BIM Services For Architect

- DESIGN DEVELOPMENT SUPPORT
- COORDINATION WITH OTHER TRADES
- INTERIOR DESIGN
- VIRTUAL MOCK UPS & VISUALIZATION
- CONTENT DEVELOPMENT
COMMITMENT

We are committed to our core values and corporate mission:

- Maximize client value by adopting the latest technologies and innovations.
- Improve project efficiency by streamlining workflow and provide high quality services.
- Save time by using a large global team to leverage time zone advantages.
- Reduce client costs up to 15% by harnessing a highly experienced global work force.

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Revolutionizing the AEC Industry

Proper planning and coordination are the keys to the successful execution of projects in the construction industry. Building Information Modeling (BIM) allows stakeholders to create and examine virtual representations of the Mechanical and Electrical (MEP) systems, and other utilities.

The virtual construct can be used to generate accurate shop drawings and address design issues before construction begins. Advancements in 3D technology and the advent of BIM have also revolutionized the Architectural, Engineering and Construction (AEC) industry.

Pinnacle Infotech has been acknowledged as the global leader in providing innovative BIM solutions. We have received several awards and recognition from both industry and government.

Our process orientation & quality control is as per ISO 9001:2008 and ISO 14001:2015 standards.

Serving the industry for more than 20 years in 36 countries with 5051+ projects, Pinnacle acquired deep understanding of international building codes and procedures. Our global delivery system allows us to maintain constant contact with our clients making geographical separation meaningless.

We recognize the importance of effective work process management and regular communication when outsourcing services. We have developed an ideal mix of infrastructure, experience, global presence and commitment to excellence that has led to long-term relationships with more than 1151 clients worldwide.

Benefits of Architectural Modeling

- **Coordination**: Streamline communication with 3D visualization among all stakeholders for quick decision making during design and pre-construction phase.
- **Sales Tool**: 3D visualization enables potential investors, buyers and owners to understand the layout and spatial interrelationships of a project.
- **Bidirectional Associativity**: Ensures all changes to any part of the building need to be made only once. Ensures annotation decisions, such as a changed sheet scale properly resizing all annotations and graphics, need to be made only once.
- **Efficiency**: Eliminate 2D by generating CD set from BIM models which are accurate and coordinated.
- **Quality**: Ensures all data and graphics, details, schedules, drawings and sheets in the CD set is current and coordinated.
- **Conceptual Cost Estimating**: Quantity take offs can be extracted from model which, when linked with the prevalent rates of materials, labor and construction techniques, can enable the stakeholders to prepare cost estimates.
- **Integrated Building Materials**: Real-world materials drive detailed plan, section and elevation representations of building components to save documentation time. The integrated Accurender, raytracing and radiosity engine uses the same materials, saving time and effort when producing visualizations.

Our clients have reported cost savings up to 15% by successfully implementing BIM.
Design Development Support

Pinnacle is the global leader with 15 years of experience in working with architects and assisting them in the process of developing their design. Our dedicated team of skilled personnel interacts with architects to understand their design-intent and provides value-added support as the design evolves from conceptual/schematic stage to construction stage. In order to do this, the inputs required by Pinnacle include any or all of the following:

- Conceptual Drawings
- Hand-sketches
- Conceptual Models

Pinnacle’s resources translate designer’s thoughts, expressed through the aforesaid inputs into buildable information in the form of 2D drawings and/or 3D models.

The above process can pass through one or more of the following stages of Design Evolution:

1) Concept Design:

Conceptual design is the very first phase of design, in which the drawings or the solid models are the dominant tools to provide a description of the proposed system. The description is in terms of a set of integrated ideas and concepts about what the proposed system should do, behave and look like, so that it is understandable by the users in their desired manner. We relate this stage of design roughly to the LOD 100 Revit model.

The following images graphically illustrate one such collaboration with an architect:

**Input from Architect:**

![Input Images]

LOD 100 Models include elements defined as Masses and are used for preliminary studies, such as Conceptual Design and Overall Project Phasing.

