

# Building Design Standards

## 5.1 PURPOSE AND INTENT

The purpose of establishing supplementary requirements for development is to ensure that the physical characteristics of proposed development are compatible with the context of the surrounding areas and to preserve the unique visual character and streetscapes of Wake Forest. These requirements strike a balance between creativity and innovation on one hand while avoiding obtrusive, incongruous structures on the other. Wake Forest strongly encourages architectural styles that build upon and promote the existing historic character of the town and supports the view that inspiring, well-maintained, and harmonious development is in the best economic development interests of all residents and businesses.

## 5.2 APPLICABILITY AND ADMINISTRATION

The provisions outlined in this chapter shall apply throughout the jurisdiction of this code, regardless of the underlying zoning district provisions and shall apply to all development, including renovations, remodelings, face lifts, repainting, and additions to existing structures. The notable exception may be any Planned Unit Development District, which is intended to create its own building design standards, so long as they are of equal or greater quality to the standards set forth in this section herein. The building type standards only apply to those buildings which are specified for the various zoning districts in this chapter. This chapter is comprised of a combination of quantitative, easily measureable standards for administrative review and qualitative standards for discretionary review. For those qualitative standards (as noted) that require a discretionary review for compliance, such applications will be reviewed and approved in accordance with Section 15.8.5 by the Design Review Board.

### 5.2.1 APPLICATION OF BUILDING TYPE REQUIREMENTS

While it is expected that some new building types will be introduced to the town, these variations should be based upon the predominant types listed in this chapter. Innovative planning or design ideas for development in any district where the proposed building types are different than those allowed by the base district requirements may be approved by the Design Review Board in accordance with the discretionary review standards in Section 5.10. All buildings greater than 100,000 square feet in total area shall be subject to the standards of the specific building type and shall be approved by the Design Review Board in accordance with Section 5.10.

### 5.2.2 ADOPTED PLANS OR HISTORIC GUIDELINES TO TAKE PRECEDENCE

Where specific architectural elements are required as part of an adopted plan or associated with local historic guidelines, these shall take precedence over the building design requirements of this chapter. In the case of a contributing building to a National Register Historic District, the Secretary of Interior's Standards for Rehabilitation will be used as a guideline for exterior work.

### 5.2.3 APPLICABILITY OF STANDARDS

The provisions in this chapter shall apply to all new structures and expansions to existing structures in accordance with the following:

- A. New Structures:** All standards apply.
- B. Expansions of Less Than 50% of Floor Area:** Standards apply to expansion area only and those areas necessary to visually tie the new to the old.

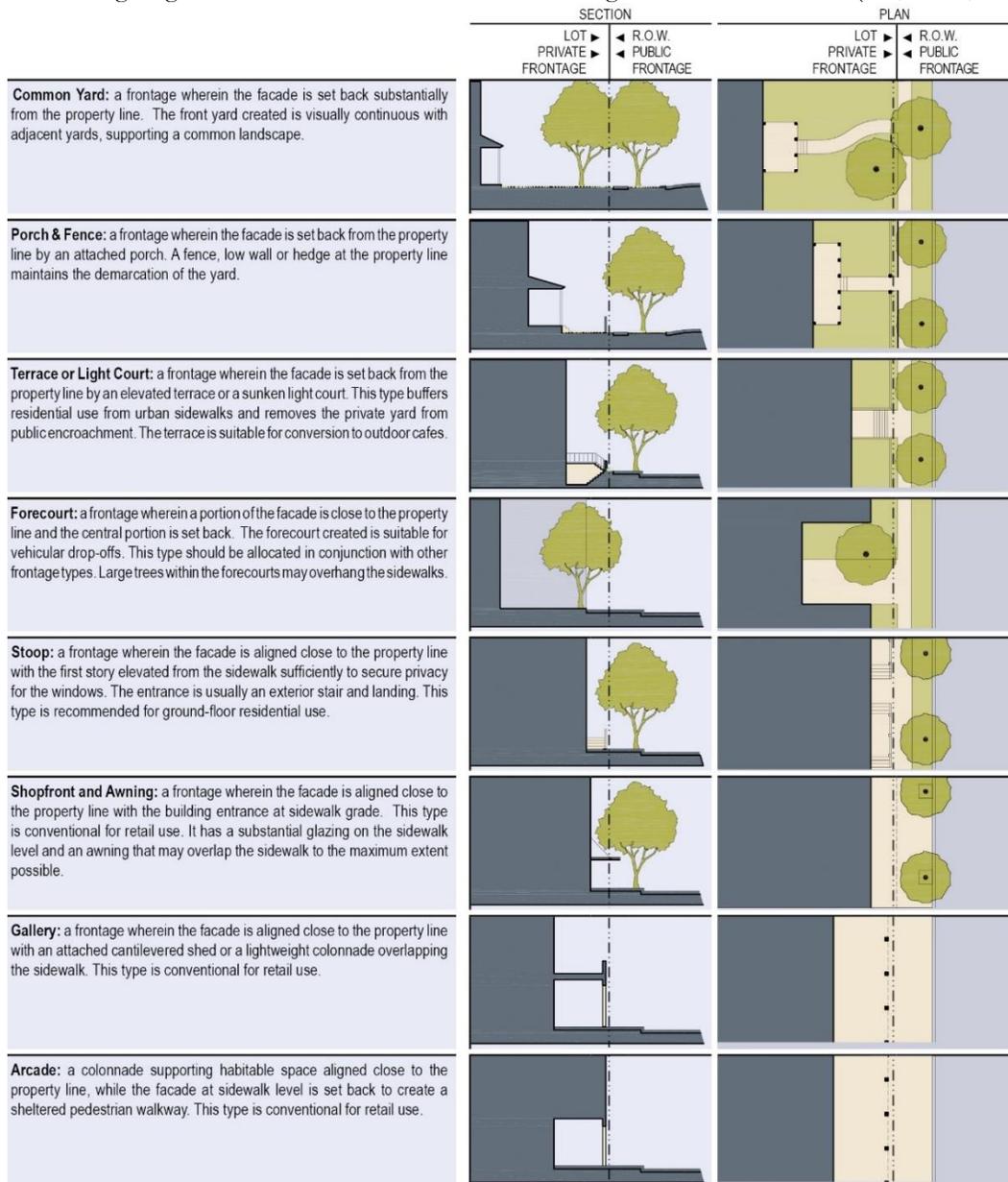
**C. Expansions of 50% or Greater in Floor Area:** All standards apply to facades visible from the public right-of-way.

**5.2.4 MODIFICATION OF STANDARDS/DESIGN EXCEPTIONS**

The Administrator may make modifications to the standards in this section upon the written request of the applicant if the standard(s) in question conflicts with other requirements by law, as long as the proposal is in compliance with the Purpose and Intent above. If the applicant and Administrator cannot come to an agreement the proposal shall be submitted to the Design Review Board for review at their next available meeting in accordance with Section 15.8.5.

