

City of Cleveland | Plans Review Manual



City of Cleveland
Development and Engineering
Building Division
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Overview

The manual serves to organize the plans review requirements for commercial projects in the City of Cleveland.

These guidelines should serve as the starting point for all commercial projects, but the building official may request additional information if necessary for a particular project.

In addition, the manual explains what is required when there are additions, alterations, repairs, or change of occupancy to an existing building.



Contents

Overview.....	1
Contents	2
Design Professional Requirements.....	3
Tenant Spaces less than 5,000sf.....	4
Mechanical, Electrical, and Plumbing.....	5
Commercial Kitchen Hoods	6
Signs.....	7
Additional Requirements and Exceptions	8
New Construction Plans Requirements and Standards..	9
Plans Submittal Requirements	9
Plans Prepared by Non-Registrants.....	11
Existing Buildings	12
Plans Submittal Requirements	12
Change of Occupancy or Use.....	13
Additions	14
Alterations	15
Historic Buildings	16
Letter of Assurance.....	Appendix A
Letter of Clarification.....	Appendix B



Design Professional Requirements

Plans and specifications for all structures classified as *assembly*, *educational*, and *institutional* must have plans prepared by a Tennessee registered design professional. Unless specifically exempted below or elsewhere in these guidelines, all other structures also require the appropriate Tennessee registered design professional to prepare the required plans.

The following structures are not required to be prepared by a registered design professional unless required by the building official due to project specific criteria:

- Structures classified as *business*, *factory-industrial*, *hazardous*, *mercantile*, *residential*, and *storage* occupancies that are both (1) less than three stories in height, and (2) less than 5,000 square feet in total gross area.
- One-family and two-family dwellings and domestic outbuildings
- Farm buildings not designed or intended for human occupancy



Design Professional Requirements (cont.)

Tenant Spaces Less Than 5,000sf

For alterations to tenant spaces classified as *business, factory-industrial, hazardous, mercantile, residential, and storage* that are less than 5,000sf in area, drawings by a registered design professional are not required when:

- The tenant shell is not required to be altered
- The tenant space is separated from other tenant spaces by the minimum fire-rated separation required by the 2012 International Building Code for the proposed use.
- The egress requirements are not being altered
- The fire protections system is not being altered
- There are no structural alterations
- Not otherwise required by the building official

Design Professional Requirements (cont.)

Mechanical, Electrical, and Plumbing

In general, when plans are required to be prepared by a registered design professional, a full set of mechanical, electrical, and plumbing plans are also required to be submitted bearing the stamp appropriate registered design professional.

In instances where no work is being performed in one of these disciplines, the designer of record for the project shall submit a signed letter making a statement to that effect.

The following exceptions apply to structures over 5,000sf in area or over two stories in height that are classified as *business, factory-industrial, hazardous, mercantile, residential, and storage* occupancies:

Mechanical

- Existing interior space, where the occupancy or floor plan is not altered, but cosmetic or minor work is performed such as finishes are altered or prefabricated partitions are rearranged.
- Mechanical equipment is replaced with like equipment of a like size.

Plumbing

- Minor plumbing upgrades and the addition of up to three fixture unit valves, which does not alter the waste, vent, or supply system.

Electrical

- Minor electrical additions, such as receptacles, lighting, or other circuits not exceeding 20 amperes provided that such work does not require additional distribution panel(s) and/or the need for upgrading, resizing, or enlarging branch circuits and main feeders. The work must be performed by an appropriately licensed individual who shall submit a written statement that such work has been evaluated in relation to the current electrical code for compliance with the number of circuits added and the revised loads on the existing panel(s).

Design Professional Requirements (cont.)

Commercial Kitchen Hoods

Design drawings prepared by a Tennessee registered architect or engineer must be submitted for commercial kitchen hoods and duct systems and shall include:

- Preliminary static pressure loss calculations and room ventilation balancing
- The kitchen layout
- The location and type of cooking equipment
- Exhaust and supply duct systems
- Exhaust and supply air fans
- Fuel or electrical power supply
- Automatic fire-extinguishing system and manual pull system activation location
- Means of egress
- Prep tables
- Cabinets
- Electrical control panels
- Fire alarm system activation and monitoring
- Extra hazard fire extinguisher location

Design Professional Requirements (cont.)

Signs

In general, all signs must have plans prepared by a design professional registered in the State of Tennessee. Signs that do not exceed either of the following limits are exempt from this requirement:

- Signs where any portion of the sign is twenty feet (20') or more above the ground level; or
- Any portion of the sign is fifteen feet (15') or more above the ground level, if the sign has more than one hundred twenty square feet (120 sq. ft.) in total sign face area.

Design Professional Requirements (cont.)

