



GUIDELINES FOR

GROUND FLOOR RESIDENTIAL DESIGN

A Guide To Ground Floor Residential Design  
in RH, RM, RC, RTO, NC, DTR, & Eastern  
Neighborhoods Mixed Use Districts





## Mayor

Edwin M. Lee

## Board of Supervisors

London Breed, President

John Avalos

David Campos

Aaron Peskin

Malia Cohen

Mark Farrell

Jane Kim

Eric Mar

Katy Tang

Scott Wiener

Norman Yee

## Planning Commission

Rodney Fong, President

Cindy Wu

Michael Antonini

Rich Hillis

Christine Johnson

Kathrin Moore

Dennis Richards

## San Francisco Planning Department

John Rahaim, Director of Planning

Glenn Cabrerros

Ben Fu

Kevin Guy

Adrienne Hyder

Jeff Joslin

Michael Smith

Josh Switzky

Adam Varat

Elizabeth Watty

David Winslow

## Architects

Mark Macy, Macy Architecture

John Schlesinger

Peter Waller, Pyatok Associates

Kevin Wilcock, David Baker & Associates

Rick Williams, Chris Sensenig; Van Meter Williams & Pollack

Toby Levy, Levy Design





## CONTENTS

G1

Modulate facades to express individual ground floor residences

G2

Set back frontages to create a usable transition space between the street and the individual dwelling unit

G3

Raise the floor level of residences to enhance livability

G4

Design protected and identifiable entries

G5

Define setbacks with landscaping

G6

Create defensible spaces with screening elements

# Introduction

The Ground Floor Residential Design Guidelines promote buildings that enhance the pedestrian experience and the livability of dwellings. Building design can contribute to active, safe, and comfortable streets by providing active ground floors that encourage use and interaction at the street edge. These guidelines illustrate how residential uses should engage with the street to provide the opportunity for neighborliness. Qualities that promote comfort, safety, and activity are: a sense of transition between public and private; clear and identifiable habitation; and a sense of privacy balanced with ability for residents to use the space and have “eyes on the street”.

The Ground Floor Residential Design Guidelines consist of six guidelines found in various building types to be used to impart these qualities. Some, or all of these may apply depending on the particular building type, site conditions, or programmatic circumstances. There are a number of building types and solutions that may result in response to the zoning districts and height limits, and to each site’s specific context. The Ground Floor Residential Guidelines encourage different means of achieving these goals. In all cases durable, high-quality materials that respond to context, and thoughtful design and craftsmanship, are expected.

The approaches and guidelines illustrated here are especially important for large projects with significant frontages in order to create dynamic, fine-grained residential neighborhoods, though they are also important for small scale infill buildings.

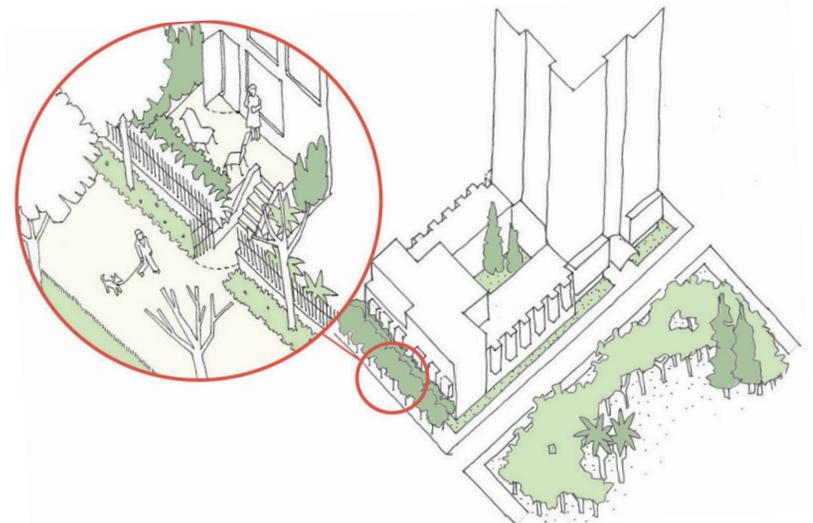
## ORGANIZATION:

This document is comprised of six guidelines that each contain:

- **Principles** that describe the rationale and goals of the guidelines;
- A range of quantitative and qualitative **means** that projects must follow to achieve the goals; and
- **Illustrative examples** that show successful and unsuccessful ways of applying the guidelines.

