Inclusive Design Standards

The Kelsey in partnership with ***Mikiten Architecture***
and the ***Inclusive Design Council***

First Edition

Table of Contents

1 Introduction

Background 6
Goals 8

2 Approach

Defining the Elements 12
Design Categories 13
Impact Areas 14
Additional Benefits 15
Process 16

3 Implementation

Scoring Approach 19
Full Certification 21
Exemplary Badges 22
Focused Certifications 23
Self-Certification 24

4 Elements

Overview 26
Element Detail Sheet 27
Elements Index by Design Category 28
Elements Index by Impact Area 41
Element Details - Design Process 71
Element Details - Site 84
Element Details - Building Components 146
Element Details - Interior Spaces 190
Element Details - Dwelling Units 235
Element Details - Operations & Amenities 288
Conclusion 313

5 Sources and Partners

Overview 315
References 316
Designer Workshop Participants 318
Inclusive Design Council 320

6 Appendix

Terms of Use 326
Overview of Relevant Accessibility Codes 330

1

Introduction

- Background
- Goals

Disabled advocates changed the way the United States thinks about access and opportunity. Their advocacy led to the Fair Housing Act (1968), the Americans with Disabilities Act (ADA) (1990) and Olmstead decision in 1999. Photo of group in Los Angeles, California, by Tom Olin.

Background

26% of people have a disability, yet it's estimated that less than 6% of the national housing supply is designed to be accessible. As housing communities are created, they don't often meet the diverse accessibility and inclusion needs of people with disabilities. While basic code and compliance measures require specific features, no holistic set of guidelines and standards define an implementable, progressive approach to design truly accessible and inclusive housing communities. Equipping designers, builders, and developers with a set of standards and a new framework for accessibility-forward design can drastically improve housing quality and housing options for all people.

Accessible design standards first appeared in October of 1961 in a publication by the American Standards Association with the purpose "to make all buildings and facilities used by the public accessible to, and functional for, the physically handicapped." In 1968, with the Architectural Barriers Act's passage, the federal government identified specific accessibility requirements to receive federal funding. Federal laws like the Civil Rights Act of 1964 and the Americans with Disabilities Act of 1990 affirmed equal access to accommodations and spaces. The dominant impacts of the ADA's accessibility prioritized public facilities such as parks, recreation centers, schools, and government buildings.

For the most part, accessibility in multifamily housings is driven by a baseline of federal, state and local codes, layered with requirements from funding sources. This baseline can vary greatly across geographies and project type, construction date, and size. They often emphasize physical access, with some addressing sensory related access needs, but do not have a 'cross-disability' approach to support the diverse needs of those with disabilities. And, in all of these cases, code compliance is too often seen as the baseline requirement and as a risk the design team must mitigate by 'checking the box' rather than a mission-oriented design choice to benefit the people with disabilities who will eventually use or visit the spaces being created.

As a complement to existing code, the goal of the Inclusive Design Standards is to define a set of guidelines for the diverse community of people with disabilities that is applicable and aspirational, creating implementable tools to be used for multifamily housing of all sizes and locations while serving as a springboard for housing success and increased creativity in inclusive building design. These design standards are a guide, a philosophy, and a tool for advancing the field.

The Inclusive Design Standards are purposefully aspirational. With the rich history of disability activism and accessibility advances, there is a clear arc of continued evolution and pushing past what was previously defined as possible or attainable. These design standards are no different; rooted in what is implementable today, the aim is to drive towards a future where people have full access in places with inclusion as the norm.

Goals

The Inclusive Design Standards define multifamily housing elements throughout the development process and address everything from the design approach to physical spaces, to mobility and reach to healthy materials selection, to amenities, outdoor spaces, on-site staffing, and resident supports. A cross-disability approach provides elements that are specific to individualized access needs and others that benefit a diversity of disabilities. The **elements** were assessed on intersectional benefits alongside affordability options, considerations for residents, racial equity, sustainability, and a better resident experience. The below goals were embedded throughout the creation of the standards.

Cross Disability

Support access and inclusion for the broad and diverse needs of people with disabilities.

The first guidelines for accessibility in design only centered on physical and mobility access; subsequent standards have included design for blind, deaf, and cognitive disabilities. In recent years housing organizations have published design guidelines for specific types of accessibility — people with specific needs such as those with autism and with mental health disabilities, as well as for healthcare and wellness settings, deaf space, and beyond. The difference in these design standards is its intention to maintain cross-disability accessibility — to address multiple disability access needs. The elements and scoring support projects to meet a threshold for cross-disability access and provide elements where design teams can expand accessibility focused on specific impact areas and access needs. A key feature of cross-disability design is to recognize that one size does not fit all, and to consciously discuss and pinpoint when access needs may not be met, such as why the access needs could not be fully met for certain individuals. At times, there may be conflicting access needs that should be acknowledged and addressed where possible.

Abstract illustration: disability is part of human diversity.

Multidimensional

Address the many elements of housing development, design, and operations that impact accessibility and inclusion.

Often accessibility discussions are limited to physical spaces — only considered once it's too late — in certain moments within the design process or among certain project team members. Design and development teams must consider strategies at all phases of the project to support accessibility and inclusion that accommodates more people. Members of the team must recognize and address multiple dimensions of a housing community's needs, understanding conflicts and creating solutions that address a resident's access needs. Development teams can use them to direct their designers and engineers on project access targets and goals. Architects can use them in the design development and value engineering processes. Funders can set funding requirements for projects to meet threshold scoring. Cities can direct new affordable housing developments to utilize them in their communities. Advocates can drive policy to advance access with these as a guide. Property managers can create operations strategies that support more inclusion and equity for their residents. The Inclusive Design Standards aim to anchor access and inclusion as fundamental, throughout housing design and operations; and by all members of a team or community.

Implementable and Expandable

Provide standards that can be clearly and swiftly adopted into projects and policies while evolving and expanding over time.

These design standards are meant to be immediately usable by project development teams, including funders, designers, project managers, city officials, community members, engineers, and owners. Some people will come to these standards with a mission-oriented approach to inclusion and access, and others will be thinking about these issues for the first time beyond basic code requirements. The Inclusive Design Standards are simple, digestible, and recognize that these design goals addressing access and inclusion are complex and evolving. There will be opportunities for feedback and refinement of these standards over time as projects implement them and residents experience their effects.

Value Creation

Disability-forward design supports better, more efficient, equitable, building development.

In addition to the explicit goals outlined above, the standards are developed with an eye towards value creation for the communities they inform and the ultimate future residents of those communities. Too often accessibility is seen as a risk projects face, by not meeting code, or risking lawsuits around compliance. Modifying units are costly for owners and managers, and burdensome for residents. Needless to say, institutions and hospitals, where many people are stuck because of the lack of accessible community living options, are always more costly and less desired. Embedding access and inclusion as a fundamental design strategy is an opportunity for value creation in a resident-centered approach. It mitigates the risk of needing to adapt or modify homes in the future, creates more cost-effective outcomes, and incorporates community-based housing for people with disabilities. It also pushes innovation, creativity, and planning to the forefront of design. Ultimately, disability-forward design creates better homes and opportunities for all people.

2 Approach

- Defining the Elements
- Design Categories
- Impact Areas
- Additional Benefits
- Process

The Kelsey Civic Center Interior Courtyard, San Francisco, CA

Defining the Elements

The creation of the Inclusive Design Standards began with defining key terms and element categories, researching existing standards and design strategies, soliciting expert and lived-experience feedback and compiling the standards into a usable format. The entire process broke down design choices, development processes, and operation strategies into elements. **Elements** were then categorized by Design Categories, Impact Areas, and Additional Benefits.

Design Categories

Choices throughout the development, design, and operations process impact access and inclusion. The area or phase of the process in the Inclusive Design Standards is defined as a Design Category. Outlined below, Design Categories help outline when in the process an element can be implemented, and what member or part of the development or design team should own that elements implementation. Project scoring requires implementation of elements across all Design Categories.

- **Design Process:** Elements that the project team will utilize to support comprehensive access and inclusion goals for residents; everything from building the team to community outreach-strategies to processes that provide access and define an inclusive building program.
- **Site:** The location of the community related to retail, transit, parks, employment and educational opportunities, and other amenities and the physical characteristics of the site itself that allow easy access from the Public Way to the front door, accessible walkways through buildings or amenities, and opportunities for usable outdoor spaces like gardens, playgrounds, or gathering spots.
- **Building Components:** Physical features that might occur both on the site and in the building, or in various types of interior spaces. They span multiple categories and are grouped together to support team implementation.
- **Interior Spaces:** Interior features of the building, excluding the dwelling units. This includes spaces like the lobby, corridors, and special rooms like mailrooms, and gyms, as well as broader ideas about overall design approaches and program elements for the building.
- **Dwelling Units:** Specific room-by-room features that improve the interior of the dwelling units for residents. Features provide guidance to the project team for design of the overall dwelling unit.
- **Operations and Amenities:** Operations guidelines, building staffing, on-site services, and resident experiences. Services that create connections between residents and the community that feel natural to the resident, and are centered on the resident's housing goals.

Impact Areas

As standards designed to support cross-disability accessibility, each element supports one or more impact areas. These impact areas are intentionally not named after a diagnosis or type of disability, but instead link to access needs that different design or program choices can support.

Mobility and Height

Individuals who have limited use of their limbs, limited range of motion or dexterity, who use mobility supports (i.e., wheelchairs - manual and motorized; scooters; walkers; canes; grab bars), who are of short stature, and/or who use assistive tools (i.e., reachers, step ladders, stools, etc.) to access spaces.

Hearing and Acoustics

Individuals who are hard of hearing (HOH), use hearing supports and devices to engage in surrounding environments (i.e., voice amplification devices, hearing aids, video relay services, cochlear implants, ASL, etc.), and/or who have auditory sensory sensitivities.

Vision

Individuals who are blind, who have low vision, and/or who use visual supports and devices to engage in surrounding environments (i.e., Braille, screen readers, magnifiers, lightboxes, etc.). This can also include people with high sensitivity to glare, or rapid changes in light levels.

Health and Wellness

Individuals who have chronic health conditions, who have allergies and chemical sensitivities, are immunocompromised, and/or regularly utilize medical and/or therapeutic services. Aspects of the building that promote wellness for all, such as connection to nature and natural light, are also included.

Cognitive Access

Individuals who process information differently, who have alternative language reception and/or communication preferences and needs, who need items or materials presented in different ways or speeds of information, and/or who use supports in understanding and content retention, information processing, and decision making or choice selection. Includes wayfinding support for memory or orientation.

Support Needs

Individuals who use support services in their home and/or the community including but not limited to: direct support professionals, health aides, nursing support, behavioral supports, and individualized therapies. Can also include individuals using in-house family support for mobility or other assistance.

Additional Benefits

Choices made to support the accessibility and inclusion of individuals with disabilities often result in greater benefits and better housing for all people. All elements in the Inclusive Design Standards advance multiple and various benefits for diverse groups of residents and neighbors, but some elements are specific to the following additional benefits.

Affordability

Individuals with disabilities are more likely to live in poverty, and those reliant on SSI as their primary source of income would have to pay, on average nationally, 131% of their entire income to afford rent. Elements that meet additional affordability goals support project feasibility and increased affordability goals.

Racial Equity

Centering on the most marginalized is essential to expanding inclusion and access. Elements address specific ways to increase anti-racist strategies in design and operation, broad equity goals, accessibility and inclusion for Black, Indigenous, and People of Color (BIPOC) individuals, and strategies to support the inclusion of individuals with intersectional identities.

Environmental Sustainability

Choices made to improve materials selection, climate reducing strategies, daylighting, site selection, space planning, and overall design; most often also achieving sustainability and environmental impact goals. Beyond providing direct impacts with healthier environments for all residents, environmental sustainability approaches even provide positive externalities to the greater society, including community members with disabilities.

Safety

Design strategies that support access and inclusion not only keep residents with disabilities safe, but support overall community safety for all people in and around the building. More navigable spaces, safe walking surfaces, good lighting, clear communication systems, robust staffing, and community-based programs all help keep people safe in their homes and communities.

Beauty and Better Design

Inclusive and accessible design provides an opportunity for creativity, innovation, and rethinking spaces in a more identity-rich, resident-centered way. A focus on sensory related access creates spaces with increased harmony. Wayfinding strategies make for more graceful navigation. Cross-disability inclusion builds more interesting and meaningful communities. Elements support diverse definitions of artistic design, housing innovation, beauty in placemaking, and experiences that improve the lives of all residents.

Process

As a starting point to this work, the research of elements supported the development of accessible, affordable, and inclusive housing projects, and led to the framework and approach for its successful implementation. The method included the input of multiple industry professionals, people with disabilities as partners and leaders, and support of housing organizations interested in building a pipeline of inclusive housing throughout the U.S.

The creation of the Inclusive Design Standards included research and discovery, focus groups, project reviews, and expert feedback.

Research and Element Compilation

Existing projects and guidelines currently available to developers, architects, contractors, and property managers include strategies for greater inclusion and accessibility. These are often created for a specific type of disability or access needs, or for certain parts of building design. Each of these existing resources were reviewed in detail. Items from these publications were broken down into singular elements, which were categorized in design categories and noted based on their impact areas and additional benefits. Similar elements that appeared in different forms were consolidated, edited, paired with diagrams, or expanded upon. Each source where an element appeared is referenced in that specific element, and all references are listed in the sources section.

Alignment with Other Standards

Federal law and guidance require a baseline of accessibility standards for people with disabilities (see appendix). On top of that baseline, architects must follow state and local building codes when they design buildings to increase accessibility and protect occupants' health and safety. However, there is a heightened need for a set of housing design standards that increase accessibility and inclusion for all.

Moreover, there are other solution-oriented standards to create better buildings from organizations such as the U.S. Green Building Council (USGBC), International Living Future Institute (ILFI), and the International Well Building Institute (WELL). They have each created their own sets of standards and performance-based systems to build and transform housing communities that are healthy and environmentally sustainable.

The Inclusive Design Standards are meant to complement existing standards to support multifamily housing projects and to think beyond code compliance, ultimately increasing accessible, inclusive housing design.

Expert and Lived Experience Feedback

Transforming existing design strategies as compiled into elements, input was solicited from leaders in the building development industry, future potential residents, and intersectional partners. Preliminary 1:1 meetings supported early direction pathways and led to the assemblage of two important groups: the Inclusive Design Council, and the many architects and designers who attended Designer Workshops for feedback and input specific to identifying the standards' usability and implementation. The goals of the designer workshops were to bring designers' insights to bear on the applicability of the tool, solicit feedback on the approach to element categorization, and identify strategies to increase adoption of the standards once published. Beyond giving feedback on elements compiled and overall structure, these groups also helped define new elements and additional sections of the final structure of the Inclusive Design Standards.

Project Application

Simultaneous to research and focus groups, with Mikiten Architecture as the Universal Design Consultant, The Kelsey applied these standards with the development teams at The Kelsey Ayer Station (San Jose, CA) and The Kelsey Civic Center (San Francisco, CA). With over 240 homes in the pipeline, they were able to utilize these as ongoing reference projects at critical developmental points to understand how The Kelsey Civic Center and The Kelsey Ayer Station could be applied to future projects. In addition to fully applying elements to these two projects, other project developers and design teams were consulted on how these design standards could be applied to their existing or planned housing development efforts.

Planning for Adoption and Roll Out

As the Inclusive Design Standards are implemented, they will be tested against projects and updated with partner feedback. New design strategies will continue to influence the Inclusive Design Standards, and elements will be periodically updated. On an ongoing basis, they will be refined to reflect changes in disability related supports and services, and the multifamily building development processes. To support adoption, the Inclusive Design Standards could be linked to funding incentives supporting project development and design, policy standards, and land use incentives to promote project teams in their efforts to build multifamily housing that is inclusive and accessible.

3
Implementation

- Scoring Approach
- Full Certification
- Exemplary Badges
- Focused Certifications
- Self Certification

The Kelsey Ayer Station, San Jose, CA

Scoring Approach

Multifamily housing communities of all sizes can be certified using the Inclusive Design Standards. Development teams can score their project comprehensively and use ”Exemplary Badges” in specific impact areas. There are also opportunities for focused certification, especially for projects already developed or addressing access and inclusion in a more limited scope of Design Categories. Scoring supports cross-disability accessibility across all Design Categories with Exemplary Badges for impact areas to support a project’s ability to showcase their efforts to increase access in innovative ways, for target communities, or within certain phases of design.

Certification under these Design Standards demonstrates that broad accessibility and inclusion in multifamily buildings is achievable, and promotes others to do the same. Stepping through the certification process is a rich learning process that will prepare teams to incorporate more accessibility in future projects of all types.

The entire team benefits from an inclusive and accessible process. Having the important mission of inclusion can help unify a team, from project engineers to city planners and building department personnel to the entire contractor team, under a shared purpose, leading to a stronger team in every respect. This certification also provides benefits to project teams and housing owners: it allows developers, architects, and other project members to demonstrate their social consciousness and commitment to inclusion; it shows potential renters that the building is designed more carefully and thoughtfully for them; and it makes the community a more desirable and usable place for everyone to live.

Full Certification

Projects can either become certified by meeting Essential Elements or achieve a higher certification level of Silver, Gold, or Platinum by implementing more elements in each Design Category, as shown below.

Essential
66 Total Elements

Silver
95 Total Elements

Gold
145 Total Elements

Platinum
235 Total Elements

Category	Essential	Silver Certified	Gold Certified	Platinum Certified	Max Available
1. Design Process	6	8	11	16	22
2. Site	16	23	35	58	86
3. Building Components	12	18	28	47	67
4. Interior Spaces	11	16	25	40	62
5. Dwelling Units	11	17	29	50	77
6. Operations and Amenities	10	13	17	25	34
TOTAL	**66**	**95**	**145**	**236**	**348**

Exemplary Badges

An idea driven by the Inclusive Design Council, Exemplary Badges can be achieved in design or operation in addition to full certification. They allow projects to showcase their choice to emphasize strategies for a specific impact area. While cross-disability access is captured in the overall certification, and important for designing inclusive communities, Exemplary Badges demonstrate when certain projects have deployed additional features to support a target population or local need.

The below summarizes the required points in an impact area to be considered exemplary. Points can be distributed across any design categories.

EXEMPLARY Mobility and Height	EXEMPLARY Support Needs	EXEMPLARY Hearing and Accoustics	EXEMPLARY Vision	EXEMPLARY Cognitive Access	EXEMPLARY Health and Wellness
72	36	21	54	49	31

Focused Certifications

Very often existing projects undertake a partial remodel, such as rehabilitation of all the dwelling units or a refresh of outdoor spaces. For these types of limited-scope projects, there are targeted opportunities to achieve excellence in accessibility and inclusion through a focused certification.

Due to the underlying philosophy that an inclusive project can't happen without an inclusive process, scoring for all four types of focused certifications require a certified level of scoring in the design process category. For instance, a Gold level certification is required for the area of focus.

Category	Certified Site	Certified Interiors	Certified Dwelling Units	Certified Operations
1. Design Process	6	6	6	6
2. Site	35	-	-	-
3. Building Components	12	12	12	-
4. Interior Spaces	-	25	-	-
5. Dwelling Units	-	-	29	-
6. Operations and Amenities	5	10	5	17
TOTAL	**58**	**53**	**52**	**23**

Self-Certification

Project teams can self-certify and utlize The Kelsey for Technical Assistance through the process. Details on the certification process can be found at thekelsey.org/design. There you can also find resources for project consultants, advisors, and other strategies to support inclusive, accessible design. Questions on the process or project-specific support needs can be directed to design@thekelsey.org.

Evaluate your project by utlizing the Self-Certfication spreadsheet, starting prior to project kickoff. Self-certification tool provides access to consultants, and Technical Assistance; more information can be located at thekelsey.org/design.

4 Elements

- Overview
- Element Detail Sheet
- Elements Index by Design Category
- Elements Index by Impact Area
- Element Details - Design Process
- Element Details - Site
- Element Details - Building Elements
- Element Details - Interior Spaces
- Element Details - Dwelling Units
- Element Details - Operations and Amenities
- Conclusion and Considerations

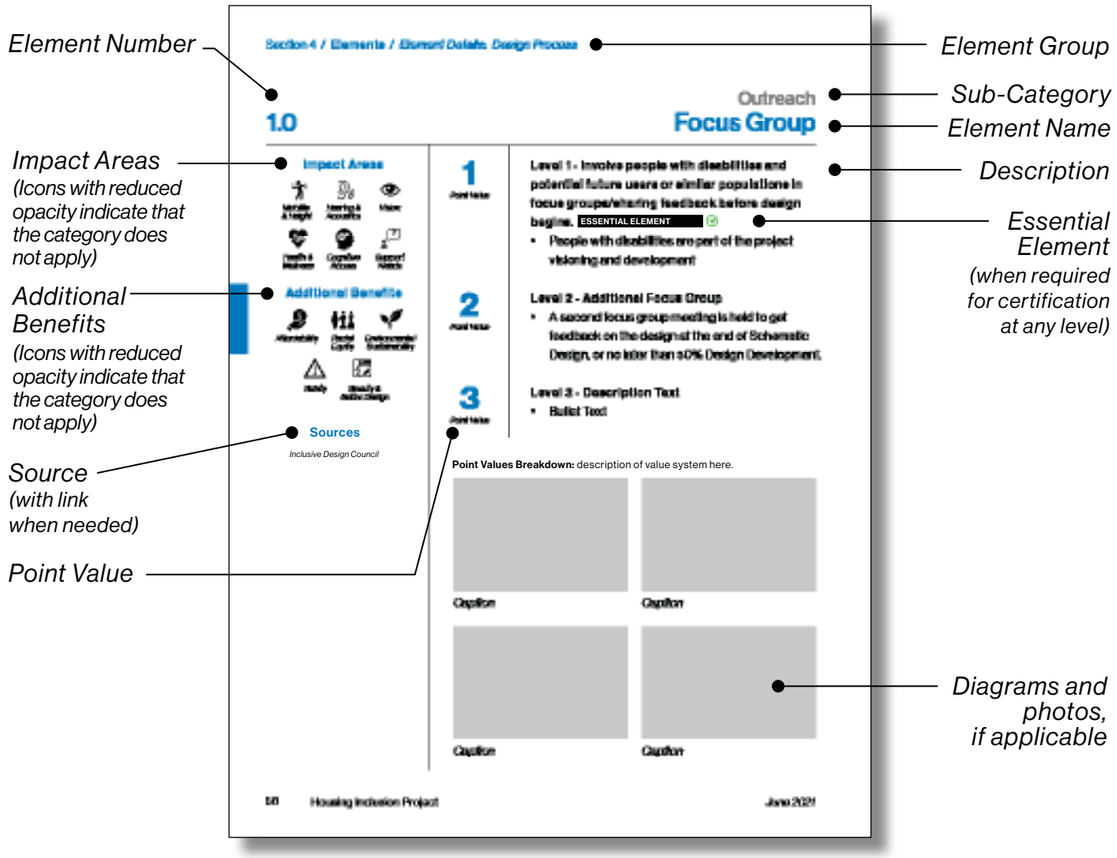
The Kelsey Ayer Station (San Jose, CA), Sensory Garden

Overview

The elements are organized by Design Category and Impact Area. Each element includes additional details, access needs, additional benefits, imagery and source information. The element detail sheet shows how each element sheet is built and supports improved accessibility and inclusion. A sortable database of all elements is available at thekelsey.org/design.

Element Detail Sheet

The following pages describe each element. Each element sheet is laid out as follows:



Elements Index by Design Category

1 Design Process

Sub-Category Number	Sub-Category Name	Element Name	Essential	Page
1.0	Outreach	Focus Group	X	73
1.1	Team	Universal Design Expertise	X	74
1.1	Team	Inclusive Design Workshop		75
1.1	Team	Design Education Process	X	76
1.1	Team	People with Disabilities Represented on the Project Team	X	77
1.2	Project Program	Service Ready Housing	X	78
1.2	Project Program	Indoor Air Quality - LEED Criteria	X	78
1.2	Project Program	isUD Certification		79
1.2	Project Program	Community-Driven Security Planning		79
1.3	Education	Resident Education		80
1.3	Education	Case Study		80
1.3	Education	Construction Signage		81
1.3	Education	Local Accessibility Advocacy		82
1.4	General	Wayfinding - Signage		83

Elements Index by Design Category

2 Site

Sub-Category Number	Sub-Category Name	Element Name	Essential	Page
2.0	General	Outdoor Seating and Furnishing		89
2.0	General	Density		90
2.1	Neighborhood	Neighborhood Connections and Usability		91
2.1	Neighborhood	Outdoor Amenities		91
2.2	Overall Design	Solar Orientation		92
2.2	Overall Design	Site Organization	X	93
2.2	Overall Design	Indigenous Land Dedication		94
2.2	Overall Design	Directional Signage	X	95
2.3	Building Approach and Entry	Arrival Wayfinding	X	96
2.3	Building Approach and Entry	Drop-Off Area	X	97
2.3	Building Approach and Entry	Paving Surface Wayfinding		98
2.4	Vehicles	Parking Lot Wayfinding		99
2.4	Vehicles	Vehicular Clearance		100
2.4	Vehicles	Parking Lot Pedestrian Safety	X	101
2.4	Vehicles	Parking Lot Safe Lighting		101
2.4	Vehicles	Parking Space Safety		102
2.4	Vehicles	Parking Space Protection		103
2.4	Vehicles	Van Accessible Parking Space Size		104

Sub-Category Number	Sub-Category Name	Element Name	Essential	Page
2.4	Vehicles	Accessible Parking Space Type		105
2.4	Vehicles	Accessible Parking Space Count	X	106
2.4	Vehicles	Family Parking Space		107
2.4	Vehicles	Staff Parking Spaces		108
2.4	Vehicles	Car Share Parking Space		108
2.5	Bikes	Public Access		109
2.5	Bikes	Dedicated Paths		110
2.5	Bikes	Bike Pathway Gates/Doors		111
2.5	Bikes	Visitor Parking		112
2.5	Bikes	Resident Parking		113
2.6	Pedestrians	Wayfinding - Arrival	X	114
2.6	Pedestrians	Wayfinding - Simplicity		115
2.6	Pedestrians	Exterior Guide Strips		116
2.6	Pedestrians	Wayfinding - Paving	X	117
2.6	Pedestrians	Pedestrian Paths Width	X	118
2.6	Pedestrians	Pedestrian Gates		119
2.6	Pedestrians	Path Slopes		120
2.6	Pedestrians	Stairs		121
2.6	Pedestrians	Exterior Handrails		122
2.6	Pedestrians	Pedestrian Safety		122
2.6	Pedestrians	Pedestrian Routes		123
2.6	Pedestrians	Pedestrian Path Lighting	X	123
2.6	Pedestrians	Protected Building Connections		124
2.6	Pedestrians	Safety Railings		124
2.7	Transit	Public Transit		125
2.7	Transit	Reduced Vehicle Speeds		126
2.7	Transit	Project-Based Transit	X	127
2.8	Gardens and Courtyards	Green Space	X	128
2.8	Gardens and Courtyards	Protected Green Spaces		129
2.8	Gardens and Courtyards	Sensory Garden		130

Sub-Category Number	Sub-Category Name	Element Name	Essential	Page
2.8	Gardens and Courtyards	Outdoor Water Feature		131
2.8	Gardens and Courtyards	Vegetable Garden		132
2.8	Gardens and Courtyards	Outdoor Planter Areas		133
2.8	Gardens and Courtyards	Accessible BBQ Area		134
2.8	Gardens and Courtyards	BBQ Areas - Ground Surface		135
2.8	Gardens and Courtyards	Pet and Service Animals Relief Areas		136
2.9	Building and Site Security	Security Systems		137
2.9	Building and Site Security	Access Controls		138
2.9	Building and Site Security	Entry System Communications		139
2.10	Entrance Porch	Protected Porch		140
2.10	Entrance Porch	Lighting		141
2.10	Entrance Porch	Weather Infiltration Protection		142
2.11	Gates and Exterior Doors	Entry Doors Hardware		143
2.11	Gates and Exterior Doors	Automatic Entry Doors	X	144
2.11	Gates and Exterior Doors	Entry Doors Security		145

Elements Index by Design Category

3 Building Components

Sub-Category Number	Sub-Category Name	Element Name	Essential	Page
3.0	Overall Design	Building Organization	X	149
3.1	Space and Reach	Turning Space	X	150
3.1	Space and Reach	Floor Space		151
3.1	Space and Reach	Reach Requirements		152
3.2	Acoustics	Background Noise		153
3.2	Acoustics	Large Spaces		153
3.2	Acoustics	Noise Isolation		154
3.2	Acoustics	Outdoor Noise Control		154
3.3	Air Quality or HVAC	Pollutants	X	155
3.3	Air Quality or HVAC	Filtration		155
3.3	Air Quality or HVAC	Low-VOC Materials		156
3.3	Air Qualityor HVAC	Ceiling Fans		157
3.3	Air Quality or HVAC	HVAC Controls		158
3.3	Air Quality or HVAC	Window Controls		159
3.4	Artificial Lighting	Glare and Light Quality	X	160
3.4	Artificial Lighting	Color Rendering Index		160
3.4	Artificial Lighting	Light Levels		161
3.4	Artificial Lighting	Lighting Controls		161
3.4	Artificial Lighting	Switch Cover Plates	X	162
3.4	Artificial Lighting	Lighting Master Switch		162
3.5	Natural Lighting	Daylighting	X	163
3.5	Natural Lighting	Managed Daylighting		164
3.5	Natural Lighting	Window Design		165
3.5	Natural Lighting	Window Location		166
3.6	Doors	Clearance Space		167
3.6	Doors	Door Visibility		168
3.6	Doors	Swing Door Automation	X	169
3.6	Doors	Automatic Operator	X	170
3.6	Doors	Door and Gate Rails		171
3.6	Doors	Glass Doors		172
3.7	FF&E	Area Rugs	X	173
3.7	FF&E	Indoor Seating	X	174
3.7	FF&E	Desk or Meeting Room Chairs		175
3.7	FF&E	Work Surfaces and Tables		176
3.7	FF&E	Furniture Visibility		177
3.7	FF&E	Artwork in Building		178
3.8	Wayfinding	Glazing Safety	X	179
3.8	Wayfinding	Differentiation of Spaces	X	180
3.8	Wayfinding	Interior Guide Strips		181
3.8	Wayfinding	Walking Surface Patterns	X	182
3.8	Wayfinding	Directional Signage	X	183
3.8	Wayfinding	Acoustic Wayfinding		184
3.8	Wayfinding	Wayfinding - Flooring		185
3.8	Wayfinding	Wayfinding - Lighting		186
3.8	Wayfinding	Multilingual Communication		187
3.9	Mailboxes	Mailbox Shelter		188
3.9	Mailboxes	Mailbox Counter		189

Elements Index by Design Category

4 Interior Spaces

Sub-Category Number	Sub-Category Name	Element Name	Essential	Page
4.0	Overall Design	Low Glare Materials	X	194
4.0	Overall Design	Activity Areas	X	195
4.0	Overall Design	Staff Spaces		196
4.0	Overall Design	Assistance Signage		196
4.0	Overall Design	Slip Resistance Floor Finishes		197
4.1	Lobbies and Horizontal Circulation	Building Notifications		198
4.1	Lobbies and Horizontal Circulation	Circulation Design		199
4.1	Lobbies and Horizontal Circulation	Lobby and Large Space Acoustics		200
4.1	Lobbies and Horizontal Circulation	Usable Corridors		201
4.1	Lobbies and Horizontal Circulation	Corridor Handrails		202
4.1	Lobbies and Horizontal Circulation	Lobby Entry Counter	X	203
4.1	Lobbies and Horizontal Circulation	Lean Rails		204
4.2	Vertical Circulation	Usable Stairs		205
4.2	Vertical Circulation	Stair Evacuation Chairs		206
4.2	Vertical Circulation	Convenient Ramps		207
4.2	Vertical Circulation	Dual Handrails		208
4.2	Vertical Circulation	Handrail Design		209
4.2	Vertical Circulation	Tactile Handrails		210
4.2	Vertical Circulation	Elevator Foot Controls		211
4.2	Vertical Circulation	Elevator Interior Buttons		212
4.2	Vertical Circulation	Elevator Usability		213
4.2	Vertical Circulation	Elevator Design		214
4.2	Vertical Circulation	Elevator Emergency Evacuation Use		215
4.2	Vertical Circulation	Elevator Security		216
4.2	Vertical Circulation	Full-Story Ramp		217
4.3	Common Rooms and Offices	Shared Kitchen Appliances	X	218
4.3	Common Rooms and Offices	Microwave Drawer		219
4.3	Common Rooms and Offices	Shared Kitchen Sinks	X	220
4.3	Common Rooms and Offices	Shared Kitchen Faucets	X	221
4.3	Common Rooms and Offices	Community Room Hearing System		222
4.3	Common Rooms and Offices	Laundry Rooms		223
4.4	Common Restrooms	Common Area Restrooms		224
4.4	Common Restrooms	Single-Occupancy Restrooms	X	224
4.4	Common Restrooms	Adult Changing Room		225
4.4	Common Restrooms	Restroom Doors		225
4.4	Common Restrooms	Plumbing - Faucets	X	226
4.4	Common Restrooms	Plumbing - Sinks	X	227
4.4	Common Restrooms	Plumbing - Toilets		228
4.4	Common Restrooms	Restroom Toiletries		229
4.4	Common Restrooms	Stored Shared Lift Mechanism		230
4.4	Common Restrooms	Hazardous Waste Disposal Bin		230
4.4	Common Restrooms	Mirrors	X	231
4.4	Common Restrooms	Restroom Storage		231
4.4	Common Restrooms	Paper Towel Dispenser	X	232
4.4	Common Restrooms	Air Hand Dryers		232
4.5	Trash and Recycling Rooms	Accessible Trash Chute Doors		233
4.5	Trash and Recycling Rooms	Accessible Dumpsters		234

Elements Index by Design Category

5 Dwelling Units

Sub-Category Number	Sub-Category Name	Element Name	Essential	Page
5.0	Overall Design	Mixed Unit Types		239
5.0	Overall Design	Mixed Unit Orientations		239
5.0	Overall Design	Unit Types - Adaptability	X	240
5.0	Overall Design	Bathroom Count		240
5.0	Overall Design	Unit Types - Units for Better Mobility		241
5.0	Overall Design	Navigable Floor Plans		242
5.0	Overall Design	Single-Story Units		243
5.0	Overall Design	Kitchen Layout		244
5.0	Overall Design	Hallway Width	X	245
5.0	Overall Design	Window Access		245
5.1	Details	Flooring Materials		246
5.1	Details	Window Controls		247
5.1	Details	Window Security		247
5.1	Details	Kitchen and Bathroom Faucets	X	248
5.1	Details	Balcony		249
5.1	Details	Washer and Dryer		250
5.1	Details	Flexible Lighting		251
5.1	Details	Smart Home Controls		251
5.1	Details	Built-in Furniture		252
5.1	Details	Dwelling Unit Closets		253
5.1	Details	Dwelling Unit Storage		254
5.1	Details	Visible Alerts		255
5.1	Details	TV or Cable		256
5.1	Details	Usable Interfaces		256
5.2	Doors	Automatic Unit Doors		257
5.2	Doors	Pocket Doors		258
5.2	Doors	Door Viewers	X	259
5.2	Doors	Unit Entry Thresholds	X	260
5.2	Doors	Unit Entry Hardware		261
5.3	Kitchens	Dishwasher Location		262
5.3	Kitchens	Cabinet Usability		263
5.3	Kitchens	Base Cabinets		264
5.3	Kitchens	Sink Cabinets		264
5.3	Kitchens	Countertops		265
5.3	Kitchens	Kitchen Shelving		266
5.3	Kitchens	Flexible Work Surface		267
5.3	Kitchens	Kitchen Lighting		268
5.3	Kitchens	Plumbing - Sink Faucet		269
5.4	Appliances	Range Controls		270
5.4	Appliances	Induction Range		270
5.4	Appliances	Range Hood		271
5.4	Appliances	Microwave		272
5.4	Appliances	Wall Oven		272
5.4	Appliances	Refrigerator - Location	X	273
5.4	Appliances	Refrigerator - Storage		273
5.4	Appliances	Automatic Appliance Shut Off		274
5.4	Appliances	Individual Cooking Facilities	X	275
5.4	Appliances	Easy to Use Appliances		276
5.5	Bathrooms	Safety		276
5.5	Bathrooms	Toilet Location		277
5.5	Bathrooms	Handheld Shower Mounting		278
5.5	Bathrooms	Handheld Shower Unit		279
5.5	Bathrooms	Roll-In Showers		280
5.5	Bathrooms	Shower Curtains		281
5.5	Bathrooms	Toilet - Selection	X	282

Sub-Category Number	Sub-Category Name	Element Name	Essential	Page
5.5	Bathrooms	Toilet - Bidet Seat Prep		282
5.5	Bathrooms	Grab Bars	X	283
5.5	Bathrooms	Safe Towel Bars		284
5.5	Bathrooms	Bathroom Storage		285
5.5	Bathrooms	Bathroom Vanities		286
5.5	Bathrooms	Bathroom Lighting		287

Elements Index by Design Category

6 Operations and Amenities

Sub-Category Number	Sub-Category Name	Element Name	Essential	Page
6.0	General	Maintenance - Cleaning		291
6.0	General	Unit Trash Collection		291
6.0	General	Integrated Community	X	292
6.0	General	Information about Culture of Accessibility and Disability Justice		293
6.0	General	Deep Affordability		294
6.0	General	Deep 2-Bedroom Affordability		294
6.0	General	Laundry Equipment		295
6.1	Staffing	Front Desk Staffing		296
6.1	Staffing	Inclusion and Disability Training	X	297
6.1	Staffing	Inclusion Supports and Services Personnel		298
6.1	Staffing	24/7 On-Call Support		299
6.1	Staffing	Service-Provider Gap Support		299
6.1	Staffing	Manager Units for Staff		300
6.2	Leasing	Acceptance of Vouchers	X	300
6.2	Leasing	Deep Affirmative Marketing	X	301
6.2	Leasing	Embedded Inclusion in Marketing Process		302
6.2	Leasing	Lottery Application System		303
6.2	Leasing	Plain Language Leasing Information	X	304
6.2	Leasing	Individual Roommate Selection	X	305
6.2	Leasing	3rd Party Deposit and Credit Support		305

