

COMMERCIAL CONSTRUCTION PERMIT GUIDE

This information guide should be utilized if you are proposing to do any of the following: construct a new commercial structure; add an addition to an existing commercial structure; renovate or alter an existing commercial building which does NOT fall under the 2003 Existing Building Code requirements; any other work associated with a commercial structure which is covered under Section 403.42 of the Uniform Construction Code Act 45.

***While this guide has been created to assist applicants and professionals with the building permit plan review process, this guide can not and does not indicate all code requirements. Applicants should consult their design professional or the current PA UCC Standards for all the applicable code requirements. Applicants should understand that the plans will be reviewed to the most current PA UCC standards for compliance. ***

All permits must have the following information submitted with the applications, as applicable. If the information is not submitted, the application will be considered incomplete and will be returned noted as such.

We understand that many items on the list may not be included in all alterations or renovation projects, we request that all applicants work through the entire list to ensure that any necessary items are included. This will greatly facilitate review and approval of projects.

****Note: Plans/Drawings are REQUIRED to be prepared by an engineer or architect; must be drawn clearly, accurately, to scale and with sufficient detail and clarity to indicate the nature and extent of the work proposed; and conform to the most recent provisions of the PA UCC.**

Fairview Township has adopted the following climatic data chart:

Ground Snow Load	Wind Speed	Seismic Design Category	Weathering	Frost Line Depth	Termite Damage	Decay	Winter Design Temp	Ice Shield Under- layment Required	Flood Hazards	Air Freezing Index	Mean Annual Temp
30 lb sq. ft	90 mph	B	Severe	36"	Mod- Heavy	Slight Moderate	20°	Yes	Feb 7, 1978	784	53.1°

For questions regarding the chart or any of the requirements, please see the adopted building code or contact our office at 717-901-5220.

Zoning Permit Information:

Two (2) copies of a plot plan which indicates the following:

- The location of all property lines associated with the property and a north point.
- Location of all **existing** structure(s) located on the property and their distances to property lines and distances between structures.

- Location of the **proposed** structure(s) to all property lines and to other structures on the property. It is the property owners/contractors responsibility to know and to be able to identify the property lines.
- Location of any access drive(s) or driveway(s).
- Location of all utilities (well, septic system, public water lines, sewer lines if applicable).
- Location of all streets, easements, and right-of-ways associated with the property.

Building Requirements:

Two (2) copies of heating, ventilation, and air conditioning designs and/or calculations.

Two (2) copies of information pertaining to Energy Conservation Code compliance. Please submit all designs and/or calculations.

Two (2) copies of all plumbing schematics for the structure. These should include supply and waste systems. (These can be incorporated into the above building plan requirements)

Two (2) copies all proposed electrical plans (these can be incorporated into the above building plan requirements). Fairview Township has hired an independent inspector to conduct all electrical plan reviews and electrical inspections.

Two (2) complete sets of the construction drawings or blueprints.

The abovementioned items should containing the following information:

- All drawings, shall be sealed, signed, and dated, by a design professional (licensed architect or engineer). The **ONLY** exception is when **ALL** of the following apply:
 - The proposed work only involves remodeling or alterations of an existing building or structure.
 - The proposed work does not change the building's structure **OR** means of egress.
 - The person preparing the plans is not compensated for the preparation of the drawings.
- Room names and numbers for each floor should be on a floor plan for each level.
- Site plans shall be prepared to scale (not less than 1"=20'), with legend, north arrow, and separate vicinity (site location) map.
- Show the correct street address, parcel number and required zoning on the site plans.
- Show any penthouse drawings.
- Provide on the drawings the calculations for the means of egress widths for the entire floor occupancy load and the existing capacity of all exits including all stairs, doors, corridors and ramped exits.
- Show and identify all property lines and rights-of-way, with distance from property lines and adjacent buildings on site plans.
- Show all accessible parking spaces and signage per ICC/ANSI A117.1 and the *International Building Code* on site plan.
- Show accessible curb cuts, ramps and access ways to the building.
- Identify adjacent land uses and zoning.

