

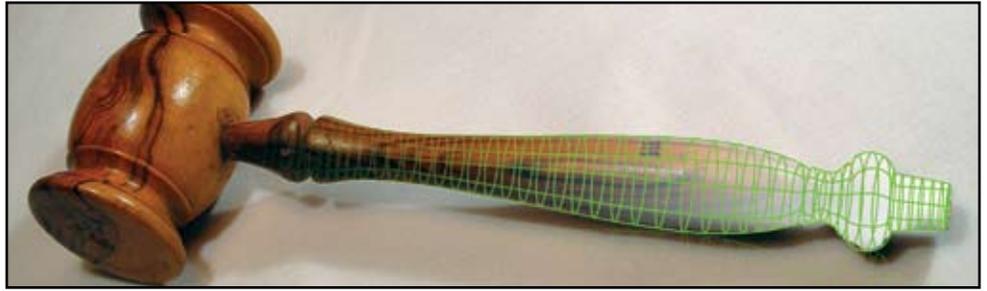
## Standard of Care and the Structural Engineer

By David J. Hatem PC and Eric A. Howard

A critical risk management issue that every structural engineer must understand and appreciate is the professional standard of care by which you agree to perform your design services. Simply stated, the professional standard of care is the yardstick by which the courts will measure a design professional's performance. The standard of care can be defined by contract, statute, conduct, and common law (court-made law). Generally, one who undertakes to render services in the practice of a profession or trade is required to exercise the skill and knowledge normally possessed by members of that profession or trade whom are in good standing in similar communities. Unless the design professional can represent otherwise, through demonstration of greater or lesser skill or knowledge, he or she will be held to these standards. This is commonly referred to as a negligence-based standard of care. In order for a design professional to be liable for professional malpractice, a judge, jury or arbitration tribunal must find that the design professional's services fell below the standard of what similarly-situated design professionals would have done under the same and like circumstances.

This article focuses on negligence-based standard of care provisions. It is worth noting, however, that a design professional can contractually assume a heightened or higher degree of care in which the design professional warrants or promises that the plans will be perfect and the design services will be of the highest degree in the profession. Such heightened standard of care provisions are valid, enforceable and present increased risk exposure for design professionals, and should be avoided at all cost. A heightened standard of care is particularly onerous to design professionals because it represents an uninsurable risk that goes beyond what a Professional Liability Insurance policy will cover.

A recommended negligence-based standard of care provides the following: professional services shall be performed in a manner consistent with *that degree of skill and care ordinarily exercised by practicing design professionals performing similar services in the same locality, at the same site and under the same or similar circumstances and conditions*. The design professional makes no other warranties, express or implied, with respect to the services rendered hereunder.



The negligence-based standard of care does *not* require perfection. Nor is the standard measured in terms of client satisfaction. Courts throughout the United States have recognized the negligence-based standard of care. For example, the Supreme Judicial Court of Massachusetts explained the justification for this standard in the following legal decision:

Architects [and]...engineers...and others deal in somewhat inexact sciences and are continually called upon to exercise their skilled judgment in order to anticipate and provide for random factors which are incapable of precise measurement. The indeterminable nature of these factors makes it impossible for professional service people to gauge them with complete accuracy in every instance.... Because of the inescapable possibility of error which inheres in these services, the law has traditionally required, not perfect results, but rather the exercise of that skill and judgment which can be reasonably expected from similarly situated professionals. *Klein v. Catalano*, 386 Mass. 701, 718-719 (1982).

Because the negligence-based standard of care provisions expressly recognize that design professionals will undoubtedly make mistakes, errors, or omissions which may potentially result in increased construction costs, it is imperative that design professionals educate clients early and often about the realities of the meaning of the negligence-based standard of care (i.e., errors or omissions will occur for which the design professional can not be held liable). The project owner should plan for and carry a reasonable contingency fund to address change orders that result from errors and omissions. This communication is particularly important where the design professional is retained for high risk projects.

In addition to protecting the design professional from liability for every error or omission on a project, the negligence-based standard of care also requires that claimants satisfy mini-

mum threshold requirements in order to establish a viable claim. For example, a claimant must establish the applicable standard of care and the design professional's failure to adhere to the applicable standard of care. To meet this threshold, a claimant will retain a similarly situated design professional to serve as an expert and offer an opinion that the design professional breached the standard of care.

Although the negligence-based standard of care provision insulates a design professional from being liable for every error or omission on a given project, a key issue in every professional malpractice claim is: at what point do the total number of errors or omissions constitute a breach of the standard of care? Put another way, in every professional malpractice case there is a threshold by which the dollar value or number of change orders attributable to design errors or omissions, relative to total construction costs, rises to the level of negligence. Most industry experts recognize that under a standard design-bid-build project delivery method, an owner can expect a certain percentage cost growth, which is related to change orders attributable to design errors or omissions. The acceptable percentage is fact specific and must be evaluated on a case-by-case basis. Factors such as the complexity of the project, whether it was a rehabilitation and remodeling project as compared to new construction, whether it was a fast track project or one where time was not an issue at all must be considered when evaluating design error and omission cost growth. While there is no universal agreement for this allowable cost growth, most practitioners would agree that it ranges between three and eight percent.

