

ARCHITECTURAL DESIGN AND BUILDING STANDARDS/SPECIFICATIONS

1. The hospital must be designed according to the VAHBS.

- 1-1.** VA Hospital Building System: A prototype system design developed by VA for use in the design and construction of new hospital buildings; characterized by modular design and the use of systems approach to the integration of building services and functional or planning modules.
- 1-2.** The Red Book (DEVELOPMENT STUDY - VA HOSPITAL BUILDING SYSTEM RESEARCH STUDY REPORT) presented a prototype design system for new hospital buildings. In the prototype system, building systems and subsystems and their interrelationships are defined and examined as integrated or coordinated components of the building as a whole from the very beginning of the design process.
- 1-3.** The primary objectives for systems integration are cost control, improved performance, adaptability, time (schedule) reduction, and the provision of a basis for the long term development and modification of the hospital building.
- 1-4.** the prototype design system was not intended to be used as a standardized scheme. The prototype design system was to be used as a model for the generalized decision process for the design and construction of new facilities. The prototype space modules were based on functional criteria appropriate to the health care delivery model of the time.
- 1-5.** To use the VAHBS, a designer need to understand the following concepts:
 - Service Modules.
 - Fire Compartments (Sections).
 - Building Subsystems , Shell Systems , Service Systems and Subzones.

References:

- 1-SUPPLEMENT TO RESEARCH STUDY REPORT VA HOSPITAL BUILDING SYSTEM.
- 2-DEVELOPMENT STUDY - VA HOSPITAL BUILDING SYSTEM RESEARCH STUDY REPORT.

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2. The core of the hospital is to be composed of three major systems of like- spaces ,each horizontally contiguous and in one layer :on the top the patient fostering space (PFS),where residential patients are based and dispersed clinical technique carried out; on the bottom consolidated clinical technique spaces (CCTS),to which both

residential and nonresidential patients go for clinical techniques centralized there and in the middle the industrial technique spaces (ITS), which serve the other two but to which patients never go.

Reference :

Hospitals and Healthcare Facilities
Edited By FAIA Redstone, FAIA
An Architectural Record Book

3. Design Objectives

Healthcare facilities must meet the state of practice and art for high performance, sustainable, and flexible environments for healing to optimize care, increase productivity, enhance sustainability, and improve disaster resistance, while reducing energy consumption and operating and maintenance expenses.

In buildings, to achieve a truly successful holistic project, the following design objectives must be considered in concert and in balance with each other:

- 1- Care Optimization.
- 2- Healing Environments.
- 3- Satisfaction.
- 4- Adaptability.
- 5- Sustainability.
- 6- Building Operations and Maintenance.
- 7- Building Acquisition.
- 8- Data Acquisition.
- 9- Continuous Innovation.

References:

REPORT OF THE TASK GROUP FOR “INNOVATIVE 21st CENTURY
BUILDING ENVIRONMENTS FOR VA HEALTHCARE DELIVERY” June
2009 Prepared by: National Institute of Building Sciences 1090 Vermont
Avenue, NW, Suite 700 Washington, DC 20005

- 4.** The Surgical Department the Surgical Department is comprised of all areas required for patient surgical services. It includes the Surgical Suite (defined below), Post Anesthesia Care Unit (PACU), Phase II Recovery, Surgical Intensive Care Unit (SICU) and the Procedure Suite (including Cystoscopy and Endoscopy Procedure Rooms.
- 4-1.** modular cladding and prefabricated self-loading partition systems that guarantee optimal and flexible utilization of spaces in The Surgical Department requiring controlled bacterial contamination conditions.

References:

VA DESIGN GUIDE SURGICAL SERVICE

Department of Veterans Affairs PG 18-9: Space Planning Criteria Veterans Health Administration Chapter 286: Surgical Service Washington, DC 20420 June 1, 2014

5. DESIGN and BUILDING standards

Space Planning Criteria, Space & Equipment Planning System ,Standards for ,Design Guides, Room Finishes, Door, and Hardware Schedules, Minimum Requirements for A/E Submissions are to be according to the following VA Standards:

- PG-18-1 Master Standards for Construction.
- PG-18-3 Design and Construction Procedures.
- PG-18-4 Standard Details and CAD Standards.
- PG-18-5 Equipment Guide List.
- H-18-8 Seismic Design Handbook.
- PG-18-9 Space Planning Criteria, and VA-Space & Equipment Planning System (VA-SEPS).
- PG-18-10 Design Manuals (by discipline).
- PG-18-12 Design Guides (graphical, by function).
- PG-18-13 Barrier Free Design Guide.
- PG-18-14 Room Finishes, Door, and Hardware Schedules.
- PG-18-15 Minimum Requirements for A/E Submissions.
- PG-18-17 Environmental Planning Guidance.

All above standards can be found and downloaded from:

<https://www.cfm.va.gov/til/>