## Building a Wood Deck, Gazebo, or Pergola

**ADDRESS:**

**Applicant Name:**

**Applicant Daytime Phone:**

**Applicant Email Address:**

**Date Received:**

**Check in by:**

**Date Returned to Applicant:**

I understand that any missing or incomplete items or failure to clearly describe the proposed scope of work will cause this plan review to be delayed until the submittal is complete and/or the work is correctly described. Upon submittal of the remaining items, I understand that the plans are still subject to review by the Village and that corrective measures and/or additional information may be required.

_____________________________________                          ________________________  
Applicant Signature                                                           Date

### Submittal Checklist, minimum requirements: (* = pergola)

<table>
<thead>
<tr>
<th>Item Description</th>
<th>OK</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homeowners Association Approval letter, if required *</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete building permit application form *</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accurate plat of survey, indicating;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exact location and size of deck/gazebo to scale *</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distance of deck/gazebo to all side and rear property lines, and to the house *</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distance to any other structure on the lot (such as garage, shed, permanent fire pit) *</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two (2) copies of detailed structural drawing of deck or gazebo indicating:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall dimensions of deck/gazebo, including height of deck above grade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depth of post holes, post sizing, and spacing *</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location of basement window wells, hose bibs, electric meter and gas meter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Method and materials of attachment of the ledger board</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If attached to house, list exterior finish (brick, siding, etc) and method of attaching *</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade and nominal sizes of structural lumber</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size of beams; size, spacing and span of floor joists</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type and direction of decking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flooring elevation in relationship to the existing grade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A detail of stair width, tread depth, riser height, handrail and guardrail</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Comments / Other Submittals Required:**
Minimum Requirements:
1. The structure cannot encroach on any zoning setback or easement *
2. Post holes must be a minimum 42 inches deep *
3. All weight bearing lumber must be of structural grade and suitable to its application *
4. A guardrail is required where the deck surface is 30 inches or more above grade. All guardrails must conform to code, including baluster spacing and top rail.
5. Fasteners along ledger boards must attach directly to wall studs.
6. Basement egress windows must remain accessible. *
7. All lumber must be moisture resistant. *
8. Metal fasteners must be rust resistant. *
9. Staircases with four or more stair risers must have a graspable handrail.
10. The bottom staircase stringers must bear on an all weather surface.
11. A floor or landing is required at the top and bottom of each stairway.
12. Note that decks associated with swimming pools have special requirements for a barrier.
13. Lighting is required at the top of a stairway so that the landing and treads are illuminated.
   (A separate electrical permit may be required)

Minimum Required Inspections:
1. Post holes prior to pouring concrete *
   (Post holes must be dry at time of concrete pour)
2. Rough framing (Note: If the deck is 48" or higher from grade and the area under the deck will remain accessible, the rough framing inspection can be done during the final inspection.)
3. Final framing when the structure is complete with Community Development *

Helpful Contact Information:  
J.U.L.I.E.   811
Ameritech  (800) 244-4444
Comcast    (800) 226-2278
ComEd      (800) 344-7661
NICOR      (800) 730-6114
Community Development (847) 551-3478

This list comprises some of the most common code violations when installing a deck, gazebo, or pergola. It does not address every possible violation, nor is it intended as an instruction manual.
APPLICATION FOR BUILDING PERMIT

Date: ________________  Permit No.: ________________
Name of Owner: ___________________________  Property Index No.: 03-:
Address of Property: ___________________________  Suite No.: ________________
Scope of Work: ____________________________________________________________

☐ SINGLE FAMILY RESIDENCE  ☐ APARTMENTS  ☐ NO. OF BEDROOMS  ☐ ADDITIONS-ALTERATIONS
☐ TOWN HOMES  ☐ COMMERCIAL  ☐ NO. OF UNITS  ☐ INDUSTRIAL
☐ GARAGE  ☐ OTHER BUILDING

CONSTRUCTED OF ____________________________________________ CONSTRUCTION COST ________________
______ STORIES  ______ FEET WIDE  ______ FEET LONG  ______ FEET HIGH  ______ BASEMENT: YES NO
______ FIREPLACE: YES NO

CONSISTING OF ____________________________________________ (INCL. DRAINS)
______ ROOMS CUBIC FEET  ______ NO. OF PLUMBING FIXTURES

NAME | ADDRESS | PHONE
--- | --- | ---
OWNER | | |
GEN. CONTRACTOR | | |
EXCAVATOR | | |
CARPENTER | | |
ROOFER | | |
BRICK MASON | | |
CEMENT MASON | | |
PLUMBER | | |
SEWER BUILDER | | |
ELECTRICIAN | | |
HEATING | | |
ARCHITECT | | |

No error or omission in either the plans or application, whether said plans or application has been approved by the Building Official or not shall permit or relieve this applicant from constructing the work in any other manner than that provided for in the ordinance of this Village relating thereto. The applicant having read this application and fully understanding the intent thereof declares that the statements made are true to the best of my knowledge and belief.

