

# Architects



[pinnacleinfotech.com](http://pinnacleinfotech.com)



**Pinnacle  
Infotech**

Construct  
Certainty, with  
Technology

# Mission

Help the AEC industry optimize resources, cost and quality through innovative use of technology for:

- Sustainable and efficient design
- Collaborative pre-construction planning
- Agile construction process
- Reliable facility management

# Vision

Lead the global AEC industry to certainty and efficiency using technology.

## Associations:



# Our Values

- E Excellence**  
We take pride in our passion for excellence. It is a way of life for us.
- A Agility**  
We are always at the edge of technology and driven by agile transformations.
- R Reliability**  
We have ISO-certified processes and workflow to produce consistent and reliable performance.
- T Teamwork**  
Pinnacle provides an environment where teams collaborate effectively to excel.
- H Honesty**  
We win the trust of our stakeholders through integrity, straightforwardness, and transparency.

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## 1. Revolutionizing the AEC Industry



*Architectural BIM Model*

Effective project execution in the construction sector hinges on meticulous planning and coordination. Building Information Modeling (BIM) empowers stakeholders to craft and assess virtual renditions of Mechanical and Electrical (MEP) systems alongside other utilities.

The virtual construct can generate accurate shop drawings and pre-emptively tackle design challenges before construction initiation. Advancements in 3D technology and the advent of BIM have also revolutionized the Architectural, Engineering, and Construction (AEC) industry.

Pinnacle Infotech is internationally recognized as the global leader in providing cutting-edge BIM solutions, earning accolades and recognition from both industry and government authorities.

Our process orientation and quality control are per ISO standards – 9001:2015, 27001:2013, 19650-2, 19650-3, and 19650-5, plus EMS 14001:2015. As holders of **ISO 19650-5**, the esteemed international certification for BIM services, we ensure adept data management and transparent collaboration.

With 30+ years of global service in 43+ countries, Pinnacle boasts a robust portfolio of 15,000+ successful projects, granting unmatched expertise in international building codes and procedures. Our global delivery system ensures constant client contact, erasing geographic barriers.

We acknowledge the significance of efficient work process management and consistent communication in outsourcing services. Our optimal blend of infrastructure, extensive experience, global presence, and unwavering commitment to excellence has fostered enduring relationships with 2000+ clients across the globe.

## 2. 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*

Eliminating 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 Accrender, raytracing and radiosity engine uses the same materials, saving time and effort when producing visualizations.

*Our clients have reported up to 15% cost savings by successfully implementing BIM*



### 3. 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

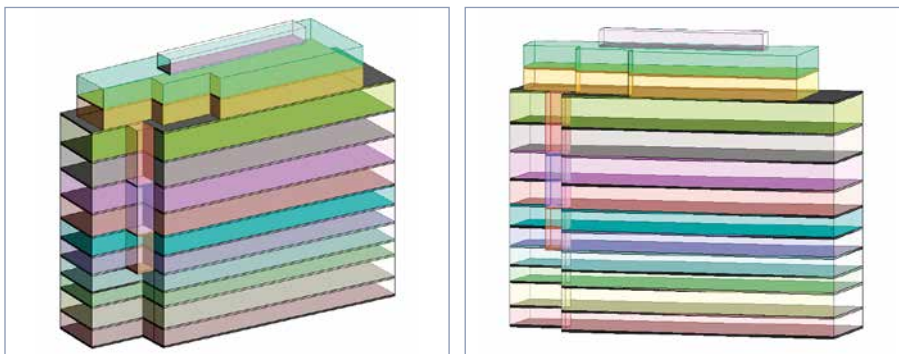
Pinnacle's resources translate designer's thoughts, expressed through the aforesaid inputs into buildable information in the form of 2D drawings and/or 3D models.

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

#### 3.1 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*



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

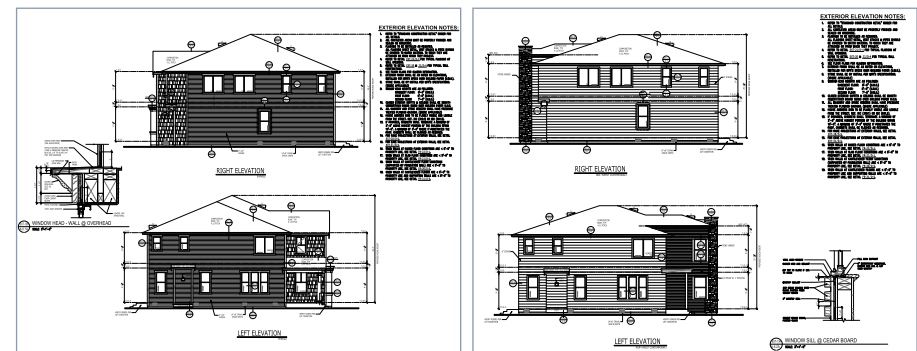
#### Exploring Design Options during Concept Design Stage

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:

- 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.