- Show all easements, flood ways, and required buffers.
- Show existing and proposed utilities to serve the site.
- Show existing and proposed finish grades.
- Show details, sections, and elevations needed for construction.
- Show all buffer and screening landscaping.
- Show all required parking and loading spaces and calculations.
- Show floor plans of each floor. These pages must be at least 18" x 24" in size (but not more than 36" x 42"), drawn to a scale of not less than 1/8" = 1' (or 1" = 10').
- Show the square footage of each floor on the corresponding floor plans.
- Identify the names and uses of each room.
- Show occupancy loads for all areas/rooms of the proposed structure.
- Furnish door schedule(s), including size, type, rating (if any) and hardware.
- Provide all glazing schedules.
- Show all interior and exterior wall, ceiling and floor coverings.
- Show compliance with the flame spread and smoke density requirements for all proposed finishes.
- Show elevations with dimensions defining overall building height, floor-to-floor heights, or heights to ridge and eave as applicable to the type of building construction listed on the UCC application.
- Provide basement percentage-below-grade calculations.
- Indicate all roof slopes.
- Show stairways, geometry and compliance with the fire protection/fire barrier requirements.
- Show wall sections with proposed material sizes, construction and fire-rated assemblies.
- Plans should identify all hazardous material control areas, fire barriers and the required fire-resistance ratings for these barriers. All identified control areas shall list the name, class, quantity and method of storage of all hazardous materials processed, manufactured or used in a manufacturing process and contained within its fire barriers. Provide a Material Safety Data Sheet for each listed hazardous material. See sections 414 and 415 of the *International Building Code*.
- List all special inspections and provide name(s) of approved testing laboratory being used.
- Indicate design dead and live, wind, snow, seismic loads for floor areas, roofs, balconies, porches, breezeways, corridors, stairs, mezzanines and platforms. Show concentrated loads, i.e. file rooms, machinery and forklift areas. Identify shear walls. Bracing, strapping fastening, reinforcement and any special anchoring required.
- Indicate grade beam sizes.
- Show beams, joists, girders, rafters, and/or truss layouts and details of connections, structural steel stud gage, gage size, and connections.
- Where applicable, indicate on roof framing plan where concentrated loads (mechanical equipment, cranes, etc.) will be placed.

- Indicate the sizes and species of all wood members and their respective design strength.
- Show all columns, girders, joists, purlins, beams and base plates; for wood construction. Show all headers.
- Indicate on foundation and framing plans the location and lateral load resisting system. (Show walls, braced frames, moment connections, etc.)
- Provide preliminary soil analysis data done by a licensed engineer, if required.
- Indicate dimensions of foundations.
- Show foundation plans indicating the proposed slab elevations and type of foundation (i.e., mat foundation, caissons, spread footings, etc.).
- Show foundation water-proofing, if applicable.
- Show type, size and location of piling and pile caps for pile foundation.
- Indicate a footing schedule defining footing sizes and the required reinforcing.
- Show the established footing depth below grade and method of frost protection allowed in Section 1805.2.1 of the International Building Code.
- Indicate the thickness of the floor slab, size of reinforcing, slab elevations, and type and details of foundations.
- Indicate location, size and amount of reinforcing steel.
- Provide a complete lintel schedule.
- Show foundation corner reinforcing bars and minimum overlapping (as applicable to project structure).
- Provide strength of concrete according to designed soil reports.
- Indicate the type of anchoring for steel bearing directly on masonry.
- Provide a mix design for grout, footing, concrete, wall concrete, interior slabs and exterior slabs exposed to weather.
- If masonry construction is proposed, include the following information:
 - Type of brick ties and spacing of weep holes.
 - Control joints.
 - Placement of wall flashing and reinforcement.
- Provide construction requirements for elevator shafts and stairways.
- Show the floor slab vapor barrier.
- All penetrations of fire-rated construction must be per manufacturer's details. The details shall meet or exceed ratings of construction being penetrated. Penetration details shall be exactly as tested by an approved testing laboratory or agency and shall include their system numbers. New penetrations of existing fire-rated walls and assemblies shall be shown with appropriate designs.
- Indicate (or reproduce) the approved, tested hourly rating, number and location of all rated members and assemblies (walls, columns, beams, floor and ceiling, and ceiling and roof fire-rated design assemblies).

