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**HIDDEN DANGER: DISCOVERY OF LATENT
DEFECTS IN OCCUPIED BUILDINGS:
CALCULATION OF DAMAGES**

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By:
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INTRODUCTION

When a defect is discovered after substantial completion, the owner can recover reasonable damages that will be incurred to correct, fix or replace the defect. Adherence to a few simple steps can increase the owner's probability of a successful recovery.

The owner must give prompt notice of the defective work in accordance with any contract terms. Typically, the contractor is given the opportunity to remedy the defect, if it is not an emergency or safety hazard. The obligation to provide the "right to cure" may be a statutory precedent to subsequent enforcement of legal rights. If the contractor refuses or fails, then the construction contract may have been breached and the owner may be entitled to damages. Damages must be reasonably quantified and are to be measured without speculation as well as supported by evidence that is reasonable, reliable and sufficient.

Most construction claims such as delay or acceleration claims arise from events that take place during the actual construction of the project. In contrast, defect claims can arise prior to substantial completion or many years after substantial completion when the building is occupied. As such, damages for these types of claims may go well beyond those elements that are typically found in claims made during the construction of a project and will be subject to statutes of limitations, which vary by jurisdiction.²

General Damages

Generally, identifying and describing a defect is sometimes easier than measuring its effect. Damages can be grouped into one of four types: general, special, punitive or a combination of all three.

There are two basic techniques generally used in calculating general damages in defect cases: one summarizes the costs that have been incurred to cure the defect(s) and the other calculates the loss in value or the diminution-in value since the construction contract was not fully performed. Costs the owner might incur to modify, fix, replace, and/or repair a defect may include items such as: labor, materials, and subcontractor costs, equipment rental fees, engineering or architectural fees, relocation expenses, finance costs and demolition/tear-out costs. However, the owner cannot seek recovery for costs that are reasonable and necessary to complete the project, but were not completed by the contractor, as part of its defect claim.

Project completion might also play a role in an owner's claim. For example, an owner notifies the contractor, prior to the installation of the dry-wall, that the installed insulation does not match the contract plans and specifications. The owner's claim may be limited to only the cost of removing the defective insulation and installing the specified insulation, even if the contractor refuses to or does not cure the defect.

However, if the owner does not discover the nonconforming insulation until after substantial completion and the existing insulation poses no safety hazard, removing and installing the specified insulation might result in greater costs. The contractor may argue that any changes will result in economic waste. This defense has been successfully used when the cost of repair is substantial or the repair destroys the property. However, some Courts have refused to allow a contractor who intentionally or wilfully breaches its contract to use the economic waste rule to avoid the cost of repair damages.³ Similarly, if the defect causes significant safety concerns, then the economic waste argument is not valid and the cost to cure is the basis of recovery.⁴

Also known as the benefit of the bargain, diminution-in value measures the decline in property value as compared to expected market value if there were no defects. That is, the

owner is being compensated for any decrease in the property's market value that results from the existence of the defect. For example, a commercial shopping mall owner sued its contractor for defects in the installation of a terrazzo tile floor. The owner, through its expert, provided testimony that the value of the mall had declined as a result of the defective tile floor.⁵

Similarly, various Courts have held that when the contractor has intentionally performed defective work, then the right measure of damages is the actual cost of the corrective work and not diminution-in value. In *Shell v. Smidt*, the contractor was found to have intentionally deviated from the plans and specification during the construction of some tract homes. Here the contractor was responsible for fixing the homes to conform to the construction plans and specifications, even though the cost to repair was greater than the resulting diminution-in value.⁶

Diminution-in value calculations attempt to compensate the owner for a defective project that is not worth what the owner expected. While it is usually easy to determine the actual amount that the owner received, the difficulty lies in calculating the value that would have been received if the project had been completed as the plans and specifications stated.

One method that has been developed over the years for determining value is a comparison of similar properties or projects. For example, during construction, a contractor inadvertently omits soundproofing insulation as called for by the plans and specifications. However, all of the other homes in this upscale development have soundproof insulation. The homeowner has been advised by his agent that his property is not as valuable as the other homes because the soundproof insulation is missing. There are no other differences between this homeowner's house and the others within the development. In addition, the homeowner has been reviewing recent sales within the neighborhood, and examining recent real estate listings and found that his house will not sell for the same price as the others within the

development. Finally, after talking with his real estate industry expert he is shocked to learn that there has been a diminution-in value in his property.

While this example illustrates a simple technique to calculate diminution-in value, this approach can be burdensome since there may not be other comparable properties that can be used to make this comparison. This is especially true with specialty projects, such as sports arenas, libraries, schools, bridges, dams, etc., where comparable value information may not be available.