4 specific ground floor residential use types are illustrated with diagrams:

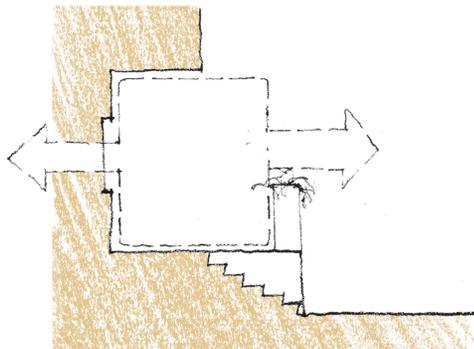
- A. Raised stoops
- B. Stoops with sub-grade units
- C. At-Grade entrances
- D. Lobbies



# Legal Basis and Applicability

The General Plan and Planning Code contain policies and standards requiring land uses and design measures that ensure ground floor uses engage with the public realm in an active and pedestrian-friendly manner to enhance the livability and sustainability of the public realm. For projects in RTO, NCT, DTR, and the Eastern Neighborhoods Mixed Use Districts, Planning Code Sections 144, 145.1, 145.4, 825, and 827 require off-street parking to be set back from street-facing facades or placed underground, garage entries and blank walls to be minimized, and active uses – commercial, public or residential – to be located at the ground floor and provide direct engagement with the street. These Planning Code standards are based on policies and principles established in the General Plan, including the Market & Octavia, Mission, Central Waterfront, East Soma, and Rincon Hill Area Plans.

The guidelines in this document supplement the existing policies and principles in the General Plan and the requirements and standards in the relevant Planning Code sections. In R Districts where the guidelines of this document apply, these Ground Floor Residential Design Guidelines supplement and build on existing guidelines in the Residential Design Guidelines, which continue to apply.

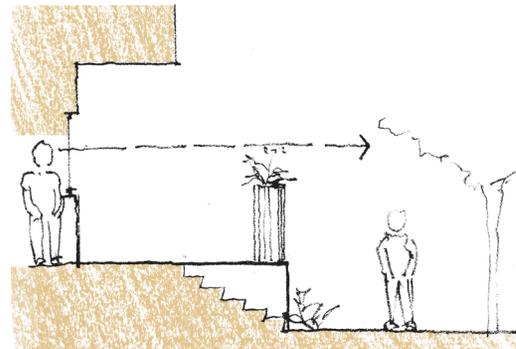


The space between building and street is a transition.

These Guidelines provide specific guidance and elaboration on the design and activation of residential uses at ground stories. They apply to all projects where ground floor residential uses face public rights-of-way and public spaces, to meet requirements for active uses per the Planning Code. In such buildings, active commercial space, lobbies, and individual ground floor residential units with direct resident access to the sidewalk are recommended along street frontages of buildings, or portions of buildings, except where parking and loading access, utilities, and open space are necessary or desirable and provided pursuant to the allowances and requirements of the Planning Code.

The existing character of the street should be evaluated to inform the design of an appropriate building type and frontage. Some building types and frontages may work better than others in certain locations.

Specific dimensions in these Guidelines are considered conventional and ideal, but may be used as a target and modified. Applicants must demonstrate how their designs meet the guidelines. Deviations must be justified by the project sponsor to demonstrate that the intent of the guidelines is being achieved.



Appropriately balanced to offer “prospect and refuge.”

## G1

## MODULATE FACADES TO EXPRESS INDIVIDUAL GROUND FLOOR RESIDENCES

---

The historical increment of residential development in San Francisco is a 25-30 foot wide lot. This has produced vertically modulated buildings with a scale and variety of architectural expression that make an engaging pedestrian experience. Vertical articulation using repetitive forms helps moderate the scale of large buildings. Additionally, in many cases, new buildings in San Francisco need to fit into an existing context of buildings that are horizontally articulated by a well-defined base, middle, and top. A recognizable presence and delineation of individual residences that is consistent with the scale of San Francisco's traditional residential pattern can contribute to a context responsive and human-scaled pedestrian environment.

- » Use massing breaks, architectural projections and recesses to vertically modulate buildings. Exterior modulation should correspond to the interior divisions of the buildings, and should also correspond with landscaping, porch, or setback treatments along the sidewalk. Modulation should be strong, consistent, and coherent with the building's architecture.
- » New buildings that are in a consistent existing context should generally use a tripartite (base, middle and top) scheme to reference surrounding buildings. Design the ground floor to help define a base.
- » New buildings which are in a new context, or are creating a new context, may be freer to diverge from the tripartite precept.

## ILLUSTRATIVE EXAMPLES



Use entrance systems, such as this exterior stair, to vertically modulate the building and provide variation in the street wall.



Use entries to modulate the building horizontally by defining a base, and vertically by establishing a regular interval along the facade. Using high inset entries (at least two stories) may allow a lesser setback of the entire building.



Vertically modulate the building using repeating patterns of bays, exterior stairs, railings, and recessed entries that express individual units.

## G2

## SET BACK FRONTAGES TO CREATE A USABLE TRANSITION SPACE BETWEEN THE STREET AND THE INDIVIDUAL DWELLING UNIT

Setbacks help create comfortable “urban rooms” that provide usable and defensible private open space and encourages public interaction and surveillance. Transition space from the sidewalk to the ground floor unit increases the habitability of ground floor dwellings, and enhances pedestrian comfort along the building edge. Building setbacks provide space for inviting and safe building entries: a transitional gesture toward the public realm that softens the hard edge of the building at the sidewalk. These setbacks provide a physical and psychological buffer between sidewalk activity and ground floor uses. Landscaped setbacks with generous stoops, porches, terraces, or patios can enhance social interaction and safety in the public realm. Absolute consistency of building facades between adjacent buildings is not necessary to maintain an urban street wall.

