



CITY OF PARK RIDGE

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DEPARTMENT OF COMMUNITY - PRESERVATION AND DEVELOPMENT –

BUILDING SAFETY DIVISION

Commercial Guidelines

All construction shall meet:
International Building Code 2015
International Energy Conservation Code 2015
International Property Maintenance Code 2015
City of Park Ridge Code Amendments
National Electric Code 2014
International Mechanical Code 2015
International Fuel Gas Code 2015
State of Illinois Plumbing Code
International Fire Code 2015
2015 NFPA 101

Review the City Ordinances at www.parkridge.us

NOTE:

Separate applications (if applicable) must be submitted for a:

- Fire Alarm System
- Fire Sprinkler System
- New signage
- Liquor sales
- Business licenses/registration

PLAN SUBMITTAL REQUIREMENTS:

- Use and Occupancy Classification
- Type of Construction
- Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and relevant laws, ordinances, rules and regulations, as determined by the building official.
- Demolition Plan shall provide a plan demonstrating all demolition and new construct
- Must include Index of Drawings on Cover Sheet
- Must include a letter of intent/scope of work describing the exact details of what is proposed to be demolished, constructed and/or installed.

BASICS:

- Use and Occupancy Classification
- Type of Construction
- Contain all debris in containers

- Keep public ways open and clear
- Keep all sidewalks clear
- Post address numbers on all exterior doors
- Approved Fire Extinguishers are required for all altered spaces
- Exit signage and emergency lights are required for all altered spaces
- All drywall is to be 5/8, per city the ordinance
- All walls separating units and hallways shall be two hour rated per city ordinance required for all altered spaces
- A minimum of 36” of aisle width is required for all altered spaces
- Doors shall be a minimum of 32” and open outward if occupancy is greater than 50 are required for all altered spaces

OUR MISSION: THE CITY OF PARK RIDGE IS COMMITTED TO PROVIDING EXCELLENCE IN CITY SERVICES IN ORDER TO UPHOLD
A HIGH QUALITY OF LIFE, SO OUR COMMUNITY REMAINS A WONDERFUL PLACE TO LIVE AND WORK.

The Building Review Process

All construction documents to be prepared by a registered design professional.

The information shall be submitted for both existing and proposed property conditions and shall conform to the following:

Submit a permit application along with a minimum five sets of construction documents that are signed and sealed by an Illinois licensed design professional. By affixing the professional's design seal and signing the technical submissions, it affirms that these submissions have been prepared by or under the direct supervision and control of that licensed design professional and to the best of the design professional's knowledge and belief those documents comply with applicable laws, codes and ordinances.

The construction documents will consist of appropriately scaled drawings that include a vertical segment of the building from the peak of the roof to the footing with details and dimensions of all structural interior and exterior materials and proposed spans. Submit manufacturer's span charts when using engineered lumber. All other types of construction require a plan of the sectional view with all the details and dimensions of all structural interior and exterior materials be submitted.

Drawings (The maximum size shall be 24 x 36. The minimum size shall be 18 x 24) shall include the following components

Cover sheet

- Must include a letter of intent/scope of work describing the exact details of what is proposed to be demolished, constructed and/or installed.
- Must include Index of Drawings on Cover Sheet.
- Identify the project.
- Project address and a location map.
- Professional design firm(s) shall be identified.
- Principal design professional(s) for each firm shall be identified.
- All applicable codes shall be listed.
- Design criteria list shall include, but not limited to: Local design load criteria, including: frost depth, live loads, snow loads, wind loads, and other special loads. Occupancy group, the design approach for mixed- uses (if applicable), type of construction, height and area limitations, location of property, seismic zone, fire sprinklers, adequate details to evaluate fire resistive construction requirements, including data substantiating required ratings occupant load, land use zone, parking load requirements
- Seal(s) and signature(s) of responsible design professional(s) and indication as to which of the indexed drawings the seal applies, the expiration of the license and the registration number of the professional design firm, if applicable

