



Couldn't Care Less

Part 2: A Malpractice Primer for Structural Engineers

By Matthew R. Rechten, P.E., Esq.

Part 1 of this series (STRUCTURE, June 2014) built the foundation for understanding structural engineering malpractice. We explained concepts like liability and claims, generally, and tort liability specifically. On top of that foundation, we erected the framework, examining the basic elements of structural engineering malpractice, starting with the concept of duty.

In this article, we complete our project by examining the final three elements of structural engineering malpractice: breach, damages and causation. We then close out this subject by exploring some common defenses to malpractice liability.

Breach

The second element of a structural engineering malpractice claim is its simplest: breach. Simple because breach is defined by the first element, duty. A structural engineer commits a breach when they do not meet their duties. Proving a duty requires proof of what the engineer should have done; proving a breach is as simple as establishing that the engineer did not do it.

Damages

Where a man has but one remedy to come at his right, if he loses that he loses his right. Holt, CJ, Ashby v White (1703), 2 Raym 954.

It is a vain thing to imagine a right without a remedy; for want of right and want of remedy are reciprocal. Id.

This brings us to the third element of any malpractice claim: damages. Without damages, what Black's Law Dictionary defines as "[m]oney claimed by, or ordered to be paid to, a person as compensation for a loss or injury," there is no malpractice liability. An engineer is not typically liable in malpractice for careless practice that causes no harm. Although the "loss or injury" necessary to

trigger liability is often physical (e.g., death or a broken leg), it need not always be. It could be a sagging floor, drooping cladding, or objectionable movement.

There are numerous kinds of damages: punitive, liquidated, consequential, etc.

When we talk about malpractice, however, the damages for which the structural engineer may be liable are generally compensatory damages: damages sufficient in amount to indemnify the injured person for the loss suffered. Put differently, the focus of a malpractice claim is generally to make the injured person "whole." This is an admittedly fuzzy concept when applied to broken legs and the like, which no doubt explains at least part of the public curiosity over verdicts in personal injury cases like the McDonald's hot coffee case.

Compensatory damages are a fuzzy concept applied to non-economic damages, too. If an owner is stuck with a floor that vibrates, how can that injury be measured? How can he or she be made "whole?" The law employs two general approaches. One measures diminution in value: how much less is the owner's building worth because of the malpractice, the vibrating floor. The other measures the cost of repair, i.e., the cost to fix the problem. Jurisdictions vary in their preference for one approach over another. Some jurisdictions employ both, the proper approach depending on the factual circumstances. Thus, for example, although one jurisdiction may favor the cost of repair measure, it may opt for the diminution measure where the engineer's defect needs no fixing, and where fixing it would require the wasteful destruction of good work. Determining the proper approach or measure under the law can be tricky business, and often the subject of expert testimony.

Finally, the element of compensatory damages raises the related subject of "betterment," the idea that compensatory damages should compensate, but not overcompensate. Thus, if an engineer commits malpractice by specifying a 5-inch floor where 7 was needed, the engineer may be liable for the rework, but the owner is not entitled to the additional 2 inches they never purchased in the first place. The law will not permit the owner to profit from the malpractice.

Causation

I am by no means sure that if a man kept a tiger, and lightning broke his chain, and he got loose and did mischief, that the man who kept him would not be liable. Bramwell, B, Nichols v Marsland (1875), L R 10 Ex 260.

We now come to causation, the trickiest element of all. A malpractice claim (and the resulting liability) requires that the engineer's breach caused the injury at issue.

Great minds since Aristotle – who in *Metaphysics* stated one definition of a cause as "the result of whose presence something comes into being" – have struggled with understanding causation. Yet, causation is the soul of liability: the idea that a person should only be responsible for the consequences of their *own* actions, the harms they cause, is deeply rooted in American jurisprudence. Nevertheless, to say that a person is liable for all consequences of their actions goes too far. The world is interconnected; one thing leads to another. Any injury is the result of countless actions. This is the "butterfly effect," a concept that meteorologist Edward Lorenz planted in the public consciousness when he observed: "one flap of a seagull's wings could change the course of weather forever." The law also recognizes that a person should not necessarily be responsible for every consequence of his actions. From these two basic rules, arise the two forms of causation that are essential to any malpractice claim.

The first kind of causation, causation in fact, arises from the rule that a person should only be responsible for the consequences of their own actions. This kind of causation is captured by the jargon that often precedes it: *sine qua non*, literally, "without which it cannot be." Lawyers often refer to this as a "but for" test. But for the malpractice, would the injury have happened? Causation in fact asks whether the malpractice was necessary (if not necessarily sufficient) for the injury to occur. If the injury would have happened regardless of the engineer's breach, then there is no claim. If for example, a motorist is distracted upon viewing a sagging steel beam and as a result collides with a stop sign, then the

malpractice of the beam's designer is a cause in fact of the motorist's resulting injuries.

