

**REPORT OF THE
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT**

**UNIFORM STATEWIDE BUILDING CODE
REQUIREMENTS AND AFFORDABLE
ASSISTED LIVING FACILITIES**

**TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA**



HOUSE DOCUMENT NO. 33

**COMMONWEALTH OF VIRGINIA
RICHMOND
2000**



COMMONWEALTH of VIRGINIA

James S. Gilmore, III
Governor

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

December 7, 1999

Berry E. DuVal
Secretary of
Commerce and Trade

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TO: The Honorable James S. Gilmore, III, Governor of Virginia
and
Members of the Virginia General Assembly

The 1999 General Assembly, through House Joint Resolution 750, requested that the Department of Housing and Community Development "review national model building and safety codes for the purpose of identifying any alternatives to the institutional categories currently used to classify the health and safety features applicable to assisted living facilities." The resolution also requested that the department inform the Board of Housing and Community Development if any such a category would foster the development of affordable assisted living options within Virginia. The Board would then be able to consider the possible inclusion of such provisions in future editions of the Uniform Statewide Building Code (USBC). The accompanying report, which is presented for your review and consideration, documents the Department's findings and discusses possible options for USBC provisions applicable to assisted living facilities

Respectfully submitted,

William C. Shelton



PREFACE

The 1999 General Assembly approved House Joint Resolution 750, which requested that the Department of Housing and Community Development (DHCD) review national model building and safety codes for the purpose of identifying any alternatives to the institutional categories currently used to classify the health and safety features applicable to assisted living facilities. If such a category would foster the development of affordable assisted living options within Virginia, the resolution further requests that the Department inform the Board of Housing and Community Development so that it might consider incorporating such provisions during the ongoing revision of the current edition of the Uniform Statewide Building Code (USBC).

This study was included among several recommendations relating to affordable assisted living alternatives that the Virginia Housing Study Commission (VHSC) made because of a two-year study that it completed in 1998. The VHSC noted the possible impact of regulatory requirements, including building regulations, on the ability to develop affordable assisted living facilities. The ability to create facilities that would permit residents to “age in place” while continuing to receive appropriate levels of supportive services was a particular concern. However, the classification of assisted living facilities as institutional subjected them to relatively stringent construction standards that could adversely affect the affordability or even the feasibility of such facilities.

Staff from the Division of Building and Fire Regulation at DHCD reviewed current requirements applicable to these facilities, identified the specific construction standards associated with them, and noted a possible alternative to the current system. Their findings and recommendations to the Board of Housing and Community Development may be found on the following pages within the main body of the report.

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EXECUTIVE SUMMARY

Assisted living has emerged as one response to the growing demand for facilities that combine housing and necessary supportive services while promoting the maximum independence possible for elderly and other residents. The cost of residency in these facilities may exceed the resources of older citizens creating considerable interest in finding ways to make them more affordable. Regulatory provisions, including those of building codes and standards, are among the factors influencing the affordability of existing and future facilities.

House Joint Resolution 750 requested that the Department of Housing and Community Development (DHCD) review national model building and safety codes, identifying any alternatives to the institutional use categories currently used to classify the health and safety features applicable to assisted living facilities. The resolution further requested that DHCD inform the Board of Housing and Community Development of any alternatives that it might consider incorporating during the ongoing revision of the current edition of the Uniform Statewide Building Code (USBC).

The USBC imposes a variety of requirements on assisted living facilities, classifying them as “institutional” uses that they must meet rigorous standards intended to assure the health and safety of residents in case of fire or other emergencies.

The Virginia Housing Study Commission (VHSC), which recently completed a two-year study of assisted living issues, noted that modern facilities did not fit easily within the current use classifications of the USBC. Institutional classifications, and particularly the I-2 classification, may exceed what is needed to provide a healthy and safe living environment. On the other hand, the current residential classifications may not provide sufficient protection for the population of these facilities.