- » Setbacks should adhere to the specifications, as illustrated in Figures A through D.
- » Set the ground floor building facade back from the street-front property line between six feet and ten feet. Where a building façade faces a public right-of-way 40 feet in width or less, the set back may be reduced.
- » Only the base of the building needs to be set back, if the lower two stories (or approximately 20 feet from grade) are set back.
- » Where a front setback is provided, an equivalent reduction of the required rear yard may be warranted based on the condition of adjacent buildings and rear yard patterns, particularly in large projects, such as those subject to LPAs and PUDs.
- » Architectural projections, such as bay windows, are encouraged and may extend down to the ground provided they do not encroach within the 24-inch planting strip described below.
- » Provide a planting strip, which may be raised, abutting the sidewalk in the first 24 inches of the setback depth, for at least half of the width of each residential unit.
- » Setbacks greater than six feet are encouraged to provide a usable porch or planting area with a raised residential entry.

## ILLUSTRATIVE EXAMPLES



Setback individual dwellings to allow sheltered entrances. Use structure and landscaping to modulate and reinforce the street wall.



Use extra height to create an easily identifiable and defined entrance. A change of height creates a transition from the street and the setback provides just enough space to be useful and act as a buffer between the public and private realms.



Provide setbacks to allow planting and building entrances that animate the public realm.



Terrace planting to create sheltered entrances while maintaining the street presence.

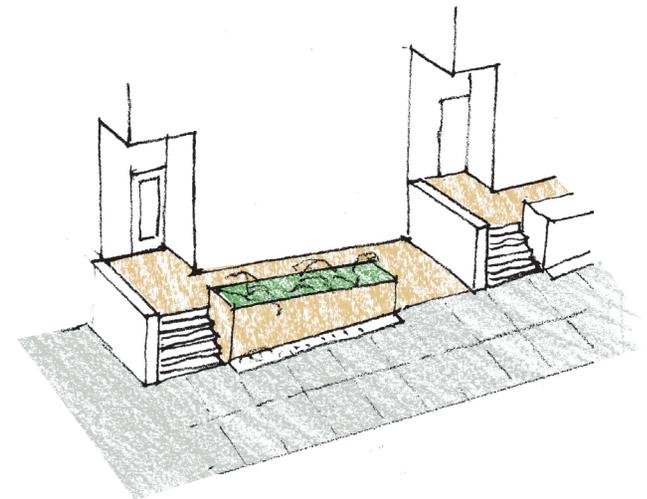
## G3

## RAISE THE FLOOR LEVEL OF RESIDENCES TO ENHANCE LIVABILITY

Ground floor residential units are important for providing “eyes” on the street. When ground floor units are raised at least three feet above grade, sufficient privacy and usability of the dwelling and the setback is provided. This height allows windows to have a direct prospect to people on the street but still be above pedestrians’ eye level to allow for privacy.

The raised setback will also be more likely to be used because of the sense of ownership that elevation.

- » Raise the ground floor a minimum of three feet above the grade of the sidewalk, but not more than five feet. Provide exterior steps from the sidewalk to the raised entrance.
- » Where programmatic or irreconcilable and unique site constraints prevent units from being raised at least 3 feet above grade provide greater setbacks (9’ minimum) that extend the first two stories or 20 feet above grade. Deeper setbacks and tall ceiling heights can partially compensate, but do not provide the same privacy benefits as raising a unit above sidewalk grade.



On sloped sites the setback may provide a means of accommodating accessible entrances and a raised stoop.

## ILLUSTRATIVE EXAMPLES



Use raised porches to provide a sense of protection – ‘refuge’, while offering a view to the street – ‘prospect’.



### California Building Code Chapter 11: BUILDING ACCESSIBILITY

Chapters 11A and 11B of the California Building Code contain various requirements for building accessibility, including criteria for exterior doors and access to individual dwelling units. Simple adherence to these requirements is not sufficient grounds to disregard these guidelines. Well-designed, grade-separated residential ground floors benefit both the public realm as well as the individual dwelling. Thoughtful use of interior routes of travel, sufficient setbacks, and sidewalk grading (among other solutions) can meet the letter of the law and the spirit of these guidelines.



Screen with layers of landscape elements such as low walls and plantings, to maintain views to and from the street.



A low wall and ramp help define the setback and provide universal access.

## G4

## DESIGN PROTECTED AND IDENTIFIABLE ENTRIES

Prominent and gracious entryways are inviting and celebrate arrival. Recessed and covered entries provide sheltered protection from rain, wind, and sun for residents entering and exiting the building. Recessed entries also provide a sense of ownership—a visual cue for way finding and identifying the dwelling. Entries add texture and articulation on the façade and focus attention on the active human aspects of the building.



Use a simple palette of materials with well-executed craftsmanship to delineate a comfortable transition between private and public realm.

