

Construction Cost Estimating

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Revised February 2007

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SUMMARY

Cost estimating a project early in the design phase is more an art than a science. With that in mind Victor O. Schinnerer & Company have created a brief checklist to help guide the estimating process and limit potential risks.

KNOW YOUR LIMITS

Detailed construction cost estimating is a skill generally outside the realm of architects' professional expertise. Estimating requires detailed knowledge of construction materials, methods, sequence, and labor. Contractors acquire this knowledge through direct construction and cost management experience and daily interaction with material suppliers, manufacturers, subcontractors, and workers.

The preparation of construction cost estimates may entail considerable risk because the parties receiving the estimates are likely to rely on them to make critical decisions related to the allocation of capital resources. The construction of any building also involves factors both known and unknown before the project begins. Inevitably, estimating involves making informed, educated, and calculated assumptions or guesses about the cost of future construction projects based on statistical data and experience.

Contractors routinely assume the substantial risk related to construction cost estimating, particularly when they must submit lump-sum bids or guaranteed maximum prices. That assumption of risk is a powerful incentive to sharpen one's estimating skill and produce accurate estimates. The compensation paid to contractors is generally commensurate with the risks assumed.

BROADEN YOUR LIMITS—CAREFULLY

Contractors are not inherently more able than architects to produce accurate construction cost estimates. However, architects who wish to offer construction cost estimating services to their clients should be mindful of the need to acquire the necessary knowledge and skill. Architects must also understand and be prepared to assume the inherent risks and therefore may want to evaluate the level of compensation commensurate with those risks.

CHECK YOUR INSURANCE COVERAGE

Typical professional liability insurance policies might not cover construction cost estimating services, particularly if the architect is expected to provide an express or implied warranty or guarantee of construction cost. Before offering these services, check with your professional liability insurance provider. It may be possible to add an endorsement to your policy (a special provision not included in a standard policy) to provide the desired additional insurance coverage. Alternatively, you might be able to buy other types of insurance to reduce the risk of providing construction cost estimating services.

COST ESTIMATING WITHIN YOUR LIMITS

Architects are often called upon to provide some preliminary construction cost estimating services within their realm of expertise. Some owner-architect agreements obligate the architect to provide these to the owner. An architect's construction phase services also typically include reviewing and signing change orders, which often modify the original contract sum.

COST ESTIMATING CHECKLIST

It may be helpful to review periodically the checklist below in connection with providing these services.

- Review with the client the nature and scope of your estimating services. Confirm that the client understands that you are providing only an opinion about possible costs, not an exact estimate that can be used as a reliable

maximum figure. Confirm that the client understands the difference.

- Be conservative. Prepare accurate area and material projections, and use cost data that are both current and local.
- Prepare cost estimates using as complete a set of drawings and specifications as possible.
- Obtain accurate information from manufacturers and suppliers about the cost of materials or systems. Obtain written guarantees that quoted prices are firm and will not change for a specified period of time.
- Define “cost estimates” in a written contract. Ambiguities about cost estimating in a written agreement could be interpreted to mean a guaranteed maximum amount.
- If the client insists on a cost ceiling for budgeting purposes, suggest that the client contract directly with a professional construction cost estimator.
- After every project is complete, compare actual costs with projected costs to evaluate your cost estimating proficiency and improve your skill.

RESOURCES

More Best Practices

The following AIA Best Practices provide additional information related to this topic:

- 18.02.03 Before You Sign: An Owner-Architect Agreement Checklist
- 12.01.03 A Primer on Project Delivery Terms
- 17.01.04 Legal Elements of Contracts

For More Information on This Topic

See “Construction Cost Management” by Brian Bowen, FRICS, *The Architect’s Handbook of Professional Practice*, 13th edition, Chapter 14, page 462.

See also the 14th edition of the *Handbook*, which can be ordered from the AIA Bookstore by calling 800-242-3837 (option 4) or by email at bookstore@aia.org.



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Key Terms

- Design
- Design context
- Cost
- Cost estimating
- Cost breakdown



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