Site Plan/Survey

- Show to scale on a plat of survey prepared, certified and sealed by an Illinois Professional Land Surveyor that clearly and accurately depicts the current conditions on the property including the size and location of all new construction, and any existing buildings, structure or engineering works, distances from lot lines, all property lines with dimensions, all streets, easements and setbacks. Show north arrow and scale. A survey older than 6 months must be accompanied with an affidavit of present accuracy and signed by the current property owner. The survey must be legible, to scale and accurate.
- Utility Plan - show applicable water, fire service, sewer, gas, communication, electrical including point of connection, proposed service routes and existing utilities on the site.
- Show all required parking, drainage, and grading information with reference to finish floor and adjacent streets.
- Site topography - indicate drainage inflow and outflow locations and specify areas required to be maintained for drainage purposes and storm water control. Provide flood plain information.
- Soil boring and geotechnical recommendations report, including the description and bearing value.
- Erosion control
- Photometric
- Landscape plan - Submit the Appearance Commission approved landscape plan, where applicable.

- The survey must indicate the building front, side, rear and either the corner side or reverse corner side yard setback dimensions.
- The survey must indicate any easements or vacated alleys.
- Submit proof of ownership, if your property includes a vacated alley.
- If your property includes an easement, submit a statement of whether there are any building restrictions for the easement on your property.

SITE PLAN

- Must be to scale.
- Show the location of any proposed air conditioning condenser units.
- Show the location of all existing and proposed buildings, structures and impervious surfaces such as driveways, walkways, decks, etc. indicating the setbacks. The size and location of sewer and water services and where they connect to the main must also be shown.
- Show the location of all overhead utilities.
- For commercial and multi-family permit applications, show the location of the required 6-foot high fenced refuse enclosure.
- Show the location, size and species of all existing trees larger than 3 inches in diameter including those on the parkway.
- Indicate any proposed tree removals. Tree removals require a separate permit from the forestry division. Apply in Public Works for this permit either before or at the time the building permit application is submitted.
- Indicate any proposed new trees.
- A detailed drawing demonstrating or a statement stipulating that all trees and the entire parkway will be protected by fencing throughout construction in accordance with forestry guidelines. Nothing may be stored within the protected fenced areas.

**For information about the Tree Preservation Regulations and Guidelines, please call the Forestry Division
Phone: 847-318-5451.**

4. *ENGINEERING/GRADING PLAN – Review **Municipal Code Article 15 Chapter 8** Increased impervious surfaces of >5% shall be certified by a professional engineer. All elevations should be with USGS datum (bench mark available from public works). An As-Built grading plan is normally required toward the end of your project. Submit the following:*
- Sheet Size - 8-1/2" x 11" minimum.
 - Scale 1" = 20'.
 - Subdivision Name, Lot Number and Street Address.
 - Dimensions for all property lines.
 - All easements.
 - Building lines.
 - North Arrow (Up).
 - All elevations shown to U.S.G.S. datum.
 - Include the benchmark used (from list of Benchmarks in Engineering Department).
 - Existing elevations to be shown:
 - All lot corners and midpoints.
 - Side yard lot line and low points.
 - The Public sidewalk adjacent to the lot.
 - Curb and flow line on both sides of the lot.
 - Adjacent buildings and garage foundations and midpoint grades.

- Centerline of roadway at center of property frontage.
- Existing one (1) foot contours within lot and extended a minimum of 10' from perimeter to adjacent property.
- Proposed elevations to be shown (in bold or indicate with a "box"):
- Top of the proposed foundations for house (show all multilevel elevations) and detached garage.
- Side yard as well as midpoint grade elevations.
- Arrows indicating the proposed direction of storm water drainage (existing and proposed)
- Side yard summits.
- Phasing of Drainage Work.
- Location of the required area basin with plumbing details how the basin will be connected to the sewer with a minimum of a two-inch reducer inlet.
- For commercial or institutional plans provide detailed detention calculations in accordance with the Storm Water Management Ordinance, Article 11 Chapter 3 of the Park Ridge Municipal Code
- Proposed elevations or finished grade - that is the top of sod or seed, and the finished dirt grade shall be 2" below top of sod.
- In addition to the dimensions of the lot, the drawing must show the elevation of the proposed foundation, the elevation of the proposed grade at the foundation (6-8 inches below the top of the foundation) and the proposed elevation of the summits and low points on the property.
- A drainage basin is required for all single-family dwellings and major additions/alterations.