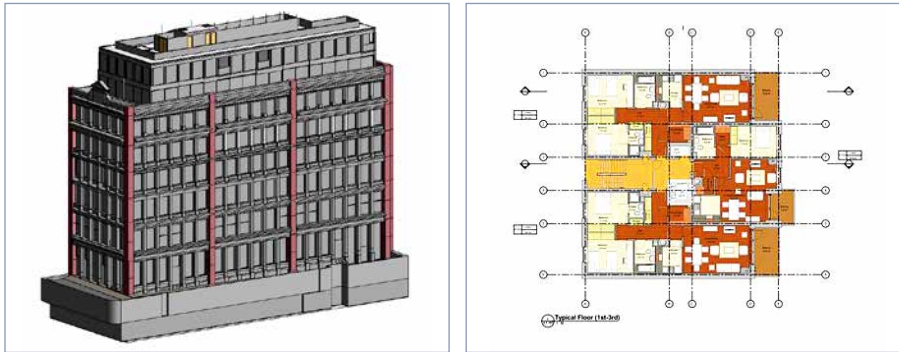
*The following images graphically illustrate this methodology*



### 3.2 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:*

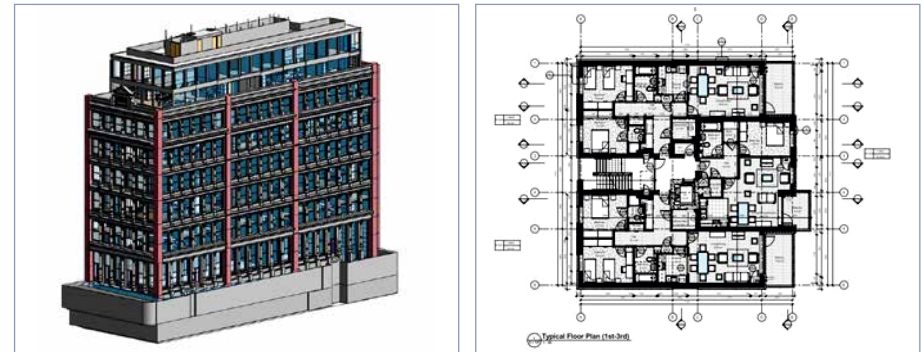


LOD 200 models include elements where the Masses are replaced with Generic Components. Analysis based on Overall Systems can be performed and Quantities based on Specific Elements can also be obtained. The major characteristics of components are their thickness and width, allowing quick quantity-takeoffs.

### 3.3 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*

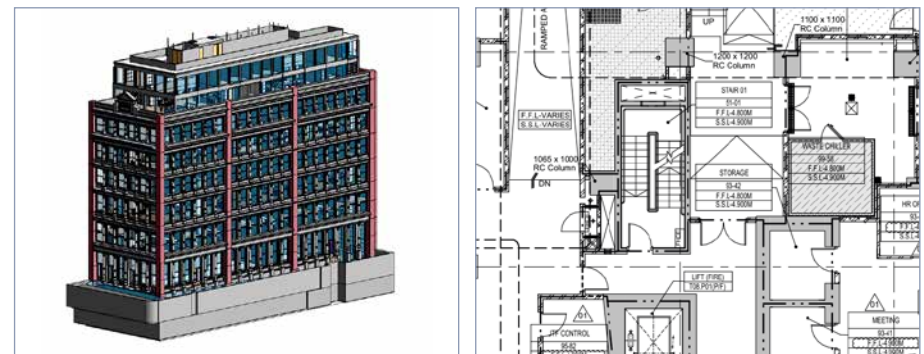


LOD 300 models include elements where the Generic Components have been replaced with fully defined Assemblies. Analysis based on Specific Systems can be performed and Quantities based on Materials can also be obtained. At LOD 300, the model can be leveraged for the generation of traditional Construction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

### 3.4 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.

## 4. 3D Laser Scanning and BIM Modeling Services

Pinnacle Infotech Inc. has partnered with various Local Scanning Vendors across North America to support your Scanning requirement and to provide you the ultimate one stop shop solution in Scan to BIM technology. Our laser scanning service will keep your project on time & under budget. We provide 3D laser scanning for every aspect and phase of construction. Compare the newly constructed work against the as-designed model or drawings for quality assurance and get as-built documentation showing exact dimensions and locations.



