

DESIGN REVIEW

for B5 DOWNTOWN ZONING

STANDARDS, GUIDELINES AND PROCESS
COMMUNITY PLANNING AND DEVELOPMENT AGENCY



CITY and COUNTY of DENVER
SPRING 1995

CONTENTS

Introduction 2

- Objectives*
- Organization*
- Process*

Procedures For Design Review 3

- Participants*
- Review Process Options*
- Required Submissions*
- Appeal Options*

Design Standards 5

Design Guidelines 21

Introduction

■ Objectives

These Design Review Standards and Guidelines have been created through the joint efforts of downtown business and professional organizations and the Denver Planning and Development Office with the understanding that Downtown is and must remain our finest and most prominent public environment. The Standards and Guidelines contained herein address the quality of that public environment, recognizing that it is ultimately formed by a thousand individual, private creative decisions. It is the intent of these documents to provide direction to those decisions in the common interest of creating an urban center that is at once comfortable, delightful, exciting and without question the business and entertainment center of the region.

■ Organization

There are three primary sections to this document, Procedures for Design Review, Design Standards and Design Guidelines. The review procedures are intended to be clear, precise and flexible, allowing a choice of review sequences to be based on development schedules and design intentions. The review and submittal requirements closely parallel others in the Denver area that are familiar to developers. The applicant or designer using this document should be familiar with the procedures for design review before referring to the standards or guidelines sections. Project design intentions and schedules may need to be considered prior to determining which review process will best suit the project needs.

■ Process

Design review is mandatory for all projects meeting the criteria specified in Section 59-368 of the zoning code. However, there are two primary review processes to choose from; the fast and objective Design Standards (“the Cookbook”) or the more deliberative and flexible Design Guidelines.

The “Cookbook” Design Standards received their nickname from their intention of creating a clear and unequivocal “by the book” approach to design review. Within the “Cookbook” some very basic concepts about what makes the architecture of downtown Denver streets unique, comfortable and attractive have been prescribed in an objective and quantifiable manner. These standards address issues of pedestrian amenities such as scale, access, pedestrian oriented activity, and environmental comfort.

The Design Guidelines recognize that not every project wants to be or should be “by the book”. There are many more ways of achieving excellence than can possibly be anticipated when drafting standards. These guidelines describe the goals of design in Downtown Denver: to encourage variety, creativity and quality in architectural design, to promote well proportioned and active streets, to enhance human scale, amenity and environmental comfort, and to respect the historic heritage of our unique location. They invite new projects to recognize these goals and to work with the City to achieve the highest return to the community.

Procedures for Design Review

Design Standards and Guidelines are authorized by the Zoning Ordinance of the City and County of Denver and are to be used in conjunction with that ordinance as it applies to the Downtown B5 Zone District.

■ I. Participants

Design review will be conducted by the Deputy Director of Planning for Urban Design and other designated staff as appropriate. Participants from the development team shall include a representative of the applicant (owner, developer), the architect and other development team members as appropriate.

■ II. Review Process Options

All applicants have two design review options and may select the process that best suits the needs of their project. To provide maximum flexibility different components or different phases of an individual project may go through different design review processes and may do so simultaneously. The design review process selected may have design and schedule implications, therefore a thorough understanding of the review options is important at the outset of design and project scheduling. The development team should make the Deputy Director for Urban Design aware of the preferred design review option and project schedule at the earliest possible date to facilitate expeditious review. The review process selection may be changed at the applicant's option as project development warrants.

Option One — Design Standards Review • "The Cookbook"

Design Standards Review is based on the Design Standards contained in Section Three of this document. This is the fastest and most objective review process. All aspects of a project that meet the Design Standards will be approved through a review to be completed in no more than 15 calendar days.

Option Two — Design Guidelines Review

Design Guidelines Review is based on the Design Guidelines contained in Section Four of this document. These guidelines parallel the Design Standards in Section Three but allow for broader interpretation of the goals of those standards. Any aspect



of project design that does not literally conform to the Design Standards may be submitted for review under the guidelines independent of other design issues. Design Guidelines Review is conducted through negotiation with the Deputy Director of Planning for Urban Design and designated staff to be completed in no more than 45 calendar days.

■ III. Review Schedule and Submission Requirements

Design review under either option may be requested by the applicant at any point in the development process as may be required to provide clear direction on specific issues. The Planning Office requires meetings with the development team and submittal of design documents at the following key project phases: Pre-Design Conference, Concept and/or Schematic Design, Design Development and permitting. The Applicant must submit design documents appropriate to the phase and level of project development at the time review is requested. Sufficient information and detail must be provided to fully evaluate relevant issues at each phase. Some or all of the following information will be required, as applicable, prior to completion of all design review phases but may not be required at each separate phase:

- ▶ Declaration of intent to be reviewed under the Design Standards or the Design Guidelines.
- ▶ Request for special considerations i.e., phasing, etc.
- ▶ Project program indicating building areas and uses.
- ▶ Design documents to include:
 - ▶ Site and Context Plan
 - ▶ Building and Context Elevations

- ▶ Detailed Ground Floor Plan
- ▶ Building and Context Sections
- ▶ Architectural facade details (lower eighty feet)
- ▶ Building Materials Schedule (samples if requested)

At the completion of review of each submittal the applicant will receive a determination of consistency or approval to proceed with noted conditions. Consistency determinations and approvals at each phase will be valid for a period of three years, unless extended by the Planning Office in accordance with provisions of the B-5 Zone District Ordinance. All conditions must be resolved prior to permit submittal and a determination of consistency with all review requirements must be issued prior to permitting.

Note: The review process may be delayed by the incomplete submittal of required review documentation. Review may also be delayed at the request of the developer. The following items are required to meet specific standards set by ordinance and not subject to design guideline interpretation: Sky exposure diagrams, Shadow study (if shadow falls on 16th Street Mall)

■ IV. Appeal Options

If a design is not approved under Design Standards Review the applicant may: revise and resubmit, opt for Design Guidelines Review or appeal to the Downtown Design Review Appeals Committee.

If a design is not approved under Design Guidelines Review the applicant may: revise and resubmit or appeal to the Downtown Design Review Appeals Committee as provided for by ordinance.

DESIGN STANDARDS

“THE COOKBOOK”

BUILDING ELEMENTS	TYPICAL REQUIREMENTS GROUND FLOOR TO SECOND FLOOR	TYPICAL REQUIREMENTS THIRD FLOOR TO 80 FEET	SPECIAL REQUIREMENTS OR UNIQUE CONDITIONS
<p>Section 1: Fenestration</p> <p>Wall to Window Ratios (Solid to Transparent)</p> <p>Intent: 1) Require more transparent and open lower floor facades, in order to insure the visibility of pedestrian active uses, and provide a lighter, more detailed and human scaled architectural expression along the sidewalk and,</p> <p>2) Require a more solid wall with a pattern of individual windows at the upper floors in order to provide greater variety of scale through fenestration patterns, architectural elements, surface relief, texture and materials.</p> <p>Transparency and Reflectivity</p> <p>Intent: 1) Insure the visibility of pedestrian-active uses; 2) to reduce the amount of glare produced by highly reflective glass.</p>	<ul style="list-style-type: none"> ▶ Section 1.1: Between 60% and 90% of the ground floor facade (as measured from floor to floor), and any second floor facade containing pedestrian-active uses, shall be made of transparent materials, or otherwise designed to allow pedestrians to view activities inside the building or displays related to these activities. (Illustration 1) <p>Transparent glass shall possess a minimum 60% light transmittance factor.</p> <p>Parking garages are excepted from the ground floor and second floor transparency standard if they do not provide ground floor pedestrian active uses.</p> ▶ Section 1.1a: No portion of the facade shall be of highly reflective glass (maximum reflectance factor of: .25). No reflective coating shall be on the first (exterior) surface of the glass. 	<ul style="list-style-type: none"> ▶ Section 1.2: Between 25% and 40% of the facade area for each building facade directly adjoining a street, excepting parking garages, shall be made of transparent materials. (Minimum light transmittance factor shall not be applied above second floor) ▶ Section 1.2a: No portion of the facade shall be of highly reflective glass (maximum reflectance factor of: .25). No reflective coating shall be on the first (exterior) surface of the glass. ▶ Section 1.2b: Upper floors may utilize opaque glass to meet minimum glazing requirements where it is determined for reasons of use or construction that transparent glazing is not functionally feasible. Opaque glazing may not exceed 15% of the facade area for each building facade directly adjoining a street. 	<ul style="list-style-type: none"> ▶ Section 1.3: Parking Garages: Parking garage openings which face any street shall be horizontally and vertically aligned. (Illustration 2) Parking garage facades shall conceal from view the entirety of all parked vehicles from the far side of any street R.O.W. that is contiguous to the property within which the garage is located. ▶ Section 1.3a: Other Building Types: Those portions of any facility that are functionally required to restrict natural daylight or views into the facility may be exempted from the 25% minimum transparent materials requirement so long as any resulting blank walls adjoining a street or public space provide architectural scaling elements as described under Section 3. ▶ Section 1.3b: Existing Buildings: Glazing requirements do not apply when restoring original features of existing buildings.

