

THE BASIC BOND BOOK

SECOND EDITION



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The Associated General Contractors of America
National Association of Surety Bond Producers

This book is dedicated to the memory of John J. “Jack” Curtin, Jr., who tirelessly gave of himself to the surety industry as an advocate, an educator, and a leader.

ACKNOWLEDGEMENTS

The Basic Bond Book provides an overview of contract surety bonding. This publication is intended to be a resource for contractors, architects, engineers, educators, project owners and others involved with the construction process.

The Basic Bond Book is a joint publication of the Associated General Contractors of America (AGC) and the National Association of Surety Bond Producers (NASBP) and this revised edition is a project of the NASBP Professional Development Committee.

The principal author of the first edition was the late John J. Curtin, Jr. Other contributors to the first edition were Denton R. Hammond, Daniel D. Waldorf, and the law firm of Ernstrom & Drete.

Primary contributors to the second edition of this book were Erle Benton, Matthew Cashion, David Castillo, Edward Gallagher, Bud Herndon, Ann Latham, and Mark McCallum. Primary reviewers of the second edition were David Hanson, Marvin House, Steve Warnick, Michael Youngblut, and Marco Giamberardino. We would like to thank all of the individuals who have participated in making this publication possible.

FORWARD

As you will see from the original acknowledgement, the principal author of The Basic Bond Book was John J. Curtin, Jr. Known as Jack, he was also the leader of this book's revision project. Jack's long term and continual involvement with the National Association of Surety Bond Producers (NASBP), specifically its governmental affairs efforts, educational initiatives and as a Past President, created a loyal group of people that could be called admirers, former students, and co-teachers; but most importantly, friends.

There are those that have passion for what they do, perform above all expectations in their endeavors and relish the accolades that come with the recognition. Then there are those that have passion, achieve beyond their expectations, yet shun the accolades that come with it, and in the midst of it all, touch everyone's life they come in contact with in a profound way. This was Jack Curtin. Many of us can point to the beginning of our involvement with NASBP to the time when we met Jack.

Jack completed the revision's rough draft just before he passed away on September 20, 2008, culminating a project of passion; bringing The Basic Bond Book forward, reflecting economic, cultural and industry specific changes affecting the surety business.

Jack Curtin's life experiences taught him that when working well with others, the sum of the whole team was greater than its individual members. So it is with this book. Through the efforts of NASBP, specifically the Professional Development and Education Committee, Jack's project of passion became our labor of love; this completed revision of The Basic Bond Book.

Jack understood the value that surety bonds bring to the construction process. But more importantly, he understood, and tirelessly preached, the real value is that which a professional surety producer brings to the process.

"Good theater" is a phrase Jack often used as he led students, as well as when he taught others the skilled art of classroom instruction. His joy was watching new surety practitioners grow and succeed in the surety industry. Above all Jack was a linguist and a student of the history of surety. It is our sincere hope that this completed revision fulfills this book's basic intent Jack previously penned, simplifying some of the mysteries of this business we've come to know as "the mistress of surety".

With this completed revision, it is our desire that Jack's words and teachings will live for generations to come.

NASBP Professional Development and Education Committee

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Chapter 1

WHAT IS SURETY?

The concept of surety is in fact an ancient one and encompasses all of the elements in Webster's dictionary definition:

Surety—1. The state of being sure; certainty; security; sure knowledge. 2. (a) That which confirms or makes sure; a guarantee; ground of confidence or security. (b) Security for payment or for the performance of some act. 3. A sponsor or a bondsman. 4. Law: One bound with and for another who is primarily liable (the principals); one legally liable for the debt, default, or failures of another.

In the United States, corporations have issued surety guarantees for more than 110 years. Most U.S. corporate sureties are insurance companies, primarily because, as large financial institutions, they have the capital necessary to make large commitments in the form of surety bonds. The regulation of those companies engaged in the business of corporate suretyship is the responsibility of state insurance commissioners.

Because insurance companies are the primary issuers of surety bonds in the United States, there is a common misperception that bonds and insurance policies are one and the same. This is not the case.

While surety and other lines of insurance are analogous in many respects, they are underwritten on different premises and perform in markedly different ways. Understanding the similarities as well as the differences is fundamental to an intelligent procurement and use of bonds.

The issue of indemnity, whether in the form of insurance or surety, is the same. Indemnity, in layman's terms, is to make whole, or return a person or party to the position they held before the loss.

Insurance is a two-party risk transfer mechanism whereby one party pays to have another party protect it from certain well-defined risks. In purely theoretical terms, insurance is a pool created by a large number of people exposed to a common risk. Each member of the pool contributes to it and any members who suffer loss as a result of the risk assumed may be compensated for that loss by the pool. The contribution to the pool is determined by an actuarial study of the probability of loss. The probability factor determines how much will be charged to pay losses while still leaving the pool solvent.

Suretyship, on the other hand, is a three-party relationship which is more in the nature of a credit transaction. Unlike insurers, sureties do not expect to suffer losses. This may be unrealistic, but it is an underlying principle of suretyship and is the expectation of the sureties. The other fundamental difference between surety and insurance is that sureties demand reimbursement from their principals (and indemnitors) in the event of a loss. The indemnification of the owners or third parties is a key component of the surety transaction. In theory, the only time a surety will pay on a loss is when the contractor does not do what it promised, via contractual obligations.

Surety is also a risk transfer device in that the bearer of the risk (in a construction context, the person or entity commissioning and paying for the project) desires to be relieved of risk associated with the failure of a contractor to perform its obligations. Because the contractor may not be able to credibly assure an owner that the contractor will not fail and will indeed perform its contractual obligations, the owner turns to a third party who can give adequate assurance of performance. The third party, the surety, must be financially viable if its assurance or bond is to be considered credible. This is the primary reason why the business of corporate surety has fallen to the insurance industry.

To some extent, there is an element of certitude as to the probability of loss in surety just as there is in insurance. The history of surety over the years has clearly demonstrated that the probability of the incidence of contractor failure is predictable within a certain range. The Surety Fidelity Association of America has structured programs that allow for the accumulation of surety loss data that can be used by sureties in the determination of rates appropriate for their business models.

It is worth noting that the surety premium it charges is based upon the cost of delivering the services it provides and making a modest profit, but not with the expectation of paying losses.

No individual would guarantee a bank loan for another knowing that there was a significant possibility that the loan would not be repaid. Similarly, bankers do not loan money to borrowers who are believed incapable of repaying them. If there is a doubt regarding the borrower's ability to repay, a bank will take sufficient security or collateral to assure itself of repayment regardless of what happens to the borrower. These principles are manifested in surety and are fundamental to an understanding of the differences between surety and other lines of insurance.

Insurers analyze risk on the basis of how often a covered peril will occur: the probability that a house will burn down,

a car will be in an accident or stolen, a worker will be injured, or a lawsuit will take place. The surety analysis is focused on the conclusion that it can reasonably guarantee that its principal will be able to perform its contractual obligations.

Once the risk of failure has been transferred to surety by the requirement that a contractor be bonded, the surety becomes a risk sharer. By agreeing to accept a contract for a specific construction project, the contractor, or principal on the bond, assumes various financial and legal risks inherent in that contract. The surety, after doing its underwriting, determines that the risks being assumed by the contractor are within the capabilities of the contractor, and issues its bond stating that, if the contractor cannot fulfill its contractual obligations (assuming all contractual obligations owed to the contractor have been met), the surety will do so.

Having made such a judgment and having issued its bond, the surety fully expects the contractor to be successful. This is why one often hears that a surety is supposed to be loss-free. In theory it is, but theory does not take into account uncontrollable events such as the oil embargo of the 1970s, recessions, or government budget deficits that result in a lack of funding for construction. Nor does the theory of surety allow for management failure on the part of the contractor, inexperienced or uninformed judgments by analysts or underwriters, or the inevitable human error.

At the outset it was indicated that the concept of surety is ancient, one entity guaranteeing the obligations of another to a third party. In the United States, surety became a business in the mid-1880s. In 1894 the Congress of the United States passed the Heard Act, which codified the requirement for surety on U.S. government contracts and institutionalized the business of surety. The Heard Act was revised in 1935 by the Miller Act. The Miller Act was intended to make sure bidders on government work were qualified to do the work and that the taxpayers of the United States would get what they were paying for—a construction project done in accordance with the plans and specifications. In addition, the act assured that those providing labor and materials to the contractor would receive what they were owed, as law precludes them from placing a lien on federal funds or property to secure their payments. The passage of the Miller Act prompted the passage of similar laws in all the states to achieve the same ends on state-funded construction projects.

In the private sector of construction there is no mandate for the use of bonds, although governments require bonds for those commissioning private construction projects as well as for those who fund them. The private sector,

however, is more attuned to taking risk than government. Therefore, the rule that governs the requirement of bonds in the private sector is the “prudent man rule.” The banking crisis of the 1990s will undoubtedly redefine the “prudent man rule” and the economic concerns of the early 21st century should reinforce this rule as it relates to the use of surety in private construction. This should increase bond requirements on private projects, which had already grown significantly through the 1980s. The measure of the value of surety lies in two areas.

The first measure is in the avoidance of loss. Surety, done correctly, should result in projects consistently completed and all bills paid. From an economic standpoint the other measure of surety value (and to some, the more significant) is what is paid out under a bond, whether the loss to the surety was caused by the failure of the contractor or an error in judgment on the part of the underwriter. From the mid 1980s to early 2000s, sureties paid out billions in losses. Had those monies not been paid by sureties, these costs would have been borne by taxpayers, laborers, subcontractors, material suppliers, and their dependents and families.

WHAT IS A SURETY BOND?

In technical terms, what is a bond? A surety bond is a promise to be liable for the debt, default or failure of another. Contract surety bonds are three-party instruments by which one party (surety) guarantees or promises a second party (obligee) the successful performance of a contract by a third party (principal). As a practical matter, a bond is also an instrument of prequalification, representing that the principal has been examined by the surety and found to be qualified to complete the obligation. The functions of the bond shall be discussed in some detail after some basic terms are defined.

The obligee is the entity or individual to whom the bond is given; in construction this usually is the project owner. The obligee also can be a general contractor that has taken the precaution of bonding its subcontractors. The surety is the financial institution, entity or individual giving the bond or guarantee.

The principal on a bond is the person or entity on whose behalf the bond is given. It is the principal’s obligation or undertaking that is being guaranteed by the surety.

A surety bond is only as good as the surety issuing it. A surety that is not itself financially sound cannot add to the credit standing of its principal. Surety is regulated as a type of insurance, and to some extent an owner, contractor or subcontractor can depend on the state insurance departments and the United States Department of the Treasury to perform financial due diligence. There are also

several private organizations, most prominently A.M. Best Company, that issue financial ratings of insurers. Although the bond is normally legitimate, a prudent owner, contractor or subcontractor should take steps to assure that the bond will, in fact, provide the promised protection.

CORPORATE SURETIES

Regulated insurance companies write the vast majority of surety bonds. Contractors and subcontractors should check with the insurance department of the state where the bond is issued to verify that the surety company is authorized to write surety bonds. Surety companies wishing to write Miller Act bonds on federal construction projects must possess a certificate of authority from the U.S. Department of the Treasury. A list of surety companies approved to write bonds to the United States, Department Circular 570, is available at www.fms.treas.gov. The name of the surety and the name of the insurance company should be an exact match. There are instances in which unlicensed entities used a name that was very similar to a legitimate surety company.

The fact that the surety company is genuine and solvent is not sufficient if the company did not authorize the bond. The easiest way to confirm that the bond was authorized is to contact the surety directly. Treasury Department Circular 570 includes the telephone number of the Treasury Listed sureties, and The Surety & Fidelity Association of America's website has a Bond Obligees' Guide that identifies whom to contact to verify bonds issued by its members.

INDIVIDUAL OR PERSONAL SURETIES

There is a long history of fraud by individuals claiming to act as sureties on construction contract bonds. For state or private projects, surety is regulated by the states as a type of insurance. Unfortunately, state insurance departments have typically enforced their laws by issuing cease and desist orders, which have not proven to be effective in preventing abuse.

The United States will accept individual surety bonds on federal government construction projects if certain stringent requirements are met. The surety must place cash or cash equivalents equal to the amount of the bonds in escrow with a federally insured financial institution or provide the government with a deed of trust on real property to secure the bond. See Federal Acquisition Regulations (FAR) §28.203, et seq. (48 C.F.R. §§28.203 et seq.).

Prior to amendments effective on February 26, 1990, the FAR permitted acceptance of individual sureties based on a sworn statement from the surety that his or her net worth was sufficient to cover the bond obligations. In many

instances, this sworn statement was found to be false and the assets illusory. The FAR amendments required the deposit of cash or cash equivalents, and excluded various types of assets that fraudulent individual sureties often claimed on their sworn statements. The change was comparable to a bank stopping unsecured lending based on the borrower's representations and instituting secured lending based on a security interest in specific, verified assets.