In the previous example, the diminution-in value was limited to one homeowner. Now, consider an upscale commercial building project with multiple tenants including residential and commercial. In this example the owner/developer is not planning on selling the property, but plans on renting the available space. Assume the contractor installed soundproofing insulation in some of the units, in others it is missing, and the contractor refuses to make the necessary corrections. As a result, the owner/developer is unable to rent the property at full market rates or fill the units to capacity as originally planned because the construction contract has not been fully performed. This diminution-in-value is then measured by the difference between the owner's income streams (had the contractor performed) and what the owner actually receives. In this situation, other commercial rental projects could be used to determine the amount of lost rental income. This difference is then valued by applying a revenue and/or earnings multiple derived from a study of comparable projects.

Various methods such as discounted cash flow analysis, comparable appraisal analysis and statistical modeling have been used by experts. Experts may use market or rental studies of similar projects to analyze revenue, cash flows, sale prices and other metrics to calculate the value of the project. The difference between these values and the owner's actual value is the loss.

Special Damages

Special damages are by definition, unique and depend on the legal theories underlying the claim. For example, special damages may not be recoverable under a breach of contract claim if contractual clauses preclude the parties from recovering consequential damages. However, the owner may be entitled to special damages, despite the contractual clauses, if the contractor engages in negligent actions or misrepresentations.

One type of special damage is lost profits. Some examples include a contractor's remediation efforts caused an owner to miss a window of opportunity, much like a retailer missing a holiday shopping season; a contractor seeks to recover losses it incurred when it was forced to divert resources away from another project to cure the defects caused by its subcontractor; and, a third-party asserts claims to recoup lost business profits when the contractor blocked access to his business during demolition. In contrast to general damages, special damages are a by-product of the defect and result in damages that are over and above the actual repair or fix of the defect. For example, out-of-pocket costs compensate the owner of a newly built hotel for repairing any defects. Whereas, when the hotel opens late because of these repairs, any lost profits or losses from increasing vacancy rates during the remediation efforts would not be compensated. These are special damages and the fact that they are not referenced in the contract documents is not a bar to recovery. However, many "industry form" contracts waive the right to collect these special damages.

As a general rule, "recovery will be allowed for damages that a party should have foreseen and could have been avoided by reasonable effort without undue risk, expense, or humiliation."⁷ If the owner fails to mitigate its damages, it may not maintain a claim against another for those same damages⁸ For example, if the owner discovers that the roof leaks, the owner has the obligation to repair the leak. If the owner fails to act in a reasonable manner, recovery may be difficult.

Punitive Damages

A third category of damages is punitive damages. Punitive damages are generally used to punish the wrongdoer for past behavior and to discourage any future misconduct. A claim for punitive damages may arise if the defects result from the contractor's deliberate or fraudulent actions. The United States Supreme Court has held that certain requirements must be met to recover these damages.

Establishing Damages

The general standard for establishing damages is threefold. The owner must establish that the damages were caused by a breach in the contract; the damages were contemplated by the parties; and the amount is reasonably certain. While absolute certainty is not required, "...sufficient relevant data [to] support a finding that profits were reasonably certain to result, and (are) not merely 'speculative' or 'imaginary'"⁹ must be shown. Any underlying data and/or documentation the owner's expert uses in forming their opinion is also held to this same standard.

While it is critical for the contractor to understand the owner's claim, it becomes a formidable task to comply with general discovery requests. It is not uncommon for the owner to literally back up the truck and dump volumes of accounting and cost information. Generally, this accounting and cost information includes bids and/or estimates, if available, bid take-offs, general ledgers, change orders, job cost reports, project profit and loss statements, cancelled checks, purchase orders, invoices, equipment reports, applications for payment, time cards and payroll records, project progress reports, correspondence, meeting minutes and project schedules. If the alleged damages relate to lost profits then some of the underlying accounting documentation to support these damages might include historical financial statements; customer contracts, orders, and correspondence; competitor and marketshare data; detailed cost information like bills of materials and standard costs;

production/efficiency reports; forecasts, projections, and budgets; and business and marketing plans. In addition, other financial and economic data may also be presented such as national and regional economic growth trends; industry-specific data on market participants, growth, trends, and profitability; analyst reports; rates of return; and various other relevant metrics.

Calculating Damages

The owner's claim is dependent on several factors, including proving that the contractor caused the defect and the costs incurred are reasonable and necessary. Generally, it is relatively easy to determine if the costs that the owner incurred are reasonable by reviewing the owner's invoices or other data and information such as subcontractor prices, correspondence between the owner and contractor, other contractor bids or estimates, standard estimating guides, time cards and certified payrolls and equipment rental contracts; while owner financial statements, projections and market studies from trade associations and proprietary market research groups such as Freedonia or ABI can also be used. Annual reports, SEC filings and information from customers and suppliers can also offer detailed financial insights. Testimony from other experts or those performing the remediation work as well as their reports, estimates or bids are often used to show that the costs are reasonable and necessary. Finally, the owner should also be prepared to prove that it attempted to mitigate its damages.

