

***BUILDING
DESIGN
STANDARDS*** **ARTICLE**
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ARTICLE

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BUILDING DESIGN STANDARDS

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ARTICLE 6. BUILDING DESIGN STANDARDS

6.1 PURPOSE & APPLICABILITY

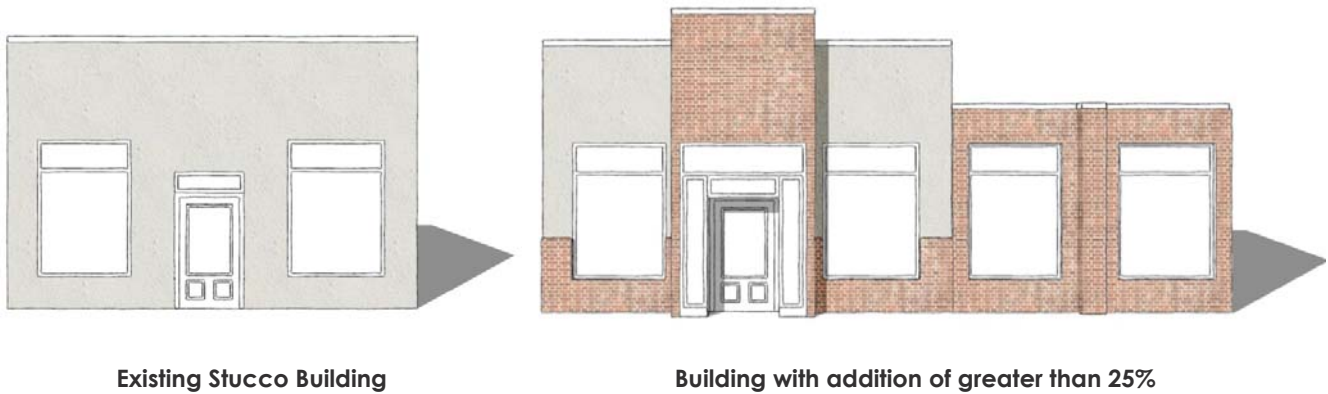
6.1.1 PURPOSE

The purpose of this Section is to ensure architectural and design compatibility and the establishment and preservation of architectural character throughout Mineral Springs. Enumerated in the sections below are general standards all buildings, multi-family residential buildings, standards for non-residential buildings, standards for buildings in the Town Center (TC) zoning district.

6.1.2 APPLICABILITY

- A. Building standards shall apply to all new non-residential construction in the TC, NB, GB, and LI zoning districts and to all new multi-family residential construction. These standards shall also apply to expansions of greater than 25% of the gross floor area of the building.
- B. Nonresidential building design standards shall not apply to existing residential structures that are undergoing a change-of-use to a non-residential use as permitted by this Ordinance.
- C. If a nonconforming nonresidential building is being expanded by greater than 25%, then the existing portion of the building shall comply with the following standards:
 - 1. The primary building material, as permitted, shall be continued over to 50% of the front façade of the existing building;
 - 2. A minimum of one (1) vertical articulation element listed in Section [6.4.4](#) shall be incorporated into the front façade;
 - 3. A minimum of one (1) horizontal articulation element listed in Section [6.4.5](#) shall be incorporated into the front façade; and
 - 4. All unscreened mechanical, utility equipment, loading areas, and solid waste receptacles shall be screened per Section [5.4.10](#).

▼ FIGURE 6.1 EXAMPLE OF BUILDING EXPANSION DESIGN COMPLIANCE



6.2 GENERAL STANDARDS

- A. The primary entrance shall be architecturally and functionally designed on the front façade facing the primary public street, except that buildings interior to a development may be arranged to front a common courtyard, parking area, driveway, or private street. Building entrances shall be emphasized using massing, architectural features, and/or changes in the roofline.
- B. The front façade of the principal structure shall be parallel to the front lot line and street. Any side of a building that faces an arterial or collector street that is not screened from view by or landscaping shall be treated as a front façade.
- C. Manufactured housing and units shall not be used as permanent structures except where manufactured houses are permitted as set forth in Article 4.
- D. Modular buildings and shipping containers shall not be used as permanent structures unless such meet NC Building Code, are placed on a permanent masonry foundation, and meet all of the other design standards for buildings in the district in which they are located.

6.3 MULTI-FAMILY & TOWNHOME RESIDENTIAL DESIGN STANDARDS

6.3.1 WALL MATERIALS

- A. Exterior wall materials shall be wood, fiber cement board, brick, stone, vinyl, or similar materials.
- B. A minimum of two (2) materials shall be mixed on all facades, and a minimum of 50% of all multi-family residential facades and townhome front and side facades shall be brick, stone, or a material similar in appearance and durability. Brick, stone or similar heavy materials shall be located below lighter materials such as wood or vinyl.



Brick with vinyl accents



All vinyl siding

6.3.2 ROOFS

- A. Roof materials shall be architectural asphalt shingles, standing seam metal, slate, tile, or similar materials. Gutter and downspout color shall match either the trim color or primary building material color.
- B. Pitched roofs for one-story buildings shall have a slope of between 4:12 and 8:12. Pitched roofs for one-and-a-half (1 ½) or multiple story buildings shall have a slope of between 6:12 and 12:12. Flat roofs shall have a parapet wall with a decorative cap or cornice.
- C. Architectural elements such as height variations, gables, dormers, cupolas, towers, and other similar elements shall be incorporated into the roof design at a minimum of every 25 linear feet on all facades.
- D. Roofs shall be in scale with the building and shall have an overhang of six (6) inches or more to facilitate proper water run-off.



Proportional roof with variation and overhang



Shallow roof with no variation or side overhang



Flat roof with decorative parapet and variation



Flat roof with no decorative parapet or variation

6.3.3 WINDOWS

- A. A minimum of 25% of the primary façade and 20% of all secondary/corner side facades shall be composed of window area.
- B. Windows shall follow a regular rhythm and be aligned on and between floors.



