



Architectural Drawing Requirements For Single Family Residences New Building/Addition/Alteration

These items (all for new single family residences and applicable for additions or alterations) should be shown on the architectural drawings submitted for permit. Additional items may be required based on the specific project circumstances

Typical

- Drawing sheet size - 24" x 36" (maximum preferred)
- Project Address-every sheet
- Drawing Date-with revision date(s) on each affected sheet
- North Arrow-where applicable
- Scale
- Architect's (or Structural Engineer's) Name / Address / Telephone / Fax
- Architect's (or Structural Engineer's) State of Illinois seal with signature, date of signature and license expiration date - on cover sheet with index of drawings or on every sheet. Required for all new Single Family Residences, Additions and Alterations where any structure is modified or changed
- Applicable codes or reference to adopted codes
- Required design loads
- Lumber species, grade, allowable bending fiber stress
- Indicate that any new residence is required to be fire sprinklered per NFPA 13D. This is not applicable for additions and alterations without existing fire sprinkler systems.
- Indicate whether IECC envelope compliance will be prescriptive or performance.

Site Plan

- Zoning District designation
- Property Line with lengths of each segment
- Building Line(s), if any shown on the Plat of Survey
- District minimum setbacks - front (or average), side, rear
- Easements (with "type" described)
- Building footprint (dimensioned) with upper story projections, existing & proposed (where applicable)
- Dimension from property line to closest portion of building on all sides (dimension to upper story projections & columns for any open roofed areas)
- Air conditioning unit location with dimension to property line (not allowed in the front/side/corner side setbacks)
- Areas of each floor
- Dimension all paved surfaces
- Impervious Surface Area Calculations- existing & proposed
- Water service, sanitary & storm service, sump discharge, downspout discharge locations (as applicable)

Plans

- All floor levels - including roof
- Room names
- Dimensions-all exterior & interior
- Door / window sizes (unless shown elsewhere)
- All structural components-floor/ceiling joists shown on floor plan below (unless shown elsewhere), rafters, beams, columns, wall construction, foundation / footing, drain tile loop
- All headers / lintels
- Plumbing locations (proposed & existing) - show water service & meter size & location, all fixtures, water heater, clothes washer, laundry sink, sump & ejector pits
- Electrical locations - show receptacles, lights, switching, service panel location, underground or overhead service size & location (existing & new)
- HVAC plans - line diagram of system with outside air location(s), ahu location(s), exhaust locations, whole house information, makeup air as required. Note right-sizing of equipment & required cfm sizing of system.
- Attic/crawl access panels.
- Stair & guardrail locations & information - see below
- Demolition Plan - as required (or indicate on floor plan as necessary)

Elevations

- All sides of building or addition - indicate proposed / existing where applicable
- Note materials
- Height of structure dimensioned from the highest point of the structure to the lowest grade around the building
- Height of chimney above roof
- Flashing locations - including window/door heads, roof to wall intersections, etc.
- Window sizes - unless indicated elsewhere
- Escape windows labeled at all required locations (basement, basement bedroom and all new and / or altered bedrooms)
- Safety glazing - all required locations including at tubs and adjacent to doors (unless indicated elsewhere)

Details

- Masonry fireplace section / details - include flue size, firebox opening size & depth, hearth extension / surround & mantel materials & sizes
- Plumbing riser diagrams (required for new single family residences only)
- Light & Ventilation Schedule
- Stair (all floor) & guardrail section with dimensions & headroom clearances indicated
- Wall section with wall / floor / roof construction noted
- Structural & miscellaneous details - as required

See Page 2 for additional requirements

Energy Code Requirements

- Thermal envelope compliance per 2015 International Energy Conservation Code (IECC) may be by either the prescriptive or performance method; identify method used on the cover sheet. All new single family residences and only the new parts of additions are required to meet the 2015 IECC.
- If meeting the code by the prescriptive method, no REScheck, or equivalent, is required. All code required R-values and U-factors must be identified on the construction drawings (see below).
- If meeting the code by the performance method, submit REScheck, or equivalent.
- For either method, include thermal envelope floor plans similar to Drawing Examples I found here:
<https://www.northbrook.il.us/267/Energy-Code-Information>
(These example drawings were prepared using the 2009 IECC requirements. Be aware that the State of Illinois has adopted the 2015 IECC; compliance with this code's requirements is mandatory.)
- For either method, fully illustrate all parts of the thermal envelope and indicate all R and U values for walls, windows and doors.
- For either method, identify required insulation for any ducts or water piping.
- For either method, any plumbing or ducts must have the full required insulation between the exterior sheathing and the pipe or duct.