DOWNTOWN FAÇADE DESIGN STANDARDS

November 2007

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CREDITS:

Most of the information and illustrations contained in this booklet were taken from the Magnolia Avenue Design Guidebook prepared by Kathy Fonville of the City of Fort Worth Planning Department.

INTRODUCTION

This Guidebook provides basic reference information that property owners and merchants in the Public Improvement District (PID) can use to improve building facades and make other structural and visual improvements. Because PID consists of many individual stores and businesses, it is important that all storefront and general building improvements be undertaken in a coordinated manner in which to create an ***overall image*** *for the entire commercial area. The basic premise of all design standards is to insure the unified, visual enhancement of the affected area. Adherence to these standards will enable the PID to become a more profitable and productive place to do business. The standards permit a range of options within a coordinated framework so that creativity and variety in design are encouraged. Conformance with these design standards will insure a unified image for the area and will contribute significantly to the overall revitalization of the PID. Before carrying out any improvements, property owners must obtain all necessary City permits and approvals to insure compliance with the City Building Code.*

GENERAL PRINCIPLES

In most commercial areas the original buildings are the key to any major building improvement efforts. Because of their individual importance and because they establish the character of the area, these older structures warrant special consideration. The following general principles should be used to guide building treatment efforts:

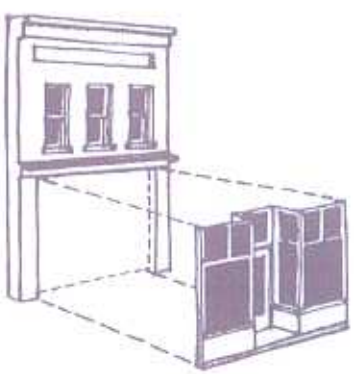
- If introducing modern parts or mixing old and new elements on the outside of a building, make sure that its character is not spoiled in the process and, if possible, get some advice from a design professional with experience in such work.
- Consider the scale, volume and texture of adjoining or adjacent structures in the redevelopment of your building.
- Uncover and/or restore original detail and materials where feasible. Where original construction has been removed, provide new construction of the same or similar materials and pattern to the original.
- Never try to make a building look older than it is. Such efforts merely substitute a phony character for the real thing. Furthermore, the end results will never look completely genuine.
- It is usually preferable to retain genuine old work of several periods rather than to restore an entire building by new work to its appearance at a single selected period, unless there is some special significance to this period.
- Good contemporary design should be encouraged in new building construction. A well designed new building which is compatible with the old in its scale and use of quality materials is better than a fake antique. Discretion is needed to determine which new construction would make a positive contribution to the image of the commercial area.

Your entire building presents an image that acts as a sign. The appearance of your building is more subtle than a word sign, but it can be more effective.

STOREFRONTS

Generally, it is the storefronts which are most likely to have been altered or completely covered or replaced over the years through architectural fads and commercial gimmicks. Aluminum storefronts has often been installed because of their modern appearance and low price. However, it is out of place in the architectural styling of the older structures. Although a few of these remodelings are adequately designed, many are poorly done. Thus, restoration of the original storefront is recommended in order to make the storefront more attractive and accessible to shoppers.

Because the storefronts are most directly in view of passersby and shoppers, storefronts are perhaps the area of greatest need for restoration and renovation to keep them in a form which is compatible with the design of the rest of the building as well as that of the commercial area as a whole. Storefront renovation, which is in keeping with the original building design, need not always be an act of academic restoration. When the original storefront remains, it should be reserved and repaired with little or no further alteration. Where the shop windows, doors and columns have been considerably altered, the building owner should probe into and under the accumulation of 20th century veneers to ascertain if original frames, bulkheads or other details still remain. The following guidelines are recommended in order to improve the appearance of the storefront and make it accessible to shoppers.



A storefront should be designed to fit inside the original opening and not extend beyond it.

- Avoid choosing a "historic revival look" that is neither historically correct nor good design in the first place. If at all possible, the original styles of the building and/or area should be sought, not out-of-place "colonial" or other designs.
- Any original materials on the store's façade, such as brick, stone, or glass, are also part of the building's architecture and should not be painted or covered over. If the original surface material of the building façade cannot be restored, new facing should be highly resilient, to avoid the necessity of repeated repairs. The new facing should also be compatible with the store's image and with the rest of the structure. It should be less visually prominent than the store's windows or sign, so it does not compete with the "selling" features of the storefront. Imitation materials (such as permastone, scored brick, etc.) are generally not a suitable solution.
- Whenever changes are made to a store's façade, the original architectural elements of the first floor — the piers and the cornice — should be retained, since they form the outline of the storefront.
- Owners of one-story buildings, which are not part of a larger structure and therefore are more easily overwhelmed by larger neighboring buildings, should take particular care to relate to the buildings on either side of them. The most effective approach for building owners in this situation may be to use similar storefront and sign designs to create a unified, attractive row of stores.
- Additions to a store's façade, such as a marquee or decorative door and window frames, should be in keeping with the architecture of the building. In general, mixing architectural styles (Colonial, Victorian, Spanish, etc.) creates a confusing appearance.

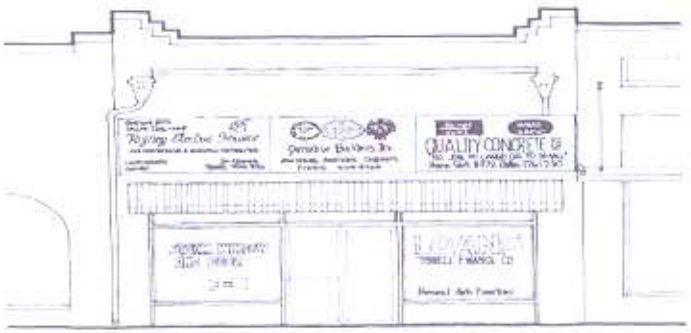
- STOREFRONT SECURITY DESIGN

  Security after business hours is a concern for many business owners. Fortunately, a number of electronic security systems that do not significantly alter the character of a storefront are available. Those that have glass breakage and motion detectors can be installed inside display windows and entries without altering the storefront. Another type using thin foil strips applied to the glass will slightly change the character of a storefront, but is not noticeable to the average eye.

