Some character-defining features of a historic building or site such as cupolas, shutters, transoms, skylights, sun rooms, porches, and plantings also play a secondary, energy-conserving role. Therefore, prior to retrofitting historic buildings to make them more energy efficient, the first step should always be to identify and evaluate the existing historic features to assess their inherent energy-conserving potential. If it is determined that retrofitting measures are necessary, then such work needs to be carried out with particular care to insure that the building's historic character is preserved in the process of rehabilitation.
Recommended

**District/Neighborhood**
Maintaining those existing landscape features which moderate the effects of the climate on the setting such as deciduous trees, evergreen windblocks, and lakes or ponds.

**Building Site**
Retaining plant materials, trees, and landscape features, especially those which perform passive solar energy functions such as sun shading and wind breaks.

- Installing freestanding solar collectors in a manner that preserves the historic property’s character-defining features.

- Designing attached solar collectors, including solar greenhouses, so that the character-defining features of the property are preserved.

**Masonry/Wood/Architectural Metals**
Installing thermal insulation in attics and in unheated cellars and crawlspaces to increase the efficiency of the existing mechanical systems.

- Installing insulating material on the inside of masonry walls to increase energy efficiency where there is no character-defining interior molding around the window or other interior architectural detailing.

Not Recommended

- Stripping the setting of landscape features and landforms so that the effects of the wind, rain, and the sun results in accelerated deterioration of historic materials.

- Removing plant materials, trees, and landscape features, so that they no longer perform passive solar energy functions.

- Installing freestanding solar collectors that obscure, damage, or destroy historic landscape or archeological features.

- Locating solar collectors where they radically change the property’s appearance; or damage or destroy character-defining features.

- Applying thermal insulation with a high moisture content into wall cavities in an attempt to reduce energy consumption.

- Resurfacing historic building materials with more energy efficient but incompatible materials, such as covering historic masonry with exterior insulation.
Recommended

Installing passive solar devices such as a glazed "trombe" wall on a rear or inconspicuous side of the historic building.

**Roofs**

Placing solar collectors on non-character-defining roofs or roofs of nonhistoric adjacent buildings.

**Windows**

Utilizing the inherent energy conserving features of a building by maintaining windows and louvered blinds in good operable condition for natural ventilation.

Improving thermal efficiency with weatherstripping, storm windows, caulking, interior shades, and if historically appropriate, blinds and awnings.

Installing interior storm windows with air-tight gaskets, ventilating holes, and/or removable clips to insure proper maintenance and to avoid condensation damage to historic windows.

Installing exterior storm windows which do not damage or obscure the windows and frames.

Not Recommended

Installing passive solar devices such an attached glazed “trombe” wall on primary or other highly visible elevations; or where historic material must be removed or obscured.

Placing solar collectors on roofs when such collectors change the historic roofline or obscure the relationship of the roof features such as dormers, skylights, and chimneys.

Removing historic shading devices rather than keeping them in an operable condition.

Replacing historic multi-paned sash with new thermal sash utilizing false muntins.

Installing interior storm windows that allow moisture to accumulate and damage the window.

Installing new exterior storm windows which are inappropriate in size or color.

Replacing windows or transoms with fixed thermal glazing or permitting windows and transoms to remain inoperable rather than utilizing them for their energy conserving potential.
**Recommended**

Considering the use of lightly tinted glazing on non-character-defining elevations if other energy retrofitting alternatives are not possible.

**Not Recommended**

Using tinted or reflective glazing on character-defining or other conspicuous elevations.

**Entrances and Porches**

Utilizing the inherent energy conserving features of a building by maintaining porches and double vestibule entrances in good condition so that they can retain heat or block the sun and provide natural ventilation.

Enclosing porches located on character-defining elevations to create passive solar collectors or airlock vestibules. Such enclosures can destroy the historic appearance of the building.

*In hot climates, buildings were historically designed to minimize the heat gain from the summer sun. The wide roof overhangs, exterior porches, shutters, shade trees, and heavy masonry walls (painted white) are all energy saving characteristics.*
Recommended

**Interior Features**
Retaining historic interior shutters and transoms for their inherent energy conserving features.

**New Additions to Historic Buildings**
Placing new additions that have an energy conserving function such as a solar greenhouse on non-character-defining elevations.

**Mechanical Systems**
Improving energy efficiency of existing mechanical systems by installing insulation in attics and basements.

Not Recommended

Removing historic interior features which play a secondary energy conserving role.

Installing new additions such as multi-story solar greenhouse additions which obscure, damage, or destroy character-defining features.

Replacing existing mechanical systems that could be repaired for continued use.