

Plume enters 16.6m above floor with flux as show on curves

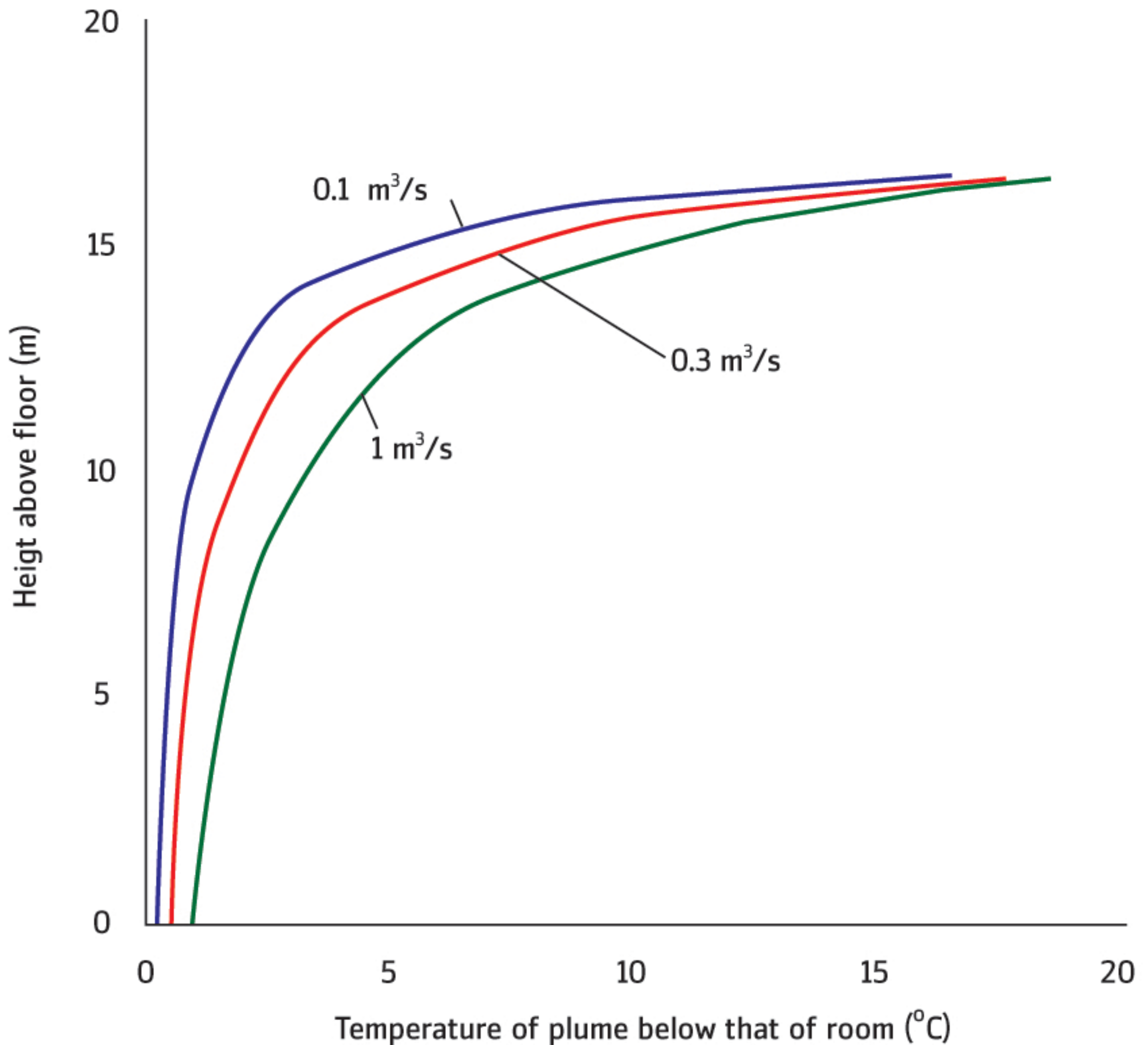


Figure 6. Calculation from the theory of turbulent buoyant plumes of the difference in temperature of a cold descending plume, relative to the temperature of the interior air. Curves are shown for plumes with flow rates of 0.1, 0.3 and 1.0 cu m/s which would provide ventilation for 10, 30 or 100 people respectively. In tall spaces, with more than 5m floor to ceiling, the ventilation plume will dilute sufficiently that the air at floor level is only a few degrees cooler than the exterior