ILLUSTRATIONS AND NOTES

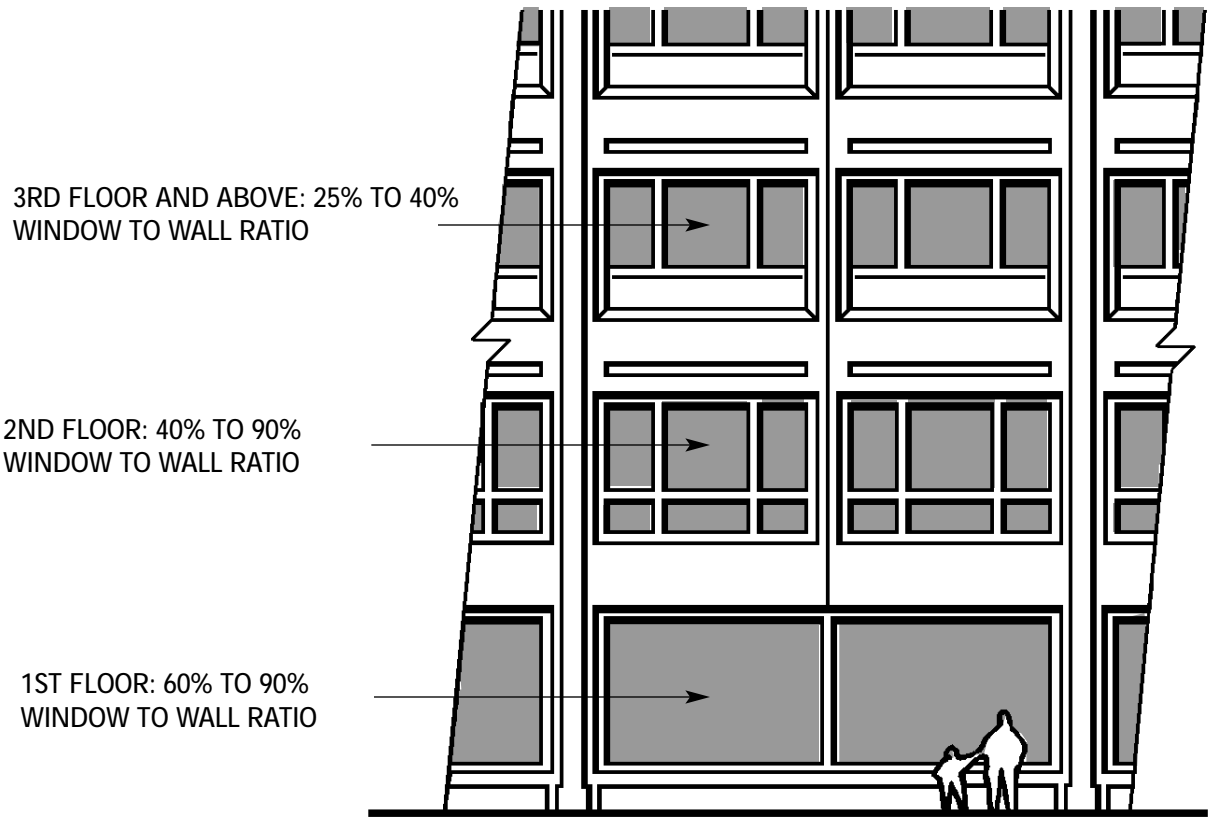


ILLUSTRATION 1 — WINDOW TO WALL RATIOS

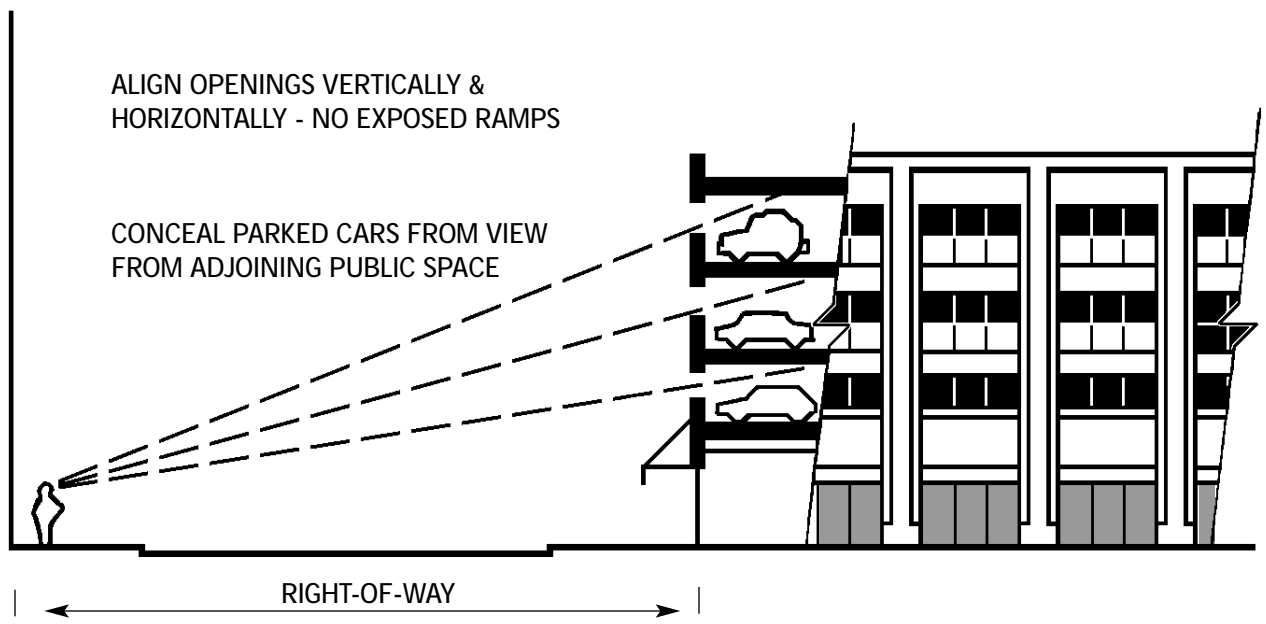


ILLUSTRATION 2 — PARKING GARAGE SCREENING

BUILDING ELEMENTS	TYPICAL REQUIREMENTS GROUND FLOOR TO SECOND FLOOR	TYPICAL REQUIREMENTS THIRD FLOOR TO 80 FEET	SPECIAL REQUIREMENTS OR UNIQUE CONDITIONS
<p>Section 2: Building Placement & Access</p> <p>Build-To Lines and Zones</p> <p>Intent: Define and contain the street space in order to concentrate and reinforce pedestrian activity and to create a sense of the street as a “place” in the city.</p> <p>Entries</p> <p>Intent: Reinforce the convenience of pedestrian activity and circulation along the street by creating as many external, street oriented entries as possible to ground floor “pedestrian active” uses.</p>	<ul style="list-style-type: none"> ▶ Section 2.1: From the SW side of 14th St. to the NW side of 18th St., and from Broadway and Colfax to the Larimer/ Market Street alley, buildings shall be built-to or within 10 feet of the property line adjoining the street for no less than 65% of each separately owned zone lot frontage; except along the SW side of the 16th St. Mall where the build-to zone will be increased to 20 feet. (see also Section 2.3d) <p>In the B5 district northeast and southwest of the above noted area, buildings shall be built to or within 10' of the property line adjoining the street for no less than 50% of each separately owned zone lot frontage. (Illustrations 3A& 3B)</p> <ul style="list-style-type: none"> ▶ Section 2.1a: Where pedestrian active uses face the 16th St. Mall, there shall be at least one entry 1) every 50 linear feet along the Mall, or 2) for each tenant adjoining the Mall, giving public access to such uses. 	<ul style="list-style-type: none"> ▶ Section 2.2: The minimum height of building frontage required to be constructed within or up to the build-to zone is thirty feet (30'). ▶ Section 2.2a: Within 50 feet of the 16th Street Mall no building or portion of building shall exceed 200 feet in height. Buildings located entirely on zone lots of 15,000 square feet or less shall be exempt from this provision. 	<ul style="list-style-type: none"> ▶ Section 2.3: Modification of the build-to requirements may be requested or approved by staff if such modification is for either a purpose that 1) furthers the urban design goals of the downtown area, or 2) the provision of a public open space that meets established criteria for the location and design of such space. For the purpose of these standards, public open space is defined as plazas, courts, parks and similar spaces provided for the use and enjoyment of the public. ▶ Section 2.3 a: Build-to requirements will not be enforced in situations involving the restoration of the lower levels or additions to the upper levels of existing buildings. ▶ Section 2.3b: Where buildings are located within or up to the build-to zone adjacent to light rail stops, doors shall be provided giving direct access to that stop.

