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**Date** September 24, 2012

**RESOLUTION AFFIRMING THE DECISION OF THE HISTORIC PRESERVATION COMMISSION TO CONDITIONALLY APPROVE A CERTIFICATE OF APPROPRIATENESS FOR THE REPLACEMENT OF TEN WINDOWS IN THE MULTIPLE-FAMILY DWELLING AT 826 18TH STREET**

WHEREAS, on November 30, 2011, the Historic Preservation Commission conditionally approved an application from Conlin Properties for a Certificate of Appropriateness for the replacement of ten first floor windows in the multiple-family dwelling at 826 18th Street, subject to the following conditions:

1. The windows shall be constructed of wood with no metal cladding.
2. The windows shall be of the same general style, shape and dimensions as the existing windows.
3. Review and approval of the selected window product by staff prior to installation.

WHEREAS, pursuant to §58-31(f) of the Des Moines Municipal Code, Conlin Properties appealed the conditions imposed by the Historic Preservation Commission and sought to be allowed to use vinyl windows of the type that have already been installed in 5 of the windows to be replaced; and

WHEREAS, on April 23, 2012, after public notice and hearing, the City Council referred the matter back to the Historic Preservation Commission to review new information presented by Conlin Properties; and,

WHEREAS, on May 16, 2012, the Historic Preservation Commission reaffirmed its prior decision and conditionally approved the application for a Certificate of Appropriateness upon the same three conditions identified above; and,

WHEREAS, pursuant to §58-31(f) of the Des Moines Municipal Code, Conlin Properties has again appealed the conditions imposed by the Historic Preservation Commission; and

WHEREAS, on April 23, 2012, by Roll Call No. 12-0629, it was duly resolved by the City Council that the appeal be set down for hearing on July 9, 2012, at 5:00 p.m., in the Council Chambers; and,

WHEREAS, due notice of the hearing was published in the Des Moines Register on June 29, 2012, and a copy of the notice was provided to the attorney for Conlin Properties; and,

WHEREAS, on July 9, 2012, by Roll Call No. 12-1123, the City Council continued the hearing until September 10, 2012, at 5:00 p.m., and referred to the City Manager and Historic District commission to review the requirements and appropriateness of the materials; and,

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WHEREAS, On September 10, 2012, by Roll Call No. 12-1453, the City Council continued the hearing until September 24, 2012, at 5:00 p.m., and directed the City Manager to report on the 10-year history of tax values in the Sherman Hill area; to work with Jack Porter to provide information on how vinyl windows are used across the country; and, to receive information from Mr. Conlin regarding wood-grain vinyl products; and,

WHEREAS, in accordance with the published notice, those interested in the issuance of the Certificate of Appropriateness, both for and against, have been given opportunity to be heard with respect thereto and have presented their views to the City Council; and,

WHEREAS, Section 303.34(3) of the Iowa Code and Section 58-31(f) of the Des Moines Municipal Code provide that on an appeal such as this, the City Council shall consider whether the Historic Preservation Commission has exercised its powers and followed the guidelines established by the law and ordinance, and whether the Commission's decision was patently arbitrary or capricious; NOW THEREFORE,

BE IT RESOLVED, by the City Council of the City of Des Moines, Iowa, as follows:

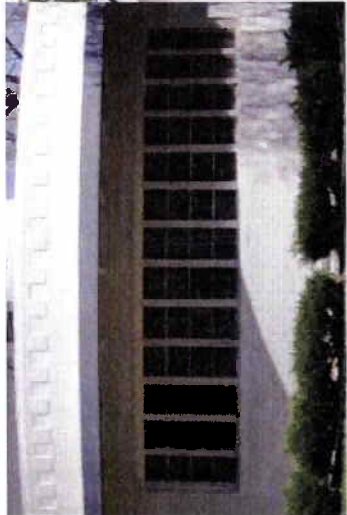
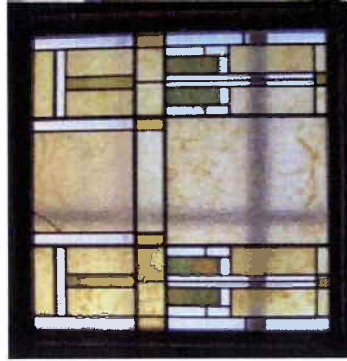
1. The public hearing on the appeal is hereby closed.
2. The City Council hereby finds that the decision of the Historic Preservation Commission approving a Certificate of Appropriateness for the replacement of ten windows in the multiple-family dwelling at 826 18th Street is not arbitrary or capricious and should be upheld.
3. The City Council hereby finds that the decision of the Historic Preservation Commission to require the replacement windows to satisfy the three conditions identified above was NOT patently arbitrary or capricious for the following reasons:
  - a) The conditions of approval are consistent with the *Architectural Guidelines for Building Rehabilitation in Des Moines' Historic Districts* and are consistent with past actions of the Commission for both investor-owned and owner-occupied properties.
  - b) The guidelines state that "any replacement windows should duplicate the original window in type, size and material." Design guidelines by nature eliminate some design and material options that may be lower in cost.
  - c) Although the City has ordered the repair or replacement of portions of the windows in question, that order did not excuse the applicant from repairing or replacing the windows in a manner that conforms with the requirements of Article II - Historic Districts, in Chapter 58 - Historical Preservation, in the City Code and the guidelines identified above.



# Windows

## Rehabilitation Standard No. 6 - Part 1

**Rehabilitation Standard No. 6:** Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.



Many historic buildings can achieve higher levels of energy efficiency simply by maintaining and repairing their existing historic windows. The addition of a storm window, weatherstripping, and proper maintenance is much more cost effective than replacement, and can yield better energy efficiency than a double-paned, thermal replacement window.

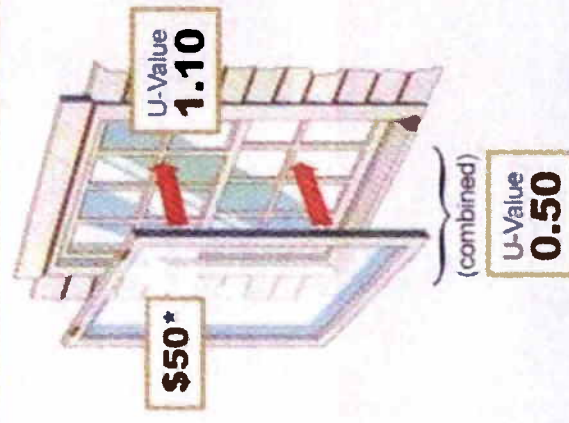
**Vinyl replacement windows are not 'green'.** They contain PVC (poly vinyl choride) which creates toxic by-products from their manufacture and can emit harmful gases into your home.

**Always repair rather than replace.** New windows often have a life of around 20 years, while historic windows in good repair can last centuries. Even new wood will not have the density and strength of the old wood, so it is always best to repair rather than replace whenever possible.

**Closing or shrinking window openings is not an effective way to improve energy savings.** Decreasing the amount of natural daylight creates an increased demand for artificial lighting, which give off more heat and can have the reverse result of increasing energy bills.

**Windows are generally not the main culprit of energy loss.** Only 10 - 25% of energy loss actually comes from windows. Most often simple weatherization projects, including adding insulation in the attic and maintaining fireplace dampers, can save building owners as much as several hundred dollars per year on energy bills.