Adequate windows with regular rhythm and alignment



Few windows with no regular rhythm and alignment

6.3.4 FAÇADE ARTICULATION

- A. Façade articulation in the form of gables, projections, recesses, and/or porches or balconies of a minimum of three (3) feet in depth shall be located a minimum of every 25 feet along the all facades.
- B. Exterior stairs and open circulation corridors shall not be located on the front façade.



Facade articulation with recesses and projections



No facade articulation



Interior stairs and circulation corridors



Exterior stairs and circulation corridors

6.4 NONRESIDENTIAL DESIGN STANDARDS

6.4.1 ARCHITECTURAL COMPATIBILITY AND COHESIVENESS

- A. Buildings shall be designed so that each side of the building is architecturally compatible with each other side of the building, unless otherwise exempted by a specific provision of this Section.
- B. Where more than one (1) building is being constructed as part of a larger common development plan, each building in that development, including pad sites and out parcels, buildings shall be designed with a cohesive architectural aesthetic throughout the development. Architectural compatibility within a development may include the use of the following methods:
1. Similar building materials;
 2. Similarly colored building materials;
 3. Proportional quantities of building materials on building facades;
 4. Similar roof forms; and/or
 5. Similar architectural detailing.
- C. Additions to existing buildings shall match the materials of the building. If the existing building is constructed of nonconforming materials and the addition is greater than 25% of the gross floor area, then the addition shall incorporate a permitted primary material into the design of the addition and the front façade. See [Figure 6.1](#).

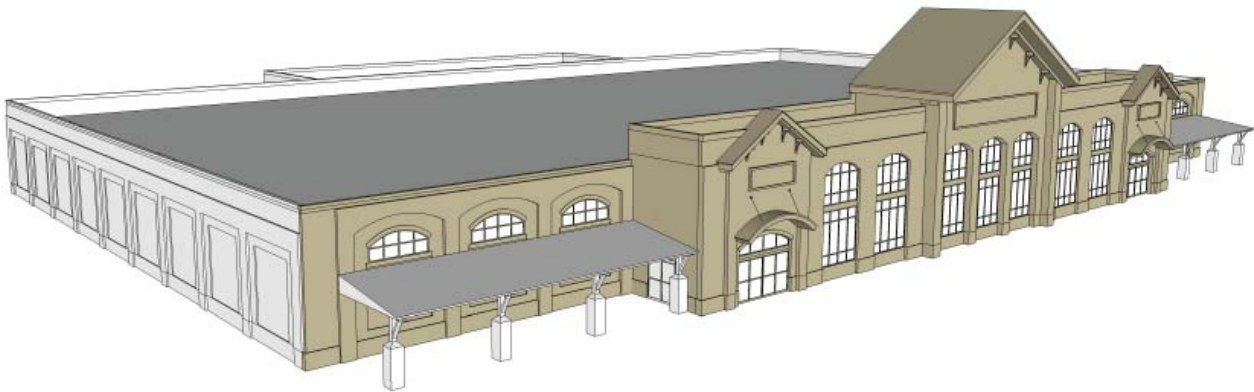
6.4.2 BUILDING WALL TYPES

Different design standards apply to different types of building walls. For the purposes of this Section, building walls shall be divided into the following categories:

6.4.2.1 Primary Building Wall / Facade

A primary building wall/facade is any building wall plane which is oriented toward a public street or internal access drive, or which contains the primary building entrance (single tenant structures) or entrances (multi-tenant structures). Buildings on corners have more than one primary building wall. Primary building walls are always active building walls.

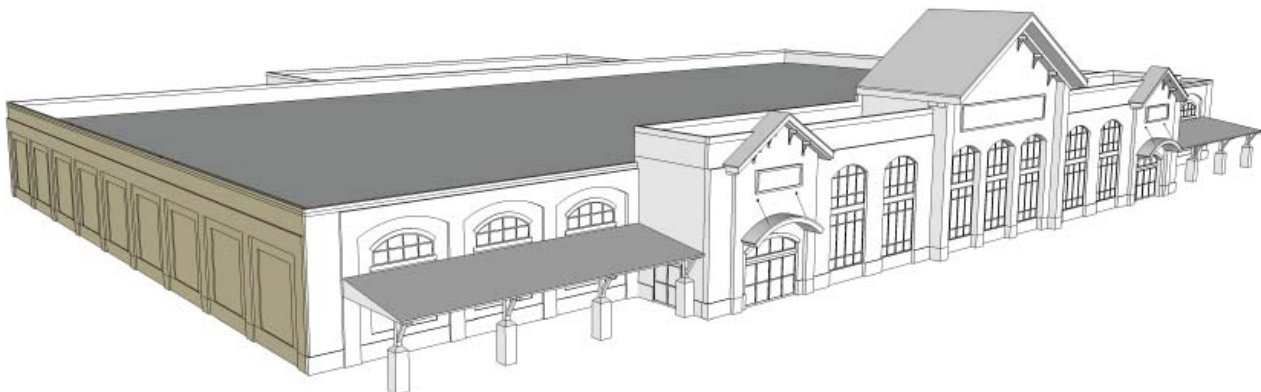
▼ FIGURE 6.2 PRIMARY BUILDING WALL



6.4.2.2 Secondary Building Wall

All building wall planes that are not defined as a Primary Building Wall or as a Utility / Service Building Wall are Secondary Building Walls. Secondary building walls may be active or inactive depending on location and access to the building.

