Downtown Brockton

Design Guidelines for Buildings



Office of the City Planner, City of Brockton

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Mayor Winthrop H. Farwell, Jr. Nancy Stack Savoie, City Planner

Michael Bolger, Vice President Security Federal Bank

Pedro Bosch, Economic Development Director City of Brockton

Geraldine Creedon, President

City Council

Steven Cruz, Executive Director

Brockton Redevelopment Authority

Mark Egan, Chief Executive Officer

Metro South Chamber of Commerce

Reinald G. Ledoux, Jr., Administrator

Brockton Area Transit

Donald Megathlin, Executive Vice President

21st Century Corporation

Andrew Mimms, Preston Market

Written by Richard Wagner, AIA David H. Gleason Associates, Inc. Baltimore, Maryland.

In association with
Kathleen McCabe
McCabe Enterprises
Boston, Massachusetts
and
Ernest Zupancic
Newtonville, Massachusetts

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Introduction

The revitalization of downtown Brockton is important to every citizen. The traditional commercial center of the city, downtown today is the home of numerous governmental offices, financial and religious institutions, industries, social organizations, and a variety of small and large businesses. Downtown is also a local and regional transportation center and provides residential opportunities for many of Brockton's citizens.

The design of buildings in downtown Brockton should reflect its past and provide direction for its future. They range from exemplary structures such as Brockton City Hall and the Moses Packard House to more modest one and multi-story commercial, institutional, and industrial structures from the 19th and 20th centuries.. Thirteen of downtown Brockton's buildings have been recognized for their architectural and historic importance by being listed in the National Register of Historic Places. The materials, scale, details, and ornamentation of National Register and other existing buildings gives downtown Brockton its character, one that should be built upon in rehabilitation and new construction.

Design guidelines are created by cities concerned with the appearance of their buildings and how that appearance contributes to economic revitalization and a sense of civic pride. Over two thousand towns and cities all across the country have adopted design guidelines through ordinances, as part of economic development programs, or in other ways. They help to protect and enhance the architectural quality of buildings as well as signs, landscapes, and public spaces. They provide a basis for objective decisions about the appropriate design of proposed rehabilitations and new construction. And, they have been shown to protect and enhance property values and tax revenues.

However, design guidelines cannot exist in a vacuum. If they are intended to guide development, they should be part of an overall revitalization strategy for a downtown. Design guidelines should reflect the existing quality architecture, signs, and urban design existing in a downtown. They should accommodate the

functional and economic requirements of businesses, government, institutions, and other uses in the downtown. And, they should provide guidance rather than prescriptions for future changes.

Downtown Brockton: Design Guidelines for Buildings is intended to assist property owners, tenants, architects, developers, and others to understand the important characteristics of existing buildings and how those characteristics should be used to guide their rehabilitation and the construction of new buildings. Among the buildings that contribute to this character are the majority of multi-story and some single story commercial buildings built to the front property line, most of the free-standing government, institutional, mill, and industrial buildings, and the buildings listed in the National Register.

Downtown Brockton: Design Guidelines for Buildings is intended to improve the appearance of the existing buildings by being sensitive to their original architecture as well as to costs associated with rehabilitating exteriors. Unlike design guidelines written for historic districts, which usually are intended to preserve the area as it is, these guidelines recognize that less expensive designs, construction methods, and materials can be used in downtown to rehabilitate existing buildings while still retaining their architectural character.

Downtown Brockton: Design Guidelines for Buildings is based on the design philosophy contained in The Secretary of the Interior's Guidelines for Rehabilitating Historic Buildings, which encourages sensitive treatment of historic buildings while allowing change to occur. The Secretary of the Interior's guidelines were developed to assist property owners, tenants, architects, and others involved in rehabilitating National Register buildings by recommending designs, constructions methods, and treatment of existing materials appropriate to historic buildings. The Secretary of the Interior's guidelines also discuss inappropriate designs and methods of construction and treatments that will result in physical deterioration or loss of important architectural character. However, they do not dictate any specific design or stylistic approach, material, or method of construction or treatment.

Downtown Brockton

Brockton was the north parish of the Town of Bridgewater until 1821 when it became North Bridgewater. The community's birth as a separate town came soon after the beginning of Brockton's famous shoe industry. Legend has it that the shoe industry began in 1811 when Micah Faxon carried 100 pairs of shoes on horseback from Brockton to Boston. In those early days, all shoes were hand pegged in the home, thus there were no large factories as we now know them. Employment levels were not inconsequential though, since by 1837 over one thousand "hands" were employed by the town's shoe industry. Industrial expansion was greatly enhanced by the opening of the Old Colony Railroad in 1846 (first know as the Randolph and Bridgewater Railroad).

Two events further guaranteed Brockton's prominence as a shoe manufacturing center. One was the invention of the McKay Sewing Machine in 1858, which further accelerated the movement from home industry to factories. The second was the demand for boots and shoes brought about by the Civil War. It is claimed that half of the Union Army was shod by North Bridgewater.