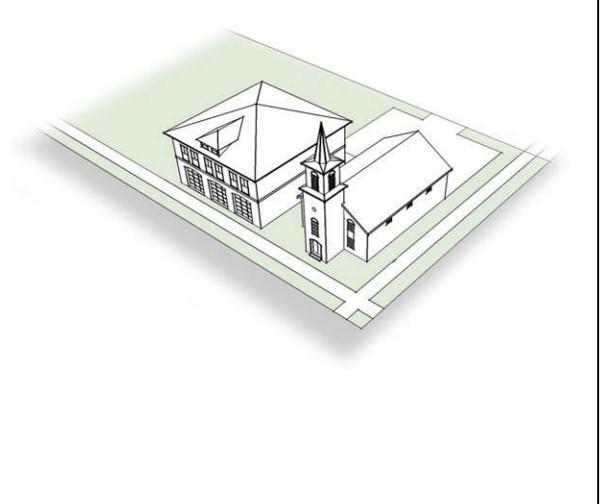
**5.3 PRIVATE FRONTAGE REGULATIONS**

Private frontage regulations have been established for buildings in the urban districts (UR, RMX, NMX,



UMX and RA-HC). Buildings in these districts shall conform to a private frontage type, as described in the table below, which is permitted within their associated zoning district by the table in Section 2.2.3.

## 5.4 CIVIC / INSTITUTIONAL BUILDINGS

<p><b>CIVIC / INSTITUTIONAL BUILDINGS</b></p> <p>The Civic/Institutional Building serves as a landmark and a public gathering place. The use of this designation is limited to public buildings (e.g., schools, fire stations, and town halls), and semi-public buildings (e.g., hospitals and religious institutions). The Civic/Institutional Building defines a sense of prominence or to accommodate the unique needs of its users.</p> <p><b>Typological Variants:</b></p> <ul style="list-style-type: none"> <li>Churches</li> <li>Schools</li> <li>Museums</li> <li>Hospitals</li> <li>Town Hall</li> <li>Child / Adult Care Centers (more than 8 persons)</li> <li>Recreation / Clubhouse Buildings</li> </ul>	
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### 5.4.1 APPLICABILITY AND REVIEW PROCESS

Because of the often unique design requirements and the expected prominence of certain Civic/Institutional buildings, the process for review and approval shall be different than those of the other building types listed in this section. It requires that additional standards, as set forth below, be met, but relaxes some of the standards found in the applicable land development district. Approval of all Civic/ Institutional Buildings shall be vested solely with the Design Review Board in accordance with Section 15.8.5 subject to the following standards.

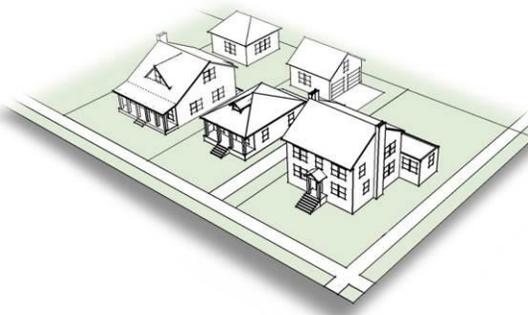
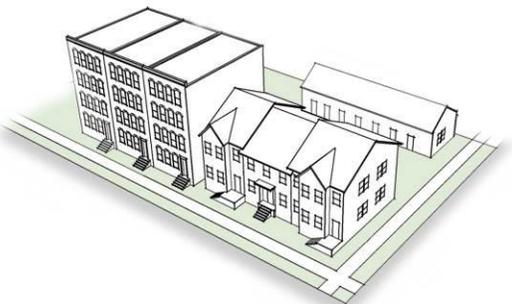
### 5.4.2 STANDARDS FOR DESIGN REVIEW

The Design Review Board in reviewing the application shall consider the following in their review and approval of all Civic/ Institutional buildings. Each application shall be considered unique to the sponsoring applicant and location and therefore shall not be bound by previous decisions as precedents.

- A. Design and Construction Excellence:** Such buildings should be constructed as permanent additions to the long-term vibrancy of the town and should serve to exemplify the very best architectural designs and building practices.
- B. Site Prominence:** Designers should consider methods in which to place such buildings above the grade of the surrounding buildings as a means to provide site prominence. Methods to consider include the incorporation of a raised entry from the primary street frontage (while still accommodating NC Accessibility Code requirements) and/or the setback of such buildings to create a formal landscaped area or plaza. Where possible, such buildings shall form a terminating vista down a street or across a civic space whenever possible.
- C. Building Design Elements:** The nature and location of the building should be demonstrated in the architectural design and the detailing. Depending on the expressed architectural style of the building the following elements may be considered for inclusion:

- Pronounced window lintels/sills/muntins/etc.
  - Columns with a capital and a base.
  - A water table made up of large, quality masonry units (such as cut or hew stone) or made of smaller masonry units that extend beyond the face of the façade in order to clearly delineate the water table.
  - Vertically oriented windows of at least 2:1 ratio.
  - Relief in the façade must occur on many levels (the depth of the relief cannot be limited to 1 or 2 patterns repeated).
  - Cornice lines with significant depth and multiple levels of relief.
  - A very well designed entry way, including doors at the main entry that are monumental (taller, larger, heavier, more ornately designed, etc. than normal).
  - A tower element of some nature.
- D. High Quality Materials:** Acceptable exterior primary wall materials for such buildings include brick, stacked stone, lap siding (cementitious fiber board), stucco, stone/stone masonry units, and architectural concrete masonry units (CMU). Exterior insulation finishing systems (EIFS) may be used as a secondary building material. Under no circumstances shall unfinished concrete block be permitted. No vinyl or metal siding shall be attached to any side of a civic/institutional building that is visible from a public street.
- E. Material Colors:** Facade colors shall be of low reflectance earth tone, muted, subtle, or neutral colors. Building trim may feature brighter colors as an accent material. The use of high-intensity, metallic, fluorescent, day glow, or neon colors shall be prohibited. Variations in color schemes are encouraged in order to articulate entry ways and public amenities so as to give greater recognition to these features.
- F. Submittals:** Color samples shall be provided to the staff at the time of site plan review and prior to renovations, remodeling, facelift, and repainting, along with a description of how and where each color will be used. Colored renderings shall also be required.

**5.5 RESIDENTIAL: DETACHED HOUSE, TOWNHOUSE AND APARTMENT BUILDING**

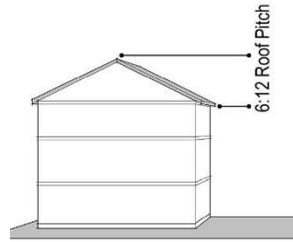
<p><b>DETACHED HOUSE</b>                  This building type is flexible in use accommodating primarily residential uses, home occupations, professional offices, and limited retail uses based on the zoning district in which it is located. In general, within a block, building types should be uniform in their use of driveways or alleys. Variations include setting the building on one of the side property lines.</p> <p><b>Typological Variants:</b>                  Dwelling-Single family                  Dwelling-Duplex (Maximum of 2 doors facing the street)                  Dwelling-Multifamily (Maximum of 2 doors facing the street)                  Manufactured Home                  Commercial Conversion                  Bed and Breakfast</p>	
<p><b>TOWNHOUSE</b>                  The townhouse is a residential building with 3 or more dwelling units that share a common wall. The townhouse typically has one yard (rear) through variations including a small front setback to provide some landscaping.</p> <p><b>Typological Variants:</b>                  Dwelling-Townhome                  Dwelling-Duplex                  Dwelling-Multifamily                  Live-Work</p>	
<p><b>APARTMENT</b>                  The apartment building is a multiple-unit building with dwelling units vertically arranged (generally) and with parking typically located below or behind the buildings. Units may be for rental or for sale in condominium ownership or may be designed as continuing care facilities or dormitories. The ground floor may be available for commercial uses. The Apartment Building typically has one yard (rear) though variations include a small front and side setbacks to provide some landscaping.</p> <p><b>Typological Variants:</b>                  Dwelling-Multifamily                  Mixed-Use Building</p>	