  Only after it has been determined that an electronic or interior non-electronic security system is inadequate should a business or property owner consider installing exterior bars, grilles, or grates. If these types of security systems are used, a business owner should first consider installing retractable or removable grates on the inside of the display windows and doors. During business hours, the system should be retracted into housing that is designed to blend into the interior. If this option is appropriate, the housing should be designed to blend into the storefront cornice or piers. They should be located so that they do not obscure details or damage character-defining features. Open, rather than solid, grilles should be used so that police have visual access into the ground floor after business hours, and pedestrians can view merchandise.

- STOREFRONTS AS SCREENING

  The continuous "street wall" formed by the facades of abutting buildings must be preserved if at all possible. Even when a building may have to be demolished due to its unsalvageable condition, architecturally and/or historically significant storefronts should be stabilized and restored. The area behind the façade could be used for the construction of a new building or may temporarily be adapted for use as off-street parking.

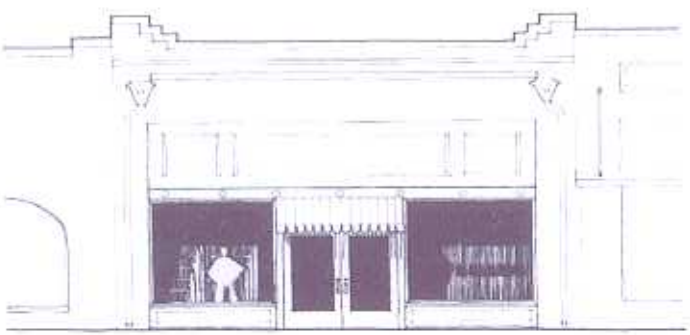


BEFORE

- Downspouts have been twisted and are misshapen
- Painted brick
- Signs dominate and detract from façade
- Metal canopy not appropriate
- Plastered brick
- Aluminum storefront not appropriate with original building design

AFTER

- Repair and repaint brick
- Retain leader boxes and install new downspouts
- New transom windows
- Remove metal canopy
- Remove plaster from brick
- Replace existing storefront with wood or factory finished aluminum storefront of an appropriate color and finish
- Recessed doorway allows for covered entry

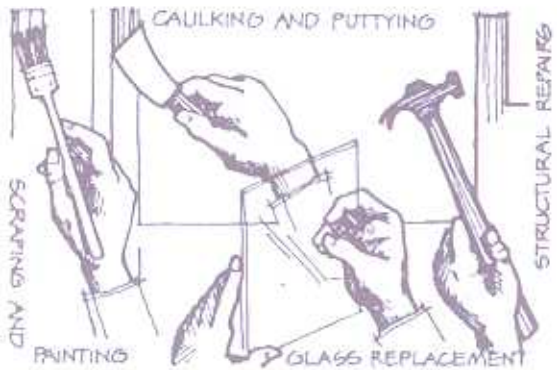


AFTER

- Wood paneled signband in place of glass transom
- Vinyl or canvas canopy at entry

WINDOWS

Next to the materials of the building, the windows — in shape, size, placement, and decorative trim — constitute the major element in creating the character of the building. They are what gives the building its impression of human occupancy, of life and activity, not unlike the eyes of a person. As such, the windows must be preserved and protected against needless alteration, boarding up, or elimination.



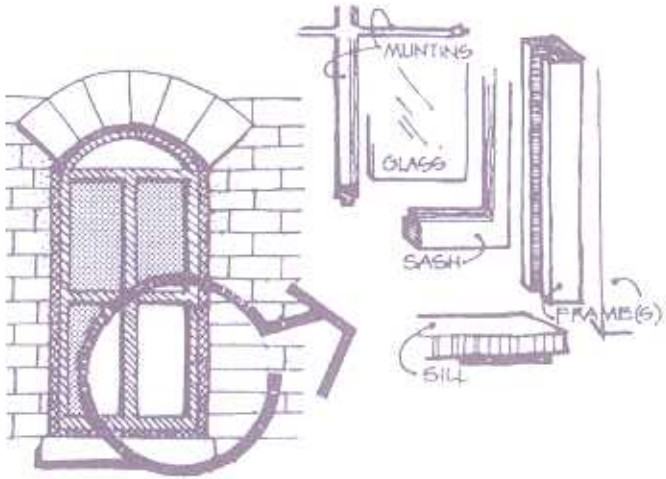
- Windows that have been blocked in, boarded up or painted should be restored to their original appearance, size and type. In some cases where original wooden frames cannot be duplicated, metal frames of similar profiles can be used. Factory painted finishes for aluminum are available. Clear (untreated) aluminum window frames or screens are not recommended.
- Mechanical equipment such as air conditioning, exhaust fans and vents should not be placed in front windows.
- Window glass generally should be clear, avoiding colors or plastic materials typical of modern manufacturing. Where original glass exists, protect it carefully.
- If in doubt about color, paint the moving parts of the windows cream or another appropriate light color. This gives life to the building exterior by contrasting with the glazed "hole" of the window which is usually black in effect.
- The original stone sills and lintels are a major element in the success of the renovation process. They should be carefully cleaned and pointed along the adjacent masonry, with care taken not to destroy surface textures by harsh methods of cleaning, such as sandblasting.
- Window openings should not be bricked-in or boarded up.

REPAIR/REPLACE LINTEL

CLEAN GLASS REMOVE ANY PAINT, BOARDS, OR SIGNS

PAINT WINDOW FRAMES

REPAIR/REPLACE WINDOW SILLS

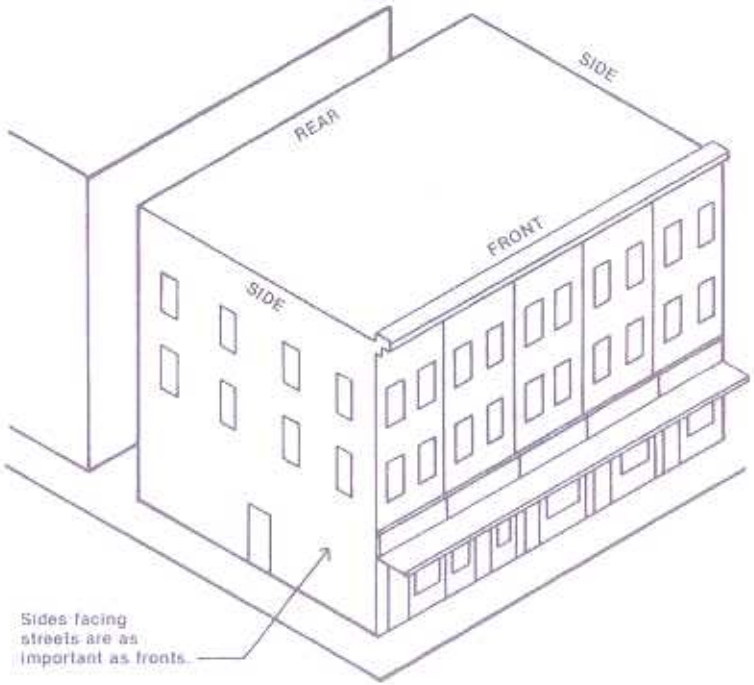


REAR AND SIDE WALLS

Most often, renovation and restoration are thought of as streetfront actions only. However, a successful renovation program must include all aspects of a building and site. The following standards should be considered regarding rear and side walls:

- Remove unnecessary additions to each building, including signs, pipes, non-functioning grilles, antennas and electrical connections.
- Air conditioning units, garbage cans, and other necessary but unsightly things are often found at the rear and sides of buildings. These features need to be attractively screened from view.
- Repointing of brick or masonry, painting of wood and reducing the clutter of mechanical equipment are required. On the main facades, avoid the use of extraneous materials, particularly those that simulate something else, such as cast plaster imitating stone or aluminum sheet imitating wood.

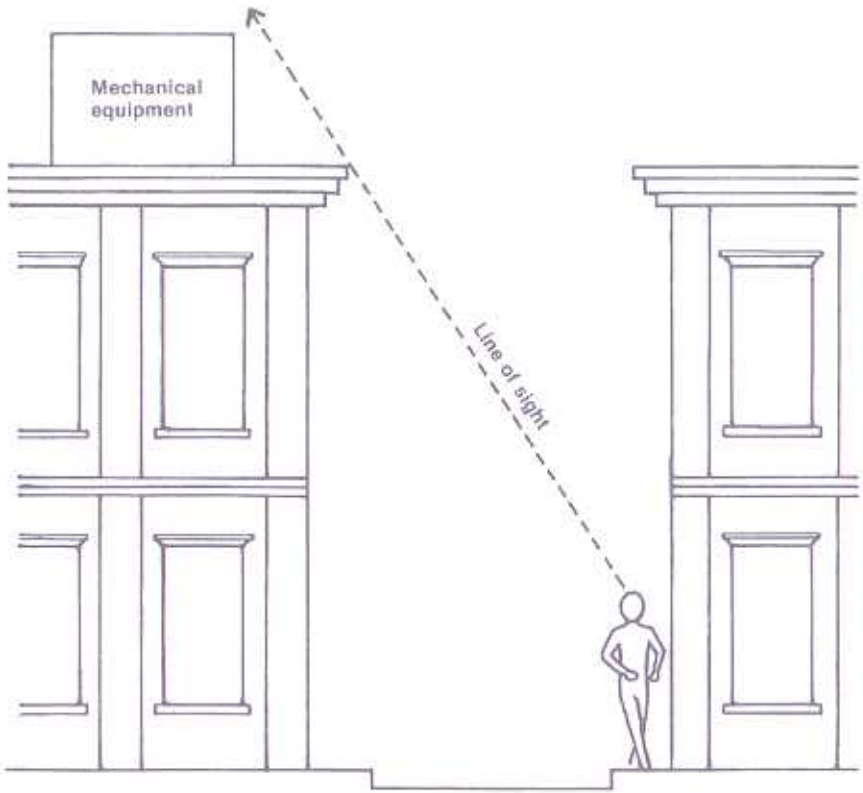
REAR ENTRANCES



ROOFS

The following guidelines are recommended in regard to building roofs:

- Functional elements such as antennas, flagpoles, chimneys, flashing, etc., should be kept clean, in good repair and as compatible with the building front as possible..
- If structurally possible, any mechanical equipment placed on a roof should be so located as to be hidden from view from the street. Equipment should be screened or painted so as to harmonize with the rest of the building.
- Antennas should be located so as to be as inconspicuous as possible.
- Roofs should be kept free of signage, or any other elements which are not a permanent part of the building or a functional element of its mechanical or electrical system.
- Flashing (e.g., around chimneys and at parapets) which shows from the street should be done in a manner which is effective yet inconspicuous. Copper flashing allowed to weather, tinner's sheet or Terne roofing to be painted, or other materials should be quiet and neutral in color and non-glossy.
- Where a roof is visible, avoid bright colors when choosing roofing materials unless the roof is being considered as part of the building's color scheme. Many otherwise effective color combinations have been spoiled by the introduction of green, violet, or pink-tinted asphalt shingles. Overly-colorful roofs also have the undesirable effect of drawing attention away from the more important parts of the building. Neutral gray roofs will allow a much wider selection of colors on the lower parts of the building — where it really counts — and provide a safety buffer against "over-color." The darker tones of gray, such as charcoal, are particularly effective as a replacement for the traditional slates and combine with almost any color.



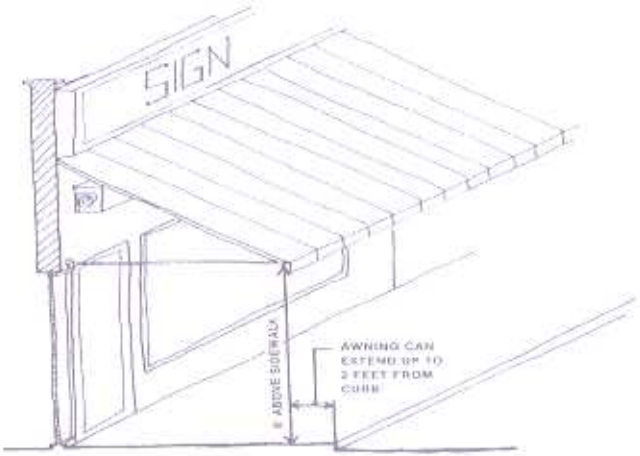
New mechanical equipment must be out of view from across the street.

AWNINGS

Awnings can be important architectural devices which are both visually appealing and functionally useful in a commercial shopping area. They can add color and interest to the streetscape, and when coordinated, they can provide a unified image to the street. From a practical standpoint, awnings can also help to reduce sun glare and its effects on storefronts as well as provide weather protection for pedestrians.