ILLUSTRATIONS AND NOTES

RECESSED ENTRIES ARE EXCLUDED FROM THE BUILD-TO REQUIREMENT - NOT TO EXCEED WIDTH OF DOORS & TYPICAL SIDELIGHTS

FRONTAGE WHICH MEETS THE BUILD-TO REQUIREMENTS

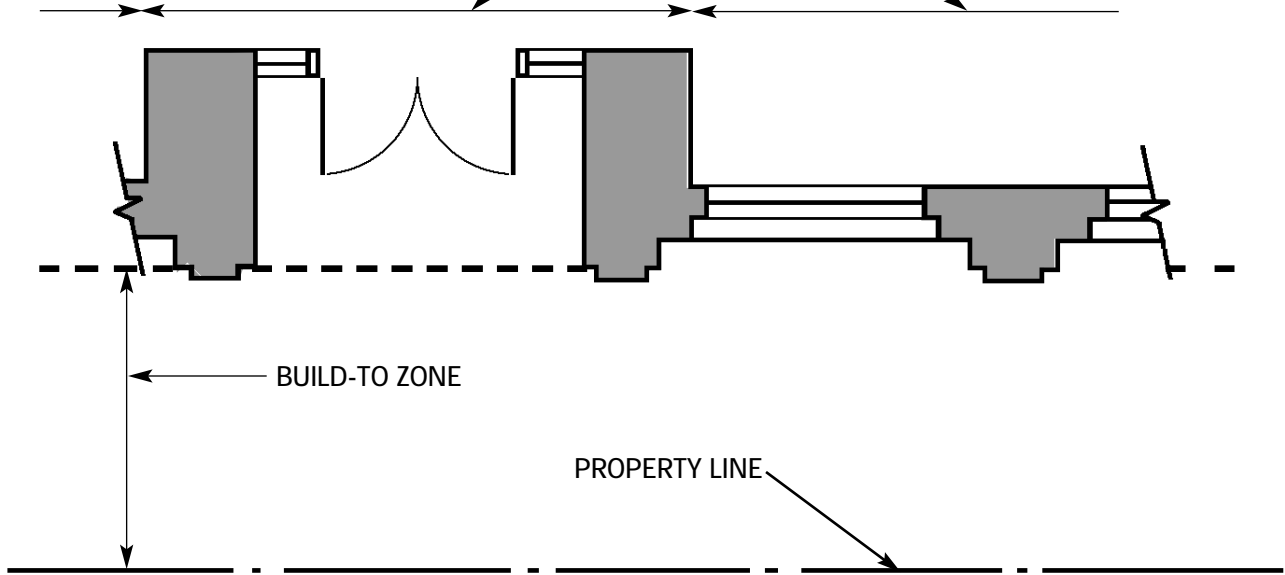


ILLUSTRATION 3A — BUILD-TO DEFINITION

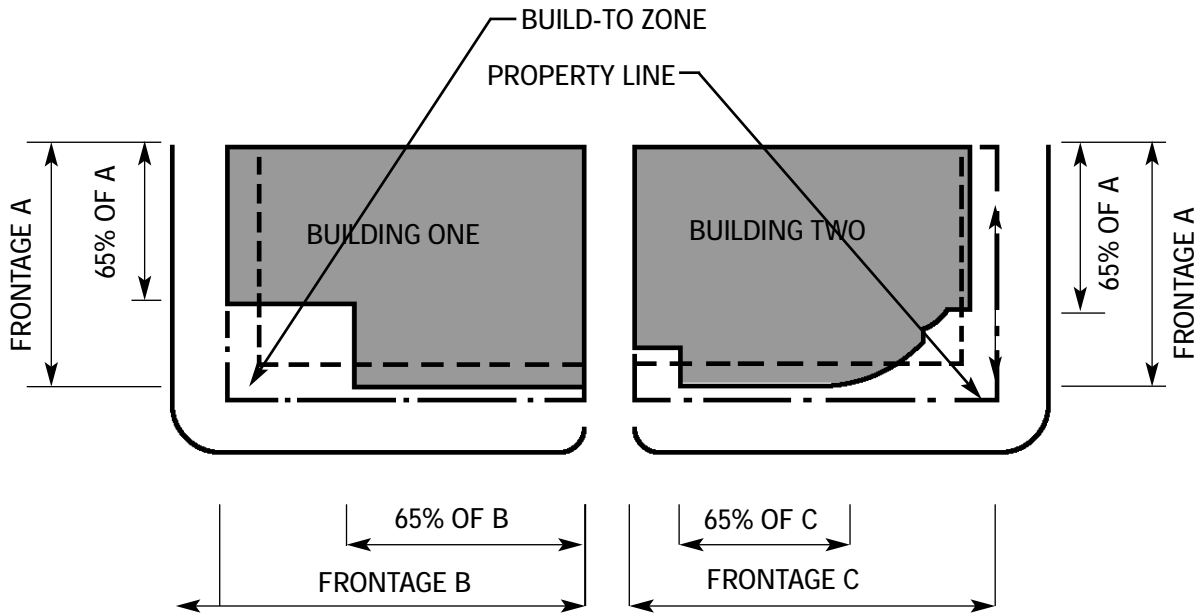


ILLUSTRATION 3B — BUILD-TO requirements

BUILDING ELEMENTS	TYPICAL REQUIREMENTS GROUND FLOOR TO SECOND FLOOR	TYPICAL REQUIREMENTS THIRD FLOOR TO 80 FEET	SPECIAL REQUIREMENTS OR UNIQUE CONDITIONS
<p>Section 2: Building Placement & Access (continued)</p> <p>Arcades and Entries</p> <p>For the purposes of this section, an arcade is a linear uninclosed portion of a building which adjoins, and extends the width of the sidewalk parallel to a public street. It is spatially defined on its exterior face by columns supporting upper floors of the building and on its interior face by the facade of the ground floor</p> <p>Intent: Allow the exterior face of the column line of an arcade to satisfy the “build-to” requirement if 1) the arcade column line satisfies the architectural scaling requirements of Section 3 within the build-to zone; 2) the arcade is shallow rather than deep in order to create a light and inviting space; and 3) it doesn’t separate retail frontage from pedestrian traffic and exposure.</p>	<p>► Section 2.1b: The location of the interior enclosure wall of an arcade may be excluded from the ‘Build-To’ requirements if:</p> <ol style="list-style-type: none"> 1) the exterior boundary of the arcade is defined by columns located within the Build-To Zone; 2) the exterior plane of the arcade’s columns generally continues the plane of the building facade above (Illustration 4A); 3) the columns may not be spaced further than 30 feet apart; 4) the depth of the arcade measured from the front face of the columns to the face of the ground floor facade is no more than two-thirds of the average clear height of the arcade (Illustration 4B); 5) the minimum depth of the arcade is 5 feet, measured from the back face of the columns to the ground floor facade. 	<p>Not Applicable</p>	<p>► Section 2.3c: An arcade may only adjoin the 16th St. Mall so long as its exterior columns are located on or within 18 inches of the 16th St. property line.</p>

ILLUSTRATIONS AND NOTES

Note: a lower floor facade that is recessed below the upper floors of a building but does not have columns defining its exterior face, is not considered to be an arcade, and therefore may not be excluded from the 'Build-To' requirements of Section 2.1.

