

# Case Study

## Luxury Hotel



**Overview:** This 42 collector evacuated tube solar system is located near the Dead sea in Jordan. Designed to provide 80% solar fraction for the hotels DHW needs, the closed loop pressurized system uses ASME rated glass lined pressure tanks to store the preheated water. The system is controlled using a state of the art Honeywell controller that is connected online and can be accessed wherever there is an internet connection. This is useful for performance monitoring, maintenance and fault detection. This installation completed first quarter of 2013 is expected to save the hotel \$24,000 USD per year.

“During the first week of operation (February) our boiler rarely fired. We are very happy with the performance of the system thus far.” *Building Owner*



### Project Description:

<b>Property Name:</b>	Luxury Hotel
<b>Location:</b>	Dead Sea in Jordan
<b>System Type:</b>	Closed Loop, Domestic Hot Water
<b>Array Size:</b>	42 Apricus AP-30 Collectors
<b>Fuel Displaced:</b>	Diesel Oil
<b>Estimated Cost Savings:</b>	25,000 L / 6,604 gal. or \$24,000 USD per year

### Apricus APSE-30:

#### Physical Specifications:

Dimensions:	2.0m x 2.2m / 78.9" x 86.4"
Aperture Area:	2.98m <sup>2</sup> / 32.05ft <sup>2</sup>
Gross Area:	4.15m <sup>2</sup> / 44.76ft <sup>2</sup>
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:	6005-T5 Aluminum Alloy
Manifold Casing:	3A21 Anodized Aluminum

#### Warranty:

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

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### Contact Information:

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