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# **Introduction**

#### Statement of Purpose

Neighborhood commercial districts in the older sections of Pittsburgh have a visual continuity and interest that result from being built according to a traditional design formula. When most of these districts were developed, in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries, commercial buildings shared a number of important characteristics that made them parts of a larger, interrelated whole. The consistency of the commercial building tradition produced a unity of appearance that defined and enhanced the shopping experience, and strengthened the visual character and image of the commercial districts.

The purpose of these Design Guidelines is to provide basic standards for maintaining, improving, and/or restoring these characteristics in neighborhood commercial districts of the city of Pittsburgh. Adherence to these standards will make business districts more attractive and inviting to potential new businesses and shoppers.

#### Administration

These Design Guidelines are part of the administration of the Storefront Facade Program. All facade improvements funded through this program must comply with these Guidelines. The Storefront Facade Program is administered by the staff of the Urban Redevelopment Authority. In some cases, when a building is historic, there will be an additional review by the staff of the Department of City Planning and/or the Pittsburgh Historic Review Commission. For historic information, call the Department of City Planning at (412) 255-2243.



Figure 1. Intact neighborhood commercial buildings



Figure 2. A mix of historic and remodeled storefront buildings



**Figure 3.** A typical traditional commercial building

# **General Principles**

#### Commercial Building Design

Traditional commercial buildings of the 19<sup>th</sup> and early 20<sup>th</sup> centuries (Figure 3) are the cornerstones of Pittsburgh's neighborhood business districts. These buildings are typically two- to four-story brick structures with a storefront on the first floor, smaller uniformly-arranged windows in the upper stories, and a decorative cornice at the roofline. The storefront is usually framed by brick or stone side walls and an elaborate horizontal cornice or lintel above the storefront windows. The basic principle in the original design of the storefront was to make it as transparent as possible by using as large an expanse of glass as possible.

Transom windows above the display windows provided as much daylight as possible inside the store, which was important in a period when interior light fixtures were not very efficient. Store entrances were usually recessed behind

the plane of the facade, and secondary doorways opened to stairs that led to the apartments on the upper floors. The lintel or cornice separates the storefront from the simpler upper floors, in which the masonry wall is usually broken only by the windows and their decorative frames (if any). The architectural style of the building derives only in small part from the design of the storefront itself. Instead, it manifests itself mostly in the design of the window frames and moldings and of the building's cornice.

Commercial buildings that were built in the mid-20th century (Figure 4) are often shorter, one- or two-story buildings with a storefront at the first floor. Although an occasional commercial building from this period is decorated, for the most part they bear little or no ornamentation. They relate to the earlier commercial buildings by the expanse of glass that marks their storefronts.

Only in recent decades have building owners and tenants rejected the standard principles of storefront building design that guided the builders of Pittsburgh's commercial districts in the past. In an attempt to compete with the suburban commercial districts that sprang up after World War II, merchants and owners often copied



Figure 4. A typical mid-20th century commercial building

elements from shopping center and highway strip commercial design, however inappropriate they may have been for traditional urban settings. Some covered storefronts (and sometimes



**Figure 5.** Inappropriate remodeling: inauthentic Tudor details added to a Greek Revival building

construction. In other words, the very qualities that made Pittsburgh's neighborhood commercial districts distinctive and attractive were tossed aside in the course of inappropriate and expedient alterations to the buildings in those districts.

The goal of these Design Guidelines is to recover and emphasize the distinctive design characteristics of the traditional commercial buildings in Pittsburgh's commercial districts, while restoring the elements that give visual continuity to the shopping areas. The aim is not to create a "Disneyland" effect by imposing a historic theme on all of the buildings. It is explicitly recognized that all things change over time, and buildings must change as the uses that they house change. The crucial point is to accommodate necessary changes while maintaining the valuable qualities of individual buildings and of districts as a whole. This can be achieved by recognizing and appreciating the unique characteristics of each building, capitalizing on the surviving assets of each one, and by reinstating the design formula by which the traditional commercial buildings were originally designed and built.

