

Residential Inspections

City of DeKalb Building Division
164 E Lincoln Hwy, DeKalb IL 60115
(815)748-2070 or (815)748-2073



Required Inspections for New Residential Construction

- **Inspection Scheduling** - Call 815-748-2070 or 815-748-2073 to schedule an inspection. Minimum of twenty-four (24) hour notice required for inspections. Final inspections, seventy-two (72) hours.
- **Blueprints** - approved plans (stamped/signed by City) must be on-site for all inspections.
- **Plan Review Fee:** \$300 plan review fee at time of application submittal.
- **Occupancy** – Final Inspections shall NOT be conducted when furniture or personal items are on the premises. Occupancy prior to approval or illegal occupancy and shall result in fines and possible legal action.
- **Construction Completion** – cash bonds may be posted when winter or adverse weather prevents completion of work. See the cash bond requirements at the end of this handout for details.
- Municipal Code and Standard Construction Requirements can be found at www.cityofdekalb.com

Miscellaneous:

- Protect storm water inlets with silt fence and filter fabric. Sediment and erosion control measures must be maintained throughout construction.
- Keep site, parkway and street clean.
- Temporary sanitary facilities required on site.

Inspection Hours: Monday – Friday – 8:00 a.m. – 3:30 p.m.

| | Looking for: |
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| Footings: | |
| Footings shall be drained of standing water and inspected prior to pouring Reinforcing rods required in walls and prior to pouring <i>Footings-continued</i> | <ul style="list-style-type: none">✓ Footings per approved plans, or at a minimum, eighteen by ten inches. (18" x 10").✓ Meet required setbacks for foundation.✓ Elevations must match approved grading plan.✓ NO standing water or mud in footings.✓ Install concrete encased electrode to reinforcing bars and clamp listed for concrete encasement.✓ Submit Soils Test Report signed and sealed by State of Illinois licensed engineer confirming the soil load bearing |

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| *See Cold Weather Regulations | capacity unless designed to presumptive 1,500 lb. soil bearing capacity. |
| Foundation Wall: | ***Provide survey showing top of foundation elevation after pouring the wall. |
| <p>Inspection prior to pouring foundation wall</p> <p>*See Cold Weather Regulations</p> | <ul style="list-style-type: none"> ✓ Horizontal Rebar: three (3) #4 (1/2") rods: one foot up from top of footing as specified per drawing must be installed prior to foundation wall pre-pour inspection. The top rod must offset over the top of escape window. ✓ Vertical Rebar: per IRC requirements ✓ Center wall on footing. ✓ Wall must be properly sized. ✓ Foundation wall must be straight & plumb. |
| Backfill: | |
| Inspection prior to backfilling the wall. | <p>Wall damp proofing.</p> <ul style="list-style-type: none"> ✓ Footing drain pipe must have filter fabric & gravel with a minimum of twelve inches (12") gravel over tile. ✓ Check location of sump pit & drain. ✓ Window wells must be securely attached with drains in the window wells. ✓ Anchor bolts & spacing: Maximum six (6') o.c. & minimum twelve inches (12") from the corners. Minimum two (2) per board. ✓ Brace walls if floor system is not installed. |
| Underground: | |
| Inspections shall be performed prior to concealing. | <ul style="list-style-type: none"> ✓ Underground plumbing, underground electric & underground ducts require inspection prior to covering. ✓ Provide ladder on site. |
| Garage: | |
| Inspection performed prior to pouring the concrete. | <ul style="list-style-type: none"> ✓ Slab reinforcing installed per approved plans, or at a minimum, welded wire six inch by six inch (6" x 6") or fiber mesh must be placed prior to inspection. ✓ Fill with three to four (3-4") stone, topped with four inches (4") of three quarter inch (3/4") stone. No clay or dirt fill. ✓ Slab must be a minimum of four inches (4") thick. ✓ Gas curb must be six inches (6"). ✓ Slope floor towards garage door opening for drainage. |
| Basement: | |