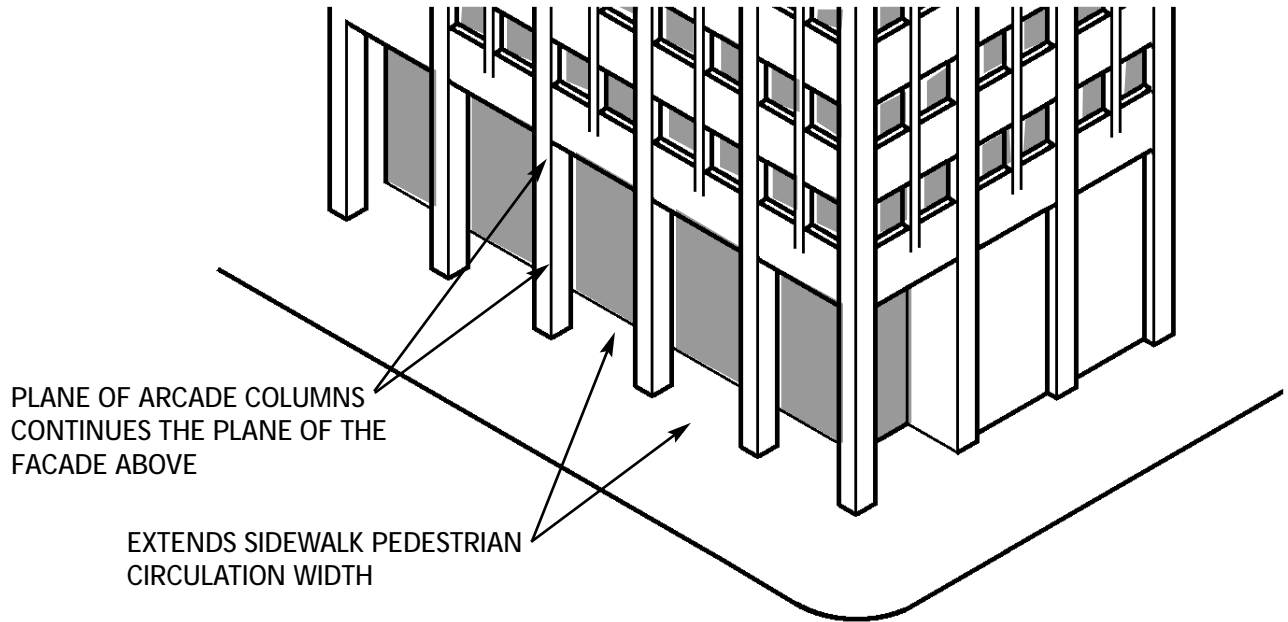


ILLUSTRATION 4A — ARCADE REQUIREMENTS

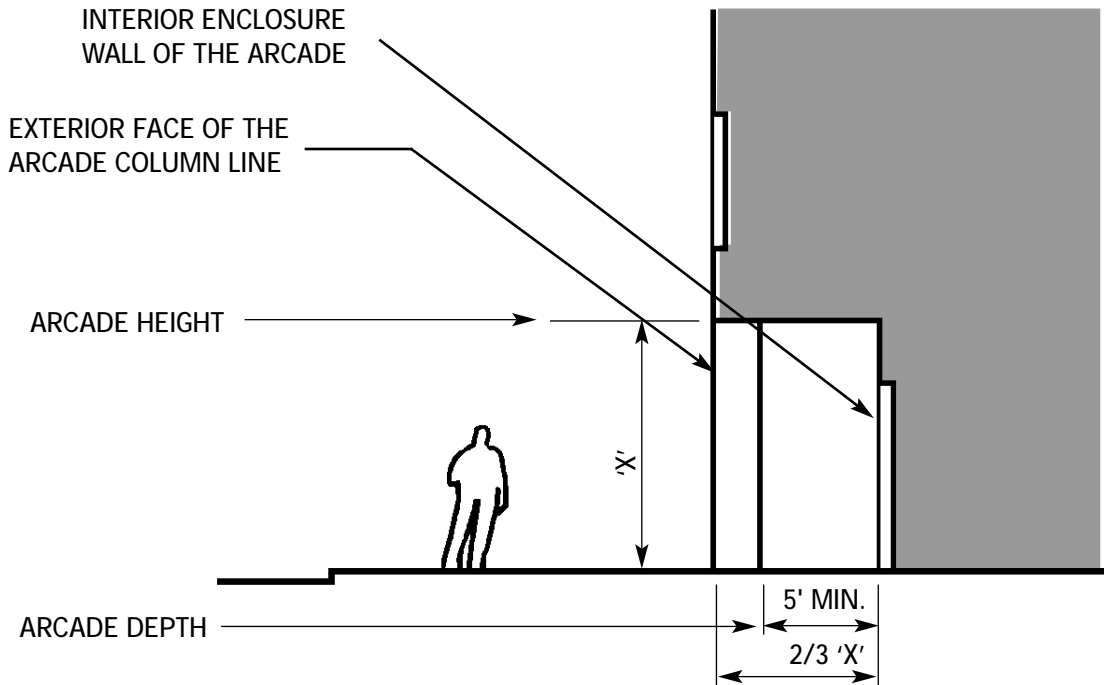


ILLUSTRATION 4B — ARCADE PROPORTIONS

BUILDING ELEMENTS	TYPICAL REQUIREMENTS GROUND FLOOR TO SECOND FLOOR	TYPICAL REQUIREMENTS THIRD FLOOR TO 80 FEET	SPECIAL REQUIREMENTS OR UNIQUE CONDITIONS
<p>Section 3: Architectural Scaling Elements</p> <p>Facade Detail and Variety</p> <p>Intent: Create a varied and human scaled architectural expression at the lower level facades of buildings in order to improve the comfort and interest of the pedestrian environment.</p> <p>Intent: Create texture and relief in the lower facades of buildings, taking advantage of Denver’s sunny climate to bring out changes in plane, material and detail through the interplay of light and shadow.</p> <p>Entries</p> <p>Intent: Emphasize street-related entries to improve the legibility and convenience of the pedestrian environment and to provide variety of architectural expression.</p>	<ul style="list-style-type: none"> ▶ Section 3.1: A minimum of 50% of the glazed area (as measured to the face of the frame of the glazing system) of the ground floor facade shall be set back at least 4" from the solid wall plane of that facade. ▶ Section 3.1a: Entries to ground floor pedestrian active uses and building lobbies shall be emphasized through changes in plane, differentiation in material and/or color, greater level of detail, and enhanced lighting, as well as permanent signage. 	<ul style="list-style-type: none"> ▶ Section 3.2: A minimum of 50% of the glazed area (as measured to the face of the frame of the glazing system) of the upper floor facades shall be set back at least 4" from the solid wall plane of that facade. ▶ Section 3.2a: The expression of entry on a large urban building may involve more than the design of the ground floor. The arrangement of fenestration, materials and details should provide emphasize and identity appropriate to the scale of the public environment and the scale of the building. 	<ul style="list-style-type: none"> ▶ Section 3.3: Ground floor recessed glazing requirement may be waived where it can be shown to adversely affect the implementation of retail or other pedestrian oriented display and access systems. ▶ Section 3.3a: The required area of recessed glazing at the upper levels may be in a single large feature or distributed among numerous glazed areas.

ILLUSTRATIONS AND NOTES

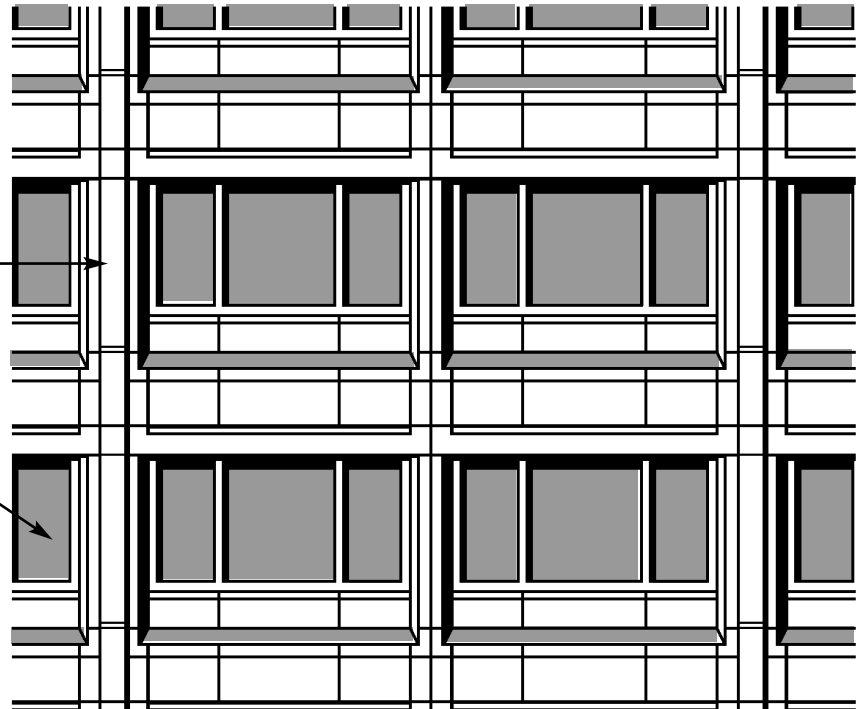
UPPER FLOORS

VERTICALLY REPEATING
GROUP TWO OPTION:
Architectural detail creating
a change in plane - 1" wide x
1" deep minimum

HORIZONTALLY REPEATING
GROUP TWO OPTION:
Expression of an architectural
bay through a change in
plane - 4" deep x 8" wide
minimum

HORIZONTALLY REPEATING
GROUP TWO OPTION:
Architectural detail creating a
change in plane - 1" wide x
1" deep minimum

Glazing recessed 4" min.