# Let the Numbers Convince You: Do the Math



**TUNE-UP STRATEGIES**  
**Storm window over single-pane original window**

**ANNUAL ENERGY SAVINGS**

**722,218 Btu**

**ANNUAL SAVINGS PER WINDOW\*\***

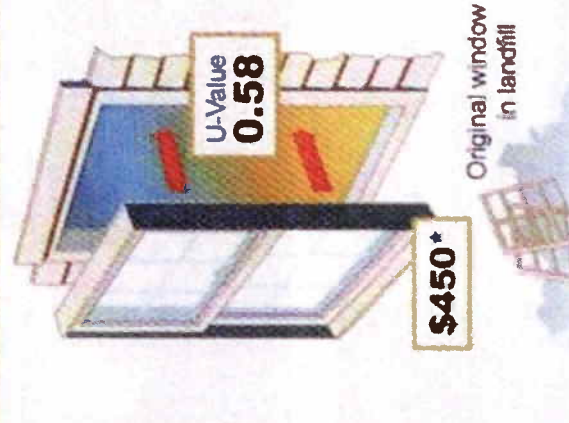
**\$13.20**

**SIMPLE PAYBACK**

**4.5**

**Years**

$\$50/\$13.20 =$



**Double-pane thermal replacement of single-pane window**

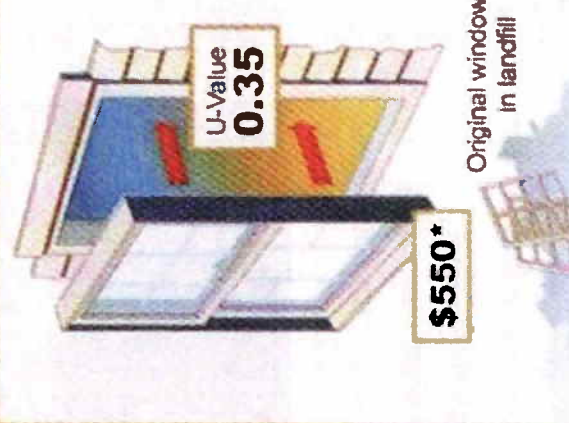
**625,922 Btu**

**\$11.07**

**40.5**

**Years**

$\$450/\$11.07 =$



**Low-e glass double-pane thermal replacement of single-pane window**

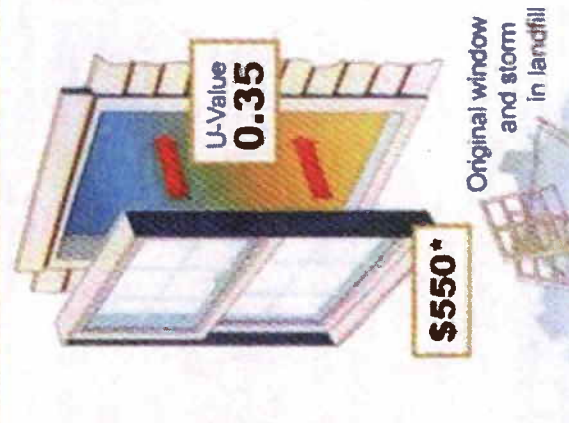
**902,772 Btu**

**\$16.10**

**34**

**Years**

$\$550/\$16.10 =$



**Low-e glass double-pane thermal replacement of single-pane window with storm window**

**132,407 Btu**

**\$2.29**

**240**

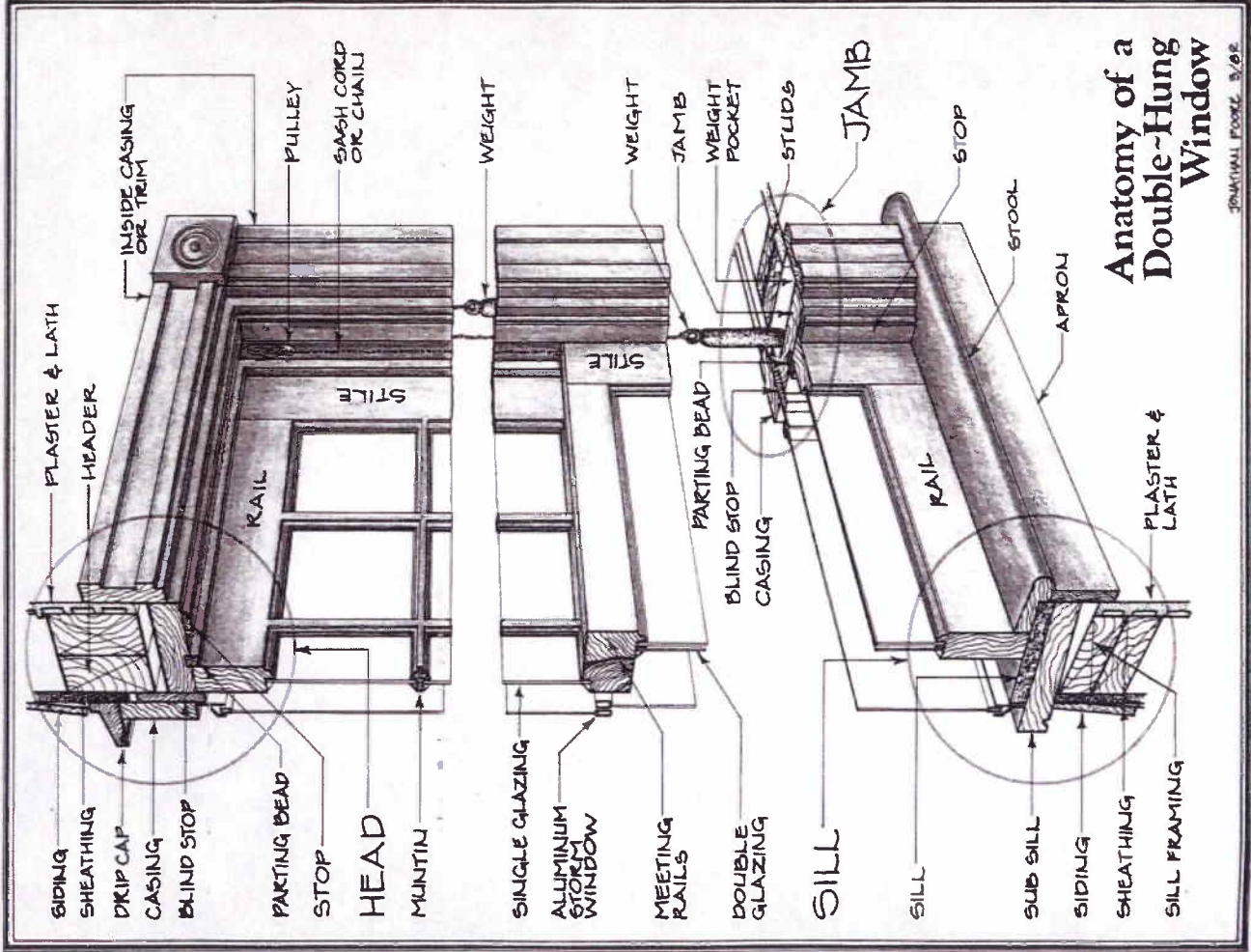
**Years**

$\$550/\$2.29 =$

\*Cost of 3' x 5' window, installed

\*\*Assuming gas heat at \$1.09/therm

# Window Parts and Terminology



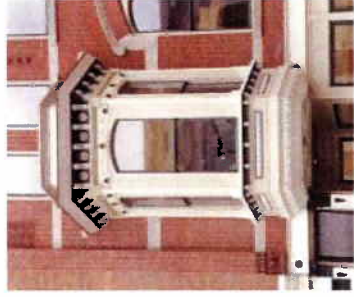
# Architectural Window Styles



Fanlight



Rose or Wheel



Oriel



Eyebrow or Eyelid



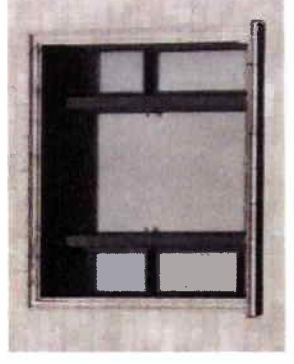
Porthole or Round



Ribbon or Continuous



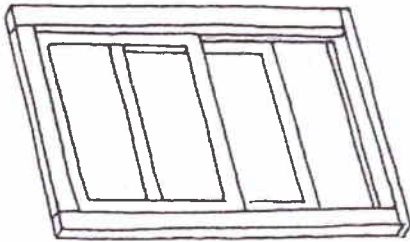
Palladian



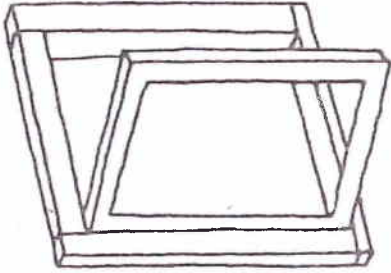
Chicago

# Sash Operating Types

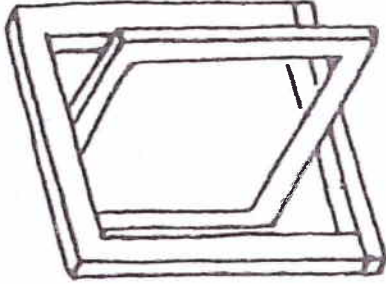
