

# EVALUATION AND COMPARISON OF STATE AND FEDERAL ACCESSIBILITY CODES

CITIZENS' HOUSING AND PLANNING ASSOCIATION

NOVEMBER 2009



## **Acknowledgements**

CHAPA would like to thank MassHousing for their financial support of this report, without which it would not have been possible. We would also like to thank LCM Architects for their detailed and comprehensive analysis of the codes which serves as the foundation for our committee's recommendations and advocacy efforts going forward. Of the many individuals who reviewed and provided feedback on the details contained within this report, CHAPA would like to give special thanks to our Report Review Subcommittee: Deborah Goddard, Henry Korman, Deborah Ryan, David Harris, Deborah Piltch, Amber Fagan, Diane Georgopoulos, and Barbara Chandler.

## **Evaluation and Comparison of State and Federal Accessibility Codes Citizens' Housing and Planning Association**

### **Background**

In May of 2008, Citizens' Housing and Planning Association (CHAPA) brought together a committee to respond to the need for accessible, affordable housing for persons with disabilities throughout Massachusetts. The committee has representation from a broad cross-section of interests - including government officials, architects, fair housing and disability advocates, building inspectors, developers, property managers, and others (See Attachment I: List of Committee Members). The committee's charge was to examine the present and planned supply of accessible housing units funded by the Commonwealth and how it could better meet the regulatory mandates of both state and federal fair housing law.

Of the existing barriers to the development of more accessible, affordable housing in Massachusetts, of which there are many, the CHAPA committee identified the lack of substantial equivalency between the required state and federal codes for accessible housing to be foremost.

In October of 2008, CHAPA engaged LCM Architects to assist the committee in conducting an evaluation of substantial equivalency between the state access code, Massachusetts Architectural Access Board Regulations (MAABR/521 CMR), and Federal access standards including the Fair Housing Act Design Manual (FHA DM-1998), the Uniform Federal Accessibility Standards (UFAS-1988) and the Americans with Disabilities Act (ADA) Standards for Accessible Design (ADAAG-1994). Through the evaluation process, LCM Architects (LCM) identified the sections of the MAAB Rules and Regulations where the state code differs significantly from the above referenced Federal codes. To the extent that such differences materially affect accessibility and the federal standard provides a higher degree of accessibility, LCM has recommended the technical changes and/or specific steps that must be incorporated into MAAB to achieve substantial equivalency. Areas designated in Sections B and C as "unique", "exceeding" or "less than equivalent" to the ADA, FHA or Section 504 should be evaluated for the level of access provided before being automatically considered as an acceptable modification to existing MAAB regulations.

Please note this report should be viewed within the context of the time frame in which it was researched and written. The CHAPA Access Committee is knowledgeable of the planned changes in some of the national and state accessibility standards. Presently, the U.S. Department of Justice is reviewing the proposed 2004 version of the Americans with Disabilities Act Accessibility Guidelines (ADAAG). A new version of accessible technical specifications will be released by the American National Standards Institute (ANSI) after the release of this report. The Massachusetts Architectural Access Board is in the midst of reviewing its regulations as well. Because none of these activities have yet to produce final documentation, it was deemed impractical to include comparisons of 2 proposed technical specifications that are still subject to further revisions.

Furthermore, the content of this study should not be used as a substitute for any content of the aforementioned individual accessibility code documents. These code documents should be referred to in their original form when they are to be consulted for accessibility compliance.

## **Methodology**

LCM conducted their analysis on 2 major levels: They first developed a large matrix (Section A, which was used as an internal document only) comparing similar sections of the four codes mentioned above. After comparing each of the codes to one another they then compiled two smaller matrices outlining those areas where the Massachusetts code had a lower standard of accessibility (Section B – Attachment III); and a higher or unique standard of accessibility (Section C – Attachment IV).

Section B identifies and lists those MAABR/521 CMR provisions that LCM believes to be less than equivalent to at least one of the Federal accessibility standards for housing. In relation to every MAABR/521 CMR provision listed, LCM has provided observations, commentary, cited references and evaluated the provision for substantial equivalency. LCM has made recommendations for how the particular MAABR/521 CMR provision may be modified to achieve substantial equivalence with the other Federal standards. Section C identifies and lists those MAABR/521 CMR provisions that LCM believes are either more stringent than any of the Federal codes or are unique to MAABR/521 CMR.

## **Scoping and Coverage**

A very basic scoping and coverage matrix has been developed (see Attachment II) as a complementary piece to this report's analytic comparison of the technical specifications of the MAAB to the federal standards of the Fair Housing Act, the Uniform Federal Accessibility Standards and the Americans with Disabilities Accessibility Guidelines. The Scoping and Coverage Matrix does not provide an analytical comparison as do the other sections of this report. Its purpose is solely to illustrate what an architect must take into consideration to determine which federal standards and whether MAAB will apply to their housing project. Scoping and coverage will also indicate not only what standards, codes and/or guidelines apply but to what degree they may apply. As illustrated by the matrix, none of these are in agreement with each other. This matrix is not to be used as a guide but as an illustration of the confusing and oftentimes contradictory nature of the MAAB and federal standards.

While it is not addressed in the attached scoping and coverage matrix, it is worth noting that under certain circumstances, scoping may apply based on the size of a building as opposed to based on the number of units in the project, regardless of whether units in the project are in the same building. For example, Title VIII applies only to buildings of four or more units. Comparatively, Section 504 rules utilizes a concept of "project" which is not based on how many units are in a building; rather, it's based on how many units are on the same site or contiguous sites. Under ADAAG, "project" applies to residential facilities of 15 or fewer units, while "building" applies to 16 or more unit buildings.

MAAB regulation contains a definition of multiple dwelling that suggests that publicly funded multiple dwellings are defined based on the total number of units, whether or not they are in the same building, and that implies that multiple dwellings in non-public facilities are defined based on the number of units in the building.

## **Findings - Section A**

Section A of LCM's research is an evaluation of the substantial equivalency between the Massachusetts Architectural Access Board Rules and Regulations (MAABR/521 CMR-2006) and the Federal standards for accessibility of multifamily housing listed above. Therefore, the majority of the body of Section A consists primarily of a direct cross comparison between the exact stated provisions of each of these accessibility codes.

## **Findings – Section B**

In total, LCM identified 48 areas in the MAABR/521 CMR they believed to be less than equivalent to similar areas in at least one of the Federal accessibility standards for housing. Their findings are summarized below:

### **521 CMR 5.00**

#### ***Definitions – (in general)***

The differences between similar definitions result in differences in scoping that result in nonequivalent conditions. In addition the Federal definitions set a minimum base requirement for accessibility and for coordination with the applicable local building codes.

### **UFAS 4.1.4**

#### ***Occupancy Classifications***

There is no equivalent 521 CMR section to this ADAAG section which has the potential to affect federally owned and assisted 1 & 2 family dwelling projects.

### **521 CMR 8.00**

#### ***Transient Lodging Facilities***

The differences in this section affect scoping due to the definition of uses and also affect the equivalency of the required number of accessible rooms. The differences in this section also affect the equivalent accessibility of alteration projects, the minimum base requirement for resident and visitor parking and the equivalency of kitchenette storage.

### **521 CMR 9.00**

#### ***Multiple Dwellings***

The differences in this section affect the scoping due to the definition of uses, the date of required compliance and the required number of Group 1 & 2 accessible units. The variance procedure for Group 2A units is unique to the 521 CMR regulations. Other differences affect outlet locations and reach ranges and townhouse scoping.

## **521 CMR 10.00**

### ***Public Use & Common Use Spaces in Multiple Dwellings***

There are differences in scoping in terms of date of required compliance. The 521 CMR parking requirements do not establish a minimum absolute requirement for resident or visitor parking. There are differences in terms of control location, reach range limits and allowable kitchen sink bowl depths.

## **521 CMR 42.00**

### ***Group 1 Bathrooms***

There are differences in scoping in terms of the required number of accessible bathrooms. There are adaptability provisions that are unique to 521 CMR. Other differences affect door swing clearance, toilet clear floor space definition and location, tub and shower CFS locations and outlet and controls reach range limits.

## **521 CMR 43.00**

### ***Group 1 Kitchens***

There are adaptability provisions that are unique to 521 CMR. There are differences between how the measurements between counters are required to be taken and the dimensional requirements for U shaped kitchens.

## **521 CMR 44.00**

### ***Group 2 Bathrooms***

The differences in this section affect side grab bar location at toilets, tub CFS location and tub and shower controls locations.

## **Findings – Section C**

In total, LCM identified over 100 areas in the MAABR/521 CMR they believed to be either unique to MAABR/521 CMR *or* to have a higher standard of accessibility than the Federal codes it was compared to. Please see Section C for further detail.

## **Recommendations**

Based upon the evaluation conducted by LCM Architects, the CHAPA Accessible Code Committee recommends one, or a combination, of the following:

1. An updating of the text contained within the MAABR/CMR 521 to incorporate the textual changes recommended by LCM Architects in Section B;
2. Advocacy for the adoption of new legislation which incorporates recommendations provided by LCM Architects;
3. Adoption of the 2009 International Building Code (IBC) with an addendum stipulating use of MAABR/521 CMR in instances where the state regulations have a *higher* standard for accessibility than IBC based on the analysis contained in Section C.

The CHAPA Access Committee recommends that the 2009 version of the International Building Code (IBC) be adopted as a platform for addressing the dissimilarities between the MAAB code and the federal accessibility standards of the Fair Housing Act, Sec. 504 and ADA. IBC has been developed to be equivalent with all of these federal mandates. The International Code Council (ICC), which promulgates IBC, developed this version also to be equivalent to the 2004 version of the Americans with Disabilities Act Accessibility Guidelines (ADAAG) which is presently awaiting Dept. of Justice approval.

All the accessibility technical specifications in MAAB that exceed IBC would be maintained by adding it to the IBC framework. This approach has been used successfully by several states, cities and towns to achieve federal substantial equivalency while maintaining the higher standards that were unique to their area of governance. IBC and its format are presently used by Massachusetts and the other 49 states in some capacity for developing multifamily building codes. This makes IBC the most commonly used and understood set of building standards in this country. Adopting the accessibility chapters of the IBC combined with the MAAB specifications deemed as a higher standard will provide a more consistent and cohesive approach to building multifamily housing in this state.

## **Attachments**

- I. List of Committee Members
- II. Scoping matrix for MAABR/521 CMR, Fair Housing Amendments Act of 1988, Section 504, Titles II and III of the Americans With Disabilities Act
- III. Section B: Matrix of sections of MAABR/521 CMR less than equivalent to similar sections in FHA DM-1998, UFAS-1988, and ADAAG-1994.
- IV. Section C: Matrix of sections of MAABR/521 CMR either unique to MAABR or having a higher standard of accessibility than similar sections in FHA DM-1998, UFAS-1988, and ADAAG-1994.

**CHAPA Accessible Code Committee  
Members**

Chair: David Harris, CHAPA Board Member and Harvard University, Charles Hamilton  
Houston Institute

Nancy Blueweiss, Massachusetts Housing Partnership

Bethany Brown, Massachusetts Attorney General's Office

Barbara Chandler, Metropolitan Boston Housing Partnership

Maggie Dionne, Massachusetts Rehabilitation Commission

Amber Fagan, Institute for Human Centered Design

Eileen Feldman, Disability Advocate

Diane Georgopoulos, MassHousing

Deborah Goddard, Department of Housing and Community Development

Aaron Gornstein, Citizens' Housing and Planning Association

Bill Henning, Boston Center for Independent Living

Henry Korman, Consultant

Margaux LeClair, Department of Housing and Community Development

David Lieb, Lieb Studios: Architecture

Ron Marlow, Assistant Secretary for Access and Opportunity, Executive Office for  
Administration and Finance

Tom Murphy, Disability Law Center



Debbie Piltch, Maloney Properties

Gary Rhodes, Building Commissioner, Town of Lexington

Josh Rucker, Institute for Human Centered Design

Deborah Ryan, Consultant

Linn Torto, Department of Developmental Services

Joe Tringali, Stavros Independent Living Center

Katy Trudeau, Citizens' Housing and Planning Association

Paul Warkentin, Mostue & Associates

Law	Massachusetts Architectural Access Board & Regulations 521CMR	Fair Housing Amendments Act of 1988	Sec. 504 of the Rehabilitation Act of 1973	Americans with Disabilities Act: Title II: Either ADAAG or UFAS can be used	Americans with Disabilities Act: Title III: ADAAG only
<b>General Scoping/coverage</b>	<p>New construction of multifamily housing of 3 or more units built after 9/1/96</p> <ol style="list-style-type: none"> <li>In buildings with an elevator all units are covered.</li> <li>In buildings without an elevator only ground floor units (first level of residential units) are covered.</li> <li><b>9.3 GROUP 1 DWELLING UNITS</b> In <i>multiple dwellings</i>, for which building permits for new <i>construction</i> are issued on or after September 1, 1996, that are for rent, hire, lease or sale and that are equipped with an elevator, all <i>dwelling units</i> must be constructed as <i>Group 1 Dwelling Units</i>, except those covered in <b>521 CMR 9.4, Group 2 Dwelling Units</b> <p><b>9.4 GROUP 2 DWELLING UNITS</b> In <i>multiple dwellings</i> that are for rent, hire, or lease (but not for sale) and contain 20 or more units, at least 5% of the <i>dwelling units</i> must be <i>Group 2A</i> units. <i>Group 2A</i> units must comply with <b>521 CMR 9.5, Dwelling Unit Interiors</b>; and <b>521 CMR 44.00: GROUP 2 BATHROOMS</b>; and <b>521 CMR 45.00: GROUP 2 KITCHENS</b>; and <b>521 CMR 47.00: GROUP 2 BEDROOMS</b>.</p> <p>Existing dwellings of 12 or more units for rent, hire or lease, undergoing major alteration, renovation, reconstruction</p> <ol style="list-style-type: none"> <li>12 or more units, public areas must be accessible</li> <li>20 or more units, 5% must be designed as Group 2A</li> </ol> </li></ol>	<p>Multifamily buildings of 4 or more first occupied after 3/13/91</p> <ol style="list-style-type: none"> <li>In buildings with a common use elevator all units are covered.</li> <li>In buildings without a common use elevator only ground floor units (first level of residential units) are covered.</li> </ol>	<p><b>Note:</b> Each federal agency promulgates its own Sec. 504 regulations. Below references the Sec. 504 regulations of HUD only for residential units.</p> <p>New housing construction built after 7/11/88, multifamily units, built by recipients of direct federal funding.</p> <ol style="list-style-type: none"> <li>Five percent, but not less than one unit, must be accessible for persons with physical disabilities.</li> <li>An additional 2% must be accessible for persons with vision and/or hearing loss.</li> <li>For single family detached or duplex family dwellings where the occupancies are primarily permanent in nature and not classified as institutional.</li> </ol>	<p><b>Note:</b> The current version of ADAAG does not contain technical specifications for residential units so most design professionals and builders use UFAS.</p> <p><b>ADA Sec.36.401 New construction.</b></p> <p>(a) General.</p> <p>(1) Except as provided in paragraphs (b) and (c) of this section, discrimination for purposes of this part includes a failure to design and construct facilities for first occupancy after January 26, 1992, that are readily accessible to and usable by individuals with disabilities.</p> <p>-or-</p> <p><b>UFAS 4.1.4 (11)</b> 5 percent of the total, or at least one unit, whichever is greater, in projects of 15 or more dwelling units, or as determined by the appropriate Federal agency.</p>	<p>Applies to common use areas in residential settings if used as a public accommodation such as a leasing office.</p> <p><b>ADA Sec.36.401 New construction.</b></p> <p>(a) General.</p> <p>(1) Except as provided in paragraphs (b) and (c) of this section, discrimination for purposes of this part includes a failure to design and construct facilities for first occupancy after January 26, 1992, that are readily accessible to and usable by individuals with disabilities</p>
<b>Rehab and/or conversion of use</b>	<p>9.2.2</p> <p><i>Renovation</i> and reuse of dwelling units is subject to <b>521 CMR 9.4, Group 2 Dwelling Units</b> through <b>521 CMR 9.5, Dwelling Unit Interiors</b> provided the work being performed, in a three year period, exceeds 30% of the <i>full and fair cash value of the building</i> (See <b>521 CMR 3.3.2</b>). Work performed to public use and common use areas however, is subject to all of <b>521 CMR 3.3</b>.</p>	Not covered	<ol style="list-style-type: none"> <li>Substantial rehabilitation is covered in buildings of 15 or more units when the alterations cost 75% of the replacement cost of the building.</li> <li>Non substantial alterations to units and/or common use areas must be made accessible to the greatest feasible extent. If the entire unit is being altered, the unit must then be made fully accessible.</li> </ol>	<p><b>ADAAG 4.1.5 Accessible Buildings: Additions.</b> Each addition to an existing building or facility shall be regarded as an alteration. Each space or element added to the existing building or facility shall comply with the applicable provisions of <a href="#">4.1.1</a> to <a href="#">4.1.3</a>, Minimum Requirements (for New Construction) and the applicable technical specifications of section 4 and the special application sections. Each addition that affects or could affect the usability of an area containing a primary function shall comply with <a href="#">4.1.6(2)</a>.</p> <p>-or-</p> <p><b>4.1.6 ACCESSIBLE BUILDINGS. ALTERATIONS</b></p> <p>(c) If alterations of single elements, when considered together, amount to an alteration of a</p>	<p><b>ADAAG 4.1.5 Accessible Buildings: Additions.</b> Each addition to an existing building or facility shall be regarded as an alteration. Each space or element added to the existing building or facility shall comply with the applicable provisions of <a href="#">4.1.1</a> to <a href="#">4.1.3</a>, Minimum Requirements (for New Construction) and the applicable technical specifications of section 4 and the special application sections. Each addition that affects or could affect the usability of an area containing a primary function shall comply with <a href="#">4.1.6(2)</a>.</p> <p>-or-</p> <p><b>4.1.6 ACCESSIBLE BUILDINGS. ALTERATIONS</b></p> <p>(c) If alterations of single elements, when considered together, amount to an alteration of a space of a building or facility, the entire space shall be made accessible.</p>

