

Appendix B

BUILDING REGULATION IN THE UNITED STATES

INTRODUCTION

The regulation of building construction has been a matter of public concern from the beginning of civilization. An early building code provision can be found in the *Old Testament*:

“When you build a new house you shall make a parapet for your roof that you may not bring the guilt of blood upon your house if anyone fall from it.”

This provision has remained relatively intact for 4000 years and is now (in less emotional language) Section 1711 of the *Uniform Building Code*, which reads:

“All unenclosed floor and roof openings . . . and roof used for other than service of the building shall be protected by a guard rail.”

Building regulation reflects the fundamental duty of government to protect people and property from harm within the concept of *police power* – the right of all states to protect the general health, safety and welfare through appropriate legislation. In the United States, building regulations generally are an expression of the police power of government, which the *Constitution* has reserved for the states.

Most states have delegated this function in whole or in part to their political subdivisions (cities, counties, villages, towns, and other special districts). Therefore, the building regulatory system is predominantly an aspect of local *home rule* and has evolved with different traditions and to different degrees in various localities and regions. Even today, building remains unregulated in some parts of the United States in deference to the perceived right of property owners to build as they wish on their own land.

If a community decides that it should have a building code, it can:

- Develop its own code,
- Adopt one of the three available national model codes in its entirety. (The model codes are described later in this appendix), or
- Develop its own code by modifying a model code to reflect specific local concerns.

THE PURPOSE OF BUILDING REGULATION

The specific purposes of building regulations usually are set forth clearly in the code or operative legal document of a jurisdiction. In order to understand building regulations, it is

essential to realize that they are *minimum legal criteria for construction that can establish both criminal and civil liability* for noncompliance. The specific goals and objectives of building regulatory systems generally are to:

- Prevent or minimize bodily injury to building users and occupants,
- Prevent or minimize structural failures and collapse with attendant injuries to the public and damage to property,
- Prevent or minimize the incidence of fire damage and spread both for individual structures and the community as a whole,
- Prevent or minimize deterioration and damage to property from the elements,
- Prevent or minimize "overcrowding" and the creation of slum and ghetto community conditions, and
- Protect the public welfare as this concept is further defined in local community and/or state law.

Starting from this basic list, the concept of public welfare in relation to U.S. building regulations has been expanded by the courts significantly during the past 25 years. Building regulations and codes now often include detailed provisions for other than safety objectives (for example, accessibility for the disabled, historic preservation, energy conservation, and noise control). Some broader environmental concerns (for example, air and water pollution), economic development issues, and aesthetic considerations also have found their way into some building regulations under the aegis of the police power protection within an expanded concept of public welfare.

PARTICIPANTS IN THE REGULATORY PROCESS

The principal participants in the U.S. regulatory system are:

- Local government building and safety departments and special districts,
- State agencies (both regulatory and proprietary interests),
- Federal agencies (both regulatory and proprietary interests), and
- Model code organizations, professional societies, and building industry and trade associations.

LOCAL GOVERNMENT BUILDING AND SAFETY DEPARTMENTS AND SPECIAL DISTRICTS

Enforcement of the building regulatory system for some 75 percent of construction activity emanates from local jurisdictions that issue permits and inspect private projects for conformance. The content and detail of these building regulations are developed, however, in a more complex regional and/or national context and process.

Separate from local regulatory jurisdictions are a large number and variety of local special-purpose districts (for example, schools and utilities). The state or regional enabling legislation for these special districts often makes them autonomous authorities and exempts them from local regulatory controls; thus, they may develop their own building regulations for their programs, which may cross local regulatory jurisdictional boundaries.

STATE AGENCIES

Many states, in response to either lack of uniformity in or the absence of local building regulations, have enacted parallel sets of statewide minimum regulations for selected classifications of private buildings (for example, housing or high-rise structures). These statewide regulations reflect a multitude of state organizational formats and legislative backgrounds and often serve as a screening device for state lending, insurance, and other indirect funding programs and mechanisms.

Virtually all states also have agencies that construct, regulate, and maintain state-owned and -operated facilities (for example, schools, correctional facilities, and hospitals). These agencies also often are exempt from local regulations and develop types of internal building regulations for their programs and projects.

Although most state agencies have the authority to write their own building regulations, as a practical matter they usually adopt some form of the model code in current general use in the region, incorporating additions and amendments to reflect specific state concerns.

FEDERAL AGENCIES

Like the states, agencies of the federal government are exempt from the home rule concept of U. S. building regulations. Although the trend is for these agencies to use existing national standards whenever possible, over the years they have developed extensive internal building regulations to address their own proprietary construction interests. In some cases, federal agencies have developed or adopted forms of building regulations as direct qualifying standards for federal funding of private sector construction or for indirect funding through redevelopment and other subsidy programs.

Other federal agencies are directly involved in either developing and writing building regulations and standards or providing technical assistance to and research for those organizations that do write and promulgate them. Many of these agencies participate on the Interagency Committee on Seismic Safety in Construction (ICSSC).

Two recent executive orders impose new directives on the federal government. With respect to new construction, Executive Order 12699 requires that new buildings be designed and constructed to meet the requirements of either the latest edition of the *NEHRP Recommended Provisions* or the immediately preceding edition. Executive Order 12941 directs federal agencies to evaluate existing federally owned and leased buildings to identify buildings that are potentially hazardous and to plan for the seismic rehabilitation of those so identified.

