



## Smart insulation

An award-winning cellulose fibre ceiling insulation was recently installed under the roof, covering a large area of classrooms at the Durbanville Preparatory School.

SOLVING the school's problem of excessive and expensive electricity consumption by air conditioners lay in reducing reliance on active temperature control interventions during seasonal temperature extremes. This also prepared for possible load shedding – a very real possibility given the cutbacks on Eskom's planned infrastructure upgrade spend this year as the grid nears capacity.

The Durbanville school case history file is typical of many public infrastructure buildings in South Africa. Originally built during times of cheap power supply, scant attention was given to thermal/energy-efficient building under tight construction budgets.

Increasingly being specified within the built environment, Eco-Insulation is ideally suited to working public buildings due to:

- **Minimum consideration of construction schedules.** “A turnkey service in all sense of the word – delivery on time and on budget,” says Richard Ellis, general manager of Eco-Insulation and principal installer in the Cape Town area.
- **Convenience.** The Eco-Insulation team worked in the background at the Durbanville Preparatory School while classes were being held.
- **Minimal impact.** There is minimum disruption to roof infrastructure as single tiles or roof sheets are removed to facilitate access, thus minimising potential for damage. Delivery of the product in situ is via a simple pneumatic hose. From there the product flows over the surface of the ceiling and very efficiently and evenly distributes itself, sealing off the area by close to 100%. The hose



is fed from a pump that is operated from outside the building. Once installed it mats together and does not migrate around the roof space.

Ellis explains that decisions for retrofitting of energy-efficient measures are currently driven by the occupants/tenants/users of the building, since they are the most immediately affected by energy cost increases. They are also the most affected by disruptions of any kind.

An important part of his company's service is the removal and approved disposal of any existing non-performing insulation product from the roof space. They have an approved method of removing and disposal of noxious glass fibre material, which traditionally presents a huge headache for property owners due to the fact that many established municipal waste facilities will not accept hazardous waste.

"The insulation industry needs to provide easy, cost-effective solutions to retrofitting, and argue the

case better for passive temperature control," explains Ellis.

"In our case, Eco-Insulation is definitely the more cost-effective solution. As far as housing projects are concerned, our promise is energy efficiency, on time and on budget. We save the project manager and ultimately the property owner money – and we are SABS-approved."

Indeed, it seems as if this company has produced the energy efficiency goods. They are recipients of the Company of the Year Excellence Award by the Southern African Association for Energy Efficiency ([www.sae.org.za](http://www.sae.org.za)). T

Eco-Insulation  
T 0860 105 231  
W [www.eco-insulation.co.za](http://www.eco-insulation.co.za)