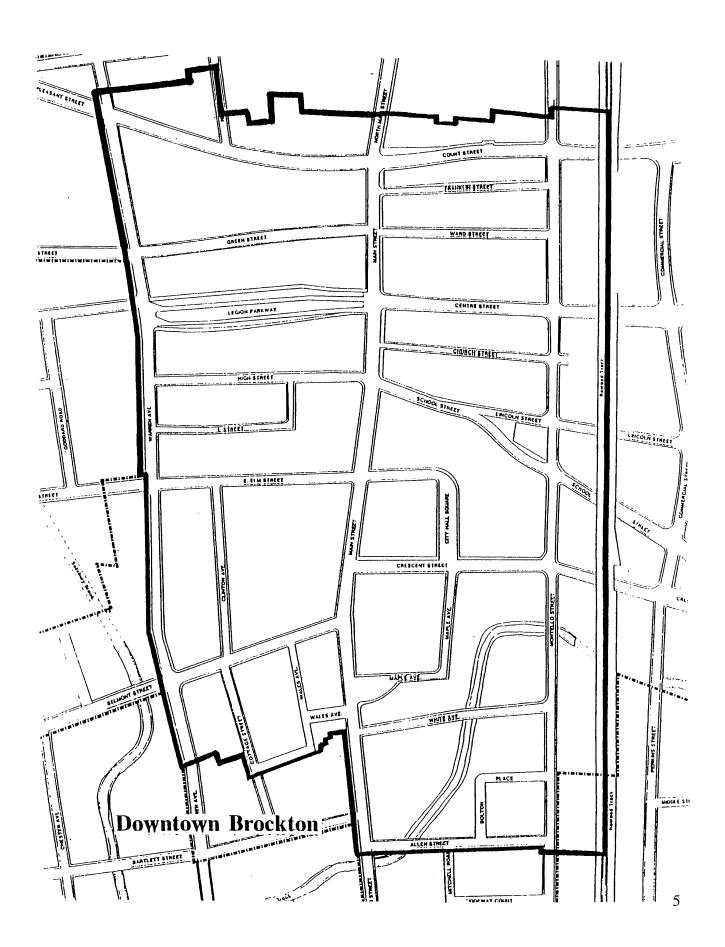
Downtown Brockton at the turn of the century.

By the 1860s, the town had grown to 6,500 people living in four villages. The largest was Centre Village (now downtown) that was described at the time as "a large and growing place . . . (its) facilities for trade are not surpassed by any in the country." The second most important village was Campello, meaning "small plain". Always known as a center for the manufacture of shoes, cabinets, and musical instruments, it was almost totally destroyed in the fire of 1853.

Another early village, Sprague's Factory Village, was situated 3/4 of a mile east of Centre Village on today's Crescent Street. It contained a large water-powered mill owned by Chandler Sprague. In close proximity to the mill, was Sprague's mansion, workers' housing, a school, and several smaller factories. The fourth village was known as North-West Bridgewater, located along the Boston to Taunton Turnpike (now Pearl Street). It was primarily a farming community, best remembered for its countryside and magnificent views.

Rapid industrial growth continued in Brockton between the Civil War and World War I. It was during this time that many mill buildings were constructed near the railroad tracks, with commercial, residential and other types of buildings surrounding. During the 60 years between 1860 and 1920, Brockton's population increased ten-fold to over 66,000.

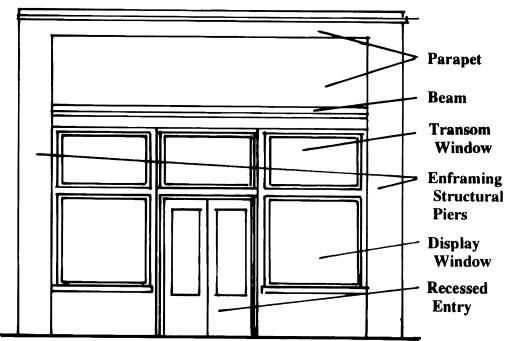
With the end of World War I came a period of stagnation for Brockton. Businesses began to move south where costs were lower and profits higher. Population growth leveled off and construction of new buildings slowed dramatically. Growth was not to occur again until after World War II when the automobile age spurred suburban growth in the city.



Guidelines for Existing Buildings

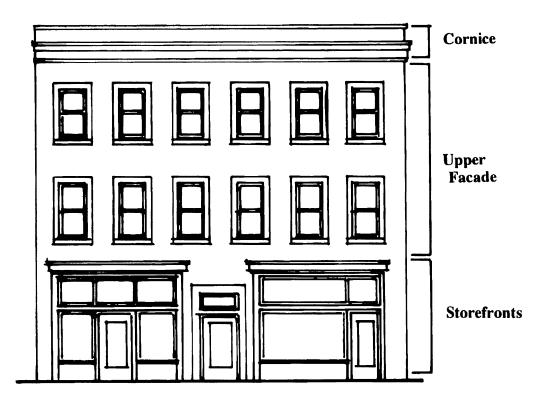
The exterior appearance of buildings in downtown Brockton is derived from their design, materials, methods of construction, details and ornamentation. The buildings range from imposing structures such as City Hall to plain commercial buildings, and include institutional, religious, and industrial buildings as well as housing.