entire facades) with smooth metal panels. Others pasted inauthentic historic themes – Tudor, Wild West, Oriental - onto their buildings (Figure 5). Still others installed greatly oversized signs, separating the storefronts from the upper facades. The transom windows of many storefronts were covered up, display windows were reduced in size, and upper-story windows boarded up or bricked in, often with materials such as plywood, cedar shakes, synthetic stone, and metal panels (Figure 6). None of these changes were cost-effective or aesthetically successful. They ignored the assets of the traditional commercial buildings: their oneof-a-kind designs, their ornamental character, and the quality of their materials and



Figure 6. Inappropriate remodeling: closing up storefronts and windows, covering transom windows

### Basic Principles for Renovation

• <u>Keep all original materials and designs</u>. The removal or alteration of original building materials or distinctive architectural features should be avoided whenever possible, especially if they are important in defining the overall historic or visual character of a building. If the materials and features are original and in serviceable repair, they should be maintained as they are.

- Repair is the first priority. Deteriorated materials and architectural features should be repaired, rather than replaced, whenever possible. Proper maintenance should be the overall goal.
- Replacements should match originals. Any material and/or architectural feature that is too deteriorated to repair should be replaced with an exact duplicate, or with a substitute material or feature that looks the same (if replacement with the same materials is not technically or economically feasible). The appearance of the replacement should match the appearance of the original material or feature.
- **Design new features to fit with the old.** New features that are designed and installed to replace original features that are completely missing should either be:
  - an accurate restoration of the original features (based on photographs, drawings, or physical evidence), or
  - (2) new designs that are compatible with the scale, material, and color of the historic buildings (even though they may be constructed with modern materials and details).
- **Do not disguise the building.** All buildings and structures are products of the design and construction methods of their own time. All buildings were designed, and the original design is almost always the best design for the building. Alterations that attempt to make a building look older or newer than it is, or that try to change the architectural style of the building (such as in Figure 5), should be avoided.
- <u>Keep all good work from the past</u>. Later additions to an old building, or remodeled facades or storefronts (especially Carrara glass facades from the 1930s and 1940s), may have gained significance in their own right as examples of historical changes to the building. If so, these additions or alterations to the original building should be recognized, respected, and retained (such as in Figure 7).
- **Do not change the openings.** Original window openings should not be altered on the principal façade(s) of a building, because enlarging, reducing the size, or eliminating openings can dramatically alter the appearance and character of a building.
- **Do not cover the building up.** Original building materials and architectural features should not be covered by other materials, in an attempt to change the design of the building or reduce maintenance costs. Instead, the original design of the building and quality materials and craftsmanship should be emphasized.



**Figure 7.** Significant Art Deco storefront from the 1930s, added to a Victorian building

• <u>Clean the building carefully</u>. The cleaning of buildings should be undertaken by the gentlest means possible. Often, cleaning with household detergents and scrub brushes is sufficient. Do not sandblast or use other abrasive cleaning methods to clean the exterior of a building, since these methods will damage the original building materials and make the building vulnerable to further deterioration.

# **Storefront Renovations**

The design guidelines for renovation of storefronts vary, depending on the age of the building and the current condition of the storefront:

- (1) a traditional (historic) commercial building with an original storefront that is intact;
- (2) a traditional (historic) commercial building with an original storefront that has been altered;
- (3) a traditional (historic) commercial building that has lost its original storefront completely;
- (4) a newer (non-historic) commercial building (built after 1940);
- (5) a building that was not originally designed as a storefront commercial building (for instance, a residence or a theater)
- (1) Existing Historic Storefront: If the original storefront and distinctive features of a commercial building built before 1940 are still intact, they shall be retained, and repaired if necessary (see storefront renovation guidelines on page 8).
- (2) and (3) <u>Historic Storefront Altered or Missing</u>: If the original storefront and distinctive features of a commercial building built before 1940 are dramatically altered or completely missing, either of two approaches may be taken:
  - a) the original storefront may be reconstructed if its appearance can be documented through photographs or drawings (Figure 8); or
  - b) a new storefront may be constructed, compatible with the design of the building, according to the storefront design guidelines. However, if the current storefront is a high-quality alteration of the original that has attained an historical significance of its own (such as an Art Deco storefront), it shall be retained, and repaired if necessary (Figures 7 and 9).

