

**Fact Sheet**

# Passive House and Other Deep Energy Retrofits

In 2009, LPC received its first application for a historic building renovation seeking to use the Passive House building standard for high performance in energy efficiency, very low heating and cooling loads, superior indoor air quality and comfort, and improved building resiliency. Since then, many more applications have followed, and although LPC does not substantively review much of the work that goes into these projects because it takes place inside the building, staff has become very familiar with certain exterior components requiring specialized detailing, such as high-performance triple-glazed windows. Several of our designated historic landmarks have become Passive House certified, while countless more have made significant gains in their energy-efficiency, proving historic buildings can be sensitively retrofit to meet both historic preservation and energy performance goals.

## **LPC review of high-performance windows that meet Passive House standards**

For Passive House-type projects requiring extremely energy efficient windows with triple-glazing, very high insulation values and no air leakage, for which typical modern double-hung windows and retrofitted older windows cannot comply, the Commission has approved simulated double-hung windows (i.e., a casement lower sash set back from and below a fixed upper sash) numerous times for several distinct building types located in many different historic districts. In fact, as a result of the 2019 LPC Rules amendments, these particular window approvals are no longer subject to the Public Hearing process and can be approved at staff level in most cases. This change has allowed many projects of this type to be reviewed more quickly by LPC staff, assuming other aspects of the proposal (i.e., new additions) also qualify for staff level review. See page 8 of the [Windows and Doors](#) chapter of our Permit Guidebook for these rules.

## **LPC review of other work related to Passive House-type projects**

*All exterior work except for general maintenance, and most interior work (including work filed with the NYC Department of Buildings), does require an LPC permit.*

There are currently no special provisions or exceptions for reviewing these projects, so existing LPC rules and policies apply. Encouragingly, almost all interior work and most exterior work (i.e., installing mechanical equipment and renewable energy equipment at rooftops) are reviewed and approved at staff level. Other exterior work, such as adding exterior insulation to historic masonry facades, has not been supported by the Commission to date, with limited exceptions at non-visible rear facades. Though not reviewed substantively by staff, some interior work (i.e., intensive insulating and air sealing) should be carefully designed by a professional with expertise in working with older buildings specific to our local climate, to minimize or eliminate risk of damaging the historic building envelope. If you are considering a historic building renovation using the Passive House standard or something similar to it, please discuss this with Preservation Department staff early in the application process.