



7 CRITICAL DESIGN PRINCIPLES EVERY SUCCESSFUL HOSPITAL MUST FOLLOW (BEFORE CONSTRUCTION STARTS)



BY HOSPITAL ARCHITECTURE SPECIALIST

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AVOID COSTLY LAYOUT **MISTAKES** AND DESIGN A HOSPITAL THAT PERFORMS FOR DECADES.



WHY MOST HOSPITALS FAIL BY DESIGN (Not by Doctors)

Most hospitals are built by copying:

- * Old building plans
- * Hotel layouts
- * Residential logic

But hospitals are
Living, complex machines.

Common failures:

- ✗ Confusing circulation
- ✗ Long walking distances for staff
- ✗ Infection cross-contamination
- ✗ Poor emergency access
- ✗ No future expansion planning

Truth

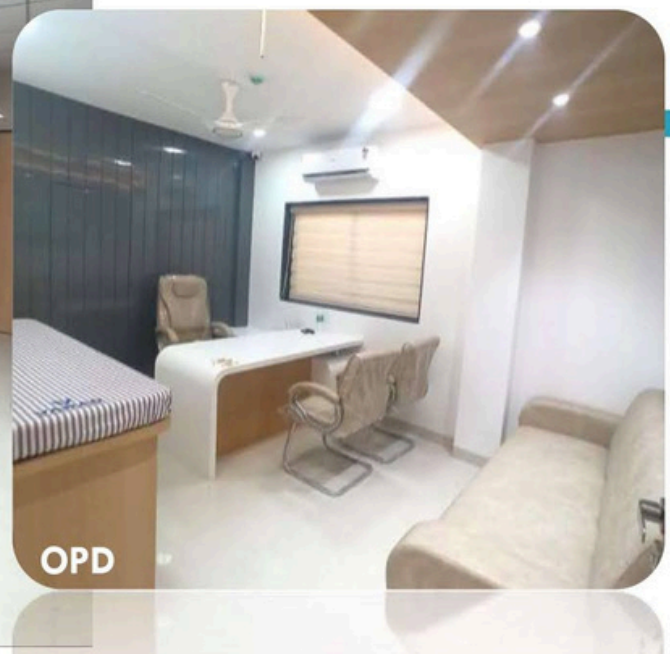
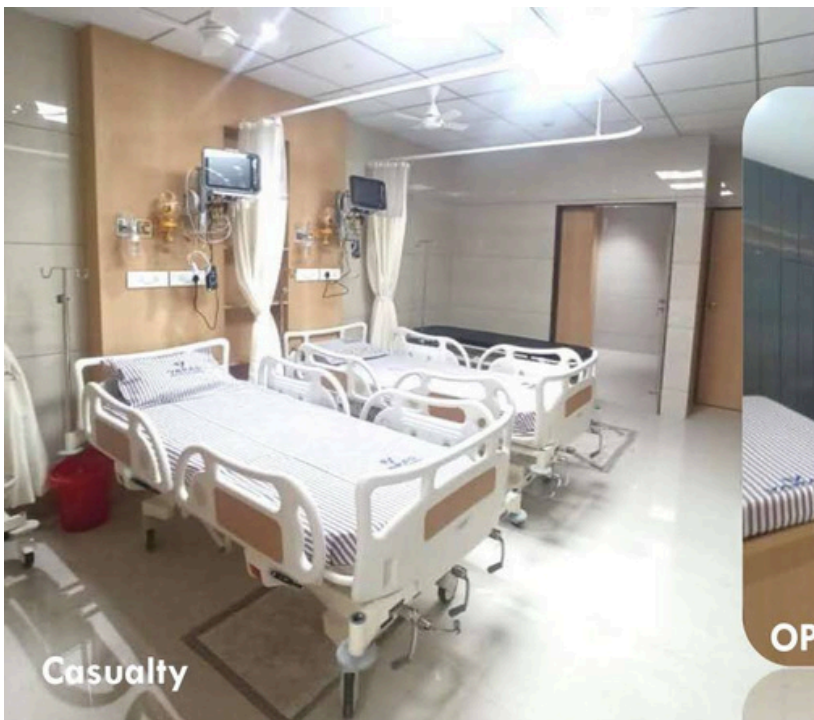
A well-designed hospital increases efficiency by 30–40% and reduces operating stress for decades.