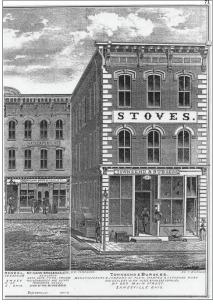


Figure 8. 19th century print of original building design

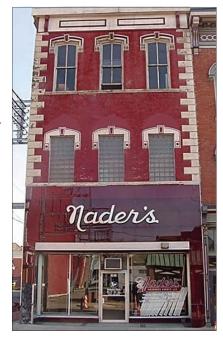


Figure 9. The same building today, remodeled with a significant later storefront

- (4) <u>Non-Historic Storefront (Existing or Altered)</u>: If the commercial building in question was built after 1940, it will be considered non-historic. The storefront of a non-historic commercial building may be treated in either of two ways:
  - a) the existing storefront may be repaired, to match its present appearance, if it is compatible with the commercial district and is of high-quality design and materials; or
  - b) a new storefront may be constructed, according to the storefront design guidelines.
- **(5)** <u>Building Without a Storefront:</u> If the building in question was not designed or originally intended for storefront commercial use (such as a residence, a theater, etc.) it may be treated in either of two ways:
  - a) if the building is historically important, or if it has a distinct historical character, or if it is of a high architectural quality, it shall be renovated with as few changes to the exterior as possible to accommodate the new use (that is, a full storefront should probably not be inserted into the façade); or
  - b) if the building does not have a distinct historical character or if it is of low architectural quality, it may be altered according to the storefront design guidelines (that is, a full storefront could be inserted into the façade).

#### Storefront Renovation Guidelines

Storefronts were traditionally simple in design: large expanses of glass in display windows, transom windows, and doors, opened up the interior to view and to light. The display windows spanned from one exposed brick or stone side wall to the other (unless there was also an entrance door to the upper floors), and from bulkhead panels at ground level up to the lintel or cornice that supported the brick wall above. The storefront was seldom ornamented; ornament was usually limited to the cornice over the storefront and to the upper façade.

- Retain original materials and features. Original materials and features of the storefront (which may still exist under recent remodelings) shall not be removed or destroyed. If it is impossible to repair them, they shall be replaced with the same material or one that matches the original visually.
- Remove unhistorical alterations. Alterations with no historical basis, or which seek to create an appearance that the building and its storefront were built earlier than they actually were, should be removed. These include solid infill materials (wood, brick, synthetic stone or stucco, glass block, metal panels, etc.), mansard or pent roofs, solid or colonial doors, small-paned windows, coach lanterns, and panels or signs that cover the transom windows (such as in Figure 5).
- Retain or restore the glass storefront. The open commercial character of the storefront shall be retained, regardless of use, by filling it almost entirely with glass (Figure 11). The storefront shall not be filled in or closed up; instead, other interior

devices to ensure privacy (including but not limited to interior shades, curtains, and opaque glass in transoms) may be employed.

- Retain the location of the main entryway in an intact historic storefront.
- Retain or restore an appropriate door. If the historic character of the storefront remains intact, an appropriate commercial wood-and-glass door shall be installed in the main entrance (if needed). A solid paneled wood door may be installed in the entranceway to a non-commercial use. The design of the doors shall be relatively simple, and shall not be over-decorated or inappropriately "historical" (Figures 15, 16, and 17).



**Figure 10.** Storefront set in structural frame

# New Storefront Design Guidelines

- General Principle: The design of a new storefront may be traditional or contemporary, but in either case it shall be compatible with the character of the building in which it is constructed.
- <u>Location</u>: The storefront shall be designed to fit within the original structural "frame" made up of the side walls and the lintel that spans the storefront opening. It may be set back slightly within the frame, but it shall not be pulled back into the building to create a recessed arcade (Figures 10 and 12).