- Flat, light weight metal awnings and sloped, slatted aluminum awnings are not recommended. Where awnings are needed for glare, carefully designed vinyl or canvas awnings which are compatible with the architecture may be used. Modern awning canvas fabrics are of synthetic fibers and quite colorfast. Flat awnings of appropriate scale and material are acceptable.
- Awnings should be weather-resistant and flame-proofed.
- The shape of the awning should be designed to fit the building's architecture. Distinctively-shaped awnings, such as arches or round-ended awnings, can be used when appropriate, to add interest to a plain façade.
- Awnings may extend up to seven (7) feet but not more than two-thirds of the distance from the property line to the nearest curb line. No portion of the awning shall extend nearer than two (2) feet to the face of the curb line and should not be lower than eight (8) feet above the sidewalk. These distances may vary depending on the presence of streetscape features such as trees and lamp poles.

Typical Awning



SIGNS

The function of the storefront sign is to inform the customer of the goods or services provided within. It can also express the individual character of the store. The sign message is most effectively conveyed by limiting the amount of information to the essentials. Too much information can be as ineffective as too little. A shopper should be able to read a sign at a glance, and not have to spend a lot of time trying to find the relevant facts.

Signs are not only property in a commercial area, but if well-designed they can contribute positively to the area's character and flavor. In many cases, due to their close proximity and excessive numbers, they become confused, ugly, and fail to deliver the messages that were intended. Signs that detract from an area include: the sign that is oversized for its job or its setting, the sign that is crudely designed or lettered or carelessly built or mounted, the sign that is merely painted on the building surface when the surface deserved better treatment and the sign that overwhelms with too much light or with animation or flashing.

It is not always easy to determine when a sign exceeds the limits of compatibility with its surroundings. What is desired is inventiveness, excellence of lettering, careful color coordination with the building, good mounting, readability, materials compatible with the building, lighting which is creative without being overwhelming and, where effective, the use of plaques, logos, and decorative devices.

Type Faces

Commercially available type faces come in many styles. The possibilities should be explored thoroughly since the type style chosen for the store's sign can set the tone for the store. A bold, solid letter design, for example, conveys a very different image from a light, delicate script letter.

The clarity and legibility of a sign can be enhanced by choosing an appropriate letter size and color, a compatible but contrasting background color, and a well-designed layout. Hand painted letters should be done by a highly skilled sign painter.

Materials

Reflective surfaces, such as glass or plastic, used as the background material of a sign should be carefully chosen, because they can sometimes cause unwanted reflections that can make the sign hard to read. Whatever the material used, the sign should be well constructed and easily maintained.

Horizontal Signs

The size and location of a horizontal sign is best determined by the architecture and scale of the building. The natural space for a horizontal sign is in the area defined by the piers (vertical support pieces) and the first-floor cornice (the flat or projecting horizontal piece that runs between the piers at ceiling level). The sign should logically fill or be contained within that space, so that it fits with the building's architecture. The tops of the windows on the first floor should not be covered by a horizontal sign, because it gives the storefront a squeezed-down look.

Horizontal or flat signs should be placed parallel to the building face and should not project more than 12" from the surface of the building and should not exceed in area two (2) times the width in feet of the frontage of the building. In calculating the permitted sign area, the sign frontage refers to the length of a building along a public way occupied by a separate and distinct use. Flat signs should be placed below the cornice line of the first floor, no higher than the bottom of the second story window where windows exist, and not less than eleven (11) feet above grade level.

Triangular, round, or freeform shapes, rather than the standard horizontal rectangle, may sometimes be effective on a storefront, but they should be carefully designed so they look well on their particular facades.

At a minimum, all signs must conform with city ordinances.

letters illuminated by spotlights

A back-lit sign

individually back-lit letters

solid letters back-lit

neon

Horizontal signs should be placed in the area defined by the piers and first floor cornice.

Projecting Signs

Effective design and placement of signs that project at right angles from a building require coordination among neighboring store owners. A row of projecting signs that are all at different heights and of different sizes and shapes, can create a jarring appearance and be confusing rather than informative. A better approach might be for all the buildings to have signs of compatible design, all placed at about the same height. Each message would then come through clearly.

The entire signage program for a store should be carefully thought through so that the projecting sign does not block the store's horizontal sign, if it has one. Often, this can be avoided by attaching the projecting sign to one of the piers. Additions hanging from projecting signs should be avoided, as they tend to look like an afterthought. The structures that support a projecting sign should be an attractive, integral part of the sign, or should be very simple and unobtrusive.

Three dimensional representations of objects — the store's logo, or a symbol representing the goods or services available, such as tobacco, hardware, haircutting, etc. — can make very effective projecting signs because they can be unique to the particular store and can be unusua and eye-catching when seen from a distance.

Projecting signs should be maintained as close as possible to the building façade, and in size proportionate to height and width of the store front, sidewalk, and other vertical elements in the adjacent area. A projecting sign should not project higher then the bottom of the second-story windows, and not less than eleven feet above grade. Projecting signs should not extend more than two feet beyond the building surface.

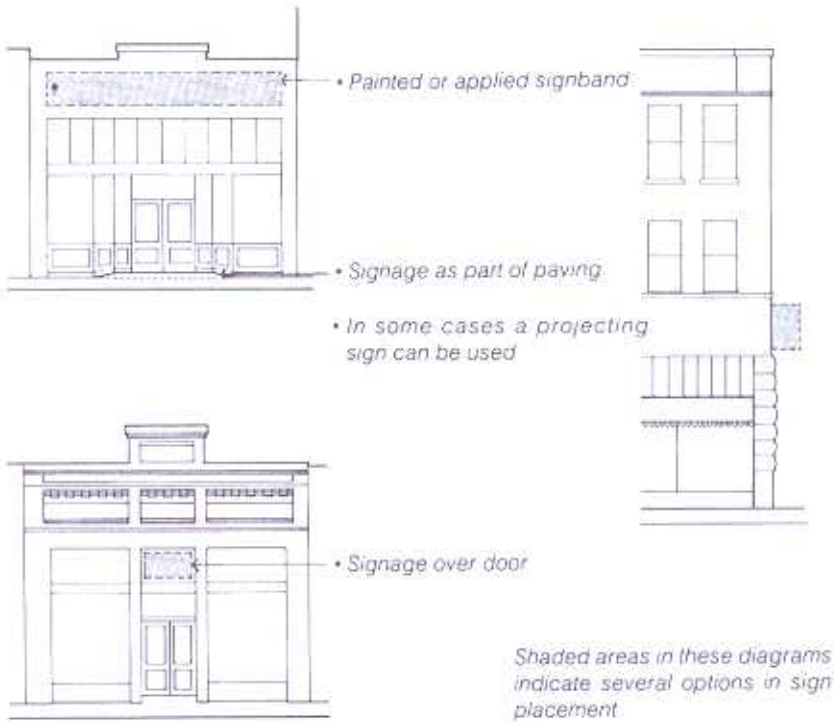
Any sign that extends more than 6 inches into public right-of-way will require an encroachment agreement from the City of Waco.

