Challenge:
Replace several 25-year-old, non-insulated fire station sectional doors with high R-value doors that complement a specific exterior renovation paint scheme and allow improved views of all activity in front of and behind the station.

Solution:
Five Amarr® 2742 Steel sectional doors (14’2” high x14’ wide) featuring a factory-applied Commercial Gray, stucco-embossed finish and two aluminum full view sections with ClearView aluminum struts and high-performance 1/8” tempered glass.

Results:
A dramatic improvement in natural light penetration, unobstructed views through the doors from inside the fire station as well as lower heating costs due to the high 19.4 R-value of each sectional door.

Application:
Adams County Fire Rescue

Environment:
Combined Fire Station and Administrative Offices

Location:
Denver, CO

Architect:
Allred & Associates – Broomfield, CO

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Adams County Fire Rescue – Denver, CO

Fire stations, by their very purpose, clearly follow the “form follows function” architectural principle. That’s because a station’s primary function is to house and protect the vital equipment that’s so critical to firefighting.

Although a fire station’s form (or design) is secondary to its function, that certainly doesn’t diminish form’s importance. A station’s form correlates directly to how its firefighting equipment enters and exits the structure. And central to a station’s form is its largest doors that make such equipment entry and exit possible.

For Adams County Fire Rescue’s (ACFR) Washington St. station in Denver, Colo., form has definitely followed function. When ACFR decided to proceed with an extensive and adaptive reuse project to transform the older station into a new, state-of-the-art combination station and administrative center, that also meant the timing was perfect to replace the station’s five aging sectional doors.
The decision to repair or replace

“Our 25-year-old doors were showing significant signs of wear and tear, including the tracks, rollers, and openers,” pointed out Captain Thom Jeffries, who manages all of ACFR’s new construction and renovation projects. “We were faced with either nursing the doors along with ongoing repairs or replace them all together. So, we chose the latter.”

Jeffries also explained that the fire station’s old red doors, each containing four small oblong windows, had little to no R-value. That meant the station’s bays would get very cold during the winter months, even with gas-fired radiant heaters running. The station operates two drive-through bays with doors on each end, as well as a third bay that uses only one door on the front.

Working with Project Manager Brad Bonnet of Allred & Associates (Broomfield, Colo.), a local firm that specializes in fire station design and renovation, ACFR installed five Amarr® 2742 Steel sectional doors (14’2” high x14’ wide) with a 19.4 R-value.

Each Amarr door features a factory-applied Commercial Gray, stucco-embossed finish on the exterior and white on the interior, as well as two aluminum full view sections with ClearView aluminum struts and high-performance 1/8” tempered low-E glass.

High R-value and much better views

The combination steel and aluminum full view sectional doors provide two primary benefits:

- Significant energy savings due to their high R-value application in a semi-conditioned space;
- Unobstructed views of all activity in front of and behind the station thanks to each door’s two rows of aluminum full view panels.

“Entrematic has a great selection of factory-applied colors and finishes, so that was very important to us as architects for the overall look of the station’s exterior.”

– Brad Bonnet, Allred & Associates

Bonnet said that when ACFR contacted his firm about the fire station renovation project, he was already familiar with Amarr sectional doors. His firm had used them for several other projects.
“We agreed that this station would definitely benefit from the new doors along with increased visibility and plenty of R-value,” he added. “Entrematic has a great selection of factory-applied colors and finishes, so that was very important to us as architects for the overall look of the station’s exterior.”

Bonnet further explained that the fire station exterior had a “1980s look” that was predominantly red throughout. The station’s exterior renovation required a more contemporary design and color scheme.

Allred & Associates created a two-tone gray design with red accents. Bonnet emphasized the importance of the new sectional doors meeting the firm’s color scheme design requirements and their availability with a factory finish.

A prominent feature designed into the station’s front elevation is a clear finish anodize aluminum (non-Amarr) store-front door system. “From an architectural perspective, the horizontal appearance of the Amarr sectional doors and the store-front door system integrate very well with each other,” Bonnet commented.

Overall, the Amarr sectional doors helped to bring the 1980s-vintage structure nearly four decades forward as part of a dramatic revitalization project that’s made a positive impact on the local community.

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– Brad Bonnet, Allred & Associates

Reduced need to run radiant heaters

Jeffries stressed that the Amarr doors’ R-value rating was very appealing. “Once we encountered our first winter with the new doors, we not only experienced a definite improvement in operation but also a
significant change in temperature in the station bays on cold days,” he said. “Our bays now warm up much faster and the gas-fired radiant heaters don’t run as long as they did with the old doors.”

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Instead of overhead door openers, ACFR now uses wall-mounted openers for its new high-lift doors. Jeffries said that the door installation process didn’t require any special requirements aside from moving the power supplies from the ceiling to the walls to accommodate the new openers.

“So far, we’ve received very positive comments about the look of the doors,” Jeffries shared. “And we’re really benefitting from the additional ambient light that enters our bays from both sides of the station through the full view panels. The full view panels provide added visibility while the steel door construction provides privacy and security.”

To obtain detailed information on Amarr Aluminum Full View sectional doors — designed and manufactured by Entrematic — please visit Amarr Commercial Doors, or contact us at 800-503-DOOR (3667).

And to learn more about how Entrematic works with architects, please visit Architect Resources, which also includes BIM models for Revit, SketchUp models, CAD details, architectural specifications, information about the company’s commitment to sustainability and more.

“The full view panels provide added visibility while the steel door construction provides the privacy and security we need as well.”

– Thom Jeffries, Adams County Fire Rescue