SAN ANTONIO
HOUSING
TRUST

MULTI-FAMILY UNIVERSAL DESIGN STANDARDS

VERSION 1.1 - MAY 9 2025

MESSAGE FROM THE EXECUTIVE DIRECTOR

Each human being is different, yet most structures designed to house our population only accommodate the needs of the "average" household. This approach does not account for our diverse and growing population, consisting of folks of different ages, body types, and abilities… and that we are all getting older. To adequately meet the needs of our community, we must rethink our approach to housing design to refocus on the long-term changes that we as human beings go through and how our housing stock will be able to effectively accommodate for those changes.

Recognizing this, the San Antonio Housing Trust (SAHT) embarked on a process to establish new design standards that were inclusive in its research and intentional in its outcomes. In early 2022, our Foundation created a committee composed of community members living with various forms of disabilities, housing design experts, and housing development professionals to develop a set of inclusive and universal design standards that would provide more equitable multifamily housing for SAHT partnered developments.

The Multi-Family Universal Design Standards are intended to engage architectural teams directly by instructing specific design elements, including site-based considerations, building components, interior spaces, and dwelling units.

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Introduction

The San Antonio Housing Trust's (SAHT) primary purpose is to provide housing opportunities for low- and moderate- income families within the City of San Antonio. Through this work, our goal is to promote public health, safety, convenience and welfare within the communities that we serve. To fulfill this mission and goal, it is crucial that we consider how the buildings we create best meet the needs of their residents.

Historically, the housing developers have focused on accessible design, as mandated by the American Disabilities, Rehabilitation and Fair Housing Acts, to provide accommodations to users with a federally recognized disability. Beyond these specific accommodations, there are no guidelines to address the diverse physical and mental capabilities and needs of the residents in our community.

Moving forward, the San Antonio Housing Trust will promote a universal design approach to building housing that improves usability for the greatest number of people, regardless of body type, fit, age or ability.

Building off of the contributions of the Kelsey, The University of Buffalo IDeA Center and others, we have developed a San Antonio-specific set of universal design standards. These standards ask home builders to find design-based solutions that are equitable, simple, flexible, have a tolerance for error, are easy to perceive, require low physical effort and allocate appropriate space for use.

What is Universal Design?

Universal Design is "a design process that enables and empowers a diverse population by improving human performance, health and wellness, and social participation" (Steinfeld and Maisel, 2012).

▸ Body Fit
Accommodating a wide range of body sizes and abilities.

▸ Comfort
Keeping demands within desirable limits of body function and perception.

▸ Awareness
Ensuring that critical information for use is easily perceived.

▸ Understanding
Making methods of operation and use intuitive, clear, and unambiguous.

▸ Wellness
Contributing to health promotion, avoidance of disease, and protection from hazards.

▸ Social Integration
Treating all groups with dignity and respect.

▸ Personalization
Incorporating opportunities for choice and the expression of individual preferences.

▸ Cultural Appropriateness
Respecting and reinforcing cultural values, and the social and environmental contexts of any design project.

University at Buffalo - Center for Inclusive Design and Environmental Access

Contributors

SAHT SUSTAINABLE AND UNIVERSAL DESIGN COMMITTEE

- Jane Paccione,* Managing Director of Collective Impact, San Antonio Area Foundation, SAHT Board Vice President
- Rachell Hathaway,* Grant Systems & Reporting Manager, Kronkosky Charitable Foundation, SAHT Board Member
- Teri Castillo, District 5 Councilwoman, SAHT Board Member
- Trent Tunks*, Architect, Alamo Architects
- Adam Martin*, Architect, Lake Flato Architects
- Charles Morris, Chief Program Officer, Southwind Fields
- Christopher Salas, Executive Director, Rolling Inspiration
- Ryan Baldwin, VP of Operations, Franklin Development
- Deborah Scharven,* Accessibility Compliance Manager, City of San Antonio Disability Access Office
- Jason Arechiga*, Sr. Vice President of Development, NRP Group
- Shelia Brown*, Peer Mentoring Coordinator, Connectability
- Scott D. Ackerson, Director, WestEast Social Impact Studio
- Traci Lewand, Sr. Vice President of Operations, San Antonio Zoo
- Andre Greene, Community Member
- Todd Hargroder, Community Member
- Susan Garza, Community Member