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| Inspection must be performed prior to pouring concrete: | <ul style="list-style-type: none"> ✓ 6-mil vapor barrier, seams overlapped twelve inches (12"). ✓ Slab shall be minimum of four inches (4") thick. ✓ Sump pit shall be a minimum of two inches (2") above basement floor. ✓ Basements must have access to the outside by means of an Emergency Escape and Rescue Opening, sizes and sill heights as prescribed by section R310.2.1 of the 2015 International Residential Code (IRC). ✓ Protective covers shall be required over emergency escape window well openings per code requirements. |
| Electric Service: | |
| | <ul style="list-style-type: none"> ✓ Grounds must be connected to ground rods (two (2) ground rods six inches (6") apart) and electrodes. ✓ Panel box must be covered. ✓ Upon approval, the City of DeKalb will notify Com-Ed in order to connect the service. |
| Water & Sewer Tap: | |
| Water service buffalo boxes cannot be located within the driveway, drive apron or public walk under any circumstances. No couplings, splices, joints, etc. are allowed between the tap & the b-box, and between the b-box & the house. | <ul style="list-style-type: none"> ✓ Water & sanitary sewer shall be installed in separate trenches with a minimum of ten feet (10') horizontal separation. ✓ Water service shall be a minimum of five feet (5') below grade. ✓ Full size sewer cleanout shall be located within five feet (5') of the building. |
| Storm Sewer Connection: | |
| | Call 815-748-2070 or 815-748-2073 to schedule inspection. |
| Rough Inspections: | |
| Inspections of all rough-ins must be performed prior to installation of insulation. The roof shall be weather-tight & the window openings shall be sealed. House-wrap will also be inspected at this time. | <p>Framing:</p> <p>Truss drawings must be on-site (one copy must be submitted to the building department 24-hours prior to scheduled inspection) ●Drywall backing ●Fire stopping around all holes in floors, studs & walls ●Chimney fire stopping & clearance ●Double floor joist below interior load bearing walls ●Headers ●Bracing ●Joist overlap minimum four inch (4") ●Stairways; thirty-six inch (36") width, ten inch (10") minimum tread nose</p> |

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| | <p>to nose, seven & three quarter inch (7-3/4") maximum rise</p> <ul style="list-style-type: none"> ●Handrails required for four (4) or more risers ●Six foot eight inches (6' 8") minimum head room clearance ●Bridging ●Flashing ●Beam bolts & anchor bolt spacing ●Tightening of anchor bolts ●Anchor bolts of middle third of sill ●Hurricane clips ●Lateral wall bracing for walls over eight feet (8') high ●Stiff backs ●Notching ●Boring ●Shield plates ●Safety glass in hazardous locations ●Window child fall protection (where required). <p>Electrical:</p> <ul style="list-style-type: none"> ●If in conduit, wires are required to be pulled prior to rough inspection. ●Tamper resistant receptacles are required per NEC 2014. <p>Plumbing:</p> <ul style="list-style-type: none"> ●Submit stack test results (at inspection) ●System shall be tested with water or air ●All hot water piping shall be insulated from the water heater to the fixture(s) ●Fixtures shall be labeled Water Sense product, as specified by EPA, when such labeled fixtures are available per municipal ordinance. <p>Radon:</p> <ul style="list-style-type: none"> ●Passive Radon System required with future power source in attic and must be accessible ●Sump pit shall be covered with a gasketed sealed lid ●Exposed & visible vent pipes shall be identified |
| Insulation: | |
| <p>Inspection must be performed prior to installation of drywall.</p> <p><i>Insulation - continued</i></p> | <p>Fire-stopping (non-combustible materials) for penetrations.</p> <ul style="list-style-type: none"> ●Fire-stop all vertical and horizontal connections. All joints, penetrations, doors and windows shall be caulked, gasketed, weather-stripped or otherwise sealed. Conduit in slabs, gaps and openings in concrete (behind tubs and showers on exterior walls) need to be sealed. ●Energy rating requirements: Attic – R-49; Walls – R-13+5 or R-20 ●Engineered floor joist (I-beams, TJI's, trusses) on first floor require fire protected basement ceiling (drywall, flak jacket, etc.) and fire block OR fire sprinkler system in basement ●NO paper-backed insulation in unfinished basements ●Drywall under stairs required ●Drywall interior (shared house wall/ceiling) walls of garage ●Install 5/8" type X drywall on garage ceiling if second floor is above. |
| FINAL INSPECTIONS: | BUILDING |