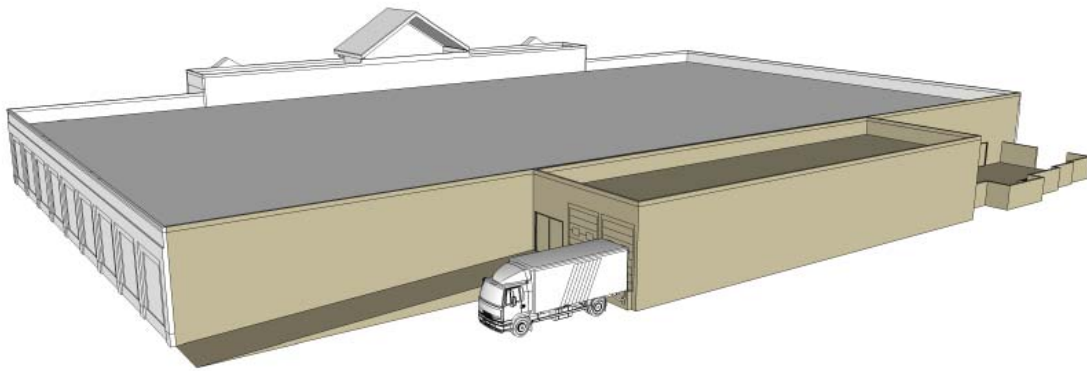
▼ FIGURE 6.3 SECONDARY BUILDING WALL



6.4.2.3 Utility/Service Building Walls

A utility/service building wall is the wall plane, or portion thereof, that contains utility and service areas. Utility/service building walls shall not front on the primary street. Any utility/service building walls visible from a major thoroughfare shall meet the requirements for a secondary building wall or be screened by a Type 1 buffer yard per Section [5.4.6](#).

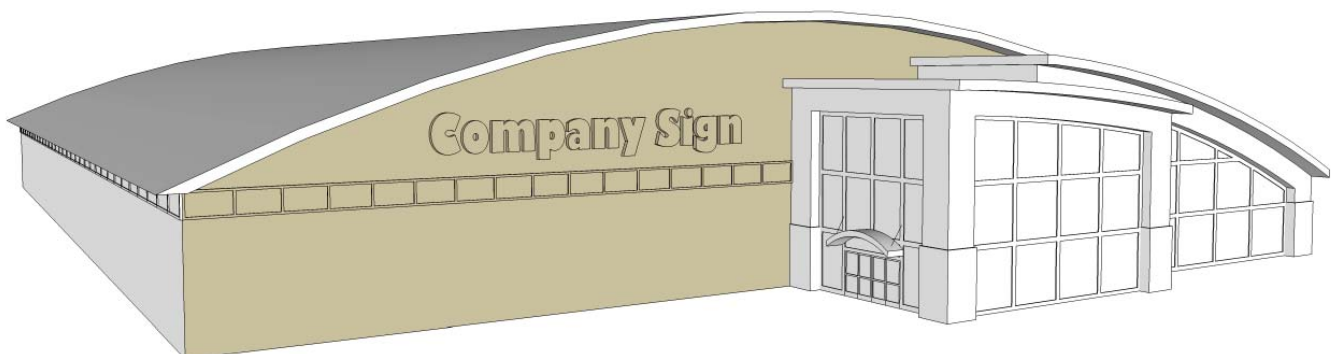
▼ FIGURE 6.4 UTILITY / SERVICE BUILDING WALL



6.2.4 Industrial Building Walls

An Industrial Building Wall includes each wall plane of an industrial, warehousing, or similarly used building, located within the LI zoning districts, which does not contain space used for offices, customer service, retail areas, product display areas or similar nonindustrial spaces. Any industrial building walls located within 250 feet of a major thoroughfare shall meet the requirements for a secondary building wall or be screened by a Type 1 buffer yard per Section [5.4.6](#).

▼ FIGURE 6.5 INDUSTRIAL BUILDING WALL

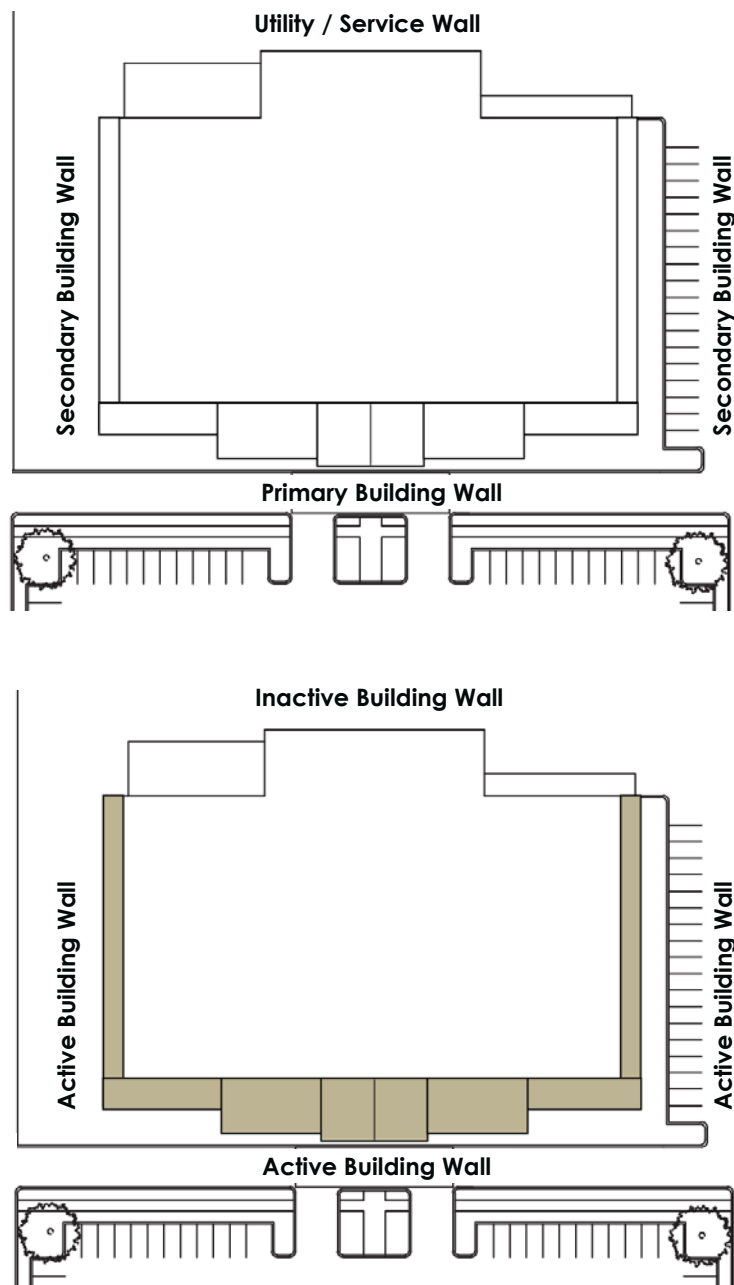


6.4.2.5 Active Building Wall

An active building wall is any building wall plane, or portion of a wall plane, whether along a primary or secondary building wall, which:

- Contains a customer entrance;
- Is oriented toward a public street or internal access drive;
- Is adjacent to a pedestrian walkway; or
- Is adjacent to a customer parking area.