Downtown Brockton contains a number of modest one story commercial buildings. First appearing in the latter part of the 19th century, the one-story commercial building is typified by large display windows fronting the street, a central entry door often recessed behind the facade, a storefront framed by exposed structural piers and beam, and a pronounced cornice or parapet that was designed as the location for a business sign. Some of the one story commercial blocks have transom windows above the display windows and entry door. Most contain bulkheads below the display windows. Usually constructed of inexpensive materials, and often plain in detail and ornamentation, the one story commercial building is frankly businesslike in appearance.



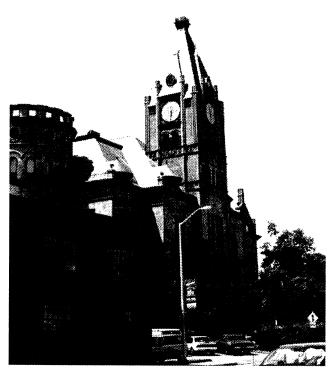
One story commercial buildings are typified by large display windows, recessed center entry, enframing structural piers and beam, and a pronounced parapet.

Downtown Brockton contains a large number of multi-story commercial buildings with rich ornamentation and design. Typically, these buildings are composed of a series of ground floor storefronts containing display windows, entries, and enframing structural piers and beam. Many of these storefronts contain transom windows and storefront cornices designed to contain business signs. The entry to the upper floors is sometimes centered in the facade and decorated with ornamental surrounds. The upper facades of these buildings are typically composed of regularly spaced windows of similar width but decreasing in height on each floor to accentuate the building's verticality. Some of the upper facades are fairly plain, using inexpensive materials, while others are richly detailed employing expensive materials. Most of the multi-story commercial buildings in downtown Brockton are capped by a decorative cornice.



Multi-story commercial buildings are typified by ground floor storefronts, regularly spaced windows in the upper facade, and a decorative cornice.

Most of the existing government and institutional buildings in downtown Brockton are free-standing, employing expensive materials and a high level of detail on all elevations. Principle entries are often accentuated by imposing surrounds and a flight of steps. Many of these buildings contain sloped roofs, and some have towers that give the buildings an interesting and varied skyline.



Free-standing governmental and institutional buildings are typified by ornate facades, imposing entries, and varied roof lines.

Downtown Brockton also contains some plain, but significant, multi-story mill and industrial buildings that contribute to the character of the district. Typically built of brick, the facades are composed of large regularly spaced windows, with discrete ground floor entries. Cornices are typically plain, contributing to their quiet grandeur.



Mill and industrial buildings are typified by plain facades with regularly spaced windows and simple cornices.

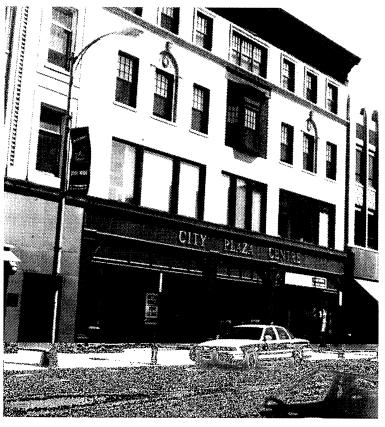
In addition, downtown Brockton contains some buildings, that due to their design and site plan, do not contribute to the character of the area. Typically these buildings were built in the 20th century, are one-story, and surrounded by parking.

While these guidelines address the design and materials of proposed rehabilitations, owners of existing buildings will also be concerned with their structural integrity and code compliance. Both require that the existing building be thoroughly examined by an architect or engineer who specializes in older and historic buildings. For example, the engineer should be able to determine cosmetic from actual structural problems. The architect should be familiar with Chapter 22 of the Massachusetts State Building Code and with sections of other codes that address older and historic buildings rather than new construction.

Storefronts

The storefront is the most important component of a commercial building. Storefronts usually consist of three major elements - display windows sometimes surmounted by transom windows, entry doors, and enframing structural members. Most storefronts also contain three minor, but nonetheless important elements - bulkheads, decorative trim, and a signboard or storefront cornice.

The display windows allows customers to window shop and view activity inside the store. They also provide visual access for security personnel after hours. Along with transom windows, display windows allow natural light to enter the business space, producing an inviting appearance. Display and sometimes transom windows also provide space for business signs and advertising.

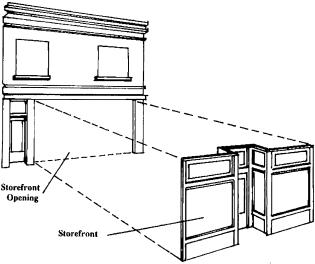


Storefronts are important features of commercial buildings and should be retained even after a change of use.

Ground floor business entry doors are traditionally centered in storefronts. Often constructed of wood or metal with a large glass panel, storefront entries should present an open, inviting appearance. Many of the storefront entries in downtown Brockton are recessed to provide a sheltered space between the sidewalk and the business interior, as well as increase the amount of display windows contained in the storefront.

Storefronts are typically enframed by masonry or metal vertical piers and a horizontal beam. The piers and beam serve to define the storefront as well as typically provide structural support for the facade above.