Exploring Design Options during Concept Design Stage

Pinnacle facilitates the design process by using the Design Options tool within Revit. In Revit, every design option belongs to a design option set, which is a way of structuring the design options into clusters to assist the architect’s workflow. In order to take an instance, a project may have 3 design options for an exterior façade, 2 options for a bathroom configuration and 3 options for the reflected ceiling plan. Revit enables the architect to create several sets for each major type of option being explored. So the project can have the following design option sets:
2. Schematic Design:

Schematic design is an initial design scheme that seeks to define the general scope of the project, including scale and relationships between the building components. The architect’s sketches interpreting the client’s desired functional relationships between various activities are translated to a model, corresponding roughly with the LOD 200 Revit model.

The following images graphically illustrate one such collaboration with an architect:

- Exterior Facades
- Bathrooms
- Reflected Ceiling Plans

In each of the above sets, it is possible to have as many options as required by the architect. The design process is expedited with this methodology of creating and developing several alternatives in a single model. Once an option is accepted or finalized, the architect can delete all the other options from the model.

LOD 200 models include elements where the Masses are replaced with Generic Components. Analysis based on Overall Systems can be performed and Quantities based on Specific Elements can also be obtained. The major characteristics of components are their thickness and width, allowing quick quantity-takeoffs.
3. Detailed Design:

Detailed Design is the stage following schematic design where the schematic design decisions are worked out in greater details. The details are reflected in the model, corresponding roughly with the LOD 300 Revit model. This also provides the client with drafted to-scale drawings, illustrating how the project would look like after the construction gets over.

The following images graphically illustrate one such collaboration with an architect:

LOD 300 models include elements where the Generic Components have been replaced with fully defined Assemblies. Analysis based on Specific Systems can be performed and Quantities based on Materials can also be obtained. At LOD 300, the model can be leveraged for the generation of traditional Construction Documents and Shop Drawings and can be used for the analysis of Energy Performance, Clash & Cost.

4. Construction Documentation:

Construction Documentation is a bridge between building design and physical building form. It encompasses the preparation of drawings and specifications that set forth the detailed requirements for the construction of a building project. In terms of modeling, this corresponds roughly with the LOD 400 Revit model with all information of the building.

The following images graphically illustrate one such collaboration with an architect:

LOD 400 Models include elements that are accurate in terms of size, shape, location, quantity and orientation with complete fabrication, assembly and detailing information. At this Level, the Model has non-geometric (3D) information like text, dimensions, notes and 2D details and it is a complete representation of all the proposed elements. Analysis can also be performed at this level such as Energy Performance, Clash Detection and Sequencing & Cost.
During this stage, Pinnacle produces the following sheets:

- Overall Floor Plan
- Typical room layouts
- Building sections
- Typical Details
- Floor Finish Plans
- Reflected Ceiling Plans & Details
- Landscape plans & Details (As required)
- Egress Plans
- Door & Window Schedules
- Enlarged Floor Plans
- Elevations (All 4 Sides)
- Partition Details
- Door & window Details
- Floor Finish Details
- Furniture Layout plans
- Interior Elevations
- Quantity take offs

**Co-ordination with Other Trades**

Coordination between different elements of a building is essential for the building design to be efficient. The gaps between design disciplines are a common cause for change orders in the field of construction and can be eliminated by early coordination among all trades (Architecture, Structure, MEP), thereby closing the design loopholes.

Pinnacle’s team with 15 years of expertise proactively gets involved in finding & highlighting the possible gaps to the relevant disciplines.

**Interior Design**

Pinnacle has also the expertise in assisting architects with the development of interior design - be it for renovation of building or new building. Our team assists architects in their presentations by using AutoCAD, Revit, 3DS Max, AutoCAD Architecture, Photoshop, Illustrator, SketchUp, Microstation, Navisworks, Bluebeam, A 360 Collaboration, Autodesk BIM 360 Glue, Newforma collaboration and continue the job to Formatting & Construction Documentation stage with all detailing and necessary sections along with creation of schedules of materials & fixtures used.

**Instances of Pinnacle's completed projects:**
Input from Architect:

Output from Pinnacle:

Energy Analysis:

Identifying as well as benchmarking energy use across buildings has become an important consideration for architects while designing. This identifies opportunities for energy efficiency that in turn aids cost savings and improved building performance. With Revit’s advance features of Solar study & Thermal analysis, Pinnacle’s team can do wonders in this segment as well.