BUILDING PERMIT ......................... $ __________ SCHOOL ......................... $ __________
ELECTRICAL ................................ $ __________ PARK ......................... $ __________
PLUMBING FIXTURES ......................... $ __________ LIBRARY ......................... $ __________
PLAN REVIEW FEE/OPTIONS DELETE ........ $ __________ SIDEWALK ......................... $ __________
FIREPLACE ................................ $ __________ SEWER TAP ( ) ......................... $ __________
PATIO/DECK ......................... $ __________ WATER TAP ( ) ......................... $ __________
DRIVEWAY PERMIT ......................... $ __________ WATER METER ( ) ......................... $ __________
HEAT. VENTILATION, AIR CONDITIONING ...... $ __________ WATER FOR CONSTRUCTION-INSPECT ........ $ __________
OCCUPANCY CERTIFICATE ......................... $ __________ TRAFFIC IMPACT FEE ......................... $ __________
TOTAL ......................... $ __________

Name of Applicant: ___________________________  Print ___________________________  Date: ________________  Phone No.: ________________
Signature of Applicant: ___________________________  Date: ________________
Signature of Owner: ___________________________  Date: ________________
Permit Approved: ___________________________  Date: ________________

Building Official

1200 L. W. Besinger Drive  Carpenterville, IL 60110  847-551-3478
VILLAGE OF CARPENTERVILLE  COMMUNITY DEVELOPMENT DEPARTMENT
APPLICATION FOR BUILDING PERMIT
DOES NOT QUALIFY FOR 1-DAY PERMIT REVIEW

This is an example of the property drawing on a Plat of Survey that is not current or up-to-date. This Plat of Survey shows only the foundation of the house. It does not show any improvement on the property, such as the garage, deck, stoop, sidewalk, etc.

QUALIFIES FOR 1-DAY PERMIT REVIEW

This is an example of the property drawing on a Plat of Survey that is current and up-to-date. This plat of survey shows the foundation of the house, as well as the driveway, garage, stoop, and sidewalk. If this property had a shed, patio, pool, etc., it would all be shown on the Plat of Survey.
JOIST-TO-BEAM CONNECTION
Joists may bear on the beam and everhang past the beam (3 feet max.)—In this case, use Option 1 or Option 2. Joists may also attach to the side of the beam with joist hangers—In this case, use Option 3. Your drawings shall indicate the option(s) selected. In case you selected Option 3, please indicate the characteristics of the joist hangers.

EXAMPLE OF DECK FRAME PLAN
Your drawings shall indicate the joists and beams layout, including size, location of the ledger board, posts, piers, and the type, size and spacing of the ledger board fasteners.
The determination of beam size is based on your joist span characteristics. Also, if your joists overhang, or do not overhang. The following drawing illustrates these requirements. Please indicate in your drawings the beam(s) size(s); the joists size(s) and the joists & beam(s) spans.

This drawing illustrates the joist span of a deck attached at house.
LEDGER ATTACHMENT REQUIREMENTS

GENERAL: The ledger board shall be equal to or greater than the joists size. Make sure that the existing house band board is capable of supporting the new deck. Otherwise, a free standing deck is required. Flashing is required at any ledger board connection to a wall of wood framed construction. Please indicate length of the $\frac{1}{2}\"$ Ø lag screws and spacing.

EXAMPLE OF ATTACHMENT OF LEDGER BOARD-TO-BAND BOARD

EXAMPLE OF ATTACHMENT OF LEDGER BOARD-TO-FUNDATION WALL
(CONCRETE OR SOLID MASONRY)
GUARD REQUIREMENTS

GENERAL: All deck surfaces located more than 30" above the floor or grade below shall have guardrails not less than 36" in height. Any pre-fabricated wood, plastic, composite or manufactured guard system purchased from a home center store, lumber company or similar will also require a plan submission.

EXAMPLE OF GUARD POST TO OUTSIDE JOIST DETAIL

![Diagram of guard post to outside joist detail.]

Please note that you may use other ways to attached the posts to the rim joist; such as holding them using hold-down anchors or stud tie plates. Your drawings shall indicate the way chosen to attached the posts to the rim joists.

EXAMPLE OF GUARD POST TO RIM JOIST DETAIL

![Diagram of guard post to rim joist detail.]

VILLAGE OF CARPENTERSVILLE
COMMUNITY DEVELOPMENT DEPARTMENT
TYPICAL DECK DETAILS

Page 4 of 8

Q:\Forms, Lists & Handouts\Handouts\070219-Deck Handout Set\070216-Deck handoutdwgs- page 4 of 8.doc
GUARD REQUIREMENTS

GENERAL: All deck surfaces located more than 30” above the floor or grade below shall have guardrails not less than 36” in height. Any pre-fabricated wood, plastic, composite or manufactured guard system purchased from a home center store, lumber company or similar will also require a plan submission.

Please note that only those plastic, composite or manufactured guard systems listed by an accredited testing agency are approved for use in the Village of Carpentersville.

STAIR HANDRAIL REQUIREMENTS

All stairs with more than three (3) risers shall have a handrail at least on one side of the stairway. Handrails shall have a minimum height of 34 inches and a maximum height of 38 inches measured from the nosing of the threads.

All required handrails shall be continuous the full length of the stairs. End shall be returned or shall terminate in newel posts or safety terminals.

Handrails shall comply with the grip size requirements.

HANDRAIL REQUIREMENTS

Refer to the 2006 International Residential Code, Section R311.5.6.3 or call for further information.
STAIR REQUIREMENTS

GENERAL: Stairs, stairs stringers, and stair guard rails shall meet the minimum requirements shown in the following figures:

TREAD AND RISER DETAIL

STAIR STRINGER REQUIREMENTS

TYPICAL DECK DETAILS
A hard surfaced landing is required, which shall be 36" long by the width of the stairway.
POST REQUIREMENTS

*All deck and pergola posts shall be 6 x 6 minimum, and the maximum height shall be 14'-0. The beam shall be attached to post by notching the 6 x 6 as shown below.

(2) 2x beam
beam most bear on 6 x 6 notch
6 x 6 minimum

PROHIBITED POST-TO-BEAM ATTACHMENT CONDITION

POST-TO-BEAM REQUIREMENTS

RIM JOIST REQUIREMENTS

Attach a continuous rim joist to the ends of joists as shown below. Attach decking to the rim joist.

RIM JOIST CONNECTION DETAILS