Village of Richmond

Building Department

REQUIREMENTS FOR DECKS/PORCHES

What is required to obtain a building permit for a deck on my home?

- Completed permit application including the estimated cost of construction.
- Two copies of a plat of survey or a site plan drawn to scale with accurate dimensions, depicting:
  - The location and dimensions of the deck or porch.
  - The distance of the existing residence and the proposed deck or porch from the lot lines.
  - The location of any easements on the property, and the location of any underground or above ground utilities.
  - Two copies of deck or porch pier and framing details.
- Copy of Estimate or Proposal.
- All Contractors must be registered with the Village.

Note: Computer generated framing plans provided by retail outlets which do not provide the required information will not be accepted.

What must be included in the building plan?

OVERALL DIMENSIONS OF DECK OR PORCH (HEIGHT, DEPTH, AND WIDTH)

- MAXIMUM AREA: Ten percent (10%) of the lot area.
- MAXIMUM HEIGHT: No deck detached from the principal shall be higher than thirty-six (36) inches above the ground beneath the deck.
- SETBACKS: Five (5) feet from any side or rear lot line provided that no deck attached to the principal building shall be located less than (15) feet from a rear lot line.

TYPE AND DEPTH OF PIERS

- Minimum depth is forty-two (42) inches.
- Piers must be sized to carry superimposed loads.
- Holes must be ten (10) inches wide, and must be inspected with a post-hole inspection prior to pouring concrete.
- Shall be water resistant or pressure treated lumber.

BEAMS/FLOOR JOISTS

- Post and beam locations and dimensions.
- The beam span between posts and the clear span of joists shall also be included.
- Nominal lumber sizes of all joists, and type and direction of decking.
- Please see SPAN TABLE FOR DECKS

