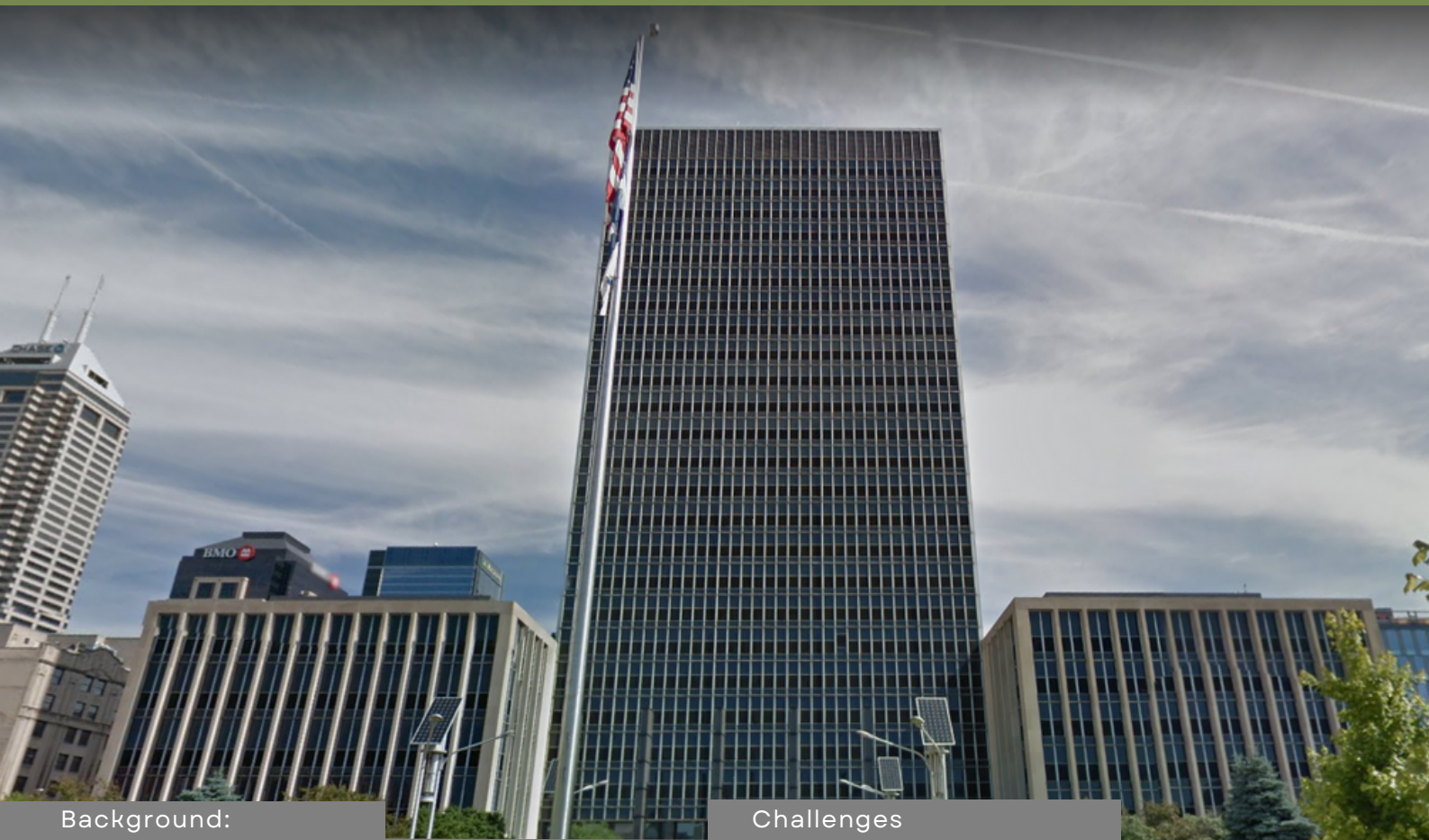


Case Study Indianapolis County City Building



Background:

The Indianapolis City County Building was built in 1962 with 3,400 windows, the majority facing due South, and subjected to wind speeds of over 80mph (130kph).

Over 40 years after installation, the Microlouvre Koolshade® screens on the Indianapolis City County Building are still operational and continue to provide thermal and visual comfort to occupants whilst making substantial energy savings, all with minimal maintenance.

Challenges

With 28 storeys, 2 wings each with 7 storeys, 1 million square feet of space, 3,400 windows, solar heat gain was a big problem.

Offices were overheating and cooling energy usage was tremendous.



The Problem:

Internal temperatures were reaching an impossible 100°F (39°C) requiring three massive refrigeration units of 1,000, 1,350 and 1,500 tons each. Energy costs were a problem and there was increasing pressure for green, sustainable buildings.

In 1978, after six years of problems, the Chief building Engineer searched for solutions including solar control films, sunscreens and shading devices to reduce solar radiation. Vinyl coated woven fibre glass external fabrics were quickly rejected because of poor visibility and life span.



The City-County Building is a 28-story building at 200 East Washington Street in downtown Indianapolis, Indiana, that houses the offices of the consolidated city-county government of Indianapolis and Marion County, Indiana, known as Unigov.

THE SOLUTION

The chief opted for Microlouvre Koolshade® (then known as Koolshade®) which had shown in tests to be nearly three times as effective as window film, reducing temperatures by up to 26°F enabling an unobstructed view out, and with 500% better life span.

Immediately after the installation of the Microlouvre Koolshade® screens in 1976, during a four-month period, the electricity consumption of the three chillers was down 11.8%, and during the year it was down a total of 21%.

40 years after installation, the Microlouvre Koolshade® screens on the Indianapolis City County Building are still operational and continue to provide thermal and visual comfort to occupants whilst making substantial energy savings, all with minimal maintenance.

RESULTS

- 100% solar heat block
- 100% summer shading
- Hurricane wind resistant at 100mph
- Clear outward vision
- 40-year maintenance-free life span
- Massive energy saving and ROI
- Green, sustainable building
- Temperatures reduced by up to 26°F (15°C)