

VILLAGE OF OAKWOOD HILLS BUILDING DEPARTMENT

A QUICK REFERENCE FOR THE BUILDING OF GARAGES DRIVEWAYS CULVERTS

FOR REFERENCE ONLY
SEE MUNICIPAL CODE FOR COMPLETE DETAILS

CONSTRUCTION REQUIREMENTS

Garages must be constructed according to the 2021 International Residential Code with Amendments. The following sections are some of the amendments to the 2021 IRC.

R302.5.1 Opening protection. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 1 3/4 inch (44 mm) in thickness or a solid or honeycomb core steel door not less than 1 3/4 inch (44 mm) in thickness with a minimum one hour fire-rating. Doors shall be self-latching and equipped with self-closing or automatic-closing device. All doors must fit in the frame so that air cannot pass freely around the door when it is in a closed position. Doors must be provided with wood or metal thresholds and weather stripping.

R302.6 Dwelling-garage fire separation. All walls and ceilings of an attached garage shall be separated from the residence by not less than 5/8-inch (15.9 mm) type X fire-rated gypsum board or equivalent applied to the garage side. All wall and ceiling gypsum board edges and ends must have taping and minimum 2 box coats applied to prevent the passage of gasses, smoke, and odor from the garage to the residence. Openings in the garage walls shall comply with Section R302.5. Attachment of gypsum board shall comply with Table R702.3.5.

R304.4 Minimum area - Garage. Minimum dimensions for garages shall be as follows:

Garage Dimensions	Square Feet	Square Meters
Inside width	11	3.5
Inside depth	19.5	5.9
Door width	9	2.7
Minimum door height	7	2.1
Maximum door height	9	2.7

Minimum floor area for the foregoing shall be measured from the inside of all finished walls.

R304.5 Maximum area – Garage. The maximum size for an attached or detached garage shall be 850 square feet (78.97 square meters) in R-3 zoning district and 1200 square feet (111.48 square meters) in all other residential zoning districts, with not more than three (3) car door openings (27 feet, 8.23 meters, maximum opening). The maximum number of garages per residential lot is restricted to two (2), one attached and one detached, with a combined square footage of 1200 square feet (111.48 square meters) with no more than 4 car openings.

R309.1 Garage floor surface. Garage floor surfaces shall be of approved noncombustible material. The area of floor used for parking of automobiles or other vehicles shall be sloped a minimum of 2 inches (51 mm) to facilitate the movement of liquids toward the main vehicle entry doorway. A minimum 6-inch (152 mm) high concrete curb shall be constructed between the garage floor surface and adjacent interior spaces.

R309.6 Garage required. No permit for the construction of a new residence or addition to a residence that does not presently have a garage shall be issued unless at least a one-car garage (either attached or unattached) is included in the plans. A carport shall not satisfy the garage requirements of this section. When an attached garage is sought to be converted to habitable living space, a new substitute garage must be constructed prior to the issuance of a conversion permit. If a garage is demolished or removed for any reason, a replacement garage must be constructed within 6 months of demolition.

R506.1 General. All slabs on grade shall have synthetic fibers added to the concrete and a minimum of 4 inches (102 mm) thick (for expansive soils, see Section R403.1.8). The specified compressive strength of concrete shall be as set forth in Section R402.2. All exterior concrete slabs on ground and those in garages shall be reinforced with a minimum of 6 inch (152 mm) by 6 inch (152 mm) by 10 gauge welded wire mesh reinforcement. Flashing is required when concrete is placed against wood construction.

Exception: Welded wire fabric reinforcement is not required in concrete slabs less than 5 feet (1524 mm) in width.

R506.2 Site preparation. The area shall have all vegetation, topsoil and foreign material removed. No concrete slab shall be placed in water or on a soft wet subgrade. The site must be pumped dry at least twenty-four (24) hours before concrete is poured. Concrete shall not be poured on frozen soil.

R506.2.2 Gravel base. A 4-inch thick (102 mm) base course consisting of clean graded gravel or crushed stone shall be placed on the prepared subgrade.

R506.2.3 Vapor retarder. A 10-mil polyethylene vapor retarder with joints lapped not less than 6 inches (153 mm) shall be placed between the concrete floor slab and the base course.

Exception: The vapor retarder may be omitted:

1. From detached garages, utility buildings and other unheated accessory structures.
2. From driveways, walks, patios and other flatwork not likely to be enclosed and heated at a later date.
3. Where approved by the Building Official, based on local site conditions.

ELECTRICAL REQUIREMENTS

Electrical in garages must be installed according to the 2020 edition of the National Electric Code (NEC) with Amendments. The following sections are some of the amendments to the NEC.

Electrical requirements for attached and detached garages: see 6-401.

- All garages (including detached type) shall have at least one (1) lighting fixture per car area (bay). Said lighting fixture(s) shall be switched at all entrances/exits of said garages. A minimum of one (1) switched outside lighting fixture shall be installed at all service doors.
- All detached structures requiring service shall be served underground in an approved manner and shall be suitably protected against physical damage.
- Conductors installed for the connection to detached garages, detached buildings of any type, general lighting, etc. shall be copper. Said conductors running under driveways, sidewalks, paved areas, etc. shall be installed in rigid galvanized metal conduit. Raceways shall be sized per decision to provide ample cross section space for wire pulls and shall also contain a ground conductor which insulation shall be green in color.
- All remodeling, additions, etc. to any building as recognized in this code shall be in full compliance with all code requirements and/or ordinances as adopted by the Village of Oakwood Hills. If, in the Building Official's judgment, any wiring, electrical devices, etc. in existing buildings (as recognized in this code) is unsafe to property, human life, etc. or in noncompliance with the electrical codes/ordinances adopted by the Village of Oakwood Hills, said wiring, devices, etc. shall be upgraded to safe conditions.