Sub-Category Number	Sub-Category Name	Element Name	Essential	Page
6.2	Leasing	Leasing Support Services		306
6.2	Leasing	Building Staff Involved In Leasing Process		306
6.2	Leasing	Inclusive Leasing Documentation	X	307
6.2	Leasing	Eviction Protection Plan		307
6.2	Leasing	Accessible Unit Tracking	X	308
6.3	Services	Culture of Interdependence		309
6.3	Services	Residents Control of Living Structure and Schedule	X	310
6.3	Services	Resident Selected Service Providers	X	311
6.4	Programming	Carsharing Support		311
6.4	Programming	Resident Programs and Events		312

Elements Index by Impact Area

Mobility and Height

Sub-Category Number	Sub-Category Name	Element Name	Essential	Page
1.0	Design Process - Outreach	Focus Group	X	73
1.1	Design Process - Team	Universal Design Expertise		74
1.1	Design Process - Team	Inclusive Design Workshop		75
1.1	Design Process - Team	Design Education Process	X	76
1.1	Design Process - Team	People with Disabilities Represented on the Project Team	X	77
1.2	Design Process - Project Program	Service Ready Housing	X	78
1.2	Design Process - Project Program	Indoor Air Quality - LEED Criteria	X	78
1.2	Design Process - Project Program	isUD Certification		79
1.2	Design Process - Project Program	Community-Driven Security Planning		79
1.3	Design Process - Education	Resident Education		80
1.3	Design Process - Education	Case Study		80
1.3	Design Process - Education	Construction Signage		81
1.3	Design Process - Education	Local Accessibility Advocacy		82
1.4	Design Process - General	Wayfinding - Signage		83
2.0	Site - General	Outdoor Seating & Furnishing		89
2.0	Site - General	Density		90

2.1	Site - Neighborhood	Neighborhood Connections and Usability		91
2.1	Site - Neighborhood	Outdoor Amenities		91
2.2	Site - Overall Design	Site Organization	X	93
2.3	Site - Building Approach and Entry	Drop-Off Area	X	97
2.4	Site - Vehicles	Vehicular Clearance		100
2.4	Site - Vehicles	Parking Lot Pedestrian Safety	X	101
2.4	Site - Vehicles	Parking Space Safety		102
2.4	Site - Vehicles	Parking Space Protection		103
2.4	Site - Vehicles	Van Accessible Parking Space Size		104
2.4	Site - Vehicles	Accessible Parking Space Type		105
2.4	Site - Vehicles	Accessible Parking Space Count	X	106
2.4	Site - Vehicles	Family Parking Space		107
2.4	Site - Vehicles	Car Share Parking Space		108
2.5	Site - Bikes	Public Access		109
2.5	Site - Bikes	Dedicated Paths		110
2.5	Site - Bikes	Bike Pathway Gates/ Doors		111
2.5	Site - Bikes	Visitor Parking		112
2.6	Site - Bikes	Resident Parking		113
2.6	Site - Pedestrians	Wayfinding - Simplicity		115
2.6	Site - Pedestrians	Pedestrian Paths Width	X	118
2.6	Site - Pedestrians	Pedestrian Gates		119
2.6	Site - Pedestrians	Path Slopes		120
2.6	Site - Pedestrians	Stairs	X	121
2.6	Site - Pedestrians	Pedestrian Safety		122
2.6	Site - Pedestrians	Pedestrian Routes		123
2.6	Site - Pedestrians	Pedestrian Path Lighting	X	123
2.6	Site - Pedestrians	Protected Building Connections		124
2.6	Site - Pedestrians	Safety Railings		124
2.7	Site - Transit	Public Transit		125
2.7	Site - Transit	Reduced Vehicle Speeds		126

2.7	Site - Transit	Project-Based Transit	X	127
2.8	Site - Gardens & Courtyards	Vegetable Garden		132
2.8	Site - Gardens & Courtyards	Outdoor Planter Area		133
2.8	Site - Gardens & Courtyards	Accessible BBQ Area		134
2.8	Site - Gardens & Courtyards	BBQ Areas - Ground Surface		135
2.8	Site - Gardens & Courtyards	Pet and Service Animals Relief Areas		136
2.9	Site - Building and Site Security	Security System		137
2.9	Site - Building and Site Security	Access Controls		138
2.10	Site - Entrance Porch	Protected Porch		140
2.10	Site - Entrance Porch	Weather Infiltration Protection		142
2.11	Site - Gates and Exterior Doors	Automatic Entry Doors	X	144
3.0	Building Components - Overall Design	Building Organization	X	149
3.1	Building Components - Space & Reach	Turning Space	X	150
3.1	Building Components - Space & Reach	Floor Space		151
3.1	Building Components - Space & Reach	Reach Requirements		152
3.3	Building Components - Air Quality / HVAC	HVAC Controls		158
3.3	Building Components - Air Quality / HVAC	Window Controls		159
3.4	Building Components - Artificial Lighting	Lighting Master Switch		162
3.5	Building Components - Natural Lighting	Managed Daylighting		164
3.5	Building Components - Natural Lighting	Window Design		165
3.5	Building Components - Natural Lighting	Window Location		166
3.6	Building Components - Doors	Clearance Space		167
3.6	Building Components - Doors	Swing Door Automation	X	169
3.6	Building Components - Doors	Automatic Operator	X	170
3.6	Building Components - Doors	Door and Gate Rails		171
3.7	Building Components - FF&E	Area Rugs	X	173
3.7	Building Components - FF&E	Indoor Seating	X	174
3.7	Building Components - FF&E	Desk or Meeting Room Chairs		175

3.7	Building Components - FF&E	Work Surfaces and Tables		176
3.7	Building Components - FF&E	Furniture Visibility		177
3.9	Building Components - Mailboxes	Mailbox Shelter		188
3.9	Building Components - Mailboxes	Mailbox Counter		189
4.0	Interior Spaces - Overall Design	Assistance Signage		196
4.0	Interior Spaces - Overall Design	Slip Resistance Floor Finishes		197
4.1	Interior Spaces - Lobbies & Horizontal Circulation	Circulation Design		199
4.1	Interior Spaces - Lobbies & Horizontal Circulation	Usable Corridors		201
4.1	Interior Spaces - Lobbies & Horizontal Circulation	Corridor Handrails		202
4.1	Interior Spaces - Lobbies & Horizontal Circulation	Lobby Entry Counter	X	203
4.1	Interior Spaces - Lobbies & Horizontal Circulation	Lean Rails		204
4.2	Interior Spaces - Vertical Circulation	Usable Stairs		205
4.2	Interior Spaces - Vertical Circulation	Stair Evacuation Chairs		206
4.2	Interior Spaces - Vertical Circulation	Convenient Ramps		207
4.2	Interior Spaces - Vertical Circulation	Dual Handrails		208
4.2	Interior Spaces - Vertical Circulation	Handrail Design		209
4.2	Interior Spaces - Vertical Circulation	Elevator Foot Controls		211
4.2	Interior Spaces - Vertical Circulation	Elevator Design		214
4.2	Interior Spaces - Vertical Circulation	Elevator Emergency Evacuation Use		215
4.2	Interior Spaces - Vertical Circulation	Elevator Security		216
4.2	Interior Spaces - Vertical Circulation	Full-Story Ramp		217
4.3	Interior Spaces - Common Rooms & Offices	Shared Kitchen Appliances	X	218
4.3	Interior Spaces - Common Rooms & Offices	Microwave Drawer		219
4.3	Interior Spaces - Common Rooms & Offices	Shared Kitchen Sinks	X	220
4.3	Interior Spaces - Common Rooms & Offices	Shared Kitchen Faucets	X	221
4.3	Interior Spaces - Common Rooms & Offices	Laundry Rooms		223

4.4	Interior Spaces - Common Restrooms	Common Area Restrooms		224
4.4	Interior Spaces - Common Restrooms	Single-Occupancy Restrooms	X	224
4.4	Interior Spaces - Common Restrooms	Adult Changing Room		225
4.4	Interior Spaces - Common Restrooms	Restroom Doors		225
4.4	Interior Spaces - Common Restrooms	Plumbing - Faucets	X	226
4.4	Interior Spaces - Common Restrooms	Plumbing - Sinks	X	227
4.4	Interior Spaces - Common Restrooms	Plumbing - Toilets		228
4.4	Interior Spaces - Common Restrooms	Stored Shared Lift Mechanism		230
4.4	Interior Spaces - Common Restrooms	Mirrors	X	231
4.4	Interior Spaces - Common Restrooms	Restroom Storage		231
4.4	Interior Spaces - Common Restrooms	Paper Towel Dispenser	X	232
4.4	Interior Spaces - Common Restrooms	Air Hand Dryers		232
4.5	Interior Space - Trash & Recycling Rooms	Accessible Trash Chute Doors		233
4.5	Interior Space - Trash & Recycling Rooms	Accessible Dumpsters		234
5.0	Dwelling Units - Overall Design	Mixed Unit Orientations		239
5.0	Dwelling Units - Overall Design	Unit Types - Adaptability	X	240
5.0	Dwelling Units - Overall Design	Unit Types - Units for Better Mobility		241
5.0	Dwelling Units - Overall Design	Navigable Floor Plans		242
5.0	Dwelling Units - Overall Design	Single-Story Units		243
5.0	Dwelling Units - Overall Design	Kitchen Layout		244
5.0	Dwelling Units - Overall Design	Hallway Width	X	245
5.0	Dwelling Units - Overall Design	Window Access		245
5.1	Dwelling Units - Details	Window Controls		247
5.1	Dwelling Units - Details	Window Security		247
5.1	Dwelling Units - Details	Kitchen & Bathroom Faucets	X	248
5.1	Dwelling Units - Details	Balcony		249
5.1	Dwelling Units - Details	Washer & Dryer		250
5.1	Dwelling Units - Details	Smart Home Controls		251
5.1	Dwelling Units - Details	Built-in Furniture		252
5.1	Dwelling Units - Details	Dwelling Unit Closets		253
5.1	Dwelling Units - Details	Dwelling Unit Storage		254

5.1	Dwelling Units - Details	TV or Cable		256
5.2	Dwelling Units - Doors	Automatic Unit Doors		257
5.2	Dwelling Units - Doors	Pocket Doors		258
5.2	Dwelling Units - Doors	Door Viewers	X	259
5.2	Dwelling Units - Doors	Unit Entry Thresholds	X	260
5.2	Dwelling Units - Doors	Unit Entry Hardware		261
5.3	Dwelling Units - Kitchens	Dishwasher Location		262
5.3	Dwelling Units - Kitchens	Cabinet Usability		263
5.3	Dwelling Units - Kitchens	Base Cabinets		264
5.3	Dwelling Units - Kitchens	Sink Cabinets		264
5.3	Dwelling Units - Kitchens	Countertops		265
5.3	Dwelling Units - Kitchens	Kitchen Shelving		266
5.3	Dwelling Units - Kitchens	Flexible Work Surface		267
5.3	Dwelling Units - Kitchens	Plumbing - Sink Faucet		269
5.4	Dwelling Units - Kitchen Appliances	Induction Range		270
5.4	Dwelling Units - Kitchen Appliances	Range Hood		271
5.4	Dwelling Units - Kitchen Appliances	Microwave		272
5.4	Dwelling Units - Kitchen Appliances	Wall Oven		272
5.4	Dwelling Units - Kitchen Appliances	Refrigerator - Location	X	273
5.4	Dwelling Units - Kitchen Appliances	Refrigerator - Storage		273
5.4	Dwelling Units - Kitchen Appliances	Automatic Appliance Shut Off		274
5.5	Dwelling Units - Bathrooms	Safety	X	276
5.5	Dwelling Units - Bathrooms	Toilet Location		277
5.5	Dwelling Units - Bathrooms	Handheld Shower Mounting		278
5.5	Dwelling Units - Bathrooms	Handheld Shower Unit		279
5.5	Dwelling Units - Bathrooms	Roll-In Showers		280
5.5	Dwelling Units - Bathrooms	Shower Curtains		281
5.5	Dwelling Units - Bathrooms	Toilet - Selection	X	282
5.5	Dwelling Units - Bathrooms	Toilet - Bidet Seat Prep		282
5.5	Dwelling Units - Bathrooms	Grab Bars	X	283
5.5	Dwelling Units - Bathrooms	Safe Towel Bars		284
5.5	Dwelling Units - Bathrooms	Bathroom Storage		285
5.5	Dwelling Units - Bathrooms	Bathroom Vanities		286

6.0	Operations & Amenities - General	Information about Culture of Accessibility and Disability Justice		293
6.0	Operations & Amenities - General	Deep Affordability		294
6.0	Operations & Amenities - General	Laundry Equipment		295
6.1	Operations & Amenities - Staffing	Service-Provider Gap Support		299
6.1	Operations & Amenities - Staffing	Manager Units for Staff		300
6.2	Operations & Amenities - Leasing	Acceptance of Vouchers	X	300
6.2	Operations & Amenities - Leasing	Deep Affirmative Marketing	X	301
6.2	Operations & Amenities - Leasing	Embedded Inclusion in Marketing Process		302
6.2	Operations & Amenities - Leasing	Lottery Application System		303
6.2	Operations & Amenities - Leasing	Individual Roommate Selection	X	305
6.2	Operations & Amenities - Leasing	3rd Party Deposit and Credit Support		305
6.2	Operations & Amenities - Leasing	Leasing Support Services		306

Elements Index by Impact Area

Hearing and Acoustics

Sub-Category Number	Sub-Category Name	Element Name	Essential	Page
1.0	Design Process - Outreach	Focus Group	X	73
1.1	Design Process - Team	Universal Design Expertise		74
1.1	Design Process - Team	Inclusive Design Workshop		75
1.1	Design Process - Team	Design Education Process	X	76
1.1	Design Process - Team	People with Disabilities Represented on the Project Team		77
1.2	Design Process - Project Program	Service Ready Housing	X	78
1.2	Design Process - Project Program	Indoor Air Quality - LEED Criteria	X	78
1.2	Design Process - Project Program	isUD Certification		79
1.2	Design Process - Project Program	Community-Driven Security Planning		79
1.3	Design Process - Education	Resident Education		80
1.3	Design Process - Education	Case Study		80
1.3	Design Process - Education	Construction Signage		81
1.3	Design Process - Education	Local Accessibility Advocacy		82
1.4	Design Process - General	Wayfinding - Signage		83
2.0	Site - General	Density		90
2.7	Site - Transit	Reduced Vehicle Speeds		**126**
2.8	Site - Gardens & Courtyards	Outdoor Water Feature	X	131
2.9	Site - Building and Site Security	Entry System Communications		139
3.2	Building Components - Acoustics	Background Noise		153
3.2	Building Components - Acoustics	Acoustics - Large Spaces		**153**
3.2	Building Components - Acoustics	Noise Isolation		154
3.2	Building Components - Acoustics	Outdoor Noise Control		154
3.8	Building Components - Wayfinding	Differentiation of Spaces	X	180
3.8	Building Components - Wayfinding	Acoustic Wayfinding		184
3.8	Building Components - Wayfinding	Wayfinding - Flooring		185
3.8	Building Components - Wayfinding	Wayfinding - Lighting		186
3.8	Building Components - Wayfinding	Multilingual Communication		187
4.0	Interior Spaces - Overall Design	Assistance Signage		196
4.1	Interior Spaces - Lobbies & Horizontal Circulation	Building Notifications		197
4.1	Interior Spaces - Lobbies & Horizontal Circulation	Lobby and Large Space Acoustics		200
4.3	Interior Spaces - Common Rooms & Offices	Community Room Hearing System		222
4.4	Interior Spaces - Common Restrooms	Plumbing - Toilets		228
4.4	Interior Spaces - Common Restrooms	Air Hand Dryers		232
5.1	Dwelling Units - Details	Smart Home Controls	X	251
5.1	Dwelling Units - Details	Visible Alerts		255
5.4	Dwelling Units - Kitchen Appliances	Range Controls		270
6.0	Operations & Amenities - General	Information about Culture of Accessibility and Disability Justice		293
6.0	Operations & Amenities - General	Deep Affordability		294
6.0	Operations & Amenities - General	Laundry Equipment		295
6.1	Operations & Amenities - Staffing	Manager Units for Staff		300
6.2	Operations & Amenities - Leasing	Acceptance of Vouchers	X	300
6.2	Operations & Amenities - Leasing	Deep Affirmative Marketing	X	301
6.2	Operations & Amenities - Leasing	Embedded Inclusion in Marketing Process		302
6.2	Operations & Amenities - Leasing	Lottery Application System		303
6.2	Operations & Amenities - Leasing	Individual Roommate Selection	X	305
6.2	Operations & Amenities - Leasing	3rd Party Deposit and Credit Support		305
6.2	Operations & Amenities - Leasing	Leasing Support Services		306

6.2	Operations & Amenities - Leasing	Accessible Unit Tracking	X	308
6.2	Operations & Amenities - Leasing	Eviction Protection Plan		307
6.3	Operations & Amenities - Services	Residents Control of Living Structure and Schedule	X	310

Elements Index by Impact Area

Vision

Sub-Category Number	Sub-Category Name	Element Name	Essential	Page
1.0	Design Process - Outreach	Focus Group	X	73
1.1	Design Process - Team	Universal Design Expertise	X	74
1.1	Design Process - Team	Inclusive Design Workshop		75
1.1	Design Process - Team	Design Education Process	X	76
1.1	Design Process - Team	People with Disabilities Represented on the Project Team	X	77
1.2	Design Process - Project Program	Service Ready Housing	X	78
1.2	Design Process - Project Program	Indoor Air Quality - LEED Criteria	X	78
1.2	Design Process - Project Program	isUD Certification		79
1.2	Design Process - Project Program	Community-Driven Security Planning		79
1.3	Design Process - Education	Resident Education		80
1.3	Design Process - Education	Case Study		80
1.3	Design Process - Education	Construction Signage		81
1.3	Design Process - Education	Local Accessibility Advocacy		82
1.4	Design Process - General	Wayfinding - Signage		83
2.0	Site - General	Outdoor Seating & Furnishing		89
2.0	Site - General	Density		90
2.1	Site - Neighborhood	Neighborhood Connections and Usability		91
2.1	Site - Neighborhood	Outdoor Amenities		91
2.2	Site - Overall Design	Solar Orientation		92

2.2	Site - Overall Design	Site Organization	X	93
2.2	Site - Overall Design	Directional Signage	X	95
2.3	Site - Building Approach and Entry	Arrival Wayfinding	X	96
2.3	Site - Building Approach and Entry	Drop-Off Area	X	97
2.3	Site - Building Approach and Entry	Paving Surface Wayfinding		98
2.4	Site - Vehicles	Parking Lot Wayfinding		99
2.4	Site - Vehicles	Parking Lot Pedestrian Safety	X	101
2.4	Site - Vehicles	Parking Lot Safe Lighting		101
2.4	Site - Vehicles	Parking Space Safety		102
2.4	Site - Vehicles	Parking Space Protection		103
2.5	Site - Bikes	Public Access		109
2.5	Site - Bikes	Dedicated Paths		110
2.6	Site - Pedestrians	Wayfinding - Arrival	X	114
2.6	Site - Pedestrians	Wayfinding - Simplicity		115
2.6	Site - Pedestrians	Exterior Guide Strips		116
2.6	Site - Pedestrians	Wayfinding - Paving	X	117
2.6	Site - Pedestrians	Pedestrian Paths Width	X	118
2.6	Site - Pedestrians	Path Slopes		120
2.6	Site - Pedestrians	Exterior Handrails		122
2.6	Site - Pedestrians	Pedestrian Safety		122
2.6	Site - Pedestrians	Pedestrian Routes		123
2.6	Site - Pedestrians	Pedestrian Path Lighting	X	123
2.6	Site - Pedestrians	Protected Building Connections		124
2.6	Site - Pedestrians	Safety Railings		124
2.7	Site - Transit	Public Transit		125
2.7	Site - Transit	Reduced Vehicle Speeds		126
2.8	Site - Gardens & Courtyards	Green Space	X	128
2.8	Site - Gardens & Courtyards	Sensory Garden		130
2.8	Site - Gardens & Courtyards	Outdoor Water Feature		131
2.8	Site - Gardens & Courtyards	Outdoor Planter Areas		133
2.8	Site - Gardens & Courtyards	Pet and Service Animals Relief Areas		136
2.9	Site - Building and Site Security	Access Controls		138
2.9	Site - Building and Site Security	Entry System Communications		139
2.10	Site - Entrance Porch	Protected Porch		140

2.10	Site - Entrance Porch	Lighting		141
2.10	Site - Entrance Porch	Weather Infiltration Protection		142
2.11	Site - Gates and Exterior Doors	Entry Doors Hardware		143
3.0	Building Components - Overall Design	Building Organization	X	149
3.1	Building Components - Space & Reach	Turning Space	X	150
3.1	Building Components - Space & Reach	Floor Space		151
3.1	Building Components - Space & Reach	Reach Requirements		152
3.2	Building Components - Acoustics	Background Noise		153
3.2	Building Components - Acoustics	Large Spaces		153
3.4	Building Components - Artificial Lighting	Glare and Light Quality		160
3.4	Building Components - Artificial Lighting	Color Rendering Index		160
3.4	Building Components - Artificial Lighting	Lighting Levels	X	161
3.4	Building Components - Artificial Lighting	Lighting Controls		161
3.4	Building Components - Artificial Lighting	Switch Cover Plates	X	162
3.4	Building Components - Artificial Lighting	Lighting Master Switch		162
3.5	Building Components - Natural Lighting	Daylighting	X	163
3.5	Building Components - Natural Lighting	Managed Daylighting		164
3.5	Building Components - Natural Lighting	Window Design		165
3.5	Building Components - Natural Lighting	Window Location		166
3.6	Building Components - Doors	Clearance Space	X	167
3.6	Building Components - Doors	Door Visibility		168
3.6	Building Components - Doors	Swing Door Automation	X	169
3.6	Building Components - Doors	Automatic Operator	X	170
3.6	Building Components - Doors	Glass Doors		172

3.7	Building Components - FF&E	Area Rugs	X	173
3.7	Building Components - FF&E	Furniture Visibility		177
3.7	Building Components - FF&E	Artwork in Building		178
3.8	Building Components - Wayfinding	Glazing Safety	X	179
3.8	Building Components - Wayfinding	Differentiation of Spaces	X	180
3.8	Building Components - Wayfinding	Interior Guide Strips		181
3.8	Building Components - Wayfinding	Walking Surface Patterns	X	182
3.8	Building Components - Wayfinding	Directional Signage	X	183
3.8	Building Components - Wayfinding	Acoustic Wayfinding		184
3.8	Building Components - Wayfinding	Wayfinding - Flooring		185
3.8	Building Components - Wayfinding	Wayfinding - Lighting		186
3.9	Building Components - Mailboxes	Mailbox Shelter		188
3.9	Building Components - Mailboxes	Mailbox Counter		189
4.0	Interior Spaces - Overall Design	Low Glare Materials	X	194
4.0	Interior Spaces - Overall Design	Activity Areas	X	195
4.0	Interior Spaces - Overall Design	Assistance Signage		196
4.0	Interior Spaces - Overall Design	Slip Resistance Floor Finishes		197
4.1	Interior Spaces - Lobbies & Horizontal Circulation	Building Notifications		198
4.1	Interior Spaces - Lobbies & Horizontal Circulation	Circulation Design		199
4.1	Interior Spaces - Lobbies & Horizontal Circulation	Lobby and Large Space Acoustics		200
4.1	Interior Spaces - Lobbies & Horizontal Circulation	Usable Corridors		201
4.1	Interior Spaces - Lobbies & Horizontal Circulation	Corridor Handrails		202
4.1	Interior Spaces - Lobbies & Horizontal Circulation	Lobby Entry Counter	X	203
4.1	Interior Spaces - Lobbies & Horizontal Circulation	Lean Rails		204
4.2	Interior Spaces - Vertical Circulation	Convenient Ramps		207
4.2	Interior Spaces - Vertical Circulation	Handrail Design		209
4.2	Interior Spaces - Vertical Circulation	Tactile Handrails		210
4.2	Interior Spaces - Vertical Circulation	Elevator Usability		213
4.3	Interior Spaces - Common Rooms & Offices	Shared Kitchen Appliances	X	218
4.4	Interior Spaces - Common Restrooms	Mirrors	X	231
4.5	Interior Space - Trash & Recycling Rooms	Accessible Dumpsters		234
5.0	Dwelling Units - Overall Design	Navigable Floor Plans		242
5.1	Dwelling Units - Details	Washer & Dryer		250
5.1	Dwelling Units - Details	Flexible Lighting		251
5.1	Dwelling Units - Details	Smart Home Controls		251
5.1	Dwelling Units - Details	Usable Interfaces		256
5.2	Dwelling Units - Doors	Unit Entry Thresholds	X	260
5.2	Dwelling Units - Doors	Unit Entry Hardware		261
5.3	Dwelling Units - Kitchens	Kitchen Lighting		268
5.4	Dwelling Units - Kitchen Appliances	Induction Range		270
5.4	Dwelling Units - Kitchen Appliances	Range Hood		271
5.4	Dwelling Units - Kitchen Appliances	Automatic Appliance Shut Off		274
5.5	Dwelling Units - Bathrooms	Bathroom Lighting		287
6.0	Operations & Amenities - General	Information about Culture of Accessibility and Disability Justice		293
6.0	Operations & Amenities - General	Deep Affordability		294
6.0	Operations & Amenities - General	Laundry Equipment		295
6.1	Operations & Amenities - Staffing	Service-Provider Gap Support		299
6.1	Operations & Amenities - Staffing	Manager Units for Staff		300
6.2	Operations & Amenities - Leasing	Acceptance of Vouchers	X	300
6.2	Operations & Amenities - Leasing	Deep Affirmative Marketing	X	301
6.2	Operations & Amenities - Leasing	Embedded Inclusion in Marketing Process		302
6.2	Operations & Amenities - Leasing	Lottery Application System		303
6.2	Operations & Amenities - Leasing	Individual Roommate Selection	X	305

6.2	Operations & Amenities - Leasing	3rd Party Deposit and Credit Support		305
6.2	Operations & Amenities - Leasing	Leasing Support Services		306
6.2	Operations & Amenities - Leasing	Accessible Unit Tracking	X	308
6.2	Operations & Amenities - Leasing	Eviction Protection Plan		307
6.3	Operations & Amenities - Services	Residents Control of Living Structure and Schedule	X	310
6.4	Operations & Amenities - Programming	Carsharing Support		311

Elements Index by Impact Area

Health and Wellness

Sub-Category Number	Sub-Category Name	Element Name	Essential	Page
1.0	Design Process - Outreach	Focus Group	X	73
1.1	Design Process - Team	Universal Design Expertise	X	74
1.1	Design Process - Team	Inclusive Design Workshop		75
1.1	Design Process - Team	Design Education Process	X	76
1.1	Design Process - Team	People with Disabilities Represented on the Project Team	X	77
1.2	Design Process - Project Program	Service Ready Housing	X	78
1.2	Design Process - Project Program	Indoor Air Quality - LEED Criteria	X	78
1.2	Design Process - Project Program	isUD Certification		79
1.2	Design Process - Project Program	Community-Driven Security Planning		79
1.3	Design Process - Education	Resident Education		80
1.3	Design Process - Education	Case Study		80
1.3	Design Process - Education	Construction Signage		81
1.3	Design Process - Education	Local Accessibility Advocacy		82
1.4	Design Process - General	Wayfinding - Signage		83
2.0	Site - General	Density		90
2.1	Site - Neighborhood	Neighborhood Connections and Usability		91
2.1	Site - Neighborhood	Outdoor Amenities		91
2.5	Site - Bikes	Public Access		109

2.5	Site - Bikes	Dedicated Paths		110
2.5	Site - Bikes	Resident Parking		113
2.7	Site - Transit	Reduced Vehicle Speeds		126
2.8	Site - Gardens & Courtyards	Green Space	X	128
2.8	Site - Gardens & Courtyards	Sensory Garden		130
2.8	Site - Gardens & Courtyards	Outdoor Water Feature		131
2.8	Site - Gardens & Courtyards	Vegetable Garden		132
2.8	Site - Gardens & Courtyards	Pet and Service Animals Relief Areas		136
2.9	Site - Building and Site Security	Security System		137
2.9	Site - Building and Site Security	Entry System Communications		139
3.2	Building Components - Acoustics	Background Noise		153
3.2	Building Components - Acoustics	Large Spaces		153
3.2	Building Components - Acoustics	Noise Isolation		154
3.2	Building Components - Acoustics	Outdoor Noise Control		154
3.3	Building Components - Air Quality / HVAC	Pollutants	X	155
3.3	Building Components - Air Quality / HVAC	Filtration		155
3.3	Building Components - Air Quality / HVAC	Low-VOC Materials		156
3.3	Building Components - Air Quality / HVAC	Ceiling Fans		157
3.3	Building Components - Air Quality / HVAC	HVAC Controls		158
3.3	Building Components - Air Quality / HVAC	Window Controls		159
3.5	Building Components - Natural Lighting	Daylighting	X	163
3.7	Building Components - FF&E	Artwork in Building		178
4.0	Interior Spaces - Overall Design	Activity Areas	X	195
4.0	Interior Spaces - Overall Design	Staff Spaces		196
4.0	Interior Spaces - Overall Design	Assistance Signage		196
4.1	Interior Spaces - Lobbies & Horizontal Circulation	Circulation Design		199
4.2	Interior Spaces - Vertical Circulation	Elevator Foot Controls		211
4.2	Interior Spaces - Vertical Circulation	Elevator Design		214

4.2	Interior Spaces - Vertical Circulation	Elevator Security		216
4.2	Interior Spaces - Vertical Circulation	Full-Story Ramp		217
4.3	Interior Spaces - Common Rooms and Offices	Shared Kitchen Faucets	X	221
4.4	Interior Spaces - Common Restrooms	Plumbing - Faucets	X	226
4.4	Interior Spaces - Common Restrooms	Restroom Toiletries		229
4.4	Interior Spaces - Common Restrooms	Hazardous Waste Disposal Bin		230
4.5	Interior Space - Trash & Recycling Rooms	Accessible Dumpsters		234
5.0	Dwelling Units - Overall Design	Bathroom Count		240
5.1	Dwelling Units - Details	Flooring Materials		246
5.1	Dwelling Units - Details	Balcony		249
5.1	Dwelling Units - Details	Flexible Lighting		251
5.3	Dwelling Units - Kitchens	Kitchen Lighting		268
5.5	Dwelling Units - Bathrooms	Toilet - Bidet Seat Prep		282
6.0	Operations & Amenities - General	Unit Trash Collection		291
6.0	Operations & Amenities - General	Information about Culture of Accessibility and Disability Justice		293
6.0	Operations & Amenities - General	Deep Affordability		294
6.1	Operations & Amenities - Staffing	Front Desk Staffing		296
6.1	Operations & Amenities - Staffing	Inclusion and Disability Training	X	297
6.1	Operations & Amenities - Staffing	Service-Provider Gap Support		299
6.1	Operations & Amenities - Staffing	Manager Units for Staff		300
6.2	Operations & Amenities - Leasing	Acceptance of Vouchers	X	300
6.2	Operations & Amenities - Leasing	Embedded Inclusion in Marketing Process		302
6.2	Operations & Amenities - Leasing	Lottery Application System		303
6.2	Operations & Amenities - Leasing	Individual Roommate Selection	X	305
6.2	Operations & Amenities - Leasing	3rd Party Deposit and Credit Support		305
6.2	Operations & Amenities - Leasing	Leasing Support Services		306
6.2	Operations & Amenities - Leasing	Building Staff Involved In Leasing Process		306

6.2	Operations & Amenities - Leasing	Inclusive Leasing Documentation	X	307
6.2	Operations & Amenities - Leasing	Eviction Protection Plan		307
6.2	Operations & Amenities - Leasing	Accessible Unit Tracking	X	308
6.3	Operations & Amenities - Services	Culture of Interdependence		309
6.3	Operations & Amenities - Services	Residents Control of Living Structure and Schedule	X	310
6.3	Operations & Amenities - Services	Resident Selected Service Providers	X	311
6.4	Operations & Amenities - Programming	Carsharing Support		311
6.4	Operations & Amenities - Programming	Resident Programs and Events		312

Elements Index by Impact Area

Cognitive Access

Sub-Category Number	Sub-Category Name	Element Name	Essential	Page
1.0	Design Process - Outreach	Focus Group	X	73
1.1	Design Process - Team	Universal Design Expertise	X	74
1.1	Design Process - Team	Inclusive Design Workshop		75
1.1	Design Process - Team	Design Education Process	X	76
1.1	Design Process - Team	People with Disabilities Represented on the Project Team	X	77
1.2	Design Process - Project Program	Service Ready Housing	X	78
1.2	Design Process - Project Program	Indoor Air Quality - LEED Criteria	X	78
1.2	Design Process - Project Program	isUD Certification		79
1.2	Design Process - Project Program	Community-Driven Security Planning		79
1.3	Design Process - Education	Resident Education		80
1.3	Design Process - Education	Case Study		80
1.3	Design Process - Education	Construction Signage		81
1.3	Design Process - Education	Local Accessibility Advocacy		82
1.4	Design Process - General	Wayfinding - Signage		83
2.0	Site - General	Density		90
2.1	Site - Neighborhood	Neighborhood Connections and Usability		91
2.1	Site - Neighborhood	Outdoor Amenities		91

2.2	Site - Overall Design	Site Organization	X	93
2.2	Site - Overall Design	Directional Signage	X	95
2.3	Site - Building Approach and Entry	Arrival Wayfinding	X	96
2.3	Site - Building Approach and Entry	Drop-Off Area	X	97
2.3	Site - Building Approach and Entry	Paving Surface Wayfinding		98
2.4	Site - Vehicles	Parking Lot Wayfinding		99
2.4	Site - Vehicles	Parking Lot Pedestrian Safety	X	101
2.4	Site - Vehicles	Parking Lot Safe Lighting		101
2.4	Site - Vehicles	Parking Space Safety		102
2.5	Site - Bikes	Public Access		109
2.5	Site - Bikes	Dedicated Paths		110
2.6	Site - Pedestrians	Wayfinding - Arrival	X	114
2.6	Site - Pedestrians	Wayfinding - Simplicity		115
2.6	Site - Pedestrians	Exterior Guide Strips		116
2.6	Site - Pedestrians	Wayfinding - Paving	X	117
2.6	Site - Pedestrians	Exterior Handrails		122
2.6	Site - Pedestrians	Pedestrian Safety		122
2.6	Site - Pedestrians	Pedestrian Path Lighting	X	123
2.7	Site - Transit	Public Transit		125
2.7	Site - Transit	Reduced Vehicle Speeds		126
2.7	Site - Transit	Project-Based Transit	X	127
2.8	Site - Gardens & Courtyards	Green Space	X	128
2.8	Site - Gardens & Courtyards	Sensory Garden		130
2.8	Site - Gardens & Courtyards	Outdoor Water Feature		131
2.8	Site - Gardens & Courtyards	Vegetable Garden		132
2.8	Site - Gardens & Courtyards	Outdoor Planter Areas		133
2.8	Site - Gardens & Courtyards	Pet and Service Animals Relief Areas		136
2.9	Site - Building and Site Security	Entry System Communications		139
2.10	Site - Entrance Porch	Protected Porch		140
2.10	Site - Entrance Porch	Lighting		141
2.11	Site - Gates and Exterior Doors	Entry Doors Hardware		143
2.11	Site - Gates and Exterior Doors	Automatic Entry Doors	X	144
2.11	Site - Gates and Exterior Doors	Entry Doors Security		145

3.0	Building Components - Overall Design	Building Organization	X	149
3.2	Building Components - Acoustics	Background Noise		153
3.2	Building Components - Acoustics	Large Spaces		153
3.2	Building Components - Acoustics	Noise Isolation		154
3.2	Building Components - Acoustics	Outdoor Noise Control		154
3.3	Building Components - Air Quality / HVAC	Pollutants	X	155
3.3	Building Components - Air Quality / HVAC	Low-VOC Materials		156
3.3	Building Components - Air Quality / HVAC	Ceiling Fans		157
3.3	Building Components - Air Quality / HVAC	HVAC Controls		158
3.4	Building Components - Artificial Lighting	Switch Cover Plates	X	162
3.4	Building Components - Artificial Lighting	Lighting Master Switch		162
3.5	Building Components - Natural Lighting	Daylighting	X	163
3.5	Building Components - Natural Lighting	Managed Daylighting		164
3.5	Building Components - Natural Lighting	Window Design		165
3.5	Building Components - Natural Lighting	Window Location		166
3.6	Building Components - Doors	Door Visibility		168
3.6	Building Components - Doors	Swing Door Automation	X	169
3.6	Building Components - Doors	Automatic Operator		170
3.6	Building Components - Doors	Glass Doors		172
3.7	Building Components - FF&E	Artwork in Building		178
3.8	Building Components - Wayfinding	Differentiation of Spaces	X	180
3.8	Building Components - Wayfinding	Interior Guide Strips		181
3.8	Building Components - Wayfinding	Walking Surface Patterns	X	182
3.8	Building Components - Wayfinding	Directional Signage	X	183
3.8	Building Components - Wayfinding	Acoustic Wayfinding		184
3.8	Building Components - Wayfinding	Wayfinding - Flooring		185
3.8	Building Components - Wayfinding	Wayfinding - Lighting		186
3.8	Building Components - Wayfinding	Multilingual Communication		187