Solar Study

Understanding the sun’s position, how it changes with respect to the building being designed over the course of a day or the different seasons in a year enables the architect to visualize the shadows and assess the building’s performance in terms of natural light and/or heating requirements.

Pinnacle assists architects to do this by using Solar Study tool in Revit.
Virtual Mockups & Visualization

Pinnacle facilitates the design verification process by enabling the architect to ensure that his design meets his client’s expectations. Virtual mockup of various building components, complete with equipment and finishes is an efficient device to do this.

Content Development

Pinnacle assists architects to transform 2D drafting and drawings to BIM base work process and provides the following for Content Development:

- Drawing and/or Revit Template files
- Standard Details/Callouts
- Revit Families
- BIM Consulting & Training

Revit Families contain all relevant information about technical specification including product manufacturer, Omni Class Code, Title & Subcategories, that help clients to identify the required component with much ease.

Instances of Revit Families created by Pinnacle:

- Cabinet and Drawer
- Fixture & Furniture
- Doors & Windows
- Specialty Equipment
- Stairs & Railings
- Care Cart and Desk
- Caseworks, Sheets & Watches
- Interior Decoration Accessories
- Plumbing Fixtures
- Mechanical Equipments
- Electrical Fixtures
- Structural Components (Columns, Beam, etc)
Quality Control Process

Our QC process is ISO 9001:2015 certified and managed by an independent QC team. We have implemented Environment Management Systems (EMS) 14001:2015.

The main objective of the quality control (QC) process is to detect errors and rectify it. Ensuring quality is a group effort and our dedicated QC team is led by a highly qualified and experienced Manager in M&E Coordination and Quality Control.

The entire QC process is handled in three phases:

QC Check Phase I

- The model is plotted on paper and a preliminary grid by grid check is done comparing it with the original contract documents. Member of the Project Management team assists in this process.
- The project team leader sends status report to the QC Department to begin QC Phase II.

QC Check Phase II

- The QC Team performs a more detailed comparison of the Contract Documents against the 3D BIM model. Specific Checklist is prepared to review/check the deliverables. Their main objective is to review, identify and address the following:
  - Missing data (if any)
  - Mismatches with the contract documents
  - Clashes (Old/New), Elevation, Routing, Fittings, etc.
  - Construction point of view.
  - Fly-Zones requirements
  - Attribute Checking (Pressure class, Pipe material, etc.)
  - Location of Equipment such as VAV, Sleeves, Hangers, Valves.
  - Equipment Connection details as per Schematic Drawings.
  - Equipment Models as per Technical Submittals.
  - Annotations & Dimensions, Aesthetic View.
  - Miscellaneous issues
- The QA/QC Team continuously interacts with the Project Lead and other team members to resolve all technical issues related to the project.

QC Check Phase III

- The Project Manager conducts the pre-shipment check before sending them to the client.
Work Flow

We have a standard BIM Process, which has been prepared, based on our experience, which we follow for all the Architectural projects, unless the project has other requirements. Below is a simple flow chart, which explains the process in detail:

- The process has been broken down as per the responsibility.
- The blue colored activity / task is PINNACLE’s responsibility.
- The green colored activity / task is the client’s responsibility.
- We have a Quality Process in place, to check the quality of the deliverable that is being provided to the client.

![Flow Chart Image]
Why Pinnacle?

Pinnacle is a global leader in providing innovative BIM services. Our in-house team of more than 1251 experienced Architects, Engineers and BIM professionals provide end-to-end solutions to discerning clients around the world.

Our 3,80,000 sq ft, world-class production facility is equipped with high-end workstations, advanced servers with real time backup and a high speed data and voice network. There is a 24 x 7 uninterrupted power supply security system by CISCO.

Fast Turnaround

Our skilled team of professionals can provide quick turnarounds on complex projects. Pinnacle has successfully completed several large-scale projects across multiple verticals.

Technical Strengths

Our professionals use the latest BIM software: Autodesk Suite (Revit, all versions), Microstation, NavisWorks, Inventor, AutoCAD Civil 3D, Plant Design Suite, Pro/Engineer, Sysque, Allplan, Adobe Photoshop, Adobe Illustrator, Adobe Aftereffects, 3DS Max, Tekla Structure, SolidWorks, Autodesk Fabrication Suite, Quickpen, Cadpipe, SketchUp, Bluebeam, Pipenet, and design other software.