- Indicate the certified testing laboratory or agency (e.g., UL), their test # and hourly ratings of all new and/or affected rated members and assemblies (i.e. columns, beams, floor/ceiling, and ceiling/roof fire-rated design assemblies). Show all new and/or affected fire-rated walls with their ratings, if not shown elsewhere.
- New penetrations of existing fire-rated walls and assemblies shall be shown with appropriate designs.
- Provide smoke barrier locations.
- If applicable, Note construction site safeguard regulations for all areas under construction.
- Show electrical plans for each affected floor, including the roof.
- Show wiring method(s), conduit sizes and types, termination temperature (60, 75, 90) requirements, conductor sizes and insulation types. Indicate the design and/or operation for any of the following applicable life safety systems: emergency generators, smoke evacuation, shaft pressurization and relief, smoke detection, egress and emergency lighting, and fire alarms. Indicate how special needs such as classified (hazardous), corrosive and patient care are treated. Provide detailed plan of classified areas, the classifications and how complied with (i.e. hangers, waste treatment and collection, flammable dusts, gases or liquids, spray booths, vehicle servicing and parking, etc).
- All submittals should include a listing and labeling statement. (All electrical materials, devices, appliances and equipment shall be labeled and listed by a certified testing laboratory or agency.)
- Provide all applicable International Energy Conservation Code compliance data on the Building Code Summary sheet or on the electrical plans.
- Provide panel schedules with circuit and feeder loading, overcurrent protection, and NEC load summaries for all new and/or affected panels and services (loading has to be evaluated by highest phase); include fault current data, short circuit ratings and fault current protection co-ordination.
- Provide a single line riser diagram showing all new and/or affected services, feeders, wire sizes and insulation types, and conduit sizes and types. Indicate number of services and their physical locations; clearly indicate mains and characteristics.
- Indicate the grounding electrode conductor size with new and/or affected services and transformers; where necessary provide details or notes on methods.
- Show physical locations of all new and/or affected panels and switchgear (indicate front).
- Indicate receptacle plans with circuitry.
- Indicate lighting plans with circuitry.
- Provide all HVAC nameplate data, including MCA and MOCP. List all other appliance and/or equipment (other than those which will be connected to a general use receptacle) with nameplate data (i.e., voltage, phasing, HP, KVA, FLA, RLA, etc).
- Indicate all motor horsepower ratings, if not supplied elsewhere.
- Provide gas piping layout on the floor plan for each floor. If it is a multi-story building, all gas piping shall be shown per floor. Include pipe sizes, water column, and type of material. Provide a schedule of connected equipment, total BTUH demand, total equivalent length, and most remote gas appliance.
- Indicate roof slopes, drainage system and sized through wall scuppers, if applicable to the project.

- Provide plumbing plan layouts for each floor. These should show the water distribution and drain-waste-vent piping, and all details, notes, legends, and schedules necessary to define the system being installed.
- Show proposed plumbing fixtures and privacy screens on the plans.
- Show the location of all major components required for a complete system.
- Provide fixture and equipment schedule showing fixture number, detailed description, hot water, cold water, waste and vent connection sizes and other pertinent data.
- Identify all fixtures on floor plans and in riser diagrams with the plumbing fixture schedule number.
- Supply and Waste/Vent piping shall be shown on the floor plans. All pipe sizes shall be clearly shown. In congested areas (e.g., restaurants, grocery stores, etc.), isometrics are required.
- On buildings two stories and above, provide isometric diagrams and/or schematic riser diagrams for Supply and Waste/Vent piping and identify the risers by number (e.g., R1, R2, etc.). Show where all riser base terminations connect to the building drain, along with all interconnected piping on each floor plan. All pipe sizes shall be clearly defined.
- Show the water, sanitary drain-waste-vent piping and storm leaders/drains. Indicate sizes and materials for above/below grade.
- Show slope of horizontal sanitary and storm drains that equal or exceed 3" diameter, if less than 1/8" per foot. Indicate roof drains and emergency roof drains/scuppers with the areas they impact.
- Show toilet room layouts.
- Show drinking fountain locations.
- Show the sanitary sewer service from building to public sewer or approved private sewage disposal system.
- Show interceptors as applicable to project and size by flow rate. (i.e. grease, oil, lint, acid, sand).
- Provide minimum facilities calculations per occupant loads generated by means of egress.
- Complete a sprinkler design data sheet and include it on the first plan of the sprinkler drawings. Show floor plans for each floor with sprinkler piping layout, pipe sizes, pipe hanger details, piping materials, doors, walls and room identities.
- Verify system design by providing hydraulic calculations to include the following information:
 - Recent water flow test.
 - 10 percent safety margin.
 - Type of backflow-preventer or reduced pressure zone showing equivalent foot loss.
 - Fire pump summary.
- Show ceiling plans with sprinkler head(s) layout, walls, soffits, openings, doors, dimensions and room identities.