General Guidelines

- No signs other than those identifying the property where they are installed or identifying the business conducted therein should be permitted. All lighting elements such as wires, conduits, junction boxes, transformers, ballasts switches and panel boxes should be concealed from view as much as possible.
- Content of signs should be limited to the name of the business, the use conducted within the property, the store logo, and the retail area logo, if any.
- Roof top signs, signs on or about the parapet of a building, billboards, or outdoor advertising signs painted or mounted on structures, except as otherwise described are prohibited.
- Temporary display window signs should not occupy over 20 per cent of the window area. This window area includes signs placed within three (3) feet of the window and visible from the outside.
- Flashing, moving or portable signs other than barber poles are prohibited.

Not Permitted:

- Signs exceeding 2 × width of building
- Roof-top signs
- Flashing or moving signs
- Projecting signs beyond 2'
- Free-standing signs (other than for auto service stations)
- Temporary signs for more than 20 days
- Product-advertising signs



Shaded areas in these diagrams indicate several options in sign placement

LIGHTING

In general, good lighting of a storefront and window at night can be good advertising, and should be considered along with the lighting of the signage. A storefront and its signs can be lit by a variety of methods. Light can come from spotlights, recessed fixtures or exposed globes, from the windows or from the sign itself. Signs can be illuminated by spotlights, by fluorescent tubing built into the sign, by individually lit letters, by solid letters placed in front of a lighted background, or it can consist of neon tubing spelling out the sign message.

In a small-scale, quiet neighborhood, it is best to stick to indirect lighting on signs, while in a large, busy shopping district back-lit signs and neon may be more appropriate and effective. Care must be taken in designing internally lighted signs, since their daytime appearance is totally different from their effect at night. Maintenance of such signs should also be considered; a lighted sign with burned-out bulbs can make a store look unattractive.

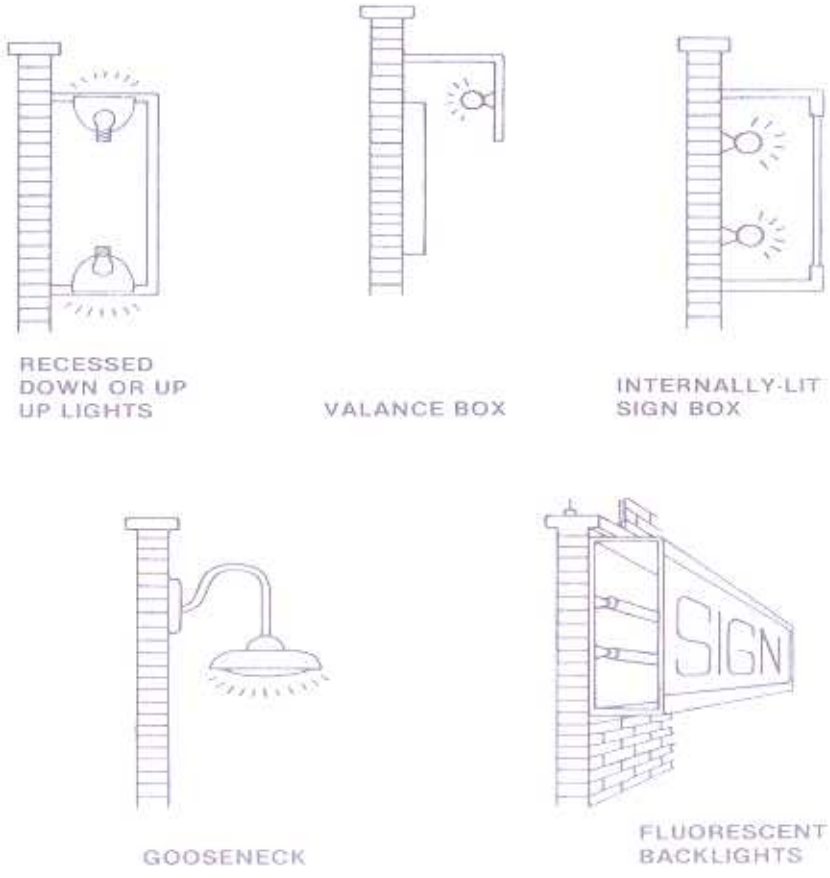
Recommended lighting methods are:

- Fully recessed down lights or wall washers in projecting metal box which run the full length of the store at the top of the sign zone.
- Shielded fluorescent lamps with diffusers in projecting metal box which runs the full length of the storefront at the top of the sign zone.
- Internally-illuminated box signs and individual letters or back-lit "halo" letters.
- "Gooseneck" incandescent, porcelain enamel reflector on bent metal tube arm, if well designed and compatible with the building.

Lighting methods not generally recommended are:

- Exposed fluorescent lighting.
- Exposed quartz or mercury vapor lamps.
- Exposed incandescent lamps.

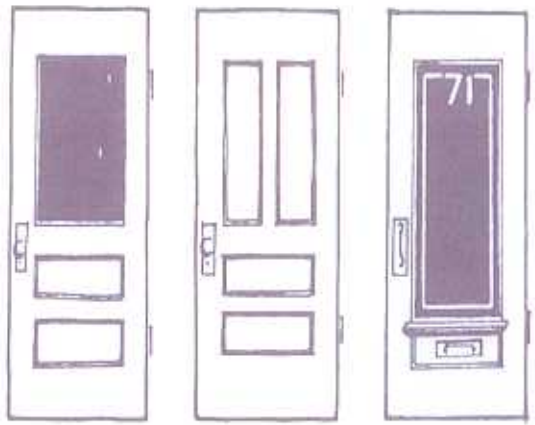
Good Lighting Methods



DOORS AND ENTRANCES

Where they still exist, original doors should be retained. If original doors are not available, new doors of similar design should be obtained. Many door manufacturers now market quality reproductions. These should not be mistaken for modern "Traditional" or "Early American" styles which are not historically accurate or appropriate. **Modern aluminum doors should be avoided.** Also, avoid over-decorating the door. The door should reinforce the character of the building, as well as beckon shoppers inside. A handsome door knob or pull, a brass kick plate, or an attractive painted sign on the window is enough to make the door something special.

