

FM Approved

Owner:

Seattle Public Utilities

Architect:

The Miller/ Hull Partnership, LLP

General Contractor:

M.A. Mortenson Company

Installation sub-Contractor:

Lacey Glass, Inc.



Seattle's LEED Gold South Transfer Station specifies CPI Daylighting's Quadwall® featuring 40% light transmission and FM-rated Class B roofing construction

More than 33,000-sq.-ft. of CPI Daylighting's Quadwall® sky and wall lights helped Seattle Public Utility's (SPU) arena-size South Transfer Station earn LEED Gold, operating at 40% light transmission without the need for any artificial light on an ordinary day.

And that's a big feat for a city with more clouds than sun.

"Being able to include a lot of daylight in the facility means that we're not relying on the electric lighting," said Sian Roberts, The Miller/Hull Partnership, the project's architect, who conducted multiple daylighting studies before specifying CPI's Quadwall. "This is a huge upgrade for [Seattle Public Utilities] to have even distribution and good quality of light to operate in."



The Quadwall system is an assembly of two independent translucent insulated panels, resulting in one integrated, high-performance daylighting system. Quadwall is the only system that can provide indefinite building envelope protection with its advanced RST – Removable Skin Technology.



Scalable, the Quadwall system can be configured with additional insulation, FM-rated Class A or B fire-rated roof assembly (chosen for the South Transfer Station), sound reduction, dynamic shading, additional structural performance or even military forced entry resistance. Joined by a mechanically interlocking connection, the dry-glazed Quadwall system eliminates the need for vulnerable adhesives, adding durability, as well as even light distribution with the system's tight-cell technology.

The mechanically interlocking connection was a bonus for South Transfer, helping to seamlessly integrate the sky and wall lights with the building's exterior metal paneling.

"The [Quadwall's] metal frame comes in a higher quality level and allows us to integrate it better into the architecture of the building than if it was a panel without a frame," said Roberts. "CPI was really good at helping us coordinate with the metal building manufacturer so we could get those details right, facilitating it during construction to integrate the two systems."

Per code, the South Transfer Station was required to meet FM-rated Class B roof construction. With a proprietary insert, the scalable Quadwall was the only solution. "CPI had the right balance - what we needed for the Class B roof and the level of quality we were looking for with the price we could afford," said Roberts.

When processing as much as 700,000 tons of trash annually as SPU does, every detail counts.

"We were very concerned about hot spots and glare temporarily blinding equipment operators with light and we haven't seen any of that [with the Quadwall]," said Facilities Program Manager Jeff Neuner, SPU. "The natural light has been a big help and improved color recognition. We have a lot of heavy equipment and customers moving around and the better everyone.

CPI Daylighting pioneered the use of polycarbonate translucent panel systems for architectural use in 1980. Today, CPI continues to offer new and innovative daylighting products, including skylights, wall lights and canopies for any commercial, industrial and institutional application, with complete services from manufacturing to design and installation. CPI products enhance the sustainability of any high-performance building project through daylight transmission levels, optimized insulation values, thermal performance and recycled content.