

Case Study

College Dining Facility



Overview: The Oxford dining facility at the University of California - Davis uses 23 Apricus AP-30 collectors in a drainback configuration to preheat water before it enters the high efficiency boilers. The system, designed and installed by J.R. Pierce plumbing, was designed to offset 10% of the buildings total energy consumption.

The University design was looking to upgrade the building to achieve LEED silver status and found that most solar companies could not find a way to lay out collectors with the scattered mechanical equipment on the roof. J.R. Pierce found a solution by building a metal roof to protect the water heating equipment and then place the collectors on a metal frame above the other mechanical equipment. In doing so, the solar water heating system helped the building reach a higher mark, LEED gold.



Project Description:

Property Name:	University of California
Location:	Davis, CA
System Type:	Drainback Commercial Hot Water
Array Size:	23 Apricus AP-30 Collectors



Apricus APSE-30:

Physical Specifications:

Dimensions:	2.0m x 2.2m / 78.9" x 86.4"
Aperture Area:	2.98m ² / 32.05ft ²
Gross Area:	4.15m ² / 44.76ft ²
Gross Dry Weight:	95kg / 209lb
Fluid Capacity:	710ml / 24 fl oz
Max Pressure:	800kPa / 116psi

Materials of Construction:

Evacuated Tubes:	Borosilicate 3.3. Glass
Absorber Coating:	Aluminum Nitrate
Heat Pipes:	High Purity Copper
Mounting Frame:	439 Stainless Steel
Manifold Casing:	5005-H16 Anodized Aluminum

Warranty:

Manifold & Frame:	15 years
Tubes & Heat Pipes:	10 years

Contact Information:

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