Law	Massachusetts Architectural Access Board & Regulations 521CMR	Fair Housing Amendments Act of 1988	Sec. 504 of the Rehabilitation Act of 1973	Americans with Disabilities Act: Title II: Either ADAAG or UFAS can be used	Americans with Disabilities Act: Title III: ADAAG only
				space of a building or facility, the entire space shall be made accessible. (d) No alteration of an existing element, space, or area of a building shall impose a requirement for greater accessibility than that which would be required for new construction.	(d) No alteration of an existing element, space, or area of a building shall impose a requirement for greater accessibility than that which would be required for new construction.
<b>Multilevel Units</b>	9.4.2 EXCEPTION FOR TOWNHOUSES: When 5% of the total number of units required to be accessible includes townhouses, they shall comply by any of the following means: <ul style="list-style-type: none"> <li>a. substitute a fully accessible flat of comparable size, amenities, etc.;</li> <li>b. provide space for the future installation of a wheelchair lift to access either upper or lower level of townhouse.</li> <li>c. provide space for the future installation of a residential elevator to access either the upper or lower level of the townhouse.</li> </ul>	<ul style="list-style-type: none"> <li>a. Multistory units without access to an elevator are not covered.</li> <li>b. Multistory units with private internal elevators must meet Requirements 1-7.</li> <li>c. Multistory units in a common use elevator building must have the elevator serve the primary entrance level of the unit. The primary entrance level must meet Requirements 3-7.</li> </ul>	No specific scoping and coverage for multi-level units, however the standard requirements for multifamily projects apply to multilevel units.	The dispersion rule creates an exception for single floor units in development with multilevel units.	<ul style="list-style-type: none"> <li>a. Dormitories: Same as traditional multifamily residential units</li> <li>b. Nursing homes, assisted living units, etc. use the scoping and coverage of UFAS or ADAAG institutional units</li> <li>c. Any residential unit(s) or project that provides housing for less than 30 days uses the scoping and coverage of UFAS transient housing.</li> </ul>
<b>Home Ownership Units</b>	Group 1 units are covered but Group 2 are not.	<ul style="list-style-type: none"> <li>a. Single family detached home ownership units are not covered.</li> <li>b. Condo units in multifamily buildings of 4 or more units first constructed after 3/13/91 <b>are</b> covered</li> </ul>	According to UFAS, In federally assisted homeownership projects, accessibility is determined by the buyer. However some of the HUD Handbooks indicate otherwise. At this time, conclusive scoping and coverage information on homeownership units can not be provided.	According to UFAS, In federally assisted homeownership projects, accessibility is determined by the buyer.	N/A
<b>Non-multifamily housing: dormitories, assisted living, transitional living, shelters</b>	Except for assisted living, all are considered transient lodging under <b>521 CMR 8.00: TRANSIENT LODGING FACILITIES.</b>	Scoping and coverage is the same as standard multifamily residential buildings	<ul style="list-style-type: none"> <li>a. Dormitories: Same as traditional multifamily residential units</li> <li>b. Nursing homes, assisted living units, etc. use the scoping and coverage of UFAS institutional units</li> <li>c. Any residential unit(s) or project that provides housing for less than 30 days uses the scoping and coverage of UFAS transient housing.</li> </ul>	Hotels, motels, inns, boarding houses, dormitories and resorts are considered transient lodging not residential multifamily.	N/A for traditional multifamily units but does contain specifications for medical care facilities such as nursing homes and transient lodging.
<b>Units for Persons with Hearing and/or Vision Loss</b>	2% of the total number of <i>dwelling units</i> in the complex or project, but not less than one	No design and construction requirement specifications. Addressed through reasonable modification provision.	An additional 2% must be accessible for persons with vision and/or hearing loss	No residential design and construction requirement specifications. Addressed through reasonable modification provision.	No residential design and construction requirement specifications. Addressed through reasonable modification provision.
<b>Provision for Variance Request</b>	Yes	<b>No</b>	No	No	No
<b>Access Standard</b>	Massachusetts Regulations 521 CMR	Safe Harbors  Fair Housing Guidelines  ANSI A117.1 1986 ANSI in conjunction with FHAA, HUD regulations and Guidelines.	Uniform Federal Accessibility Standards	ADA Accessibility Guidelines or UFAS	ADA Accessibility Guidelines

Law	Massachusetts Architectural Access Board & Regulations 521CMR	Fair Housing Amendments Act of 1988	Sec. 504 of the Rehabilitation Act of 1973	Americans with Disabilities Act: Title II: Either ADAAG or UFAS can be used	Americans with Disabilities Act: Title III: ADAAG only
		<p>CABO/ ANSI A117.1 1992 in conjunction with FHAA, HUD regulations and Guidelines.</p> <p>ICC/ A117.1 1998 in conjunction with FHAA, HUD regulations and Guidelines.</p> <p>Fair Housing Act Design Manual</p> <p>Code Requirements for Housing Accessibility 2000 (CRHA)</p> <p>International Building Code (IBC) 2000 in conjunction with the 2001 Supplement</p> <p>International Building Code (IBC) 2003</p> <p>International Building Code (IBC) 2006</p> <p>ANSI A117.1 2003</p>			
Responsible Government Agency	Massachusetts Architectural Access Board (MAAB)	<p>Department of Housing &amp; Urban Development</p> <p>(HUD)</p>	<p>Department of Housing &amp; Urban Development</p> <p>(HUD)</p>	Department of Justice	Department of Justice

Developed By MBHP 09/09

Introduction to Section B - pages 1 to 12
110309 MABBR Sections Identified as " Not Equivalent"
<p>Section B identifies and lists those MAABR/521 CMR provisions that LCM believes to be less than equivalent to at least one of the Federal accessibility standards for housing.</p> <p>In relation to every MAABR/521 CMR provision listed, LCM has provided observations, commentary, cited references and evaluated the provision for substantial equivalency.</p> <p>Finally, LCM has made recommendations for how the particular MAABR/521 CMR provision may be modified to achieve substantial equivalence with the other Federal standards.</p> <p><b>Black</b> = typical text</p> <p><b>Green</b> = passage deemed noteworthy by LCM</p> <p><b>Red</b> = provision determined by LCM to be less than substantially equivalent to one of Federal accessibility standards</p> <p><b>Red</b> = recommended revised text to MAABR/521 CMR provision to achieve substantial equivalency</p>

SECTION B SUMMARY of "Not Equivalent Issues"
<p><b>521 CMR 5.0 Definitions</b> The differences between similar definitions result in differences in scoping that result in nonequivalent conditions. In addition the Federal definitions set a minimum base requirement for accessibility and for coordination with the applicable local building codes.</p> <p><b>UFAS 4.1.4 Occupancy Classifications</b> There is no equivalent 521 CMR section to this ADAAG section which has the potential to affect Federally owned and assisted 1 &amp; 2 family dwelling projects.</p> <p><b>521 CMR 8.00 Transient Lodging Facilities</b> The differences in this section affect scoping due to the definition of uses and also affect the equivalency of the required number of accessible rooms. The differences in this section also affect the equivalent accessibility of alteration projects, the minimum base requirement for resident and visitor parking and the equivalency of kitchenette storage.</p> <p><b>521 CMR 9.00 Multiple Dwellings</b> The differences in this section affect the scoping due to the definition of uses, the date of required compliance and the required number of Group 1 &amp; 2 accessible units. The variance procedure for Group 2A units is unique to the 521 CMR regulations. Other differences affect outlet locations and reach ranges and townhouse scoping.</p> <p><b>521 CMR 10.00 Public Use &amp; Common Use Spaces in Multiple Dwellings</b> There are differences in scoping in terms of date of required compliance. The 521 CMR parking requirements do not establish an absolute minimum requirement for resident or visitor parking. There are differences in terms of control location, reach range limits and allowable kitchen sink bowl depths.</p> <p><b>521 CMR 42.00 Group 1 Bathrooms</b> There are differences in scoping in terms of the required number of accessible bathrooms. There are adaptability provisions that are unique to 521 CMR. Other differences affect door swing clearance, toilet clear floor space definition and location, tub and shower CFS locations and outlet and controls reach range limits.</p> <p><b>521 CMR 43.00 Group 1 Kitchens</b> There are adaptability provisions that are unique to 521 CMR. There are differences between how the measurements between counters are required to be taken and the dimensional requirements for U shaped kitchens.</p> <p><b>521 CMR 44.00 Group 2 Bathrooms</b> The differences in this section affect side grab bar location at toilets, tub CFS location and tub and shower controls locations.</p>

110309 MAABR Sections Identified as "Not Equivalent to Federal Standards"

MAABR Section #	Massachusetts Architectural Access Board Rules and Regulations		LCM Observations, Evaluation & Commentary	MAABR Section #	LCM Recommendation for/Restatement of MAAB Provision to Achieve Substantial Equivalency		
521 CMR 5.00:	<b>DEFINITIONS</b>						
5.1	<b>ACCESSIBLE:</b> A site, building, facility or portion thereof that complies with 521 CMR and that can be approached , entered, and used by persons with disabilities . When the term "accessible" is used, it shall mean both physical and communication accessible unless otherwise noted in 521 CMR.		Accessible as defined in the FHA DM is that which, "complies with the appropriate requirements of ANSI A117.1-1986, ...". The requirements of ANSI 1986 are different than what the 521 CMR definition of "accessible" requires.  In addition it sets a base minimum requirement that 521 CMR does not refer to.	5.1	<b>ACCESSIBLE:</b> A site, building, facility or portion thereof that complies with 521 CMR and that can be approached , entered, and used by persons with disabilities . When the term "accessible" is used, it shall mean both physical and communication accessible unless otherwise noted in 521 CMR. A public or common use area that complies with the appropriate requirements of ANSI A117.1 - 1986, a comparable standard or 521 CMR is "accessible" within the meaning of this paragraph.		
5.1	<b>ACCESSIBLE ROUTE:</b> A continuous, unobstructed path connecting all accessible elements and spaces within or between buildings or facilities . Interior accessible routes may include corridors, floors, ramps , elevators, lifts, and clear floor space at fixtures. Exterior accessible routes may include parking, access aisles , curb cuts, crosswalks at vehicular ways, walks , ramps , and lifts.		Accessible route as defined in the FHA DM is that which, "is also safe for and usable by people with other disabilities." and "...complies with the appropriate requirements of ANSI A117.1-1986, ...". The 521 CMR definition of "accessible route" contains no mention of the word safe and the requirements of ANSI 1986 are different than what the 521 CMR definition of "accessible route" requires.  In addition it sets a base minimum requirement that MAAB does not refer to.  None of the standards have a precise definition of what constitutes safe.	5.1	<b>ACCESSIBLE ROUTE:</b> A continuous, unobstructed path connecting all accessible elements and spaces within or between buildings or facilities . Interior accessible routes may include corridors, floors, ramps , elevators, lifts, and clear floor space at fixtures. Exterior accessible routes may include parking, access aisles , curb cuts, crosswalks at vehicular ways, walks , ramps , and lifts. A route that complies with the appropriate requirements of ANSI A117.1 - 1986, a comparable standard or 521 CMR and is safe for and usable by people with disabilities is an "accessible route".		
5.1	<b>BUILDING:</b> A structure enclosed within exterior walls or fire walls (as defined in 780 CMR), built, erected and framed in a combination of any materials, whether portable or fixed having a roof, to form a structure for the shelter of persons, animals or property. For the purposes of this definition, "roof" shall include an awning or similar covering, whether or not permanent in nature. The word "building" shall be construed where the context requires, as though followed by the words "or part or parts thereof". For application of 521 CMR, each portion of a building which is separated from other portions by fire walls (as defined in 780 CMR) and are not dependent on the existing building for accessible elements shall be considered a separate building .		Building in the FHA DM is not defined in terms of separation by fire walls.	5.1	<b>BUILDING:</b> A structure enclosed within exterior walls, built, erected and framed in a combination of any materials, whether portable or fixed having a roof, to form a structure for the shelter of persons, animals or property. For the purposes of this definition, "roof" shall include an awning or similar covering, whether or not permanent in nature. The word "building" shall be construed where the context requires, as though followed by the words "or part or parts thereof". For application of 521 CMR, each portion of a building which is separated from any other portions and is not dependent on the existing building for accessible elements shall be considered a separate building .		
5.1	<b>COMPLEX:</b> multiple housing developed on one or more sites by a single entity For complexes currently owned or financed by public agencies, including local housing authorities, Massachusetts Housing Finance Agency, or Housing and Urban Development, the complex means the whole of one or more residential structures and appurtenant structures, equipment, roads, walks, and parking lots which a single entity owns, within a municipality, and is or will be covered by a single mortgage contract for permanent financing or was originally constructed or acquired under one contract for financial assistance for new construction or acquisition.		The FHA Design Manual defines the required scope of the Guidelines on a building by building basis. The scoping for the application of the FHA Guidelines is never done on a project or complex basis.  LCM cannot be certain if this definition might constitute a "loophole" that would permit different scoping requirements than the other standards and might result in a less stringent requirement.		LCM suggests that this definition be considered for deletion.		

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5.1	EGRESS, MEANS OF: A continuous and unobstructed way of exit travel from any point in a building or structure to a public way and consisting of three separate and distinct parts: (a) the exit access, (b) the exit, and (c) the exit discharge. A <i>means of egress</i> comprises the vertical and horizontal means of travel and shall include intervening room spaces, doorways, hallways, corridors, passageways, balconies, ramps, stairs, enclosures, lobbies, horizontal exits, courts and yards.		<p>The UFAS definition also includes that a "means of egress" also " ... meets all applicable code specifications of the regulatory building agency having jurisdiction over the building or facility."</p> <p>LCM recommends that for 521 CMR to be substantially equivalent to the the UFAS code that it should incorporate the additional UFAS language on this definition.</p>	5.1	EGRESS, MEANS OF: A continuous and unobstructed way of exit travel from any point in a building or structure to a public way and consisting of three separate and distinct parts: (a) the exit access, (b) the exit, and (c) the exit discharge. A <i>means of egress</i> comprises the vertical and horizontal means of travel and shall include intervening room spaces, doorways, hallways, corridors, passageways, balconies, ramps, stairs, enclosures, lobbies, horizontal exits, courts and yards. A <i>means of egress</i> is an accessible route of exit that meets all applicable code specifications of the regulatory building agency having jurisdiction over the building or facility.		
5.1	MEZZANINE OR MEZZANINE FLOOR: An intermediate level between the floor and ceiling of any story with an aggregate floor area of not more than 33% of the floor area of the story in which the level is located.		<p>The ADAAG definition does not define <u>Mezzanine or Mezzanine Floor</u> in terms of a percentage of the floor area below it.</p> <p>The 521 CMR definition is similar to the current IBC definition.</p>		Although the 521 CMR definition is not equivalent to the ADAAG definition, it is likely, that in the future the IBC definition, which is similar to the 521 CMR definition, will become the conventional definition.		
5.1	PROJECT: See 521 CMR 5.00: Complex		See commentary at COMPLEX above.				
5.1	<p><b>PUBLIC BUILDING:</b></p> <p>a. A <i>building</i> privately or publicly financed that is open to and used by the public, including but not limited to transportation terminals, institutional buildings, educational buildings, commercial buildings, buildings having places of assembly, hotels, motels, dormitories, <i>multiple dwellings</i> consisting of three or more units, 5% of the units in lodging or residential facilities for rent, hire or lease containing 20 or more units, public use and common use areas of apartment buildings and condominiums, parking lots of 15 or more automobiles, public sidewalks and ways, funeral homes, and public restrooms, and public areas of shopping centers and restaurants.</p> <p>b. A <i>building</i> constructed by the Commonwealth or any political subdivision thereof with public funds and open to public use, including but not limited to those constructed by public housing authorities, the Massachusetts Port Authority, the Massachusetts Parking Authority, the Massachusetts Turnpike Authority, the Massachusetts Bay Transportation Authority, and building authorities of any public educational institution or their successors.</p>		<p>The passages in red to the left define a scope of requirement that appears to be less equivalent then the FHA Guidelines. The FHA Guidelines are applicable to all ground floor units in buildings containing 4 or more units, all units in elevator buildings and 2% of the parking spaces that serve covered dwelling units.</p>		<p>LCM recommends that the passages in red noted in the definition at left be considered for deletion.</p> <p>This may require revision of the statute by the state legislature.</p>		

						<div>UFAS 4.1.4</div>	<div>Occupancy Classifications. Buildings and facilities shall comply with these standards to the extent noted in this section for various occupancy classifications, unless otherwise modified by a special application section. Occupancy classifications, and the facilities covered under each category include, but are not necessarily limited to, the listing which follows:</div> <div>(11) Residential. Residential occupancy includes, among others, the use of a building or structure or portion thereof, for sleeping accommodations when not classed as an institutional occupancy. Residential occupancies shall comply with the requirements of 4.1 and 4.34 except as follows:</div> <div>(c) Residential occupancies in one (1) and two (2) family dwellings where the occupancies are primarily permanent in nature and not classified as preceding residential categories or as institutional.</div> <table><tr><th>Facilities</th><th>Application</th></tr><tr><td colspan="2">1 &amp; 2 family dwelling:</td></tr><tr><td>Federally assisted, rental</td><td>5% of the total, or at least one unit, whichever is greater, in projects of 15 or more dwelling units, or as determined by the appropriate Federal agency following a local needs assessment conducted by local government bodies or states under applicable regulations.</td></tr><tr><td>Federally assisted, homeownership</td><td>To be determined by home buyer.</td></tr><tr><td>Federally owned</td><td>5% of the total, or at least one unit, whichever is greater.</td></tr></table>	Facilities	Application	1 & 2 family dwelling:		Federally assisted, rental	5% of the total, or at least one unit, whichever is greater, in projects of 15 or more dwelling units, or as determined by the appropriate Federal agency following a local needs assessment conducted by local government bodies or states under applicable regulations.	Federally assisted, homeownership	To be determined by home buyer.	Federally owned	5% of the total, or at least one unit, whichever is greater.
Facilities	Application																
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Federally assisted, rental	5% of the total, or at least one unit, whichever is greater, in projects of 15 or more dwelling units, or as determined by the appropriate Federal agency following a local needs assessment conducted by local government bodies or states under applicable regulations.																
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521 CMR 8.00:	<b>TRANSIENT LODGING FACILITIES</b>						
<b>8.1</b>	<b>GENERAL</b> <i>Transient lodging</i> facilities shall comply with 521 CMR, except as specified or modified in <b>521 CMR 8.00</b> . <i>Transient lodging</i> shall include but not be limited to hotels, motels, bed and breakfasts, inns, boarding houses, dormitories and resorts. Transient lodging facilities shall also include homeless shelters, halfway houses, lodging houses and transitional housing, and other places that provide temporary accommodations. <i>Transient lodging</i> includes facilities, or portions thereof, used for <i>sleeping accommodations</i> . <i>Sleeping accommodations</i> in a medical care facility are covered by <b>521 CMR 13.00: MEDICAL CARE FACILITIES</b> .		<p>"Whether a facility is considered a "dwelling" depends on whether the facility is to be used as a residence for more than a brief period of time. The operation of each continuing care facility must be examined on a case-by-case basis to determine whether it contains covered multifamily dwellings."</p> <p>Based on the above paragraph from the FHA Design Manual, LCM can not be certain that the 521 CMR and FHA Design Manual definitions of Transient Lodging are equivalent.</p>		LCM recommends that the 521 CMR definitions in this section should be added to those already located in Section 521 CMR 5.00/ <b>5.1</b> as well.		
			<p>There does not seem to be a comparable section to this ADAAG section (at far right column) within 521 CMR that proposes requirements for alterations to Transient Lodging Facilities.</p> <p>LCM has been advised that 521 CMR 3.3 EXISTING BUILDINGS is a section that would require alterations to existing transient lodging facilities to be accessible. We cannot be certain that its provisions will produce results substantially equivalent to the ADAAG section identified at left.</p>		LCM recommends that for 521 CMR to be substantially equivalent to the ADAAG code that it should either incorporate the ADAAG language at right , or reference the appropriate ADAAG sections.	<b>ADAAG 9.1.5</b>	<b>Alterations to Accessible Units, Sleeping Rooms, and Suites.</b> When sleeping rooms are being altered in an existing facility, or portion thereof, subject to the requirements of this section, at least one sleeping room or suite that complies with the requirements of 9.2 (Requirements for Accessible Units, Sleeping Rooms, and Suites) shall be provided for each 25 sleeping rooms, or fraction thereof, of rooms being altered until the number of such rooms provided equals the number required to be accessible with 9.1.2. In addition, at least one sleeping room or suite that complies with the requirements of 9.3 (Visual Alarms, Notification Devices, and Telephones) shall be provided for each 25 sleeping rooms, or fraction thereof, of rooms being altered until the number of such rooms equals the number required to be accessible by 9.1.3.
<b>8.3</b>	<b>PARKING SPACES</b> Where parking is provided, it shall comply or be capable of complying with the provisions of <b>521 CMR 23.2, Number through 521 CMR 23.8, Valet Parking</b> . If parking spaces are assigned to individual units, said spaces designated for <i>accessible</i> units shall have <i>signage</i> reserving said space. An international symbol of <i>accessibility</i> need not be used.		This provision does not state a minimum absolute requirement. In addition there is no identification requirement if accessible spaces are assigned on an individual basis.		LCM recommends that for 521 CMR to be substantially equivalent to the UFAS and ADAAG codes that 521 CMR Section 23.2 <b>NUMBER</b> be revised so that the lowest required number of accessible spaces occurs beginning from 1-25 total parking spaces in lot and does not begin at a minimum of 15 total parking spaces in lot.		
					This may require revision of the statute by the state legislature.		
<b>8.3.1</b>	Visitor parking spaces: Where parking is provided for visitors, it shall comply fully with the requirements of <b>521 CMR 23.00: PARKING AND PASSENGER LOADING ZONES</b> .		This provision does not state a minimum absolute requirement.		LCM recommends that for 521 CMR to be substantially equivalent to the UFAS and ADAAG codes that 521 CMR Section 23.2 <b>NUMBER</b> be revised so that the lowest required number of accessible spaces occurs beginning from 1-25 total parking in lot and does not begin at a minimum of 15 total parking spaces in lot.		
					This may require revision of the statute by the state legislature.		
<b>8.4</b>	<b>UNITS, SLEEPING ROOMS, AND SUITES: MINIMUM NUMBER</b>  At least 5% but in no case less than one of the units, sleeping rooms, and suites shall be <i>accessible</i> . In applying the 5% rule to facilities which consist of more than one <i>building</i> , all of the units in the entire <i>facility</i> shall be added together.		<p>The provision at left requires 5% of the total number of units to be "<i>accessible</i>" (or Group 2) units. There is no requirement for Group 1 units as part of "Transient Lodging Facilities".</p> <p>Therefore, this 521 CMR provision is less than equivalent to the 100% of "covered dwelling units" that would be required in an elevator building by the FHA DM.</p>		LCM recommends that for 521 CMR to be substantially equivalent to the FHA DM that the 521 CMR provision at left be revised so that units equivalent to FHA "covered dwelling units" are included within the "Transient Lodging Facilities" category.		
					This may require revision of the statute by the state legislature.		

