

Robert G. Clark Jr. Building Jackson, MS



Window replacement project with immediate ROI due to 34% HVAC system downsizing

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Two factors were set in stone when the state of Mississippi decided to make improvements to one of its buildings: cost and carbon footprint. The state found a creative and cost-saving solution with View Dynamic Glass.

Objectives When the state of Mississippi upgraded the Robert G. Clark Jr. government office building in Jackson with a new lighting and HVAC system, the project team managing the retrofit discovered a very concrete problem: the proposed HVAC system was larger than the designated mechanical space. Enlarging the area was not an option.

The team needed to reduce the building's cooling load requirements to install a smaller system, while avoiding design changes that would increase the project budget.

Solution View Dynamic Glass provided the flexibility needed. The project team found that replacing the approximately 3,000 square feet of existing, clear, single-pane glass with a more energy-efficient glass would block enough solar heat to allow them to reduce the HVAC capacity amount and hold to the original project budget.

View worked with engineering consultants, who performed building-load and energy calculations, to determine what affect Dynamic Glass would have on the HVAC system and annual energy consumption. The results showed that the overall HVAC system load would be reduced 34 percent, generating a savings of about \$300,000 in equipment costs. Using Dynamic Glass rather

Team

Architect:
Eley Guild Hardy

Glazier:
Capital Glass,
Wasau Window
and Wall Systems

Glazing system

Project type:
Retrofit

Type:
Curtain Wall, punch openings

Make and model:
Kawneer 1600 Wall System,
Custom Window Series
8200 System

IGU makeup

Overall thickness:
1"

Outboard lite:
6mm tempered clear with EC
on surface #2

Spacer:
½" black warm edge spacer

Inboard lite:
6mm tempered clear



than single-pane glazing would cut annual energy consumption 45 percent, leading to a savings of \$24,000 in utility bills in the first year. After seeing these results, the project team decided to replace the entire window wall system with Dynamic Glass.

Outcome View Dynamic Glass provided a cost-neutral solution. A smaller HVAC system was installed and the savings in equipment and electricity was invested in purchasing the glass.

Payoffs

- Saved \$300,000 immediately in equipment costs by lowering HVAC cooling load by one-third
- Saved \$24,000 in electricity bills in first year alone
- Eliminates glare without sacrificing views