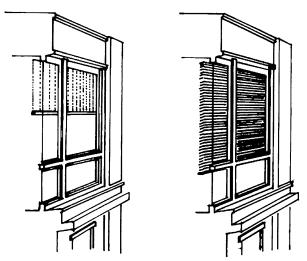
Storefront bulkheads were traditionally constructed of a variety of materials including masonry, wood, and metal. They serve to raise the base of the display window to viewing height as well as protect it from damage. Decorative trim of masonry, wood, and sometimes metal is found on a number of storefronts. Typically used to enliven the appearance of the storefront, decorative trim also serves to hide joints in underlying materials. The signboard or storefront cornice visually caps the storefront, separating it from the upper facade, and is an appropriate location for a business sign.



Storefronts consist of important elements that should be retained in a rehabilitation project and incorporated in new construction.

Recommended

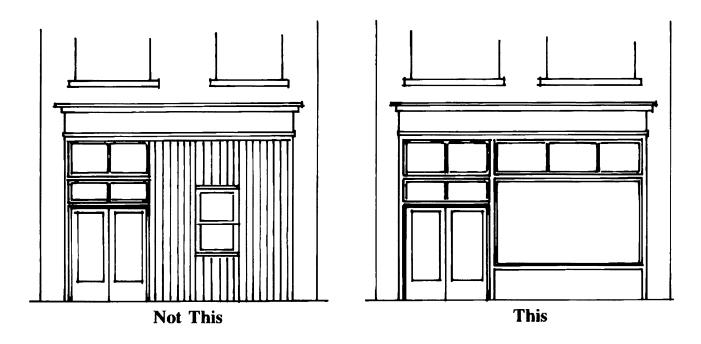
- 1. Storefronts should respect the design of the building as a whole and be compatible with the scale, materials, color, and texture of the facade in which it is located.
- 2. Storefronts should be designed to fit within the original enframing storefront opening.
- 3. Storefronts should contain the largest possible display window area and, if appropriate, transom windows.
- 4. When display windows have been removed, new display windows should be designed to fill the original openings. If possible, existing framing materials should be repaired and maintained. If replacement is necessary, new framing materials should match the design and profile of the original as closely as possible.
- 5. Depending on code requirements clear plate or tempered glass should be used for display windows.
- 6. Interior artificial display window lighting should be designed to highlight displays as well as correct for sun glare.
- 7. If the business space behind the display window requires privacy, use interior curtains or blinds rather than blocking-down or removing existing display windows.
- 8. Ground floor entries should be centrally located in the storefront and, where possible, recessed.
- 9. Bulkheads should be included as a component of storefronts. Their materials should be robust and compatible with the materials of the storefront and the building as a whole.
- 10. Existing incompatible storefronts should be removed and new compatible storefronts designed and installed.



If a ground floor business requires privacy, use interior curtains or blinds rather than blocking-down display windows.

Not Recommended

- 1. Designing a new storefront that is incompatible with the design of the building facade in which it is to be located.
- 2. Removing existing compatible storefronts without replacing them.
- 3. Blocking-down or removing storefronts or display windows.
- 4. Using tinted, reflective or mirrored glass, plexiglass, or glass blocks for display windows.
- 5. Covering existing storefronts with incompatible materials.
- 6. Removing existing compatible storefront details or ornamentation without replacing them.
- 7. Removing enframing structural storefront piers or beams.



Storefronts that have been removed or blocked-down should be reinstalled.

Upper Facades

One story commercial blocks typically have unadorned upper facades sometimes used as the location for a business sign. They are frequently capped with a plain cornice. Multi-story commercial blocks have upper facades typically containing regularly spaced windows, sometimes surface ornamentation, and often pronounced cornices.

The size, shape, placement, number of lights, and type of window are major components of the character of upper facades of multistory buildings. In downtown Brockton, most upper facade windows are one-over-one double hung, constructed of wood, with square or rounded heads, and are regularly spaced across the facade.

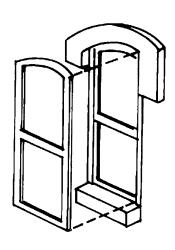
The materials of upper facades and their details and ornamentation contributes to the character of the building. Upper facades of Brockton's downtown buildings are primarily of brick or stone, although porcelain metal panels and stucco are also employed. Cornices are typically wood, stone or metal, although brick cornices are also found.



Upper facades are typified by regularly spaced windows and elaborate cornices.

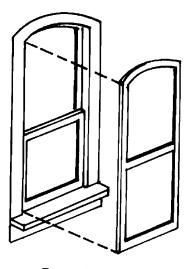
Recommended

- 1. Original upper facade window placement should be maintained. Upper facade windows should not be blocked-down or covered.
- 2. Upper facade window openings that have been blockeddown or covered should be reopened and, if necessary, new windows installed.
- 3. Deteriorated sashes and frames should be repaired and maintained if possible. If replacement is necessary, the new window should match the existing in materials, size, profile, type, and number of lights as closely as possible.
- 4. Clear glass should be used in upper facade windows.
- 5. If storm windows are installed to improve thermal efficiency they should match the size, profile, and number of lights of the original window.

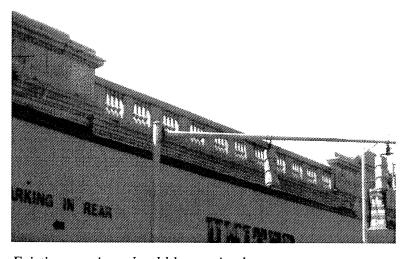


Exterior

Interior or exterior storm windows should match the size, shape, and character of the existing window.