PERFECT ZONING = PERFECT FUNCTION

Every hospital must be divided into clear zones:

1. Public Zone
2. Patient Care Zone
3. Critical Zone (OT, ICU, Emergency)
4. Service & Utility Zone
5. Staff-only zone



Golden Rule:

No unnecessary overlap between clean & dirty zones.

If your architect didn't show you "zoning diagrams", you are in danger

Non Sterile Zone

Semi
Sterile
Zone

Sterile Zone



FLOW DESIGN

(PEOPLE, PATIENTS, WASTE, DEAD BODIES)

flows must never mix

- ✓ Patients & visitors
- ✓ Doctors & staff
- ✗ Bio-waste & soiled materials
- ✗ Deceased bodies

Mistakes seen:

- * Same lift for visitors + dead bodies
- * Same corridor for waste + patients
- * OT near public waiting

Professional hospitals design separate:

- * Lifts
- * Corridors
- * Entries
- * Exit paths

This is where Architects **save** crores in retrofitting.

EMERGENCY DEPARTMENT IS THE HEART

Emergency must be: Directly connected to:

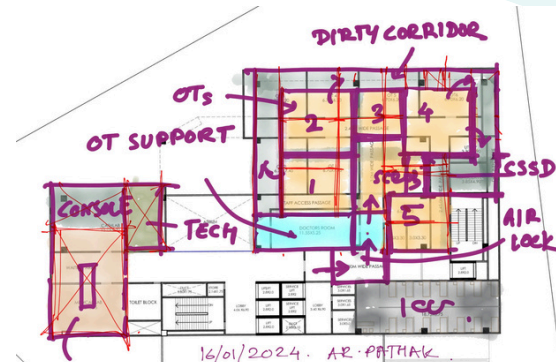
- * Imaging (CT, X-Ray)**
- * OT**
- * ICU**
- * Blood bank**
- * Separate ambulance entry & exit**
- * Trauma room**
- * Triage area**
- * Resuscitation bay**

Golden Design:
Patient moves in a straight, logical path without turning, confusion, or backtracking.

OT & ICU LOCATION = LIFE OR DEATH

OT & ICU should be:

- * Centrally placed
- * Closest to emergency
- * **Away** from public waiting
- * With sterile circulation
- * With dedicated HVAC zones



Key advantage:

- ✓ Faster surgery time
- ✓ Less infection
- ✓ Better staff performance
- ✓ International standard **compliance**



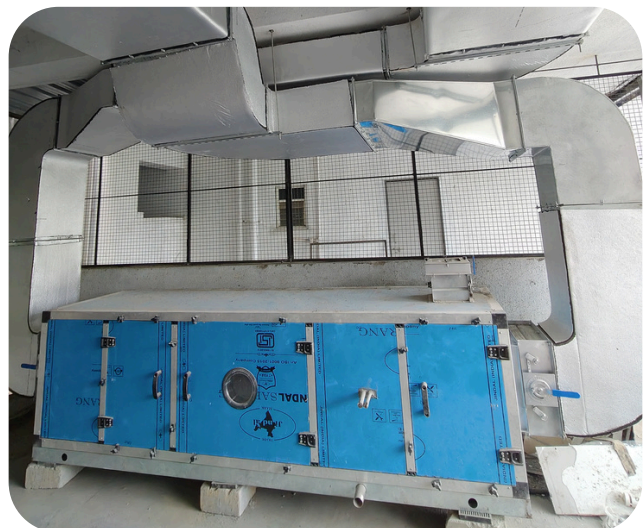
Important:

Most Indian hospitals place OT wrong.
Fixing it later costs crores.

HVAC, AIR & INFECTION CONTROL

Hospital architecture = Infection control architecture. Must include:

- * Positive pressure in OTs
- * Negative pressure in isolation rooms
- * **HEPA** filtration
- * Separate AHUs per zone



Your architect must coordinate with:

- * **MEP engineer**
- * Biomedical consultant
- * Infection control team

Most “normal” architects **skip** this.

