

YPSILANTI HISTORIC DISTRICT FACT SHEET

MASONRY CLEANING

This is one of a series of Fact Sheets provided by the Historic District Commission to assist property owners and building contractors in planning appropriate rehabilitation of structures within the Historic District.

The Historic District Commission requires that a building be maintained in its original form whenever possible. The character and historic value of a building both change whenever alterations are made and every effort shall be made to maintain the historical integrity of a building.

Your application for a Historic District Work Permit, submitted to the Building Department, will be forwarded to the Historic District Commission for review and must be approved by the Commission before work can begin. A Building Permit will likely also be required.

Historic District Work Permit applications may be obtained from the Building Department in the basement of City Hall, in the Planning and Development Department on the 4th floor of City Hall, or on the City website, www.cityofypsilanti.com.

The Historic District Commission generally approves exterior masonry cleaning for the rehabilitation or restoration of an historic structure, provided that the techniques and materials used will not cause damage or permanent alteration to the structure. However, the Commission discourages the use of any cleaning technique that would totally remove the natural discoloration of the masonry due to weathering. This "patina" is to be respected as the appearance achieved as a result of the building's designer's selection of original exterior materials. Masonry cleaning should be limited to the removal of surface grime (airborne dirt and pollutants), staining resulting from failed drainage systems, graffiti, and damaged and/or loose paint in preparation for repainting or for investigative purposes to determine the condition of the underlying masonry.

GUIDELINES:

Any proposal for masonry cleaning shall meet the following applicable conditions:

- A. The Historic District Commission shall review all work permit applications which propose the cleaning of a masonry surface on an individual basis. No person should interpret any Commission approval of a cleaning technique for an individual structure as being precedent setting, thereby allowing unrestricted use of that cleaning technique on other structures.
- B. Necessary masonry repairs (tuckpointing, crack repairs, brick replacement, etc.) are to be satisfactorily completed prior to cleaning the masonry surface. The masonry surface that is to be cleaned must be in a state of good repair before any cleaning is attempted. However, there may be some instances where preparatory, gentle cleaning may be done first, in order to discover the extent of the masonry repairs that are required.
- C. Abrasive cleaning will NOT be permitted on any exterior masonry surface. Abrasive cleaning is defined as any cleaning technique that wears away surface material. These techniques include the use of materials, usually under pressure, such as, but not limited to, sand, glass beads, synthetic particles, silica flour, baking soda, crushed shells (egg, walnut, almond, coconut, etc.) rice husks or ground corncobs. The use of abrasive tools and/or equipment, for example, wire brushes, rotary or belt sanders, power sanding disks, are also not permitted.

The use of water, under high levels of pressure, can also be considered as an abrasive technique under certain circumstances. Pressure levels, stated in PSI (pounds per square inch), must be included in the description of the proposed cleaning work to be done on the Historic District Work Permit Application. See "F" below for pressure levels that are not considered abrasive.

D. Chemical cleaning is permissible provided:

1. That the cleaning contractor submit written guarantees stating that any damage that might be caused to adjacent glass, stone, brick, stucco, wood, paint, foundation landscaping or other building or plant materials, shall be repaired in an appropriate manner as determined by the Historic District Commission. With the exception of certain detergents, chemical cleaning is not recommended for most stone and stucco surfaces. If the contractor chooses to make financial restitution to the property owner in lieu of making physical repairs, the property owner will then be responsible for making those repairs in an appropriate manner as determined by the Commission. A time limit for making such repairs may be set by the Commission.
2. That the cleaning method proposed is not one that is known to cause damage to the type of material that is to be cleaned.

E. Any masonry cleaning that involves the use of pressure-applied water as a cleaning agent or rinse shall not be done during periods of the year when freezing temperatures are likely to occur. Scheduling of such work shall allow at least two weeks for the proper "drying out" of the cleaned masonry surfaces prior to the onset of freezing weather. Generally, wet cleaning should be scheduled only between May 1 and October 15 of any given year.

F. High temperature water or steam cleaning can usually be used successfully on all masonry surfaces. Appropriate repairs should be made, where required, on the masonry surface prior to employing this cleaning technique. Pressure levels for water cleaning/rinsing are limited to 200-300 psi to test clean all types of masonry. For low-fired brick, 300-400 psi is appropriate when used with a medium to wide spray tip. For high-fired or glazed brick, 600-900 psi is appropriate when used with a medium to wide spray tip.

G. Proper safety precautions should always be taken to protect equipment operators, surrounding building materials, surrounding landscape materials and the general public from the hazards inherent to the specific cleaning materials and techniques being used.

H. Disposal of chemicals and runoff shall follow manufacturer's instructions and City of Ypsilanti ordinances.

The Historic District Commission may allow variance to the previously stated guidelines, if the Commission views such variances to be beneficial to the overall appropriateness of a masonry proposed or rehabilitation project.