We have a deep understanding of global as well as regional codes and standards.

Global Presence

Pinnacle has offices around the world (USA, UK, UAE, ITALY, INDIA - Durgapur, Kolkata & Jaipur), serving clients around the clock.

Experience in BIM Domain

We have a global experience of 20 years and have successfully collaborated with several leading contractors on BIM projects for Specialty Hospitals, Stadiums, Universities, Dams, Apartment Complexes, Hotels, Casinos, Large Retail Center, High School, Airport, Commercial Buildings, Convention Center, High Rise Towers and Industrial Projects.

Communication

Pinnacle's Project Management team is available to clients through various communication channels including:

1. **Global telephone networks** for instant communication
2. **FTP** (AWS) over a secured network for file transfers
3. **Email** (on Google server) for reports and interactions
4. **Video and teleconferencing** for presentations and conversations
5. **Online Web Meeting** and Conferences with US & UK based phone systems
6. **Newforma** project information management system
Testimonials

"Pinnacle has been a great resource and is willing to always take on work on short notice. The quality of work is excellent and always on time."

Travis Xayaseng | Beazer Homes

"Communication was smooth. Progress sets were helpful. All in all we are impressed with the work quality and adherence to our standards."

Alex Duran | Godden Sudik Architects

"Your work was quite good overall. The speed at which you were able to return the drawing from my mark-up was also quite good."

Woodrow Bryant | Bryant Architects

"It was our first time working with Pinnacle and they provided reliable service. The quality of work was excellent but most importantly, fast."

Edgar Gallegos | Corgan

"Thank you all for hitting a tough schedule. You accomplished what we needed in a short amount of time and made client very happy."

Don Brogan | M+A Architects

"We are really appreciative of the work you do! It has helped us to grow our firm without a large staff, which really helps us adjust to market conditions!"

Kimberly Fredrickson | ProjX LLC

"We are very impressed with Pinnacle's speed and efficiency. We look forward to working with them on future projects."

S. Chris Getman | R4 Architecture, LLC

"The speed and competence of the team has been such a value add to our firm!"

Tighe Kirkland | Manning Architects, APAC

"Despite coming 2nd post tender Midas were able to secure the contract on this new build extension to this Grade II listed building in the historic centre of Bristol following extensive archaeological activity and preparatory ground works. As part of the initial talks with the client Midas presented the 4d sequence that was produced by Pinnacle for this project. This was a great way of starting a dialogue with the client! Everyone in the office including the client was very impressed with the animation, to the point, that the client also wanted to upload the sequence on his website for PR purposes. Personally, this has been my favourite project so far! Well done!"

Veronika Gambioli | Midas Construction

"Very impressed with the turn-around and the amount of work done in such a short time. There were some back and forth but overall for the stage we were at (early schematic) we are very happy with the product."