Both the Building Officials and Code Administrators International (BOCA) organization and the model code organizations working to develop the proposed International Building Code (IBC) have recognized the need to find more appropriate regulatory provisions for assisted living facilities. Thus, the 1999 BOCA and the proposed 2000 IBC codes propose related but distinct methods for responding to the issue.

By classifying medium-sized (serving 16 or fewer residents) assisted living facilities as residential uses, the provisions of these model codes could reduce some of the costs associated with institutional use classifications. At the same time, however, it should be noted that in both model codes facilities serving individuals not capable of responding unaided to an emergency would continue to require a higher level of building safety systems.

The assisted living provisions of the 1999 BOCA and IBC model codes do not fall precisely between those of the current I-1 and I-2 use categories. Nonetheless, they could

permit the construction and operation of more medium-sized facilities at a lower cost than under the existing rules, increasing their affordability to future residents without compromising essential health, safety, and accessibility features.

The process for revising the Uniform Statewide Building Code was already underway at the time that the General Assembly approved HJR 750. However, the Board of Housing and Community Development will be considering the adoption of portions of the 1999 BOCA or other model codes in the future. The information included in this document and supporting materials will be directly relevant to that process and will be reported to the Board for its consideration during that process.

I. INTRODUCTION

Recently, assisted living has emerged as one response to the growing demand for facilities that combine housing and necessary supportive services in a form promoting the maximum independence possible for elderly and other residents. These facilities have become more common as the market responds to steady growth in the ranks of older Americans. More facilities are in the planning or construction stage. However, because the cost of residency in these facilities may exceed the resources of older citizens, there is also considerable interest in finding ways to make them more affordable. Regulatory provisions, including those of building codes and standards, are among the factors influencing the affordability of existing and future facilities.

Following a two-year study that the Virginia Housing Study Commission (VHSC) completed in 1998, the Commission recommended that detailed studies examine more closely several specific issues relating to affordable assisted living. Among these, the VHSC noted the possible impact of regulatory requirements, including building regulations, on the ability to provide affordable assisted living facilities. The ability to create facilities that would permit residents to “age in place” while continuing to receive appropriate levels of supportive services was a particular concern. House Joint Resolution 750, introduced by Delegate Alan A. Diamonstein, requested that the Department of Housing and Community Development (DHCD) review national model building and safety codes, identifying any alternatives to the institutional use categories currently used to classify the health and safety features applicable to assisted living facilities. The resolution further requested that the Department inform the Board of Housing and Community Development of any recommended alternatives that it might consider incorporating during the ongoing revision of the current edition of the Uniform Statewide Building Code (USBC).

II. BACKGROUND

The concept of assisted living involves a residential setting where appropriate personal care services, 24-hour supervision, and assistance can be provided in an environment fostering the maximum possible independence and dignity of the resident. Because of the varied physical or mental limitations affecting the residents of such facilities, state and local building codes place a number of special requirements upon them.

The USBC and Assisted Living Facilities

The current provisions of the Virginia USBC impose a variety of requirements on residential properties serving six or more individuals living in supervised environments or under custodial care. Because the USBC and underlying national model code provisions classify them as “institutional” (I) uses, they must meet rigorous standards

intended to assure the health and safety of residents in case of fire or other emergencies. The regulations address the types of construction permitted, fire resistance ratings, building height and floor area per story, fire suppression systems, fire alarm systems, fire and smoke detector systems, and the interactions among these factors.

Assisted living facilities currently fall under one of two classifications within the USBC, neither of which was specifically intended for them. Facilities serving six or more persons capable of responding to an emergency without requiring personal assistance are classified as being within Use Group I-1. The USBC also has special provisions for one particular type of assisted living. Group homes licensed by the Virginia Department of Mental Health, Mental Retardation and Substance Abuse Services (DMHMRSAS) and that serve eight or fewer mentally ill, retarded, or developmentally disabled persons with one or more resident counselors are classified as residential uses (either R-3 or R-4).

