Stairs

- Stairs with more than 3 risers shall have a handrail on one side. The length of stair or vertical height between any landing shall not exceed 3.7 m.
- Stair Risers for private stairs shall be between 125mm and 200mm. Risers for public stairs shall be between 125 mm and 180mm. Stair rise shall be consistent within a 5mm tolerance.
- Stair Run for private stairs shall be between 255mm and 355mm. Runs for public stairs shall be a minimum of 280mm.
- Rectangular tread depths shall be not less than the run and not more than the run + 25mm
- Tread thickness shall be 25mm. Where the distance between stringers exceeds 750mm, the tread thickness shall be 38mm.
- Stringers shall be 255mm with a depth of 90mm, supported and secured at the top and bottom, not less than 38mm if unsupported along the length and spaced at 900mm serving a single dwelling unit and 600mm if serving more than one dwelling unit.
- Handrail height shall be between 865mm and 965mm. Intermediate support is required where the length of the stair exceeds 1.2 m.
- Guards on the sides of stairs not exceeding 965mm in height above the tread and having a diameter not less than 89mm may also serve as a handrail.

Inspections

The owner of a property or their contractor must arrange for inspections with 24 hours notice:

- Excavation post hole inspection prior to filling with concrete,
- Framing inspection prior to applying top boards and guards, and
- Final inspection of completed deck

Guards

- Guards of preservative treated, pressure treated, cedar lumber or suitable protective coating are required where the difference between the grade and the deck surface exceed 600mm.
- Minimum 4 x 4 posts spaced and fastened as per SB-7, EB-1 through EB-5.
- Guard height to be minimum 900 mm where the deck surface is less than 1.8 m and 1070 mm where the deck surface exceeds 1.8 m.
- Top and bottom rails to be fastened as per SB-7, EA-1 through EA-5 and cannot be climbable between 140 mm and 900 mm above the deck surface.
- Pickets to meet SB-7, EC-1 through EC-4 or ED-1 through ED-5 spaced at 100 mm on center
- If using a guard other than wood or if guard detail is not part of SB-7, please provide the manufacturer's installation instructions and specifications stamped and signed by a Professional Engineer licensed in Ontario.

Proprietary Products and Materials

Composite decking must have a Building Materials Evaluation Commission approval and steel, aluminum and glass railing systems must be designed by a Professional Engineer. Applicants must submit the manufacturer's installation manual, engineering or BMEC approval. Please check with the building official to discuss pre-approved options.

Contact Us

This guide was produced by the City of Kingston. If you have any questions or comments, please contact us at the following:

- Permit Application and Inspections
- 613-546-4291 extension 3280
- Buildingpermits@cityofkingston.ca
- CityofKingston.ca

City of Kingston – Deck Guide

What You Need to Know Before Building a Deck

Building a deck is a great way to enhance your property but it must be designed and constructed to meet safety and regulatory requirements. The Ontario Building Code (OBC) regulates new construction, alteration and demolition of decks in Ontario. The Property Standards By-law also requires that decks be maintained in good repair.

Zoning for Decks

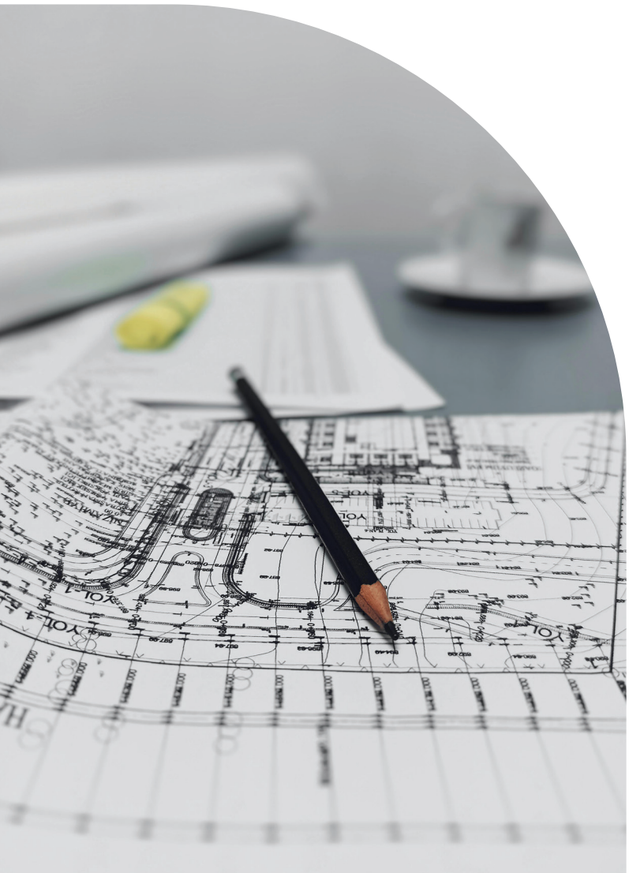
Zoning compliance is applicable law under the OBC. Your deck must comply with zoning Bylaw 2022-62 before a building permit can be issued.

