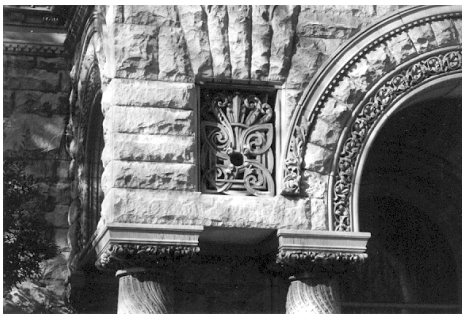
MAINTENANCE
GUIDELINES

Maintaining the historic character of a local preservation district is a tall order. Districts are made up of dozens of buildings and sites, and each possesses its own distinctive stylistic features and site conditions. All of these elements combine to create a rich architectural fabric.

Individual district characterizations prepared for the Landmarks Commission broadly describe these unique features and outline steps you can take to learn to "read" your building. Once you have identified these character-defining features, the guidelines in this section offer guidance on how to protect and maintain them. The maintenance, repair, replacement, or reconstruction of architectural elements, as outlined below, should be done with the use of physical or documentary evidence. Maintenance should be done to protect historic elements of a building, site, and preservation district.



Entrances

MA.1 Carry out regular maintenance for entrance features.

» Proper maintenance includes regular cleaning, rust removal, limited paint removal, and the application of protective coatings.

MA.2 Remove and then reinstall door hardware when repainting.

MA.3 Apply weather stripping as needed.

» Installation of weather stripping around door frames can increase energy efficiency significantly.

MA.4 Do not paint historically clear-finished doors.

Masonry

MA.5 Regularly inspect a building for mortar deterioration caused by a leaking roof and gutter, exposure, differential settlement, and capillary action in which moisture is drawn up into the walls.

» Where mortar joints have deteriorated, repoint with an appropriate mortar mixture that is no harder than the original historic mortar.

MA.6 Identify the cause(s) of localized mortar failure.

» Such failure can be caused by broken downspouts, damaged flashing, building settlement, or improper site drainage.

MA.7 Identify the cause(s) of localized masonry deterioration.

» Drainage problems, rising damp, freeze-thaw cycles, absorption of de-icing salts, building settlement, hard mortar, and vine or moss coverage can all cause brick to crack and crumble.

MA.8 Do not clean a masonry surface unless heavy soiling is causing deterioration.

» Cleaning should use only the gentlest means necessary, such as low-pressure water and natural bristle brushes.

» Do not use metal brushes, which can damage masonry surfaces.

MA.9 Do not apply a waterproof coating, paint, or stucco to a masonry building as a substitute for repointing and general maintenance.

» In addition to altering their original appearance, such treatments may ultimately trap moisture within the walls. They should be used only as a last resort in instances where maintenance and masonry repairs have not succeeded in limiting water penetration.

MA.10 Remove deteriorated paint only to the next sound layer before applying a compatible paint coating system to previously-painted masonry.

» Paint that firmly adheres to masonry should be left in place, since it acts as a protective coating.

MA.11 Install a sloping mortar wash surface at the top of a chimney to protect the chimney wall.

MA.12 Do not place insulation within the cavities of a masonry wall.

» This limits the ability of water vapor to pass through the walls and could lead to condensation-related deterioration within the walls. In addition, installation can significantly damage historic fabric.

MA.13 Do not use an anti-graffiti masonry sealant. They alter the appearance of historic masonry after frequent applications.

Metals

MA.14 Regularly inspect ornamental metalwork for signs of corrosion, tears, holes, or missing pieces.

» Rust and surface discoloration are often evidence of internal deterioration. Sanding, priming, and painting can address small patches of deterioration; however, more extensive damage may require limited replacement.

MA.15 Identify the types of metal on your historic building before undertaking any type of project, since the unique characteristics of each metal require different treatments.

Paint

MA.16 Remove, handle, and dispose of lead-containing paint in compliance with all local, state, and federal standards.

MA.17 Remove deteriorated paint only to the next sound layer before applying a compatible paint coating system to previously-painted masonry.

» Paint firmly adhering to masonry should be left in place, since it acts as a protective coating.

MA.18 Remove only deteriorated paint layers using the gentlest means possible (handscraping and handsanding in conjunction with chemical strippers).

» Electric hot-air guns and electric heat plates may be used with extreme caution when total paint removal is required. Care should be taken not to scorch the wood or start a fire.

MA.19 Prepare wood surfaces properly and apply a compatible paint coating system following manufacturers' application instructions.

» Generally, a primer coat and two finish coats are recommended.

MA.20 Coat all surfaces of wood repairs, including those that will be concealed, with primer.

» This is called "back-priming" and helps combat deterioration and warping caused by moisture absorption over time.

MA.21 Paint all wood porch elements.

» Painting protects porch elements from exposure and undue weathering.

MA.22 Reapply an appropriate paint or other coating system to previously painted metal features after cleaning.

» Failure to do so will result in accelerated corrosion of the metal or alloys.

MA.23 Remove and then reinstall window and door hardware when repainting.

MA.24 Do not use propane or butane torches, sandblasting or waterblasting, or belt or disc sanders to remove deteriorated paint from the wood surfaces of historic buildings.

» These methods are extremely harsh and can significantly damage historic woodwork.

Porches and Entrances

MA.25 Install wood lattice or grillage between porch piers for adequate ventilation.

MA.26 Install a stone or concrete plinth upon which the wood post and bottom steps can rest.

» This will help control future deterioration by raising wood members above the ground level.

MA.27 Paint all wood porch elements. Painting protects porch elements from exposure and undue weathering.

