

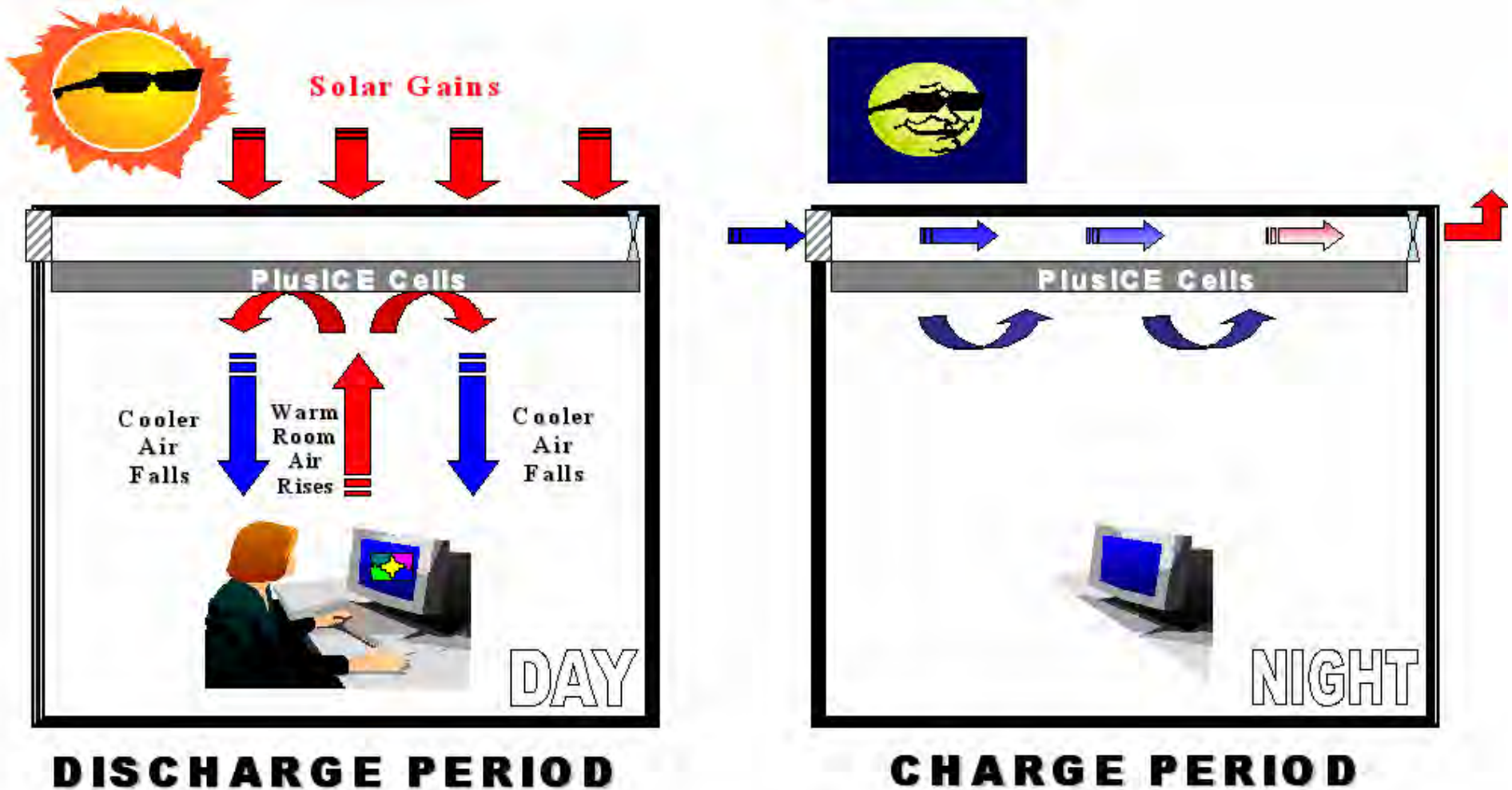


Educational Facility, Passive Cooling Application

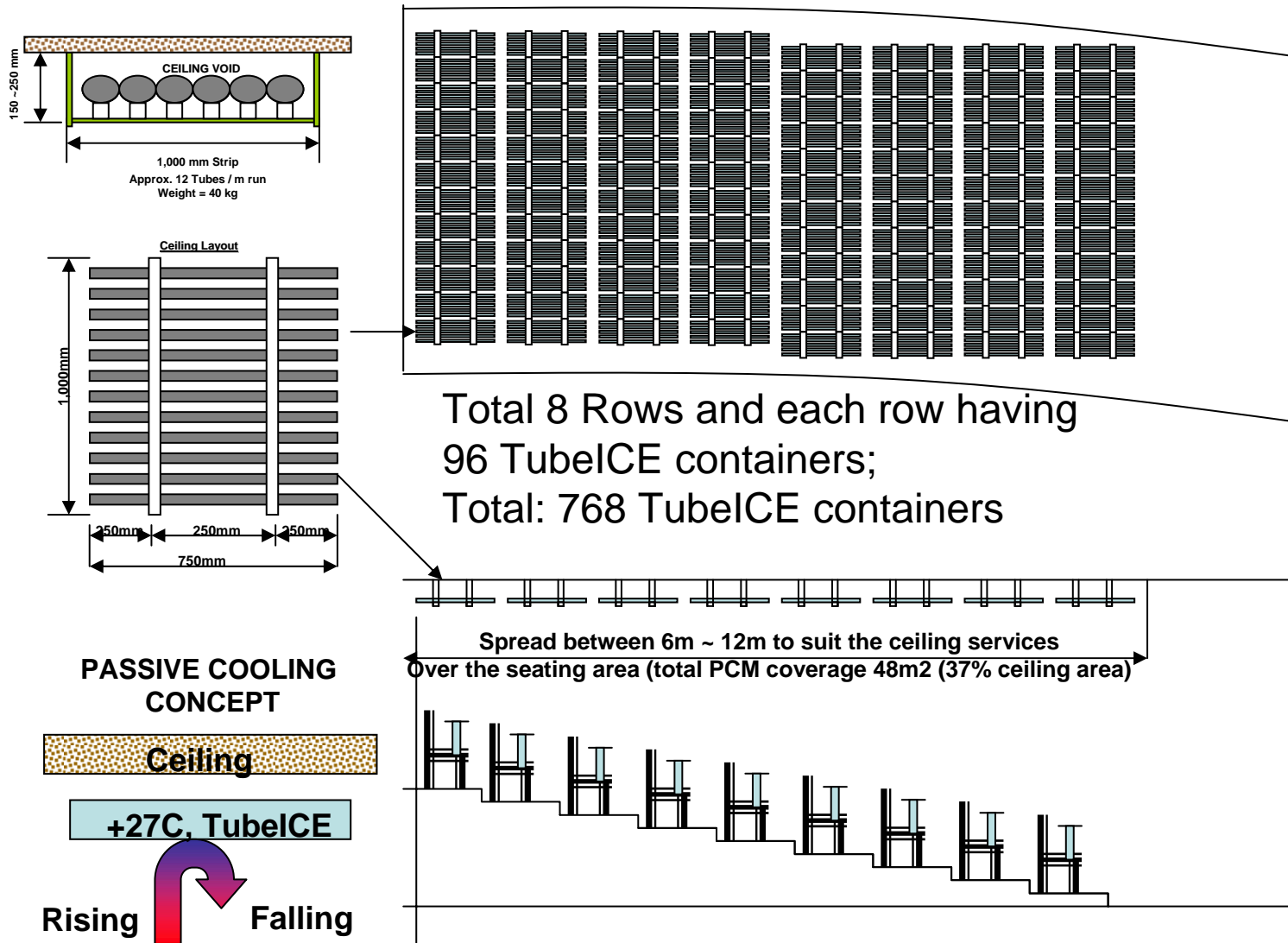


Passive Cooling Concept

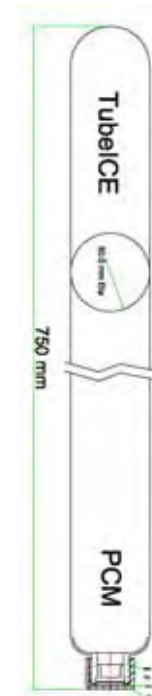
Passive cooling relies on a temperature swing between night and day. Cooler night-time air charges the PCM storing energy which is later released as required during warmer day time temperatures. The heat transfer between the cell and the surrounding area provides a Passive Cooling facility and this charging / discharging process is repeated on a daily basis to provide cooling without a mechanical cooling system.