Real World Building





Scanned Point Cloud




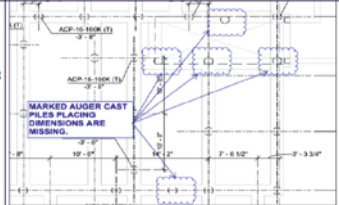
3D Model Made by Pinnacle

## 5. Constructability Review

Pinnacle will analyze the documentation packages/pdf for errors and omissions that may impede construction. We will verify that work requirements are clear and the documents are coordinated. We will make written comments to plans and specifications then submit them to you for review. The analysis may include the Architecture, Structural, Site, Site Utilities or Mechanical. The following will be checked: Plans Specifications Relevant Special Provisions.

<div>  <div> <div>Constructability Log_Architecture</div> <div> <div>Client:</div> <div>Sub Contractor: Pinnacle Infotech Solutions</div> <div>DATE - 31-Dec-2018</div> </div> </div> </div>								
Sl. No.	Building	Level	Area	Drawing Sheet No.	Drawing Title	Grid	Description	Drawing Image
1	BUILDING G G	1	G1	A151R	TH-LEVEL 01 RCP (TH - LEVEL 01 - BUILDING G1)	G-C TO G-D & G-10 TO G-11	CEILING HEIGHT IS MISSING. IT IS HAPPEN ON TYPICALLY IN ALL TH UNIT .	

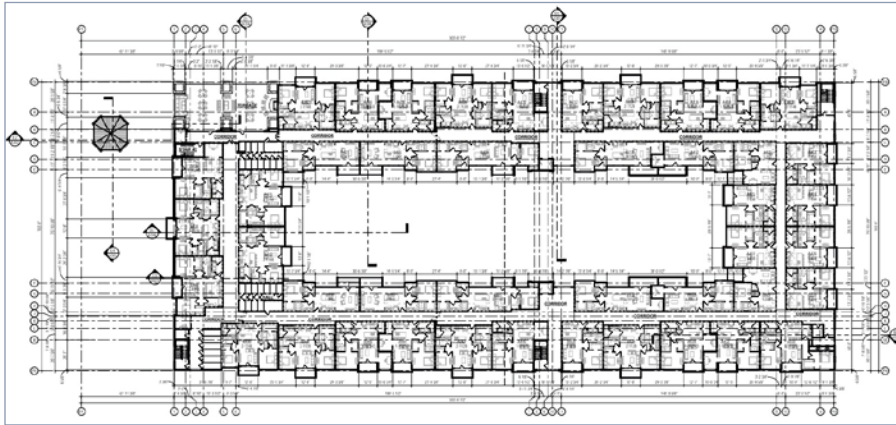
Constructability Log for Architectural

<div>  <div> <div>Constructability Log_Structure</div> <div> <div>Client:</div> <div>Sub Contractor: Pinnacle Infotech Solutions</div> <div>DATE - 31-Dec-2018</div> </div> </div> </div>								
Sl. No.	Building	Level	Area	Drawing Sheet No.	Drawing Title	Grid	Description	Drawing Image
1	BUILDING B	PIER LEVEL	B1	S100B	ACP LAYOUT PLAN BUILDING B	B-1 - B-4 & B-A - B-C	MARKED AUGER CAST PILES PLACING DIMENSIONS ARE MISSING.	

