

high performance translucent building systems

# **Project Report**

## **Dunbar High School**

Washington, DC







Photography: Joseph Romeo

Architecture: Ehrenkrantz, Eckstut & Kuhn Archs.-Engs. and Moody-Nolan Architects



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#### **KALWALL SPECIFICATION:**

Panel: 2.75" | 70 mm

Grid core: shoji

Exterior FRP: crystal

Interior FRP: white

System finish: aluminum #79

U-Value: .14 | 0.80 Wm2K

Solar Heat Gain Coefficient: 0.17

Visible Light Transmission: 12%

#### WHAT IS KALWALL?

A translucent, structural sandwich panel that provides:

Glare-free, balanced daylighting

Superior thermal performance

Energy + electricity saving

Low maintenance life cycle requirements

Safety + security through visual privacy

Durability + graffiti / vandal-resistance

Hurricane, explosion venting + blast rated options



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For unparalleled thermal performance in translucent daylighting, consider specifying Kalwall with **CABOT's Lumira**® aerogel insulation. Available in 2.75" (70 mm) panel formats up to: 4' x 12' (1200 mm x 3600 mm) and 5' x 10' (1500 mm x 3000 mm) maximum.

### **Dunbar High School in Washington, DC**

Paul Laurence Dunbar would be proud. The sun is once again shining on – and into - the historic Washington, D.C. high school named in his honor.

When Dunbar High opened its doors in 1870, it became the first public high school in the United States for African-Americans. It has a long list of notable alumni and was once considered one of the elite secondary educational institutions in the country.

The school was first housed in the basement of a church. Now, Dunbar High calls home a \$128 million dollar award-winning complex that opened its doors in August of 2013. The U.S. Green Building Council awarded it the LEED® for Schools v2009 Platinum certification; Dunbar was the only project in its class worldwide to receive at least 91 of 110 points.

The project, which incorporated the use of Structures Unlimited and its strategic partner Kalwall for its skylights, was also given the Gold Citation by the American School & University in its annual Educational Interiors Showcase. AS&U is a leading voice in education facilities and its annual Educational Interiors Showcase is the premier architectural competition in the industry.

Much changed for Dunbar High between 1870 and today.

Dunbar, first known as Preparatory High School for Colored Youth and re-named after the famed African-American poet Paul Laurence Dunbar in 1916, moved out of the church basement and was located in two different buildings before its current home. The school counts world renowned scientists and playwright, activists and politicians, athletes and Pulitzer Prize-winning journalists among its alumni. They followed in the words of Paul Laurence Dunbar, who wrote in his poem "The Seedling":

The sunshine poured upon it, And the clouds they gave a shower; And the little plant kept growing Till it found itself a flower.

The high school's academic reputation, however, suffered through the end of the 20th century and over the past decade. Construction of a new home was seen as a way to pump new life into Dunbar High and bringing light into the facility was essential since the previous building was seen as dark and dreary.

That is where Structures Unlimited played its role. Using Kalwall translucent panels, Structures was brought in by architects Perkins Eastman (associated firm: Moody Nolan) to create the skylight in the design of its centerpiece atrium, which is the school's common area.

It is not only breathtaking, but also energy efficient.

Dunbar High Principal Stephen Jackson has said publicly he believes the culture of learning at the high school will change because of the building's airy design. The image of Paul Laurence Dunbar is prominent inside the atrium where light is again shining on Dunbar High.

And the sun and showers will help you Through the lonesome, struggling hours, Till you raise to light and beauty Virtue's fair, unfading flowers.

