▼ FIGURE 6.6 BUILDING WALL TYPES

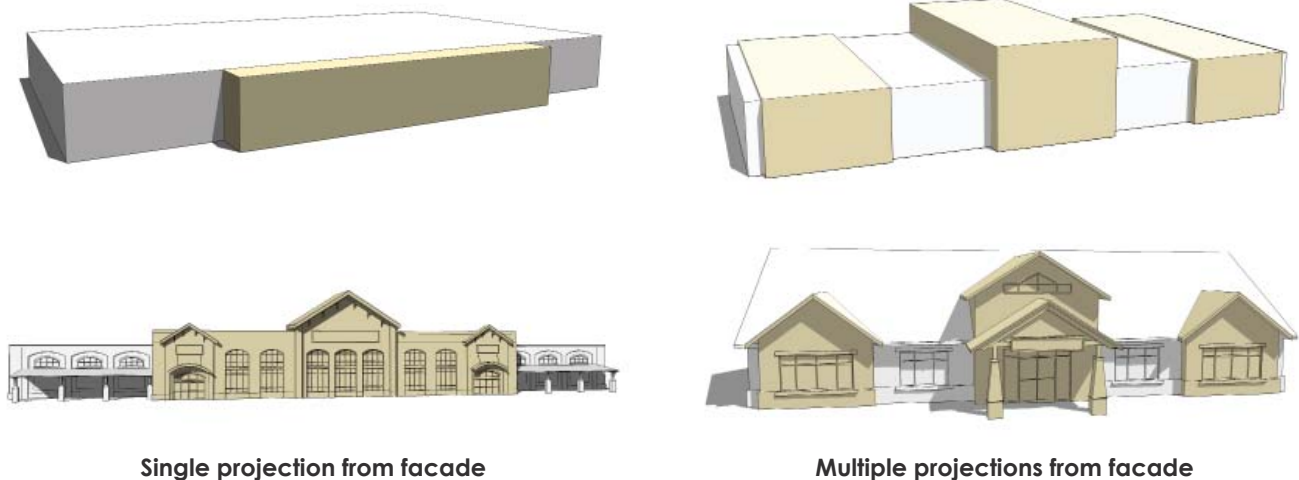


6.4.3 BUILDING MODULATION

A. Building modulation is the varying of the footprint of a building by projecting or recessing portions of the façade from the base plane of the building wall. The use of a modulated façade helps to define the most important portion(s) of a building (such as customer entrances), reduces monotony along building walls and helps to distinguish adjacent buildings from each other by encouraging distinctive designs. The following building modulation standards apply to all non-residential buildings of greater than 50 linear feet on the primary façade:

1. Primary building walls shall be modulated through the use of projections or recessions of the building wall from the base wall plane.
2. Projections or recessions used to meet this requirement shall project or recede from the base wall plane by a minimum of one (1) foot for buildings under 100 feet wide a minimum of three (3) feet for buildings over 100 feet wide.
3. The combined length of the modulating feature(s) shall be a minimum of 35% of the width of the base wall plane.