3.9	Building Components - Mailboxes	Mailbox Shelter		188
3.9	Building Components - Mailboxes	Mailbox Counter		189
4.0	Interior Spaces - Overall Design	Low Glare Materials	X	194
4.0	Interior Spaces - Overall Design	Activity Areas	X	195
4.0	Interior Spaces - Overall Design	Assistance Signage		196
4.1	Interior Spaces - Lobbies & Horizontal Circulation	Building Notifications		197
4.1	Interior Spaces - Lobbies & Horizontal Circulation	Usable Corridors		201
4.1	Interior Spaces - Lobbies & Horizontal Circulation	Corridor Handrails		202
4.2	Interior Spaces - Vertical Circulation	Convenient Ramps		207
4.2	Interior Spaces - Vertical Circulation	Elevator Interior Buttons		212
4.2	Interior Spaces - Vertical Circulation	Elevator Usability		213
4.2	Interior Spaces - Vertical Circulation	Elevator Emergency Evacuation Use		215
4.3	Interior Spaces - Common Rooms & Offices	Shared Kitchen Faucets	X	218
4.4	Interior Spaces - Common Restrooms	Single-Occupancy Restrooms	X	224
4.4	Interior Spaces - Common Restrooms	Restroom Doors		225
4.4	Interior Spaces - Common Restrooms	Plumbing - Faucets	X	226
4.4	Interior Spaces - Common Restrooms	Plumbing - Toilets		228
4.4	Interior Spaces - Common Restrooms	Air Hand Dryers		232
4.5	Interior Space - Trash & Recycling Rooms	Accessible Trash Chute Doors		233
4.5	Interior Space - Trash & Recycling Rooms	Accessible Dumpsters		234
5.1	Dwelling Units - Details	Flooring Materials		246
5.1	Dwelling Units - Details	Washer and Dryer		250
5.1	Dwelling Units - Details	Flexible Lighting		251
5.1	Dwelling Units - Details	Usable Interfaces		256
5.3	Dwelling Units - Kitchens	Kitchen Lighting		268
5.4	Dwelling Units - Kitchen Appliances	Induction Range		270

5.4	Dwelling Units - Kitchen Appliances	Automatic Appliance Shut Off		274
5.4	Dwelling Units - Kitchen Appliances	Easy to Use Appliances		276
6.0	Operations & Amenities - General	Information about Culture of Accessibility and Disability Justice		293
6.0	Operations & Amenities - General	Deep Affordability		294
6.0	Operations & Amenities - General	Laundry Equipment		295
6.1	Operations & Amenities - Staffing	Front Desk Staffing		296
6.1	Operations & Amenities - Staffing	Inclusion and Disability Training	X	297
6.1	Operations & Amenities - Staffing	Service-Provider Gap Support		299
6.1	Operations & Amenities - Staffing	Manager Units for Staff		300
6.2	Operations & Amenities - Leasing	Acceptance of Vouchers	X	300
6.2	Operations & Amenities - Leasing	Deep Affirmative Marketing	X	301
6.2	Operations & Amenities - Leasing	Embedded Inclusion in Marketing Process		302
6.2	Operations & Amenities - Leasing	Lottery Application System		303
6.2	Operations & Amenities - Leasing	Plain Language Leasing Information	X	304
6.2	Operations & Amenities - Leasing	Individual Roommate Selection	X	305
6.2	Operations & Amenities - Leasing	3rd Party Deposit and Credit Support		305
6.2	Operations & Amenities - Leasing	Leasing Support Services		306
6.2	Operations & Amenities - Leasing	Building Staff Involved In Leasing Process		306
6.2	Operations & Amenities - Leasing	Inclusive Leasing Documentation	X	307
6.2	Operations & Amenities - Leasing	Accessible Unit Tracking	X	308
6.2	Operations & Amenities - Leasing	Eviction Protection Plan		307
6.3	Operations & Amenities - Services	Culture of Interdependence		309
6.3	Operations & Amenities - Services	Residents Control of Living Structure and Schedule	X	310
6.3	Operations & Amenities - Services	Resident Selected Service Providers	X	311
6.4	Operations & Amenities - Programming	Carsharing Support		311

6.4	Operations & Amenities - Programming	Resident Programs and Events	312

Elements Index by Impact Area

Support Needs

Sub-Category Number	Sub-Category Name	Element Name	Essential	Page
1.0	Design Process - Outreach	Focus Group	X	73
1.1	Design Process - Team	Universal Design Expertise	X	74
1.1	Design Process - Team	Inclusive Design Workshop		75
1.1	Design Process - Team	Design Education Process	X	76
1.1	Design Process - Team	People with Disabilities Represented on the Project Team	X	77
1.2	Design Process - Project Program	Service Ready Housing	X	78
1.2	Design Process - Project Program	Indoor Air Quality - LEED Criteria	X	78
1.2	Design Process - Project Program	isUD Certification		79
1.2	Design Process - Project Program	Community-Driven Security Planning		79
1.3	Design Process - Education	Resident Education		80
1.3	Design Process - Education	Case Study		80
1.3	Design Process - Education	Construction Signage		81
1.3	Design Process - Education	Local Accessibility Advocacy		82
1.4	Design Process - General	Wayfinding - Signage		83
2.0	Site - General	Density		90
2.1	Site - Neighborhood	Outdoor Amenities		91
2.4	Site - Vehicles	Staff Parking Space		108
2.4	Site - Vehicles	Car Share Parking Space		108
2.7	Site - Transit	Public Transit		125

2.7	Site - Transit	Reduced Vehicle Speeds		126
2.7	Site - Transit	Project-Based Transit	X	127
2.8	Site - Gardens & Courtyards	Green Space	X	128
2.8	Site - Gardens & Courtyards	Protected Green Spaces		129
2.8	Site - Gardens & Courtyards	Sensory Garden		130
2.8	Site - Gardens & Courtyards	Vegetable Garden		132
2.8	Site - Gardens & Courtyards	Accessible BBQ Area		134
2.8	Site - Gardens & Courtyards	Pet and Service Animals Relief Areas		136
2.9	Site - Building and Site Security	Security System		137
2.11	Site - Gates and Exterior Doors	Entry Doors Security		145
3.3	Building Components - Air Quality / HVAC	HVAC Controls		158
3.6	Building Components - Doors	Glass Doors		172
3.7	Building Components - FF&E	Indoor Seating	X	174
3.7	Building Components - FF&E	Desk or Meeting Room Chairs		175
3.7	Building Components - FF&E	Work Surfaces and Tables		176
3.7	Building Components - FF&E	Furniture Visibility		177
3.7	Building Components - FF&E	Artwork in Building		178
3.8	Building Components - Wayfinding	Directional Signage	X	183
4.0	Interior Spaces - Overall Design	Low Glare Materials	X	194
4.0	Interior Spaces - Overall Design	Activity Areas	X	195
4.0	Interior Spaces - Overall Design	Staff Spaces		196
4.0	Interior Spaces - Overall Design	Assistance Signage		196
4.1	Interior Spaces - Lobbies & Horizontal Circulation	Lobby Entry Counter	X	203
4.2	Interior Spaces - Vertical Circulation	Elevator Design		214
4.2	Interior Spaces - Vertical Circulation	Elevator Emergency Evacuation Use		215
4.2	Interior Spaces - Vertical Circulation	Elevator Security		216
4.2	Interior Spaces - Vertical Circulation	Full-Story Ramp		217
4.3	Interior Spaces - Common Rooms & Offices	Microwave Drawer		219
4.3	Interior Spaces - Common Rooms & Offices	Laundry Rooms		223

4.4	Interior Spaces - Common Restrooms	Common Area Restrooms		224
4.4	Interior Spaces - Common Restrooms	Single-Occupancy Restrooms	X	224
4.4	Interior Spaces - Common Restrooms	Adult Changing Room		225
4.4	Interior Spaces - Common Restrooms	Stored Shared Lift Mechanism		230
4.4	Interior Spaces - Common Restrooms	Restroom Storage		231
4.5	Interior Space - Trash & Recycling Rooms	Accessible Dumpsters		234
5.0	Dwelling Units - Overall Design	Bathroom Count		240
5.0	Dwelling Units - Overall Design	Navigable Floor Plans		242
5.0	Dwelling Units - Overall Design	Kitchen Layout		244
5.1	Dwelling Units - Details	Window Security		247
5.1	Dwelling Units - Details	Washer and Dryer		250
5.1	Dwelling Units - Details	Dwelling Unit Storage		254
5.4	Dwelling Units - Kitchen Appliances	Wall Oven		272
5.4	Dwelling Units - Kitchen Appliances	Automatic Appliance Shut Off		274
5.4	Dwelling Units - Kitchen Appliances	Easy to Use Appliances		276
5.5	Dwelling Units - Bathrooms	Safety	X	276
5.5	Dwelling Units - Bathrooms	Roll-In Showers		280
5.5	Dwelling Units - Bathrooms	Toilet - Bidet Seat Prep		282
5.5	Dwelling Units - Bathrooms	Bathroom Storage		285
6.0	Operations & Amenities - General	Maintenance - Cleaning		291
6.0	Operations & Amenities - General	Integrated Community	X	292
6.0	Operations & Amenities - General	Information about Culture of Accessibility and Disability Justice		293
6.0	Operations & Amenities - General	Deep Affordability		294
6.0	Operations & Amenities - General	Laundry Equipment		295
6.1	Operations & Amenities - Staffing	Front Desk Staffing		296
6.1	Operations & Amenities - Staffing	Inclusion Supports & Services Personnel		298

6.1	Operations & Amenities - Staffing	24/7 On-Call Support		299
6.1	Operations & Amenities - Staffing	Service-Provider Gap Support		299
6.1	Operations & Amenities - Staffing	Manager Units for Staff		300
6.2	Operations & Amenities - Leasing	Acceptance of Vouchers	X	300
6.2	Operations & Amenities - Leasing	Deep Affirmative Marketing	X	301
6.2	Operations & Amenities - Leasing	Embedded Inclusion in Marketing Process		302
6.2	Operations & Amenities - Leasing	Lottery Application System		303
6.2	Operations & Amenities - Leasing	Plain Language Leasing Information	X	304
6.2	Operations & Amenities - Leasing	Individual Roommate Selection	X	305
6.2	Operations & Amenities - Leasing	3rd Party Deposit and Credit Support		305
6.2	Operations & Amenities - Leasing	Leasing Support Services		306
6.2	Operations & Amenities - Leasing	Building Staff Involved In Leasing Process		306
6.2	Operations & Amenities - Leasing	Inclusive Leasing Documentation	X	307
6.2	Operations & Amenities - Leasing	Eviction Protection Plan		307
6.2	Operations & Amenities - Leasing	Accessible Unit Tracking	X	308
6.3	Operations & Amenities - Services	Culture of Interdependence		309
6.3	Operations & Amenities - Services	Residents Control of Living Structure and Schedule	X	310
6.3	Operations & Amenities - Services	Resident Selected Service Providers	X	311
6.4	Operations & Amenities - Programming	Carsharing Support		311
6.4	Operations & Amenities - Programming	Resident Programs and Events		312

Element Details: Design Process

Element Details: Design Process

Sub-Category Number	Sub-Category Name	Element Name	Essential	Page
1.0	Outreach	Focus Group	X	73
1.1	Team	Universal Design Expertise	X	74
1.1	Team	Inclusive Design Workshop		75
1.1	Team	Design Education Process	X	76
1.1	Team	People with Disabilities Represented on the Project Team	X	77
1.2	Project Program	Service Ready Housing	X	78
1.2	Project Program	Indoor Air Quality - LEED Criteria	X	78
1.2	Project Program	isUD Certification		79
1.2	Project Program	Community-Driven Security Planning		79
1.3	Education	Resident Education		80
1.3	Education	Case Study		80
1.3	Education	Construction Signage		81
1.3	Education	Local Accessibility Advocacy		82
1.4	General	Wayfinding - Signage		83

1.0

Outreach
Focus Group

Impact Areas

Mobility and Height · *Hearing and Acoustics* · *Vision*

Health and Wellness · *Cognitive Access* · *Support Needs*

Additional Benefits

Affordability · *Racial Equity* · *Environmental Sustainability*

Safety · *Beauty and Better Design*

Sources

Housing Development Consortium, isUD, Mikiten Architecture, The Kelsey

1
Point Value

Level 1 - Involve people with disabilities and potential future users or similar populations in focus groups/sharing feedback before design begins. **ESSENTIAL ELEMENT**

- People with disabilities are part of the project visioning and development
- Document the comments and requests and incorporate into the project's list of Universal Design goals
- Possible methods: Confidential survey, design workshop, focus group, open meeting

2
Point Value

Level 2 - Additional Focus Group.

- A second focus group meeting is held to get feedback on the design at the end of Schematic Design, or no later than 50% Design Development

Team

1.1 Universal Design Expertise

Impact Areas

Mobility and Height · *Hearing and Acoustics* · *Vision*

Health and Wellness · *Cognitive Access* · *Support Needs*

Additional Benefits

Affordability · *Racial Equity* · *Environmental Sustainability*

Safety · *Beauty and Better Design*

Sources

Enterprise Green Communities, isUD, Mikiten Architecture, The Kelsey

1 *Point Value*

Level 1 - At least one member of the design team has been trained in disability accessibility and/or Universal Design. ESSENTIAL ELEMENT

2 *Point Value*

Level 2 - A professional Universal Design expert is part of the core project team.

- Joins the team at the initiation of the project.
- Customizes UD goals based on any specific project population needs
- Orients the team to the intentions and benefits of Universal Design (owner, developer, contractor, architect, and all architect's subconsultants)
- Tracks Universal Design elements incorporated into the project
- Runs UD workshops
- Reviews drawings to identify Universal Design opportunities
- Works with the building operator to identify Inclusion opportunities

3 *Point Value*

Level 3 - Universal Design expert is the main point of contact to coordinate the documentation and certification process.

4 *Point Value*

Level 4 - Universal Design expert is the project owner, developer, or architect.

Team

1.1 Inclusive Design Workshop

Impact Areas

Mobility and Height · *Hearing and Acoustics* · *Vision*

Health and Wellness · *Cognitive Access* · *Support Needs*

Additional Benefits

Affordability · *Racial Equity* · *Environmental Sustainability*

Safety · *Beauty and Better Design*

Sources

Mikiten Architecture

1 *Point Value*

Design team conducts at least one accessible design strategy workshop at the beginning of Schematic Design.

- Orients the design team to accessible, inclusive possibilities for the project and at least one team review workshop before 50% Schematic Design Phase drawings are complete.
- Facilitated by accessibility/inclusion expert or trained professional

Virtual Design Workshop

Team

1.1 Design Education Process

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision
Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability
Safety · Beauty and Better Design

Sources

Amy Pothier, isUD, Mikiten Architecture

1 *Point Value*

Level 1 - Project team has accessibility/inclusion support materials. ESSENTIAL ELEMENT

- Universal Design introductory manual
- Universal Design web links for research
- Case Studies of successful accessibility/ inclusion projects

2 *Point Value*

Level 2 - Additional UD Workshops.

- In addition to the above, UD expert conducts at least one project review meeting per project phase (Design Development, Construction Documents, Pre-Construction)

3 *Point Value*

Level 3 - Project General Contractor (GC) is involved in the UD Workshops listed above.

- By more deeply understanding the design intent, GC can offer strategies to include more UD elements more efficiently, thereby reducing costs
- Improves likelihood that GC's field decisions won't inadvertently conflict with UD intent, especially when they are proposing substitutions for specified products that may no longer be available

Team

1.1 People with Disabilities Represented on the Project Team

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision
Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability
Safety · Beauty and Better Design

Sources

The Kelsey

1 *Point Value*

Level 1 - People with disabilities are part of advisory groups and/or focus groups; their input is documented and seriously considered.
ESSENTIAL ELEMENT

- Advisory or focus groups are people with lived experience assembled by the project team

2 *Point Value*

Level 2 - People with disabilities are paid consultants on the project team.

3 *Point Value*

Level 3 - People with disabilities are full-time members of the project team and/or developer/ owner team.

Project Program

1.2 Service Ready Housing

Impact Areas

Mobility and Height | Hearing and Acoustics | Vision

Health and Wellness | Cognitive Access | Support Needs

Additional Benefits

Affordability | Racial Equity | Environmental Sustainability

Safety | Beauty and Better Design

1
Point Value

Involve a person/organization who will be part of designing and delivering services in the project design process. ESSENTIAL ELEMENT

Early exploration of local connections can:

- Lead to a richer array of services
- Create early connections with service providers and other community members who could benefit the project through their input
- Ensure that full services are defined early and ready to be offered even during the lease-up process

Sources: *Mikiten Architecture, The Kelsey*

Project Program

1.2 Indoor Air Quality - LEED Criteria

Impact Areas

Mobility and Height | Hearing and Acoustics | Vision

Health and Wellness | Cognitive Access | Support Needs

Additional Benefits

Affordability | Racial Equity | Environmental Sustainability

Safety | Beauty and Better Design

1
Point Value

Level 1 - Project team documents adhere to LEED requirements for indoor air quality.
ESSENTIAL ELEMENT

- Ensures a higher level of indoor air quality for users, especially residents, with chemical sensitivities and compromised respiration

2
Point Value

Level 2 - Project is LEED certified or can demonstrate LEED-equivalent self-certification.

Sources: *Mikiten Architecture*

Project Program

1.2 isUD Certification

Impact Areas

Mobility and Height | Hearing and Acoustics | Vision

Health and Wellness | Cognitive Access | Support Needs

Additional Benefits

Affordability | Racial Equity | Environmental Sustainability

Safety | Beauty and Better Design

1
Point Value

For mixed use projects, achieve isUD certification or demonstrate self-certification for the non-residential portion of the project.

Sources: *Anderson Brule Architects, Mikiten Architecture*

Project Program

1.2 Community-Driven Security Planning

Impact Areas

Mobility and Height | Hearing and Acoustics | Vision

Health and Wellness | Cognitive Access | Support Needs

Additional Benefits

Affordability | Racial Equity | Environmental Sustainability

Safety | Beauty and Better Design

1
Point Value

Sources:
The Kelsey

Building team and community advisors plans a holistic security program that supports residents and neighbors and includes community-led public safety efforts.

- Security planning includes future potential residents and existing neighborhood residents in the process
- Plan defines explicitly: security and safety staffing, use of cameras and other monitoring, building access controls, and policies around conflict resolution, de-escalation, and 3rd party interventions by police and police-alternatives
- Consider how security and safety program is: cognitively and physically accessible, culturally responsive and trauma informed, and addresses how racism and ableism impact how safety and security protocols are carried out
- Reference: SITE - BUILDING AND SITE SECURITY

Education

1.3 Resident Education

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision

Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability

Safety · Beauty and Better Design

1
Point Value

Project development team creates accessible, inclusive design educational strategies.

- Education for residents on accessible and inclulsive concepts and features, accessibility, and inclusivity
- Support local public institutions, policymakers, and other organizations to understand and achieve access and inclusion
- Outreach to nearby places and programs to share best practices and strategies

Sources: *The Kelsey*

Education

1.3 Case Study

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision

Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability

Safety · Beauty and Better Design

1
Point Value

Project development team creates a case study document.

- For use in promoting other accessibility/ inclusion in other housing projects
- For use by the Inclusive Design Standards for sharing with future certification efforts

Sources: *Mikiten Architecture, The Kelsey*

Education

1.3 Construction Signage

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision

Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability

Safety · Beauty and Better Design

Sources

The Corporation for Supportive Housing

1
Point Value

Property sign during construction includes useful project information:

- Active ISA logo
- Equal Opportunity Housing Logo
- Hearing-impaired access information
- Leasing contact phone numbers for the developer and/or operator
- Phone number for the general contractor for reporting construction site problems

Education

1.3 Local Accessibility Advocacy

Impact Areas

Mobility and Height · *Hearing and Acoustics* · *Vision*

Health and Wellness · *Cognitive Access* · *Support Needs*

Additional Benefits

Affordability · *Racial Equity* · *Environmental Sustainability*

Safety · *Beauty and Better Design*

Sources

The Kelsey

1
Point Value

Development process includes one or more efforts to increase local accessibility.

- Advocacy for increased accessible amenities in the surrounding area
- Inclusive housing advocacy
- Other disability-forward development advocacy

General

1.4 Wayfinding - Signage

Impact Areas

Mobility and Height · *Hearing and Acoustics* · *Vision*

Health and Wellness · *Cognitive Access* · *Support Needs*

Additional Benefits

Affordability · *Racial Equity* · *Environmental Sustainability*

Safety · *Beauty and Better Design*

Sources

Mikiten Architecture

1
Point Value

All accessibility signage is to use the Active ISA. Includes but is not limited to the following:

- Parking signs (post/wall mounted and painted on spaces)
- Directional signs indicating accessible routes
- Signs denoting accessible entries
- Signs on restroom doors and stall doors
- Signs elsewhere in the building, including the project's promotional materials such as brochures, websites, or similar
- Coordinate early with the local jurisdiction to confirm acceptance - may only be accepted in non-code-required locations

Element Details: Site

Element Details: Site

Sub-Category Number	Sub-Category Name	Element Name	Essential	Page
2.0	General	Outdoor Seating and Furnishing		89
2.0	General	Density		90
2.1	Neighborhood	Neighborhood Connections and Usability		91
2.1	Neighborhood	Outdoor Amenities		91
2.2	Overall Design	Solar Orientation		92
2.2	Overall Design	Site Organization	X	93
2.2	Overall Design	Indigenous Land Dedication		94
2.2	Overall Design	Directional Signage	X	95
2.3	Building Approach and Entry	Arrival Wayfinding	X	96
2.3	Building Approach and Entry	Drop-Off Area	X	97
2.3	Building Approach and Entry	Paving Surface Wayfinding		98
2.4	Vehicles	Parking Lot Wayfinding		99
2.4	Vehicles	Vehicular Clearance		100
2.4	Vehicles	Parking Lot Pedestrian Safety	X	101
2.4	Vehicles	Parking Lot Safe Lighting		101
2.4	Vehicles	Parking Space Safety		102
2.4	Vehicles	Parking Space Protection		103
2.4	Vehicles	Van Accessible Parking Space Size		104
2.4	Vehicles	Accessible Parking Space Type		105
2.4	Vehicles	Accessible Parking Space Count	X	106
2.4	Vehicles	Family Parking Space		107
2.4	Vehicles	Staff Parking Spaces		108

Sub-Category Number	Sub-Category Name	Element Name	Essential	Page
2.4	Vehicles	Car Share Parking Space		108
2.5	Bikes	Public Access		109
2.5	Bikes	Dedicated Paths		110
2.5	Bikes	Bike Pathway Gates/Doors		111
2.5	Bikes	Visitor Parking		112
2.5	Bikes	Resident Parking		113
2.6	Pedestrians	Wayfinding - Arrival	X	114
2.6	Pedestrians	Wayfinding - Simplicity		115
2.6	Pedestrians	Exterior Guide Strips		116
2.6	Pedestrians	Wayfinding - Paving	X	117
2.6	Pedestrians	Pedestrian Paths Width	X	118
2.6	Pedestrians	Pedestrian Gates		119
2.6	Pedestrians	Path Slopes		120
2.6	Pedestrians	Stairs		121
2.6	Pedestrians	Exterior Handrails		122
2.6	Pedestrians	Pedestrian Safety		122
2.6	Pedestrians	Pedestrian Routes		123
2.6	Pedestrians	Pedestrian Path Lighting	X	123
2.6	Pedestrians	Protected Building Connections		124
2.6	Pedestrians	Safety Railings		124
2.7	Transit	Public Transit		125
2.7	Transit	Reduced Vehicle Speeds		126
2.7	Transit	Project-Based Transit	X	127
2.8	Gardens and Courtyards	Green Space	X	128

Sub-Category Number	Sub-Category Name	Element Name	Essential	Page
2.8	Gardens and Courtyards	Protected Green Spaces		129
2.8	Gardens and Courtyards	Sensory Garden		130
2.8	Gardens and Courtyards	Outdoor Water Feature		131
2.8	Gardens and Courtyards	Vegetable Garden		132
2.8	Gardens and Courtyards	Outdoor Planter Areas		133
2.8	Gardens and Courtyards	Accessible BBQ Area		134
2.8	Gardens and Courtyards	BBQ Areas - Ground Surface		135
2.8	Gardens and Courtyards	Pet and Service Animals Relief Areas		136
2.9	Building and Site Security	Security Systems		137
2.9	Building and Site Security	Access Controls		138
2.9	Building and Site Security	Entry System Communications		139
2.10	Entrance Porch	Protected Porch		140
2.10	Entrance Porch	Lighting		141
2.10	Entrance Porch	Weather Infiltration Protection		142
2.11	Gates and Exterior Doors	Entry Doors Hardware		143

Sub-Category Number	Sub-Category Name	Element Name	Essential	Page
2.11	Gates and Exterior Doors	Automatic Entry Doors	X	144
2.11	Gates and Exterior Doors	Entry Doors Security		145

General

2.0 Outdoor Seating and Furnishing

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

Amy Pothier, isUD, Mikiten Architecture

1
Point Value

Seating options are available in a variety of outdoor locations, in a variety of heights, and with arms to assist stability and getting up/down.

- Adjacent to pedestrian circulation paths for people with less stamina and to enable and encourage resident interactions
- Some seats are provided in shaded/weather-protected areas
- Recreation areas (playgrounds, pools, tennis courts, etc.) have seats at the perimeter for viewing activities and for interaction
- Other activity areas (BBQ areas, sensory gardens, vegetable gardens, etc.) have seats inside the activity area for participation in activities by a wider range of people
- Seating and other furnishings (trash cans, mailboxes, etc.) should be located along but on the side of pedestrian paths to avoid becoming a trip or fall hazard for people with low vision or those not aware of their environment
- Include seats with and without arms. Arms offer support for unstable torsos, reduce fatigue, and are useful for getting up and down, but chairs without arms can be easier for horizontal transfers to and from a wheelchair
- Reference: SITE - GARDENS & COURTYARDS / OUTDOOR SEATING

2.0

General
Density

Impact Areas

Mobility and Height · *Hearing and Acoustics* · *Vision*

Health and Wellness · *Cognitive Access* · *Support Needs*

Additional Benefits

Affordability · *Racial Equity* · *Environmental Sustainability*

Safety · *Beauty and Better Design*

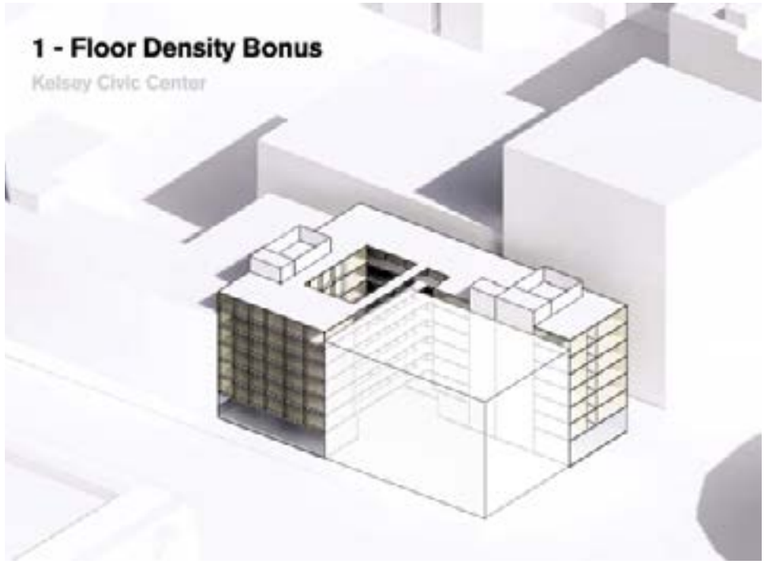
Sources

AARP Liveable Cities, The Kelsey, YIMBY Action

1
Point Value

Building includes maximum allowable denisity.

- Leverages density bonuses based on building affordability
- Increased density creates more housing opportunities and increases activity within a community



2.1

Neighborhood
Neighborhood Connections and Usability

Impact Areas

Mobility and Height · *Hearing and Acoustics* · *Vision*

Health and Wellness · *Cognitive Access* · *Support Needs*

Additional Benefits

Affordability · *Racial Equity* · *Environmental Sustainability*

Safety · *Beauty and Better Design*

1
Point Value

2
Point Value

Level 1 - Site is within 1/2 mile of:

- A grocery store
- A pharmacy
- Banking (relates to income equity)
- The block the building is on offers accessible sidewalks and curb cuts

Level 2 - Site is within 1/4 mile of the above.

Sources: *Mikiten Architecture, California Department of Housing and Community Development, The Kelsey*

2.1

Neighborhood
Outdoor Amenities

Impact Areas

Mobility and Height · *Hearing and Acoustics* · *Vision*

Health and Wellness · *Cognitive Access* · *Support Needs*

Additional Benefits

Affordability · *Racial Equity* · *Environmental Sustainability*

Safety · *Beauty and Better Design*

1
Point Value

Site is located within two miles of outdoor amenities including one or more of the following:

- Wheelchair-accessible outdoor walking paths
- Public park
- Waterfront outdoor areas

Sources: *Inclusive Design Council*

Overall Design
2.2 Solar Orientation

Impact Areas

Mobility and Height — Hearing and Acoustics — **Vision**

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — **Environmental Sustainability**

Safety — **Beauty and Better Design**

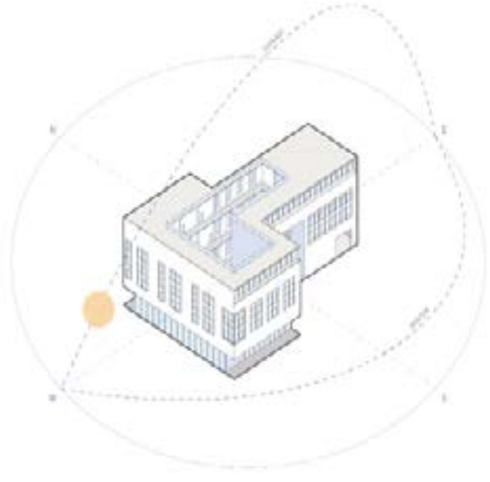
Sources

National Institute of Building Sciences

1
Point Value

Orient new buildings for comfort.

- Minimize east and west-facing exposures to reduce glare from rising or setting sun
- Avoid or protect east or west-facing main building entrances to prevent glare - important for people with low vision, aging eyes, and increases comfortability for everyone
- Maximize landscape views for resident comfort
- North and south-oriented buildings, and glazing reduces solar load and operating costs



Overall Design
2.2 Site Organization

Impact Areas

Mobility and Height — Hearing and Acoustics — **Vision**

Health and Wellness — **Cognitive Access** — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — **Beauty and Better Design**

Sources

Mikiten Architecture

1
Point Value

The site is organized using straightforward and clear patterns of circulation routes and buildings.

ESSENTIAL ELEMENT

- Understandable circulation patterns are easier to navigate for people unfamiliar with a site
- People prone to disorientation are more comfortable
- People with no or low vision can navigate the site more easily
- When organic or secondary paths are used, delineate them (passing type, lighting, planting, etc.) in ways that make them distinct from primary circulation routes
- Incorporating primary and secondary circulation paths can make a site more interesting for everyone

Overall Design
2.2 Indigenous Land Dedication

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision
Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · **Racial Equity** · Environmental Sustainability
Safety · Beauty and Better Design

Sources

The Kelsey

1
Point Value

Development team acknowledges original land holders.

- Can be done in groundbreaking, visual marker on-site, or other partnership with local tribal nations, historically important past owners

Overall Design
2.2 Directional Signage

Impact Areas

Mobility and Height · Hearing and Acoustics · **Vision**
Health and Wellness · **Cognitive Access** · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability
Safety · Beauty and Better Design

Sources

Amy Pothier,
Mikiten Architecture,
National Disability Authority

1
Point Value

Design site directional signage to be clear and broadly usable. **ESSENTIAL ELEMENT**

- Signs are high-contrast (light text on a dark field yields the least glare), in raised text, and in braille
- Text should use sans serif fonts
- Signs have pictograms for children, non-English speakers, people with learning disabilities, and others who cannot read
- Coordinate signage for the site and the building to use a consistent set of pictograms, wording, font style, or similar
- Reference: BUILDING COMPONENTS: DIRECTIONAL SIGNAGE

Building Approach and Entry
2.3 Arrival Wayfinding

Impact Areas

Mobility and Height | Hearing and Acoustics | **Vision**

Health and Wellness | **Cognitive Access** | Support Needs

Additional Benefits

Affordability | Racial Equity | Environmental Sustainability

Safety | Beauty and Better Design

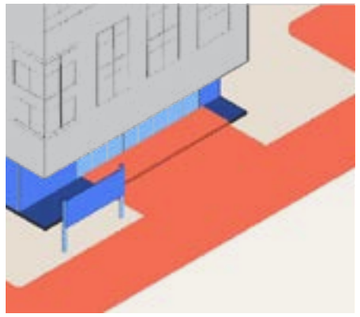
Sources

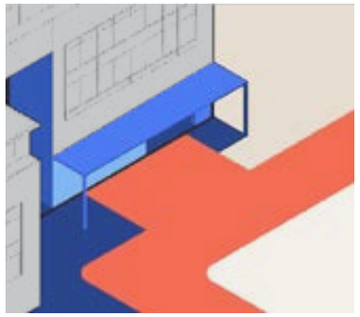
isUD

1
Point Value

Architectural Landmarks.
ESSENTIAL ELEMENT

- Architectural features distinguish all primary entrances and exits from other entrances and exits (e.g., prominent signs, graphics, architectural features, landmarks, etc.)
- Landmark elements have unique lighting to assist in locating them
- They are visible along the primary approach route of motor vehicles, pedestrians, and cyclists





Building Approach and Entry
2.3 Drop-Off Area

Impact Areas

Mobility and Height | Hearing and Acoustics | **Vision**

Health and Wellness | **Cognitive Access** | Support Needs

Additional Benefits

Affordability | Racial Equity | Environmental Sustainability

Safety | Beauty and Better Design

Sources

Architecture for the Blind, LCM Architects

1
Point Value

Strategically avoid curbs at vehicular drop-off areas. **ESSENTIAL ELEMENT**

- Creates an easier transition from vans, ride-shares, etc. for mobility devices and everyone else
- Use tactile warnings where curbs are eliminated.
- Use bollards to protect pedestrians and add visual clues to vehicular areas
- Limit to only the area needed for easy access to vehicles, leaving other areas with curbs for easier detection for blind people with canes

Building Approach and Entry

2.3 Paving Surface Wayfinding

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

Mikiten Architecture

1
Point Value

Change of materials at entrance doors assists in finding the way into the building.

- Extends across sidewalk to curb
- Cane detectable
- Not too rough that it disrupts sidewalk travel
- Select colors for visibility to people with different sorts of color blindness; minimum luminance contrast of 50 percent as well

Vehicles

2.4 Parking Lot Wayfinding

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

isUD,
Mikiten Architecture

1
Point Value

Parking facilities with more than one area or floor have each area uniquely identified with numbers, letters, colors, or symbols.

- Assists residents and visitors in remembering where they parked, especially when parking is not assigned

Vehicles

2.4 Vehicular Clearance

Impact Areas

Mobility and Height; Hearing and Acoustics; Vision; Health and Wellness; Cognitive Access; Support Needs

Additional Benefits

Affordability; Racial Equity; Environmental Sustainability; Safety; Beauty and Better Design

Sources

Mikiten Architecture

1 *Point Value*

Level 1 - Provide 98 inch vertical clearance in all circulation and parking areas of garage and on-site parking, not just routes to accessible spaces.

- Allows people with an accessible van to park elsewhere, even if the designated accessible spaces are full

2 *Point Value*

Level 2 - Provide additional vertical clearance beyond the ADA 98 inches requirement for taller accessible vans.

- Regular accessible vans are in the 78-inch to 95-inch range. Taller ones can be 105 inches to 108 inches high
- Allows for Paratransit vans
- Allows space for roof racks on shorter vans

Vehicles

2.4 Parking Lot Pedestrian Safety

Impact Areas

Mobility and Height; Hearing and Acoustics; Vision; Health and Wellness; Cognitive Access; Support Needs

Additional Benefits

Affordability; Racial Equity; Environmental Sustainability; Safety; Beauty and Better Design

1 *Point Value*

All parking facilities have a continuous network of pedestrian routes with marked pedestrian crossings at all intersections with a vehicular way.

ESSENTIAL ELEMENT

Sources: *isUD*

Vehicles

2.4 Parking Lot Safe Lighting Pedestrian Safety

Impact Areas

Mobility and Height; Hearing and Acoustics; Vision; Health and Wellness; Cognitive Access; Support Needs

Additional Benefits

Affordability; Racial Equity; Environmental Sustainability; Safety; Beauty and Better Design

1 *Point Value*

All parking facilities have electric lighting.

Sources: *isUD*

Vehicles

2.4 Parking Space Safety

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

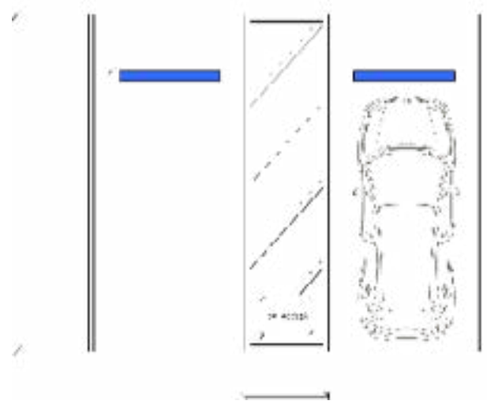
Sources

Mikiten Architecture

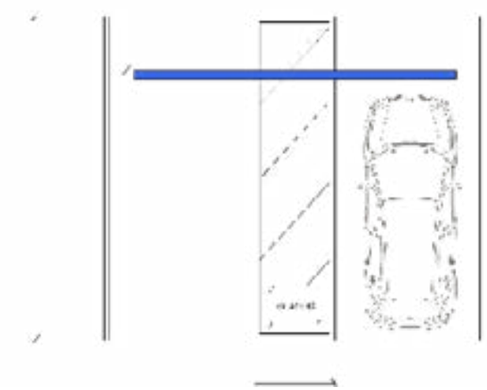
1
Point Value

Wheel stop placement.

- Avoid one wheel stop used for two parking spaces; creates a potential tripping hazard for people walking between parking spaces



Correct



Incorrect

Vehicles

2.4 Parking Space Protection

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

Sources

isUD,
Mikiten Architecture

1
Point Value

Accessible parking spaces are covered for protection from the weather.

