GPG FINDINGS

The GPG program enables GSA to make sound investment decisions in next generation building technologies based on their real world performance. www.gsa.gov/gpg

HVAC

CAPITAL SAVINGS
REDUCES REQUIRED SIZE OF HVAC EQUIPMENT;
MODELING ESTIMATES $120K IN EQUIPMENT SAVINGS FOR A 498K SF BUILDING

SAME INSTALLATION
IDENTICAL THICKNESS, COMPARABLE WEIGHT, ~10% MORE EXPENSIVE THAN HIGH-PERFORMING DOUBLE-PANE

LOADED AND UNLOADED PERFORMANCE

4 PANES IN INSULATED FIBERGLASS FRAME WITH WARM-EDGE SPACERS & KRYPTON GAS
R-8 RATED FULL-FRAME INSULATING VALUE

24% AVERAGE HVAC SAVINGS
*SUSPENDED-FILM CONFIGURATION
SAVED 1% MORE ENERGY THAN THIN GLASS OPTION

Positive Return on Investment Across Climate Zones

New construction payback < 3 years at average GSA utility rates, $0.11/kWh and $7.43/MMBtu

AVERAGE SAVINGS

Windows are responsible for how much energy use? How are Lightweight Quad-Pane Windows made? How did Lightweight Quad-Pane Windows perform in M&V? Where did M&V occur? Measurement and Verification done?

Where does M&V recommend deploying Lightweight Quad-Pane Windows? Where does M&V recommend deploying Lightweight Quad-Pane Windows?

SAME INSTALLATION
IDENTICAL THICKNESS, COMPARABLE WEIGHT, ~10% MORE EXPENSIVE THAN HIGH-PERFORMING DOUBLE-PANE

ALL NEW-CONSTRUCTION WINDOW REPLACEMENT

Thin-glass configuration is more cost-effective. Suspended-film version offers versatility in low-e coatings, meets tempered glass requirements, and is about 1 lb lighter per square foot than the thin-glass configuration.

M&V

NATIONAL RENEWABLE ENERGY LABORATORY (NREL) assessed quad-pane windows provided by Alpen High Performance Products at the Denver Federal Center. One option used thin glass and one used suspended film.

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