There is no central authority, such as the U.S. Department of the Treasury, to vet proposed individual surety bonds. The contracting officer has to evaluate them during the course of a particular procurement. This places a significant administrative burden on federal contracting officers who possess differing levels of knowledge regarding surety bonds and the kinds of assets required to back individual surety bonds under the FAR. Contracting officers are sometimes fooled by artfully crafted submissions that appear impressive but have no substance. See, U.S. Dept. of Treasury, Financial Management Service, "Special Informational Notice to All Bond-Approving (Contracting) Officers," dated February 3, 2006 at http://www.fms.treas.gov/c570/special_notice.pdf

An owner or prime contractor tendered a bid or performance bond, or a subcontractor or supplier asked to provide labor or material in reliance on a payment bond, should not assume that someone else has done its due diligence. Anyone relying on a bond should obtain a copy and verify that there is a legitimate surety that will be financially responsible. If the surety is not a regulated insurer, the assets pledged to back the bond should be verified. An attorney can help check on any criminal record, bankruptcies, or cease and desist orders issued against the purported surety.

KINDS OF CONTRACT BONDS

The majority of bonds given by a surety in conjunction with construction projects are bid bonds, performance bonds, and labor and material payment bonds. These types of bonds are generally referred to as contract surety bonds. They can be separate instruments or combined into one or two instruments.

A bid bond is provided as the basic instrument of prequalification. Prequalification in this context means that the surety has investigated the contractor sufficiently to be convinced that it can safely issue a bid bond on a given project. The bid bond states that the contractor will enter into a contract if the contractor's bid is accepted, and the contractor will furnish whatever additional bonds are required. If the contractor fails to do either, the bid bond specifies the amount, called the penalty, that may be paid as damages. The bid bond may

be a forfeiture bond where the surety is liable for a fixed amount of the bond as expressed in dollars or as a percentage of the amount of the contractor's bid regardless of the damages to the owner. Sureties are generally reluctant to issue forfeiture bonds as bid security. Usually the surety, under a bid bond, may be liable for the lower of the bid bond penalty or the difference between the contractor's low bid and the contract price the owner must pay to the firm ultimately awarded the contract. In no event will the surety be liable for more than the penalty stipulated in the bond.

The performance bond assures that the principal will perform the work it is contracted to perform in accordance with the contract plan and specifications, and perform all the other obligations in the construction contract. If the contractor fails, the owner has a right of action against the surety to secure the completion of the project and enforce the owner's rights under the contract. The payment bond assures that certain suppliers of labor and material on the project will be paid subject to restrictions and limitations imposed by statute, the contract or the bond.

There are other bonds that can be required in the context of construction, but for our purposes discussion will first be limited to these three types.

PREQUALIFICATION

In the public sector, bonds are required by federal, state, county and municipal governments for purposes of prequalification, and to assure successful completion of public construction contracts.

With open competitive bidding on government projects, some method of screening out unqualified contractors must be used. Many government agencies attempt to prequalify contractors by the use of various formulas or methods. Some government agencies employ a dual system of in-house prequalification and a bid bond requirement for individual projects. Some use certified or cashier's checks as bid security and some use bid bonds exclusively as bid security. Regardless of the method used, the certified check or the bid bond enables the awarding authority to assess a monetary penalty as damages if the low bidder fails to enter into a contract or fails to provide any required bonds. The prequalifying of contractors directly by government agencies is limited because the government's analysis must be driven more by quantitative rather than qualitative factors. Every aspect of governmental pre-qualification must be numerically defensible so that the government agency being charged with the responsibility is not left open to a challenge on the basis of favoritism, or worse.

Professional prequalification, as done by surety, must by necessity be more qualitative than quantitative. Balance sheets do not make mistakes, people do. Financial statements are scorecards. They demonstrate how well a contracting firm is performing. They also show the resources available to the firm with which it can continue to operate and mitigate or absorb risks or mistakes. The purely quantifiable analysis, however, is less capable of measuring innovative and managerial skills than is the qualitative analysis of the surety. In addition, different state prequalification requirements can inhibit a contractor's ability to market the firm's services within its geographic area of operations; it may have a prequalification limit in one state that is significantly different from what it has in others.

CERTIFIED CHECKS AS BID SECURITY

From the contractor's and surety's standpoint, the use of certified checks as bid security has several disadvantages. One negative factor is that an awarding authority, without the prior acknowledgement of the bidder, can cash a certified check given as bid security. If the contractor feels that its bid deposit has been wrongfully appropriated, the contractor must sue to get its money back. Further, the surety loses control over a contractor that uses checks in lieu of bid bonds. A bad job bid with a certified check could affect an entire work program if it puts the company in jeopardy.

The certified check throws the responsibility for underwriting the contractor onto the shoulders of the banker, and very few bankers want that responsibility. If the contractor is low bidder and a surety declines to provide performance and payment bonds, the contractor must either find another surety very quickly or suffer the loss of either all or part of the bid security. Obviously, there is the potential to impair the contracting firm's banking relationship and possibly its financial structure.

The bid bond is the best form of bid security in that it allows the surety to review the contract as well as the contractor's ability to perform the contract before the project is bid. A drawback to using a bond, from the owner's standpoint, might be the fear that the surety will resist parting with its money if it feels that the owner is wrongfully assessing damages against the contractor. A frequent example of such a situation is one in which the contractor chooses to withdraw a bid for what the contractor and the surety believe is good and sufficient reason, and the owner does not consent to the withdrawal.

BONDS FOR PRIVATE WORK

The same considerations apply in the private sector, where bonds are required to secure the owner's investment in

the property to be built, altered or rehabilitated. In many cases, if the owner does not require bonds of the contractor, the bank providing construction financing for the project will require them. The bank will want assurance that the money it is lending will result in a completed project, which is the bank's fundamental collateral for its loan. The bond will also assure that the labor and material bills will be paid, thereby leaving the property unencumbered by claims from unpaid subcontractors and material suppliers.

FUNCTIONS OF A SURETY

The primary functions of a surety:

- Prequalifying the contractor.
- Providing guarantees of contractual performance and payment of bills in the event of a contractor's inability or unreasonable unwillingness to do so.

The secondary functions of the surety involve:

- Expediting a project by assuring subcontractors and material suppliers of payment or the creditworthiness of the prime contractor.
- Keeping the contractor out of trouble by refusing to guarantee projects on which the contractor may be incapable of performance or on which the risks are too great.
- Providing management assistance to the contractor.

Chapter 2

WHAT THE SURETY LOOKS FOR IN A CONTRACTOR

As the surety is concerned with guaranteeing a contractor's performance of the contract and the payment of bills, it is logical that a surety would want all the information it can get to be assured of the contractor's ability to perform and pay.

CAPACITY TO PERFORM

To be sure of the contractor's ability to perform the proposed undertaking, the surety will want the following information from the contractor:

1. RESUMES of the contractor and the key people in the contracting organization will illustrate their educational and professional backgrounds. If a number of people are working for the contracting firm, include resumes of the key inside administrative staff as well as the key outside field personnel. Be as objective as possible in the evaluation of the contracting firm's prior history. Be sure to include major projects and the employees' role in the execution of those contracts.
2. A TRACK RECORD, which is simply an objective listing of work successfully completed, means a lot to a surety. If the principal of the contracting firm was a project manager or superintendent for someone else, provide a list of the jobs supervised. If the firm has been in existence for a while prior to application to a surety, list the projects it has completed, the location and description of each project, the amount each cost, and the year in which each was completed. Some sureties will ask for the largest work program handled to date by the firm. If possible, include the profit earned on the projects listed, particularly if the profit level is consistent with prior profit levels or exceeds the norm.
3. TRADE REFERENCES should be available in the form of names and addresses of owners, architects, subcontractors, general contractors, material suppliers, etc., with which the firm has worked. Any letters of commendation that the firm may have received should be volunteered.
4. An ORGANIZATIONAL CHART of the firm should be provided, if applicable, as well as copies of brochures and website addresses.
5. The CONTINUITY PLAN of the business should be made known. This means that the surety should be informed of what provisions have been made for the continuation of the firm in the event of the inability of key people to function, or the demise of key people. A one-person company doing a large long-term project represents a fairly risky proposition to a surety, in that it will have to see to the completion of the project in the event of that person's disability or death. Similarly, the demise of a majority or significant stockholder in a large company can have serious financial ramifications that could impair the firm's ability to fulfill its contractual obligations. A well-constructed and equitable continuity plan ensures that the families of owners or key people will be less likely to interfere in the affairs of a company during times of trouble. Equally important in the construction of the continuity plan is the funding of the plan. Learning whether the plan has been funded, and how, will help the surety evaluate the viability of the document.
6. The RATIONALE for doing a particular project can be important to a surety. A contractor should be prepared to explain, particularly in the case of a project or program larger than anything done before, why the firm should undertake the project or program, how it fits into what already exists in the way of work or organization, how it will be financed, and what the return will be. The soundness of the reasoning may well be what makes or breaks the decision.
7. A BUSINESS PLAN of the contracting firm that includes a detailed overview of the history, current position, and future one to five-year plans for expansion of existing services and/or the addition of new services, equipment, and personnel. The business plan should include a market analysis that demonstrates their understanding of current market conditions, current and prospective client demographics and competing providers of similar services. The plan should also address the firm's marketing and sales strategies and the infrastructure that supports these activities. Proactive, ongoing business planning discipline is the cornerstone of a well run business.

The objective of furnishing all the above information is to show the surety that a contractor has the ability to manage as well as construct. It demonstrates the capabilities of the contracting firm, the experience of its people and their ability to do the business of construction. It also provides a

benchmark by which to judge the firm's ability to execute its plans, and is a means by which to forecast the firm's future success.

SUFFICIENT FINANCIAL STRENGTH

Financial strength is perhaps the most complex aspect of the contractor-surety relationship. It was stated earlier that the payment of bills is a primary function of a surety's guarantee. It is also where the primary losses originate. The losses originate because the "performers" do not get paid. It takes money to make sure that all subcontractors, laborers and material suppliers get paid, to start up a job, to carry a company over a period in which there might be a dispute with an owner or a downturn in the economy, to pay for changes ordered but for which a price adjustment is not yet agreed upon, to finance retainage, to pay the overhead, to prepay bills and take resulting discounts, to finance slow receivables, and to assure the availability of bank credit.

The amount of money required can depend on the type of work being performed or the organization performing it. Therefore, we will not attempt here to prejudge what may be required, or to set standards. The following is merely an outline of the information that a surety will likely want to see so an evaluation can be made of the contractor's financial ability to carry out its business plan.

1. FINANCIAL STATEMENT PRESENTATION

It is the contractor's responsibility to ensure that the company's financial statements accurately reflect the financial position and operating results of the company, and include all disclosures necessary to make the financial statements meaningful to the contractor's surety. Proper presentation of a contractor's financial position is key to the process.

Generally Accepted Accounting Principles (GAAP) requires several basic financial statements for profit-making companies in all industries:

- Balance Sheet
- Statement of Earnings
- Statement of Changes in Owner's Equity (or, in the case of a corporation, stockholder's equity)
- Statement of Cash Flow (or changes in cash flow)
- Notes on the Financial Statements

However, sureties generally require several additional schedules along with the contractor's financial statements in order to help them assess the financial strength and management controls of the company. These are:

- Contract schedules
- Summary of Contract Earnings
- Completed Contracts
- Contracts in Progress
- The schedule detailing unallocated indirect costs
- The schedule presenting the company's general and administrative expenses

2. ACCOUNTING METHODS

Accounting normally addresses itself to matching, within the same accounting period, the revenue from the sale of a widget with all the costs of producing and delivering the widget. For industries other than construction, this matching process is relatively straightforward. However, in the construction industry the one distinguishing characteristic that makes accounting different is that the widget (a project) that is sold does not exist at the time of the sale (contract), and the ultimate cost to produce it is not yet known. There are a number of ways to account for a contract.

Under GAAP there are two acceptable methods of accounting for construction contracts:

- Completed-Contract
- Percentage-of-Completion

Completed-Contract Method

The completed-contract method is primarily used for tax reporting for small contractors. The method accounts for a contract when it is completed; that is, all revenue (contract billings) and costs are recognized in the statement of income when the contract is completed. Although the completed-contract method is acceptable for reporting contract revenues and expenses on financial statements under certain circumstances, the percentage-of-completion method is preferred by the American Institute of Certified Public Accountants (AICPA). Percentage-of-completion is also the method favored by most sureties, because it focuses on the most current economic activity of the contractor.