LOWER FLOORS

HORIZONTALLY REPEATING
GROUP ONE OPTION:
Expression of an
architectural bay through a
change in plane - 12" wide x
4" deep minimum

VERTICALLY REPEATING
GROUP TWO OPTION:
Architectural detail creating
a change in plane 1" wide x
1" deep minimum

Glazing recessed 4"

VERTICALLY REPEATING
GROUP ONE OPTION:
Texture change

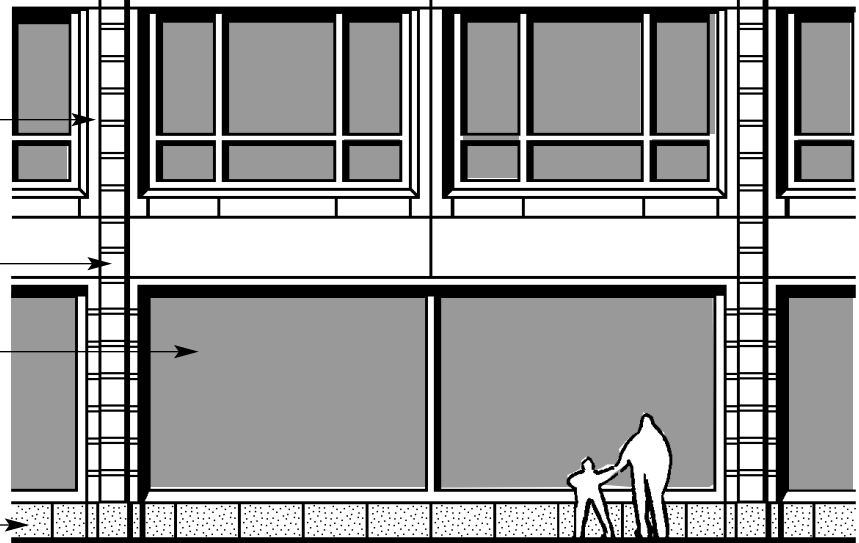


ILLUSTRATION 5 — APPLICATION OF SCALE ELEMENT OPTIONS
See Scale Element Options - Page 15

BUILDING ELEMENTS	TYPICAL REQUIREMENTS GROUND FLOOR TO SECOND FLOOR	TYPICAL REQUIREMENTS THIRD FLOOR TO 80 FEET	SPECIAL REQUIREMENTS OR UNIQUE CONDITIONS
<p>Section 3: Architectural Scaling Elements (continued)</p> <p>Facade Detail and Variety</p> <p>Intent: Architectural scaling techniques shall be used to express an organized variety of architectural divisions and to avoid large areas of undifferentiated or blank facade. Specifying a maximum dimension between architectural elements is not intended to favor a repetitive spacing, but merely to insure the occurrence of a minimum amount of change.</p>	<p>▶ Section 3.1b: For any facade adjacent to a public street, each floor must include a pattern of at least three scaling elements, of which at least one must be from Group Two (others may be from Group One) and one must repeat horizontally (others may repeat vertically). (Illustration 5)</p>	<p>▶ Section 3.2b: For any facade adjacent to a public street, each floor must include a pattern of at least three scaling elements, of which two must be from Group Two (others may be from Group One) and at least one must repeat horizontally (others may repeat vertically). (Illustration 5)</p> <p>▶ Section 3.2c: A large area change in facade form or architectural expression incorporating a minimum of two bays in width, and two floors in height reduces the required scaling elements by one within the area of change.</p>	

<p>SCALE ELEMENT OPTIONS</p> <p>HORIZONTALLY REPEATING SCALE ELEMENTS:</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding: 0 10px;">1</td> <td style="padding: 0 10px;">2</td> <td style="padding: 0 10px;">3</td> </tr> <tr> <td style="text-align: center;">•</td> <td style="text-align: center;">•</td> <td style="text-align: center;">•</td> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> </tr> </table>	1	2	3	•	•	•				<p>SCALE ELEMENT OPTIONS</p> <p>VERTICALLY REPEATING SCALE ELEMENTS:</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding: 0 10px;">3</td> <td style="padding: 0 10px;">•</td> <td style="padding: 0 10px;">——</td> </tr> <tr> <td style="padding: 0 10px;">2</td> <td style="padding: 0 10px;">•</td> <td style="padding: 0 10px;">——</td> </tr> <tr> <td style="padding: 0 10px;">1</td> <td style="padding: 0 10px;">•</td> <td style="padding: 0 10px;">——</td> </tr> </table>	3	•	——	2	•	——	1	•	——
1	2	3																	
•	•	•																	
3	•	——																	
2	•	——																	
1	•	——																	
<p>GROUP ONE OPTIONS</p> <p>REPEATS AT LEAST ONCE WITHIN EVERY 30 HORIZONTAL FEET OF EACH FLOOR'S FACADE:</p> <ul style="list-style-type: none"> • Expression of architectural or structural bay through a change in plane at least 4 inches deep, and at least 12 inches wide (such as a pilaster). • Color change. • Texture change. • Material module change. • Architectural ornament integral to the building materials. • Art work integral to the building's form or facade (minimum size: 2 square feet in area at the ground floor, 9 square feet in area at the upper floors) 	<p>GROUP ONE OPTIONS</p> <p>REPEATS VERTICALLY AT LEAST ONCE IN EACH FLOOR'S FACADE:</p> <ul style="list-style-type: none"> • Color change. • Material module change. • Texture change. • Architectural details creating a change in facade plane at least 4 inches deep. • Architectural ornament integral to the building materials. 																		
<p>GROUP TWO OPTIONS</p> <p>REPEATS ONCE WITHIN AT LEAST EVERY 15 HORIZONTAL FEET OF EACH FLOOR'S FACADE:</p> <ul style="list-style-type: none"> • Expression of architectural or structural bay through a change in plane at least 4 inches deep, and at least 8 inches wide. • Color change. • Texture change. • Material module change. • Architectural details creating a change in facade plane at least 1 inch deep, and at least 1 inch wide. • Recessing more than 50% of the required glazed area at least 4" on at least two edges. 	<p>GROUP TWO OPTIONS</p> <p>REPEATS VERTICALLY AT LEAST TWICE IN EACH FLOOR'S FACADE:</p> <ul style="list-style-type: none"> • Architectural details creating a change in facade plane at least 1 inch deep, and at least 1 inch wide. • Color change. • Texture change. • Material module change. • Recessing more than 50% of the required glazed area at least 4" on at least two edges. 																		

- Note 1:** The second floor may be designed to meet either the ground floor or the second floor requirements.
- Note 2:** Mortar color which contrasts with the material, or other clearly visible material joints and reveals (minimum 3/8" wide), are required in order to count a material module change as a scaling technique.
- Note 3:** Removable signage, awnings and other accessories do not count as required scaling elements. However, facades should be designed to accommodate these features.
- Note 4:** Glazed areas do not count as changes in material, color or texture. Glazing frames and mullions may count as scale elements provided that they are at least 6 inches in width or depth or are of a strongly contrasting color.

BUILDING ELEMENTS	TYPICAL REQUIREMENTS GROUND FLOOR TO SECOND FLOOR	TYPICAL REQUIREMENTS THIRD FLOOR TO 80 FEET	SPECIAL REQUIREMENTS OR UNIQUE CONDITIONS
<p>Section 3: Architectural Scaling Elements (continued)</p> <p>Facade Detail and Variety — Relationship to Existing Buildings of Architectural and/or Historic Merit</p> <p>Intent: Relate new development to existing historic buildings in order to respect the quality of Downtown’s historic heritage and reinforce the significance of the existing buildings. Relationships should be developed through similar proportions, rhythms and dimensions rather than imitation of style.</p> <p>Intent: Coordinate existing and new development to achieve a larger ‘sense of place,’ whether it is the reinforcement of the particular character of a street, the definition of a public space, the accentuation of a special building, or the creation of a gateway or district.</p>			<p>► Section 3.3b: If a proposed building is adjacent to an existing building that has been designated as a National Register or Denver Landmark building or contributing structure (subject to Section 59-368(1) Design Standards), the proposed building facade shall reflect the height and other major architectural features (below 80’) of the adjacent building by at least two of the following facade elements: a step-back in the building form (min. 5’) reflecting the height of the existing building; material or color similarities; similar window pattern, alignment, or proportions; reveals, belt courses, or bands of contrasting material or color in alignment with major features of the adjoining building.</p> <p>Section 3.3c: The above requirement does not apply when the proposed project consists of restoring the original features of an existing building.</p>