* Designates Technical Working Group members

SPECIAL THANKS

- The Kelsey, a 501(c)(3) nonprofit, and Mitken Architecture for the use of the Kelsey Housing Design Standards for Accessibility and Inclusion (v. December 2021) and for providing training sessions on their methodology. The Kelsey's approach formed the foundation of the SAHT Universal Multi-Family Design Standards. Thank you, Fatimah Aure, Caroline Bas, and Erick Mikiten, AIA LEED A-P for your expertise!
- The NRP Group and Franklin Development for inviting us to their multi-family housing projects to allow the committee to visualize and evaluate proposed universal design standards in person.
- Deepa Modadugu, Sr. Associate at Alta Architects for her technical contributions.
- Blair Tennant, Principal, Vermuelens for providing a cost analysis.
- Jack McClellan RAS, ADA Coordinator, APAC-BE for his technical analysis and efforts to align this document with other regulatory standards.

POLICIES

▸ SAHT Policy

All multi-family housing that is developed in partnership with the San Antonio Housing Trust shall comply with these standards.

▸ Commitment to Continued Improvement

SAHT has a commitment to continued improvement of these standards based on feedback from the development community, residents, design professionals and others. After sufficient feedback and experience implementing the standards, SAHT will reevaluate the standards and update as needed.

▸ Compatibility with Other Codes

The SAHT Universal Design Standards are designed to work in concert with the requirements of the American Disabilities Act, Section 504 of the Rehabilitation Act, the Fair Housing Act, the Texas Accessibility Standards, the Public Right of Way Accessibility Guidelines, local code, and other similar laws and statutes.

Specifically, the standards assumes that the baseline regulation for accessibility is the IBC + ANSI 2017 ICC 117.1 (referred to in this document as "ANSI"), as required by San Antonio Ordinance. The 2010 ADA standards (including the 11 exceptions listed by DOJ) is used as the safe harbor for federally funded projects.

The SAHT Universal Design Standards only identify requirements beyond the baseline and therefore are not inclusive of either the ANSI117.1 or 2010 ADA standards.

If there is conflict between standards, projects should be designed to the most stringent requirement. It is the responsibility of the design team to ensure compliance with all local, state and federal regulations.

WAIVERS

The San Antonio Housing Trust acknowledges that some of the proposed standards may impact the cost and complexity of the building development. SAHT believes that the benefit to the residents is worth the extra investment and expect our development partners to make their best effort to adhere to the standards. However, SAHT does not want to create unreasonable barriers to the development of affordable housing. If there are particular standards that cause undue strain on the project feasibility, we encourage developers to reach out to the SAHT development team to discuss waivers of specific requirements. The SAHT Executive Director will have discretion to review and approve waivers.

DESIGN PROCESS

▸ Team Organization

SAHT will assign a staff member to field inquiries and answer questions regarding the standards and provide a third party reviewer to review and inspect projects for compliance. The developer must identify and provide contact information for the developer's project manager and architect in charge of implementing the Universal Design Standards.

▸ Target Populations Focus Group

For housing targeted towards specific high-need populations, such as older adults, youth, veterans, unhoused people, or survivors of domestic abuse; the developer and architect, must hold at least one focus group meeting with a non-profit or local service provider that includes individuals with lived experience of the target population during the schematic design phase. If the developer is not already partnered with a service provider or organization specialized in their target population, SAHT shall be responsible for facilitating this meeting.

▸ Universal Design Site Plan

The architectural drawings shall include a universal design site plan that demonstrates compliance with the standards including: green space dedication, accessible routes (including slope callouts), accessible connections to public right of way, location of accessible units and parking stalls. Plans must demonstrate the dispersion of universal design unit types and parking.

▸ Schematic Design Meeting

The development and design team must present their universal design plan to SAHT at or before the delivery of 100% schematic design documents. The developer's project manager and the project architect must be in attendance. Additional meetings with SAHT can be requested by the developer at any time.

▸ Plan Review

The architectural plans, including the final Universal Design site plan, shall be submitted to SAHT within a maximum of 10 days of submitting drawings to the City of San Antonio for permitting.

A third-party universal design reviewer will complete a plan review of the project and provide a report within 15 days. Design changes made in response to the City of San Antonio permit review must be submitted with the city comments as they arise. SAHT will make every effort to review updated drawings quickly and consider conflicts with City code and SAHT standards.

Any deficiencies found in the plan review shall be corrected, revised, and submitted to the SAHT before the start of construction. This review will only pertain to SAHT Universal Design Standards and will not evaluate compliance with any other regulatory entity.