8.4.5	<p><i>Sleeping Accommodations</i> for persons who are deaf or hard of hearing. In all <i>transient lodging</i> facilities, additional <i>accessible</i> sleeping rooms and suites with accommodations for persons who are deaf or hard of hearing shall be provided in conformance with the table below. These rooms and suites shall comply with the requirements of <b>521 CMR 8.6, Sleeping Accommodations</b>.</p> <table><tr><td><u>Number of Rooms</u></td><td><u>Accessible Equipment Provided</u></td></tr><tr><td>5 to 25</td><td>1</td></tr></table>	<u>Number of Rooms</u>	<u>Accessible Equipment Provided</u>	5 to 25	1		<p>The lowest 521 CMR requirement for this section seems to be less than equivalent to the ADAAG requirement.</p> <p>Less than equivalent to ADAAG.</p>	8.4.5	<table><tr><td><u>Number of Rooms</u></td><td><u>Accessible Equipment Provided</u></td></tr><tr><td>1 to 25</td><td>1</td></tr></table>	<u>Number of Rooms</u>	<u>Accessible Equipment Provided</u>	1 to 25	1										
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8.5.6	<p>Storage: If fixed or built-in storage such as cabinets, shelves, closets, and drawers are provided in <i>accessible</i> spaces, at least one of each type of storage <i>space</i> shall comply with <b>521 CMR 34.00: STORAGE</b>.</p>		<p>In both drawings in Figs. 34a and 34b the dimension from the wheelchair to the closet rod is 21 to 24 inches, therefore the closet will most likely be greater than 24 inches deep. If so <b>521 CMR 9.5.8(b)</b> will control. It should be cross referenced here.</p>	8.5.6	<p>Storage: If fixed or built-in storage such as cabinets, shelves, closets, and drawers are provided in <i>accessible</i> spaces, at least one of each type of storage <i>space</i> shall comply with <b>521 CMR 34.00: STORAGE</b> and <b>521 CMR 9.5.8(b.) Closet depth</b>..</p>																		
8.5.8	<p><i>Accessible</i> spaces: Where provided as part of an <i>accessible</i> unit, sleeping room, or suite, the following spaces shall be <i>accessible</i> and shall be on an <i>accessible route</i>:</p> <table><tr><td>a. the living area;</td><td></td></tr><tr><td>b. the dining area;</td><td></td></tr><tr><td>c. at least one sleeping area;</td><td></td></tr><tr><td>d. at least one <i>bathroom</i>;</td><td></td></tr><tr><td>e. if only half baths are provided, at least one <i>half bath</i>;</td><td></td></tr><tr><td>f. carports, garages or parking spaces; and</td><td></td></tr><tr><td>g. patios, terraces, and balconies.</td><td></td></tr></table>	a. the living area;		b. the dining area;		c. at least one sleeping area;		d. at least one <i>bathroom</i> ;		e. if only half baths are provided, at least one <i>half bath</i> ;		f. carports, garages or parking spaces; and		g. patios, terraces, and balconies.			<p>The corresponding ADAAG section seems less than equivalent to the FHA DM as well.</p> <p>The FHA provisions only apply to flat and not to multi-level units.</p> <p>Less than equivalent to FHA DM.</p> <p>Less than equivalent to FHA DM.</p>	8.5.8	<table><tr><td>c. all sleeping/bedrooms;</td></tr><tr><td>d. all <i>bathrooms</i>;</td></tr></table>	c. all sleeping/bedrooms;	d. all <i>bathrooms</i> ;		
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8.5.10	<p>Kitchenettes: When provided, kitchens and kitchenettes in <i>accessible</i> units, sleeping rooms, and suites shall comply with the requirements for <i>Group 2B</i> Kitchens in <b>521 CMR 45.00: GROUP 2 KITCHENS</b>.</p>		<p><b>521 CMR Section 45.7 WALL CABINETS</b> requires that, "... the inside of the bottom surface of the cabinet is capable of being located between 42 inches (42" = 1067mm) and 54 inches (54" = 1372mm) above the floor.</p> <p><b><i>In Group 2B units, the wall cabinets shall be mounted so that the inside bottom surface of the cabinet is no higher than 48 inches (48" = 1219 mm) from the floor.</i></b></p> <p><b>521 CMR Section 45.10 REFRIGERATORS</b> states, "When the refrigerator is provided with the unit, it may be combination refrigerator-freezers with two doors side by side, or may be two door freezer-above-the-refrigerator units, provided the floor of such freezer is no higher than 44 inches (44" = 1118mm) above the floor, and shall be self-defrosting."</p> <p>None of the above quoted provisions require that , "At least fifty per cent of shelf space in cabinets or refrigerator/freezers shall be within the reach ranges of 4.2.5or 4.2.6 ..." as stated in ADAAG 9.2.2, although <b>521 CMR 8.5.11 Wet Bars</b> includes this requirement.</p>		<p>LCM recommends that for 521 CMR to be substantially equivalent to the ADAAG code that 521 CMR Sections <b>45.7 WALL CABINETS</b> and <b>45.10 REFRIGERATORS</b> be revised by adding the sentence, "<b>At least fifty per cent of shelf space in [cabinets or refrigerator/freezers] shall be within the reach ranges of 521 CMR 6.5, FORWARD REACH and 521 CMR 6.6, SIDE REACH.</b>"</p>																		

521 CMR 9.00:	<b>MULTIPLE DWELLINGS</b>					
9.1.1	<i>A lodging facility is a building or portion of a building, primarily used for the purpose of sleeping accommodations. Lodging facilities shall include but not be limited to shelters, hospices, group homes, and congregate living facilities. A dwelling unit in a lodging facility is defined as the sleeping space provided to a single individual; i.e., a bedroom.</i>		Should be located in Section 521 CMR 5.00/5.1 DEFINITIONS as well.  <i>Sleeping rooms/accomodations are defined at left as part of a lodging facility, so therefore, they are not considered to be dwelling units.</i>		LCM recommends that the 521 CMR definitions in this section should be located in Section 521 CMR 5.00/5.1 as well.	
9.1.2	<i>A residential facility is a building or buildings consisting of dwelling units each of which provides complete, independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation. When a dwelling unit houses more than three lodgers or boarders it is a lodging facility. Residential facilities shall include but not be limited to apartments, condominiums, assisted living and cooperatives.</i>		Should be located in Section 521 CMR 5.00/5.1 DEFINITIONS as well.  521 CMR defines the minimum requirements for a lodging facility based on the number of lodgers (> 3) while ADAAG 9.1.1 EXCEPTION defines its minimum requirement based on the number of sleeping rooms (>5).  <i>521 CMR includes assisted living facilities as an example of a residential facility and a multiple dwelling. However, the requirements for this type of unit are located in <b>MEDICAL CARE FACILITIES 521 CMR 13.3.3</b>. ADAAG considers this type of unit under Section 6. <b>MEDICAL CARE FACILITIES</b>.</i>  <i>521 CMR 13.3.3 requires 5% of the total number of units to be Group 2B units and 45% to be Group 1 units. This requirement is less than what the FHA DM would require. The FHA DM requires 100% of this type of unit in elevator buildings to be "covered dwelling units". ADAAG requires 50 % of the total number of these units to be accessible.</i>		LCM recommends that the 521 CMR definitions in this section should be located in Section 521 CMR 5.00/5.1 as well.  LCM recommends that for 521 CMR to be substantially equivalent to the ADAAG code that 521 CMR define a lodging facility in terms of its number of sleeping rooms rather than by the number of lodgers housed.	
9.2	<b>APPLICABILITY</b> <i>New construction: Multiple dwellings, for which building permits for new construction are issued on or after September 1, 1996 shall meet the requirements of 521 CMR 9.3, Group 1 Dwelling Units and 521 CMR 9.4, Group 2 Dwelling Units.</i>		The date of First Occupancy for the FHA is March 13 1991. Multifamily housing buildings, permitted in Massachusetts between March 13, 1991 and September 1, 1996, are required to comply with the FHA Guidelines.		There is the possibility that during the period between March 13, 1991 and September 1, 1996 compliance with the FHA Guidelines may not have been enforced for multifamily housing buildings, permitted in Massachusetts.	
9.3	<b>GROUP 1 DWELLING UNITS</b> <i>In multiple dwellings, for which building permits for new construction are issued on or after September 1, 1996, that are for rent, hire, lease or sale and that are equipped with an elevator, all dwelling units must be constructed as Group 1 Dwelling Units, except those covered in 521 CMR 9.4, Group 2 Dwelling Units.</i>  <i>In multiple dwellings that are for rent, hire, lease or sale but are not equipped with an elevator, only units on the ground floor must be constructed as Group 1 Dwelling Units.</i>  <i>Group 1 Units must comply with 521 CMR 9.5, and, 521 CMR 42.00: GROUP 1 BATHROOMS; 521 CMR 43.00: GROUP 1 KITCHENS; and 521 CMR 46.00: GROUP 1 BEDROOMS.</i>		The date of First Occupancy for the FHA is March 13 1991. Multifamily housing buildings, permitted in Massachusetts between March 13, 1991 and September 1, 1996, are required to comply with the FHA Guidelines.		There is the possibility that during the period between March 13, 1991 and September 1, 1996 compliance with the FHA Guidelines may not have been enforced for multifamily housing buildings, permitted in Massachusetts.	

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9.4	<p><b>GROUP 2 DWELLING UNITS</b></p> <p>In <i>multiple dwellings</i> that are for rent, hire, or lease, (but not for sale) and contain 20 or more units, at least 5% of the <i>dwelling units</i> must be <i>Group 2A</i> units. <i>Group 2A</i> units must comply with <b>521 CMR 9.5, Dwelling Unit Interiors</b>; and <b>521 CMR 44.00: GROUP 2 BATHROOMS</b>; and <b>521 CMR 45.00: GROUP 2 KITCHENS</b>; and <b>521 CMR 47.00: GROUP 2 BEDROOMS</b>.</p>		<p>The scoping described in this section appears to be less equivalent than that required by the UFAS. See 9.4.1 below. It also excludes for sale (condominium) units.</p> <p>There is no absolute certainty that federal resources will never be used in projects that contain for sale units.</p> <p>This may require revision of the statute by the state legislature.</p>	9.4	<p><b>GROUP 2 DWELLING UNITS</b></p> <p>In <i>multiple dwellings</i> that are for rent, hire, lease, or sale and contain 15 or more units, at least 5% of the <i>dwelling units</i> must be <i>Group 2A</i> units. <i>Group 2A</i> units must comply with <b>521 CMR 9.5, Dwelling Unit Interiors</b>; and <b>521 CMR 44.00: GROUP 2 BATHROOMS</b>; and <b>521 CMR 45.00: GROUP 2 KITCHENS</b>; and <b>521 CMR 47.00: GROUP 2 BEDROOMS</b>.</p>		
9.4.1	<p>Total <i>dwelling units</i> in a complex: When <i>multiple dwellings</i> consist of more than one <i>building</i> on a <i>site</i> or are located on several, non-contiguous <i>sites</i>, all <i>dwelling units</i> shall be added together to determine applicability of 521 CMR 9.4.</p>		<p>The least restrictive requirement in UFAS Section 4.1.4(11) is "5 per cent of the total, or at least one unit, whichever is greater, in projects of 15 or more <i>dwelling units</i>, or as determined by the appropriate Federal agency following a local needs assessment conducted by local government bodies or states under applicable regulations."</p>		<p>The UFAS requirement is also computed on a project basis.</p>		
9.4.3	<p><i>Variance: The Board may consider applications for a variance from the 5% requirement if there is a greater or lesser need for Group 2A units in certain areas of the Commonwealth. A variance may be granted only if there is a sufficient factual basis, using data from the central registry of the Massachusetts Rehabilitation Commission or other sources, to establish with a reasonable degree of certainty the present and future needs for the applicable Group 2A units. The Board may not require more than 10% of the dwelling units to be Group 2A units. A variance for less than 5% shall not be granted unless the applicant can demonstrate that the units are not needed by disabled persons and cannot be readily rented, hired, or leased to other persons. Applications for variances to increase or decrease must be made to the Board before the issuance of a building permit.</i></p>		<p>There is no variance procedure within the UFAS regulations.</p> <p>Since there is no variance procedure within the UFAS requirements, this variance procedure would not be applicable to federally owned or assisted projects. It could still be applicable to other projects containing Group 2A units that were only governed by local code requirements.</p>		<p>LCM recommends that for 521 CMR to be substantially equivalent to the UFAS code that the provision at left should be considered for deletion, or modified to exclude federally owned or assisted projects.</p>		
9.5.6	<p>Outlets: Electrical outlets, telephone outlets, cable TV jacks, and other wall outlets shall be located between 15 inches (15" = 381mm) and 48 inches (48" = 1219mm) above the floor, measured at the centerline of the <b>lowest</b> receptacle. <b>All outlets shall be located no less than 18 inches (18" = 457mm) from interior corners.</b> When outlets are located on walls above counters or other fixtures that are 22 inches (22" = 559mm) or greater in depth, they shall be no higher than 44 inches (44" = 1118mm). In <i>Group 1</i> and <i>2</i> units, at least one electrical outlet must be provided on the same wall as the telephone outlet and door chime. Wherever exterior decks, patios, and balconies are provided, an exterior electrical outlet shall also be provided.</p>		<p>The FHA Design Manual at page 5.8 shows a drawing that indicates that at least one electrical outlet above a counter at an inside kitchen corner must be a minimum of 36 inches away from the corner. The drawing is labeled, "Electrical Outlets on Walls Over Cabinets Must Be a Minimum of 36" from a Corner.</p> <p>The FHA DM also states at 5.8 that, "For accessible controls and outlets, all operable parts must be within the ranges specified above. When electrical outlets are installed horizontally or vertically, duplex outlets must have both receptacles within the reach range. ..."</p>	9.5.6	<p>Outlets: Electrical outlets, telephone outlets, cable TV jacks, and other wall outlets shall be located between 15 inches (15" = 381mm) and 48 inches (48" = 1219mm) above the floor, measured at the centerline of the <b>highest</b> receptacle. All outlets shall be located no less than 18 inches (18" = 457mm) from interior corners. <b>At least one outlet shall be located no less than 36 inches (36" = 900mm) from an interior corner.</b> When outlets are located on walls above counters or other fixtures that are 22 inches (22" = 559mm) or greater in depth, they shall be no higher than 44 inches (44" = 1118mm). In <i>Group 1</i> and <i>2</i> units, at least one electrical outlet must be provided on the same wall as the telephone outlet and door chime. Wherever exterior decks, patios, and balconies are provided, an exterior electrical outlet shall also be provided.</p>		
9.6	<p><b>TOWNHOUSES - GROUP 1 UNITS ONLY: RESERVED until further notice. In the interim, they are exempt.</b></p>		<p>Townhouses in elevator buildings and townhouses that contain internal elevators are covered by the FHA Guidelines.</p>	9.6	<p><b>TOWNHOUSES - GROUP 1 UNITS ONLY: RESERVED until further notice. In the interim, they are exempt, except for townhouses in elevator buildings and townhouses that contain internal elevators or elevator shafts for future use.</b></p>		