As a major element of the storefront, the door or entrance should be carefully designed to be as attractive as possible. Any solid or aluminum and glass doors that do not fit into the character of the existing storefront should be replaced.



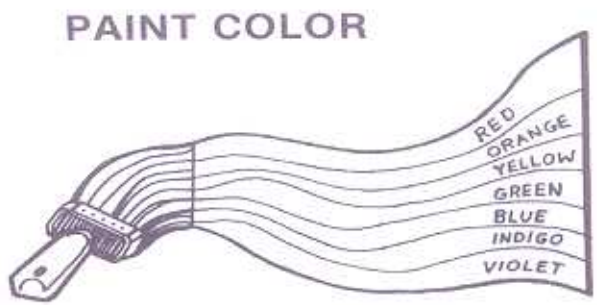
If you choose to maintain a traditional appearance, an old wood panel door is most appropriate.

COLORS

One of the most important decisions building owners make is the choice of exterior color. By coordinating paint colors with those of neighboring structures, it is possible to create a desirable, unified image for a group of architecturally diverse structures. Such coordination may be achieved by using all "warm" colors (reds, yellows, oranges, browns, gold) or all "cool" colors (blues, greens, whites, grays, silver) in varying intensities. Colors may also be coordinated by balancing lighter complementary (opposite colors) or monochromatic (different shades of same color) colors with small accent areas of brighter or darker colors. Light colors (pale or pastel colors) are recommended for wall surfaces with darker colors used for the trim and cornice. Bright colors (saturated, pure colors) are good for accenting or high-lighting particular features and are most effective when used for awnings, graphics and banners.

There is no simple standard that defines the right use of color for all time. It is a subjective and personal matter which often defies a consensus on the part of owner, tenant, patron, or reviewer. Nevertheless, color is most significantly a part of the total design effort and must be considered with discretion. This is of particular importance in the case of a wood frame building where the combination of wall and trim colors usually decides its basic character, making it appear either cheerful or gloomy, light or heavy, restful or "busy," and so on. In the case of a brick building, although the basic wall color has already been established (unless the brick is painted), the choice of color for windows, doors, trim, and other features can still have a decisive influence on the character of the exterior. The following guidelines should be considered when selecting colors:

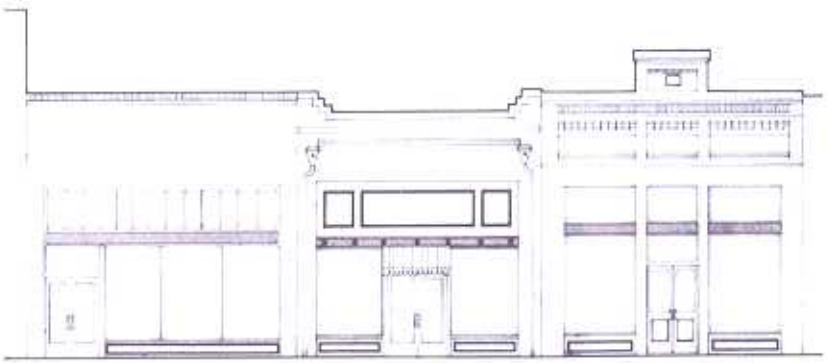
- Avoid bright or raw primary colors or the use of two colors of the same intensity. Select colors compatible with neutral masonry and other neutral building materials as well as colors of adjoining buildings. The original colors of the structure should be used if at all possible.
- Original brick surfaces should be cleaned, or, where necessary, repointed — **not painted**. When brick is already painted, flaking paint could be removed to the original brick surface and repointed, where necessary, or repainted an appropriate color. Painting previously painted surfaces is an inexpensive and effective way to change and improve the appearance of a building façade.
- Keep the color scheme simple. Limit the number of colors to two or no more than three. The most effective architectural color schemes usually contain a very limited number of real colors — perhaps one or two at the most — many of the elements such as windows, trim, and roofing tiles being in the white, gray, or black which are actually noncolors.



- Buildings already in color because of painted brick may well remain so. It is not necessary to match the natural brick coloration by the use of, say, red paint.

- All windows and cornices on the same façade should be of the same color. Use a lighter color to emphasize their architectural detailing, especially where there are darker original brick surfaces. Darker colors may be used to contrast with lighter wall surfaces. A general rule for wall surfaces is that it is better to choose light colors over dark ones since lighter colors tend to give a clean, bright feeling.
- Color work on side and rear walls should avoid harsh shifts in effect from front or street walls. A building should be treated as consistently as possible on all sides to avoid a "shirt front" image.
- Features, such as gutters and downspouts, mechanical equipment, air-conditioning units and flashing should be painted a flat finish and should match the wall color of the building.
- The quality of light a building receives throughout the day depends on orientation to the sun and whether or not the building is shaded by taller structures. For a building that is in shade most of the business day, lighter, warmer colors or lighter, cooler colors should be used. This will have the effect of reflecting the light and will brighten up the shady side of the street.

Before selecting paint colors, look at the building in relation to the overall character of the block or commercial area.

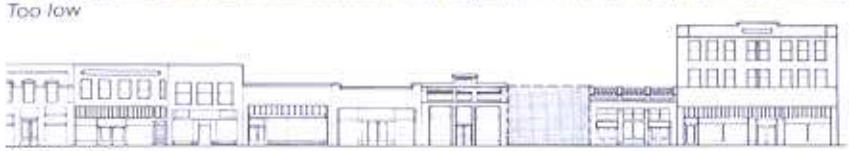


Shaded areas indicate places where the use of color can be particularly effective. The natural color of the brick should be retained, though sometimes painting particular details can enrich and articulate the façade.