Figure 11. Storefront filled with glass

- <u>Cornice or Lintel</u>: A lintel, or cornice, shall be provided above the storefront in order to separate it from the upper façade and to provide a signboard for the business (Figures 13 and 14).
- <u>Viewing Zone</u>: The "viewing zone" of the storefront (from two to eight feet above the floor) shall have a minimum of 75% clear glass (excluding entries) for commercial uses and a minimum of 40% clear glass (excluding entries) for service uses. It is desirable that new storefronts be glazed up to the lintel or cornice that ran above the storefront originally (Figures 12 and 15).
- Glazing: Storefront glass (as well as glass in doors) shall include safety glass, in accordance with the requirements of the International Building Code (Chapter 24, section 2406). Reflective, opaque, or heavily-tinted glass shall not be used in the storefront, with the exception that opaque glass may be used in transom windows above the viewing zone in cases where dropped ceilings need to be concealed. However, it is

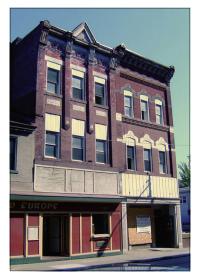


Figure 12. Storefronts with not enough glass (left) or recessed too far (right)



Figure 14. Ornamental storefront cornice



Figure 16. Storefront with recessed entrance



Figure 13. Storefront with signboard cornice



Figure 15. Glass storefront viewing zone



Figure 17. Storefront with commercial wood-and-glass doors

preferable to rework dropped ceilings so that they start several feet back from the storefront, in a vertical or slanted bulkhead.

- Entrances: The main entrance shall be recessed at least three feet from the front plane of the building, in order to visually emphasize the entryway, to accommodate the swing of the door, and to provide shelter from the elements (Figure 16). The floor of the recessed entrance was traditionally covered
  - floor of the recessed entrance was traditionally covered with ceramic tile (often mosaic tile in a decorative pattern) or terrazzo. It will be desirable to restore entrance floors with traditional materials.
- **Doors:** The main entry door into a commercial space should be a traditional wood-and-glass door (especially in an original or new wooden storefront), or it may be a simple metal-and-glass door. In either case, the door shall be commercial in character, with a large panel of clear safety glass (Figures 15, 17, and 19). Secondary doors, including doors that give access to the upper floors, should be either paneled wood or wood-and-glass doors, but not solid metal doors (Figure 18). "Natural" or mill-finish metal doors or pseudo-historic doors shall not be used.
- Materials: Storefronts shall be constructed of high quality, durable materials, similar in type and scale to traditional materials, such as wood, cast iron, structural metal, and glass. The bulkhead panels below the display windows should be made of wood panels, stone slabs, or ceramic tile (Figures 20, 21, and 22). Brick may be used in narrow vertical piers, but only if appropriate to the design of the building. Corrugated metal panels, aluminum or vinyl siding, synthetic stucco, plywood siding, and concrete block shall not be used in storefronts. Storefronts shall not be decorated with half-timbering, shingles, pent roofs, or other pseudo-historical materials or treatments. Glass block is only appropriate in certain "Art Deco" designs from the 1930s and 1940s.

## Upper Façade Renovations

The exterior surfaces of the upper facades of older commercial buildings are usually masonry (brick or stone), with stone, terra cotta, or sheet metal details. It is in these details that the architectural style and character of the buildings is expressed.



