

MULTIFAMILY PERFORMANCE

# CASE STUDY: 1212 Martin Luther King Apartments

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MULTIFAMILY BUILDING IN THE NATION

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# The New York Energy Smart<sup>SM</sup> Multifamily Performance Program

## Case Study:

### 1212 Martin Luther King Apartments

Bronx, NY

#### Background

1212 Martin Luther King (MLK) Apartments is a state-of-the-art building located in the historic Highbridge neighborhood in the Bronx. It provides affordable housing to low-income working families, formerly homeless families, and adults with developmental disabilities. It is also the nation's first high-rise multifamily building to earn the ENERGY STAR<sup>®</sup> label.

#### Challenges

Dunn Development, a socially conscious, innovative private developer, and Beulah HDFC, Inc., a non-profit community-based organization based in the South Bronx, co-developed 1212 MLK Apartments. The challenge was to set a new standard in affordable housing by combining high-performance design, durability, spaciousness and eye-catching allure. Making sure the apartments were energy efficient was a key objective in order to reduce operating costs.

#### Solution

Through NYSERDA's Multifamily Performance Program, Steven Winter Associates, Inc. worked with Dunn Development and their design team to determine the suite of energy-efficient measures that could achieve the program's performance target of 20% energy savings in respect to an equivalent building designed per ASHRAE 90.1-2004 standards.

The measures identified included both conventional and custom components. Two 87% efficient, direct-vent natural gas Lochinvar<sup>®</sup> boilers were used instead of atmospheric boilers, which are typically installed in multifamily buildings. The windows were custom made, low-e, argon filled aluminum frame units, with insulated panels that can be removed to allow the installation of window air-conditioners in the summer. The use of high-performance insulation and energy-efficient lighting also resulted in significant energy savings.

#### Benefits

The construction of 1212 MLK Apartments cost \$145 per square foot in hard costs, with only an additional \$3 per square foot to install the energy-efficiency measures. Through the ENERGY STAR Multifamily Performance Program, NYSERDA provided incentives that covered the bulk of this additional cost. The energy measures are expected to save the building owners and tenants a combined \$12,631 per year. Working together, Dunn Development and the 1212 MLK Apartments have redefined affordable housing to include not only affordable rent, but also affordable energy bills.

**Developer:** Dunn Development Corp.  
**Owner:** Dunn Development Corp.

**Number of Units:** 54

#### Energy-Efficient Measures Cost:

**Baseline Cost** \$174,601

**As-Built Cost** \$328,845

**Total Incremental Costs** \$154,244

#### Observed Energy Savings:

**Annual Gas Savings** 327 MMBtu

**Annual Electricity Savings** 51,066 kWh

**Demand Savings** 10.9 kW

**Total Annual Savings** \$12,631

**Gross Lifetime Savings\*** \$187,917

**Simple Payback:** 12 years

**Savings to Investment Ratio:** 1.22

\*Gross Lifetime Savings represents the net present value of the utility cost savings, inclusive of the total incremental costs.



**"We are pleased to have the opportunity to participate in the ENERGY STAR Multifamily Program. The energy efficiency elements we incorporated at 1212 MLK Apartments will directly result in lower utility bills for the residents and for the building, and because they are easily replicable, will help contribute to the long-term viability of affordable housing in New York City."**

Martin Dunn, President  
Dunn Development Corp.



For more information about the program, please call **1-877-NY-SMART**, or visit **www.GetEnergySmart.org**