

Integrated Design Detailing

For Faster Project Delivery



Local Expertise. Reliable Results

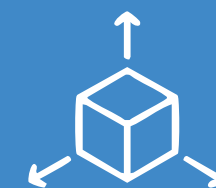




A BIM company, providing Constructible solutions



Save Time and Costs by Starting Detailing Early in Construction Projects



Early 3D modeling significantly accelerates project timelines and lowers costs.



Overlapping design and detailing phases reduces project duration by **30-40%** compared to traditional workflows.



Detailing begins when designs are roughly **50%** complete, allowing accurate material reports and drawings for bidding.



After fabricator selection, models and documents are customized to meet their standards.



Structural Engineers and Detailers working simultaneously during design phase, enable an integrated workflow that significantly accelerates project timelines.



01

See How Integrated Design Detailing Works



Integrated Design Detailing at a glance

01

Single Contract

The Engineering Company holds both design and detailing contracts while partnering with an experienced and qualified detailer.

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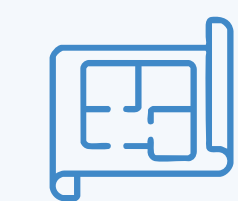
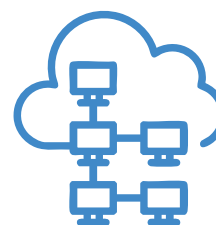
Integrated Teams

We work collaboratively with the engineering company using a cloud-connected Common Data Environment (CDE). This ensures seamless communication, efficient data sharing, and streamlined project coordination.

03

Early Detailing

Detailing typically begins once structural design has progressed to approximately 50% to 60%, depending on the specific requirements and complexities of the project.



04

Cloud based Collaboration

With the integration of BIM technology and cloud connectivity, collaboration becomes seamless, enabling the effortless integration of models and data across project teams.

05

Comprehensive Bidding Documentation

Shop drawings, prepared alongside Design Drawings, are available during the bidding phase to enable more precise and accurate cost estimates.

06

Customized Fabrication Packages

Upon awarding the fabrication contract, we work closely with the fabricator's team to ensure all drawings align with their specific standards and requirements.