▸ Inspection

An inspection by a third-party universal design reviewer retained by SAHT will be required at substantial completion of the project. Any deficiencies found shall be corrected before final completion. SAHT highly encourages the development team to request an additional inspection at the framing stage of construction.

Inspections will only pertain to SAHT Universal Design Standards and will not evaluate compliance with any other regulatory entity. All inspections cost will be covered by the development team.

SITE DESIGN

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MULTI-FAMILY UNIVERSAL DESIGN STANDARDS

PATHWAYS & CONNECTIONS

▸ Neighborhood Connections

Site layout should maximize opportunities to create accessible routes from the development to neighborhood resources, such as bus stops, stores or thoroughfares. If sidewalk improvements in the public right of way are being provided, they shall meet the ADA Public Right-of-Way Accessibility Guidelines (PROWAG).

▸ Accessible Routes

Where technically feasible, the primary route between buildings and site amenities shall be accessible. If multiple routes are provided, some accessible and some that are not, the accessible route shall be equitable (i.e. the accessible route should not be circuitous or lead to a secondary entrance). Accessible pedestrian routes shall not be within vehicular routes.

▸ Construction Phase Routes

If an accessible path in the public right of way is blocked during construction, provide an alternate accessible route.

▸ Exterior Grade Changes

When navigating grade changes on site, use as low a slope as technically feasible, i.e. use a 1:20 sloped walk instead of a ramp. When a ramp is required, the slope cannot exceed 1:15. SAHT encourages using both ramps and stairs along primary routes.

▸ Exterior Stairs

All stairs shall have a cane-detectable tactile walking surface indicator at the top of every run (i.e. 12-16" deep truncated dome) that extends the length of the stair. If stairs have treads over 14 inches deep, the tread must be at least 24 inches deep.

▸ Pedestrian Paths

All pedestrian walkways, except for maintenance paths, shall be a minimum of 60 inches in width.

Exterior paths to any tenant amenities or features must be stable, firm, and slip resistant. If a natural surface is utilized, proper subsoil, base, binder and edge restraints must be used. Surface must be self-draining and designed to prevent erosion and a maintenance plan must be created and implemented.

Use contrasting color at curb cuts. Consider changes in paving to indicate transitions from one space to another, or alert people to entrances, stairs, etc.

▸ Site Lighting

- Surface Parking Areas: 3FC minimum average and 15:1 max to min uniformity
- Sidewalks: 1FC minimum average and 10:1 max to min uniformity
- Amenity Areas (secure courtyards, plazas, gathering): 0.5FC minimum average and 10:1 max to min uniformity.

Fixtures must be located to minimize glare and not light directly into tenant's windows at night. Use day/night automatic lights rather than motion activated lights.

▸ Exterior Gates

All exterior gates on site shall have a minimum 42" of clear width when open 90 degrees. Gate hardware must be sealed against weather, have a maximum 5 lbs. Opening force and self-close in no less than 5 seconds. Gate hardware must be operable from both sides of the gate. Property must have at least one exterior pedestrian entry and exit that leads to a public right-of-way that has an automatic operator.

PARKING AREAS

▸ Accessible Parking Space Count

Utilize the table to provide the minimum number of required accessible parking spaces:

Total # of Parking Spaces	Minimum # of Accessible Parking Spaces
1 to 25	3
26 to 50	6
51 to 75	9
76 to 100	12
101 to 150	15
151 to 200	18
201 to 300	21
301 to 400	24
401 to 500	27
501 and Over	6% of total

The number of parking spaces required to be accessible is to be calculated separately for each parking area.

▸ Van Accessible Parking Space

No less than 3 van spaces must be provided, including one visitor space. One van space must be directly adjacent to the property's main entrance or amenity center. The remaining van spaces should be dispersed across the site.

▸ Accessible Parking Signage

All accessible parking signage shall follow the Texas Administrative Code 2020 Rule Change, Rule 68.104.

▸ Parking Space Size

20% of standard spaces shall be no less than 10'-0" wide minimum (UDC + 12"), use double line striping, and evenly distributed throughout the site. No more than 20% of spaces shall be compact. Compact spaces shall be no less than 8'-6" wide minimum (UDC + 6").

▸ Pedestrian Safety

Sidewalks that are parallel with parking curbs/ spaces shall be separated from the curb by a minimum 2' buffer zone, such as increased sidewalk width, vegetative strip, or pavers. Alternately, wheelstops can be placed within the parking stall, 2' from the curb.

