



THE MAZDON SYSTEM

The internationally successful Mazdon system is developed specially for regions where water quality is unfavourable. Applications range from simple domestic hot water supply to commercial and industrial heating and cooling.

The Mazdon system consists of a special "dry" connecting copper manifold, and stainless steel support with solar collector tubes. The system has been designed to ensure that the condenser or 'heat exchanger' at the top of each solar tube never comes into direct contact with the water circulating in the system, while assuring a highly efficient heat transfer process. The high quality insulation in the manifold ensures minimal heat loss. Each system is secured to the roof by means of stainless steel fixing brackets. In the case of a Flat roof, a stainless steel frame is available to fit the collector to an optimum angle.

Thermomax patented temperature limiting tubes are unique. In the case

of the TMA600 tube used in the Mazdon system, this is achieved by a bi-metal 'snap-disk' technology, which limits the maximum temperature to 250 F to prevent overheating. At this temperature, the bi-metal disk closes and plugs the neck of the 'heat pipe' preventing the return of the condensed fluid and stopping heat transfer. At temperatures below the maximum programmed limit, the disk retracts' allowing the condensed fluid to return to the lower section of the 'heat pipe'. The diode function of the heat-pipe will only allow for a one-direction transfer of heat i.e. from the absorber to the manifold heat exchange and never in reverse.

Two sizes of collectors are available in arrays of 20 and 30 tubes. Tubes can be adjusted to face the optimum orientation for maximum solar radiation absorption. Each solar tube is an independent collector with its own heat transfer mechanism 'heat-pipe'.

Special Features

- Special 'dry connection' to manifold, particularly suitable for regions with high chloride water quality.
- High performance, even in adverse weather conditions due to vacuum insulation.
- Self-limitation of maximum working temperature to 250 °F, using bi-metal disk technology.
- The 'heat-pipe' technology ensures high heat transfer and low heat capacity.
- Ease of installation - each tube can be installed individually.
- Minimum maintenance requirement - a single tube can be replaced at a time.
- High durability and reliability, due to the high quality of the materials used in the manufacturing process.



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