521 CMR 10.00:	<b>PUBLIC USE AND COMMON USE SPACES IN MULTIPLE DWELLINGS</b>					
10.1	<b>GENERAL</b> <i>The public use and common use spaces of multiple dwellings in existing buildings consisting of 12 or more units in a building, shall be accessible and shall comply with 521 CMR. Public and common use spaces are those spaces inside or outside a building that are used by residents and/or visitors. Public use and common use spaces shall include but not be limited to community facilities, meeting rooms restaurants, recreation spaces, health facilities, pools, public toilet rooms, laundry areas, trash areas, storage areas, mailboxes, walks, sidewalks, parking lots and garages, entrances, elevators, lobbies and foyers, as well as corridors and stairways leading to dwelling units.</i>		The provision at left is stated such that it implies that all public use and common use spaces of multiple dwellings in existing (prior to September 1, 1996) buildings, with 12 or more units, must be accessible and comply with 521 CMR.		LCM recommends that the language of this provision be modified such that it refers to <b>521 CMR 3.3 EXISTING BUILDINGS</b> in addition.	
10.3	<b>PARKING SPACES FOR DWELLING UNIT OCCUPANTS</b> Where parking is provided, it shall comply or be capable of complying with the provisions of <b>521 CMR 23.2, Number through 521 CMR 23.8, Valet Parking</b> . The number of <i>accessible</i> spaces shall not be limited in number by <b>521 CMR 23.2.1, Number</b> but shall be provided in sufficient numbers to meet the needs of the <i>dwelling unit</i> occupants. If parking spaces are assigned to individual units, those spaces designated for <i>accessible</i> units shall have <i>signage</i> reserving said space. An international symbol of accessibility need not be used.		This provision does not state a minimum absolute requirement. In addition there is no identification requirement if accessible spaces are assigned on an individual basis.		LCM recommends that for 521 CMR to be substantially equivalent to the UFAS and ADAAG codes that 521 CMR Section 23.2 <b>NUMBER</b> be revised so that the lowest required number of accessible spaces occurs beginning from 1-25 total parking spaces in lot and does not begin at a minimum of 15 total parking spaces in lot.  This may require revision of the statute by the state legislature.	
10.3.1	Visitor Parking Spaces: Where parking is provided for visitors, it shall comply fully with the requirements of <b>521 CMR 23.00: PARKING AND PASSENGER LOADING ZONES</b> .		This provision does not state a minimum absolute requirement.		LCM recommends that for 521 CMR to be substantially equivalent to the UFAS and ADAAG codes that 521 CMR Section 23.2 <b>NUMBER</b> be revised so that the lowest required number of accessible spaces occurs beginning from 1-25 total parking in lot and does not begin at a minimum of 15 total parking spaces in lot.	
10.7	<b>HEIGHT OF CONTROLS</b> The highest position of the <i>operable parts</i> of any control, dispenser, receptacle, or other operable equipment shall be located within the <i>zone of reach</i> as defined in <b>521 CMR 5.00: DEFINITIONS</b> .		The FHA Guidelines which determine the interior of dwelling units require that, "Light switches, electrical outlets, thermostats and other environmental controls would meet section 100.205(c)(3)(ii) if operable parts are located no higher than 48 inches, and no lower than 15 inches, above the floor."  Other HUD approved safe harbors require this lower maximum side reach limit in public and common use spaces.  The 521 CMR requirements will permit a side approach with a maximum height of 54 inches which is similar to the ANSI 1986 requirement.		LCM recommends that MAAB consider adopting the lower maximum high side reach limit which would result in <b>521 CMR Section 6.6 SIDE REACH</b> being revised to 48 inches ( 48" = 1200mm).	
10.8.4	Controls, including the payment mechanism, shall fall within the <i>zone of reach</i> as defined in <b>521 CMR 5.00: DEFINITIONS</b> .		See above. The 521 CMR requirements will permit a side approach with a maximum height of 54 inches which is similar to the ANSI 1986 requirement.		LCM recommends that MAAB consider adopting the lower maximum high side reach limit which would result in <b>521 CMR Section 6.6 SIDE REACH</b> being revised to 48 inches ( 48" = 1200mm).	
10.9	<b>KITCHEN FACILITIES</b> Sinks, counters, and cooking facilities provided in <i>common use spaces</i> shall comply with <b>521 CMR 32.00: KITCHENS</b> .		If sink depth as permitted by <b>521 CMR 32.7.3</b> can be 8 inches, or greater than 7 inches, it will conflict with the 27 inch high knee space requirement in <b>521 CMR 32.6.1</b> .		LCM recommends that for 521 CMR to be substantially equivalent to the UFAS code that <b>521 CMR Section 32.7.3</b> be revised so that, "Sink depth shall not exceed 6 1/2 inches (6 1/2" 162.5mm).	



521 CMR 42.00:	<b>GROUP 1 BATHROOMS</b>						
42.1.1	Number: If more than one <i>bathroom</i> is provided, whether a full bath or <i>half bath</i> , and one <i>bathroom</i> is a captive <i>bathroom</i> ( a <i>bathroom</i> only entered through a bedroom) then both must comply unless the captive <i>bathroom</i> has two entries, one from the <i>bedroom</i> and one from the corridor, then only the captive <i>bathroom</i> is required to comply. If two common <i>bathrooms</i> are provided, then only one full <i>bathroom</i> must comply. If two captive <i>bathrooms</i> are provided, then both must comply.		The FHA Design Manual requires that when covered dwelling units contain only Specification A bathrooms, that all bathrooms within the unit comply with requirements 3,4,5,6 and 7 of the FHA Guidelines.		LCM recommends that the entire passage at left in red be considered for deletion.		
42.2	<b>CLEAR FLOOR SPACE</b> Shall be as defined in <b>521 CMR 6.4, Clear Floor or Ground Space for Wheelchairs</b> . <i>Clear floor space</i> shall be available at each fixture as shown below to enable users to reach fixture controls and to transfer out of a wheelchair. <i>When a bathroom is adapted, the clear floor space must be able to be made free of obstructions, other than those shown in the diagram. The clear floor space for one fixture may overlap the clear floor space for other fixtures. The clear floor space for the tub or the water closet is measured from the closest edge of that fixture. The clear floor space for the sink may extend a maximum of 19 inches (19" = 483mm) under the sink. Wing walls may not intrude on the minimum clear floor space.</i>		The FHA Design Manual does not contain any adaptability provisions except for the removable base cabinet provision.  For 521 CMR to be considered to be equivalent to the FHA DM, LCM recommends that the passage noted in red at left be considered for deletion.	42.2	<b>CLEAR FLOOR SPACE</b> Shall be as defined in <b>521 CMR 6.4, Clear Floor or Ground Space for Wheelchairs</b> . <i>Clear floor space</i> shall be available at each fixture as shown below to enable users to reach fixture controls and to transfer out of a wheelchair. The <i>clear floor space</i> for one fixture may overlap the <i>clear floor space</i> for other fixtures. The <i>clear floor space</i> for the tub or the water closet is measured from the closest edge of that fixture. The <i>clear floor space</i> for the sink may extend a maximum of 19 inches (19" = 483mm) under the sink. Wing walls may not intrude on the minimum <i>clear floor space</i> .		
42.4.1	Operation: Doors may swing into the <i>bathroom</i> if the swing of the door does not impede <i>clear floor space</i> . <i>If the door impedes the clear floor space, the doors shall be capable of being adapted to swing out, fold or slide.</i>		Requirement 7 of the FHA Guidelines requires that bathrooms contain a clear floor space outside the swing of the bathroom door. It contains no adaptability provisions for bathroom doors and their swings.  For 521 CMR to be considered to be equivalent to the FHA DM, LCM recommends that the passage noted in red at left be considered for deletion.	42.4.1	Operation: Doors may swing into the <i>bathroom</i> if the swing of <i>at least one</i> door does not impede <i>the area of a clear floor space beyond the swing of that door</i> .		
42.5	<b>WATER CLOSETS</b> Shall comply with the following:						
42.5.1	<i>Clear Floor Space</i> : As defined in <b>521 CMR 42.2, Clear Floor Space</b> , shall be provided or shall be capable of being provided without <i>structural change</i> in at least one of two specific locations at the water closet. One shall be beside the water closet with its short edge parallel to the wall behind the water closet. The other shall be in front of the water closet with its long edge parallel to the wall behind the water closet.		LCM cannot be absolutely certain that in all possible configurations the water closet CFS requirements in 521 CMR will be equivalent to one of the 3 water closet CFS configurations in the FHA Design Manual.		LCM recommends that MAAB consider adopting the water closet CFS requirements that are similar to the other 3 codes so that there can be no question as to a lack of equivalency.		
42.5.2	Location:						
	a. When a water closet is located between a wall and a fixture, its centerline shall be 18 inches (18" = 457mm) from the wall. If the <i>clear floor space</i> is provided in front of the water closet, the centerline of the water closet shall be a minimum of 15 inches (15" = 381mm) from the closest edge of the fixture. <i>See Fig. 42c.</i>		Within the FHA Design Manual only a lavatory or a wing wall less than 24 inches long is able to be within 15 inches of the water closet.				
	b. When a water closet is located between two fixtures, its centerline shall be 18 inches (18" = 457mm) from a bathing fixture and a minimum of 15 inches (15" = 381 mm) from other types of fixtures. <i>See Fig. 42c.</i>		A water closet could be located between a tub and a shower. The 33 inches permitted in the 521 CMR requirement at left would be less than the 48" required for a water closet CFS in the FHA Design Manual.		LCM recommends that MAAB consider adopting the water closet CFS requirements that are similar to the other 3 codes so that there can be no question as to a lack of equivalency.		

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42.7	<b>BATHING FIXTURES</b> If more than one bathing fixture is provided in a <i>bathroom</i> , at least one must meet the requirements of 521 CMR 42.		The FHA Design Manual requires that all bathing fixtures in a Specification A bathroom meet Requirement 7. 521 CMR does not permit an FHA Specification A bathroom within its requirements because it does not permit a forward approach to a bathtub.  In addition, if a bathroom contained both a bathtub and a shower and the shower was the bathing fixture that complied with 521 CMR, it would not comply with the CFS requirements for a shower in the FHA DM because the CFS would be required by <b>521 CMR 42.7.2(b)</b> to be centered on the stall opening and therefore would not be flush with the control wall as required by the FHA DM as shown on pages 7.56 - 7.59.		See this column at 521 CMR 42.7.2 below.		
42.7.1	b. <i>Clear Floor Space</i> : At the bathtub, as defined in <b>521 CMR 42.2</b> , <b>Clear Floor Space</b> shall be parallel to the face of the tub.		The statement at left seems to indicate that only a parallel approach/CFS to a tub is permitted.		LCM has been advised that either the short or long sides of a clear floor space are permitted to be parallel to the face of a tub.		
42.7.2	b. Minimum <i>Clear Floor Space</i> : At the shower, as defined in <b>521 CMR 42.2</b> , <b>Clear Floor Space</b> shall be located parallel to and centered on the shower stall opening.		The CFS as required for showers in the FHA Design Manual must be flush with the control wall. The 521 CMR regulation at left would permit the shower CFS to extend 6 inches beyond the control wall.  LCM believes that the FHA DM requirement is the more restrictive regulation. Therefore, for 521 CMR to be substantially equivalent to the FHA DM, LCM recommends that the statement at left be revised.	42.7.2	b. Minimum <i>Clear Floor Space</i> : At the shower, as defined in <b>521 CMR 42.2</b> , <b>Clear Floor Space</b> shall be located parallel to the fixture and flush with the control wall.		
42.8	<b>OUTLETS AND CONTROLS</b> Shall comply with <b>521 CMR 39.00: CONTROLS</b> .		The FHA Guidelines require that, "Light switches, electrical outlets, thermostats and other environmental controls would meet section 100.205(c)(3)(ii) if operable parts are located no higher than 48 inches, and no lower than 15 inches, above the floor."  The 521 CMR requirements will permit a side approach with a maximum height of 54 inches which is similar to the ANSI 1986 requirement.		LCM recommends that MAAB consider adopting the lower maximum high side reach limit which would result in <b>521 CMR Section 6.6 SIDE REACH</b> being revised to 48 inches ( 48" = 1200mm).		

521 CMR 43.00:	<b>GROUP 1 KITCHENS</b>						
<b>43.1</b>	<b>GENERAL</b> In all <i>Group 1</i> Dwelling units, kitchens shall be designed so that <b>when a unit is adapted</b> a person in a wheelchair has access to the sink, cooking surface, refrigerator, and a food preparation surface and can turn around without having to leave the kitchen.		The FHA Design Manual does not contain any adaptability provisions except for the removable base cabinet provision.  For 521 CMR to be considered to be equivalent to the FHA DM, LCM recommends that the passage noted in red at left be considered for deletion.	<b>43.1</b>	<b>GENERAL</b> In all <i>Group 1</i> Dwelling units, kitchens shall be designed so that a person in a wheelchair has access to the sink, cooking surface, refrigerator, and a food preparation surface and can turn around without having to leave the kitchen.		
<b>43.2</b>	<b>CLEAR FLOOR SPACE:</b> Shall be measured at the face of the base cabinets or appliances, (excluding cabinet hardware and appliance hardware) and shall be provided at the time of first occupancy as follows:		The 40 inch required clearance between kitchen counters in the FHA Design Manual is measured between the counter edges when counter edges oppose each other.  LCM believes that the FHA DM requirement is the more restrictive regulation. Therefore, for 521 CMR to be substantially equivalent to the FHA DM, LCM recommends that the statement at left be revised.	<b>43.2</b>	<b>CLEAR FLOOR SPACE:</b> Shall be measured <b>from any countertop or the face of any appliance</b> (excluding cabinet hardware and appliance hardware <b>that projects into the kitchen</b> ) <b>to the opposing cabinet, countertop, appliance or wall</b> and shall be provided at the time of first occupancy as follows:		
<b>43.2.2</b>	U-shaped kitchens shall provide a minimum <i>clear floor space</i> of 48 inches (48" = 1219mm) between opposing base cabinets or appliances. See <b>Fig.43b</b> .		The FHA Design Manual requires a 60 inch diameter turning space within a U-shaped kitchen when a sink, range, or cooktop is located at the base of the U.  For 521 CMR to be considered to be equivalent to the FHA DM, LCM recommends that the provision at at left be revised and restated. LCM recommends that <b>Fig. 43b</b> be revised as well.	<b>43.2.2</b>	U-shaped kitchens shall provide a minimum <b>60 inch (60" = 1500mm) turning circle at the base of the U</b> when a sink, range, or cooktop is located at the base of the U. See <b>Fig.43b</b> .		
<b>43.2.3</b>	Galley kitchens shall provide a minimum <i>clear floor space</i> of 40 inches (40" = 1016mm) between opposing base cabinets or appliances. See <b>Fig.43c</b> .		The 40 inch required clearance between kitchen counters in the FHA Design Manual is measured between the counter edges when counter edges oppose each other.  LCM believes that the FHA DM requirement is the more restrictive regulation. Therefore, for 521 CMR to be substantially equivalent to the FHA DM, LCM recommends that the statement at left be revised. LCM recommends that <b>Fig. 43c</b> be revised as well.	<b>43.2.3</b>	Galley kitchens shall provide a minimum <i>clearance</i> of 40 inches (40" = 1016mm) between opposing base cabinets, <b>countertops</b> , appliances <b>or walls</b> . See <b>Fig.43c</b> .		



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521 CMR 44.00:	<b>GROUP 2 BATHROOMS</b>						
44.4.4	Wall Reinforcement: Walls adjacent to and behind the water closet shall be capable of structurally supporting the future installation of grab bars from 32 to 38 inches (32" to 38" = 813mm to 965mm) above the floor. The back wall shall have reinforcement from the interior corner to a distance of six inches (6" = 152mm) beyond the widest part of the water closet. <b>The side wall shall have reinforcement from the interior corner to a distance of six inches (6" = 152mm) beyond the front edge of the water closet, unless interrupted by a door or other fixture, then the reinforcement shall be installed as far as possible.</b>		The 521 CMR requirement for wall reinforcing at the side wall of the water closet seems to be less equivalent than that required by UFAS.  For 521 CMR to be considered to be substantially equivalent to UFAS, LCM recommends that the provision at left be revised and restated.	44.4.4	Wall Reinforcement: Walls adjacent to and behind the water closet shall be capable of structurally supporting the future installation of grab bars from 32 to 38 inches (32" to 38" = 813mm to 965mm) above the floor. The back wall shall have reinforcement from the interior corner to a distance of six inches (6" = 152mm) beyond the widest part of the water closet. The side wall shall have reinforcement from the interior corner to a distance of <b>54 inches (54" = 1350mm) from the interior corner.</b>		
44.6.1	b. Minimum floor area: A clear floor area 30 inches (30" = 762mm) wide and at least 72 inches (72" = 1829mm) long shall be provided adjacent to the tub. <b>At least 12 inches (12" = 305mm) of the clear floor area length shall extend beyond the drain end of the tub if the tub is 60 inches (60" = 1524mm) long.</b>		The parallel CFS at the tub in both the FHA Design Manual and the UFAS standard is required to be flush with the control wall at the foot of the tub.  For 521 CMR to be considered to be substantially equivalent to the FHA DM and UFAS, LCM recommends that the passage at left in red be deleted.	44.6.1	b. Minimum floor area: A clear floor area 30 inches (30" = 762mm) wide and at least 72 inches (72" = 1829mm) long shall be provided adjacent to the tub.		
44.6.1	f. Hardware location: <b>Faucets and mixing valves shall be centered horizontally on the long wall of the tub, 28 inches (28" = 711mm) above the floor.</b> The tub spout shall be located on the end wall above the drain and a shower head may be located on either the end wall or long wall. <b>If hardware is installed in locations other than those specified, piping shall also be provided and capped in the wall.</b>		Bathtub faucets and controls within the UFAS standard are required to be located on the control wall at the foot of the tub.  For 521 CMR to be considered to be substantially equivalent to UFAS, LCM recommends that the provision at left be revised and restated.	44.6.1	f. Hardware location: Faucets and mixing valves shall be <b>located on the foot wall of the tub, between the top of the tub and 31 1/2 inches (31 1/2" = 787.5mm) above the floor, no further than 15 inches (15" = 375mm) inside the outside edge of the tub.</b> The tub spout shall be located on the end wall above the drain and a shower head may be located on either the end wall or long wall.		
44.6.2	e. Hardware location: <b>Mixing valves shall be centered horizontally on the long wall.</b> The centerline of the control shall be mounted 38 inches to 48 inches (38" to 48" = 965mm to 1219mm) above the shower floor.		Shower faucets and controls within the UFAS standard are required to be located on the control wall at the foot of the shower.  For 521 CMR to be considered to be substantially equivalent to UFAS, LCM recommends that the provision at left be revised and restated.	44.6.2	e. Hardware location: Mixing valves shall be <b>located on the wall at the foot of the shower no more than 18 inches (18" = 450mm) inside the outside edge of the shower.</b> The centerline of the control shall be mounted 38 inches to 48 inches (38" to 48" = 965mm to 1219mm) above the shower floor.		