Figure 18. Intact storefront with paneled door to upper floors



Figure 19. New storefront designed in accordance with traditional principles



**Figure 20.** Paneled wood bulkhead panels below display windows



Figure 21. Stone bulkheads below display windows



Figure 22. Tiled bulkheads below display windows



**Figure 23.** Commercial building with inappropriate synthetic stone on brick facade

- General Principles: Original materials and features of upper facades shall not be removed or destroyed, but shall be retained and repaired, if possible. If it is impossible to repair them, they shall be replaced with the same material(s) or with material(s) that visually match the original.
- Masonry Exteriors: Upper-floor masonry shall be repaired or replaced to match the appearance of the original materials as closely as possible (including color, texture, size, shape, placement, detailing, and type of joint). Masonry surfaces should be cleaned, if necessary, by the gentlest means possible (water and detergent, or a mild acid, with low-pressure water wash not to exceed 600 psi). Abrasive cleaning methods (such as sandblasting or sanding) shall not be used. Repointing of masonry shall be done with a mortar that matches the original as closely as possible in lime and cement content (high-Portland cement mortars shall not be used with older brick), color, and profile. No waterproofing or water-repellant coatings, artificial siding, stucco, or synthetic stucco material shall be applied over existing masonry. Existing unpainted masonry surfaces shall not be painted (except in certain cases of advanced deterioration) (Figures 23, 24, and 25).
- **Wood:** If the upper facade has wood siding, the wood siding shall be repaired or replaced to match existing (Figure 26). If artificial (aluminum or vinyl) sidings have been installed in the past (over wood or masonry), they shall be removed and the surfaces under them repaired. No artificial siding (aluminum, vinyl, asbestos, asphalt, insulbrick, etc.), shingles, or stucco shall be applied over existing wood siding. All wooden trim and ornament, including cornices and brackets, shall be retained and repaired or replaced to match, if necessary.
- **Roofs:** All mansard roofs shall be repaired or replaced, if necessary, with slate or artificial slate, in a color and pattern to match the original (Figures 27 and 30).
- Window Openings: Original window openings shall not be altered, either by enlargement or by closing them in. All closed-up windows in the front façade shall be reopened to their original sizes and windows re-installed, if part of the overall renovation plan. All enlarged windows in the front facade shall be rebuilt to their original sizes and windows re-installed, if part of the overall renovation plan (Figure 28).
- Windows: Original wood windows shall be retained and repaired, if possible. If the existing windows cannot be repaired, or if the existing windows are inappropriate for the building, they shall be replaced by new windows. In historic districts, all replacement windows in the principal facades shall match the original in material (in most cases, wood). Outside of historic districts, all replacement windows shall be constructed of wood, clad wood, or metal, in that order of preference. All metal windows shall be anodized or painted to match the color of the window trim; a metallic "natural" mill finish shall not be permitted. Regardless of material, all replacement windows shall match the original windows in muntin and pane arrangement and molding profile (Figure 29).



Figure 24. Brick façade cleaned and repointed

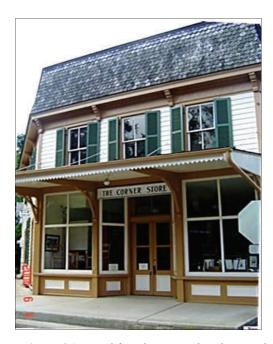


Figure 26. Wood façade restored and painted



Figure 25. Stone trim cleaned and repaired



Figure 27. Mansard roof restored with slate

- Glass: Window glass may be double-glazed (insulated) and clear; reflective and opaque glass, and artificial muntin grids, shall not be permitted. Storm windows shall be installed so as to be inconspicuous (colored to match the window frames, sized to fit the openings, divided like the windows that are being covered).
- <u>Façade lighting</u>: All lighting of the facade of the building shall be done in a discreet manner, using fixtures that are unobtrusive and that have light sources shielded from the public view.

## **Accessories**

Accessory elements – those elements of the building façade that are not part of the permanent structure of the building – can play an important part in the ornamental character of the building. They can also serve the owner and tenant by helping to identify and advertise the business located in the storefront. However, the building façade itself and the display windows should be thought of as the best and most effective sign for the business. Signs should be designed as elements of the building, not as unrelated items merely attached to it, should complement the style of the building, and should be sized to relate to pedestrian, not vehicular, traffic.

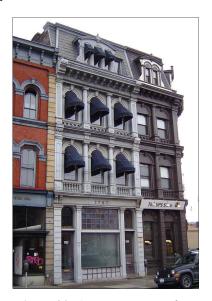
• Awnings: Awnings are always acceptable on the storefront of the building, and may also be installed over all of the upper-floor windows (Figure 30). They shall be sloping and triangular in section, in most cases (arched awnings should be used only over arched openings). They shall be made of canvas or canvas-like materials (not metal), and they shall not have internal illumination (Figures 31 and 32).