ILLUSTRATIONS AND NOTES

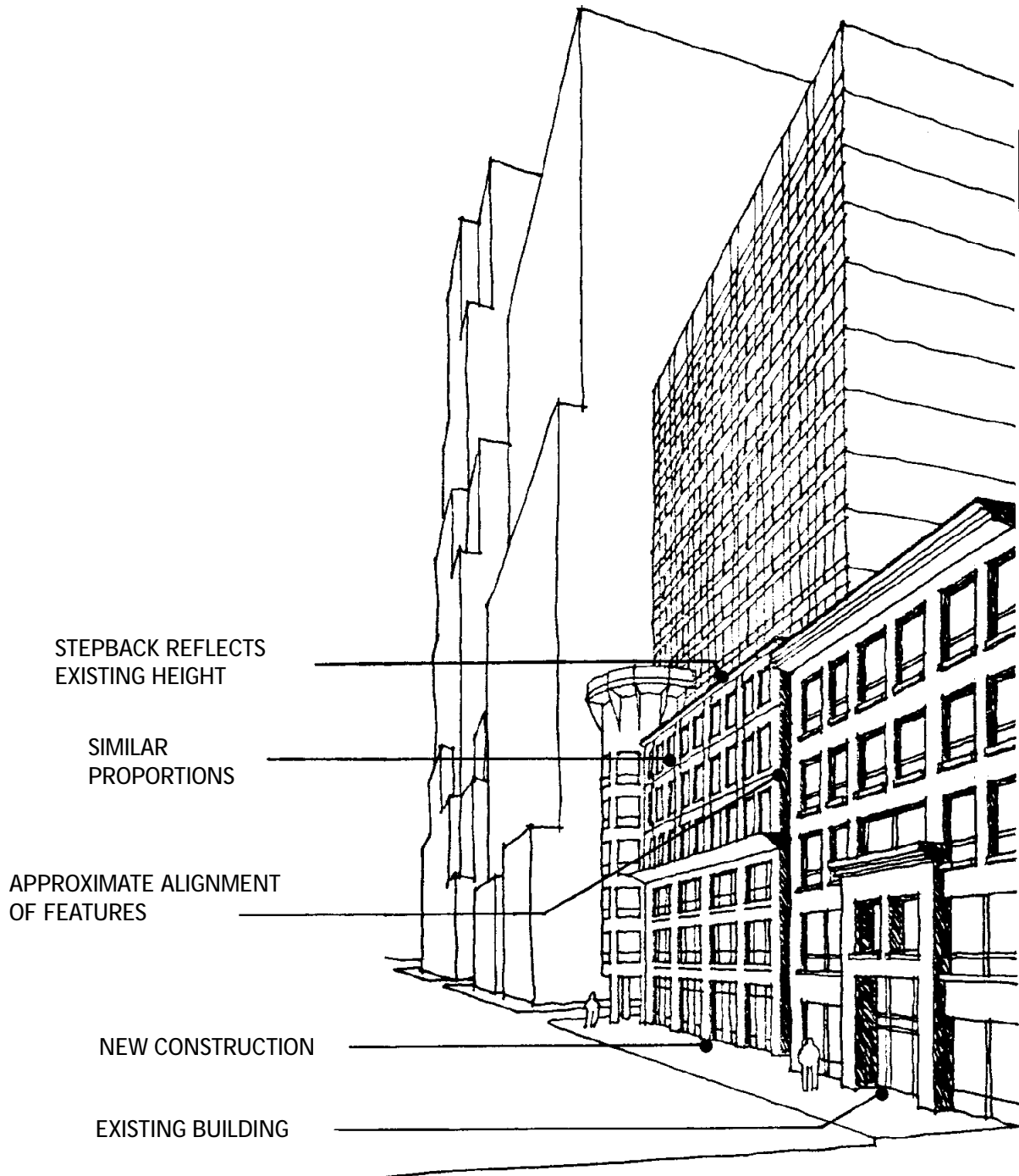
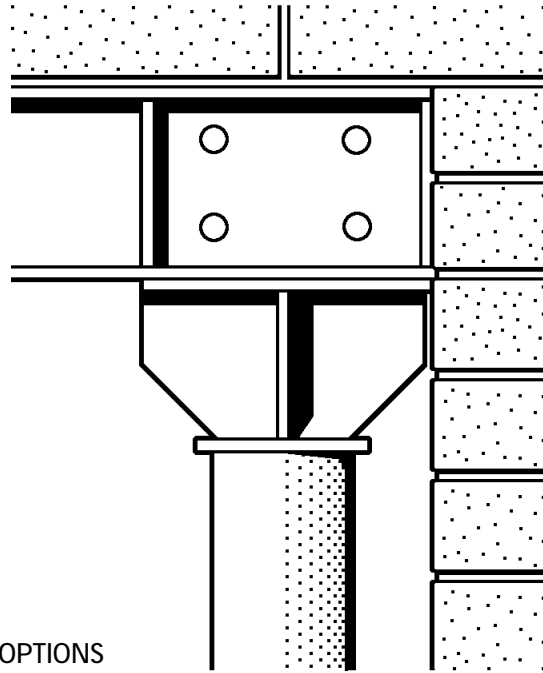
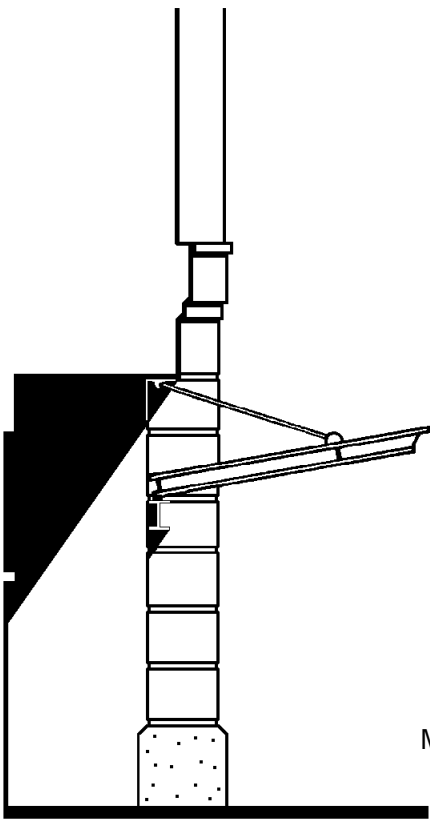


ILLUSTRATION 6 — CREATING RELATIONSHIPS TO EXISTING BUILDINGS OF MERIT

BUILDING ELEMENTS	TYPICAL REQUIREMENTS GROUND FLOOR TO SECOND FLOOR	TYPICAL REQUIREMENTS THIRD FLOOR TO 80 FEET	SPECIAL REQUIREMENTS OR UNIQUE CONDITIONS
<p>Section 3: Architectural Scaling Elements (continued)</p> <p>Materials</p> <p>Intent: Reinforce the masonry traditions of Denver and regional architecture. Help create human scaled building facades by encouraging smaller material modules.</p>	<p>▶ Section 3.1c: All floors to 80 feet are required to meet the same material standards; see Section 3.2d. (Illustration 7)</p>	<p>▶ Section 3.2d: All floors to 80 feet: Street facing facade areas, other than glazed areas, shall be constructed of masonry materials or architectural metals. For the purposes of this section masonry materials are defined as: stone, brick, clay units, terra cotta, architectural precast concrete, cast stone, and prefabricated brick panels. Not included in this definition are: cast-in-place concrete, concrete masonry units (concrete block), and tile. Architectural metals are defined as metal panel systems (either coated or anodized), metal sheets with expressed seams, metal framing systems, or cut, stamped, or cast ornamental metal panels. Not included in this definition are ribbed or corrugated metal panel systems. Material modules, other than glazing systems, shall not exceed either 5' horizontally, or 3' vertically without the clear expression of a joint.</p>	<p>▶ Section 3.3c: Material requirements and limitations do not apply to conditions where the repair or restoration of an existing building requires replacement or replication of existing materials.</p> <p>▶ Section 3.3d: "Architectural" cast in place concrete may be acceptable with specific review of finish specifications to ensure a quality, highly finished surface.</p>

ILLUSTRATIONS AND NOTES



MATERIAL OPTIONS
SHOULD BE VARIED
AND MATERIAL
MODULES EXPRESSED

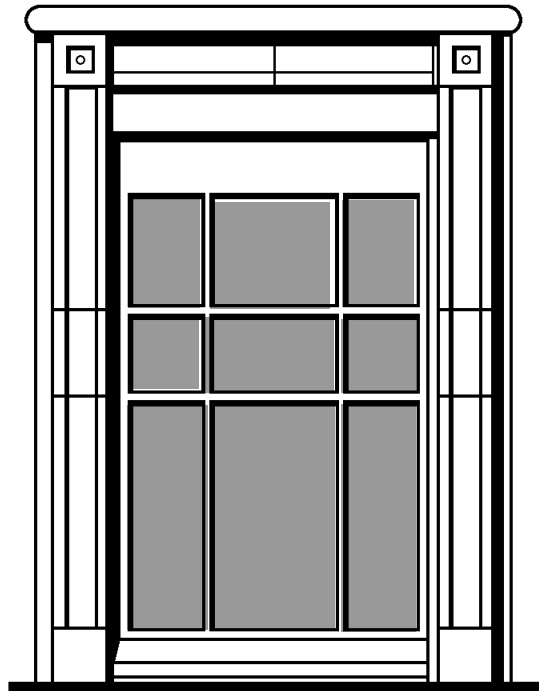
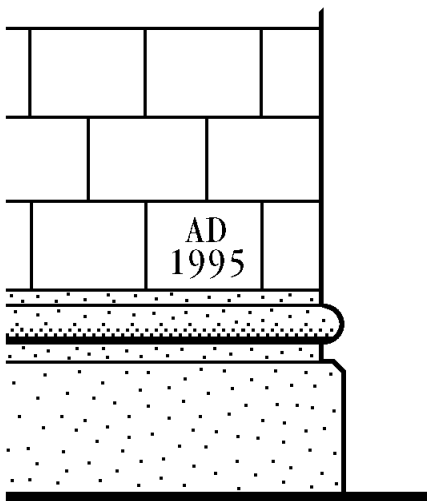


ILLUSTRATION 7 — USE OF MATERIALS TO ESTABLISH HUMAN SCALE

BUILDING
ELEMENTS

TYPICAL REQUIREMENTS
GROUND FLOOR TO SECOND FLOOR

TYPICAL REQUIREMENTS
THIRD FLOOR TO 80 FEET

SPECIAL REQUIREMENTS
OR UNIQUE CONDITIONS

**Section 4:
Wind Mitigation**

Generation of excessive wind drafts by tall buildings

Intent: Ensure the mitigation of excessive, building generated wind drafts through the encouragement of modulated building forms that disrupt wind flow and diminish velocity.