NEW CONSTRUCTION

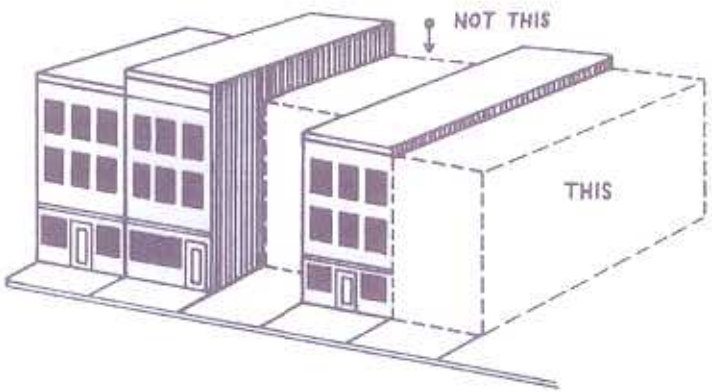
It is important that new construction be architecturally compatible with the character of existing structures. New buildings should respond sympathetically to the existing streetscape and its visual character and should contribute to the cohesiveness and common elements of the commercial area. This does not mean that new buildings should mimic existing structures or be constructed as "replica buildings" of earlier period buildings. On the other hand, while blending harmoniously with neighbors certainly does not mean duplicating them, the design of new buildings should respect certain principles and elements which are inherent to existing buildings in the commercial area. To this end, all of the guidelines spelled out earlier relating to materials colors, signs, etc. for renovation of existing structures should be carefully considered and applied where appropriate, in the design of new construction. Consider the scale, volume and texture of adjoining or adjacent structures in the redevelopment of your building Pre-engineered metal buildings are prohibited. All new construction must conform with the City Building Code.

Too low



Appropriate

Too tall



New construction should respect and relate to the height and width of neighboring buildings, so as to avoid distracting changes in scale and proportion.

Yes

No

REPAIR AND MAINTENANCE STANDARDS

The following guidelines should be followed in regard to the repair and maintenance of existing structures.

Cleaning Masonry

A thorough exterior cleaning can make an amazing improvement in the appearance of a building. Furthermore, if allowed to remain, deposits of dirt can have detrimental effects on the soundness of the building itself, acting as reservoirs for harmful chemicals and hiding decay. Cleaning should be done in a careful manner because inappropriate methods may result in serious damage to the building and its materials.

What may appear to be dirt may actually be weathered masonry. Some harmless dirt should be left alone. A brand new look should certainly be avoided. Most importantly, improper cleaning could trigger or accelerate the deteriorating effect of dirt and pollutants. Many cleaning processes are available but the type and source of the dirt should be determined in order to effectively select a cleaning method. Paint, soot, smoke or even bird droppings each will require a different technique of removal. Other construction materials of the building must be considered since certain cleaning methods could have detrimental effects on non-masonry surfaces. Certain natural stones such as marble and sandstone are not compatible with masonry cleansers. Also, certain cleansers can have a harmful effect on glass, wood, and paint. There are four basic types of masonry cleaning:

- **Water Spray** — A simple, low-cost, but relatively slow method of cleaning is to spray water on the building surface. The intention is to keep deposits of dirt moist long enough for them to soften, thereby allowing them to be removed by either hosing them down or using bristle brushes. This method is effective for brickwork when the dirt is merely sitting on the surface or is bound to the wall with water-soluble matter. It is not useful for removing heavily encrusted dirt; such conditions require follow-up attention using other methods. When there is no need for more effective methods of cleaning the water spray process has relatively few disadvantages. The primary ones are that limestone may develop brown, patch stains, and when water is used in large quantities, its penetration may damage interior finishes, hidden timbers, and ferrous metals. Staining can often be reduced by applying a water jet when the stone has dried and by washing the building regularly (every three to five years).

- **Chemicals** — There are a number of chemical cleaners available which generally promise low-cost and efficient cleaning. Many of them have the added advantage of being able to remove paint from brick and stone surfaces. All chemical cleaners, however, pose some risk to the building and to the users of the chemicals. Therefore, they should be applied only with caution.

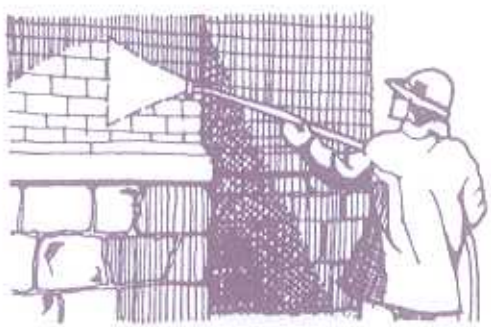
  Because different cleaning agents are composed of different chemical compounds, it is difficult to generalize regarding the suitability of chemical cleaners for a particular kind of building. Some chemical cleaners, in fact, may be highly effective on some surfaces while causing irreparable damage to others. A test patch in an unobtrusive location should be prepared well in advance of the actual work. Furthermore, no chemical cleaning product is any better than the person using it. For these reasons, it is extremely important that any prospective contractor be carefully screened as to his previous work on similar buildings. References should be checked, and, even most important, actual samples of the contractor's work should be viewed first-hand.

Bristle brushes are recommended over metal brushes since metal can damage the mortar and masonry.

- **Steam** — When used alone, steam cleaning has been shown to be a relatively inefficient cleaning method. As with water spray, it is usually necessary to follow the steam with brushes and other abrasives to remove dirt. When used with paint strippers or chemicals, however, steam is very efficient and poses little threat to the building materials. Although steam cleaning has the potential disadvantage of staining and causing internal damage, the risk of staining is less than with water spray.

- **Sandblasting** — Brick surfaces should ***never*** be sandblasted. Along with the dirt, sandblasting removes the outer surface of the brick, leaving it porous and badly pitted, thus leading to another cycle of deterioration. Mortar joints, too, are badly damaged in the process. As a result, tuck-pointing is almost always needed afterwards, even though the wall might not have required it before being sandblasted.

  Sandblasting is general not recommended for hard stone either. As a last resort, however, hard stone can be cleaned by dry sandblasting under a pressure of 90 to 100 pounds of air. Alternatively, wet sandcleaning using water and sand with pressures under 60 pounds can be tried. However, repointing of the entire wall surface will probably be necessary after the cleaning has been completed. Like brickwork, soft stone should ***never be sandblasted.***



Cleaning the building surface can give the building new visual life, restoring the natural qualities of the brick or stone.

Waterproofing Masonry

Waterproof and water repellent coatings for above grade masonry are generally not recommended. The presence of such coatings can create more problems than they cure. Often moisture in the wall is present from overhead leaks or damprise rather than from surface absorption. Therefore, coatings tend to trap water in the wall rather than keep it out. Usually it is when the surface integrity of the masonry is already destroyed that a water repellent treatment is needed.