- People with disabilities may take longer to get in and out of vehicles and/or deploy van lifts
- Getting in and out of vehicles using mobility aids is more dangerous in conditions not protected from snow and ice

Vehicles

2.4 Van Accessible Parking Space Size

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

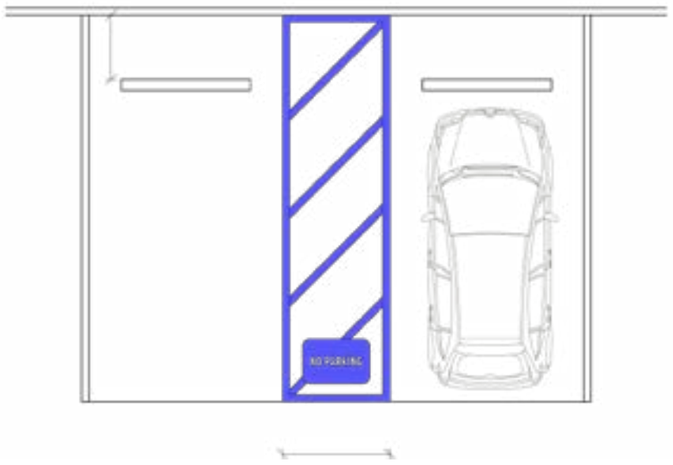
Sources

Mikiten Architecture

1
Point Value

Use 60-inch access aisles throughout.

- The ADA requires a total of 192 inches for a van accessible space plus its access aisle, but the access aisle can be 60 inches or 96 inches of that width. Striping the narrower 60 inch access aisle is less likely to look like a full parking space, so less likely to tempt people to park there, blocking needed access



Vehicles

2.4 Accessible Parking Space Type

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

isUD,
Mikiten Architecture

1
Point Value

All accessible parking spaces are sized as van accessible spaces.

- Provides more flexibility and parking opportunities for people with vans with side-entry ramps (which usually require more space than vertical lifts, and need more than a regular 60-inch access aisle)
- The greater width of van spaces provides additional maneuvering space between vehicles

Vehicles

2.4 Accessible Parking Space Count

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision · Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability · Safety · Beauty and Better Design

Sources

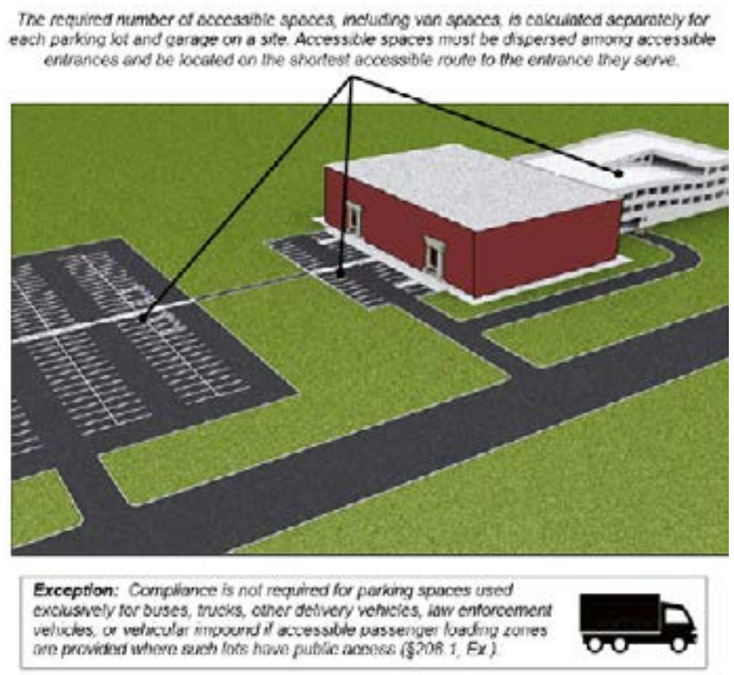
Mikiten Architecture

1
Point Value

When parking is provided include accessible spaces beyond the ADA requirement.

ESSENTIAL ELEMENT

- Minimum 1 additional space for projects with less than 25 total spaces
- In addition to the above, one additional space for each 50 spaces beyond 25



Mikiten Architecture - Sample Diagram

Vehicles

2.4 Family Parking Space

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision · Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability · Safety · Beauty and Better Design

Sources

isUD,
Mikiten Architecture,
National Disability Authority

1
Point Value

Include non-reserved Family / Temporarily Disabled Parking spaces adjacent to regular accessible spaces.

- For families with children, expecting mothers, and people with a temporary disability but no disabled parking permit
- Criteria:
  - 10 feet wide
  - Share access aisle with an accessible space
  - Meet the slope requirements of accessible spaces
  - Be on an accessible route
  - One per five code-required accessible spaces, but not less than one, or adjusted based on project resident demographics and urban vs. suburban sites

Vehicles

2.4 Staff Parking Space

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

1
Point Value

Reserve one dedicated parking space for the Inclusion Concierge program or staff member specifically providing direct services to the residents.

- Increases staff retention, which contributes to creation of a more stable community

Sources: *Mikiten Architecture*

Vehicles

2.4 Car Share Parking Space

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

1
Point Value

Reserve one dedicated parking space for use by a car share program.

Sources: *Mikiten Architecture*

Bikes

2.5 Public Access

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

Sources:

Mikiten Architecture

1
Point Value

Bike connection from the public street or public bike path:

- Leads to resident bike parking with minimal crossing of pedestrian walkways
- Has clear signage about location of bike parking
- Has clear safety signage as needed to minimize hazards to pedestrians

Bikes

2.5 Dedicated Paths

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

Mikiten Architecture

1
Point Value

When dedicated bike paths are provided (generally on larger sites), where the path is intended for riding vs. just reaching the bike parking:

- Have divided traffic with painted lanes and painted directional arrows
- Have yellow detectable warnings on pedestrian paths crossing the bike path
- Have warning signs for pedestrians where pedestrian paths cross the bike path

Bikes

2.5 Bike Pathway Gates/Doors

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

isUD,
Mikiten Architecture

1
Point Value

2
Point Value

Level 1 - Gates and door operation along on-site bike paths:

- Have automatic gate/door operators (since a gate or door cannot easily be unlocked and held open by someone in a recumbent, or who cannot easily dismount an adaptive trike to walk it through the gate/door)
- Timing for closing of automatic gates/doors should be set to allow a slower-moving person or longer bike/trailer to pass easily before they start to close
- Should have a maximum operating force of 10 pounds without the operator, in case the operator malfunctions
- Use operators that, if power to operator fails, don't create additional resistance

Level 2 - Gates and door operation along on-site bike paths:

- Have automatic gate or door operators (since a gate or door cannot easily be unlocked and held open by someone in a recumbent, or who cannot easily dismount an adaptive trike to walk it through the gateor door)
- Timing for closing of automatic gate or doors should be set to allow a slower-moving person or longer bike or trailer to pass easily before they start to close
- Should have a maximum operating force of 10 pounds without the operator, in case the operator malfunctions
- Use operators that, if power to operator fails, don't create additional resistance

Bikes

2.5 Visitor Parking

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

Mikiten Architecture

1
Point Value

Visitor accessible bike parking is provided on the street.

- Minimum 48 inches open on one side (preferably both sides) of bike racks to accommodate larger bikes such as tricycles or adaptive cycles, providing more space for mounting, unmounting, and locking up
- Minimum 72 inches between rear of bike rack and perpendicular pedestrian traffic to accommodate longer adaptive cycles and child trailers without creating a tripping hazard or conflicts between cyclists and pedestrians

2
Point Value

Level 2 - On site visitor accessible bike parking is provided, meeting the requirements above.

3
Point Value

Level 3 - Secured (interior, gated, etc.) on-site visitor accessible bike parking is provided, meeting the requirements above.

Bikes

2.5 Resident Parking

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

Mikiten Architecture, The Kelsey

1
Point Value

Level 1 - Access-controlled resident accessible bike parking is provided.

- Minimum 48 inches open on one side (preferably both sides) of bike racks to accommodate larger bikes such as tricycles or adaptive cycles, providing more space for mounting, unmounting, and locking up
- Minimum 72 inches between rear of bike rack and perpendicular pedestrian traffic to accommodate longer adaptive styles and child trailers without creating a tripping hazard or conflicts between cyclists and pedestrians

2
Point Value

Level 2 - Separate adaptive bike/trike rack(s) are provided.

- Allows more access on both sides of bike/trike for left or right-handed mounting/dismounting
- - 5% of total bike parking provided; minimum 1

3
Point Value

Level 3 - Bike repair services or station is provided, including resident-accessible pressurized air.

- Provide maneuvering space around air hose and mount in accessible reach range

Pedestrians

2.6 Wayfinding - Arrival

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

isUD,
Mikiten Architecture

1
Point Value

The site allows pedestrians to directly access a primary entrance without crossing a vehicular way or parking lot. ESSENTIAL ELEMENT

- Enhances wayfinding and safety for all residents and visitors

Pedestrians

2.6 Wayfinding - Simplicity

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

Mikiten Architecture

1
Point Value

Create an accessible, direct connection between adjacent buildings.

- Makes wayfinding easier for visitors
- Shortens distance to travel for greater convenience

Pedestrians

2.6 Exterior Guide Strips

Impact Areas

Mobility and Height · Hearing and Acoustics · **Vision**

Health and Wellness · **Cognitive Access** · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability

Safety · Beauty and Better Design

Sources

isUD, Mikiten Architecture

1
Point Value

Level 1 - Exterior wayfinding system to the building entrance delineates primary routes and destinations with guide strips that have a different color than the surrounding paving.

- Minimum luminance contrast of 50 percent
- Provides a path for people with low vision to follow
- Strips connect site entry points (transit, pedestrian, and vehicular) with the main building entrance
- Grounds people who are easily disoriented
- Creates opportunities for easy directions for visitors to reach locations like the main building entrance, and a rental office

2
Point Value

Level 2 - Exterior guide strips are both colored and textured differently from the surrounding paving.

- Minimum luminance contrast of 50 percent
- Adding a cane-detectable texture difference allows lower-sighted and blind people to use the guide strips
- Can create an architectural accent element for increased interest

Guide stripe, covered entry

Guide stripe, textured pavement

Pedestrians

2.6 Wayfinding - Paving

Impact Areas

Mobility and Height · Hearing and Acoustics · **Vision**

Health and Wellness · **Cognitive Access** · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability

Safety · Beauty and Better Design

Sources

Mikiten Architecture

1
Point Value

Changes in paving can indicate transitions from one space to another, or alert people to entrances, stairs, elevators or similar.

ESSENTIAL ELEMENT

- Guide strips in concrete can be followed by a cane user
- Texture changes should be cane-detectable.
- Contrast changes perceptible by people with low vision
- A varied and thoughtful paving palette creates more clarity and a more interesting environment for everyone

Pedestrians

2.6 Pedestrian Paths Width

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

isUD,
Mikiten Architecture,
Amy Pothier

1
Point Value

Level 1 - Pedestrian walkways are 4’-0” minimum in width. **ESSENTIAL ELEMENT**

- Allows an ambulatory person to pass a wheelchair or scooter user

2
Point Value

Level 2 - Primary pedestrian walkways that connect buildings, main site entries, or other main site features are 6’-0” minimum in width, others are 4’-0” minimum in width.

- Allows two wheelchair or scooter users to travel side-by-side, allowing conversation
- Allows someone with a mobility device to turn around more easily anywhere on the path

Pedestrians

2.6 Pedestrian Gates

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

Housing Development Consortium,
Mikiten Architecture

1
Point Value

Level 1 - Gates along on-site pedestrian paths (not bike paths):

- Provide 3’-0” min. clear width when the gate is at 90° to allow for easier maneuverability - especially when gate closes automatically

2
Point Value

Level 2 - Gate operation along on-site pedestrian paths:

- Provide automatic operators for ease of use
- Especially important for gates, as the force required to use them often changes over time with exposure to weather, warping, etc., and adjustments to spring closers that enable the gate to remain closed in the wind often make the force to operate greater than the allowed five pounds of effort

Pedestrians
2.6 Path Slopes

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

isUD,
Mikiten Architecture,

1 *Point Value*

Level 1 - Design exterior pedestrian circulation with shallow-sloping walkways (under 1:20 slope) rather than a ramp or stair.

- To accommodate the difficulty in achieving even slopes with poured concrete, design to 1:21 or 1:22 maximum slope to ensure the result is not over 1:20, which would be a “ramp” rather than a “walkway,” and therefore require handrails

2 *Point Value*

Level 2 - In locations with snow and sleet, add one or two handrails on 1:20 or shallower (non-ramp) slopes for safety.

- Follow all related ramp handrail requirements

3 *Point Value*

Level 3 - Design accessible indoor circulation between buildings wherever the site topography is too steep for an exterior accessible route.

Pedestrians
2.6 Stairs

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

isUD,
Mikiten Architecture,
Amy Pothier

1 *Point Value*

Level 1 - Exterior Stairway Usability:

ESSENTIAL ELEMENT

- Equal riser heights of 4-7 inches and equal tread depths of 12-14 inches
- Treads over 14 inches should be at least 24 inches, to allow people to take two comfortable steps on each tread, to keep a comfortable walking gait
- Shallower stairs allow people with mobility disabilities to move around and access spaces more easily

2 *Point Value*

Level 2 - Multi-use Exterior Stairs:

- Stairs have risers of 4” and treads of at least 36”
- Allows use by more agile people with wheelchairs who are able to roll up or down a 4” riser. The 36” tread allows space for many manual wheelchairs to pause between steps
- Creates a safer stair for toddlers and people with walkers, without the possibility of falling down multiple steps if they do lose their footing
- Easier and safer for assisted evacuation of people with wheelchairs
- Useful in secondary paths without space for a ramp
- Must include code-complying handrails

Pedestrians

2.6 Exterior Handrails

Impact Areas

Mobility and Height — Hearing and Acoustics — **Vision**

Health and Wellness — **Cognitive Access** — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

1 *Point Value*

All stairways and ramps have luminescent striping or integrated lighting on at least one set of handrails.

Sources: *isUD*

Pedestrians

2.6 Pedestrian Safety

Impact Areas

Mobility and Height — Hearing and Acoustics — **Vision**

Health and Wellness — **Cognitive Access** — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

1 *Point Value*

Pedestrian routes adjacent to vehicular ways and passenger loading zones are distinctively marked.

- Paving materials and curbs or protective edges such as bollards, chains, walls, and/or planted areas
- These measures assist in wayfinding and in protecting pedestrians from vehicles

Sources: *isUD, Amy Pothier*

Pedestrians

2.6 Pedestrian Routes

Impact Areas

Mobility and Height — Hearing and Acoustics — **Vision**

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

1 *Point Value*

Pedestrian routes connecting site elements are continuously paved and are free of protrusions.

- If non-paved pedestrian areas are provided (such as gravel, mulch, or sand), they cannot lead to site features that would be unreachable by people with mobility devices, difficulty walking, or the blind who would not know that an amenity is available off the paved path

Sources: *Mikiten Architecture*

Pedestrians

2.6 Pedestrian Path Lighting

Impact Areas

Mobility and Height — Hearing and Acoustics — **Vision**

Health and Wellness — **Cognitive Access** — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

1 *Point Value*

Pedestrian paths are illuminated.

ESSENTIAL ELEMENT

- Low-mounted lighting for paths reduces glare for people with low vision or who are sensitive to glare
- Higher-mounted lights placed strategically improve the perception of safety and provide wayfinding assistance for path crossings, entrances, etc
- All ground-mounted lighting must be positioned off the pedestrian path to avoid impeding pedestrians
- Use day or night automatic lights rather than motion. activated lights, which can startle some users and create uncomfortable pools of darkness

Sources: *AARP Liveable Cities, Autism Center, Mikiten Architecture*

Pedestrians

2.6 Protected Building Connections

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision

Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability

Safety · Beauty and Better Design

1 *Point Value*

Level 1 - For multi-building projects in locations with snow and sleet, the site has covered walkways between buildings.

- Creates a safer connection between buildings

2 *Point Value*

Level 2 - For multi-building projects in locations with snow and sleet, the site has enclosed connections between buildings.

- Provides complete weather protection and greater safety for residents

Sources: *isUD, Mikiten Architecture*

Pedestrians

2.6 Safety Railings

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision

Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability

Safety · Beauty and Better Design

1 *Point Value*

Level 1 - Include a handrail on one side of circulation paths that is between 1:24 and 1:20 slope.

2 *Point Value*

Level 2 - Include a handrail on two sides of circulation paths that is between 1:24 and 1:20 slope.

Sources: *Mikiten Architecture*

Transit

2.7 Public Transit

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision

Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability

Safety · Beauty and Better Design

Sources

The Kelsey

1 *Point Value*

Level 1 - Site is located within 1/2 mile of public transit.

2 *Point Value*

Level 2 - Site is located within 1/4 mile of public transit.

3 *Point Value*

Level 3 - Site is located within 1/10 mile of public transit.

Public sidewalk

Transit

2.7 Reduced Vehicle Speeds

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

AARP Liveable Cities

1
Point Value

Level 1 - Streets within 1 square mile of the development have maximum speed limits of 20 mph.

- Neighborhood streets should allow drivers able to easily stop for slow walkers or people who dart into the roadway. Safety, and the ability to react quickly, increases as vehicle speeds decrease
- Fatality from being struck by an automibile increases from 10 percent at 20 mph to 50 percent at 30 mph
- Speed limits should be approriately signed and enforced locally

2
Point Value

Level 2 - Streets within 2 square miles of the development have maximum speed limits of 20 mph.

- Neighborhood streets should allow drivers able to easily stop for slow walkers or people who dart into the roadway. Safety, and the ability to react quickly, increases as vehicle speeds decrease.
- Fatality from being struck by an automibile increases from 10 percent at 20 mph to 50 percent at 30 mph
- Speed limits should be approriately signed and enforced locally

Transit

2.7 Project-Based Transit

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

Anderson Brule Architects, Mikiten Architecture

1
Point Value

When site-based transit is provided (buses, shuttles to mass transit, shopping, etc.), at least one vehicle shall be wheelchair-accessible.

ESSENTIAL ELEMENT

Gardens and Courtyards
2.8 Green Space

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

Sources

Mikiten Architecture, National Institute of Building Sciences

1
Point Value

Provide at-grade or rooftop green spaces.

ESSENTIAL ELEMENT

- Recreation areas, BBQ areas, and gardens for growing food or for meditation, or sensory gardens create opportunities for building resident community, provide a variety of experiences, and connection to nature for general well-being
- Place trees strategically for wayfinding and shade, especially at sitting areas
- Avoid tree species or placement that could result in low-hanging limbs that could pose a hazard for the blind
- Avoid trees that drop nuts, messy flowers, or cones that could be a hazard underfoot or for wheelchairs

Gardens and Courtyards
2.8 Protected Green Spaces

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

Sources

isUD

1
Point Value

Outdoor gathering spaces have gathering areas that are protected from sun, wind, and/or inclement weather.

Protected green space mock-up

Gardens and Courtyards
2.8 Sensory Garden

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

ELS for Autism School, Mikiten Architecture, National Disability Authority

1
Point Value

Include a sensory garden and aromatic plantings.

- Plants in a sensory garden are selected to stimulate and appeal to the five senses
- Fragrant plants at building entrances aid in wayfinding, particularly for people with cognitive, mental, or visual disabilities

Sensory garden mock-up

Gardens and Courtyards
2.8 Outdoor Water Feature

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

Mikiten Architecture, National Institute of Building Sciences

1
Point Value

Include a pond or fountain in outdoor community spaces.

- The sound of water is a wayfinding element for blind or low-sighted people
- The white noise of the water is calming
- In urban projects the white noise can mitigate surrounding traffic noise
- Using a fountain without a basin prevents people from interacting with stagnant water if the pump malfunctions
- Tip: Freestanding, premade fountains can be more cost-effective. Confirm pumps are replaceable
- Water features should have raised perimeters (walls or seating) of 24 inches above adjacent walkways to protect from falling or tripping, which may impact older residents and people with mobility disabilities

Gardens and Courtyards
2.8 Vegetable Garden

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision
Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability
Safety · Beauty and Better Design

Sources

Autism Center, isUD, Mikiten Architecture, National Institute of Building Sciences

1
Point Value

Provide a shared vegetable garden for residents.

- Use both seat-height raised beds with seating surface (to avoid the need for bending or kneeling) as well as without seating surfaces (to enable more direct access by someone with a wheelchair)
- 48” square beds with seats on two opposite sides to optimize reach for more people
- Provide multiple hose locations to minimize the extent to which hoses can create a tripping hazard
- Provide a range of passage spaces between beds to allow comfortable wheelchair passage past other gardeners, including ones seated on benches
- Provide an accessible table-height surface with knee and toe clearance for cleaning vegetables, pruning, and other prep. Make it solid so that soil and water doesn’t fall on a seated person’s lap
- When drainable walking surfaces are needed, use pervious pavers or stabilized decomposed granite (or similar surface that’s safe for walking and doesn’t inhibit wheelchair movement)
- Promotes social interaction between community members
- If possible, include an accessible sink for cleanup

Gardens and Courtyards
2.8 Outdoor Planter Areas

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision
Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability
Safety · Beauty and Better Design

Sources

Mikiten Architecture

1
Point Value

Level 1 - Use planter edges as seating opportunities at a variety of height from 17” to 28.”

- Provides options for people with different abilities to transfer to or from a wheelchair or get up or down
- Provides a more interesting range of landscape design elements
- For CMU walls, use a CMU cap rather than grouted cap for better use as a seat and to avoid cracking in areas of use by people

2
Point Value

Level 2 - When using CMU or concrete walls, use 12” wide rather than 8” for better seat use.

Outdoor area mock-up

Gardens and Courtyards

2.8 Accessible BBQ Area

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

Amy Pothier, Mikiten Architecture

1
Point Value

Provide an accessible BBQ area for communal events.

- Locate to minimize smoke infiltration into dwelling unit windows
- Provide a minimum 3’-0”” wide work space conforming to ADA interior kitchen requirements
- A sink and counter, if provided, conform to ADA requirements
- BBQ itself conforms to the following:
  - Grill surface 34”” maximum AFF
  - Full ADA toe & knee clearance may be impossible due to depth of available BBQs, but specify unit without storage below, to allow as much toe and knee space as possible for a partial forward approach
- If a propane BBQ is used, plan a space for the tank that will not be needed for ADA-required toe and knee space under a prep countertop
- Specify BBQ with easy-to-use knobs that do not require grasping and twisting, that have tonal contrast with background, and easy-to-read and interpret markings
- Specify BBQ or adapter handle to prevent reaching over flames to open/close the lid for everyone’s safety/comfort - especially from a seated position

Gardens and Courtyards

2.8 BBQ Areas - Ground Surface

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

Mikiten Architecture

1
Point Value

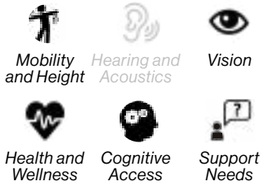
Specify slip resistant pavers when used in BBQ area.

- Ensure non-porous pavers near BBQ to avoid grease stains from BBQ
- Contrasting color pavers near the BBQ can help indicate a more dangerous zone for people to avoid
- Floors should have a DCOF (Dynamic Coefficient Of Friction) rating appropriate for their use, slope, and exposure to water, soap, and cleaning fluids

Gardens and Courtyards

2.8 Pet and Service Animal Release Areas

Impact Areas



Additional Benefits

Sources

Inclusive Design Council, isUD, Mikiten Architecture

1 *Point Value*

Level 1 - Provide at least a small area outside for service animal relief that does not require residents to leave the property.

- Allows blind residents with service animals to stay on site any time of day or night
- Emotional support pets can be important for residents' overall emotional well-being
- Locate where staff is able to monitor activities for all residents' safety and comfort
- Provide pet waste bag dispenser
- Provide covered garbage receptacle for pet waste bags

2 *Point Value*

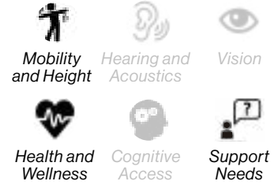
Level 2 - Provide an enclosure and water supply for the service animal relief area, in addition to items above.

- Allows animals to be let off-leash
- Provide a water source and basin that can be replenished without needing to touch the basin
- Animal relief area to have porous surface
- For gates, Reference - GATES AND EXTERIOR DOORS

Building and Site Security

2.9 Security System

Impact Areas



Additional Benefits

Sources

Autism Center, National Disability Authority, The Corporation for Supportive Housing

1 *Point Value*

Provide a security system with 24-hour video monitoring and recording and front entrance door-opening capability from front desk.

- Cameras in stairwells, outside entrances, and all floors
- Cameras allow building management to see if someone has fallen or is having trouble
- Helps ensure building security and resident safety
- Alarmed panic bars on all doors that are assigned function exclusively as emergency exits; clear signage to denote alternative exit doors where residents cannot get back in (due to one-way doors); strategies to prevent residents from opening unmonitored doors for unauthorized entry of others

Building and Site Security
2.9 Access Controls

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

Sources

Mikiten Architecture

1
Point Value

Use proximity sensors for access controls rather than contact card readers and/or keypads for daily resident use.

- Eliminates the need to dig for a card in a pocket, purse, backpack
- Especially helpful for people with low dexterity, arthritis, and for mobility device users to keep their hands available for movement (pushing a wheelchair, using crutches, etc.)
- Eliminates need to position a wheelchair to reach for the card reader
- Speeds entry for everyone - especially welcome in inclement weather
- Eliminates need for low-sighted user to find the contact reader target
- More hygienic than a keypad

Building and Site Security
2.9 Entry System Communications

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

Sources

California Housing and Community Development, Mikiten Architecture

1
Point Value

Provide flexible two-way communications to dwelling units.

- Security controls for visitors at the building entrance provide both audio and visual communications between residents and visitors via a smartphone app that allows remote unlocking of the entry door
- Lets residents with less mobility/dexterity respond to a visitor in a more convenient and timely way
- Affords better communication options for people who lip read or sign
- Allows better confirmation of who a visitor is, for increased security

2.10 Entrance Porch
Protected Porch

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

Sources

Mikiten Architecture, Autism Center, California Housing and Community Development, LCM Architects

1
Point Value

Include covered pedestrian arrival spaces.

- Covered entry doors protect users, staff, and visitors from inclement weather
- Benefits people with mobility aids who may take longer to enter a building
- Prominent covered entrances are architectural cues for where people should enter a building, reducing stress on visitors and users
- Provide cover at main building entries as well as dwelling unit entries that open directly to the outside
- Shared porches at entrance lobbies act as a clear and understandable central pick-up/drop-off point
- Provide a shelf, planter edge, or similar surface for residents to put down things they may be carrying while waiting for a ride or when talking to someone, to reduce fatigue
- Assists in marking entries for familiarity and wayfinding clarity
- Offers opportunities for project community interaction
- Prevents water infiltration into the building

2
Point Value

Level 2 - Include covered vehicular arrival spaces.

- Additional benefits for people with mobility aids who may take longer to enter and exit a car, van with a lift, or similar
- Provide 118 inch clearance (ADA 98”” + 20””) to allow for paratransit van use

2.10 Entrance Porch
Lighting

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

Sources

LCM Architects

1
Point Value

Design lighting to create comfortable transitions between interior and exterior spaces.

- Provide lighting below awnings and covered drop-offs
- Benefits low-vision people in adapting to entering buildings at night or going from lower-light interiors to bright daylight

Entrance Porch

2.10 Weather Infiltration Protection

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

Sources

isUD,
Mikiten Architecture

1
Point Value

All primary entrances and exits have protection against the direction of prevailing wind.

- Screen walls, vestibules, air curtains, etc.
- Reduce infiltration of rain, blowing snow, etc., creating safer entry lobby floors
- Reduces energy loss, increases efficiency, and creates a more controllable and comfortable indoor environment

The broad front porch is shaded from the sun, provides seating to invite socializing, and has enough room for wheelchair passing.

Gates and Exterior Doors

2.11 Entry Doors Hardware

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

Sources

isUD

1
Point Value

Entry door manual hardware is cognitively clear.

- Hardware has design cues indicating the appropriate pushing or pulling action to open (e.g., plate or bar for pushing, U-shaped handle for pulling)

Gates and Exterior Doors
2.11 Automatic Entry Doors

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision
Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability
Safety · Beauty and Better Design

Sources

isUD,
Mikiten Architecture

1 *Point Value*

Level 1 - Automatic doors at primary exterior entrances. **ESSENTIAL ELEMENT**

- Vertical push bar activator or motion sensor
- No in-ground operators at exterior doors (not reliable)
- If only one leaf of a pair of doors is automated, select which door, and place the push bar activator, based on the anticipated direction of traffic flow

2 *Point Value*

Level 2 - Automatic doors at every exterior entrance used by residents or visitors.

- Vertical push bar activator or motion sensor
- No in-ground operators at exterior doors (not reliable)

Vertical push-bar activator for entry doors

Gates and Exterior Doors
2.11 Entry Doors Security

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision
Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability
Safety · Beauty and Better Design

Sources

isUD,
Mikiten Architecture

1 *Point Value*

Exterior doors balance security and ease of resident entry.

- Self-locking exterior doors eliminate the possibility of residents forgetting to lock doors and outside people infiltrating the property
- Selected doors can be secured and unsecured using magnetic swipe cards, electronic key fobs, smart phones, numeric keypads, or other technology in lieu of keys for more convenient entry by residents with low dexterity or limited reach

Element Details: Building Components

Element Details: Building Components

Sub-Category Number	Sub-Category Name	Element Name	Essential	Page
3.0	Overall Design	Building Organization	X	149
3.1	Space and Reach	Turning Space	X	150
3.1	Space and Reach	Floor Space		151
3.1	Space and Reach	Reach Requirements		152
3.2	Acoustics	Background Noise		153
3.2	Acoustics	Large Spaces		153
3.2	Acoustics	Noise Isolation		154
3.2	Acoustics	Outdoor Noise Control		154
3.3	Air Quality or HVAC	Pollutants	X	155
3.3	Air Quality or HVAC	Filtration		155
3.3	Air Quality or HVAC	Low-VOC Materials		156
3.3	Air Qualityor HVAC	Ceiling Fans		157
3.3	Air Quality or HVAC	HVAC Controls		158
3.3	Air Quality or HVAC	Window Controls		159
3.4	Artificial Lighting	Glare and Light Quality	X	160
3.4	Artificial Lighting	Color Rendering Index		160
3.4	Artificial Lighting	Light Levels		161
3.4	Artificial Lighting	Lighting Controls		161
3.4	Artificial Lighting	Switch Cover Plates	X	162
3.4	Artificial Lighting	Lighting Master Switch		162
3.5	Natural Lighting	Daylighting	X	163
3.5	Natural Lighting	Managed Daylighting		164

Sub-Category Number	Sub-Category Name	Element Name	Essential	Page
3.5	Natural Lighting	Window Design		165
3.5	Natural Lighting	Window Location		166
3.6	Doors	Clearance Space		167
3.6	Doors	Door Visibility		168
3.6	Doors	Swing Door Automation	X	169
3.6	Doors	Automatic Operator	X	170
3.6	Doors	Door and Gate Rails		171
3.6	Doors	Glass Doors		172
3.7	FF&E	Area Rugs	X	173
3.7	FF&E	Indoor Seating	X	174
3.7	FF&E	Desk or Meeting Room Chairs		175
3.7	FF&E	Work Surfaces and Tables		176
3.7	FF&E	Furniture Visibility		177
3.7	FF&E	Artwork in Building		178
3.8	Wayfinding	Glazing Safety	X	179
3.8	Wayfinding	Differentiation of Spaces	X	180
3.8	Wayfinding	Interior Guide Strips		181
3.8	Wayfinding	Walking Surface Patterns	X	182
3.8	Wayfinding	Directional Signage	X	183
3.8	Wayfinding	Acoustic Wayfinding		184
3.8	Wayfinding	Wayfinding - Flooring		185
3.8	Wayfinding	Wayfinding - Lighting		186
3.8	Wayfinding	Multilingual Communication		187
3.9	Mailboxes	Mailbox Shelter		188
3.9	Mailboxes	Mailbox Counter		189

Overall Design
3.0 Building Organization

Impact Areas

Mobility and Height · *Hearing and Acoustics* · *Vision*

Health and Wellness · *Cognitive Access* · *Support Needs*

Additional Benefits

Affordability · *Racial Equity* · *Environmental Sustainability*

Safety · *Beauty and Better Design*

Sources

The Kelsey

1
Point Value

Circulation spaces are organized in straightforward and clear patterns. ESSENTIAL ELEMENT

- Understandable circulation patterns (linear, radial, grid, axial, central atrium, etc.) are easier to navigate for people unfamiliar with a building
- People prone to disorientation are more comfortable
- People with no or low vision can navigate the space more easily

3.1 Space and Reach
Turning Space

Impact Areas

Mobility and Height — *Hearing and Acoustics* — *Vision*

Health and Wellness — *Cognitive Access* — *Support Needs*

Additional Benefits

Affordability — *Racial Equity* — *Environmental Sustainability*

Safety — *Beauty and Better Design*

Sources

The Kelsey

1
Point Value

Level 1 - Provide space for a mobility device to enter, turn around in, and exit rooms, clear of furniture and door swings. **ESSENTIAL ELEMENT**

- Provide 67” min. (60” ADA + 7”) diameter circle for turning, connected to a path of travel from the door. (per 2017 ANSI A117.1)

2
Point Value

Level 2 - Provide additional turning space.

- Provide 72” min. (60” + 12”) diameter circle for turning, connected to a path of travel from the door
- Accommodates mobility scooters and multiple people in a space

3.1 Space and Reach
Floor Space

Impact Areas

Mobility and Height — *Hearing and Acoustics* — *Vision*

Health and Wellness — *Cognitive Access* — *Support Needs*

Additional Benefits

Affordability — *Racial Equity* — *Environmental Sustainability*

Safety — *Beauty and Better Design*

Sources

The Kelsey

1
Point Value

Level 1 - Better space requirements:

- Clear floor space: 32”” x 54”” minimum (30” ADA + 2”, and 48” + 6”)
- Knee and toe clearance 32”” wide (30” ADA + 2”)
- Knee clearance:
  - 28”” min. high (27” ADA + 1”) at 8”” depth
  - 11”” min. high (9” ADA + 2”) at 12”” depth
- Toe clearance (work surfaces, sinks, tables):
  - 11”” min. high (9” ADA + 2”) at 20”” min./25”” max. depth
- Toe clearance (lavatories):
  - 11”” min. high (9” ADA + 2”) at 20” min./25”” max. depth”

2
Point Value

Level 2 - Increased Clearance - For larger mobility devices, easier maneuvering, and multiple users at once:

- Clear floor space: 36”” x 56”” minimum (30” + 6”, and 48” + 8”)
- Knee clearance:
  - 28.5” min. high (27” + 1.5”) at 8”” depth
  - 12”” min. high (9” + 3”) at 12”” depth
- Toe clearance (work surfaces, sinks, tables):
  - 12”” min. high (9” + 3”) at 20”” min./25”” max. depth
- Toe clearance (lavatories):
  - 12”” min. high (9” + 3”) at 20”” min./25”” max. depth

3
Point Value

Level 3 - User-Adjustable Clearance - Common Spaces

- Use electric high/low countertops to provide knee space up to at least 36” (27”+9”) high and 24” (19”+5”) deep
- Allows users of all standing and seated heights to easily adjust work surfaces and sinks to their ideal heights
- Include sensors to detect and reverse direction if obstruction is encountered (knee, chair arm, etc.)
- Specify controls that can be operated with one finger (some require two buttons to be pressed at once)
- Kits are available for bathroom and kitchen sink drains

Space and Reach

3.1 Reach Requirements

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

1
Point Value

Level 1 - Make controls, switches, and outlets more reachable.

- 18” min. to bottom of device. (15” + 3”)
- 42” max. to top of device, whether side or front reach, or reaching over obstruction. (44” - 2”)
- 25” max. reach across obstruction
- If placing an outlet under a built-in element, place an accessible one above instead or in addition
- Reach targets are 12” min. from an inside corner (inside corners inhibit easy approach and require diagonal reach)
- Keep in mind that as reach limits are reached, leverage, strength, and grasp are diminished, making items at the reach limit more difficult to use)

Sources

The Kelsey

2
Point Value

Level 2 - Increased vertical reachability:

- 24” min. to bottom of device. (15” + 9”)
- 40” max. to top of device, whether side or front reach, or reaching over obstruction. (44” - 4”)
- 22” max reach across an obstruction. (25” - 3”)
- If placing an outlet under a built-in element, place an accessible one above instead or in addition.
- Reach targets are 12” min. from an inside corner (inside corners inhibit easy approach and require diagonal reach)
- Keep in mind that as reach limits are reached, leverage, strength, and grasp are diminished, making items at the reach limit more difficult to use

Acoustics

3.2 Background Noise

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

1
Point Value

Avoid introducing background noise that can hamper communication.

- Video displays (in lobbies, gyms, etc.) should be silent or the volume should be easily controlled by occupants.
- Avoid background music in lobbies and other shared spaces
- For people with poor hearing or wearing hearing aids, background noise is disruptive to hearing conversations
- Background noise can be overwhelming for people susceptible to cognitive overload
- For blind people navigating in part by sound, background noise can hamper orientation

Sources

The Kelsey

Acoustics

3.2 Large Spaces

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

1
Point Value

Design large spaces (atriums, large lobbies, large community rooms, etc.) to provide acoustic comfort and usability.

- Use materials that reduce echo, which can be overwhelming to some people and inhibit orientation by blind people
- Minimize hard surfaces that create reverberation of sound for everyone’s comfort, especially those with hearing aids, cochlear implants, etc. that can accentuate the echo effect
- Design in smaller areas that are easier to acoustically control to provide a relief from the main space
- A mix of active and quiet spaces allows people with autism and other forms of sensory sensitivity to be in proximity to people but control their engagement.
- Window seats and nooks offer opportunities to participate from the periphery

Sources

The Kelsey

Acoustics
3.2 Noise Isolation

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision · Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability · Safety · Beauty and Better Design

Sources *The Kelsey*

1 *Point Value*

Level 1 - Isolate noise and vibration from all noise-generating building systems.

- People range in their sensitivity to hums and vibrations, which can make some dwelling units unusable by sensitive people
- Enhances user comfort

2 *Point Value*

Level 2 - Exceed code requirements for noise transmission at dwelling units.

- Exceed required STC and IIC ratings to limit noise between dwelling units and between units and corridors
- Enhances privacy
- Enhances user comfort
- Reduces neighbor disputes

Acoustics
3.2 Outdoor Noise Control

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision · Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability · Safety · Beauty and Better Design

1 *Point Value*

All doors and windows exceed the required Sound Transmission Class (STC) to control outside noise sources.