▸ Parking Lot Pedestrian Routes

All accessible parking spaces shall be connected to a continuously accessible pedestrian route. All standard parking spaces shall be connected to a continuous network of pedestrian routes. Marked pedestrian crossings shall be provided at all intersections with a vehicular way.

▸ EV Charging Stations

If EV charging stations are provided, they must be provided to accessible spaces at the same ratio they are provided to standard spaces. Accessible EV spaces shall meet the US Access Board's Design Recommendations for Accessible Electric Vehicle Charging Stations.

▸ Drop-Off & Loading Areas

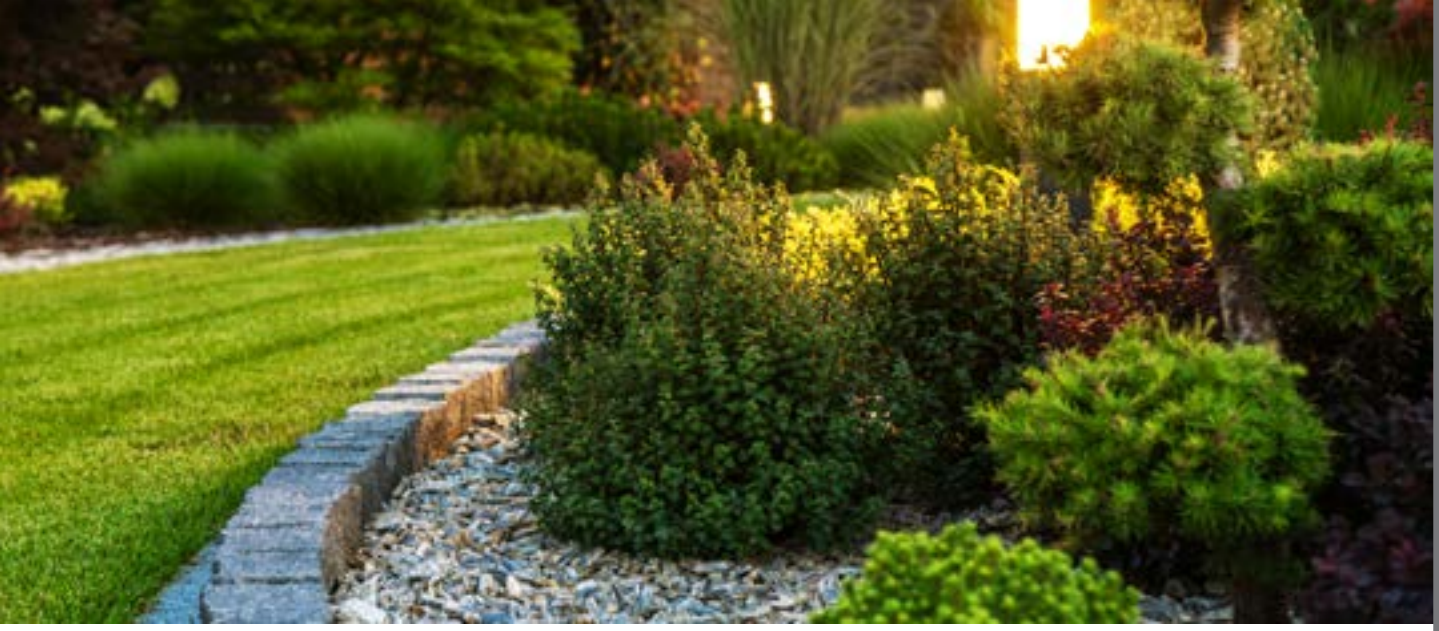
Passenger loading zones shall comply with ADA Public Right of Way Accessibility Guidelines (PROWAG) R311. At amenity center arrival area, provide a covered drop off/ loading zone, that extends at least 6' from the main entry door.

▸ Vertical Clearance

Provide 98-inch vertical clearance for accessible parking spaces. For properties for older adults or for properties with food pantries or other bulk distribution areas, loading zones must accommodate 28' box trucks with clearance height of 13'-6" and weight of 6,000 lbs. Provide necessary turning radius and off-loading access to storage/distribution areas.

▸ Covered Parking

50% of the required accessible parking shall be covered. If individual garages are provided, the garages must be provided to universal design units at the same ratio as they are provided to all other units. Garages for universal design units shall comply with the FHA Design Manual (pg 2.25).