02

Using Technology

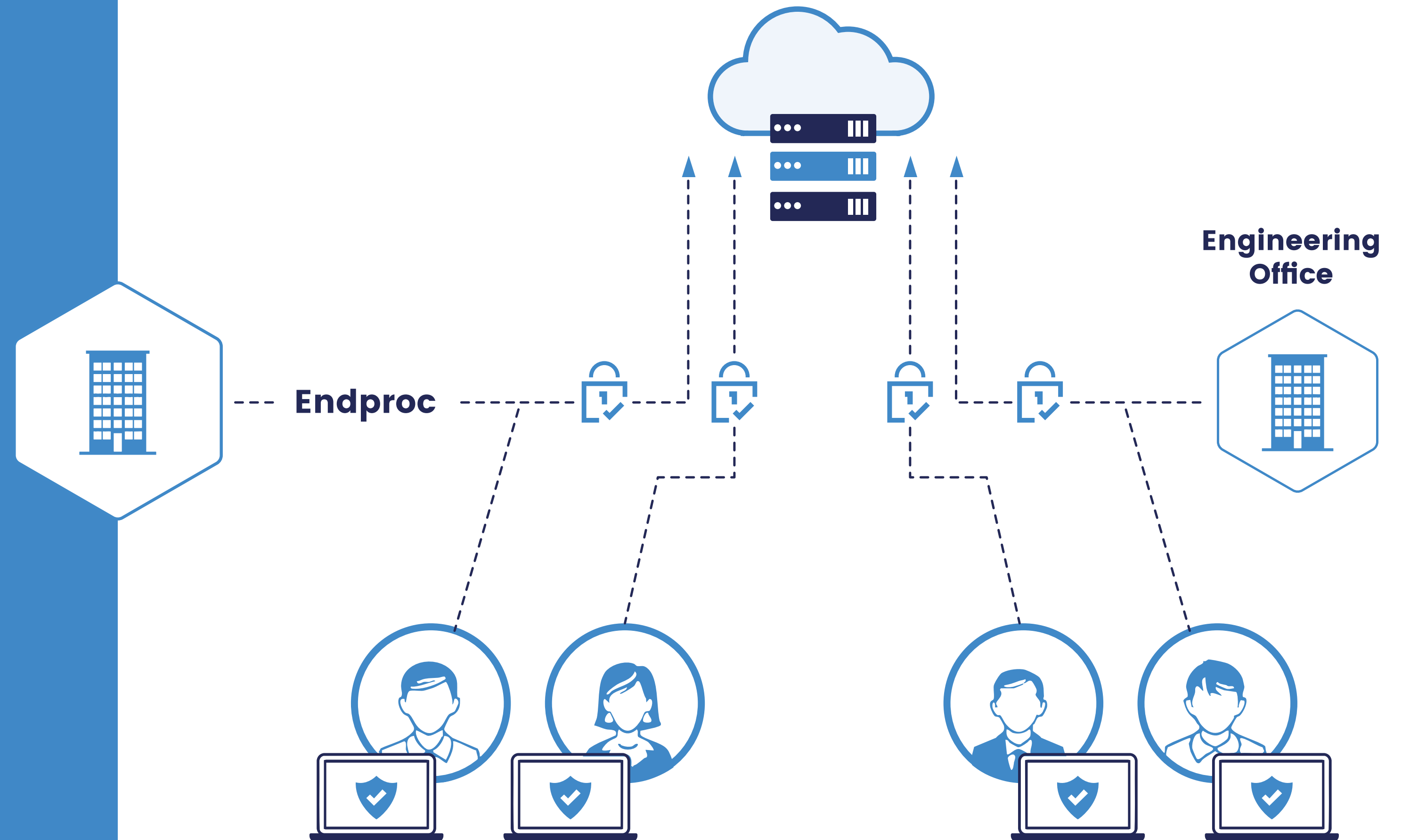
To enhance collaboration



Improve Project Results with BIM and Cloud-Based collaboration tools.

BIM and cloud connectivity facilitate collaboration among all project stakeholders. During the design process, these tools enable seamless teamwork by providing a shared source of information.

This approach facilitates efficient design review, well-organized documentation management, and real-time task tracking for design team members.





Streamline Project Workflow

from model review to Approval

Model Review



Revision of detailed model during design phase reduces the turnaround time and improves accuracy. The revision process focuses on— Constructability,— connections, and dimensional accuracy.

Communication



A Common Data Environment, streamlines communication across project teams by enabling the following capabilities:

- Live Model Reviews and In-model Annotations
- Controlled Action Lists
- Tracking Formal RFIs

Model Approval



Shop drawings can now be reviewed directly within the same 3D model, simplifying and speeding up the approval process. — Connections are verified using engineering software and are automatically transferred into a construction-ready detailed model, ensuring accuracy while saving valuable time for your team.



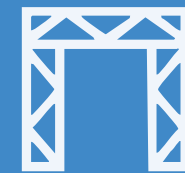
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Accelerating Project Schedules

By integrating the design and detailing phases, and eliminating time-consuming steps in the workflow, project delivery timelines are significantly shortened.



Know the Primary Factors leading to Compressed Schedules



- 01.** Detailing starts earlier.
- 02.** Design issues affecting constructability are resolved earlier by the integrated Design and detailing teams
- 03.** Fabricators receive Fabrication ready documents, when the contract is awarded.
- 04.** RFIs at the fabrication phase are minimized or eliminated.

