EE 9: IMPROVE OPERATION OF DRYERS IN APARTMENT BUILDINGS

Administrative Code (Housing Maintenance Code)
Proposal developed by the Energy & Ventilation Committee

Summary

Issue:
Shared clothes dryers in multifamily residential properties have a large energy impact because they are heavily used. Many dryers sell drying time in large increments (45 minutes to an hour), causing the dryer to run longer than necessary.

Recommendation:
Require dryers to sell time in increments of 15 minutes or less.

Proposed Legislation, Rule or Study

Amendments to the Administrative Code of the City of New York:

1. Add a new Section 27-2051.1 as follows:

§ 27-2051.1 Common Clothing Dryers. Any clothing dryer purchased or rented after July 1, 2010 and intended for common use by the occupants of a multiple dwelling shall allow the purchase of drying time in increments of fifteen minutes or less.

Supporting Information

Issue- Expanded
Nationally, clothes dryers are the second biggest electricity-consuming home appliance after the refrigerator. According to 2001 Department of Energy statistics, they account for 5.8% of the total residential electricity.1 While some dryers use moisture sensors that determine when the clothes are dry and automatically shut-off, most dryers have an adjustable timer that shuts the machine off after a pre-selected period. Commercial dryers typically sell drying time in large increments, which results in dryers running longer than required. The situation is exacerbated by the tendency to overestimate required time to dry a load. Over-drying results in wasting energy, time, and money as well as often wear-and-tear of fabric and shrinkage.

While both federal standards and ENERGY STAR criteria for residential clothes washers changed on January 1, 2007 to ensure energy savings, there was no parallel change regarding clothes dryers.2 In fact, there is still no federal regulation related to dryers and, consequently, ENERGY STAR does not have a program or labeling system that applies to dryers. New York City is different from many other cities in that dryers typically utilize gas rather than electricity, which makes them far more efficient. In this context, the most effective approach to reducing energy consumption of dryers in New York City is to reduce the time dryers run by allowing for small increments of drying time to be sold in multi-family residential properties.

Environmental & Health Benefits
Shorter drying times will give consumers more control over the drying, allowing a more efficient use of the dryers. In addition to conserving energy, time and money, this proposal gives the consumer options on how dry and how fast they can complete the task of doing their laundry. Shorter drying times may have the added benefit of making clothes last longer as a result of not over-drying.

This proposal was found to have a low, positive environmental impact per building and to impact a small number of buildings. It was thus given an environmental score of 1.

This proposal was found to have a positive, indirect health impact.
Cost / Savings
This proposal is not expected to have any significant impact on capital costs.

Precedents
There are no known precedents for this proposal.

LEED
The government does not test or assign ENERGY STAR ratings to dryers because most dryers use relatively similar amounts of energy. Therefore, dryers will not comply with credits LEED CI-EA cr.1.4 or LEED for Homes EA9, which use ENERGY STAR ratings as the standard for Equipment & Appliances.

The reduction in power usage may assist in achieving Energy & Atmosphere prerequisites and credits in all of the rating systems, depending upon which options are pursued for LEED compliance.

Under the performance method outlined in LEED NC EA prerequisite 2 Minimize Energy Performance and EA cr. 1 Optimize Energy Performance, process energy is considered to include laundry washing and drying. Process loads shall be identical for both the baseline building performance rating and for the proposed building performance rating. However, project teams may follow the Exceptional Calculation Method (ASHRAE 90.1-2007 G2.5) to document measures that reduce process loads.

Implementation and Market Availability
There are no known implementation or market availability issues for this proposal.