Floor Plan

- Includes all new walls, doors, and windows with all the corresponding dimensions of each floor, including any attic space that is accessible by walk-up stairs. All other applicable construction also requires a floor plan be submitted. This drawing must be to scale.
- Safety plan to include life safety components which include occupant load, fire separation, travel path and distance, exit access
- Show all floors including basements. Show all rooms, with their use, finishes, overall dimensions, and locations of all structural elements and openings.
- Show all doors and windows, including door and window schedules, if applicable.
- All fire assemblies and area and occupancy separations shall be shown.
- Show all structural members, their size, methods of attachment, location and materials for floors and roofs. Structural design shall consider static and dynamic loading and wind and seismic forces where applicable. All design loads and allowable stresses utilized shall be indicated. Show all roof and deck drainage systems.
- Exterior elevations shall show how all views, all dimensions, referenced elevation, and all openings. Identify all materials and, where applicable, show the lateral bracing system.
- Building Sections and Wall Sections shall show materials of construction and their assemblies. Show all pertinent dimensions.
- Reflected Ceiling Plan shall show all electrical fixtures, diffusers, and grills, sprinkler heads, and other required devices as applicable.

Building Plans

- Must include exact details of what is proposed to be constructed and/or installed. Building plans **must** be prepared by a licensed architect for construction of any new or an addition to a residential or commercial building, and for any major commercial remodeling.

- Sign Plan shall provide the dimensions of the panel and letters, colors, and type of illumination and mounting. Show the awning or canopy details where applicable. Submit the approved Appearance Commission plan where applicable. A separate permit is required.
- Demolition Plan shall provide a plan demonstrating all demolition and new construction
- Structural Plans, Specifications, Calculations and Engineering
- Structural Plans include a vertical segment of the building from the peak of the roof to the footing with details and dimensions of all structural interior and exterior materials and proposed spans. Submit manufacturer's span charts when using engineered lumber. All other types of construction require a plan of the sectional view with all the details and dimensions of all structural interior and exterior materials be submitted.
- Show all foundations and footings. Indicate size, location, thick stresses, materials and strengths and locate reinforcing. Show all imbedded anchoring such as anchor bolts, hold downs, post bases, etc. Provide allowable design pressures or data utilized in design of footings or building supports. Provide soils report for the proposed structure at that site. Soils report indicating the soil type and recommended allowable bearing pressure and foundation type.
- Provide structural calculations for the entire structural system of the project for both vertical and lateral loads. Sufficient input, output, design assumptions and other information should be submitted. Signed and sealed structural design calculations which support the member sizes on the drawings.
- Local design load criteria, including: frost depth, live loads, snow loads, wind loads, earthquake design data, and other special loads.
- Details of foundations and superstructure.
- Provisions for required special inspections.
- Applicable construction standards and material specifications (i.e., masonry, concrete, wood, steel, etc.).

Mechanical System

- Provide Gas Riser Diagram.
- Heating, Ventilation and Air Conditioning (HVAC) or Mechanical Plan shall include the location of the ducts, fans, equipment and appliances and all the corresponding air speeds and volumes.
- Hood/Duct Systems shall include complete details for the entire system including materials of exhaust system, equipment the hood is serving and fire suppression details.
- Show the entire mechanical system (heating, ventilating and air conditioning). Include all equipment and devices, their sizes, structural supports, piping system, duct work and sizes, and temperature control systems. Details of all duct penetrations through fire-resistance rated assemblies including locations for all fire dampers, smoke dampers and ceiling radiation dampers along with applicable fire protection ratings and labeling requirements where required. Provide equipment schedules. Include listing, labeling, installation and compliance with referenced material standards.
- Details on the HVAC equipment including the equipment capacity (Btu/h input), controls, equipment location, access and clearances.
- A ventilation schedule indicating the outdoor air rates, the estimated occupant load/1,000 ft², the floor area of the space and the amount of outdoor air supplied to each space.
- The location of all outdoor air intakes with respect to sources of contaminants.
- Duct construction and installation methods, flame spread/smoke development ratings of materials, flexible air duct and connector listing, sealing of duct joints, seams and connections and duct support spacing.
- Condensate disposal, routing of piping and auxiliary and secondary drainage systems.
- Required exhaust systems, routing of ducts and termination to the exterior.
- Complete details of all Type I and II kitchen hoods, grease duct construction and velocity, clearance to combustibles and fire suppression system.
- Method of supplying combustion air to all fuel fired appliances, the location and size of openings and criteria used to size the openings.
- Details on the vents used to vent the products of combustion from all fuel burning appliances including the type of venting system, the sizing criteria required for the type of vent and the routing of the vent.
- Boiler and water heater equipment and piping details including safety controls, gauges, valves and distribution piping layout.
- Details on the type and quantity of refrigerant, calculations indicating the quantity of refrigerant and refrigerant piping material and the type of connections.
- Complete details on the gas piping system including materials, installation, valve locations, sizing criteria and calculations (i.e., the longest run of piping, the pressure, the pressure drop and applicable gas pipe sizing Table(s) in the IFGC.)

