Professional Unit

The SolarVenti Professional ® Solar Air System significantly reduces running costs for heating and dehumidification of larger commercial and Professional buildings.

Economy:
Installing a SolarVenti Professional ® Solar Air System in conjunction with an existing ventilation system (HVAC) saves costs for both heating and dehumidification. Payback time is usually less than 5 years.

Function:
The air enters the collector through a patented double-perforated rear wall. The air passes through the absorber, made of a black technical material, which is resistant to high temperatures. The material is also an effective air filter. Unique to this collector is the conversion of solar energy to warm, fresh air. The air gap between the rear wall and the absorber provides sufficient thermal resistance to transfer heat energy to the incoming air, eliminating the need for insulation. The recommended air volume is 80-150 m3/h/m2 collector area.

Maintenance free:
The filter (which is also the absorber) is automatically cleaned by the heat from the sun when the fan is turned off, and the temperature exceeds 80 degrees C. The system is thus maintenance free.

Benefits:
Short payback time.
Powerful dehumidification, and free supplementary heated fresh air, resulting in lower energy consumption.
Improves the operation of existing ventilation systems.
Especially suitable for Professional and commercial building applications.

Applications:
Preheating of fresh air for warehouses, manufacturing and storage units.
Preheating of fresh air for industrial and agricultural buildings.
Preheating of fresh air for commercial buildings, offices, shops etc.
Preheating of fresh air for sports clubs, gymnasiums, swimming pools and spa baths.
Preheating of fresh air to institutions (large village halls, museums, hospitals, universities, schools, etc.).
Drying of stored timber, biomass, grain and feed products.
Keeping moisture critical products dry.

SolarVenti Professional can be integrated with existing air handling (HVAC) systems or designed to optimize a new building HVAC specification.