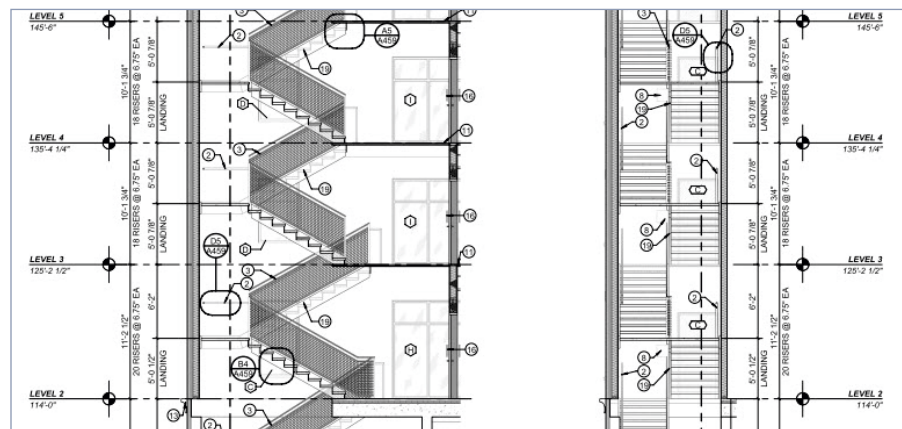
Constructability Log for Structural

## 6. Construction Drawing Sets

Pinnacle will help you prepare detailed drawing sets for construction. We will coordinate with you from the concept design stage and prepare error free construction drawings that supports construction on site. We have more than 30 years of experience in preparing construction drawings for Architecture projects from around the world and our work have always met our client's expectation.



Floor Plan



Building Sections - Stairs

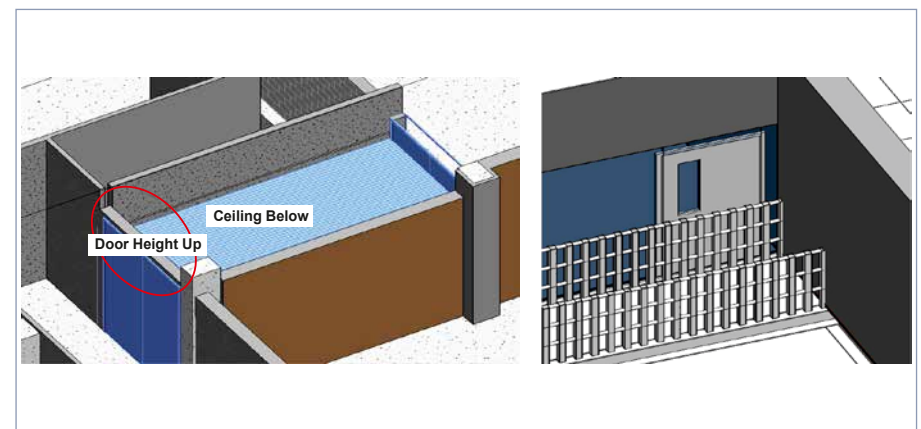
*During this stage, Pinnacle produces the following sheets*

- 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

## 7. 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 proactively gets involved in finding & highlighting the possible gaps to the relevant disciplines.

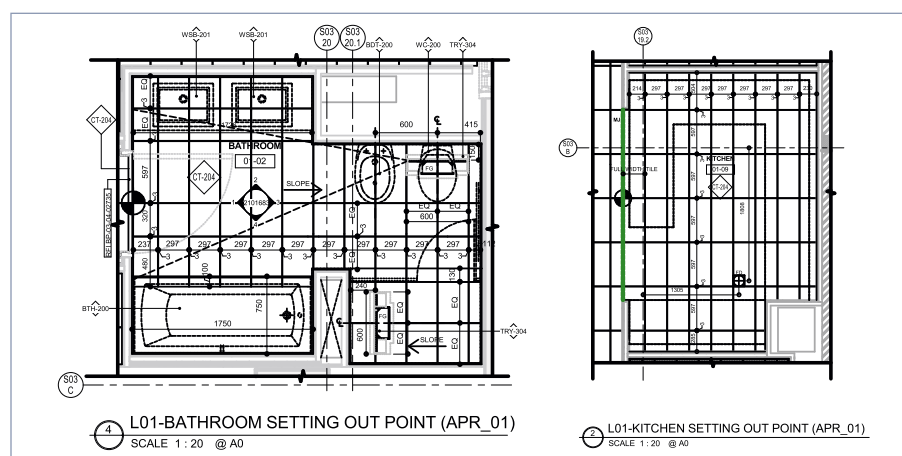
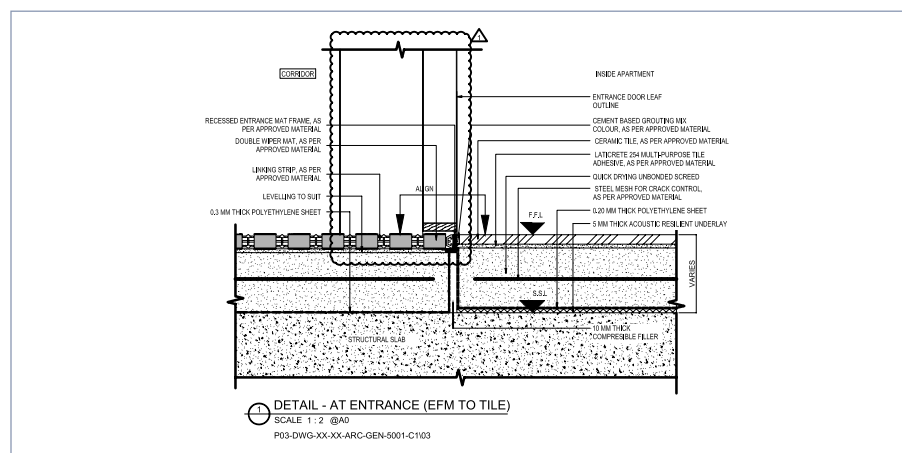




## 8. Interior Design

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.