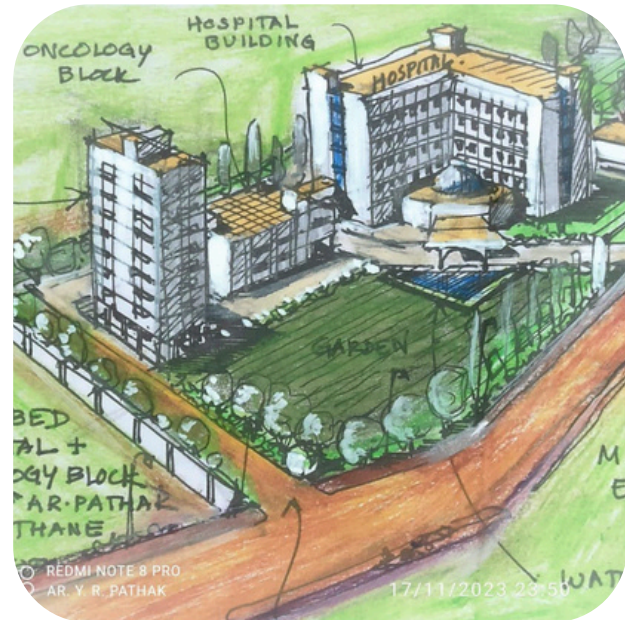
This is why you need a Hospital **Specialist** Architect.

SMART FUTURE EXPANSION PLAN

Hospitals grow. Always.

Plan for:

- ✓ Vertical expansion
- ✓ Modular extensions
- ✓ Additional OT floors
- ✓ Future departments
- ✓ Parking expansion



Bad design = hospital stuck forever
Good design = hospital turns into a
medical campus

Ask yourself:

**Will this building still work 20 years
from now?**

THE PROFESSIONAL ADVANTAGE SYSTEM

Professional hospital architects always include:

- ✓ Clear Signage Strategy
- ✓ Medical Equipment Planning
- ✓ Staff Comfort Areas
- ✓ Code Compliance (NABH, **Fire**, Local Laws)

These small details increase:

- * Staff efficiency
- * **Patient trust**
- * Brand value
- * Hospital reputation

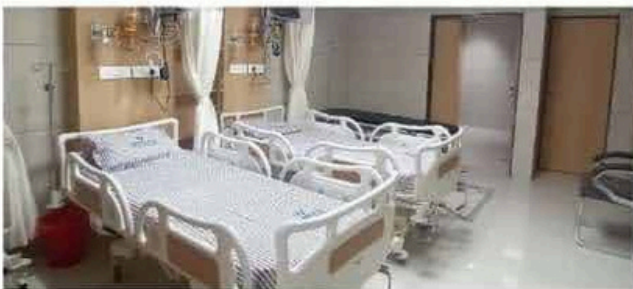
Your building becomes a medical brand asset, not just construction.

Ready to design your hospital the right way from the first brick?

We offer:

- ✓ Site feasibility analysis
- ✓ Space programming
- ✓ Floor planning
- ✓ 3D hospital visualisations
- ✓ Expansion strategy
- ✓ Hospital Management
- ✓ Hospital Business Strategy
- ✓ Equipment Planning
- ✓ Medical Liscensing

HAPPY DOCTORS WITH SUCCESSFUL PROJECT FOREVER



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150 Bed Hospital at Bhandup

- **Location :** Bhandup, Mumbai
- **Client :** Adani Realty
- **Typology :** 150 Bedded General Hospital
- **Area :** 1 L sq.ft.
- **Features :** 6-Bed Emergency, 20 OPDs, Radiation Diagnostics, Labs, General Wards, I.C.U., NICU, OT Complex, Special Rooms, Staff Facility, Laundry in Basements, Conference room, Canteen.



