



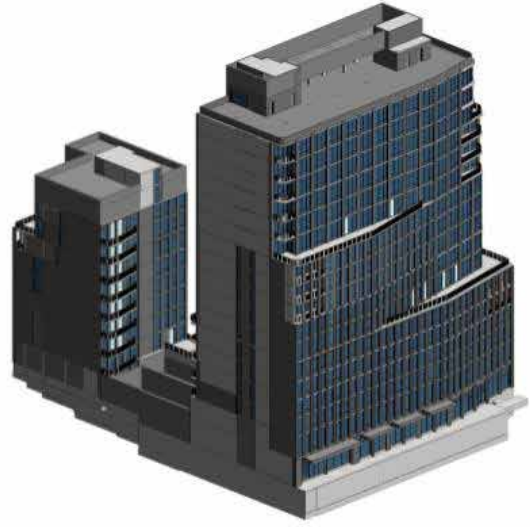
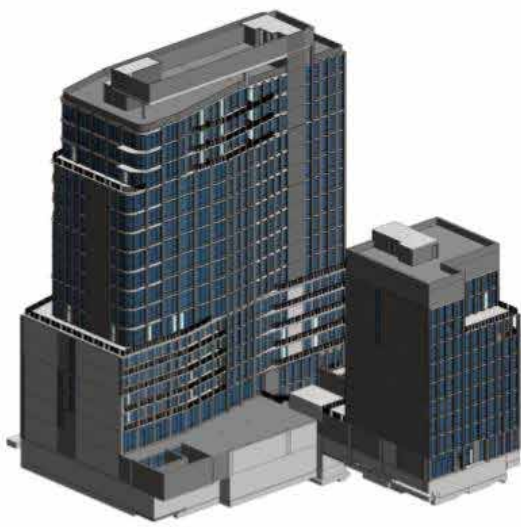
Urban Living Apartments

(Architecture, Structural & MEPF Modeling, BIM & VDC Coordination Services)

CASE STUDY



TECHTURE



Client : General Contractor

Team Size : 5 No.s (BIM Engineer & BIM Coordinator)

Disciplines : Architecture, Structure & MEPF

Duration : 8 months

Scale : 172,000 Sq. ft.

Software : Autodesk Revit, Navisworks, Bluebeam

Type : Residential

Location : New York, USA



Project Overview

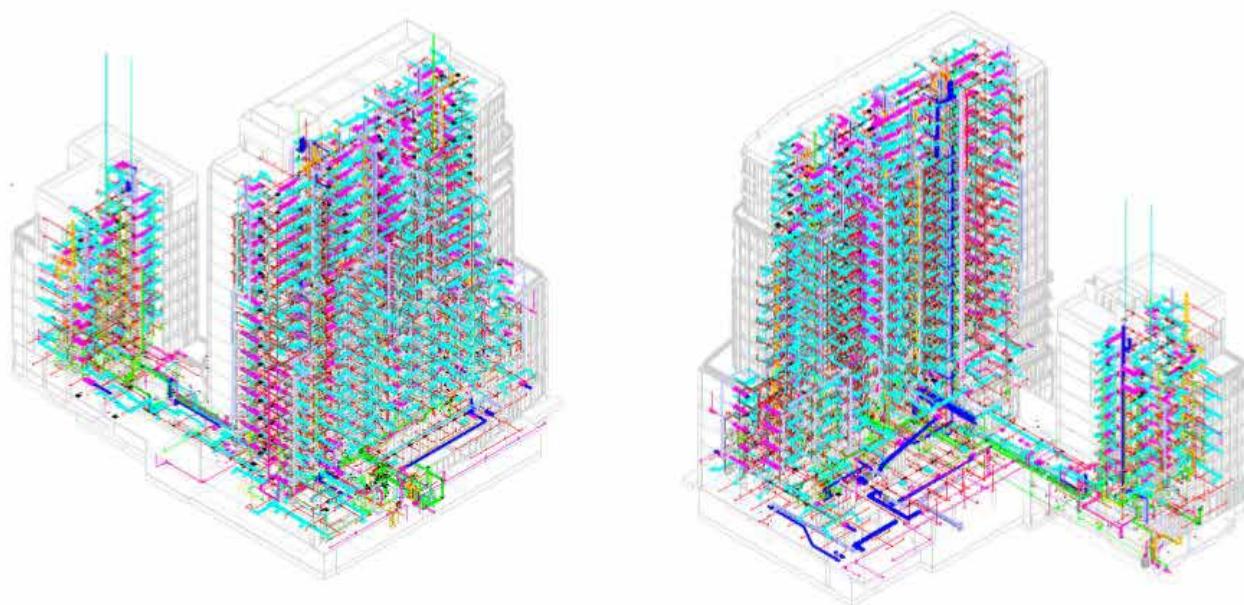
The project involved developing coordinated BIM models for a residential apartment complex, covering architecture, structure, MEP, RCP, and the building envelope. The models were created to LOD 300 based on the received design drawings and were regularly updated with design changes and clash resolutions. The main objective was to deliver a coordinated reference model and drawings that subcontractors could confidently use during execution.

Scope & Deliverables

- Development of LOD 300 Architectural, Structural, MEP, RCP, and Building Envelope models based on received design drawings.
- Clash detection and coordination across all trades.
- Regular model updates based on resolved clashes and design changes.
- Coordination meetings with the client and subcontractors to review issues and align models with site execution standards.
- Preparation of Builder's Work Drawings to define service penetrations, openings, and cross-discipline coordination requirements.
- Generation of coordinated reference shop drawings as the final output of the coordination process."

Challenges

- Design Changes:** Frequent iterations made it difficult to finalize drawings and maintain consistency.
- Swift Revisions:** Sudden changes had to be implemented quickly, putting pressure on the workflow.
- Comments Management:** Unstructured comments caused scattered revisions and made tracking difficult.
- Delivery Schedule:** Some areas had to be prioritized to secure timely approvals and keep overall deliveries on track.



Techture Approach

- **Structured Coordination:** Adopted a clear workflow with regular discussions involving the client and subcontractors to align model development with site requirements.
- **Efficient Clash Management:** Streamlined clash detection by using zone-wise reports, viewpoints, and focused coordination meetings.
- **Comments Tracking:** Set up an organized comments management workflow, consolidating feedback on layouts/PDFs for easy tracking and implementation.
- **Phased Deliverables:** Prioritized work in phased areas to secure timely approvals and keep overall deliveries on schedule.

Benefits

- A coordinated LOD 300 model across all disciplines minimized conflicts and supported smoother execution.
- Improved traceability of design revisions reduced repetitive rework and saved valuable time.
- Subcontractors were able to prepare execution shop drawings with greater accuracy and confidence using the coordinated reference outputs.
- Phased prioritization streamlined approvals, helping maintain delivery timelines and avoid delays.