ZONING REQUIREMENTS

10-103 (F). Accessory Buildings in Residential Districts. Not more than one detached garage and one other accessory building may be located on any residential zoning lot; accessory buildings shall comply with the following standards:

1. All accessory structures shall be located in the rear yard.
2. No accessory structure may be located in any easement
3. Minimum separation of accessory structure from principal building 5 feet.
4. A detached garage may be placed in a side yard provided it meets the principal buildings set back requirements.
5. A detached garage shall be minimum 10 feet from principal structure.
6. Living quarters shall not be permitted within an Accessory Structure
7. Minimum rear set back:
 - a. Lake lot – 15 feet from high water line.

- b. Double frontage lot – 20 feet
- c. Other lots – 5 feet
- 8. Minimum side yard set back
 - a. Corner lot same as principal building
 - b. All other lots - 3 feet

10-105.3. Lot or Parcel Bulk Requirements.

Accessory building height: Located within 50 feet of the lake high water line - 10 feet; Garage - 16 feet;

Maximum lot coverage for accessory building: Located within 50 feet of lake high water line - 65 square feet; Garage - 850 square feet.

SECTION R334 DRIVEWAYS AND CULVERTS

R334.1 New Driveways (not replacement or temporary). Every residence shall have a driveway at least 12 feet (366 cm) in width of paver brick, asphalt or concrete construction, as provided in R334.1.1-R334.1.3, connecting the garage with the adjoining public road. All driveways servicing garages shall be designed, constructed and maintained in such a manner as to prevent surface water drainage from entering into the garage. No final certificate of occupancy shall be issued until such driveway is completed. Driveways shall be installed so that they will not interfere with drainage.

R334.1.1 Concrete. Concrete driveways shall be constructed in accordance with Section R506

R334.1.2 Asphalt paving. A minimum of two and half (2 ½) inches (64 mm) of compacted asphalt paving required over a compacted CA-6 gravel base of eight (8) inches (203 mm) minimum.

R334.1.3 Paver Brick. Installed per manufacturers recommendations over a minimum of one (1) inch (25 mm) bedding sand over eight (8) inches (203 mm) of a compacted CA-6 gravel base.

R334.1.4 Culverts and/or Drainage Ditches. Whenever a driveway cannot be installed without obstructing the free flow of surface water drainage in the right-of-way, the owner of the premises served by such driveway shall install a culvert to facilitate such drainage. The Village Engineer shall determine the necessity for, and the proper placement of, such culvert. The driveway culvert shall be made of corrugated steel or other material acceptable to the Village Engineer and shall possess the following minimum specifications:

1. Culvert Pipe shall be installed prior to start of construction
2. Diameter: Minimum diameter shall be fifteen (15) inches (380 mm) with a minimum of four (4) inch (102 mm) bedding and a minimum of eight (8) inches (152 mm) cover of gravel over the pipe
3. Length: Culvert Pipes shall have the cross slope over the culvert no greater three to one (3:1) unless approved headwall is used.

R334.2 Temporary Driveways (New Construction Residencies). A minimum of four (4) inches (102 mm) of gravel shall be installed in the driveway at the time the foundation is backfilled. Whenever a temporary driveway cannot be installed without obstructing the free flow of surface water drainage in the right-of-way, the owner of the premises served by such driveway shall install a culvert in accordance with Section R334.1.4.

R334.3 Replacement Driveways. Replacement driveways shall use the materials as provided in Section R334.1 with the following exceptions:

1. The requirements for base material thickness are recommendations only.
2. It is recommended that existing driveway culverts of less than 15 inches (380 mm) be upgraded to 15 inch (380 mm). Unless approved by the Village engineer.
3. Significant changes to the current driveway length and width shall constitute a new driveway and the requirements of R334.1 shall apply in full.

TO APPLY FOR A PERMIT

1. Complete permit application
2. Submit 2 copies of a scaled ($\frac{1}{4}'' = 1'$) drawing with information about construction of the garage, including foundation detail, size and location of all framing members, type of lumber, detail of attachment to the house. Show all dimensions. Show driveway and culvert.
3. Submit 2 plats of survey and indicate the location of the garage, driveway and culvert and distance to property lines..
4. Submit 2 copies of septic system plan and indicate on the septic plan the location of the proposed garage, driveway and culvert.
5. Copy of roofer's license.
6. Truss certificates.
7. Contactor's bond.
8. Copy of proposal from contractor.

INSPECTION REQUIREMENTS

1. Footings (culvert and gravel installed)
2. Foundation pre-pour
3. Concrete floor (gravel, vapor barrier, wire mesh)
4. Rough (framing and electric)
5. Driveway gravel base
6. Final inspection upon completion.

Additional inspections may be required depending on site and project conditions.

Call J.U.L.I.E. at 800-892-0123 or contact them at illinois1call.com for utility locations and before digging.

The above is provided for general information purposes only and shall not be construed as total compliance with any or all Codes and Ordinances of the Village of Oakwood Hills. Always consult the Codes or Ordinances for accurate information

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