- » Recess entry doorways from the building façade or provide a projecting overhead covering at least one foot in depth.
- » Provide adequate sight-lines from the sidewalk and natural light to the entryway to make an inviting entry.
- » Make private entryways no less than five feet wide at the building face. Grouped entryways should be at least ten feet wide. The scale of building entries should be articulated and proportional to the number of units served.
- » Where the front door is recessed more than three feet from the building façade, the entryway should be increased in width by at least one foot for every additional two feet in recess depth. (For example, if the doorway is recessed five feet from the building face, the entryway should be at least six feet wide at the building face.)
- » Make entryways at least 10 feet in clear height as measured from the landing in front of the door to the underside of the ceiling or projecting element defining the entryway.
- » Focus attention on high-quality materials, details, and craftsmanship at the entrances.
- » Provide night-time lighting a entrances.
- » Where porches or patios are not provided, provide projecting steps with generous top landings to enable social use by residents.
- » Avoid recessed entries that are low, narrow, or deep. Entries that are too shallow or too narrow will fail to provide adequate public/private transition space or a gracious sense of arrival, and may be perceived as unsafe

## ILLUSTRATIVE EXAMPLES



Use strong, distinctive architectural detailing and quality materials and workmanship to provide transition and identity to the dwelling entrance.



Articulation of the ground floor references the architecture above while providing a distinctive identity to the dwelling entrance.

## G5

**DEFINE SETBACKS  
WITH LANDSCAPING**

---

Landscaping helps soften the transition between the sidewalk and the residence. Landscaping the building setback creates a greener, more comfortable and relaxed neighborhood environment, while helping to screen sidewalk activity from ground floor residences. Landscaping provides opportunities for residents to personalize the public face of their residences and to provide variety and seasonal or intermittent changes of color. Permeable landscaping slows and reduces stormwater runoff into the sewer system, helping reduce the demands on the public stormwater treatment system and the frequency of overflows into the Bay. Healthy plants, and trees in particular, need sufficient soil depth in order to grow to maturity.

- » Include landscaping in setbacks or provide access to landscaped areas, to encourage gardening and other uses by residents.
- » Use permeable surfaces for porches, patios, landings, and walkways.
- » Provide a minimum soil depth of 3 feet 6 inches to allow for landscaping at street grade. Planting beds in setback areas may be raised up to 18 inches above grade to provide additional soil depth as needed.
- » Landscaping can be at varied levels to add to the layering of the transition space.

## ILLUSTRATIVE EXAMPLES



Use planting to help define the entry. Sidewalk landscaping can also augment the transition.



Provide layers of planting to provide a sense of privacy and usable open space protected but visible to the public realm.

## G6

## CREATE DEFENSIBLE SPACES WITH SCREENING ELEMENTS

A strong relationship between ground floor residences and the street allows for visual surveillance. Clear definition between public and private space maintains a sense of ownership and security that is essential to the usability and appeal of a setback. Low fencing, walls, gates or hedges at the sidewalk edge can effectively define private spaces, and contribute to a welcoming and human-scaled interface between buildings and streets. Similar features can also provide privacy between dwellings. Screening elements can also help to establish a sense of ownership and identity that encourages use and care. Solid fencing and gates block views between sidewalk and entryway or setback area and break the relationship between the building and the street which also hinders surveillance of public areas.

- » Use fences, railings, gates\*, grilles, planters and retaining walls to delineate private from public space. They may be solid up to 3' feet high, and are encouraged to be no taller than 3 feet 6 inches high.
- » The Planning Code allows railings, fences, and grilles up to a height of 3 feet 6 inches on top of a landing or porch, regardless of the combined total height of the railing and porch from street grade. Such railings should be at least 75 percent transparent.
- » Use low railings, fencing, screens, hedges or walls between units to delineate of one unit from the next. If not transparent, such features should not exceed a height of about 3 feet 6 inches.
- » Demonstrate craft, human scale, and richness in materials and detailing of planters, railings, and low walls.
- » \* In order for stoops to be considered private space they must be separated by lockable gates. Since gates are not allowed to swing over the public right-of way, a sufficient landing area must be provided at the bottom of any steps.

## ILLUSTRATIVE EXAMPLES



Use a combination of low, transparent fencing with plant material in a generous setback to create usable space for residents.



Use a modest elevation in combination with a generous setback and low, transparent fencing to create usable space where residents feel comfortable. Note that the front windows need only be covered at the lower portions.

## NOT RECOMMENDED

### ILLUSTRATIVE EXAMPLES

The following examples illustrate what to avoid in application of the guidelines.



Although the entrance is a raised, more space, transparency, and landscaping would provide a usable and comfortable terrace that balances privacy and prospect.