## Typical Wood Sash Operation



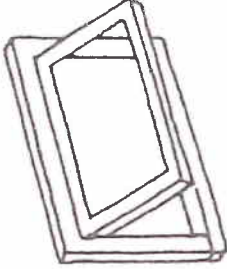
Single- or Double-Hung



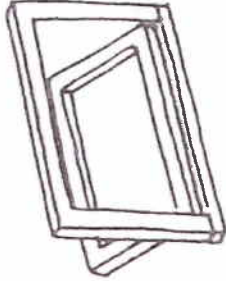
Casement



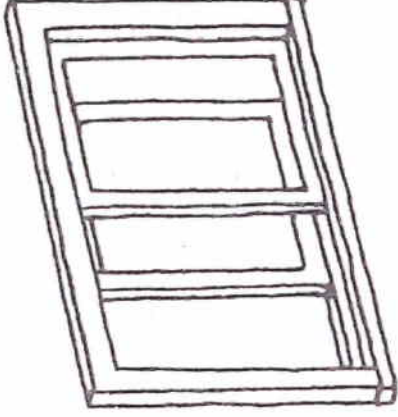
Pivot



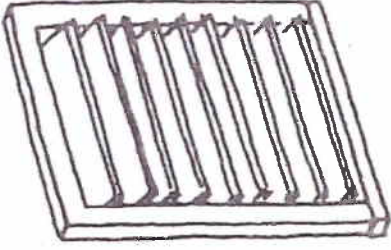
Awning



Hopper

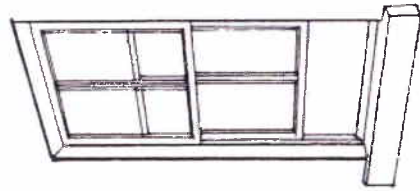


Sliding

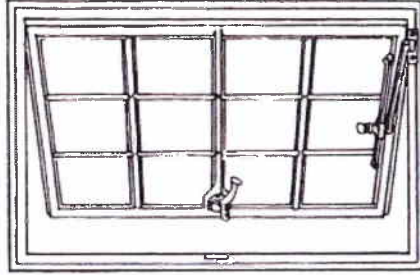


Louver / Jalousie

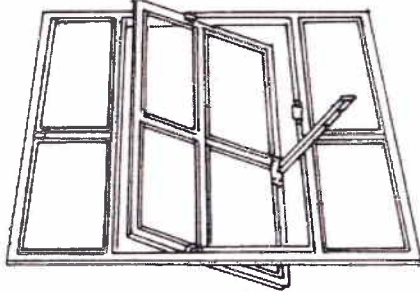
## Typical Metal Sash Operation



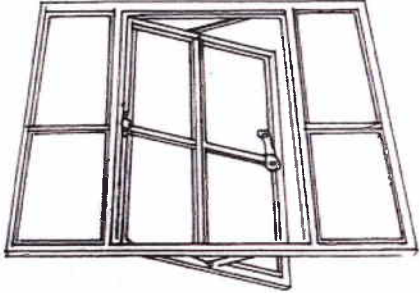
Single- or Double-Hung



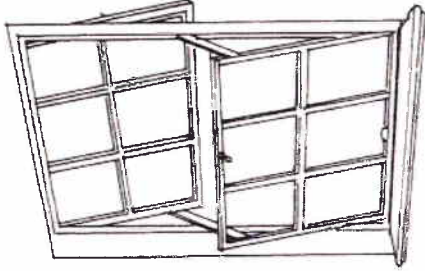
Casement



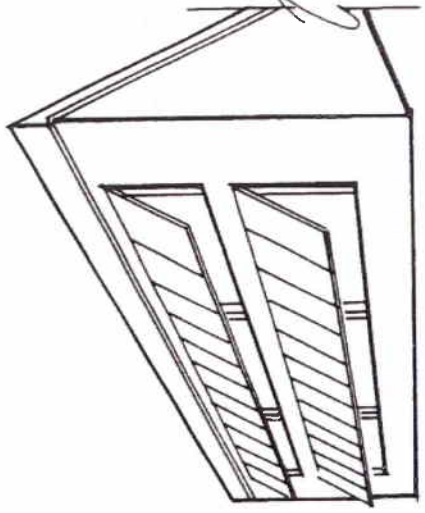
Pivot



Projecting (Awning or Hopper)



Austral



Continuous / Clerestory / Awning

## Steps for Planning Your Window Project

- 1.) Research the history of the building and its windows through pictorial and written documents found in libraries, archives, historical society collections, and the National Register of Historic Places. Document the windows with interior and exterior photographs BEFORE any work is done.
- 2.) Using the earlier research, evaluate the historical significance of the windows. Consider any original windows and their materials, features and finishes. Also identify any changes that have occurred over time, which may or may not be an integral part of the historic character.