► **Section 4a:** Buildings that are built no more than twenty feet (20') from any public right-of-way and that are either over 400 feet in height or are more than 200 feet higher than the average height of structures within 200 feet of any part of the proposed building are required to create step backs in the building facade that faces the right-of-way totaling not less than ten feet (10') extending across 100% of the building facade occurring between fifteen feet (15') and eighty feet (80') above the public sidewalk. (Illustration 8)

ILLUSTRATIONS AND NOTES

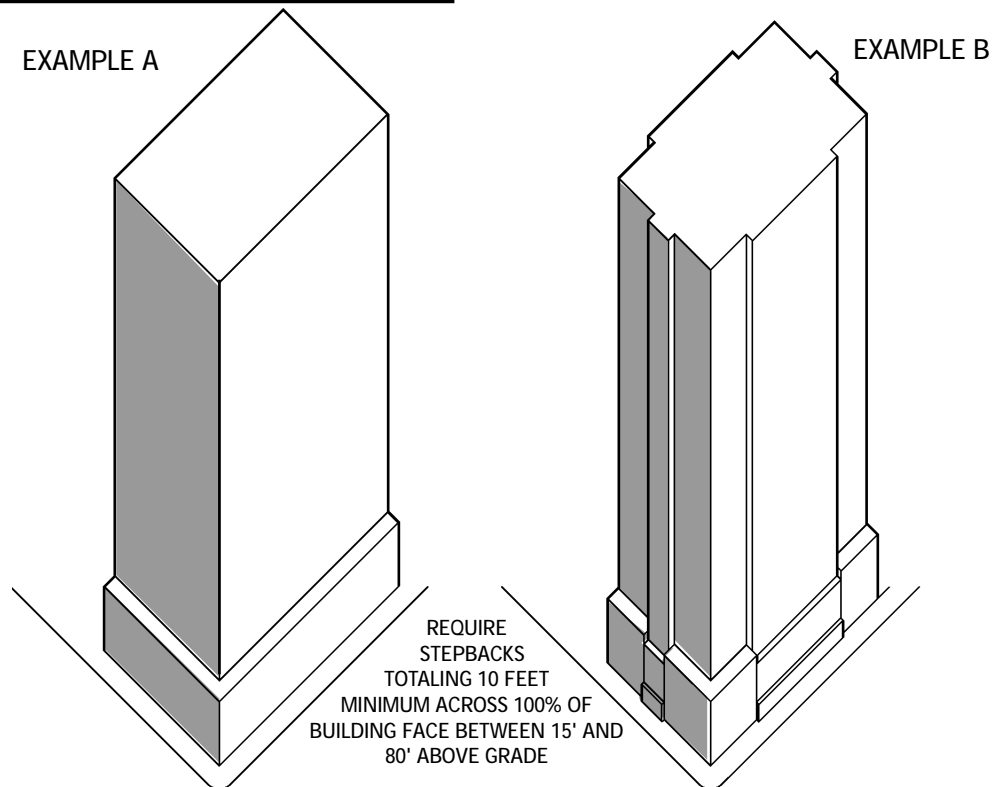


ILLUSTRATION 8 — REQUIRED STEPBACKS TO MITIGATE WIND AT PEDESTRIAN LEVEL

DESIGN

GUIDELINES

The following Design Guidelines correspond to the intent statements and urban design principles that are found in the “Cookbook” Design Standards, Section III of this document. They are intended to guide the project design team and the City’s staff in the evaluation of proposed building projects in the Downtown B5 zone. These guidelines The Design Guidelines are intended to recognize that there may be many ways in which superior architectural design can meet Denver’s urban design goals. These guidelines are to be used as performance standards against which proposed project designs can be evaluated.

Section One:

Fenestration

Downtown is a pedestrian zone. City sidewalks are the stage and marketplace of urban life. The lower street related floors of urban buildings should interact with the pedestrian environment through the well designed integration of pedestrian oriented uses and human scaled design elements.



■ Adjacent to the Street Level

Intent: Encourage largely transparent, open and inviting facades at the lowest levels of the building where it is in direct contact with the pedestrian environment. Street level facades should provide the setting for pedestrian oriented businesses to engage the interest of people passing on adjacent sidewalks through the inclusion of substantial areas of transparent glazing allowing views into showwindows and business interiors. The area of transparent glazing will generally be expected to exceed the area of solid wall. Large areas of transparent glazing may be appropriate at levels above the street if pedestrian oriented uses such as retail and restaurants occur there.

■ Above Street Oriented Floors and Below Eighty Feet

Intent: Encourage a greater ratio of solid wall to window allowing for more variety of architectural material and form expression, and encouraging the inclusion of human scaled proportions and elements in fenestration patterns, architectural detail, surface relief, texture and materials (See also Section Three—Architectural Scaling Elements).





The area of solid wall surface will generally be expected to be greater than the glazed area.

■ **Building Types Other Than Retail and Commercial**

Intent: Portions of buildings that can not reasonably include pedestrian oriented uses adjacent to the street due to use or site constraints and buildings that do not utilize regular commercial type glazing patterns such as parking garages should provide variety and human scale through the use of architectural proportions, detail, surface relief, texture and materials that are complimentary to traditional commercial buildings. (See also Architectural Scaling Elements).

**Section Two:
Building Placement**

The public space of an urban street is given shape by the surrounding buildings. A downtown street is typically characterized by a regular progression of large buildings closely bordering the public sidewalk. It is a space that is both linear and vertical and its containment by the mass of buildings around it both enhances its heightened sense of energy and defines its sense of place. Urban streets are more successful market places and safer pedestrian environments when



they are active and vital through the presence of concentrated activity. Different streets within an urban core, such as 16th and 17th Streets in Downtown Denver, have distinctly different qualities that are recognizable in their characteristic scale and profile against the sky as seen from the street.

■ Defining Street Space

Intent: Downtown Buildings should reinforce the urban characteristics of the street by maintaining the majority of their lower floor frontage at the edge of the public right-of-way. Buildings along the street edge should be tall enough to reinforce the urban character of the street. Single floor buildings generally appear too small and out of scale in an urban context. While the excitement of some urban streets is in their monumental “canyon-like” scale it is preferred that the 16th Street Mall maintain a more open atmosphere by stepping back very tall buildings away from the edge of the public right-of-way.

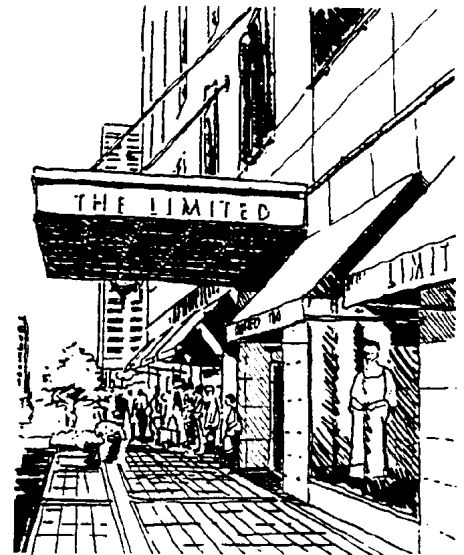
■ Setbacks and Open Space

Intent: Building setbacks to create plazas, arcades or other additions to the

public street space should be special events carefully considered to provide maximum public benefits. Setbacks, plazas, arcades, colonnades, galleries, etc. should not dilute or short circuit the activity of the public sidewalk. The public amenity provided by any proposed open space should be clearly defined and provided for in the design of the space. These benefits might include but are not limited to access to sunlight or views, access to public transportation or deference to a designated public landmark. Public open space should be programmed to encourage a high level of activity through interaction with adjacent uses.

