

5.3 Exterior Storefront and Entry Technical Guidelines



These technical guidelines apply to all properties that are considered historically significant in the Main Street Historic District

5.3.1 INTRODUCTION

Building storefronts and entries are the most important architectural feature of many historic commercial buildings. In commercial buildings, storefronts play a crucial role in a store's advertising and merchandising strategy to draw customers and increase business. Not surprisingly, then, the storefront has become the feature most commonly altered in a historic commercial building. In the process, these alterations may have completely changed or destroyed a building's distinguishing architectural features that make up its historic character.

Wherever possible, significant storefronts (be they original or later alterations), including windows, sash, doors, transoms, signs and decorative features, should be repaired in order to retain the historic character of the building. Where original or early storefronts no longer exist or are too deteriorated to save, the commercial character of the building should nonetheless be preserved - either through an accurate restoration based on historic research and physical evidence or a contemporary design which is compatible with the scale, design, materials, color and texture of the historic building. The sensitive rehabilitation of historic storefronts will not only enhance the architectural character of the overall building but will contribute to rejuvenating neighborhoods or business districts as well.

Refer to ‘Storefront & Entry Design Guidelines,’ section 4.3 for design information regarding storefronts and entries in historic commercial properties.

5.3.2 EVALUATION OF THE PHYSICAL CONDITION

The physical condition of a storefront can show mild, moderate or severe deterioration:

- **Mild Deterioration:** Do the surface materials need repair? Is paint flaking? Are metal components rusting? Do joints need recaulking where materials meet glass windows? Mild deterioration generally requires only maintenance level treatments.



**MILDLY DETERIORATED
PAINTED SURFACE.**

- **Moderate Deterioration:** Can rotted or rusted or broken sections of material be replaced with new material to match the old? Can solid material (such as Carrara glass) from a non-conspicuous location be used on the historic facade to repair damaged elements? Do stone or brick components need repointing? Is the storefront watertight with good flashing connections? Are there leaky gutters or air conditioner units which drip condensation on the storefront? Is caulking needed? Moderate deterioration generally requires patching or splicing of the existing elements with new pieces to match the deteriorated element.

- **Severe Deterioration:** Have existing facing materials deteriorated beyond repair through vandalism, settlement, or water penetration? Is there a loss of structural integrity? Is the material rusted through, rotted, buckling, or completely missing? Are structural lintels sagging? Are support columns settled or out of alignment? Severe deterioration generally requires replacement of deteriorated elements as part of the overall rehabilitation.

5.3.3 DECIDING A COURSE OF ACTION

The evaluation of the storefront's architectural features and physical condition will help determine the best course of action in the actual rehabilitation work. The following recommendations, adapted from the Secretary of the Interior's "*Standards for Rehabilitation*", are designed to ensure that the historic commercial character of the building is retained in the rehabilitation process.

If the original or significant storefront or entry exists, repair and retain the historic features using recommended treatments. Removal of later additions that contribute to the character of the building should not be undertaken.

If the original or significant storefront or entry no longer exists or is too deteriorated to save, undertake a contemporary design which is compatible with the rest of the building in scale, design, materials, color and texture; or undertake an accurate restoration based on historical research and physical evidence (see section on "*Replacement Storefronts*" in this chapter).

The new storefront design should not draw attention away from the historic building with its detailing but rather should respect the existing historic character of the overall building. A new design that copies traditional details or features from neighboring buildings or other structures of the period may give the building a historical appearance which blends in with its neighbors but which never, in fact, existed. For this reason, use of conjectural designs, even if based on similar buildings elsewhere in the neighborhood or the availability of different architectural

elements from other buildings or structures, is generally not recommended.

5.3.4 REHABILITATING WOOD STOREFRONTS

The key to the successful rehabilitation of wooden storefronts is a careful evaluation of existing physical conditions. Moisture, sun, vandalism, insect attack, and lack of maintenance can all contribute to the deterioration of wooden storefronts. Paint failure should not be mistakenly interpreted as a sign that the wood is in poor condition and therefore irreparable. Wood is frequently in sound physical condition beneath unsightly paint. An ice pick or awl may be used to test wood for soundness - decayed wood that is jabbed will lift up in short irregular pieces; sound wood will separate in long fibrous splinters.

Wood storefronts showing signs of physical deterioration can often be repaired using simple methods. Partially decayed wood can be patched, built up, chemically treated or consolidated and then painted to achieve a sound condition, good appearance, and greatly extended life.

To repair wood showing signs of rot, it is advisable to dry the wood; carefully apply a fungicide such as pentachlorophenol (a highly toxic substance) to all decayed areas; then treat with 2 or 3 applications of boiled linseed oil (24 hours between applications). Afterward, fill cracks and holes with putty; caulk the joints between the various wooden members; and finally prime and paint the surface.

Partially decayed wood may also be strengthened and stabilized by consolidation, using semirigid epoxies which saturate porous decayed wood and then harden. The consolidated wood can then be filled with a semirigid epoxy patching compound, sanded and painted.

Where components of wood storefronts are so badly deteriorated that they cannot be stabilized, it is possible to replace the deteriorated parts with new pieces. These techniques all require skill and some expense, but are recommended in

cases where decorative elements, such as brackets or pilasters, are involved. In some cases, missing edges can be filled and rebuilt using wood putty or epoxy compounds. When the epoxy cures, it can be sanded smooth and painted to achieve a durable and waterproof repair.