**5.5.1 APPLICABILITY**

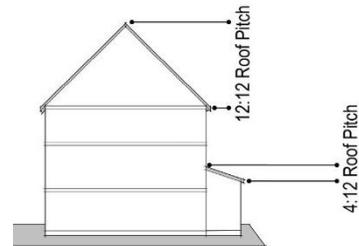
The following standards are applicable to all multifamily structures unless otherwise noted. Single family dwellings, duplexes & townhomes subject to regulation under the North Carolina Residential Code for One and Two Family Dwellings shall be subject to the provisions of 5.5.4.A and 5.5.4.B only (unless located in an area designated as a local historic district, historical district on the National Register of Historic Places, or individually designated as a local, State, or national historic landmark). Voluntary building design standards may be applied to single family dwellings, duplexes & townhome structures upon consent by the owner at the time of Zoning, Master Subdivision, or Master Site Plan approval.

### 5.5.2 ROOFS AND EAVES

- A. Except for residential buildings in the UR and RMX districts, all residential buildings shall have sloped roofs. Flat and shed roofs may be used for the main roof, dormers or above porches, in the UR and RMX districts if approved by the Design Review Board.



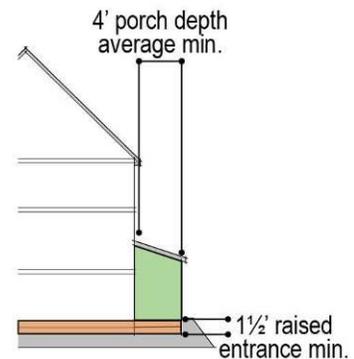
- B. Main roofs on residential buildings shall have a pitch between 6:12 and 12:12. Monopitch (shed) roofs are allowed only if they are attached to the wall of the main building. No monopitch roof shall have a pitch less than 4:12.



- C. Flush eaves shall be finished by profiled molding or gutters.
- D. All rooftop equipment (except small items such as fans and vents) shall be screened from view from the public right-of-way within the block.

### 5.5.3 BUILDING ENTRANCES

- A. **Porches:** Useable porches and stoops are recommended to form a predominant motif of the building design and be located on the front and/or side of the building to respond to the climatic conditions and the vernacular of the area. Front porches, if provided, shall be at least 4 feet in average depth.

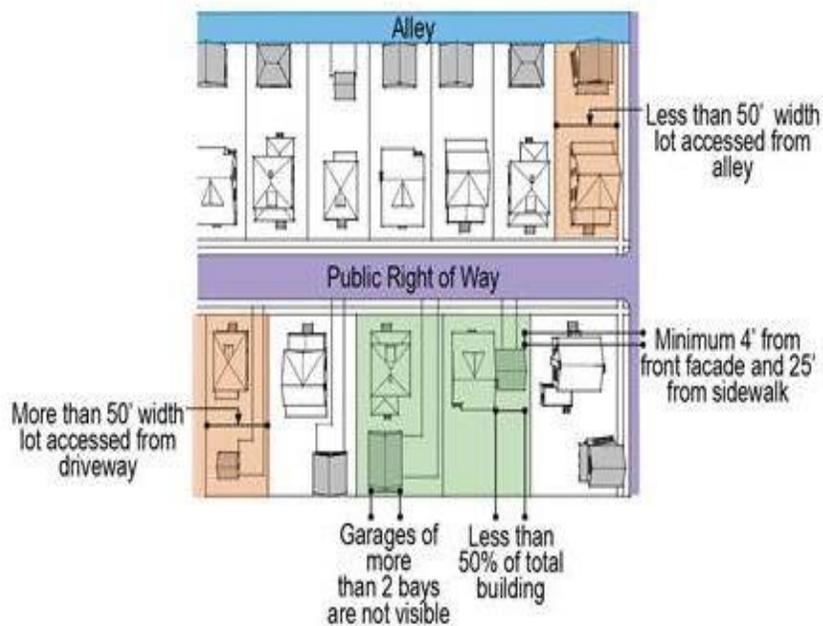


- B. **Raised Entries:** To provide privacy, all residential entrances within 18 feet of the sidewalk paralleling the front property line shall be raised above the average finished grade of the sidewalk a minimum of 1½ feet.

- C. **Visibility/Accessibility:** For residential buildings in developments designed for residents aged 55 and older, there shall be provided 1 zero-step entrance to each building from an accessible path at the front, side, or rear of each building. This does not eliminate the requirements for residential buildings to have raised front entrances unless topographic conditions present no practical alternative.

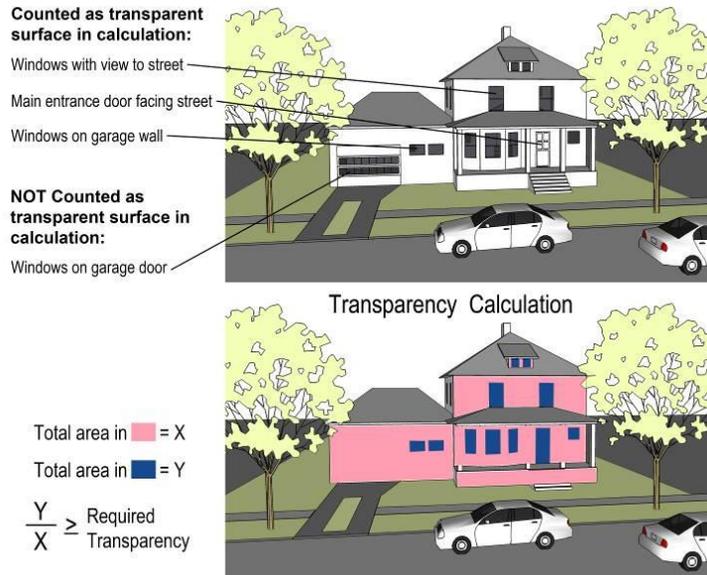
**5.5.4 GARAGES**

- A. For Houses (on lots of 40 feet or less in width):** Garages or off-street parking areas shall be accessed only from an alley. Driveways shall not be permitted to connect to the fronting street. Where topographic or unique site conditions preclude the use of an alley, as determined by the Administrator, a driveway of no more than 12 feet in width may be used to provide access to garages or off-street parking areas in the third layer of the lot only, as defined in Section 9.3. (See illustration below)
- B. For Houses (on lots between 40 feet and 50 feet in width):** One driveway of no more than 12 feet in width may be used to provide access to garages or off-street parking areas. Garages or off-street parking areas shall be located in the third layer of the lot only, as defined in Section 9.3. (See illustration below)
- C. Garage Door Setback from Façade:** Garages with front loading bays shall be recessed from the front facade of the house by a minimum of 4 feet and shall be visually designed to form a secondary building volume. Garage doors shall be setback a minimum of 25 feet from the back of sidewalk. (See illustration below)
- D. Garage Door Width** At no time shall the total width of an attached garage door(s) exceed 50% of the total building façade for lots more than 50 feet in width. (See illustration below)
- E. Extra Bays to Be Turned:** All garages with more than 2 bays shall be turned such that no more than 2 bays are visible from the street. (See illustration below)
- F. For All Townhouses:** Garages or off-street parking areas shall be accessed only from an alley or via a driveway leading to a detached garage or parking area behind the front facade.