However, would it be fair to hold the beam's designer responsible for the motorist's injuries? Most would say no, which is why the law also requires legal causation, or proximate cause. Proximate cause captures the notion that some consequences of negligent acts are too remote, too difficult to foresee, to give rise to liability. *Minor v Zidell Trust*, a 1980 case before the Oklahoma Supreme Court, furnishes a good example of the limits of proximate cause in the structural engineering context. There the Court held that even though an engineer had negligently designed the curb in a parking garage, and but for that design, an unconscious motorist would not have been able to drive over it and suffer injury, "[s]uch an event was so extraordinary that it was unforeseeable in law" and there was no proximate cause and no liability.

Proximate cause relates to another key legal concept: intervening events (i.e., causes) may relieve the negligent engineer of liability. In a 1986 case, the Ohio Supreme Court (in *Cincinnati Riverfront Coliseum, Inc v McNulty Co*) held that although a structural engineer's design was defective, material deviations from it during construction were a significant enough cause of the injury to relieve the engineer of liability. It found that the deviations broke the causal connection between the design and the injury.

Defenses

Finally, no discussion of malpractice would be complete without mention of "affirmative defenses." These are like claims: they are a set of facts that, if established, negate an

otherwise established claim. In other words, even if a plaintiff can prove malpractice, by proving that he or she suffered an injury caused (proximately and in fact) by an engineer's breach of their professional duties, the engineer may be able to prove other facts to defeat that claim. As Black's Law Dictionary puts it, an affirmative defense is "new facts and arguments that, if true, will defeat the plaintiff's ... claim, even if all [its] allegations are true."

There are a great many recognized affirmative defenses to malpractice claims: common law, contractual and statutory. Here, we mention two of the most common: 1) statute of limitations and repose, and 2) comparative or contributory negligence.

As to the former, in Michigan, for example, MCL 600.5839(1) provides that "[n]o person may maintain any action to recover damages for any injury ... arising out of the defective and unsafe condition of an improvement to real property against any state licensed ... professional engineer ... more than 6 years after the time of occupancy of the completed improvement ..." This statute of repose puts a limit on the time that a plaintiff may wait before suing. If the plaintiff exceeds that limit, his or her claim, even if otherwise valid, is barred and will be dismissed. Similar statutes exist in various other jurisdictions.

Another common defense is comparative negligence or fault. Black's Law Dictionary defines comparative negligence as the "principle that reduces a plaintiff's recover proportionally to the plaintiff's degree of fault in causing the damage, rather than barring recovery completely." Many states

have codified this principle. Michigan, again as an example, enacted this defense in MCL 600.2959, which provides that: "[i]n an action based on tort or another legal theory seeking damages for personal injury, property damage, or wrongful death, the court shall reduce the damages by the percentage of comparative fault of the person upon whose injury or death the damages are based ..." Bottom line: under this statute and others like it, a plaintiff's recovery will be reduced by the extent to which their own carelessness contributes to their injury. The same statute further provides that if "that person's percentage of fault is greater than the aggregate fault of the other person or persons ... the court shall reduce economic damages by the percentage of comparative fault of the person upon whose injury or death the damages are based ... and noneconomic damages shall not be awarded." This means that if the plaintiff is more than 50% responsible, then not only are their damages reduced accordingly, but noneconomic damages, i.e., "pain and suffering" damages, are no longer available.

Conclusion

This ends our malpractice primer for structural engineers. Taken together, both parts of this primer provide a structural engineer with an intellectual framework for understanding malpractice claims, as well as an explanation of the essential building blocks of these claims. The primer also identifies some of the more typical but tricky issues that arise in malpractice disputes. While not an exhaustive treatment of the subject, these articles should, however, give the reader at least working fluency in the subject. ■

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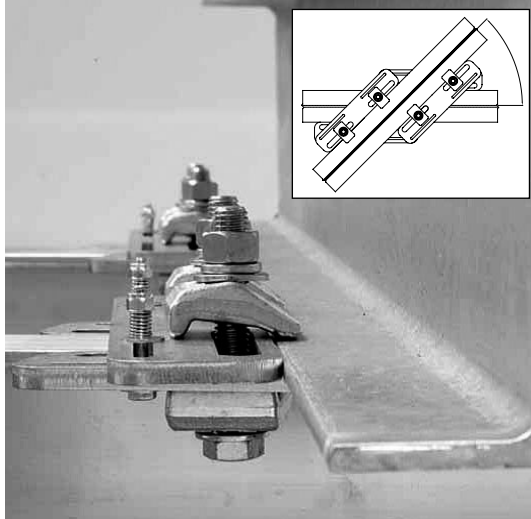
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