



# LOD 300 Feature Wall Modeling & Visualization

(Architectural Modeling & Walkthrough, BIM & VDC Coordination Services)

CASE STUDY



TECHTURE



**Client** : Architect

**Team Size** : 2 Nos. (BIM Architect & BIM Coordinator)

**Disciplines** : Architecture

**Duration** : 4 Days

**Software** : Autodesk Revit & Lumion

**Location** : Ontario, Canada

**Type** : Commercial



## Project Overview

This feature wall project involved LOD 300 3D modeling of a custom stone wall for a commercial building using Autodesk Revit, followed by photorealistic rendering in Lumion. The model was developed strictly based on client-provided CAD drawings, elevation details, and stone dimension schedules, with no design changes permitted. After model approval, Techtur produced high-quality renders reflecting material selections and agreed camera views. The workflow ensured accurate visualization and client alignment prior to fabrication.

## Scope & Deliverables

- ❏ LOD 300 3D modeling of the feature wall based on final client CAD drawings
- ❏ Geometry development of stone courses with thickness and dimension variations per elevations
- ❏ Application of client-selected stone materials within the model
- ❏ Production of up to three Lumion-rendered visualizations based on approved model and camera views
- ❏ Coordination with client for camera angles, background context, and material confirmation

## Challenges

- ❏ Strict reliance on CAD drawings with no scope for geometric modification without approval
- ❏ Dimensional variations in stone patterns requiring precise interpretation from sectional details
- ❏ Limited modeling boundary (feature wall only) while ensuring visual realism in rendering
- ❏ Managing clarity gaps or missing information through early client queries





## Techture Approach

- ❏ Developed a detailed LOD 300 feature wall model in Revit aligned exactly with CAD elevations and dimensions
  - ❏ Standardized stone geometry setup and assigned material properties based on client specifications
  - ❏ Used the approved Revit model to generate Lumion render scenes with agreed camera angles
  - ❏ Maintained continuous communication for material confirmation, background selection, and iterative visual refinement
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## Benefits

- ❏ Accurate dimensional visualization of complex stone wall patterns prior to site execution
- ❏ Reduced ambiguity and design misinterpretation through model-driven clarity
- ❏ Faster client decision-making with photorealistic renders supporting material finalization
- ❏ Minimised rework through structured approval checkpoints and coordinated deliverables