Percentage-of-Completion Method

The **percentage-of-completion** method recognizes revenue and cost throughout the life of each contract, based on a periodic measurement of progress. In the simplest sense, a ratio, the percentage of completion, is determined and then this factor is applied to the expected revenue for the contract. This determines the revenue for the contract to be recognized in the financial statements. Three typical methods of measuring the percent complete are:

The **cost-ratio method**, which uses the ratio of actual contract costs incurred during the reporting period to total estimated contract costs. This method is the most commonly used method of computing the percentage of completion, and should be used for projects with costs that are evenly distributed over the life of the project. This method is typically used for building and some parts of heavy construction projects.

The **units-of-work method**, which uses the ratio of units of work performed to total units of work to be performed under the contract. For contracts under which discrete units of output are produced, progress may be measured on the basis of units completed; a typical unit of work would be cubic yards of materials excavated. This method is typically used for highway projects that are broken down into specific units of performance for billing purposes. This method is typically combined with other methods to account for certain parts of a project, such as the excavation and landfill portion of a hydroelectric dam project.

The **effort-expended method** uses the ratio of some measure of the work input during the reporting period, such as labor hours, labor cost, machine hours or material quantities, to the units of that measure of work required to complete the contract. The use of this method assumes that profits on the contract are derived from the contractor's efforts rather than from the acquisition of materials or other tangible items. It is typically used for fee contracts.

Many other techniques will be found in practice, including combinations of the above, or the application of one or more of these methods to different elements of the same contract, even with differing rates of gross profit between elements. The preferable method depends on the situation surrounding each project. However, the most widely accepted and easiest method to understand is the cost-ratio method.

Unacceptable Methods

Two other methods, the **cash basis** and the **accrual basis**, are not generally accepted methods of financial reporting for contractors. The cash basis of reporting does not result in a meaningful measure of gross profit. To the extent that a contractor successfully accelerates billings and cash collections and delays cash disbursements, the cash method distorts actual performance. The accrual method also produces a distorted gross profit figure, because billings that are not a measure of contract performance are considered revenue. While these two methods are not acceptable for financial reporting, they may be used for tax determination under certain circumstances. Contractors frequently use one accounting method for financial statements and a different method for tax reporting.

3. WHAT THE CPA'S INVOLVEMENT MEANS

The quality of the Certified Public Accountant (CPA) and the degree of involvement with the financial statements is critical to obtaining the optimum level of surety bonding. A contractor should seek a CPA who knows the construction industry and the peculiarities of construction accounting. The CPA firm that handles three convenience stores and a widget manufacturer may not have any knowledge of the construction industry and will be of questionable value to the contractor and to the surety. Many CPAs that are knowledgeable about the industry are active members of construction industry trade associations and have several contracting firm clients.

Service Levels

Privately owned companies may choose from among three different levels of financial services. Each offers a different degree of assurance from the independent certified public accountant. Here are the choices available: Financial statement "**audits**" provide the highest degree of assurance for sureties. The independent certified public accounting firm expresses an opinion on the conformity of the financial statements with GAAP and provides assurance that the underlying data has been tested. The tests are extensive, and usually require outside verification of balances with owners, clients, and suppliers. This opinion can be expressed only by CPAs certified in the respective state or territory.

Financial statement "**reviews**" provide a significantly lower degree of assurance than audits. During a review, the CPA firm makes inquiries of management, but requires no outside substantiation of the answers. The CPA may perform some analytical procedures that enable the firm to express limited assurance that it is not aware of any material changes needed for the financial statements to be in conformity with GAAP.

Financial statement "**compilations**" provide no assurance. Generally the compilation is not acceptable to the surety company. The CPA firm or public accountant assists in preparing the financial statements, but is not obliged to make inquiries unless it observes an obvious error or lack of disclosure, etc. Therefore, the firm gives no assurance as to whether the financial statements meet any of the professional standards.

4. SURETY ANALYSIS OF A CONTRACTOR'S FINANCIAL POSITION

The analysis of the contractor's financial position is an involved process that encompasses all the information gathered by the surety. The primary focus is on the

financial statements. Here are some of the most common analytical techniques used by sureties:

- Detailed review of financial statements and footnotes
- Analytical procedures
- Working capital
- Net worth
- Ratio analysis

The primary purpose of the financial analysis is to develop a thorough understanding of the contractor's financial position and to evaluate the contractor's creditworthiness.

5. DETAILED REVIEW OF THE FINANCIAL STATEMENTS

If the financial statements are properly prepared, the surety will learn about the following critical areas:

- Accounting method used to determine income recognition
- Method of determining income recognition for tax purposes
- The extent of litigation or contingent liabilities
- Related-party transactions
 - Joint ventures
 - Stock repurchase agreements
 - Lease commitments
 - Claims and adjustments
 - Officer, shareholder and related-party loans and notes
 - Pension, profit sharing, and other employee benefit plans
- The size of
 - Total assets
 - Long-term debt
 - Equity (net worth)
 - Working capital (current assets minus current liabilities)
 - Annual volume
- Other disclosures for contractors
 - Backlog
 - Over- and under-billings

- Detailed job schedules tied to the financial statements
- Amount of unallocated indirect costs

6. ANALYTICAL PROCEDURES

Because the surety is providing a financial guarantee of performance and the payment of bills, the primary focus of a surety's information gathering and analysis is directed at the "financial strengths" of the contractor. This analysis will focus primarily on the financial statements of the contractor.

The analytical procedures for financial analysis include numerous quantitative techniques used to evaluate the creditworthiness of a company. The techniques include working capital and net worth, ratio analysis, trend analysis, and gross profit analysis for construction contractors.

Working Capital and Net Worth

The two primary indicators used by sureties to evaluate a contractor are working capital and net worth. Working capital is the difference between current assets and current liabilities. Current assets are cash and other assets expected to be converted into cash within one year. Current liabilities are those obligations that will be paid or liquidated in the same period. Working capital measures the short-term aspects of the operating cycle, and creditors use it to evaluate the company's ability to furnish cash in the current year.

Net worth, or net equity, is the difference between assets and liabilities. It represents the investment and retained earnings in the company. Net worth is sometimes referred to as long-term liquidity, because it measures the company's ability to produce profits over the long run, or the long-term aspects of the operating cycle. Net worth also indicates the company's ability to sustain losses.

Analysts often use working capital and net worth as benchmarks to determine the level of credit capacity, i.e., the safest level of credit that can be extended, on the basis of the belief that these factors represent the company's loss paying power.

Ratio Analysis

Ratio analysis is a mathematical technique for assessing a company's current financial position using information from the financial statements. As the variety of ratios and the method of calculation are too numerous to mention here, a few key business ratios commonly used by sureties are presented in Appendix A.

7. RED FLAGS IN FINANCIAL STATEMENTS

Sureties will look for the following “red flags” that are a signal of questionable financial statements:

- **Late reporting.** Audited financial statements should be available within 90 days of the end of the fiscal year. Late reports are often a sign that there are problems with the underlying records or that there are significant disputes between the contractor and the CPA or discrepancies that need to be resolved. The audited financial statement should be issued and in the hands of the surety not later than ten days after the date of the CPA’s opinion letter.
- **Errors in the statement, footnotes, or supporting schedules.** There is no such thing as an inconsequential error in a CPA-prepared statement. Sureties rely heavily on the expertise of the CPA to perform the work with due diligence. Where there are obvious errors, there often are even more substantial ones that remain hidden.
- **Inadequate footnote disclosure.** Footnotes are the primary responsibility of management, but the CPA has a duty to see that they are accurate and complete.
- **Lack of appropriate or properly prepared supporting schedules.** This could mean that the principal or contractor is trying to hide unfavorable information about the business.
- **Changes in the reporting entities, accounting policies, or the CPA.** Changes in entities or accounting policies interfere with the ability to track performance, and can mask the full impact of negative financial developments. A change of CPA is a major event that must be carefully evaluated. It may be a positive change, if the new CPA firm has greater knowledge and experience in the company’s industry; but it may also be a signal that there is a disagreement between the contractor and the CPA.
- **Funds of the contracting firm that are being used for non-construction activities.** Examples of these would be real estate development, outside investments, or any other activity that may inhibit the ability of the firm to perform its obligations or pay its bills. This is a definite “red flag”, because the draining of funds can put the surety in serious jeopardy.

8. CASH FLOW PROJECTIONS

Cash management is one of the most important yet frequently neglected aspects of financial management in the construction industry. The financial manager of a growing construction company is responsible for ensuring that enough cash is available at the right time to keep the firm in business. It is not unusual, particularly in small construction operations, for the firm’s cash position to be left to chance, with little effort expended on planning or managing cash. Cash flow analysis may be required by sureties to evaluate the short-term plans of the construction company.

A sound business model would dictate that there are processes and procedures in place to accurately calculate and forecast the cash-flow requirements of the company on an ongoing basis.

9. CONTRACTS-IN-PROCESS SCHEDULES

These should be done periodically. They tell the surety and the contractor:

The status of the jobs on a project-by-project basis:

- How much is done
- How much is billed
- What the work has cost
- How much profit has been earned
- Estimated cost-to-complete

The status of the company:

- How much gross profit it will earn
- How much money it has borrowed from the jobs
- How much needs to be billed to recoup costs and profits to which the contractor is entitled

It should not be surprising if most discussions with the surety agent and company involve the contractor’s finances and financial structure. This is quite normal, but it does tend to give a distorted picture of the surety’s priorities.

To keep the discussion in perspective, think of it in the following way. All the elements of the contractor’s case, except the contractor’s finances, should represent a constant. The contractor’s organization, track record, and approach to a job, once demonstrated, are not generally questioned with any frequency as long as the contractor’s operations are consistent and there have been no significant changes in ownership or key personnel. When a material change is made (such as adding personnel with additional capabilities, initiating new data processing programs, or getting into a

different type or area of construction), this information should be volunteered to the surety. So should any other significant change in the capabilities of the contractor or the manner in which the contractor conducts business. The contractor's financial situation fluctuates from day to day and from job to job, and consequently is the area subject to the greatest scrutiny from the surety, the bank, and even more important, from the contractor. When applying for the first bond and probably for subsequent bonds, it must be kept in mind that, once the surety is satisfied as to the ability to perform, it is going to look at the financial results of the contractor's performance and translate that into a decision on the firm's present and future ability to pay bills, finance additional undertakings, and accept or mitigate risk. Once again, the numbers are the scorecard that tells all parties how well the contractor is performing.

10. COST RECORDS

These are extremely important, because without a good cost recording and bookkeeping system, a contractor does not know where its projects and its company stand financially. Because of the risks inherent in the construction business, it behooves every contractor, large or small, to have cost and bookkeeping systems adequate to account for the financial status of its jobs. Without these systems, the contractor is not really in control, and is subject to failure because of the inability to identify and rectify problems before they become too severe to correct.

Having good internal cost controls is not enough. The contractor must use the cost records in the management of the company. The surety, in its analysis of the contractor's operations, will want to satisfy itself that the contractor is making proper use of the cost records.

11. CREDIT REFERENCES

For an existing company, credit references demonstrate how bills have been paid in the past. There are various credit inquiry services to which sureties have access, but a contractor's own references will probably be more accurate.

12. CREDIT SCORING /MODELING

The beginning of the 21st century saw the introduction of credit modeling into the surety's due diligence process.

All facets of the credit industry utilize credit scoring or modeling as another method of organizing and evaluating the creditworthiness of a contractor. Most of the information involved is derived from the financial information of the contractor; some is derived from credit reporting agencies.

There is no uniform scoring system, but there are very few sureties that have not adopted this as an evaluation tool.

13. BANK LINE OF CREDIT

A bank line of credit should be established and its extent made known to the surety. It is important to point out that sureties are generally looking for an unsecured line of credit that can be used for short-term working capital purposes. Secured financing is not necessarily what a surety would like to see, and financing based on an assignment of accounts receivable will not generally be looked upon favorably by a surety. Receivable financing tends to pit the surety against the bank in a default situation.

However, sureties are aware that unsecured credit is not always available to a contractor, and may be willing to accept secured credit if sound business principles suggest it. In any event, the contractor can be assured that the surety will look not only at the basis for the credit, but also at the extent to which bank loans are used, at the amount, and at the terms of their repayment.

The surety wants the contractor to have a bank line of credit available, to augment working capital as well as to handle temporary cash flow needs. However, sureties tend to look less favorably at contractors who continually rely on heavy bank debt to finance their operations. They may make an exception if the contractor involved needs bank lending in order to finance the acquisition of the equipment or of fixed assets needed to perform their construction activities.

14. PERSONAL INDEMNIFICATION

The final item to be discussed with the surety will be the contractor's personal involvement with the contracting company and with the surety. This is sometimes a sensitive area, but is nonetheless important and should be discussed with candor. A contractor will likely be asked to provide the personal indemnity of the principal stockholders of the company and, in many cases, of their spouses as well. Rarely does a surety write bonds for contractors who are unwilling to put their resources on the line to support their companies. The owner of a company is the beneficiary of the endeavors of the company when things are going well. Conversely, the surety expects the owner to step up and help solve problems when things are not going as well as predicted. Those who indemnify will be asked to provide personal financial statements to show what that indemnity is worth. The initial reaction to this may be the determining factor in whether or not the surety will be willing to provide surety credit to the contractor. A contractor would be well advised to consider the subject carefully before approaching a surety.