- Enhances hearing and communication
- Reduces distractions
- Enhances user comfort

Sources *The Kelsey*

Air Quality or HVAC
3.3 Pollutants

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision · Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability · Safety · Beauty and Better Design

1 *Point Value*

Prohibit smoking within buildings or within 25 feet of openings. **ESSENTIAL ELEMENT**

- Post signage near all doors and windows where people might smoke outside
- Make it clear in resident materials and with signage on site if there are designated smoking areas for residents

Sources *The Kelsey*

Air Quality or HVAC
3.3 Filtration

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision · Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability · Safety · Beauty and Better Design

1 *Point Value*

Include HEPA filtration for mechanical equipment.

- Building-wide and dwelling unit HVAC filters protect users against outdoor and recirculated pollutants
- Protects people with chemical and pollutant sensitivities or seasonal allergies
- Helps people with dog allergies cope with service dogs in a building

Sources *The Kelsey*

Air Quality / HVAC

3.3 Low-VOC Materials

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision

Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability

Safety · Beauty and Better Design

Sources

The Kelsey

1 *Point Value*

Level 1 - Use low- or no-VOC building materials (paints, adhesives, caulking, carpets, vinyl tile, linoleum, particle board, plywood, and/or engineered wood products).

- Reduces environmental hazards to residents and visitors
- Many people with disabilities have other underlying health issues that are exacerbated by environmental chemicals
- Ensure that low or no-VOC products are durable (for example, some no-VOC paints are more susceptible to physical damage and do not adhere as well)
- VOC-containing materials emit toxic fumes from products or processes to form ozone, which may cause residents to have long-term health effects

2 *Point Value*

Level 2 - Better VOC Controls.

- Use no-VOC materials in all the locations in L1 above.
- Use low- and low-VOC materials for furniture and other FF&E elements

3 *Point Value*

Level 3 - Chemical free areas.

In addition to L1 and L2, designate lobby/common spaces as chemical/odor free zones

- Designate one or more floors, or an entire building, as chemical/odor-free
- Protects people with chemical sensitivities and provides cleaner air for everyone

Air Quality / HVAC

3.3 Ceiling Fans

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision

Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability

Safety · Beauty and Better Design

Sources

The Kelsey

1 *Point Value*

Provide ceiling fans to augment air conditioning at indoor shared spaces, and at outdoor gathering spaces.

- Benefits people with less ability to move around/ get up, and people who may have unique temperature and comfort issues
- Mixes air to boost mechanical system's effectiveness and efficiency
- In large spaces, provide localized control to increase comfort only in areas needed
- Increases comfort and airflow in selective areas - such as those near west-facing windows

Air Quality / HVAC
3.3 HVAC Controls

Impact Areas

Mobility and Height | *Hearing and Acoustics* | *Vision*

Health and Wellness | *Cognitive Access* | *Support Needs*

Additional Benefits

Affordability | *Racial Equity* | *Environmental Sustainability*

Safety | *Beauty and Better Design*

Sources

The Kelsey

1
Point Value

Level 1 - Mechanical system controls are broadly usable.

- See also: BUILDING ELEMENTS - REACH
- Temperature controls can be programmed for different settings based on time of day (and optionally, by season as well)
- In rooms and spaces where occupants have control over temperature, controls follow a common conceptual model. Thermostats are accessible for blind users (tactile buttons and braille, not touch screens) with audible feedback and/or connectivity through mobile apps

2
Point Value

Level 2 - Mechanical system controls are more usable.

- Temperature settings and programming can be adjusted by remote control for more user flexibility and to overcome reach and manipulation issues around a thermostat on the wall or on the HVAC unit itself

Air Quality / HVAC
3.3 Window Controls

Impact Areas

Mobility and Height | *Hearing and Acoustics* | *Vision*

Health and Wellness | *Cognitive Access* | *Support Needs*

Additional Benefits

Affordability | *Racial Equity* | *Environmental Sustainability*

Safety | *Beauty and Better Design*

Sources

The Kelsey

1
Point Value

Operable windows are usable.

- Operating mechanisms are within reach range. See: BUILDING ELEMENTS - REACH
- Surrounding space is designed for access to the window. See: DWELLING UNITS - WINDOW ACCESS
- Cranks and latches can be operated, and windows opened, with the palm of one hand, without grasping or twisting
- If unlatching and opening is one motion, ensure they are in the same direction, so that two hands are not required
- Horizontal sliders can be operated with maximum five-pound pressure within reach range, not just at the middle of the window
- Vertical sliders can be lifted with maximum five-pound pressure

Artificial Lighting
3.4 Glare and Light Quality

Impact Areas

Mobility and Height · Hearing and Acoustics · **Vision**

Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability

Safety · Beauty and Better Design

1
Point Value

Artificial lighting is even, free from glare, and does not cast distracting shadows.

- Glare inhibits lip reading
- Strong directional lighting on a ceiling creates glare and backlighting that can make lip reading difficult, especially when looking up at a taller speaker

Sources *The Kelsey*

Artificial Lighting
3.4 Color Rendering Index

Impact Areas

Mobility and Height · Hearing and Acoustics · **Vision**

Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability

Safety · Beauty and Better Design

1
Point Value

Artificial lighting has a color rendering index of 90 or higher.

- Creates a more natural-looking and comfortable indoor environment
- Colors read more accurately and more easily between artificially- and naturally-lit spaces

Sources *The Kelsey*

Artificial Lighting
3.4 Lighting Levels

Impact Areas

Mobility and Height · Hearing and Acoustics · **Vision**

Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability

Safety · Beauty and Better Design

1
Point Value

Design lighting levels to be appropriate for the activity in a space.

- Provide task or ceiling-mounted directional lighting where needed
- Provide task lighting in reading areas to minimize casting shadows on reading materials
- Design lighting appropriate for each activity that may occur in a multi-purpose room

Sources *The Kelsey*

Artificial Lighting
3.4 Lighting Controls

Impact Areas

Mobility and Height · Hearing and Acoustics · **Vision**

Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · **Environmental Sustainability**

Safety · Beauty and Better Design

1
Point Value

2
Point Value

Level 1 - Occupancy sensors with overrides control all common area artificial lighting.

Level 2 - Common area lighting automatically dims based on the amount of daylight available.

- Creates a more comfortable environment.
- Include separate user-controllable task lighting
- Dimming should be continuous, not just at a few preset levels
- Rather than timers and seasonal settings, light sensors on mullions can be more responsive, changing interior lighting levels only when needed, such as when it's cloudy or hazy
- Reduces energy needs

Artificial Lighting
3.4 Switch Cover Plates

Impact Areas

Mobility and Height · Hearing and Acoustics · **Vision**

Health and Wellness · **Cognitive Access** · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability

Safety · Beauty and Better Design

1 *Point Value*

Switch plates contrast noticeably in color from the surrounding wall. Differentiate color from non-user controls cover plates that may be used elsewhere in the room. **ESSENTIAL ELEMENT**

- Easier to find for everyone, including those with low vision
- Select colors for visibility to people with different sorts of color blindness; minimum luminance contrast of 50 percent as well
- Cognitively more clear

Sources *The Kelsey*

Artificial Lighting
3.4 Lighting Master Switch

Impact Areas

Mobility and Height · Hearing and Acoustics · **Vision**

Health and Wellness · **Cognitive Access** · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability

Safety · Beauty and Better Design

1 *Point Value*

Lighting master switch: All rooms and spaces with multiple artificial lighting controls have a master switch control.

- Allows easier control without having to go to different places in the room
- Cognitively more clear

Sources *The Kelsey*

Natural Lighting
3.5 Daylighting

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision

Health and Wellness · **Cognitive Access** · Support Needs

Additional Benefits

Affordability · Racial Equity · **Environmental Sustainability**

Safety · **Beauty and Better Design**

Sources

The Kelsey

1 *Point Value*

Level 1 - Lobby spaces should have direct access to natural light. **ESSENTIAL ELEMENT**

- Connection to the outside environment increases comfort and well-being
- Include a direct line of sight to the vehicular pick-up area from the interior lobby to allow residents to wait indoors for rides
- Enhances orientation, and therefore wayfinding
- Saves energy

2 *Point Value*

Level 2 - Locate community rooms where they can open to the outdoors and get natural light.

- Encourages use and community-building
- Creates a more comfortable, calmer environment
- Provides opportunities for events to expand to outdoor spaces
- Connection to the outside environment increases comfort and well-being
- Enhances orientation, and therefore wayfinding

3 *Point Value*

Level 3 - In addition to L2, all additional rooms and spaces (excluding storage and utility rooms) have access to natural light either directly or through an adjacent space.

- Connection to the outside environment increases comfort and well-being
- Enhances orientation, and therefore wayfinding can be adjusted by remote control for more user flexibility and to overcome reach and manipulation issues around a thermostat on the wall or on the HVAC unit itself

Natural Lighting
3.5 Managed Daylighting

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

Sources

The Kelsey

1
Point Value

Level 1 - All rooms and spaces with direct access to daylight have architectural features to manage the daylight (e.g. light shelves, clerestories, recessed skylights, etc.)

- Reduced glare increases lipreading communication
- Reduced glare enhances visibility and therefore, wayfinding - especially for low-sighted people who may acclimate more slowly to changes in brightness between outside exterior and interior spaces.
- Eliminating natural lighting overload increases thermal comfort by eliminating hot spots inside the building
- Controlling solar heat gain helps mechanical equipment run more efficiently

2
Point Value

Level 2 - Window shades allow users to control the natural light.

- Reference: THERMAL COMFORT - WINDOW CONTROLS

Natural Lighting
3.5 Window Design

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

Sources

The Kelsey

1
Point Value

Windows have low sills.

- Offers equal view experience to shorter or seated people
- Creates a stronger connection to the outdoors for all users

Natural Lighting
3.5 Window Location

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

1
Point Value

Locate windows at the ends of or at changes in direction of corridors.

- Can assist in wayfinding
- Creates a sense of orientation (both to the outside in general and to the sun for time of day and direction, especially in a large building)
- Natural light creates a sense of well-being throughout the building
- Natural light helps to counter isolation
- Avoid shiny floor and wall surfaces that can create a glare problem in the corridor, which can be a detriment to wayfinding
- Diffuse the light with window treatments inside or outside if necessary

Sources

The Kelsey

Doors
3.6 Clearance Space

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

1
Point Value

Ensure clear space and safe navigation at entries.

- Ensure that doors do not swing into a perpendicular path of travel - if they do, create an alcove or provide cane-detectable protection from impact
- Provide glass doors or an adjacent full-height view panel to improve visibility at entries; helpful for people with low vision and the deaf who might not hear someone approaching
- Specify fixed trash can locations outside the area of navigation at doors to ensure that conflicting trash cans do not get placed in navigation area by maintenance staff
- If designated near entries, design trash cans into specific enclosures to prevent maintenance staff and others from putting them in the required strike-side clearance

Sources

The Kelsey

Doors

3.6 Door Visibility

Impact Areas

Mobility and Height | Hearing and Acoustics | **Vision**

Health and Wellness | **Cognitive Access** | Support Needs

Additional Benefits

Affordability | Racial Equity | Environmental Sustainability

Safety | Beauty and Better Design

Sources

The Kelsey

1
Point Value

All doors or door frames visually contrast with the surrounding walls.

- Easier identification by people with low vision
- Select colors for visibility to people with different sorts of color blindness; minimum luminance contrast of 50 percent as well
- Unique colors for visitor and resident doors vs. service or delivery doors assist in wayfinding and orientation
- Reference: BUILDING COMPONENTS - Doors - Glass Doors

Doors

3.6 Swing Door Automation

Impact Areas

Mobility and Height | Hearing and Acoustics | **Vision**

Health and Wellness | **Cognitive Access** | Support Needs

Additional Benefits

Affordability | Racial Equity | Environmental Sustainability

Safety | **Beauty and Better Design**

Sources

The Kelsey

1
Point Value

Where automatic swing door operators are provided, use vertical activator bars and more flexible operators. **ESSENTIAL ELEMENT**

- Vertical activator bars:
  - Allow activation with wheelchair footrest by someone's foot when their arms are occupied carrying something, or at any other height for flexibility and convenience
  - Cleaner and less institutional-looking than two buttons, can be freestanding, such as in front of a window, and can sometimes be combined in one bollard with building entry system keypads
- Flexible operators meet the following criteria:
  - Create no resistance when pushed manually (ideally operator reduces effort while still allowing a door to be opened quickly manually)
  - Have no resistance when there is a power outage and doors are used manually
  - Have a wide range of adjustability for opening times and speed
  - Can be mounted upside down on door when needed (such as when a storefront system header is not tall enough)

Doors

3.6 Automatic Operator

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

The Kelsey

1 *Point Value*

2 *Point Value*

3 *Point Value*

Level 1 - In addition to providing automatic doors at building entrances used by residents (Reference: SITE - GATES & EXTERIOR DOORS), also provide at common restrooms.

ESSENTIAL ELEMENT

- Meet the criteria of BUILDING ELEMENTS - DOORS / Swing Door Automation

Level 2 - In addition to L1, provide automatic doors at shared resident spaces and staff offices.

Level 3 - Rather than swing doors, make doors at building entrances used by residents sliding doors.

- Automatic operation by motion sensor from the interior and building access controls from the exterior. Reference: EXTERIOR-SECURITY / Access Controls
- Provides a usable opening width faster than swing doors
- Avoids congestion from multiple users at a time
- Avoids collisions between mobility devices or low-sighted people and the arc of swing doors
- For double doors, lets groups of people (especially when traveling in both directions at once) negotiate passage with less conflict/ confusion

Doors

3.6 Door and Gate Rails

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

The Kelsey

1 *Point Value*

High bottom rails.

- Provide 12” rather than 10” smooth surface or kick plates at bottom of doors and gates for larger/taller electric wheelchairs - especially at custom gates

Doors

3.6 Glass Doors

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision · Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability · Safety · Beauty and Better Design

Sources

The Kelsey

1
Point Value

Use glass doors along a wayfinding path and into community spaces.

- Assists visibility of the wayfinding path and general visual/cognitive orientation
- No frameless glass doors, which are less visible to people with low vision
- Reference: BUILDING ELEMENTS - DOORS / Door Visibility

FF&E

3.7 Area Rugs

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision · Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability · Safety · Beauty and Better Design

Sources

The Kelsey

1
Point Value

Avoid the use of unsecured area rugs.

ESSENTIAL ELEMENT

- Creates potential tripping hazards, especially for people who can't lift their feet, cane, walker, or crutches well
- Interferes with turning a wheelchair
- When used on carpeted floor, the ADA pile height is usually exceeded, making too soft a surface for mobility aids

FF&E

3.7 Indoor Seating

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

The Kelsey

1
Point Value

Specify a variety of seating types to provide a wide range of options for different needs and comfort levels. **ESSENTIAL ELEMENT**

- Include seats with and without arms. Arms offer support for unstable torsos, reduce fatigue, and are useful for getting up and down, but chairs without arms can be easier for horizontal transfers to and from a wheelchair
- Include backrests on most seats for safety, support, and comfort
- Include seats of different heights in each location to provide options for tall and short people, or people who can't get up and down easily
- Include seats of different firmness - some people cannot get up from chairs, sofas, or other seats that are too soft, but many people cannot sit comfortably on hard seats for long periods
- Variety in seating design and types can foster different types of conversations and connections between residents
- Reference: INDOOR AIR QUALITY - LOW-VOC MATERIALS

FF&E

3.7 Desk or Meeting Room Chairs

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

The Kelsey

1
Point Value

Specify a variety of desk and meeting room chairs with and without wheels and arms.

- Wheels make a chair easier to pull out from a desk or to position once seated, but can dangerously roll away from someone who is unsteady or transferring from a mobility device
- Include chairs with and without arms. Arms offer support for unstable torsos, reduce fatigue, and are useful for getting up and down, but chairs without arms can be easier for horizontal transfers to and from a wheelchair

FF&E

3.7 Work Surfaces and Tables

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

The Kelsey

1
Point Value

Level 1 - Tables are easy to move, on locking wheels and/or are lightweight.

- Allows easier repositioning to make space for larger mobility devices
- Allows easier repositioning for different types of group meetings or educational events

2
Point Value

Level 2 - Provide electric user-adjustable desks and countertops.

- Provides greater knee space for electric wheelchairs
- Increases flexibility for people with bad backs to use a range of ergonomic chairs or stools, or to stand
- Allows smaller people to lower the surface below standard desk height for easier use
- Should not require users to hold two buttons at once to adjust

FF&E

3.7 Furniture Visibility

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

Design Resources for Homelessness, Mikiten Architecture, National Institute of Building Sciences

1
Point Value

Specify common space furniture that is easily seen and is movable.

- Consider form, color, and value visibility against the flooring and other surrounding surfaces so that they do not become collision hazards
- Creates a less homogenous interior environment.
- Movable furniture provides opportunities for different types and sizes of social interactions

Navigable lobby with floor-furniture contrast

FF&E

3.7 Artwork in Building

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

Mikiten Architecture, Shopworks Architecture

1
Point Value

Include artwork in interior and exterior spaces.

- Promotes a sense of welcome and home
- Can enhance wayfinding with strategic placement
- Artwork can be placed on walls and/or integrated as part of the graphic wayfinding strategy
- Ensure sculpture is cane-detectable and that wall-mounted pieces do not project more than 4” from the wall

Wayfinding

3.8 Glazing Safety

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

Architecture for the Blind, Mikiten Architecture

1
Point Value

Level 1 - Glass doors and windows that extend to the floor should have visible and and cane-detectable sills. ESSENTIAL ELEMENT

- Glass wall systems with no delineation at the sill can be a hazard for everyone, especially low-vision people

2
Point Value

Level 2 - Use safety decals on glazing with low sills.

- In addition to L1, use decals on glazing less than 12 inches above the walking surface, use visible decals or patterns at median eye level as a visual identification/warning to benefit low vision or aging eyes

Wayfinding

3.8 Differentiation of Spaces

Impact Areas

Mobility and Height | Hearing and Acoustics | Vision

Health and Wellness | Cognitive Access | Support Needs

Additional Benefits

Affordability | Racial Equity | Environmental Sustainability

Safety | Beauty and Better Design

Sources

Design Resources for Homelessness, isUD, Mikiten Architecture, Sonoma UD for Housinga

1
Point Value

Interior wayfinding system differentiates primary routes, zones, or nodes using variations in flooring, lighting, color, ceiling height, materials, and/or other architectural features.

ESSENTIAL ELEMENT

- Color-code or have unique materials for each floors' elevator lobbies for orientation
- Select colors for visibility to people with different sorts of color blindness; minimum luminance contrast of 50 percent as well
- Change color/contrast to delineate between floors and walls and between stair treads and risers to assist people with low vision
- Creates architectural reference points
- Creates zones with unique character
- Assists older adults with memory issues, people with cognitive impairments that affect orientation, and people who cannot read or understand signage

Wayfinding

3.8 Interior Guide Strips

Impact Areas

Mobility and Height | Hearing and Acoustics | Vision

Health and Wellness | Cognitive Access | Support Needs

Additional Benefits

Affordability | Racial Equity | Environmental Sustainability

Safety | Beauty and Better Design

Sources

Inclusive Design Council, isUD, Mikiten Architecture

1
Point Value

Level 1 - Interior wayfinding system delineates primary routes and destinations with guide strips that have a different color than the surrounding floor.

- Provides a path for people with low vision to follow.
- Grounds people who are easily disoriented
- Creates opportunities for easy directions for visitors to reach locations like a rental office, community room, etc.
- Can also be achieved with baseboard colors.
- Select colors for visibility to people with different sorts of color blindness; minimum luminance contrast of 50 percent as well

2
Point Value

Level 2 - In addition to L1, interior guide strips are both colored and textured differently from the surrounding floor.

- Adding a cane-detectable texture difference allows lower-sighted and blind people to use the guide strips
- Can create an architectural accent element for increased interest

Interior floor guides examples

Wayfinding

3.8 Walking Surface Patterns

Impact Areas

Mobility and Height | Hearing and Acoustics | **Vision**

Health and Wellness | **Cognitive Access** | Support Needs

Additional Benefits

Affordability | Racial Equity | Environmental Sustainability

Safety | Beauty and Better Design

1
Point Value

Avoid confusing patterns on interior floor and exterior paving walking surfaces.
ESSENTIAL ELEMENT

- Carpets and flooring with busy visual patterns can be distracting for people with low vision and disorienting to people with cognitive differences
- Complex patterns can obscure tripping hazards, especially rocks, branches, etc. outside

Wayfinding

3.8 Directional Signage

Impact Areas

Mobility and Height | **Hearing and Acoustics** | **Vision**

Health and Wellness | **Cognitive Access** | **Support Needs**

Additional Benefits

Affordability | Racial Equity | Environmental Sustainability

Safety | **Beauty and Better Design**

1
Point Value

Level 1 -Design building directional signage to be clear and broadly usable. **ESSENTIAL ELEMENT**

- Signage includes room name or use in addition to room numbers, in both raised text and braille
- Signs are high-contrast (light text on a dark field yields the least glare)
- Signs have pictograms for non-English speakers, children, and others who cannot read
- Coordinate signage for the site and the building to use a consistent set of pictograms. wording, font style, etc.
- Directional signage: Position to face the direction of approach at intersecting routes and include arrows with room number groups or other primary rooms and functions
- In-stair signage indicates the floor number and direction to exit clearly
- Reference: SITE - OVERALL DESIGN / SITE DIRECTIONAL SIGNAGE.

2
Point Value

Level 2 - Use tactile building orientation / evacuation maps.

- Tactile maps showing rooms and circulation spaces let people who are blind navigate spaces easier - can be 3D printed or built up. Locate at all primary entrances the primary access point to each floor, and all corridor intersections
- Consider having this available as printout for people to memorize/carry with them, especially if it contains evacuation information

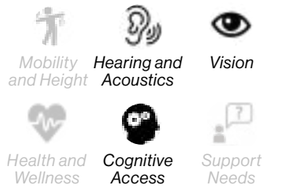
3
Point Value

Level 3 - Augment signage with QR codes.

- Provides a link to additional online resources (information about the room, a link to get assistance or report a problem, etc.)

Wayfinding
3.8 Acoustic Wayfinding

Impact Areas



Additional Benefits

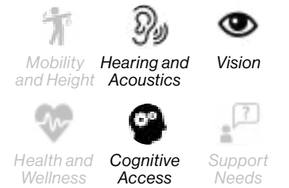
1
Point Value

Use wall and ceiling surface materials and ceiling heights to differentiate spaces.

- Audible changes in the acoustic environment are a helpful guide for visually impaired people
- Ceiling heights can indicate different functions for visual orientation
- Circulation paths, atriums, or other large spaces can be articulated with spaces with different acoustic responses to indicate location (e.g.: corridor intersections, unit entries, sitting areas vs. circulation areas, etc.)

Wayfinding
3.8 Flooring

Impact Areas



Additional Benefits

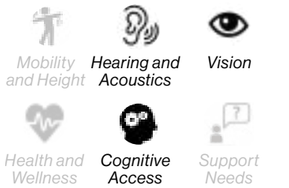
1
Point Value

Interior floor materials indicate transitions from one space to another, or alert people to entrances, stairs, or elevators.

- Texture changes should be cane-detectable by individual with vision-related access needs
- Select colors for visibility to people with different sorts of color blindness; minimum luminance contrast of 50 percent as well
- Baseboard or floor material border color changes in corridors can help with navigating the building's orientation
- A varied and thoughtful flooring palette creates more clarity and a more interesting environment for everyone

3.8 Wayfinding
Lighting

Impact Areas



Additional Benefits

1
Point Value

Use distinctive decorative lighting fixtures as landmarks.

- Corridor ends and crossings to reduce disorientation
- At unit entries to differentiate from other doors
- A number of wall sconces indicating the floor you are on outside an elevator (for buildings with fewer floors)
- Use downlighting, uplighting, and wall sconces strategically in different parts of a corridor

3.8 Wayfinding
Multilingual Communication

Impact Areas

Additional Benefits

1
Point Value

Level 1 - Multi Language Sign Communication.

- Signage includes multiple languages based on highly used local languages

2
Point Value

Level 2 - American Sign Language (ASL) Hand Signs.

- Signage includes illustrations of key words and places in ASL

Mailboxes

3.9 Mailbox Shelter

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

Sources

Mikiten Architecture

1
Point Value

Provide weather protection at outdoor mailbox areas.

- Protects everyone getting their mail from a central location, especially if they are moving more slowly
- Protects packages that might be left
- Protects management notice areas that often occur at mailboxes

Mailbox area with overhead shelter

Mailboxes

3.9 Mailbox Counter

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

Sources

Mikiten Architecture

1
Point Value

Provide a counter at mailboxes.

- Easier use for people with less dexterity
- More convenient for everyone
- Provide clear knee space under counter

Element Details: Interior Spaces

Element Details: Interior Spaces

Sub-Category Number	Sub-Category Name	Element Name	Essential	Page
4.0	Overall Design	Low Glare Materials	X	194
4.0	Overall Design	Activity Areas	X	195
4.0	Overall Design	Staff Spaces		196
4.0	Overall Design	Assistance Signage		196
4.0	Overall Design	Slip Resistance Floor Finishes		197
4.1	Lobbies and Horizontal Circulation	Building Notifications		198
4.1	Lobbies and Horizontal Circulation	Circulation Design		199
4.1	Lobbies and Horizontal Circulation	Lobby and Large Space Acoustics		200
4.1	Lobbies and Horizontal Circulation	Usable Corridors		201
4.1	Lobbies and Horizontal Circulation	Corridor Handrails		202
4.1	Lobbies and Horizontal Circulation	Lobby Entry Counter	X	203
4.1	Lobbies and Horizontal Circulation	Lean Rails		204
4.2	Vertical Circulation	Usable Stairs		205
4.2	Vertical Circulation	Stair Evacuation Chairs		206
4.2	Vertical Circulation	Convenient Ramps		207
4.2	Vertical Circulation	Dual Handrails		208
4.2	Vertical Circulation	Handrail Design		209
4.2	Vertical Circulation	Tactile Handrails		210
4.2	Vertical Circulation	Elevator Foot Controls		211
4.2	Vertical Circulation	Elevator Interior Buttons		212

Sub-Category Number	Sub-Category Name	Element Name	Essential	Page
4.2	Vertical Circulation	Elevator Usability		213
4.2	Vertical Circulation	Elevator Design		214
4.2	Vertical Circulation	Elevator Emergency Evacuation Use		215
4.2	Vertical Circulation	Elevator Security		216
4.2	Vertical Circulation	Full-Story Ramp		217
4.3	Common Rooms and Offices	Shared Kitchen Appliances	X	218
4.3	Common Rooms and Offices	Microwave Drawer		219
4.3	Common Rooms and Offices	Shared Kitchen Sinks	X	220
4.3	Common Rooms and Offices	Shared Kitchen Faucets	X	221
4.3	Common Rooms and Offices	Community Room Hearing System		222
4.3	Common Rooms and Offices	Laundry Rooms		223
4.4	Common Restrooms	Common Area Restrooms		224
4.4	Common Restrooms	Single-Occupancy Restrooms	X	224
4.4	Common Restrooms	Adult Changing Room		225
4.4	Common Restrooms	Restroom Doors		225
4.4	Common Restrooms	Plumbing - Faucets	X	226
4.4	Common Restrooms	Plumbing - Sinks	X	227
4.4	Common Restrooms	Plumbing - Toilets		228
4.4	Common Restrooms	Restroom Toiletries		229
4.4	Common Restrooms	Stored Shared Lift Mechanism		230
4.4	Common Restrooms	Hazardous Waste Disposal Bin		230
4.4	Common Restrooms	Mirrors	X	231
4.4	Common Restrooms	Restroom Storage		231
4.4	Common Restrooms	Paper Towel Dispenser	X	232

Section 4 / **Elements** / *Element Details: Interior Spaces*

Sub-Category Number	Sub-Category Name	Element Name	Essential	Page
4.4	Common Restrooms	Air Hand Dryers		232
4.5	Trash and Recycling Rooms	Accessible Trash Chute Doors		233
4.5	Trash and Recycling Rooms	Accessible Dumpsters		234

Overall Design
4.0 Low Glare Materials

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision

Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability

Safety · Beauty and Better Design

Sources

Architecture for the Blind, Mikiten Architecture

1 *Point Value*

Use wall and floor surfaces that are low glare.
ESSENTIAL ELEMENT

- Matte surfaces and medium-value surfaces are better for reducing glare
- Facilitates wayfinding for people with low vision.
- Prevents uncomfortable conditions for lip reading and signing
- Results in less slippery floors
- Protects against slipping when floors get wet

Overall Design
4.0 Activity Areas

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision

Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability

Safety · Beauty and Better Design

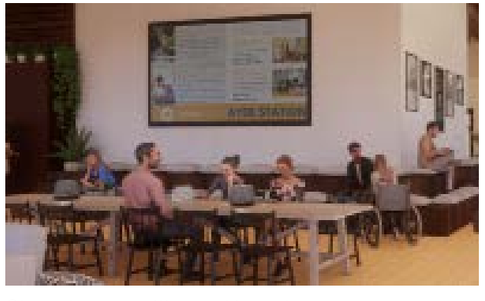
Sources

LCM Architects, Mikiten Architecture, Inclusive Design Council Shopworks - Designing for Healing, Dignity, and Joy

1 *Point Value*

Provide shared social spaces for activities and interactions. **ESSENTIAL ELEMENT**

- Sensory gardens, demonstration or shared-use kitchens, fitness areas, game/TV room, and similar spaces – that are thoughtful and intentional in their design - are important for resident mental and physical health
- Design shared spaces and their furnishings to be flexible and easily moved, to accommodate multiple uses that may develop over time
- These spaces are especially important in affordable housing and for residents with disabilities who have fewer options outside the project
- Locate close to staffed areas for residents who have experienced trauma to feel safer
- Staff help create a sense of community, build trust with and among residents, and facilitate relationships
- For furnishings, Reference: BUILDING COMPONENTS - FF&E
- For outdoor spaces, Reference: SITE - GARDENS & COURTYARDS



Shared space with event board

Overall Design
4.0 Staff Spaces

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision · Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability · Safety · Beauty and Better Design

1 *Point Value*

Provide respite area(s) for staff outside their dwelling unit.

- Improves their performance and helps to prevent burnout or exhaustion
- Include natural light and air, connection to nature

Sources: *LCM Architects*

Overall Design
4.0 Assistance Signage

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision · Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability · Safety · Beauty and Better Design

1 *Point Value*

Use signage to alert people that support is available.

- "Need something? Just ask." signs in common rooms. Sets a positive tone, lets everyone know there is support available from building staff
- Fosters a collaborative atmosphere
- Include phone number and QR code to make it easy to contact staff

Sources: *Mikiten Architecture*

Overall Design
4.0 Slip Resistance Floor Finishes

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision · Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability · Safety · Beauty and Better Design

1 *Point Value*

2 *Point Value*

3 *Point Value*

Specify slip-resistant floors, especially at building entrances.

- Floors should have a DCOF (Dynamic Coefficient Of Friction) rating appropriate for their use, slope (such as ramps), and exposure to water, soap, and cleaning fluids
- Use recessed walk-off mats instead of temporary roll-out mats, which can create tripping hazards.
- Reduces tracking outdoor pollutants, mud, etc. into indoor spaces
- Avoid sisal or other mats that can 'pull' wheeled traffic at a 45° angle

Sources:

Mikiten Architecture

Lobbies and Horizontal Circulation

4.1 Building Notifications

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

Sources

Mikiten Architecture

1 *Point Value*

Level 1 - Make video screen displays for resident notifications broadly usable.

- Applies to lobbies, gyms, common rooms, or similar
- Design visual on screen content to use larger print
- Use dark-on-light backgrounds when possible to counteract the glare of lights on a dark-background screen
- Avoid audio content that can create background noise, making conversations, hearing, and audio wayfinding for the blind more difficult
- When audio content is needed, always accompany with closed captions or text with the same information
- Avoid content with flashing lights or swirling visual patterns, which can trigger seizures for people with epilepsy

2 *Point Value*

Level 2 - More Flexible Displays: Alternate delivery.

- Create a way that blind/low vision people can receive the same information via an app or website
- Additional benefit of people not having to be in the space to see announcements

Lobbies and Horizontal Circulation

4.1 Circulation Design

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

Sources

Mikiten Architecture

1 *Point Value*

Use curves or obtuse angles to smooth circulation.

- Curves reflect the natural, comfortable flow of wheeled traffic
- Obtuse angles are easier to navigate for mobility devices and help to avoid collisions for mobility devices, the blind, and people who cannot hear approaching traffic at 90-degree corners
- Helps create a graceful, less rigid environment that promotes well-being
- Improves wayfinding by introducing landmarks and recognizable, unique forms

Lobbies and Horizontal Circulation

4.1 Lobby and Large Space Acoustics

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

Sources

Mikiten Architecture

1
Point Value

Minimize acoustic reverberation with materials and geometry of spaces.

- Helps everyone have a better entry lobby interaction experience
- Aids communication for those with hearing aids and cochlear implants that can overload in noisy spaces
- Aids the blind with auditory orientation
- Reference: BUILDING ELEMENTS - ACOUSTIC WAYFINDING

Lobbies and Horizontal Circulation

4.1 Usable Corridors

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

Sources

Autism Center, Mikiten Architecture

1
Point Value

Level 1 - Incorporate wide corridors.

- 72” minimum width to allow two mobility devices to pass each other or go side-by-side in a conversation, and to allow easier passage for support animals
- Corridors can reduce to 60” minimum width for a maximum of 48” before widening to 72” for at least 72”, or at a dead-end corridor of not more than 20 feet in length
- Gives space for cane sweep navigation for someone who is blind
- Creates a sense of openness and comfort for all residents
- Enhances unit entry door privacy
- Facilitates signing by the deaf

2
Point Value

Level 2 - Wider corridors.

- More than half of corridors are 78” or more in width.

Lobbies and Horizontal Circulation

4.1 Corridor Handrails

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

Amy Pothier, Mikiten Architecture

1
Point Value

Level 1 - Handrail on one side of the corridor.

- Helps people with ambulatory disabilities travel further, more safely
- Acts as guide rail for people with low vision
- Consider antimicrobial finish

2
Point Value

Level 2 - In addition to L1, install handrail on both sides of the corridor.

- Helps people with one-sided dominance better than a single handrail
- Better as a guide rail than a handrail only on one side

Lobbies and Horizontal Circulation

4.1 Lobby Entry Counter

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

Amy Pothier, Mikiten Architecture

1
Point Value

Level 1 - Lobby entry counters are accessible.

ESSENTIAL ELEMENT

- If counters are one level, they should be low for the most flexible use from both sides
- For larger counters where a high portion is desired for easier standing use, the low portion should be the primary counter
- Design a location for computer screens that does not block the open use of the counter
- Provide contrast between counter tops and faces for people with low vision

Level 2 - Lobby counter allows forward approach.

- Provide knee and toe clearance for a forward approach on both sides
- Allows a face-to-face conversation, easier writing or other interactions for someone using a wheelchair and for a seated staff member
- Ensure areas that are open for knee and toe clearance have cane-detectable end panels or legs

2
Point Value

Lobbies and Horizontal Circulation

4.1 Lean Rails

Impact Areas

Mobility and Height — *Hearing and Acoustics* — *Vision*

Health and Wellness — *Cognitive Access* — *Support Needs*

Additional Benefits

Affordability — *Racial Equity* — *Environmental Sustainability*

Safety — *Beauty and Better Design*

Sources

Design Resources for Homelessness

1
Point Value

Lean rails in circulation areas.

- Helpful in lobbies or entry porches where people are awaiting a ride
- Beneficial for older adults with mobility impairments or general stamina limitations

Vertical Circulation

4.2 Usable Stairs

Impact Areas

Mobility and Height — *Hearing and Acoustics* — *Vision*

Health and Wellness — *Cognitive Access* — *Support Needs*

Additional Benefits

Affordability — *Racial Equity* — *Environmental Sustainability*

Safety — *Beauty and Better Design*

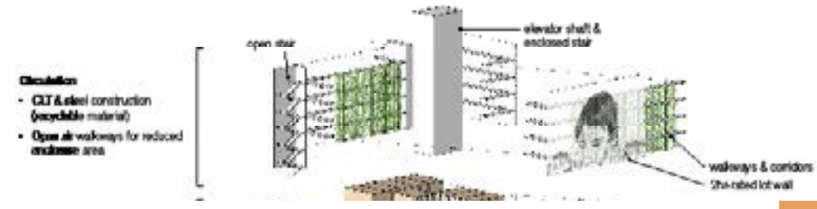
Sources

isUD, Mikiten Architecture

1
Point Value

Stairs are designed for safety and ease of use (incorporate ramps rather than stairs whenever possible).

- Stairs have no fewer than 3 risers, to prevent tripping
- Stairs other than emergency egress stairs have no more than 11 risers, for easier use and less distance to fall in an accident
- All stair treads have a code-complying contrasting stripe at every nosing. Use photoluminescent stripes when possible for additional safety in emergencies
- Stairs wider than 78 inches have at least one additional handrail
- All stairs have a cane-detectable tactile walking surface indicator at the top of every run



Sample stairway specs

Vertical Circulation
4.2 Stair Evacuation Chairs

Impact Areas

Mobility and Height — *Hearing and Acoustics* — *Vision*

Health and Wellness — *Cognitive Access* — *Support Needs*

Additional Benefits

Affordability — *Racial Equity* — *Environmental Sustainability*

Safety — *Beauty and Better Design*

Sources

Inclusive Design Council, Mikiten Architcture, Amy Pothier

1
Point Value

Provide evacuation chairs in stairways.

- Provides a safe way for people with mobility limitations to be rolled down the stairs by other occupants in the case of an emergency, rather than being forced to wait for rescue personnel in a stairway while other occupants exit the building
- Coordinate with code requirements for chairs to avoid blocking exiting width, and provide space for people with mobility devices to await assistance with evacuation chairs

Vertical Circulation
4.2 Convenient Ramps

Impact Areas

Mobility and Height — *Hearing and Acoustics* — *Vision*

Health and Wellness — *Cognitive Access* — *Support Needs*

Additional Benefits

Affordability — *Racial Equity* — *Environmental Sustainability*

Safety — *Beauty and Better Design*

Sources

isUD, Mikiten Architecture

1
Point Value

Ramps are designed for broad usability and comfort.