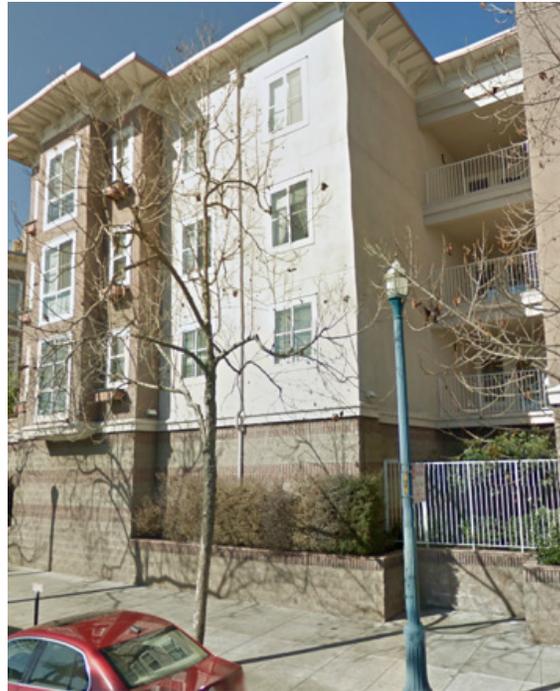
Dwelling height exposes parking garage and weakens the relationship to the street. Minimal entry porch render it marginally usable. Low planting provides little screening or buffering from sidewalk. Quality of materials and detailing show little care.



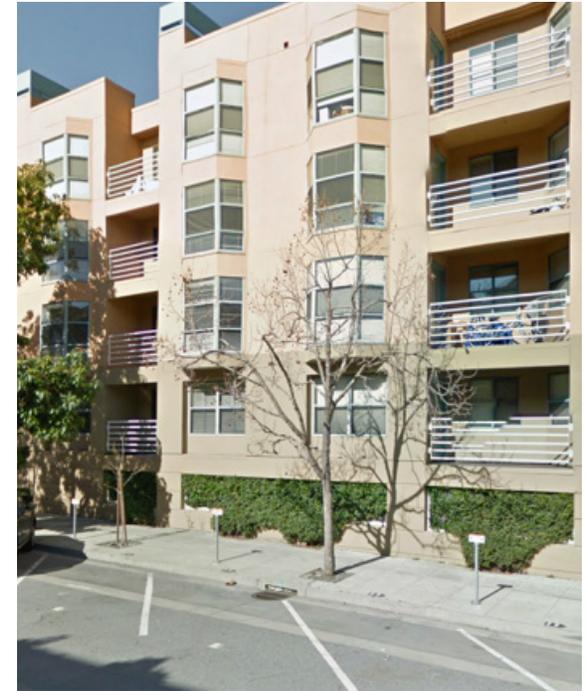
The ground floor dwellings are directly at grade with negligible setbacks and low landscaping which compromise privacy, and livability. The low overhang at the entry is not prominent enough to provide a transition space, or an identifiable entrance.



This minimally raised and setback landing provides neither usable transition space from the street. Lack of landscaping exposes an indefensible space rather than creating a usable connection to the street.



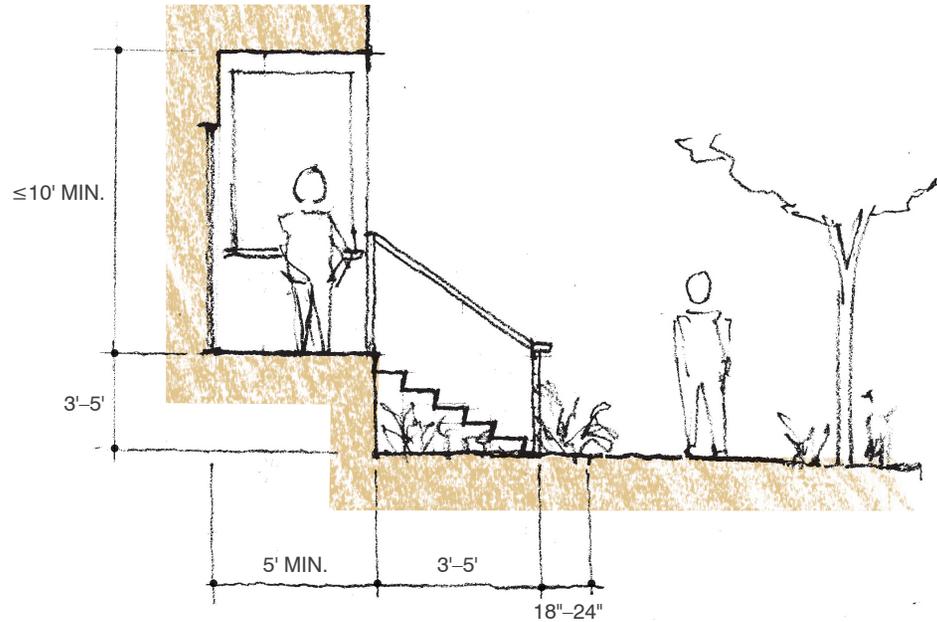
A street faced with blank walls that landscaping alone cannot enliven. The edge of the buildings must provide opportunity for active uses.



