

FEATURED UNIT: Custom Outdoor Desiccant Dehumidification AHU

MARKET: Ice Arena



This XeteX project showcases a customized air handling unit designed specifically for a high school ice arena. The air handler features a high-capacity active regen energy recovery wheel with heat reactivating H4M molecular sieve desiccant removing up to 296 lbs. of moisture per hour; a direct fired burner for regen heat; an indirect gas fired burner for winter post heat; and a split DX producing 80 tons of cooling.

With the expertise of XeteX engineers, this custom air handler was designed to maintain optimal ice quality by ensuring extra dry air while providing year-round skating comfort.

Model:	AHR DHU-1750-RT-CD-RC-HI
Dimensions:	124"H x 84"W x 312"L
Weight:	13,250 lbs
Energy Recovery:	Active Regen Wheel
Moisture Removal:	296 lb/hr
Effectiveness:	EAT Moisture: 52 gr/lb LAT Moisture: 21 gr/lb
Supply CFM:	15,000 CFM
Cooling Capacity:	826 MBH
Heating Capacity:	1,184 MBH

Construction

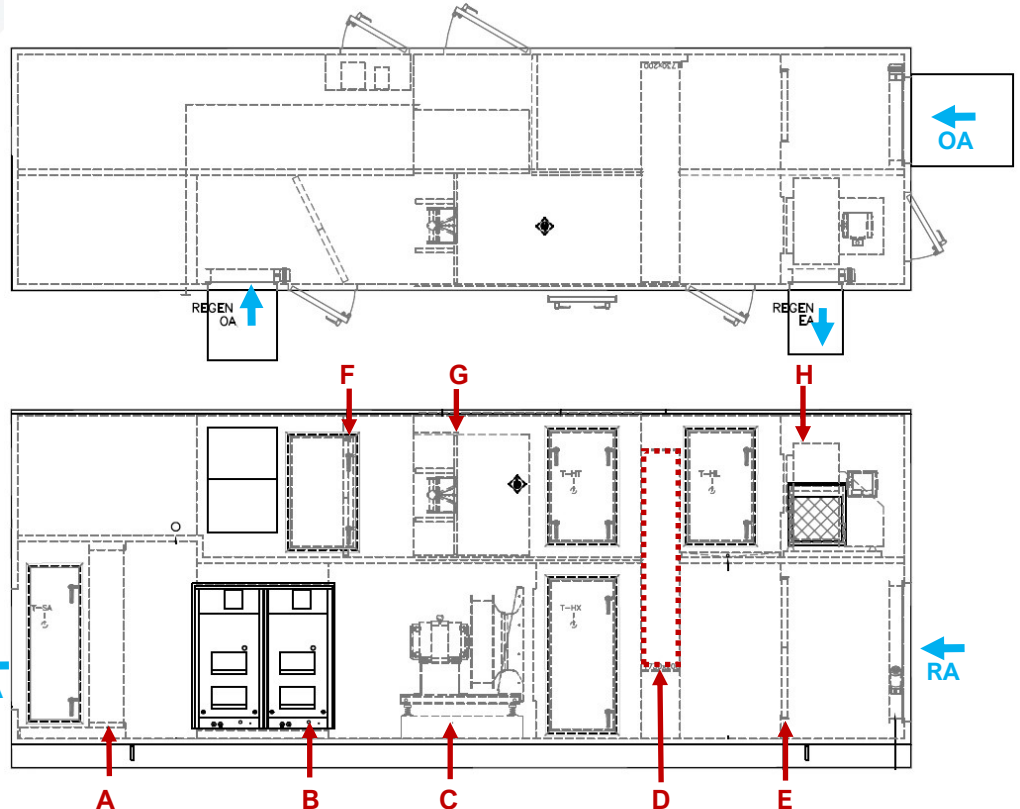
- Outdoor unit
- 2" double wall casing with injected foam (R-value 6.9/in) insulation; 18ga galvaneal exterior casing with XeteX gray acrylic 20ga galvanized steel interior casing
- Welded 8" structural steel base frame covered with a welded 22ga galvanized sheet metal skin
- Thermal break construction in regen tunnel with 16GA 304SS liner

Features

- XeteX Unit DDC Controls
- Piezo flow rings for supply fan

Components

- A. DX cooling coil
- B. 409 SS indirect fired gas furnace in the SA
- C. Supply Fan
- D. High-capacity desiccant wheel with heat reactivating H4M molecular sieve desiccant
- E. 2" MERV 8 OA Filters
- F. 2" MERV 8 Regen Filters
- G. Direct fired gas furnace in the regen airstream
- H. H. Regen Fan



Contact XeteX for your next Custom AHU!

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