GENERAL AMENITIES & SECURITY

Green Space Dedication

A minimum of 10% of the total site area of the project must be dedicated to a contiguous vegetative or landscaped area that is accessible to all residents. The green space must have a minimum width of 30 feet, and include at least two shaded seating areas with accessible furniture within or adjacent to the vegetated area. Permeable paths (such as compacted decomposed granite) adjacent or within vegetated areas may be included.

Roof decks may contribute to the green space if they are accessible to all residents by an elevator. Areas dedicated to pool and pool uses cannot be included in the green space. A circular accessible walking path around the entirety of the project site may be pursued in lieu of the continuous green space requirement. Shade structures or shade trees along paths and over seating areas are encouraged. *SAHT may waive contiguity requirement based on site layout needs and/or for high-density urban development.*

BBQ Area

Provide at least one accessible grill area located to minimize smoke infiltration into dwelling unit windows. Provide a minimum 3'- 0" wide workspace conforming to common area reach requirements. A sink and counter, if provided, shall conform to ADA requirements. The grill should have a cooking surface 34" maximum above the finished floor and allow as much toe and knee space as possible for a partial forward approach (specify a unit without storage below). If a propane grill is used, the tank shall not impede any toe and knee clearances. Specify grill with easy-to-use knobs that do not require grasping and twisting, that have tonal contrast with background, and easy-to-read markings; Grill must have an adapter handle to prevent reaching over flames to operate grill especially from a seated position. *SAHT may waive requirement in instance of high density vertical urban development.*

Pet and Service Animals Relief Areas

Provide a small on-site area for service animal relief that is connected to an accessible route. The service animal relief area shall be at least an 8' x 12' with natural ground cover or artificial turf over drainage cells and compacted gravel base. Provide a nearby disposal bag station and hose-bib within accessible reach ranges. (The relief area may be included in the Green Space Dedication)

SIGNAGE AND WAYFINDING

▸ Construction Signage

A property sign must be included during construction with useful project information such as leasing contact phone numbers for the developer and/or operator, and phone number for the general contractor for reporting construction site problems. Signage should include access information for people who are deaf, the SAHT Universal Design logo and promote the project's universal design commitment.

▸ Wayfinding Signage

Directional and building signage should clearly communicate wayfinding to amenity spaces and residential buildings at a scale that is appropriate for both vehicles and pedestrians. Exterior signage must be legible at night and use contrasting color palettes. Interior signage shall use pictograms and braille. SAHT encourages the use of signage technology, such as NaviLens, in common and exterior areas.

▸ Building Entrances

All common building entrances shall provide permanent weather protection, such as roof or porch, that cover the landing and door swing area. Architectural features and wayfinding elements (e.g., prominent signs, graphics, architectural features, landmarks, etc.) Shall distinguish primary entrances and exits from secondary entrances and exits. Landmark elements shall have lighting features to assist in locating them and be visible along the primary approach routes for motor vehicles, pedestrians, and cyclists. (*Not applicable to housing for those exiting domestic abuse)

▸ Parking Structure Wayfinding

Multi-story parking garages shall identify each floor or area with numbers, letters, colors, or symbols. Wayfinding signage shall be displayed prominently at the elevator lobby and on columns within that level. Utilize contrasting color palettes.

BUILDING COMPONENTS

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COMMON AREA ACCESS AND CIRCULATION

▸ Floor Space

For all common areas, provide the following:

- Turning area: 67” minimum diameter circle (ANSI)
- Clear floor space: 32” x 54” minimum (30” ANSI + 2”, and 48” ANSI + 6”)

▸ Common Corridors

All common area corridors shall be at least a 72” minimum width. Corridors can be reduced to a 60” minimum width for a maximum length of 48”.

▸ Entry Door Hardware

Primary entrance doors and gates (except pool enclosures) shall be automated and must be push button activated. Manual door hardware should have design cues indicating the appropriate pushing or pulling action to open (e.g., plate or bar for pushing, U-shaped handle for pulling).

▸ Access Controls

For common area doors, use proximity sensors rather than contact card readers or keypads. The time of the activation should allow enough time for occupants to activate the sensor and comfortably operate the door. Exterior exit doors with locking panic hardware shall be able to be re-entered using a key fob device by residents with accessibility needs.

▸ Interior Stairs & Ramps

Stairs to have a maximum rise of 6” and interior ramps that exceed 6” vertical change utilize a 1:15 slope or less. Where feasible, SAHT encourages long runs (exceeding 11 risers) of interior or breezeway stairs to be broken with a landing.