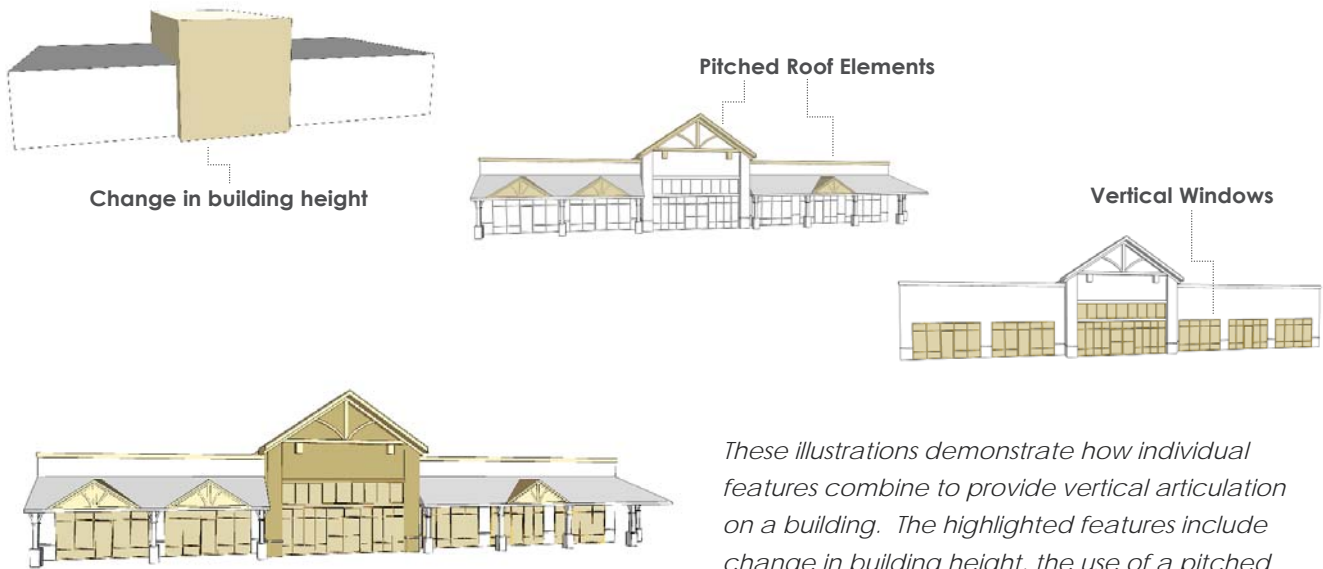
▼ FIGURE 6.7 BUILDING MODULATION



6.4.4 VERTICAL ARTICULATION

- A. Vertical articulation is used to give emphasis to the height of a building and to provide relief along the vertical wall plane. Appropriate vertical articulation techniques vary based on the size and height of a building, as well as its architectural style. Vertical articulation shall be provided on each vertical building wall plane as required below. Utility/Service and Industrial building wall types shall be exempt from these standards.
- B. The primary and secondary building walls of non-residential buildings shall be vertically articulated by using a minimum of two (2) of the techniques listed below:
- Using visually “heavy” building materials, such as stone, on lower surfaces when a “lighter” material is used on higher surfaces. Using larger or more coarsely faced building materials on lower surfaces and smaller or more finely textured materials on higher surfaces;
 - Using different colors of materials along the vertical wall plane, with darker colors used on lower surfaces and lighter colors used on higher surfaces;
 - Including gables or minor pitched roof forms that coordinate with building modulation;
 - Using stepped parapet walls;
 - Providing towers or similar features that extend vertically above the top of the building wall;
 - Varying the height of different portions of a building;
 - Using tall windows, particularly when coupled with an arched frame at the top;
 - Using distinct masonry patterns or inlays that extend vertically along the building wall; and/or
 - Using pilasters or engaged columns that extend vertically along the building wall.

▼ FIGURE 6.8 VERTICAL ARTICULATION

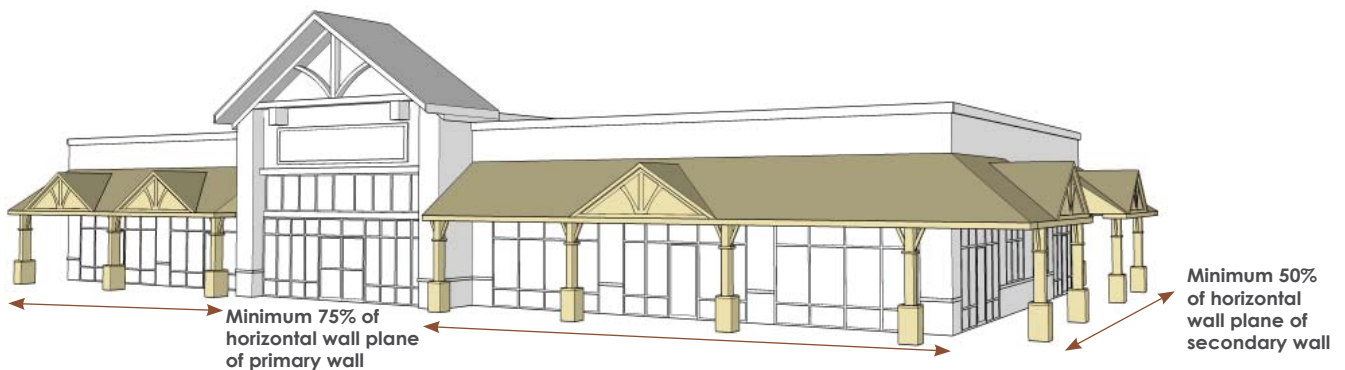


These illustrations demonstrate how individual features combine to provide vertical articulation on a building. The highlighted features include change in building height, the use of a pitched roof elements, and the use of vertical windows to achieve compliance with the vertical articulation standards.

6.4.5 HORIZONTAL ARTICULATION

- A. Horizontal articulation is used to provide visual interest along the horizontal wall plane and to define the human scale of a building. Appropriate horizontal articulation techniques vary based on the architectural style of a building, as well as its intended use. Utility/Service and Industrial building wall types shall be exempt from these standards.
- B. Ground floor primary and secondary building walls shall be articulated in a manner that provides visual interest and emphasizes the human scale by using one (1) or more of the below referenced techniques, or by an equally effective method that achieves the stated goal:
- Trellises
 - Arcades
 - Recessed openings
 - Arbors/Pergolas
 - Porticos
 - Decorative masonry patterns or inlays
 - Decorative metalwork
 - Awnings
- C. A minimum of 75% of the width of the horizontal wall plane of the primary façade(s) shall contain articulating features (see Figure 6.9 below). More than one feature type may be used to meet this requirement. A minimum of 50% of the width of the horizontal wall plane of secondary building walls shall contain articulating features (see Figure 6.9 below). More than one feature type may be used to meet this requirement. Features used to satisfy these requirements shall not be separated by a gap wider than 20 feet between the outer edges of each individual feature.
- D. Features used to satisfy this requirement shall be appropriate to the context of the wall on which they are placed. An example of an inappropriate use of an architectural feature would be to place an awning in a location that does not cover a pedestrian walkway or window.

