

## INTRODUCTION TO CONTRACT BONDS (152-1)

EO 1. A **CONTRACT BOND** guarantees a contractor's performance on a construction contract. A **surety bond** is a written contract in which one party (**the surety**) guarantees that another party (**the principal**) will fulfill his obligations to a third party (**the obligee**). **Suretyship** imposes the obligation to pay the debts of or to remedy the contractual default of another.

### Three forms of contract suretyship:

1. **Bid bonds**--guarantee that a contractor will enter into the contract at the bid price and provide performance and payment bonds if his bid is chosen.
2. **Performance bonds**--guarantee performance of a contract.
3. **Payment bonds**--guarantee payment of labor, materials, and subcontractor bills.

**THE NEED FOR AND THE PURPOSE OF CONTRACT BONDS--The principal** (contractor) has primary responsibility under the bond.

Performance of the underlying contract extinguishes the surety's obligation.

Default triggers the surety's obligations *if* the **obligee** (owner) has fulfilled its duties to pay for work, to give the surety notice of material changes in the contract, *and* to provide the surety with status reports.

If the obligee defaults on the contract, the principal and surety may be released from their duties under the contract and bond.

The surety has an obligation to the principal to refrain from making payments that are not clearly due.

**Public projects** (federal, state, and local projects) make up the bulk of surety contract bond work.

**The Heard Act** (1894) required contractors on public works to post surety bonds and to make prompt payments for labor and materials. In 1935, the Heard Act was replaced by the Miller Act.

**The Miller Act** requires contractors to post separate payment bonds to protect the rights of certain subcontractors and suppliers on federal construction projects.

**Construction Industry Payment Protection Act of 1999 (CIPP)** revised the Miller Act to require a 100% payment bond on any federal construction project over \$100,000.

State **Little Miller Acts** cover public construction at the state level.

### People who benefit from surety bonds:

1. **Project owners**--Prequalification eliminates the need to investigate contractors. **Bonds guarantee the contractor with the winning bid will** enter into the contract, post appropriate bonds, perform the contract, *and* pay for labor and materials.
2. **Laborers, subcontractors, and suppliers--Payment bonds** guarantee payment for services on a bonded project.
3. **Lenders**--The owner's bank has the surety's guarantee that the work will be done.
4. **Architects and engineers**--The surety confirms the contractor can translate the plans into a finished project.
5. **Owners' risk managers**--Bonds protect against contractor failure.
6. **Taxpayers**--Competitive bidding awards contracts to the lowest bidder.
7. **Contractors**--Bonds establish credibility and eliminate the need to post letters of credit.

**THE IMPORTANCE OF THE CONSTRUCTION INDUSTRY IN THE ECONOMY**--The construction industry contributes about 5% of the gross domestic product.

**There are four broad classes of construction contractors:** general building contractors, heavy and industrial contractors, highway and municipal contractors, *and* utility contractors.

**The two main sources of US construction work are** 1) private construction (77% of total new construction) *and* 2) public construction (23% of total new construction).

