Claims

1. A partition plenum, comprising:

a hollow structure with an opening for admitting air that is cooler than ambient air;

and an array of perforations in a major face of said hollow structure that cause the air in the hollow structure to flow out of the hollow structure at a non-mixing air velocity.

2. The plenum of claim 1, wherein the hollow structure is of flexible material, and wherein the flexible material is tethered to prevent ballooning of the hollow structure.

3. The plenum of claim 1, further comprising:

an internal inflatable support structure that provides a rigid frame when the support structure is filled with pressurized gas.

4. The plenum of claim 3, wherein

the plenum is wound up into a roll when the plenum is not fully inflated with air.

5. The plenum of claim 1, wherein the hollow structure is made of a transparent material.

6. The plenum of claim 1, wherein the hollow structure is inflatable.

7. The plenum of claim 6, wherein the hollow structure, once inflated, is free-standing.

8. The plenum of claim 1, wherein

each of the perforations has a diameter D, and

said array of perforations discharges air at velocity of 100 fpm when measured at a distance of 10 D away from the wall such that the array forms a displacement register.

9. A method of cooling an outdoor space, comprising:

providing one or more sections of a ventilated wall;

forming an enclosure from the one or more sections of the ventilated wall;

supplying cooled air into the one or more sections of the ventilated wall;

discharging the cooled air out of a permeable face of the one or more sections of the ventilated wall at a non-mixing air velocity, wherein

the cooled air discharged at non-mixing air velocity does not disrupt stratification of air within the enclosure up to at least a height of the ventilated wall.

10. The method according to claim 9, further comprising:

inflating the one or more sections of the ventilated wall to create a self-supporting structure.

11. The method according to claim 9, wherein the forming an enclosure includes hanging the one or more sections of the ventilated wall on a support frame.

12. The method according to claim 9, further comprising:

determining an air velocity at least at one of inside and outside of the enclosure;

comparing the determined air velocity to a threshold velocity value; and

suspending the supplying of the cooled air if the determined air velocity is at or above the threshold velocity value.

13. The method according to claim 12, further comprising:

restarting the supplying of the cooled air if the determined air velocity drops below the threshold velocity value.

14. The method according to claim 12, wherein the threshold velocity value is an air velocity that disturbs stratification of air inside of the enclosure.

15. The method according to claim 12, wherein the threshold velocity value is an air velocity that is sufficient to provide evaporative cooling of occupants within the enclosure.