- Use ramps instead of stairs whenever possible
- Design ramps to be the full width of the corridor or walkways at top and bottom
- Ramps connecting vertical level changes of over 6 inches are 1:15 slope or less (vs. 1:12 for ADA)

Vertical Circulation
4.2 Dual Handrails

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

Mikiten Architecture

1
Point Value

Stairs and ramps have high and low handrails.

- One handrail at 36” and another at 30” above the nosing
- Provides safety for children and shorter adults
- For ramps, someone in a wheelchair can slow their descent or pull themselves up the ramp more easily with better leverage than pushing a wheelchair wheel

Vertical Circulation
4.2 Handrail Design

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

Amy Pothier, isUD, Mikiten Architecture

1
Point Value

Handrails should be designed for better use and safety.

- Handrail extensions should extend 6 inches more than required by code, to provide greater stability for people leaning heavily on them to pull up the stairs or reach forward for sufficient stability when stepping down
- Ends of handrails should return to the wall or floor/ground, not wrap back on themselves, creating a potential impact hazard that is not easily cane-detectable
- Avoid gaps of more than 1.5 inches between handrails and walls to prevent arms sliding into the space as someone falls, and to facilitate using the wall as a stabilizer for the forearm
- Select colors that are discernable from the wall behind for people with different sorts of color blindness; minimum luminance contrast of 50 percent as well

Vertical Circulation
4.2 Tactile Handrails

Impact Areas

Additional Benefits

Sources

isUD,
Mikiten Architecture

1
Point Value

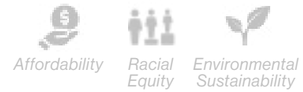
All stairways and ramps have tactile information on lower and upper handrails.

- Tactile letters and Braille indicating floor (L1, L2, etc.) and shall match the designations used in the elevator
- Tactile direction arrow

Vertical Circulation
4.2 Elevator Foot Controls

Impact Areas

Additional Benefits



Sources

Mikiten Architecture

1
Point Value

Provide foot-level controls inside and outside.

- Low-mounted paddle-type buttons can be activated with the foot or a wheelchair footrest
- Avoids the need for positioning a mobility device at the floor buttons inside, where someone else is often naturally standing
- Convenient option for people whose hands are full
- More hygienic for all people to avoid touching buttons with their hands
- Provides options for people who are short, with low dexterity or no fingers, or who cannot see the small regular buttons easily

Vertical Circulation
4.2 Elevator Interior Buttons

Impact Areas

Mobility and Height | Hearing and Acoustics | Vision
Health and Wellness | **Cognitive Access** | Support Needs

Additional Benefits

Affordability | Racial Equity | Environmental Sustainability
Safety | **Beauty and Better Design**

Sources

Mikiten Architecture

1
Point Value

Include descriptive elevator buttons..

- In addition to the floor number, include entire words, such as “parking,” “lobby,” or “roof garden,” for example

Interior elevator buttons with full words

Vertical Circulation
4.2 Elevator Usability

Impact Areas

Mobility and Height | Hearing and Acoustics | **Vision**
Health and Wellness | **Cognitive Access** | Support Needs

Additional Benefits

Affordability | Racial Equity | Environmental Sustainability
Safety | Beauty and Better Design

Sources

Mikiten Architecture

1
Point Value

Specify door timing and audible feedback for better usability.

- Voice feedback states direction traveling and floor reached
- Benefits low-sight and blind passengers
- Provides more clarity for everyone
- Set door-close timing to 10 seconds to allow people with mobility devices or service animals to enter or exit before it starts closing

Vertical Circulation
4.2 Elevator Design

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

Mikiten Architecture, isUD

1
Point Value

Level 1 - Provide at least one cab that is larger than the standard “gurney elevator” size.

- Allows someone with a larger electric wheelchair or scooter to turn around and face the door if other people are in the elevator, rather than back out
- Allows two people in wheelchairs or scooters to use the elevator together

2
Point Value

Level 2 - Elevators have doors on both ends and controls positioned to allow people to use the elevator without turning around inside.

Vertical Circulation
4.2 Elevator Emergency Evacuation Use

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

Mikiten Architecture

1
Point Value

Provide backup power and meet fire department requirements that allow elevators to be used for emergency evacuation.

- Prevents people in wheelchairs from being stuck in an Area of Refuge in a stairway in case of an emergency
- Especially important in buildings with a higher percentage of people with disabilities, making fire department-assisted evacuation more difficult and slower
- Coordinate with local codes to provide appropriate signage inside and outside the elevator that indicates it’s availability in emergencies

Vertical Circulation
4.2 Elevator Security

Impact Areas

Mobility and Height — *Hearing and Acoustics* — *Vision*

Health and Wellness — *Cognitive Access* — *Support Needs*

Additional Benefits

Affordability — *Racial Equity* — *Environmental Sustainability*

Safety — *Beauty and Better Design*

Sources

isUD

1
Point Value

All elevators with security access controls (e.g., swipe card, key fob, biometrics, etc.) allow floor selection before and after authorization, and provide clear feedback when access is not authorized.

- Allows someone with a larger electric wheelchair or scooter to turn around and face the door if other people are in the elevator, rather than back out
- Allows two people in wheelchairs or scooters to use the elevator together

Vertical Circulation
4.2 Full-Story Ramp

Impact Areas

Mobility and Height — *Hearing and Acoustics* — *Vision*

Health and Wellness — *Cognitive Access* — *Support Needs*

Additional Benefits

Affordability — *Racial Equity* — *Environmental Sustainability*

Safety — *Beauty and Better Design*

Sources

Mikiten Architecture

1
Point Value

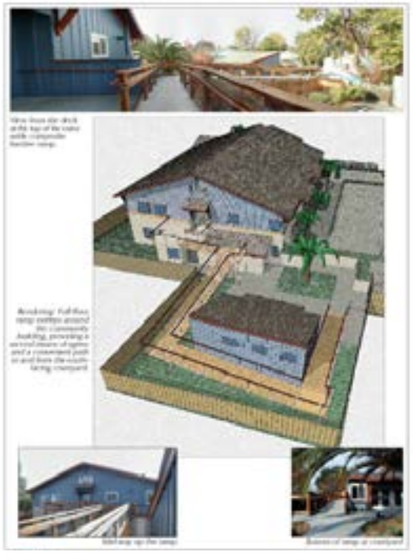
Provide a full-story ramp for accessing and emergency exit from the second floor.

- Can also be an exterior ramp if interior space is not available

Interior ramp

Interior multi-level ramp

Ramp art



Caldera Place Apartments exterior diagram

Common Rooms and Offices
4.3 Shared Kitchen Appliances

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision · Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability · Safety · Beauty and Better Design

Sources

Autism Center, Mikiten Architecture

1
Point Value

Level 1 - Use safe and accessible appliances for shared kitchens. ESSENTIAL ELEMENT

- Specify induction ranges or cooktops. The glass surface does not heat up as much as an electric cooktop, and turns off when a pot is removed, and avoids the potential hazard of an open gas flame. Helpful when children are around and for people with autism and others who experience forgetfulness and inability to recognize problems
- Use shorter refrigerators with top freezers to optimize reach and usability
- If a dishwasher is provided, specify an ADA-height one to fit under a 34 inch high countertop (confirm locally whether NSF certification is required)
- Provide extra space around all appliances for a wheelchair rider and walking person to use the space together (Reference: BUILDING COMPONENTS - SPACE and REACH or Floor Space)
- Use range hoods that can be wired to have a remote-located switch installed on the face of an adjacent base cabinet, providing the same controls (multi-speed fan, dimming) as on the hood itself, since range hood controls are not reachable. Confirm with manufacturer that variable controls can be remote even if the hood is labeled “ADA”
- Use range hoods with curved corners for greater safety, especially for low-sighted and taller people
- No microwave or hood combo units over the range; they are out of reach of many people

2
Point Value

Level 2 - In addition to L1, use a separate cooktop and wall oven rather than a combined range.

- Allows the oven to be mounted higher for easier use for everyone, with less stooping to reach food, and allows safer, more stable reach from a seated position
- Side-swinging oven doors can make for an even safer approach and access for everyone

Common Rooms and Offices
4.3 Microwave Drawer

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision · Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability · Safety · Beauty and Better Design

Sources

Mikiten Architecture

1
Point Value

When microwaves are built in, specify a drawer-type unit.

- Easier to lift food out of for a wider range of users
- Easier to see in and stir from a seated position
- Doesn’t require removal of food from oven for stirring, adding ingredients

Common Rooms and Offices
4.3 Shared Kitchen Sinks

Impact Areas

Additional Benefits

Sources

Mikiten Architecture

1
Point Value

Specify sinks for broad usability.

ESSENTIAL ELEMENT

- Specify single bowl sinks for easier use for larger pots and by people with less dexterity
- Stainless steel sinks should be coated or protected to provide protection from heat for a seated person who might not be able to feel that the bottom is hot
- Specify shallow sinks to increase knee clearance. Reference: BUILDING ELEMENTS - SPACE AND REACH
- Specify sinks with drains in the rear to optimize knee space
- Avoid garbage disposals (when possible), which reduce knee space. Use grid drains instead to prevent clogged drains
- Use undermount sinks to avoid buildup of water around a top-mount sink rim, which gets the sleeves of seated and shorter users wet as they reach across the sink and surrounding countertop, and allow easier cleanup by wiping down countertops into the sink. They also avoid the sink rim being higher than an ADA-height countertop in which they are installed

Common Rooms and Offices
4.3 Shared Kitchen Faucets

Impact Areas

Additional Benefits

Sources

Mikiten Architecture

1
Point Value

Level 1 - Specify usable faucets.

ESSENTIAL ELEMENT

- Use gooseneck faucets to get water stream closer to user and minimize forward reach
- Provide pull-out spray for more flexibility and easier cleanup
- Use levers that are easy to control for people with less dexterity
- Select longer levers that require less reach over the sink

2
Point Value

Level 2 - Improved faucet usability: Specify hands-free (sensor-activated) faucets.

- Does not require reach for users
- More hygienic
- Easier one-handed use

3
Point Value

Level 3 - Improved faucet placement: Locate to the side of the bowl.

- A faucet to the side of the bowl (as is done in many classroom and art sinks) to make reach and use even easier

Common Rooms and Offices

4.3 Community Room Hearing System

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

Sources

Mikiten Architecture
National Disability Authority

1
Point Value

Level 1 - Provide Assistive Listening System (ALS) for people with or without hearing aides.

- When the speaker wears a mic, these allow people with hearing loss to receive amplified sound via their hearing aid or headphones, without interference from background noise
- Examples are FM systems, Inductive Loop systems, and Infrared Systems

Level 2 - Use a Sound Field System for greater flexibility and less user equipment.

- Loudspeakers located throughout larger rooms amplify the speaker's voice or an A/V feed
- Boosts comprehension and reduces effort required to hear for people of all hearing abilities
- Lessens fatigue for presenter to need to speak up - especially for long presentations
- In addition to ALS system used for those with more severe hearing loss
- For those with mild to moderate hearing loss, Sound Field offers an improved hearing experience without a headset with possibly hard-to-use small controls

Common Rooms and Offices

4.3 Laundry Rooms

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

Sources

Mikiten Architecture,
Amy Pothier,
Opening Doors Report (pg. 53)

1
Point Value

Create usable shared laundry rooms.

- Specify front-load and front-control washers and dryers for more usability
- Raise washers and dryers up on platforms to increase reach for wheelchair riders and to prevent uncomfortable stopping by taller users (ensure reach heights to controls are not exceeded when machines are raised up)
- Plan washer and dryer wall connections so that the washing machine is on the left and dryer on the right, which facilitates moving clothing from one machine to the other
- Provide minimum 36 inch-wide surface for folding clothes at 34 inches high with knee space below for forward use
- Provide min. 60 inch maneuvering space from face of front-loading machines to wall or other element to allow space for a mobility device and another person to use the space together
- Coordinate opening direction of laundry equipment with direction of user approach and clearances
- Include seating for use while folding or waiting for a load to complete (Reference: BUILDING COMPONENTS - FF&E/Indoor Seating)
- Reference: BUILDING ELEMENTS: SPACE AND REACH for reach height, maneuvering space, and folding surface
- Reference: DWELLING UNITS - DETAILS / Washer & Dryer
- Reference: OPERATIONS & AMENITIES - GENERAL / Laundry Equipment for controls

Shared laundry room example

Common Restrooms
4.4 Common Area Restrooms

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision
Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability
Safety · Beauty and Better Design

1
Point Value

Provide a common-area restroom.

- Convenient for visitors
- Allows residents to maintain the privacy of their dwelling unit bathrooms
- When located near lobby or community spaces, offers a more convenient alternative for residents to avoid returning to their dwelling units, especially residents with reduced mobility

Sources: *Mikiten Architecture*

Common Restrooms
4.4 Single-Occupancy Restrooms

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision
Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability
Safety · Beauty and Better Design

1
Point Value

When common-use restrooms are provided, make them single-occupancy and gender-neutral / unisex.

ESSENTIAL ELEMENT

- Creates a non-binary restroom option for everyone
- Provides an option for person with a disability of one gender and an assistant of another
- Offers privacy for people uncomfortable sharing a restroom with others
- Provides more space for larger mobility devices and for accompaniment by an assistant
- Allows better use by families
- For those with OCD, it can benefit them by having personal space to place things and keep away from touching the floor or the toilet, versus a stall in a multi-user restroom

Sources: *Mikiten Architecture, Inclusive Design Council*

Common Restrooms
4.4 Adult Changing Room

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision
Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability
Safety · Beauty and Better Design

2
Point Value

Make one common-use restroom an Adult Changing Room.

- Allows space for someone with an attendant to safely perform personal care, which can otherwise keep people homebound
- Doubles as single-occupancy restroom for other people who need more space

Sources: *Mikiten Architecture*

Common Restrooms
4.4 Restroom Doors

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision
Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability
Safety · Beauty and Better Design

1
Point Value

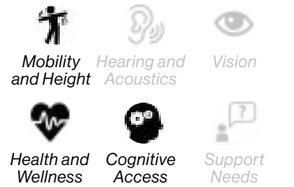
Design restrooms to have out-swing doors.

- More hygienic to not have to grab a handle
- Arrange restrooms so that outswing doors do not swing into a path of travel

Sources: *Mikiten Architecture*

Common Restrooms
4.4 Plumbing - Faucets

Impact Areas



Additional Benefits

Sources

Architecture for the Blind, Mikiten Architecture

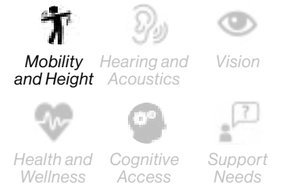
1
Point Value

Automatic, touch-free faucets and soap dispensers.
ESSENTIAL ELEMENT

- Easier for users with low dexterity or only one hand
- More comfortable for users with hygiene concerns, and more hygienic for everyone
- More convenient for everyone

Common Restrooms
4.4 Plumbing - Sinks

Impact Areas



Additional Benefits

Sources

Mikiten Architecture

1
Point Value

Specify wall-hung sinks with more accessible drains.
ESSENTIAL ELEMENT

- Wall-hung sinks avoid flat countertops that accumulate water and wet the sleeves of shorter or wheelchair-riding users as they reach across to the faucet
- Drains toward the rear of the basin provide more knee space and comfort for wheelchair riders
- Specify bottle traps when possible to further increase knee space

Common Restrooms
4.4 Plumbing - Toilets

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

Sources

Amy Pothier, Mikiten Architecture

1 *Point Value*

Specify toilets that are more usable.

- Seats: Specify elongated seats - they work better and are more comfortable for a range of big and small people
- Seat covers: Mount seat covers where there is clear floor area - not over the toilet (Reference: BUILDING COMPONENTS: SPACE and REACH or FLOOR SPACE)
- Seat operation: Coordinate flush valve, toilet depth, seat location, and grab bar location to confirm seat cover can open all the way and stay open
- Avoid automatic flush sensors; they are easily activated unintentionally (by slow-moving people, the blind, someone transferring from a mobility device, etc.) flushing the paper seat cover away repeatedly, and can be disturbing to some people when they flush spontaneously
- Valve location: Ensure manual valves are on the side of the toilet away from the wall to make them reachable
- Valve effort: Avoid push-button valves - even young people with dexterity problems or rheumatoid arthritis can have trouble with these
- Valve operation: Lever flush valves are easiest to use, and can be bi-directional (up for a half flush, down for full flush) to save water
- Depending on population, consider bariatric toilets where appropriate

Common Restrooms
4.4 Restrooms Toiletries

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

Sources

The Kelsey Inclusive Design Council

1 *Point Value*

All restrooms contain personal hygiene supplies and/or dispensers.

- Could be tiered with secondary tiers providing free hygienic products including sanitary napkins

Common Restrooms
4.4 Stored Shared Lift Mechanism

Impact Areas

Mobility and Height — *Hearing and Acoustics* — *Vision*

Health and Wellness — *Cognitive Access* — *Support Needs*

Additional Benefits

Affordability — *Racial Equity* — *Environmental Sustainability*

Safety — *Beauty and Better Design*

1
Point Value

Residents have access to one free mobile shared "Hoyer Lift" stored within building and organized for use by all residents who require this accommodation.

- Provides flexibility for residents and visitors who are not able to transfer themselves
- Prevents caregiver injuries
- Reduces cost of acquiring multiple lifts for individual residents

Sources: *The Kelsey Inclusive Design Council*

Common Restrooms
4.4 Hazardous Waste Disposal Bin

Impact Areas

Mobility and Height — *Hearing and Acoustics* — *Vision*

Health and Wellness — *Cognitive Access* — *Support Needs*

Additional Benefits

Affordability — *Racial Equity* — *Environmental Sustainability*

Safety — *Beauty and Better Design*

1
Point Value

Include a wall-mounted disposal bin in restrooms for hazardous waste.

- Provides a safe disposal spot for individuals who self-inject to manage chronic illnesses
- Include a shelf to allow for occupants to place medication and other necessary items while injecting

Sources: *The Kelsey Inclusive Design Council*

Common Restrooms
4.4 Mirrors

Impact Areas

Mobility and Height — *Hearing and Acoustics* — *Vision*

Health and Wellness — *Cognitive Access* — *Support Needs*

Additional Benefits

Affordability — *Racial Equity* — *Environmental Sustainability*

Safety — *Beauty and Better Design*

1
Point Value

Provide mirror options. **ESSENTIAL ELEMENT**

- Bring mirrors behind sinks down as low as possible to allow seated or shorter people to see more of themselves than a code-implying mirror with the bottom at 40 inches AFF
- Provide at least one full-length mirror per restroom
- Allows everyone to check themselves fully - especially seated or shorter people who are served less well than standing people at sink mirrors
- Allows people with low vision to approach the mirror closely (locate well outside of the door swing area)

Sources: *Mikiten Architecture*

Common Restrooms
4.4 Restroom Storage

Impact Areas

Mobility and Height — *Hearing and Acoustics* — *Vision*

Health and Wellness — *Cognitive Access* — *Support Needs*

Additional Benefits

Affordability — *Racial Equity* — *Environmental Sustainability*

Safety — *Beauty and Better Design*

1
Point Value

Incorporate built-in storage for extra supplies in restrooms.

- Avoids Maintenance adding cabinets, tables, or storage in the room that block passage or create a collision hazard for the blind
- Provides at-hand extra supplies whenever users need them

Sources: *Mikiten Architecture, Inclusive Design Council*

Common Restrooms
4.4 Paper Towel Dispenser

Impact Areas

Mobility and Height; Hearing and Acoustics; Vision; Health and Wellness; Cognitive Access; Support Needs

Additional Benefits

Affordability; Racial Equity; Environmental Sustainability; Safety; Beauty and Better Design

1
Point Value

Include touch-free dispenser (gravity or electric, no cranks, levers, etc.) with a fully or semi-recessed waste bin next to the restroom main door.

ESSENTIAL ELEMENT

- Allows people to open the door with a paper towel and dispose of it in the same place
- Without this, building maintenance will place a freestanding trash can at the door, blocking the required strike-side clearance
- Even if air hand dryers are provided, people may still need paper towels

Sources: *Mikiten Architecture*

Common Restrooms
4.4 Air Hand Dryers

Impact Areas

Mobility and Height; Hearing and Acoustics; Vision; Health and Wellness; Cognitive Access; Support Needs

Additional Benefits

Affordability; Racial Equity; Environmental Sustainability; Safety; Beauty and Better Design

1
Point Value

If specifying air hand dryers, make them usable and quiet.

- Use dryers that do not require a shorter or seated person to reach into them
- Specify quieter ones, since some people can be overwhelmed by the noise
- Locate dryers close to sinks to avoid wet floors, and so that someone can reach them without repositioning their mobility aid with wet hands
- Use dryers integrated into faucets if possible, which keeps floors dryer and safer (verify that manufacturer-supplied signage is clear and accessible, as operation is not always obvious)
- Provide recessed paper towel dispenser or disposal near door for people to use for opening the door

Sources: *Amy Pothier, Mikiten Architecture*

Trash and Recycling Rooms
4.5 Accessible Trash Chute Doors

Impact Areas

Mobility and Height; Hearing and Acoustics; Vision; Health and Wellness; Cognitive Access; Support Needs

Additional Benefits

Affordability; Racial Equity; Environmental Sustainability; Safety; Beauty and Better Design

Sources

Mikiten Architecture

1
Point Value

When used, trash chute doors are electrically operated.

- A button opens the door, which is often heavy and difficult to operate
- Allows single-handed disposal of trash and recycling
- Use a vertical push bar actuator rather than a single. button, if compatible with the door mechanism
- A second press closes the door (if that function is available form the manufacturer) to minimize odor infiltration into the trash room

Doors open easily into trash room

4.5

Trash and Recycling Rooms
Accessible Dumpsters

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

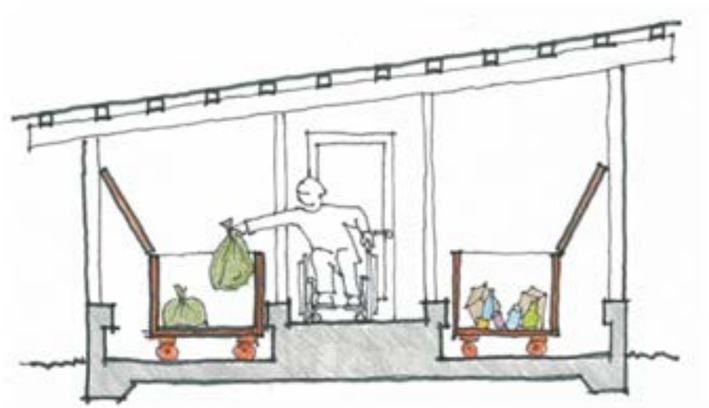
Sources

Mikiten Architecture

1
Point Value

Provide a raised approach to dumpsters.

- A raised walking surface adjacent to trash and recycling dumpsters provides seated or smaller people with a lower edge over which to lift their refuse
- Limits the likelihood of people missing the high edge of a dumpster and having refuse fall on the walking area
- Allows maintenance staff to see in and monitor more easily whether incorrect items are thrown in different bins



Element Details: Dwelling Units

Element Details: Dwelling Units

Sub-Category Number	Sub-Category Name	Element Name	Essential	Page
5.0	Overall Design	Mixed Unit Types		239
5.0	Overall Design	Mixed Unit Orientations		239
5.0	Overall Design	Unit Types - Adaptability	X	240
5.0	Overall Design	Bathroom Count		240
5.0	Overall Design	Unit Types - Units for Better Mobility		241
5.0	Overall Design	Navigable Floor Plans		242
5.0	Overall Design	Single-Story Units		243
5.0	Overall Design	Kitchen Layout		244
5.0	Overall Design	Hallway Width	X	245
5.0	Overall Design	Window Access		245
5.1	Details	Flooring Materials		246
5.1	Details	Window Controls		247
5.1	Details	Window Security		247
5.1	Details	Kitchen and Bathroom Faucets	X	248
5.1	Details	Balcony		249
5.1	Details	Washer and Dryer		250
5.1	Details	Flexible Lighting		251
5.1	Details	Smart Home Controls		251
5.1	Details	Built-in Furniture		252
5.1	Details	Dwelling Unit Closets		253
5.1	Details	Dwelling Unit Storage		254
5.1	Details	Visible Alerts		255
5.1	Details	TV or Cable		256
5.1	Details	Usable Interfaces		256
5.2	Doors	Automatic Unit Doors		257
5.2	Doors	Pocket Doors		258
5.2	Doors	Door Viewers	X	259
5.2	Doors	Unit Entry Thresholds	X	260
5.2	Doors	Unit Entry Hardware		261
5.3	Kitchens	Dishwasher Location		262
5.3	Kitchens	Cabinet Usability		263
5.3	Kitchens	Base Cabinets		264
5.3	Kitchens	Sink Cabinets		264
5.3	Kitchens	Countertops		265
5.3	Kitchens	Kitchen Shelving		266
5.3	Kitchens	Flexible Work Surface		267
5.3	Kitchens	Kitchen Lighting		268
5.3	Kitchens	Plumbing - Sink Faucet		269
5.4	Appliances	Range Controls		270
5.4	Appliances	Induction Range		270
5.4	Appliances	Range Hood		271
5.4	Appliances	Microwave		272
5.4	Appliances	Wall Oven		272
5.4	Appliances	Refrigerator - Location	X	273
5.4	Appliances	Refrigerator - Storage		273
5.4	Appliances	Automatic Appliance Shut Off		274
5.4	Appliances	Individual Cooking Facilities	X	275
5.4	Appliances	Easy to Use Appliances		276
5.5	Bathrooms	Safety		276
5.5	Bathrooms	Toilet Location		277
5.5	Bathrooms	Handheld Shower Mounting		278
5.5	Bathrooms	Handheld Shower Unit		279
5.5	Bathrooms	Roll-In Showers		280

Sub-Category Number	Sub-Category Name	Element Name	Essential	Page
5.5	Bathrooms	Shower Curtains		281
5.5	Bathrooms	Toilet - Selection	X	282
5.5	Bathrooms	Toilet - Bidet Seat Prep		282
5.5	Bathrooms	Grab Bars	X	283
5.5	Bathrooms	Safe Towel Bars		284
5.5	Bathrooms	Bathroom Storage		285
5.5	Bathrooms	Bathroom Vanities		286
5.5	Bathrooms	Bathroom Lighting		287

Overall Design
5.0 Mixed Unit Types

Impact Areas

Additional Benefits

1
Point Value

Provide a range of unit types.

- Includes studios through multi-bedroom units
- Creates options for people of different family types, live-in assistants, and living structures

Sources: *LCM Architects*

Overall Design
5.0 Mixed Unit Orientations

Impact Areas

Additional Benefits

1
Point Value

Provide both left- and right-hand dwelling units.

- People have different dominant sides, preferences, and abilities for transfers to and from toilets and tubs, using controls and cooking in kitchens, or similar, so a variety of unit orientations should be made available to provide choices for residents when more than one unit is available for rent

Sources: *Mikiten Architecture*

Overall Design

5.0 Unit Types - Adaptability

Impact Areas

Mobility and Height, Hearing and Acoustics, Vision, Health and Wellness, Cognitive Access, Support Needs

Additional Benefits

Affordability, Racial Equity, Environmental Sustainability, Safety, Beauty and Better Design

1 *Point Value*

All units meet the following requirements for adaptibility: **ESSENTIAL ELEMENT**

- Meet the ADA 809.2 requirements for accessible routes, as well as FHA and other applicable local and state building code accessibility requirements
- Provide in-wall backing for grab bars in bathrooms at toilets, tubs and showers, whether or not grab bars are actually installed
- Make any cabinets installed under all bathroom or kitchen sinks removable without the use of special tools, to enable a forward approach (Reference: DWELLING UNITS - KITCHENS/ Cabinet Usability)

Sources: *Mikiten Architecture*

Overall Design

5.0 Bathroom Count

Impact Areas

Mobility and Height, Hearing and Acoustics, Vision, Health and Wellness, Cognitive Access, Support Needs

Additional Benefits

Affordability, Racial Equity, Environmental Sustainability, Safety, Beauty and Better Design

1 *Point Value*

2-Bedroom units have 1.5 baths.

- Half bath allows for resident/caregiver privacy

Sources: *The Kelsey*

Overall Design

5.0 Unit Types - Units for Better Mobility

Impact Areas

Mobility and Height, Hearing and Acoustics, Vision, Health and Wellness, Cognitive Access, Support Needs

Additional Benefits

Affordability, Racial Equity, Environmental Sustainability, Safety, Beauty and Better Design

Sources

Mikiten Architecture

1 *Point Value*

Level 1 - 10% or more of the project's dwelling units meet the following:

- Kitchens meet the requirements of ADA 809.4
- Toilet rooms and bathrooms meet the requirements of ADA 809.4
- Offers better accommodations for the needs of people using mobility devices

2 *Point Value*

Level 2 - 30% or more dwelling units meet the requirements of L1 above.

- Higher percentage of mobility-oriented units increases the likelihood that a tenant or visitor with a mobility device will be able to maneuver through the dwelling unit, use the bathroom safely, and use the kitchen

3 *Point Value*

Level 3 - 50% or more of dwelling units meet the requirements of L1 above.

- Higher percentage of mobility-oriented units increases the likelihood that a tenant or visitor with a mobility device will be able to maneuver through the dwelling unit, use the bathroom safely, and use the kitchen

Overall Design

5.0 Navigable Floor Plans

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

Mikiten Architecture, Home Matters

1
Point Value

Lay out dwelling units to ensure navigability.

- Especially in small units, ensure that standard-size beds and furniture will not prevent wheelchair maneuverability
- An open interior design provides better natural light, enhancing well being for everyone
- Exploring this early in the design process can help determine placement of closets, windows, or similar, to yield a more usable unit
- Avoid placing protruding mechanical equipment under windows that impair reach and reduce leverage for opening windows
- Layout realistic furniture options that do not require furniture below windows - especially at bedrooms with egress windows
- Consider navigation of unit with a ceiling-mounted Hoyer-type lift, or ceiling reinforcement for future lifts if populations warrant it
- Reference: DWELLING UNITS - OVERALL DESIGN or Hallway Width

Overall Design

5.0 Single-Story Units

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

Mikiten Architecture, Sonoma County

1
Point Value

If site topography or local parking requirements dictate it, a maximum of 25% of all units may be multi-story dwelling units or dwelling units that are not served by elevators, but must meet the following requirements.

- The kitchen, one full bathroom, the living space, and at least one bedroom on an accessible floor level with the main entry
- Allows a resident unable to use stairs the use of more functions
- Creates visitability for family, friends, and other guests
- Reference: DWELLING UNITS - OVERALL DESIGN or Hallway Width

Overall Design

5.0 Kitchen Layout Plans

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision · Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability · Safety · Beauty and Better Design

Sources

Mikiten Architecture

1 *Point Value*

Level 1 - Use L-shaped or straight-run kitchens rather than galley or U-shaped kitchens.

- There is more flexibility for positioning a dining table and using that table as an additional wheelchair-accessible prep area
- Seated prep is better for people with difficulty standing for long periods
- Two or more people can use the kitchen more easily at once
- Two people with mobility devices can navigate around each other
- Dishwasher and range doors, when open, do not prevent entrance/exit as they do with galley and U-shaped layouts

2 *Point Value*

Level 2 - Galley or U-shaped kitchens provide minimum 60 inches between cabinet faces or cabinets and projecting appliance faces.

- Allows better turning space
- Allows use by more than one person - including one in a mobility device

Accessible kitchen layout

Kitchen knee space

Overall Design

5.0 Hallway Width

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision · Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability · Safety · Beauty and Better Design

1 *Point Value*

2 *Point Value*

Level 1 - Hallways are minimum 42 inches wide.

ESSENTIAL ELEMENT

- Allows easier turns through doors perpendicular to the hallway for people with mobility devices vs. standard 36 inch hallways.
- 90-degree turns into bedrooms and bathrooms off a hallway is difficult without scraping door and wall surfaces.

Sources: *Mikiten Architecture*

Overall Design

5.0 Window Access

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision · Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability · Safety · Beauty and Better Design

1 *Point Value*

Lay out dwelling units to allow access to windows and window coverings.

- Avoid placing protruding mechanical equipment under windows that impair reach and reduce leverage for opening windows
- Layout realistic furniture options that don't require furniture below windows - especially in bedrooms with egress windows

Sources: *Home Matters*

Details

5.1 Flooring Materials

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision · Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability · Safety · Beauty and Better Design

Sources

Mikiten Architecture

1
Point Value

Use hard surfaces rather than carpet.

- Easier to clean
- Harbors fewer allergens - better for immunocompromised people
- More durable - do not need to change between each lease

Details

5.1 Window Controls

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision · Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability · Safety · Beauty and Better Design

1
Point Value

Ensure window treatments have controls that come down to maximum 44 inches high.

- Specify windows with mechanisms that meet ADA requirements for controls, and ensure there are no secondary latches mounted high, which is the case with many casement windows.

Sources: *Mikiten Architecture*

Details

5.1 Window Security

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision · Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability · Safety · Beauty and Better Design

1
Point Value

Install bars or other security measures on first-floor dwelling unit windows and exterior glass doors.

- Provides a more secure environment, especially in complexes that are unfenced or more susceptible to intrusion
- Must comply with fire regulations for emergency egress and fire department ingress

Sources: *The Corporation for Supportive Housing*

Details

5.1 Kitchen and Bathroom Faucets

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision · Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability · Safety · Beauty and Better Design

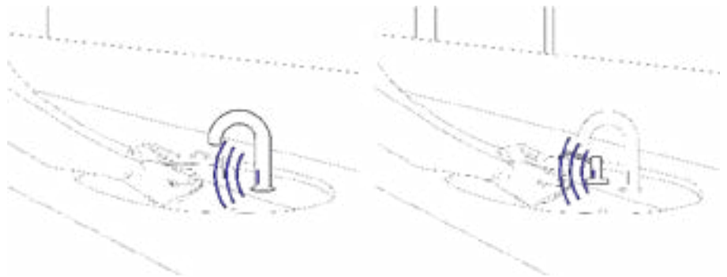
Sources

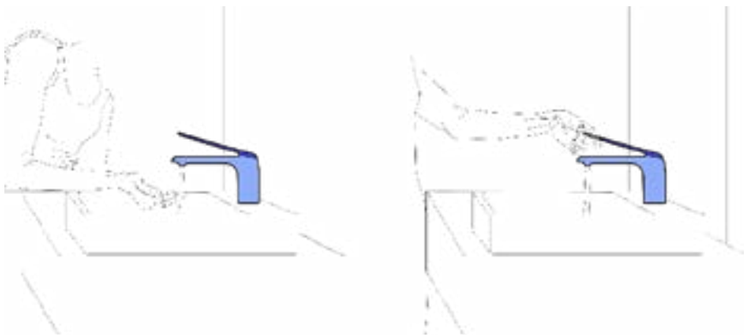
Mikiten Architecture

1
Point Value

Faucets are to have a single lever for temperature and water flow control. ESSENTIAL ELEMENT

- Use levers that are easy to control for people with less dexterity
- Select longer levers that require less reach over the sink
- Longer spouts bring the water closer to the user





Details

5.1 Balcony

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision · Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability · Safety · Beauty and Better Design

Sources

Inclusive Design Council

1
Point Value

Individual unit balconies:

- Provides access to outdoor space and is especially useful for people with chronic illnesses or other disabilities that require spending a lot of time at home and/or in bed
- Doors to balconies provide more natural light
- If occupiable balconies are not possible, use Juliette balconies
- Balconies with doors (especially Juliette balconies without a view-obstructing walking surface) afford residents a larger view of the outdoors - especially seated residents - increasing a sense of well being

Details

5.1 Washer and Dryer

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

Sources

Inclusive Design Council, Safe Score

1
Point Value

Include a washer and dryer in dwelling units.

- Makes chores more accessible
- Especially useful for people with executive dysfunction, support needs, limited mobility and/or people with chronic fatigue who have difficulty going to a shared laundry room elsewhere in the building
- Plan washer and dryer wall connections so that the washing machine is on the left and dryer on the right, which facilitates moving clothing from one machine to the other - Consider single-unit combined washer or dryers to reduce closet size and preserve storage in smaller units
- Stacking machines should not be used since the dryer on top is not reach-accessible
- Reference: INTERIOR SPACES - COMMON ROOMS and OFFICES: Laundry Rooms
- Reference: OPERATIONS and AMENITIES - GENERAL or Laundry Equipment for controls

Washer or Dryer usability

Details

5.1 Flexible Lighting

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

1
Point Value

Unit lighting that is flexible for resident use and sensitivities.

- Allow for high (ceiling) and low (task, countertop) lighting
- Provide dimming options
- Flexible way to customize lighting within a dwelling unit according to mood, activities, and time of year

Sources: *Mikiten Architecture*

Details

5.1 Smart Home Controls

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

1
Point Value

Dwelling Unit lighting, local smoke alarms, HVAC, or other controls can be activated by remote control (smartphone app, or similar) or voice command.

- Unit smoke/carbon monoxide alarms can be controlled/silenced with, and send notifications to, a smartphone app - (Does not include fire detection that is required to be build-wide)
- Reduces effort - especially if there are multiple wall control locations - for people with mobility limitations, and is more convenient for everyone
- Incorporation will allow extensibility in the future as new technologies continue to develop

Sources: *Inclusive Design Council, isUD, Mikiten Architecture, Nimble Spaces: Ireland*

Details

5.1 Built-in Furniture

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

Inclusive Design Council

1
Point Value

Build furniture into the unit.

