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The Commonwealth of Massachusetts
State Board of Building Regulations and Standards

CODEWORD

October, 1986

LEGISLATION - CHAPTER 637 OF THE ACTS OF 1985

An Act Promoting Solar Energy and Protecting Access To Sunlight For Solar Energy System

This existing legislation amends Section 1A of Chapter 40A, The Zoning Act, by inserting the following two definitions:

"Solar Access", the access of a solar energy system to direct sunlight.

"Solar Energy System", a device or structural design feature, a substantial purpose of which is to provide daylight for interior lighting and provide for the collection, storage and distribution of solar energy for space heating or cooling, electricity generating or water heating.

Section 3 of the same Act is also amended by the addition of the following paragraph:

No zoning ordinance or by-law shall prohibit or unreasonably regulate the installation of solar energy systems or the building of structures that facilitate the collection of solar energy, except where necessary to protect the public health, safety or welfare.

Other Sections would allow by local by-law special permits authorizing increases in the permissible density or intensity of a particular use conditionally upon the installation of solar energy systems and/or protection for solar access. Another special permit, a "solar access permit" could be provided by local by-law to create an easement to sunlight over neighboring property, and the recordation of such permits on burdened and benefited property deeds.

Other general laws amended by this Act include: Chapter 40C, Section 7; Chapter 41, Section 81M and 81Q (The Subdivision Control Law); Chapter 184, Section 23C; and Chapter 187, Section 1A.

USE OF FLEXIBLE DUCT AND DUCT CONNECTORS

Recently, Official Interpretation No. 9-86 was sent to all Building Departments. This interpretation confirmed that flexible duct and connectors are permitted for all occupancies when conforming to the UL181 standards and subject to other provisions of the BOCA Basic Mechanical Code, 1978 Edition.

The following provisions are those of the BOCA Mechanical Code (1978):

M-301.4.5 Flexible duct provisions: Flexible air duct material and flexible air duct connectors shall be subject to the following provisions:

1. They shall be rated as Class 1 when tested under applicable sections for flexible connectors and air ducts of the standard for air ducts listed in Appendix C;
2. they shall not penetrate required fireresistance rated assemblies;
3. they shall not pass through floors, walls, or ceilings;
4. they shall not be used within six (6) feet of heating element;
5. the temperature of the air conveyed through such connectors and air ducts shall not be more than two hundred fifty (250) degrees F.;
6. connectors and air ducts shall conform to the applicable requirements for air ducts;
7. connectors and air ducts shall be installed in accessible areas only; and
8. connectors and air ducts shall be rated for the system pressure.

Section M-302.2 of that same reference standard allows the use of flexible duct and connector in one and two-family dwellings subject to their construction and installation in accordance with the UL181 test standard and applicable SMACNA (Sheet Metal and Air Conditioning Contractors National Association) construction standards.

S.B.B.R.S. PUBLIC HEARING

On November 25, 1986, the State Board of Building Regulations and Standards in accordance with the provisions of the M.G.L., Chapter 30A and Chapter 143, Sections 94 and 97 will hold a public hearing at 1:00 p.m. in Conference Rooms 1 and 2, twenty-first floor, McCormack State Office Building, One Ashburton Place, Boston, Massachusetts.

OFFICIAL INTERPRETATION VERSUS APPEALS BOARD DECISION

This issue of CODEWORD contains a review of an Official Interpretation (No. 9-86) of the State Board of Building Regulations and Standards (S.B.B.R.S.) as well as two recent decisions of the State Building Code Appeals Board. These are two very distinct types of actions and it is critically important that Building Officials understand the differences between the two.

An Official Interpretation is an action taken by vote of the entire S.B.B.R.S. to interpret and clarify the Code. It is a general and binding statement of the meaning of a Code requirement, and, when voted, becomes effectively a part of the Code itself. Official Interpretations are given under the authority of Chapter 143, Section 95 as a power and duty of the Board to provide uniform standards.

The State Building Code Appeals Board, a three member Board, is established by M.G.L. Chapter 143, Section 100. Its function is to hear appeals of interpretations, orders, requirements, directions or failures to act by Building Officials concerning specific cases. Their decisions are not generalizable and not binding on any matter other than the subject of the appeal. Any variance from any provision of the Code in any particular case may be applied only to the case in question.

CODEWORD

This issue's CODEWORD is a phrase which carries a very specific meaning in the context of the Code, and is often misunderstood by designers, builders and Building Officials. The CODEWORD is: Multiple Single-Family Dwellings.

Multiple single-family dwellings are addressed by Sections 909.1.2 and 2101.16 of the State Building Code. Commonly known as townhouses or row houses, multiple single-family dwellings are classified in Use Group R-3 and, as such, must satisfy the following Code requirements and criteria:

- 1) Since they are classified as single-family dwellings, no shared egress facilities are permitted. Two means of egress are required from each dwelling unit, per the One and Two-Family Dwelling Code (Article 21).
- 2) Dwelling units must be separated from one another by a one (1) hour rated fire separation wall which extends from the foundation to the underside of the roof sheathing.
- 3) The number of multiple single-family dwellings which may be contained in a single building is constrained by the area limits of Table 305 of the Code. For example, a building containing multiple single-family dwellings of Type 4A construction would be limited by Table 305 to the base area per floor of 10,200 square feet permitted by Table 305, plus or minus any area reductions or exceptions applicable from Table 305.4 or Section 306.

Sections 909.1.2 and 2101.16 also contain provisions for multiple two-family dwellings, which the Code addresses in a similar manner.