With Team Adani Realty , Bandra, Mumbai



PALEP'S POLYCLINIC, PRABHADEVI

- **Location** : Prabhadevi, Mumbai
- **Client** : Dr. Palep
- **Typology** : Poly-Clinic
- **Area** : 1000sq.ft
- **Cost** : On request
- **Features** : Spacious designer OPDs, relaxing Waiting Lobby
- **Highlight** : Flexible planning for Multiple doctor's functioning
- **Scope** - Design and Build
- **Timeline** - 3 Months



Status : Completed

Varad Multispecialty Hospital, Boisar



Hesmart
COMPLETE HEALTHCARE SOLUTION



ICU



Modular OT

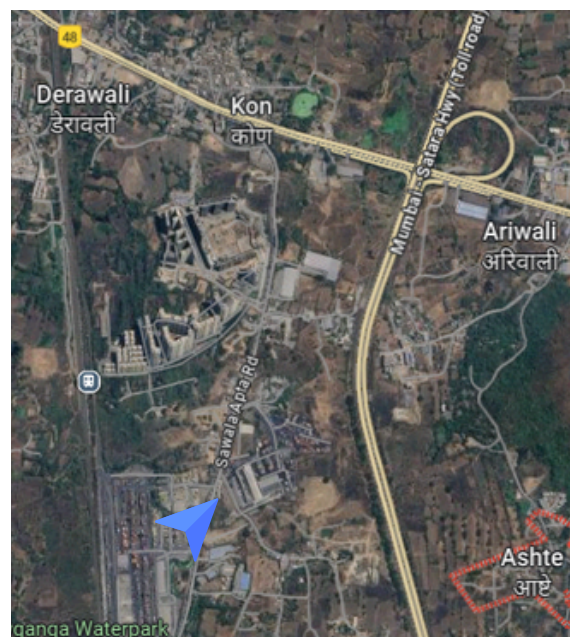


Cath lab



DR. ANITA MEMORIAL CARDIOLOGY INSTITUTE

- **Location :** Ashte, Panvel, Navi Mumbai
- **Client :** Dr. Tarlekar
- **Typology :** 50 Bed, Cardiac and Cancer care Hospital
- **Area :** 55000 Sqft
- **Cost :** Not Disclosed
- **Features :** 4-Bed Emergency, 8 OPDs, Diagnostics, Labs, I.C.U., OT Complex, Special Rooms, Radio therapy
- LINAC, Brachy, CT, MRI, X Ray, USG all inclusive
- Research and Training Facility
- **Highlight :** Steel Construction with GRC Cladding and DGU



Location Plan

"ॐ गुरुवे नमः"

OUR MENTOR



Dr. Ravindra Karanjikar

Mentor , Hosmart Healthcare Pvt. Ltd.

OUR PHILOSOPHY

MISSION

To pursue excellence in Public and Private healthcare sectors, and to carry out research and development to enhance human well-being.

VISION

To deliver intelligent and holistic knowledge along with necessary technical support to healthcare industry.

CORE VALUES

Compassion, Quality, Innovation and Accountability

WE, HOSMART



Dr. Madhukar Rathod

CEO, Healthcare Consultant
Hosmart Healthcare Pvt. Ltd.

With 25+ years of experience in the field of healthcare management, Hosmart is his brainchild to specifically develop a high quality technical consultation and development service for better hospitals and allied healthcare facilities.

With broader and compassionate vision, he has been guiding many fellow doctors and healthcare setups to work with progressive and positive impact.



OUR TEAM OF ARCHITECTS



Ar. Neeta Mahajani
Associate Architect
Pune, India



Ar. Shirin Hassan
Associate Architect
Doha, Qatar



Ar. Pankti Sanganee
(LEED Green Associate (USGBC))
Site Planner and Landscape
Designer



Ar. Rohan Sharma
Associate Architect
Goregaon, India



Ar. Anil Avad
Associate Architect
Navi Mumbai, India



Ketki Nalawade
Intern Architect
Thane, India

LEAD ARCHITECT

Ar. Yadneshwar R Pathak hold 20 Years of Experience, passion and qualifications for designing technically correct healthcare facility



Ar. Yadneshwar R Pathak
Director, Hospital Architect
Hosmart healthcare Pvt. Ltd.

DHPD - Post Graduate in Hospital Planning and Design,
Symbiosis International

MUMAD - Master in Urban Management and Architectural Design
Domus Academy **Milan**, Italy

B. ARCH (Honours) - Bachelor of Architecture, Sir J J COA, Mumbai

PGIA - Post Graduate in India Aesthetics - Jnan Pravah.

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