



## **Philadelphia Energy Authority and PHDC Set Energy Standards for Basic System Repair Program**

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Philadelphia has one of the highest levels of homeownership in the country, but many homeowners struggle to maintain their aging homes. The City of Philadelphia created the Basic Systems Repair (BSR) Program as a resource for low-income homeowners who experience major problems in their homes, such as roof leaks and heating system breakdowns. By investing in these homes, the City hopes to keep low-income residents in their homes.

The Philadelphia Energy Authority (PEA) is working with PHDC, which manages the BSR program, and other Philadelphia affordable housing program providers to consider the long-term affordability of homes. In order to be affordable, the total cost of a home - mortgage payments, taxes, utilities, and additional healthcare costs caused by unhealthy conditions - need to be accounted for. PEA consulted with PHDC to improve the performance of homes that participate in the BSR Program and to help achieve the goal of long-term affordability.

Through this collaboration, PHDC incorporated a set of standards in July 2017 that will help cut the long-term energy and water use of homes, while also providing basic system repair. PHDC introduced the following standards:

**1. All new windows must have a thermal resistivity rating of at least R-5 and new doors be exterior-rated.**

The BSR program replaces missing or badly damaged windows and doors. Poor quality window and door replacements can lead to heat loss in the winter and gain in the summer, as well as condensation issues that can cause mold growth. The marginal additional cost of installing higher quality windows and doors when a replacement is needed is made up for through the energy savings over the lifetime of those materials.

**2. Replacement heaters (both furnaces and boilers) must be high efficiency whenever feasible.**

High efficiency heaters can save owners thousands of dollars compared to the standard heaters available on the market. High efficiency heaters are also matched with a 3-year warranty and service plan so that residents are protected against early failure of units. Since introducing this standard, PHDC inspectors specify high efficiency models for approximately 50% of heater replacements.

### **3. All plumbing fixtures must carry the WaterSense label.**

WaterSense certified products are designed to use less water for the same functions, such as bathing, hand-washing, food preparation, dishwashing, and laundering.

### **4. Attic and crawl space insulation.**

When a new roof is installed and funding is available, insulate the attic with blow-in cellulose insulation. PHDC does not insulate homes where active knob and tube wiring is found in the attic cavity, due to the additional cost and complication of rewiring. Accessing the attic from above while the roof is accessible reduces installation labor. Insulating a home's roof can cut energy costs by as much as 20%. PHDC expects to be able to add attic insulation to 25 homes per year with the new standard.

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### **About PHDC**

PHDC works with residents and community leaders to revitalize Philadelphia's neighborhoods. PHDC fosters stronger communities by keeping homes livable, comfortable, and affordable. The Basic System Repair and Adaptive Modifications Programs help residents stay in their homes and in their communities. The improved housing stock promotes neighborhood stability and increases property values. PHDC has been serving Philadelphia neighborhoods since 1965.

### **About PEA**

PEA is an independent municipal authority focused on issues of energy affordability and sustainability for Philadelphia. In early 2016, in partnership with City Council President Darrell Clarke, PEA launched the Philadelphia Energy Campaign, a \$1 billion, 10-year investment in energy efficiency and clean energy projects in 4 sectors: city buildings, the School District, affordable housing, and small businesses. We believe that energy is an important vehicle for reducing poverty, improving education, strengthening communities and leveraging public investment.