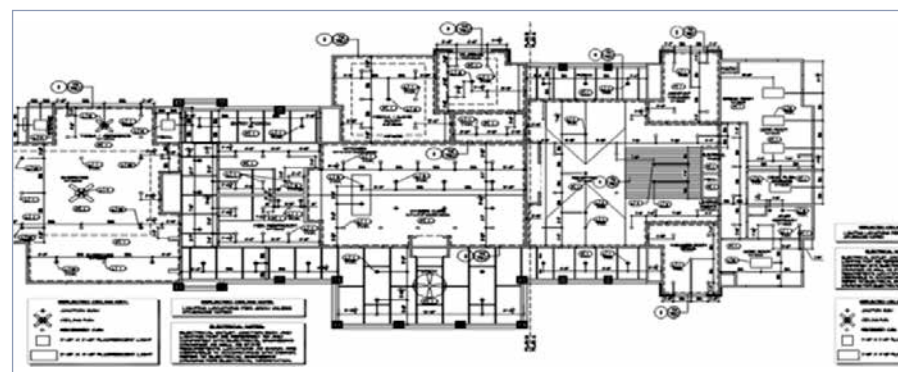
### Instances of Pinnacle's completed projects



### Input from Architect



### Output from Pinnacle



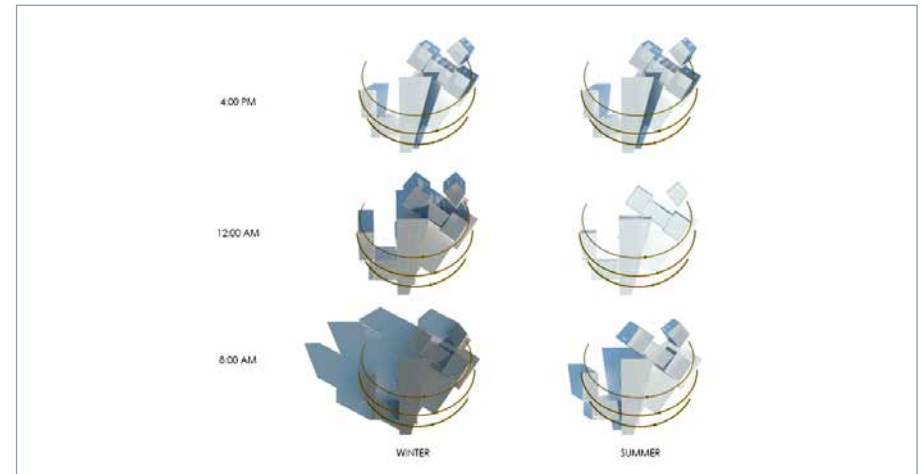
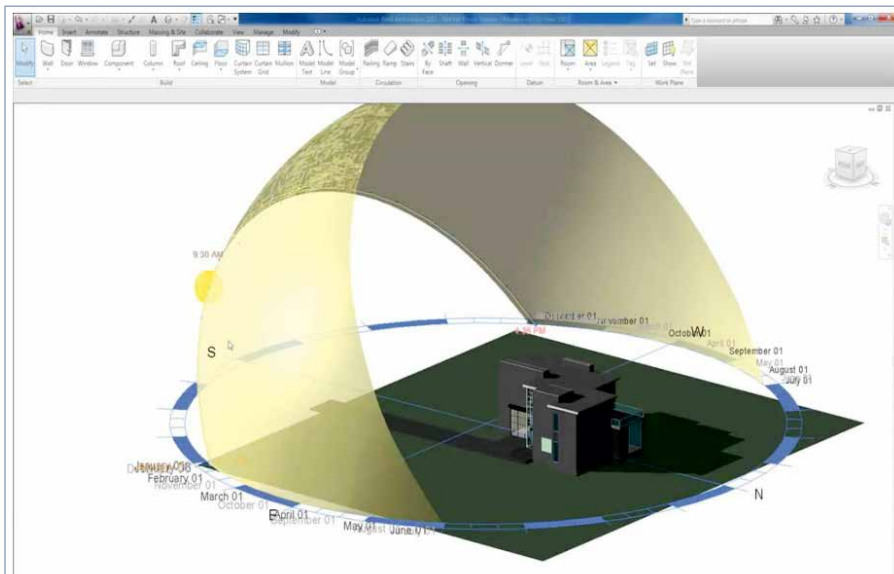
## 9. Energy Analysis

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.

