM CENTRE OF SUPPORT)

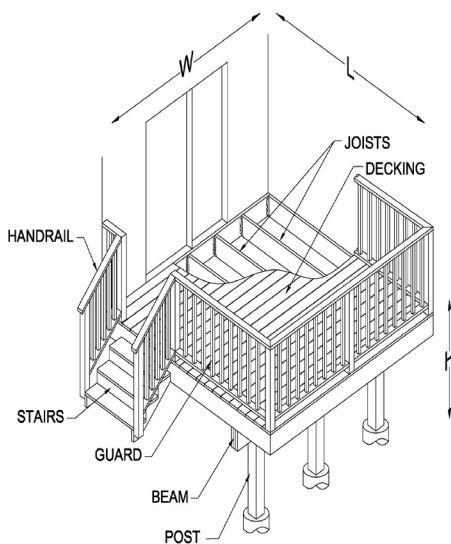


**Span:** Maximum distance joist may span for selected joist spacing

Joist Size	8" OC	12" OC	16" OC	24" OC	Optional Maximum Cantilever
2" x 4"	<input type="checkbox"/> ≤ 7'-4"	<input type="checkbox"/> ≤ 6'-5"	<input type="checkbox"/> ≤ 5'-10"	<input type="checkbox"/> ≤ 5'-1"	<input type="checkbox"/> ≤ 8"
2" x 6"	<input type="checkbox"/> ≤ 11'-6"	<input type="checkbox"/> ≤ 10'-0"	<input type="checkbox"/> ≤ 9'-1"	<input type="checkbox"/> ≤ 8'-0"	<input type="checkbox"/> ≤ 16"
2" x 8"	<input type="checkbox"/> ≤ 15'-1"	<input type="checkbox"/> ≤ 13'-2"	<input type="checkbox"/> ≤ 12'-0"	<input type="checkbox"/> ≤ 10'-2"	<input type="checkbox"/> ≤ 16"
2" x 10"		<input type="checkbox"/> ≤ 16'-2"	<input type="checkbox"/> ≤ 14'-0"	<input type="checkbox"/> ≤ 11'-5"	<input type="checkbox"/> ≤ 24"
2" x 12"			<input type="checkbox"/> ≤ 16'-3"	<input type="checkbox"/> ≤ 13'-3"	<input type="checkbox"/> ≤ 24"

Optional Maximum Cantilever selection must be on the same row as joist size selection

## SECTION 3: BEAM



**Minimum beam dimension for selected post spacing**

Posts ≤ 4' OC	Posts ≤ 6' OC	Posts ≤ 8' OC	Deck Length
	<input type="checkbox"/> 2-2" x 6"		<input type="checkbox"/> ≤ 6'
<input type="checkbox"/> 2-2" x 6"		<input type="checkbox"/> 2-2" x 8"	<input type="checkbox"/> ≤ 9'
	<input type="checkbox"/> 2-2" x 6"	<input type="checkbox"/> 3-2" x 8"	<input type="checkbox"/> ≤ 11'
<input type="checkbox"/> 2-2" x 6"	<input type="checkbox"/> 2-2" x 8"	<input type="checkbox"/> 3-2" x 8"	<input type="checkbox"/> ≤ 14'
<input type="checkbox"/> 2-2" x 6"	<input type="checkbox"/> 2-2" x 8"	<input type="checkbox"/> 3-2" x 10"	<input type="checkbox"/> ≤ 16'

**Note:**

1. May Substitute: 3-2"x8" = 2-2"x10" OR 3-2"x10" = 2-2"x12"
2. Posts: Wood 6"x6", or 4"x4" allowable for 2-ply Beam
3. Beams and Joists: S-P-F #1 & #2 Factory-Treated Wood
4. Beam Length corresponds to Deck Width
5. OC: "On Centre" measured centre to centre of support
6. ≤ means less than or equal to
7. See the [Deck Design Guide](#) for more information

# INSTRUCTIONS

"Yes" response in **all applicable sections** below indicates your application **does not** require any additional information

"D" indicates additional design drawings must be submitted with application: plan, elevation, cross-section, details