### 5.5.5 FAÇADE DESIGN / PERMEABILITY / TRANSPARENCY

At least 15% of the area of each façade that faces a street lot line must be windows or main entrance doors. Windows used to meet this standard must allow views from the building to the street. Glass block does not meet this standard. Windows in garage doors do not count toward meeting this standard, but windows in garage walls do count toward meeting this standard. To count toward meeting this standard a door must be at the main entrance and facing the street property line. (See illustration below)



### 5.5.6 MATERIALS

- A. Building Walls:** Building walls (including accessory structures greater than 144 square feet) shall be primarily clad in wood clapboard, cementitious fiber board, wood shingle, wood drop siding, primed board, wood board and batten, brick, stone, stucco, or synthetic materials similar and/or superior in appearance and durability. Vinyl may only be used on buildings that are no closer than 20 feet from the next closest building and that do not contain mixed occupancy or multifamily dwelling units and not located in an area designated as a local historic district, historical district on the National Register of Historic Places, or individually designated as a local, State, or national historic landmark. The primary materials used for building walls should reflect the context of the surrounding area or neighborhood.
- B. Roof Materials:** Residential roofs shall be clad in wood shingles, standing seam metal, terne, slate, asphalt shingles or synthetic materials similar and/or superior in appearance and durability. The primary materials used for roofs should reflect the context of the surrounding area or neighborhood.
- C. Material Colors:** Facade colors should reflect the context of the surrounding area and should generally be of low reflectance earth tone, muted, subtle, or neutral colors. Variations in color schemes are encouraged in order to articulate entry ways and public amenities so as to give greater recognition to these features. This paragraph shall not apply to detached houses or townhomes.
- D. Submittals:** Color samples shall be provided to the staff at the time of site plan review and prior to renovations, remodelings, facelift, and repainting, along with a

description of how and where each color will be used. Colored renderings shall also be required.

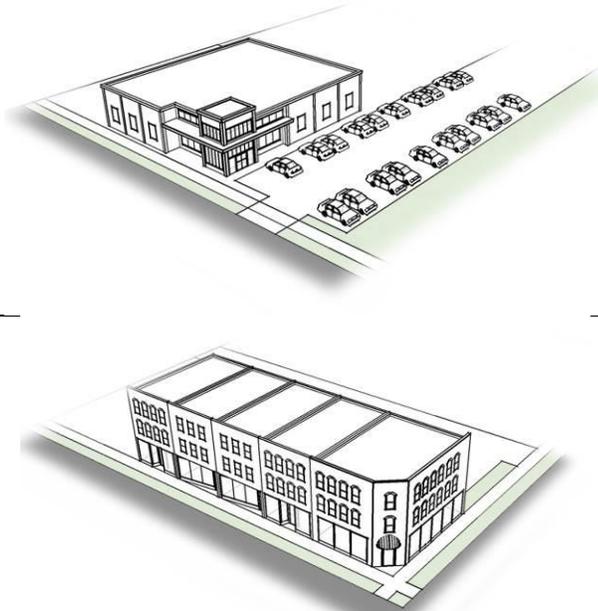
## 5.6 COMMERCIAL BUILDINGS IN URBAN DISTRICTS

**COMMERCIAL BUILDINGS**

The commercial building is a structure with a high percentage of its ground level façade in transparent fenestration (windows and doors) to encourage pedestrian activity along its frontage. The Commercial Building typically has one yard (rear) though variations include a small front plaza or courtyard to provide public space for outdoor seating as well as a building with complete lot coverage where parking is handled in a manner other than on-site surface parking.

**Typological Variants**

Commercial Building – Neighborhood  
Mixed-Use Building (multi-story)  
Downtown Buildings

**5.6.1 APPLICABILITY**

The following standards are applicable to all commercial buildings in the Urban Districts (UR, RMX, NMX, and UMX) per Chapter 2.2.2 of this Ordinance.

**5.6.2 FACADE MATERIALS**

- A. Materials:** Commercial building walls visible from a public street or civic space shall be primarily brick, stacked stone, stone or stone masonry units, wood clapboard, cementitious fiber board, exposed heavy timber, or architectural concrete masonry units (CMU). Glass curtain walls may be approved subject to Design Review to ensure the styling and details are appropriate for the context. Exterior insulation finishing systems (EIFS) may be used on facades not facing a public street or civic space or as a secondary building material only (less than 25% of the wall area) on primary frontage facades. Under no circumstances shall unfinished concrete block be permitted.
- B. Balance of Wall Materials:** When 2 or more materials are used on a façade, the heavier material shall be placed below the lighter material (e.g., siding over brick) to give the sense of support and grounding.
- C. Material Colors:** Facade colors shall be of low reflectance earth tone, muted, subtle, or neutral colors. Building trim may feature brighter colors as an accent material. The use of high-intensity, metallic, fluorescent, day glow, or neon colors shall be prohibited. Variations in color schemes are encouraged in order to articulate entry ways and public amenities so as to give greater recognition to these features.
- D. Submittals:** Color samples shall be provided to the staff at the time of site plan review and prior to renovations, remodelings, facelift, and repainting, along with a

description of how and where each color will be used. Colored renderings shall also be required.

**5.6.3 GROUND LEVEL DETAILING**

- A. Minimize Blank Walls:** Expanses of blank walls facing streets (excluding rear access drives or alleys) or public civic spaces may not exceed 20 feet in length. (A "blank wall" is a facade that does not contain transparent windows or doors.)
- B. Ground-Level Glazing:** Window glazing and doorways shall be the predominant features in the street-level facade. Exterior burglar bars, fixed "riot shutters," or similar security devices shall not be visible from the public right-of-way. All ground level windows shall provide direct views to the building's interior extending a minimum of 6 feet behind the window.
- C. Transparency Zone:** Glazing that is transparent under all lighting conditions shall extend from a base of contrasting material (not exceeding 4 feet in height above the adjacent grade) to at least the height of the door head. However, spandrel or colored glass may be used above the height of the door head. The table below lists the standards for the required percentage of square footage in the Transparency Zone that must have a glazing treatment.



Commercial Buildings in District	Percentage of Glazing in Transparency Zone	
	Primary Facade	Side Facade
UR, RMX, NMX, RA-HC, UMX	70% min.	50% min.

- D. Glazing to be Dispersed:** Required glazing shall not be aggregated into a single undivided area of glazing treatment. Individual glazing areas shall not span more than 15 linear feet, and must be separated by at least 1 linear foot of contrasting material.
- E. Canopies/Awnings:** A building canopy, awning, or similar weather protection may be provided and should project a minimum of 5 feet from the façade.
- F. Ventilation Grates and Emergency Exit Doors:** Ventilation grates or emergency exit doors located at the first floor level in the building facade, which are oriented to any public street, shall be decorative. Unless otherwise required by the building code, such grates and doors shall be located away from pedestrian spaces (sidewalks and pedestrian paths).