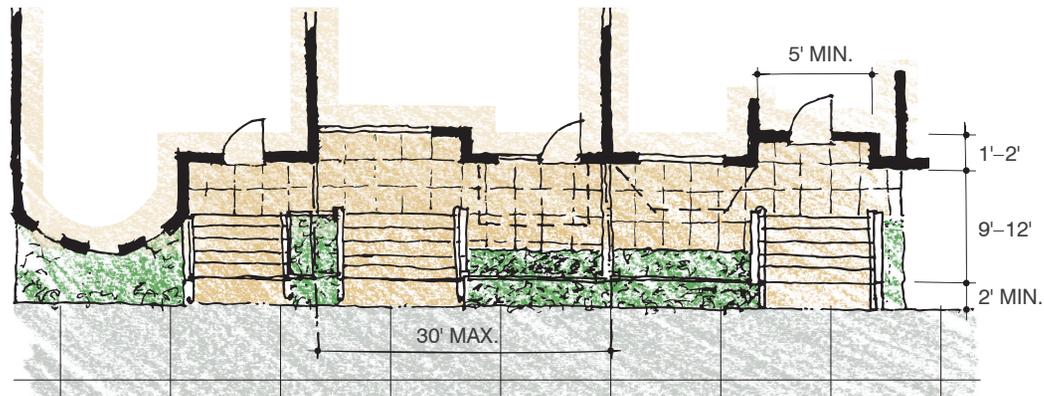
Raising the residential floor without setbacks and a direct connection from the street to the dwelling inhibits active use. The landscape screening the sub-grade parking fails to contribute to an active presence.

**ENTRY TYPE A:**  
**EXTERIOR STOOPS**

Individual, direct entrances to ground-floor residences raised three to five feet above the sidewalk is the ideal response to these guidelines. This allows an appropriate level of separation between fully public and interior private space and generally prevents passers-by from peering through windows. Private entrances six or more steps above the sidewalk, with a landscaped setback, at roughly 25-foot intervals reflect the prevailing residential pattern of San Francisco's streets. A 3 to 5-foot landscaped setback in front of porches and open spaces allows mature plants to screen views from passers-by, while an 18 to 24-inch planted setback in front of interior occupied spaces softens the transition from public pavement to individual residence. Covered open space at the top of the steps should have a minimum 10-foot vertical clearance to keep them from being perceived as low, dark, or unsafe.



**SECTION**  
Dimensions  
for Ground  
Floor Exterior  
Stoop Units



**PLAN**  
Dimensions  
for Ground  
Floor Exterior  
Stoop Units

## ILLUSTRATIVE EXAMPLES



Use landscaping in the raised setback to create a usable and comfortable terrace that balances privacy and prospect. Note the trees planted in front setback.



Provide regularly spaced intervals of raised and setback terraces with landscaping.



Use a covered entryway combined with a modest setback to create an inviting entryway and usable terrace. Although only slightly elevated, most of the setback is used for landscaping to screen the terrace from the sidewalk.



Provide raised and generous setbacks (approximately 8 feet), with significant landscaping to provide greater privacy; modulate the building and detailing to clearly identify individual units; recess the entries to provide protection. Layer the landscaping to further screen the ground floor units.

## ENTRY TYPE B: AT GRADE ENTRANCES

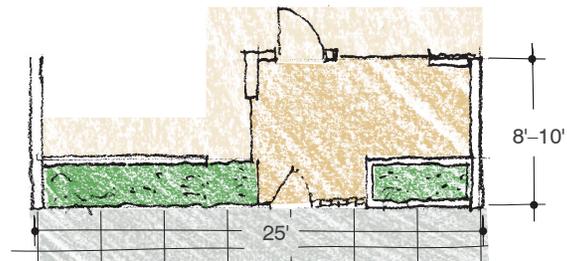
Where it is not physically possible to raise residential units at least 3 feet above sidewalk grade (see G3), additional care must be taken to ensure the habitability of the units and provide a sufficient public/private buffer. First, the setback should be at the upper range (8'-10') of the desired setback to provide adequate buffer and transition space between the sidewalk and the unit. Second, a 2-story height should be provided to accommodate screening features such as higher planting and to offset the increased depth of the setback in order to provide reasonable exposure to light.

Where units are not raised, there is a tendency to protect privacy by installing taller and more opaque fencing at the sidewalk. Per Planning Code standards, fencing at the sidewalk must be at least 75% transparent to perpendicular view; however the 25% non-transparent portion may be strategically placed at eye-level of pedestrians to prevent direct viewing into ground floor windows, while permitting upward and downward views toward the building façade and setback area. Additionally, landscaping within the setback area may provide additional filtering of views from sidewalk space to ground floor windows that are not raised from grade.

### SECTION Dimensions for At Grade Entries



### PLAN Dimensions for At Grade Entries



## ILLUSTRATIVE EXAMPLES



In some cases townhouses may be designed with entries near grade. Sensitive attention to the design, height, and proportions may succeed in achieving the goals of these guidelines. This building is a good example of a residential entrance at grade providing a transition area. The proportions of the width to depth to height provide a comfortable and identifiable space. It could be improved with a more generous setback that could be usable and a low fence or landscaping that delineates private from public space.



