CASE STUDY

Architectural Engineering & Construction (AEC) Services

BIM & MEP | Architectural/Structural Drafting | 3D Modeling & Rendering
Energy Modeling & LEED Consulting
Cost Effective Early Clash Detection; 2D to 3D MEP BIM (Building Information Modeling) for a Multistory Hospital

Case Study Highlights

**Client Profile**
- Company: Building contractor
- Location: Malta
- Industry: Construction

**The Objective:** Convert 2D to 3D modeling for a multi-story hospital, without making any major changes in the original design.

**The Solution:**
- The 2D drawings were exported into the 3D model by using tools like Revit and 3D Max.

**The Challenges:**
- Clash detection while converting 2D drafts to 3D for streamlined MEP installations.
- Creating a coordinated 3D model from the 2D drawings provided by the client, with proper clash detection for better MEP installations.

**Technology / Software Used**
AutoCAD, Revit

Technology has been making its way in various fields! Architectural, engineering and construction have made incredible progress in the past few years; thanks to various tools that provided photo-realistic and improved visualization to the structure.

Outsourcing 3D rendering services has gained a tremendous momentum among Architectural firms, homebuilders and real estate developers, as it saves around 60% of the cash flow of capital and overheads.

With the intent to get a technically refined 3D model of a multi-story hospital, a leading construction firm from Malta, contacted us to convert the 2D drawings to 3D.

**The Solution**
- The project involved conversion of 2D drawings of a multi-story hospital building to 3D models. With this input, we deployed a team of highly resourceful designers possessing unmatched technical expertise.
  - Detailed examination of the 2D drawings provided by the clients, to achieve a lucid view of the project.
  - Furthermore, converting 2D drawings to 3D models using AutoCAD and Revit tools.
  - Various components like interior walls, ceilings, framing slabs, foundations, electrical and plumbing systems were carefully examined to identify the clashes.
  - To ensure the model is at par with international standards of quality; there was prime emphasis on constant auditing and improvisation.
  - Model passed through multilayered quality check process for technically impeccable designs, before being finally handed to the client.

**Benefits**
- With early clash detection; MEP installation became cost-effective and hassle-free.
- The conversion from 2D drawings to 3D helped the customers to smoothly execute the construction.
- This association, has been effective both economically and work wise

About Hi-Tech iSolutions LLP

hitech offers a full range of 3D rendering, modeling, architecture design and engineering services to its global clientele across the AEC industry. Understanding and delivering as per client requirements remains the prime focus, for every project that is undertaken. With a multilayered quality check and flexible time scheduling, quality is maintained and projects are always delivered on time.

hitech is your innovative partner offering multidisciplinary services for various domains across industries. We are an ISO 9001:2008 Certified India based organization providing comprehensive outsourcing services to 3,100 plus - 80% recurring clients across USA, Europe, Australia and Middle-East. Enhancing your business operations, making them smarter, faster and cheaper has been our ongoing pursuit, backed with two decades of experience. It has helped us evolve into a leading customer centric outsourcing service provider for all your BPO, Software, AEC, and Engineering solutions.