Electrical System

- Electrical Plan - includes the location of all new lights, devices, switches, outlets, smoke/fire alarm, and the service

- equipment. Include measurement of panel clearances and spacing. Include electric service clearances.
- Show all electrical fixtures and devices (interior, exterior and site). Show all fire alarm, security, exit and emergency lighting, and data communication systems as applicable. Show point of connection to utility.
- Labeling criteria of all electrical equipment.
- Lighting floor plan including fixture locations, electrical circuits, circuit numbers, and panel locations.
- Lighting fixture schedule.
- Power floor plans including electrical circuits, wiring sizes, panel locations, working clearances and electrical room egress, disconnect switches, receptacle locations including GFCI locations and required arc fault protected circuits.
- Single line diagram and panel board schedule including AIC rating and available fault current and the calculated service load with a load distribution schedule.
- Details showing the grounding electrodes, bonding of the grounding electrode system and the size of all bonding and grounding electrode conductors for the service.

Plumbing System

- Provide Plumbing Riser Diagram.
- Plumbing Plan - includes the location of all new gas, water supply and wastewater fixtures and pipes and the corresponding pipe sizes.
- Show all fixtures, piping, slopes, materials and sizes. Show point of connections to utilities or on-site disposal systems and water wells. Provide schematic diagrams as necessary for water supply and drainage systems.
- Fire Suppression System
- Show head layout, standpipes, backflow preventers, risers, hazard classification, control, supply and pressure availability, fire department standpipes, fire pumps, and other code requirements.
- Show all fire protection of structural members and architectural elements and show, if applicable, industry recognized fire ratings assemblies.
- Utility Openings
- Show all utility openings in floors, ceilings, walls and roofs, including fire stopping.
- Specifications
- Either on the drawings or in booklet form to further define components, materials, and standards of construction, quality, and all pertinent equipment.
- Elevation Plan – includes exterior views of the outer walls and roof that will be changed or created such as a new structure, an addition, change of roof, etc. Plans must show all the dimensions, architectural details and selection of building materials. This drawing must be to scale. Submit the Appearance Commission approved plan, where applicable.
- Elevator Plan – provide a detailed drawing with dimensions. The drawing must indicate the provision of an emergency phone. A separate permit is required for an elevator.

Agenda Changes

- The design professional(s) of record shall provide notification to the Code Enforcement Official of any and all changes throughout the project and provide revised plans, calculations or other appropriate documents. All revisions shall be identified and included on the technical submissions.

Quality Standards

- It is the responsibility of the design professional(s) of record to provide and maintain complete, consistent and competent technical submissions. If the plans do not meet the criteria, the code enforcement official may take any of the following actions, when consistent with local ordinances and policies:
- Provide a complete list of corrections for revision and resubmittal.
- Increase the plan review fee for additional plan review time required due to lack of completeness.
- Return plans without review.
- Refer the design professional(s) of record to the appropriate state board for possible disciplinary action.
- Pursue other remedies provided by ordinance.

Energy Review

- Design conditions (interior and exterior) consistent with local climate
- Envelope design method, including supporting calculations and documentation
- Complete mechanical plans, specifications and equipment schedules

- Interior lighting design method, including supporting calculations and documentation
- Lighting fixture and control schedules (building interiors and exteriors)
- Com-check or equivalent report

Energy Document

For all new buildings and alterations, submit an approval certificate and the energy efficiency calculations of the building envelope. A free computer program can be found on the U.S. Dept. of Energy WEB page.

Submit Recheck for residential construction and Comcheck for all new commercial structures. The City of Park Ridge is in established climate ZONE 5. See table R301.1.