This building is a good example of a residential entrance at grade providing a transition area. The setback, landscaping, and low wall provide a usable and defensible space.



Provide a greater setback and a raised step at-grade to provide an entrance transition, though higher vegetation and low fences could improve the screening for privacy.

**ENTRY TYPE C:****SUB-GRADE ENTRANCES**

In some cases it may be appropriate and possible (though not preferred) to provide residential space below grade. This may be allowed to occur under raised ground floor units, (see G3), but additional care must be taken to ensure sufficient exposure and quality of the transition space. First, the setback should be at the upper range of the desired setback to provide adequate transition space between the sidewalk and the unit. Second, the unit should be no greater than 4' below grade, with planter walls, and steps strategically placed to prevent direct viewing into sub-grade windows, while allowing upward views and light from the building façade. To ensure adequate light into the ground floor unit, the height of the floor above should be maximized. Additionally, landscaping within the setback area may provide additional filtering of views from sidewalk space to ground floor windows that are below grade.



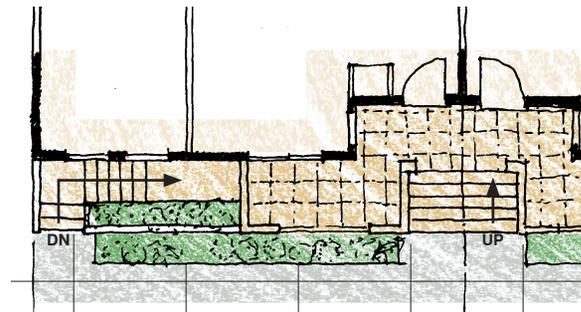
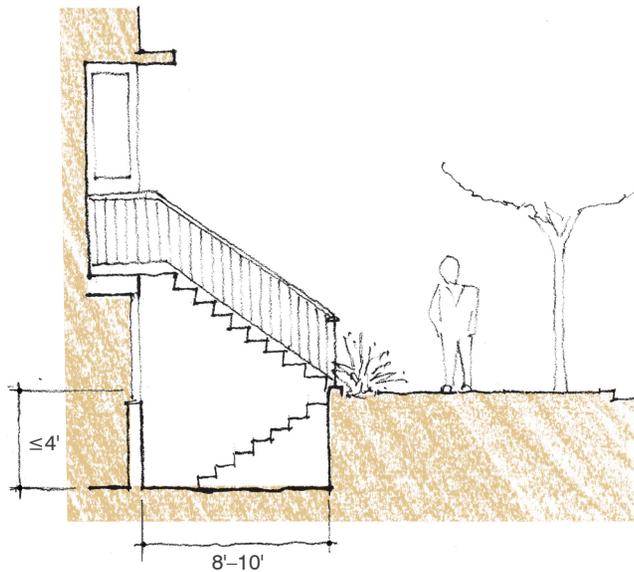
The front setback may be adapted to provide light and air to sub-grade habitable space that is part of a 2-story unit.



## ILLUSTRATIVE EXAMPLES



San Francisco has many good examples of partial sub-grade residences. The setbacks, landscaping, and low walls create usable and defensible space.



Setback with paired entries and private terraces, adapted to also provide sub-grade residential use.

## ENTRY TYPE D: LOBBY ENTRIES

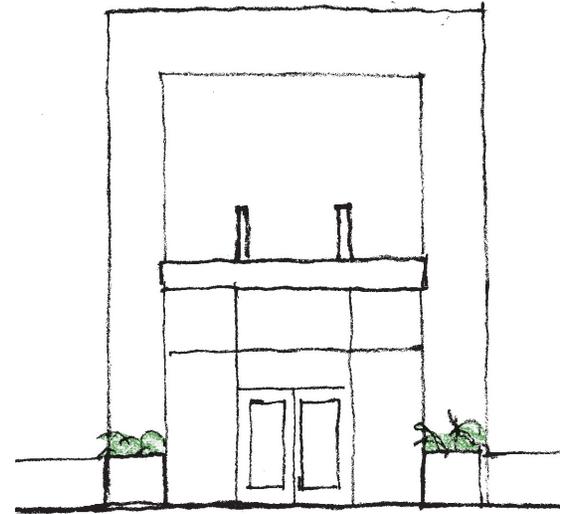


Buildings with ground floor uses devoted primarily to retail or other uses and served by an elevator lobby still have opportunities to create gracious entrances that act as transitions between the street and interior, signal a sense of arrival and identity, and create a sense of security.