Zoning	Height 0.6 m or less	Height 0.6 m to 1.2 m	Height > 1.2 m
Maximum surface area of floor level(s)	10% of the lot area	10% of the lot area	10% of lot area, with a max of 30 m² permitted at heights ≥ 1.2 m
Minimum front setback	3.5 m	3.5 m	Must comply with zone provisions
Minimum interior setback	• Semi-detached and townhouse: 0.6 m, or 0.0 m along a common party wall. • Common privacy fence a minimum of 1.5 m high • All other uses 0.6 m	• Semi-detached and townhouse: zone provisions, 0.0 m along a common party wall. • Common privacy fence a minimum of 1.5m high • Other uses comply with zone provisions	Same as previous column
Minimum exterior setback	3.5 m	3.5 m	Must comply with Zone provisions
Minimum rear setback	2.0 m	2.0 m	4.0 m

Building Permit Submission

Property owners or persons authorized by the owner may submit building permit applications online through Dash. Your application must include:

- Schedule 1 designer information form.
- Site plan showing property lines, structures, septic bed and tank location (where applicable), deck and dimensions from edge of deck (or stairs) to each property line. This can be hand drawn, but must be clear, concise and drawn to scale.
- Deck framing plan, elevations and cross sections
- 1.5 m is required from the deck pier to the septic tank and 5 m is required from the deck pier to the edge of the leaching bed.
- Ontario One utility locate confirmation. Call 1-800-400-2255 before digging.



Construction Drawings

Fully dimensioned plan showing spacing and length for beams, joists and posts; and elevation drawings showing the height of the deck walking surface above grade and the following:

Excavation and Ledger

- Piers must be excavated 1.2 m below grade, free of organics, loose material and water.
- Piers: 230 mm diameter extending 150 mm above grade. A footing is required where the pier also supports a roof.
- Deck blocks may be used where the deck is not attached to the building, is less than 592 ft2 and the distance from the ground to the underside of joists does not exceed 0.6 m.
- Ledger to be fastened to the structure with 12.7mm lag bolts spaced at maximum 800mm on center. Lag bolts are to extend into rim joist and ledger shall not be supported by masonry veneer. If siding is to be cut around the ledger, proper flashing is to be installed.

Framing

Deck framing is to be of preservative treated, pressure treated, cedar lumber or suitable protective coating.

- Minimum 140x140mm wood columns, centered over pier and fastened to post saddles and beams.
- Beams (3 or more ply supporting joists from both sides) and lintels (2 ply supporting joists from one side only) shall be fastened together with minimum 2 rows of 89mm nails at 450mm apart starting 100mm to 150mm from the end of each beam or lintel.
- Two ply beams and lintels shall have 38mm end bearing and maximum spans of 3 meters. Longer spans or beams and lintels with more than two ply's shall have 76mm bearing.
- Beams can be cantilevered 305mm past posts where not supporting walls or roof.

- Beam splices to be over 140mm x 140mm (6x6) posts.
- Joists fastened to the ledger or beams with joist hangers or to be supported over beams. All holes in joist hangers to be nailed, including shear holes.
- Joists to be a minimum of 38mm x 184mm for guard fastening.
- Joists to be spaced at 400mm on centre when 32mm decking is used.
- Solid blocking to be provided mid span of joists where spans exceed 2.1m.
- Joists 38x184mm can be cantilevered 400mm and joists 38x235mm cantilevered 610mm.

Beam and Lintel Spans			Joist Spans		
2 ply	38x184mm	1.81m	38x184mm (2x8)	@ 300 on center	3.95m
	38x235mm	2.22m		@ 400 on center	3.49m
	38x286mm	2.58m		@ 600 on center	2.85m
3 ply	38x184mm	2.22m	38x235mm (2x10)	@ 300 on center	4.92m
	38x235mm	2.72m		@ 400 on center	4.26m
	38x286mm	3.15m		@ 600 on center	3.48m
4 ply	38x184mm	2.57m	38x286mm (2x12)	@ 300 on center	5.71m
	38x235mm	3.14m		@ 400 on center	4.95m
	38x286mm	3.64m		@ 600 on center	4.04m

As per Decks section of CWC The Span Book 2020 Edition, Incised SPF#2, Live Load 1.9kPa, Supported Length 3.0m