## 10. 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.



## 11. 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.





## 12. 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
- Revit Families
- Standard Details/Callouts
- 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
- Caseworks, Sheets & Watches
- Fixture & Furniture
- Interior Decoration Accessories
- Doors & Windows
- Plumbing Fixtures
- Specialty Equipment
- Mechanical Equipment
- Stairs & Railings
- Electrical Fixtures
- Care Cart and Desk
- Structural Components (Columns, Beam, etc.)



## 13. Why Pinnacle

Each of our employees has ingrained in themselves the core values - 'EARTH' of our organization.



Excellence



Agility



Reliability



Teamwork



Honesty

### *Excellence*

Excellence is a way of life for us. Our commitment to hard work, creativity, and innovation allows us to reach our full potential in approach, operations, and collaborations. We foster a culture of excellence from the ground up within our organization to achieve operation at the highest industry standards.

### *Agility*

We understand that every business is different. We are highly agile and can adjust quickly to changing market conditions and client requirements. In addition, we offer a variety of business models to suit your specific needs at competitive prices.

### *Reliability*

Pinnacalites rely on trusted processes to consistently produce excellent results. We have over 30 years of experience in the AEC industry, and our work processes are ISO-certified.

### *Teamwork*

We work together to scale every challenge. We understand that it is only through teamwork that we can provide the best possible results for our customers. Pinnacle fosters a team-oriented culture where everyone is valued, and their contributions are encouraged and recognized.

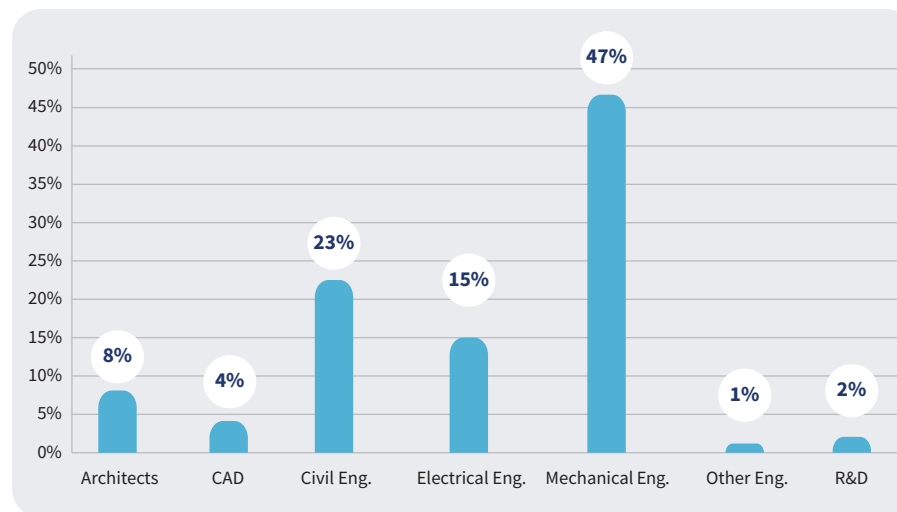
### *Honesty*

Honesty is our key value, and we hold ourselves to the highest standards of integrity. We strive to be transparent and clear in our communication to ensure that our clients get the best value for the money.

