



Public Works Department

5885 NE 14 Street
Des Moines, Iowa 50313

Divisions

Air Quality
Engineering & Operations
Housing Services
Planning & Development
Water Resources

Commercial Project Guidelines

New Building Construction, Additions and Alterations

Adopted Codes - *2021 Code Editions adopted* - adoption of codes are with amendments. Please visit the following link: <https://www.polkcountyiowa.gov/public-works/planning-development/building-services/>

2021 International Building Code

2021 International Fire Code

2021 International Existing Building Code

2021 International Mechanical Code – State Code

2021 Uniform Plumbing Code – State Code

2020 National Electrical Code – State Code

2012 International Energy Efficiency Code – State Code

Plan submittals can be either electronic or paper. If plans are submitted via paper, then 2 sets are required for review. An electronic copy of plans is preferred for submittal.

The following information is required for the plan review process.

- **Plans & Documents** for review shall include architectural, structural, mechanical, electrical and plumbing plans along with a Code Analysis. Fire Sprinkler, Fire Alarm and Structural steel are allowed to be deferred submittals. One copy of project specifications, soils reports and structural calculations, when applicable, shall be submitted for review.
- **Code Analysis** shall provide the code editions and design criteria utilized, type of construction, occupancy groups (all occupancies), calculated occupant loads, height and area limitations, building risk category, plumbing fixture counts, exit width, exit discharge points, travel distances, distance to property lines and fire rated assemblies. Analysis shall also indicate whether building is provided with an automatic sprinkler system and fire alarm system.
- **Design Professional Responsible/In Charge** as applicable shall be documented, including the extent of their responsibilities through the construction phase until project completion. The plans are required to bear the signature and seal of an Iowa licensed design professional pursuant to Iowa Code 542B and 544A, when applicable.
- **Architectural Plans** shall include Floor plans of each level, the use and size of all rooms, exiting system, location of sprinkler riser room, fire dept. connection and electrical room; Exterior wall elevations showing all pertinent vertical dimensions; Square footage of building (existing and proposed); Cross section detailing roof, ceiling, interior and exterior walls, stair and elevator shafts, mechanical shafts; Fire Rated Assemblies of roofs, walls, floors and shafts; Additional Details such as exit signage, emergency lighting, door and glazing schedule, door hardware, accessibility fixtures and equipment.
- **Structural Plans** shall include footing and foundation dimensions, reinforcement schedule, main structural building elements such as walls, beams, columns, headers, horizontal diaphragms, etc.; anchorage details, connection details, construction assembly details, etc.
- **Special Inspections** shall be as required per the 2021 International Building Code Chapter 17 and shall be duly noted on the plans or on a separate submittal sheet (3rd party inspection required). NOTE: On a case-by-case basis for commercial projects a specialty contractor shall be responsible for the fire stopping requirements of all trades (plumbing, mechanical and electrical).
- **Hazardous Materials** commodities (MSDS), quantities and storage systems shall be submitted to Polk County for review and approval.

Phone 515.286.3705

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www.polkcountyiowa.gov

- **Fire Alarm and Suppression** system plans shall be submitted to Polk County for review and approval.
- **Accessibility** for the physically disabled shall be documented as part of the code analysis (in accordance with Chapter 11 of the 2021 IBC and ICC A117.1-09). The owner, contractor and developer are also responsible for compliance with the American with Disabilities Act (ADA) and the Fair Housing Act regardless of whether those requirements are enforced through Polk County plan reviews or inspections. The State of Iowa utilizes the 2010 ADAAG Standards.
- **Energy Analysis** documentation showing compliance with the 2012 International Energy Conservation Code and State of Iowa energy requirements, 661 IAC Chapter 303. The Prescriptive, Comcheck or other Nationally recognized program may be submitted.
- **Utility** systems consisting of septic systems and wells require separate permits, review and approvals. Connections to public utilities such as public sanitary sewer and/or public water system also requires additional documentation, reviews and approvals.

Additional Links/Jurisdictions – Polk County also has jurisdiction with some areas noted below

The following State Agencies are housed with the **Iowa Department of Inspections, Appeals & Licensing**:

- **State of Iowa Building Code Bureau:** Designers/Owners/Contractors for requirements regarding State funded projects, schools, daycares, hospitals, senior care centers should contact the State Building Code Bureau at 515-725-6145. You can visit their website at <https://dial.iowa.gov/contacts/state-building-code>.
- **Swimming Pools, Food Service Inspections, Elevators, Boilers, Contractor registration: Iowa Department of Public Health:** For Questions, Licensing/registration and Inspections of, please contact the following at 515-725-6145 OR:
Swimming Pools: website at <https://dial.iowa.gov/i-need/licenses/swimming-pools-spas>.
Food Service: website at <https://dial.iowa.gov/licenses/food-hotels/apply-food-license>.
Elevators: website at <https://dial.iowa.gov/licenses/building/elevators>.
Boilers: website at <https://dial.iowa.gov/licenses/building/boilers>.
Contractor Registration: All contractors must be registered with the State of Iowa. You can visit their website at <https://dial.iowa.gov/licenses/building/contractors>.
Electrical Contractors: Electrical contractors must be Licensed with the State of Iowa. All permits are obtained with Polk County. You can visit their website at <https://dial.iowa.gov/licenses/building/electrical-licensing>.
Mechanical and Plumbing Contractors: Mechanical and Plumbing contractors must be Licensed with the State of Iowa. All permits are obtained with Polk County. You can visit their website at <https://dial.iowa.gov/boards/plumbing-mechanical>.
Fire Alarm and Sprinkler Contractors: Fire Alarm and Sprinkler contractors must be Licensed with the State of Iowa. All permits are obtained with Polk County. You can visit their website at <https://dial.iowa.gov/licenses/alarms-fire>.

Additional Utility Information:

- **Septic Installers:** Septic Contractors installing septic systems must be licensed with Polk County. Permits for systems must be obtained with Polk County. For questions or additional information please contact 515-286-3705 or visit our website at <https://www.polkcountyiowa.gov/public-works/planning-development/environmental-health-services/>.
- **Grease Interceptors:** Any establishment that stores, prepares, packages, serves, vends or otherwise provides food for human consumption is considered a Food Service Establishment (FSE) and shall install at a minimum a 1,000-gallon outdoor grease interceptor.

For questions concerning grease interceptor(s) and sizing that connects to the public sanitary sewer system please contact Wastewater Reclamation Authority (WRA). They can be contacted at 515-323-8000. You can visit their website at <https://www.dmmwra.org/174/Fat-Oil-Grease-FOG-Program>.