- 6. If individual air conditioning units must be installed, use through-wall units rather than through-window units.
- 7. Deteriorated upper facade wall material should be repaired and maintained if possible. If replacement is necessary, the deteriorated portions only should be replaced in-kind. If a substitute material is used, it should be visually, physically, and chemically compatible with the surrounding original material.
- 8. Deteriorated upper facade details and ornamentation should be repaired and maintained. If replacement is necessary, the deteriorated portions only should be removed and replaced in-kind. If a substitute material is used, it should be visually, physically, and chemically compatible with surrounding original material.
- 9. Deteriorated cornices should be repaired and maintained if possible. If replacement is necessary, the deteriorated portions only should be replaced in-kind. If a substitute material is used, it should be visually, physically, and chemically compatible with surrounding original material.
- 10. Unpainted masonry should remain unpainted.



Existing cornices should be retained.

Not Recommended

- 1. Blocking-down or covering windows or window openings.
- 2. Removing repairable original windows, or replacing deteriorated windows with ones that do not fill the opening or match the profile, type, and number of lights of the original.
- 3. Using tinted, reflective or mirrored glass in upper facade windows.
- 4. Installing storm windows that are not properly vented and that do not match the size, profile, and number of lights of the original window.
- 5. Installing through-window air conditioning units.



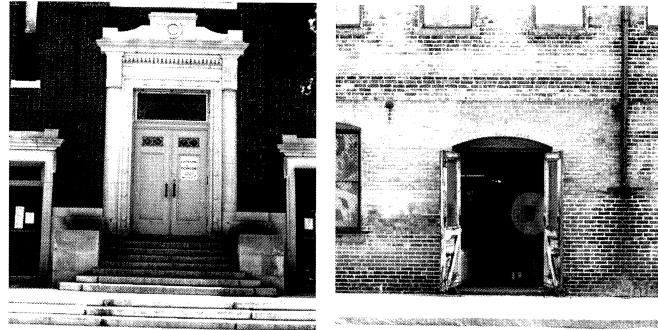
Through-window air conditioning units detract from the appearance of the facade.

- 6. Covering or completely removing original upper facade wall materials.
- 7. Removing upper facade details and ornamentation without replacing them.
- 8. Removing upper facade cornices without replacing them.
- 9. Painting or applying sealants to unpainted masonry surfaces.
- 10. Using sandblasting or other abrasive cleaning methods on masonry or wood.

Doors and Entries

Multi-story commercial blocks, institutional, and governmental buildings in downtown Brockton often contain elaborate primary doors and entries. Many principle doors of governmental buildings are accentuated by imposing flights of stairs. Typically constructed of masonry, primary entries welcome people to the building. Principle doors are often oversized and contain fine materials, details, and craftsmanship.

Doors and entries of mill and industrial buildings and secondary doors and entries on multi-story commercial blocks, institutional, and governmental buildings are typically plain, but are nonetheless important to defining the character of a building.





Entries may have elaborate or plain doors and surrounds.

Recommended

- 1. Original door and entry locations should be maintained.
- 2. Deteriorated original doors should be repaired and maintained if possible. If replacement is necessary, the door should be replaced with one of the same materials, size, design, and profiles.
- 3. Attractive door hardware such as pulls, plates, hinges, and closures should be retained if possible. If replacement is necessary, the new hardware should be compatible with the design of the door and entry.
- 4. Deteriorated entry surrounds including stairs and landings, should be repaired and maintained. If replacement is necessary, the deteriorated portions only should be replaced in-kind. If a substitute material is used, it should be visually, physically, and chemically compatible with surrounding original materials.



Commercial buildings typically have recessed entries and glass doors.



Handicapped accessibility modifications should be compatible with the existing character of the entry.

- 5. If modifications to doors or entries is necessary to accommodate the disabled the location, design, materials, and details of the modifications should be compatible with the design of the entry and door.
- 6. If storm doors are installed to improve thermal efficiency, they should be compatible with the size, design, materials, and profiles of the original door. If sufficient interior space exists, consider installing an interior air-lock instead of exterior storm door.
- 7. Entry doors should contain clear tempered glass.

Not Recommended

- 1. Blocking-down or covering original door openings or removing original entries without replacing them.
- 2. Replacing deteriorated doors or door hardware with incompatible doors or hardware.
- 3. Replacing deteriorated entries with ones of incompatible design.
- 4. Incompatibly modifying doors or entries to accommodate the disabled.
- 5. Installing incompatible storm doors.
- 6. Using tinted, reflective or mirrored glass in doors.
- 7. Installing solid metal or wood doors except in service entries or where clear historic evidence of their use exists.

Side and Rear Elevations

The side and rear elevations of most commercial buildings in downtown Brockton are utilitarian in nature, without the level of detail or ornamentation found on the front facades. In cases where the side elevation faces a street, it is usually similar to the front facade in design, materials, and ornamentation.

Side elevations and, in many cases, rear elevations of institutional, governmental and other free-standing buildings, are frequently as architecturally significant as the front facade. Whether or not the side and rear elevations are elaborate, they still contribute to the design of a building. Any alterations to these elevations should seek to maintain the building's overall character.



Many side and rear elevations are utilitarian in design.