Introduction to Section C - pages 1 to 22
110309 MABBR Sections Identified as "Exceeding or Unique to Federal Standards"
<p>Section C identifies and lists those MAABR/521 CMR provisions that LCM believes exceed all of the Federal accessibility standards for housing and/or are unique to MAABR/521 CMR.</p> <p>In relation to every MAABR/521 CMR provision listed, LCM has provided observations and commentary.</p> <p><b>Black</b> = typical text</p> <p><b>Green</b> = passage deemed noteworthy by LCM</p> <p><b>Red</b> = provision determined by LCM to be less than substantially equivalent to one of Federal accessibility standards</p>

MAABR Section #	Massachusetts Architectural Access Board Rules and Regulations		LCM Observations, Evaluation & Commentary				
521 CMR 2.00:	PURPOSE AND SCOPE						
2.5	<b>REASONABLE MODIFICATIONS</b> <i>Reasonable modifications to public use and common use spaces in a multiple dwelling must comply with 521 CMR. Reasonable modifications to an individual unit do not need to comply with 521 CMR.</i>		Reasonable modifications to public and common use spaces are specifically regulated by accessibility code requirements by this provision of 521 CMR.				
521 CMR 3.00:	JURISDICTION						
3.4.1	RESERVED FOR FUTURE ACTION: Changes in use, from private to public, in private residential homes where no work is being performed.		This potential provision appears to be unique to 521 CMR.				
521 CMR 5.00:	DEFINITIONS						
5.1	<b>BUILDING:</b> A structure enclosed within exterior walls or fire walls (as defined in 780 CMR), built, erected and framed in a combination of any materials, whether portable or fixed having a roof, to form a structure for the shelter of persons, animals or property. For the purposes of this definition, "roof" shall include an awning or similar covering, whether or not permanent in nature. The word " <i>building</i> " shall be construed where the context requires, as though followed by the words "or part or parts thereof". For application of 521 CMR, each portion of a building which is separated from other portions by fire walls (as defined in 780 CMR) and are not dependent on the existing building for accessible elements shall be considered a seperate building.		Although some parts of this definition, printed in red, appear to be less equivalent than that in the FHA DM; because building in the FHA DM is not defined in terms of separation by fire walls; this definition in other aspects is more extensive than those in the FHA DM and ADAAG.				
5.1	<b>COMPLEX:</b> multiple housing developed on one or more sites by a single entity For complexes currently owned or financed by public agencies, including local housing authorities, Massachusetts Housing Finance Agency, or Housing and Urban Development, the complex means the whole of one or more residential structures and appurtenant structures, equipment, roads, walks, and parking lots which a single entity owns, within a municipality, and is or will be covered by a single mortgage contract for permanent financing or was originally constructed or acquired under one contract for financial assistance for new construction or acquisition.		This definition is unique to 521 CMR.  The FHA Design Manual defines the required scope of the Guidelines on a building by building basis. The scoping for the application of the FHA Guidelines is never done on a project or complex basis.  LCM has been advised that this definition is only used within the context of 521 CMR to determine the quantity of Group 2 units  LCM cannot be certain if this definition might constitute a "loophole" that would permit different scoping requirements than the other standards and result in a less stringent requirement.				
5.1	<b>GROUND FLOOR:</b> The floor of a building closest to the level of the exterior grade and any floor within 36 inches (36" = 914mm) of an exterior grade at some or all of its perimeter. Buildings on sloped sites may have more than one ground floor. For multiple dwellings with a garage or commercial space at grade level, the first floor of dwelling units above the garage or commercial space shall be considered the ground floor.		This definition is more extensive than those in the FHA DM and ADAAG.				
5.1	<b>GROUP 1:</b> Applies to dwelling units that have features that can be modified without structural change to meet the specific functional needs of an occupant with a disability.		This term is unique to 521 CMR. It is roughly comparable to a "covered dwelling unit" that conforms to the FHA Guidelines and also to a Type B IBC/ANSI dwelling unit.				
5.1	<b>GROUP 2A:</b> Applies to dwelling units that have features similar to Group 1, but have the additional feature of greater floor space to accommodate the needs of occupants who need such space due to their disability.		This term is unique to 521 CMR. It is roughly comparable to a dwelling unit that conforms to the UFAS requirements and also to a Type A IBC/ANSI dwelling unit.				

MAABR Section #	Massachusetts Architectural Access Board Rules and Regulations		LCM Observations, Evaluation & Commentary				
5.1	<b>GROUP 2B:</b> Applies to <i>dwelling units</i> that contain features that provide, at the time of initial construction, full accessibility without need for further modification.		This term is unique to 521 CMR. It is roughly comparable to a fully accessible unit and also an Accessible IBC/ANSI dwelling unit.				
5.1	<b>LODGING HOUSE:</b> A building where lodgings are let to four or more persons not within second degree of kindred to the persons operating the facility, including fraternity houses and dormitories of educational institutions.		This definition is unique to 521 CMR.				
5.1	<b>MEZZANINE OR MEZZANINE FLOOR:</b> An intermediate level between the floor and ceiling of any story with an aggregate floor area of not more than 33% of the floor area of the story in which the level is located.		This definition is more specific than the ADAAG definition because it defines <i>Mezzanine or Mezzanine Floor</i> in terms of a particular percentage of the floor area below it. The 521 CMR definition is similar to the current IBC definition.				
5.1	<b>MULTIPLE DWELLING:</b> A lodging or residential facility for hire , rent, lease, or sale, containing three or more <i>dwelling units</i> .		This definition is unique to 521 CMR.				
5.1	<b>PROJECT:</b> See 521 CMR 5.00: Complex		See commentary at COMPLEX above.				
5.1	<b>PROPRIETOR:</b> One with title to the establishment who owns the entire fee or portion of the entire fee and the consequent right to dispose of the establishment or such fee portion as vested in him or her.		This definition is unique to 521 CMR.				
5.1	<b>PUBLIC BUILDING:</b> a. A <i>building</i> privately or publicly financed that is open to and used by the public, including but not limited to transportation terminals, institutional buildings, educational buildings, commercial buildings, buildings having places of assembly, hotels, motels, dormitories, <i>multiple dwellings</i> consisting of three or more units, 5% of the units in lodging or residential facilities for rent, hire or lease containing 20 or more units, public use and common use areas of apartment buildings and condominiums, parking lots of 15 or more automobiles, public sidewalks and ways, funeral homes, and public restrooms, and public areas of shopping centers and restaurants.		The passages in red to the left define a scope of requirement that appears to be less equivalent then the FHA Guidelines. The FHA Guidelines are applicable to all ground floor units in buildings containing 4 or more units, all units in elevator buildings and 2% of the parking spaces that serve covered dwelling units.  Although some parts of this definition, printed in red, appear to be less equivalent than that in the FHA DM, this definition in other aspects appears to be more extensive.				
	b. A <i>building</i> constructed by the Commonwealth or any political subdivision thereof with public funds and open to public use, including but not limited to those constructed by public housing authorities, the Massachusetts Port Authority, the Massachusetts Parking Authority, the Massachusetts Turnpike Authority, the Massachusetts Bay Transportation Authority, and building authorities of any public educational institution or their successors.						
5.1	<b>REASONABLE MODIFICATION:</b> Physical changes to <i>multiple dwellings</i> requested by <i>persons with disabilities</i> or their agents to enable full use and enjoyment thereof, as described in M.G. L., c. 151B, § 4(a), or St. 1989, c. 722.		This definition is unique to 521 CMR.				
5.1	<b>TOWNHOUSE:</b> A <i>dwelling unit</i> with finished living space on more than one <i>story</i> .		This definition is unique to 521 CMR.				
5.1	<b>TRANSIENT LODGING:</b> A <i>building, facility</i> , or portion thereof, excluding inpatient medical care facilities, that contains one or more <i>dwelling units</i> or sleeping accommodations not intended for permanent residence. Transient lodging may include but is not limited to resorts, group homes, hotels, motels, and dormitories.		This definition is more specific than the ADAAG definition because it includes the phrase "not intended for permanent residence".				
5.1	<b>WALK (WALKWAY):</b> An interior or exterior pathway with a prepared surface intended for pedestrian use, including but not limited to general pedestrian areas such as plazas, courts and crosswalks.		This definition is more inclusive than the UFAS and ADAAG definitions because it includes the phrase "including but not limited to " and adds "interior" and "crosswalks".				

MAABR Section #	Massachusetts Architectural Access Board Rules and Regulations		LCM Observations, Evaluation & Commentary																				
521 CMR 8.00:	TRANSIENT LODGING FACILITIES																						
8.1	<b>GENERAL</b> <i>Transient lodging</i> facilities shall comply with 521 CMR, except as specified or modified in <b>521 CMR 8.00</b> . <i>Transient lodging</i> shall include but not be limited to hotels, motels, bed and breakfasts, inns, boarding houses, dormitories and resorts. Transient lodging facilities shall also include homeless shelters, halfway houses, lodging houses and transitional housing, and other places that provide temporary accommodations. <i>Transient lodging</i> includes facilities, or portions thereof, used for <i>sleeping accommodations</i> . <i>Sleeping accommodations</i> in a medical care facility are covered by <b>521 CMR 13.00: MEDICAL CARE FACILITIES</b> .		"Whether a facility is considered a "dwelling" depends on whether the facility is to be used as a residence for more than a brief period of time. The operation of each continuing care facility must be examined on a case-by-case basis to determine whether it contains covered multifamily dwellings."  Based on the above paragraph from the FHA Design Manual, LCM can not be certain that the 521 CMR and FHA Design Manual definitions of Transient Lodging are equivalent. It appears that the 521 CMR definition is more extensive.																				
8.2	<b>PUBLIC AND COMMON USE AREAS</b>																						
8.2.2	Registration counters shall comply with the following:		This provision appears to be more inclusive than the FHA DM and UFAS provisions																				
	a. Location: The counter shall be on an accessible route.																						
	b. Length: A portion of the counter or an auxiliary counter shall be at least 36 inches (36" = 914mm) in length.																						
	c. Height that portion of the counter shall not exceed 36 inches (36" = 914 mm) above the finish floor.																						
	d. <i>Clear Floor Area</i> : Shall be provided in front of the counter.																						
8.4.1	Distribution: To provide <i>persons with disabilities</i> a range of options equivalent to those available to other persons served by the <i>facility</i> , <i>accessible</i> sleeping rooms and suites shall be dispersed proportionally among the various classes of <i>sleeping accommodations</i> available to patrons of the place of <i>transient lodging</i> . Factors to be considered include room size, price, location, smoking/non-smoking, amenities provided, and the number and size of beds provided.		This provision is more extensive than the ADAAG provision.																				
8.4.3	<i>Bathrooms</i> and Kitchens: <i>Accessible</i> units shall have <i>bathrooms</i> and kitchens (where provided), that comply with <i>Group 2B</i> requirements in <b>521 CMR 44.00: GROUP 2 BATHROOMS</b> and <b>521 CMR 45.00: GROUP 2 KITCHENS</b> .		The references to Group 2 Bathrooms and Kitchens make this provision more extensive than the FHA DM and UFAS provisions.																				
8.4.4	Wheel-in Showers: In transient lodging facilities with 50 or more sleeping rooms or suites, <i>accessible</i> sleeping rooms or suites shall include a wheel-in shower in conformance with the table below. Wheel-in showers shall comply with the requirements of <b>521 CMR 44.6.2, Showers</b> .  <table><tr><td><u>Number of Rooms</u></td><td><u>Rooms with Wheel-in Showers</u></td></tr><tr><td>50 to 100</td><td>1</td></tr><tr><td>101 to 200</td><td>2</td></tr><tr><td>201 to 300</td><td>3</td></tr><tr><td>301 to 400</td><td>4</td></tr><tr><td>401 to 500</td><td>5</td></tr><tr><td>501 to 1000</td><td>2% of total</td></tr><tr><td>1001 and over</td><td>22 + 1 for each 100 over 1000</td></tr></table>	<u>Number of Rooms</u>	<u>Rooms with Wheel-in Showers</u>	50 to 100	1	101 to 200	2	201 to 300	3	301 to 400	4	401 to 500	5	501 to 1000	2% of total	1001 and over	22 + 1 for each 100 over 1000		This provision appears to be more extensive than the ADAAG provision both in terms of the required number of roll-in showers when rooms exceed 1000 and the specific roll-in shower provisions at <b>521 CMR 44.6.2 Showers</b> . <i>Required control/hardware locations differ</i> .				
<u>Number of Rooms</u>	<u>Rooms with Wheel-in Showers</u>																						
50 to 100	1																						
101 to 200	2																						
201 to 300	3																						
301 to 400	4																						
401 to 500	5																						
501 to 1000	2% of total																						
1001 and over	22 + 1 for each 100 over 1000																						
8.4.6	In facilities with multi-bed rooms (such as dormitories) or spaces, 5% of the beds shall comply with <b>521 CMR 8.5.3, Maneuvering space</b> .		This provision is unique to 521 CMR.																				

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8.5	<b>UNITS, SLEEPING ROOMS, AND SUITES: MINIMUM REQUIREMENTS</b> <i>Accessible</i> units, sleeping rooms and suites shall comply with the following:		This provision is the introduction to those following.				
8.5.1	<i>Accessible Route</i> : <i>Accessible</i> units, sleeping rooms and suites shall be on an <i>accessible route</i> . An <i>accessible route</i> shall connect all <i>accessible</i> spaces and <i>elements</i> including telephones, televisions, alarm clocks, and climate controls within the unit, sleeping room or suite.		This provision provides a more extensive listing of those items required to be connected by an accessible route.				
8.5.2	Elevators: An elevator is not required in a <i>transient lodging facility</i> that is less than three stories or has less than 3000 square feet per story if all rooms are proportionally distributed in accordance with <b>521 CMR 8.4.1</b> and all public spaces are fully <i>accessible</i> .		This provision is unique to this section of 521 CMR.				
8.5.4	Doors and doorways designed to allow passage into and within all <i>accessible</i> units, sleeping rooms, or suites shall comply with <b>521 CMR 26.00: DOORS AND DOORWAYS</b> .		This provision, because of its reference to <b>521 CMR 26.00: DOORS AND DOORWAYS</b> , is more extensive than the ADAAG provision.				
8.5.5	Visitor Identification: Every entry door to each <i>accessible</i> unit shall have a means by which the person can visually identify a visitor before opening the door. This may be achieved by any of the following means:		This provision is unique to 521 CMR.				
	a. A peephole mounted at 42 inches (42" = 1067mm) above the floor.						
	b. A vision panel in the door with its bottom edge no higher than 42 inches (42" = 1067mm) above the floor.						
	c. A sidelight with its bottom edge no higher than 42 inches (42" = 1067mm) above the floor.						
8.5.7	Controls: All controls in <i>accessible</i> units, sleeping rooms, and suites shall comply with <b>521 CMR 39.00: CONTROLS</b> .		This provision is more extensive than the ADAAG provision.				
8.5.8	<i>Accessible spaces: Where provided as part of an accessible unit, sleeping room, or suite, the following spaces shall be accessible and shall be on an accessible route:</i>		Although this provision and the corresponding ADAAG section seem less than equivalent to the FHA DM; it contains a more extensive listing of spaces. The FHA provisions only apply to flat and not to multi-level units.				
	a. the living area;						
	b. the dining area;						
	c. at least one sleeping area;		Less than equivalent to FHA DM.				
	d. at least one bathroom;		Less than equivalent to FHA DM.				
	e. if only half baths are provided, at least one half bath;						
	f. carports, garages or parking spaces; and						
	g. patios, terraces, and balconies.						
8.5.9	Patios, Terraces, and Balconies: Where it is necessary to utilize a door threshold or a change in level between the interior and exterior greater than 1/2 inch (1/2" = 13mm) to protect the integrity of the unit from water or snow damage, equivalent facilitation such as raised decking or a <i>ramp</i> shall be provided. See <b>Fig. 8a</b> .		By referencing <b>Fig. 8a</b> ; this provision provides a more complete description of a proposed equivalent facilitation.				

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8.5.10	Kitchenettes: When provided, kitchens and kitchenettes in <i>accessible</i> units, sleeping rooms, and suites shall comply with the requirements for <i>Group 2B Kitchens</i> in <b>521 CMR 45.00: GROUP 2 KITCHENS</b> .		<p>Although in one aspect the 521 CMR provision is less equivalent than its corresponding ADAAG provision; in other aspects , by referencing 521 CMR 45.00: GROUP 2 KITCHENS, it appears to also be more extensive. See below.</p> <p><b>521 CMR Section 45.7 WALL CABINETS</b> requires that, "... the inside of the bottom surface of the cabinet is capable of being located between 42 inches (42" = 1067mm) and 54 inches (54" = 1372mm) above the floor.</p> <p><b><i>In Group 2B units, the wall cabinets shall be mounted so that the inside bottom surface of the cabinet is no higher than 48 inches (48" = 1219 mm) from the floor."</i></b></p> <p><b>521 CMR Section 45.10 REFRIGERATORS</b> states, "When the refrigerator is provided with the unit, it may be combination refrigerator-freezers with two doors side by side, or may be two door freezer-above-the-refrigerator units, provided the floor of such freezer is no higher than 44 inches (44" = 1118mm) above the floor, and shall be self-defrosting."</p> <p>None of the above quoted provisions require that , "At least fifty per cent of shelf space in cabinets or refrigerator/freezers shall be within the reach ranges of 4.2.5or 4.2.6 ..." as stated in ADAAG 9.2.2, although <b>521 CMR 8.5.11 Wet Bars</b> includes this requirement.</p>				
8.5.11	Wet Bars: When provided as an accessory to an <i>accessible</i> unit, sleeping room or suite, wet bars or similar amenities shall be <i>accessible</i> , on an <i>accessible route</i> , and comply with the following:		This provision is unique to 521 CMR.				
	a. <i>Clear floor space</i> for a front or parallel approach to cabinets, counters, sinks, and appliances shall be provided to comply with <b>Fig. 8b</b> .						
	b. Countertops and sinks shall be at a maximum height of 34 inches (34" = 864mm) above the floor.						
	c. <i>Accessible</i> storage: At least 50% of shelf space in cabinets or refrigerator/freezers shall comply with <b>521 CMR 6.5, Forward Reach</b> and <b>521 CMR 6.6, Side Reach</b> and <i>space</i> shall be designed to allow for the operation of cabinet and/or appliance doors so that all cabinets and appliances are <i>accessible</i> and usable.						
	d. Controls and operating mechanisms shall comply with <b>521 CMR 39.00: CONTROLS</b> .						
8.6	<b>SLEEPING ACCOMMODATIONS FOR PERSONS WHO ARE DEAF OR HARD OF HEARING</b>  <i>Sleeping accommodations</i> for persons who are deaf or hard of hearing required by <b>521 CMR 8.4.5</b> shall comply with the following requirements for smoke/fire/safety alarms, visual signal devices, telephones, televisions, alarm clocks and climate controls.		This provision provides a more extensive listing of those devices required to be accessible by persons who are deaf or hard of hearing.				
8.6.4	Televisions: Where televisions are provided in sleeping rooms or suites, the operator of the <i>facility</i> shall provide a television amplifier and a caption decoder in rooms for persons who are deaf or hard of hearing.		This provision is unique to 521 CMR.				