MA.28 Do not apply waterproof sealants over masonry walls or steps.

» This will cause moisture to become trapped within the steps or walls.

MA.29 Do not use rock salt or halite to melt snow and ice on stone or brick steps.

» Salts dissolved in the meltwater will be absorbed and crystallize, damaging historic masonry.

Roofing

MA.30 Regularly inspect gutters, flashing, and downspouts to ensure that they are effective in carrying rainwater away from the building.

» All roof surfaces should be watertight, and flashing should be intact around chimneys, parapets, dormers, and along valleys created by intersecting slopes.

MA.31 Maintain the effectiveness of the roof by regularly cleaning gutters and downspouts, replacing deteriorated flashing as needed, properly venting attics to prevent moisture condensation, and inspecting for insect infestation.

MA.32 Use gutter guards to reduce the collection of organic matter.

MA.33 In the absence of a sub-surface system, install splash blocks beneath downspouts to carry water away from the foundation and limit soil erosion.

MA.34 Replace any missing downspouts.

» Uncontrolled roof drainage will result in severe damage to masonry, foundations, and interiors over time.

MA.35 Install a sufficient number of gutter hangers to attach downspouts securely to the wall.

MA.36 Protect a leaking roof temporarily, until permanent repairs can be made.

» Without such intervention, deterioration of other building materials, such as adjacent masonry, wood, plaster, and paint, will be accelerated.

MA.37 Make provisions to protect adjacent features (windows, trim, etc.) and landscape elements when undertaking a roof replacement project.

Siding and Trim

MA.38 Regularly inspect ornamental woodwork and siding for cracks or loose joints, and recaulk and paint as needed.

MA.39 Reduce wood deterioration by painting, repairing faulty flashing, leaking gutters, and cracks in siding, as well as removing invasive plant material and remedying fungus or insect infestation.

MA.40 Pay particular attention to the condition of the siding above the foundation. This area is exposed to rain, splashing water, and rising damp, which makes it very susceptible to deterioration.

MA.41 Treat rot by eliminating the source of excess moisture.

» Drying and cleaning the wood, and using a sterilizing fungicide and a wood preservative treatment should follow.

» Use only dry, un-infested wood for replacement.

MA.42 Repaint wood surfaces with colors that are appropriate to the historic building and the district.

MA.43 Use wood sealants only at vertical joints, such as where a clapboard meets a corner board.

» Applying sealant to horizontal joints will trap moisture and cause deterioration.

MA.44 Retain and renew paint coatings on historically-painted wood features.

» Such coatings inhibit deterioration caused by ultraviolet light, moisture, and the elements.

MA.45 Prepare wood surfaces properly and apply a compatible paint coating system following manufacturers' application instructions.

» Generally, a primer coat and two finish coats are recommended.

MA.46 Coat all surfaces of wood repairs, including those that will be concealed, with primer. This is called "back-priming" and helps combat deterioration caused by moisture absorption over time.

MA.47 Remove only deteriorated paint layers using the gentlest means possible.

» Handscraping and handsanding in conjunction with chemical strippers is best for wood structures, and chemical strippers are effective on masonry buildings. Electric hot-air guns and electric heat plates are not recommended, because of their tendency to dry and scorch the wood and ignite debris behind clapboards.

MA.48 Do not use propane or butane torches, sandblasting or waterblasting, or belt or disc sanders to remove deteriorated paint from historic buildings.

» These methods are extremely harsh and can significantly damage historic woodwork.

MA.49 Do not strip historically-painted architectural features to bare wood, leaving it in an unfinished state.

Vegetation and Landscaping

MA.50 Take the health and shape of trees into account when pruning. Overpruning should be avoided.

MA.51 Ensure that the grade around the perimeter of a building is sufficient to carry water away from the foundation and basement.

» Improper drainage may cause rising damp where water is drawn into the walls by capillary action, leading to efflorescence, mortar joint deterioration, and flaking stone.

MA.52 Monitor vegetation adjacent to or on historic structures to ensure that it is not damaging wood or masonry through root penetration, abrasion, or related biological growth.

Storefronts

MA.53 Practice regular cleaning, limited paint removal, painting, and inspection for metallic corrosion where necessary.

Windows

MA.54 Carry out regular window maintenance, including inspecting caulk and glazing putty, painting, reinforcing wooden members as needed, and monitoring metal sash for signs of corrosion.

MA.55 Regularly inspect windows to make sure that the joints where the frame and masonry or wood meet are tight. If they are loose or open, the joints should be caulked to prevent the infiltration of air and water.

MA.56 Install interior storm windows with air-tight gaskets, ventilating holes, and/or removable clips to avoid condensation damage to historic windows.

» A metal thermal sash is recommended for metal windows and a wood, PVC, or vinyl thermal sash for wood windows.

MA.57 Remove and then reinstall window hardware when repainting.

MA.58 Apply unobtrusive metal caps along the top edge of shutters to increase their longevity.

MA.59 Do not use the "dip-stripping" method to remove paint from shutters.

» This weakens the glue and can abrade the wood. In-place chemical stripping is the preferred method.

Energy Efficiency

MA.60 Install batt insulation in attic and crawl spaces with the vapor barrier facing the heated space to prevent moisture build-up from condensation.

MA.61 If blown-in insulation is to be used in the wall of a historic building, use a procedure that will not cause damage to the structure.

» The use of blown-in insulation is not recommended in historic structures, because this technique does not install needed vapor barriers. Without a vapor barrier, moisture will condense within the walls, resulting in deterioration and mildew inside.