

Distributed Air Conditioning for an Animal Clinic

Instead of one, central air handler, many building owners and engineers prefer a distributed approach to air conditioning. This unit was one of six small, straightforward, and highly economical units installed in an veterinarian clinic. Each unit was tailored to meet the requirements of the specific space in the facility that it serves, allowing for very precise control over different areas in the building. To reduce the size and cost of each unit, one dual-use water coils was used for both heating and cooling. Every unit was also equipped with a flat plate heat exchanger and customized frost control, economizer mode, and cooling mode changeover functions. With energy recovery, providing 100% outdoor air ventilation is affordable—making it possible to provide a healthy, fresh air environment for the animal patients and the people that care for them.

Performance Specification

Model:	XHS-50-60-RT-BP-HW-EX
Supply cfm:	900
Exhaust cfm:	900
Built:	March, 2008
Dimensions:	29" H, 102" L, 36" W
Weight:	1,200 lbs
Energy Recovered:	36 MBH (Winter) 10 MBH (Summer)
Design Conditions:	15 °F / 100% RH (Winter) 94 °F / 39% RH (Summer)



The unit, ready to be shipped.

Unit Features

- An XLT Type S Stainless Steel Flat Plate Exchanger operates at 60% effectiveness under Winter Design Conditions and at 55% effectiveness in Summer.
- The Double Wall cabinet has a heavy duty 18 gauge Galvanealed Steel Exterior, 22 gauge Galvanized Interior, and 1" thick Fiberglass Insulation. Frame is Welded Structural Steel and drain pans are all-welded stainless steel.
- The 7"-5" FC DWDI supply air supply air and exhaust air blowers are belt driven by 1/2 hp ODP motors.
- A dual-use HW/CW Coil provides 26.7 MBH of cooling capacity and 34.2 MBH of heating capacity.
- 2" 30/30 filters slide into racks in both airstreams.

The Xetex unit featured on this page was built for an actual application. It is provided here to show our capability.