RECENT STATE BUILDING CODE APPEALS BOARD DECISIONS

Section 126.7.11 (Contents of Decision) of the Code states, "Any decision shall not be considered by any person or agency as a precedent for future decisions."

Appeal Docket Number 904

The Building Inspector denied a permit to build an exterior stairway to provide a second means of egress from the second story of a building containing a mixed use and occupancy (first floor mercantile, second floor storage and one apartment). The Inspector denied the permit as the new stairway would further increase the non-conformity of the building in regard to zoning lot coverage requirements.

The Appellant requested a permit be issued for an exterior stairway to provide a second means of egress from the second floor.

The Board determined that a second means of egress is required by Section 609.2; additionally, Section 101.2 allows the State Building Code to control the reconstruction of buildings, when the requirements of the Code for safe egress conflict with local zoning requirements. The Board further determined that requiring the appellant to provide an alternate second means of egress within the structure would impose an unnecessary hardship. Therefore, the Board ordered the Building Inspector to issue a building permit for the construction of the exterior stairway.

Appeal Docket Number 908

The Building Commissioner refused to issue a building permit for a new single-family dwelling including a full basement which would be partially located within the one hundred (100) year flood plain.

The Appellant argued that the location of the house on a small inlet approximately one (1) mile from the ocean would protect it from wave action. The basement would be used for storage only, and federal flood insurance would not be sought.

The Board determined that the basement floor is not elevated above the one hundred (100) year flood plain as required by Section 744.2. The flood plain regulations contained in the Code represent minimum standards of safe design. The Board denied the requested variance and affirmed the decision of the Building Commissioner.

SOUTHEASTERN MASSACHUSETTS BUILDING OFFICIALS

The Southeastern Massachusetts Building Officials and Fire Chiefs Association held its September 10 meeting at the "Inn for all Seasons" in Plymouth. Mr. Donald J. Schmidt, of the Executive Office of Communities and Development, and the editor of its publication "The Land Use Manager" gave a presentation on zoning issues. His presentation highlighted issues relating to the "protection" of undersized lots. After his presentation, Mr. Schmidt answered questions dealing with Inspectors' recent experiences with the subdivision control law and non-conforming uses and lots.

TRAINING TOPICS SURVEY RESULTS

The August issue of CODEWORD contained a survey requesting Building Officials' response as to the level of training and training topics they would like to see presented. A summary of the results is presented below. The surveys themselves, many of which contained useful comments, will be reviewed by the State Board of Building Regulations and Standards and used for the design and scheduling of inspector training.

When asked to choose the degree of detail in which they would like to see material presented, the Inspectors responded as follows:

General Overview	- 35	General Code	- 24
Basic Code	- 30	Basic Materials	- 18
Specific Code	- 25		

When asked to rank training topics, the Inspectors responded as follows:

Wood Frame Construction	- 36	Architectural Barriers Regulations	- 23
Code Administration and Enforcement	- 31	Specific Code Articles (see below)	- 14
Assembly Buildings	- 29	Institutional Buildings	- 12
Commercial Building Construction	- 27	High-Rise Construction	- 6
Alteration of Existing Structures	- 26		

The most requested Code Articles were: Article 6, Article 22, Article 21, Article 20, Article 4, Article 12 (descending order).

Additionally, many other topics were suggested and will be considered by the Board.

BUILDING OFFICIALS OF WESTERN MASSACHUSETTS

The Building Officials of Western Massachusetts held its September 10th meeting at the "Yankee Peddler Inn" in Holyoke. Mr. Richard R. Pedersen, Executive Vice President of the Homebuilders Association of Greater Springfield, Inc. gave a presentation describing the expansion of his organization in the greater Springfield area. Following his presentation, there was an open discussion of Code violations commonly encountered. Mr. Pedersen made the commitment to inform the membership of his association of these recurring problems.

PLANS FOR SINGLE AND TWO-FAMILY DWELLINGS

Recently, we have received several inquiries from Building Departments as to whether or not Sections 113.5.2 and 127.1 of the State Building Code allow a Building Official to require that plans for single or two-family dwellings be sealed and signed by a registered architect or professional engineer. We have also received a few complaints about municipalities attempting to impose such a requirement, and so we thought it was time to re-examine this issue.

Sections 113.5.2 and 127.1 of the State Building Code originate from those sections of the General Laws of the Commonwealth of Massachusetts which create the professional registration of architects and engineers and define the scope of duties and responsibilities of these professionals. In its requirements for professional architectural or engineering services in conjunction with building permit, the Code attempts to paraphrase the laws, and in some cases, provide greater detail as to the form or scope of certain duties. However, no code may conflict with the General Laws, and in cases of conflict, the law would govern.

Chapter 112, Section 60L of the General Laws specifically allows unregistered persons to prepare plans and specifications for "...any single or two-family house or accessory building thereto". Likewise, Section 127.1 of the State Building Code quotes the law in excepting, "Any single or two-family house or any accessory building thereto," from Code requirements for construction control. Both exceptions are without limitation as to size, and therefore, no requirement for sealed plans may be imposed, regardless of the size of the one or two-family dwelling.

LICENSING CLARIFICATION

At their August 26th meeting, the State Board of Building Regulations and Standards affirmed that a building permit obtained to construct a foundation and set up a manufactured home does, in fact, involve structural work and that a Construction Supervisor's license is required, per Section 109.1.1 of the Code.

CONSTRUCTION SUPERVISOR'S LICENSES REVOCATIONS AND SUSPENSIONS

On August 21st, the Board of Examiners of the State Board of Building Regulations and Standards convened as a result of complaints received and heard testimony. The results follow:

Construction Supervisor's License No. 016948, Mr. John Basile, Jr.
License suspended for six (6) months.