

# SHAKE SHACK CASE STUDY



## INTELLI-HOOD® KEY SAVINGS

### Overview

Shake Shack, located in Jumeirah Beach Residence (JBR) Dubai, is a popular fast-food restaurant known for its delicious burgers, hot dogs, and frozen custard. This Shake Shack location was looking for ways to reduce energy consumption and operational costs while also contributing to sustainability efforts. This case study explores the installation of Intelli-Hood's Demand Control Kitchen Ventilation (DCKV) system at Shake Shack and the benefits that resulted from this decision.

### Reason For DCKV

Before the installation of Intelli-Hood's DCKV controls, Shake Shack incurred annual operating expenses of \$14,845 related to kitchen ventilation and exhaust systems. These expenses included electricity,



**Total Energy Savings**  
\$8,127/Year



**Carbon Dioxide**  
100,831 lbs./Year



**Simple Payback Period**  
1.0 Year

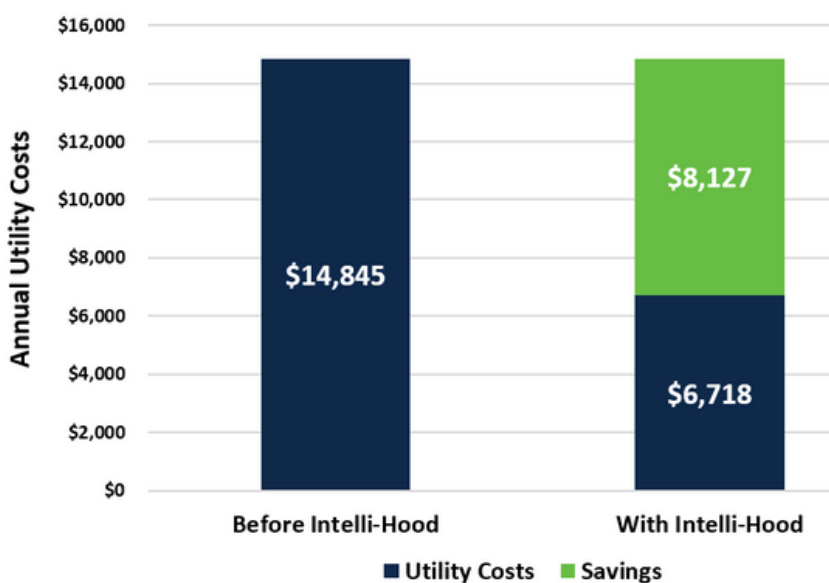


**Operating Expense Reduction**  
55%

maintenance, and other operational costs associated with the ventilation system.

Shake Shack chose to invest in Intelli-Hood's DCKV system to optimize their kitchen's ventilation and exhaust processes. The Intelli-Hood system is designed to monitor and adjust the exhaust fan speed in real-time, aligning it with the actual cooking activities in the kitchen. This ensures that the ventilation system operates efficiently, using only the necessary amount of energy to maintain air quality.

### Annual Kitchen Hood Energy Costs (USD)



## Results

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

**Substantial Cost Savings:** After installing Intelli-Hood's DCKV system, Shake Shack experienced a remarkable reduction in their annual operating expenses, with costs dropping to \$6,718. This resulted in substantial savings of \$8,127 annually (Figure A).

**Fast Payback Period:** Shake Shack's investment in the Intelli-Hood system paid off quickly. With a one-year payback period, the restaurant saw a rapid return on their initial investment, making it a financially sound decision.

**Operating Expense Savings:** The DCKV system enabled Shake Shack to reduce operating expenses by an impressive 55%. This not only contributed to improved profitability but also enhanced the overall sustainability of the restaurant.

**Carbon Footprint Reduction:** Shake Shack's commitment to sustainability was further reinforced by the installation of Intelli-Hood. The restaurant saved a significant amount of carbon dioxide emissions, totaling 100,831 lbs., due to the reduced

*energy consumption of their ventilation system.*

**Optimized Fan Speed:** The average fan speed under Intelli-Hood's control was maintained at 62% (Figure B). This ensured that the system only used the required amount of energy to maintain a comfortable and safe kitchen environment, further contributing to energy efficiency.

## Conclusion

The implementation of Intelli-Hood's DCKV system at Shake Shack in JBR, Dubai successfully demonstrated substantial operating expense savings, achieved a 1-year payback, and significantly lowered carbon emissions by optimizing their kitchen's exhaust and ventilation system. Intelli-Hood not only lowered their utility costs, but improved their overall sustainability as well.



Shake Shack JBR Dubai UAE - Average Fans Speed

Figure B

