



# How Much Do Phius Buildings Cost?

## Passive Premium?

Conventional wisdom says that the efficiency, comfort, resilience, and quality of Phius buildings come at a stiff premium. But as more and more performance data rolls in, we're learning otherwise.

**Phius certified buildings are coming in at or near cost levels of conventional equivalent buildings.**

## The Bigger the Building, the Lower the Cost

Multifamily Phius projects have proven to be the most cost-effective building type for two main reasons:

### 1. Advantageous surface area to volume ratio

The high surface area to volume ratio of multifamily projects reduces the amount of insulation required to meet the Phius standard for a given climate.

### 2. Easier air sealing compared to smaller buildings

The higher ratio also makes it easier to achieve the stringent air tightness requirement prescribed by Phius standards.

## Practice Makes Cost-Effective

Data from a number of multifamily Phius projects show an incremental cost of 1-4% on average; that cost can be lowered (or even eliminated) with an experienced project team and contractor.

**The largest ever Phius certified project, the 26-story 425 Grand Concourse in the Bronx, was constructed at only a 2% premium.**


Teams that are familiar with passive building processes, principles, and materials save money by working more efficiently and making sound decisions when it comes to materials and systems. This effect has been measured in areas with large numbers of Phius projects that have been incentivized through local and state policies.

**Policy → Construction → Expertise → Lower Costs**

## Bottom Line

**For little to no incremental cost, multifamily developers can construct resilient, comfortable, highly energy efficient Phius buildings.**

The cost-effectiveness of meeting the Phius standard shows that with smart policy development, there does not have to be a trade-off between high-performance buildings and cost.

 Learn more at [www.phius.org](http://www.phius.org)

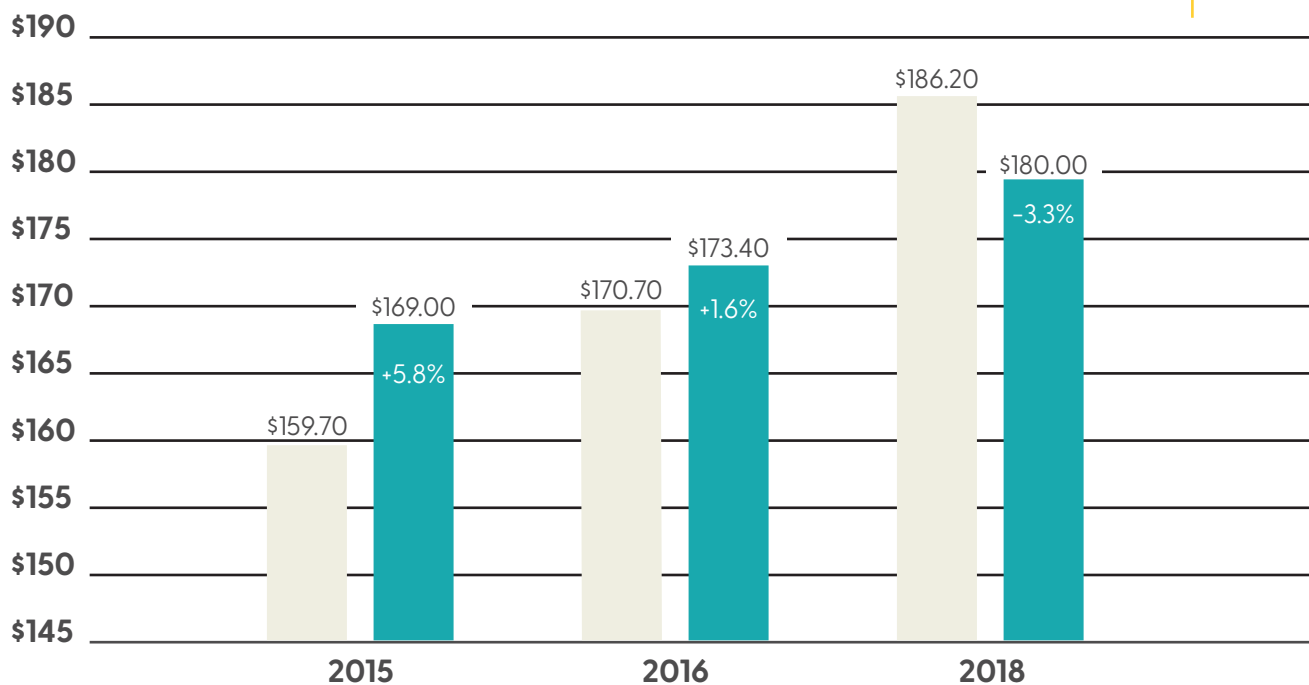


**425 Grand Concourse**  
Bronx, NY

## Summary of Incremental Cost of Multifamily Buildings Built to the Phius Standard

Project	No. of Units	Incremental Cost
Beacon Communities Old Colony Phase Three C	55	3.5%
Community Builders North Commons	53	4.1%
Dakota Partners Depot Village	48	N/A
Homeowner's Rehab Finch Cambridge	98	1.4% <i>(itemized cost)</i>
NorthShore Community Dev. Corp. Harbor Village	30	1.8%
POAH Mattapan Station	135	2.0%
POAH The Kenzi at Bartlett Station	52	1.0%

## Passive House Costs Less with Experience (Cost per Square Foot)



**Conventional Construction**

**Passive House Construction**

**Note:** Low-income housing tax credits were not awarded in 2017.

**Sources:** "How a PA affordable housing agency is making ultra-efficient buildings mainstream", *Pittsburgh Post-Gazette*, Dec. 31, 2018 and Pennsylvania Housing Finance Agency (PHFA)

Graph adapted from the AUROS Group blog | <https://www.aurosgroup.com/post/high-performing-buildings-do-not-cost-more>