

KAWNEER

PROJECT PROFILE



Medical Center of the Rockies

Loveland, Colorado, USA

ARCHITECT

Heery-HLM/design
Denver, Colorado, USA

GLAZING CONTRACTOR

A-1 Glass, Inc.
Englewood, Colorado, USA

FEATURED PRODUCTS

1600 Wall System™1 Curtain Wall
1600 SunShade™
InLighten™ Light Shelf
GLASSvent™ Windows
for Curtain Wall
2250 IG (Inside Glazed)
Curtain Wall System
Custom 350 Medium Stile Entrances



BRINGING A "GREEN" HOSPITAL TO LIFE IN LOVELAND, COLORADO

Based in Loveland, Colorado, the Medical Center of the Rockies (MCR) is a 570,000-square-foot facility that is changing the face of healthcare construction. One of the largest LEED®* healthcare projects west of the Mississippi, the revolutionary critical care facility could be one of the first hospitals to receive LEED Gold certification.

The case for more green hospitals is a strong one. On average, healthcare facilities consume nearly twice the annual energy of an average commercial office building. Plus, sustainable design approaches could have multiple benefits, as studies are now investigating the link between quality of the built environment and therapeutic outcome.

From its earliest stages, the concept for MCR had a green focus. MCR's parent company, Poudre Valley Health System (PVHS), set out to build a state-of-the-art facility that not only promoted health and healing, but also supported the environment and the well-being of the hospital's staff. Careful attention to the bottom line was a priority throughout construction, with the facility's final estimated cost totaling \$265.55 per square foot. What's more, MCR will use 35 percent less energy than an average hospital, a huge win for the team and for long-term energy expenditures.

Design Highlights

Nestled in the foothills of the Rocky Mountains, MCR was designed to reflect its surroundings and project a resort-like environment. A four-story atrium was created, featuring stacked stone fireplaces and a warm color palette. Along with the large amount of natural light created by the atrium, the warmth and tranquility of the space further contributed to the welcoming, hotel-like feel.

Challenges

- While the views and aesthetics of the design were visually striking, the building's orientation and its proximity to the mountains created some of the project's biggest challenges.
- "High wind pressures are common in the Rocky Mountain region; on this particular project we were challenged with 90 psf loads on the atrium curtain wall," said Kawneer sales representative Pat Murray. "That issue, coupled with the southwestern elevation and the LEED parameters we were working within, meant that the thermal performance, products and engineering had to be verified through a licensed engineer in the state of Colorado."
- "Hospitals are some of the most complex facilities to engineer for, due to the extensive wiring and electrical systems they must house," said Murray. "We had to utilize products with superior water and thermal performance and ensure they were readily available so that construction could remain on schedule."

Solutions

- For the grand atrium, the team utilized an integrated curtain wall, equipped with both sunshades and light shelves. This combination of products would reduce solar heat gain and bounce indirect light into the atrium, saving energy costs and providing daylighting throughout the main area.
- An inside-glazed ribbon window and curtain wall system was chosen for MCR's patient rooms. Zone-dammed and pressure-equalized, the product offered the team fabrication flexibility and thermal performance – two important criteria for the project, which had to be fully enclosed before work could begin on its interior. The oversized windows in patient rooms created an open, airy environment with abundant natural light, further promoting a positive, healing environment.

Featured Products

Kawneer's 1600 Wall System™1 Curtain Wall, 1600 SunShade™, InLighten™ Light Shelves, GLASSvent™ Windows for Curtian Wall, dual purpose 2250 IG (Inside Glazed) Curtain Wall System, and custom 350 Medium Stile Entrances.

Kawneer Company, Inc.
Technology Park / Atlanta
555 Guthridge Court
Norcross, GA 30092

kawneer.com
770 . 449 . 5555

