



How to win more construction bids using BIM – A practical guide

Step-by-step guide for contractors and owners, powered by ReviCAD Solutions

The competitive edge in construction bidding

The construction industry is more competitive than ever. Owners and developers have multiple bidders for each project, while contractors are under pressure to demonstrate not just the lowest cost, but also the ability to deliver on quality, schedule, and risk control.

In this environment, Building Information Modeling (BIM) has emerged as a game-changer. BIM is no longer only about creating 3D models—it is about data-driven decision-making. From accurate quantity takeoffs to 4D scheduling and 5D cost simulations, BIM provides both contractors and owners with the tools to evaluate, plan, and deliver projects with confidence.

Industry insight: *A case study from Saudi Arabia revealed that contractors who included BIM in their proposals increased their probability of winning tenders by 9.4% in quality-based selections and 5.5% in cost-based selections. For owners, this translated into fewer risks, better cost accuracy, and stronger project outcomes.*

This guide walks through five stages of the bidding process and explains how both contractors and owners can leverage BIM at each stage.





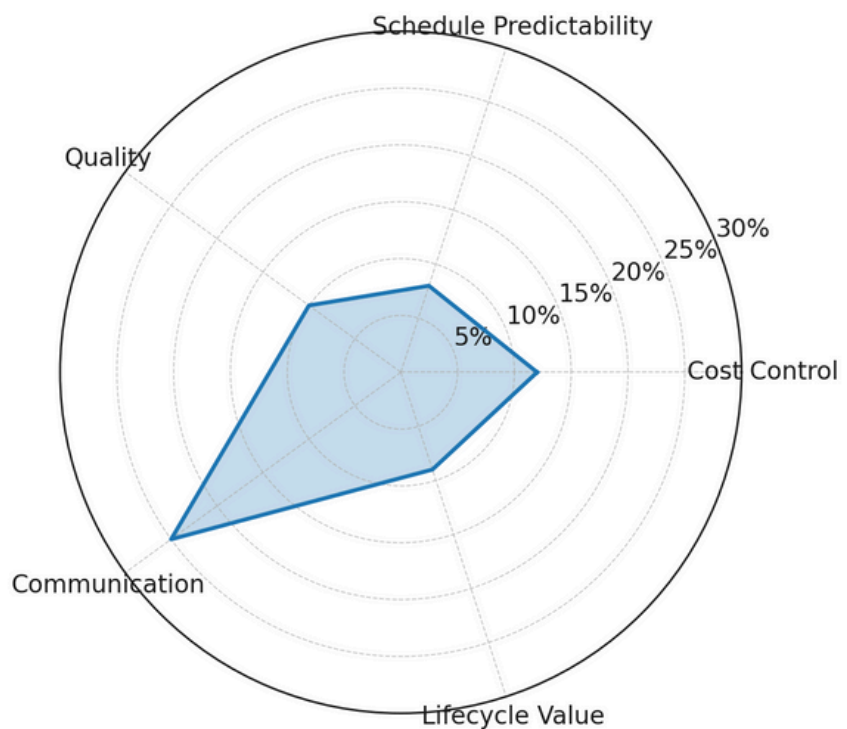
Understanding the role of BIM in tendering

Tendering is no longer just a race to the lowest price. Today's evaluations include:

- Cost – accuracy and predictability.
- Schedule – confidence in delivery timelines.
- Quality – design reliability, clash-free coordination, compliance.
- Collaboration – communication among stakeholders.
- Lifecycle Value – operational savings for the owner post-handover

For Contractors: BIM is your chance to demonstrate technical excellence and reduce perceived risks.

For Owners: BIM ensures bids are evaluated fairly with measurable, digital evidence instead of vague promises.



The above radar graph shows how BIM boosts bid scores across evaluation criteria.

Preparing a winning construction bid with BIM

Success in construction bidding begins long before submitting your proposal. The careful preparation phase using BIM can be your greatest competitive advantage.

Step 1 – Identifying the right projects

Before bidding, the first decision is which projects to pursue. BIM helps here by providing clarity on scope and feasibility.

For contractors

- Use BIM to analyze project scope quickly.
- Run feasibility simulations (e.g., can sequencing fit within client deadlines?).
- Avoid chasing projects with unclear or risky design requirements.

For owners

- Use BIM models to define requirements clearly in RFPs.
- Share as-built or concept models to give bidders a realistic understanding of the scope.
- This ensures higher quality submissions and fewer disputes later

Checklist: Pre-bid questions contractors should ask

- Does the RFP specify BIM deliverables?
- Are models or point-cloud surveys available from the owner?
- Is the timeline realistic for BIM-enabled workflows?
- Can my team demonstrate previous BIM success to strengthen this bid?

Step 2 – Preparing a BIM-enhanced bid

This is where BIM becomes a real differentiator. Instead of traditional 2D drawings and spreadsheets, contractors can deliver data-rich proposals.





For Contractors

- **Quantity take-offs (QTOs):** Extract precise BOQs directly from BIM models.
- **Clash detection reports:** Show owners you've already resolved conflicts digitally.
- **4D scheduling:** Present visual construction sequences.
- **5D estimation:** Link costs to model components for transparent pricing.