"E" indicates Engineer-stamped Drawings must be submitted

## DECK HEIGHT (UP TO 1.8 M OR 71 ")

<b>Stair Guard and Handrail</b>	Steps (rectangular) have consistent (+/-5mm): Rise: 5" - 7 <sup>7</sup> / <sub>8</sub> " Run: 10" - 14" Nosing: 0 - 1"	<input type="checkbox"/> Yes	<input type="checkbox"/> No Stairs
	Stair Guard where not adjacent to a wall is minimum 35 <sup>1</sup> / <sub>2</sub> " high, measured vertically through nosing	<input type="checkbox"/> Yes	
	Handrails are smooth, graspable, and mounted 34" - 38" above stairs, measured vertically through nosing	<input type="checkbox"/> Yes	
<b>Deck Guard</b>	Deck Guard is non-climbable between 5 <sup>1</sup> / <sub>2</sub> " - 35 <sup>1</sup> / <sub>2</sub> " above surface	<input type="checkbox"/> Yes	
	No gaps greater than 100mm (4") in or under the Deck Guard	<input type="checkbox"/> Yes	
	Guard height minimum 0.9m (36")	<input type="checkbox"/> Yes	
<b>Decking</b>	Lumber: ≤ 5/4" Decking on joist support ≤ 16" on centre <b>OR</b> 1 <sup>1</sup> / <sub>2</sub> " Decking on joist support ≤ 24" on centre	<input type="checkbox"/> Yes	<input type="checkbox"/> D
	Manufactured / membrane: submitting CCMC - or product specification indicating NBCC2015/ABC compliance	<input type="checkbox"/> Yes	<input type="checkbox"/> D
<b>Joists</b>	Joists are S-P-F #1 & #2 factory-treated/suitably coated lumber, at least as large as per table in Section 2	<input type="checkbox"/> Yes	<input type="checkbox"/> D
<b>Beam</b>	Beam is S-P-F #1 & #2 factory-treated/suitably coated lumber, at least as large as per table in Section 3	<input type="checkbox"/> Yes	<input type="checkbox"/> D
<b>Posts</b>	Posts are factory-treated wood minimum 6"x6" under 3-ply beam <b>OR</b> allowable 4"x4" under 2-ply beam	<input type="checkbox"/> Yes	<input type="checkbox"/> D
<b>Foundation</b>	Posts supported on Pads, on well-drained compact soil <b>OR</b> Piles, of concrete or metal (torque or screw piles)	<input type="checkbox"/> Yes	<input type="checkbox"/> E

## DECK HEIGHT (OVER 1.8M OR 71" AND UP TO 3.6M OR 11'-8")

<b>Stair Guard and Handrail</b>	Steps have consistent (+/-5mm): Rise: 5" - 7 <sup>7</sup> / <sub>8</sub> " Run: 8 <sup>1</sup> / <sub>4</sub> " - 14" Tread: 9 <sup>1</sup> / <sub>4</sub> " - 14" Nosing: 0 - 1	<input type="checkbox"/> Yes	<input type="checkbox"/> No Stairs
	Stair Guard where not adjacent to a wall is minimum 35 <sup>1</sup> / <sub>2</sub> " high, measured vertically through nosing	<input type="checkbox"/> Yes	
	Handrails are smooth, graspable, and mounted 34" - 38" above stairs, measured vertically through nosing	<input type="checkbox"/> Yes	
<b>Deck Guard</b>	Deck Guard is non-climbable between 5 <sup>1</sup> / <sub>2</sub> " - 35 <sup>1</sup> / <sub>2</sub> " above surface	<input type="checkbox"/> Yes	
	No gaps greater than 100mm (4") in or under the Deck Guard	<input type="checkbox"/> Yes	
	Guard height minimum 1.07m (42")	<input type="checkbox"/> Yes	
	Guard is wood <b>OR</b> submitting CCMC - or product specification indicating NBCC2015/ABC compliance	<input type="checkbox"/> Yes	<input type="checkbox"/> D
<b>Decking</b>	Lumber: ≤ 5/4" Decking on joist support ≤ 16" on centre <b>OR</b> 1 <sup>1</sup> / <sub>2</sub> " Decking on joist support ≤ 24" on centre	<input type="checkbox"/> Yes	<input type="checkbox"/> D
	Manufactured / membrane: submitting CCMC or product specification indicating NBCC2015/ABC compliance	<input type="checkbox"/> Yes	<input type="checkbox"/> D
<b>Joists</b>	Joists are S-P-F #1 & #2 factory-treated/suitably coated lumber, at least as large as per table in Section 2	<input type="checkbox"/> Yes	<input type="checkbox"/> D
<b>Beam</b>	Beam is S-P-F #1 & #2 factory-treated/suitably coated lumber, at least as large as per table in Section 3	<input type="checkbox"/> Yes	<input type="checkbox"/> D
<b>Posts</b>	Posts are factory-treated wood minimum 6"x6" under 3-ply beam <b>OR</b> allowable 4"x4" under 2-ply beam	<input type="checkbox"/> Yes	<input type="checkbox"/> D
	Posts are factory-treated wood minimum 6"x6" under 3-ply beam <b>OR</b> allowable 4"x4" under 2-ply beam	<input type="checkbox"/> Yes	<input type="checkbox"/> D
<b>Foundation</b>	Pads below frostline <b>OR</b> submitting CCMC - or product specification indicating NBCC2015/ABC compliance		<input type="checkbox"/> D
	Posts supported on Pads, on well-drained compact soil <b>OR</b> Piles, of concrete or metal (torque or screw piles)		<input type="checkbox"/> E

## DECK HEIGHT (OVER 3.6M OR 11'-8")

<b>High Deck</b>	Submit engineer-stamped drawings for deck foundation, columns, guards, stringers, and all connections: deck ledger to house frame; joists to ledger; joists to beam; beam to posts; posts to foundation.	<input type="checkbox"/> E
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### WHERE TO APPLY

Edmonton Services Centre  
**2nd floor**, 10111 - 104 Avenue NW  
 Edmonton, AB T5J 0J4  
 Monday - Friday, 8am to 4:30pm

### QUESTIONS?

Phone: **311** or if outside of Edmonton  
 780-442-5311  
 Email: [developmentsservices@edmonton.ca](mailto:developmentsservices@edmonton.ca)

### FEES

For additional information,  
 visit: [edmonton.ca/permitfees](http://edmonton.ca/permitfees)

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