SPAN TABLE FOR DECKS

POST SPACING		JOIST LENGTH	6'	7'	8'	9'	10'	11'	12'	13'	14'	15'	16'
	4'	JOIST SIZE	2x6 24" oc	2x6 16"oc 2x8 24"oc	2x6 16"oc 2x8 24"oc	2x8 16"oc 2x10 24"oc	2x8 16"0c 2x10 24"oc	2x8 16"0c 2x10 24"oc	2x8 12"0c 2x10 16"oc	2x10 16"oc 2x12 24"oc	2x10 16"oc	2x10 12"oc 2x12 16"oc	2x12 16"oc
		BEAM SIZE	1 – 2x6	1 – 2x6 1 – 2x8	1 – 2x6 1 – 2x8	1 – 2x8 1 – 2x10	1 – 2x8 1 – 2x10	1 – 2x8 1 – 2x10	1 – 2x8 1 – 2x10	1 – 2x10 1 – 2x12	1 – 2x10	1 – 2x10 1 – 2x12	1 – 2x12
	5'	JOIST SIZE	2x6 24" oc	2x6 16"oc 2x8 24"oc	2x6 16"oc 2x8 24"oc	2x8 16"0c 2x10 24"oc	2x8 16"0c 2x10 24"oc	2x8 16"0c 2x10 24"oc	2x8 12"0c 2x10 16"oc	2x10 16"oc 2x12 24"oc	2x10 16"oc	2x10 12"oc 2x12 16"oc	2x12 16"oc
		BEAM SIZE	1 – 2x6	2 – 2x6 1 – 2x8	2 – 2x6 1 – 2x8	1 – 2x8 1 – 2x10	1 – 2x8 1 – 2x10	1 – 2x8 1 – 2x10	1 – 2x8 1 – 2x10	1 – 2x10 1 – 2x12	1 – 2x10	1 – 2x10 1 – 2x12	1 – 2x12
	6'	JOIST SIZE	2x6 24" oc	2x6 16"oc 2x8 24"oc	2x6 16"oc 2x8 24"oc	2x8 16"0c 2x10 24"oc	2x8 16"0c 2x10 24"oc	2x8 16"0c 2x10 24"oc	2x8 12"0c 2x10 16"oc	2x10 16"oc 2x12 24"oc	2x10 16"oc	2x10 12"oc 2x12 16"oc	2x12 16"oc
		BEAM SIZE	2 – 2x6	2 – 2x6 1 – 2x8	2 – 2x6 2 – 2x8	2 – 2x8 1 – 2x10	2 – 2x8 1 – 2x10	2 – 2x8 1 – 2x10	2 – 2x8 1 – 2x10	2 – 2x10 1 – 2x12	2 – 2x10 1 – 2x12	2 – 2x10 1 – 2x12	2 – 2x10 1 – 2x12
	7'	JOIST SIZE	2x6 24" oc	2x6 16"oc 2x8 24"oc	2x6 16"oc 2x8 24"oc	2x8 16"0c 2x10 24"oc	2x8 16"0c 2x10 24"oc	2x8 16"0c 2x10 24"oc	2x8 12"0c 2x10 16"oc	2x10 16"oc 2x12 24"oc	2x10 16"oc	2x10 12"oc 2x12 16"oc	2x12 16"oc
		BEAM SIZE	2 – 2x6	3 – 2x6 2 – 2x8	3 – 2x6 2 – 2x8	2 – 2x8 2 – 2x10	2 – 2x8 2 – 2x10	2 – 2x8 2 – 2x10	3 – 2x8 2 – 2x10	2 – 2x10 1 – 2x12	2 – 2x10 2 – 2x12	2 – 2x10 2 – 2x12	2 – 2x10 2 – 2x12
	8'	JOIST SIZE	2x6 24" oc	2x6 16"oc 2x8 24"oc	2x6 16"oc 2x8 24"oc	2x8 16"0c 2x10 24"oc	2x8 16"0c 2x10 24"oc	2x8 16"0c 2x10 24"oc	2x8 12"0c 2x10 16"oc	2x10 16"oc 2x12 24"oc	2x10 16"oc	2x10 12"oc 2x12 16"oc	2x12 16"oc
		BEAM SIZE	3 – 2x6 2 – 2x8	3 – 2x6 2 – 2x8	3 – 2x6 2 – 2x8	3 – 2x8 2 – 2x10	3 – 2x8 2 – 2x10	3 – 2x8 2 – 2x10	3 – 2x8 2 – 2x10	2 – 2x10 2 – 2x12	3 – 2x10 2 – 2x12	3 – 2x10 2 – 2x12	3 – 2x10 2 – 2x12
	9'	JOIST SIZE	2x6 24" oc	2x6 16"oc 2x8 24"oc	2x6 16"oc 2x8 24"oc	2x8 16"0c 2x10 24"oc	2x8 16"0c 2x10 24"oc	2x8 16"0c 2x10 24"oc	2x8 12"0c 2x10 16"oc	2x10 16"oc 2x12 24"oc	2x10 16"oc	2x10 12"oc 2x12 16"oc	2x12 16"oc
		BEAM SIZE	3 – 2x6 2 – 2x8	4 – 2x6 3 – 2x8	4 – 2x6 3 – 2x8	3 – 2x8 2 – 2x10	3 – 2x8 2 – 2x10	3 – 2x8 2 – 2x10	4 – 2x8 3 – 2x10	3 – 2x10 2 – 2x12	3 – 2x10 2 – 2x12	3 – 2x10 2 – 2x12	3 – 2x10 2 – 2x12
	10'	JOIST SIZE	2x6 24" oc	2x6 16"oc 2x8 24"oc	2x6 16"oc 2x8 24"oc	2x8 16"0c 2x10 24"oc	2x8 16"0c 2x10 24"oc	2x8 16"0c 2x10 24"oc	2x8 12"0c 2x10 16"oc	2x10 16"oc 2x12 24"oc	2x10 16"oc	2x10 12"oc 2x12 16"oc	2x12 16"oc
		BEAM SIZE	4 – 2x6 3 – 2x8	3 – 2x8 2 – 2x10	3 – 2x8 2 – 2x10	3 – 2x8 3 – 2x10	4 – 2x8 3 – 2x10	4 – 2x8 3 – 2x10	4 – 2x8 3 – 2x10	3 – 2x10 2 – 2x12	3 – 2x10 3 – 2x12	4 – 2x10 3 – 2x12	4 – 2x10 3 – 2x12
	11'	JOIST SIZE	2x6 24" oc	2x6 16"oc 2x8 24"oc	2x6 16"oc 2x8 24"oc	2x8 16"0c 2x10 24"oc	2x8 16"0c 2x10 24"oc	2x8 16"0c 2x10 24"oc	2x8 12"0c 2x10 16"oc	2x10 16"oc 2x12 24"oc	2x10 16"oc	2x10 12"oc 2x12 16"oc	2x12 16"oc
		BEAM SIZE	3 – 2x8 2 – 2x10	3 – 2x8 2 – 2x10	4 – 2x8 3 – 2x10	4 – 2x8 3 – 2x10	3 – 2x10 2 – 2x12	3 – 2x10 3 – 2x12	3 – 2x10 3 – 2x12	4 – 2x10 3 – 2x12	4 – 2x10 3 – 2x12	4 – 2x10 3 – 2x12	4 – 2x10 3 – 2x12
	12'	JOIST SIZE	2x6 24" oc	2x6 16"oc 2x8 24"oc	2x6 16"oc 2x8 24"oc	2x8 16"0c 2x10 24"oc	2x8 16"0c 2x10 24"oc	2x8 16"0c 2x10 24"oc	2x8 12"0c 2x10 16"oc	2x10 16"oc 2x12 24"oc	2x10 16"oc	2x10 12"oc 2x12 16"oc	2x12 16"oc
		BEAM SIZE	3 – 2x8 2 – 2x10	4 – 2x8 3 – 2x10	4 – 2x8 3 – 2x10	3 – 2x10 2 – 2x12	3 – 2x10 3 – 2x12	4 – 2x10 3 – 2x12	4 – 2x10 3 – 2x12	4 – 2x10 3 – 2x12	3 – 2x12	3 – 2x12	3 – 2x12
	13'	JOIST SIZE	2x6 24" oc	2x6 16"oc 2x8 24"oc	2x6 16"oc 2x8 24"oc	2x8 16"0c 2x10 24"oc	2x8 16"0c 2x10 24"oc	2x8 16"0c 2x10 24"oc	2x8 12"0c 2x10 16"oc	2x10 16"oc 2x12 24"oc	2x10 16"oc	2x10 12"oc 2x12 16"oc	2x12 16"oc
		BEAM SIZE	3 – 2x8 3 – 2x10	4 – 2x8 3 – 2x10	3 – 2x10 3 – 2x12	4 – 2x10 3 – 2x12	4 – 2x10 3 – 2x12	4 – 2x10 3 – 2x12	4 – 2x10 3 – 2x12	3 – 2x12	4 – 2x12	4 – 2x12	4 – 2x12
	14'	JOIST SIZE	2x6 24" oc	2x6 16"oc 2x8 24"oc	2x6 16"oc 2x8 24"oc	2x8 16"0c 2x10 24"oc	2x8 16"0c 2x10 24"oc	2x8 16"0c 2x10 24"oc	2x8 12"0c 2x10 16"oc	2x10 16"oc 2x12 24"oc	2x10 16"oc	2x10 12"oc 2x12 16"oc	2x12 16"oc
		BEAM SIZE	4 – 2x8 3 – 2x10	3 – 2x10 3 – 2x12	4 – 2x10 3 – 2x12	4 – 2x10 3 – 2x12	4 – 2x10 3 – 2x12	3 – 2x12	4 – 2x12	4 – 2x12	4 – 2x12	Engineered beam req'd.	Engineered beam req'd.