For Owners

- Expect bidders to provide clash-free models and cost-linked data.
- Evaluate bids on both price and quality of BIM deliverables.
- Owners can set scoring rubrics: e.g., "Up to 10 points for inclusion of 4D sequencing."

Aspect	Traditional Bid Package	BIM-Enhanced Bid Package
Deliverables	2D drawings, spreadsheets, written narratives	3D models, parametric data, BIM Execution Plan
Cost Estimation	Manual BOQs, prone to errors and inconsistencies	Automated QTOs from BIM models; up to 12% better cost accuracy
Design Quality	Risk of clashes discovered on site	Clash detection reports included; ~10% fewer expected change orders
Schedule Planning	Gantt charts, text-based schedules	4D simulations visualizing sequencing and logistics
Communication	Narrative-heavy; risk of misinterpretation	Visual models + federated environment; 25% stronger communication effectiveness
Lifecycle/Operations	Focus ends at construction handover	Asset data structured for FM systems; ~9% O&M cost savings
Owner Confidence	Based on promises and references	Based on transparent digital evidence and scenario simulations

Step 3 – Strengthening collaboration & communication


Construction is rarely about one contractor—it’s about an ecosystem of architects, engineers, subs, and owners. Miscommunication leads to disputes and change orders. BIM fixes this by becoming a single source of truth.

For Contractors

- Show how your BIM workflows keep stakeholders aligned (federated model, CDE).
- Highlight previous collaboration wins (e.g., reduced RFIs by 20%).

For Owners

- Require bidders to specify their collaboration platform (e.g., BIM 360, Navisworks).
- Evaluate contractors on their ability to integrate with your digital ecosystem.

 *Tip: Contractors should include a **model-sharing protocol** in the proposal: how files will be updated, shared, and validated. Owners should ask for this to ensure accountability.*

Step 4 – Submitting a winning proposal

When it’s time to submit, presentation matters. Contractors who can make BIM tangible to evaluators stand out.

For Contractors












- Include screenshots or short animations of 4D sequencing.
- Attach a sample clash detection report.
- Add a one-page “BIM Execution Plan” summarizing your strategy.

For Owners

- Score bids not only on cost, but also on the clarity of digital deliverables.
- Ask for sample BIM outputs as mandatory attachments in tenders.



Tender Evaluation – Comparative View

 Bid A Traditional narrative only	 Bid B Narrative + visuals, BIM Execution Plan, clash reports	
 Presentation style Limited	 Communication Improved +25%	
 Cost estimation accuracy Medium	 Cost control & estimation accuracy +12%	
 Risk of clash/errors High	 Change orders reduction -10%	
 Lifecycle value Low	 MEP duration reduction -8%	
Probability of winning Baseline (reference 0%)	 Lifecycle & maintenance cost +5.5% (CBS) to +9.42 %QBS)	

Step 5 – Post-submission strategies

Winning doesn't end at submission. Owners often call shortlisted contractors for interviews or presentations.

For Contractors

- Use BIM to present simulations during interviews.
- Show “what-if” scenarios (e.g., alternate construction sequencing).
- Demonstrate transparency: “Here’s how our model helps you track progress.”

For Owners

- Ask bidders to walk through their BIM models live.
- Verify they can deliver what was promised, not just present polished visuals.



Common pitfalls and how to avoid them

- *Overpromising:* Contractors commit to BIM deliverables they can't provide → damages credibility.
- *Inconsistent standards:* Different formats or naming conventions confuse owners.
- *Limited owner awareness:* Some owners don't specify BIM requirements, leading to missed opportunities.

Quick Fixes

- *Contractors:* only promise BIM services you have the expertise to deliver.
- *Owners:* standardize BIM requirements in tender documents.
- *Both:* adopt recognized BIM standards (ISO 19650, LOD specifications).





ReviCAD advantage

At ReviCAD Solutions, we specialize in making BIM a competitive advantage for tender wins. Our services are designed to support both sides of the table:



With ReviCAD, BIM stops being a buzzword and becomes a measurable edge in tendering.



BIM as a business-winning strategy

BIM is no longer just a design tool—it is a business strategy. Contractors who integrate BIM into bids gain credibility, reduce perceived risks, and increase their probability of winning.

Owners who demand BIM in tenders secure better projects with higher quality, fewer disputes, and lifecycle-ready assets.

In today's competitive market, a 5–9% uplift in win probability can mean the difference between success and failure. With the right partner, that advantage is within reach.

ReviCAD Solutions is here to help owners and contractors harness BIM as a proven strategy to win more bids and deliver better projects.

[Talk to a BIM expert](#)



References & Further Reading

- Majzoub, M., & Eweda, A. (2021). [Probability of Winning the Tender When Proposing Using BIM Strategy: A Case Study in Saudi Arabia. Buildings, 11\(7\), 306.](#)
- ISO 19650: [International Standard for BIM Information Management.](#)
- Industry reports on BIM adoption and procurement best practices.