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| <p>Schedule the final inspection when all work is completed and prior to occupancy. No furniture may be brought in until the final inspection has been done and all work approved. If all work is not done at the time the inspector arrives fines and fees may apply per Chapter 24 of the City of DeKalb Municipal Code.</p> <p>*See Cold Weather Regulations</p> | <p><u>Electrical:</u> ●GFCI receptacles and arc-fault protection where required per NEC ●Tamper-resistant receptacles ●Interior & exterior lighting ●Ground panel box ●Bonding of water pipe at water meter ●Bonding of gas & water line ●Interconnected smoke detectors ●Carbon monoxide detectors (required outside each separate sleeping ● All lights must be in working condition. Must have access to whirlpool motor.</p> <p><u>Plumbing:</u> ●Plumbing fixtures installed and functional ●Water meter ●Water heater ●Future openings capped ●Sump pump connection ●Overhead sewers connected and draining</p> <p><u>HVAC:</u> ●Installation of furnace, ducts, vents and flue ●Covers on duct openings ●Energy certificate in utility room per IECC R401.3 ●All mechanical seams to be sealed. ● Provide HVAC Calculations per IECC Section R403.7</p> <p><i>**Must Provide Blower Door Test</i></p> <p><u>GENERAL – the following must be completed at the time of the final inspection</u> - ●Interior and exterior painting, staining, caulking ●Kitchen & bath counter tops, cabinets & flooring ●Guardrails & handrails ●Interior & exterior doors, windows & screens. Windows must have safety glass in hazardous locations ●Garage doors ●One (1) hour separation between house & garage ●House numbers must be 4” minimum height per Municipal Code, no script ●Chimney spark arrestor ●Fireplace chimney cricket ●Submit Blower door test report as required by IL Energy Code ●Label dryer exhaust length, maximum thirty-five foot (35’) run, capped if dryer is not installed at final ●Whole house mechanical ventilation required ●Range hoods that exhaust over 400 cfm require fresh air intake/makeup air</p> |
| <p><u>FINAL INSPECTIONS:</u></p> | <p>SITE</p> |
| <p><i>Final Inspections-continued</i></p> | <p><u>Driveways:</u> Concrete – Concrete driveways shall be a minimum of 6” over a minimum four inch (4” base, compacted three quarter inch (3/4”) clean, crushed stone – CA-6 preferred, (no pea gravel). All portions of the driveway shall include six inch by six inch (6 x 6”) welded wire or fiber mesh.</p> |

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| <i>Final Inspections - continued</i> | <p>Asphalt – Asphalt driveways shall be a minimum of two and one half inches (2 ½”) of bituminous surface over a minimum of eight inches (8”) of compacted three quarter inch (¾”) clean, crushed stone – CA-6 preferred, (no pea gravel).</p> <p>Driveway Approach & Public Sidewalk Within Driveway – Approach shall be comprised of seven inches (7”) of concrete on a minimum of three inches (3”) compacted three quarter inch (¾”) clean, crushed stone (CA-6 preferred). Expansion joint shall be used between driveway and sidewalks. Three (3) #4 reinforcing bars, ten (10) foot long shall be used over all utility trenches for new sidewalks. New public walk must be pinned to existing with three (3) rebar. Public sidewalk within driveway must be seven inches (7”) thick.</p> <p>Public Sidewalk (not within driveway) shall be five inches (5”) of concrete on a minimum of three inches (3”) compacted aggregate base.</p> <p>Service Walks & Patios – Service walks shall be a minimum of four inches (4”) concrete on minimum four inches (4”) compacted three quarter inch (¾”) clean, crushed stone (no pea gravel). Patios shall include six inch by six inch (6” x 6”) welded wire or fiber mesh.</p> <p>Concrete Stoops – Stoops shall be poured on a minimum of four inches (4”) compacted three quarter inch (¾”) clean, crushed stone (no pea gravel). Where attached to the house, a frost footing is required at the outside edge.</p> <p>Final Grading – At least two (2) days prior to Final Occupancy Inspection submit a Final Grading Survey the Building Division.</p> <p>Landscaping – Grass seed with blanket and germination to prevent runoff OR sod in place, adequately watered to ensure growth and soil stabilization. All other bushes, trees and plantings to be installed per approved plans and in good health.</p> <p>*Cold Weather Regulations:</p> <p>Temporary Occupancy Cash Bond Requirements –A Temporary Occupancy may be applied for should adverse conditions/winter prevent completion of exterior work. Upon approval by the CBO, a completion date will be given. A cash</p> |
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| | <p>bond will be required for the unfinished work and will be returned when work is completed by completion date. A request for return of bond needs to be received by the CBO after Final Occupancy is issued. Re-inspection fees are not refundable.</p> <p><u>Cash Bond Amounts</u> Driveway & Approach - \$5,000 Landscaping - \$1,500 Sidewalk (mid-block, 5" & 7" rebar for trench) - \$2,000 Sidewalk (corner lot, 5" & 7" rebar for trench) - \$4,600</p> |
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