1) Minimum of 12 air changes per hour.

2) Doors should be self-closing.

3) The room should be "well-sealed", this includes sealing of the ceiling and gaskets around items which enter into the room e.g. electric sockets, gas supplies, etc. Replace acoustic ceiling tiles with non-porous vinyl tiles and apply gasketing at tile connection to ceiling grid. Replace recessed light fixtures with surface-mounted fixtures.

4) The negative pressure should exceed the supply by about 30%.

5) The bathroom/WC should be at negative pressure with respect to the isolation room (probably 50 CFM between the 2 rooms).

6) The exhaust from the isolation rooms should be at least 25 ft from other ventilation intakes or occupied areas.

7) The windows are openable only by the use of a tool/keys (or permanently sealed).

8) The ventilation switching controls are not (repeat not) within reach of the patient/visitors/members of the public. They should either be key operated and the key available along with the drug cupboard keys or the switches should be totally away from the ward.

9) Temperature control should be within the room such that whatever the season there is no temptation to open the door/window and/or frustration at being unable to do so.

10) There should be 1/2 " gap under the door.

11) The exhaust ducts should be oversized to allow for loss of efficiency i.e. expected airflow plus 50%.
12) Exhaust ducts should be labelled "Caution - negative pressure isolation room exhaust". The labels should be present at least every 20’ along the ducting and at all penetration points.

13) A permanent warning sign should be posted on the fan, at the electrical disconnect, and at appropriate electrical panel breaks - "Negative pressure isolation room exhaust fan - contact Infection Control before turning off fan". (Sign includes telephone number.)

14) The fan discharge should be directed vertically upward at a speed of at least 2,000 ft per min (FPM). Discharge location should be at least 25’ away from public areas or openings into buildings.

15) Permanent room pressure monitor provides instant notification if the pressurisation fails or fluctuates. Monitors need to be able to accurately and reliably measure a negative pressure of -0.001 WC.

16) Alarm - will sound when room pressurisation drifts to less than the monitors reference pressure value; should be programmable for a built in time delay. Audible alarm will stop: when 'mute' button is pressed when negative pressure restored. Visual alarm is red warning light. (also a "green" or "safe" light). Remote alarm based at nurses station.

17) Negative pressure value should be at least 0.006 WC

18) The airflow of clean air from the staff to the patient and from the patient to be exhausted via as short a route as possible. Thus the exhaust should access near the floor at the head of the bed, with the grill starting approximately 6 inches above the floor. The supply air should be from the ceiling above the foot of the bed.

19) There should be telephone and TV socket outlets and, ideally, space for an exercise bike (!)