#### • Signs:

- (a) <u>Number</u>: A maximum of one wall, one window sign, and one awning sign per first-floor business, and one projecting sign (if permitted) per entrance into a business, shall be permitted per street facade. A maximum of two window signs and one awning sign per upper-floor business shall be permitted.
- (b) <u>Type</u>: Only business and identification signs shall be permitted; advertising signs and mass-produced signs supplied by national distributors shall not be permitted.
- (c) <u>Size</u>: Wall signs shall be a maximum of two square feet in area for every lineal foot of building frontage, up to a maximum of 40 square feet (though they may be limited by district-specific zoning guidelines). Window signs shall be a maximum of 20% of the glazed area of storefront windows in area, or a maximum of 50% of the glazed area of upper-floor windows in area. Awning signs may include one small business identification sign (measuring no more than six inches in height) on the front vertical flap of the awning. Projecting signs, if permitted, shall meet the zoning ordinance in terms of size and placement. For businesses located on a corner and having two street facades, the frontage on each street shall be computed and employed separately for the determination of sign areas.



Figure 28. Inappropriately small replacement windows



**Figure 30.** Awnings over window openings on upper floors



Figure 32. Storefront with awning below transom windows



Figure 29. Wood replacement windows with arched tops to fit openings



Figure 31. Storefront with awning below transom windows



Figure 33. Signboard with individual letters and window signs

- (d) <u>Location</u>: No sign may be placed in such a way as to obscure any architectural feature or ornament. Signs for first-floor businesses shall be located below the sills of the second-floor windows, preferably on the lintel or signboard over the storefront. Signs may be painted onto the insides of the storefront windows. Signs for upper-floor businesses shall be painted onto the insides of the upper-floor windows. No signs shall be located on the roof of the building, nor shall the supports for any sign extend above the cornice of the building.
- (e) <u>Materials</u>: Wall signs shall be painted onto wood, metal, or opaque plastic backboards, or individually-applied letters may be used. Individually-illuminated channel letters, back-lit (silhouetted) letters, neon signs, and signs illuminated by small shielded spotlights may be used. Internally-illuminated plastic-faced box signs, and signs that move, flash or are intermittently illuminated, shall not be permitted. See Figures 33 through 38.
- <u>Security Gates</u>: Security gates shall be installed on the inside of the storefront windows. They shall be a type of gate that can be removed or folded completely back when not in place, and shall be painted so as to be as inconspicuous as possible.

# **Painting**

Historically, wooden and cast iron storefronts were painted to prevent the harmful effects of weathering (moisture, ultraviolet rays from the sun, wind, etc.) as well as to define and accent architectural features. Repainting exterior surfaces is an inexpensive way to provide continued protection from weathering and to give a fresh appearance to the storefront and building façade.

- <u>Basic Guidelines</u>: Existing unpainted masonry surfaces shall remain unpainted (except in certain cases of advanced deterioration). Masonry surfaces that have been painted in the past may be repainted. Exterior masonry, wood, and cast iron surfaces should be prepared properly by removing loose paint by the gentlest means possible (usually scraping or sanding by hand) and by cleaning the surface before applying a primer appropriate to the material and at least two coats of exterior grade paint.
- Colors: Building colors should be considered in relation to the colors of the other buildings in the block and down the street. Buildings should be "good neighbors" and not clash visually with adjacent buildings. Muted colors are preferable to bright ones; primary colors should not be employed except in signs. Color should be used to "tie together" all of the building's parts, including the storefront, windows, doors, and cornice. This can be done by choosing a single body color (or using the color of the existing masonry), a trim color that is a shade lighter or darker than the body color, and (if desired) a third, contrasting color for the ornament. No more than three colors should be used. Aluminum and steel windows, doors, and frames should be painted or anodized in accordance with the overall color scheme for the building. A metallic "natural" mill finish shall not be permitted.
- <u>Historic colors</u>: If a traditional color scheme is desired, the following points should be considered:



Figure 34. Signboard with individual letters and gooseneck lighting



Figure 36. Painted wooden signboard and awning sign



**Figure 35.** Sign in storefront window and projecting sign



Figure 37. Projecting and awning signs



Figure 38. Projecting and banner signs

- a) it may be possible to discover the original color scheme by carefully scraping or sanding an area down to the first coat of paint
- b) in the mid-1800s, soft, neutral tints were popular
- c) in the late 1800s, darker, richer shades of color were in vogue
- d) in the early 1900s, lighter, calmer colors were fashionable
- e) white paint was not widely used in the 19th century

## Green Design / Energy Conservation

The design of the exterior of an older commercial building provides limited scope for the employment of techniques of "green design". However, it can be made more energy-efficient by the use of a number of low-cost, low-technology measures that do not entail any great changes in the appearance of the building, and can achieve substantial savings in heating and cooling costs.