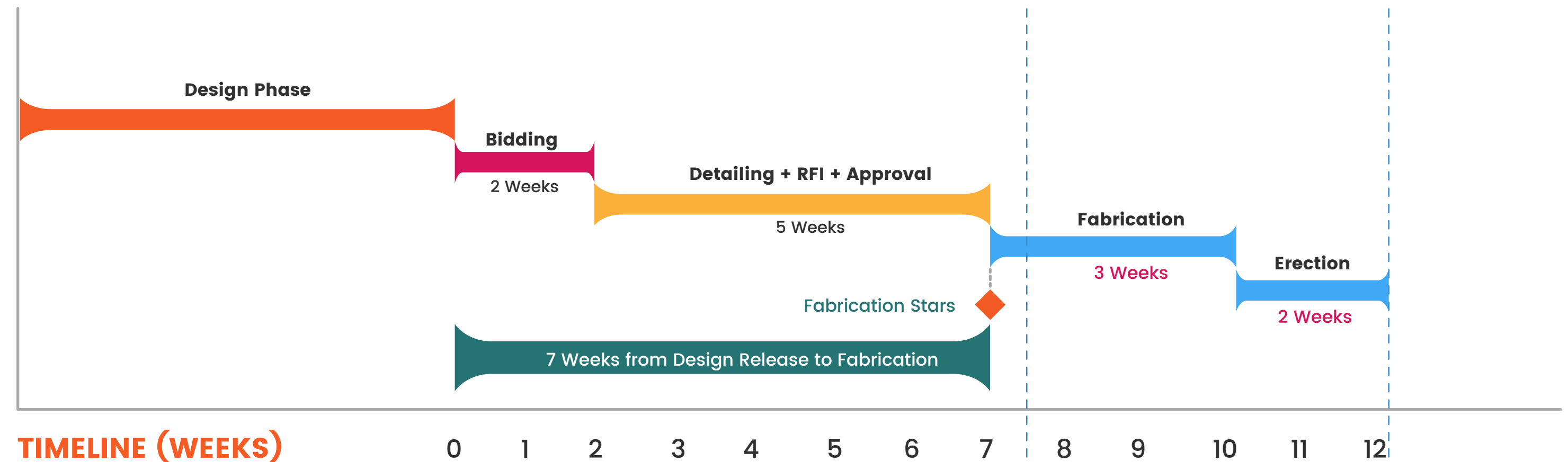


See Schedule Compression in Action

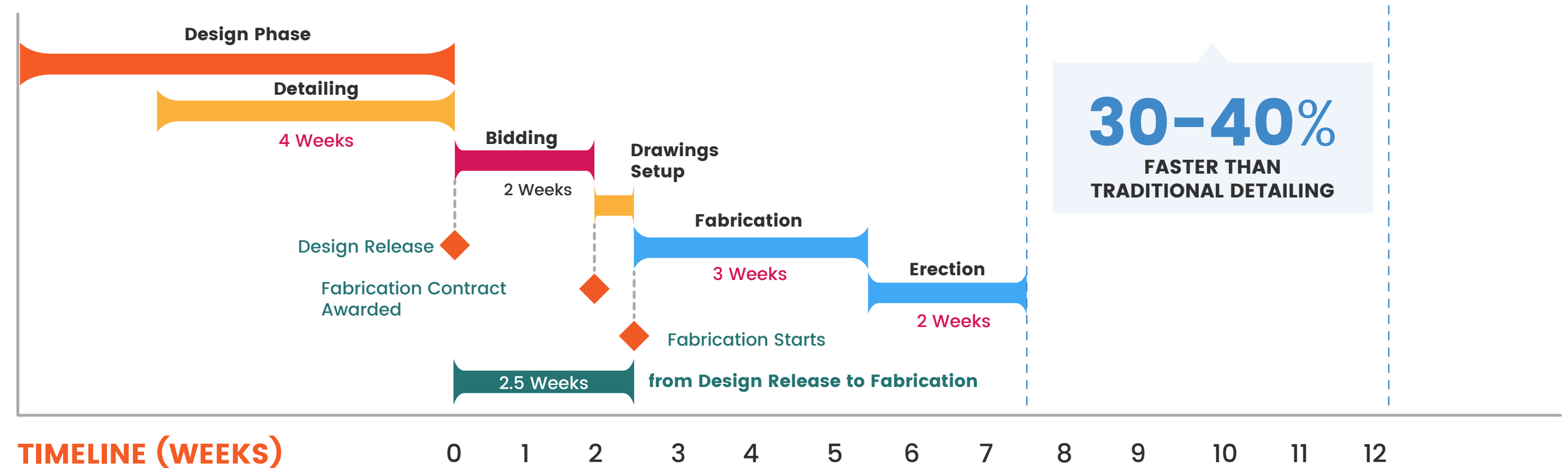
With Integrated Design detailing, your structural steel projects move faster and more efficiently.

For a typical project involving 200 tons of structural steel, you can accelerate delivery by 30% to 40%.

TRADITIONAL DETAILING (LOD 400 MODEL)



INTEGRATED DESIGN DETAILING (LOD 400 MODEL)





04

Reducing Project Costs



Know the Key Factors

Driving Cost Reduction in Construction Projects



Minimizing Change Orders

One of the most effective ways to reduce costs is by minimizing change orders during the construction process. When structural designs are thoroughly detailed and finalized before the release of construction documents, the risk of costly revisions is significantly reduced. Change orders should ideally be limited to design modifications requested directly by the owner.



Accurate and Competitive Bids

Providing precise and detailed project information enables special trade contractors bidding to produce more accurate estimates. This detailed approach eliminates much of the guesswork, reducing the need for risk premiums and fostering more competitive bid pricing. The result? Lower project costs.



Accelerated Schedules

With detailed planning and fabrication-ready designs, fabricators can deliver more quickly, reducing the overhead costs allocated to the project. For general contractors, shorter schedules mean lower site management costs and faster project delivery.



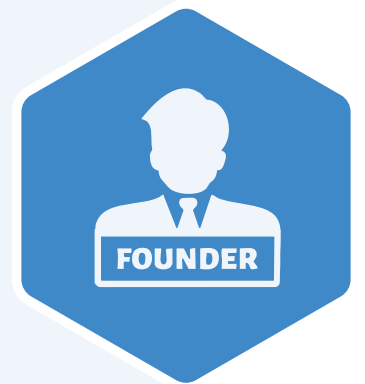
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Providing BENEFITS for all project's stakeholders



Owners

- Start Building Faster, Generate Revenue Sooner
- Obtain more accurate quotes from contractors, as quotes are based on actual material take-offs and erection drawings.
- Accelerate your project schedule.



Engineers

- Resolve constructability issues early, avoiding design Delays.
- Take Control of the Detailing Process, partnering with an experience Detailing company.
- No delays resolving RFIs when the design drawings have been released to fabricators.



**Benefits for all
Stakeholders**



Contractors

- Improve Quote Accuracy with Complete Material Data
- Optimized Collaboration Across Disciplines, the fabrication-ready 3D model enables integration of mechanical, electrical, and plumbing (MEP) components.
- Streamlined project timelines reduce costs and improve overall project's efficiency.



Fabricators

- Quoting Made Easy with Constructible Models and accurate materials take-offs
- It is no necessary to manage RFIs for detailing
- Fabrication can start after 5 days the contract is awarded
- Faster delivery means more business opportunities.



Benefits for all Stakeholders



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