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8.7	<b>OTHER SLEEPING ROOMS AND SUITES</b>  Doors and doorways designed to allow passage into and within all sleeping units or other covered units shall comply with <b>521 CMR 26.00: DOORS AND DOORWAYS</b> on the corridor side of the door only.		This provision, because of its reference to <b>521 CMR 26.00: DOORS AND DOORWAYS</b> , is more extensive than the ADAAG provision.				
521 CMR 9.00:	<b>MULTIPLE DWELLINGS</b>						
9.1	<b>GENERAL</b> <i>A multiple dwelling</i> is considered to be either a lodging <i>facility</i> or a residential <i>facility</i> for hire, rent, lease, or sale containing three or more <i>dwelling units</i> in a <i>building</i> . Facilities used for temporary accommodations are considered <i>transient lodging facilities</i> . See <b>521 CMR 8.00: TRANSIENT LODGING FACILITIES</b> . For public and common use spaces in <i>Multiple Dwellings</i> , See <b>521 CMR 10.00: PUBLIC USE AND COMMON USE SPACES IN MULTIPLE DWELLINGS</b> .		This provision is an elaboration of the definition in 521 CMR 5.1. It is unique to 521 CMR.				
9.1.1	<i>A lodging facility is a building or portion of a building, primarily used for the purpose of sleeping accommodations. Lodging facilities shall include but not be limited to shelters, hospices, group homes, and congregate living facilities. A dwelling unit in a lodging facility is defined as the sleeping space provided to a single individual; i.e., a bedroom.</i>		This provision is a clarifying definition derived from the previous multiple dwelling definition. It should probably be located in Section 521 CMR 5.00/5.1 DEFINITIONS as well. It is unique to 521 CMR.  <i>Sleeping rooms/accomodations are defined at left as part of a lodging facility, so therefore, they are not considered to be dwelling units.</i>				
9.1.2	<i>A residential facility is a building or buildings consisting of dwelling units each of which provides complete, independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation. When a dwelling unit houses more than three lodgers or boarders it is a lodging facility. Residential facilities shall include but not be limited to apartments, condominiums, assisted living and cooperatives.</i>		Should be located in Section 521 CMR 5.00/5.1 DEFINITIONS as well.  521 CMR defines the minimum requirements for a lodging <i>facility</i> based on the number of lodgers (> 3) while ADAAG 9.1.1 EXCEPTION defines its minimum requirement based on the number of sleeping rooms (>5).  <i>521 CMR includes assisted living facilities as an example of a residential facility and a multiple dwelling. However, the requirements for this type of unit are located in <b>MEDICAL CARE FACILITIES 521 CMR 13.3.3</b>. ADAAG considers this type of unit under Section <b>6. MEDICAL CARE FACILITIES</b>.</i>  <i>521 CMR 13.3.3 requires 5% of the total number of units to be Group 2B units and 45% to be Group 1 units. This requirement is less than what the FHA DM would require. The FHA DM requires 100% of this type of unit in elevator buildings to be "covered dwelling units". ADAAG requires 50 % of the total number of these units to be accessible.</i>				
9.2.2	<i>Renovation</i> and reuse of dwelling units is subject to <b>521 CMR 9.4, Group 2 Dwelling Units</b> through <b>521 CMR 9.5, Dwelling Unit Interiors</b> provided the work being performed, in a three year period, exceeds 30% of the <i>full and fair cash value of the building</i> (See <b>521 CMR 3.3.2</b> ). Work performed to public use and common use areas however, is subject to all of <b>521 CMR 3.3</b> .		This provision is unique to 521 CMR.				



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9.4	<b>GROUP 2 DWELLING UNITS</b> In <i>multiple dwellings</i> that are for rent, hire, or lease, (but not for sale) and contain 20 or more units, at least 5% of the <i>dwelling units</i> must be <i>Group 2A</i> units. <i>Group 2A</i> units must comply with <b>521 CMR 9.5, Dwelling Unit Interiors</b> ; and <b>521 CMR 44.00: GROUP 2 BATHROOMS</b> ; and <b>521 CMR 45.00: GROUP 2 KITCHENS</b> ; and <b>521 CMR 47.00: GROUP 2 BEDROOMS</b> .		<p>The scoping described in this section appears to be less equivalent than that required by the UFAS, (See 9.4.1 below) in terms of number of units to be accessible. It also excludes for sale (condominium) units.</p> <p>However, the requirements for Group 2 units in 521 CMR are generally more extensive than those in UFAS.</p> <p>Although multiple dwelling projects containing for sale units are excluded from providing Group 2 units that conform to 521 CMR, these for sale units are still required to comply with the requirements for Group 1 units.</p>				
9.4.1	Total <i>dwelling units</i> in a complex: When <i>multiple dwellings</i> consist of more than one <i>building</i> on a <i>site</i> or are located on several, non-contiguous <i>sites</i> , all <i>dwelling units</i> shall be added together to determine applicability of 521 CMR 9.4.		<p>The FHA Design Manual defines the required scope of the Guidelines on a building by building basis. The scoping for the application of the FHA Guidelines is never done on a project or complex basis.</p> <p>LCM cannot be certain if this provision might constitute a "loophole" that would permit different scoping requirements than the other standards.</p>				
9.4.2	Distribution: <i>Group 2A dwelling units</i> shall be proportionally distributed across the total number of units according to number of bedrooms, size, quality, price and location.		This provision is unique to 521 CMR.				
	EXCEPTION FOR TOWNHOUSES: When 5% of the total number of units required to be accessible includes townhouses, they shall comply by any of the following means:						
	a. substitute a fully accessible flat of comparable size, amenities, etc.;						
	b. provide space for the future installation of a wheelchair lift to access either upper or lower level of townhouse.						
	c. provide space for the future installation of a residential elevator to access either upper or lower level of townhouse.						
9.5	<b>DWELLING UNIT INTERIORS</b> The interiors of all <i>Group 1</i> and <i>2 dwelling units</i> , except as exempted by <b>521 CMR 9.2.1</b> , shall comply with the following requirements:		This provision is the introduction to those following.				
9.5.1	Doorways: All doorways and all openings that allow passage in a <i>Group 2</i> unit must comply with <b>521 CMR 26.2, Double Leaf Doorways</b> , through <b>521 CMR 26.11, Door Hardware</b> . All doorways and all openings that allow passage in <i>Group 1</i> units shall be capable of complying, without <i>structural change</i> , with <b>521 CMR 26.2, Double Leaf Doorways</b> , through <b>521 CMR 26.11, Door Hardware</b> . For door types such as bifold, pocket, and accordion doors, the clear opening is measured when the door is in its most fully open position. See <b>Fig. 26b</b> and <b>26c</b> . For <i>Group 1 units</i> , only the common area and apartment entrance door hardware are required to comply with <b>521 CMR 26.11, Door Hardware</b> .		This provision, because of its reference to <b>521 CMR 26.00: DOORS AND DOORWAYS</b> , is more extensive than the UFAS provision.				

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9.5.2	Every entry door to each <i>dwelling unit</i> shall have a means by which the resident can visually identify a visitor before opening the door. This may be achieved by any of the following means:		This provision is unique to 521 CMR.				
	a. In <i>Group 1 and 2A</i> units, a peephole mounted 60 inches (60" = 1524mm) above the floor, a vision panel in the door with its bottom edge no higher than 60 inches (60" = 1524mm) above the floor, or a sidelight with its bottom edge no higher than 60 inches (60" = 1524mm) above the floor, shall be provided.						
	b. In <i>Group 2B</i> units, an additional peephole mounted 42 inches (42" = 1067mm) above the floor; a vision panel in the door with its bottom edge no higher than 42 inches (42" = 1067mm) above the floor, or a sidelight with its bottom edge no higher than 42 inches (42" = 1067mm) above the floor. See <b>Fig. 9a</b> .						
9.5.3	Buzzers/bells and intercoms: All buzzers/bells and intercom systems shall comply with <b>521 CMR 6.5, Forward Reach</b> or <b>521 CMR 6.6, Side Reach</b> .		This provision is unique to 521 CMR.				
9.5.4	<i>Accessible routes</i> : An <i>accessible route</i> at least 36 inches (36" = 914mm) wide shall be provided to all rooms and spaces in the <i>dwelling unit</i> including exterior decks, patios, balconies, attached garages and storage closets. An <i>accessible route</i> shall be provided to mechanical spaces, only if the resident is expected to service, adjust or maintain the equipment therein.		This provision is slightly more extensive than the UFAS provision.				
	a. Patios, Terraces, and Balconies: Where it is necessary to use a door threshold or a change in level between the interior and exterior, greater than 1/2 inch (1/2" = 13mm) to protect the integrity of the unit from water or snow damage, equivalent facilitation such as raised decking or a ramp shall be provided or capable of being provided.		This provision provides a more complete description of a proposed equivalent facilitation.				
	In <i>Group 2B Units</i> , the exterior deck, patio, balcony surfaces shall be either permanently installed at no more than 1/2 inch (1/2" = 13mm) below the floor level of the interior of the <i>dwelling unit</i> or a temporary raised surface, such as duckboards, that is no more than 1/2 inch (1/2" = 13mm) below the interior floor <i>level</i> shall be available upon request.		This provision provides a more complete description of a proposed equivalent facilitation.				
9.5.5	Laundry Facilities: If a washer or dryer is provided in a <i>Group 1</i> or <i>Group 2A</i> unit, it shall be front loading or capable of being replaced with a front loading appliance. If a washer or dryer is provided in a <i>Group 2B dwelling unit</i> , it shall be front loading. Operating controls for washers and dryers shall be located within the <i>zone of reach</i> . If residents are expected to operate shut-off valves for the washer, the shut-off valves shall be located within the <i>zone of reach</i> . For common area laundry facilities, see <b>521 CMR 10.8, Laundry Facilities</b> .		This provision is more extensive that in UFAS.				

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9.5.6	Outlets: Electrical outlets, telephone outlets, cable TV jacks, and other wall outlets shall be located between 15 inches (15" = 381mm) and 48 inches (48" = 1219mm) above the floor, measured at the centerline of the lowest receptacle. <b>All outlets shall be located no less than 18 inches (18" = 457mm) from interior corners.</b> When outlets are located on walls above counters or other fixtures that are 22 inches (22" = 559mm) or greater in depth, they shall be no higher than 44 inches (44" = 1118mm). In <i>Group 1</i> and <i>2</i> units, at least one electrical outlet must be provided on the same wall as the telephone outlet and door chime. Wherever exterior decks, patios, and balconies are provided, an exterior electrical outlet shall also be provided.		Although some parts of this provision,printed in red, appear to be less equivalent than that in the FHA DM; this provision in other aspects is more extensive than that in the FHA DM, especially because it includes scoping for more different types of electrical devices and because the height limitation above a counter is reduced from 46 to 44".				
	In <i>Group 2B</i> units, all telephone outlets must have an electrical outlet located within 12 inches (12" = 305mm) for installation of a <i>TTY</i> .						
9.5.7	Controls and alarms: In <i>Group 2A</i> and <i>2B</i> units, the operable portions of all controls and alarms, including but not limited to: intercoms, heat and air controls, shall be located between 36 and 48 inches (36" to 48" = 914mm to 1219mm) above the floor, measured at the centerline of the operable portion in its highest position. Operable portions shall be located at least 24 inches (24" = 610mm) from interior corners. Controls and alarms in <i>Group 1</i> units may be located at other locations so long as sufficient wiring is provided to permit future location from 36 inches to 48 inches (36" to 48" = 914mm to 1219mm) above the floor.		This provision is more extensive than that in UFAS and the FHA DM, especially because it contains more restrictive reach range limits.				
9.5.8	Closets/pantries and linen closets: Shall comply with the following:		This provision is more extensive than that in UFAS and the FHA DM.				
	a. Closet shelves/poles: Closet walls shall be structurally capable of supporting the installation of shelves and poles which are relocatable from 42 inches to 72 inches (42" to 72" = 1067mm to 1829mm) to the top of shelf or pole whichever is higher.						
	b. Closet depth: Where the interior depth of the closet exceeds 24 inches (24" = 610mm), the doorway must comply with <b>521 CMR 26.5, Width</b> so that a disabled person can enter the closet. The bottom track of the closet door must also be recessed with no more than 1/4 of an inch (1/4" = 6mm) change in finish material. For <i>Group 2 units</i> , when the interior depth of the closet is 24 inches (24" = 610mm) or less, it shall be open to the room to permit a person with a disability to reach all parts of the closet. See <b>Fig. 9b</b> .						
9.7	<b>SLEEPING ACCOMODATIONS FOR PERSONS WHO ARE DEAF OR HARD OF HEARING.</b> In addition to those units required to be <i>accessible</i> by <b>521 CMR 9.4, Group 2 Dwelling Units</b> , 2% of the total number of <i>dwelling units</i> in the complex or project, but not less than one shall comply with the following:		This provision is unique to 521 CMR.				
9.7.1	<i>Sleeping accommodations</i> for persons who are deaf or hard of hearing required by <b>521 CMR 9.7</b> shall comply with the following requirements for smoke/fire/safety alarms, visual signal devices, telephones, televisions, alarm clocks and climate controls.		This provision is unique to 521 CMR.				

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9.7.3	Visual Notification Devices shall be provided in <i>sleeping accommodations</i> to alert room occupants of incoming telephone calls and a door knock or doorbell. Visual notification devices shall not be connected to auxiliary visual alarm signal appliances.		This provision is unique to 521 CMR.				
9.7.4	Equivalent Facilitation: For rooms required under <b>521 CMR 9.7</b> , the operator of a <i>facility</i> may either permanently install the equipment required under <b>521 CMR 9.7</b> or may elect to install electrical outlets (including outlets connected to a <i>facility's</i> central alarm system) and telephone wiring in sleeping rooms and suites to enable persons with hearing impairments to utilize portable visual alarms and communication devices. For purposes of equivalent facilitation, such devices shall be provided by the operator of the <i>facility</i> during the tenancy of a person with a hearing impairment.		This provision is unique to 521 CMR.				
521 CMR 10.00:	<b>PUBLIC USE AND COMMON USE SPACES IN MULTIPLE DWELLINGS</b>						
10.1	<b>GENERAL</b> <i>The public use and common use spaces of multiple dwellings in existing buildings consisting of 12 or more units in a building, shall be accessible and shall comply with 521 CMR. Public and common use spaces are those spaces inside or outside a building that are used by residents and/or visitors. Public use and common use spaces shall include but not be limited to community facilities, meeting rooms restaurants, recreation spaces, health facilities, pools, public toilet rooms, laundry areas, trash areas, storage areas, mailboxes, walks, sidewalks, parking lots and garages, entrances, elevators, lobbies and foyers, as well as corridors and stairways leading to dwelling units.</i>		This provision is the introduction to those following and is included even though it appears to be less equivalent; because it is stated such that it implies that all public use and common use spaces of multiple dwellings in existing (prior to September 1, 1996) buildings, with 12 or more units, must be accessible and comply with 521 CMR;				
	<i>See 521 CMR Section 28 ELEVATORS</i>		This provision is more extensive than that in the FHA DM and ANSI standard.				
10.2	<b>ACCESSIBLE ROUTES</b> There shall be an <i>accessible route</i> at least 36 inches (36" = 914mm) wide connecting <i>accessible</i> parking, <i>accessible</i> entrances, <i>public</i> and <i>common use</i> spaces, and <i>dwelling units</i> . Wherever possible, the <i>accessible route</i> shall be the shortest possible route, <i>see 521 CMR 20.00: ACCESSIBLE ROUTE</i>		This provision, because of its reference to <b>521 CMR 20.00: ACCESSIBLE ROUTE</b> , is more extensive than the FHA DM & UFAS provisions.				
10.4	<b>DOORS</b> All doorways and openings located in <i>common use</i> and <i>public use</i> spaces and along <i>accessible routes</i> shall comply with <b>521 CMR 26.2, Revolving Doors</b> through <b>521 CMR 26.11, Door Hardware</b> .		This provision, because of its reference to <b>521 CMR 26.00: DOORS AND DOORWAYS</b> , is more extensive than the FHA DM & UFAS provisions.				
10.6	<b>ALARMS</b> Where a fire alarm is provided, it shall comply with <b>521 CMR 40.00: ALARMS</b> .		This provision is more extensive than that in the FHA DM and ANSI standard.				
10.8	<b>LAUNDRY FACILITIES</b> If laundry facilities are provided in <i>Multiple dwellings</i> , then equivalent, <i>accessible</i> laundry facilities shall be provided.		This provision is introductory to the following.				
10.8.2	At least one washing machine and at least one clothes dryer shall be front loading, shall have a side hinged door, and shall be located so that the door can be opened 180 degrees. <b>See Fig. 10a.</b>		This provision is more extensive than that in the FHA DM and ANSI standard.				

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10.9	<b>KITCHEN FACILITIES</b> Sinks, counters, and cooking facilities provided in <i>common use spaces</i> shall comply with <b>521 CMR 32.00: KITCHENS</b> .		Although a part of this provision appears to be less equivalent than the FHA DM and the ANSI standard; (sink depth requirement); this provision in other aspects is more extensive than that in the FHA DM and ANSI standard.				
521 CMR 42.00:	<b>GROUP 1 BATHROOMS</b>						
42.1	<b>GENERAL</b> In <i>Group 1 dwelling units</i> , (see <b>521 CMR 9.2, Applicability</b> ) <i>bathrooms</i> and <i>half bathrooms</i> shall comply with the following:		This provision is the introduction to those following.				
42.1.1	Number: If more than one <i>bathroom</i> is provided, whether a full bath or <i>half bath</i> , and one <i>bathroom</i> is a captive <i>bathroom</i> ( a <i>bathroom</i> only entered through a bedroom) then both must comply unless the captive <i>bathroom</i> has two entries, one from the <i>bedroom</i> and one from the corridor, then only the captive <i>bathroom</i> is required to comply. If two common <i>bathrooms</i> are provided, then only one full <i>bathroom</i> must comply. If two captive <i>bathrooms</i> are provided, then both must comply.		Although this provision appears to be less equivalent than the FHA DM it is unique to 521 CMR.  The FHA Design Manual requires that when covered dwelling units contain only Specification A bathrooms, that all bathrooms within the unit comply with requirements 3,4,5,6 and 7 of the FHA Guidelines.				
42.2	<b>CLEAR FLOOR SPACE</b> Shall be as defined in <b>521 CMR 6.4, Clear Floor or Ground Space for Wheelchairs</b> . <i>Clear floor space</i> shall be available at each fixture as shown below to enable users to reach fixture controls and to transfer out of a wheelchair. <i>When a bathroom is adapted, the clear floor space must be able to be made free of obstructions, other than those shown in the diagram. The clear floor space for one fixture may overlap the clear floor space for other fixtures. The clear floor space for the tub or the water closet is measured from the closest edge of that fixture. The clear floor space for the sink may extend a maximum of 19 inches (19" = 483mm) under the sink. Wing walls may not intrude on the minimum clear floor space.</i>		This provision appears to be less equivalent than the FHA DM; however, adaptability provisions are unique to 521 CMR.  The FHA Design Manual does not contain any adaptability provisions except for the removable base cabinet provision.				
42.4	<b>DOORS</b> Shall be capable of complying with <b>521 CMR 26.5, Width</b> through <b>521 CMR 26.11, Door Hardware</b> .		This provision, because of its reference to <b>521 CMR 26.00: DOORS AND DOORWAYS</b> , is more extensive than the FHA DM provisions.				
42.4.1	Operation: Doors may swing into the <i>bathroom</i> if the swing of the door does not impede <i>clear floor space</i> . <i>If the door impedes the clear floor space, the doors shall be capable of being adapted to swing out, fold or slide.</i>		This provision is less equivalent than the FHA DM, however, adaptability provisions are unique to 521 CMR.  Requirement 7 of the FHA Guidelines requires that bathrooms contain a clear floor space outside the swing of the bathroom door. It contains no adaptability provisions for bathroom doors and their swings.				
42.5	<b>WATER CLOSETS</b> Shall comply with the following;		This provision is the introduction to those following.				
42.5.1	<i>Clear Floor Space</i> : As defined in <b>521 CMR 42.2, Clear Floor Space</b> , shall be provided or shall be capable of being provided without <i>structural change</i> in at least one of two specific locations at the water closet. One shall be beside the water closet with its short edge parallel to the wall behind the water closet. The other shall be in front of the water closet with its long edge parallel to the wall behind the water closet.		The definition of clear floor space and how it is utilized in relation to toilets is unique to 521 CMR.  LCM cannot be absolutely certain that in all possible configurations the water closet CFS requirements in 521 CMR will be equivalent to one of the 3 water closet CFS configurations in the FHA Design Manual.				

