

# FocusOn **FACILITIES**

## Codes, Standards, and Guidelines

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Owners of buildings, building managers, and individuals in charge of maintenance are aware of Code requirements but maybe not be proficient in the Code enforcement compliance that is the responsibility of building management every year. The searchable Ohio Building Code web site <https://up.codes/codes/ohio> is comprised of several Codes that must be followed including:

- Ohio Building Code itself which adopted the International Building Code (IBC) with amendments
- Ohio Fire Code which too adopted the International Fire Code (IFC) with amendments
- Ohio Plumbing Code which adopted the International Plumbing Code (IPC) with amendments
- Ohio Mechanical Code which adopted the International Mechanical Code (IMC) with amendments
- Accessibility and Usable Building and Facilities of Ohio which adopted Accessibility (A117.1) with amendments
- Standards for Installation of Sprinkler Systems of Ohio which adopted National Fire Protection Association (NFPA) 13 with amendments
- National Electrical Code of Ohio which adopted NFPA 70 with amendments
- National Fire Alarm and Signaling Code of Ohio which adopted NFPA 702 with amendments
- Standards for High Challenge Fire Walls, Fire Walls, and Fire Barriers of Ohio which adopted NFPA 221 with amendments
- Safety Code for Elevators and Escalators of Ohio which adopted American Society of Mechanical Engineers (ASME) A17.1 with amendments
- Certain sections of Occupational Safety and Health Administration (OSHA) Standards, e.g., recordkeeping, construction, etc.
- Americans with Disabilities Act (ADA) Standards which are Guidelines



A **Code** is a set of rules that serve as generally accepted guidelines recommended for the Building industry and the management of buildings to follow. Each Code sets the minimum acceptable requirements including performance of the final system, e.g., National Electric Code but isn't a law until it is adopted into law. Also, many of these Codes apply in part to new construction, as well as existing buildings.

Not following a Code can result in violating laws and regulations. For specific design team members this could result in disciplinary action or dismissal from their company or the design team. For a company contracted to be part of the design team, errors and omissions, as they pertain to code violations, could lead to legal action, fines, and/or financial risk/penalties, license revocations, and damaged business reputation.

There are Codes and there are Standards and Guidelines. Standards and Guidelines are not Codes but can be adopted by specific Codes, e.g., Ohio Building

Code “Installation of Sprinkler Systems” adopted/ references NFPA 13 for what is specified in this Section 13 of the NFPA. As a result, NFPA Section 13 is part of the Ohio Code. The same applies in part to OSHA and ADA making up certain parts of a Section of the Ohio Code.

It can be assumed that when a building is designed and built that the design team complied with Federal, State, and Local Codes. They probably followed certain Standard too which are not necessarily Code but may be required for the particular application based on “good practice”. Guidelines can be invaluable but also not necessarily required and, when it comes to a construction budget, additional cost to accommodate non-Code Guidelines may not get absorbed into the building program financial budget.

After a building is built per Code, there are on-going requirements adopted in the associated Standards and Guidelines that a facility manager will be required to follow. In addition, there will be certain procedures, if not already required by a specific Code that must be followed by building management. For example, a building with an emergency generator, should be tested monthly, as well as an annual, longer, more comprehensive test so that it is ready to operate in an emergency, e.g., health care facility. The same with fire alarms systems should be tested on a regular schedule.

The Life Safety Code, which the State of Ohio adopted, applies to its Fire Code of Ohio, e.g., testing sprinklers. Within this Code NFPA, a Standard and not a Guideline, has been adopted with requirements to be adhered to for testing during the year. Other systems are required to be tested and services during the year as part of life safety, e.g., fire alarm system.

It is usually the responsibility of the facility manager to contract the service of qualified service company to perform some of these tests based on their training and/ or certification. These service company vendors may also be contracted to maintain specific systems in addition to the required testing. Other tasks for the facility person, as part of the fire alarm procedures should be to make sure fire extinguishers comply too.

The American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) has numerous Standards and Guidelines that have been adopted into

Codes, e.g., Standard 62.1 for ventilation system design and acceptable indoor air quality (IAQ). Other ASHRAE Standards and Guidelines are simply recommendations to the design engineer and/or the facility manager to follow as “good practice”, e.g., Standard 202 – Commissioning Process for Buildings and Systems.

With all the Codes, Standards, and Guidelines to comprise recommendations, good practice, and mandatory requirements, it can be a daunting task for both the design team contracted to design a building and for the building management staff responsible for operating and maintaining the building systems and its associated asset. But, keeping current with Codes, updated/ revised Codes from a new construction or existing structure and its infrastructure is mandatory especially when Codes are required to be brought up to the latest standards. There are also Code consultants who can be contracted to assist in keeping the building current too.

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