LECTURE THEATER PASSIVE COOLING CELL INSTALLATION



Tube ICE

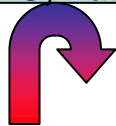


PASSIVE COOLING CONCEPT



+27C, TubeICE

Rising
Warm
Air

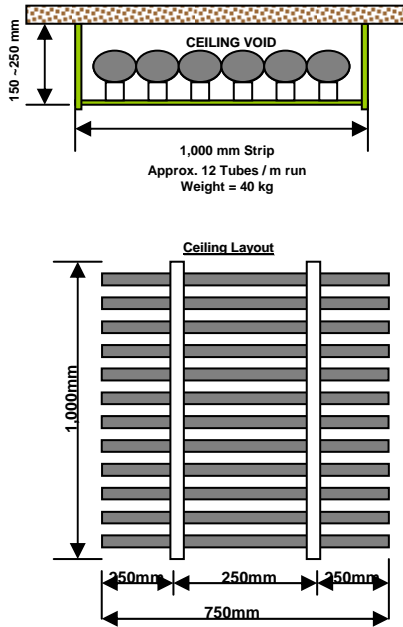


Falling
Warm
Air

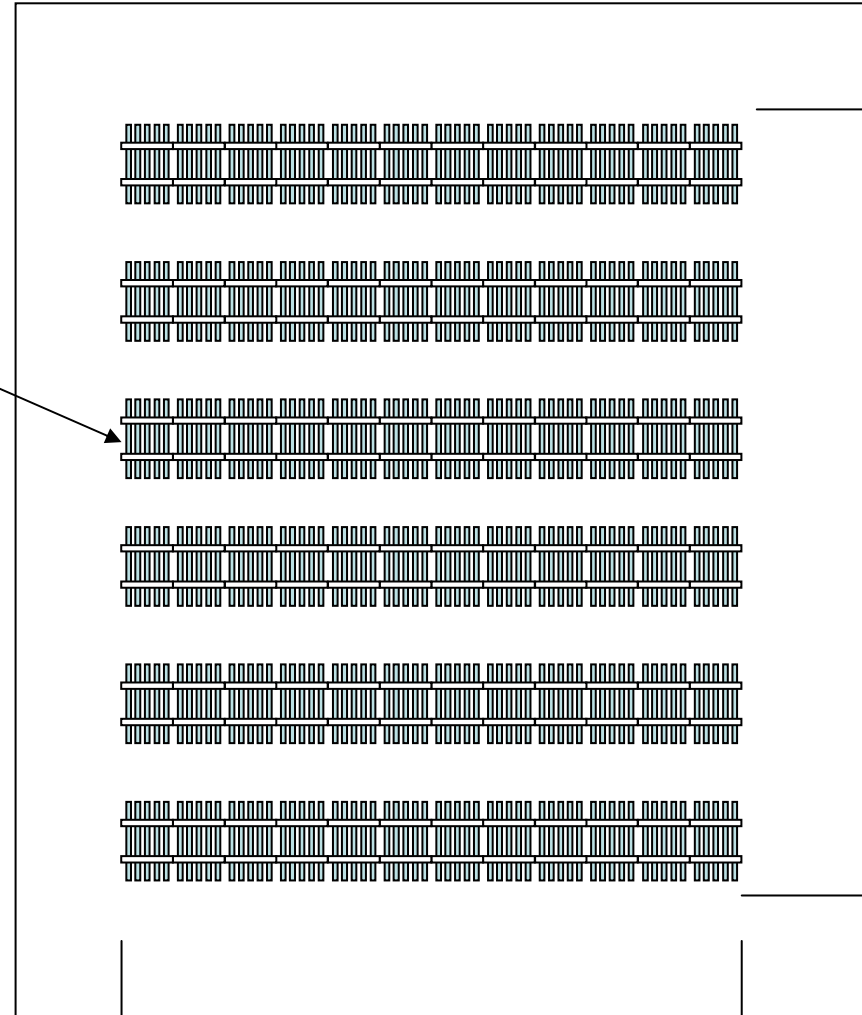
Lecture Theatre



CLASSROOM PASSIVE COOLING CELL INSTALLATION



Total 6 Rows and
each row having
60 TubeICE
containers;
Total: 360 TubeICE
containers

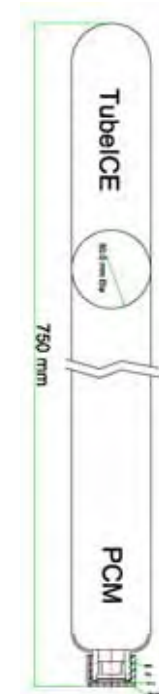


Spread between 6 m ~ 7.5m to suit the ceiling services
Over the seating area (total PCM coverage 22.5 m² (40% ceiling area))

Spread between 4.5 m ~ 9m to suit the ceiling services
Over the seating area (total PCM coverage 22.5 m² (40% ceiling area))



Tube ICE



Classroom

