



*St. John Medical Center, Tulsa, OK*

To meet an increase in demand for medical services, the owners of St. John Medical Center recently expanded their complex — including the 500 bed hospital. Located in the heart of Tulsa, OK, the medical center is subjected to the threat of rain throughout the year with occasional large hail and violent windstorms.

The new medical center expansion included a state-of-the-art emergency generator system located on the top floor. This meant that large intake openings had to be placed on the rooftop to feed the generators the proper amount of air. It also created a problem. The combination of wind and rain native to the area meant special accommodations had to be made to prevent water from seeping into the generator's air intake openings.

## Ruskin Brings Comfort to Medical Center

The owners of St. John Medical Center in Tulsa, OK find comfort in knowing their emergency generator system is protected by Ruskin. A newly built penthouse using Ruskin's Wind Driven Rain Resistant EME6625 Louver keeps the top-floor generator room dry and secure.

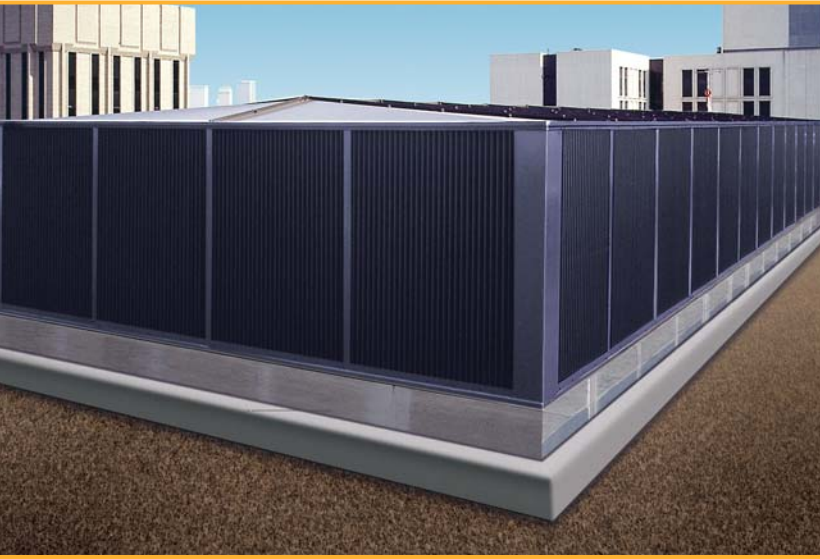
Designed to handle the severe weather conditions often found in the Midwest, the EME6625 Louver creates very low pressure drop while providing the best combination of rain protection and high airflow capacity.

- Closely spaced vertical blades prevent penetration of wind driven rain
- Certified performance per AMCA Publication 511
- 42% free area
- Low pressure drop
- Low maintenance aluminum construction
- All welded construction



# Case Study

## ST. JOHN MEDICAL CENTER



To protect the openings, a 54' x 15' x 5' tall vertical blade Wind Driven Rain Resistant Penthouse was mounted above the generator room. The penthouse solution was designed by Keith Browne of Lee and Browne Consulting Engineers using Ruskin's Wind Driven Resistant EME6625 Louver.

The engineers chose this Ruskin louver because they were able to design a structure that creates very low pressure drop and provides an excellent combination of rain protection with high airflow capacity.

"The emergency generator installation which the penthouse serves has an intake air flow

requirement of 375,000 CFM," says Keith. "The vertical blade design offers enhanced performance versus traditional horizontal blade louvered penthouses."

The hospital's new penthouse is the largest ever built by Ruskin using a Wind Driven Rain Resistant Louver. These louvers have been specifically designed and tested in the AMCA Wind Driven Rain Test for use in the most severe weather conditions.

With the performance of the hospital's generator equipment at stake, the decision to create a penthouse using the EME6625 Louver provides the owners a high level of comfort.

"Water penetration though the penthouse would be unacceptable," says Keith. "This design provides an excellent water barrier."

In addition to the Wind Driven Resistant EME6625 Louver used in this project, Ruskin's network of representatives provide a complete line of dampers and louvers. To learn more about all of Ruskin's products and services, or to find the Ruskin representative nearest you, visit our website at [www.ruskin.com](http://www.ruskin.com) or call us at **(816) 761-7476**.

# **RUSKIN**<sup>®</sup>

**Air & Sound Control**  
*Specified by Many – Equaled by None*

[www.ruskin.com](http://www.ruskin.com)

3900 Dr. Greaves Rd., Kansas City, MO 64030  
(816) 761-7476 Fax (816) 765-8955