Deck Construction Requirements

Building Division
Community Development Department
100 North Island Avenue
Batavia, IL 60510-1931
Tel: 630-454-2700 - Fax: 630-454-2775
www.cityofbatavia.net

Please direct all questions to the City of Batavia Building Division of the Community Development Department, Monday through Friday from 8 AM to 5 PM at (630) 454-2700.

This is a summary of the City of Batavia requirements for decks. This is intended to interpret and explain the ordinances and policies but does NOT represent or replace the actual ordinance language. Every effort has been made to ensure the accuracy and timeliness of this information.

4/2020

Before Starting
1. A building permit is required to erect a deck, regardless of size or type.
2. Decks cannot be placed over any utility and drainage easements, underground electrical service and septic tanks or septic fields.
3. Minimum setbacks from property lines vary for each zoning classification. Please verify your property zoning and setbacks with the Community Development Department.
4. Properties located in the Historic District shall first contact the Building Division to submit an application for review, approval and issuance of a Certificate of Appropriateness by the Historic Preservation Commission.
5. Stairs require a guardrail of 34 inches high if the rise of the stairs is more that 30 inches. A graspable handrail between 34 inches and 38 inches high is required on stairs that contain more than three risers.
6. A guardrail with a minimum height of 36 inches is required if deck platform is greater than 30 inches above grade.
7. If deck is greater than four feet (4’) above grade, 6 x 6 inch column posts are required.
8. The deck must be built exactly as shown on the approved plans for the job. Any changes must be approved by the City of Batavia Building Division prior to construction.
9. Check the plat of survey for actual measurements of deck and setbacks indicated.
10. See samples (attached) for more details.

Application Procedure
1. Submit a completed Building Permit Application to the City of Batavia Building Division of the Community Development Department.
2. Pay required minimum submittal fee.
3. Attach two (2) copies of the plat of survey showing the location of the deck and setbacks to property lines. All utilities (electric service, gas line, phone line, etc) must be indicated. Survey shall be to scale, not reduced or enlarged when copied.
4. Attach two (2) copies of plan and construction details (samples attached).
Homeowner/Contractor Responsibilities

1. Call J.U.L.I.E (Joint Underground Location for Inspectors and Engineers) at least 48 hours prior to any digging to locate any underground utilities (Dial 811 or visit www.illinois1call.com)

2. Schedule the required inspections with the Building Division of the Community Development Department for post holes, a rough framing (prior to decking installation if deck is 48” and less above grade), and a final inspection at completion. Please call at least 48 hours in advance to schedule inspections to insure that we can meet your schedule.

3. Make sure the work is ready for inspection before the inspector arrives to avoid a re-inspection fee. Please cancel the inspection if the work is not ready.

4. ALL PERMITS SHALL CONCLUDE WITH A FINAL INSPECTION.

Structural Guidelines

Design Factor for Decks:
40 Pound Live Load per Western Lumber Span
Spruce Pine Fir No. 2

1. Center to Center  Maximum Span
   2 x 6   12 inch  9 ft. 6 in.
   16 inch  8 ft. 7 in.
   24 inch  7 ft. 6 in.

2. Center to Center  Maximum Span
   2 x 8   12 inch  12 ft. 6 in.
   16 inch  11 ft. 4 in.
   24 inch  9 ft. 6 in.

3. Center to Center  Maximum Span
   2 x 10  12 inch  15 ft. 11 in.
   16 inch  14 ft. 3 in.
   24 inch  11 ft. 8 in.

4. Center to Center  Maximum Span
   2 x 12  12 inch  19 ft. 1 in.
   16 inch  16 ft. 6 in.
   24 inch  13 ft. 6 in.
Sample Deck Plan

Indicate dimensions / measurements where shown:

Stairs: Indicate location, number of risers, dimensions of risers and treads and width of stairs.

Note: You may use this drawing to show the dimensions of your deck.

1/2 inch lag bolts or through bolts securing ledger board to host structure, alternating top & bottom, spacing per Table R502.2.2.1

Beam Size—Double 2 X ___

Postholes (typical)

Joint Span | 6’ & Less | 6’-1” to 8’ | 8’-1” to 10’ | 10’-1” to 12’ | 12’-1” to 14’ | 14’-1” to 16’ | 16’-1” to 18’
---|---|---|---|---|---|---|---
Connection Details | On center spacing of fasteners alternating top and bottom of ledger board
1/2” lag screw with 15/32” Maximum sheathing | 30” | 23” | 18” | 15” | 13” | 11” | 10”
1/2” diameter bolt with 15/32” max. sheathing | 36” | 36” | 34” | 29” | 24” | 21” | 19”
1/2” diameter bolt with 15/32” max. sheathing and stacked washers. | 36” | 36” | 29” | 24” | 21” | 18” | 16”
**Deck Construction Drawing Examples:**

**Sample railing**
Guardrail side view

- 4 X 4 intermediate posts
- Maximum 6’ spacing

- Rails must be placed with a 4 inch maximum opening between.

**Deck Section Drawing**

- Exterior wall of house
- Guardrail (intermediate members not to exceed 6 ft. on center)
- Decking type
- Height ___ inches minimum
- Approved concrete embedded tie down anchor strap.

- Joist
- Ledger board & flashing

**Sample pier and column connection**

- Maximum allowable beam spans between column posts or piers:
  - 2-2 x 6 = 4 feet
  - 2-2 x 8 = 6 feet
  - 2-2 x 10 = 8 feet
  - 2-2 x 12 = 10 feet

- 1/2” J-bolt or expansion bolt anchor with column attachment hardware base
- Grade
- Concrete pier

**Sample columns and beam attachments**

- Diagram A
  - 4x4 style with cripples (braces)

- Diagram B
  - 6x6 style with mortise method

- Beam
- 1/2” Carriage bolts
- Cripples 24” long or to bearing on top of pier if less than 24”.
- Cripples 24” long or to bearing on top of pier if less than 24”.
- lumber
- mortise
- mortise

**Deck Beam Construction**

- Floor Joist
PLAT OF SURVEY

SAMPLE

SCALE 1" = 20'

ELECTRIC: ---------
TELEPHONE: ---------

PLAT OF SURVEY OF LOT 1 IN
BATAVIA, KANE COUNTY, ILLINOIS.

COMMONLY KNOWN AS

STATE OF ILLINOIS)
COUNTY OF KANE

I, ILLINOIS PROFESSIONAL LAND SURVEYOR, NO. 2768,
DO HEREBY CERTIFY THAT THE PLAT SHOWN HEREIN IS A CORRECT REPRESENTATION OF
A SURVEY PERFORMED AT AND UNDER MY DIRECTION.
DATED AT AURORA, ILLINOIS ON
1997.

SURVEYING
Associates, Inc.
Professional Land Surveyors
Aurora, IL (630)

FILE:
REV: