



October 23, 2007

To Whom It May Concern:

RE: RETScreen Solar Air Heating Simulation Program

Dear Prospective Solar Air Heating Client,

The RETScreen Solar Air Heating Simulation Program version 3.1 developed by Natural Resources Canada (NRCAN) is one of the many renewable energy programs available from RETScreen. SAH 3.1 models the transpired unglazed perforated metal panel system based on actual tests. The test panels were SolarWall panels supplied by our Canadian company Conserval Engineering. These panels were tested by NRCAN both at the National Solar Test Facility (NSTF) and in the field where the test results were compared with actual field data on SolarWall installations at Ford, General Motors and Bombardier installations. The field monitoring data were also commissioned by NRCAN to provide a totally independent evaluation of the technology. The SAH Manual clearly states that "The model is designed specifically for the analysis of transpired-plate solar collectors." The efficiency curve shown in the SAH Textbook is from the SolarWall test data measured at the NSTF.

It has come to our attention that other suppliers of solar air heating systems are advising their clients to model their particular solar panels using RETScreen SAH 3.1. To do so implies that the other system will perform the same as SolarWall. This is not possible for two reasons. If a system performs the same as SolarWall panels, then it likely infringes on one of our world wide patents since it must be a transpired perforated plate panel system. If it does not infringe on the patents, then it cannot be a transpired perforated plate panel and thus it will not perform the same as a SolarWall system.

The Kingspan Energipanel system shown to us is not a perforated plate panel but an unglazed back pass panel and it has limited air contact with the absorber surface for heat transfer. Any unglazed back pass non perforated panel will not capture the surface boundary layer which accounts for approximately 50% of the solar contribution. The heat transfer surface for the Kingspan is less than 50% of the panel surface and the cross sectional area of the air cavity severely restricts the amount of air that can be heated. **The Kingspan panel cannot be modeled with RETScreen SAH 3.1 as it is not the same panel system.**

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As the inventor of the transpired perforated solar air heater, I have tested dozens of solar air heating panels and designs and in fact our company did market an unglazed non perforated panels systems twenty years ago. Once the transpired perforated panel was invented and proven, the non perforated panel system became obsolete technology, similar to the old computers from the 1980's.

I strongly recommend that anyone considering a solar air heating system for their building or their Client's building exercise their professional duty to obtain independent test data and compare the results. If such data is not available, then the prudent approach is not to accept the unproven and untested system but rather to select a system with reliable data and a proven track record.

I contacted RETScreen and the Kingspan solar air panel is not currently listed nor is it an approved product in the RETScreen software. Again I urge you to exercise due diligence by verifying this yourself. You can contact the RETScreen customer support department listed on their website or call Mr. Gregory Leng, one of their senior Research Officers, at 905 984 6749 in Canada.

Yours truly,

A handwritten signature in black ink, appearing to read "J. Hollick". The signature is written in a cursive, slightly slanted style.

John Hollick

President

Conserval Engineering Inc.