**5.6.4 UTILITIES**

- A. Rooftop Equipment:** All rooftop equipment shall be screened from view to the extent practical. If, due to the topography of the site, a physical screen would not suffice, alternative methods to minimize the negative aesthetics of the otherwise

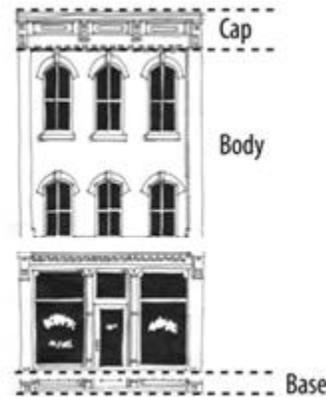
utilitarian equipment (e.g., painting the equipment to match the building) may be approved by the Administrator.

- B. Wall Mounted Equipment:** No wall-mounted building utility service equipment (e.g., electrical house panel boxes) shall be placed on the public street right-of-way side of the building.

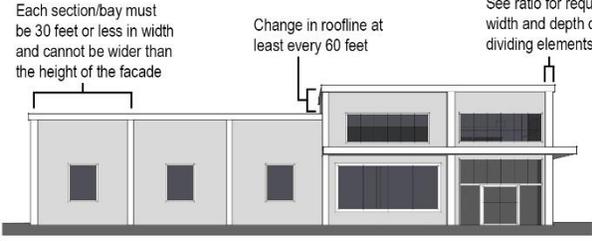
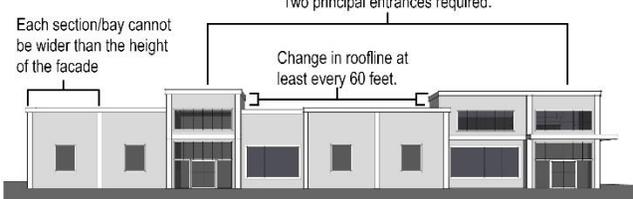
### 5.6.5 FAÇADE ARTICULATION

Articulation involves the horizontal and vertical variation of the façade so that walls are subdivided into bays or sections that are vertically proportioned. The following provisions for façade articulation shall apply to any façade visible from a public street or civic space. For buildings set back more than 200 feet from the street, the standards in this subsection apply only to the primary façade facing the street.

- A. Vertical Elements:** All architectural elevations of principal buildings (over 20 feet in height) visible from a public street or civic space shall have a clearly discernible base, body, and cap. The base shall occupy the lowest portion of the elevation, shall have a height of at least 3 feet, and be constructed of a masonry material. The component described as the body shall constitute a minimum of 50% of the total building height. The cap shall occupy the highest portion of the elevation, excluding the roof, and shall have a dimension that does not exceed the height of the base. The cap shall consist of a cornice, parapet, awning, canopy, eave or other architectural treatment that visually performs in the same manner. The base and cap shall be clearly distinguishable from the body through changes in color, material, pattern, profile, or texture.



- B. Expression of Entries:** Each entryway shall have 1 or more clearly defined, highly visible customer entrance facing the street. The entrance shall feature 1 or more of the following: canopies or porticos, arcades, arches, wing walls, and/or planters
- C. Articulation:** The frontage of buildings shall be divided into architecturally distinct sections or bays with each section taller than it is wide, unless otherwise noted. Sections or bays shall be visually established by architectural features such as columns, ribs, pilasters or piers, changes in plane, or an equivalent element that otherwise visually subdivides the wall through at least 50% of its height. The provisions on the following page shall apply:

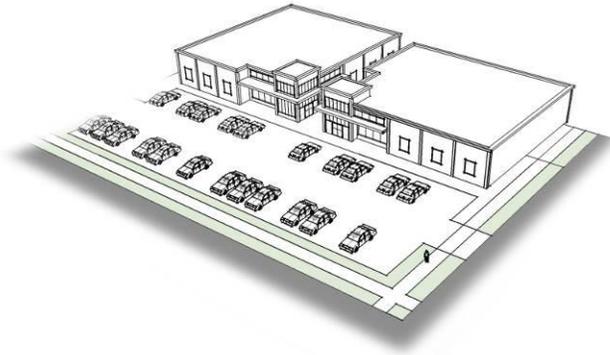
Façade Width/Use Size	Maximum Bay/Section Width	Minimum Type/Depth of Articulation	Rooflines
a. Less than 60 feet	Not Applicable	Not Applicable	Not Applicable
b. 60 feet – 120 feet	30 feet with each section taller than it is wide	At least 1 change in wall plane is required with a minimum depth of 2 feet. No single wall plane may extend more than 80% of the length of the façade. The width of required dividing elements shall be between 1/8 and 1/10 the average height of the adjacent bays. The depth of the required dividing elements shall be at least 1/3 their width.	At least 1 change in roofline every 60 ft
<p style="text-align: center;"><b>Elevation View</b></p> <p>Each section/bay must be 30 feet or less in width and cannot be wider than the height of the façade</p> <p style="text-align: center;">Change in roofline at least every 60 feet</p> <p style="text-align: right;">See ratio for required width and depth of dividing elements</p>  <p style="text-align: center;"><b>Plan View</b></p> <p>See ratio for required width and depth of dividing elements</p> <p style="text-align: right;">At least one change in wall plane of at least 2 feet is required. Each wall plane must extend at least 20% of the total length of the façade.</p> 			
c. Uses greater than 120 feet in width or 100,000 square feet whichever is less	Shall not exceed the height of the façade	No walls may extend more than 25% of the length of that side of the building without a minimum change in plane of 2 feet. A second principal entrance is required along frontage	At least 1 change in roofline every 60 ft
<p style="text-align: center;"><b>Elevation View</b></p> <p>Each section/bay cannot be wider than the height of the façade</p> <p style="text-align: center;">Two principal entrances required.</p> <p style="text-align: center;">Change in roofline at least every 60 feet.</p>  <p style="text-align: center;"><b>Plan View</b></p> <p style="text-align: right;">At least one change in wall plane of at least 2 feet is required. Each wall plane must extend at least 25% of the total length of the façade.</p> 			

**5.7 COMMERCIAL BUILDINGS IN RURAL AND SUBURBAN DISTRICTS****COMMERCIAL BUILDINGS**

The commercial building is a structure with a high percentage of its ground level façade in transparent fenestration (windows and doors) to encourage pedestrian activity along its frontage. The Commercial Building typically has one yard (rear) though variations include a small front plaza or courtyard to provide public space for outdoor seating as well as a building with complete lot coverage where parking is handled in a manner other than on-site surface parking.

**Typological Variants**

Commercial Building – Neighborhood  
Commercial Building – Highway Commercial

**5.7.1 APPLICABILITY**

The following standards are applicable to all commercial buildings in the Rural and Suburban Districts (NB and HB) per Chapter 2.2.5 of this Ordinance.