It has already been explained that what a surety does is guarantee the contractor's performance and the payment of bills. It prequalifies the firm, issues bonds and collects a fee. What the surety does not do is expect to be responsible for

taking care of the contractor's obligations. The surety expects its contracting client to perform and to pay its bills. If it fails to do so, the surety expects the contractor to do what any honorable businessperson would do: use all available means, including any bank credit and personal funds, to complete the contractual obligation.

The surety can advance its own funds, guarantee credit at a bank, or find someone else to complete the contract. But if the surety does this, it expects to be reimbursed for the monies expended on the contractor's behalf. The indemnity agreement is the vehicle used to assure reimbursement from the company that has failed, and from the principals of that company and any other third-party indemnitors that sign on behalf of the contractor. It also assures that those individuals will stand fast in the face of problems and use their talents and know-how to resolve any difficulties. This is important, because there have been numerous instances of people who have had no individual responsibility to a surety and have merely dumped a problem in the lap of the surety without attempting to offer any aid in solving it. They have walked away and left the surety financially responsible, a situation that generally makes the solution to the problem more difficult, more expensive, and not what the surety anticipated when it issued bonds in the first place.

Given that the vast majority of construction companies are owned and operated by individuals or small groups of individual stockholders, the element of **Character**, one of the three "C's" of credit analysis along with **Capital** and **Capacity**, becomes vitally important. The willingness of the contractor to stand behind his or her company and support it with personal assets can be a crucial consideration to a surety. In short, if the owners of a construction firm are unwilling to back the firm with their personal guarantee, the surety may reasonably question why it should assume an obligation that the owners are not personally willing to assume.

It should be noted that personal indemnity does not have to be unlimited. Indemnitors can agree to a specified amount of indemnity, or can exempt certain property from the scope of the indemnity agreement.

Chapter 3

MISCELLANEOUS BONDS

A surety company can guarantee various types of obligations. For example, any state or jurisdiction can require bonds guaranteeing the fulfillment of the terms of a license or permit. Therefore, one can expect bond requirements in almost any situation. Theoretically bonds can be written to guarantee any obligation to which two parties can agree. However, the most common bonds associated with construction projects, other than bid bonds, performance bonds and payment bonds, are discussed below.

MAINTENANCE BONDS—Most contracts call for the contractor to keep a project free of defects in materials and workmanship for a period of one year from the time of substantial completion or acceptance of the project. As this requirement is considered a normal part of a contract, it is expected and is guaranteed by the performance bond at no charge. Some owners will require an instrument separate from the performance bond to cover a one-year contractual maintenance provision, but such an instrument is generally redundant. Maintenance bonds covering a period greater than one year, or the scope of which exceeds defects in labor or materials, can create a problem for the surety and may be difficult to obtain. Such bonds will bear an annual premium charge.

Case law has caused many contractors and their attorneys to be exceedingly cautious about any language in a contract that may expand or alter warranty obligations. Language containing the word “warrants” can make a contractor liable for any failure of that to which the word “warrant” may be made to apply.

LIEN BONDS—Many state laws allow for the filing of a lien bond on a private construction project. Such bonds are guarantees that the project will be kept free of mechanics’ liens. Liens filed for non-payment of trade obligations would be filed against the bond and not the project itself.

RELEASE OF LIEN BONDS—Some jurisdictions permit the release of lien bonds to clear title to a project. In return for releasing its lien on the property, the lien holder receives the substitute security of a surety bond.

RETENTION BONDS—Some states or agencies allow a contractor to substitute a bond for retainage toward the end of a project. These bonds are not a substitute for the performance bond on the project, but are additional protection for the owner—generally assuring completion of the punch list.

SALES AND USE TAX BONDS—These bonds guarantee the payment of sales and use taxes where required.

HEALTH AND WELFARE BONDS—Many union agreements call for bonds guaranteeing the payment of health, welfare, pension, and vacation funds, and in some cases (up to a defined limit) even wages.

SUBDIVISION BONDS—These bonds guarantee to governmental entities that a subdivider will put in roads and utilities in accordance with plans approved by the local engineer.

Unless a contractor has obtained its surety agent’s approval, it should not sign a contract with a private owner that obligates the contractor to provide a completion bond to a governmental body for installation of public improvements. A completion bond guarantees a contractor’s performance, without any corresponding obligation for the project owner or obligee to pay the contractor for the work performed.

Chapter 4

CONSTRUCTION PROCUREMENT AND THE ROLE OF THOSE INVOLVED

THE ROLE OF THE OWNER

We have discussed at some length the surety's and the contractor's functions, but yet to be addressed are the role and obligation of the owner, or obligee. Many owners believe that, because they have pre-qualified and bonded their contractor, they have done all they must. Of course the owner must fulfill the applicable terms and conditions of the contract, but there are other specific obligations that must be fulfilled. A primary obligation of the owner is to provide complete and detailed plans and specifications. If there is any aspect of the construction process that is most likely to create problems, disputes and animosities, it is in the failure to provide complete and clearly understandable plans and specifications. When services are procured on the traditional design-bid-build model, the plans and specifications should tell exactly what the contractor is expected to do, where the contractor is to do it, and what standards are to be met. This will be discussed in greater detail later in this chapter.

Regardless of the construction services procurement method, a key responsibility of the owner is to pay the contractor on a timely basis. On a government-funded job, this means securing an adequate appropriation in advance and hopefully minimizing the red tape in handling requisitions. On a private project, it means having sufficient funds available through a lender, an escrow account, or surplus to be able to pay all approved requisitions as rendered. Failure to pay a contractor what is due can create a cash flow problem at every level of a job and impair its progress significantly, if not prohibit its completion. Failure to pay is also a material breach of contract, which may expose the owner to damages.

Finally, the owner is expected to furnish the site on which the work is to be performed, in a condition consistent with that set forth in the plans and specifications.

Failure to provide these items, or any other obligation contained in the contract, can result in a stoppage or serious delay in the work or the actual selection of the contractor. It also can delay execution of a construction contract, with obvious economic consequences to all parties concerned. Furthermore, disputes can arise over extras and changes, which can drive the price of a project well beyond its projected levels. The result can be acrimony that can be settled only by often-expensive litigation or other dispute resolution methods.

THE ROLE OF THE DESIGN PROFESSIONAL/ ENGINEER OR OWNER'S REPRESENTATIVE

Traditionally, the best way an owner can fulfill its responsibilities in a design-bid-build scenario is by retaining a responsible design professional/engineer. The design professional, in turn, can make or break the project by virtue of the quality of its plans and specifications and by the capabilities of its on-the-job representative. The design professional's position is not totally enviable, in that it is the middleman in any disputes. As the owner's representative, the architect must be responsive to the wishes of the owner. In addition, the design professional must work with the contractor to ensure that the design is properly executed. This can require a great deal of statesmanship and compromise if serious issues are raised during the course of construction.

Most a design professional and contractors are interested in a quality job for a fair and reasonable price, and will try to work well together. In cases where design or construction deficiencies become apparent and the architect and contractor begin to disagree, there is a tendency to blame the problem on the other party. When such occasions arise, the surety is often used as a lever to make the contractor perform. This serves no useful purpose. Sureties are not in the business of arbitrating disputes or acting as enforcers. That is the function of the courts, the American Arbitration Association, or other recognized mediation services.

Harmony, or at least a reasonable working relationship among owner, design professional and contractor, is a must if a construction project is to be successfully completed without serious problems. The best way to ensure harmony is to write contracts, plans and specifications that not only show what must be done, but are free of ambiguity, and clear as to who is responsible for what.

Sureties display a partiality to the design-bid-build method because they can examine the prices of the bidders to ascertain the adequacy of the price of their client. If the price of their client is significantly low (usually in excess of ten percent of the next price) the surety can demand an explanation of the difference, or even an independent engineer's estimate of the value of the work, before agreeing to provide final bonds.

Construction Management method of construction services:

1. Construction Manager (CM) Agency

Under this procurement scheme, the contractor is hired as the agent of the owner in the management of the construction services. The design professional retains much of its traditional role in terms of plans and specifications.

The construction manager has a contract with the owner to manage the subcontractors and material suppliers, but their contracts are directly with the owner. Each subcontractor has priced its trade. The CM works strictly on a fee and has no pricing risk on the job unless the project takes too long and the fee is inadequate to cover the CM's cost.

2. CM at Risk

Under CM at risk, the owner first selects a design professional to determine the basic scope of the work and an estimate of cost.

Once the design professional is selected, the owner issues a request for qualifications (RFQ) to a select list of contractors. Interested contractors respond to the RFQ and the owner selects those contractors from which it will solicit proposals for the project.

Each contractor then submits a detailed proposal explaining the methods by which it proposes to do the work, its fee, its staff, and any other details deemed relevant.

The proposals submitted are generally ranked and the CM is selected from those ranked highest.

Once the CM is selected, the owner, the design professional and the CM collaborate on refining the scope of the work, issues of scheduling, final work toward completion of the design, and any constructability issues that may arise.

The CM works with selected subcontractors to develop a line item budget for the job. Once the plans and the budgets have reached the point where everyone is comfortable with the costs and the schedule the CM negotiates a guaranteed maximum contract price (GMP) with the Owner.

The GMP contains a contingency depending on the status of the completion of the plans. The contract may also ultimately contain a shared savings clause in which the owner and the contractor agree to split whatever savings may accrue during the course of construction.

This method of procurement is favored in the private sector and increasingly in the public sector. The primary benefit in its application is that the owner, the architect and the contractors are all involved in the development of the project and its key ingredients. This enhances communication and tends to reduce the variables inherent in construction.

3. Design-Build

When an owner wants a project done in a fairly short period of time, it may adopt a design-build method by which teams, consisting of design professionals and contractors, pair up to both design and build a project. This method can save time

particularly if the design element is not overly complex or time-consuming.

Under this method, the owner looks to only one point of contact, which is generally the contractor or a single purpose entity established for the express purpose of executing the contract in question.

The surety industry was initially reluctant to enthusiastically embrace this type of contract, for fear of having to assume responsibility for the design aspect of the job, something a surety is not well equipped to do. However, the surety and construction industries' experience with design-build has been favorable, leading to more widespread use of it. The development of the Contractor's Professional Liability product has added to the comfort level of both contractors and sureties. This coverage is generally required when a design-build project is bonded.

BONDING SUBCONTRACTORS

In all these construction methodologies, numerous subcontractors physically perform most of the work. Each subcontractor hired bears to the general contractor (GC) or construction manager (CM) for its portion of the work at risk similar to that which the GC or CM bears to the owner. No discussion of contract suretyship would be complete if it did not address the bonding of subcontractors by general contractors. This issue is widely misunderstood, evidenced by the fact that it is commonly referred to as "double bonding." This phrase is used because it carries the connotation of bonding at least portions of a job twice—once by the GC, and again on those sections that are subcontracted and bonded. There is a further misconception that the bonding of a subcontractor automatically reduces the amount of work to be charged against a GC's bonding capacity. Neither concept is valid.

The GC is held totally responsible for the performance of a contract by the owner that awarded that contract. The owner is not interested in subcontractor problems because it is paying the GC to oversee the performance of the subcontractors. In addition, the owner has bonds from the GC, guaranteeing that the GC will fulfill its obligations. All the responsibility for what the subcontractors do on a job and how they do it rests with the GC. But what guarantee does the GC have that its subcontractors will perform their work and pay their bills? Without a bond, it has nothing other than the subcontractors' reputations or its own knowledge of the subcontractors from previous jobs on which they worked together.

If a subcontractor fails to do its work, it becomes the problem of the GC. If a subcontractor becomes insolvent or fails to pay its bills, that too becomes the responsibility of

the GC. How then, can the GC protect itself against the failure of a subcontractor? There are certain classic responses to that question, but each carries an element of risk. The GC can:

- Withhold payment from a subcontractor, but this may exacerbate a subcontractor's problem by impeding its cash flow.
- Put the subcontractor's employees on its own GC payroll, but the GC may not get the same productivity from them and that may well increase the GC's direct costs. Also, this could cause the GC to unknowingly accept other liabilities of the subcontractor.
- Default the subcontractor and hire a successor—but at what cost in dollars and lost time?
- Withhold increased retainage from the subcontractor, over and above what is being withheld by the owner. If the subcontractor is having cash flow problems or is having difficulty meeting its weekly payroll, holding back more money each month is not likely to improve the subcontractor's situation or enhance the security of the GC in the event of a subcontractor failure.

Regardless of what action the GC takes, it cannot abrogate its responsibilities. In addition, it will most likely incur additional costs and delays with no recourse to anyone but the defaulted or defunct subcontractor. In effect, the GC is surety for the subcontractor unless the subcontractor provides its own bonds.