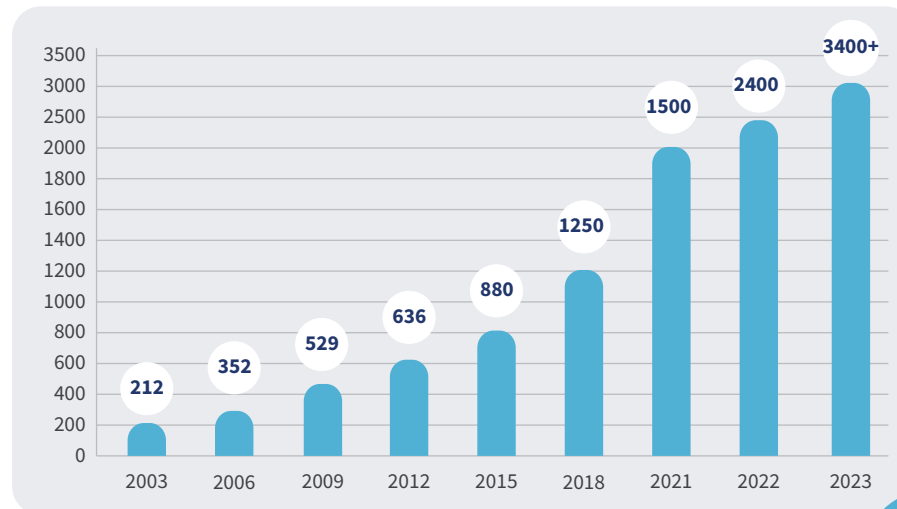
## 14. Our Team

Pinnacle's significant contribution to Building Information Modeling is made possible by its highly qualified and experienced workforce, including engineers, architects, and other experienced professionals. All our employees are well-versed in handling international construction codes and standards. We are proud of the diverse team and their global experience.

### *Employee Background*



### *Workforce Growth*



## 15. Our Infrastructure

Pinnacle has large state-of-art campuses in Durgapur, Jaipur, Kolkata & Madurai, comprising facilities like High-speed Bandwidth, Blade servers, an R&D center, a Datacenter, recreational zones, playgrounds, and more.

We also have equipped global delivery centers in the US (Houston and Atlanta), Canada (Toronto), UK (London), UAE (Dubai), Singapore, Germany (Munich), and Japan (Tokyo) that allow our employees to work in the same time zone as our customers.

Pinnacle's *Construct-ability Installation Lab* gives construction site experience to employees, integrating theoretical learning with practical experience. It enables our employees to deliver BIM solutions on time and with accuracy.



## 16. Our Work Processes

We strongly emphasize the significance of efficient work process management and consistent communication in the context of outsourcing services. Our process orientation and quality control are per ISO standards – 9001:2015, 27001:2013, 19650-2, 19650-3, and 19650-5, plus EMS 14001:2015. As holders of **ISO 19650-5**, the esteemed international certification for BIM services, we ensure adept data management and transparent collaboration. On orders, we assign a dedicated Relationship Manager, a competent Project Delivery Head, and Project Managers for focused execution.

### *Relationship Management*

Our relationship managers are co-located with customers, ensuring clear communication, managing timelines, and handling deliveries promptly to surpass customer expectations. They advise customers on the services Pinnacle provides and build long-term business relationships.

### *Production Process*

Project teams report to Project Delivery Head (PDH). The PDH provides technical leadership to the team and ensures standard work processes (as per ISO norms) are followed. They oversee project delivery. Project Delivery Heads periodically communicate with the client to get regular feedback and ensure the successful completion of the project.

Project Managers handle small teams for a customer and are responsible for understanding project requirements, project standards, invoicing processes, and communication protocols. They prepare project templates per project specifications, plan resources and align project delivery schedules.

### *Auditing Process*

The COE team is an independent body in the company for Process and quality management and monitors the process and quality through various audit parameters, sets up feedback management processes, carries out investigations in case of any complaints/concerns, and provides action items. This way, Pinnacle ensures consistency in the final deliverables throughout the company.

### *Quality Control Process*

Pinnacle's efficient processes and stringent quality control mechanisms have added certainty to 15000+ projects worldwide. Our process orientation and quality control are per ISO 9001:2015, ISO/IEC 27001:2013, ISO 19650-2, ISO 19650-3, and **ISO 19650-5** standards and are managed by an independent QC team.

## 17. Our Projects

### Murray-Massenburg Elementary School

*Durham, USA*



### North Birmingham Academy

*Birmingham, United Kingdom*



### Qiddiya Resort Core District

*Dubai, UAE*



### Grady Nurses Offices

*Atlanta, USA*



### Grand Hyatt Seaside Resort

*California, USA*



### Ledgestone Retail

*Austin, USA*





## 18. Clients Speak

“The Pinnacle team can thoroughly review and analyze the drawing set and quickly respond with succinct questions needed to complete the task. Their responsiveness is assuring, and the quality and completeness of work are consistent with what our firm expects of all its employees.”

### **NSPJ Architects, USA**

“Pinnacle does an outstanding job when getting projects turned around in a timely fashion. We greatly appreciate their efforts in doing so. I think the hardest thing with any client is getting projects nailed down at 100% quality, as it requires clearer coordination efforts in getting expectations across. Regardless, their quality is top-notch, and I highly recommend them.”