■ Frequent Access To and From the Sidewalk

Intent: Pedestrian activity and pedestrian oriented uses are facilitated when frequent access is provided to businesses adjoining the public sidewalk. Doors from the public walk to individual businesses should be provided as frequently as possible rather than funneling access through interior building atriums or courts with limited sidewalk access.



Section Three:

Architectural Scaling Elements

The close proximity of massive buildings and intense pedestrian activity fosters and rewards greater complexity of building form and detail. Urban architecture is perceived at close range and pedestrian pace.

“Buildings do not move. Light, though, moves over them, and the surfaces change, in lightness, darkness and shadow, and therefore in color. The changes may be slow but are changes nonetheless, and it would seem that the eyes, ever sensitive, are happy to respond. Complex building facades over which light can pass or change make for better streets than do more simple ones.”

~ Allan B. Jacobs *Great Streets*

■ Human Scaled Building Facades

Intent: Building facades should provide elements of architectural scale and proportion that relate to the human scale of the pedestrian environment. Large expanses of undifferentiated building wall should be avoided. Facades that provide a regular and frequent pattern of architectural variety through such things as modulation of the wall plane, detailing, color, texture, materials and the incorporation of art and ornament are encouraged. Buildings should take advantage of the play of light and shadow across their surfaces that the Colorado climate provides.

■ Emphasis of Building Entries

Intent: Primary building entries should provide opportunities to create unique, landmark addresses along the street through the use of elements such as distinctive form, detail, materials, color, ornament, lighting and signage.

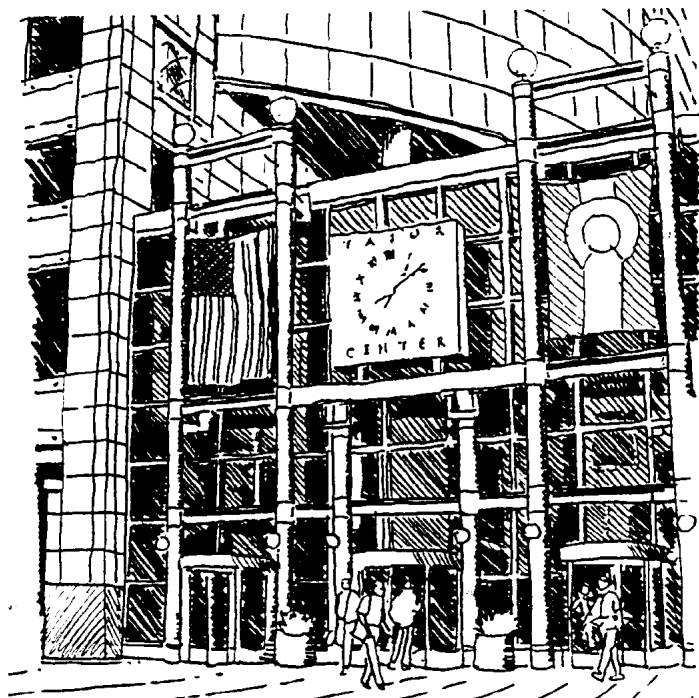
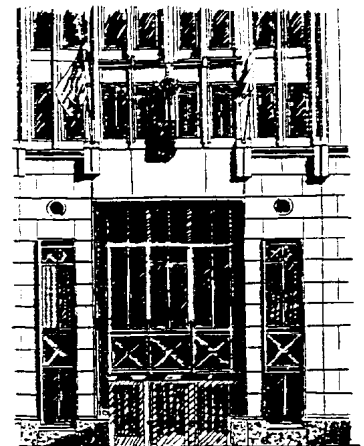
■ Relationship to Existing Buildings of Architectural or Urban Merit

Intent: This issue includes and goes beyond compatibility with historic buildings or architectural style. The character of downtown streets is evident in the many common rhythms and proportions of the buildings. Opportunities to find common notes, a height, proportion, material or detail help keep the downtown composition in tune. This is not intended to encourage historic replication.



■ Material Qualities

Intent: Denver and its surrounding region have a long tradition of building in stone and brick. This tradition is complimentary to the goals of these guidelines in the effort to provide scale, texture, detail and color in the downtown pedestrian environment. These materials have an inherently human scaled quality to them derived from their traditional shaping and placement by hand. Materials are not limited to masonry. However the form, scale, detail,



texture and quality of any materials used in close proximity to the pedestrian environment should be considered in relation to human interaction.

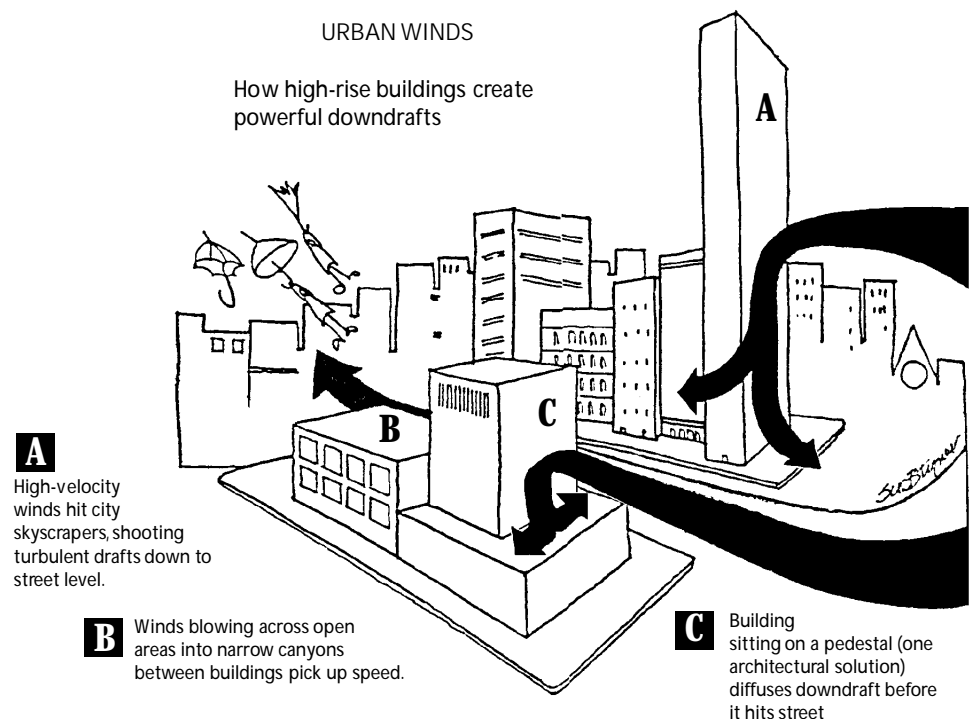
Section Four: Mitigation of Wind Drafts Generated By Tall Buildings

Tall buildings in dense urban contexts are known to generate and accelerate intense wind drafts both through the affects of their own form and in relation to adjacent buildings. Winds are generated in the form of downdrafts originating at the upper heights of tall facades and as drafts funneled between closely adjacent building forms. Slick building skins and large, unvaried walls exacerbate these problems. Buildings that are considerably higher than their surrounding context are also notorious for creating new high wind impacts on the surrounding streets.

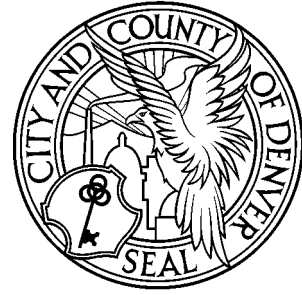
■ Wind Mitigation Strategies

Large buildings should seek to mitigate potential hazards and discomfort to pedestrians by arying the form and facades of buildings to disrupt and diminish wind flow. Downdrafts riginate at the upper floors and can be defeated by facade step backs, notches, projections and other features. Stepbacks at the lower floors of buildings can be particularly effective at deflecting downdrafts before they impact the pedestrian environment. Similarly, horizontal wind velocity can be diminished through similar variation in building form and wall plane.

Projects over 400 feet must submit an analysis by an acknowledged expert in wind testing and design stating that the typical wind patterns generated by the proposed project will not exceed levels commonly acceptable for pedestrian comfort in the public areas immediately surrounding the project.



Source: From diagram accompanying Scott Armstrong, "Taming the fury of man-made-wind," Christian Science Monitor (January 15, 1985), p23.



CITY and
COUNTY of
DENVER

Approved for Legality:

Robert M. Kelly

Robert M. Kelly
Assistant City Attorney,
City and County of Denver

_____ Date

Approved and Adopted:

Marilyn Stokes

Marilyn Stokes
Vice-Chair
Denver Planning Board

_____ Date

Adopted and published pursuant to Section 59-368 of the Revised Municipal Code of the City and County of Denver and Article VI of Chapter 2 of the Revised Municipal Code of the City and County of Denver.