

# High Performance Learning facilities Fact Sheet



## High Performance Learning facilities

Heating, ventilation and air conditioning systems do more than simply provide a comfortable and healthy environment for teachers and students.

While it can't guarantee academic improvement, modulating the temperature, humidity, air quality and air supply has a significant impact on how quickly and accurately students complete tasks.\*

A High Performance Learning Centre is:

- **A healthy environment measured by indoor air quality surveys and rates of absenteeism.**

In a recent case study, a regional Victorian school that was not air conditioned had an excessive non attendance rate of between 6.7% and up to 30% and early pickup rate during summer. After they installed air conditioning, their non-attendance rate dropped to only 3%.

IAQ measurement and remediation are core capabilities offered by Haden.

- **Comfortable in terms of ambient temperature, acoustics, visual appearance and lighting.**

Student activity levels within an area can affect the efficiency of the HVAC system. The more active the class, such as a dance or physical education class, the more heat they produce. This affects the volume of air that needs to be delivered to the space to produce and maintain optimum conditions.

- **Energy efficient from cradle to grave.**

Efficient systems will cost you much less in the long term as they use less energy and require less maintenance.

Efficiency is calculated and designed into the system using analysis tools, modelling and design strategies to improve the efficiency of the system. We refer to this as 'whole of life value' design.

- **Easy to maintain and control**

Maintenance staff are fully trained in and have control over the temperature and airflow within each building via a well designed Building Energy Monitoring and Control System with web interface capability.

Equipment is easy for maintenance teams to access to complete maintenance and repairs.

- **Commissioned to manufacturer's standards to ensure the system is operating in the way that it was designed.**

Commissioning is an integral part of the whole of life value cycle. Routine commissioning is integral to the ongoing efficiency of the system; the costs of doing so offset by the savings generated in having an efficient system.

- **Environmentally responsible**

Waste from systems is reduced, reused or recycled, as appropriate.

Temperzone units use R410A refrigerant with zero ozone potential.

- **Safe and secure and provides security to users without being restrictive.**

Wall mount systems can be prone to vandalism or damage by students. Commercial grade ducted systems are more difficult to tamper with and hence require less maintenance.

- **Designed well and is a source of pride for the community.**

Designing systems to cope with the increased pressures of community use outside regular schools hours will provide a better facility to the community as a whole.

Installing motion sensors and building management control systems provides a cost effective solution that will maximise the comfort of occupants.

\* As reported in the ASHRAE Journal October 2006.



### Helping Young People at Risk

Haden are proud to be Gold Sponsors of the Property Industry Foundation, established by the Property Council of Australia to assist charitable organisations provide help to young people at risk.

The Foundation raises around \$1.5m per year and distributes donations and in-kind building services to approximately 20 children's charities.