- With layouts for maximum accessibility and space utilization
- Include bookshelves, benches, and other features that do not require residents to purchase and/or save floor spaces

Details

5.1 Dwelling Unit Closets

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

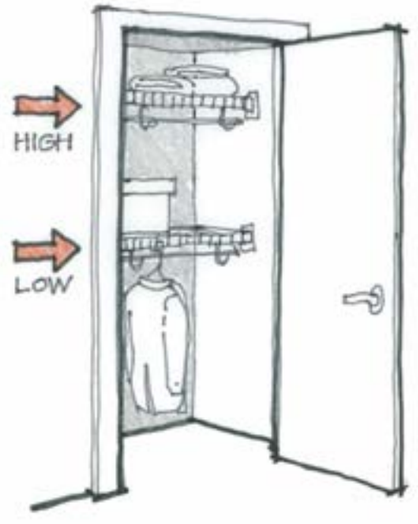
Sources

Mikiten Architecture, Sonoma County

1
Point Value

Provide accessible closet storage within the unit.

- Doors to closets allow a minimum 32 inch clear width for forward approach (more stable and generally stronger than a side reach)
- Include closet rods/shelves that are adjustable between 36 and 60 inches for flexible use by people with different reach abilities and strength



Closet usability

Details

5.1 Dwelling Unit Storage

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

Mikiten Architecture

1
Point Value

Provide sufficient accessible general storage within the unit.

- 50% of all storage within the unit should be less than 48 inches high.

Details

5.1 Visible Alerts

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

Mikiten Architecture

1
Point Value

Level 1 - Visible alerts are installed in 25% of dwelling units.

- All units have hardwired doorbells with lights or high contrast buttons
- All units have visible alarms for smoke, fire, and carbon monoxide warnings
- 25% of units have visible doorbell strobes installed in the living space and sleeping areas to alert deaf occupants when the doorbell is pressed
- Doorbell strobes in sleeping areas shall have accessible override controls to deactivate

2
Point Value

Level 2 - Visible alerts are installed in 50% of dwelling units, meeting the requirements above.

- Creates more likelihood that an available unit will have the visible alerts needed by tenants or visitors with low or no hearing

3
Point Value

Level 3 - Visible alerts are installed in 100% of dwelling units, meeting the requirements above.

- Guarantees that tenants or visitors needing the visible alerts will have them
- Allows people who have low or no hearing to have free choice to rent any apartment that's available
- Simplifies and removes stigma from the leasing process

Details

5.1 TV or Cable

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

1
Point Value

Prepare wall for power and cable connection for a wall-mounted TV.

- Eliminates a piece of furniture, making small rooms better for mobility

Sources: *Mikiten Architecture*

Details

5.1 Usable Interface

Impact Areas

Mobility and Height — Hearing and Acoustics — **Vision**

Health and Wellness — **Cognitive Access** — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

1
Point Value

Use appliances with buttons and dials rather than touch pads and screens.

- Accessible for people with no or low vision
- Cognitively less abstract

Sources: *Architecture for the Blind, Mikiten Architecture*

Doors

5.2 Automatic Unit Doors

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

Sources

Mikiten Architecture, The Kelsey

1
Point Value

Level 1 - Automatic Unit doors.

- Units are equipped with a junction box and cover plate adjacent to the head of the door, on the dwelling unit side, to support easy future installation of a plug-in automatic door operator
- Future operators can use a hand-held remote control or radio frequency wall-mounted button(s) inside the unit
- Unlocking and unlatching for this type of installation still needs to be performed by the tenant

2
Point Value

Level 2 - Automatic Unit doors.

- Individual unit doors can be unlocked through a key fob, card key, or alternative mechanism
- Requires an electrified strike if unlatching is also provided

Doors

5.2 Pocket Doors

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

Sources

Mikiten Architecture

1
Point Value

Use pocket doors when space is limited.

- Makes rooms more furnishable
- Better fit where strike-side clearance is not available for a swing door
- Does not impede maneuvering space in a small room the way a swing door might
- Must have accessible hardware (examples: edge-mounted paddle type or a loop pull on each side) with a rubber stop in the pocket to prevent the loop from striking the jamb when opened
- Use soft-roll wheels for noise control and reduced operation effort

Doors

5.2 Door Viewers

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

Sources

Mikiten Architecture, The Corporation for Supportive Housing

1
Point Value

Provide high and low, wide-angle door viewers (peep holes) in every unit entry door.

ESSENTIAL ELEMENT

- Door viewers centered at 42 inches and 56 inches high can benefit including but not limited to: children, wheelchair riders, and shorter adults
- 180-degree door viewers allow people to better identify who is at the door for better security

Doors

5.2 Unit Entry Thresholds

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

Sources

Mikiten Architecture

1
Point Value

When dwelling unit doors open directly to the exterior, every door is to have an ADA-compliant, no-step threshold. ESSENTIAL ELEMENT

Doors

5.2 Unit Entry Hardware

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — Beauty and Better Design

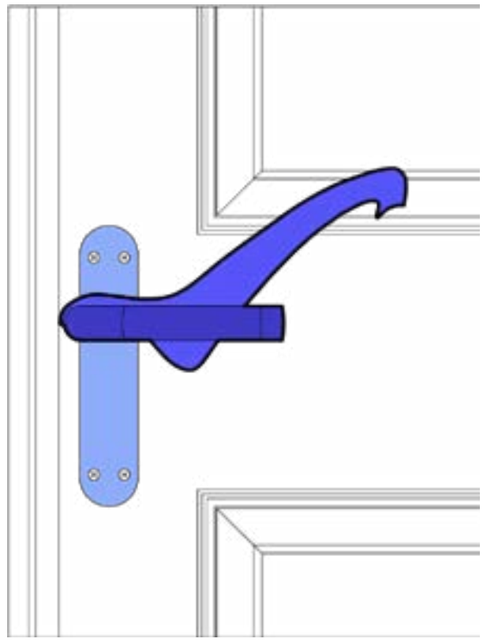
Sources

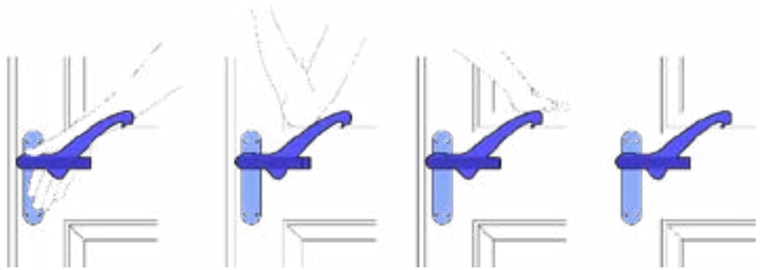
Mikiten Architecture

1
Point Value

Deadbolt latches extend at least 3/4 inch beyond their escutcheon.

- Enables closed-hand use without needing to grasp the lever

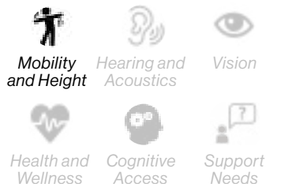




Kitchens

5.3 Dishwasher Location

Impact Areas



Additional Benefits

Sources

Amy Pothier, Mikiten Architecture

1
Point Value

If a dishwasher is provided, position is for easier use and to avoid obstructing traffic when open.

- Place next to sink
- Avoid corner placement that blocks access for putting away clean dishes and cutlery
- Model the unit kitchen design for someone sitting in a wheelchair with knees under the sink, and being able to reach as much storage as possible
- Consider dishwasher drawers as a more accessible option that also takes up less storage space - especially in smaller dwelling units

Kitchens

5.3 Cabinet Usability

Impact Areas

Additional Benefits

Sources

Mikiten Architecture

1
Point Value

Provide more usable cabinets and hardware.

- Mount wall (upper) cabinets so that the bottom shelf is max 46 inches high OR provide minimum 50% of kitchen storage at an accessible height (combination of wall cabinets as described here and other shelves, such as in a full-height pantry, between 15 and 48 inches high)
- Cabinet handles are C-shaped with end extensions that allow closed-hand or limited-dexterity use
- Mount cabinet door handles at least 1/2 inch below the max 46 inch reach height for a wall cabinet (when reaching over a base cabinet or other obstruction)
- When not reaching over an obstruction, mount cabinet door and drawer handles 1/2 inch above the 15 inch low reach range minimum and 1/2 inch below the 48 inch maximum
- Due to the difficulty of providing usable and accessible kitchen storage, this component is not restricted to the reach ranges in BUILDING COMPONENTS - REACH
- Reference: DWELLING UNITS - OVERALL DESIGN/Adaptability

Kitchens

5.3 Base Cabinets

Impact Areas

Mobility and Height; Hearing and Acoustics; Vision; Health and Wellness; Cognitive Access; Support Needs

Additional Benefits

Affordability; Racial Equity; Environmental Sustainability; Safety; Beauty and Better Design

1
Point Value

Provide drawers or roll-out shelves in 50-75% of base cabinets.

- Provides more usable storage space that is easier to reach for someone who cannot stoop down to get items in the back of base cabinets
- Provide some deeper drawers to allow for storage of larger items such as pots and other cookware

Sources: *Mikiten Architecture, LCM Architects*

Kitchens

5.3 Sink Cabinets

Impact Areas

Mobility and Height; Hearing and Acoustics; Vision; Health and Wellness; Cognitive Access; Support Needs

Additional Benefits

Affordability; Racial Equity; Environmental Sustainability; Safety; Beauty and Better Design

1
Point Value

Create usable kitchen sink cabinets.

- Avoid “”floating”” toe kicks attached to sink cabinet doors - they become an obstruction to wheelchair use when the doors are open
- Continue flooring below cabinet so that cabinets are easily used for knee space
- Sometimes a removable bottom shelf is provided in adaptable cabinets. Avoiding these lets people store things directly on the floor, allows leaks to be detected earlier than if they are in an enclosed cabinet, keeps the space available for visitors without having to remove a shelf, and saves money

Sources: *Mikiten Architecture*

Kitchens

5.3 Countertops

Impact Areas

Mobility and Height; Hearing and Acoustics; Vision; Health and Wellness; Cognitive Access; Support Needs

Additional Benefits

Affordability; Racial Equity; Environmental Sustainability; Safety; Beauty and Better Design

Sources

Mikiten Architecture

1
Point Value

Level 1 - Install solid surface countertops, fixed at 34 inches high.

- Solid surface is more durable than plastic laminate
- Sink is undermount for easier cleaning and because rim cannot be higher than 34 inches
- Contrasts with cabinet faces and surrounding walls and/or backsplash for people with low vision

2
Point Value

Level 2 - Include at least one variable height kitchen countertop.

- Can be for the sink, work surface, and/or cooktop
- Varies from 28 to 42 inches high with a crank or by electric switch (with safety bar sensor on bottom to detect knees).
- Fixed countertops comply with L1 above

Kitchens

5.3 Kitchen Shelving

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision

Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability

Safety · Beauty and Better Design

Sources

Mikiten Architecture

1
Point Value

Provide an additional shelf at the backsplash.

- Placing a shallow shelf above the countertop creates additional reachable storage
- Max. 8 inches deep, max. 46 inches high to top
- Use selectively to maintain countertop space for a microwave (if not built in), toaster oven, or coffee maker

Kitchens

5.3 Flexible Work Surface

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision

Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability

Safety · Beauty and Better Design

Sources

Mikiten Architecture

1
Point Value

Provide slide-out cutting boards.

- Must be solid material - not wood laminate, and be easily removed for cleaning
- This is a separate credit from the microwave cutting board to avoid microwave access problems when prep work is being done

Flexible work surface

Kitchens

5.3 Kitchen Lighting

Impact Areas

Mobility and Height — Hearing and Acoustics — **Vision**

Health and Wellness — **Cognitive Access** — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — **Beauty and Better Design**

Sources

Mikiten Architecture, LCM Architects

1
Point Value

Provide task lighting below upper cabinets.

- Specify downward-facing strip LED's with a diffuser to avoid reflected glare off a tall, shiny backsplash for seated or shorter users
- Creates shadow-free lighting for better visibility and safety for everyone
- Provides another option for creating lighting moods for different users and seasons, thereby increasing a sense of comfort and wellness

Kitchens

5.3 Plumbing - Sink Faucet

Impact Areas

Mobility and Height — Hearing and Acoustics — Vision

Health and Wellness — Cognitive Access — Support Needs

Additional Benefits

Affordability — Racial Equity — Environmental Sustainability

Safety — **Beauty and Better Design**

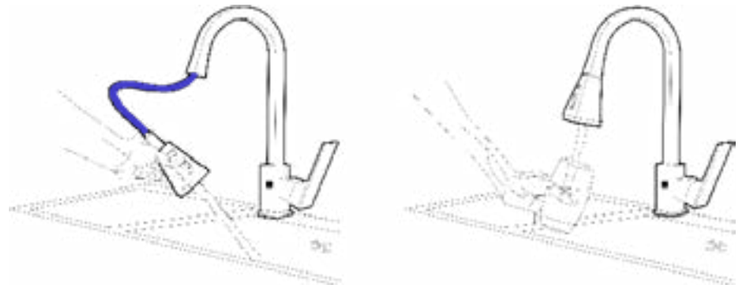
Sources

LCM Architects

1
Point Value

Include pull-out faucet.

- Provides more flexible cleaning for people with limited reach into sink



Appliances

5.4 Range Controls

Impact Areas

Mobility and Height; Hearing and Acoustics; Vision; Health and Wellness; Cognitive Access; Support Needs

Additional Benefits

Affordability; Racial Equity; Environmental Sustainability; Safety; Beauty and Better Design

1 *Point Value*

Specify range with audible feedback for controls.

- Provides confirmation (especially for controls with no tactile feedback) that an action has been taken

Sources:

Appliances

5.4 Induction Range

Impact Areas

Mobility and Height; Vision; Cognitive Access

Additional Benefits

Affordability; Racial Equity; Environmental Sustainability; Safety; Beauty and Better Design

1 *Point Value*

Specify induction range or cooktop.

- No open flame or hot electric element
- Glass surface can be touched without burning the hand seconds after hot pan is removed
- Smooth surface is easy to clean without removing grates
- Pans can slide between cooktop and stove, and between burners, with less effort
- Height of cooking surface (and view into pans from seated height) is not made higher by grates

Sources: *Mikiten Architecture*

Appliances

5.4 Range Hood

Impact Areas

Mobility and Height; Vision; Health and Wellness; Cognitive Access; Support Needs

Additional Benefits

Affordability; Racial Equity; Environmental Sustainability; Safety; Beauty and Better Design

Sources

Architecture for the Blind, Mikiten Architecture

1 *Point Value*

Provide separate control(s) on face of cabinet or other reachable location for both the light and the fan.

- Use range hoods that can be wired to have a remote-located switch installed on the face of an adjacent base cabinet, providing the same controls (multi-speed fan, dimming) as on the hood itself, since range hood controls are not reachable. Confirm with manufacturer that variable controls can be remote even if the hood is labeled “ADA”
- Use range hoods with curved corners for greater safety, especially for low-sighted and taller people
- No microwave/hood combo units over the range; they are out of reach of many people
- Hoods must be directly connected to the building exterior to reduce interior smoke and odors vs. recirculating hoods

Appliances

5.4 Microwave

Impact Areas

Mobility and Height; Hearing and Acoustics; Vision; Health and Wellness; Cognitive Access; Support Needs

Additional Benefits

Affordability; Racial Equity; Environmental Sustainability; Safety; Beauty and Better Design

1 *Point Value*

Level 1 - Built-in microwave height.
When a microwave oven is built in, install so that the interior surface is max. 36 inches high and controls are max. 48 inches high

2 *Point Value*

Level 2 - Provide a pull-out cutting board directly under the microwave.

- Provides a location for pulling food out for stirring or repositioning user's body to be able to transfer the hot dish to a countertop more easily
- Must be solid material - not wood laminate and be easily removed for cleaning
- This is a separate credit from the work surface cutting board since microwave access would be blocked by someone using this as a regular work surface

Sources: *Mikiten Architecture*

Appliances

5.4 Wall Oven

Impact Areas

Mobility and Height; Hearing and Acoustics; Vision; Health and Wellness; Cognitive Access; Support Needs

Additional Benefits

Affordability; Racial Equity; Environmental Sustainability; Safety; Beauty and Better Design

1 *Point Value*

If a wall oven is used, mount at a usable height.

- Top of control should be max. 48 inches high
- Bottom of oven should be min. 15 inches above the floor
- Allows use from a seated position
- Prevents as much stooping down as a conventional range

Sources: *Home Matters, Mikiten Architecture*

Appliances

5.4 Refrigerator - Location

Impact Areas

Mobility and Height; Hearing and Acoustics; Vision; Health and Wellness; Cognitive Access; Support Needs

Additional Benefits

Affordability; Racial Equity; Environmental Sustainability; Safety; Beauty and Better Design

1 *Point Value*

Locate refrigerator so that door can swing open 180 degrees. **ESSENTIAL ELEMENT**

- A refrigerator door at 90-degrees is an impediment to positioning a mobility device for user access to refrigerator contents
- Many refrigerators require the door to open to more than 90 degrees to remove trays for cleaning

Sources: *Mikiten Architecture*

Appliances

5.4 Refrigerator - Storage

Impact Areas

Mobility and Height; Hearing and Acoustics; Vision; Health and Wellness; Cognitive Access; Support Needs

Additional Benefits

Affordability; Racial Equity; Environmental Sustainability; Safety; Beauty and Better Design

1 *Point Value*

Install refrigerators with at least 50% of freezer space at maximum 54 inches high.

- Allows more access to contents for seated and shorter users, including children

Sources: *Mikiten Architecture*

Appliances

5.4 Automatic Appliance Shut Off

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision
Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability
Safety · Beauty and Better Design

Sources

Autism Center
Mikiten Architecture

1
Point Value

Appliances include an automatic shut-off feature.

- Plug-in modules shut off stoves via motion detector or the sound of a smoke alarm
- Provides higher safety for all residents
- Helpful support for people with Alzheimer's who may be easily distracted/forgetful, or who have other access needs

Appliances

5.4 Individual Cooking Facilities

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision
Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability
Safety · Beauty and Better Design

Sources

Home and Community Based Services Settings Rule,
Inclusive Design Council,
The Kelsey

1
Point Value

Homes include cooking facilities that residents can freely use at all times. ESSENTIAL ELEMENT

- Could include efficiency kitchens, full unit kitchen, or shared kitchens in co-living environments

Individual cooking facilities

Appliances

5.4 Easy to Use Appliances

Impact Areas

Mobility and Height; Hearing and Acoustics; Vision; Health and Wellness; Cognitive Access; Support Needs

Additional Benefits

Affordability; Racial Equity; Environmental Sustainability; Safety; Beauty and Better Design

1
Point Value

Appliances should be easy to operate.

- Controls should be logical and direct, without hidden or complex functions
- Doors and drawers should allow for use by the whole hand (for example, loop handles rather than recessed finger pulls)
- Controls should have large numbers/letters, be non-glare and non-reflective, and provide contrast, making them easy to read

Sources: *Autism Center, Mikiten Architecture*

Bathrooms

5.5 Safety

Impact Areas

Mobility and Height; Hearing and Acoustics; Vision; Health and Wellness; Cognitive Access; Support Needs

Additional Benefits

Affordability; Racial Equity; Environmental Sustainability; Safety; Beauty and Better Design

1
Point Value

Use textured, non-slip flooring.

ESSENTIAL ELEMENT

- People with mobility aids or other instability are more likely to slip on a wet bathroom floor
- Safeguards everyone with wet feet getting out of a bathtub or shower
- Floors that can become wet should have a DCOF (Dynamic Coefficient Of Friction) rating appropriate for their use, slope, and exposure to water and soap

Sources: *Mikiten Architecture, Sonoma County*

Bathrooms

5.5 Toilet - Location

Impact Areas

Mobility and Height; Hearing and Acoustics; Vision; Health and Wellness; Cognitive Access; Support Needs

Additional Benefits

Affordability; Racial Equity; Environmental Sustainability; Safety; Beauty and Better Design

1
Point Value

Position toilets in a corner.

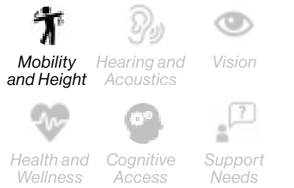
- Allows side and rear fixed grab bars to be installed, rather than flip-down grab bars when toilets are between a vanity and a tub or shower

Sources: *Mikiten Architecture*

Bathrooms

5.5 Handheld Shower Mounting

Impact Areas



Additional Benefits

Sources

Mikiten Architecture

1
Point Value

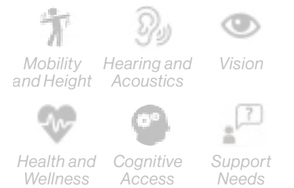
Provide handheld shower on fixed mount (that allows rotation angle of handheld shower) as well as regular shower head, with a diverter lever valve between the two.

- Fixed location designed for a seated user prevents standing users from moving the hand-held unit out of the reach of sitting users, which happens when a slider bar is used
- Offers flexibility for users to sit or stand
- Offers the option of having water from above whether seated or standing
- Diverter set to the hand-held unit allows adjustment of water temperature in the controlled spray before switching to the overhead shower head
- Handheld unit allows showering without wetting one's head and not committing to a larger hair-care task

Bathrooms

5.5 Handheld Shower Unit

Impact Areas



Additional Benefits

Sources

Home and Community Based Services Settings Rule, Inclusive Design Council, The Kelsey

1
Point Value

Specify a broadly usable and functional handheld shower.

- Use a flexible metal hose with swivel connections (the rigidity or nylon and vinyl hoses, and restriction of a fixed connection, create resistance to easy use and cause the shower to twist when mounted)
- Specify handhelds with a "pause" control - makes it easy to stop the water without fuss with the wall controls for pressure and temperature, then quickly and easily restart, also saving water
- Avoid large or rainshower-style handhelds - they limit targeted spraying, get in the way (especially in a small shower), and are heavier and more cumbersome
- Specify handhelds with an oval grip, preferably knurled or textured, to enable easy control and direction even with minimal hand strength

Bathrooms

5.5 Roll-In Showers

Impact Areas

Mobility and Height; Hearing and Acoustics; Vision; Health and Wellness; Cognitive Access; Support Needs

Additional Benefits

Affordability; Racial Equity; Environmental Sustainability; Safety; Beauty and Better Design

Sources

Mikiten Architecture, Home Matters

1 *Point Value*

Level 1 - Installed in 10% of units in building.

- Distribute evenly between unit types (studios, 1-bedroom, etc.)
- In a multistory building with a concrete slab-on-grade foundation and/or concrete podium, recesses for roll-in showers on the concrete floor(s) are less costly (and there are fewer waterproofing measures needed) vs. the wood-framed floors. But install no more than 50% of them on those levels to ensure they are distributed equitably among different floors
- When selecting which dwelling units will have roll-in showers, distribute evenly between unit types (studios, 1-bedroom, etc.), direction the units face for sun and views to ensure choice for residents selecting units

2 *Point Value*

Level 2 - Installed in 25% of units in building.

3 *Point Value*

Level 3 - Installed in 50% or more of units in building.

Bathrooms

5.5 Shower Curtains

Impact Areas

Mobility and Height; Hearing and Acoustics; Vision; Health and Wellness; Cognitive Access; Support Needs

Additional Benefits

Affordability; Racial Equity; Environmental Sustainability; Safety; Beauty and Better Design

Sources

Mikiten Architecture

1 *Point Value*

Use curved curtain rods at tubs, straight at showers.

- Curved rods provide more space in combination tub/showers but still keep the water in the tub
- Straight rods are needed at showers in order to drip into the shower rather than onto the bathroom floor

Appliances

5.5 Toilet - Selection

1
Point Value

Use accessible toilets. **ESSENTIAL ELEMENT**

- Trip lever should be on the front of the tank (easier to reach) and toward the side of the toilet away from the side wall (for easier approach and reach)
- Trip lever default position should be horizontal for easier use, including with an elbow
- No push button flushers, which require dexterity and more effort than levers
- Toilet seat height: 17 inches min. to 19 inches max.
- Use elongated bowl toilets to provide more surface area for support and more open area for people's varied toilet needs. Check turning space and clear floor area in front of the toilet early in the design process to confirm fit.
- Recommend noting these requirements on the drawings to avoid substitutions during Value Engineering or construction-phase substitutions

Sources: *Mikiten Architecture*

Impact Areas

Mobility and Height — *Hearing and Acoustics* — *Vision*
Health and Wellness — *Cognitive Access* — *Support Needs*

Additional Benefits

Affordability — *Racial Equity* — *Environmental Sustainability*
Safety — *Beauty and Better Design*

Bathrooms

5.5 Toilet - Bidet Seat Prep

1
Point Value

Provide electrical outlet at rear of toilet for future installation of bidet seat.

- Eases cleaning for people with limited dexterity
- Provides better, easier sanitation

Sources: *Mikiten Architecture*

Impact Areas

Mobility and Height — *Hearing and Acoustics* — *Vision*
Health and Wellness — *Cognitive Access* — *Support Needs*

Additional Benefits

Affordability — *Racial Equity* — *Environmental Sustainability*
Safety — *Beauty and Better Design*

Bathrooms

5.5 Grab Bars

Impact Areas

Mobility and Height — *Hearing and Acoustics* — *Vision*
Health and Wellness — *Cognitive Access* — *Support Needs*

Additional Benefits

Affordability — *Racial Equity* — *Environmental Sustainability*
Safety — *Beauty and Better Design*

Sources

Mikiten Architecture

1
Point Value

Level 1 - Include grab bar backing for toilet, tub, and shower in all bathrooms. Install grab bars in 10% of all units. **ESSENTIAL ELEMENT**

- Backing to be from 2x10 material to provide more flexibility in installation heights for future tenant needs that may differ from standard heights
- Use decorative grab bars to avoid an institutional feel
- Install grab bars at 34 inches high (rather than 36 inches) for better reach for smaller people and better leverage for everyone getting on/off a toilet
- Grab bars may not overlap an adjacent countertop

2
Point Value

Level 2 - In addition to L1, install toilet side grab bars in all dwelling unit bathrooms and all grab bars in 25% of all units.

- Toilet side grab bar is needed by more people than rear grab bars
- Additional grab bars elsewhere increase convenience and safety for all

3
Point Value

Level 3 - In addition to L2, install two grab bars in tubs and showers (one at entry, one opposite entry) in all dwelling unit bathrooms and all grab bars in 50% of units.

- Entering and exiting tubs or showers can lead to slips and falls for people with or without a disability

4
Point Value

Level 4 - Install all grab bars in all units.

- Ensures maximum safety and convenience for both tenants and visitors

Bathrooms

5.5 Safe Towel Bars

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision · Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability · Safety · Beauty and Better Design

Sources

Mikiten Architecture

1
Point Value

Use decorative grab bars as towel bars.

- People often grab onto towel bars for support, which often fail, either pulling out of the wall or bending

Bathrooms

5.5 Bathroom Storage

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision · Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability · Safety · Beauty and Better Design

Sources

Mikiten Architecture

1
Point Value

Level 1 - Incorporate useful and accessible bathroom storage.

- Include under-cabinet storage in addition to clear knee space
- Avoid a mirrored medicine cabinet behind the vanity. When installed high enough to avoid hitting the faucet, the mirror does little for a seated or shorter person and the contents are put mostly out of reach. Reach to a medicine cabinet to the side of the vanity is also not ideal
- If a medicine cabinet to the side of a vanity is used, install it 8” or more in front of the vanity, to enhance side reach
- Consider a 48 inch or taller cabinet recessed in the wall near the vanity instead
- In-bathroom storage is especially important for people with more hygiene needs and equipment, but desirable for everyone

2
Point Value

Level 2 - Include a full-height linen cabinet or closet in the bathroom.

Bathrooms

5.5 Bathroom Vanities

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

Home Matters, Mikiten Architecture, National Institute of Building Sciences

1 *Point Value*

2 *Point Value*

Level 1 - Vanities should be broadly usable.

- Countertops are max. 34 inches high
- Sinks should be undermount with the drain outlet as far to the rear as possible to provide additional knee clearance
- P-trap should be plumbed to be as short as possible, or be bottle traps
- Mirrors should be positioned with the bottom directly on the countertop backsplash - the resulting lower position vs. the ADA 40 inches provides a seated or shorter user much more visibility

Level 2 - Provide a dual-level vanity.

- Allows people of different heights, whether seated or standing, to each use sinks comfortably
- To increase reachable storage, the upper portion of the vanity can have a storage cabinet below, while the lower portion provides knee clearance space

Bathrooms

5.5 Bathroom Lighting

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

Mikiten Architecture, National Institute of Building Sciences

1 *Point Value*

Provide safe and useful bathroom lighting.

- Bathroom ambient lighting should cover all areas equally to avoid problematic shadows for people with visual impairments
- A light (can be integrated in an exhaust fan) should be provided above the shower or tub to provide direct illumination and a safer environment
- Lighting should provide non-glare, non-shadow illumination on people's faces when at the vanity mirror. Multi-source lights or light bars can work well

Element Details: Operations and Amenities

Element Details: Operations and Amenities

Sub-Category Number	Sub-Category Name	Element Name	Essential	Page
6.0	General	Maintenance - Cleaning		291
6.0	General	Unit Trash Collection		291
6.0	General	Integrated Community	X	292
6.0	General	Information about Culture of Accessibility and Disability Justice		293
6.0	General	Deep Affordability		294
6.0	General	Deep 2-Bedroom Affordability		294
6.0	General	Laundry Equipment		295
6.1	Staffing	Front Desk Staffing		296
6.1	Staffing	Inclusion and Disability Training	X	297
6.1	Staffing	Inclusion Supports and Services Personnel		298
6.1	Staffing	24/7 On-Call Support		299
6.1	Staffing	Service-Provider Gap Support		299
6.1	Staffing	Manager Units for Staff		300
6.2	Leasing	Acceptance of Vouchers	X	300
6.2	Leasing	Deep Affirmative Marketing	X	301
6.2	Leasing	Embedded Inclusion in Marketing Process		302
6.2	Leasing	Lottery Application System		303
6.2	Leasing	Plain Language Leasing Information	X	304
6.2	Leasing	Individual Roommate Selection	X	305
6.2	Leasing	3rd Party Deposit and Credit Support		305
6.2	Leasing	Leasing Support Services		306
6.2	Leasing	Building Staff Involved In Leasing Process		306
6.2	Leasing	Inclusive Leasing Documentation	X	307

Sub-Category Number	Sub-Category Name	Element Name	Essential	Page
6.2	Leasing	Eviction Protection Plan		307
6.2	Leasing	Accessible Unit Tracking	X	308
6.3	Services	Culture of Interdependence		309
6.3	Services	Residents Control of Living Structure and Schedule	X	310
6.3	Services	Resident Selected Service Providers	X	311
6.4	Programming	Carsharing Support		311
6.4	Programming	Resident Programs and Events		312

General

6.0 Maintenance - Cleaning

Impact Areas

Mobility and Height; Hearing and Acoustics; Vision; Health and Wellness; Cognitive Access; *Support Needs*

Additional Benefits

Affordability; Racial Equity; Environmental Sustainability; Safety; *Beauty and Better Design*

1 *Point Value*

Maintain indoor air quality with quarterly deep cleaning of common area carpets.

- Increases safety and comfort for people with allergies

Sources: *Mikiten Architecture*

General

6.0 Unit Trash Collection

Impact Areas

Mobility and Height; Hearing and Acoustics; Vision; *Health and Wellness*; Cognitive Access; Support Needs

Additional Benefits

Affordability; Racial Equity; *Environmental Sustainability*; Safety; Beauty and Better Design

1 *Point Value*

Trash collection is provided from the individual unit.

- Shared service for all residents

Sources: *Inclusive Design Council*

General

6.0 Integrated Community

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision · Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability · Safety · Beauty and Better Design

Sources

Home and Community Based Services Settings Rule Settings Rule,
Inclusive Design Council,
The Kelsey

1
Point Value

The community does not isolate people with disabilities. **ESSENTIAL ELEMENT**

- The housing project should continually work to model its program design on other market-rate and/ or affordable housing and not on disability-specific communities

Inclusive community activities

General

6.0 Information About Culture of Accessibility and Disability Justice

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision · Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability · Safety · Beauty and Better Design

Sources

Inclusive Design Council

1
Point Value

Principles of accessibility/inclusion and Disability Justice posted and described in multiple locations of the building in multiple languages.

- Including braille, plain-language versions, and bilingual options
- These principles should not be coercively enforced or used to shame people for not living up to them, but rather used to promote and encourage a culture of celebrating ability-diverse communities
- Residents and on-site workers should have some familiarity with these principles so they can have conversations about how to put them into practice

General

6.0 Deep Affordability

Impact Areas

Mobility and Height · *Hearing and Acoustics* · *Vision*

Health and Wellness · *Cognitive Access* · *Support Needs*

Additional Benefits

Affordability · *Racial Equity* · *Environmental Sustainability*

Safety · *Beauty and Better Design*

1
Point Value

Provide deed-restricted apartments affordable to individuals reliant on SSI.

- Individuals with disabilities often rely on fixed income (SSI) as their primary source of income; homes are provided for people at the local AMI level corresponding to SSI income
- Define rents and income qualifications that people are able to qualify to pay with SSI-level income

Sources: *The Kelsey*

General

6.0 Deep 2-Bedroom Affordability

Impact Areas

Mobility and Height · *Hearing and Acoustics* · *Vision*

Health and Wellness · *Cognitive Access* · *Support Needs*

Additional Benefits

Affordability · *Racial Equity* · *Environmental Sustainability*

Safety · *Beauty and Better Design*

1
Point Value

Provide deed-restricted 2-bedroom apartments affordable to a single individual reliant on SSI.

- Supports individuals who are extremely low income to have an additional bedroom for support staff, family, or other members of their household
- Consider affordability income limits to support cases when residents have other earners (family or roommates) living in the unit who are not a caretaker; support providers/caretakers do not impact maximum earning
- Define rents and income qualifications that people are able to qualify to pay with SSI-level income

Sources: *The Kelsey*

General

6.0 Laundry Equipment

Impact Areas

Mobility and Height · *Hearing and Acoustics* · *Vision*

Health and Wellness · *Cognitive Access* · *Support Needs*

Additional Benefits

Affordability · *Racial Equity* · *Environmental Sustainability*

Safety · *Beauty and Better Design*

Sources

Downey
Mikiten
The Kelsey

1
Point Value

Coordinate with laundry equipment company for accessible equipment.

- Washers and dryers should have buttons and dials rather than touch pads and screens, for users with low or no vision and for cognitive clarity
- Buttons and dials should be easy to use, without requiring tight grasping or pinching, for users with low strength or dexterity
- Provision of high-capacity machines are helpful for family members of people with high support needs

Staffing

6.1 Front Desk Staffing

Impact Areas

Mobility and Height | Hearing and Acoustics | Vision

Health and Wellness | Cognitive Access | Support Needs

Additional Benefits

Affordability | Racial Equity | Environmental Sustainability

Safety | Beauty and Better Design

Sources

The Kelsey

1
Point Value

Level 1 - Include lobby or building entrance staff at designated hours who:

- Staff an entry lobby desk.
- Assist visitors with entry, orientation, and communicating with residents.
- Provide police-alternative building security.

2
Point Value

Level 2 - Include lobby/building entrance staff per L1, but 24/7.

Flexible front desk

General

6.1 Inclusion and Disability Training

Impact Areas

Mobility and Height | Hearing and Acoustics | Vision

Health and Wellness | Cognitive Access | Support Needs

Additional Benefits

Affordability | Racial Equity | Environmental Sustainability

Safety | Beauty and Better Design

Sources

The Kelsey Program Operating Standards

1
Point Value

All building staff and personnel receive training in disability rights, inclusion, accessibility, and equity prior to building occupancy or within first 60 days of onboarding. **ESSENTIAL ELEMENT**

- Includes all management, resident-facing, and maintenance staff
- Provides ongoing professional development opportunities

Staffing

6.1 Inclusion Supports and Services Personnel

Impact Areas

Mobility and Height | Hearing and Acoustics | Vision

Health and Wellness | Cognitive Access | Support Needs

Additional Benefits

Affordability | Racial Equity | Environmental Sustainability

Safety | Beauty and Better Design

Sources

Solutions - isUD (pg. 22)

Designing for Healing, Dignity, and Joy (pg. 14) - Shopworks pdf in folder

The Kelsey Program Operating Standards

1
Point Value

Level 1 - (intermediate) A dedicated staff trained in inclusion, disability, supports, and services on staff to:

- Assists with wayfinding, assistive technology like listening devices, etc
- Provides assistance to visitors with disabilities
- Manages events and promotes social connections for all residents, promoting long-term residency
- Manages outreach and engagement with the neighborhood community outside the building
- Assists with connecting residents to services they require

2
Point Value

Level 2 - (Advanced) A dedicated staff trained in inclusion, disability, supports, and services on staff to:

- Lead inclusion services and support training and development for all staff, residents and community
- Build trust and rapport with residents with disabilities and support with personalized housing access goals that are centered upon the residents' goals and identified needs
- Manage events and promote social connections for all residents, promoting long-term residency
- Manage outreach and engagement with the neighborhood community outside the building and develops ongoing resources
- Assess existing community services; identify and outreach to potential community services to connect residents to services they require
- Trained in personal care supports and networks to be able to find emergency personal care support services to step in when a resident's attendant is unavailable

Staffing

6.1 24/7 On-Call Support

Impact Areas

Mobility and Height | Hearing and Acoustics | Vision

Health and Wellness | Cognitive Access | Support Needs

Additional Benefits

Affordability | Racial Equity | Environmental Sustainability

Safety | Beauty and Better Design

1
Point Value

Staffed 24/7 for resident support.

- Trained in disability access, trauma-informed care, and service delivery systems
- Available to respond to calls and refer to additional support as needed

Sources: *The Kelsey Program Operating Standards*

Staffing

6.1 Service-Provider Gap Support

Impact Areas

Mobility and Height | Hearing and Acoustics | Vision

Health and Wellness | Cognitive Access | Support Needs

Additional Benefits

Affordability | Racial Equity | Environmental Sustainability

Safety | Beauty and Better Design

1
Point Value

On-Site staff will respond to resident needs in the case of service provider gaps.

- Residents who use individualized in home services (HCBS and similar) may have instances where staff are unable to arrive or do not arrive on time
- Building staff is trained to support residents to call service provider backup and ensure proper staff support arrives

Sources: *The Kelsey Program Operating Standards*

Staffing

6.1 Manager Units for Staff

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision

Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability

Safety · Beauty and Better Design

1
Point Value

Provide live-in staff units.