HEDGING YOUR BETS

Requiring a surety bond from a subcontractor will give the GC the protection needed in the event of subcontractor failure. If nothing else, the presence of a surety in the picture will make a problem subcontractor think twice before walking off a job, or not paying a bill because of its obligations to the surety under the bond application form and indemnity agreement.

By reducing and controlling the risk of subcontractor failure, the GC may expand its own surety credit capacity. For example, assume that the GC has required bonds of all key subcontractors and wants its surety to provide more credit by virtue of the fact that it has taken this important step. The contractor still has to see to the completion of the project and the payment of bills. But, as pointed out earlier, the GC has protected its interests by seeing to it that someone is answerable to the GC if any of the subcontractors fail. The GC has reduced its risk, and by doing so has properly made the surety more comfortable in its role as risk sharer.

No one can assess the return to the GC arising out of its decision to bond subcontractors. The return, unless it recovers from a subcontractor's surety, is measured in subjective ways. The decision will classify the GC in the eyes of its own surety as a prudent businessperson, which in the long run may be as valuable as (or even more valuable than) the assets on the firm's balance sheet. Sureties themselves use reinsurance to hedge their bets. Shouldn't the general contractor consider doing the same?

Having required subcontractors to post bonds, the GC must realize that it has acquired additional issues to manage. As mentioned earlier, care should be taken to verify the authenticity of bonds issued on behalf of subcontractors. More than one GC, when making a claim on a bond, was shocked to learn that the bond was either unauthorized or just plain fraudulent. An original power of attorney attached to the bond and a telephone call to the surety's home office will avoid this problem.

One of the rules of suretyship is that an obligee can lose its rights under a bond if it increases the surety's risk without the surety's consent. Therefore, GCs are well advised to seek the consent of the surety before revising the terms of a subcontract. Some bonds waive notice of alterations to the contract or extensions of time; some do not. Therefore, it is important to review the subcontractor's bond before revising the subcontract.

Incidentally, even if a bond waives notice of alterations, a change that materially changes the subcontract may relieve the surety of liability. So again, the safest path is to obtain the consent of the surety if there is any question as to the impact of the change on the surety's liability.

A SUBCONTRACTOR IN DEFAULT

The time may come when a GC believes a subcontractor is not performing its obligations and the GC wants to protect its rights under the bond. When this occurs the GC should review both the subcontract and the bond to determine what, if any, specific procedures, notices, etc. need to be followed to both invoke and protect its rights under the bond.

For example, the subcontract may require on behalf of the subcontractor a mandatory period in which to cure a default. Or, the subcontract may simply provide that the GC must give notice of its intended course of action prior to declaring a default.

If these steps are not followed, the GC's attempt to default the subcontractor may be defective. The GC may then find itself in default if it terminates the subcontract; it may even find that it has lost its bond rights.

Likewise, the bond may provide that specific notice be given or, as in the case of the AIA 312 Performance Bond, that the bond obligee request a meeting prior to declaration of a default. Again, if these steps are not strictly followed, the GC runs the very real risk of jeopardizing its coverage under the bond.

Assuming proper procedures are followed and notices given, the subcontractor's surety should, at minimum, acknowledge receipt of the claim and begin its own independent investigation. The extent and urgency of the investigation will depend upon the circumstances of the situation.

If a claim is more or less routine and not particularly urgent, the surety may begin its investigation by getting the subcontractor's side of the story. On the other hand, if the claim is large, serious and urgent, the surety may immediately deploy a team of claims people, construction consultants and accountants. The former is much more common than the latter.

After the surety has been put on notice of the claim and the investigation begun, the GC will have a number of questions, such as: what happens to the job and can the GC continue working? The answer to these questions will depend on the circumstances of each project, so there are no blanket rules or advice that can be given ahead of time, except for this: stay in close contact with the surety.

It is critical to remember that, if the subcontractor has defaulted, any damages suffered by the GC will probably be recoverable from the surety. Therefore, if the subcontractor is clearly in default, the surety will act promptly to minimize the GC's loss and expenses. If it is not clear who is in default, the surety is caught between obligations to both the GC and subcontractor (and the third party indemnitors) and will have to proceed with great caution. This caution is often mistaken as non-action, but the surety has little choice.

Ordinarily, the obligations of the surety are the same as those of the subcontractor. Therefore, if the subcontractor is not in default, the surety will not be obligated under its bond to complete the project or reimburse the GC. As long as the subcontractor, in the surety's opinion, has a reasonable argument, based on law or the facts, that it has not breached the subcontract, the surety will not intercede. In such a case, the surety will await the outcome of the trial or other dispute resolution proceeding to determine its liability.

If the subcontractor has voluntarily defaulted or is clearly in default, the surety's activities are those outlined in the next chapter.

GCs often are not sure of their responsibilities when notified by lower-tier subcontractors and suppliers of nonpayment. As with questions pertaining to a subcontractor's performance bond, questions pertaining to a subcontractor's payment bond should be brought immediately to the surety's attention.

Before the GC takes any steps that affect the subcontractor, especially withholding payment, the surety should be given an opportunity to look into the situation. It should also be pointed out that trust fund or other laws may apply in the case of unpaid subcontractors and suppliers. In such cases, payment by the GC to the subcontractor may result in the GC being exposed to double payment for the same labor or material. GCs may also be subject to criminal prosecution for violation of trust fund laws. If there is any question as to the safest course of action, the GC should seek legal counsel.

Remember, a GC ordinarily looks only to the performance bond for problems related to the subcontractor's performance of the subcontract, whether the problem is with the actual work or non-payment of bills. Therefore, a surety's handling of a claim by the GC should follow the steps outlined above regardless of the type of problem caused by the subcontractor.

Chapter 5

BOND CLAIMS

We have discussed the function of the surety and the roles of all those associated with a construction project. The other side should be examined as well: what happens when a claim is filed against the bond.

THE SURETY'S OBLIGATION

There are four items that define a surety's obligation: the bond itself, the underlying construction contract, any applicable statutes, and the legal precedent interpreting the first three.

On public work, statutes generally define who may make a claim under a payment bond; what labor and material is covered by the bond; the notice that must be given to a surety of an impending claim; and the time frame in which suit against a surety may be brought. Any claim made against a surety which does not comply with statutory requirements will likely result in a denial of the claim by the surety, which will be upheld in court. These statutes are designed to protect the surety and the contractor from remote creditors on a job, i.e., third-tier and lower suppliers who might supply the bolt that goes into the housing that goes into the motor that goes into the heater that is sold to the HVAC subcontractor. Sureties and contractors will argue vehemently over any effort to extend payment bond protection beyond subcontractors, their sub-subcontractors, and material suppliers that have direct contracts with either. The GC lacks knowledge of the identity of remote subcontractors and suppliers, and it is difficult to ensure that subcontractors and suppliers of all tiers are being paid during the life of the project.

Generally speaking, the bond and the contract govern the parameters under which and by whom claims can be made against bonds on private work. Here, case law precedent rather than statute often governs a surety's response to a claim.

Keep in mind that the surety guarantees exactly what the contractor agrees to do. Also, every contract bond has behind it at least an application or general indemnity agreement signed by the contracting firm's principal. This agreement calls for the principal and any other indemnitors to hold the surety harmless from any loss, cost or expense arising out of the execution of the bonds.

In other words, a claim against a surety is generally only enforceable if it would have been enforceable against the principal—statute, contract, bond and precedent permitting. Furthermore, the surety will look to its

principal to hold it harmless, either before or after the fact. If a questionable default is forced on a contractor, the contractor may be able to persuade the surety not to take any action until the matter has been adjudicated. The contractor can then show that it has a reasonable or arguable defense based on law or the facts. However, the contractor may not prohibit or inhibit a surety from fulfilling those of its obligations not reasonably contestable.

If a contractor finds itself in such a discussion with its surety, it had better review the indemnity agreement. These agreements universally give the surety sole discretion to settle claims. This sole discretion, however, is tempered by a contractual or court-imposed requirement that the surety act in good faith.

If the surety believes in good faith that the claim should be settled, it will do so over the objection of the contractor and will seek reimbursement from the contractor and the indemnitors. This is a drastic step, rarely taken, and is one of the most difficult situations a surety claims person can face. Disagreement with a solvent contractor/principal may end a profitable relationship of many years, and is highly unpopular with surety agents and underwriters.

However, situations do occur where the surety has competing obligations between its principal and an obligee/claimant, with both ready to accuse the surety of bad faith and unfair claim handling practices. If, in the good faith judgment of the surety, the safer option is to settle the claim and seek reimbursement that is the course the surety will take. And because of the indemnity agreement, the contractor will have little in the way of defenses.

If a claim is brought by an ineligible claimant, or one who does not conform to statutory, bond, or contractual requirements, the claim will generally go unsatisfied. Predictably, this causes the disgruntled claimant to doubt the validity of a bond.

On the other hand, those claims brought by valid claimants, or which represent valid defaults, are generally handled in a timely and satisfactory manner.

DEFAULT: VOLUNTARY AND INVOLUNTARY

There are generally two routes through which a case can end up in a surety's claim department. A common route is the classic default for failure to perform, or for insolvency or incompetence. The contractor, whether general or subcontractor, may not be able to perform under the contract and the owner/general contractor can invoke the default provisions in the contract. The contractor may have run out of money and may be placed into receivership under state law, which constitutes

grounds for default under most contracts. Note that under current federal bankruptcy law, a contractor cannot be declared in default simply because it has filed for bankruptcy. The project may be beyond the contractor's ability, or there may be other projects with problems that preclude the contractor from completing the project in question. Again, this could end in a default situation.

The second route is the voluntary default, which arises when a contractor realizes that the firm is unable to continue. Knowing that it is running out of money, is having cash flow problems, or is unable to continue for a variety of reasons, a contractor wisely calls in the surety with the idea of gaining its support.

For purposes of discussion, these default methods will be labeled as involuntary (former) and voluntary (latter).

CLAIM INVESTIGATION

In either case, the first action of the surety is to investigate the facts and determine exactly what the problem is. There is an old saying to the effect that you cannot solve a problem if you can't define it. Therefore, before any surety determines what action it will take, if any, it will want a full analysis of the situation. This effort obviously takes time, and the amount of time required depends on the number and nature of the construction contracts, the adequacy of the contractor's records, and the amount of cooperation the surety receives from all parties to the problem: the owner, the architect, the contractor, and the subcontractors.

Failure of sureties to investigate claims and take appropriate actions may subject them to bad faith suits, which can lead to substantial punitive damage awards in certain states.

The claim investigation process can take weeks or sometimes months to complete. In any event, it must be done, in spite of the fact that owners may be demanding immediately what they perceive as their due. However, the surety is entitled to look before it acts. Its actions, if based on an informed judgment, will probably be in the best interest of all parties. The contractor and indemnitors ultimately suffer if a surety needlessly expends money for which it will expect to be reimbursed at a later date. Owners suffer when a project has been constructed poorly or late, and the problem is exacerbated if a surety acts hastily and perpetuates the contractor's error. Knowing there are construction problems, the surety usually will take remedial action immediately to correct deficiencies and to reduce the possibility of post-construction litigation.

In the event of a pending voluntary default, the surety will want to ascertain that there is a genuine reason for its involvement. Occasionally a contractor will actually believe

that the firm is going into bankruptcy, when in fact it is having a temporary cash flow problem. In such cases the surety may conclude after its investigation that the contractor can, in fact, survive without the surety's direct involvement. That may reassure the contractor's bank and creditors. The surety may institute a system for maintaining job progress while reviewing and monitoring the payment of bills, but it will not have any financial involvement.

On the other hand, the surety may perceive that a genuine problem exists and that it will be called upon to fulfill its obligations. In such cases, the first thing the surety must do is obtain a letter from its contractor-principal, requesting its assistance. Without such a request, the surety, in the absence of a default by the owner, may be construed to be a volunteer; or worse, to have interfered with the principal's contract with the owner. This could void the surety's rights under the indemnity agreement and its subrogation rights, as well as expose the surety to damages. Once the surety has determined the scope of the problem and the extent of its responsibility, it will decide on the best method of solving the problem and fulfilling its responsibilities.

THE SURETY'S OPTIONS

Basically, depending on the factors previously mentioned, a surety has three options open to it to cure a default.

1. The surety can **Finance the Contractor** until all of its obligations are satisfied. The advantage of this method is that it masks from creditors the fact that the contractor is in difficulty, thus keeping the contracting organization together and the contractor (who may be the only party other than the surety who knows of the problem) on the job. If the contractor stays involved, job continuity and momentum may be maintained and loss minimized. The disadvantage of this method is that the surety may end up expending funds in excess of its bond penalty. In addition, unless the projects are profitable, or there are significant assets outside the construction company, recovery of funds by the surety may be difficult. It can also lead to extreme pressure to continue to guarantee new work to generate profits to offset the loss. More often than not, the surety will avoid this option.

