

WATERHOUSE JANSEVILLE- SOUTH AFRICA/EASTERN CAPE

SOLARAIR-SYSTEM

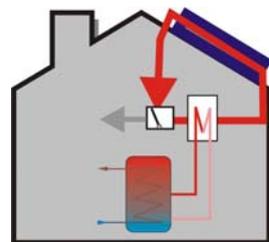


Self-sustaining SolarAir System supplying hot water for showers and washing machines.

Additional ventilation and heating of showers and laundry provided.

Installation within the framework of the research and development project "Wasserhaus Südafrika" (Communal Water House, CWH, South Africa).

CWH comprises facilities for laundry, sanitation, and communal services in a communication centre. It consists of four long term proven modules of sustainable technologies, successfully applied worldwide, combined in an innovative manner, including water recycling for high quality service water (after EU regulation), water heating by solar energy, solar air conditioning and solar water pumping, as well as modern sanitation.



www.communal-waterhouse.net

SolarAir-System:

Collectortype: 4 x TWINSOLAR 18.0
Collectorsurface: 72 m²
Airflow max.: 2 x 700 m³/h
Storage capacity: 2 x 1.500 liter



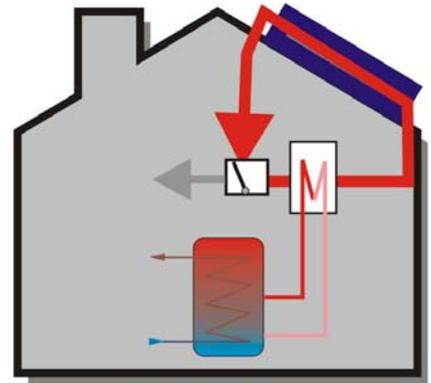
Installation in April 2009
in co-operation with
SolarHeat

www.solarheat.co.za



SOLARBOX – HEATING WATER UNDER THE ROOF

Without running the risks of overheating, rust or limescale in your equipment, or of leakages damaging your home, we can cover your hot water demand with Grammer Solar's recently upgraded SolarBox. This box was installed in the Waterhouse in Jansenville.



In the usual operating mode of a SolarAir system, outdoor air is blown through the Twinsolar collectors by means of a ventilator. The air is heated and pipes convey the heated air into the building, supplying ventilation and covering between 20% and 40% of its heating requirements.



Whenever heating is unnecessary, the heat provided can be diverted to a closed circuit running through an air-water heat exchanger. The differential regulator installed in the house shifts automatically between both operating modes by sending a signal to the motorized valve integrated into the SolarBox. The box also contains the air-water heat exchanger and the connections to the circuits of both fluids (air and water). Despite all its features, the Grammer SolarBox is compact and easy to install.



Since the components are dimensioned to cover heating demands which are generally higher than the hot water requirements, the system can easily cover 70% of the home's hot water needs. With the great advantage of not having a primary circuit with a liquid fluid circulating across the roof, SolarAir systems are not subject to problems such as overheating and corrosion.



Instead of dissipating your excess of hot water into a pool during summer, we dissipate our excess of hot air to produce hot water. We obtain a maximum benefit from the sun's energy all year round by using an abundant fluid: outdoor air.

The SolarAir-System in the Waterhouse produces mainly hot water and is totally independent. Integrated photovoltaic delivers the energy for the entire system (ventilators, pumps, controller)

Water project set to put Jansenville on the map

HELPING GERMAN HAND: Communal centre to run as pilot for rest of country

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WEEKEND POST REPORTER

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WHILE the government's lack of service delivery to rural towns throughout the Eastern Cape has been slammed in recent weeks, a small Karoo town is taking the bull by the horns with a project which is set to have national repercussions.

Jansenville, 130km north-west of Nelson Mandela Bay, is on the cusp of completing a pilot community water recycling project for the entire country – the Communal Water House (CWH).

The multi-million rand project, which includes a community centre fitted with 10 private showers and a room for washing machines and a laundry, is a joint operation funded by the department of science and technology, as well as the German ministry for education and research.

The University of Potsdam, outside Berlin, is overseeing the project.

The CWH will also have solar-heated water, solar air-conditioning and solar-powered water pumps.

Next week giant specialised water treatment tanks will arrive in the Bay, shipped from Germany. The tanks, which will recycle water used to shower and wash clothes, make up the final part of the year-long project.

"The Communal Water House is important because water is so scarce in this area," said Ikwezi (consisting of

Jansenville, Kliplaat and Waterford) mayor Sizwe Mngwevu. "We have already set up a committee, made up of members of the community, to oversee its running."

Plagued not only with an unemployment rate of more than 60 per cent, Jansenville residents must constantly battle low water reserves brought on by frequent droughts.

But refusing to accept the status quo, Mngwevu last year made contact with German ambassador to South



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Africa Dieter Haller, who earmarked the tiny town for the pilot project.

The plan, said Mngwevu standing outside the centre which is built in the Kwazamucinga township which surrounds the town, was to use the project to unify the community.

A co-op business would be formed by the community to operate a laundry in the centre, where residents could take their dirty clothes and for a much-reduced fee, have them cleaned and ironed.

"While they wait they can sit and

watch sport and speak about important matters," Mngwevu said, pointing to the adjacent sportsfield. Excess water from the centre would go to watering the field, which at present is bone dry.

"I got hold of Mr Haller last year regarding this project," he said. "I didn't want to waste any time. I want to see this centre up and running by June."

With no short-cuts taken, the centre is one to be proud of. The showers are tiled and will also have lockers for residents to store valuables while showering. While residents will be able to make use of the basins in the centre to wash their clothes, the washing machines will be under the care of the co-op company which will run the laundry service. All the water used will be recycled using the state-of-the-art German technology.

Mngwevu said the German funding didn't stop there.

Other German-funded upliftment projects include a mohair spinning and weaving workshop due in June, training women in the area to be able to make saleable products out of raw mohair, as well as a recycling project which would see plastic waste melted down and used for making, among other things, roof gutters, and metals would be gathered and sold.

"We would like to establish an Ikwezi soccer team as well," Mngwevu said. "With all the hype around the 2010 Soccer World Cup, it would be nice to have a local team to be proud of."

www.weekendpost.co.za March 28, 2009

Projektpartner



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GTS

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