

# Energy Savings & Improved Indoor Environment in Relocatable Classrooms



~100,000 RCs in California, 10,000 new/yr

Constructed, deployed and monitored four Relocatable Classrooms

- Demonstrated saving energy and improving Indoor environment quality simultaneously in RCs

Each week, operated one of two HVAC systems

- Standard (heat pump) with intermittent ventilation
- Novel (indirect/direct evaporative cooling and hydronic heating) with continuous ventilation

Findings and implications

- HVAC energy reduced 50% to 70%
- Indoor pollutant concentrations reduced by 60%
- Moves energy efficient HVAC system closer to commercialization

## CONTACT:

Michael G. Apte  
510/486-4669  
MGAPte@lbl.gov  
[http://buildings.lbl.gov/hpcbs/Element\\_6/02\\_E6.html](http://buildings.lbl.gov/hpcbs/Element_6/02_E6.html)