2. The surety can **Re-Bid the Project** to another contractor. Again, there are both advantages and disadvantages. The loss can be reasonably well defined by virtue of the signing of a bonded contract with a new contractor. However, the surety runs the risk of alienating the original contractor. This, aside from making recovery difficult, can result in the loss of the original contractor's knowledge of the problems and intricacies of the project. Furthermore, the original contractor will be known as one who is having difficulties, possibly forcing the firm

into bankruptcy, with all the problems that situation may cause. The surety also runs the risk of incurring a loss in excess of the penal sum of the bond.

3. The surety can **Let the Owner Finish** the project and reimburse the owner up to the limit of the bond. This is called “buying the bond back.” Few owners will agree to this method, making it somewhat impractical. In addition, the surety loses control of the situation, but it will have precisely established its loss.

FINANCING THE CONTRACTOR

If the surety decides to finance the contractor, it may do so through a direct advance of funds or by guaranteeing a loan from a bank. If the surety is using its own money, it will almost certainly insist upon control over the expenditure of funds.

For example, the surety may insist that the money be deposited in a joint account over which it can maintain control. It may require that its funds be used exclusively for the payment of bills for which it is responsible under its payment bond. If the surety is guaranteeing a bank line of credit, it may require the same controls and restrictions on the money borrowed from the bank. Furthermore, the surety may insist that, when permitted by law, all requisitioned funds be paid jointly to the contractor and the surety. The surety is not going to proceed with the financing option on the basis of an uncontrolled blank check.

In return for the use of a financing program, the surety will expect the contracting firm’s owners and employees to cooperate and continue to run the jobs with as much diligence and care as they would if the surety were not involved. The principals of the construction firm may be called upon to use personal assets to help alleviate the financial problems of the company. The principals and the staff will be expected to follow through with claims, extras, disputes and litigation until they are all concluded. The contractor may find its new partner not to its liking from time to time. It must realize that the surety, by offering its assistance, is keeping the firm from being defaulted or possibly forced into bankruptcy. The contractor also retains a voice in the management of the firm and can use its expertise to minimize the ultimate loss for which it may be responsible.

If the surety chooses to rebid the contract, or let the owner finish, the contractor has lost control over its destiny. It should realize that sometimes this may be in its best interest. Any surety is going to do what it considers most economically prudent. The surety will attempt to fulfill its obligations at the lowest price it can. In doing so, the surety, if successful, should complete the project with the lowest possible cost under the circumstances.

PAYMENT BOND CLAIMS

When work has been physically completed, but bills remain unpaid, a different situation exists. These circumstances generally occur if a job is unprofitable or a contractor lacks sufficient funds to pay creditors. Such situations may be compounded by disputes between an owner and a contractor. The contractor may choose to complete the project under protest, rather than shutting it down. The owner may withhold payments from the contractor, creating a problem that can be solved only by arbitration or litigation. When this happens the surety may become inundated with claims under its payment bond.

Again, as in the case of claims under the performance bond, the surety must evaluate the situation to arrive at an informed judgment as to the action it will take. The first judgment the surety must reach is the reasonableness of the contractor’s position. This is a difficult judgment and will have a strong bearing on its course of action, both as to the payment of the claims and the continued support of the contractor.

There is no “set” answer to the question of what the surety will do in such cases. The surety’s actions will be determined by the attitude and cooperation of the contractor, the merits of the claim, the dispute itself, and the laws of the state that governs the bond. In one recent case, a contractor wanted to fight the owner and let the subcontractors wait for their money. The surety had to convince the contractor that it was in everyone’s best interest to settle as many claims as possible with the surety’s funds. Their reasoning was that the litigation with the owner would take a long time. The claims of the subcontractors were valid for the most part, and litigation between the subcontractors and the contractor would be reduced.

Finally, the contractor would control what was paid to whom and would, with a few exceptions, have to deal with only one major creditor—the surety.

The bottom line is that the surety and the contractor must cooperate for their mutual benefit. However, everyone must understand that sureties are businesses, operated for the benefit of their shareholders. The decisions reached will be made as objectively as possible. A minimum of subjectivity and emotion will enter into the decision-making process.

Chapter 6

OTHER SERVICES OF A SURETY

Aside from collecting money in return for what seems a few pieces of signed paper, what does a surety do for the contractor?

The term “surety” can apply both to the surety company staff and the surety agent. Working together, these two entities can do a lot for a contractor if it will let them. Of course, this presupposes that contractors is dealing with a surety company and a surety agency that understands the surety business and are professionals in the surety field.

These professionals are going to question many of the contractor’s business judgments and procedures. They are going to do all they can to see that a contractor remains profitable and liquid. They see a good cross-section of the construction industry and in most cases will have learned not only from their mistakes but also from the mistakes of others. If a contractor will let them share their knowledge, the contractor may travel a somewhat more conservative road than some competitors. The surety’s advice is designed to keep a contractor solvent, and is therefore at least worth hearing, if not heeding.

- **INTERNAL CONTROLS**—Sureties see more cost systems than a contractor and can advise as to what works and what doesn’t.
- **PROFESSIONAL REFERENCES**—Sureties know the accountants, lawyers and bankers who understand the business.
- **OBJECTIVE MANAGEMENT ADVICE**—Sometimes emotions get in the way of good judgment. The surety (again with the idea of keeping a firm liquid and profitable) will generally give dispassionate, objective advice on any management decision a contractor is facing.
- **INVESTIGATION**—This service becomes very important if a contractor is involved in private construction. Many contractors have gone broke because they didn’t ask where the money was coming from to fund private jobs. No surety worth its salt is going to make that mistake. It will insist on knowing the source and adequacy of funds before it will commit to a project. All a contractor has to say is, “my surety insists,” and let the surety take it from there.

Many sureties and their agents perform contract reviews for their clients. The purpose of such a review is to identify contract terms, general condition requirements, or anomalies in the specifications or bond forms that may be blatantly onerous, unacceptable or likely to add undue risk to the project. If the contractor is not able to negotiate unfavorable terms and conditions out of a contract, the surety may increase the contractor’s leverage by refusing to bond contracts containing such terms and conditions. The following types of clauses are being used with greater frequency between owners and general contractors, and between general contractors/construction managers and subcontractors:

Multiple damage clauses may contain provisions for normal liquidated damages of x number of dollars per day. They may also contain provisions for the charging of actual damages, as well as consequential damages. Any or all of these may arise as a result of a failure to complete a project or failure to complete it on time.

In **Indemnity** clauses, a contractor may agree to indemnify an owner for damages arising out of bodily injury claims or property damage. In addition the contractor agrees to indemnify the owner, and anyone else associated with the project on behalf of the owner, against any damage or loss arising out of the performance of the work.

No damages for delay clauses generally stipulate that the only recompense that will accrue to a contractor, if the owner delays the progress of the job, will be an extension of the time allowed for the completion of the work.

Condition precedent clauses stipulate that payments to a subcontractor by a general contractor are conditioned upon payments to the general contractor by the owner. Such clauses generally state that payments will be made either *if* the general contractor is paid, or *when* the general contractor is paid.

In some clauses, general contractors or subcontractors may agree, or be forced to agree, to waive their rights to lien a private job.

Clauses in contracts between general contractors and subcontractors (incorporating clauses in the contract between the owner and the general contractors) may bind subcontractors to conditions or terms, of which they may be unaware, if such clauses are not shared with them.

Change order clauses may require that work be done on changes dictated by the owner, without any written agreement as to the cost of the changed work.

Dispute resolution clauses may establish tiers to which subcontractors and general contractors must apply in order

to resolve disputes on a project, before application for arbitration may be made or suits filed.

Payment offset clauses may allow a general contractor to withhold payments from subcontractors on Job A, pending resolution of problems on Job B.

These are but a few of the types of clauses that can impose unfair or onerous terms and conditions on the various parties to a construction project. They are mentioned because they should not be ignored before a contract is signed. Any contract should be reviewed with the surety, with insurance providers, and certainly with attorneys. Clauses such as these pose risk that may turn out to be more injurious than any normal construction risk.

With the emergence of numerous new sureties and the general public's concern about the solvency of financial institutions, agents should be utilized to review bonds given to their general contractor clients. This review of a surety company should include:

- A check of the status of licenses or qualifications to do business in a given jurisdiction
- A check of A.M. Best's or other ratings of the surety's financial stability
- A review of its standing as a surety qualified to write bonds to the federal government, as delineated in the Department of the Treasury Circular 570
- A check to make sure the proper form of bond is used, and that it was properly executed by an individual with a power of attorney issued by a legitimate surety

With a population that is demographically aging, one of the most significant problems facing businesses throughout America is the loss of succession or continuity. Sureties are highly sensitive to this problem and are insisting that continuity plans be in place as part of their underwriting or due diligence. This requirement, while considered burdensome by many, is a service. By forcing the issue, the surety is assisting its contractor clients in protecting their families, their estates, their partners, their creditors, their employees, and their assets developed over lifetimes of endeavor.

The surety industry is an integral part of the construction business. Sureties and surety agencies possess, or have access to, a wide variety of resources that can be made available to individual contractors and their trade associations. The sharing of those resources, as well as the expertise and business perspective of the surety companies and agencies, is crucial.

Chapter 7

SPECIAL CONCERNS OF SURETIES

So far, this text has examined what bonds are, how they are obtained, how claims arise, and how they are handled. For obvious reasons, we have concentrated on the usual or normal rather than the exception. This approach naturally leaves myriad questions unanswered about situations outside the normal framework.

We'll now address that segment of the construction community that has had problems obtaining bonds and may be uncertain why they were declined. We will attempt to shed some light on the background of their problems and some of the reasons the problems persist.

Some startup and small contractors ("emerging" contractors) of the late 1960s and early '70s charged sureties with discrimination. The sureties alleged that many of the applicants for bonds were undercapitalized or underqualified.

Both sides had a point. The sureties were sticking to their principles and saying that their underwriting base of experience, integrity and financial responsibility had to be maintained, or their value as an instrument of prequalification would be severely diminished. Also, implicit in the sureties' argument was the inherent fear of loss if they failed to maintain their standards and wrote bonds for contractors who did not qualify. Finally, the surety industry maintained that it would not be fair to qualified contractors to foster competition from contractors who failed to measure up to reasonable underwriting standards. On the other side of the coin were the small contractors, who argued that they could not meet experience requirements if they were not given the opportunity to gain that experience.

Since then, both sides of the discussion have seen numerous changes in the environments under which sureties have operated. They have realized the unfairness (both to sureties and to small contractors) of putting contractors with minimum credentials in positions where their ability to perform, or even survive, was not assured.

In the 1990s many new surety players emerged. New companies were started—divisions of existing insurance companies, specifically committed to the small contractor marketplace. Bonds were being written and the needs of the marketplace appeared to be satisfied. All seemed well until the turn of the century, when a variety of forces combined to create the largest losses ever experienced in the history of surety.

The same conversations that took place before are taking place again, but with a significant and hopefully beneficial twist.

The primary problems of the small and emerging contractors arose because these contractors needed to know more about what it takes, not just to be a small contractor, but to be a bonded contractor. At the same time that these problems were acknowledged, the surety industry and the construction industry stepped up to teach these new contractors what they needed to know to become eligible for surety credit.

Several states have established bond program initiatives. The heart of such programs is a solid curriculum that is administered and delivered by local professionals. It is designed to give participants what they need to know to succeed in the construction industry, including knowledge that will help them prepare to enter the surety arena.

SURETY BOND GUARANTEE PROGRAM

In 1968 the Small Business Administration (SBA) was granted the authority to issue guarantees to surety companies whereby the SBA would reimburse a surety for losses up to 90 percent on any bond written, up to certain stated limits. There were size standards established which governed a contractor's eligibility for the program, and a fee schedule was promulgated. Today this program is available for use by eligible small contractors regardless of race, age or sex.

In the mid-1980s, the surety availability for small contractors once again constricted. This time the government stepped in with an effort to expand the Small Business Administration's Surety Bond Guarantee (SBG) Program. The key to this initiative was to reduce the existing program's volume of paperwork and duplicative underwriting, making the program more attractive to the major sureties who had become disillusioned with it. In 1990, Congress passed what is now known as the Preferred Surety Bond Guarantee (PSBG) Program. Under this innovative program, sureties that possess adequate qualifications can treat the government as the equivalent of a treaty reinsurer, which means that the surety does not have to share decision-making with the SBA and can obligate the government to a guarantee of its loss merely by notifying it of the fact that it has written the bond. It is hoped that the major surety companies will be enticed into participation by the Preferred Program's lower costs and minimal red tape. The original SBG program, coupled with the Preferred Program, will help small and emerging contractors to get their foot in the door of the construction business.

