

RESIDENTIAL GARAGE

Permit Application Guidelines

- 1. Submit to Community Development Building Division the following for review:
 - a) Building permit application. Libertyville Municipal Code (LMC) 6-86(a), (b), (c) & (d)
 - b) Two copies of the Plat of Survey dimensionally locating the garage and driveway with respect to the property lines and any buildings on the site. LMC 6-86(f) Two copies of the garage foundation and framing plans and elevations indicating the overall size and materials to be used in construction. Two copies of the garage wall section indicating the overall height from top of grade to top of roof, foundation type and depth and building materials. LMC 6-86(e)
 - c) Calculations indicating building and lot coverages.
- 2. The permit may be issued within 5 business days from date of submittal to Building Division if information submitted is complete. LMC 6-87(a)
- 3. Engineering Division review is required for any site work, including any additions or accessory structures and any grading, drainage, utility, or surface improvements. Note: In accordance with the Village's Appendix P amendment to the Lake County Watershed Development Ordinance (WDO), stormwater storage (detention) is required on most properties in the Village if there is a net increase of impervious surface area exceeding 200 square feet (compared to existing conditions on the effective date of 7/28/2015). For more information, visit the <u>Stormwater Management Ordinance</u> webpage, or call the Engineering Division at (847) 918-2100.
- 4. Call **J.U.L.I.E.** at (800)892-0123 to locate any underground utility lines before start of construction.

Garage Construction Guidelines

- A formed spread footing and foundation wall is required for all garages except one story structures a maximum of 24' in each direction and not to exceed 576 square feet where a trench footing/foundation wall is allowed. A minimum 8" thick foundation wall is required. A minimum 8" deep by 18" wide formed spread footing is required.
 2015 LMC 6-130(a) & (e)
- 2. There shall be a service door from the garage to either the dwelling or directly to the outside as a means of emergency egress. There shall not be any opening from a garage directly into a room used for sleeping purposes. All door openings between the garage and the dwelling shall be provided with solid core doors, not less than 1 3/8" thick with rabbeted jamb, or a twenty-minute labeled fire door. No other non-fire-rated openings between the garage and the dwelling shall be permitted. **2015 IRC R302.5.1 & 2015 LMC R309.6**
- 3. The installation of any open-flame heating unit, hot water tank or other open-flame,

fuel-burning appliance in the garage space is not permitted. Heating appliances that are approved (by testing agency) for use in a garage may be permitted. **2015 IRC M1307.1**

