

IN MY OPINION...

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Expert Witness Qualifications Should They Have Some?

was recently retained as an expert witness in a California construction defect lawsuit involving some 70 single-family residences. The homes were built with conventional wood framing, interior gypsum wallboard, exterior stucco walls, and post-tensioned concrete slab-onground foundations. I represent the post-tensioning tendon fabricator, who also hired the structural designer of the post-tensioned slabs-on-ground.

A few months ago I attended a meeting on this case where the plaintiff's expert witnesses made a presentation to the defense experts and attorneys, in which they stated their defect allegations and their estimated costs of repair. In his introductory remarks the lead plaintiff expert made the following extraordinary statements:

"Post-tensioned slabs-on-ground have all failed or will all eventually fail. Post-tensioned slabs-on-ground are defective by design."

The "expert" then proceeded to present level surveys made on the surface of the concrete slabs, and photographs of cracking in the gypsum wallboard and exterior stucco walls. On the basis of this evidence he concluded that the post-tensioned slab foundations had "failed" due to excessive expansive soil movement (edge lift, he thought) and that the homes required more than five million dollars in repairs.

This "expert", it should be noted, is a geologist, not a licensed civil or structural engineer, and has never designed a posttensioned slab-on-ground (or any other civil engineering structure). His primary experience has been in hydrogeology. He has never published any peer-reviewed papers dealing with any aspect of the design, construction, or evaluation of post-tensioned slabs-on-ground, and has never served on any local or national committee which addresses post-tensioned concrete slabs-onground. It is difficult to see from where he derives his claimed expertise in posttensioned slabs-on-ground, yet, astoundingly, the California courts will most likely qualify him as an expert witness in the case.

Had the plaintiff expert been competent in the evaluation of post-tensioned concrete slab-on-ground foundations he would know that the slab surface in every one of the homes he surveyed was level within standard American Concrete Institute slab construction levelness tolerances, and the wall cracking was not consistent with the type of one-way diagonal cracking associated with differential soil movement. The evidence this "expert" presented to support five million dollars of repair actually indicated that the post-tensioned slabs-onground were fully functional and were performing in a satisfactory manner. If the plaintiff had retained an expert with real expertise in post-tensioned slabs-onground, the allegations of slab failure would not exist.

This case will almost certainly go to trial. I am confident that the plaintiff "expert" will not be found credible by an impartial jury, and his claims of slab failure will be rejected. But it will cost hundreds of thousands of dollars in attorney and expert fees to defend the case. This money will be paid by insurance companies, and will be passed on to design professionals, contractors, material suppliers, and eventually to future California homeowners.

This is a striking example of the deficiencies in the expert witness system in construction defect litigation. The approval process for expert engineering witnesses lacks a "filter" for ensuring some

level of specialized and pertinent expertise among retained experts. I believe it is essential that legislation be enacted, and professional and ethical guidelines be developed, which

will require engineers who serve as experts to demonstrate specific relevant design and construction experience in the particular type of project involved in the litigation.

California already has such legislation in place for emergency room physicians. California Health & Safety Code \$1799.110(c) provides that in any malpractice lawsuit against an emergency room physician, only physicians who have had "substantial professional experience within

the last five years" while working in an emergency department may provide expert medical testimony. "Substantial experience" is determined by custom and practice in the same or similar location where the alleged negligence occurred.

There is no reason why a similar statute could not be drafted for expert witnesses in construction defect cases. For example, in cases involving the design or evaluation of post-tensioned concrete structures, in order to offer expert opinions on those issues an engineer could be required, by law, to demonstrate that he/she has designed, as engineer of record, at least three similar post-tensioned concrete buildings which were actually built. As modest as this simple criteria is, its enforcement in California alone would, in my opinion, save millions of dollars per year in attorneys' fees, expert witness fees, unjustified settlements based on unqualified and incorrect technical opinions, and the defense of frivolous cases.

It is, of course, easy to blame the legislature, the courts and attorneys for this problem. However, design professionals are equally at fault. Design professionals have the duty to police their members and to promulgate and enforce professional and ethical standards. Professional associations should take the lead in doing so. They should establish rules and guidelines for engineers acting as expert witnesses, and censure, discipline or even expel their members for failing to adhere to them. State licensing

committees can further support the professional associations by denial or revocation of professional licenses for serious violations, and by prosecuting engineers who prac-

tice without an appropriate license.

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Obviously, reform of the current system will not be easy. There are some who benefit from the use of unqualified experts, and they will predictably oppose any reform. Nonetheless, someone needs to speak up on this issue and keep it in the public eye. The waste and inefficiency in construction litigation caused by unqualified experts is massive and, to some degree, we all end up paying for it.