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42.5.2	Location: a. When a water closet is located between a wall and a fixture, its centerline shall be 18 inches (18" = 457mm) from the wall. If the <i>clear floor space</i> is provided in front of the water closet, the centerline of the water closet shall be a minimum of 15 inches (15" = 381mm) from the closest edge of the fixture. See Fig. 42c. b. When a water closet is located between two fixtures, its centerline shall be 18 inches (18" = 457mm) from a bathing fixture and a minimum of 15 inches (15" = 381 mm) from other types of fixtures. See Fig. 42c.		Although the following 2 provisions appear to be less equivalent than the FHA DM; they are unique to 521 CMR.  Within the FHA Design Manual only a lavatory or a wing wall less than 24 inches long (not any fixture) is able to be within 15 inches of the water closet.  A water closet could be located between a tub and a shower. The 33 inches permitted in the 521 CMR requirement at left would be less than the 48" required for a water closet CFS in the FHA Design Manual.				
42.5.3	Wall reinforcement: Walls adjacent to and behind the water closet shall be capable of structurally supporting the future installation of grab bars from 32 to 38 inches (32" to 38" = 813mm to 965mm) above the floor. The back wall shall have reinforcement from the interior corner to a distance of six inches (6" = 152mm) beyond the widest part of the water closet. The side wall shall have reinforcement from the interior corner to a distance of six inches (6" = 152mm) beyond the front edge of the water closet, unless interrupted by a door or other fixture, then the reinforcement shall be installed as far as possible.  When the water closet is located between two fixtures, the wall reinforcement behind the water closet shall extend at least six inches (6" = 152mm) beyond the widest part of the water closet.		This provision is more extensive than that in the FHA DM.  This provision is more extensive than that in the FHA DM.				
42.6	<b>SINKS</b> At least one sink in a <i>bathroom</i> must meet the following:		This provision is the introduction to those following.				
42.6.1	Vanity Cabinets: If a cabinet is provided under a sink, it shall be capable of being removed without structural change.		This provision is more extensive than that in the FHA DM.				
42.6.2	Knee <i>Space</i> Width: The sink shall have or be capable of having a knee <i>space</i> of 30 inches (30" =762mm) in width.		This provision is more extensive than that in the FHA DM.				
42.6.3	Knee <i>Space</i> Depth: The front edge of the sink fixture, or the countertop in which a sink is located, shall be a minimum of 19 inches (19" = 482mm) from the back wall or shall be capable of being relocated to create a <i>space</i> of that depth under the sink.		This provision is more extensive than that in the FHA DM.				
42.6.4	Height: The sink shall be capable of being relocated without structural change.		This provision is more extensive than that in the FHA DM.  LCM doesn't understand how it is possible to achieve this result with standard plumbing industry assemblies.				
42.6.5	<i>Clear Floor Space</i> : Shall be provided at the sink, as defined in <b>521 CMR 42.2, Clear Floor Space</b> and shall be perpendicular to the face of the sink and may extend under the sink. See Fig. 42d.		This provision is more extensive than that in the FHA DM.				



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42.7.1	Bathtubs shall comply with the following:		This provision is the introduction to those following.				
	a. Size: Bathtubs shall be at least a nominal 60 inches (60" = 1524mm) long.		This provision is more extensive than that in the FHA DM.				
	b. <i>Clear Floor Space</i> : At the bathtub, as defined in <b>521 CMR 42.2</b> , <i>Clear Floor Space</i> shall be parallel to the face of the tub.		The statement at left seems to indicate that only a parallel approach/CFS to a tub is permitted. If this is the case, then this provision is more extensive than that in the FHA DM.				
	c. Wall Reinforcement: All tub walls shall be capable of structurally supporting the future installation of grab bars from six inches (6" = 152mm) above the tub rim to a height of 48 inches (48" = 1219mm) above the tub bottom and shall extend the length and width of the tub.		This provision is more extensive than that in the FHA DM.				
	d. Door Enclosure: Tracks for sliding doors or enclosures mounted on the rim of a bathtub must be capable of removal to provide a smooth tub rim for transfer.		This provision is more extensive than that in the FHA DM.				
42.7.2	Showers shall comply with the following:		This provision is the introduction to those following.				
	b. Minimum <i>Clear Floor Space</i> : At the shower, as defined in <b>521 CMR 42.2</b> , <i>Clear Floor Space</i> shall be located parallel to and centered on the shower stall opening.		The CFS as required for showers in the FHA Design Manual must be flush with the control wall. The 521 CMR regulation at left would permit the shower CFS to extend 6 inches beyond the control wall.  LCM believes that the FHA DM requirement is the more restrictive regulation, although this provision is unique to 521CMR. Therefore, for 521 CMR to be substantially equivalent to the FHA DM, LCM recommends that the statement at left be revised.				
	c. Wall Reinforcement: All shower walls shall be capable of structurally supporting the future installation of grab bars, seats, etc., from a height of six inches (6" = 152mm) to 48 inches (48" = 1219mm) above the floor and shall extend the full width and length of the shower stall. Grab bars shall not be located behind the seat.		This provision is more extensive than that in the FHA DM.				
	d. Door: The opening of the shower stall must be 32 inches (32" = 813mm) wide. If a shower door is provided, it shall be capable of swinging open 180 degrees or capable of being removed.		This provision is more extensive than that in the FHA DM.				
	e. Seat: If a wall mounted seat is provided, it shall be located on a wall adjacent to the opening. The seat shall be mounted with the edge as close as possible to the door opening to allow a safe transfer.		This provision is more extensive than that in the FHA DM.				
	f. Hardware Location: Mixing valves shall be mounted on the wall opposite the seat. The centerline of the shower controls shall be located between 38 inches and 48 inches (38" to 48" = 965mm to 1219mm).		This provision is more extensive than that in the FHA DM.				
	g. Where curbs are provided, they shall not exceed four inches (4' = 102mm) in height.		This provision is more extensive than that in the FHA DM.				
42.7.3	Soap Tray shall not have a hand hold feature unless it can support 250 lbs for five minutes. Soap dispensers, holders, etc., shall be located within the <i>zone of reach</i> from the seat.		This provision is more extensive than that in the FHA DM.				
42.7.4	Prefabricated Units: In prefabricated showers and tubs, structural reinforcement for grab bars must be in full contact with the surface of walls of the unit on which grab bars may be mounted as described in <b>521 CMR 42.7.1 (c)</b> and <b>521 CMR 42.7.2 (c)</b> .		This provision is more extensive than that in the FHA DM.				

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42.8	<b>OUTLETS AND CONTROLS</b> Shall comply with <b>521 CMR 39.00: CONTROLS.</b>		The FHA Guidelines require that, "Light switches, electrical outlets, thermostats and other environmental controls would meet section 100.205(c)(3)(ii) if operable parts are located no higher than 48 inches, and no lower than 15 inches, above the floor."  The 521 CMR requirements will permit a side approach with a maximum height of 54 inches which is similar to the ANSI 1986 requirement and less stringent. The 521 CMR requirements also pertain to communications system receptacles, which is more stringent.				
42.9	<b>ALARMS</b> Shall comply with <b>521 CMR 40.00: ALARMS.</b>		This provision is more extensive than that in the FHA DM.				
521 CMR 43.00:	<b>GROUP 1 KITCHENS</b>						
43.1	<b>GENERAL</b> In all <i>Group 1</i> Dwelling units, kitchens shall be designed <b>so that when a unit is adapted</b> a person in a wheelchair has access to the sink, cooking surface, refrigerator, and a food preparation surface and can turn around without having to leave the kitchen.		This provision is unique to 521 CMR. The FHA Design Manual does not contain any adaptability provisions except for the removable base cabinet provision.  For 521 CMR to be considered to be equivalent to the FHA DM, LCM recommends that the passage noted in red at left be considered for deletion.				
43.2.1	L-shaped kitchens shall have a minimum <i>clear floor space</i> of 48 inches by 48 inches (48" x 48" = 1219mm x 1219mm). <i>See Fig.43a.</i>		This provision is unique to 521 CMR.				
43.3	<b>SINKS</b> Shall comply with the following:		This provision is the introduction to those following.				
43.3.1	Sink cabinet: The base cabinet under the sink shall be capable of being removed to provide a knee space of 30 inches (30" = 762mm) in width.		This provision is more extensive than that in the FHA DM.				
43.3.2	Sink Depth: The sink bowl shall not exceed 6 1/2 inches ( 6 1/2" = 165mm) in depth. Where more than one bowl is provided, only one bowl must meet this requirement.		This provision is more extensive than that in the FHA DM.				
43.4	<b>COOKING UNITS</b> Shall comply with the following to ensure that both burners and ovens can be made functional and safe for a person in a wheelchair.		This provision is the introduction to those following.				
43.4.1	In-Counter cook tops: If a cook top is provided, its base cabinet shall be capable of being removed to provide future knee space the width of the cook top but not less than 30 inches (30" = 762mm) wide. Cook tops shall have controls located at the front or side of the unit.		This provision is more extensive than that in the FHA DM.				
43.4.2	Wall Ovens: If a wall oven is provided, the floor of the wall oven shall be located 30 inches (30" = 762mm) above the floor.		This provision is more extensive than that in the FHA DM.				
43.5	<b>WALL CABINETS</b> Walls shall be capable of structurally supporting wall cabinets at any location from 42 inches to 54 inches (42" to 54" = 1067mm to 1372mm) from the floor to the bottom of the inside of the cabinet.		This provision is more extensive than that in the FHA DM.				
43.6	<b>BASE CABINETS</b> Each base cabinet shall be capable of being removed to provide knee space for persons using wheelchairs.		This provision is more extensive than that in the FHA DM.				



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43.7	<b>REFRIGERATORS</b> <i>Space</i> shall be provided so that the refrigerator can be located so that its doors can be opened to 180 degrees. If doors cannot be opened to 180 degrees, a minimum of 30 inches (30" = 762mm) of counter <i>space</i> next to the refrigerator shall be provided.		This provision is more extensive than that in the FHA DM.				
43.7.1	Where refrigerators are provided with less than nine cubic feet of capacity, <b>521 CMR 43.7, Refrigerators</b> shall not apply.		This provision is more extensive than that in the FHA DM.				
43.8	<b>OUTLETS AND CONTROLS</b> Shall comply with <b>521 CMR 39.00: CONTROLS.</b>		This provision is more extensive than that in the FHA DM.				
43.9	<b>ALARMS</b> Shall comply with <b>521 CMR 40.00: ALARMS.</b>		This provision is more extensive than that in the FHA DM.				
521 CMR 44.00:	<b>GROUP 2 BATHROOMS</b>						
44.1	<b>GENERAL</b> In all <i>dwelling units</i> required to be <i>Group 2A</i> units, (see <b>521 CMR 9.4 Group 2A Dwelling Units</b> ) all <i>bathrooms</i> and <i>half bathrooms</i> shall comply with 521 CMR 44, exclusive of the bold and italicized text which refer to <i>Group 2B</i> units. In <i>facilities</i> required to have <i>Group 2B bathrooms</i> , such as hotels, motels, inns, and health facilities, the <i>bathroom</i> shall comply with 521 CMR including the bold and italicized text which refer to <i>Group 2B</i> units.		This provision is more extensive than that in the UFAS Standards because it refers to half bathrooms.				
44.3	<b>DOORS</b> Shall comply with <b>521 CMR 26.5, Width</b> through <b>521 CMR 26.11, Door Hardware.</b> Doors shall swing out, fold or slide. Doors may swing into the <i>bathroom</i> only if the door does not impede the wheelchair turning <i>space</i> .		This provision is more extensive than that in the UFAS Standards.				
44.4	<b>WATER CLOSETS</b> Shall comply with the following:						
44.4.1	Location: The centerline of the water closet shall be located 18 inches (18" = 457mm) from the nearest side wall and at least 42 inches (42" = 1067mm) from the farthest side wall or the closest edge of an adjacent fixture. There shall be 42 inches (42" = 1067mm) clear from the front edge of the water closet to the nearest wall or fixture.		This provision is more extensive than that in the UFAS Standards, due to the clearance required from the front edge of the water closet.				
44.4.2	<b><i>In Group 2B bathrooms, the water closet seat shall be 17 inches to 19 inches (17" to 19" = 470mm to 483mm) above the floor.</i></b>		This provision is more restrictive than that in the UFAS Standards.				
44.4.3	Operation: The flush activator shall be operable with a closed fist and shall not require grasping, pinching, or twisting of the wrist. Water closet flush control shall be located on the <i>accessible</i> side of the water closet.		This provision is more extensive than that in the UFAS Standards.				

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44.4.4	Wall Reinforcement: Walls adjacent to and behind the water closet shall be capable of structurally supporting the future installation of grab bars from 32 to 38 inches (32" to 38" = 813mm to 965mm) above the floor. The back wall shall have reinforcement from the interior corner to a distance of six inches (6" = 152mm) beyond the widest part of the water closet. <b>The side wall shall have reinforcement from the interior corner to a distance of six inches (6" = 152mm) beyond the front edge of the water closet, unless interrupted by a door or other fixture, then the reinforcement shall be installed as far as possible.</b>		The 521 CMR requirement for wall reinforcing at the side wall of the water closet seems to be less equivalent than that required by UFAS.  For 521 CMR to be considered to be substantially equivalent to UFAS, LCM recommends that the provision at left be revised and restated.  Although the 521 CMR requirement for side wall reinforcing is less, the requirement for back wall reinforcing is more extensive than that in the UFAS Standard.				
	<b><i>In Group 2B bathrooms, two grab bars, one 42 inches (42" = 1067mm) long and one 36 inches (36" = 914mm) long shall be installed at the water closet between 33 inches (33" = 838mm) and 36 inches (36" = 914mm) above and parallel to the floor. The 42 inch (42" = 1067mm) grab bar shall be mounted on the side wall closest to the water closet, no more than 12 inches (12" = 305mm) from the back wall. The 36 inch (36" = 914mm) grab bar shall be mounted on the back wall six inches (6" = 152mm) from the interior corner and may be located up to three inches (3" = 76mm) above the top of the water closet tank.</i></b>		This provision is more extensive than that in the UFAS Standards.				
44.4.5	Toilet Paper Dispensers: The toilet paper dispensers shall be located on the side wall closest to the water closet. The centerline of the roll shall be set at a minimum height of 19 inches (19" = 483mm) above the floor. Dispensers that control delivery or that do not permit continuous paper flow are not allowed.		This provision is more extensive than that in the UFAS Standards.				
44.5	<b>SINKS</b> Shall comply with the following:		This provision is the introduction to those following.				
44.5.1	<b>Adaptability:</b> The sink, its plumbing, and the walls adjacent to the sink shall be designed so that the sink can be relocated vertically and so that the sink installation meets the definition of <i>structural strength</i> .		This provision is more extensive than that in the UFAS Standards.				
44.5.2	Vanity Cabinets: Where a cabinet or vanity is provided under a sink, it shall be removable or replaceable to provide a knee space that complies with <b>521 CMR 44.5.4</b> and <b>44.5.5</b> .  <b><i>In Group 2B bathrooms, base cabinets can be used only if knee space is also provided.</i></b>		This provision is more extensive than that in the UFAS Standards.  This provision is more extensive than that in the UFAS Standards.				
44.5.3	Height: The sink shall be capable of being relocated vertically, in the future, without requiring <i>structural change</i> to the walls of the <i>bathroom</i> . A sink with knee space shall be installed or be capable of being installed, with at least 27 inches (27" = 686mm) of clearance from the floor to the bottom of the sink or counter apron.		This provision is more extensive than that in the FHA DM.  LCM doesn't understand how it is possible to achieve this result with standard plumbing industry assemblies.				
	<b><i>In Group 2B bathrooms, the sink rim or counter surface shall be installed at a height of 34 inches ( 34" = 864mm) from the floor and there shall be at least 29 inches (29" = 737 mm) of clearance from the floor to the bottom of the sink or counter apron.</i></b>		This provision is more extensive than that in the UFAS Standards.				

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44.5.5	Knee space depth: The front edge of the sink or the front edge of the countertop in which a sink is located, shall be a minimum of 22 inches (22" = 559mm) from the back wall or be capable of being relocated to create a space 22 inches (22" = 559mm) deep from the back wall to the front edge of the sink.		This provision is more extensive than that in the UFAS Standards.				
	<b><i>In Group 2B bathrooms, the front edge of the sink or the front edge of the countertop in which a sink is located, shall be a minimum of 22 inches ( 22' = 559mm) from the back wall.</i></b>		This provision is more extensive than that in the UFAS Standards.				
44.5.6	Piping: All piping under the sink shall be offset to the back wall so that persons in wheelchairs have maximum possible knee space.		This provision is more extensive than that in the UFAS Standards.				
	<b><i>In Group 2B bathrooms, the hot water and waste pipes under the sink shall be offset to the back wall and insulated.</i></b>		This provision is more extensive than that in the UFAS Standards.				
44.6	<b>BATHING FIXTURES</b> If more than one bathing fixture is provided in a <i>dwelling unit</i> , one shall be a shower unit complying with <b>521 CMR 44.6.2</b> . If a jacuzzi or whirlpool tub is the only bathing <i>facility</i> , it must meet the requirements of <b>521 CMR 44.6.1</b> . where one bathing fixture is provided, it may be either a shower unit or a bathtub.		This provision is more extensive than that in the UFAS Standards.				
44.6.1	Bathtubs shall comply with the following:						
	a. Fixtures: Bathtubs shall be a minimum, nominal dimension of 60 inches (60" = 1524mm) long. The rim shall be between 16 and 18 inches (16" and 18" = 406mm and 457mm) above the floor.		This provision is more extensive than that in the UFAS Standards.				
	b. Minimum floor area: A clear floor area 30 inches (30" = 762mm) wide and at least 72 inches (72" = 1829mm) long shall be provided adjacent to the tub. <b>At least 12 inches (12" = 305mm) of the clear floor area length shall extend beyond the drain end of the tub if the tub is 60 inches (60" = 1524mm) long.</b>		The parallel CFS at the tub in both the FHA Design Manual and the UFAS standard is required to be flush with the control wall at the foot of the tub. This provision is therefore more extensive than that in the UFAS Standards.  For 521 CMR to be considered to be substantially equivalent to the FHA DM and UFAS, LCM recommends that the passage at left in red be deleted.				
	c. Wall reinforcement: All walls of the tub shall have structural reinforcement to allow the future installation of grab bars at any location from the rim of the tub to a height of 60 inches (60" = 1524mm) above the tub bottom.		This provision is more extensive than that in the UFAS Standards.				
	<b><i>In Group 2B bathrooms, two grab bars, 48 inches (48" = 1219 mm) long, shall be installed centered on the long wall and parallel to the floor . One shall be mounted at a height of 21 inches (21" = 533mm) and one at a height of 36 inches (36" = 914mm) above the floor.</i></b>		This provision is more extensive than that in the UFAS Standards.				
	d. Tub material: Plastic or fiberglass tubs shall be structurally capable of accepting the installation of a lift that clamps onto the rim.		This provision is more extensive than that in the UFAS Standards.				
	<b><i>f. Hardware location: Faucets and mixing valves shall be centered horizontally on the long wall of the tub, 28 inches (28" = 711mm) above the floor. The tub spout shall be located on the end wall above the drain and a shower head may be located on either the end wall or long wall. If hardware is installed in locations other than those specified, piping shall also be provided and capped in the wall.</i></b>		This provision is unique to 521 CMR. Bathtub faucets and controls within the UFAS standard are required to be located on the control wall at the foot of the tub.  For 521 CMR to be considered to be substantially equivalent to UFAS, LCM recommends that the provision at left be revised and restated.				