MODEL CODE ORGANIZATIONS, PROFESSIONAL SOCIETIES AND INDUSTRY AND TRADE ORGANIZATIONS

Currently the following three model code organizations are active in the United States and produce model sets of basic building regulations:

- The Building Officials and Code Administrators International (BOCA),
- The International Conference of Building Officials (ICBO), and
- The Southern Building Code Congress International (SBCCI).

These model code organizations have regional bases – BOCA produces building and other codes focusing on the Northeast and Midwest, SBCCI produces similar codes for the South and Southeast, and ICBO produces codes for the West and Midwest. In addition, the National Fire Protection Association (NFPA) produces electrical and fire protection codes that are generally used nationwide. All these organizations publish code documents and offer a variety of other educational and support services that assist local jurisdictions.

The model code organizations are structured as nonprofit, membership-owned corporations. Through appropriate bylaws and voting processes, they develop, publish, and modify building regulations in response to changing building technology and experience. A published model code usually is adopted by reference by a local jurisdiction's legislative body.

The building design professions (architects and engineers) have a long-standing tradition of active professional interest in the building regulatory system. Organizations such as the Building Seismic Safety Council (BSSC), the American Society for Testing and Materials (ASTM), the American National Standards Institute (ANSI), the American Institute of Architects (AIA), the American Society of Civil Engineers (ASCE), the Applied Technology Council (ATC), the Earthquake Engineering Research Institute (EERI), and many state and regional structural engineers associations have developed material standards, testing procedures, and design parameters. Beyond this, the major manufacturers of almost every component used in buildings (such as roofs and windows) are members of a trade association that develops standards and design guidelines. This information often is incorporated directly into model codes or serves as background assistance for design and construction professionals.

CODE CHANGE PROCEDURES

A brief outline of some aspects of the code evolution and change process of the model code organizations is presented below as an overview of the general way in which states, counties, and cities develop regulations. Each of the model code groups publishes a new edition every three years and issues amendment supplements each year.

MODEL CODE CHANGE PROCEDURES

Each of the model code groups operates on an annual change cycle so that a code change can be fully processed within a 12-month period.

Each model code group distributes to its membership and all other interested parties a booklet of proposed code changes and a booklet of recommendations by the organization's code revision committee. Each code change proposal is identified with a specific number so that it can be tracked through the code change process. Although anyone may submit a code change proposal to a model code group, those doing so are encouraged to submit adequate substanti-

ating material so that the code revision committees can base their recommendations on factual information.

The model code organizations' code revision committees generally are composed of the organizations' voting members (usually individuals representing a code enforcement entity such as a city, county, or state). Ad hoc committees for each of the model code organization are appointed to study special topics and are composed of all interested parties with appointments limited when required to maintain a balance of interests. All model code hearings are open to the public, and any individual or organization may present testimony on any agenda item. Some entities such as national trade associations, professional associations or committees appointed by the model code group can exert special influence on the code change process and it is up to each code revision committee as a whole to maintain balance.

A committee recommendation is made on each code change proposal. This recommendation may be for approval as submitted, approval as revised at the hearing, or disapproval. In some instances, further study may be recommended.

Committee actions, with reasons for each recommendation, are published and distributed to the model code membership and other interested parties. These actions become the agenda base for a public hearing and membership vote during the model code groups' annual meetings. Final action taken by voting members at an annual meeting (or, in some cases, by letter ballot) are published either in the form of annual supplements and/or as part of the triennial code editions.

STATE CODE ADOPTION PROCEDURES

The adoption of building regulations by states may take a variety of forms. The two most common are total pre-emption, in which the state develops or adopts rules and regulations that must be enforced by the local jurisdiction, or partial pre-emption, in which the state regulations are minimum standards and the local jurisdiction may adopt equal or more restrictive regulations.

In states that have mandatory statewide building regulation (currently approximately 25 states have some form of building regulation), proposed new rules usually are submitted as amendments to existing regulations. When the proposed rules are included in a model code forming the basis of the state code, they may be adopted very simply as a routine update to the model code on an annual basis or upon publication of a new edition of the model code.

In states that do not regulate building, an initiative must be generated by one or more interested persons who arrange for a member of the legislature to introduce a bill containing the proposed rules. Following introduction, the bill is assigned to one or more committees and placed on a calendar that directs its path through the legislative process. If it makes it through the process, the bill is signed by the governor and published in the statute books with responsibility for implementation placed in one of the state agencies.

LOCAL CODE ADOPTION PROCESS

When a city or county uses one of the model codes, new regulations are most readily introduced as part of that code's periodic revision and adoption process. In this situation, local opposition to the proposed rules may be significantly reduced since the public debate over the appropriateness of the rules already has been conducted at the national level; thus, any local

opponent must show that the local community's uniqueness warrants noncompliance with the national standards.

When a locally written code is in effect or there is no code at all, new rules must have a local sponsor such as a councilman, building official, fire official, or legal counsel to initiate preparation of an adoption ordinance. Once introduced, a proposed ordinance usually is assigned to a local government standing committee or subcommittee for presentation and discussion at public hearings, the results of which will influence, to a great extent, whether the committee or subcommittee recommends that the ordinance be passed, be referred back for amendment, or be defeated.

Once adopted and after publication in an official paper, an ordinance usually becomes effective on a date specified in the ordinance or set forth by statute and is assigned an agency or department, usually the city or county building department, for implementation and enforcement. The building official then needs to review, and revise as necessary, his rules of procedure to reflect the newly adopted ordinance. Plan review, permit, and inspection procedures must be evaluated for adjustment. Personnel training and qualification in the plan review, permit, and inspection procedures also must be reviewed and updated as necessary.