

Case Study:

IAC Acoustics Sound Barrier



Cincinnati Children's Medical Center
Cincinnati, Ohio



IAC Acoustics Barrier System Helps Keep the Community Quiet for the Cincinnati Children's Medical Center

The IAC Acoustics FS/S Noishield® Model R sound barrier systems are designed to protect communities against noise generated by air-conditioners, pumps, chillers, compressors and fans where restricted airflow caused by an all solid barrier is a concern. Cincinnati Children's Medical Center had a noise level that exceeded the community noise ordinance at several locations along the property line.

Custom Configurations

By incorporating the IAC Acoustics Noishield® Model R louvers into a sound barrier system, we were able to achieve the acoustic requirement without compromising the airflow. There was an average of 11 dBA reduction realized at the required locations along property line.

Manufacturing

The IAC Noishield® Model R sound barrier systems are designed and pre-engineered including structural steel

and support systems. The louvers can be 4", 6", 12" or 24" thick (depending on airflow and acoustic requirements) and measure 2' to 8' wide by 2' to 12' high. The louvers can be constructed from galvanized steel, aluminum or stainless steel and can be powder coated to match existing building trim or décor. The louvers can be banked to achieve various height and configurations.

For the Cincinnati Children's Medical Center project, IAC Acoustics provided a Noishield® Model R sound barrier system which included sixteen individual louvers measuring approximately 5' wide x 6' high, structural supports and finish trim pieces — all powder coated to blend with the community and environment. The louvers are rated for transmission loss and pressure drop in IAC Acoustics' Aero-Acoustic Laboratory.

The final result was another successful turn-key barrier application that delivered the acoustic and aesthetic expectations of the customer without compromising the operation of the mechanical equipment.