Side elevations fronting a street are often as elaborate as the front facade.

Recommended

- 1. Deteriorated original wall materials, details, and ornamentation should be repaired and maintained if possible. If replacement is necessary, the deteriorated portions only should be replaced in-kind. If a substitute material is used, it should be visually, physically, and chemically compatible with the surrounding original material.
- 2. Unpainted masonry should remain unpainted.
- 3. Original door and window openings should be maintained.
- 4. If side or rear doors are used by customers or clients, they should contain glass.

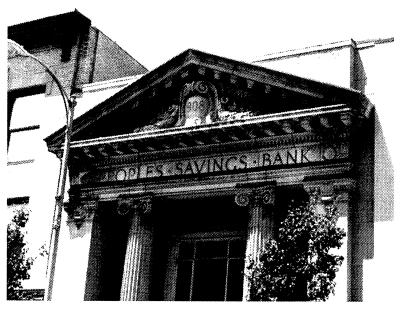
Not Recommended

- 1. Covering original wall materials with incompatible materials.
- 2. Blocking-down or covering original door or window openings.
- 3. Painting or applying sealants to unpainted masonry surfaces.
- 4. Removing original details or ornamentation without replacing them.
- 5. Using sandblasting or other abrasive cleaning methods on masonry or wood.
- 6. Using tinted, reflective or mirrored glass on side elevations facing a street.

Building Details and Ornamentation

Many of the commercial buildings in downtown Brockton have intricate details and ornamentation on their front facades. Free-standing institutional, religious, and governmental buildings often have elaborate details and ornamentation on all four elevations. Mill and other industrial buildings in downtown are generally unadorned.

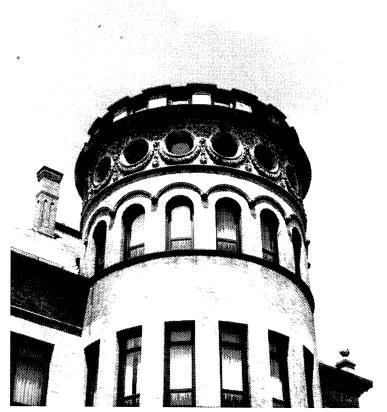
Details and ornamentation on downtown buildings are constructed of a wide range of materials, including wood, brick, stone, terra cotta, and metal. They occur on storefronts, around windows and doors, at primary and some secondary entries, on front facades and side elevations facing streets, and building cornices. Details and ornamentation can also be found on sloped roofs and towers of free-standing governmental and institutional buildings. Individually and collectively, the details and ornamentation on the buildings of downtown Brockton give character to the district.



Elaborate details are often found on cornices of commercial buildings.

Recommended

- 1. Deteriorated details and ornamentation should be repaired and maintained if possible. If replacement is necessary, the deteriorated portions only should be replaced in-kind. If a substitute material is used, it should be visually, physically, and chemically compatible with surrounding original material.
- 2. Numerous coats of paint that obscure details and ornamentation should be removed prior to repainting.



Free-standing governmental and institutional buildings typically have ornamentation on all elevations.

Not Recommended

- 1. Removing details or ornamentation without replacing them.
- 2. Covering details and ornamentation.
- 3. Adding historically incorrect details or ornamentation to a building.

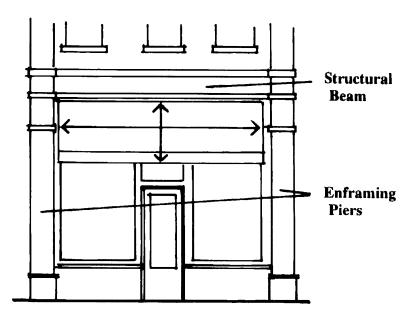


Some multi-story commercial buildings have upper facade ornamentation.

Awnings

Historically, awnings were often found on storefronts and sometimes on upper facade windows of commercial buildings. They provided shelter from the sun, rain, and snow and helped to improve the thermal efficiency of windows. Many historic storefront awnings were retractable so they could be secured at night as well as allow sun to enter the ground floor business during the winter. The slope, returns, and valance of storefront awnings were also often used as the background for business signs.

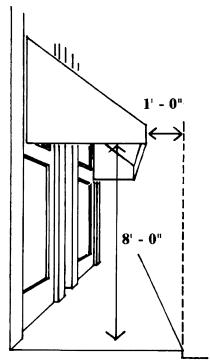
Awnings were historically made of steel frames and canvas duck. Today, frames are typically made of aluminum, covered with a wide range of fabrics, the most popular being canvas duck and vinyl. Modern awning fabric may be opaque or translucent, or opaque with translucent panels, and is available in a wide range of colors. Almost all awning fabric available today is treated with a fire retardant.



Storefront awnings should fit within the enframing piers and beam.

Recommended

- 1. Awning frames should fit within the storefront or window opening to which it is attached.
- 2. Storefront and other ground floor awnings should have a 8'-0" minimum clearance above a sidewalk. The valance should be at least 1'-0" behind the plane of the street curb.
- 3. Awning colors should complement the colors of the building. No more than two colors should be used; if a sign is included on the awning, three colors are acceptable.
- 4. Awning signs may be silkscreened onto or sewn into the fabric.
- 5. Translucent sign panels may be used on the valance. They may be backlighted.



