



# **BUILDING INFORMATION** MODELING

CONSAC | BUILDING INFORMATION MODELING | WWW.CONSAC.COM





Consac is a pioneering Building Information Modelling (BIM) company that provides cutting-edge technology services to leading international architects, engineers and contractors, building owners and developers. Our objective is to leverage international best practices, and latest advancements in Virtual Design and Construction (VDC) technology, to improve design, construction & facility management processes.

We specialize in developing customized technology solutions for each project, based on our client's project and business needs. Project requirements are mapped with international best practices, software tools, and implementation processes available across the globe. Primary objective is to save time and money for our clients, thereby improving project profitability and fueling business growth.

CONSAC | BUILDING INFORMATION MODELING | WWW.CONSAC.COM





STRUCTURE	Business development and Project Management Team in US.
PRIMARY FOCUS	BIM Modelling, BIM Coordination & Clash Detection, AS Built and Facility Management, Scan to BIM, Quantity Extraction, BIM Support and Design-Detailing Process.
OFFICES	Work force in US, Norway and India.
GROWTH	A Team of 50+ experienced of architects, engineers and BIM professionals.
ORGANIZATION SIZE	100 % year over year growth in revenue from 1991.





INTEGRITY	We behave ethically and are respectful, open and honest.
WORK QUALITY	Commitment to excellence with no compromise.
SUPERIOR SERVICES	We provide the best customised BIM services to cater for our customer needs.
COMMITMENT	Assist in our client's success by providing exceptional service and personal relationship.
TECHNICAL IMPROVEMENT	We develop better BIM solutions through continuous learning.





**Our team** comprises of architects, engineers and BIM professionals with hands-on experience design and construction as well as BIM software experience. Team Consac has over 13 years experience working with leading international AEC firms and have worked on various projects in North America. Almost all our team members have prior design and construction experience in the building industry. They have good knowledge of design and construction practices, as well as international BIM best practices, and are experts at retooling industry processes to achieve maximum benefit for our Clients.

Our team understands the importance of effective communication and understanding client's requirements. Our commitment to quality and timely delivery of each project undertaken, has been one of the main reasons for getting repeat work from our clients.

CONSAC | BUILDING INFORMATION MODELING | WWW.CONSAC.COM





**Architects and Engineers:** Consac provides a comprehensive range of architectural, engineering and interior design development, BIM modeling and documentation services to leading international design firms. We work as an "Extended Studio", seamlessly integrating client's processes and standards to deliver projects from schematic design through construction documents.

Using sketches, 2D drawings, and mark-ups, our team translates the designer's ideas into BIM models and design drawings. BIM models are developed progressively from LOD 100 at the concept/schematic stage, to LOD 200 at the design development stage, and LOD 300/350 at the construction document stage. Models created are coordinated with other trades periodically, to ensure optimized, value-engineered design. Construction documents are prepared based on our client's documentation and detailing standards. Strict Quality Assurance processes are implemented on all projects. Based on the stage of a project and client standards, we customize our quality check templates to ensure that the work delivered matches the client's own quality and graphic standards.Facility Management purposes.

CONSAC | BUILDING INFORMATION MODELING | WWW.CONSAC.COM

## CONSAC



#### OUR SERVICE INCLUDE:

- Complete CD Set Production
- BIM Execution Plan
- LOD 100/200/300/350 Modelling
- Energy Analysis
- Design Development (SD to DD)
- Scan to BIM
- Existing condition Modelling
- Quantity Take off from BIM Model
- Visualization Support and VR
- Interference Check and Analysis

### CONSAC | BUILDING INFORMATION MODELING | WWW.CONSAC.COM





**General Contractors:** Consac specializes in providing a complete range of Virtual Construction services to General Contractors. By leveraging our design and construction experience, we virtually construct existing condition models and simulate the construction of structure, MEP and architecture systems, based on the construction drawings provided by the design team. We firmly believe that the conventional "BIM modelling" process does not provide the value and output that a general contractor would benefit from. Apart from the trade coordination, our customised "Virtual Construction" process enables us to identify and address errors-omissions on drawings, constructability architects and engineers with extensive design and construction experience, in North America. We understand how construction materials, methodologies and techniques are used in various parts of the world.

Our 13 years of experience working with some of the most reputed construction firms enables us to add value, and contribute more than mere BIM modeling team issues, construction sequence clashes, and accessibility and maintenance issues. LOD 400 models created are used to produce coordinated shop drawings. LOD 500 models are developed for As-built and Facility Management purposes.

CONSAC | BUILDING INFORMATION MODELING | WWW.CONSAC.COM

## CONSAC



#### **OUR SERVICE INCLUDE:**

- Virtual Construction LOD 400/500
- Model Validation with Audit Reports
- Constructability Analysis
- BID Support
- Clash Detection & Coordination
- 4D, 5D & 6D Analysis
- ASMEP Modelling & Detailing
- Interoperability Support
- BIM Coordination with Subs
- Scan to BIM
- Shop Drawing Production
- Quantity Take Off/Estimation
- On-site Co-ordination
- Customized Model for Specific Trades
- COBie Integration
- Room Data Sheet
- As Built Model & Drawings Production

CONSAC | BUILDING INFORMATION MODELING | WWW.CONSAC.COM





**Sub-Contractors:** Team Consac works closely with mechanical, electrical, fire protection and interior sub-contractors. We create (or develop) BIM models based on trade-specific requirements. Models are created using construction drawings, material specifications, specific fitting, and equipment selected for each trade.