EO 2. **THE DESIGN AND CONSTRUCTION PROCESS:**

1. **The design process**--The architect prepares sketches.  
Engineers determine the specifications for structural components (**civil engineers**), electrical components (**electrical engineers**), *and* climate control, ventilation, and plumbing (**mechanical engineers**).
2. **Construction management--Construction managers** minimize costs; maximize facility utilization; and may prepare specifications, review bids, award contracts, manage construction, and approve billings and payments. Their roles range from merely coordinating construction to assuming all the risks and obligations of an independent contractor.
3. **Design/build**--Some contractors offer both design and construction services. [*See below.*]
4. **Financing--Projects use two types of financing programs:**  
**A construction mortgage** provides financing *during* the construction period.  
The owner makes interest payments, but *not* principal payments.  
**A permanent mortgage** is used *after* construction is completed.  
The owner makes *both* interest payments *and* principal payments.
5. **Selection of contractors**--A negotiated construction contract is used when the owner has prequalified a trusted contractor. The competitive bid process works best when the design professional has prepared thorough, easily understood plans.
6. **Bidding and prejob preparation**--The contractor's estimating department determines the costs of completion. Most general contractors accept subcontractor bids for specific phases of the project. A contractor's final bid incorporates the bids from subcontractors and materials suppliers.  
**Before the contractor mobilizes, it must** execute the contract, give certificates of insurance to the owner, *and* obtain permits.  
**Mobilization** includes moving equipment to the site, installing temporary utilities, converting bids into contracts and supply orders, *and* obtaining material delivery dates and subcontractor work dates.
7. **Construction**--First, contractors clear the property and excavate, build foundations and footers, and erect structural walls.  
Then contractors complete specialty items such as flooring, painting, roofing, elevators, windows, ceilings, and mechanical, electrical, interior, and finishing work.
8. **Scheduling**--Efficient contract completion requires proper sequencing of activities.  
Some contractors use a bar chart schedule.  
Others use more sophisticated methods, such as the **critical path method (CPM)**, which identifies the major elements of the construction project, gives each element a time estimate, and incorporates them into a master schedule.  
**The critical path** shows the logical progression of work activities that must be completed to finish the project within the time (and money) budget.
9. **Maintenance**--Once the project reaches substantial completion, the owner compiles a **punch list** (list of the remaining finishing tasks) and the maintenance period begins.  
Many contracts call for a one-year maintenance period during which the contractor is required to repair any defective work at no cost to the owner.

**THE TWO BENEFITS OF DESIGN/BUILD CONSTRUCTION:**

1. **Reduced costs**--The owner doesn't pay both a design fee and construction overhead and profit.  
The contractor knows the costs associated with the construction techniques and materials.
2. **Reduced planning time**--Communication delays are eliminated.

*But*, many design/build contractors do *not* have in-house design professionals. Also, governmental regulations may require certification by a professional engineer or registered architect prior to approval. If the design/build contractor is financially weak or lacks insurance, the owner may not recover for design failures or lack of compliance with governmental regulations.

### **THE SIX STAGES OF THE DESIGN PROCESS:**

1. The design professional determines the client's current and future needs.
2. The design professional evaluates the existing facilities for renovation potential and the ability to handle future needs.
3. Engineers, architects, and attorneys obtain zoning approvals and verify that plans meet government regulations.
4. The owner acquires the land or building.
5. The owner obtains the building permit.
6. The owner arranges financing.

### EO 3. **THE TWO MAJOR TYPES OF CONSTRUCTION:**

1. **Heavy and highway construction** include highways, bridges, dams, roads, railroad beds, and similar projects.
2. **The general building trades** include frame buildings, masonry construction, structural steel buildings, and concrete structures.

### EO 4. **THE SIX MAJOR TYPES OF CONTRACTORS:**

1. **General building contractors** enter into direct contracts with project owners and coordinate entire projects. Most perform some work themselves and hire subcontractors for the rest. General building construction includes commercial, industrial, residential, and public works.
2. **General engineering contractors** build large projects such as bridges, dams, and sewage plants. The bulk of their work is owned by public bodies and is subject to bonding.
3. **Highway and heavy contractors** build roads and install underground pipes, mains, and drains.
4. **Subcontractors** perform specialized work such as excavation, roofing, masonry, drywall, painting, electrical, plumbing, and landscaping.
5. **Material suppliers** include manufacturers and distributors of materials and equipment.
6. **Design/build contractors** both design and build the project. If the project does not conform to the owner's requirements, the contractor has not fulfilled all obligations under the contract.

**Set-aside programs** require successful bidders on public contracts or subcontracts to set aside a certain percentage of work for minority-owned business enterprises (**MBEs**), disadvantaged business enterprises (**DBEs**), or women-owned business enterprises (**WBEs**).

Bids must designate the qualifying subcontractors and certify that they will be used on the project. Failure to list appropriate subcontractors makes a bid nonresponsive.

### EO 5. **THE DIVISION OF LABOR BETWEEN**

1. **THE OWNER AND THE OWNER'S REPRESENTATIVES**--The architect designs the facility, prepares plans and specifications, estimates project costs, and receives bids. The architect and owner are jointly responsible for giving the contractor thorough plans and specifications.
2. **THE CONTRACTOR AND ITS REPRESENTATIVES AND SUBCONTRACTORS**--The general contractor coordinates the subcontractors and is responsible for compliance with the plans and specifications. Each subcontractor is responsible to the general contractor for its own portion of the work.

