

# Alina Residences: Case Study



## Challenges

Executing hundreds of precisely aligned custom wood blades required exceptional design clarity, coordination, and precision to maintain geometric accuracy from digital modeling through final installation. The complexity of layered elements demanded a highly controlled approach to ensure consistency, and alignment to the architectural vision.



## Solutions

The team created a custom 3D parametric model that transformed the design process. Real-time updates with the architect allowed rapid adjustments to complex geometries, while the model's built-in intelligence generated fabrication-ready files automatically. Through close collaboration with our vendor, every element was produced with accuracy and consistency, ensuring the design vision was fully realized.



## Results

Lessons from the initial phase informed refinements for the more complex second phase, resulting in an installation that closely mirrored the original design vision. By controlling the digital model and fabrication data, the team maintained exceptional precision, streamlined coordination, and delivered a finished product that reflected both technical excellence and craftsmanship.



## Lessons Learned

Early alignment approaches revealed opportunities to enhance installation precision. For Phase 2, the team introduced vertical dowels to allow independent alignment of layers, establishing a higher standard of accuracy. Combined with the approved digital model and digital fabrication methods, this refined process ensured consistent, near-perfect execution from design through installation.