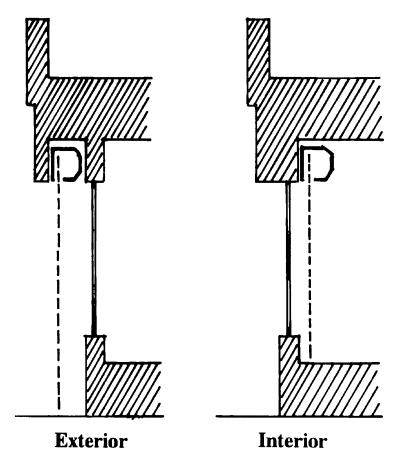
Storefront awnings should have a minimum clearance of 8'-0" above the sidewalk.

Not Recommended

- 1. Awning frames that do not fit within the storefront or window opening.
- 2. Using metal, wood, fiberglass, plastic, shiny vinyl, or other inappropriate materials for awning covers.
- 3. Backlighting entire awnings, not just the sign panel.

Security Systems

Security systems are an important consideration for buildings in downtown Brockton, particularly for storefronts and ground floor windows and doors. In selecting a security system, it is important that it functions effectively and is as visually unobtrusive as possible. The least obtrusive systems available are interior motion and sound detectors that are typically monitored by a private security agency. Slightly more obtrusive systems rely on electrical circuits affixed to glass. Interior and exterior grates are typically the most unsightly type of security system.



If security grates are used they should be installed on the interior or, mounted on the exterior, the housing should be screened.

Recommended

- 1. Use the least visually obtrusive security system possible such as an electronic motion and sound detection system.
- 2. If security grates are used for storefront display widows, they should be installed on the interior, be open-grate systems to allow visual access into the business by security personnel, and be retractable during business hours.
- 3. If exterior storefront security grates must be used, they should be open-grate, retractable system, with the housing designed to be as unobtrusive as possible, to fit within the storefront, and painted to blend in with the storefront.

Not Recommended

- 1. Using non-retractable security grate systems on storefronts, ground floor windows on side street elevations, and primary entry doors.
- 2. Using solid-grate security systems on storefronts, ground floor windows on side street elevations, and primary entry doors.

Building Color

Many of the construction materials used for the buildings in downtown Brockton have colors that are integral to their manufacture including brick, stone, cast stone, concrete, and metals such as aluminum, copper, bronze, and porcelain steel. Other materials are painted or finished with other types of applied architectural coatings. They include wood, tin, zinc, and some stucco and concrete. The paint or other architectural coatings applied to the latter materials protects them from the weather as well as contributes to the character of a building.

In selecting a color scheme for a building, it is always best to begin with the palette presented by the materials with integral colors, selecting paint and other architectural coating colors to complement. In addition when selecting the applied colors for a building, the colors of adjacent buildings should be complemented. Finally, buildings in downtown Brockton should contain no more than three basic colors, and no more than two additional colors to accent details, ornamentation, awnings, window and door surrounds, and cornices.

Recommended

- 1. Applied colors used on side and rear elevations should be compatible with those used on the front facade. Complementary colors should be used on all elevations.
- 2. If the building is listed in the National Register, a paint analysis to determine historic colors and paint composition should be conducted. Strong consideration should be given to repainting using the historic color scheme.
- 3. Complementary painted colors should be used from storefronts to cornice.
- 4. Unpainted materials should not be painted.
- 5. Paint applied to buildings built prior to 1960 should be tested for lead. If found, appropriate abatement should be undertaken.

Not Recommended

- 1. Materials with integral colors should not be covered with paint or other architectural coatings.
- 2. Using sandblasting or other abrasive methods to strip paint from wood, masonry, tin or zinc.

Cleaning Buildings

Cleaning a building is one of the most dramatic and least expensive ways to improve its appearance. Cleaning can also reduce future maintenance and repair costs. The dirt and other discoloration agents found on buildings in environments such as downtown Brockton often contain pollutants that erode building materials.

Extreme care must be taken is selecting a method for cleaning a building. Sandblasting or blasting with other abrasive agents such as sand, grit, pecan shells, plastic beads, and the like will pit masonry and metal surfaces and raise the grain of wood. This will cause loss of definition of details and ornamentation and weathertightness of surfaces, allowing water to penetrate and deteriorate materials. Abrasive cleaning should be avoided.



Sandblasting will abrade masonry surfaces allowing water to penetrate into the wall.

Dozens of chemical cleaners are available, which, if properly selected and applied, will effectively clean most dirt and discolorations from buildings. Care must be taken in selecting the correct chemical cleaner to remove dirt or discoloration to avoid undesirable reactions in the underlying material. In addition, care must be taken to control run-off from chemical cleaners.

The safest methods of cleaning buildings is to use low pressure water or steam or soapy water and brush. These methods will be effective for almost all discolorations, and if properly applied will not damage underlying materials.

Always start with the safest methods first before proceeding to chemical cleaning. Test clean a small, unobtrusive area and observe the effect for a few weeks. If the results are not satisfactory, repeat the test using another cleaning method.



Low pressure water cleaning is safe and often effective.

Recommended

1. Start with the safest cleaning method - soapy water and brush, water or steam cleaning - before proceeding to chemical cleaning.