▼ FIGURE 6.9 HORIZONTAL ARTICULATION





Trellises



Recessed openings and decorative metalwork



Portico and pergola



Arcade and decorative masonry patterns



Awnings over windows

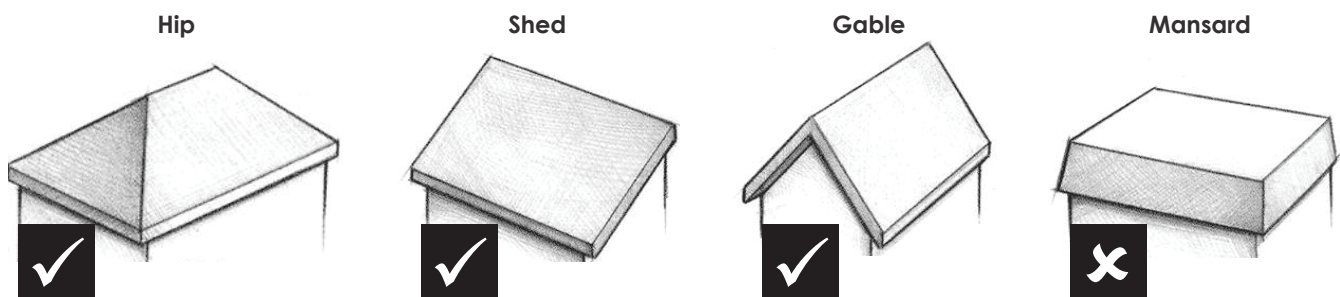


Awnings not over windows

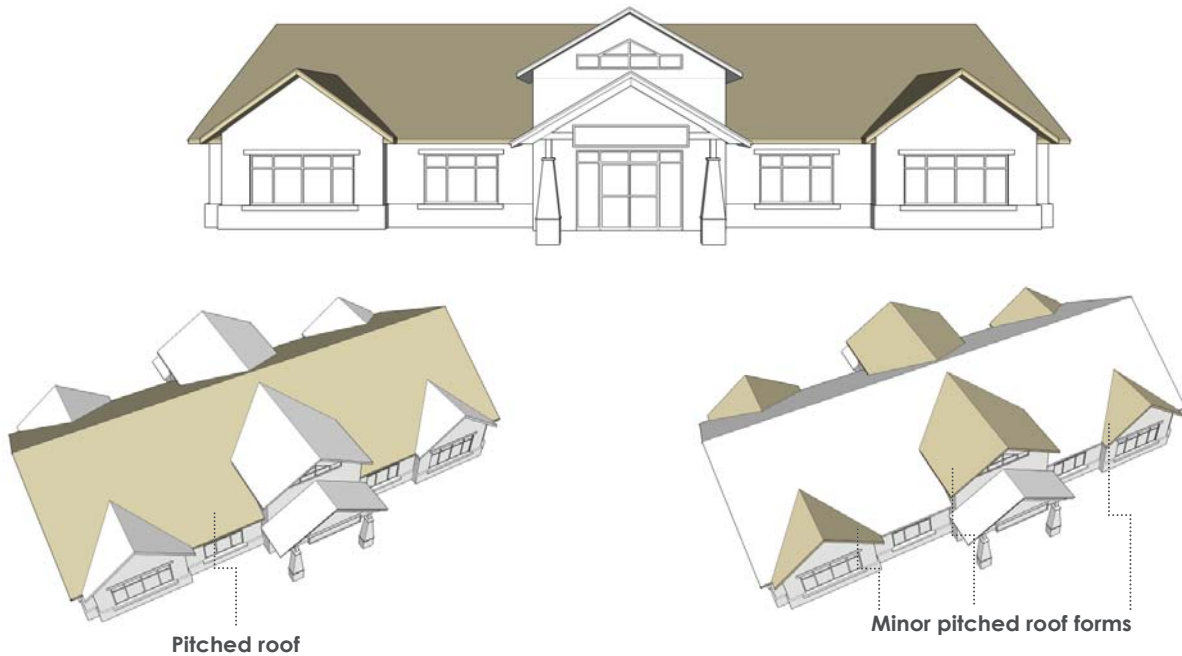
6.4.6 ROOF FORM AND MATERIALS

- A. A roof is an integral structural component of the building and should be varied to reinforce the rhythm and scale of the facades. The standards of this section shall apply to roofs of non-residential structures. Industrial building wall types shall be exempt from these standards, except that all roof-mounted mechanical equipment shall be screened in accordance with Section [6.4.12](#).
- B. Pitched roof materials shall consist of asphalt shingles, standing seam metal, or slate in muted, earth tone colors.
- C. Pitched roofs shall be simple hip, shed or gable forms. Mansard roofs are prohibited. Pitched roof forms shall utilize eaves which overhang the building wall a minimum of 12 inches. A pitched primary roof form shall have a minimum pitch of 6 inches of vertical rise to each 12 inches of horizontal run (6:12) and a maximum pitch of 12 inches of vertical rise to each 12 inches of horizontal run (12:12). Secondary roof forms shall have a minimum pitch of 4 inches of vertical rise to each 12 inches of horizontal run (4:12).
- D. Roof pitches of less than 2:12 and flat roofs shall incorporate a parapet wall along the primary and secondary building walls. An articulated cornice or cap shall be provided along those portions of a parapet wall that are located above a section of a building that projects from the base wall plane. Cornices or caps shall continue around all sides of a parapet wall on which they are required, and may only terminate at an interior building corner or continue at least eight (8) feet around an exterior building corner.
- E. Parapet walls on primary facades shall contain at least one (1) change in height of at least one (1) foot a minimum of every 25 feet, through the use of a stepped wall or the inclusion of a minor pitched roof form. Height changes shall align with the modulation of the building wall. Parapet walls may not exceed 10 feet in height at any point along the wall.

▼ FIGURE 6.10 PITCHED ROOF TYPES



▼ FIGURE 6.11 ROOF FORM



The illustrations above demonstrate proper use of a pitched roof on a modulated building wall. As the illustration shows, the pitched roof form is enhanced with minor pitched roof elements and changes in height that correspond to changes in the base wall plane.



The illustration above demonstrates the proper inclusion of minor pitched roof forms with a parapet wall.



Continuous parapet with height changes



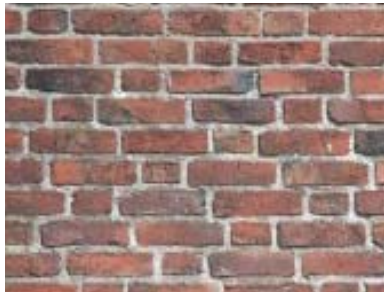
Non-continuous parapet without height changes

