



ATAS International, Inc.

InSpire™

Transpired Solar Collector

- Heats Fresh Air
- Utilizes Free Solar Energy
- Converts up to 80% of Solar Energy
- Payback Generally within 3-8 years
- Beneficial in Summer
- Favorable Tax Incentives
- Ideal for Commercial and Industrial Buildings
- Lowers Heating Costs by \$1.50 - \$5.50 per sq. ft. of Panel per Year
- Recaptures Heat Loss Through Building Wall
- Contributes toward potential LEED® Credits

A simple concept, the InSpire Wall System utilizes metal wall cladding to heat outside fresh air.

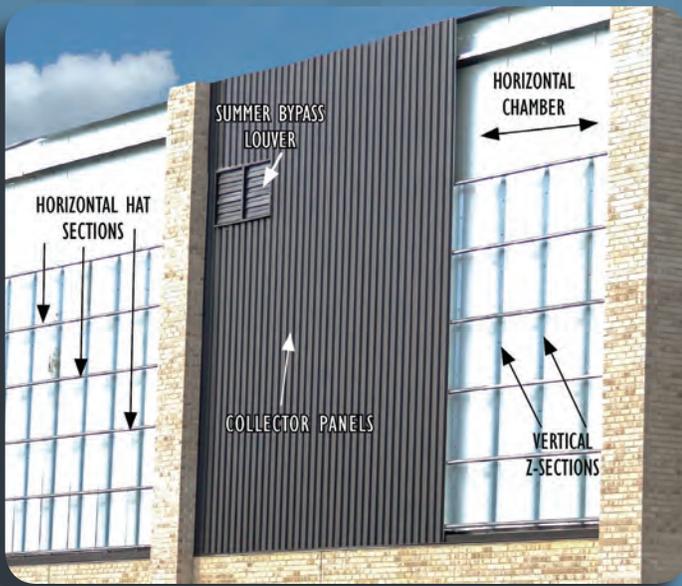
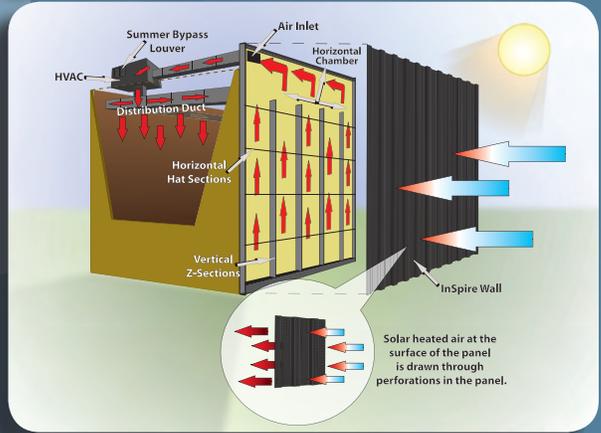
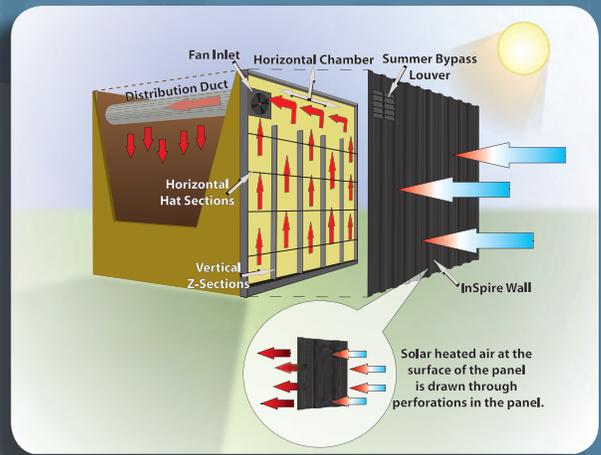
- InSpire wall panels, which are perforated, are installed on light gauge framing mounted to a wall, typically facing south, creating several inches of air space or a "plenum".
- Sunlight heats the solar collector surface.
- Fans draw warmed air through the perforations into the plenum.
- Preheated air is distributed into the building through conventional HVAC systems or perforated ducts.

"Transpired collectors provide the most reliable, best performing, and lowest cost solar heating for commercial and industrial buildings available on the market today."
- U. S. Department of Energy



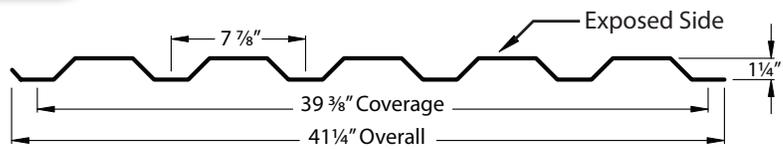
Function of the InSpire Wall System

The InSpire wall panel, a transpired solar collector, is mounted a few inches from the building's outer wall. The precision perforations in the wall panels allow outside air to travel through the face of the panel. Solar heated air at the surface of the panel is drawn through the perforations where it rises between the two walls and enters the building's central ventilation system or supply fan. The InSpire wall panel also helps to reduce the cooling load in the summer by preventing normal solar radiation from striking the building's main wall. Hot air is thermally siphoned up the wall and vented through holes at the top of the system, leaving the main wall cooler. In the summer, by-pass louvers allow cool fresh air to be drawn into the building at night, maintaining indoor air quality.

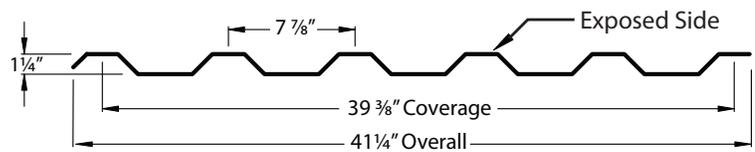


Vertical and horizontal structural components are used to create passageways for airflow. Z-shaped members applied to the exterior building wall provide a plenum for vertical air movement to the top of the wall. Horizontal hat sections fastened to the Z-sections are used to attach the collector panels. The horizontal chamber at the top of the wall is used to gather the air to a centralized inlet to the building or roof-mounted air handler. The standoff distance of the plenum and horizontal chamber are designed to meet certain air velocity requirements. Various flashing components and closures are used to complete the installation.

The InSpire wall panel is available in .032 Aluminum and 0.027 Zinc. *31 1/2" Coverage for Zinc. Inquire for availability.



BWS390



BWS392

Preferred Inspire Colors in KYNAR 500® PVDF or HYLAR 5000® PVDF: Black, Classic Bronze, Regal Blue, and Redwood