

## **Ventilation of operating rooms' parameters and its different flow types**

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### **Abstract**

**Due to the high importance of designing operating rooms (especially the air conditioning parameters), many studies, researches and international codes were achieved in order to reach the optimum parameters for this mission. Hundreds of hospitals in Syria and all around the world are still suffering from wounds contamination during surgery.**

**This paper is dedicated to re document collect the latest information to help researcher and designers achieving their mission, especially those information that are not available in one reference by itself.**

**The research paper discusses the optimal air conditioning requirement like, temperature, humidity, required filtration, number of air changes per hour, pressures to be maintained and the recommended face velocity. An extended research studies focus on laminar flow system, and its advantages over the conventional ones. It mentions the sterilization supporting systems which use UVGI In-ducts and in rooms.**

**The paper concluded that new ideas adopting different philosophies by either supplying fresh air from lower rooms areas or laminar flow wall should be further investigated.**

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**Keywords: Operating room ventilation, Laminar flow ceiling**

For the paper in Arabic see pages (73-86)

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