Some claimants disagree with such an aggregate analysis and instead argue that each error or omission must be examined individually to determine compliance with the applicable standard of care. In some instances, claimants will argue that some individual errors, without regard to the dollar value of the error, are so egregious as to represent a breach of the stan-

dard of care. In addition, some claimants will argue that any error or omission (regardless of dollar value) that constitutes a violation of applicable code is a breach of the standard of care by virtue of the design professional's obligation to design according to that code. What if, however, the code violation is the only error or omission and constitutes less than one percent of the total construction cost? As previously stated, the negligence-based standard of care expressly acknowledges that a design profession is not held to a standard of perfection; errors or omissions are to be expected. Thus, to hold a design professional strictly liable for every violation of applicable code seems incongruous with the applicable standard of care. Despite the acknowledgment of what the standard of care actually embodies, claimants and design professionals frequently wrestle with the above mentioned issues on any given professional malpractice case.

Regrettably, as noted above, some design professional will expressly or impliedly guaranty or warrant a perfect plan or satisfactory results. Particularly important in the current challenging economic times, as design professionals are confronted with increased demands by clients to accept unfavorable contract terms that increase risk exposure, is the necessity to not expressly or impliedly guaranty or warrant a perfect plan or satisfactory results. Often such warranties derive from the design professional inadvertently agreeing that the professional services rendered will be the "highest" or "first class." In other instances, a design professional will promise that the design will be fit for its intended purpose and technical accuracy. The language of these heightened standards of care provisions is enforceable and poses significant increased risk exposure for design professionals. There are a number of critical problems surrounding these actions by designers. The first problem is that a claimant does not need to present expert testimony to establish the applicable standard of care. Rather, the claimant need only establish that the design professional guaranteed perfection, or promised to achieve a specific result and failed to achieve that result. This can be demonstrated by showing the design professional submitted plans and specifications with several errors or omissions that resulted in increased construction costs. If this heightened standard of care can be proven, the design professional could be found strictly liable for any error or omission. The other significant problem with heightened standard of care provisions is that they are not covered by professional liability policies, which only provide coverage for negligent conduct. Accordingly, structural engineers are well-served by ensuring that their written contracts contain a negligence-based standard of care provision.

On projects where you are functioning as a sub-consultant to an architect or prime engineer you must be equally cognizant of the standard of care that your client has agreed to adopt with its client. A contractual disconnect

between what you owe to your client and the standard of care that your client owes to the owner can result in your client holding the bag for your error. This is an unpleasant situation for all concerned. ■

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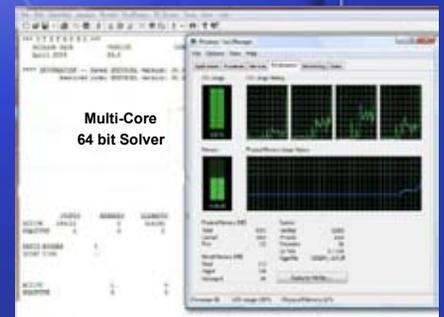
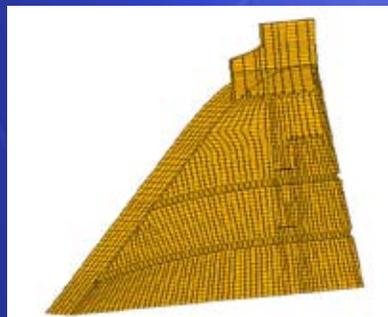
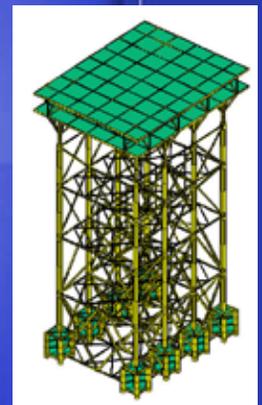
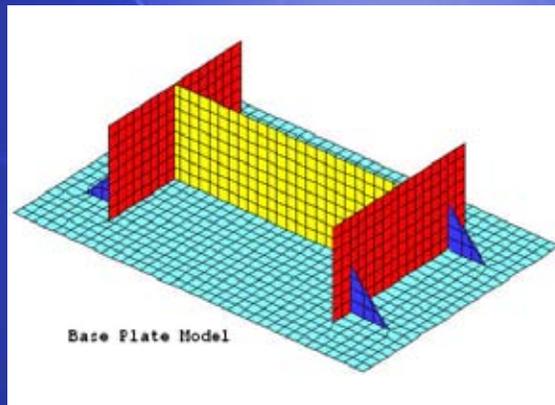
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