- 4. Ducts in the garage and ducts penetrating the walls or ceilings separating the house from the garage shall be constructed of a minimum 26 gage sheet steel and shall not have openings into the garage. **2015 IRC R302.5.2**
- All garage floor surfaces shall be of noncombustible material. The garage floor shall be pitched to surface drain all parts of the garage through the vehicle door opening.
 2015 IRC R309.1
- Concrete in garage floor slabs shall have a compressive strength of 3500 psi at 28 days.
 2015 IRC Table R402.2
- 7. Provide a 6 mil minimum vapor barrier under concrete slab. **2015 IRC R506.2.3**
- 8. A garage attached to a single-family house shall be completely separated from all portions of the dwelling unit by five-eighths-inch firecode drywall, installed on the garage side of all common walls. This fire separation wall shall be continuous from the top of the concrete up to the underside of the roof deck to separate the attic spaces, if any, or a fire ceiling of the same drywall material may be installed over the garage space as the common attic separation. Where any portion of the garage space is under any portion of the dwelling unit above the garage space, then all interior wall surfaces, ceilings, columns and structural beams within the garage space shall be protected with the same drywall material as above. **2015 IRC & LMC Table R302.6**
- 9. No garage door or doors shall constitute more than thirty percent (30%) of the area of the front face of the dwelling to which such garage is attached. Libertyville Zoning Code (LZC) 4-2.4b, 4-3.4b, 4-4.4b, 4-5.4b, 4-6.4b, 4-7.4b, 4-8.4b & 4-9.4b
- 10. The garage and dwelling unit shall conform to the Residential Coverage and Setback Requirement Table below. LZC 4-2.5, 4-3.5, 4-4.5, 4-5.5, 4-6.5, 4-7.5, 4-8.5 & 4-9.5
- The minimum depth of the footings/foundations shall be at least 42" below the finished grade. Top of foundation shall be a minimum of 6" above grade. 2015 LMC 6-130, R403.1.4 & 2015 IRC R404.1.6
- 12. Sill plates shall be of pressure-treated, dry rot resistant lumber and be bolted to the foundation walls with one-half-inch diameter anchor bolts set into the top of the foundation wall a minimum of 7" in depth. The anchor bolts shall be spaced so that there are at least two bolts per section of plate and not more than 1' from the end of each section of plate and from each corner or door opening, with intermediate bolts spaced no more than 6' on center. **2015 IRC R403.1.6**
- 13. Any detached garage that is within ten (10) feet or less to the principal building or less than five (5) feet from any property line shall have the encroaching interior walls and roof structure of the garage protected with drywall, but in no case shall a detached garage be closer than three (3) feet to any other building or structure for maintenance and walkways. 2015 LMC 6-142(b)
- 14. The maximum height of a detached garage: a) shall not be greater than one and one half story; b) shall not exceed 20' (top of grade to top of roof; and c) shall not exceed the height

of the principal structure. LZC 4-2.5a, 4-3.5a, 4-4.5a, 4-5.5a, 4-6.5a, 4-7.5a, 4-8.5a & 4-9.5a

15. The detached garage when located entirely within the rear fifty percent (50%) of a lot may be located not closer than five (5) feet to any side lot line or rear lot line. LZC 4-2.5d4ii, 4-3.5d4ii, 4-4.5d4ii, 4-5.5d4ii, 4-6.5d4ii, 4-7.5d4ii, 4-8.5d4ii & 4-9.5d4ii

Electrical Requirements for a Residential Garage

- 1. Attached and Detached Garages (which have power):
 - A separate 20-ampere circuit shall be provided for plug-in equipment and devices.
 2015 LMC 6-282 Art. 210.52(G)1(a)
 - b. A separate circuit shall be for overhead garage door. 2015 LMC 6-282 Art. 210.52(G)1(b)
 - c. A separate circuit shall be provided for lighting. In addition, there shall be at least one lighting outlet on the interior of the garage and at least one lighting outlet on the exterior of the garage (by the service door). A switch shall be installed to control these outlets. **2015 LMC 6-282 Art. 210.52(G)1(c)**
 - d. Garage to be fed underground using conduit. Galvanized rigid metal conduit a minimum of 6" below grade, PVC 18" below grade (or 18" if running rigid under a driveway). **2014 NEC 300.5(A)**
 - e. Provide a sub-panel with main breaker in the detached garage. It shall contain a minimum of four breaker spaces. All circuits supplying the garage shall originate in the garage. 2015 LMC 6-282 Art. 225.36
 - f. Provide ground rod for panel. 2014 NEC 250.32

Residential District Coverage and Setback Requirements

	R-1	R-2	R-3	R-4	R-5	R-6	R-7	R-8
Minimum Yards (feet)								
Front	50	50	40	30	30	30	30	30
Interior Side	30	20	20	10	10	5	5	5
Interior Side Aggregate	60	40	40	25	20	15	15	15
Corner Side	50	50	40	30	30	30	30	30
Rear	75	60	50	40	40	35	25	20
Maximum Building Coverage (%)								
Interior Lot	15	15	20	25	30	35	35	40
Corner Lot	20	20	25	30	35	40	40	45
Maximum Lot Coverage (%)								
Interior Lot	30	30	35	40	45	45	50	60
Corner Lot	25	25	30	35	40	40	45	55