6.4.7 WALL MATERIALS AND COLOR

6.4.7.1 PRIMARY & SECONDARY WALLS

- A. Brick or stone shall be used as cladding over a minimum of 50% of the surface area of each primary building wall and 25% of each secondary building wall. In the TC district, brick, stone or other material similar in appearance or durability shall comprise 75% of the primary building wall and 50% of secondary building walls. Concrete products that are fabricated to have the same appearance as a primary building material shall be permitted, unless otherwise noted. All other materials not expressly permitted are prohibited. Windows and other glazed areas shall be excluded from the calculation of the surface area of a building wall for the purpose of the material proportion standards. Brick and stone cladding materials may not be painted or otherwise altered in color from their natural appearance.
- B. In all districts except the TC district, the following materials may be used as cladding on up to 50% of the surface area of any primary building wall and 75% of the surface area of any secondary building walls. In the TC district, the following materials may comprise up to 25% of the primary building wall and up to 50% of the secondary building walls:
- Wood clapboard or fiber cement board horizontal or vertical siding;
 - Vinyl siding (horizontal or vertical);
 - Exterior insulation and finishing systems (EIFS);
 - Ceramic Tile / Terracotta;
 - Split-faced concrete block; and/or
 - Architectural grade metal (shall not exceed 10% of any primary or secondary façade).
- C. Prohibited materials include smooth-faced concrete block, prefab steel panels, tilt-up concrete panels, corrugated fiberglass, vinyl siding, masonite particle board, highly reflective glass or metal, astro-turf ,or any other material not typically used as an exterior wall material. Materials with a glossy or reflective finish such as polished marble should not be a dominant façade material.
- D. Primary and secondary facade colors shall be of low reflectance earth tone, muted, subtle, or neutral colors. The use of high-intensity, fluorescent, or neon colors is not permitted.

▼ FIGURE 6.12 PRIMARY MATERIALS

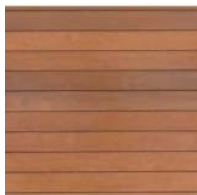


Brick



Stone

▼ FIGURE 6.13 SECONDARY MATERIALS



Wood or
Composite Siding



EIFS



Tile



Split-face Block



Architectural Metal



Brick Facade



Painted concrete block and metal facades



Muted neutral colors



High intensity colors

6.4.7.2 UTILITY / SERVICE WALLS

In addition to the materials permitted on primary and secondary walls, the following materials may be used on Utility/Service Walls, provided that the materials are either integrally colored or painted to match the color of the materials used to clad the greatest proportion of the surface area of the primary and secondary building walls:

- Exterior insulation and finishing systems (EIFS); and/or
- Split-faced concrete block.

6.4.7.3 INDUSTRIAL BUILDING WALLS

In addition to the materials permitted on primary and secondary walls for non-residential buildings, the following materials may be used on Industrial Building Walls, provided that the materials are either integrally colored or painted to match the color of the materials used to clad the greatest proportion of the surface area of the primary and secondary building walls of office, customer service, and retail portions. However, building walls located within 250 feet of major or minor thoroughfare shall meet the minimum material requirements for a secondary building wall, unless a Type 2 in accordance [5.4.6](#) buffer is installed along the thoroughfare frontage.

- Stucco or exterior insulation and finishing systems (EIFS);
- Split-faced concrete block; and/or
- Architectural grade metal.

▼ FIGURE 6.14 MATERIALS EXAMPLES

Office Building



Primary Material - Brick

Secondary Material - Stone

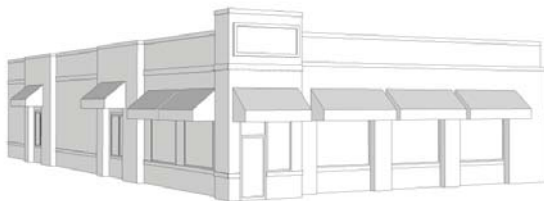
Multi-tenant Retail Building



Primary Material - Brick & Stone

Secondary Material - Wood

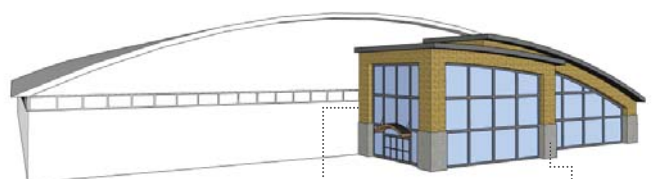
Fast food Restaurant



Primary Material - Brick & Stone

Secondary Material - EIFS

Office/ Showroom portion of Industrial Building



Primary Material - Brick

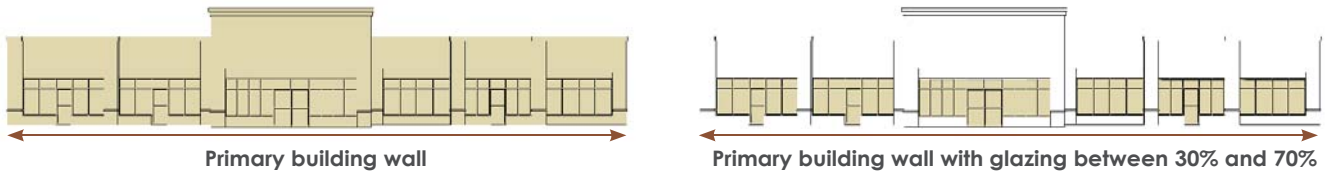
Secondary Material - Split-faced concrete block

The illustrations above demonstrate the application of permitted primary and accent cladding materials to the exterior of different building types.

6.4.8 WINDOWS AND GLAZING

- A. The use of glazed (glass) surface areas on a building wall enhances the aesthetic character of the building by adding a transparent contrast to the other cladding materials used on the wall. Transparent surfaces also increase the “activity” of a building wall by making interior spaces visible to the outside, particularly in the vicinity of customer entrances and along building walls that are adjacent to pedestrian walkways. Methods of achieving transparency can include the use of glass doors, windows and curtain walls. Industrial and Utility/Service building walls and uses listed under the “Institutional and Civic” uses category in the Permitted Uses Table are exempt from the minimum glazing standards.
- B. At least 25% of the primary building wall shall contain glazed area. In the TC district a minimum of 40% of the primary building wall shall be glazed area. For buildings located on a corner, the secondary street façade shall be at least 10% windows (20% in the TC district). Glazing shall not comprise more than 75% of any building wall.
- C. Windows shall be aligned vertically and horizontally between floors and follow the same window rhythm.
- D. Windows shall be inset from the surrounding wall cladding material by a minimum of two (2) inches with the bottom sill a minimum of 12 inches and maximum of 48 inches above grade.
- E. Glazed areas shall not be separated by a distance of greater than 20 feet on any portion of a building wall on which glazing is required.
- F. Glass or panels that obscure interior visibility may not be used to satisfy the minimum glazing requirement, except false windows may be used if they mimic true windows, are lit during nighttime business hours, and are not covered with pictures, words or other advertising materials.
- G. Windows shall be proportioned so that they emphasize the vertical rather than horizontal dimension of the opening. This may be achieved by either proportioning the window opening so that its height is greater than its width, or, when a horizontal window opening is used, using internal framing that divides the window into vertically proportioned elements. Transom and accent windows, occupying no more than 5% of the building wall on which they are located, may be horizontally-oriented.

