

Requirements for the design and implementation of modern hospital operating rooms

Dr. Mostafa Abdeljalel Hossin

Lecturer, Department of Architecture - October High Institute for Engineering & Technology – Giza- Egypt.

drmostafatefa_79@yahoo.com

Abstract:

The research paper reviews the design principles of operating room (OR) in hospitals, architectural design and execution skills, and various interior architectural finishes, according to the latest standards and techniques used, various systems that require knowledge and knowledge of the architect in the design process or during the implementation of these sensitive spaces, and given the sensitivity of these Rooms and the urgent need to shed light on these subtle details, the research presents in the first part the theoretical study of operating rooms and the historical background of operating rooms as well as the historical development of operating rooms in hospitals and the development of their internal finishing, through a presentation of the Egyptian code for hospitals, the section on operating rooms and their various requirements, the researcher followed In the second part of the research, the descriptive approach of the researcher's previous experience in the field of health care buildings, and the analytical approach of the Standard Code Group (AIA) as an applied model, the requirements of which were dealt with by the researcher.

It also contains an applied study for the design and implementation of the operations wing of the Neuroscience Department at King Abdullah Medical City, the Specialist Hospital in the Holy capital Makkah City, as an applied model for a methodology of reviewing the contents and foundations of the design and implementation of specialized operating rooms, which the researcher designed and implemented, which was based on the American code for design (American Institute of Architecture) (AIA) as a reference approved by the Ministry of Health in the Kingdom of Saudi Arabia, and it includes the proposed checklist matrix for the design, implementation and operation of operating rooms and the main items of the integrated design process in a simplified way to verify the integrity of the design elements in the operating room, which can be applied and guided when designing and implementing operating rooms, and the research is concluded with a group of Various results and recommendations to achieve integrated operating rooms, and to develop recommendations for developing operating rooms in a manner consistent with the great development in the field of health care and various specialized medical equipment, which must be accompanied by a major development in the design and implementation of operating rooms.

Key words:

technologies - operating rooms - health care - hospitals – finishing