### **ProjX LLC, USA**

“It has been great working with Pinnacle. We need quick turnarounds on many of our projects, and Pinnacle can meet every one of them, all the while providing high-quality work at very reasonable rates.”

### **RDC-Studioneleven, USA**

“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.”

### **Beazer Homes, USA**

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

### **Godden Sudik Architects, USA**

“This project with Emsick went great! Communication was excellent. Time was well spent clarifying any points that needed to be addressed. Client and production are building a strong relationship. Great project. We will see more in the future.”

### **Emsick Architects, USA**

“Overall, the work period was successful, key deadlines were met, and we were well-informed on progress. Revit protocols were maintained, and the quality of model/sheet work was good.”

### **Glancy Nicholls Architects, UK**

“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.”

### **Bryant Architects, USA**

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

### **Corgan, USA**

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

### **M+A Architects, USA**

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

### **R4 Architecture, USA**

“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!”

### **Midas Construction, USA**

“The speed and competency of the team has been such a value add to our firm!”

### **Manning Architects, USA**



## India Office Locations

### Durgapur - HQ

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### Madurai

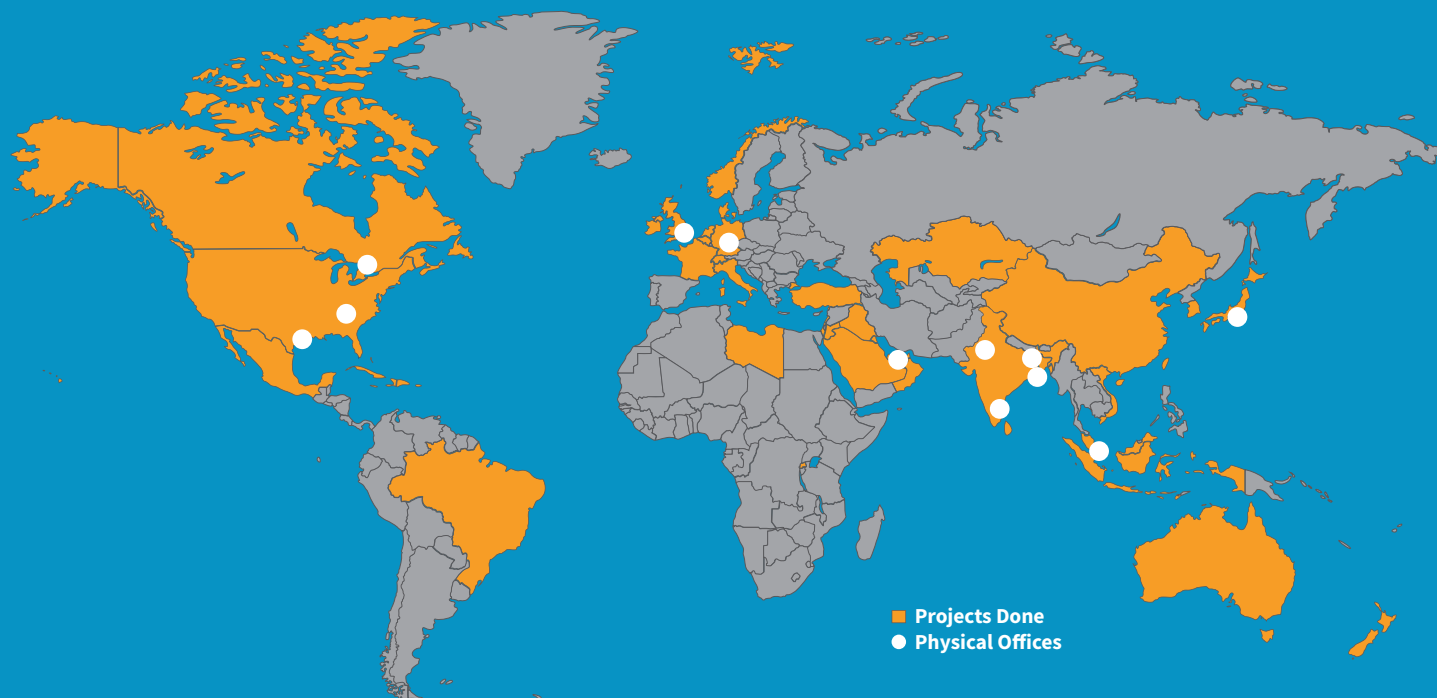
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