▼ FIGURE 6.15 WINDOWS AND GLAZING



The illustration above highlights those areas of the building that are counted toward the minimum glazing standards.



The illustration above highlights the effective use of vertically proportioned windows. The arched tops emphasize the height of the window and articulate the vertical dimension of the building wall.



The illustration above demonstrates the vertical alignment of upper and lower story windows on a multi-story building. This repetitive vertical alignment helps to articulate the vertical wall planes.



Adequate Window Area

Windows covered for interior display

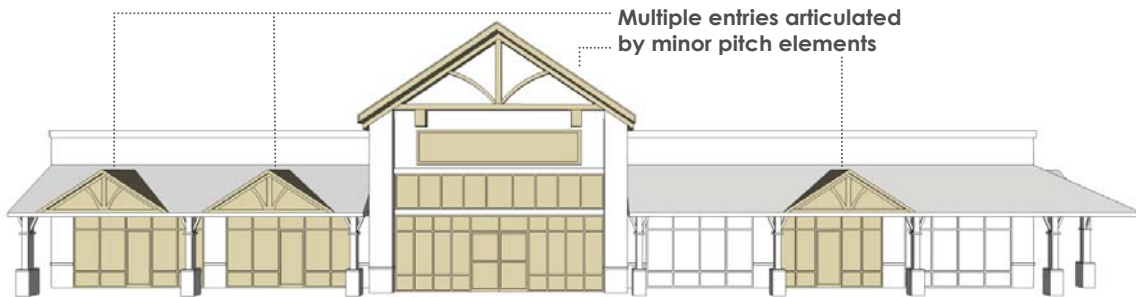
6.4.9 BUILDING ENTRANCES

- A. The primary entrance(s) to each building or tenant space shall be oriented toward the adjacent public street, or, when located in the interior of a larger development, toward an internal access drive.
- B. Buildings with a gross floor area of more than 30,000 square feet shall provide a minimum of two (2) customer entrances on the primary façade which are separated by a minimum distance of 100 linear feet from their outer edges. Industrial building walls are exempt from this requirement.
- C. Primary customer entrances shall be clearly defined by distinct architectural features. Each primary entrance shall be defined by a minimum of two (2) of the following features:
- Awnings or porticos;
 - Recesses/projections of the building wall;
 - Arcades;
 - Raised corniced parapets over the entry;
 - Pitched roof forms;
 - Arched architectural features;
 - Display windows;
 - Columns or similar vertical features;
 - The use of cladding materials around the entrance that are visually distinct from other materials on the building wall; and/or
 - Masonry, tile, metal or glass inlays around the entrance.

▼ FIGURE 6.16 BUILDING ENTRANCES



The illustrations above highlight the elements that emphasize the primary entrance into the building. These elements include a portico, projection from the base wall plane, and projecting gable roof forms.



The illustrations above demonstrate the emphasis of building entries for the following building types: multi-tenant retail building; large scale, single-tenant retail building; and restaurant.

6.4.10 AWNINGS

- A. Awning material shall be canvas or architectural grade (non-corrugated) metal with a matte, non-reflective finish.
- B. Awnings shall not be backlit or outlined with neon, LED or other lighting.
- C. Awnings shall be placed at the top of window or doorway openings, and shall not extend beyond such openings.
- D. No awning shall extend more than half (1/2) the width of the sidewalk or eight (8) feet, whichever is less and shall maintain a clear height of at least eight (8) feet above grade. No awning shall interfere with landscaping.
- E. Awnings shall be self-supporting from the wall. No supports shall rest on or interfere with the use of pedestrian walkways or streets. In no case, shall any awning extend beyond the street curb or interfere with street trees or public utilities.

▼ FIGURE 6.17 AWNINGS



The illustrations above demonstrate the improper use (right) and proper use (left) of awnings. The awnings on the bottom illustration only cover the window and door openings.



Awnings over windows



Backlit awning spanning building length

6.4.11 ORIENTATION OF CERTAIN FEATURES

Building walls that contain service areas shall be oriented so that they are not visible from adjacent public streets or internal access drives (except dedicated service drives).



Service bays on secondary building wall



Service bays on primary facade

6.4.12 MECHANICAL AND UTILITY EQUIPMENT

- A. All building mounted mechanical and utility equipment shall be located on the utility/service façade.
- B. Ground level building mounted mechanical and utility equipment shall be screened by walls that are composed of the same cladding material that is used on the building wall adjacent to their mounting location.
- C. Mechanical and utility equipment which extends along the vertical wall plane above a height of six (6) feet from grade shall be painted to match the color of the primary material on that building wall.
- D. All rooftop mounted mechanical equipment shall be screened or located in a manner that it is not visible from any point along an active building wall.



Screened ground-level equipment



Unshielded ground-level equipment



Screened rooftop equipment



Unshielded rooftop equipment

6.4.13 ACCESSORY BUILDING DESIGN

- A. The exterior materials of non-residential accessory buildings shall substantially match the primary and/or secondary materials of the principal structure and surrounding buildings.
- B. Accessory structures shall be located in the side or rear yard and shall not exceed 15 feet or the height of the principal structure, whichever is less.



Materials match principal structure



Materials do not match principal structure