Additional Requirements and Exceptions

In some instances, drawings prepared by a design professional may be requested even when not otherwise required due to the particular nature of such work. An example for this would be the mechanical system in a nail salon. Due to the involved nature of such a ventilation system, mechanical drawings prepared by a licensed design professional may be required.

When plans are not required to be prepared by a registered design professional, drawings must still meet all requirements as detailed in these guidelines. For more information, see *Plan Requirements and Standards*.

New Construction Plans Requirements and Standards

Plans Submittal Requirements

All new commercial projects must submit a New Commercial Building Permit Application as well as a digital set of plans. Permit applications are available online at clevelandtn.gov/building and may be submitted via the website or in person. Instructions for uploading digital plans are included on the application. The plan review fee is due upon submission of the permit application and may be paid on the website.

The registered design professional must submit a completed copy of the *Letter of Assurance* found in Appendix A of this manual. This form is also available to be submitted electronically via the website.

The plans review process may take up to 10 business days to complete. If additional information is required, the process may take longer.

For projects that require a registered design professional, a full set of drawings shall be submitted and include the following:

- **Site Plan** - including exit discharge from building, required parking, Fire Department access, accessibility from exterior exit discharge to a public way, fire hydrant locations with hydrant test data, and property lines.
- **Life Safety Plan** - Floor plan of each level showing use of each space with occupant load factors; show exiting paths with exit occupant load and capacity of the exit door or exit stairway; show common path and travel distance; show the ratings of all walls (i.e. smoke partitions, smoke barriers, fire-resistance rated partitions, and fire walls) with appropriate legend.
- **Architectural**
 - Cover sheet with all applicable code data
 - Floor plans, roof plans, sections, elevations
 - Sufficient detail to explain all project specific criteria – including UL fire assembly details, wall rating details, other rating details as required
 - Accessibility information, including dimensioned bathrooms showing the location of all applicable fixtures
 - Door, window, and finish schedules
 - All stair dimensions and applicable details
- **Structural**
 - Foundation plan and details
 - Building framing plans and details
 - Location and details of any rated walls
- **Mechanical** – drawings and details as required, including fire, smoke, and combination fire/smoke damper locations, gas furnace/boiler combustion air, fire resistance rated wall limits and legend which coordinate with the architectural drawings, UL firestopping details for penetrations through rated assemblies, commercial kitchen hood information

New Construction Plans Requirements and Standards (cont.)

Plans Submittal Requirements (cont.)

- **Plumbing** - drawings and details as required which include fire resistance rated wall limits and legend that matches the architectural plans and UL firestopping details for penetrations through rated assemblies.
- **Electrical** - drawings and details as required which include emergency lighting, exit signs, smoke duct detectors for HVAC fan shut down, complete fire alarm system (when required), fire resistance rated wall limits & legend which coordinate with the architectural drawings & UL firestopping details for penetrations through rated assemblies.
- **Fire Protection** (if applicable)
 - Automatic Extinguishing Systems
 - Standpipe
 - Sprinkler Systems
 - Fire resistance rated wall limits and legend which coordinate with the architectural drawings and UL firestopping details for penetrations through rated assemblies.
- **Specifications** – either on the drawings or as a separate document

New Construction Plans Requirements and Standards (cont.)

Plans Prepared by Non-Registrants

Projects that do not require plans to be submitted by a registered design professional, as outlined in this manual under the section *Design Professional Requirements*, still require the submission of a set of drawings for review. The plans shall be prepared by an individual with sufficient knowledge to produce a set of plans that demonstrate the project meets all applicable code requirements. The preparer must be capable of meeting all the requirements as outlined in this section.

All new commercial projects must submit a New Commercial Building Permit Application as well as a digital set of plans. Permit applications are available online at clevelandtn.gov/building and may be submitted via the website or in person. Instructions for uploading digital plans are included on the application. The plan review fee is due upon submission of the permit application and may be paid on the website.

The non-registrant preparing the drawings must submit a completed copy of the *Letter of Clarification* found in Appendix B of this manual. This form is also available to be submitted electronically via the website.

When plans are not prepared by a registrant, they shall adhere to the following requirements:

- Drawings must be either in ink or electronically prepared, and of sufficient clarity to indicate the location, nature, and extent of work proposed.
- Drawings must be to a standard architectural scale and dimensioned as necessary.
- Standard architectural symbols should be used and identified in a legend.
- The plans must be signed by the person who prepared them.
- Provide the following general information on the cover sheet and on title block of each page: job site address, owner's name and mailing address, and the non-registrant's name and address with (original) signature (person preparing the plans).
- For buildings that are required to be accessible, the first page of the plans must contain a statement that the construction will comply with ICC A117.1-2009.
- The first page of the plans must include
 - Occupancy Group and Use Classification per Chapter 3, 2012 IBC
 - Construction Type per 2012 IBC Chapter 6
 - Sprinkler standard used, per 2012 IBC Chapter 9
 - Number of stories, and/or height of building
 - Gross area of building
 - Design load values (where applicable)
- See the section *Plans Submittal Requirements* in this manual for a list of potential drawings that might be necessary. Include all applicable drawings from that list necessary to demonstrate the full scope of the project and its compliance with all relative codes.