The current edition of the USBC, which incorporates the standards of the 1996 BOCA National Building Code,¹ classifies facilities serving six or more persons who are not capable of unassisted self-preservation in an emergency as falling within Use Group I-2. This group has more restrictive construction requirements than the I-1 use group and significantly more restrictive requirements overall than do such residential use groups as R-2, or R-3.

All of these items can influence the cost, and therefore the affordability of an assisted living facility. They also determine whether residents will be able to continue to live in a given facility as they age or require higher levels of assistive services. As individuals age or require increased levels of assistance, they may no longer qualify to reside in a facility designed to meet I-1 use standards. In most cases, conversion of an I-1 to I-2 status is infeasible for both financial and physical reasons. Thus, the individuals may face the necessity of relocating to a facility that can meet I-2 standards.

By contrast, structures classified as “residential” uses for the purposes of building regulations may not have to meet the same standards. Thus, they would likely be somewhat less costly to construct and maintain and therefore more affordable. However, relatively few assisted living environments would qualify for inclusion as residential occupancies.

The following table, which lists limitations on height in stories or feet and the maximum permitted area in square feet per floor of the structures in the various use groups, illustrates the potential impact of the differences between various use groups.

¹ The BOCA National Building Code is produced by the Building Officials and Code Administrators, International, Inc.

Height and Area Limitations for Institutional and Residential Buildings Under the BOCA National Building Code/1996

Height limits shown as stories and feet above grade. Area limits shown as square feet per floor.
Based on Table 503 in the BOCA National Building Code/1996

Use Group	Type of Construction							
	Noncombustible			Noncombustible/ Combustible			Combustible	
	Type 2			Type 3		Type 4	Type 5	
	Protected		Unprotected	Protected	Unprotected	Heavy Timber	Protected	Unprotected
	2A	2B	2C	3A	3B	4	5A	5B
I-1 Institutional, residential care	9 stories, 100' 19,950	4 stories, 50' 13,125	3 stories, 40' 8,400	4 stories, 50' 11,550	3 story 40' 8,400	4 stories, 50' 12,600	3 story 40' 8,925	2 stories, 35' 4,200
I-2 Institutional, incapacitated	4 stories, 50' 17,100	2 stories, 30' 11,250	1 story, 20' 7,200	1 story 20' 9,900	Not Permitted	1 story 20' 10,800	1 story, 20' 7,650	Not Permitted
R-2 Residential; multi-family	9 stories 100' 22,800	4 stories 50' 15,000	3 stories 40' 9,600	4 stories 50' 13,200	3 stories 40' 9,600	4 stories 50' 14,400	3 stories 40' 10,200	2 stories 35' 4,800
R-3 Residential; 1- and 2-family; multiple 1-family	4 stories 50' 22,800	4 stories 50' 15,000	3 stories 40' 9,600	4 stories 50' 13,200	3 stories 40' 9,600	4 stories 50' 14,400	3 stories 40' 10,200	2 stories 35' 4,800

Note: Construction type refers to general requirements relating to the structural elements of a building. Type 1 construction, which has the highest overall fire resistance rating, does not limit building height or floor area. The diminishing height and floor areas permitted in other construction types reflect the degree of fire resistance of the building's elements under each type of construction.

In general, institutional settings, except those using type 1 construction, have smaller permitted floor areas per story than comparable residential uses. Similarly, I-2 uses are more restricted than I-1 uses, reflecting the reduced capacity for self-preservation among the occupants of I-2 facilities. All institutional uses face more stringent fire resistance rating requirements for than do most residential structures. Institutional structures must also include automatic fire suppression systems (e.g., sprinklers) while some, but not all, R-2 facilities may be exempted from the requirement or have the option to use sprinklers meeting NFPA 13R, a standard originally designed primarily for residential and not institutional settings.² Institutional facilities must incorporate fire alarm systems; although most R-2 facilities must also incorporate fire alarms systems, certain low-rise buildings in this use group are exempt from the requirements.