Treads over 14 inches deep must be at least 24 inches deep. Interior stairs wider than 78 inches shall have at least one additional handrail.

▸ Stair Safety

All interior stairs shall have a cane-detectable tactile walking surface indicator at the top of every run and a visually contrasting stripe at every nosing that is flush with the surface of the tread.

In the event of an power outage, ensure the minimum illumination level is maintained for at least 90 minutes at all exit stairs, or provide photoluminescent handrail and stair nosings.

Handrail color shall have a minimum 60% Light Reflectance Value (LRV) contrast to wall color.

▸ Elevator Design

For elevator serviced properties, provide a minimum of two elevators. At least one elevator shall be stretcher compliant.

Set elevator door timing to 10 seconds and specify audible feedback. Elevator buttons must include entire words, such as “parking,” or “lobby,” and braille, in addition to floor numbers.

COMMON AREA AMENITIES

▸ Lobby Entry Counter

If reception desk is provided, the main portion of the counter shall be wheelchair accessible and clear of computer monitors or barriers to allow face-to-face interactions with building staff. Provide automatic door-opening capability of main entry doors from the front reception desk.

▸ Mailboxes

Provide an accessible counter, trash and recycling at the mailbox area. If mailboxes are outdoors, provide weather protection.

▸ Security

Each project must develop a security plan. At a minimum, the security system shall provide 24-hour video recording of all exterior building doors, interior amenity center spaces, and elevators.

▸ Lobby and Large Space Acoustics

In common areas provide acoustically absorptive surfaces equal to 20% of the room total surface area (ceiling, walls, floor). Acoustically absorptive surfaces must have a minimum Noise Reduction Coefficient (NRC) of 0.7.

▸ Common Area Furniture

Specify a variety of seating types in common areas and amenity spaces to accommodate a range of needs and comfort levels. Limit the use of bar height tables, chairs or stools.

▸ Common Area Restrooms

Common area shall have at least one single-occupancy and gender-neutral /unisex restroom with an adult changing station.

Common area restroom toilets, urinals, lavatories, soap dispensers, hand dryers and towel dispensers shall be touchless. Provide a full-length wall mounted mirror. Sinks shall be wall-hung sinks with more accessible drains and avoid flat countertops that accumulate water.

▸ Gym Equipment

If the property includes a fitness room, the exercise machines and equipment must meet 2010 ADA standards for fitness facilities. Provide 30” x 52” clear floor area at each piece of exercise equipment.

▸ Laundry Rooms

If the property has a shared laundry area, provide a minimum of one side by side front-load and front-control washer and dryer with buttons and dial that are easy to use, without requiring tight grasping or pinching.

Provide minimum 36" wide surface for folding clothes with 34" knee clearance. Provide minimum 60" of maneuvering space from face of machines; coordinate door opening with direction of user approach and clearances; coordinate arrangement of machine for ease of use; and provide seating for laundry room patrons.

▸ Emergency Power

Refrigerator and emergency back-up power or battery must be made available to one common space to store medicines in the event of an emergency. Back up power must be sized to run for 72 hours.

▸ Occupancy Sensors

Lighting controls in common areas shall provide occupancy sensors with override controls.

▸ Managed Daylighting

All common area windows below 10' shall have fabric roller shades to reduce glare.

▸ Trash Chute Doors

Where trash chutes are provided, provide automatic doors with a manual option that has a 5-pound maximum opening force. The first button press shall open the door, a second button press closes the door.

▸ Dumpsters

Where residents are expected to bring their trash to a common dumpster, provide a raised walking surface adjacent to trash and recycling dumpsters that is no greater than 30" tall with a 4" tall wheel stop at the edge of the walking surface. Provide code-compliant guardrails where needed.

ALL INTERIOR SPACES
(COMMON AREAS + DWELLING UNITS)

▸ Low-VOC Materials

All interior finishes that will emit VOCs to the interior of the building such as paints, primers, caulks, window sealants, HVAC duct sealants, adhesives, finishes, stains, and coatings shall be UL Greenguard Gold certified or equivalent.

▸ Low Glare Materials

Use flat or eggshell paint finish with a maximum LRV of 85 to reduce glare. Window and Door trim and surfaces in wet/damp areas may have a higher gloss finish.

