October 5, 2017

Kansas City data center installs sound barrier fencing to mitigate compressor noise

Cerner is a large healthcare company that was undergoing a $35-million expansion of their headquarters campus in North Kansas City, Missouri. AIL Sound Walls were selected to mitigate their data center's rooftop noise issues and get their decibel levels within local ordinance.

Project at a glance:

Name: Cerner Data Center

Location: Kansas City, Missouri

Owner: Cerner

Engineer: Henderson Engineers

Contractor: Burr Computer Environments, Inc.

Product: Silent Protector (Absorptive)

Sector: Commercial

Application: Sound Barrier

Parapet Barrier Dimensions: Length 235', Height 8'

Chiller Chimney Barrier Dimensions: Length 40', Width 8', Height 5'

Installation Time: Four weeks

Parapet wall and eight chiller chimney surrounds

The project required two types of lightweight sound barrier structures — a longer parapet-mounted barrier and eight individual chiller chimney surrounds. We worked closely with both their acoustic consultant and their contractor to review options for both applications.

Our in-house engineering team designed a cost-effective solution to attach our vertical support posts to the parapet wall. The chiller chimney attachment was trickier, however, as we had to develop an attachment to their existing roof framing and grating.

A two-pronged noise barrier approach

We divided the project into two phases with the parapet barrier being designed, manufactured and installed first, while the more complex chiller chimney surrounds followed. We expedited our design and manufacturing to help meet Cerner's sound mitigation requirements on time.

Feedback from our project partners has been positive and the consultant's post-project noise measurements confirm that Silent Protector's absorptive performance has met the requirements.

Latest project in a growing sector/application for us

With their lighter weight and flexible design capabilities, AIL Sound Walls are popping up more frequently in data center applications throughout North America.

See all Project Profiles on ailsoundwalls.com