



**GENERAL NOTES:**

1. MAINTAIN NEGATIVE AIR PRESSURE (0.01 INCH WATER COLUMN [2.5 PASCAL]) BETWEEN THE AII ROOM AND THE CORRIDOR BY MODULATING VALVE V1. AII ROOMS SHALL HAVE A PERMANENTLY INSTALLED DEVICE AND/OR MECHANISM TO CONSTANTLY MONITOR THE DIFFERENTIAL AIR PRESSURE BETWEEN THE PATIENT ROOM AND THE CORRIDOR. A LOCAL VISUAL MEANS SHALL BE PROVIDED TO INDICATE WHENEVER NEGATIVE DIFFERENTIAL PRESSURE IS NOT MAINTAINED. (STROBE LITE)
2. MAINTAIN THE ATTACHED TOILET, IF ANY, AT NEGATIVE AIR PRESSURE WITH RESPECT TO THE AII ROOM. HOWEVER, THE DESIGN NEED NOT INCLUDE A PRESSURE DIFFERENTIAL SENSOR FOR VERIFICATION.
3. LOCATE EXHAUST AIR REGISTER OVER THE PATIENT BED ON THE CEILING. AS AN ALTERNATE, THE EXHAUST AIR REGISTER CAN BE LOCATED ON THE WALL NEAR THE PATIENT HEAD, IF FEASIBLE.
4. LOCATE THE SUPPLY AIR OUTLET TO BLOW AIR TOWARDS THE OCCUPIED AREA.
5. PROVIDE A DEDICATED EXHAUST SYSTEM FOR THE AII ROOMS WITHOUT MIXING IT WITH ANY OTHER EXHAUST.

**TYPICAL AIR BALANCE EXAMPLE:**

1. THE PATIENT BEDROOM IS KEPT UNDER NEGATIVE PRESSURE BY ENSURING AIR MOVEMENT INTO THE BEDROOM SPACE FROM THE ADJOINING CORRIDOR.

2. THE SUPPLY AIR SYSTEM SHALL CONSIST OF THE CONSTANT VOLUME AIR DELIVERY FROM A DEDICATED AIR TERMINAL UNIT WITH REHEAT COIL TO THE ISOLATION SUITE AS FOLLOWS:

- A – PATIENT BEDROOM  
MINIMUM 12 ACPH SUPPLY AIR (ASHRAE STANDARD 170 2008). INCREASE SUPPLY AIR VOLUME, IF REQUIRED, TO MEET THE INSIDE DESIGN CONDITIONS IN COOLING AND/OR HEATING MODES.  
EXAMPLE: 400 CFM [190 L/S]
- B – PATIENT TOILET  
DO NOT SUPPLY AIR INTO THE TOILET. DRAW MAKE-UP AIR FROM THE PATIENT'S BEDROOM AND EXHAUST AT THE RATE OF 10 ACPH OR 60 CFM [28 L/S]. EXAMPLE: 60 CFM [28 L/S]

3. THE DEDICATED EXHAUST AIR SYSTEM SHALL BE BALANCED AS FOLLOWS:

- A – PATIENT BEDROOM  
400 CFM [190 L/S] (SUPPLY) – 60 CFM [28 L/S] (TOILET) + 100 CFM [47 L/S] INFILTRATED FROM CORRIDOR = 440 CFM [180 L/S] (EXHAUST), TOTAL EXHAUST 500 CFM [240 L/S].

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NTS  
NEGATIVE PRESSURE

**DESIGNER'S NOTE:**

1. ENSURE FINAL DESIGN REFLECTS PROJECT SPECIFIC REQUIREMENTS AND MEETS ASHRAE 170, LATEST EDITION WITH **ALL** ADDENDUMS.

## AIR SYSTEM FOR AIRBORNE INFECTIOUS ISOLATION ROOM (AII) (WITHOUT ANTEROOM)