- Show locations of standpipes, main control valves, fire extinguishers, emergency lighting, exit signs, etc.
- Note the type of sprinkler system design (e.g., 13, 130, or 13R).
- If applicable, Provide a fire alarm riser showing connection to a UL-approved central station.
- Show tamper switches on both OS and Y valves of backflow prevention device, unless shown elsewhere.
- If applicable, Indicate commodity class (per section 2303 of the *International Fire Code*) and height of any storage.
- Provide Material Safety Data Sheets for any hazardous materials (also specified under "Architectural Plans").
- Where special temperature-rated or high-temperature sprinklers are required, show sprinkler type(s) per area, office size, cut sheets with K-factor, water requirements, spray pattern, coverage and other pertinent data.
- Pipe schedule fire systems should be designed with a 10 percent safety margin for addition to existing buildings. Calculations for hydraulic systems should include:
 - Flow and pressure at each flowing sprinkler head.
 - Flow diagram for a grid system.
 - Show a site utilities plan, if not provided with the civil drawings.
 - Show the domestic water, fire, and irrigation services.
 - Show the location of water meters, backflow protection type and location.
- Show mechanical room layouts at sufficient scale for dimensions and details to be ascertained.
- Provide mechanical plans for each floor and the roof. These shall show the ductwork layouts, schedules, notes, legends, piping schematics, and details necessary to define the system being installed.
- Show all mechanical equipment, piping, ductwork (above/below slab) on the mechanical floor and/or roof plan.
- Show the size of duct runs.
- Indicate air distribution devices and show cfm for all supply, return and exhaust devices.
- Indicate the location of all equipment components required for a complete system.
- Show the smoke ventilation of atriums and pressurization of high-rise stairwells.
- Indicate roof-mounted equipment locations.
- Show required ventilation louvers and vent sizes.
- Show all required wall louvers, penetrations and fans.
- Show condensation drains, primary and secondary, from the unit to the point of discharge.
- Indicate bathroom exhaust requirements and locations.

- Show the location of all UL 555-certified fire dampers, ceiling radiation dampers, smoke dampers, and fire doors.
- Show all fire-rated walls (both existing and new) with their ratings on the mechanical plans.
- Provide outside air ventilation rate per the *International Mechanical Code*.
- Column line notations, if provided on the architectural/structural plans, shall be identified on the mechanical plans.
- Indicate controls for fan shutdown: emergency manual and automatic smoke detection.

Time Required to Review Plans:

The Codes Office has up to **30 working days** to complete a commercial plan review. All applications are time stamped when submitted and plans are reviewed on a first come, first served basis. Once a plan review has been completed, a comment list will be issued noting the action taken on the submitted plan. If approved, the permit can be issued once the appropriate fees have been paid. If the submittal is denied, the comment list will indicate the reasons for the denial. The applicant then has the ability to resubmit or revise the plans accordingly. If there is substantial information that is required, any revised plans will be processed as a new plan, which means the revised plan review could take up to 30 working days to re- review. The more thorough a plan submittal, the less time that it will take to complete the plan review and have the appropriate permits ready for issuance.

Other information that may be required prior to or in conjunction with a Building/Zoning Permit:

Septic/Sewer Permit – If a septic permit is required due to new construction or an addition to an existing building, four (4) copies of the system design should be submitted to the Codes Office along with the filing of a Septic Permit application. Fairview Township has hired an independent Sewage Enforcement Officer who reviews the applications, approves the septic permits and conducts all the required septic system inspections. If a Sewer permit is required, the permit will be issued by the Codes Office in conjunction with the Building/Zoning Permit(s).

Highway Occupancy Permit (HOP) - An HOP is required for all new driveway/access drive connections to Township or State roads or relocations of existing driveways on Township or State roads. If a HOP is required, two additional copies of the plot plan indicating the driveway/access drive location should be submitted to the Codes Office along with the filing of a HOP application. The applicant should identify on the street the new or relocated driveway location with the C/L mark in white paint at the proposed location. The Public Works Department will review the proposed location and notify the Codes Office if the location is acceptable. IF the proposed driveway will be located on a State road, Penn DOT is the reviewing and issuing authority and a copy of the Penn DOT permit will be required to be submitted with the building permit application. If a HOP is required, the HOP must be approved by either authority prior to the issuance of the Building/Zoning permit(s).

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