BCH WEST MEDICAL BUILDING AT CMC LAFAYETTE

BEC PARTICIPANT
Boulder Associates

LOCATION
Colorado

SECTOR
Healthcare

ABOUT THE BUILDING

Boulder Community Health's newest medical office building supports an eye clinic and an ambulatory surgery center for a leading Colorado retina practice. Energy-efficient design elements include masonry walls with 2 inches of continuous rigid insulation complemented by R-19 batt within the stud cavity, exceeding code requirements, and a canopy on the building's south entrance that will accommodate a 99 kW photovoltaic array in the future.

This building showcases emerging hybrid vacuum-insulated glass (HIVG) technology, which improves year-round energy efficiency and comfort by reducing thermal transmittance and convection at the windows. In contrast to the U-value of 0.29 for low-emissivity insulated glass, the HVIG used on the project has a U-value of 0.071 on the north façade and 0.064 on the others. The HVIG also allowed for a 13% reduction in visible light transmittance, decreasing glare on façades with higher solar radiation.

The Building Envelope Campaign technical team assisted Boulder Associates by calculating the fenestration values of the standard thermally broken aluminum frames used in this project, as the center-of-glass U-values for the HVIG were atypical.

QUICK STATS

BUILDING TYPE
Healthcare (outpatient)

SQUARE FOOTAGE
29,652

KBTU/YEAR SAVED
266,417.1

BEP VALUE
10.8

BEP IMPROVEMENT
46%

BEC RECOGNITION LEVEL
Novel 40 Role Model

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BUILDING ENVELOPE CAMPAIGN

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