INSTALLATION OPERATION & MAINTENANCE MANUAL FOR SURGICAIR® PLENUM INTEGRATED CEILING SYSTEM WITH HEPA FILTERS



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SurgicAir® Plenum Ceiling System with Integrated Plenums and HEPA Filters

INSTALLATION, OPERATION & MAINTENANCE

- 1. Compare the actual finished plaster/gypboard ceiling opening dimensions with the required ceiling opening size indicated on Precision Air Products reflected ceiling plan drawings included in the record submittal drawings.
- 2. Within the interstitial space, install suspension hanger wires (recommend using #9 wire) to support light framing and fill in panel framing and 1/4-20 threaded rod to support integrated plenums with diffuser frames. Suspension wires shall be of length to reach from slab level strut to the slotted holes on the vertical leg of ceiling tee members. Locate suspension wires/rods approx. 24" o.c. (max.) to meet structural support requirements for approx. 10 lbs. per sq. ft.
- 3. On the floor directly beneath the plaster/gypboard opening, lay out the ceiling grid subsections and diffuser plenums in accordance with the reflected ceiling plan configuration. Note: Assure that the floor is clean and free of dirt and debris in order to avoid scratching the grid's painted finish.
- 4. Assemble the grid as detailed in the submittal drawings reflected ceiling plan and the framing section drawings. Mechanically fasten individual framing members having Tcouplers on the ends with hardware provided as required per installation drawing provided.
- 5. Upon completion of assembly of grid, wipe down all the horizontal edges of the ceiling grid to assure clean surface for gasket application.
- 6. Install the white, closed cell neoprene 1/8" x 1/2" self-adhesive gasketing to the top side of each horizontal flange as shown on the attached Lami-Air 1 ½" Ceiling Tee Sections drawing. Cut each corner such that the tape on one side butts up tight against the other. Do not bend tape around corners as this may damage the tape and prevent proper sealing. Take care in application of the tape such that the tape is not wrapped around on the vertical flange since this will interfere with the installation of the diffusers, fill-in panels and fluorescent light fixtures.
- 7. Carefully raise grid into opening while supporting adequate number of assembly intersection points to keep framing from excessively bending. Contractor may wish to tie some means of long stiffeners across entire length of framing members to avoid bowing or bending, taking care, of course, not to scratch the exposed face of tee members.

- 8. Once in place, secure grid with hanger wire or 1/4-20 threaded rod spaced approx. every 24" (max.) such that frame is capable of supporting 10 lbs. per sq. ft
- 9. Level the entire system by means of a laser level, adjusting the hanger wire or rod couplers. Keep in mind that some stretching and settling may occur once the diffusers, fluorescent lights and fill-in/blank off panels are in place.
- 10. Install the diffusers plenums in the same manner, beginning in the center and working outward, making duct connections as necessary, through adjacent spaces in framing sections. For installations with limited interstitial space, it may be necessary to install the inner-most diffuser plenums first and duct connections before installing the adjacent plenums, in order to best access ductwork. Attach and seal the supply duct in accordance with job specifications.
- 11. Install grid style light fixtures and attach independent suspension wires in accordance with available space.
- 12. Install any fill-in/blank-off panels as last step. Any panels which require cuts for surgical light, equipment boom or medical gas columns should be completed in field BEFORE any articulating arm booms are attached to the structural supports. Do NOT cut fill-in/blank panels in half.
- 13. For plenums with HEPA filters, refer to HEPA Filter Installation Instructions within separate HEPA-Vent DS IOM (Form 04-199) for detailed instructions for installing HEPA filters.)
- 14. Upon completion of installation of all components, the system should be balanced by means of adjusting each unit's individual volume control damper or the line dampers within the supply trunk.

FOR ASSISTANCE, CALL 1-800-404-0931