In early 2009, the government again altered the terms of the program by increasing the guaranty amount from \$2,000,000

to \$5,000,000, and in some cases up to \$10,000,000. As our economy develops or constricts, there are constant discussions on how to better the SBA program. The above examples indicate that this program will continue to develop, with a focus on assisting the small and emerging contractors.

The SBA has guaranteed billions of dollars of contracts and has absorbed millions of dollars in loss that otherwise would have been borne solely by sureties. Those losses would have drained capital from sureties and ultimately would have resulted in a serious diminution of surety markets. This in turn would have restricted competition among sureties and been a negative factor in the construction marketplace.

This private-public partnership between the federal government and the surety industry has worked well. However, it has not completely blunted charges, from the small, women-owned, minority-owned or disadvantaged segments of the construction community, that bonding companies block access to the opportunities presented by the expenditure of government construction dollars. That criticism won't disappear until all parties realize that qualification and assurance of performance and payment are what the government wants the surety to do, or rather *requires* the surety to do. The other factor in reducing political attempts to find alternatives to surety, or to somehow find ways around it, is the perception of fairness. Fairness will be perceived if all contractors applying for bonds are treated honestly in the sense that their qualifications are fully reviewed in a spirit, not of finding what is wrong, but rather looking for what is right. For that to happen, any contractor denied surety must also be informed as to what the firm's weaknesses are and what must be done to turn the weaknesses into strengths.

As changes take place in Washington, the SBA Surety Bond Program will continue to evolve, but with the support of the surety industry it will continue to provide capacity and underwriting support for small contractors.

THE SUBCONTRACTOR

We discussed in a prior section the prudence of bonding subcontractors. There are many who feel that sureties do not want to bond subcontractors. This may be true of a few major sureties, but is not the case as a general rule. There are more than 500 companies issuing surety bonds in the U.S. and Canada. There are obviously not enough general contractors around to support all of these companies. There are numerically far more subcontractors than there are general contractors, so it is logical to assume that the surety industry is not going to ignore a major share of its potential market.

What probably gives rise to the feeling that subcontractors are not wanted is the high declination rate in relation to

the total number of applicants, as well as a lack of understanding of the problems presented to a surety by subcontractors.

Subcontractors, by definition, are specialty contractors. Many classifications of subcontractors are made up of trade specialists who, because of their particular skills, have chosen to go into business for themselves. Many may lack capital and business acumen, thus presenting the problems discussed in the previous section on small contractors.

Cash flow is a major issue for the subcontractor. A subcontractor is two places removed from the owner, the source of all funds. The subcontractor, therefore, is subject to occasionally having money held up for reasons beyond its control. An architect or the owner can hold up the approval of a requisition, resulting in a slowdown of funds. Similarly, the general contractor can hold back money for a variety of reasons. Any slowdown of money can have a detrimental impact on the subcontractor's ability to operate.

Because so many subcontractors are trades people, they are labor-intensive and must meet a payroll every week regardless of the circumstances. Failure to meet the payroll will result in employees not showing up for work, stoppages and myriad other problems. Labor in this situation is the key to profit, and therefore productivity must be maintained at the level contemplated in the original job estimate. This means that the surety will probably expect to see a more liquid condition from a labor-intensive subcontractor than they would from one who has sub-subs or who can demonstrate that the bulk of its costs are for equipment or materials. In the latter case, cash flow is not as critical, because payment arrangements can generally be worked out in advance with suppliers and tailored to individual job payment schedules.

Scheduling of work is important to all contractors, but is particularly important to the subcontractors whose work begins in the middle to late stages of a project. The subcontractor can often be bidding work two years in advance of its scheduled commencement. This presents two problems to a surety. The first problem is price adequacy. The question is, has the subcontractor considered all reasonable contingencies, such as labor increases, inflation, and material price increases in its cost estimate? The second problem is backlog. The subcontractor wants to keep its backlog as high as it can for as far into the future as it can. This puts the subcontractor and the surety into direct conflict, because the surety will be reluctant to extend guarantees too far into the future in amounts in excess of the aggregate limit of credit it wants to extend. Time itself represents a risk, as adverse events can occur over time.

Most subcontractors would obviously prefer to avoid being asked to provide bonds. But, if they are not bonded, and the general contractor seeks to impose controls on the subcontractor for the protection of the general contractor, the subcontractor can find itself disadvantaged to a significant degree by these controls. A general contractor may decide to retain a higher percentage of the contract price than is being withheld by the owner. The general contractor may slow down payment of requisition money, if it senses a problem. The general contractor, finally, may be quicker to default a subcontractor who is unbonded than one who is.

The object of this is not to scare anyone, but to point out potential problems, so that if they are recognized, they can be addressed and solved.

THE DEVELOPER

Developers, particularly those who want to act as their own general contractor, are a major problem for sureties, just as are contractors who wish to become developers.

The first problem is the major one of risk. There is substantially less risk involved in being a hired contractor building something for a fixed price, using plans prepared by someone else who is responsible for financing, construction and the overall economics of the projects.

Surities contend that developers have historically been poor credit risks. Many people dispute this, pointing to the number of FHA and state housing finance agency projects that were bonded and completed with few problems. The point has become almost moot because of the reluctance of most sureties to bond developers and their projects. But, as it is our purpose here to explain bonding, we'll try to explain the dichotomy that exists between developers and sureties.

A developer is generally a fairly sophisticated real estate entrepreneur with good instincts regarding land acquisition and an eye for what type of project will work in what area. The developer has enough savvy to put figures together in such a way as to prove economic viability and attract financing for construction and long-term mortgaging. Given these qualities, one might assume that a developer would be an attractive risk for a surety. However, this is not the case.

DEVELOPERS BECOMING CONTRACTORS

The first stumbling block usually lies in the lack of construction experience. The developer wants to build its own project to keep costs down, but the surety is left with doubts as to whether the developer can actually complete the construction. Added to this basic question are the ancillary questions regarding a developer's ability to accurately estimate the job and forecast construction costs.

Another major problem is rooted in a mutual misunderstanding. Developers usually do not fully understand the true function of a bond, and therefore are ill-prepared to apply for one. On the other hand, the surety industry, by and large, does not understand the development business. Surety underwriters are accustomed to looking at contractors with good liquid financial positions. They are not trained to cope with people who deal in land values, equities, leverage, cash flow and debt service. The result is that developers and sureties do not always communicate on the same level.

The next stumbling block appears to be the uncertainty in the minds of sureties about whether the developer will stick with the project and see it through to completion in the face of adversity. If the project runs into trouble and the developer cannot or will not stick with it, then the surety is forced into the real estate business. As we have seen, in a normal default the surety can see to completion of the project, define its loss, and institute normal steps to recoup. When a developer fails, the surety must not only finish the project but then must manage it until it can find a buyer. It may seem that such a deal would work to the surety's advantage, particularly considering the fact that most major insurance companies have real estate investment subsidiaries or divisions. Frankly, there may be merit in such thinking, but it does not tally with the practicalities of life as it exists in the world of suretyship. Bad real estate loans often account for reduced credit ratings of insurance companies.

Surety underwriters are not in the real estate business. They are in the business of determining creditworthiness and extending credit, and if the question "what happens if?" cannot be answered in a satisfactory manner; the surety underwriter is going to make a negative decision. The same thing applies to those involved in the surety claims process. Theirs is a complex enough job without adding to it the responsibility for understanding the economic viability of a real estate project.

Finally, the credit collapses in the late 1980s and in the early 1990s, as well as in 2008 and 2009, have caused sureties to become almost cynical regarding real estate. They have seen the results of overbuilding across the country, even in regions that had previously been impervious to economic downturn. They have seen the collapse of the savings and loan industry, the closing of major commercial banks, and the general meltdown of Wall Street. In most cases the genesis of the problems of the banks was real estate. This cynicism or high anxiety is not likely to abate for years to come. This will make the bonding of developers even more problematic in the future.

CONTRACTORS BECOMING DEVELOPERS

The second facet of the developer problem involves the contractor who wants to become a developer. Attempting to go into the development business has been a significant factor in the demise of many construction companies.

The contractor knows how to estimate and how to build. It may even be able to attract financing. But what some contractors lack is that practical eye of the developer, which sees what will work and what will not. The contractor may build housing where office space is called for or may put a nursing home where a shopping center should go. When the project gets into trouble, it may well take construction company money to bail it out, thereby compounding the problem by stripping the primary source of income of its operating capital.

If a contractor has significant net worth and the development is of modest proportions; and if the contractor can prove all the bases are covered, then the contractor's surety may entertain the project. Otherwise they will probably decline and tell the contractor that it would be better off sticking to its own trade—particularly in light of the credit problems mentioned above.

HAZARDOUS WASTE REMEDIATION PROJECTS

The newest problem on the agenda of sureties and their contractor clients is the bonding of any environmentally sensitive work.

Concern about protecting human health and the environment has presented contractors with opportunities to clean up toxic waste, wherever found. With the new emphasis on removing carcinogens and toxicity from our buildings, aquifers, and the ground, there has come societal concern, as well as regulation, that has led to billions of dollars being spent on these activities. For some of these clean-up projects, technology to perform the tasks had to be developed. For others, adequate capacity to design and engineer the work had to be found. In yet other facets, issues of worker safety had to be addressed. Yet, all of these obstacles paled when compared to the fundamental question of who would bear the responsibility to the public for any injuries sustained as a result of any of these activities. As surety companies were asked to provide bonds on these types of work, they very quickly realized something: If a contractor assumes responsibility for such protection, it will become the responsibility of the surety. This relates back to the risk transfer versus risk sharing discussion.

Contractors as well as their sureties realized that the tort system made them highly vulnerable to lawsuits. This was especially the case in light of asbestosis caused by asbestos abatement, a release of toxic materials into the air, or the seepage of toxic materials into drinking water supplies as a result of remediation efforts. Concurrent with this

realization were changes in the insurance marketplace. Traditional occurrence forms of liability policies were being replaced by claims-made policies. In addition, liability insurance underwriters became less inclined to provide adequate insurance limits at affordable prices, because of their inability to predict future loss with any reasonable degree of certainty.

Asbestos abatement contracts were the first environmental projects to challenge the surety industry. At the outset bonds were not available because insurance was not available. As insurers have become more knowledgeable about the risks inherent in dealing with asbestos abatement and containment, there has been some loosening in the insurance marketplace. Although most policies are written on a "claims-made" basis, the availability of insurance has made some sureties sufficiently comfortable, and provided a stable, albeit limited marketplace. One thing is clear: sureties do not intend to assume the risk of becoming environmental insurers, nor do they intend to cover claims that may arise many years in the future. To protect itself, the contractor must purchase "occurrence" liability coverage or make sure that its "claims-made" coverage is maintained without gaps and followed by "tail" coverage.

Superfund – the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), created additional problems for surety underwriters. To the absence of a viable insurance marketplace were added concern regarding the awarding of contracts on a design-build basis, and a lack of familiarity with, and a resultant fear of, untried technologies. There also was confusion regarding the jurisdiction under which contracts would be adjudicated, and concern about vulnerability to suits from third parties other than direct bond obligees.

Industry groups are working diligently on solutions to these problems. The passage in 1990 of a revision to the Superfund Act, tying bonds on Superfund projects into the Miller Act (which governs surety on federal projects), may entice some sureties into the marketplace. In addition, it may provide a model for the revision of state statutes governing remediation work. Such revisions may provide sureties with a consistent framework within which to do their due diligence.

In some locales, alterations to proposed contract language have mitigated concerns regarding landfill closures. When language is placed in a contract limiting the contractor—and hence its surety—to responsibility only for the performance of contractual obligations in accordance with plans and specifications, the comfort level of sureties is increased.

Contractors and their sureties have dealt with the emergence of mold in the '90s, and there will be new challenges arising

out of environmental concerns. It must be kept in mind that, just because an industry such as surety is reluctant to jump into solving new problems, it doesn't mean that it will run away from those problems. Surety will perhaps spend more time assessing new risks than other industries, but history has shown that surety will play its role as soon as it understands what the appropriate role is.

These problems and others will vex contractors and their bonding companies well into the next millennium. However, close cooperation between the surety and the contracting communities gives each the best hope of coping with whatever problems arise.

DUAL OBLIGEE BONDS

Dual obligee bonds provide a way for parties other than a project owner to protect their interests in the successful completion of a construction project. In most cases, the second, or dual, obligee is a lending institution that is providing a construction loan for a private project.

On private projects, it is often the bank or other construction lender that requires that the contractor furnish the owner with performance and payment bonds in the first place. Lenders often want to be included in the bonds as a dual obligee, because they want access to the protection of the surety bond if either the contractor or the owner fails to live up to its obligations under the contract.

On public work, certain federal and state financing agencies make it mandatory that they be named as dual obligees on all projects in which they are involved.

This dual obligee situation can be beneficial for the contractor. Most importantly, it assures that if a project owner defaults on its obligation to pay the contractor, another party—the dual obligee—is sufficiently interested in the project to assume its funding and bring it to completion.