STAIRS

- Seven and three-quarter (7 ¾) inch maximum riser height and ten (10) inch minimum tread width.
- All treads must be the same depth and all risers must be the same height.
- Maximum spacing between stringers is twenty-four (24) inches.
- Stairs more than three (3) risers in height shall bear on concrete piers.
- Stairs less than three (3) risers in height shall bear on a patio block or four (4) inch concrete slab.
- Stairways stall not be less than three (3) feet wide.

HANDRAILS

- Guard rails are required when a deck floor is more than thirty (30) inches above the adjacent grade.
- Guard rails shall be a minimum of thirty-six (36) inches high with a maximum spacing between the balusters or vertical posts of four (4) inches so that an object four (4) inches or larger cannot pass through them.
- The minimum height of stair handrail is thirty-four (34) inches and the maximum height is thirty-eight (38) inches.
- Handrails are required on one side of all stairs, four risers and more in height.
- Guardrail members shall not be installed in a manner that creates a ladder-like effect.

Individual subdivision covenants may have special requirements. If you have an HOA you must provide a letter of approval with your application.

Additional Notes For Screen Room/Three Season Room: A screen room or three season room has different setback requirements than a typical deck or porch. Be sure to verify that any deck or porch will be located and structurally designed and sized to accommodate any future plans you may have to convert it to a screen room or three season room. If a screen room is to be constructed at any time in the future, piers may have to be larger or spaced closer together

REQUIRED INSPECTIONS

1. **PIERS:** After the holes for the piers are dug and prior to pouring any concrete.
2. **FINAL:** After the deck is completed, prior to the installation of any proposed skirting or screening.

A 48-HOUR NOTICE IS REQUIRED PRIOR TO SCHEDULING INSPECTIONS WITH THE CITY OF WOODSTOCK
815-338-4305

Call JULIE before you dig! In Illinois, safe digging starts when you call JULIE at 8-1-1. This is a free service to have your underground utility lines marked.

JULIE Your Illinois One-Call System