Submit a copy of the approved passing Res-Check Certificate. Provide a signed and stamped copy from the design professional to ensure that the structure complies with the International Energy Code. Refer to www.energy.gov

- Construction documents shall contain (2015 IECC R103)(if/when applicable)
- Equipment Sizing (R403.6)
- Provide a copy of the heating and cooling sizing in accordance with ACCA Manual S and. Building loads calculated in accordance with ACCA Manual J.
- Insulation materials and their *R*-values.
- Fenestration *U*-factors and solar heat gain coefficient (SHGCs).
- Area-weighted *U*-factor and solar heat gain coefficient (SHGC) calculations.
- Mechanical system design criteria.
- Mechanical and service water heating system and equipment types, sizes and efficiencies.
- Provide: Economizer descriptions.
- Provide equipment and system controls.
- Fan motor horsepower (hp) and controls.
- Duct Sealing/Pipe insulation Provide: Duct and pipe insulation size and location
- Lighting Fixtures
- Location of *daylight* zones on floor plans.
- Lighting fixture schedule with wattage and control narrative.
- Air sealing details.

2015 International Energy Conservation Code

The IECC contains two separate sets of provisions—one for commercial buildings and one for residential buildings. Each set of provisions is applied separately to buildings within their scope. The IECC—Commercial Provisions apply to all buildings except for residential buildings three stories or less in height. The IECC—Residential Provisions apply to detached one- and two-family dwellings and multiple single-family dwellings as well as Group R-2, R-3 and R-4 buildings three stories or less in height. These scopes are based on the definitions of “Commercial building” and “Residential building”

The IECC is a design document. For example, before one constructs a building, the designer must determine the minimum insulation *R*-values and fenestration *U*-factors for the building exterior envelope. Depending on whether the building is for residential use or for commercial use, the IECC sets forth minimum requirements for exterior envelope insulation, window and door *U*-factors and SHGC ratings, duct insulation, lighting and power efficiency, and water distribution insulation.

All plans must be accompanied by the following:

- Building Permit Application Form – complete the application forms and submit with the plans. This form is located on the back pages.
- Contractors List – complete the contractors’ list with all the proposed contractors and submit with the plans. A building permit will not be issued until it has been verified that your contractors are currently licensed. This form is located on the back pages.

Zoning Calculations

- A completed zoning calculation sheet that includes lot coverage, floor area ratio, open space, height and setbacks.
- The average front setback of all homes on the block, prepared by a registered land surveyor, must be submitted for permit applications to construct a new single-family residence or to construct any addition or structure onto the front of a residence that reduces the distance to the front property line.

Fire and health building plan requirements

- Fire Prevention- Requirements for Commercial and Multi-Family New, Addition, or Remodel. For information about Fire
- Regulations or details for the plans please call: 847-318-5286.
- Location of all smoke detectors, emergency lighting, exit signs, and fire suppression equipment.
- Provide the flame and smoke spread of all wall and ceiling surfaces.
- Provide a drawing of any commercial kitchen exhaust hood - fire suppression system.
- If required, include a drawing of the fire suppression system with each plan.
- Indicate the type of building construction and type of occupancy use.
- Provide 4 copies of the drawings and specifications of the fire alarm system.
- New Single-family homes include 4 copies of the drawing and specifications of the fire suppression system.
- Environmental Health- Requirements for Commercial New, Addition, or Remodel. For information about Environmental Health Regulations, please call: 847-318-5281.

Food Establishments Only:

- Environmental Health Plan Review Application Menu, or menu listing Copy of Illinois Food Manager Certification Information or Proof of Enrollment

For All Other Health Regulated Facilities:

- Submit a plumbing, HVAC, mechanical, and /or a floor plan.

Contact the City of Park Ridge upon completion for all rough and final inspections at 847-318-5291.

Review the City Ordinances at www.parkridge.us

To purchase code books, contact ICC at: 800-214-4321 / www.intlcode.org

Construction Documents (approved SITE copies) shall be available at all times at the job site. Any alterations to the approved SITE copies must be submitted to the City of Park Ridge in triplicate for review and approval.

CALL JULIE BEFORE YOU DIG....It's FREE - nationwide number 8 - 1 - 1