- 2 units per 150 dwelling units in a project
- Can be studios, 1-bedroom, or 2-bedroom units

Sources: *Mikiten, The Kelsey*

Leasing

6.2 Acceptance of Vouchers

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision

Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability

Safety · Beauty and Better Design

1
Point Value

Properties allow residents to utilize housing vouchers. **ESSENTIAL ELEMENT**

- For example, Federal Vouchers (Housing Choice and Mainstream Vouchers) or City/State Provided Vouchers

Sources: *The Kelsey*

Leasing

6.2 Deep Affirmative Marketing

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision

Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability

Safety · Beauty and Better Design

Sources

The Kelsey Program Operating Standards

1
Point Value

Level 1 - Reach out to people at all AMI levels of all races, and people with and without disabilities who may not already be aware of the affordable housing lottery process. **ESSENTIAL ELEMENT**

- Use plain language and visualizations to encourage new populations to sign up for the affordable housing lottery
- Marketing is not limited to those involved in the project development process
- Identify community-based organizations who run programming related to preparing people with and without disabilities to be ready for housing lottery and application processes and ensure that the marketing materials are provided to such CBOs

2
Point Value

Level 2 - Deeper affirmative marketing efforts.

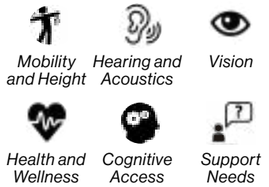
All of L1 above and:

- Affirmative marketing plan is created 6 months prior to lease up
- Affirmative marketing efforts is documented and tracked against metrics defined in planning process

Leasing

6.2 Embedded Inclusion in Marketing Process

Impact Areas



Additional Benefits

Sources

The Kelsey Program Operating Standards

1
Point Value

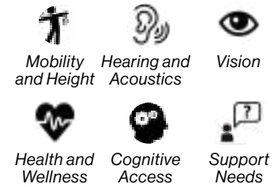
Market community based on resident experience and diverse identities.

- Center on universal benefits of accessibility and inclusion
- Avoid paternalistic language
- Avoid focusing the marketing on “cross-subsidies,” AMI levels, and affordable requirements
- Promote housing based on various personas (target residents at different income levels) centering on their future resident experience and inclusivity in the community

Leasing

6.2 Lottery Application System

Impact Areas



Additional Benefits

Sources

The Kelsey Program Operating Standards

1
Point Value

Operate a lottery versus a waitlist.

- Lottery provides people who are less aware of the project to apply, and does not disadvantage people based on access to technology or ability to attend in person events at specified times to sign up
- The lottery will have sufficient notification to give many people the opportunity to apply
- All information related to the lottery must be provided in plain language and with accessible technologies, in addition to relevant non-English languages of the communities in the surrounding neighborhoods. When people enter the lottery, a clear timeline of the leasing process and documentation needed will be provided to each lottery applicant

Leasing

6.2 Plain Language Leasing Information

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision

Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability

Safety · Beauty and Better Design

Sources

The Kelsey Program Operating Standards

1
Point Value

Include plain language overview with leasing and income verification paperwork.
ESSENTIAL ELEMENT

- In lieu of or as a supplement to existing leasing and verification paperwork
- Provide to all residents, request or opt-in not required

Leasing

6.2 Individual Roommate Selection

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision

Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability

Safety · Beauty and Better Design

1
Point Value

Residents have a choice about their individual apartment roommates. **ESSENTIAL ELEMENT**

- Matching services can be provided but residents are given ultimate choice
- Exceptions in shared/co-living where residents have individual bedroom/bathroom but share a common suite with other housemates

Sources: *TK Program Operating Standards*

Leasing

6.2 3rd Party Deposit and Credit Support

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision

Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability

Safety · Beauty and Better Design

1
Point Value

Deposit and credit support.

- Property management to partner with third party organizations and businesses that offer flexible tools for residents to secure housing who may not have strong finances (for instance, security deposit insurance, alternatives to credit scoring, and emergency rental assistance assurance)

Sources: *The Kelsey Program Operating Standards*

Leasing

6.2 Leasing Support Services

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision

Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability

Safety · Beauty and Better Design

1
Point Value

Services provided, in partnership with staff/ organization overseeing income verification process, ensures people with disabilities are given accommodations to submit income verification complete paperwork.

- Extensions provided where needed for accomodations
- Direct support completing and compiling leasing and income verification information

Sources: *The Kelsey Program Operating Standards*

Leasing

6.2 Building Staff Involved In Leasing Process

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision

Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability

Safety · Beauty and Better Design

1
Point Value

Operations staff support building leasing.

- Leasing and move-in is the first defining moment of a resident experience
- Upon signing lease, operations staff meet with resident to understand individual resident housing goals and needs

Sources: *The Kelsey Program Operating Standards*

Leasing

6.2 Inclusive Leasing Documentation

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision

Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability

Safety · Beauty and Better Design

1
Point Value

Represent diverse identities during leasing process. **ESSENTIAL ELEMENT**

- Gender inclusive phrasing in documentation for apartment leasing, in lieu of conventional representations of man and woman options
- Represent neurodiversity and disability in leasing process and resident identities

Sources: *The Kelsey Program Operating Standards*

Leasing

6.2 Eviction Protection Plan

Impact Areas

Mobility and Height · Hearing and Acoustics · Vision

Health and Wellness · Cognitive Access · Support Needs

Additional Benefits

Affordability · Racial Equity · Environmental Sustainability

Safety · Beauty and Better Design

1
Point Value

Create and implement an eviction protection plan that is rooted in disability inclusion and racial equity.

- Clearly identify and communicate eviction causes, risks, and situations that lead to housing loss
- Proactively support residents at risk of housing loss

Sources: *TKCC Community Engagement*

Leasing

6.2 Accessible Unit Tracking

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

Mikiten Architecture
The Kelsey

1
Point Value

The building operator tracks the different accessibility offerings of each dwelling unit against applications that request those features.

ESSENTIAL ELEMENT

- Residents have access to units that meet their access needs and units with accessible features
- Not applicable for buildings where all units feature the same accessibility features

Services

6.3 Culture of Interdependence

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

The Kelsey Program Operating Standards

1
Point Value

Community staff creates a culture of mutual support through strong presence in the community, a natural ability and interest to connect residents to each other, and an ability to connect residents to the larger community.

- Culture of community and interdependence
- Opportunities for residents to support and be supportive to each lottery applicant

Residents share a community painting

Services

6.3 Resident Control of Living Structure and Schedule

Impact Areas

Mobility and Height · *Hearing and Acoustics* · *Vision*

Health and Wellness · *Cognitive Access* · *Support Needs*

Additional Benefits

Affordability · *Racial Equity* · *Environmental Sustainability*

Safety · *Beauty and Better Design*

Sources

HCBS

1
Point Value

Resident have choice and control in their lives.

ESSENTIAL ELEMENT

- Residents have choice about how they live their daily life in terms of schedule, meals, and visitors
- Residents maintain control over their own housing and lease agreement
- This includes supported decision-making

Services

6.3 Resident Selected Service Providers

Impact Areas

Mobility and Height · *Hearing and Acoustics* · *Vision*

Health and Wellness · *Cognitive Access* · *Support Needs*

Additional Benefits

Affordability · *Racial Equity* · *Environmental Sustainability*

Safety · *Beauty and Better Design*

1
Point Value

Residents can choose service providers for home and community based services separate from building ownership/management.

ESSENTIAL ELEMENT

- Ability to change service providers without changing or putting their housing at risk

2
Point Value

Meet L1 requirement above and:

- Building staff can support and refer residents to service providers based on individual preferences and needs

Sources: *HCBS, The Kelsey*

Programming

6.4 Carsharing Support

Impact Areas

Mobility and Height · *Hearing and Acoustics* · *Vision*

Health and Wellness · *Cognitive Access* · *Support Needs*

Additional Benefits

Affordability · *Racial Equity* · *Environmental Sustainability*

Safety · *Beauty and Better Design*

1
Point Value

Residents have access to alternatives to car-ownership including car-sharing and on-demand rentals.

- Access either to subsidized car sharing and/or to hybrid or EV fleet vehicles
- Coordinated car-sharing by building staff
- Match residents and neighbors with a rideshare program

Sources: *Living Future: Living Building Challenge 4.0 (pg. 35), The Kelsey*

Programming

6.4 Resident Programs and Events

Impact Areas

Mobility and Height
Hearing and Acoustics
Vision
Health and Wellness
Cognitive Access
Support Needs

Additional Benefits

Affordability
Racial Equity
Environmental Sustainability
Safety
Beauty and Better Design

Sources

Healthy Places By Design
The Kelsey Program Operating Standards

1
Point Value

Ongoing building events and activities.

- In-person events, art activations, and non-traditional partnerships
- Regular opportunities for residents to connect with one another and the surrounding community members who live nearby and include them in processes to promote civic trust and strengthen a sense of community

Open space area for community events

Conclusion

Designing disability-forward communities does not only meet the overlooked and undersupplied housing needs of 1 in 4 people with disabilities, doing so also creates better housing for all people. An approach focused on cross-disability access, choices throughout the design process, and intersection benefits all support the creation of truly inclusive housing that meets diverse community needs.

The creation of this initial publication of the Inclusive Design Standards is not the completion of such work. Rather, as projects are designed, developed, and occupied, the Inclusive Design Standards will continue to evolve and be modified to reflect the most progressive and innovative disability-forward designs. Just as this first version of the Inclusive Design Standards was created with insights from existing project owners and developers, architects, disabled advocates, and other standards and guidelines, future versions will be shaped by the same.

The Inclusive Design Standards can and should also be utilized in alignment with funding sources and policy development. Regulations, policies, and public funding can support projects to utilize such accessible and inclusive design. Land use policies can align to support disability-forward projects. Predevelopment and permanent housing finance can incentivize and support projects who choose to design their projects using the Inclusive Design Standards.

The Inclusive Design Standards are developed to be more than a collection of elements and a project certification tool. Beyond being an implementation guide for inclusive housing today, the Inclusive Design Standards can be a tool to drive next phases of innovation around accessible design and advance a disability-forward housing future.

To participate in future versions email design@thekelsey.org.

5
Sources and Partners

- Overview
- References
- Workshop Participants
- Inclusive Design Council
- Terms of Use

Overview

The Inclusive Design Standards were shaped by input from industry and community partners over 12-months. During this time the team qualified and selected ten members to participate in The Kelsey's Inclusive Design Council (IDC) to provide input as consultants. Representing different states, backgrounds, identities and disabilities, the IDC supported thinking beyond current limitations to envision elements that could influence multifamily housing communities for years to come.

Two workshops held with architects and designers supported the implementation of the Inclusive Design Standards against each goal with project teams that are working to build housing for people with and without disabilities. The first workshop identified feasibility of the Inclusive Design Standards scope and worked to define key objectives missing from multifamily housing design. The second workshop reviewed the Inclusive Design Standards and element expectations for adoption.

The elements were sourced from multiple documents, edited and readapted to form over 300 elements that remain core to improving accessibility for a range of disabilities and people at different stages of life.

References

This list of references informed our certification process, but may not reflect every organization's values and goals.

- AARP Livable Cities
- Architecture for the Blind, Chris Downey
- Autism Center, Opening Doors for Autism Report
- California Housing and Community Development, HCD Universal Design
- Design Resources for Homelessness, A Review of Research: Designing the Built Environment for Recovery from Homelessness
- Disability Rights California
- Division of the State Architect, DSA, Access Code Collaborative working group
- ELS for Autism School
- Enterprise Community, 2015 Green Enterprise Communities
- Gallaudet University: DeafSpace, Gallaudet University: Campus Design and Planning
- Home and Community Based Services Settings Rule (HCBS) Settings Rule
- Home Matters America: Appliances and Work Surfaces
- Home Matters America: Bathroom
- Home Matters America: Interior and Living Spaces
- Housing Development Consortium, Housing Community and Development Report Out
- Hyperlight Systems: Hands-Free Access Gates
- Inclusive Design Council, USA
- Innovative Solutions for Universal Design, Solutions isUD
- International Living Future Institute, Living Future: Living Building Challenge 4.0
- International WELL Building Institute, WELL Standards
- LCM Architects, Chicago, IL
- Main Street Connect, Rockville, MD
- Mikiten Architecture, Berkeley, CA
- National Disability Authority, Building for Everyone
- National Institute of Building Sciences, NIBS Design Guidelines for the Visual Environment
- Nimble Spaces: Ireland
- Safe Score: Washer and Dryer Hookups
- Shopworks Architecture, Designing for Healing, Dignity, and Joy Report
- Sonoma County, Universal Design Checklist
- The American National Standards Institute, ANSI Standards
- The Corporation for Supportive Housing, CSH: Suggestions for Physical Design Standards in Supportive Housing Developments
- University at Buffalo, Buffalo Center for Inclusive Design and Environmental Access
- U.S. Department of Housing and Urban Development, Universal Design ID: Residential Remodeling and Universal Design, Home Innovation Research Labs and Upper Marlboro, MD
- U.S. Green Building Council, LEED 4.1 BDC O+M Guide
- YIMBY Action

Workshop Participants

The workshops held included architects and designers who would be the end-users of the Inclusive Design Standards. They have been most influential at three parts where we first covered feasibility and potential, secondly provided feedback on implementation for users, and lastly in the Design Sprint thinking about the tool and roll out. They are from over 25 design studios in various parts of the U.S.

Name	Organization
Alicia Anderson	Administration on Community Living
Amy Pothier	Gensler
Andrew Glba	Devcon Construction
Ann Bui	The Kelsey
Anne Riggs	David Baker Architects
Armando Tobias	LCM Architects
Bethany Hurd	The Universal Design Project
BJ Dietz Epstein	Lighthouse for the Blind - San Francisco
Bruce Prescott	Santos Prescott and Associates
Caroline Bas	The Kelsey
Chris Downey	Architecture for the Blind
Deborah Talamantez	LCM Architects
Doug Anderson	LCM Architects
Elena Prokop	LCM Architects
Emily Jones	WRNS Studio
Eric Mondragon	The Kelsey
Erick Mikiten	Mikiten Architecture
Fatimah Aure	The Kelsey
Gail Napell	Gensler
Gina Hilberry	Institute for Human Centered Design
Greg Novicoff	LMS Architecture
Jennifer Simmons	Anderson Brulé Architects
Kate Conley	OJK Architecture
Katherine Dailey	LCM Architects

Name	Organization
Katherine Rivard	Anderson Brulé Architects
Kathy Gips	Institute for Human Centered Design
Karen Braitmayer	Studio Pacific Seattle
Karen Nichols	Michael Graves
Kenneth Knox	Devcon Construction
Kimberly Bascos	Anderson Brulé Architects
Kristian Hayward	Devcon Construction
Lori Gerhard	Administration on Community Living
Matthew Brault	Institute for Human Centered Design
Micaela Connery	The Kelsey
Nicholas Sanchez	Self
Nubyaan Scott	Disability Rights California
Pamela Anderson-Brule	Anderson Brulé Architects
Pauline Souza	WRNS Studio
Raul Orellana	The Kelsey
Sabrina Odah	Suffolk Construction
Sally Roth	David Baker Architects
Sarah Pruett	The Universal Design Project
Scott Pruett	The Universal Design Project
Simcha Ward	Laurel Street Residential
Skyler Whittaker	Self
Steven Montgomery	LCM Architects
Sunday Parker	Salesforce
Susan Corry	Livelyhood Housing
Susan Duncan	Institute for Human Centered Design
Susan Moe	Access Compliance Consulting
Suzanne Hemphill	State of California Dept Housing and Community Development (HCD)
Tony Taormino	Devcon Construction
Valerie Fletcher	Institute for Human Centered Design
Wright Sherman	WRNS Studio

Inclusive Design Council

The Inclusive Design Council (IDC) for the Inclusive Design Standards is a cross disability group of 10 paid consultants who have provided input and feedback on the creation of the Inclusive Design Standards that are being developed by The Kelsey with support from Erick Mikiten of Mikiten Architecture. The Inclusive Design Standards are meant to be a set of design and program guidelines to define accessibility and inclusivity for multifamily residential communities. The goal of the Inclusive Design Council was to provide feedback on various levels of inclusion, across different access needs to achieve a set of standards that enforce an accurate level of inclusion that meets the accommodation of people with physical, intellectual, sensory, visual, and hearing disabilities.

Bethany Hurd

b4hurd@gmail.com

she/her

Lawrence, Kansas

Bethany is pursuing her Masters of Architecture at the University of Kansas. She has a passion for Universal Design and is an individual who lives with disabilities.

"Home for More Inclusion is considering the end users in the initial design process and providing access in built environments that accommodate the vast different people and abilities" - Bethany Hurd

Domonique Howell

LeolaHowell@libertyresources.org

she/her

Philadelphia, Pennsylvania

Domonique is an Independent Living Specialist at Liberty Resources. She is a disability and family advocate with knowledge and experience in disability access. She hopes these design standards could be the continued catalyst for change in access and design. These design standards are important for her because she has lived experience with inaccessible living spaces.

"Home for More Inclusion is about creating a better society for everyone, and ultimate access is freedom." - Domonique Howell

Jess Cowing, Ph.D.

jlcowing@email.wm.edu

she/they

Baltimore, Maryland

Jess is an Adjunct Assistant Professor in the American Studies Department at Franklin and Marshall College. She is a neurodivergent scholar-activist and works in the areas of feminist disability studies, settler colonialism, and 19th and 20th century literary studies. She hopes these design standards will increase access for neurodivergent and LGBTQ+ people while creating change within the disability justice community. These design standards are important for her because she has experience in academic access and has led workshops on digital and classroom accessibility for faculty at the College of William and Mary.

"More Inclusion is welcoming and inviting people to a space. More Access is the messy work done from the beginning to build in supports that make people want to be in a space." - Jess Cowing, Ph.D.

Lydia X. Z. Brown

lydia@autistichoya.com

they/them
theirs/ themself
or no pronouns

Baltimore, Maryland

Lydia is the Director of Policy, Advocacy, and External Affairs at the Autistic Women and Nonbinary Network. They are also an Adjunct Lecturer in the Disability Studies Program at Georgetown University and an Adjunct Professorial Lecturer in the Department of Critical Race, Gender, and Culture Studies at American University. They hope these design standards will increase access for multiply disabled and neurodivergent individuals and provide an intersectional lens to building accessible housing. These design standards are important for them because they have significant experience with access to technology, pedagogical and curricular design, and event planning, and some architectural access from their time as a student advocate in college.

"More Inclusion is making everyone feel genuinely welcome and a sense of belonging. More Access is ensuring everyone has the care and support they need to make meaningful decisions about participation and engagement."
- Lydia X. Z. Brown

Inclusive Design Council

he/him

Hayward, CA

Leonard Craig

(510) 566-9583

Leonard is the former President of the Orientation Center for the Blind. He is an unpaid blind consultant for Community Resources for Independent Living (CRIL). At CRIL, he works on feeding the unhoused and serves as an advocate for the housing crisis in the Bay Area. He hopes these design standards will empower people with disabilities because they provide a portal for people to individualize their lives and set a standard of accessible, affordable, and inclusive living for years to come. These design standards are important for him because they allow access for people with disabilities and give them ownership of the different housing communities they will be living in.

"More Inclusion is more connection to your community. More Access is more freedom for people with disabilities." - Leonard Craig

she/her/hers

Oakland, CA

Maddy Ruvolo

maddy.ruvolo@gmail.com

Maddy is a Transportation Planner on the Accessible Services team at San Francisco Municipal Transportation Agency. She has a master's degree in urban planning, with a focus on access for the disability community. She hopes these design standards will increase access and inclusion in transportation accessibility and provide a leading standard of inclusive design in the housing sector. These design standards are important for her because she is disabled and has worked in disability rights.

"More Inclusion is upending power dynamics to center the most marginalized. More Access is centering disabled ways of being, enabling disabled people to navigate the world without barriers." - Maddy Ruvolo

he/him

North Hollywood, CA

Nicholas Sanchez

sancheznicholas35@yahoo.com

Nicholas Sanchez graduated from California State University, Northridge with a Bachelor of Science in interior design. He shares expert opinion on access and design specific to the Deaf and Hard of Hearing community. He hopes these design standards will add valuable experience to interior design and provide architects, developers, and housers the skills and knowledge to build accessible, affordable, and inclusive spaces. These design standards are important for him because they address access needs that cover a multitude of disabilities.

"More Inclusion is having open conversations so that we could learn from each other and grow better, and more access is having closed captions, interpreters, and carts." - Nicholas Sanchez

he/him

Harrisonburg, Virginia

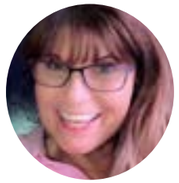
Scott Pruett

scott@universaldesign.org

Scott Pruett is Co-Founder of the Universal Design Project. He has life experience with access needs since a spinal cord injury in 1999, formal accessibility consulting between 2012-2015, Executive Director of a nonprofit focused on Universal Design, and Board President of a Center for Independent Living for the last 8 years. He hopes these design standards will address the systemic problem of inaccessibility in areas of the housing sector not regulated by the ADA. These design standards are important for him because he believes in accessible, affordable, and inclusive housing communities.

"More Inclusion is more community, and more Access is more opportunity." - Scott Pruett

Inclusive Design Council



she/they

Lincoln, Nebraska

Sharon daVanport
sharon@awnnetwork.org

Sharon is the Executive Director at Autistic Women and Nonbinary Network. They are a disabled person and someone who has provided consulting around access and disability for more than 10 years. They hope these design standards will increase access for all and provide a space of inclusivity for intersectional communities. These design standards are important for them because inclusivity is rooted in gender, racial equity, and justice.

"More Inclusion is ensuring all marginalized people and communities are not only provided a seat at the table, but they are also in leadership roles providing meaningful improvements for stakeholders living at the margins of the margins. More Access is committing to provide unlimited access without ableist barriers" - Sharon daVanport

they/them

Kansas City, Missouri

Skyler Whittaker
eowhit@gmail.com

Skyler has a BA in Educational Studies from Western Governors University and a MS in Library and Information Science from University of Illinois at Urbana-Champaign. They are an information accessibility specialist and disability justice advocate. They hope these design standards will design housing communities that are accessible, inclusive, and livable. These design standards are important to them because they support designing learning spaces and technologies that make it easier for different people.

"More Inclusion primarily means more inclusion in the process of designing one's physical and social environment for accessibility. And this is also going to look different for different people in different situations, depending on where each person's individual needs and interests fit best, and where they can most meaningfully contribute their knowledge and skills. I think the most important part of inclusion is being able to have influence over what happens to you within your broader social and community environments, instead of being at the mercy of having things done to you by other people." - Skyler Whittaker

6 Appendix

› Terms of Use
› Overview of Relevant Accessibility Codes

Terms of Use

Inclusive Design Standards End User License Agreement
This End User License Agreement (this "**Agreement**") is made between The Kelsey, a 501(c)(3) non-profit entity, with a mailing address at 1460 Mission Street, San Francisco, CA 94103 ("**The Kelsey**", "**Our**", "**Us**", or "**We**") and you ("**You**", "**Your**,", or "**Yours**") (each, a "**Party**" and together the "**Parties**"). The effective date of this Agreement is the date You accept these terms in accordance with Section 1 (Your Acceptance) (the "**Effective Date**"). Please read this Agreement carefully. This Agreement governs Your use of the Inclusive Design Standards (the "**The Design Standards**").

PLEASE READ THIS AGREEMENT CAREFULLY BEFORE YOU ACCESS OR USE THE INCLUSIVE DESIGN STANDARDS. BY ACCESSING OR USING THE DESIGN STANDARDS, YOU AGREE TO BE BOUND BY THIS AGREEMENT. IF YOU DO NOT WISH TO BE LEGALLY BOUND BY THIS AGREEMENT, THEN PLEASE DO NOT ACCESS OR USE THE DESIGN STANDARDS.

1. **Your Acceptance**. By accessing or using The Inclusive Design Standards, You acknowledge that You have read this Agreement and agree to be legally bound by it. We may also confirm Your agreement to be bound by this Agreement by asking You to click an "I accept" or similar button when You access or download The Inclusive Design Standards.

2. **The Design Standards.**

2.1. **Inclusive Design Standards**. The Design Standards include resources and information relating to housing accessibility and inclusiveness. NOTE THAT THE DESIGN STANDARDS ARE BEING PROVIDED TO YOU AS-IS AND FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT TO BE RELIED ON FOR ANY PURPOSES.

2.2. **Submission of Information**. In order to download or access The Inclusive Design Standards, You must provide us with your name, location, and the organization/entity that you represent ("Your Data"). You hereby grant The Kelsey a non-exclusive, non-sublicensable, non-transferable, limited license to use, display, publish, and reproduce Your Data for purposes of The Kelsey performing its obligations under this Agreement and otherwise promoting the use of The Inclusive Design Standards. By way of clarification, and not limitation, by submitting Your Data, you agree that The Kelsey can publish Your organization's name and location on The Kelsey's website and marketing materials.

3. **Grant of Rights to You.**

3.1. **Grant of Rights to Use The Inclusive Design Standards.** The Kelsey, under its intellectual property rights, hereby grants to You during the Term, a limited, non-exclusive, non-transferrable, and non-sublicensable license to access and use The Inclusive Design Standards as it is made available to You to: (i) reference, reproduce, and share some or all of The Inclusive Design Standards for Your personal use; and (ii) otherwise use The Inclusive Design Standards to enhance your own projects, designs, reports, and other materials, including for your commercial use (collectively, the "Permitted Uses"). Notwithstanding anything to the contrary, you acknowledge and agree that Your exercising of the Permitted Uses is expressly conditioned on the following:

3.1.1. You Will Attribute The Kelsey for all Uses of The Inclusive Design Standards. If you use, distribute, replicate, or share The Inclusive Design Standards (including in modified form), then you shall attribute The Kelsey by: (i) identifying The Kelsey and others designated to receive attribution; (ii) including The Kelsey's copyright notice; (iii) including a URL or hyperlink to The Inclusive Design Standards website to the extent reasonable; and, (iv) indicate if You modified The Inclusive Design Standards and retain records of such modifications.

3.1.2. You Will Not Replicate The Inclusive Design Standards for Commercial Use. You are not permitted to replicate, reproduce, or use The Inclusive Design Standards for commercial use. For the avoidance of doubt, you may incorporate properly attributed The Inclusive Design Standards in your commercial products and services but you may not reproduce The Inclusive Design Standards for resale or other commercial use.

3.1.3. Your Use of The Inclusive Design Standards is Not an Endorsement. Nothing in this license constitutes or shall be construed as permission to assert or imply that You are, or that Your use of The Inclusive Design Standards is, connected with, or sponsored, endorsed, or granted official status by, The Kelsey.

3.2. **No Implied Rights.** Nothing in this Agreement shall be construed as granting You any rights other than those expressly provided herein. Any rights granted to You under this Agreement must be expressly provided herein, and there shall be no implied rights pursuant to this Agreement, based on any course of conduct or other construction or interpretation thereof. All rights and licenses not expressly granted to You herein are expressly reserved by The Kelsey. By accessing or using The Inclusive Design Standards, you agree not to infringe The Kelsey or any third-party's copyright, patent, trademark, trade secret, or other proprietary rights

Section 6 / **Appendix**

or rights of publicity or privacy.

4. **Warranty Disclaimer.** THE KELSEY DISCLAIMS ALL REPRESENTATIONS AND WARRANTIES WITH RESPECT TO THE INCLUSIVE DESIGN STANDARDS, WHETHER EXPRESSED OR IMPLIED. THE INCLUSIVE DESIGN STANDARDS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND. THE KELSEY DOES NOT REPRESENT OR WARRANT THAT: (i) THE INCLUSIVE DESIGN STANDARDS WILL MEET CODE, ZONING, PERMITTING, OR FINANCING REQUIREMENTS OR RESULT IN ANY DESIRED OUTCOME; (ii) THE INCLUSIVE DESIGN STANDARDS' ARE ERROR-FREE; OR (iii) THE INCLUSIVE DESIGN STANDARDS COMPLY WITH ANY FEDERAL, STATE, OR LOCAL LAW, ORDINANCE, CERTIFICATION, PERMITTING REQUIREMENT, OR OTHER CODE. TO THE FULLEST EXTENT PERMITTED BY LAW, THE KELSEY HEREBY DISCLAIMS ALL REPRESENTATIONS AND WARRANTIES, WHETHER EXPRESSED OR IMPLIED, ORAL OR WRITTEN, WITH RESPECT TO THE INCLUSIVE DESIGN STANDARDS, INCLUDING WITHOUT LIMITATION, ALL IMPLIED WARRANTIES OF TITLE, NON-INFRINGEMENT, QUIET ENJOYMENT, ACCURACY, INTEGRATION, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE, AND ALL WARRANTIES ARISING FROM ANY COURSE OF DEALING, COURSE OF PERFORMANCE OR USAGE OF TRADE.

5. **Limit of Liability.** IN NO EVENT SHALL THE KELSEY BE LIABLE TO YOU FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OF ANY KIND OR NATURE WHATSOEVER, INCLUDING WITHOUT LIMITATION, LOSS OF PROFITS OR OTHER ECONOMIC LOSS, EVEN IF THE KELSEY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT SHALL THE KELSEY'S TOTAL AGGREGATE LIABILITY TO YOU FOR ANY CLAIMS OR DAMAGES ARISING OUT OF THIS AGREEMENT EXCEED ONE HUNDRED DOLLARS ($100.00).

6. **Term and Termination.**

6.1. **Term**. Unless earlier terminated pursuant to this Section 6 (Term and Termination), this Agreement shall come into force and effect upon Your acceptance of this Agreement and shall continue until terminated by The Kelsey. (the "Term").

6.2. **Termination by Us.** We may terminate this Agreement immediately if We determine, in our reasonable discretion, that You are in breach of this Agreement.

6.3. **Effect of Termination.** Upon termination or expiration of this Agreement for any reason, Your rights to The Inclusive Design Standards shall immediately terminate and You shall immediately stop accessing or otherwise using The Inclusive Design Standards. This Agreement will remain in effect even after Your access to The Inclusive Design Standards is terminated or Your use of The Inclusive Design Standards ends.

7. **Modifications to this Agreement.** We may modify this Agreement from time to time at Our discretion. If We modify this Agreement, then such modifications shall take effect proactively, upon Your subsequent access to The Inclusive Design Standards. You may print out a copy of this Agreement for Your records.

Overview of Relevant Accessibility Codes

The following accessibility codes are good standards to use in all multi-family housing to ensure greater accessibility, in conjunction with recommendations in the Inclusive Design Standards.[1][2][3][4]

1. U.S. Housing and Urban Development (HUD) requirements under the Federal Fair Housing Act (FHA). These laws apply to almost all multifamily housing in the country, even if there is no government program. They provide the very minimum of accessibility. These laws are found in several documents adopted at various times, which together provide the requirements and additional guidance. These include:

a. The Fair Housing Accessibility Guidelines, March 6, 1999, found at 24 C.F. Part 100, and Appendix II to the Fair Housing regulations (24 CFR Ch. I, Subch. A, App. II). The preamble to the guidelines is at Appendix III to the Fair Housing regulations (24 CFR Ch. I, Subch. A, App. III. See:

b. See specifically 24 C.F.R. Section 100.205;

c. The Supplement to Notice of Fair Housing Accessibility Guidelines: Questions and Answers About the Guidelines, June 28, 1994, at Appendix IV to the Fair Housing regulations (24 CFR Ch.I., Subch.A, App. IV);

d. *The Fair Housing Act Design Manual: A Manual to Assist Designers and Builders in Meeting the Accessibility Requirements of The Fair Housing Act,* https://www.huduser.gov/portal/publications/destech/fairhousing.html, February 25, 2008;

e. JOINT STATEMENT OF THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT AND THE DEPARTMENT OF JUSTICE ACCESSIBILITY (DESIGN AND CONSTRUCTION) REQUIREMENTS FOR COVERED MULTIFAMILY DWELLINGS UNDER THE FAIR HOUSING ACT, at https://www.hud.gov/program_offices/fair_housing_equal_opp/physical_accessibility#:~:text=Joint%20Statement%20on%20Accessibility%20(Design%20%26%20Construction)%20Requirements%20(April%2030%2C%202013); and

f. For more information on the requirements and the seven safe harbors for compliance with the Fair Housing Act, visit Fair Housing Accessibility FIRST.

2. HUD Requirements under Section 504 of the federal Rehabilitation Act. These standards apply to all housing where the agency providing the funding receives federal funds or the project receives federal funds. These accessibility standards found at 24 Code of Federal Regulations (C.F.R.) Part 8, including 24 C.F.R. Sections 8.22 (requirements for minimum percentages of fully accessible Mobility and Hearing/Vision Units) and 8.32 (Accessibility Standards) and the Uniform Federal Accessibility Standards (UFAS) found at 24 C.F.R. Part 40, Appendix A, and 24 C.F.R. Sections 40.4 and 40.7 (Standards/Availability of Accessibility Standards).

3. Federal requirements under the Americans with Disabilities Act. These standards apply to all housing where a public agency provides funding or the housing is part of a government program. Specifically, 2010 Standards for Accessible Design (2010 ADAS), 28 C.F.R. Part 35.151 and 36 C.F.R. part 1191, and Appendices B and D. In particular, the 2010 Standards

[1] **California Building Code Chapter 11A**. These codes apply to all multifamily housing in California, even if there is no government program. We note that Chapter 11A is very similar to the FHA requirements, but where there are differences the codes providing the most accessibility must be applied.

[2] **California Building Code Chapter 11B.** We note that Chapter 11B is very similar to the ADA 2010 Standards requirements, but where there are differences, or where the additional requirements of UFAS or the HUD alternative standards apply, the codes providing the most accessibility must be applied.

[3] **California Civil Code Section 51.2.** Under California law, all senior housing developments have some additional requirements, including requiring an elevator or accessible ramp to all floors, even if they are only two stories.

[4] Several major funding programs in California have increased accessibility requirements. For example, the California Tax Credit Program requires that 15 percent of new units be fully accessible Mobility Units and 4% of the new units must be fully accessible Hearing/Vision units (as described in Chapter 11B and the ADA 2010 Standards). The Program also requires that 50% of the units built in housing for seniors be fully accessible Mobility Units. These units have additional features that make them more accessible to people with particular disabilities. Chapter 11B and the ADA 2010 Standards require these units, but in lower percentages. Ideally, and consistent with the Kelsey Design Standards, all units would have all of the features from both types of units, expanding accessibility and the ability to age in place. https://www.hud.gov/sites/dfiles/FHEO/documents/1991FH%20Accessibility%20Guidelines.pdf

include 28 C.F.R Part 35.151 + 2004 ADAAG Standards. See the 2010 standards at https://www.ada.gov/2010ADAstandards_index.htm and the Dept. of Justice Guidance on the 2010 ADA Standards for Accessible Design at https://www.ada.gov/regs2010/2010ADAStandards/Guidance2010ADAstandards.htm

4. **The HUD Deeming Memo** (HUD's modified version of the 2010 ADA Standards for Accessible Design, HUD-2014-0042-0001, 79 Federal Register 29671 (5/23/14), commonly referred to as the "Alternative Standards" or "HUD Deeming Memo"). The federal standards in paragraphs 2 and 3 above are similar but not identical. This memo describes how you can comply with both paragraphs 3 and 4 by using the 2010 Standards, along with 14 exceptions to those standards. https://www.federalregister.gov/documents/2014/05/23/2014-11844/nondiscrimination-on-the-basis-of-disability-in-federally-assisted-programs-and-activities.

5. In some situations, additional standards may be applicable, such as in federal buildings or historic buildings.

In addition to specific accessibility standards, federal law also establishes some additional accessibility requirements. For example:

a. First, where not all units are fully accessible Mobility and Hearing/Vision units, the fully accessible units shall, to the maximum extent feasible and subject to reasonable health and safety requirements, be distributed throughout the project and be available in a sufficient range of sizes and amenities consistent with 24 C.F.R. § 8.26 so that a qualified individual with disabilities' choice of living arrangements is, as a whole, comparable to that of other persons eligible for housing assistance under the program.

b. Properties have a legal obligation to maintain accessible features in good condition.

c. Even if properties meet all accessibility requirements, they are required by federal law to provide reasonable modifications (physical changes to the unit or property) and reasonable accommodations (changes in rules, policies, or procedures) to individuals with disabilities when needed to allow the individual equal enjoyment of the housing.

d. Section 504 of the Rehabilitation Act, the Americans with Disabilities Act, and the Fair Housing Act, all require housing providers to take necessary steps to ensure effective communication with people with disabilities.

e. Second, where not all units are fully accessible Mobility and Hearing/Vision units, priority for the fully accessible units must be given to individuals who need the accessible features. Marketing of accessible units must be targeted to people who need the features. Further, reasonable nondiscriminatory steps to maximize the utilization of accessible units by eligible individuals whose disability requires the accessibility features of the particular unit as specified in 24 C.F.R. § 8.27: "When an accessible unit becomes vacant, the owner or manager, before offering such units to an applicant without disabilities, shall offer such unit:

(1) First, to a current occupant of another unit of the same project, or comparable projects under common control, having disabilities requiring the accessibility features of the vacant unit and occupying a unit not having such features, or, if no such occupant exists, then,

(2) Second, to an eligible qualified applicant on the waiting list having a disability requiring the accessibility features of the vacant unit, then,

(3) Third, shall work with the local continuum of care organization, mental health department, or other placement entity or attempt to market the unit for a reasonable time to identify a qualified applicant who needs the accessible features before renting to an applicant who does not need the accessible features.

When offering an accessible unit to an applicant not having disabilities requiring the accessibility features of the unit, the property shall require the applicant to agree to move to a comparable non-accessible unit when available, and shall incorporate this agreement in the lease or a lease addendum."

Relevant HUD & DOJ RA/RM and EC Guidance:
https://www.hud.gov/sites/documents/reasonable_modifications_mar08.pdf
https://www.justice.gov/sites/default/files/crt/legacy/2010/12/14/joint_statement_ra.pdf
https://www.ada.gov/effective-comm.htm

For more information on federal accessibility standards, see https://www.hud.gov/program_offices/fair_housing_equal_opp/physical_accessibility

To be involved with adoption and roll-out, and provide ongoing feedback contact design@thekelsey.org

To access additional resources including a self-certification tool, training opportunities, technical assistance or other materials visit www.thekelsey.org/design