



Performance Contracting

Project: Window & Door Replacements

How one school district combined ESSER funding with Pennsylvania's Guaranteed Energy Savings Act to replace the windows and doors in an aging Elementary School.

Background

Similar to other school districts across Pennsylvania, Dunmore School District had several facility modernization needs that had been deferred for many years. However, progress in addressing these issues was being made via Pennsylvania's Guaranteed Energy Savings Act.

Then, with the onset of the pandemic, the school district further analyzed its needs to best prioritize the ESSER (Elementary and Secondary School Emergency Relief) funds from the federal government. Several issues were identified, including the aging windows of the Elementary School, which was negatively impacting overall air quality.

The school district partnered with CM3 to conduct a complete window and door replacement (which qualified for ESSER funding).

Along with addressing indoor air quality, the window project incorporated Solarcool Grey® insulated glass which resulted in energy savings.

Dunmore's Performance Contract project provided for Solarcool Grey® insulated glass to be installed throughout the building.

Solarcool glass reflects heat transmitted through windows to keep buildings cooler, thereby reducing energy costs.

Older windows can be problematic for several reasons:

- They leak air which drives up utility bills and also creates a green house effect which increases air conditioning usage.
- Leaking issues cause mold and mildew to develop.
- Window immobility makes it difficult or impossible to open windows when needed to ventilate spaces.

Performance Contract Benefits

- » A guaranteed level of performance from the chosen partner
- » Single-point accountability for the entire project
- » No referendum required
- » No change orders
- » An accelerated timeline for facility improvements
- » Minimal disruption to building schedules
- » Greater oversight regarding scope of renovations
- » Better control over final cost of the project
- » Enhanced management of renovation timeline
- » Greater flexibility on product selection

Beyond Energy Efficiency: Benefits of New Windows

Increased Comfort

Properly-installed windows have a much better seal between the window frames and the building, thereby minimizing drafts for building occupants.

Safety

New windows are often made from tempered glass or laminated glass, both of which are less likely to shatter into sharp, jagged shards if the window gets broken, minimizing the chance of injury. They also have safety features such as locks and sensors that make them harder to force open and break into from outside.

Noise Reduction

The same features that protect against heat and energy loss through windows — double and triple panes and layers of argon gas — also provide sound dampening benefits, thereby blocking and reducing noises from construction, traffic, and people outside the building.

UV Protection

One unexpected benefit of replacing old windows is the UV protection. Unlike older windows which do not have any UV protection, new windows keep out most UV rays and protect the building interior from fading.

Easier Use

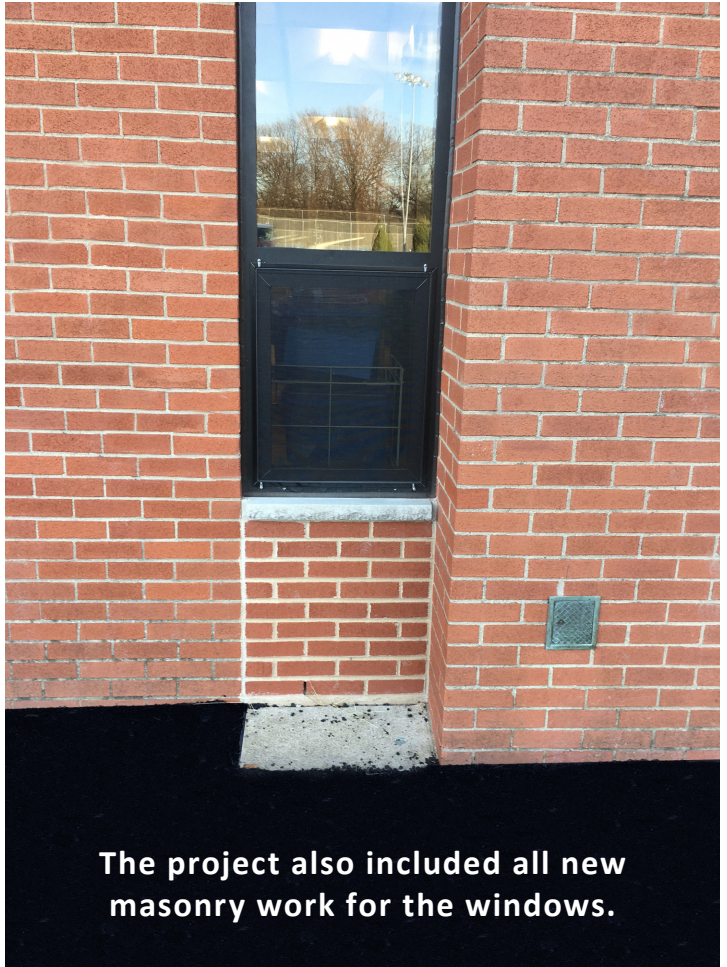
New windows are easy to open and close, which enables occupants to adjust air flow as needed thereby improving occupant comfort and indoor air quality.

Enhanced Privacy

The Solarcool® reflective glass which was installed at Dunmore Elementary School is reflective which provides a level of privacy.

Less Glare

Due to the the lower light transmittance associated with the Solarcool® reflective glass, interior glare is also reduced.



The project also included all new masonry work for the windows.

Performance Contract Projects with Window Replacements

Norristown School District - 6 Phases

Project cost: \$62 Million | Project savings: \$3.77M/YR

William Penn School District - 3 Phases

Project cost: \$15.11 Million | Project savings: \$668K/YR

Pennsbury School District

Project cost: \$10 Million | Project savings: \$695K/YR

Dunmore School District - 2 Phases

Project cost: \$7 Million | Project savings: \$137K/YR