Not Recommended

1. Using sandblasting or other abrasive agents to clean buildings.

Substitute Materials for Existing Buildings

The exteriors of buildings of downtown Brockton are constructed of a wide range of building materials. Among the most common are brick, stone, aluminum, tin, zinc, copper, porcelain metal, wood, and stucco. Although many of these materials are robust and will last for years, they will all eventually require maintenance. If maintenance is inadequate, the material may need to be repaired or replaced.

Repairing existing facade materials is often less expensive and time consuming than replacement. Repair rather than replacement also insures that the architectural integrity of the exterior is not compromised and that the character of the building remains intact. However, in some cases the deterioration has reached the point, where replacement is the only viable option. If this is the case, the building owner should always first consider replacing the material in-kind; that is, using the same type of material as the original. In doing so, the owner will insure the architectural integrity of the building and that the replacement will be physically and chemically compatible with the surrounding original material.

Only after the building owner finds that the original material, or the craftsmen needed to install it, is no longer available or that the original material or method of construction is extremely expensive, should a substitute material may be considered. In selecting a substitute material, it is very important that the following be considered.

- 1. The finished appearance of the substitute material should be the same as the original in size, shape, profile, texture, color, and reflectivity.
- 2. The substitute material should be physically compatible with surrounding original materials; that is, it should have the same expansion and contraction ratios as the original material and the connections and joints between the substitute and surrounding original materials can be made watertight.

3. The substitute material should be chemically compatible with the surrounding materials; that is, it should not promote galvanic action or chemical reactions.

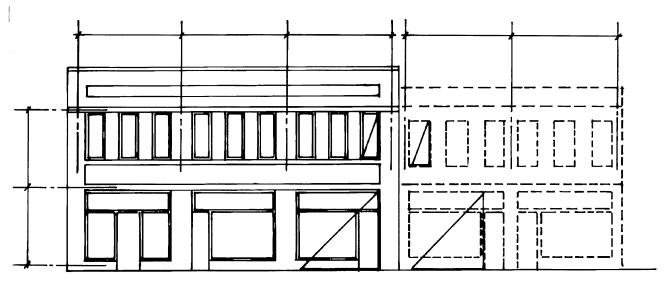
The following chart lists some acceptable substitute materials that meet the above criteria.

Acceptable Substitute Material
Aluminum
Synthetic slate
Single-ply (rubber)
Fiberglass
Cast Stone
GFRC (limited areas only)
Acrylic polymer stucco
(above ground floor only)
Fiberglass
GFRC, epoxy cement, cast stone
Fiberglass
•
Aluminum

New Construction

New construction in downtown Brockton is encouraged. It is a sign of the continued economic vitality of the district as well as an opportunity to fill in some of the vacant spaces in downtown.

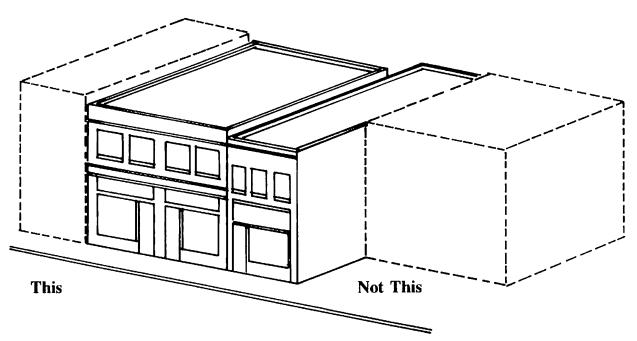
The design of new construction -- additions to existing buildings or completely new buildings -- should complement and reinforce the architectural character established by the existing buildings. This does not mean that new construction must be stylistically the same as existing buildings; rather the design of additions and new buildings should respect and reinforce the existing character by following the architectural principles.



New constuction should be compatible with the rhythm, proportion, scale, height and massing of surrounding buildings.

Design Principles

- 1. New construction should be compatible with the existing rhythm, proportion, scale, height, and massing of surrounding buildings.
- 2. Facade materials should be similar in proportion, scale, and character to those on surrounding facades.
- 3. Facade openings should be similar in rhythm, proportion, and scale to those found on surrounding facades.
- 4. Existing setbacks should be used for new construction. This is particularly important for new commercial buildings constructed on zero-lot-line streets such as Main, Centre, and Legion Parkway.



Existing setbacks should be respected by new construction.

- 5. The height of new construction, particularly for new commercial structures, should not be more than one story above or below that of the average number of stories in the block.
- 6. The ground floor of new commercial buildings should contain storefronts or openings proportioned to resemble storefronts.
- 7. New multi-story buildings should respect the visually articulated ground floor-upper facade -cornice expression of the majority of downtown buildings.
- 8. The color of exterior materials selected for new construction should follow Building Color recommendations.

Assistance

For additional information on *Downtown Brockton: Design Guidelines* for Buildings, or to obtain copies of *Downtown Brockton: Design Guidelines for Signs* or *Downtown Brockton: Design Guidelines for Urban Design* contact:

Office of the City Planner City Hall 45 School Street Brockton, Massachusetts 02401

For information on zoning or building permits contact:

Building Department City Hall 45 School Street Brockton, Massachusetts 02401