**5.7.2 FACADE MATERIALS**

- A. Materials:** Commercial building walls visible from a public street or civic space shall be primarily brick, stacked stone, stone or stone masonry units, wood clapboard, cementitious fiber board, exposed heavy timber, or architectural concrete masonry units (CMU). Glass curtain walls may be approved subject to Design Review to ensure the styling and details are appropriate for the context. Exterior insulation finishing systems (EIFS) may be used on facades not facing a public street or civic space or as a secondary building material only (less than 25% of the wall area) on primary frontage facades. Under no circumstances shall unfinished concrete block be permitted.
- B. Balance of Wall Materials:** When 2 or more materials are used on a façade, the heavier material shall be placed below the lighter material (e.g., siding over brick) to give the sense of support and grounding.
- C. Material Colors:** Facade colors shall be of low reflectance earth tone, muted, subtle, or neutral colors. Building trim may feature brighter colors as an accent material. The use of high-intensity, metallic, fluorescent, day glow, or neon colors shall be prohibited. Variations in color schemes are encouraged in order to articulate entry ways and public amenities so as to give greater recognition to these features.
- E. Submittals:** Color samples shall be provided to the staff at the time of site plan review and prior to renovations, remodelings, facelift, and repainting, along with a description of how and where each color will be used. Colored renderings shall also be required.

**5.7.3 GROUND LEVEL DETAILING**

- A. Minimize Blank Walls:** Expanses of blank walls facing streets (excluding rear access drives or alleys) or public civic spaces may not exceed 20 feet in length. (A

"blank wall" is a facade that does not contain transparent windows, doors, or façade articulation.)

- B. Ground-Level Detailing:** Window glazing, doorways, and façade articulations shall be the predominant features in the street-level facade. Exterior burglar bars, fixed "riot shutters," or similar security devices shall not be visible from the public right-of-way. At least Sixty percent (60%) of the ground level windows shall provide direct views to the building's interior extending a minimum of 6 feet behind the window.
- C. Transparency Zone:** Glazing that is transparent under all lighting conditions shall extend from a base of contrasting material (not exceeding 4 feet in height above the adjacent grade) to at least the height of the door head. However, spandrel or colored glass may be used above the height of the door head. The table below lists the standards for the required percentage of square footage in the Transparency Zone that must have a glazing treatment.



Commercial Buildings in District	Percentage of Glazing in Transparency Zone	
	Primary Facade	Side Facade
NB, HB*	50% min.	40% min.
Uses greater than 100,000 square feet*	40% min.	30% min.

*\* Up to 15% of the required glazing may be located outside of the required transparency zone for buildings with floor plans that cannot strictly comply with these requirements, as approved by the Administrator.*

- D. Glazing:** Required glazing shall not be aggregated into a single undivided area of glazing treatment. Individual glazing areas shall not span more than 15 linear feet, and must be separated by at least 1 linear foot of contrasting material, unless approved by the Design Review Board.
- E. Canopies/Awnings:** A building canopy, awning, or similar weather protection may be provided and should project a minimum of 5 feet from the façade.
- F. Ventilation Grates and Emergency Exit Doors:** Ventilation grates or emergency exit doors located at the first floor level in the building facade, which are oriented to any public street, shall be decorative. Unless otherwise required by the building code, such grates and doors shall be located away from pedestrian spaces (sidewalks and pedestrian paths).

**5.7.4 UTILITIES**

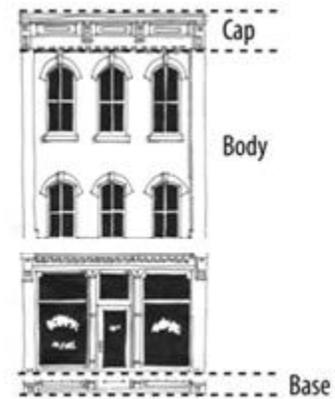
- C. Rooftop Equipment:** All rooftop equipment shall be screened from view to the extent practical. If, due to the topography of the site, a physical screen would not suffice, alternative methods to minimize the negative aesthetics of the otherwise utilitarian equipment (e.g., painting the equipment to match the building) may be approved by the Administrator.

- D. Wall Mounted Equipment:** No wall-mounted building utility service equipment (e.g., electrical house panel boxes) shall be placed on the public street right-of-way side of the building.

### 5.7.5 FAÇADE ARTICULATION

Articulation involves the horizontal and vertical variation of the façade so that walls are subdivided into bays or sections that are vertically proportioned. The following provisions for façade articulation shall apply to any façade visible from a public street or civic space. For buildings set back more than 200 feet from the street, the standards in this subsection apply only to the primary façade facing the street.

- D. Vertical Elements:** All architectural elevations of principal buildings (over 20 feet in height) visible from a public street or civic space shall have a clearly discernible base, body, and cap. The base shall occupy the lowest portion of the elevation, shall have a height of at least 3 feet, and be constructed of a masonry material. The component described as the body shall constitute a minimum of 50% of the total building height. The cap shall occupy the highest portion of the elevation, excluding the roof, and shall have a dimension that does not exceed the height of the base. The cap shall consist of a cornice, parapet, awning, canopy, eave or other architectural treatment that visually performs in the same manner. The base and cap shall be clearly distinguishable from the body through changes in color, material, pattern, profile, or texture.



- E. Expression of Entries:** Each entryway shall have 1 or more clearly defined, highly visible customer entrance facing the street. The entrance shall feature 1 or more of the following: canopies or porticos, arcades, arches, wing walls, and/or planters
- F. Articulation:** The frontage of buildings shall be divided into architecturally distinct sections or bays with each section taller than it is wide, unless otherwise noted. Sections or bays shall be visually established by architectural features such as columns, ribs, pilasters or piers, changes in plane, or an equivalent element that otherwise visually subdivides the wall through at least 50% of its height. The following provisions on the following page shall apply:

Façade Width/Use Size	Maximum Bay/Section Width	Minimum Type/Depth of Articulation	Rooflines
d. Less than 60 feet	Not Applicable	Not Applicable	Not Applicable
e. 60 feet – 120 feet	30 feet with each section taller than it is wide	At least 1 change in wall plane is required with a minimum depth of 2 feet. No single wall plane may extend more than 80% of the length of the façade. The width of required dividing elements shall be between 1/8 and 1/10 the average height of the adjacent bays. The depth of the required dividing elements shall be at least 1/3 their width.	At least 1 change in roofline every 60 ft

**Elevation View**

Each section/bay must be 30 feet or less in width and cannot be wider than the height of the façade

Change in roofline at least every 60 feet

See ratio for required width and depth of dividing elements

**Plan View**

See ratio for required width and depth of dividing elements

At least one change in wall plane of at least 2 feet is required. Each wall plane must extend at least 20% of the total length of the façade.

f. Uses greater than 120 feet in width or 100,000 square feet whichever is less	Shall not exceed the height of the façade	No walls may extend more than 25% of the length of that side of the building without a minimum change in plane of 2 feet. A second principal entrance is required along frontage	At least 1 change in roofline every 60 ft
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**Elevation View**

Each section/bay cannot be wider than the height of the façade

Two principal entrances required.

Change in roofline at least every 60 feet.