In case design models are available, we perform BIM Audit and transform them into LOD 400 tradespecific models for further coordination, shop drawings production or any other use. We also participate in BIM workshops organized by GC, as subcontractor's virtual construction team.

Using 2D drawings, scan data, or construction drawings, our team "virtually constructs" each building system, as a "virtual contractor". Discrepancies found on the construction drawings are reported, and error omissions are rectified. Constructability issues and trade coordination clashes are reported and collaboratively resolved. Building systems are visualized by the sub-contractors team as well as other trades, and value-engineering possibilities are discussed. 4D Construction sequencing and schedule-based quantities extracted from BIM models can be used for procurement. Strict Quality Assurance processes are implemented on all projects. Models are created based on material specifications and shop drawing standards. Our standard quality check templates are customized to ensure that the work delivered matches client's own quality and graphic standards.

CONSAC | BUILDING INFORMATION MODELING | WWW.CONSAC.COM





#### **OUR SERVICE INCLUDE:**

- Virtual Construction LOD 350/400
- BID Support
- Clash Detection & Coordination with other trades
- MEP Modelling & Detailing
- Shop Drawing Production
- System/Equipment Layout drawings
- Quantity Take Off
- On site Co-ordination

CONSAC | BUILDING INFORMATION MODELING | WWW.CONSAC.COM





**Owners and Developers:** Poor use of data, coupled with highly fragmented project teams, costs owners and developers huge avoidable business losses. Statistically, over 60% of large projects fail to meet cost and schedule targets, 30% of construction cost is reworking, and over 55% of maintenance is reactive. However, now BIM technology is helping owners and developers reduce losses, minimize risk, and improve profit margins. All large and progressive developers are now mandating BIM use on their projects. We provide following BIM enabled services to owners and developers:

- Business need analysis
- IPD Strategy and EIR formulation
- BIM Execution Planning and support
- Consultants BIM Maturity assessment
- BIM Audit Services
- Virtual Design and Construction of all building systems
- Design Coordination and issue tracking
- Fully coordinated construction drawings
- BIM Management Services
- Construction quality assessment services
- Safety management services

- Design change management services
- Deviation tracking and management
- Budget tracking and procurement support
- Contractors and subs BIM payment support
- Virtual Reality services
- Existing condition modelling
- BIM-enabled Facility management support
- Construction quality assurance services
- Integrated Project Delivery

## CONSAC | BUILDING INFORMATION MODELING | WWW.CONSAC.COM





**Building Product Manufacturing:** Building Product Manufacturers can get their products converted into intelligent 3D BIM Objects. This makes it easy for architects and contractors to specify use of your products in their projects. BIM objects are digital representations of products and equipment that can be placed into intelligent building models. Manufacturer-specific BIM objects contain 3D representations of the product along with associated metadata, such as Omniclass classification, material, model number, MEP connections, and service information.

As architects and designers have embraced Building Information Modeling (BIM), it's become essential for building product manufacturers to be BIM-ready. Firms that provide 3D, BIM-enabled models of their products are more likely to see their offerings included in build projects. The challenge is that many building product manufacturers don't have the knowledge and resources

required to create BIM-ready models. This is Consac can assist.

We have developed a proven process for creating product models for manufacturing clients:

- First step is to identify the product lines that need BIM-enabled models. Our team will then develop one or two sample models for review.
- Next step is to generate content with all the necessary BIM object information like part numbers and descriptions, available materials and finishes, performance criteria, electrical requirements, LEED certification, code compliance, and more.

Depending on the design requirements, we develop 3D BIM models using Revit, with different level of details (LOD-100 to LOD-500), to support BIM processes right from concept design through final building design. Our BIM services for building product manufacturers include:

- 3D BIM content development for building products
- Revit family creation for BIM library

CONSAC | BUILDING INFORMATION MODELING | WWW.CONSAC.COM

# CONSAC



<ul> <li>CONSAC CORE</li> <li>Hotels and Hospitality</li> <li>Hospitals and Medical Centre</li> <li>Transportation Facilities</li> <li>Commercial Buildings</li> </ul>	<ul> <li>Mixed-use buildings</li> <li>Residential Projects</li> <li>Retail Outlets</li> <li>Automobile showrooms</li> <li>Educational Campus</li> <li>Stadium</li> <li>Museum</li> <li>Bridge</li> <li>Airport</li> <li>Industrial buildings</li> </ul>
BIM MODELLING AND SHOP DRAWINGS	BIM FACILITY COORDINATION MANAGEMENT
OFFERING BIM COORDINATION	QUANTITY EXTRACTION BID SUPPORT
SCAN TO BIM	CLASH DETECTION AS BUILT MODEL

CONSAC | BUILDING INFORMATION MODELING | WWW.CONSAC.COM











