



LOCATION

**Manufacturing Facility and
Office Suite in Northern
New Jersey.**

Challenge

A 2,000-square-foot office suite with central heating and air-conditioning had serious Indoor Air Quality (IAQ) issues due to a manufacturing and welding facility situated directly beneath it. High levels of carbon monoxide (above 100 ppm) and combustion products infiltrated the office, which was evacuated.

Solutions

Haglid Engineering designed a ventilation system that utilizes energy recovery modules.

The system, a direct vent BPE-XE-200 unit and two 19-watt fans (total power consumption 38 watts), now provides fresh air with non-detectable CO levels. Haglid Engineering's solution saved the facility from having to purchase a new HVAC system (\$45,000). Additionally, air-conditioning and heating costs were reduced by one-third.

The total cost for equipment and installation came to under \$5,000. The system also provided over 85% energy recovery with a payback of less than four years or an IRR of over 25%