**Plan View**

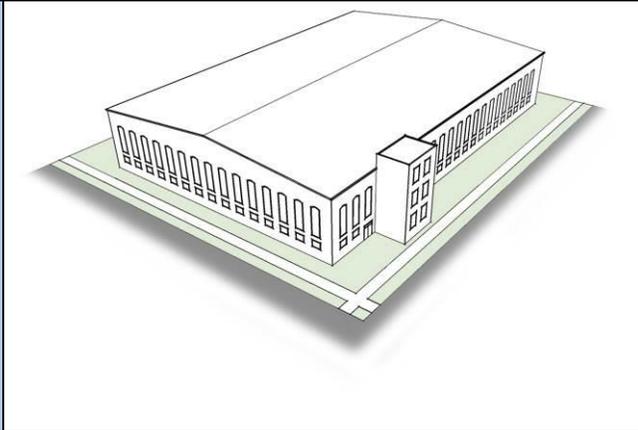
At least one change in wall plane of at least 2 feet is required. Each wall plane must extend at least 25% of the total length of the façade.

**5.8 INDUSTRIAL BUILDINGS****INDUSTRIAL BUILDINGS**

Industrial buildings are expected to be utilitarian in design to accommodate a wide range of internal activities that range from heavy machinery to storage. The industrial building typically has 4 yards (front yard; 2 side yards; and rear yard) to allow for site landscaping to soften the often long expanses of wall that are typical to this type.

**Typological Variants**

Industrial – Historic (multi-story)  
Industrial Warehouse – New

**5.8.1 APPLICABILITY**

The following standards are applicable to all industrial buildings.

**5.8.2 FACADE MATERIALS & COLORS**

- A. Materials:** Industrial building walls shall be predominantly brick, stucco, architectural concrete masonry units (CMU), or EIFS. Vinyl or metal sheeting is prohibited on the front elevations and any side elevations within 20 feet of the front elevation. Under no circumstances shall unfinished concrete block be permitted.
- B. Material Colors:** Facade colors shall be of low reflectance earth tone, muted, subtle, or neutral colors. Building trim may feature brighter colors as an accent material. The use of high-intensity, metallic, fluorescent, day glow, or neon colors shall be prohibited. Variations in color schemes are encouraged in order to articulate entry ways and public amenities so as to give greater recognition to these features.
- C. Submittals:** Color samples shall be provided to the staff at the time of site plan review and prior to renovations, remodelings, facelift, and repainting, along with a description of how and where each color will be used. Colored renderings shall also be required.

**5.8.3 FAÇADE ARTICULATION**

Articulation involves the horizontal and vertical variation of the façade so that walls are subdivided into bays or sections that are vertically proportioned. The following provisions for façade articulation shall apply to any façade visible from a public street or civic space. For buildings set back more than 200 feet from the street, the standards in this subsection apply only to the primary façade facing the street.

**A. Articulation**

1. The frontage of buildings shall be divided into architecturally distinct sections or bays with each section taller than it is wide.
2. Sections or bays shall be visually established by architectural features such as columns, ribs, pilasters or piers, recesses, projections, windows, awnings, arcades or an equivalent element that visually subdivides the wall with a roof or

cap feature that provides a rational terminus and integrates with the overall design of the façade.

3. The width of required dividing elements shall be between 1/8 and 1/10 the average height of the adjacent bays. The depth of the required dividing elements shall be at least 1/3 their width.

#### 5.8.4 ROOFTOP EQUIPMENT

All rooftop equipment shall be screened from view to the extent practical given the varied topography of Wake Forest. If, due to the topography of the site, a physical screen would not suffice, alternative methods to minimize the negative aesthetics of the otherwise utilitarian equipment (e.g., painting the equipment to match the building) may be approved by the Administrator.

### 5.9 MANUFACTURED HOMES

#### 5.9.1 APPLICABILITY

All manufactured homes permitted shall comply with the requirements of 5.3 above (unless the standards below conflict and shall therefore take precedence) and must comply with the standards established by the United States Department of Housing and Urban Development under the National Manufactured Housing Construction and Safety Act of 1974, 42 U.S.C. § 5401, et seq and that satisfies each of the following additional criteria:

#### 5.9.2 STANDARDS

- A. The manufactured home is set up in accordance to the standards set by the North Carolina Department of Insurance in the current edition of the North Carolina Regulations for Manufactured Homes, including, but not limited to, all footings, supporting piers, anchors, and tie downs.
- B. The tongue, axles, running lights and removable towing apparatus must be removed prior to the issuance of a certificate of occupancy.
- C. The manufactured home shall be attached to a permanent foundation of brick, stone, concrete, framing or block that is unpierced except for required ventilation and access as required by the North Carolina State Building Code or for flood hazard construction. If the masonry foundation is not brick, stone, or architectural concrete block it shall be parged (coated with a mortar-like finish) on the visible side.
- D. The pitch of the roof of the manufactured home has a minimum vertical rise of 3 inches for every 12 inches of horizontal run.
- E. The roof must be covered with a material that is customarily used on site-built dwellings. Aluminum or metal roofing is not permitted unless standing seam metal roofing or metal shingles are utilized.
- F. The roof shall have a minimum eave projection and roof overhang of 6 inches, not including the gutter.
- G. Exterior siding shall be of a material customarily used on site-built dwellings which does not have a high gloss finish, such as wood, conventional vinyl or metal siding, brick, stucco or similar materials. Smooth, ribbed or corrugated metal or plastic panels are not permitted.

- H. Stairs, porches, entrance platforms, ramps, and other means of entrance and exit to and from the home are installed in accordance with the requirements of the North Carolina State Building Code, attached firmly to the primary structure, and anchored securely to the ground.
- I. Other than those within the manufactured home itself, all installations of plumbing and electrical wiring and all gas and oil appliances shall comply with the provisions of the building, plumbing, electrical, heating, and gas regulations of the North Carolina State Building Code.
- J. The length of the home shall not exceed 4 times the width, excluding additions.
- K. Architectural and aesthetic standards specified in this section shall be applicable to all additions.
- L. At the main entrance door there shall be an entryway transition, such as a porch or stoop, that is a minimum 6 feet by 6 feet.
- M. The manufactured home must contain a minimum of 900 square feet of enclosed living space.
- N. Empty liquefied petroleum gas containers and other objects and materials not approved by the Wake Forest Fire Department shall not be stored under manufactured homes.
- O. The siding color shall be compatible with the immediate neighborhood and shall not have a reflectivity exceeding that of white paint.

It is the intent of these criteria to ensure that a Class A Manufactured Home, when installed, shall have substantially the appearance of an on-site, conventionally built, single-family home.

## 5.10 DISCRETIONARY REVIEW STANDARDS

The requirements of this chapter are intended to facilitate a wide variety of uses in close proximity to one another through the use of detailed design standards that address the key considerations of the pedestrian realm. That is, their primary focus is on the ground floor and those portions of the building that are most readily visible to a typical pedestrian. A secondary focus is the overall aesthetic of community and the visual perceptions that encourage a vibrant economy. The general standards noted below are intended to be used by the Design Review Board in their review of those applications that require additional review beyond the detailed building type design provisions found in the subsequent sections. Each application shall be considered unique to the sponsoring applicant and location and therefore shall not be bound by previous decisions as precedents.

### 5.10.1 CONFORMITY TO THE COMMUNITY PLAN PRINCIPLES FOR BUILDING AND SITE DESIGN

- A. New, expanding, or improved businesses should employ architectural standards consistent with Wake Forest's architectural character and should avoid standard prototype designs otherwise employed in "Anywhere, USA".
- B. Exceptional locations, views and vistas in the town should receive exceptional treatment and/or protection in design and development.
- C. Noteworthy buildings, important outdoor spaces, objects of historic merit, important monuments, and significant works of art should be placed in positions of visibility and prominence. Their placement should be coordinated with street design.