EO 6. **TEN FACTORS A CONTRACTOR MUST POSSESS TO PROSPER AND GROW**--1) adequate working capital, 2) an appropriate capital structure, 3) bank credit, 4) a motivated team of quality personnel with complementary talents, 5) good estimating and cost accounting systems, 6) timely financial reports and controls, 7) well-maintained equipment, 8) a backlog of profitable work, 9) a balanced overhead structure, ***and*** 10) continuity of ownership and management.

## **NINE FACTORS THAT MAY CAUSE A CONTRACTOR TO FAIL:**

1. **Project size increase**--Large projects require additional resources and careful planning. A few small jobs provide better cash flow than one large job, because the small jobs would be in different stages of completion. Good cash flow in the early stages and monthly payments in the middle stages offset the contract retainage (amount withheld by the owner pending completion) of projects nearly completed.
2. **Geographic unfamiliarity**--Expansion into new territories involves new procedures and regulations, local bias against newcomers, varying geological and weather conditions, and problems with local labor markets.
3. **New types of construction**--Diversification can increase opportunities for growth, but contractors often underestimate the entry cost (including the learning curve cost). Differences between public and private work include bid list qualifications, the bid selection process, the amount of collaboration, the quality of work, and the number of change orders.
4. **Key personnel replacement**--**A construction firm has three primary functions:**
  1. estimating and sales,
  2. construction, *and*
  3. administration and accounting.The loss of a manager in one of those areas puts the company at risk until a replacement is found.
5. **Managerial immaturity**--As a company grows, it must delegate authority, institute complex procedures, and hire more sophisticated personnel.
6. **Overextension**--A contractor may undertake a larger than usual job or more jobs than usual. Sureties view overextension in terms of aggregate contract backlog (costs to complete) relative to the contractor's working capital and net worth. They want working capital that covers the contract retentions plus a margin for slow accounts receivables.
7. **Continuity problems**--The contractor fails to develop a succession plan with buyout terms that preserve the company's financial status.
8. **Subcontractor failure**--**Problems with subcontractors** delay contract completion, interrupt progress payments, reduce job profits, *and* trigger liquidated damages for delay. Sureties often require contractors to bond their subcontractors.
9. **Nonpayment by owner/obligee**--Reductions in cash flow may cause the contractor to default on obligations. An owner's nonpayment may result from insufficient financing, failure of the lender or owner, the contractor's default, unclear contract specifications, significant change orders, *and/or* disputes between the owner and contractor.

## EO 7. **ISSUES ADDRESSED BY THE 2008 CONTRACT SURETY INDUSTRY REPORT:**

1. **Background**--The surety industry absorbed large losses in the late 1990s and early 2000s and tightened underwriting and raised rates to correct the market.
2. **Bond premiums**--Surety bond premiums have now stabilized. Sureties have shifted from 'blanket' pricing to more contractor- and project-specific pricing, which considers the contractor's size and bonding capacity and the project's locale, size, and type.
3. **Capacity**--Since 1990, seven of the top ten surety companies have consolidated or left the market, thus reducing capacity in the surety bond market. Small contractors might be unable to meet the more stringent current underwriting standards. Qualified, financially stable, midsized contractors (accounts under \$100 million) should be relatively unaffected by the changes. Jumbo contractors (accounts over \$250 million) should expect pricing increases, tighter underwriting conditions, co-surety arrangements, and caps on performance and payment bonds. Extremely large projects may have to break into smaller segments or form joint ventures.

4. **Underwriting**--Sureties may require more complete information and be less tolerant of late or incomplete information.  
Sureties have increased their emphasis on **the three Cs of prequalification** (capital, capacity, and character--see below), with extra focus on indemnity, work on hand, aging of accounts, interim financials, *and* timely, audited financial statements.  
**Contractors will be required to** conserve cash, prepare both short-term and long-term strategic plans, *and* provide current and detailed financial statements prepared by construction-oriented CPAs.

**The three C's of prequalification:**

1. **Capacity**--describes the contractor's ability to perform projects, including analysis of his organization, performance record, plant and equipment, work-in-progress, credit report, management control, *and* continuity planning.
2. **Capital**--describes the contractor's financial ability to absorb risks.
3. **Character**--describes the contractor's moral and ethical nature.