Alternatives to the Current Regulatory Structure

The VHSC noted that modern assisted living facilities did not fit easily within USBC current use classifications of the USBC. Institutional classifications, and particularly the I-2 classification, may exceed what is needed to provide a healthy and safe living environment. On the other hand, the current residential classifications may not provide sufficient protection for the population of these facilities. The VHSC therefore requested that DHCD attempt to identify a category that occupied "a midpoint between those required by the I-1 and I-2 designations . . ."

² The National Fire Protection Association (NFPA) has developed differing standards for automatic sprinkler systems in residential and non-residential occupancy groups. NFPA 13R installations would normally be less expensive to install.

The issues associated with finding an appropriate set of building regulations for assisted living facilities are not unique to Virginia. As assisted living facilities continue to be developed across the nation, the need for more uniform regulatory approaches to many aspects of assisted living has become increasingly apparent. Uniform building regulations cut design and construction costs. They also provide a uniform level of protection to consumers.

Both the BOCA organization and the groups working to develop the proposed International Building Code³ have recognized the need to find more appropriate regulatory provisions for assisted living facilities. The two model codes propose related but distinct methods for responding to the issue.

BOCA National Building Code/1999

The BOCA National Building Code/1999 made no explicit changes in the building height and area limitation requirements included on Table 503, which was excerpted above. However, the 1999 model code changed the definitions of residential use groups to include a new definition of “Residential care facility” as one “where more than 5 and not more than 16 occupants receive personal care in a supervised environment.” The definition encompasses the distinction between individuals capable of responding to an emergency (defined as “Occupancy Condition 1”) and those who cannot (defined as “Occupancy Condition 2”). This corresponds to the distinction already incorporated in the institutional use groups marking the difference between I-1 and I-2 uses. The 1999 model code also specifically provides that a “residential care facility” shall be classified as an R-2 (multi-family residential) or R-3 (multiple single-family or related residential) use. R-4 dwellings (single-family detached) used as residential care facilities must comply with the requirements applicable to R-3 residential care facilities.

The 1999 BOCA model code also includes explicit provisions for automatic sprinkler systems in R-2 and R-3 residential care facilities, permitting the use, depending on the height of the building, of either NFPA 13 or 13R systems. Accessibility features of residential care facilities built under one of the R use categories must match those of comparable use group I facilities.

2000 International Building Code

The final draft of the 2000 International Building Code (IBC) uses a somewhat different approach to address the assisted living issue. Unlike the BOCA, it establishes a single separate use classification, R-4, covering “buildings arranged for occupancy as Residential Care/Assisted Living Facilities including five but not more than 16

³ The International Building Code is a cooperative effort by the Building Officials and Code Administrators, International, Inc. (BOCA), the International Conference of Building Officials (ICBO), and the Southern Building Code Conference International (SBCCI) to bring greater uniformity to building codes.

occupants, excluding staff.” The IBC defines these facilities as “housing a maximum of 16 persons . . . who . . . live in a supervised residential environment which provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance . . .” The IBC height and building area limitations applicable to assisted living facilities, shown on the following table, differ from those of the 1996 and 1999 BOCA codes.

Height and Area Limitations for Institutional and Residential Buildings

Under the 2000 International Building Code—Final Draft

Height limits shown as stories above grade. Area limits shown as square feet per floor.

Adopted from Table 503

Height (feet)		TYPE OF CONSTRUCTION						
		TYPE II		TYPE III		TYPE IV	TYPE V	
		A	B	A	B	A	A	B
Group	Hgt/Area	65	55	65	55	65	50	40
I-1	H	4	3	4	3	4	3	2
	A	19,000	10,000	16,500	10,000	18,000	10,500	4,500
I-2	H	4	3	4	Not Permitted	4	3	Not Permitted
	A	15,000	11,000	12,000		12,000	9,500	
R-4	H	4	3	4	3	4	3	2
	A	24,000	16,000	24,000	16,000	20,500	12,000	7,000

Note: Construction type refers to general requirements relating to the structural elements of a building. Type IA construction, which has the highest overall fire resistance rating, does not limit building height or floor area; type IB construction places height restrictions on all three uses. The diminishing height and floor areas permitted in other construction types reflect the degree of fire resistance of the building’s elements under each type of construction.