- D. Significant natural and existing man-made elements should be incorporated into the thematic design of new developments.
- E. Large trees, ponds, creeks, or other natural features of the landscape should be saved when locating new streets, buildings, parking lots, etc.
- F. Community character should be supported by development that is compatible when considered within the context of the surrounding area.
- G. Exterior lighting should be attractive, functional and safety conscious, while also avoiding negative impacts on the night sky visibility of Wake Forest.

### 5.10.2 DESIGN AND CONSTRUCTION EXCELLENCE

All buildings should be constructed as permanent additions to the long-term vibrancy of the town and should serve to exemplify the very best architectural designs and building practices.

### 5.10.3 MATERIALS & COLORS

- A. **Building Materials:** The predominant material palette for non-residential structures in Wake Forest is brick. Other acceptable exterior primary wall materials for such buildings include stacked stone, lap siding (cementitious fiber board), stucco, stone/stone masonry units, and architectural concrete masonry units (CMU). Exterior insulation finishing systems (EIFS) may be used as a secondary building material. Under no circumstances shall unfinished concrete block be permitted. No vinyl or metal siding shall be attached to any side of a civic/institutional building that is visible from a public street.
- B. **Material Colors:** Facade colors shall be of low reflectance earth tone, muted, subtle, or neutral colors. Building trim may feature brighter colors as an accent material. The use of high-intensity, metallic, fluorescent, day glow, or neon colors shall be prohibited. Variations in color schemes are encouraged in order to articulate entry ways and public amenities so as to give greater recognition to these features.
- C. **Submittals:** Color samples shall be provided to the staff at the time of site plan review and prior to renovations, remodelings, facelift, and repainting, along with a description of how and where each color will be used. Colored renderings shall also be required.

### 5.10.4 COMPATIBILITY

- A. All development subject to this section shall be compatible with the established architectural character of the town by using a design that is complementary to existing town architectural styles, designs, and forms. As a means to provide guidance for the design of buildings that integrate well into the context of Wake Forest, this section has identified 8 key features necessary to ensure compatibility:

- 1. Street Frontage:** Along residential side streets, limit interruptions to front setback landscaping. A key way of achieving this is by preserving existing front yard landscaping and minimizing the amount of frontage devoted to paved vehicle areas.

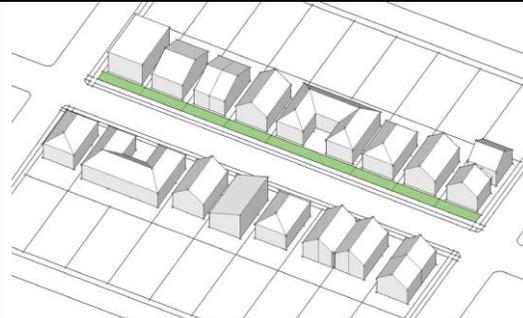


Image Source: The Infill Design Toolkit: Medium-Density Residential Development  
City of Portland Bureau of Planning, December, 2008

- 2. Rhythm Of Development Along The Street:** Continue established building rhythms along street frontages. Avoid monolithic massing that disrupts fine-grain neighborhood or mixed-use corridor pattern.

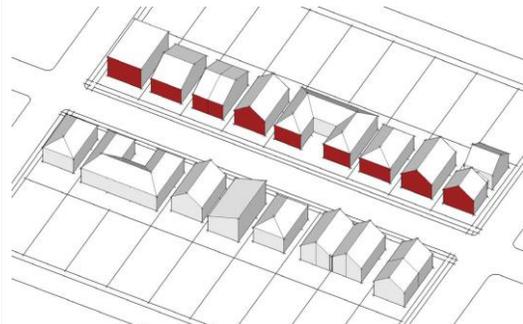


Image Source: The Infill Design Toolkit: Medium-Density Residential Development  
City of Portland Bureau of Planning, December, 2008

- 3. Building Frontages:** Along street frontages, orient windows, main entrances, and other primary building façade elements toward the street. Care should be taken to avoid the appearance of buildings turning their backs or sides toward the street. Courtyard buildings can contribute to this by orienting main entrances toward courtyards that serve as a semi-public extension of the public realm of adjacent streets.

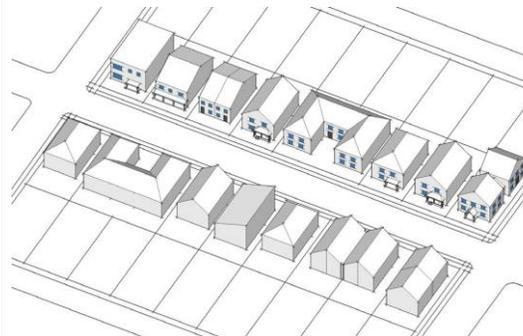


Image Source: The Infill Design Toolkit: Medium-Density Residential Development  
City of Portland Bureau of Planning, December, 2008

- 4. Front Setback Patterns:** Continue established building setback patterns, where this is a neighborhood priority and is practical. Note: Deep front setbacks can compromise the ability to provide backyard space and/or rear parking, particularly at higher densities.

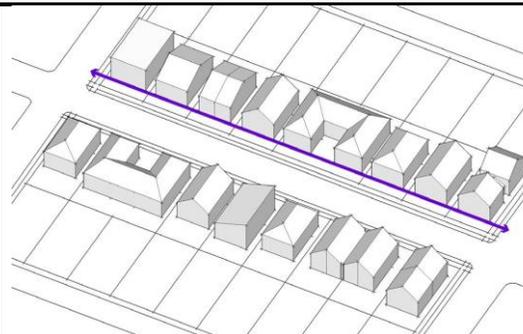
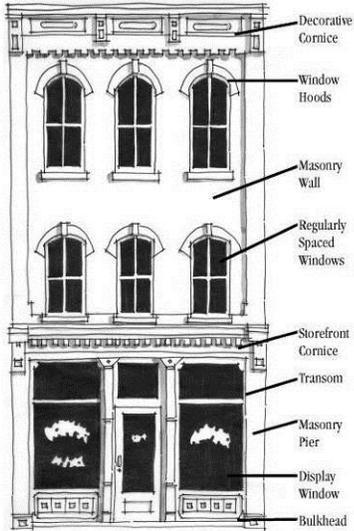


Image Source: The Infill Design Toolkit: Medium-Density Residential Development  
City of Portland Bureau of Planning, December, 2008

<p><b>5. Landscaping And Trees:</b> Use landscaping and trees to achieve compatibility in areas where these are unifying elements of community character.</p>	
<p><b>6. Viewshed Protection:</b> Important vistas and views of the Southeastern Baptist Theological Seminary's church steeple shall be protected and accentuated to the extent practical.</p>	
<p><b>7. Architectural Features:</b> Consider designing buildings to respond to prevalent architectural features of the surrounding context, especially in areas where patterns established by recurring architectural features are well-documented and valued. Consideration should also be given to avoid mimicry of existing buildings, so that opportunities for the continuation of the evolution of architectural style are not stifled.</p>	
<p><b>8. Street Vistas:</b> Important street vistas (such as along town gateways and primary pedestrian streets) should terminate in a focal point, such as a building or other architectural or landscape feature.</p>	