▸ Color Rendering Index

All light fixtures shall have a minimum Color Rendering Index (CRI) of 90 and a maximum Correlated Color Temperature (CCT) of 3000k.

▸ Interior Lighting

All interior lighting must be even, free from glare, and not cast distracting shadows.

▸ Floor Finishes

Use hard flooring materials throughout the building. (Carpet may be used to meet Lobby and Large Space Acoustics requirement.)

All floors must have a DCOF rating of 0.42. Floors on a slope or exposed to water, soap, and cleaning fluids shall have a DOCF rating of ≥ 0.42. Use textured, non-slip materials with a DCOF rating of 0.6 on all bathroom flooring surfaces including a tub or shower.

Use recessed walk-off mats instead of temporary roll-out mats. Avoid sisal or other mats that can “pull” wheeled traffic.

▸ Glazing Safety

Glass windows that extend to the floor should have visible and cane-detectable sills. Visible markings are required on the glass at handrail height.

▸ Windows Hardware and Treatments

Ensure all operable windows mechanisms are within accessible reach range, can be operated with one hand without grasping or twisting, and be operated with maximum five-pounds pressure. All window treatments must be operable within a maximum reach of 44 inches high.

▸ Smoke and Carbon Monoxide Detectors

Smoke / carbon monoxide detectors must have both audible and visual indicators when activated.

▸ Switches and Controls

All light switches, thermostats, and other environmental controls shall be no higher than 48 inches from floor. Provide rocker or occupancy-activated light switches.

▸ Electrical Outlets

Where technically feasible, locate all electrical outlets 24" above finished floor and a minimum of 12" from an inside corner. Outlets mounted on walls over cabinets, must be a minimum 36" from an inside corner. Avoid placing outlets under built-in elements.

▸ Ceiling Fans

Ceiling Fans are required in all indoor amenity areas, all bedrooms and living rooms. In bedrooms, ceiling fans must have overhead lights. Fan height should be established based on use and/or equipment and furniture provided in the room.

▸ Door Hardware

All doors to have lever style hardware.

▸ Kitchen Faucets

All sinks must have single lever handles. Kitchen sinks must have gooseneck faucets with pull-out spray and a single lever for temperature and water flow control.

DWELLING UNIT DESIGN

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ALL DWELLING UNITS

DOORS AND ACCESS

▸ Unit Entry Doors

All unit entry doors should have a minimum width of 36", with a push side clearance of 12" and pull side clearance of 18". All unit entry doors to have an ADA-compliant, no-step threshold.

▸ Access Control

All units shall use electronic key fob, key card, or other electronic reader device that allows the re-assignment of access credentials by building management. Keys or keypad locks shall not be used. Provide audio-visual doorbells.

When specifying access control systems, give consideration to the interoperability, programming, and compatibility of the selected system with gate operation, security, and package delivery systems.

▸ Interiors Doors

All interior doors shall have a minimum width of 32", except for doors that access closets less than 15 square feet.

CLEARANCES

▸ Hallway Width

All hallways and aisles within units shall maintain a minimum clear width of 42".

KITCHENS

▸ Dishwashers

If a dishwasher is provided, position it for easier use and to avoid obstructing traffic when open. Ideally, place it next to the sink and avoid corner placement.

▸ Washers & Dryers

Provide washer and dryer connections in all dwelling units. *Not required for permanent support housing.*

▸ Refrigerators

Locate the refrigerator so that the door(s) can open fully to allow full access to interior.

OTHER ITEMS

▸ HVAC Controls

Provide easy-to-read programmable thermostats that can be controlled at the device and has the capability to connect to a phone app. Interoperability of the thermostat with voice control devices is encouraged.

▸ Assistive Listening Devices

Provide wireless or bluetooth assistive listening equipment when requested by residents.

▸ Grab Bars

Provide 2x10 blocking at all potential tub, shower and toilet grab bars locations.

UNIVERSAL DESIGN UNITS

APPLICABILITY

Universal Design Units

25% of all units must meet the Universal Design unit standards outlined in this section. Universal design units must be dispersed across all unit types.

Accessible Units

5% of all units must be built out fully accessible for persons with mobility impairments and 2% must be accessible to persons with visual and hearing impairments, as regulated by TDHCA - Accessibility and Reasonable Accommodations Rule 1.207.