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	g. Hand-held showers: A hand-held shower head with a flow regulator, attached to a 60 inch (60" = 1524mm) long flexible hose and an adjustable mounting bar, shall be provided or be capable of being installed on the long wall of the tub.		This provision is more extensive than that in the UFAS Standards.				
	<b><i>In Group 2B bathrooms, a hand held shower head attached to a 60 inch (60" = 1524mm) long flexible hose and an adjustable mounting bar, 36 inches (36" = 914mm) long, shall be installed on the long wall of the tub. The bottom of the mounting bar shall be located at 40 inches (40" = 1016mm) above the tub bottom.</i></b>		This provision is more extensive than that in the UFAS Standards.				
	h. Door enclosures: Tracks for sliding doors or enclosures shall not be mounted on the rim of the bathtub unless they can be removed.		This provision is more extensive than that in the UFAS Standards.				
	<b><i>In Group 2B bathrooms, sliding doors shall not be used.</i></b>		This provision is more extensive than that in the UFAS Standards.				
	i. Soap Trays: Soap trays shall not have a hand-hold feature and shall be installed or be capable of being relocated with a centerline no higher than 48 inches (48" = 1219 mm) above the floor.		This provision is more extensive than that in the UFAS Standards.				
	<b><i>In Group 2B bathrooms, soap trays shall be installed no higher than 48 inches (48" = 1219mm) above the floor to the centerline of the soap tray.</i></b>		This provision is more extensive than that in the UFAS Standards.				
44.6.2	Showers shall comply with the following:						
	a. Fixture size: The shower stall shall be the wheel-in type with a minimum, nominal size of 30 inches by 60 inches (30" x 60" = 762mm x 1524 mm). The long side shall be fully open. In the alternative, the stall may be 36 by 60 inches (36" x 60" = 914mm x 1524mm) with a 24 inch (24" = 610mm) wing wall on the 60 inch (60" = 1524mm) side. The slope of the shower floor shall not exceed 2%. The curb shall have no more than a 1/2 inch (1/2" = 13mm) maximum lip, beveled at a slope no steeper than 1:2. See <b>Fig. 44b</b> and <b>44c</b> .		This provision is more extensive than that in the UFAS Standards.				
	b. Wall reinforcement: All walls of the shower shall have structural reinforcement to allow the future installation of a seat and grab bars, at any location from the floor to a height of 60 inches (60" = 1524) above the floor.		This provision is more extensive than that in the UFAS Standards.				
	c. Seat: A hinged, padded shower seat shall be installed or be capable of being installed on a wall adjacent to the opening. The seat shall be mounted with the edge as close as possible to the opening to provide a safe transfer. The top of the seat shall be 17 to 19 inches (17" to 19" = 432mm to 483mm) above the shower floor.		This provision is more extensive than that in the UFAS Standards.				
	<b><i>In Group 2B bathrooms, a hinged, padded shower seat shall be installed and mounted as specified above. The seat shall be a minimum of 16 inches (16" = 406mm) deep by 24 inches (24" = 610mm) long. Grab bars shall not be located behind the seat.</i></b>		This provision is more extensive than that in the UFAS Standards.				
	<b>e. Hardware location:</b> Mixing valves shall be centered horizontally on the long wall. The centerline of the control shall be mounted 38 inches to 48 inches (38" to 48" = 965mm to 1219mm) above the shower floor.		<p>This provision is unique to 521 CMR. Shower faucets and controls within the UFAS standard are required to be located on the control wall at the foot of the shower.</p> <p>For 521 CMR to be considered to be substantially equivalent to UFAS, LCM recommends that the provision at left be revised and restated.</p>				

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	f. Hand held shower: A hand held shower head attached to a 60 inch (60" = 1524mm) long flexible hose and an adjustable mounting bar shall be provided or be capable of being installed in the shower.		This provision is more extensive than that in the UFAS Standards.				
	<b><i>In Group 2B bathrooms, a hand held shower head attached to a 60 inch (60" = 1524mm) long flexible hose and an adjustable mounting bar, 36 inches (36" = 914mm) long shall be installed in the shower on the long wall adjacent to the seat. The bottom of the mounting bar shall be located at 40 inches (40" = 1016mm) above the shower floor.</i></b>		This provision is more extensive than that in the UFAS Standards.				
	g. Soap tray: Shall not have a hand-hold feature unless it can support 250lbs for five minutes. If provided, it shall be installed or be capable of being relocated with a centerline no higher than 48 inches (48" = 1219mm) above the shower floor.		This provision is more extensive than that in the UFAS Standards.				
	<b><i>In Group 2B bathrooms, soap trays shall be installed no higher than 48 inches (48" = 1219mm) above the floor to the centerline of the soap tray.</i></b>		This provision is more extensive than that in the UFAS Standards.				
44.7	<b>GRAB BARS</b> Grab bars shall be non-rusting and slip resistant, shall be between 1 1/4 inches and 1 1/2 inches (1 1/4" to 1 1/2" = 32mm to 38mm) in outside diameter, and shall be located 1 1/2 inches (1 1/2" = 38mm) clear from the wall. Grab bars shall also meet the definition of <i>structural strength</i> .		This provision is more extensive than that in the UFAS Standards.				
44.8	<b>MIRRORS</b> Shall comply with the following:						
44.8.2	The top of the mirror shall be at least 72 inches (72" = 1829mm) above the floor.		This provision is more extensive than that in the UFAS Standards.				
	<b><i>In Group 2B bathrooms, a mirror shall be installed with the bottom no more than 40 inches (40" = 1016mm) above the floor and the top no less than 72 inches ( 72" = 1829mm) above the floor.</i></b>		This provision is more extensive than that in the UFAS Standards.				
44.9	<b>MEDICINE CABINETS</b> If medicine cabinets are provided, one medicine cabinet shall be installed or be capable of being relocated so that the inside bottom surface is at a height of 40 inches (40" = 1016mm) above the floor. If the medicine cabinet is also the only mirror, the bottom of the mirror shall be no higher than 40 inches (40" = 1016mm) above the floor.		This provision is more extensive than that in the UFAS Standards.				
	<b><i>In Group 2B bathrooms, the medicine cabinet shall be installed with its inside bottom surface at a height of 40 inches (40" = 1016mm) above the floor.</i></b>		This provision is more extensive than that in the UFAS Standards.				
44.10	<b>OUTLETS AND CONTROLS</b> Shall comply with <b>521 CMR 39.00: CONTROLS.</b>		This provision is more extensive than that in the UFAS Standards.				
44.11	<b>ALARMS</b> Shall comply with <b>521 CMR 40.00: ALARMS.</b>		This provision is more extensive than that in the UFAS Standards.				

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521 CMR 45.00:	<b>GROUP 2 KITCHENS</b>						
45.1	<b>GENERAL</b> In all dwellings required to be <i>Group 2A</i> units (see <b>521 CMR 9.4 Group 2 Dwelling Units</b> ) all kitchens shall comply with 521 CMR 45, exclusive of the bold and italicized text which refers to <i>Group 2B</i> units. In <i>facilities</i> required to provide <i>Group 2B</i> units, such as hotels, motels, and inns, the kitchen shall comply with 521 CMR 45 plus the bold and italicized text that refers to <i>Group 2B</i> units.		This provision is more extensive than that in the UFAS Standards.				
45.3	<b>WHEELCHAIR TURNING SPACE</b> Shall comply with <b>521 CMR 6.3, Wheelchair Turning Space</b> , to permit a person using a wheelchair to turn around without coming into contact with any fixtures. In addition, when a sink and a cook top are located 15 inches (or less) (15" = 381mm) apart, the counter shall provide or shall be capable of providing continuous <i>clear</i> knee space at least 29 inches (29" = 737mm) in height. See <b>Fig. 45a</b> .		This provision is more extensive than that in the UFAS Standards.				
45.4	<b>SINKS</b> Shall comply with the following:		This provision is the introduction to those following.				
45.4.1	Sink cabinet: If a base cabinet is provided under the sink, it shall be removable to provide a knee space that complies with <b>521 CMR 45.4.2</b> and <b>45.4.3</b> .		This provision is more extensive than that in the UFAS Standards.				
45.4.3	Height: The sink shall be capable of being relocated vertically in the future, without structural change to the walls of the kitchen.		This provision is more extensive than that in the UFAS Standards.				
45.4.4	Countertop: A counter space at least 15 inches (15" =381mm) wide shall be provided on one side of the sink, at the same height as the sink. This may overlap with one of the 15 inch (15" = 381mm) spaces required in <b>521 CMR 45.5.4</b> .		This provision is more extensive than that in the UFAS Standards.				
45.4.5	Sink depth: Sink bowls shall not exceed 6 1/2 inches (6 1/2" = 165mm) in depth and shall have drains offset to the rear.		This provision is more extensive than that in the UFAS Standards.				
45.4.6	Piping: Water pipes and drain traps shall be located as close to the rear wall of the knee space and as high off the floor as possible to provide maximum knee space. If there is no base cabinet under the sink, pipes and traps shall be insulated or covered.		This provision is more extensive than that in the UFAS Standards.				
45.4.7	Disposals: If a garbage disposal has a remote switch, it shall be located on the front face (apron) of the counter located to the left or right of the sink but not in front of the sink.		This provision is more extensive than that in the UFAS Standards.				
45.4.8	Sink Hardware: Faucets shall be operated by a single lever. A spray hose shall be provided or a knockout provided on the sink for the future installation of a spray hose.		This provision is more extensive than that in the UFAS Standards.				
45.5	<b>COOKTOPS</b> Standard ranges shall not be the only cooking surface. Cook tops shall be provided and shall comply with the following:		This provision is more extensive than that in the UFAS Standards.				
45.5.1	Base cabinets: If a base cabinet is provided under the cook top, it shall be removable to provide knee space that complies with <b>521 CMR 45.5.2</b> and <b>45.5.3</b> .		This provision is more extensive than that in the UFAS Standards.				
	<b><i>In Group 2B units, base cabinets shall not be installed unless knee space can be provided.</i></b>						

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45.5.2	Knee space: A <i>clear</i> knee space shall be provided or be capable of being provided under the cooktop, 19 inches (19" = 482mm) deep and at least 30 inches (30" = 762mm) wide.  <i>In Group 2B units, knee space shall be provided.</i>		This provision is more extensive than that in the UFAS Standards.				
45.5.3	Height: The cook top shall be capable of being relocated vertically in the future, without <i>structural change</i> to the walls of the kitchen.  <i>In Group 2B units, the kitchen cook top shall be located so that there is 29 inches (29" = 737mm) from the floor to the underside of the cook top.</i>		This provision is more extensive than that in the UFAS Standards.				
45.5.4	Countertop: A counter space at least 15 inches (15" = 381mm) wide shall be provided on one side of the cook top, at the same height as the cook top. This may overlap with one of the 15 inch (15" = 381mm) <i>spaces</i> required in <b>521 CMR 45.4.4</b> .		This provision is more extensive than that in the UFAS Standards.				
45.5.5	Controls: Cook top controls shall be located at the front or side of the appliance. Exhaust hood: if the controls for a hood are located higher than 54 inches (54" = 1372mm) above the floor, a switch shall be provided at the front face (apron) of counter.		This provision is more extensive than that in the UFAS Standards.				
45.6	<b>Ovens</b> All microwave ovens, if built-in, and at least one conventional oven shall comply with the following:		This provision is the introduction to those following.				
45.6.1	Height: The floor of the oven shall be 30 inches (30" = 762mm) above the floor.		This provision is more extensive than that in the UFAS Standards.				
45.6.4	Where a bottom-hinged oven door is provided, a retractable "bread board" type shelf shall be provided in the counter immediately adjacent to the oven door. Where a side-hinged oven is provided, the retractable "bread board" type shelf shall be provided directly under the oven.		This provision is more extensive than that in the UFAS Standards.				
45.7	<b>WALL CABINETS</b> Walls shall be capable of structurally supporting wall cabinets so that the inside bottom surface of the cabinet is capable of being located between 42 inches (42" = 1067mm) and 54 inches ( 54" = 1372mm) above the floor.  <i>In Group 2B units, the wall cabinets shall be mounted so that the inside bottom surface of the cabinet is no higher than 48 inches (48" = 1219mm) from the floor.</i>		This provision is more extensive than that in the UFAS Standards.				
45.8	<b>BASE CABINETS</b> Shall comply with the following:		This provision is the introduction to those following.				
45.8.1	Each cabinet shall be capable of being removed to provide <i>clear</i> knee space for persons using wheelchairs.		This provision is more extensive than that in the UFAS Standards.				
45.8.2	Corners: Cabinets located at the inside corner of an L-shaped counter shall have or be capable of providing a built-in lazy susan.		This provision is more extensive than that in the UFAS Standards.				
45.8.3	Drawers: At least one base cabinet shall provide a drawer or drawers.		This provision is more extensive than that in the UFAS Standards.				
45.10	<b>REFRIGERATORS</b> When the refrigerator is provided with the unit, it may be combination refrigerator-freezers with two doors side by side, or may be two door freezer-above-the-refrigerator units, provided the floor of such freezer is no higher than 44 inches (44" = 1118mm) above the floor, and shall be self-defrosting.		This provision is more extensive than that in the UFAS Standards.				

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45.10.1	Location: The refrigerator shall be located so that its doors are capable of being opened 180 degrees and so that it meets minimum <i>clear floor space</i> and <i>zone of reach</i> requirements in <b>521 CMR 6.3, Wheelchair Turning Space, 521 CMR 6.5, Forward Reach</b> and <b>521 CMR 6.6, Side Reach</b> .		This provision is more extensive than that in the UFAS Standards.				
45.10.2	Counter space: A counter <i>space</i> at least 15 inches (15" = 381mm) wide shall be provided on one side of the refrigerator. This may overlap with one of the 15 inch (15" = 381mm) required in <b>521 CMR 45.4.4</b> or <b>45.5.4</b> .		This provision is more extensive than that in the UFAS Standards.				
45.11	<b>OUTLETS AND CONTROLS</b> Shall comply with the applicable parts of <b>521 CMR 39.00: CONTROLS</b> .		This provision is more extensive than that in the UFAS Standards.				
45.12	<b>ALARMS</b> Shall comply with the applicable parts of <b>521 CMR 40.00: ALARMS</b> .		This provision is more extensive than that in the UFAS Standards.				
521 CMR 46.00:	<b>GROUP 1 BEDROOMS</b>						
46.1	<b>BEDROOMS IN GROUP 1 UNITS</b> <i>Group 1</i> units shall provide or be capable of providing, wheelchair turning <i>space</i> as defined in <b>521 CMR 6.3, Wheelchair Turning Space</b> , <i>clear</i> of the door swing, at one side of the bed in the primary bedroom (based on a full size bed). Where more than one bedroom is provided, an additional bedroom shall also provide or be capable of providing wheelchair turning space (based on one twin size bed).		This provision is more extensive than that in the FHA DM.				
46.2	<b>DOORS</b> Doors to all bedrooms required to comply under <b>521 CMR 46.1</b> , shall comply with <b>521 CMR 26.00: DOORS AND DOORWAYS</b> .		This provision is more extensive than that in the FHA DM.				
46.3	<b>CLOSETS</b> All closets in bedrooms required to be <i>accessible</i> shall comply with <b>521 CMR 9.5.8, Closets</b> .		This provision is more extensive than that in the FHA DM.				
46.4	<b>ELECTRICAL OUTLETS AND CONTROLS</b> Shall comply with <b>521 CMR 39.00: CONTROLS</b> .		This provision is more extensive than that in the FHA DM.				
46.5	<b>ALARMS</b> Shall comply with <b>521 CMR 40.00: ALARMS</b> .		This provision is more extensive than that in the FHA DM.				
521 CMR 47.00:	<b>GROUP 2 BEDROOMS</b>						
47.1	<b>BEDROOMS IN GROUP 2 UNITS</b> <i>Group 2A</i> units shall provide or be capable of providing, wheelchair turning <i>space</i> in compliance with <b>521 CMR 6.3, Wheelchair Turning Space</b> . Said wheelchair turning space shall be or capable of being <i>clear</i> of the door swing and located at one side of the bed in the primary bedroom (based on a full size bed). Where more than one bedroom is provided, an additional bedroom shall also provide or be capable of providing such wheelchair turning <i>space</i> (based on one twin size bed).  <i>In Group 2B units, the bedrooms shall provide wheelchair turning space in compliance with 521 CMR 6.3, Wheelchair Turning Space. Said wheelchair turning space shall be provided clear of the door swing and located at one side of the bed in the primary bedroom (based on a full size bed). Where more than one bedroom is provided, an additional bedroom shall also provide such wheelchair turning space (based on one twin size bed).</i>		This provision is more extensive than that in the UFAS Standards.				
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47.3	<b>CLOSETS</b> All closets in bedrooms required to be <i>accessible</i> shall comply with <b>521 CMR 9.5.9[sic 8], Closets.</b>		This provision is more extensive than that in the UFAS Standards.				
47.4	<b>ELECTRICAL OUTLETS AND CONTROLS</b> Shall comply with <b>521 CMR 39.00: CONTROLS.</b>		This provision is more extensive than that in the UFAS Standards.				
47.5	<b>ALARMS</b> Shall comply with <b>521 CMR 40.00: ALARMS.</b>		This provision is more extensive than that in the UFAS Standards.				