James Hoapili | Architects Hawaii Limited
## Project Snap Shots

<table>
<thead>
<tr>
<th>SECTOR LOCATION</th>
<th>PROJECT NAME</th>
<th>DETAILS</th>
<th>BIM END DATE</th>
<th>PROJECT AREA</th>
<th>MANPOWER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replacement Care Center</td>
<td>Continuing Care Center</td>
<td>Our scope of work for the project included creation of Architectural 3D Model for Ground Level/Roof, Structural 3D Model for Foundation/Roof and Plumbing 3D Model (including hangers and supports) for First Level Partial Floor Plan (P620, P621, P622, P623, P624 &amp; P625) as well as preparation of Plumbing 2D Drawings &amp; Shop Drawings. We developed LOD 300 virtual model to find out coordination issues and delivered clash free model to our client resolving those issues.</td>
<td>January 2017</td>
<td>30,000 sq ft</td>
<td>4 Engineers</td>
</tr>
<tr>
<td>Hospital</td>
<td>Waianae Coast Comprehensive Health Center</td>
<td>Our scope of work for the project included creation of 3D Models &amp; Shop drawings of Architecture, Structure, Mechanical, Electrical, Plumbing &amp; Fire Protection trades. Basic coordination was done by us and coordination with other trades was done as per clash report provided by us.</td>
<td>February 2017</td>
<td>24,000 sq ft</td>
<td>5 Engineers</td>
</tr>
<tr>
<td>Residential &amp; Commercial</td>
<td>The Distillery at Lake Nona</td>
<td>Our scope of work for the project included creation of 3D BIM Model (wall, roof, windows, floors and Landscaping details), Clash Coordination as well as preparation of DD Set, CD &amp; Permit Set Drawings.</td>
<td>February 2017</td>
<td>329,404 sq ft</td>
<td>5 Engineers</td>
</tr>
<tr>
<td>Mixed Use</td>
<td>Serrano and 8th Street</td>
<td>Our scope of work for the project included creation of 3D BIM Model creation for Architectural &amp; Basic Concrete Structures at LOD 350 for designing construction document set.</td>
<td>February 2017</td>
<td>379,520 sq ft</td>
<td>8 Engineers</td>
</tr>
<tr>
<td>Mixed Use</td>
<td>Rescore Hollywood</td>
<td>Our scope of work is to generate detailed 3D BIM model for producing construction document set from Schematic Design.</td>
<td>October 2016</td>
<td>347,019 sq ft</td>
<td>12 Engineers</td>
</tr>
<tr>
<td>Commercial</td>
<td>The Mall at Green Hills</td>
<td>Our scope of work for the project included 3D Model Creation of Architecture, Concrete, Structure, Site, HVAC, Site Utility, Plumbing, Mechanical, Fire Protection and Electrical Trades and Basic Coordination.</td>
<td>October 2016</td>
<td>131,085 sq ft</td>
<td>8 Engineers</td>
</tr>
<tr>
<td>Commercial</td>
<td>Museum of the Future</td>
<td>Pinnacle executed 4D Construction Phasing/Simulation Video of 4 minutes duration. The video included the modeling of Surrounding Buildings and Structures (Emirates Towers, Metro via Duct and Station) and the Models of the Temporary Structures (Tower Crane, Site Facilities, etc.).</td>
<td>August 2016</td>
<td>328,784 sq ft</td>
<td>6 Engineers</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Dubai Metro Route 2020</td>
<td>Pinnacle’s scope of work for the project included: 1.] 3D modeling of the architectural and structural element of the expo station and other elevated stations 2.] A video presentation of route 2020 showing the construction methodology 3.] 4D simulation of the expo station, ending with a walk-through showing the proposed condition.</td>
<td>January 2016</td>
<td>484,000 sq ft</td>
<td>6 Architect &amp; Engineers</td>
</tr>
<tr>
<td>Commercial</td>
<td>Four Seasons Resort</td>
<td>A 3D BIM Model of Architecture and Structure. Civil site modeling (topography and landscape) of entire site. Major UG Utility modeling. 2-3 minutes of 4D simulation and fly through.</td>
<td>October 2015</td>
<td>385,900 sq ft</td>
<td>12 Architect &amp; Engineers</td>
</tr>
<tr>
<td>Residential</td>
<td>Dubai Festival City</td>
<td>Architectural &amp; Structural BIM Model Creation, 40%+100% Schematic Drawing Creation, Tender Drawing Creation.</td>
<td>August 2015</td>
<td>1,60,000 sq m</td>
<td>10 Engineers</td>
</tr>
</tbody>
</table>
## Project Snap Shots