- <u>Upper-floor windows</u>: All upper-floor windows should be repaired so that all of their parts fit together tightly, and all loose or broken glass panes should be reglazed. Windows should be carefully weather-stripped and caulked, to seal the cracks between the sashes and window frames. If new windows are installed, they should be double-glazed (two layers of glass with an air space between) with the highest R-value possible. Storm windows may be installed on the inside or outside of the upper-floor windows.
- **Doors:** All doors should be repaired so that all of their parts fit together tightly, and all loose or broken glass panes should be reglazed. They should be carefully weather-stripped and caulked, to seal the cracks between the door and the frame. If new doors are installed, they should be double-glazed (two layers of glass with an air space between) with the highest R-value possible.
- **Storefront:** Storefront windows should be carefully caulked and sealed. New storefront windows should be double-glazed (two panes of glass with an air-space between) with the highest R-value possible (but at least R-2). Where the sun is a factor, an operable awning should be installed. It can be projected to shade the storefront in the summer, reducing heat gain, and retracted in the winter to allow the sun to penetrate and warm the interior.
- <u>Insulation</u>: All solid surfaces should be insulated, caulked, and sealed to prevent the loss of heated or cooled air to the outdoors. The interiors of bulkhead panels below storefront display windows should be insulated. The first floor should be insulated in order to protect the commercial space from the cold of the basement below. If the building is one story in height, the roof should be substantially insulated to protect the store from both heat and cold. If the upper floors of the building are not in use, the second floor should be temporarily insulated to trap heat on the first floor.

• <u>Paint</u>: Paints should be "Low V.O.C." paints – that is, paints having a low concentration of volatile organic compounds that contribute to air pollution and indoor air quality problems.

## New Construction Design Guidelines

The design of an addition or a new building in an established commercial district is a special and difficult design problem. The appearance of the addition or new building should be compatible with its neighbors. It may be traditional in style, or it can be designed in a contemporary style, as long as it is sensitive to the design of the buildings around it (Figures 39 and 40). This can be achieved by allowing the design of the new building to "grow out of" the designs of its neighbors. Since this means that a good infill structure will respond to its surroundings, it is impossible to develop specific guidelines that will apply in all cases. However, the following general considerations should govern the visual relationship between an infill structure and its neighbors.

- <u>Height</u>: Infill construction should respect the general height of the surrounding buildings. If at all possible, new buildings in neighborhood commercial districts should be more than one story tall.
- <u>Width</u>: An infill structure should reflect the characteristic rhythm of facades along the street. If the building site is large, the new facade can be broken into a number of smaller units or bays.
- **Proportion:** The characteristic proportion, or relationship between height and width, of the existing facades should be repeated.
- Relationship to Street: The new building should set back from the street to the same degree as its neighbors.
- <u>Composition</u>: The composition (organization of the parts) of the façade of the new structure should be similar to that of surrounding facades.



**Figure 39.** New construction: one-story storefront building with traditional storefront design



Figure 40. New construction: Two-story commercial building with traditional design and contemporary materials

• **Rhythm:** Rhythms (including window spacing and location of doors) that carry through the block should be incorporated in the new façade.

- **Proportion of Openings:** The size and proportion of window, door, and storefront openings should be similar to those if adjacent buildings, as should the ratio of window area to solid wall for the façade as a whole.
- <u>Materials</u>: An infill structure should be composed of materials that complement those of adjacent buildings, and which do not stand out among the others.
- <u>Color</u>: The colors chosen for the infill structure should tie it to its neighbors.