Repainting Wood Storefronts: wood storefronts were historically painted to deter the harmful effects of weathering (moisture, ultraviolet rays from the sun, wind, etc.) as well as to define and accent architectural features. Repainting exterior woodwork is thus an inexpensive way to provide continued protection from weathering and to give a fresh appearance to the storefront.

As a general rule, removing paint from historic exterior woodwork should be avoided unless absolutely essential; see *Paint and Color Design Guidelines* chapter for information on paint removal and re-painting. Once conditions warranting removal have been identified, however, paint can be removed to the next sound layer using the gentlest method possible, then the woodwork repainted. For example, such conditions as mildewing, excessive chalking, or staining (from the oxidization of rusting nails or metal anchorage devices) generally require only thorough surface cleaning prior to repainting.



SEVERELY DETERIORATED PAINTED SURFACE ON WOOD DUE TO WEATHERING AND LACK OF MAINTENANCE.

There are several acceptable methods for total paint removal, final preparation for new paint and painting, depending on the particular wooden element involved; detailed information

on these methods are provided in the *Paint and Color Design Guidelines* chapter.

Relative to storefronts, detachable wooden elements such as exterior shutters, balusters and columns, can probably best be chemically stripped by means of immersion in commercial dip tanks because other methods are too laborious. Care must be taken in neutralizing and rinsing all chemical residue off the wood prior to painting or the new paint will not adhere.

5.3.5 REHABILITATING MASONRY STOREFRONTS

Some storefronts are constructed of brick or stone, and like their metal and wooden counterparts, also may have been subjected to physical damage or alterations over time. Although mortar may have disintegrated, inappropriate surface coatings applied, and openings reduced or blocked up, careful rehabilitation will help restore the visual and physical integrity of the masonry storefront.

Repair and Replacement of Masonry: if obvious signs of deterioration - disintegrating mortar, spalling bricks or stone - are present, the causes (ground moisture, leaky downspouts, etc.) should be identified and corrected. Some repointing may be necessary on the masonry surface, but should be limited to areas in which so much mortar is missing that water accumulates in the mortar joints, causing further deterioration. New mortar should duplicate the composition, color, texture, and hardness, as well as the joint size and profile of the original. Badly spalling bricks may have to be replaced.

Cleaning Masonry: Inappropriate cleaning techniques can be a major source of damage to historic masonry buildings. Historic masonry should be cleaned only when necessary to halt deterioration or to remove graffiti and stains, and always with the gentlest means possible, such as water and a mild detergent using natural bristle brushes, and/or a non-harmful chemical solution, both followed by a low-pressure water rinse.

Refer to the *Masonry Design Guidelines* chapter for detailed information on Cleaning Masonry.

Removing unsightly mastic from masonry presents a similarly serious problem. Its removal by mechanical means may result in abrading the masonry, and chemical and heat methods may prove ineffective, although solvents like acetone will aid in softening the hardened mastic. If the mastic has become brittle, a flat chisel may be used to pop it off; but this technique, if not undertaken with care, may result in damaging the masonry.

And even if total removal is possible, the mastic may have permanently stained the masonry. Replacement of these masonry sections marred by mastic application may be one option in limited situations; individual pieces of stone or bricks that have been damaged by inappropriate alterations may be cut out and replaced with new pieces that duplicate the original. However, since an exact match will be nearly impossible to achieve, it may be necessary to paint the repaired masonry in order to create a harmonious facade. Replacement of a large area with new materials may not be acceptable as it may give the building a new, non-historic appearance inappropriate to the building style and period.

5.3.6 REHABILITATING CAST IRON STOREFRONTS

Cast iron storefronts are usually encrusted with layers of paint which need to be removed to restore crispness to the details. Where paint buildup and rust are not severe problems, handscraping and wire-brushing are viable cleaning methods. While it is necessary to remove all rust before repainting, it is not necessary to remove all paint.

For situations involving extensive paint buildup or corrosion, mechanical methods such as low-pressure gentle dry grit blasting (80-100 psi) are effective and economical, providing a good paint surface. This can be done on-site if precautions are taken re: contamination of the area.



CAST IRON STOREFRONT

Masonry and wood surfaces adjacent to the cleaning area, however, should be protected to avoid inadvertent damage from the blasting. It will be necessary to recaulk and putty the heads of screws and bolts after grit blasting to prevent moisture from entering the joints. Cleaned areas should be painted immediately after cleaning with a rust-inhibiting primer to prevent new corrosion. Before any cleaning is undertaken, local codes should be checked to ensure compliance with environmental safety requirements.

Storefronts utilizing softer metals (lead, tin), sheet metals (sheet copper), and plated metals (tin and terneplate) should not be cleaned mechanically (grit blasting) because their plating or finish can be easily abraded and damaged. It is usually preferable to clean these softer metals with a chemical (acid pickling or phosphate dipping) method. Once the surface of the metal has been cleaned of all corrosion, grease, and dirt, a rust inhibiting primer coat should be applied. Finish coats especially formulated for metals, consisting of lacquers, varnishes, enamels or special coatings, can be applied once the primer has dried. Primer and finish coats should be selected for chemical compatibility with the particular metal in question.

The proper cleaning of metal storefronts should not be considered a "do-it-yourself" project. The nature and condition of the material should be assessed by a competent professional, and the

work accomplished by a company specializing in such work.