The IBC, like BOCA 1999, also allows the use of NFPA 13D or 13R automatic sprinkler systems for R-4 residential assisted living facilities and provides similar smoke alarm requirements for R-4 and I-1 facilities serving fewer than 16 occupants.

Although there are differences in how the IBC and 1999 BOCA approach the question of providing an appropriate level of regulation for some assisted living facilities, they share a common purpose. By classifying medium-sized (serving 16 or fewer residents) assisted living facilities as residential uses, they can reduce some of the costs associated with institutional use classifications. At the same time, however, it should be noted that in both model codes facilities serving individuals not capable of responding unaided to an emergency would continue to require a higher level of building safety systems.

The assisted living provisions of the 1999 BOCA and IBC model codes do not fall precisely between those of the current I-1 and I-2 use categories. Nonetheless, they could permit the construction and operation of more medium-sized facilities at a lower cost than under the existing rules, increasing their affordability to future residents.

Revision of USBC Provisions for Assisted Living Facilities

The resolution requests that DHCD present the Board of Housing and Community Development with information about any model code provisions that would foster the development of more affordable assisted living options. The provisions of the IBC and 1999 BOCA have the potential to increase the affordability of this specialized form of housing without compromising essential health, safety, and accessibility features.

The process for revising the Uniform Statewide Building Code was already underway at the time that the General Assembly approved HJR 750. However, the Board of Housing and Community Development will be considering adoption of portions of the 1999 BOCA or other model code provisions in the future. The information included in this document and supporting materials are directly relevant to that process and were reported to the Board at its meeting on October 17, 1999 so that it might incorporate them within the ongoing review process.

APPENDIX A

HOUSE JOINT RESOLUTION NO. 750

Requesting the Department of Housing and Community Development to review national model building and safety codes to identify any such appropriate category for health and safety features, in addition to I-1 and I-2, as may foster development of affordable assisted living options in the Commonwealth.

Agreed to by the House of Delegates, February 1, 1999

Agreed to by the Senate, February 18, 1999

WHEREAS, nationally and in the Commonwealth, the concept of assisted living has emerged in recent years as an important link in the continuum of care for the elderly; and

WHEREAS, although numerous assisted living facilities are operating in the Commonwealth, particularly in urban areas, and many more are in the planning and construction phases, the cost of residency in most of these facilities lies beyond the reach of a majority of seniors; and

WHEREAS, the number of seniors in the Commonwealth is rising significantly; and

WHEREAS, in December 1998 the Virginia Housing Study Commission concluded a two-year study of affordable assisted living options for seniors; and

WHEREAS, the Commission study identified the need for additional affordable assisted living options for seniors in the Commonwealth together with the interest of the Commonwealth in fostering the development of these options; and

WHEREAS, the development and operation of these facilities in the Commonwealth is extremely challenging, given the complexity of financing restraints, revenue concerns, staffing recruitment and retention needs, and regulatory issues; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That the Department of Housing and Community Development be requested to review national model building and safety codes to identify any such appropriate category for health and safety features, in addition to I-1 and I-2, as may foster development of affordable assisted living options in the Commonwealth. If any such category is determined by the Department to be appropriate, then the Department is further requested to present such information to the Board of Housing and Community Development for consideration for possible inclusion in the 1999 Uniform Statewide Building Code review process.

All agencies of the Commonwealth shall provide assistance to the Department for this study, upon request.

The Department shall complete its work in time to submit its findings and report on its progress to the Governor and the 2000 Session of the General Assembly as provided in the procedures of the Division of Legislative Automated Systems for the processing of legislative documents.