CLEARANCES

Floor Space

- Turning area: 67” minimum diameter circle (ANSI) in each room and in the kitchen area.
- Clear floor space: 32” x 54” minimum (30” ANSI + 2”, and 48” ANSI + 6”)

Unit Layouts

Lay out units to ensure navigability of residents using mobility devices to enter, turn around, and exit rooms. Ensure that door swings and realistic furniture layouts will not prevent wheelchair maneuverability or prevent access to egress windows.

Location and Access

Where technically feasible, all universal design units must be on an accessible level and connected to an accessible route.

DOORS

Unit Entry Doors

Any doors that open to the exterior must have an ADA-compliant, no-step threshold.

Units shall be equipped with a 15-amp receptacle located 6” above the head of the hinge side of the interior door frame.

Where automatic unit entry doors are provided, doors must automatically open when activated by an exterior reader. Electrified Strikes shall be included on dwelling unit entrance doors.

Provide high and low, wide-angle door viewers. Deadbolt latches shall extend at least 3/4 inch beyond their escutcheon.

Interior Doors

All interior doors shall have a minimum width of 36”, except for doors that access closets less than 15 square feet.

UNIVERSAL DESIGN UNITS

BATHROOMS

Provide at least one bathroom with the following features:

▸ Toilets

Provide accessible toilets with clear floor space as required by ANSI. Flush-valve lever should be on the front of the tank and toward the side of the toilet away from the side wall. The trip lever default position should be horizontal. Do not use push button flushers.

▸ Showers

Provide curbless showers.

▸ Bathroom Vanity

Bathroom vanity must provide accessible knee clearances or provide cabinetry that can easily be replaced.

▸ Handheld Shower Mounting

Provide handheld shower on fixed mount with a sliding bar with rotational and height adjustment in addition to a regular shower head. Provide a diverter lever valve between the two.

LAUNDRY

▸ Laundry Equipment

When washer and dryers are provided, specify units with buttons and dials that do not require tight grasping or pinching.

▸ Closets

A minimum of 50% of shelving / hanger rods must be within accessible reach ranges. Adjustable shelving systems are encouraged.

UNIVERSAL DESIGN UNITS

KITCHEN

▸ Ovens

Provide a wall-mounted oven within accessible reach ranges. Unit with a side opening door is preferred.

▸ Microwave Oven

Provide microwave oven at counter height or in-cabinet within accessible reach ranges.

▸ Cooktop Range

Controls must be provided at the front or side of the heating element. Provide ranges with audible feedback for controls.

▸ Refrigerators

Provide side-by-side refrigerators.

▸ Automatic Appliance Shut Off

Provide appliances that include automatic shutoff features.

▸ Countertops

Provide one 30” wide work surface at 30-32” height. Work surface can achieved by lowering a section of the countertop, providing a pull out work surface, or by locating area for dining table immediately adjacent to kitchen.

▸ Cabinets

50% of kitchen storage space is within accessible reach ranges from pull-out shelves, full extension glide drawers, or is within a roll-out pantry. Sink and range base cabinets must be mounted in a way that allows for replacement and flooring must extend underneath.

▸ Cabinet Hardware

Cabinet hardware with “D” type pull handles.

UNITS FOR OLDER ADULTS

APPLICABILITY

▸ Units for Older Adults

100% of all units for Older Adults must meet the standards outlined in this section.

BATHROOMS

Provide at least one bathroom with the following features:

▸ Toilets

Provide accessible toilets with clear floor space as required by ANSI. Flush-valve lever should be on the front of the tank and toward the side of the toilet away from the side wall. The trip lever default position should be horizontal. Do not use push button flushers.

▸ Showers

Provide low threshold shower, with a 4" maximum curb.

▸ Handheld Shower Mounting

Provide handheld shower on fixed mount with a sliding bar with rotational and height adjustment in addition to a regular shower head. Provide a diverter lever valve between the two.

▸ Grab Bars

Provide grab bars at all toilet, tub, shower and shower seat locations. Use ADA complaint decorative grab bars to avoid an institutional feel.

LAUNDRY

▸ Laundry Equipment

When washer and dryers are provided, specify units with buttons and dials that do not require tight grasping or pinching.

KITCHENS

▸ Microwave Oven

Provide microwave oven at counter height or in-cabinet.

▸ Cooktop Range

Provide ranges with audible feedback for controls.

▸ Refrigerators

Provide side-by-side refrigerators.

▸ Automatic Appliance Shut Off

Provide appliances that include automatic shutoff features.

▸ Cabinet Hardware

Provide hardware with "D" type pull handles.

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