Sandblasting is *never* recommended because it can damage or corrode the building surface.

Some especially dirty surfaces may require a good deal of manual scrubbing and strong detergent.

Tuckpointing

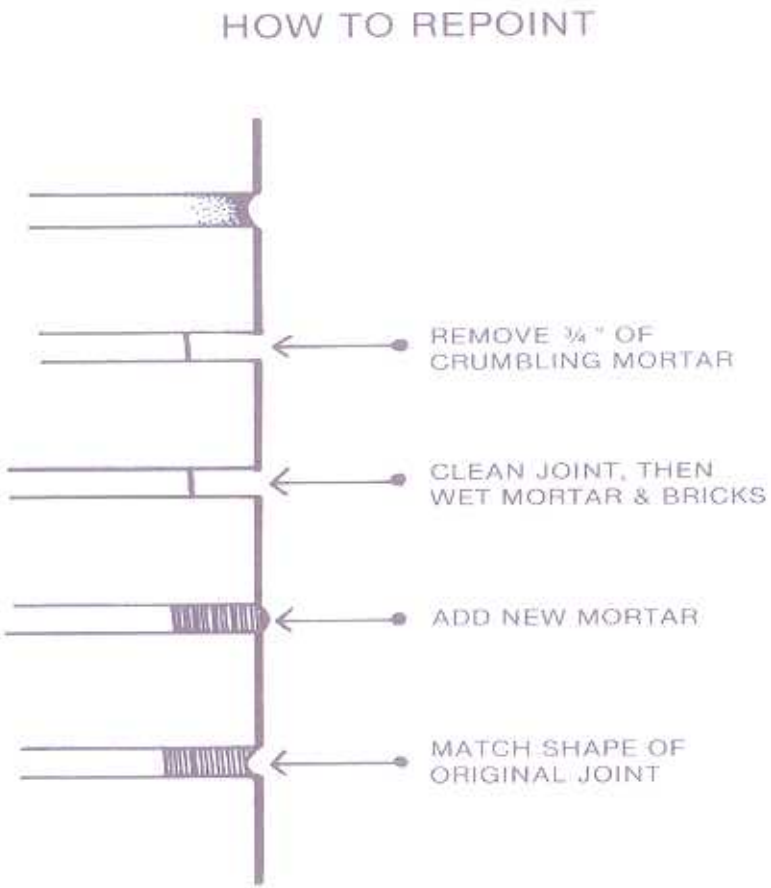
Tuckpointing or repointing is the process of replacing missing or defective mortar in brick and other masonry walls. It is often needed not only for visual reasons but also to prevent water leakage in walls of this type. If done well, tuckpointing can result in water-tightness and a like-new appearance of the building. If improperly done, it can result in a sloppy appearance and permanent damage to the fabric of the building.

Tuckpointing always should be done carefully by someone who is highly skilled in such work. As is true for cleaning contractors, prospective tuckpointing contractors should be carefully screened as to their competence, and previous work should be inspected.

There are several pointing styles for mortar joints, including various profiles, different treatment for horizontal and vertical joints and colored mortar. Properties of the mortar must be analyzed and determined. Sand color and texture can be most closely matched if the original sand pits still exist. Color can also be modified by the additions of quality, colorfast mortar pigments. Early mortars were not manufactured as finely as today and such lack of quality control may have to be duplicated. A high content lime mortar is recommended because of its inherent qualities to self-seal small cracks and voids. Also, such a mortar is more flexible and has low volume change due to weather conditions.

Normally, old mortar should be removed to a minimum depth of one inch. All loose and disintegrated mortar beyond this depth should also be removed. A clean square corner at the back of the cut should be left. Power grinders should not be used. It is essential that no brick be damaged when removing mortar.

Mortar should be mixed properly and prehydrated in accordance with quality construction methods. Use of additives is not normally recommended. Remove all loose particles from the joins with air pressure and wet the brick and old mortar just prior to placing new mortar. Apply mortar in several layers 1/4" deep, compact each layer and allow to become thumb print hard before applying the next layer. Tool the final layer to match the existing joints. The surrounding masonry should be kept reasonably clean as the work progresses. Final cleaning should be done with water and bristle brush only.



Painting

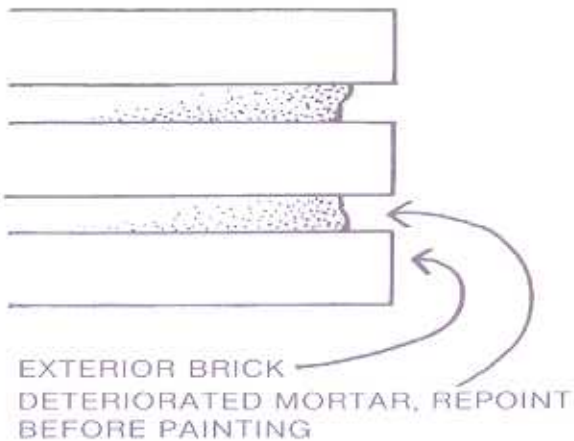
The benefits of repainting are numerous. Paint can be the single most effective improvements to the structure, and is relatively inexpensive. Obviously the structure will be better protected from weather. Also, painting is contagious. One well-painted structure on the block will encourage other property owners and tenants to improve the appearance of the buildings. Paint will tie color relationships of the various facades together.

Before selecting colors and types of paint, preparation and priming must be performed. Preparation involves removing loose paint, sanding scraped and rough surfaces, puttying and caulking as required, and removing dust and dirt. Primer should be applied to all exposed surfaces. Penetrating primers such as oil or alkyd-based products are recommended for wood. Paint dealers and contractors can recommend other products as required. In any case, it is extremely important that the surfaces be properly prepared and primed for a long lasting, quality paint job.

Before painting, prepare the surface adequately by removing all peeling or loose paint.

Paint should be selected to be compatible with the primer. Consideration should then be given to color, type (oil or latex base), and finish (gloss, semi-gloss or matte).

Unpainted brick buildings should not be painted. If the building has already been painted and repainting is desired, carefully examine the condition of brick and mortar and make essential repairs such as brick replacement and repointing prior to painting.



DOWNTOWN FAÇADE DESIGN STANDARDS

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