

Alternative Technology Association, SA Branch
Minutes of Meeting held Goodwood Community Centre
on Monday 17th October 2011 at 7-30 pm

Chairman and Minutes Alan Strickland

Attendees: Approx 35 people attended the meeting

Topic: Infrared thermography for building monitoring.

Presenter: Ian Pearce, FLIR Systems

Points arising are as follows:

Ian outlined the operation of FLIR Systems as a manufacturer of imaging systems, and his role with infrared imaging and analysis. Points arising are as follows:

Thermal cameras capture an image and measure thermal energy emitted from an object.

Our eyes see colour which is the reflection of light. IR cameras see IR energy and use colour coding to display the information. Cameras can be used for the following: locating moisture in walls and roofs including rising damp, damp course faults, insulation gaps, thermal bridges across insulation, air leaks, energy loss/gain, window efficiency, in-floor heating, aging related to weathering, termite inspection, mould growth and electrical system faults. Can scan large areas quickly and accurately. Showed damp spots in hotel ground floor lobby due to sprinkler damage on fifth floor.

In Europe and USA a thermography inspection of a commercial building is often required before new tenants move in.

Many building problems/defects are associated with temperature differences. Thermography can locate problems quickly and easily, provide a 'visual' description of problem, non-contact, non-destructive method with quantifiable, verifiable results.

Ian brought two cameras and connected to the data projector to demonstrate their capabilities. Viewing community centre walls showed the following: location of wall frames, hot and cold spots around walls, doors and electrical fittings, removal of thermal insulation around power outlets, power cables in wall cavities. He later provided an image of a distinctly hot cable in a wall cavity. The cameras can be used to quickly check electrical hot spots due to faulty cable connections and as reported in the current ReNew, problems in solar panels with individual cells and interconnections.

Next ATA Meeting:

Monday Nov 21st at 7-30 pm: The Latest in LEDs.