- 3.) If energy efficiency is a goal, it is best to identify and evaluate any historic, energy saving physical features such as entry vestibules, windows sized for daylighting, and shutters or awnings. It is vital for owners to understand these inherent energy saving qualities.
- 4.) Assess the water tightness of the building. Repair or replacement of windows may be useless if the roof or building envelope is not water tight.
- 5.) Assess the existing physical condition of the windows through a window survey (see next column).
- 6.) Following inspection and analysis of results, create a plan of the necessary repairs or replacement. Consider three categories: routine maintenance procedures, structural stabilization, and parts replacement. (See table?)

If replacement is the only viable option the new windows must match the historic windows in design, color, texture and material.\*

\*Whenever existing windows that are considered significant are to be replaced, SHPO and NPS require a detailed condition survey to justify the assessment. Contact SHPO for details.

## Steps for Evaluating Existing Window Condition

- 1.) Check for water penetration or air infiltration around the window frame interior and exterior. Caulk any joints or seams.
- 2.) Inspect all moving parts. Check that the sash lock is operable and keeps the window shut tightly. Ensure that the sash(es) move freely up and down and the sash cord or chain moves smoothly through its pulley. Jamb pegs?
- 3.) Check glazing putty for cracked, loosened or missing sections. Also check the glazing bed on interior side of glass pane.
- 4.) Examine the sill to ensure it slopes down, away from the window for water to drain off. You may also cut a dripline on the underside of the sill for proper water run off.
- 5.) On wood windows, look for areas with paint failure (peeling, cracking, blistering, etc.) to help identify points of water penetration. DO NOT assume that paint failure equals bad wood condition and requires replacement.
- 6.) Inspect the condition of the wood (or metal?). Common areas for water collection and deterioration are the sill, joints between the sill and jamb, corners of the bottom rails, and muntin joints. If severe deterioration exists it is usually visible. To check less visible deteriorated areas use a small ice pick or awl and jab into wood surface at an angle. Try to pry up a small section of the wood. Sound wood comes up in long, fibrous splinters, but decayed wood will lift up in short, irregular pieces due to the breakdown of fiber strength.
- 7.) Document window condition through a window condition survey or schedule, and interior and exterior photographs. (For examples see following pages.)