However, surety companies insist on adding conditional language to the bond, via the dual obligee rider. This provides that the rights of the second obligee cannot exceed those of the project owner or primary obligee. This is done to protect the contractor and the surety in cases where one of the obligees has breached its contractual obligations to the contractor, and the second obligee seeks to enforce performance under the bond—the breach notwithstanding. Sureties also usually want the additional obligees to have a financial interest in the project. Be sure to consult with your surety agent before agreeing that additional obligees are to be added to bonds.

GUARANTEES AND WARRANTIES IN CONTRACTS

Normally a performance bond will cover a warranty period of up to one year if such is included in the contract being bonded. However, surety companies are very reluctant to write performance bonds when the contract calls for a longer warranty period.

Long-term warranties of five or ten years are often seen in roofing and glazing contracts. It is more appropriate that such warranties should come from the manufacturers of the products used in the roof or window systems rather than from the installing contractors.

Bonds running directly to the owner may be available to guarantee these long-term warranties. If such bonds are not available, the owner will have only the contractor to look toward in the event that long-term latent defects arise.

BUSINESS PERPETUATION

The final problem to be discussed in this chapter is the one of business perpetuation or continuity. The current demographics point to an aging American population. What this means is that the owners of closely held corporate America are reaching the point in life where they want to cash in on forty or so years of endeavor. Most construction company owners, particularly those dealing with bonding companies on a regular basis, have built up significant equity in their companies. Many contractors would probably like nothing better than to write themselves a check, pack up their golf clubs, and live happily ever after in a warm climate. Unfortunately, tax laws and reality conspire to preclude such an idyllic end to an illustrious career.

Surety companies are acutely aware of the aging of their customer base, and are deeply concerned about making sure that the contractors they are bonding will remain in place at least long enough to complete the contracts on which bonds have been written. As a result of this concern, the establishment of a continuity or perpetuation plan for a contractor has become a primary focus in the due diligence/underwriting process.

Because two of the three Cs of credit, namely **Character** and **Capability**, are essentially subjective and based on people, it is logical that a surety will be keenly interested in who will succeed to the ownership of its principal. To some contractors this interest seems an unwarranted intrusion, and it may be construed as forcing a decision prematurely. In some cases that may be true, but coming to grips with the eventuality of retirement and mortality is essential to any sound business planning. It is also only fair that a contractor plan adequately for the future of the individual's family. So, in essence, by forcing the issue, the surety is causing the contractor to look at estate planning before all options have been foreclosed. If the

exercise is done properly, with individual estate planning being the primary focus, contractors can anticipate and deal with tax considerations, as well as with the continuity of the business and the proper funding of its perpetuation or orderly dissolution, whichever is appropriate.

Chapter 8

POPULAR MISCONCEPTIONS

Given that the purpose of this brief treatise on surety is to provide a guide to the basics of bonds, we should conclude by challenging some common misconceptions.

LETTERS OF CREDIT

The Irrevocable Letter of Credit (ILOC) is an instrument, primarily used in international commerce. It is a promise to pay when a second party delivers whatever it is that the first party bought. In many parts of the world an ILOC is used in construction much the same way a bond is used in the U.S. However, rather than performance and payment bonds, an owner in the Middle East may require a ten percent or twenty-five percent ILOC to secure performance of a construction project.

The Surety and Fidelity Association of America and others are working hard to promote the use of bonds in foreign countries in lieu of ILOCs. The big hurdle that must be overcome is the fact that surety bonds are based in English Common Law, and the principles espoused have been expanded and improved by the governmental and legal systems that have grown up in America. An ILOC can be cashed basically on the assertion that the beneficiary of the ILOC has been wronged. A claimant on a surety bond must prove that there has been a default of contractual obligations by the bonded party.

However, if the entity requiring an ILOC in the United States is a governmental body, the use of an ILOC as a guarantee of performance may be more desirable, in some respects, than the use of it as a guarantee of payment. While the ILOC is evidence of available credit, it is of no use as an instrument of qualification. It can be cashed without justification and it leaves the giver of it, the contractor, with little defense against wrongful termination. The proceeds of the letter may be dedicated to completion of the project, but could well be inadequate to satisfy the needs of unpaid subcontractors, laborers and suppliers. As subcontractors and suppliers cannot lien public property, they may remain unpaid, or with recourse only to an insolvent contractor. That is not sound public policy, because it serves the governmental entity to the potential detriment of all other parties to the contract—most of them taxpayers.

An ILOC in lieu of a bond on private construction at least does not impair a contractor's lien rights in the hands of a callous owner or lender. It is tremendous leverage against a contractor, because it can be used as a club to coerce the

contractor into giving up some of its rights in the prosecution or resolution of disputes.

Finally, surety companies have used ILOCs as a method of collateralizing different obligations, such as release of lien bonds or certain court bonds. Some companies also use them to secure the credit of contractor clients; in order to justify writing bonds that otherwise would be declined.

BOND THRESHOLDS

Many states, municipalities and private owners have set limits or thresholds above which bonds will be required and below which they will not. In public construction these proposals are generally put forth to defuse a political problem created by the perception of limited availability. The current federal government threshold is \$100,000, but there are numerous proposals submitted annually all over the country to raise thresholds from \$100,000 to \$500,000, or even higher. These proposals are generally conceived so that contractors can get access to government work under the threshold. This is fine if the people of that jurisdiction are willing to accept the risk of contractor failure on such projects. However, it is not fair, when viewed in the context of the small subcontractors, suppliers and laborers whose only recourse for payment is the labor and material payment bond that accompanies performance bonds. It is particularly unfair because those who are least able to bear the penalty of non-payment are the ones forced (in the absence of a bond) to accept the consequences of not being paid.

THE TEN PERCENT CASE

Anyone dealing with older books on surety will probably find sections explaining that a bonding program granted by a surety is the equivalent of ten times working capital. That may well have been true at one time, when surety underwriters held to the theory that contractors usually earned ten percent gross profits but were faced with a ten percent retainage. Therefore, if a job were to be adequately financed, a contractor should have enough money to afford the retainage that was in essence its profit. This is an oversimplification, but there still are people who subscribe to the ten percent theory.

Today there is no ten percent rule. Contractors' retainages vary, as do their gross profits. In addition, economic cycles come and go with greater rapidity than they did 25 years ago, hence greater caution must be exercised when trying to prognosticate. Finally, the surety industry, like the construction industry, has become more sophisticated, in that it understands the inner workings of a construction organization much better than it did in the past. It has a better appreciation for the meaning of cash flow—particularly as it applies to the contractor that subcontracts versus the labor-

intensive contractor. As a result of this enhanced awareness of the things a contractor already knows, the surety industry is better equipped to evaluate the overall risks associated with projects.

Surety underwriters are human, and therefore subject to error. But the ability of an underwriter to make a truly informed judgment rather than a mechanical one is very much to the overall benefit of the construction industry, particularly its better members. Today, because there is no ten percent rule, a quality contracting firm has a better opportunity to succeed. All this assumes that external economic forces do not conspire against it.

Chapter 9

THE ROLE OF THE PROFESSIONAL SURETY BOND PRODUCER

The fact that most surety companies will accept business only through independent agents and brokers—also called producers—works for everyone’s benefit. The contractor has an opportunity to dress-rehearse every proposal, and has the advantage of having someone available for consultation who is not necessarily thinking in terms of “yes” or “no.” Mutual confidence is generated between contractor and agent. This confidence can be turned into candid and practical suggestions and advice, which can then be translated into positive approaches to a surety in terms that the surety can understand.

Put another way, the agent translates what the surety says into terms the contractor can understand, and visa versa.

While most agents licensed to produce insurance business are legally permitted to handle surety as well, relatively few agents have the training and experience necessary to fully serve a contractor’s surety needs.

A contractor can look for a number of factors in determining whether a particular agent is a surety professional qualified to handle a business’s surety needs:

- An understanding of basic credit principles
- Familiarity with accounting and finance, with particular emphasis on the American Institute of Certified Public Accountants (AICPA) Audit Guide for Construction Accounting
- An ability to analyze financial statements, work-on-hand schedules, and cash flow
- Knowledge of the surety market, the surety credit process, and underwriting standards
- The respect and confidence of surety underwriters
- Active involvement in construction industry associations
- An awareness of local, regional, and national construction markets
- Membership in the National Association of Surety Bond Producers (NASBP)
- An understanding of the construction industry and the construction management process, including estimating, bidding, building, and cost control systems
- Experience in strategic planning and management practices that promote successful contracting
- Knowledge of construction contracts and contract law
- A reputation for integrity

Contractors can identify most of these characteristics in a surety producer by posing a few pertinent questions. After the initial screening, the contractor might want to have its financial officer, banker, CPA, and/or attorney interview the agent for further evaluation of its knowledge of contracts, finance, and credit.

The professional surety agent should be willing to furnish references, including the names and phone numbers of existing contractor clients, all surety companies represented in the last five years, and accountants and bankers with whom the agent has a professional relationship.

The ideal contractor-agent-surety relationship is based on candor, confidence and communication. The contractor that peddles its case to a number of agents, the agent that peddles its case to a number of companies, and the surety that declines without giving sufficient reasons—all break the candor, confidence and communication ethic, and always to someone’s detriment.

In every endeavor there is a right way to do things and a wrong way, although no one does everything right all the time. The surety business is no different. Surety people depend on the construction industry for their livelihood. Therefore, they are deeply interested in keeping contractors and their businesses healthy. The best way to accomplish that end is for all parties to keep open the lines of communication at all levels.

**Appendix A
Common Financial Ratios**

Liquidity

Ratios	Calculation	Generally Accepted Comfort Range
Number of Days of Cash	$\frac{\text{Cash} + \text{Equivalent}}{\text{Annual Revenue}} \times 360$	7 days or more
Accounts Receivable Turnover	$\frac{\text{Accounts Receivable} \times 360}{\text{Revenue}}$	45 days or less (Excluding Retentions)
Accounts Payable Turnover	$\frac{\text{Accounts Payable} \times 360}{\text{Cost of Earned Revenue}}$	45 days or less (Excluding Retentions)
Current Ratio	$\frac{\text{Current Assets}}{\text{Current Liabilities}}$	Greater than 1.2
This ratio is an indication of a firm's ability to handle its current liabilities. The higher ratio shows a numerical superiority of current assets over current liabilities. However, the composition and quality of current assets is a critical factor in the analysis of liquidity.		
Working Capital to Backlog	$\frac{\text{Working Capital}}{\text{Cost-to-Complete Backlog}}$	5 – 10% or greater
Quick or Acid Test	$\frac{\text{Cash \& Receivables}}{\text{Current Liabilities}}$	Greater than 1.1
Any value of less than 1 to 1 implies dependency on inventory or other current assets to liquidate short-term debt		

Net Worth

Ratios	Calculation	Generally Accepted Comfort Range
Debt to Net Worth	$\frac{\text{Total Debt}}{\text{Net Worth}}$	2.1 to 3.1
This ratio expresses the relationship between capital contributed by creditors and that contributed by owners. The higher the ratio, the greater the risk being assumed by creditors. A low debt/worth ratio usually has greater flexibility to borrow. A more highly leveraged company has a more limited debt capacity.		
Fixed Assets to Net Worth	$\frac{\text{Fixed Assets}}{\text{Net Worth}}$	10 – 40%
This ratio measures the extent to which the owner's equity (capital) has been invested in plant and equipment (fixed assets). A lower ratio indicates a smaller investment in fixed assets in relation to net worth, and a better position for creditors in case of liquidation.		
Net Worth to Backlog	$\frac{\text{Net Worth}}{\text{Cost-to-Complete Backlog}}$	5 – 10% or greater
Sales to Net Worth	$\frac{\text{Annual Revenue}}{\text{Net Worth}}$	Should not exceed 13 times Net Worth – Could indicate over trading capital resources

Profitability

Ratios	Calculation	Generally Accepted Comfort Range
Gross Profits to Sales	$\frac{\text{Gross Profits}}{\text{Annual Revenue}}$	5 – 10%
Overhead to Sales	$\frac{\text{General \& Administrative Expenses}}{\text{Annual Revenue}}$	5 – 10%
Overhead to Net Worth	$\frac{\text{General \& Administrative Expenses}}{\text{Net Worth}}$	60% or less
Net Profit Before Taxes to Sales	$\frac{\text{Net Profit Before Taxes}}{\text{Annual Revenue}}$	2% or greater
Return on Equity	$\frac{\text{Net Profit of Prior Year}}{\text{Net Worth of Prior Year}}$	15% or less
This ratio shows the rate of return on capital. While it can serve as an indicator of management performance, it should be used in conjunction with other ratios. A high return, usually associated with effective management, could indicate an undercapitalized firm. A low return, usually an indicator of inefficient management performance, could reflect a highly capitalized, conservatively operated business.		

