

SHAKE SHACK CASE STUDY



INTELLI-HOOD® KEY SAVINGS

Overview

Shake Shack, a popular fast-food restaurant known for its premium burgers and shakes, operates a location in Corniche, Abu Dhabi. Seeking to enhance operational efficiency, reduce utility costs, and embrace sustainable practices, Shake Shack decided to invest in the installation of Intelli-Hood®, an intelligent kitchen ventilation system.

The primary goal was to optimize kitchen ventilation, decrease utility costs, and adopt environmentally friendly practices, aligning with Shake Shack's commitment to sustainability.

Reason For DCKV

Shake Shack Corniche chose Intelli-Hood®, an advanced kitchen ventilation system designed to dynamically adjust exhaust and supply fan speeds



Total Energy Savings
\$4,091/Year



Carbon Dioxide
93,906 lbs./Year



Simple Payback Period
2.1 Years



Operating Expense Reduction
38%

based on cooking activity. The system's intelligent features ensure energy is used judiciously, resulting in significant energy savings.

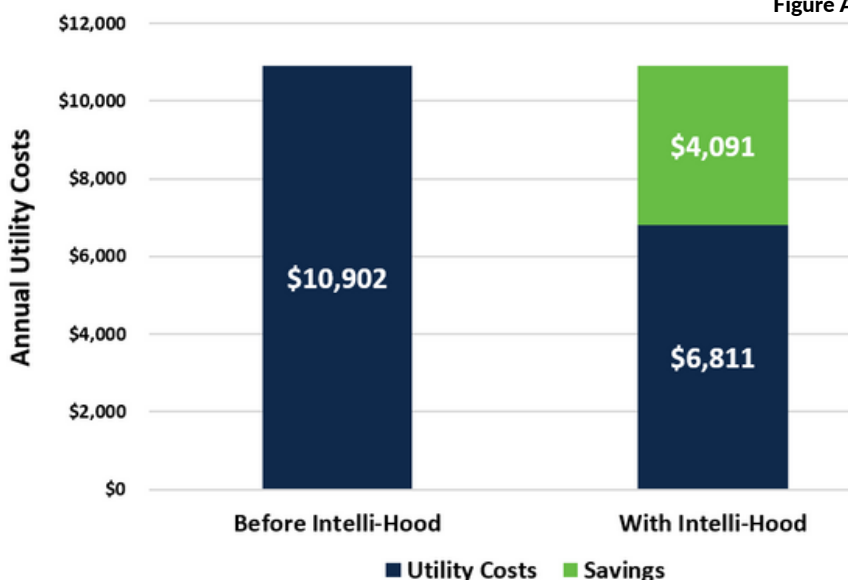
Results

Here are the results following the Intelli-Hood® installation at Corniche's Shake Shack location:

Financial Impact: Prior to the Intelli-Hood® installation, Shake Shack Corniche incurred an annual utility cost of \$10,902. Post-installation, the restaurant experienced a notable reduction, with annual utility costs decreasing to \$6,811. This

Annual Kitchen Hood Energy Costs (USD)

Figure A



resulted in substantial savings of \$4,091 (Figure A). The simple payback period for the investment was 2.1 years, demonstrating the long-term financial benefits of the Intelli-Hood® system.

Operational Efficiency: The installation of Intelli-Hood® led to an impressive 38% reduction in operating expenses, showcasing the system's efficiency in optimizing energy usage. The dynamic control of fan speeds based on cooking activity ensures energy is utilized precisely, contributing to Shake Shack's commitment to sustainability.

Environmental Impact: Shake Shack Corniche significantly reduced its carbon footprint following the installation of Intelli-Hood®, achieving a reduction of 93,906 lbs. of carbon emissions. This environmentally friendly initiative aligns with the growing importance of corporate social responsibility and sustainable business practices.

System Performance: The average fan speed of the Intelli-Hood® system at Shake Shack Corniche was maintained at 76%, illustrating the system's adaptability to cooking activities and real-time adjustments (Figure B). This optimal fan

speed ensures effective ventilation while minimizing energy consumption, contributing to a balanced and energy-efficient kitchen environment.

Conclusion

The installation of Intelli-Hood® at Shake Shack Corniche showcases the positive impact of demand control kitchen ventilation systems on both financial and environmental aspects. The 2.1 years simple payback period, substantial cost savings, and significant reductions in carbon emissions underscore the success of this initiative. Shake Shack's commitment to sustainability, coupled with the operational benefits of Intelli-Hood®, positions them as a forward-thinking leader in adopting innovative and eco-friendly solutions within the fast-food industry.



Shake Shack Corniche Abu Dhabi - Average Fan Speed

Figure B