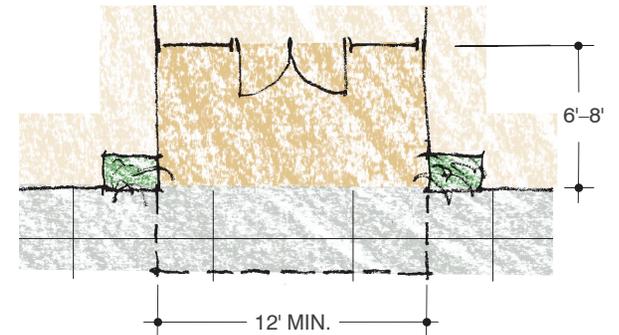
They should be wide and high and setback to signal 'entrance'. Additionally, they should incorporate welcoming features such as covered awnings, and landscaping.

- (i) Design the main residential entry lobby by a combination of a wide, tall, and recessed entryway that is distinct in scale, detail, and form from the fabric of the building. Overhangs, awnings, and canopies should also signal the lobby entry.
- (ii) Separate such residential entrances from parking entrances by at least 10 feet.
- (iii) Garage entrances should not be larger or more prominent than residential entries.
- (iv) Where courtyard open spaces are provided, a main lobby should provide a direct visual and physical connection from the street to the courtyard.

### ELEVATION Dimensions for Lobby Entries



### PLAN Dimensions for Lobby Entries



## ILLUSTRATIVE EXAMPLES



A grand lobby entrance clearly identifies and celebrates arrival.



Wide, high and transparent doorways which are set back and combined with projecting awnings create protected, inviting, and identifiable entries to a building.



Visibility into a lobby is enhanced when directly visible to an open space.



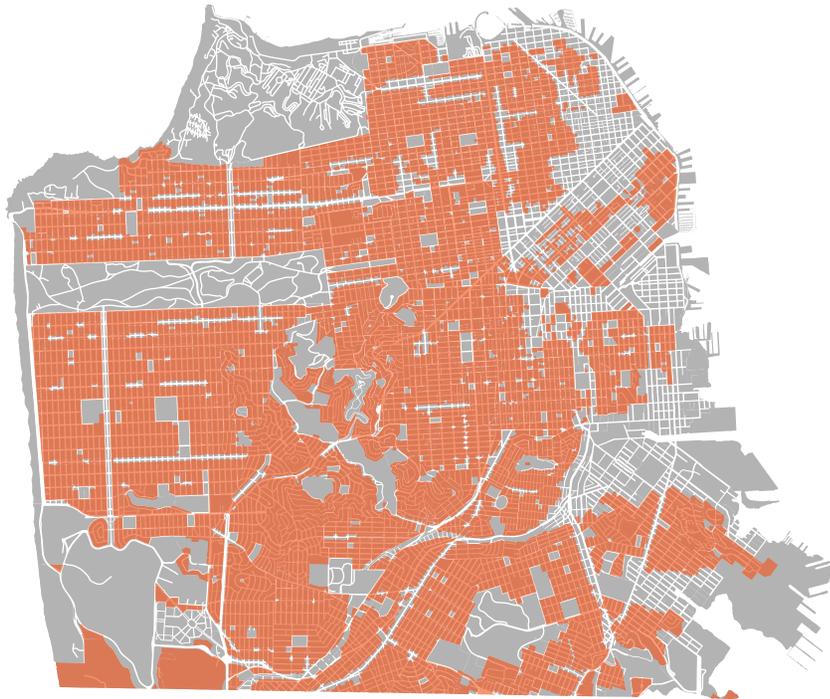
A covered and setback entrance raised a few steps provides human-scale and comfort.



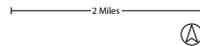


# Ground Floor Residential Design Checklist

## Applicable Areas



■ Zoning districts shown: RH, RM, RC and RTO; all NCTs, DTRs, and Eastern neighborhood mixed use districts: UMU, MUO, MUG, WMUG, WMUO and MUR



G1

Modulate facades to express individual ground floor residences.

Are individual dwellings delineated? Is the modulation appropriate to the context?

---



---



---



---



---

G2

Set back frontages to create usable transition space between the street and dwelling.

Is there enough space to sit and put planters?

---



---



---



---



---

G3

Raise the residential floor level to enhance livability.

Are the entries between 3' and 5' above grade?

---

---

---

---

---

G4

Design protected and identifiable entries.

Does the entry provide shelter from the elements? Is it inviting? Does it allow for individualization?

---

---

---

---

---

G5

Define setbacks with landscaping.

Does the landscape augment privacy and allow visual connection to sidewalk?

---

---

---

---

---

G5

Create defensible spaces with screening elements.

Are the screening elements low, transparent, and add scale and detail? Do they work together with the landscape?

---

---

---

---

---



**San Francisco**  
**Planning**

**FOR MORE INFORMATION:**  
Call or visit the San Francisco Planning Department

**Central Reception**

1650 Mission Street, Suite 400  
San Francisco CA 94103-2479

TEL: **415.558.6378**

FAX: **415.558.6409**

WEB: **<http://www.sfplanning.org>**

**Planning Information Center (PIC)**

1660 Mission Street, First Floor  
San Francisco CA 94103-2479

TEL: **415.558.6377**

*Planning staff are available by phone and at the PIC counter.  
No appointment is necessary.*