Existing Buildings

Plans Submittal Requirements

All additions, alterations, or repairs requiring a permit to an existing commercial building must submit a Commercial Addition or Alteration permit application as well as a digital set of plans. Permit applications are available online at clevelandtn.gov/building and may be submitted via the website or in person. Instructions for uploading digital plans are included on the application. The plan review fee is due upon submission of the permit application and may be paid on the website.

The plans shall be prepared by a registered design professional as required in the section of the manual, *Design Professional Requirements*.

Furthermore, if an addition to a structure results in said structure exceeding the limits of work exempt from the registered design professional requirements outlined in that section (such as total building square footage), then plans prepared by a registered design professional shall be required regardless of the size of the addition. Any alteration to a building exceeding the limits of work exempt from the registered design professional requirements as outlined in that section shall require the submission of plans prepared by a registered design professional.

Existing Buildings (cont.)

Change of Occupancy or Use

When a structure, building, or tenant space undergoes a *change of occupancy or use*, then it must be brought up to all current applicable codes for the new occupancy classification or use.

The building official may exempt this requirement if the change of occupancy or use is considered a less hazardous classification than the current occupancy or use of the building. Examples of this might include reduced occupancy load or reduced fire protection requirements. In cases where the building official makes this determination, the project shall be treated as an *alteration*, rather than a *change of occupancy or use*.

All buildings that undergo a change of occupancy or use are required to submit a permit application, obtain a permit, and receive a certificate of occupancy for the new occupancy or use type, even if there are no other proposed changes to the building. For projects not exempt by the building official as described above, a change of occupancy or use, at a minimum, will require the submittal of a life safety plan that meets the plans submittal requirements outlined in this manual.

Existing Buildings (cont.)

Additions

All additions must meet all applicable current code requirements for the occupancy classification or use. The addition must be fully accessible in that it conforms to all current handicap accessibility codes. The existing building does not need to be brought up to current code, with the following exceptions:

- Additions that result in a substantial improvement (the cost of the addition is greater than 50% of the value of the existing structure).
- If the addition affects existing structural elements, the affected portions of the structure must meet all current codes regarding design load values.
- When an addition to a structure includes a *primary function* of the building, the addition shall include an accessible restroom that meets all current accessibility codes. If this is not provided in the addition, the existing restroom must be brought up to meet all current accessibility codes. This does not apply to structures not requiring a restroom.
- If the addition contains a primary function to the building, the existing portions of the building must be altered as necessary to provide a handicap accessible route to the portion of the addition containing the primary function.
- When an addition is made to a structure containing individual sleeping or dwelling units, the existing building shall be provided with *smoke alarms* in accordance with Section 1103.8 of the *International Fire Code*.

Existing Buildings (cont.)

Alterations

All new work performed while making an alteration to an existing structure shall conform to all current codes for the occupancy classification or use. The unaffected portions of the existing building need not be brought up to current code, with the following exceptions:

- Alterations that result in a substantial improvement (the cost of the alteration is greater than 50% of the value of the existing structure).
- If the alteration affects existing structural elements, the affected portions of the structure must meet all current codes regarding design load values.
- If the alteration affects a *primary function* of the building, then the building must be brought up to current accessibility code requirements to the extent *technically feasible*. The altered primary function areas must be located on an accessible route. A handicap restroom must be provided by either altering the existing or adding a new family restroom. For projects where meeting current accessibility code requirements is not technically feasible, alternatives must comply with 2012 IBC Section 3411.8.
- When an alteration is made to a structure containing individual sleeping or dwelling units, the existing building shall be provided with *smoke alarms* in accordance with Section 1103.8 of the *International Fire Code*.

Existing Buildings (cont.)

Historic Buildings

Alterations to historic structures are exempt from many of the code requirements required for other types of existing buildings. In order to be classified as historic, the structure must meet one of the following criteria:

- Structure is certified on the National Register of Historic Places.
- Has proven eligibility to be certified on the National Register of Historic Places.
- Has been designated as historic under an appropriate state law.
- Has been designated as historic under an appropriate local law.

The requirements in this manual found in the sections regarding *change of occupancy*, *additions*, and *alterations* to existing buildings shall not be mandatory for historic buildings where such buildings are judged by the building official to not constitute a distinct life safety hazard.

For projects that qualify as historic and do not constitute a distinct life safety hazard, the following requirements shall apply:

- All new work shall meet current codes
- A minimum level of accessibility requirements shall be met including:
 - Must have one accessible route in to the building
 - Must have one accessible entrance
 - Must have access to all public spaces on the level of entrance
 - Must have at least one handicap restroom