Lost profits are calculated by determining the difference between two models – the “but-for” and the actual results. The but-for model captures the owner's anticipated profits if the defect had not occurred, while the actual model reflects the owner's actual results. The difference in these two models is the lost profits.

Lost profits calculations are derived from two sources: lost revenues and increased expenses. Both are calculated in the but-for world and compared to the actual results of the owner. Simply put, lost revenues are what the owner would have enjoyed but-for the actions

of the contractor. Increased expenses are the expenses that the owner must incur to generate the lost revenue.

One of two approaches is often utilized to calculate the but-for performance of the owner: historical analysis and yardstick approach. The historical analysis involves analyzing the owner's historical financial records and information, while the yardstick approach focuses on competitor data to act as a guide to estimate the performance of the owner.

Generally, the owner's historical operational data and information is used to estimate lost revenue and increased expenses. In addition, industry and economic data can be used as well as the firm's business plans (formal or informal) to formulate lost profit projections. Take, for example, a hotel owner who elected to upgrade the windows in each of the guest rooms. In installing the upgraded windows, the contractor's work was found to be defective causing significant water intrusion. The hotel's but-for sales, increased expenses and related profits were calculated based on the owner's internal projections, which relied on market studies the owner performed in making the decision to build the hotel, as well as other operating data and information the owner obtained from other properties within the geographic area. Any business plans, projections with daily rates, occupancy levels and profitability information were also used to analyze the owners but-for calculations. In addition, the owner's projections were adjusted for any market events which occurred that might explain any downturn in the hotel's operations. These might include significant changes in area tourism, events like 9/11 and any other external market forces unrelated to any defects. Finally any adjustments are made and the but-for projection is compared to the actual results to calculate the lost profits that resulted from this defect.

What if the hotel was brand new with no performance track record? In contrast to the above example, the owner in this case has no historical financial or economic information on performance to assist in the calculation of lost profits. Today, most jurisdictions accept

recovery of lost profits by a new business provided damages are proven with reasonable certainty.¹⁰ Thus, as before, the use of relevant data and information such as projections and/or forecasts, can assist in developing a “reasonably certain” lost profits model. In addition to analyzing the owner’s projections and forecasts; general economic and financial information such as market studies, economic outlook and industry specific outlook reports may also be considered and utilized to assist in the calculation of lost profits in a new venture.

Finally, always remember, “a dollar today is worth more than a dollar in the future.” Generally, lost profits extend into the future and must be adjusted to today’s value. Thus, all things equal, with inflation, a dollar five years from today will be worth less today. The same is true of lost profits. Accordingly, future losses are usually discounted to a net present value using a discount rate that considers the risk in both the project itself and external market forces.

Conclusion

Once the contractor has notice of a defect, exposure to a claim is possible. Counsel can provide guidance on whether general, special, or punitive damages are recoverable, while a financial or accounting expert is best suited to provide an objective calculation of damages that can be presented to the fact finder. Counsel and the owner or contractor should work closely with the financial or accounting expert to obtain the necessary documents and information as well as assisting in understanding market influences to determine the best approach to calculating damages.

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² Proving and Pricing Construction Claims, Third Edition. Ed. Robert F. Cushman, John D. Carter, et al. §8.03[E][4].

³ *City School District v. McLane Construction Co.*, 445 N.Y.S.2d 258 (App. Div. 1981); *Shell v. Schmidt*, 330 P.2d 817 (Cal. Ct. App. 1958).

⁴ *Bhattaria v. Stein*, 849 P.2d 1153 (Or. Ct. App. 1993).

⁵ *Cafaro Constr. Co. v. B & B Constr. of Ohio, Inc.*, 1999 WL 148366 (Ohio Ct. App. Mar. 15, 1999).

⁶ *Shell v. Schmidt*, 330 P.2d 817 (Cal. Ct. App. 1958).

⁷ *MLK, Inc. v University of Kansas*, 940 P.2d 1158, 1165 (Kan. 1997).

⁸ *Graphic Assoc., Inc. v. Riviana Restaurant Corp.*, 461 So. 2d 1011 (Fla. 1984); *Barry & Sewall Industrial Supply Co. v. Metal-Prep of Houston, Inc.*, 912 F.2d 252, 259 (8th Cir. 1990).

⁹ *Great Lakes Aircraft Co. v. City of Claremont*, 608 A.2d 840, 857 (N.H. 1992); *Franklin Pavkov Constr. Co. v. Ultra Roof, Inc.*, 51 F. Supp. 2d 204, 219-20 (N.Y. 1999).

¹⁰ Litigation Services Handbook, Fourth edition. Ed. R. Weil, P. Frank, C. Hughes et al. The Legal Framework for Establishing Lost Profits for a New Business, 11.2.