<table>
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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>Erickson Lantern Hill</td>
<td>177,750 sq ft</td>
<td>July 2015</td>
<td>3 Engineers</td>
</tr>
<tr>
<td>Newark, USA</td>
<td>Pinnacle's scope of work for the project included the 3D Modeling of the Architectural &amp; Structural trades in Revit. We deployed a team of 3 Engineers for the project and produced the final model after resolving all construction issues.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial</td>
<td>Pembroke Pines</td>
<td>305,000 sq ft</td>
<td>April 2015</td>
<td>8 Engineers</td>
</tr>
<tr>
<td>Fort Lauderdale, USA</td>
<td>3D Modeling of Architecture Exterior walls, Interior walls (without individual studs), Ceiling &amp; soffit, Ceiling Grid, Door and window (generic), Stairs (as per schedule), Railings, Casework/Cabinets and Light Fixtures.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospitality</td>
<td>Sofitel Wellington</td>
<td>71,128 sq ft</td>
<td>April 2015</td>
<td>4 Engineers</td>
</tr>
<tr>
<td>Lower Hutt, New Zealand</td>
<td>We animated the model in 4D as per the construction program of the project showing the different phases (existing, demolitions etc.) and executed the modeling of all exterior architectural and structural parts like walls, doors, columns and external parts of the building, that are essential for Bid presentation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>Rosslyn Central Place</td>
<td>525,000 sq ft</td>
<td>December 2014</td>
<td>8 Architects &amp; Engineers</td>
</tr>
<tr>
<td>Arlington, USA</td>
<td>Pinnacle's scope of work included the creation of 3D Models (LOD 300) for coordination. We executed the architectural modeling of the exterior walls, interior walls (without individual studs), ceiling, soffit, doors, windows (as per schedule), stair and railing. We also constructed the structural models for Beams (Primary &amp; Secondary), Columns, Structural Slab/Metal Deck, CMU/Pre-cast walls, Footing, Foundation and Metal Canopy/Trellis.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>8th Avenue Residences</td>
<td>381,000 sq ft</td>
<td>December 2013</td>
<td>10 Architects &amp; Engineers</td>
</tr>
<tr>
<td>Florida, USA</td>
<td>Scope included creation of Architectural &amp; Structural 3D Model (LOD 350), and Coordination.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>Vintage Park Apartments</td>
<td>425,754 sq ft</td>
<td>November 2013</td>
<td>5 Architects &amp; Engineers</td>
</tr>
<tr>
<td>Florida, USA</td>
<td>Delivered a 3D BIM Model of Architecture, Structure, Mechanical, Electrical, Plumbing and Fire Protection services after a complete coordination among all the trades. Clash reports were also generated from the model.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mixed Use</td>
<td>Msheireb Downtown Doha</td>
<td>390,192 sq m</td>
<td>March 2014</td>
<td>34 Architects &amp; Engineers</td>
</tr>
<tr>
<td>Residential</td>
<td>Ambit of this project includes Architectural and Structural 3D Modeling, MEP-FP (Mechanical, Electrical, Plumbing, Fire Protection) and 3D Modeling. Providing coordination services, Final Shop Drawings and generation of constructability report &amp; Quantity Take-Off, creation of 3D Mock up along with Phasing &amp; 4D Scheduling.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Township</td>
<td>Doha, Qatar</td>
<td>Doha, Qatar</td>
<td>March 2012</td>
<td>32 Architects &amp; Civil Engineers</td>
</tr>
<tr>
<td>Shopping Mall</td>
<td>North Gate Mall</td>
<td>417,500 sq m</td>
<td>March 2012</td>
<td>32 Architects &amp; Civil Engineers</td>
</tr>
<tr>
<td>Doha, Qatar</td>
<td>Pinnacle was responsible for the modeling of the entire mall area site along with the six associated office buildings. A walk through presentation was done based on the Architectural and Structural elements to show the key areas as requested by the client.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University</td>
<td>University of Maryland</td>
<td>121,705 sq ft</td>
<td>December 2010</td>
<td>20 Architects &amp; Engineers</td>
</tr>
<tr>
<td>Baltimore County, USA</td>
<td>Architecture model, Structure for PHAB, for MEP coordination. BIM for isolated sound proof panel. 3D model Architectural wall Floor. Penetration and non penetration walls. Mock Black Box presentation, PT House, Rehearsal Studio.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office</td>
<td>Great American Tower</td>
<td>1,350,000 sq ft</td>
<td>October 2010</td>
<td>25 Architects &amp; Engineers</td>
</tr>
<tr>
<td>Garage Retail</td>
<td>Pinnacle's scope of work for the project included 3D modeling of the Architectural and Structural elements as per the contract drawings along with BIM coordination for clash free construction at site.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cincinnati, USA</td>
<td>Doha, Qatar</td>
<td>Doha, Qatar</td>
<td>November 2013</td>
<td>5 Architects &amp; Engineers</td>
</tr>
</tbody>
</table>